REPORT ON
ANNUAL GROUNDWATER MONITORING, 2009
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

for

The Boeing Company,
National Aeronautics and Space Administration (NASA),
and
U.S. Department of Energy (DOE)
Canoga Park, California

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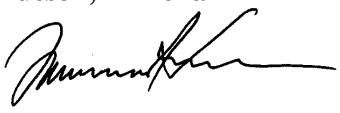

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LIST OF ACRONYMS AND ABBREVIATIONS

AAL	Archived Advisory Level
ASU	air stripping unit
CCR	California Code of Regulations
CFOU	Chatsworth Formation Operable Unit
cis-1,2-DCE	cis-1,2-dichloroethene
COC	constituent of concern
DMR	Discharge Monitoring Reports
DOE	(United States) Department of Energy
DPH	(California) Department of Public Health
DRO	Diesel Range Organics
DTSC	(California) Department of Toxic Substances Control
ECL	Engineering Chemistry Laboratory
EPA	(United States) Environmental Protection Agency
ETEC	Energy Technology Engineering Center
FLUTe	Flexible Liner Underground Technologies, LLC
GRO	gasoline range organics
GWRC	Groundwater Resources Consultants, Inc.
LCS/LCSD	laboratory control sample/laboratory control sample duplicate
LNAPL	light non-aqueous phase liquid
LUFT	leaking underground fuel tank
MCL	maximum contaminant level
MDA	minimum detectable activity
MDL	method detection limit
mg/L	milligrams per liter
MS/MSD	matrix spike/matrix spike duplicate
MSL	mean sea level
NASA	National Aeronautics and Space Administration
NDMA	n-nitrosodimethylamine
NL	notification level
NPDES	National Pollutant Discharge Elimination System
PAH	polycyclic aromatic hydrocarbon
pCi/L	picoCuries per liter
PCB	polychlorinated biphenyl
PCP	Post-Closure Permit
pg/L	picograms per liter
QAPP	Quality Assurance Project Plan
QA/QC	quality assurance and quality control
RAL	regulatory action level
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
RPD	replicate percent difference
SAP	Sampling and Analysis Plan
SDG	sample delivery group
SDWA	Safe Drinking Water Act
SSFL	Santa Susana Field Laboratory
SMCL	secondary maximum contaminant level
SMOU	Surficial Media Operable Unit

Sr-90	strontium-90
SVOC	semi-volatile organic compound
STL IV	System Test Laboratory IV
2,3,7,8-TCDD	2,3,7,8-tetrachlorodibenzo-p-dioxin
2,3,7,8-TCDD TEQ	2,3,7,8-TCDD toxic equivalency
TCE	trichloroethene
TEQ	toxic equivalency
μg/L	micrograms per liter
U-234	uranium-234
U-238	uranium-238
UV	ultraviolet
VOC	volatile organic compound

1. INTRODUCTION

This report summarizes the groundwater monitoring and groundwater extraction and treatment system activities conducted during 2009 at the Santa Susana Field Laboratory (SSFL) located in Ventura County, California (Figure 1). This report is intended to fulfill the requirements of multiple regulatory programs being implemented at SSFL. These include requirements addressed in the Post-Closure Permit monitoring program approved by the California Environmental Protection Agency Department of Toxic Substances Control (DTSC), and the Leaking Underground Fuel Tank (LUFT) monitoring program overseen by DTSC. Specific requirements include performance of detection monitoring, evaluation monitoring, and interim corrective action monitoring as described in the SSFL (Facility) Post-Closure Permits and per the requirements of Title 22, California Code of Regulations (22 CCR), sections 66264.97 through 66264.99. The monitoring also complies with the Consent Order for Corrective Action issued on 16 August 2007 by DTSC (2007).

Monitoring activities conducted during the year included:

- measurement of water levels
- collection and laboratory analysis of groundwater samples
- measurement of groundwater extraction and treatment system water levels, pumping rates, and volumes

Historical data were summarized in previous reports by Groundwater Resources Consultants (GWRC, 2000) and Haley & Aldrich (2001 through 2010).

The scope of this annual report includes the following as required per the Post-Closure Permits and 22 CCR, sections 66264.97 through 66264.99:

- summary of water level measurements
- discussion of the rates and direction of groundwater movement
- summary of results of laboratory analyses of water samples
- summary of groundwater extraction volumes and extraction well water levels and flow rates
- summary of results of laboratory analyses of permitted treatment system influent and effluent water samples
- water level hydrographs
- groundwater elevation contour map of the Chatsworth Formation water table surface for October 2009
- contaminant concentration posting maps for the year 2009
- contaminant concentration versus time plots for 2000 through 2009

Additional groundwater monitoring was performed during the year as part of the Surficial Media Operable Unit Resource Conservation and Recovery Act (RCRA) Facility Investigation (SMOU RFI), and the Chatsworth Formation Operable Unit (CFOU) investigation (Montgomery Watson, 2000b). Groundwater samples were also collected for the analysis of radionuclide activities from select Area IV wells for the United States Department of Energy (DOE) and the Energy Technology Engineering Center (ETEC).

Light non-aqueous phase liquid (LNAPL) was measured in well RD-49A, and LNAPL samples were collected and analyzed in August 2009.

Groundwater samples were also collected in December 2009 for the analysis of Appendix IX constituents and radionuclides from the extraction wells proposed for Interim Measures (MWH, 2009a). Results of the sampling and analysis of these wells will be reported separately.

1.1 Report Organization

Groundwater monitoring results, including analytical results and water levels, are presented in Section 2. Section 3 discusses remedial systems at SSFL, and Section 4 discusses surface water discharge monitoring at National Pollutant Discharge Elimination System (NPDES) Outfalls 001 and 002.

2. GROUNDWATER MONITORING

Monitoring wells are scheduled to be sampled quarterly, semiannually, or annually in accordance with the current Sampling and Analysis Plan (SAP) for the Facility (GWRC, 1995a, 1995b). The exceptions include former SSFL water supply wells, wells where Westbay or FLUTe (Flexible Liner Underground Technologies, LLC) systems are installed, and piezometers. Figure 2 shows the locations of the wells. Figure 3 shows the locations of piezometers. Groundwater elevation contours for the first-encountered water in the Chatsworth Formation, as determined from groundwater levels measured during the fourth quarter, are shown in Figure 4.

Additional subsurface investigations have been conducted at SSFL as part of ongoing operable unit characterization programs. Groundwater characterization results and data interpretations from these additional investigations were transmitted to the DTSC in mid-December 2009 as presented in the "Draft Site-wide Groundwater Remedial Report" (MWH, 2009b) and the complementary "Draft Site Conceptual Model for the Migration and Fate of Contaminants in Groundwater at the Santa Susana Field Laboratory, Simi, California" (Cherry, McWhorter, and Parker, 2009). As a result of these ongoing investigations, additional information on site geology and groundwater conditions has become available. To the extent practicable, this new information is incorporated into quarterly and annual groundwater monitoring reports.

Site geology is summarized and illustrated on Figure 5. Data collected throughout SSFL indicate that geologic features may impact groundwater flow directions and rates (MWH, 2002, 2007b). The geologic features depicted on Figure 5 reflect the understanding and interpretation of both the stratigraphy and structure at SSFL and are based on nearly 10 years of field and office evaluations.

The following subsections provide a review of groundwater levels, and groundwater quality results and trends. Annual precipitation, year 2009 water level measurements, and historical water level hydrographs for select wells are presented in Tables I and II, and Appendix A, respectively. Hydrographs representing vertical profiles of 2009 water levels in wells installed with FLUTe and Westbay systems were prepared by MWH and are presented in Appendix A. Well construction details are summarized in Appendix C. FLUTe system, Westbay system, and piezometers construction details also are presented in Appendix C.

Groundwater quality results and trends (as presented in Tables V through XVII, Appendices E and F, and Figures 6 through 39) are discussed in Section 2.2.

2.1 Groundwater Occurrence, Elevations, and Flow Directions

Groundwater occurs at SSFL in alluvium, weathered bedrock, and unweathered bedrock (Montgomery Watson, 2000a; MWH, 2009b). First-encountered groundwater may be observed in any of these media under water table conditions. For the purposes of this report, "near-surface groundwater" is defined as groundwater that is present in the alluvium and weathered bedrock, and groundwater that occurs in the unweathered bedrock is referred to as "Chatsworth Formation groundwater".

Near-surface groundwater is indicated to have a limited areal extent at SSFL, typically occurring in alluvial drainages (topographic lows) and valleys (e.g., Burro Flats in Area IV, Figure 40). In many areas within SSFL, where near-surface groundwater exists, the near-surface and Chatsworth Formation groundwater appear to be vertically continuous and not separated by a vadose zone (MWH, 2003, 2009b).

Based on data collected to date, perched groundwater is also indicated to exist at locations within SSFL (MWH, 2003, 2009b). At these locations, a vadose zone within the Chatsworth Formation apparently separates near-surface and Chatsworth Formation groundwater.

2.1.1 Near-Surface Groundwater

Near-surface water level measurements were conducted at all but one of the shallow wells, and at the Engineering Chemistry Laboratory (ECL) French Drain and ECL Sump during 2009 (Table II and Appendix A). During 2009, water levels were also measured at a number of piezometers installed at the Facility (Table II). Near-surface groundwater elevations followed the general historical trend, highest during the late winter and spring rainy season, and lowest during the summer and early fall dry months.

Near-surface groundwater is indicated to occur in Quaternary alluvium distributed primarily in the Burro Flats area (Figures 5 and 40) and along ephemeral drainages, and in the upper weathered portion of the Chatsworth Formation. The alluvium is indicated to generally consist of unconsolidated sand, silt, and clay. This occurrence of near-surface groundwater is discontinuous at the Facility. Some portions of the alluvium and upper weathered Chatsworth Formation are saturated only during and immediately following a wet season.

Discharge of water to Facility storage reservoirs and channels as part of site operations can also affect groundwater levels in shallow wells. Most of these types of discharges have ceased.

For the 2009 water year, a total of 10.80 inches of precipitation was measured, approximately 40% below average since 1960 (Table I). A water year begins on October 1 of the previous calendar year and concludes on September 30.

Water level data from shallow wells continue to indicate that the lateral component of near-surface groundwater movement is generally a reflection of surface topography. Groundwater movement within the canyon areas is generally indicated in the same direction as surface flow in the canyons. Downward vertical movement of near-surface groundwater into the Chatsworth Formation bedrock is also indicated to occur (MWH, 2003).

2.1.2 Chatsworth Formation

The principal water bearing system at the Facility is the fractured Chatsworth Formation, predominantly composed of weak- to well-cemented sandstone with interbeds of siltstone and claystone. Several hydraulically significant features such as fault zones and shale beds are present at SSFL and may act as aquitards or otherwise influence the groundwater flow system (Montgomery Watson, 2000a; MWH, 2002, 2007).

2.1.2.1 Groundwater Elevations and Flow Conditions

Water level elevations were measured during the year at all but one of the Chatsworth Formation wells (Table II and Appendix A).

Water level elevations measured in Chatsworth Formation monitor wells during 2009 ranged from approximately 1,224 feet above mean sea level (MSL) at well RD-75 to about 1,894 feet above MSL at well RD-42 (Table II, Figure 4).

Discrete depth-interval water level data from Westbay- and FLUTe-equipped wells were collected by dataloggers and are presented in Table II and Appendix A.

The water level contour map, presented as Figure 4, was prepared using October 2009 water level elevations from the shallowest well in each Chatsworth Formation cluster, and from individual Chatsworth Formation wells at non-cluster locations. Groundwater levels in Chatsworth Formation wells were generally lower during the fourth quarter 2009 than during the fourth quarter 2008 (Haley & Aldrich, 2009a; Appendix A). The elevation of first water in the multi-port devices in some wells appears to vary from that previously observed in the open well boreholes.

The groundwater elevation contour map, Figure 4, is provided to satisfy, in part, the requirements of 22 CCR, section 66264.97 for determining groundwater flow rates and directions. A groundwater elevation contour map can be used in simple hydrogeologic settings to depict variations in the elevation of the water table surface, which can in turn be used to interpret apparent relative directions of groundwater flow. However, the groundwater elevation contours depicted in Figure 4 are not used to infer groundwater flow directions or rates of groundwater movement for the following reasons, among others:

- Several hydraulically significant features such as fault zones and shale beds are present at SSFL and may act as impediments to groundwater flow across them. Accordingly, while significant variations in the elevation of groundwater are present at SSFL, these differences may not necessarily indicate preferred directions of groundwater flow.

- Some water level elevations depicted may not represent the elevation of the first occurrence of groundwater due to the relatively long, open intervals of some of the monitoring wells. The water levels shown represent average heads over the screened or open interval.

- Groundwater flow directions and rates in fractured rock are likely influenced by the bedrock fracture network and characteristics of the bedrock matrix and possibly the orientation of structural features and stratigraphy.

- Estimates of groundwater flow rates and three-dimensional groundwater flow directions from areas within SSFL were made and are presented in the "Draft Site-wide Groundwater Remedial Investigation Report" (MWH, 2009b).

2.2 Groundwater Quality Results

The groundwater monitoring program at SSFL fulfills the requirements of multiple programs prescribed by:

- the Post-Closure Permits (DTSC, 1995);
- Class 1 and Class 2 Permit Modifications of the Post-Closure Permits (DTSC, 2001);
- the LUFT program overseen by DTSC;
- various characterization efforts conducted at SSFL including the CFOU groundwater investigation (Montgomery Watson, 2000b) and the SMOU RFI program (Ogden, 2000); and
- the Consent Order for Corrective Action issued on 16 August 2007 by DTSC (2007).

The Post-Closure Permit (PCP) monitoring programs include the Evaluation Monitoring Program and the Detection Monitoring Program (DTSC, 2001). Groundwater water quality monitoring conducted for the PCP monitoring program during the year included:

The Detection Monitoring Program:

- quarterly VOC sampling and analysis at detection monitoring and background wells;

The Evaluation Monitoring Program:

- annual Appendix IX and semiannual VOC sampling and analysis at point of compliance wells; and
- semiannual VOC sampling and analysis at evaluation monitoring and interim corrective action wells.

At five-year intervals, the Post-Closure Permit requires constituent of concern (COC) monitoring at wells in the Evaluation Monitoring and Detection Monitoring Programs. The last five-year COC monitoring required by the 1995 Post-Closure Permits was conducted in 2005 (Haley & Aldrich, 2006).

Monitoring for the various characterization efforts in progress at SSFL was conducted during the year as listed in Table IV.

Analyses Performed

The water quality analyses performed pursuant to the various monitoring programs are presented in Table IV.

During the year, both unfiltered (total dissolved and suspended solids) and filtered (dissolved solids) samples were collected for radionuclide analysis, except for tritium analyses. Unfiltered samples were collected for tritium analysis. Dissolved radionuclide samples were filtered using a 0.45 micron filter to remove suspended solids and preserved in the field prior to submittal to the laboratory for analysis. Total radionuclide samples were preserved in the field, but were not filtered.

DTSC collected split samples from Chatsworth Formation well WS-09 during the third and fourth quarters for the analysis of VOCs including 1,4-dioxane, gross alpha, gross beta, tritium, strontium-90 (Sr-90), filtered metals, hexavalent chromium, semi-volatile organic compounds (SVOCs), perchlorate, and dioxins and furans. Analytical results for WS-09 groundwater samples collected by Haley & Aldrich are reported in Tables VII, IX, X, XI, XII, and XVI.

Light non-aqueous phase liquid (LNAPL) was measured in well RD-49A, and LNAPL samples were collected and analyzed in August 2009. During the fourth quarter, measurements were made to determine if LNAPL was present in 13 wells and piezometers located in the vicinity of the ALFA test stands.

Groundwater samples were also collected for the analysis of Appendix IX constituents and radionuclides from the extraction wells proposed for Interim Measures in December 2009. Results of the sampling and analysis will be reported separately.

Reporting of Results

Groundwater sampling results for individual constituents are compared to drinking water limits for discussion purposes based on the availability of the following, in descending order of priority:

- Maximum Contaminant Levels (MCLs) promulgated by the Safe Drinking Water Act (SDWA) and 22 CCR, sections 64431 through 64449 and 64672 (California Department of Public Health [DPH], 2008);
- Regulatory action levels (RALs) for lead and copper (DPH, 2008);
- Notification levels (NLs; DPH, 2007b);

- Archived advisory levels (AALs; DPH, 2007a); and
- Secondary Maximum Contaminant Levels (SMCLs) which address aesthetics, such as taste and odor (USEPA, 2009).

It is important to note that groundwater at SSFL is not used as a drinking water supply. References to MCLs, RALs, NLs, AALs, and SMCLs are for purposes of discussion only.

Analytical results with concentrations greater than the method detection limit (MDL) but less than the reporting limit are qualified (flagged as estimated with a "J") to indicate the uncertainty associated with the quantification of these data. The approved Sampling and Analysis Plan (SAP) specifies analytical methods which are not sufficiently sensitive to detect the constituents of concern 1,4-dioxane (EPA Method 8260) and n-nitrosodimethylamine (NDMA; EPA Method 8270C) at the California Department of Public Health (DPH) notification levels. Therefore, Boeing uses more sensitive DPH-approved analytical methods, including EPA Method 8260-SIM for 1,4-dioxane and EPA Method 1625M for NDMA.

Pursuant to the groundwater monitoring program, groundwater samples were collected during 2009 from shallow and Chatsworth Formation wells, and off-site wells. A summary of the analyses conducted at individual wells during 2009 is presented in Table B-I of Appendix B.

Water quality results for groundwater samples are tabulated in Tables V through XVII. Constituents detected for the first time in groundwater sampled from individual locations are presented in Table V. Constituents previously detected in groundwater sampled from each location but reported at new maximum concentrations are presented in Table VI. If an analytical result triggered permit-required re-sampling, this is discussed below and summarized in Table XVIII.

Analytical results for trichloroethene (TCE) and cis-1,2-dichloroethene (cis-1,2-DCE), the most prevalent COCs detected in groundwater samples collected from the site, are posted on Figures 6 through 9 for near-surface and Chatsworth Formation groundwater. Maximum concentrations of constituents of concern detected during 2009 plus the formerly detected COCs ethylbenzene, m- & p-xylenes, and o-xylene are posted on Figures 10 through 13 and 15 through 36. Figures are not presented for the constituents of concern that were not detected in groundwater samples collected during 2009. Figure 14 presents maximum perchlorate concentrations detected during the year. Figure 37 presents wells sampled for Appendix IX constituents during 2009 excluding the December sampling of proposed Interim Measures extraction wells. Concentrations of Appendix IX constituents detected during the year are posted on Figures 38 and 39.

Concentration versus time plots for constituents of concern at permitted wells are presented in Appendix F.

2.2.1 Near-Surface Groundwater

Groundwater samples collected from shallow wells and piezometers as part of the groundwater monitoring program in 2009 are listed in Table IV. Some shallow wells scheduled for groundwater sampling were dry or contained insufficient water for sampling when monitored (Table II and Appendix A). Analytical results are summarized in Tables V through XVII. The analytical results were within historical ranges (GWRC, 2000; Haley & Aldrich, 2001 through 2010; MWH, 2003), with the exceptions noted below. Deviations from historical water quality results for analytes greater than the reporting limits are discussed below. Results of verification sampling are discussed below and in section 2.2.4.

2.2.1.1 LUFT Program

Shallow wells RS-01, RS-30, RS-31, and RS-32 were scheduled for semiannual LUFT program sampling during 2009. These wells had insufficient water for sampling during the year. The next semiannual monitoring of shallow LUFT program wells is scheduled for the first quarter 2010.

2.2.1.2 Evaluation Monitoring Program/Interim Corrective Action Program

VOC concentrations detected in groundwater samples collected from shallow evaluation monitoring wells and interim corrective action wells during the year were within historical ranges (Table VII) except for first-time detected analytes (Table V), or analytes reported at concentrations above previously reported maximum concentrations (Table VI), or both.

Results of verification sampling conducted during the year are presented in Table XVIII. Verification sampling results indicated that:

- Chloroethane was not detected in groundwater samples collected from interim corrective action well ES-21 during the second quarter.

- 1,1,2-Trichloroethane and chloroform were not detected in groundwater samples collected from evaluation monitoring well HAR-11 during the first quarter. Shallow well HAR-11 was sampled using procedures from the 1995 SAP (GWRC, 1995a, 1995b) after a Snap Sampler system had been installed and removed during the third and fourth quarters 2008 (Haley & Aldrich, 2009a).

Some evaluation monitoring wells and interim correction action wells were sampled for additional constituents as part of other monitoring programs, and those results are discussed in the respective sections within this report.

Under the 1995 Post-Closure Permits, evaluation monitoring wells and interim corrective action wells are scheduled to be monitored semiannually for VOCs and every five years for COCs.

2.2.1.3 Point of Compliance Program

Shallow point of compliance wells SH-04, RS-08, HAR-14, and HAR-15 were scheduled for Appendix IX monitoring during the second quarter 2009. RS-08 and SH-04 had insufficient water for sampling during the second, third, and fourth quarters. Results of the monitoring are reported in Section 2.2.3 and Table XIII.

Verification samples scheduled for the analysis of chlorinated pesticides at well SH-04 could not be collected because this well had insufficient water for sampling during the year. Verification samples (primary, duplicate, split, and field blank) will be rescheduled for the first quarter 2010 to determine if chlorinated pesticide detections reported in SH-04 groundwater samples during the second quarter 2008 are repeatable in consecutive groundwater samples.

Under the 1995 Post-Closure Permits, point of compliance wells are scheduled for semiannual VOC sampling and analysis during the second and fourth quarters.

2.2.1.4 Near-Surface Groundwater Radiochemistry Analyses

During the year, near-surface groundwater samples were collected from select wells for the analysis of gross alpha and gross beta radioactivity, tritium, gamma-emitting radionuclides, strontium-90 (Sr-90), and isotopic uranium (Table IX).

During the year, both unfiltered (total dissolved and suspended solids) and filtered (dissolved solids) samples were collected for radionuclide analysis, except for tritium analyses. Unfiltered samples were collected for tritium analysis. Dissolved radionuclide samples were filtered using a 0.45 micron filter to remove suspended solids and preserved in the field prior to submittal to the laboratory for analysis. Total radionuclide samples were preserved in the field, but were not filtered.

A comparison was made of radionuclide detects in sample pairs where both the filtered and unfiltered samples from a well were analyzed during 2009. Sample pairs in which a radionuclide was detected in only the filtered or unfiltered sample, or was not detected in either sample, were not included in this analysis. Comparisons were made on the reported activity and did not include the error or a range of standard deviation. Additional pairs of filtered and unfiltered radionuclide detects would be required to conduct a robust statistical analysis.

	2009 Near-Surface Groundwater Sample Count			
Radionuclide (detected in both the filtered and unfiltered samples)	Filtered activity < Unfiltered activity	Filtered activity = Unfiltered activity	Filtered activity > Unfiltered activity	Total
Gamma-emitting radionuclides	Not applicable			
Gross alpha	3	0	0	3
Gross beta	1	0	1	2
Strontium-90	Not applicable			
Tritium	Not applicable			
Uranium-233/234	2	0	0	2
Uranium-235	1	0	1	2
Uranium-238	1	1	0	2

Not applicable: Only unfiltered samples were collected for tritium analysis. For other radionuclides, detectable activity was not reported in both the filtered and unfiltered samples.

Gross Alpha Activity

The gross alpha activities in near-surface groundwater samples collected during the year were less than the drinking water MCL of 15 picoCuries per liter (pCi/L) and were within the activity range of past samples collected from these wells (Haley & Aldrich, 2009a). Calculations of adjusted gross alpha are presented in Table IX for samples where isotopic uranium activity and gross alpha activity were analyzed.

Gross Beta Activity

The gross beta activities in near-surface groundwater samples collected during the year were less than the drinking water MCL of 50 pCi/L and were within the activity range of past samples collected from these wells (Haley & Aldrich, 2009a).

Tritium Activity

The tritium activities in near-surface groundwater samples collected during the year were less than the drinking water MCL of 20,000 pCi/L and were within the activity range of past samples collected from these wells (Haley & Aldrich, 2009a).

Gamma Emitters

Gamma-emitting radionuclide activities were not detected in near-surface groundwater samples collected during the year.

Strontium-90

Sr-90 was not detected in near-surface groundwater samples collected during the year.

Uranium

The uranium isotope activities in near-surface groundwater samples collected during the year were less than the drinking water MCL of 20 pCi/L and were within the activity range of past samples (Haley & Aldrich, 2009a). The uranium isotope activities in near surface groundwater samples collected during the year appeared to be naturally occurring uranium as indicated by the activity ratios of uranium-234:uranium-238 (U-234:U-238). Naturally occurring uranium (non-enriched and non-processed) has a U-234:U-238 activity ratio of approximately 1:1 (Federal Register, 2000).

2.2.1.5 Other Monitoring

Some shallow Facility wells sampled during the year were not part of the LUFT, evaluation, interim corrective action, or point of compliance programs. These wells are not included in any prescribed monitoring program. Results of this monitoring are summarized in Section A.

In support of the SMOU RFI program, groundwater samples were collected from piezometers and shallow wells as part of the data gap investigation for SMOU Reporting Groups as listed in Table IV. SMOU RFI monitoring results are summarized in Section B below.

A. *Other Monitoring Results* – Analytical results for VOCs and metals were within historical ranges.

B. *SMOU RFI Data Gap Results* - Groundwater samples were collected from piezometers and shallow wells as part of the data gap investigations for SMOU RFI Reporting Groups as listed in Table IV. Results are summarized in Tables VII, VIII, X, XI, XII, XIV, XV, XVI, and XVII.

Hexavalent chromium, SVOCs, polycyclic aromatic hydrocarbons (PAHs), perchlorate, and polychlorinated biphenyls (PCBs) were not detected (Tables X, XI, XII, and XVI).

Where detected, NDMA concentrations were below the NDMA NL of 0.01 micrograms per liter (μg/L) (Table XI).

Where detected, formaldehyde concentrations were below the formaldehyde NL of 100 μg/L (Table XIV).

Results of analyses for VOCs including 1,4-dioxane are reported in Table VII. Results of analyses for diesel range organics (DROs) and gasoline range organics (GROs) are reported in Table VIII. Results of analyses for dioxins and furans are reported in Table XVI. Results of analyses for hydrazines are reported in Table XVII.

Inorganic constituent concentrations were not greater than drinking water MCLs with the following exceptions (Table XV):

- Nitrate was detected at concentrations greater than the drinking water MCL of 45 milligrams per liter (mg/L) in the groundwater samples collected from piezometer PZ-103 during the third and fourth quarters at concentrations of 55 J and 58 mg/L, respectively. The nitrate concentrations in PZ-103 groundwater were within the concentration range of past samples collected from PZ-103 (Haley & Aldrich, 2009a).

Results for filtered and unfiltered metals analyzed for the SMOU RFI program were below MCLs and NLs except as noted in Table X.

Some analytes were detected for the first time in the groundwater samples collected for the SMOU RFI data gaps investigation (Table V).

Concentrations of some analytes detected in near-surface groundwater samples collected for the SMOU RFI program during the year were greater than previously reported concentrations (Table VI).

Results of verification sampling conducted during the year are presented in Table XVIII. Verification sampling results indicated that

- Chlorinated pesticides analyzed in primary, duplicate, and split groundwater samples collected from well SH-08 occurred in one or two samples (0.0033 J to 0.0022 J μg/L) during the second quarter. None of the individual pesticides were confirmed in all three samples. Previously detected pesticides from samples collected in May 2008 (Haley & Aldrich, 2009a) were not detected in the second quarter samples except for aldrin and alpha-BHC at concentrations ranging up to an estimated 0.0079 and 0.0033 μg/L, respectively.

Verification samples scheduled for the analysis for chlorinated pesticides at SH-02, SH-03, SH-04, SH-05, and SH-09 could not be collected during the year because these wells had insufficient water for sampling. Verification samples (primary, duplicate, split, field blank, and equipment rinsate) will be

rescheduled for the first quarter 2010 to determine if chlorinated pesticide detections reported in shallow well groundwater samples during 2008 are repeatable in consecutive groundwater samples.

2.2.2 Chatsworth Formation

Analytical results of Chatsworth Formation groundwater samples collected during 2009 are summarized in Tables V through XVII. Overall, results were consistent with historical results (GWRC, 2000; Haley & Aldrich, 2001 through 2009a). Deviations from past water quality results for analytes reported above the reporting limits are discussed below. Results of verification sampling are discussed below and in section 2.2.4.

Chatsworth Formation groundwater samples collected as part of the groundwater monitoring program in 2009 are listed in Table IV.

Per the Post-Closure Permits, Appendix IX monitoring of background well RD-06 and detection well RD-37 occurred during the third quarter 2009 as a result of the confirmed presence of carbon disulfide and cis-1,2-dichloroethene (cis-1,2-DCE), respectively, in verification groundwater samples collected during the second quarter 2009. On June 12, 2009, carbon disulfide and cis-1,2-DCE were verified at low levels (parts per billion, ppb) in groundwater samples collected from wells RD-06 (carbon disulfide) and RD-37 (cis-1,2-DCE) as part of the Detection Monitoring program. Current permit conditions required Boeing to propose an alternate Background monitoring well (RD-69) and an alternate Detection monitoring well (RD-70). RD-06 and RD-37 were monitored pursuant to the evaluation monitoring program beginning in the third quarter 2009 (Boeing, 2009b).

2.2.2.1 LUFT Program

VOC and gasoline range organics (GRO) analytical results for the semiannual sampling of Chatsworth Formation wells monitored under the LUFT program were within historical ranges during 2009 (Tables VII and VIII) except for first-time detected analytes (Table V), or analytes reported at concentrations above previously reported maximum concentrations (Table VI), or both.

Results of verification sampling conducted during the year are presented in Table XVIII. Verification sampling results indicated that

- cis-1,2-DCE was detected in the primary and duplicate groundwater samples collected from detection monitoring well RD-37 during the second quarter at estimated concentrations of 0.1 μg/L and 0.1 μg/L, respectively. cis-1,2-DCE was not detected in the split sample. cis-1,2-DCE was not detected in samples collected from well RD-37 during the third and fourth quarters.

Chatsworth Formation wells RD-36A and RD-38A were scheduled for semiannual LUFT program sampling during 2009. These wells had insufficient water for sampling during the year.

The next semiannual monitoring of Chatsworth Formation LUFT program wells is scheduled for the first quarter 2010.

2.2.2.2 Detection Monitoring Program

VOCs were not detected above reporting limits in groundwater samples collected from detection monitoring and background wells during 2009 (Table VII) with the following exceptions:

- Carbon disulfide was detected at a concentration of 0.8 μg/L in groundwater collected from background monitoring well RD-06 during the first quarter. Carbon disulfide was detected in primary, duplicate, and split groundwater samples collected from RD-06 during the second quarter at estimated concentrations of 0.4 μg/L, 0.5 μg/L, and 0.63 μg/L, respectively. Carbon disulfide was not detected in samples collected from well RD-06 during the third quarter. The California drinking water NL for carbon disulfide is 160 μg/L.

- TCE was detected at a concentration of 0.9 μg/L in groundwater collected from background monitoring well RD-06 during the first quarter. The MCL for TCE is 5 μg/L. TCE was not detected in verification groundwater samples (primary, duplicate, split, and field blank) that were collected and analyzed during the second quarter 2009.

Per the Post-Closure Permits, Appendix IX monitoring of background well RD-06 occurred during third quarter 2009. RD-06 was monitored pursuant to the evaluation monitoring program beginning in the third quarter 2009 (Boeing, 2009b).

VOCs detected at estimated concentrations below the reporting limit in groundwater samples collected during the year included:

- Bromoform and dibromochloromethane were detected at estimated concentrations of 0.3 μg/L and 0.2 μg/L, respectively, in the samples collected from detection monitoring well RD-43A during the third quarter. The California drinking water MCL for total trihalomethanes (bromoform, chloroform, bromodichloromethane, and dibromochloromethane) is 80 μg/L. Neither bromoform nor dibromochloromethane were detected in verification groundwater samples (primary, duplicate, split, and field blank) that were collected and analyzed during the fourth quarter 2009.

- Chloromethane was detected in the groundwater sample collected from detection monitoring well RD-51C for the first time (Table V) during the first quarter. Neither a drinking water MCL nor a California NL have been established for chloromethane. Chloromethane was not detected in verification samples (primary, duplicate, split, and field blank) that were collected and analyzed in the second quarter. Chloromethane was not detected in samples collected from well RD-51C during the third and fourth quarters.

- Chloromethane was detected at estimated concentrations of 0.3 μg/L in the duplicate sample collected from background monitoring well RD-06 and 0.2 μg/L in the primary sample collected from background monitoring well RD-67 during the second quarter. Neither a drinking water MCL nor a California NL have been established for chloromethane. Chloromethane was not detected in verification samples (primary, duplicate, split, and field blank) that were collected and analyzed from well RD-67 in third quarter. RD-06 was monitored pursuant to the evaluation monitoring program beginning in the third quarter

2009 (Boeing, 2009b). Chloromethane was not detected in samples from RD-06 in the third quarter.

- cis-1,2-DCE was detected in the groundwater sample collected from detection monitoring well RD-37 for the first time at an estimated concentration of 0.1 μg/L (Table V) during the first quarter. cis-1,2-DCE was detected in primary and duplicate samples when verification samples (primary, duplicate, split, and field blank) were collected and analyzed in the second quarter. cis-1,2-DCE was not detected in the split sample. cis-1,2-DCE was not detected in samples collected from well RD-37 during the third and fourth quarters. The MCL for cis-1,2-DCE is 6 μg/L.

  Per the Post-Closure Permits, Appendix IX monitoring of background well RD-37 occurred during the third quarter. RD-37 was monitored pursuant to the evaluation monitoring program beginning in the third quarter (Boeing, 2009b).

- Tetrachloroethene was detected for the first time in groundwater samples collected from detection monitoring well RD-43C during the fourth quarter at an estimated concentration of 0.23 μg/L. The MCL for tetrachloroethene is 5 μg/L. Verification sampling (primary, duplicate, split, and field blank) will be scheduled for first quarter 2010 to determine if the tetrachloroethene detection reported in the RD-43C groundwater sample is repeatable in consecutive groundwater samples.

- TCE was detected in primary and duplicate groundwater samples collected from background monitoring well RD-13 during the first, second, and third quarters at estimated concentrations ranging up to 0.3 μg/L. These concentrations are consistent with past samples collected from RD-13 since 2000 (Haley & Aldrich, 2001). TCE was not detected in samples collected from well RD-13 during the fourth quarter. The MCL for TCE is 5 μg/L.

- Vinyl chloride was detected at estimated concentrations ranging up to 0.2 μg/L in the groundwater samples collected from detection monitoring well RD-70 during the first, second, and third quarters. These concentrations are consistent with past samples collected from RD-70 (Haley & Aldrich, 2009a, 2009b, 2009c). Vinyl chloride was not detected in samples collected from well RD-70 during the fourth quarter. The California drinking water MCL for vinyl chloride is 0.5 μg/L.

Carbon disulfide concentrations were within historical ranges in groundwater collected from detection monitoring and background wells except for first-time detected analytes (Table V), or analytes reported at concentrations above previously reported maximum concentrations (Table VI), or both.

Proposed as a replacement background well for RD-06 (Boeing, 2009c), well RD-69 was scheduled for one year of quarterly groundwater sampling and analysis of constituents of concern and background monitoring parameters per the Post-Closure Permits beginning in the fourth quarter 2009.

NDMA was not detected in groundwater samples collected from well RD-69 (Table XIV). VOCs, 1,4-dioxane, and SVOCs were not detected in RD-69 groundwater (Tables VII, XI, and XIV).

Other constituents of concern in groundwater samples collected from background well RD-69 were less than detectable concentrations except for formaldehyde which at a concentration of 110 μg/L exceeded the California drinking water NL of 100 μg/L (Table XIV).

Background monitoring parameters in RD-69 groundwater (Table XI) did not exceed primary drinking water MCLs.

Verification samples scheduled at detection monitoring well RD-39A could not be collected during the year because the well did not contain sufficient water to collect representative samples. TCE was detected in the RD-39A groundwater sample at 1 μg/L during the first quarter 2007 (Haley & Aldrich, 2008). Verification sampling at RD-39A will be scheduled for the first quarter 2010 to determine if TCE is repeatable in consecutive groundwater samples.

Some detection monitoring and background wells were sampled for additional constituents as part of other monitoring programs, and those results are discussed in the respective sections within this report.

Under the 1995 Post-Closure Permits, Chatsworth Formation detection monitoring and background wells are scheduled to be monitored quarterly for VOCs and every five years for COCs.

2.2.2.3 Evaluation Monitoring Program/Interim Corrective Action Program

Concentrations of VOCs in groundwater samples collected from Chatsworth Formation evaluation monitoring wells and interim corrective action wells sampled during 2009 (Table VII) were within historical ranges except for first-time detected analytes (Table V), or analytes reported at concentrations above previously reported maximum concentrations (Table VI), or both.

Results of verification sampling conducted during 2009 are presented in Table XVIII. Verification sampling results indicated that

- Chloromethane was not detected in groundwater samples collected from evaluation monitoring wells RD-26 or RD-51B during the second quarter or subsequent quarters.

Per the Post-Closure Permits, samples collected from evaluation monitoring wells RD-06 and RD-37 were analyzed for Appendix IX constituents for the first time during the third quarter (Table XIII). Metals concentrations in RD-06 and RD-37 groundwater samples were below drinking water MCLs, NLs, and RALs.

Inorganic constituents were not detected in RD-06 and RD-37 groundwater samples except for the following first-time detected analytes (Table V):

- Cyanide was detected in a groundwater sample collected from evaluation monitoring well RD-06 for the first time during the third quarter. The concentration was below the California drinking water MCL. Verification samples scheduled for the analysis of cyanide at well RD-06 could not be collected during the fourth quarter because this well required maintenance. Verification samples (primary, duplicate, split, and field blank) will be

rescheduled for the first quarter 2010 to determine if the cyanide detection reported in the RD-06 groundwater sample during the third quarter 2009 are repeatable in consecutive groundwater samples.

- Sulfide was detected in groundwater samples collected from evaluation monitoring well RD-37 for the first time during the third quarter. Neither a drinking water MCL nor a California NL have been established for sulfide.

VOCs, SVOCs, and pesticides were not detected above method detection limits in samples collected from evaluation monitoring wells RD-06 and RD-37 during the third quarter except for the following first-time detected analytes (Table V):

- Gamma-BHC (Lindane) was detected in a groundwater sample collected from evaluation monitoring well RD-06 for the first time. The concentration was below the California drinking water MCL. Verification samples scheduled for the analysis of gamma-BHC at well RD-06 could not be collected during the fourth quarter because this well required maintenance. Verification samples (primary, duplicate, split, and field blank) will be rescheduled for the first quarter 2010 to determine if the gamma-BHC detection reported in the RD-06 groundwater sample during the third quarter is repeatable in consecutive groundwater samples.

- 2,4,5-TP (Silvex) was detected in a groundwater sample collected from evaluation monitoring well RD-37 for the first time. The concentration was below the California drinking water MCL. Results of verification sampling conducted during the fourth quarter indicated that 2,4,5-TP was not detected in groundwater samples collected from well RD-37 (Table XVIII).

- 1,4-Dioxane was detected in groundwater samples collected from evaluation monitoring well RD-37 for the first time. The concentrations were below the California drinking water NL.

- 1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD) was detected in a groundwater sample collected from evaluation monitoring well RD-37 for the first time. When converted to 2,3,7,8-Tetrachlorodibenzo-p-dioxin toxic equivalency (2,3,7,8-TCDD TEQ) (van den Berg et al., 2006), the concentration of the detected congener in the groundwater samples collected from RD-37 was less than the drinking water MCL of 30 picograms per liter (pg/L) for 2,3,7,8-TCDD. Results of verification sampling results conducted during the fourth quarter indicated that common laboratory contaminant OCDD was not detected in groundwater samples collected from well RD-37 (Table XVIII).

Under the 1995 Post-Closure Permits, evaluation monitoring wells and interim corrective action wells are scheduled to be monitored semiannually for VOCs and every five years for COCs.

2.2.2.4 Chatsworth Formation Operable Unit Constituents of Concern Analyses

As part of the ongoing CFOU investigation, quarterly groundwater sampling and analysis for constituents of concern was conducted at 26 wells located in seven areas: Canyon, Bowl, Alfa, Bravo, ELV/B204, Delta, and System Test Laboratory IV (STL

IV) (Figures 2 and 40). Groundwater samples for perchlorate analysis were also collected from these wells, although not part of the CFOU sampling plan.

During 2009, 25 of the 26 CFOU investigation wells were sampled for the analysis of COCs (Table XIV). RD-51A had insufficient water for sampling during the year.

Fluoride and nitrate concentrations were below drinking water MCLs of 2.0 mg/L and 45 mg/L, respectively, in groundwater samples collected from wells in the CFOU investigation during 2009. Formaldehyde concentrations were below the California drinking water NL of 100 μg/L. Ammonia concentrations detected in 2009 ranged up to 1.4 mg/L, which was detected in the RD-04 groundwater sample during the third quarter. Neither a drinking water MCL nor a California NL have been established for ammonia.

NDMA concentrations were within historical ranges in groundwater samples collected from CFOU investigation wells during 2009 except for concentrations above previously reported maximum concentrations reported in wells HAR-18 and WS-09 (Table VI). NDMA was detected at concentrations equal to or greater than the California drinking water NL of 0.01 μg/L in groundwater samples collected from wells HAR-07, HAR-08, HAR-18, HAR-20, RD-01, and RD-49B (Tables XI and XIV).

VOC concentrations, including 1,4-dioxane, were within historical ranges in groundwater collected from the CFOU investigation wells during the year (Table VII) except for first-time detected analytes (Table V), or analytes reported at concentrations above previously reported maximum concentrations (Table VI), or both:

- Chloromethane was detected in groundwater samples collected from evaluation monitoring well RD-51B and detection monitoring well RD-51C for the first time during the first quarter. Chloromethane was not detected in verification samples (primary, duplicate, split, and field blank) from wells RD-51B and RD-51C in the second quarter.

- Chloromethane was detected in groundwater samples collected from evaluation monitoring well RD-49C for the first time during the second quarter.

- cis-1,2-DCE was detected at new maximum concentrations in interim corrective action wells RD-04 and RD-09 during the third quarter.

- Vinyl chloride was detected at a new maximum concentration in interim corrective action well HAR-18 during the third quarter.

SVOCs were not detected in groundwater samples collected from CFOU investigation wells in 2009 with the exception of NDMA and the following SVOC detections (Table XI):

- Bis(2-ethylhexyl) phthalate, a common laboratory contaminant (USEPA, 2008), was detected in the groundwater samples collected from wells HAR-18, HAR-20, RD-01, RD-02, RD-49A, RD-49C, RD-58A, RD-58B, and WS-06 during the year. The California MCL for bis(2-ethylhexyl) phthalate is 4 μg/L. The laboratory contaminant detections of bis(2-ethylhexyl) phthalate were above this screening value.

- Phenol was detected in the groundwater sample collected from CFOU investigation well HAR-07 for the first time in the fourth quarter (Table V). The concentration was below the California Archived Advisory Level (AAL). Verification sampling (primary, duplicate, split, and field blank) will be scheduled for first quarter 2010 to determine if the phenol detection reported in the HAR-07 groundwater sample is repeatable in consecutive groundwater samples.

Perchlorate concentrations in groundwater samples collected from CFOU investigation wells during the year were within historical ranges (Table XII) except for first-time detected perchlorate (Table V), or perchlorate reported at concentrations above previously reported maximum concentrations (Table VI), or both:

- Perchlorate was detected in groundwater samples collected from well HAR-20 for the first time during the first quarter. The MCL for perchlorate is 6 μg/L. Perchlorate was not detected in follow-up samples (primary, duplicate, and split samples) collected during the second quarter.

2.2.2.5 Monitoring of Perimeter Wells and Private Off-Site Wells and Springs

Analytical results indicated that VOCs were not detected above the reporting limits in groundwater samples collected from perimeter wells and private off-site wells during 2009 (Table VII) with the following exception:

- Toluene was detected in the groundwater sample collected from the FLUTe system installed in perimeter well RD-50 at a concentration of 4.7 μg/L during the first quarter and 1.9 μg/L during the third quarter. Toluene was not detected in groundwater samples collected prior to FLUTe installation at well RD-50. The MCL for toluene is 150 μg/L.

NDMA was not detected in groundwater collected from private off-site well OS-28 during 2009 (Table XI). Results of analyses for cyanide and dissolved metals in groundwater samples collected during the year from perimeter wells were within historical ranges (Table X).

Results of analyses for isopropyl alcohol, DROs, and dissolved metals in groundwater samples collected from perimeter wells as part of SMOU RFI data gap investigations are discussed in Section 2.2.2.8.

2.2.2.6 Point of Compliance Program

Chatsworth Formation point of compliance wells HAR-07, HAR-16, and HAR-17 were sampled for annual Appendix IX monitoring during the second quarter 2009. Appendix IX analytical results are discussed in Section 2.2.3 and presented in Table XIII and Figures 38 and 39.

Results of verification sampling conducted during the year are presented in Table XVIII. Verification sampling results indicated that

- 1,2,3,4,6,7,8-HpCDF was not detected in groundwater samples collected from point of compliance well HAR-17 during the third quarter.

Under the 1995 Post-Closure Permits, point of compliance wells are scheduled for semiannual VOC sampling and analysis during the second and fourth quarters.

2.2.2.7 Chatsworth Formation Radiochemistry Analyses

During 2009, Chatsworth Formation groundwater samples were collected from select wells for the analysis of gross alpha and gross beta radioactivity, gamma-emitting radionuclides, Sr-90, tritium, and isotopic uranium (Table IX).

Results of analyses are compared to California drinking water MCLs for discussion purposes only. Groundwater at SSFL is not used as a drinking water supply.

During 2009, both unfiltered (total dissolved and suspended solids) and filtered (dissolved solids) samples were collected for analysis, except for tritium analyses. Unfiltered samples were collected for tritium analysis. Dissolved radionuclide samples were filtered using a 0.45 micron filter to remove suspended solids and preserved in the field prior to submittal to the laboratory for analysis. Total radionuclide samples were preserved in the field, but were not filtered.

A comparison was made of radionuclide detects in sample pairs where both the filtered and unfiltered samples from a well were analyzed during 2009. Sample pairs in which a radionuclide was detected in only the filtered or unfiltered sample, or was not detected in either sample, were not included in this analysis. Comparisons were made on the reported activity and did not include the error or a range of standard deviation. Filtering does not appear to result in any consistent reduction in sample activity. Additional pairs of filtered and unfiltered radionuclide detects would be required to conduct a robust statistical analysis.

	2009 Chatsworth Formation Groundwater Sample Count			
Radionuclide (detected in both the filtered and unfiltered samples)	Filtered activity < Unfiltered activity	Filtered activity = Unfiltered activity	Filtered activity > Unfiltered activity	Total
Gamma-emitting radionuclides	Not applicable			
Gross alpha	26	0	11	37
Gross beta	27	0	26	53
Strontium-90	Not applicable			
Tritium	Not applicable			
Uranium-233/234	1	0	2	3
Uranium-235	1	0	2	3
Uranium-238	1	0	2	3

Not applicable: Only unfiltered samples were collected for tritium analysis. For other radionuclides, detectable activity was not reported in both the filtered and unfiltered samples.

Groundwater samples were also collected for the analysis of radionuclide activities from the proposed extraction wells for Interim Measures in December 2009. These results will be reported separately.

Gross Alpha Activity

The gross alpha activities in Chatsworth Formation groundwater samples collected during 2009 were less than the drinking water MCL of 15 pCi/L when adjusted for uranium activities pursuant to EPA drinking water regulations (Federal Register, 2000). Uranium samples were not collected for fourth quarter WS-09 well. Gross alpha activities were within historical ranges except for first-time detected gross alpha (Table V), or gross alpha reported at activities above previously reported maximum activities (Table VI), or both. Calculations of adjusted gross alpha are presented in Table IX for samples where isotopic uranium activity and gross alpha activity were analyzed.

Gross Beta Activity

The gross beta activities in Chatsworth Formation groundwater samples collected during 2009 were less than the drinking water MCL of 50 pCi/L. Gross beta activities were within historical ranges except for first-time detected gross beta (Table V), or gross beta reported at activities above previously reported maximum activities (Table VI), or both.

Gamma Emitters

Gamma-emitting radionuclide activities were not detected in Chatsworth Formation groundwater samples collected during 2009 except for americium-241 in well RD-33B, potassium-40 in wells RD-15, RD-22, RD-33B, RD-34A, RD-34B, RD-63, and RD-64, and cesium-137 in wells RD-17, RD-23, and RD-27 during the first quarter (Haley & Aldrich, 2009b). After recount and data reduction, the Cs-137 results for RD-17, RD-23, and RD-27 were confirmed while the other results (K-40 and Am-241) were not detected above their respective minimum detectable activities (MDAs). The detected Cs-137 activities represented the first time Cs-137 has been detected in groundwater samples collected from each of these wells (Table V). The detections are not consistent with prior analyses, particularly the presence of gamma-emitters in the dissolved fraction. Groundwater samples were collected from RD-17, RD-23, and RD-27 in July 2009 and analyzed for gamma-emitting radionuclides, and Cs-137 was not detected in any sample. Changes were identified and reported in an errata issued for the first quarter 2009 report (Haley & Aldrich, 2010).

Tritium Activity

The tritium activities in Chatsworth Formation groundwater samples collected during 2009 were less than the drinking water MCL of 20,000 pCi/L and within the activity range of past samples collected from these wells (Haley & Aldrich, 2009a).

Strontium-90

Sr-90 activities were not detected in Chatsworth Formation groundwater samples collected during 2009 with the following exception:

- Sr-90 was detected in groundwater samples collected from well WS-09 for the first time during the fourth quarter (Table V). Concentrations were below California drinking water MCL. Eberline Services verified the initial sample results and confirmed that sample results were correctly reported. This sample was recounted three times and each recount confirmed the Sr-90 detect.

Validation also confirmed the Sr-90 detect. Verification sampling (primary, duplicate, split, and field blank) will be scheduled for first quarter 2010 to determine if the Sr-90 detection reported in the WS-09 groundwater sample is repeatable in consecutive groundwater samples.

Uranium

The sum of uranium isotope activities in Chatsworth Formation groundwater samples were detected at activities greater than the drinking water MCL of 20 pCi/L in groundwater samples collected from well RD-07 FLUTe port Z3 during the first and third quarters. The uranium isotope activities for all samples were within the activity range of past samples except for activities listed in Table VI. The uranium isotope activities in Chatsworth Formation groundwater samples collected during 2009 appeared to be naturally occurring uranium as indicated by the activity ratios of uranium-234:uranium-238 (U-234:U-238). Naturally occurring uranium (non-enriched and non-processed) has a U-234:U-238 activity ratio of approximately 1:1 (Federal Register, 2000).

2.2.2.8 Other Monitoring

Some Chatsworth Formation Facility wells sampled during the quarter were not perimeter wells, were not part of the CFOU investigation, nor the LUFT, detection monitoring, evaluation monitoring, interim corrective action, or point of compliance programs. These wells are not included in any prescribed monitoring program. Results of this monitoring are summarized in Section A through C below.

In support of the SMOU RFI program, groundwater samples were collected from Chatsworth Formation wells as part of the data gap investigation for SMOU Reporting as listed in Table IV. SMOU RFI monitoring results are summarized in Section B below.

Wells located in the vicinity of the ALFA test stands were monitored for LNAPL. Results are summarized in Section C below.

A. *Other Monitoring* - Results of analyses for VOCs, fuel hydrocarbons, and metals and cyanide are reported on Tables VII, VIII, and X, respectively.

Analytical results for VOCs, fuel hydrocarbons, metals, and cyanide were within historical ranges except for first-time detected analytes (Table V), or analytes reported at concentrations above previously reported maximum concentrations (Table VI), or both.

DTSC collected split samples for Chatsworth Formation well WS-09 during the third and fourth quarters for the analysis of VOCs including 1,4-dioxane, gross alpha, gross beta, tritium, Sr-90, filtered metals, hexavalent chromium, SVOCs, perchlorate, and dioxins and furans. Analytical results for WS-09 groundwater samples collected by Haley & Aldrich are reported in Tables VII, IX, X, XI, XII, and XVI. Analytical results for WS-09 were within historical ranges except for first-time detected analytes (Table V), or analytes reported at concentrations above previously reported maximum concentrations (Table VI), or both.

Results of analyses for dissolved and total iron and manganese collected at Chatsworth Formation well WS-09A during the third quarter for treatability investigations are reported on Table X.

B. *SMOU RFI Data Gap* - Groundwater samples were collected from Chatsworth Formation wells as part of the data gap investigations for SMOU RFI Reporting Groups as listed in Table IV. Results are summarized in Tables VII, VIII, X, XI, XII, XIV, XVI, and XVII.

Isopropyl alcohol, hexavalent chromium, SVOCs, PAHs, nitroaromatics, nitramines, NDMA, perchlorate, PCBs, and hydrazines were not detected (Tables VII, X, XI, XII, XVI, and XVII).

Where detected, formaldehyde concentrations were below the formaldehyde NL of 100 μg/L (Table XIV).

Results of analyses for VOCs are reported in Table VII. Results of analyses for DROs are reported in Table VIII.

Results for filtered metals analyzed for the SMOU RFI program were below MCLs and NLs except where indicated in Table X.

Arsenic was detected in the filtered groundwater sample collected from SMOU RFI well RD-44 for the first time during the fourth quarter (Table V). The concentration was below the California drinking water MCL. Verification sampling (primary, duplicate, split, and field blank) will be scheduled for first quarter 2010 to determine if the arsenic detection reported in the RD-44 groundwater sample is repeatable in consecutive groundwater samples.

Dioxins and furans were not detected in groundwater samples collected from RD-07 and RD-20 with the exceptions noted in Table XVI. When converted to 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) toxic equivalency (TEQ) (van den Berg et al., 2006), the concentrations of the detected dioxin and furan congeners in Chatsworth Formation groundwater samples were less than the drinking water MCL of 30 pg/L for 2,3,7,8-TCDD.

Some analytes were detected for the first time in the groundwater samples collected for the SMOU RFI data gaps investigation (Table V).

Concentrations of some analytes detected in Chatsworth Formation groundwater samples collected for the SMOU RFI program during the year were greater than previously reported concentrations (Table VI).

C. *LNAPL* - On 05 August 2009, light non-aqueous phase liquid (LNAPL) was measured in well RD-49A. The thickness was determined to be 0.03 feet at a depth of 25.80 to 25.83 feet below the measuring point. A sample of the LNAPL was collected and submitted to Lancaster Laboratories and analyzed for Total Petroleum Hydrocarbons by EPA method 8015.

Lancaster reported results in the following carbon ranges:

RD-49A LNAPL, 05 August 2009		
Carbon Range	Result (mg/L)	% of Total
C8-11	53 J	1.7%
C12-14	1200 J	38%
C15-20	1600 J	51%
C21-30	290 J	9.4%
C8-30	3100	---

J = Estimated value. Analyte is detected at a level less than the reporting limit and greater than or equal to the MDL.

The chemical composition suggests a middle distillate similar to jet fuel. Based on the chemical use in the area and distribution of petroleum hydrocarbons in soil samples in the vicinity of the ALFA test stands, the LNAPL is suspected to be liquid petroleum rocket propellant.

During the fourth quarter, measurements were made to determine if LNAPL was present in 13 wells and piezometers located in the vicinity of the ALFA test stands including HAR-09, HAR-11, PZ-049, PZ-059, PZ-060, PZ-061, PZ-070, PZ-153, PZ-154, PZ-155, PZ-156, RD-49A, and RS-08.

LNAPL was indicated in PZ-059 and RD-49A.

Well Identifier	Depth to LNAPL (feet)	Depth to Water (feet)	LNAPL Thickness (feet)
PZ-059	24.89	24.90	0.01
RD-49A	26.10	26.13	0.03

2.2.3 Appendix IX Sampling

During the second quarter 2009, the seven point of compliance wells (shallow wells SH-04, RS-08, HAR-14, and HAR-15; and Chatsworth Formation wells HAR-07, HAR-16, and HAR-17) were scheduled for sampling and analysis of Appendix IX constituents. Shallow wells SH-04 and RS-08 contained insufficient water for sampling (Table II). The point of compliance wells were also scheduled for semiannual sampling of VOCs during the fourth quarter.

Appendix IX analytical results are presented in Table XIII. Appendix IX analytical results for point of compliance wells were within historical ranges except for first-time detected analytes (Table V), or analytes reported at concentrations above previously reported maximum concentrations (Table VI), or both.

1,2,3,4,6,7,8-Heptachlorodibenzofuran (1,2,3,4,6,7,8-HpCDF) was detected for the first time in the duplicate groundwater sample collected from point of compliance well HAR-17 (Table V). When converted to 2,3,7,8-TCDD TEQ (van den Berg et al., 2006), the concentration of the detected furan congener in the groundwater samples collected from HAR-17 was less than the drinking water MCL of 30 pg/L for 2,3,7,8-TCDD. Verification sampling results conducted during the third quarter indicated that 1,2,3,4,6,7,8-HpCDF was not detected in groundwater samples collected from point of compliance well HAR-17.

Verification samples scheduled for the analysis of chlorinated pesticides at well SH-04 could not be collected during the year because this well did not contain sufficient water to collect

representative samples. Verification samples (primary, duplicate, split, and field blank) will be scheduled for the first quarter 2010 to determine if chlorinated pesticide detections reported in SH-04 groundwater samples during the second quarter 2008 are repeatable in consecutive groundwater samples (Haley & Aldrich, 2009a).

Per the 1995 Post-Closure Permits, the point of compliance wells are scheduled to be monitored annually for Appendix IX constituents and semiannually for VOCs.

Groundwater samples were also collected for the analysis of Appendix IX constituents from the extraction wells proposed for Interim Measures in December 2009. Results will be reported separately.

2.2.4 Results of 2009 Verification Sampling

Table XVIII summarizes the results of 2009 verification sampling and analyses.

Verification groundwater samples (primary, field duplicate, split, and field blank samples) were collected and analyzed during the year following detections of analytes in groundwater samples collected during prior quarters.

Verification sampling results indicated that the targeted constituents were not repeatable in consecutive groundwater samples.

2.2.5 Scheduled 2009 Verification Sampling

Table XVIII summarizes the scheduled 2009 verification and follow-up sampling groundwater monitoring schedule.

The schedule for quarterly groundwater monitoring complied with that specified in the 1995 Post-Closure Permits. Previous results indicated that additional sampling was to be scheduled to confirm if select constituents are detectable in groundwater samples.

2.2.6 Proposed First Quarter 2010 Groundwater Monitoring Schedule

Table XVIII summarizes the proposed first quarter 2010 verification and follow-up sampling groundwater monitoring schedule.

The schedule proposed for the first quarter 2010 groundwater monitoring complies with that specified in the 1995 Post-Closure Permits. The fourth quarter 2009 and previous results indicated that additional sampling be scheduled for the first quarter 2010 to confirm if select constituents are detectable in groundwater samples.

2.2.7 Quality Assurance and Quality Control

Appendix D presents the quality assurance assessment for 2009.

Boeing has performed additional quality assurance and quality control (QA/QC) analyses to assess the presence of NDMA in surface water and groundwater samples, laboratory-supplied trip blanks, field blanks, locally-supplied municipal drinking water, and method blanks.

The analytical results produced from this additional QA/QC sampling in the past indicated that NDMA was sometimes detected in QC samples at concentrations below the NL of 0.010 μg/L, but above the MDLs, indicative of the introduction of the compound from field sampling procedures or analytical laboratory processes, thus leading to false positive readings. To minimize the reporting of false positive readings, NDMA analytical results from EPA Method 1625M were previously presented at the reporting limit of 0.010 μg/L. Continuous process improvements in the field and laboratory procedures have reduced the magnitude and frequency of detects in QC samples. As a result, NDMA results from EPA Method 1625M are now presented at the reporting limit of 0.005 μg/L.

FLUTe systems are installed in wells RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50, RD-54A, RD-57, RD-64, and RD-65. Benzene, chlorobenzene, ethylbenzene, and toluene reported in groundwater samples collected from some of these wells may be chemicals introduced by FLUTe system components (Table VII). Groundwater samples collected from these wells prior to FLUTe installation using the procedures described in the SAP did not have detectable concentrations of these compounds (GWRC, 2000; Haley & Aldrich, 2001, 2002a, 2003a). Based on communication with FLUTe system designer Carl Keller, concentrations of benzene and toluene have been observed in groundwater samples collected with FLUTe systems at other sites and may be attributed to equipment components (Keller, personal communication, 2003). Potential FLUTe-equipment contaminants are qualified "F" for benzene and toluene, or "S" (Suspect) for chlorobenzene and ethylbenzene.

3. REMEDIAL SYSTEMS

3.1 Remedial Systems Activities

There are five permitted remedial systems (Alfa, Bravo, Delta, STL-IV, and WS-05 Area) at SSFL. None were in operation during 2009. The Area I Road and Canyon air-stripping units (ASUs) and the RD-09 ultraviolet (UV)/hydrogen peroxide system were placed on "stand-by" status in 2001 as part of a Post-Closure Permit modification granted by DTSC (DTSC, 2001). Operation of the Delta system was discontinued in August 2007, and operation of the WS-05 Area UV/hydrogen peroxide system was discontinued in December 2007. Construction permitting for a new treatment system was initiated in October 2007, and construction is slated for completion in 2010. Operational data for each permitted system during the quarter are presented in monthly reports from EnviroSolve Corporation (2009a through 2010b).

The shallow and Chatsworth Formation extraction wells were not in operation during the year. Cumulative groundwater extraction volumes and cumulative VOC mass removed by each treatment system through 2008 were previously summarized (Haley & Aldrich, 2009a). Cumulative extraction volume and VOC mass removal at each permitted system are presented in Appendix G, Figures G-1 to G-6.

Monthly groundwater level monitoring has been suspended at the inactive extraction wells.

In July 2008, Boeing, NASA, and DOE submitted a revised Work Plan to DTSC for groundwater Interim Measures at SSFL. The objective of the work plan is to comply with DTSC's requirements for conducting groundwater Interim Measures at SSFL as specified in the 16 May 2008 letter (DTSC, 2008a). Comments by DTSC on the Interim Measures work plan (MWH, 2008) were received in November 2008 (DTSC, 2008b). An addendum to the Interim Measures work plan was submitted on 30 January 2009 (Boeing, 2009a) and is pending review by DTSC.

4. SURFACE WATER DISCHARGE

Surface water discharge is regulated by NPDES permit No. CA-0001309. Discharge limits and results of water quality analyses of surface water samples collected at Outfalls 001 and 002 (Figure 40) during 2009 are presented in Appendix G, Tables G-I through G-VI. Discharge Monitoring Reports (DMR) for the SSFL NPDES outfalls are available at www.boeing.com\aboutus\environment\santa_susana\water_quality.html.

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TABLE I

SUMMARY OF ANNUAL RAINFALL
MEASURED AT THE SANTA SUSANA FIELD LABORATORY, 1960-2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Water Year Ending in	Precipitation (inches)	Water Year Ending in	Precipitation (inches)
1960	10.52	1985	9.64
1961	6.18	1986	23.55
1962	24.79	1987	6.27
1963	13.74	1988	17.75
1964	9.96	1989	9.46
1965	16.06	1990	8.38
1966	27.18	1991	15.10
1967	23.99	1992	32.21
1968	19.54	1993	36.23
1969	32.11	1994	12.52
1970	11.81	1995	29.91
1971	16.79	1996	21.81
1972	8.68	1997	15.44
1973	20.69	1998	41.24
1974	16.11	1999	8.84
1975	16.58	2000	12.07
1976	10.99	2001	17.05
1977	13.91	2002	5.70
1978	40.06	2003	25.65
1979	22.96	2004	16.93
1980	28.61	2005	28.60
1981	16.25	2006	21.97
1982	12.11	2007	6.15
1983	40.93	2008	15.72
1984	9.50	2009	10.80

Average Annual Precipitation (1960-2009) = 18.38 Inches

NOTE: Precipitation reported annually for the period of October of the prior year through September of the calendar year indicated. Precipitation was adjusted for Water Years 2001-2008 to be consistent with data reported by MWH in "Draft Site-Wide Groundwater Remedial Investigation Report, Santa Susana Field Laboratory, Ventura County, California." December 2009.

TABLE II
SUMMARY OF WATER LEVEL DATA, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
ECL Sump	Shallow	02/03/2009	1511.00	10.44	1500.56	
ECL Sump	Shallow	04/21/2009	1511.00	8.04	1502.96	
ECL Sump	Shallow	07/07/2009	1511.00	9.98	1501.02	
ECL Sump	Shallow	10/08/2009	1511.00	Dry	---	
ECL-FD	Shallow	02/03/2009	1525.00	Dry	---	
ECL-FD	Shallow	04/21/2009	1525.00	9.46	1515.54	
ECL-FD	Shallow	07/07/2009	1525.00	Dry	---	
ECL-FD	Shallow	10/08/2009	1525.00	Dry	---	
ES-01	Shallow	02/04/2009	1782.20	22.63	1759.57	
ES-01	Shallow	04/22/2009	1782.20	21.59	1760.61	
ES-01	Shallow	07/08/2009	1782.20	22.16	1760.04	
ES-01	Shallow	10/06/2009	1782.20	23.72	1758.48	
ES-02	Shallow	02/04/2009	1814.60	Dry	---	
ES-02	Shallow	04/23/2009	1814.60	Dry	---	
ES-02	Shallow	07/08/2009	1814.60	Dry	---	
ES-02	Shallow	10/07/2009	1814.60	Dry	---	
ES-03	Shallow	02/04/2009	1783.39	24.56	1758.83	
ES-03	Shallow	04/22/2009	1783.39	22.79	1760.60	
ES-03	Shallow	07/08/2009	1783.39	23.84	1759.55	
ES-03	Shallow	10/06/2009	1783.39	25.49	1757.90	
ES-04	Shallow	02/04/2009	1817.24	Dry	---	
ES-04	Shallow	04/23/2009	1817.24	Dry	---	
ES-04	Shallow	07/08/2009	1817.24	Dry	---	
ES-04	Shallow	10/07/2009	1817.24	Dry	---	
ES-05	Shallow	02/04/2009	1818.13	Dry	---	
ES-05	Shallow	04/23/2009	1818.13	Dry	---	
ES-05	Shallow	07/08/2009	1818.13	Dry	---	
ES-05	Shallow	10/07/2009	1818.13	Dry	---	
ES-06	Shallow	02/06/2009	1825.41	Dry	---	
ES-06	Shallow	04/22/2009	1825.41	24.68	1800.73	
ES-06	Shallow	07/08/2009	1825.41	24.37	1801.04	
ES-06	Shallow	10/07/2009	1825.41	Dry	---	
ES-07	Shallow	02/06/2009	1826.53	Dry	---	
ES-07	Shallow	04/22/2009	1826.53	Dry	---	
ES-07	Shallow	07/08/2009	1826.53	Dry	---	
ES-07	Shallow	10/07/2009	1826.53	Dry	---	
ES-08	Shallow	02/06/2009	1826.60	Dry	---	
ES-08	Shallow	04/22/2009	1826.60	Dry	---	
ES-08	Shallow	07/08/2009	1826.60	Dry	---	
ES-08	Shallow	10/07/2009	1826.60	Dry	---	
ES-09	Shallow	02/06/2009	1827.80	Dry	---	
ES-09	Shallow	04/22/2009	1827.80	Dry	---	
ES-09	Shallow	07/08/2009	1827.80	Dry	---	
ES-09	Shallow	10/07/2009	1827.80	Dry	---	
ES-10	Shallow	02/06/2009	1829.46	20.75	1808.71	
ES-10	Shallow	04/22/2009	1829.46	Dry	---	
ES-10	Shallow	07/08/2009	1829.46	20.77	1808.69	
ES-10	Shallow	10/07/2009	1829.46	20.88	1808.58	
ES-11	Shallow	02/06/2009	1835.07	Dry	---	
ES-11	Shallow	04/22/2009	1835.07	Dry	---	
ES-11	Shallow	07/08/2009	1835.07	Dry	---	
ES-11	Shallow	10/07/2009	1835.07	Dry	---	

See last page of table for notes and abbreviations.

TABLE II
SUMMARY OF WATER LEVEL DATA, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
ES-12	Shallow	02/06/2009	1838.19	23.88	1814.31	
ES-12	Shallow	04/22/2009	1838.19	21.02	1817.17	
ES-12	Shallow	07/08/2009	1838.19	Dry	---	
ES-12	Shallow	10/07/2009	1838.19	Dry	---	
ES-13	Shallow	02/04/2009	1782.58	20.61	1761.97	
ES-13	Shallow	04/22/2009	1782.58	18.97	1763.61	
ES-13	Shallow	07/08/2009	1782.58	19.78	1762.80	
ES-13	Shallow	10/06/2009	1782.58	21.15	1761.43	
ES-14	Shallow	02/04/2009	1728.69	Dry	---	
ES-14	Shallow	04/21/2009	1728.69	22.69	1706.00	
ES-14	Shallow	07/07/2009	1728.69	24.08	1704.61	
ES-14	Shallow	10/08/2009	1728.69	Dry	---	
ES-15	Shallow	02/06/2009	1730.21	Dry	---	
ES-15	Shallow	04/21/2009	1730.21	24.02	1706.19	
ES-15	Shallow	07/07/2009	1730.21	Dry	---	
ES-15	Shallow	10/08/2009	1730.21	Dry	---	
ES-16	Shallow	02/04/2009	1737.90	Dry	---	
ES-16	Shallow	04/21/2009	1737.90	23.01	1714.89	
ES-16	Shallow	07/07/2009	1737.90	Dry	---	
ES-16	Shallow	10/08/2009	1737.90	Dry	---	
ES-17	Shallow	02/04/2009	1739.31	26.02	1713.29	
ES-17	Shallow	04/21/2009	1739.31	20.76	1718.55	
ES-17	Shallow	07/07/2009	1739.31	24.63	1714.68	
ES-17	Shallow	10/08/2009	1739.31	29.47	1709.84	
ES-18	Shallow	02/03/2009	1770.25	Dry	---	
ES-18	Shallow	04/21/2009	1770.25	Dry	---	
ES-18	Shallow	07/07/2009	1770.25	Dry	---	
ES-18	Shallow	10/06/2009	1770.25	Dry	---	
ES-19	Shallow	02/03/2009	1769.44	Dry	---	
ES-19	Shallow	04/21/2009	1769.44	Dry	---	
ES-19	Shallow	07/07/2009	1769.44	Dry	---	
ES-19	Shallow	10/06/2009	1769.44	Dry	---	
ES-20	Shallow	02/03/2009	1770.58	Dry	---	
ES-20	Shallow	04/21/2009	1770.58	Dry	---	
ES-20	Shallow	07/07/2009	1770.58	Dry	---	
ES-20	Shallow	10/06/2009	1770.58	Dry	---	
ES-21	Shallow	02/03/2009	1769.62	29.83	1739.79	
ES-21	Shallow	04/21/2009	1769.62	29.69	1739.93	
ES-21	Shallow	07/09/2009	1769.62	30.68	1738.94	
ES-21	Shallow	10/06/2009	1769.62	32.18	1737.44	
ES-22	Shallow	02/03/2009	1770.93	30.88	1740.05	
ES-22	Shallow	04/21/2009	1770.93	31.01	1739.92	
ES-22	Shallow	07/09/2009	1770.93	31.90	1739.03	
ES-22	Shallow	10/06/2009	1770.93	33.23	1737.70	
ES-23	Shallow	02/04/2009	1760.73	10.87	1749.86	
ES-23	Shallow	04/21/2009	1760.73	10.41	1750.32	
ES-23	Shallow	07/07/2009	1760.73	11.92	1748.81	
ES-23	Shallow	10/08/2009	1760.73	13.46	1747.27	

See last page of table for notes and abbreviations.

TABLE II
SUMMARY OF WATER LEVEL DATA, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
ES-24	Shallow	02/04/2009	1728.67	28.95	1699.72	
ES-24	Shallow	04/21/2009	1728.67	24.48	1704.19	
ES-24	Shallow	07/07/2009	1728.67	27.20	1701.47	
ES-24	Shallow	10/08/2009	1728.67	Dry	---	
ES-25	Shallow	02/04/2009	1737.78	Dry	---	
ES-25	Shallow	04/21/2009	1737.78	Dry	---	
ES-25	Shallow	07/07/2009	1737.78	Dry	---	
ES-25	Shallow	10/08/2009	1737.78	Dry	---	
ES-26	Shallow	02/04/2009	1748.01	Dry	---	
ES-26	Shallow	04/21/2009	1748.01	18.30	1729.71	
ES-26	Shallow	07/07/2009	1748.01	22.35	1725.66	
ES-26	Shallow	10/08/2009	1748.01	30.90	1717.11	
ES-27	Shallow	02/04/2009	1740.67	26.32	1714.35	
ES-27	Shallow	04/21/2009	1740.67	20.06	1720.61	
ES-27	Shallow	07/07/2009	1740.67	24.58	1716.09	
ES-27	Shallow	10/08/2009	1740.67	30.21	1710.46	
ES-28	Shallow	02/04/2009	1759.15	10.05	1749.10	
ES-28	Shallow	04/21/2009	1759.15	9.63	1749.52	
ES-28	Shallow	07/07/2009	1759.15	10.98	1748.17	
ES-28	Shallow	10/08/2009	1759.15	12.42	1746.73	
ES-29	Shallow	02/04/2009	1760.47	10.93	1749.54	
ES-29	Shallow	04/21/2009	1760.47	10.51	1749.96	
ES-29	Shallow	07/07/2009	1760.47	11.91	1748.56	
ES-29	Shallow	10/08/2009	1760.47	13.31	1747.16	
ES-30	Shallow	02/04/2009	1759.51	10.88	1748.63	
ES-30	Shallow	04/21/2009	1759.51	10.33	1749.18	
ES-30	Shallow	07/07/2009	1759.51	11.79	1747.72	
ES-30	Shallow	10/08/2009	1759.51	13.30	1746.21	
ES-31	Shallow	02/04/2009	1787.01	19.27	1767.74	
ES-31	Shallow	04/22/2009	1787.01	15.73	1771.28	
ES-31	Shallow	07/07/2009	1787.01	18.01	1769.00	
ES-31	Shallow	10/07/2009	1787.01	20.79	1766.22	
ES-32	Shallow	02/04/2009	1740.65	Dry	---	
ES-32	Shallow	04/21/2009	1740.65	Dry	---	
ES-32	Shallow	07/07/2009	1740.65	Dry	---	
ES-32	Shallow	10/08/2009	1740.65	Dry	---	
HAR-01	Chatsworth	02/06/2009	1874.13	60.65	1813.48	(C)
HAR-01	Chatsworth	04/22/2009	1874.13	61.35	1812.78	(C)
HAR-01	Chatsworth	07/08/2009	1874.13	61.85	1812.28	(C)
HAR-01	Chatsworth	10/07/2009	1874.13	62.91	1811.22	(C)
HAR-02	Shallow	02/06/2009	1886.38	Dry	---	
HAR-02	Shallow	04/20/2009	1886.38	Dry	---	
HAR-02	Shallow	07/08/2009	1886.38	Dry	---	
HAR-02	Shallow	10/07/2009	1886.38	Dry	---	
HAR-03	Shallow	02/06/2009	1875.48	Dry	---	
HAR-03	Shallow	04/20/2009	1875.48	21.02	1854.46	
HAR-03	Shallow	07/08/2009	1875.48	Dry	---	
HAR-03	Shallow	10/07/2009	1875.48	Dry	---	

See last page of table for notes and abbreviations.

TABLE II
SUMMARY OF WATER LEVEL DATA, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
HAR-04	Shallow	02/06/2009	1873.40	23.60	1849.80	
HAR-04	Shallow	04/20/2009	1873.40	20.16	1853.24	
HAR-04	Shallow	07/08/2009	1873.40	21.59	1851.81	(C)
HAR-04	Shallow	10/07/2009	1873.40	23.29	1850.11	(C)
HAR-05	Chatsworth	02/04/2009	1812.65	32.54	1780.11	
HAR-05	Chatsworth	04/21/2009	1812.65	28.44	1784.21	
HAR-05	Chatsworth	07/07/2009	1812.65	30.63	1782.02	
HAR-05	Chatsworth	10/07/2009	1812.65	34.42	1778.23	
HAR-06	Chatsworth	02/04/2009	1815.03	32.62	1782.41	
HAR-06	Chatsworth	04/21/2009	1815.03	28.45	1786.58	
HAR-06	Chatsworth	07/07/2009	1815.03	30.10	1784.93	
HAR-06	Chatsworth	10/07/2009	1815.03	34.16	1780.87	
HAR-07	Chatsworth	02/04/2009	1728.38	76.44	1651.94	
HAR-07	Chatsworth	04/22/2009	1728.38	73.19	1655.19	
HAR-07	Chatsworth	07/07/2009	1728.38	75.15	1653.23	
HAR-07	Chatsworth	10/08/2009	1728.38	77.19	1651.19	
HAR-08	Chatsworth	02/04/2009	1730.75	57.56	1673.19	
HAR-08	Chatsworth	04/22/2009	1730.75	56.30	1674.45	
HAR-08	Chatsworth	07/07/2009	1730.75	58.05	1672.70	
HAR-08	Chatsworth	10/08/2009	1730.75	60.40	1670.35	
HAR-09	Shallow	02/03/2009	1820.62	17.91	1802.71	
HAR-09	Shallow	04/21/2009	1820.62	12.26	1808.36	
HAR-09	Shallow	07/07/2009	1820.62	14.79	1805.83	
HAR-09	Shallow	10/06/2009	1820.62	17.89	1802.73	
HAR-11	Shallow	02/03/2009	1827.90	21.74	1806.16	
HAR-11	Shallow	04/21/2009	1827.90	15.18	1812.72	
HAR-11	Shallow	07/07/2009	1827.90	17.70	1810.20	
HAR-11	Shallow	10/06/2009	1827.90	20.59	1807.31	
HAR-12	Shallow	02/04/2009	1796.73	20.13	1776.60	
HAR-12	Shallow	04/23/2009	1796.73	15.72	1781.01	
HAR-12	Shallow	07/07/2009	1796.73	18.43	1778.30	
HAR-12	Shallow	10/07/2009	1796.73	21.58	1775.15	
HAR-13	Shallow	02/04/2009	1801.18	23.86	1777.32	
HAR-13	Shallow	04/23/2009	1801.18	20.08	1781.10	
HAR-13	Shallow	07/07/2009	1801.18	22.40	1778.78	
HAR-13	Shallow	10/07/2009	1801.18	25.31	1775.87	
HAR-14	Shallow	02/04/2009	1797.02	19.94	1777.08	
HAR-14	Shallow	04/21/2009	1797.02	16.13	1780.89	
HAR-14	Shallow	07/07/2009	1797.02	18.51	1778.51	
HAR-14	Shallow	10/07/2009	1797.02	21.31	1775.71	
HAR-15	Shallow	02/04/2009	1809.69	27.36	1782.33	
HAR-15	Shallow	04/21/2009	1809.69	23.50	1786.19	
HAR-15	Shallow	07/07/2009	1809.69	25.77	1783.92	
HAR-15	Shallow	10/07/2009	1809.69	19.50	1790.19	
HAR-16	Chatsworth	02/06/2009	1872.31	57.98	1814.33	
HAR-16	Chatsworth	04/20/2009	1872.31	57.93	1814.38	
HAR-16	Chatsworth	07/08/2009	1872.31	58.60	1813.71	
HAR-16	Chatsworth	10/07/2009	1872.31	59.76	1812.55	
HAR-17	Chatsworth	02/04/2009	1711.59	24.33	1687.26	
HAR-17	Chatsworth	04/21/2009	1711.59	20.76	1690.83	
HAR-17	Chatsworth	07/07/2009	1711.59	23.59	1688.00	
HAR-17	Chatsworth	10/08/2009	1711.59	29.10	1682.49	

See last page of table for notes and abbreviations.

TABLE II
SUMMARY OF WATER LEVEL DATA, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
HAR-18	Chatsworth	02/04/2009	1749.41	29.02	1720.39	
HAR-18	Chatsworth	04/21/2009	1749.41	28.66	1720.75	
HAR-18	Chatsworth	07/07/2009	1749.41	29.54	1719.87	
HAR-18	Chatsworth	10/08/2009	1749.41	32.35	1717.06	
HAR-19	Chatsworth	02/03/2009	1833.42	189.05	1644.37	
HAR-19	Chatsworth	04/21/2009	1833.42	187.66	1645.76	
HAR-19	Chatsworth	07/07/2009	1833.42	188.29	1645.13	
HAR-19	Chatsworth	10/06/2009	1833.42	187.96	1645.46	
HAR-20	Chatsworth	02/03/2009	1830.47	186.73	1643.74	
HAR-20	Chatsworth	04/21/2009	1830.47	185.67	1644.80	
HAR-20	Chatsworth	07/07/2009	1830.47	185.61	1644.86	
HAR-20	Chatsworth	10/06/2009	1830.47	185.41	1645.06	
HAR-21	Chatsworth	02/03/2009	1821.30	16.91	1804.39	
HAR-21	Chatsworth	04/21/2009	1821.30	11.80	1809.50	
HAR-21	Chatsworth	07/07/2009	1821.30	14.47	1806.83	
HAR-21	Chatsworth	10/06/2009	1821.30	17.73	1803.57	
HAR-22	Chatsworth	02/03/2009	1816.41	38.24	1778.17	
HAR-22	Chatsworth	04/22/2009	1816.41	35.44	1780.97	
HAR-22	Chatsworth	07/07/2009	1816.41	37.10	1779.31	
HAR-22	Chatsworth	10/06/2009	1816.41	40.08	1776.33	
HAR-23	Chatsworth	02/04/2009	1805.87	28.02	1777.85	
HAR-23	Chatsworth	04/21/2009	1805.87	23.82	1782.05	
HAR-23	Chatsworth	07/08/2009	1805.87	25.97	1779.90	
HAR-23	Chatsworth	10/07/2009	1805.87	28.06	1777.81	
HAR-24	Chatsworth	02/06/2009	1906.89	92.09	1814.80	
HAR-24	Chatsworth	04/20/2009	1906.89	92.32	1814.57	
HAR-24	Chatsworth	07/08/2009	1906.89	92.95	1813.94	
HAR-24	Chatsworth	10/08/2009	1906.89	93.92	1812.97	
HAR-25	Chatsworth	02/06/2009	1889.75	72.69	1817.06	
HAR-25	Chatsworth	04/20/2009	1889.75	72.78	1816.97	
HAR-25	Chatsworth	07/08/2009	1889.75	74.62	1815.13	
HAR-25	Chatsworth	10/07/2009	1889.75	74.83	1814.92	
HAR-26	Chatsworth	02/03/2009	1763.23	24.83	1738.40	
HAR-26	Chatsworth	04/21/2009	1763.23	21.43	1741.80	
HAR-26	Chatsworth	07/07/2009	1763.23	24.17	1739.06	
HAR-26	Chatsworth	10/08/2009	1763.23	25.78	1737.45	
HAR-27	Shallow	02/04/2009	1719.39	31.50	1687.89	
HAR-27	Shallow	04/22/2009	1719.39	30.02	1689.37	
HAR-27	Shallow	07/08/2009	1719.39	32.43	1686.96	
HAR-27	Shallow	10/08/2009	1719.39	34.24	1685.15	
HAR-28	Shallow	02/04/2009	1720.17	31.38	1688.79	
HAR-28	Shallow	04/22/2009	1720.17	30.12	1690.05	
HAR-28	Shallow	07/08/2009	1720.17	32.08	1688.09	
HAR-28	Shallow	10/08/2009	1720.17	33.78	1686.39	
HAR-29	Shallow	02/04/2009	1724.13	31.62	1692.51	
HAR-29	Shallow	04/22/2009	1724.13	32.78	1691.35	
HAR-29	Shallow	07/08/2009	1724.13	39.47	1684.66	
HAR-29	Shallow	10/08/2009	1724.13	38.43	1685.70	
HAR-30	Shallow	02/04/2009	1806.47	18.72	1787.75	
HAR-30	Shallow	04/21/2009	1806.47	18.64	1787.83	
HAR-30	Shallow	07/07/2009	1806.47	Dry	---	
HAR-30	Shallow	10/07/2009	1806.47	Dry	---	

See last page of table for notes and abbreviations.

TABLE II
SUMMARY OF WATER LEVEL DATA, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
HAR-31	Shallow	02/04/2009	1812.45	32.48	1779.97	
HAR-31	Shallow	04/21/2009	1812.45	28.48	1783.97	
HAR-31	Shallow	07/07/2009	1812.45	30.98	1781.47	
HAR-31	Shallow	10/07/2009	1812.45	34.66	1777.79	
HAR-32	Shallow	02/04/2009	1736.58	28.97	1707.61	
HAR-32	Shallow	04/21/2009	1736.58	20.39	1716.19	
HAR-32	Shallow	07/07/2009	1736.58	25.26	1711.32	
HAR-32	Shallow	10/08/2009	1736.58	33.36	1703.22	
HAR-33	Shallow	02/04/2009	1744.66	28.64	1716.02	
HAR-33	Shallow	04/21/2009	1744.66	23.15	1721.51	
HAR-33	Shallow	07/07/2009	1744.66	26.14	1718.52	
HAR-33	Shallow	10/08/2009	1744.66	32.08	1712.58	
HAR-34	Shallow	02/04/2009	1751.17	Dry	---	
HAR-34	Shallow	04/21/2009	1751.17	Dry	---	
HAR-34	Shallow	07/07/2009	1751.17	Dry	---	
HAR-34	Shallow	10/08/2009	1751.17	Dry	---	
OS-24	Chatsworth	02/02/2009	1947.30	UTM	---	(*)
OS-24	Chatsworth	04/22/2009	1947.30	UTM	---	(*)
OS-24	Chatsworth	07/07/2009	1947.30	UTM	---	(*)
OS-24	Chatsworth	10/08/2009	1947.30	UTM		(*)
OS-25	Chatsworth	02/05/2009	2043.58	467.21	1576.37	
OS-25	Chatsworth	04/22/2009	2043.58	463.64	1579.94	
OS-25	Chatsworth	07/07/2009	2043.58	463.00	1580.58	
OS-25	Chatsworth	10/08/2009	2043.58	463.11	1580.47	
OS-26	Chatsworth	02/05/2009	2080.58	228.08	1852.50	
OS-26	Chatsworth	04/22/2009	2080.58	230.07	1850.51	
OS-26	Chatsworth	07/07/2009	2080.58	232.16	1848.42	
OS-26	Chatsworth	10/08/2009	2080.58	234.93	1845.65	
PZ-004A	Shallow	02/04/2009	1716.00	13.41	1702.59	
PZ-004A	Shallow	04/22/2009	1716.00	17.62	1698.38	
PZ-004B	Shallow	02/04/2009	1715.89	33.14	1682.75	
PZ-004B	Shallow	04/22/2009	1715.89	33.26	1682.63	
PZ-006A	Shallow	02/04/2009	1765.82	Dry	---	
PZ-006A	Shallow	04/21/2009	1765.82	Dry	---	
PZ-006A	Shallow	07/07/2009	1765.82	Dry	---	
PZ-006A	Shallow	10/08/2009	1765.82	Dry	---	
PZ-006C	Shallow	02/04/2009	1765.82	10.18	1755.64	
PZ-006C	Shallow	04/21/2009	1765.82	9.36	1756.46	
PZ-006C	Shallow	07/07/2009	1765.82	11.18	1754.64	
PZ-006C	Shallow	10/08/2009	1765.82	13.68	1752.14	
PZ-006D	Shallow	02/04/2009	1765.82	11.66	1754.16	
PZ-006D	Shallow	04/21/2009	1765.82	9.30	1756.52	
PZ-006D	Shallow	07/07/2009	1765.82	11.07	1754.75	
PZ-006D	Shallow	10/08/2009	1765.82	13.41	1752.41	
PZ-006E	Shallow	02/04/2009	1765.82	12.37	1753.45	
PZ-006E	Shallow	04/21/2009	1765.82	9.97	1755.85	
PZ-006E	Shallow	07/07/2009	1765.82	11.24	1754.58	
PZ-006E	Shallow	10/08/2009	1765.82	13.71	1752.11	
PZ-016	Shallow	04/23/2009	1854.34	Dry	---	
PZ-016A	Shallow	02/05/2009	1854.34	Dry	---	
PZ-016B	Shallow	02/05/2009	1854.34	Dry	---	
PZ-016C	Shallow	02/05/2009	1854.34	Dry	---	

See last page of table for notes and abbreviations.

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SUMMARY OF WATER LEVEL DATA, 2009
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VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
PZ-016D	Shallow	02/05/2009	1854.34	Dry	---	
PZ-016E	Shallow	02/05/2009	1854.34	51.23	1803.11	
PZ-016F	Shallow	02/05/2009	1854.34	Dry	---	
PZ-016G	Shallow	02/05/2009	1854.34	Dry	---	
PZ-019	Shallow	02/03/2009	1776.77	Dry	---	
PZ-019	Shallow	04/21/2009	1776.77	31.63	1745.14	
PZ-019	Shallow	07/07/2009	1776.77	31.52	1745.25	
PZ-023	Shallow	02/04/2009	1758.96	Dry	---	
PZ-023	Shallow	04/21/2009	1758.96	17.48	1741.48	
PZ-023	Shallow	07/07/2009	1758.96	19.19	1739.77	
PZ-023	Shallow	10/08/2009	1758.96	Dry	---	
PZ-024	Shallow	02/04/2009	1770.30	Dry	---	
PZ-024	Shallow	04/21/2009	1770.30	25.31	1744.99	
PZ-024	Shallow	07/07/2009	1770.30	Dry	---	
PZ-024	Shallow	10/08/2009	1770.30	Dry	---	
PZ-025	Shallow	02/03/2009	1780.27	16.12	1764.15	
PZ-025	Shallow	04/21/2009	1780.27	19.21	1761.06	
PZ-025	Shallow	07/07/2009	1780.27	20.45	1759.82	
PZ-025	Shallow	10/08/2009	1780.27	22.27	1758.00	
PZ-026	Shallow	02/05/2009	1755.75	21.37	1734.38	
PZ-026	Shallow	04/21/2009	1755.75	15.62	1740.13	
PZ-026	Shallow	07/07/2009	1755.75	19.99	1735.76	
PZ-026	Shallow	10/08/2009	1755.75	22.30	1733.45	
PZ-027	Shallow	02/03/2009	1773.06	19.48	1753.58	
PZ-027	Shallow	04/21/2009	1773.06	16.98	1756.08	
PZ-027	Shallow	07/07/2009	1773.06	18.81	1754.25	
PZ-027	Shallow	10/08/2009	1773.06	21.42	1751.64	
PZ-028	Shallow	02/03/2009	1788.47	35.69	1752.78	
PZ-028	Shallow	04/21/2009	1788.47	36.29	1752.18	
PZ-028	Shallow	07/07/2009	1788.47	36.78	1751.69	
PZ-028	Shallow	10/08/2009	1788.47	Dry	---	
PZ-042	Shallow	02/04/2009	1729.25	Dry	---	
PZ-042	Shallow	04/22/2009	1729.25	32.73	1696.52	
PZ-043	Shallow	02/03/2009	1776.63	Dry	---	
PZ-043	Shallow	04/22/2009	1776.63	43.73	1732.90	
PZ-045	Shallow	02/03/2009	1828.55	Dry	---	
PZ-045	Shallow	04/22/2009	1828.55	43.05	1785.50	
PZ-046	Shallow	02/03/2009	1826.87	Dry	---	
PZ-046	Shallow	04/22/2009	1826.87	Dry	---	
PZ-047	Shallow	02/03/2009	1835.51	Dry	---	
PZ-047	Shallow	04/22/2009	1835.51	38.66	1796.85	
PZ-048	Shallow	02/03/2009	1847.11	15.22	1831.89	
PZ-048	Shallow	04/22/2009	1847.11	10.58	1836.53	
PZ-049	Shallow	04/22/2009	1884.75	Dry	---	
PZ-049	Shallow	07/09/2009	1884.75	Dry	---	
PZ-050	Shallow	02/04/2009	1765.50	11.35	1754.15	
PZ-050	Shallow	04/21/2009	1765.50	10.59	1754.91	
PZ-050	Shallow	07/07/2009	1765.50	12.00	1753.50	
PZ-050	Shallow	10/08/2009	1765.50	13.45	1752.05	
PZ-056	Shallow	02/05/2009	1805.86	Dry	---	
PZ-056	Shallow	04/22/2009	1805.86	29.98	1775.88	

See last page of table for notes and abbreviations.

TABLE II
SUMMARY OF WATER LEVEL DATA, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
PZ-057	Shallow	04/22/2009	1812.19	24.82	1787.37	
PZ-057	Shallow	07/07/2009	1812.19	24.93	1787.26	
PZ-058	Shallow	04/22/2009	1784.63	10.91	1773.72	
PZ-058	Shallow	07/08/2009	1784.63	15.64	1768.99	
PZ-059	Shallow	10/07/2009	1836.67	24.90	1811.77	
PZ-060	Shallow	04/22/2009	1868.90	44.45	1824.45	
PZ-060	Shallow	07/09/2009	1868.90	Dry	---	
PZ-062	Shallow	02/04/2009	1716.57	Dry	---	
PZ-062	Shallow	04/21/2009	1716.57	27.01	1689.56	
PZ-062	Shallow	07/08/2009	1716.57	26.98	1689.59	
PZ-062	Shallow	10/07/2009	1716.57	27.00	1689.57	
PZ-067B	Shallow	02/06/2009	1909.06	61.75	1847.31	
PZ-067B	Shallow	04/22/2009	1909.06	Dry	---	
PZ-068	Shallow	02/06/2009	1894.02	Dry	---	
PZ-068	Shallow	04/22/2009	1894.02	Dry	---	
PZ-070	Shallow	04/21/2009	1834.61	Dry	---	
PZ-070	Shallow	07/07/2009	1834.61	26.66	1807.95	
PZ-071	Shallow	04/22/2009	1817.94	17.50	1800.44	
PZ-071	Shallow	07/07/2009	1817.94	20.74	1797.20	
PZ-075	Shallow	02/06/2009	1893.10	Dry	---	
PZ-075	Shallow	04/27/2009	1893.10	Dry	---	
PZ-076	Shallow	10/06/2009	1767.09	43.18	1723.91	
PZ-077	Shallow	10/08/2009	1753.42	27.79	1725.63	
PZ-078	Shallow	10/09/2009	1755.77	Dry	---	
PZ-079	Shallow	10/06/2009	1776.66	25.97	1750.69	
PZ-080	Shallow	10/06/2009	1813.15	33.57	1779.58	
PZ-082	Shallow	10/06/2009	1798.08	23.32	1774.76	
PZ-084	Shallow	10/06/2009	1836.00	UTM	---	(*)
PZ-085A	Shallow	10/06/2009	1816.79	UTM	---	(*)
PZ-085B	Shallow	10/06/2009	1816.81	UTM	---	(*)
PZ-087A	Shallow	10/06/2009	1817.15	UTM	---	(*)
PZ-087B	Shallow	10/06/2009	1816.23	UTM	---	(*)
PZ-091	Shallow	10/06/2009	1788.84	25.63	1763.21	
PZ-095	Shallow	02/04/2009	1760.02	Dry	---	
PZ-095	Shallow	04/21/2009	1760.02	27.57	1732.45	
PZ-095	Shallow	07/08/2009	1760.02	27.50	1732.52	
PZ-095	Shallow	10/07/2009	1760.02	27.60	1732.42	
PZ-096	Shallow	02/04/2009	1766.30	Dry	---	
PZ-096	Shallow	04/22/2009	1766.30	47.78	1718.52	
PZ-100	Shallow	02/02/2009	1870.11	15.08	1855.03	
PZ-100	Shallow	04/21/2009	1870.11	14.94	1855.17	
PZ-101	Shallow	02/02/2009	1869.71	22.88	1846.83	
PZ-101	Shallow	04/21/2009	1869.71	Dry	---	
PZ-102	Shallow	02/02/2009	1827.78	60.51	1767.27	
PZ-102	Shallow	04/21/2009	1827.78	Dry	---	
PZ-103	Shallow	02/03/2009	1815.93	26.87	1789.06	
PZ-103	Shallow	04/21/2009	1815.93	26.24	1789.69	
PZ-103	Shallow	07/07/2009	1815.93	27.42	1788.51	
PZ-103	Shallow	10/07/2009	1815.93	28.60	1787.33	

See last page of table for notes and abbreviations.

TABLE II
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BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
PZ-104	Shallow	02/03/2009	1797.47	23.13	1774.34	
PZ-104	Shallow	04/22/2009	1797.47	22.53	1774.94	
PZ-104	Shallow	07/07/2009	1797.47	23.14	1774.33	
PZ-104	Shallow	10/09/2009	1797.47	24.78	1772.69	
PZ-105	Shallow	02/03/2009	1803.87	19.39	1784.48	
PZ-105	Shallow	04/21/2009	1803.87	18.69	1785.18	
PZ-105	Shallow	07/07/2009	1803.87	19.72	1784.15	
PZ-105	Shallow	10/08/2009	1803.87	21.03	1782.84	
PZ-108	Shallow	02/03/2009	1809.36	15.75	1793.61	
PZ-108	Shallow	04/21/2009	1809.36	12.37	1796.99	
PZ-108	Shallow	07/07/2009	1809.36	14.14	1795.22	
PZ-108	Shallow	10/08/2009	1809.36	16.68	1792.68	
PZ-109	Shallow	02/03/2009	1809.51	17.28	1792.23	
PZ-109	Shallow	04/22/2009	1809.51	16.88	1792.63	
PZ-109	Shallow	07/07/2009	1809.51	16.54	1792.97	
PZ-109	Shallow	10/07/2009	1809.51	17.21	1792.30	
PZ-114	Shallow	02/05/2009	1818.19	Dry	---	
PZ-114	Shallow	04/22/2009	1818.19	50.09	1768.10	
PZ-116	Shallow	02/03/2009	1763.01	Dry	---	
PZ-116	Shallow	04/22/2009	1763.01	Dry	---	
PZ-117	Shallow	02/05/2009	1845.90	23.52	1822.38	
PZ-117	Shallow	04/22/2009	1845.90	22.91	1822.99	
PZ-120	Shallow	02/02/2009	1810.96	21.60	1789.36	
PZ-120	Shallow	04/21/2009	1810.96	18.44	1792.52	
PZ-120	Shallow	07/07/2009	1810.96	19.31	1791.65	
PZ-120	Shallow	10/07/2009	1808.80	20.19	1788.61	
PZ-121	Shallow	02/03/2009	1808.98	22.09	1786.89	
PZ-121	Shallow	04/22/2009	1808.98	20.70	1788.28	
PZ-121	Shallow	07/07/2009	1808.98	20.36	1788.62	
PZ-121	Shallow	10/09/2009	1809.50	21.62	1787.88	
PZ-122	Shallow	02/02/2009	1810.80	20.55	1790.25	
PZ-122	Shallow	04/21/2009	1810.80	16.49	1794.31	
PZ-122	Shallow	07/07/2009	1810.80	18.82	1791.98	
PZ-122	Shallow	10/08/2009	1808.40	21.58	1786.82	
PZ-124	Shallow	02/02/2009	1764.11	27.81	1736.30	
PZ-124	Shallow	04/21/2009	1764.11	27.85	1736.26	
PZ-127	Shallow	02/05/2009	1877.19	66.54	1810.65	
PZ-127	Shallow	04/23/2009	1877.19	66.52	1810.67	
PZ-128	Shallow	02/05/2009	1757.26	Dry	---	
PZ-129	Shallow	02/05/2009	1741.94	30.05	1711.89	
PZ-130	Shallow	02/05/2009	1746.66	Dry	---	
PZ-131	Shallow	02/05/2009	1759.95	Dry	---	
PZ-131	Shallow	10/07/2009	1759.95	Dry	---	
PZ-132	Shallow	10/07/2009	1758.38	Dry	---	
PZ-135	Shallow	10/07/2009	1823.84	Dry	---	
PZ-138	Shallow	02/02/2009	1829.85	Dry	---	
PZ-138	Shallow	10/06/2009	1829.85	Dry	---	
PZ-139	Shallow	02/02/2009	1831.91	48.39	1783.52	
PZ-139	Shallow	10/06/2009	1831.91	48.16	1783.75	
PZ-140	Shallow	02/02/2009	1832.82	17.73	1815.09	
PZ-140	Shallow	10/07/2009	1832.82	17.46	1815.36	
PZ-141	Shallow	10/07/2009	1856.58	20.16	1836.42	

See last page of table for notes and abbreviations.

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Well Identifier	Geological Unit	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
PZ-143	Shallow	10/07/2009	1849.84	Dry	---	
PZ-144	Shallow	10/07/2009	1859.13	Dry	---	
PZ-145	Shallow	10/06/2009	1766.87	Dry	---	
PZ-146	Shallow	02/03/2009	1789.82	23.22	1766.60	
PZ-146	Shallow	10/06/2009	1789.82	Dry	---	
PZ-147	Shallow	02/03/2009	1791.24	38.18	1753.06	
PZ-147	Shallow	10/06/2009	1791.24	Dry	---	
PZ-148	Shallow	02/03/2009	1794.71	Dry	---	
PZ-148	Shallow	10/06/2009	1794.71	Dry	---	
PZ-150	Shallow	02/03/2009	1852.23	Dry	---	
PZ-150	Shallow	04/22/2009	1852.23	30.16	1822.07	
PZ-150	Shallow	07/07/2009	1852.23	Dry	---	
PZ-150	Shallow	10/12/2009	1852.23	Dry	---	
PZ-151	Shallow	10/06/2009	1862.80	79.51	1783.29	
PZ-152	Shallow	10/07/2009	1881.02	34.01	1847.01	
PZ-153	Shallow	10/06/2009	1908.18	Dry	---	
PZ-154	Shallow	10/06/2009	1902.39	Dry	---	
PZ-155	Shallow	10/06/2009	1832.04	60.11	1771.93	
PZ-156	Shallow	10/06/2009	1849.56	114.32	1735.24	
PZ-157	Shallow	10/06/2009	1809.98	Dry	---	
PZ-158	Shallow	10/07/2009	1797.57	20.81	1776.76	
PZ-159	Shallow	10/06/2009	1814.33	Dry	---	
PZ-160	Shallow	02/03/2009	1851.41	Dry	---	
PZ-160	Shallow	04/22/2009	1851.41	Dry	---	
PZ-160	Shallow	07/07/2009	1851.41	Dry	---	
PZ-160	Shallow	10/12/2009	1851.41	Dry	---	
PZ-161	Shallow	02/03/2009	1852.23	Dry	---	
PZ-161	Shallow	04/22/2009	1852.23	29.19	1823.04	
PZ-161	Shallow	07/07/2009	1852.23	28.28	1823.95	
PZ-161	Shallow	10/12/2009	1852.23	28.77	1823.46	
RD-01	Chatsworth	02/05/2009	1935.89	201.78	1734.11	
RD-01	Chatsworth	04/22/2009	1935.89	203.42	1732.47	
RD-01	Chatsworth	07/08/2009	1935.89	203.85	1732.04	
RD-01	Chatsworth	10/07/2009	1935.89	202.88	1733.01	
RD-02	Chatsworth	02/05/2009	1873.92	158.12	1715.80	
RD-02	Chatsworth	04/22/2009	1873.92	157.64	1716.28	
RD-02	Chatsworth	07/08/2009	1873.92	157.75	1716.17	
RD-02	Chatsworth	10/06/2009	1873.92	UTM	---	(*)
RD-03	Chatsworth	02/04/2009	1743.50	18.45	1725.05	
RD-03	Chatsworth	04/23/2009	1743.50	16.91	1726.59	
RD-03	Chatsworth	07/08/2009	1743.50	18.60	1724.90	
RD-03	Chatsworth	10/08/2009	1743.50	20.62	1722.88	
RD-04	Chatsworth	02/03/2009	1883.85	283.49	1600.36	
RD-04	Chatsworth	04/21/2009	1883.85	282.11	1601.74	
RD-04	Chatsworth	07/07/2009	1883.85	281.42	1602.43	
RD-04	Chatsworth	10/06/2009	1883.85	280.53	1603.32	
RD-05A	Chatsworth	02/04/2009	1704.66	82.14	1622.52	
RD-05A	Chatsworth	04/21/2009	1704.66	81.56	1623.10	
RD-05A	Chatsworth	07/07/2009	1704.66	81.19	1623.47	
RD-05A	Chatsworth	10/08/2009	1704.66	81.96	1622.70	

See last page of table for notes and abbreviations.

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Well Identifier	Geological Unit	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
RD-05B	Chatsworth	02/04/2009	1705.89	60.08	1645.81	
RD-05B	Chatsworth	04/21/2009	1705.89	60.68	1645.21	
RD-05B	Chatsworth	07/07/2009	1705.89	61.92	1643.97	
RD-05B	Chatsworth	10/08/2009	1705.89	63.80	1642.09	
RD-05C	Chatsworth	02/04/2009	1705.25	50.91	1654.34	
RD-05C	Chatsworth	04/21/2009	1705.25	50.81	1654.44	
RD-05C	Chatsworth	07/07/2009	1705.25	50.60	1654.65	
RD-05C	Chatsworth	10/08/2009	1705.25	50.94	1654.31	
RD-06	Chatsworth	02/04/2009	1617.21	50.73	1566.48	
RD-06	Chatsworth	04/21/2009	1617.21	47.90	1569.31	
RD-06	Chatsworth	07/07/2009	1617.21	49.63	1567.58	
RD-06	Chatsworth	10/08/2009	1617.21	52.04	1565.17	
RD-07	Chatsworth	02/02/2009	1812.82	NM		(1)
RD-07	Chatsworth	04/21/2009	1812.82	FLUTe		(1)
RD-07	Chatsworth	07/07/2009	1812.82	FLUTe		(1)
RD-07	Chatsworth	10/08/2009	1812.82	FLUTe		(1)
RD-08	Chatsworth	02/03/2009	1763.38	14.60	1748.78	
RD-08	Chatsworth	04/21/2009	1763.38	19.93	1743.45	
RD-08	Chatsworth	07/07/2009	1763.38	14.32	1749.06	
RD-08	Chatsworth	10/08/2009	1763.38	15.42	1747.96	
RD-09	Chatsworth	02/03/2009	1768.20	30.12	1738.08	
RD-09	Chatsworth	04/21/2009	1768.20	29.98	1738.22	
RD-09	Chatsworth	07/07/2009	1768.20	31.02	1737.18	
RD-09	Chatsworth	10/06/2009	1768.20	32.81	1735.39	
RD-10	Chatsworth	02/05/2009	1904.43	184.34	1720.09	
RD-10	Chatsworth	04/22/2009	1904.43	184.62	1719.81	
RD-10	Chatsworth	07/08/2009	1904.43	184.60	1719.83	
RD-10	Chatsworth	10/07/2009	1904.43	185.05	1719.38	
RD-11	Chatsworth	02/03/2009	1762.65	36.71	1725.94	
RD-11	Chatsworth	04/21/2009	1762.65	44.55	1718.10	
RD-11	Chatsworth	07/07/2009	1762.65	40.03	1722.62	
RD-11	Chatsworth	10/08/2009	1762.65	36.16	1726.49	
RD-12	Chatsworth	02/03/2009	1762.62	29.85	1732.77	
RD-12	Chatsworth	04/21/2009	1762.62	23.83	1738.79	
RD-12	Chatsworth	07/07/2009	1762.62	27.98	1734.64	
RD-12	Chatsworth	10/08/2009	1762.62	31.13	1731.49	(C)
RD-13	Chatsworth	02/02/2009	1840.27	58.76	1781.51	
RD-13	Chatsworth	04/21/2009	1840.27	59.49	1780.78	
RD-13	Chatsworth	07/07/2009	1840.27	60.26	1780.01	
RD-13	Chatsworth	10/08/2009	1840.27	61.34	1778.93	
RD-14	Chatsworth	02/03/2009	1824.29	79.33	1744.96	
RD-14	Chatsworth	04/21/2009	1824.29	UTM	---	(*)
RD-14	Chatsworth	07/09/2009	1824.29	80.75	1743.54	
RD-14	Chatsworth	10/06/2009	1824.29	81.61	1742.68	
RD-15	Chatsworth	02/03/2009	1817.70	52.12	1765.58	
RD-15	Chatsworth	04/22/2009	1817.70	51.48	1766.22	
RD-15	Chatsworth	07/07/2009	1817.70	52.34	1765.36	
RD-15	Chatsworth	10/06/2009	1817.70	53.86	1763.84	
RD-16	Chatsworth	02/03/2009	1808.99	50.19	1758.80	
RD-16	Chatsworth	04/22/2009	1808.99	48.30	1760.69	
RD-16	Chatsworth	07/07/2009	1808.99	49.67	1759.32	
RD-16	Chatsworth	10/08/2009	1808.99	51.54	1757.45	

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Well Identifier	Geological Unit	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
RD-17	Chatsworth	02/03/2009	1836.30	31.10	1805.20	
RD-17	Chatsworth	04/22/2009	1836.30	29.07	1807.23	
RD-17	Chatsworth	07/07/2009	1836.30	29.89	1806.41	
RD-17	Chatsworth	10/07/2009	1836.30	31.65	1804.65	
RD-18	Chatsworth	02/03/2009	1839.49	90.12	1749.37	
RD-18	Chatsworth	04/21/2009	1839.49	90.25	1749.24	
RD-18	Chatsworth	07/07/2009	1839.49	90.57	1748.92	
RD-18	Chatsworth	10/06/2009	1839.49	91.46	1748.03	
RD-19	Chatsworth	02/03/2009	1853.13	80.28	1772.85	
RD-19	Chatsworth	04/22/2009	1853.13	79.41	1773.72	
RD-19	Chatsworth	07/07/2009	1853.13	79.87	1773.26	
RD-19	Chatsworth	10/06/2009	1853.13	81.43	1771.70	
RD-20	Chatsworth	02/02/2009	1819.72	45.91	1773.81	
RD-20	Chatsworth	04/21/2009	1819.72	44.21	1775.51	
RD-20	Chatsworth	07/07/2009	1819.72	44.99	1774.73	
RD-20	Chatsworth	10/08/2009	1819.72	46.49	1773.23	
RD-21	Chatsworth	02/02/2009	1866.96	FLUTe		(1)
RD-21	Chatsworth	04/21/2009	1866.96	FLUTe		(1)
RD-21	Chatsworth	07/07/2009	1866.96	FLUTe		(1)
RD-21	Chatsworth	10/08/2009	1866.96	FLUTe		(1)
RD-22	Chatsworth	02/02/2009	1853.41	FLUTe		(1)
RD-22	Chatsworth	04/21/2009	1853.41	FLUTe		(1)
RD-22	Chatsworth	07/07/2009	1853.41	FLUTe		(1)
RD-22	Chatsworth	10/08/2009	1853.41	FLUTe		(1)
RD-23	Chatsworth	02/02/2009	1838.19	FLUTe		(1)
RD-23	Chatsworth	04/21/2009	1838.19	FLUTe		(1)
RD-23	Chatsworth	07/07/2009	1838.19	FLUTe		(1)
RD-23	Chatsworth	10/08/2009	1837.39	FLUTe		(1)
RD-24	Chatsworth	02/05/2009	1809.93	44.30	1765.63	
RD-24	Chatsworth	04/21/2009	1809.93	40.48	1769.45	
RD-24	Chatsworth	07/07/2009	1809.93	40.71	1769.22	
RD-24	Chatsworth	10/08/2009	1809.93	41.50	1768.43	
RD-26	Chatsworth	02/03/2009	1880.39	108.83	1771.56	
RD-26	Chatsworth	04/21/2009	1880.39	108.30	1772.09	
RD-26	Chatsworth	07/07/2009	1880.39	109.13	1771.26	
RD-26	Chatsworth	10/07/2009	1880.39	111.06	1769.33	
RD-27	Chatsworth	03/06/2009	1841.67	55.87	1785.80	
RD-27	Chatsworth	04/27/2009	1841.67	54.79	1786.88	
RD-27	Chatsworth	07/30/2009	1841.67	56.04	1785.63	
RD-27	Chatsworth	10/07/2009	1841.67	58.19	1783.48	
RD-29	Chatsworth	02/02/2009	1806.29	19.74	1786.55	
RD-29	Chatsworth	04/21/2009	1806.29	16.23	1790.06	
RD-29	Chatsworth	07/07/2009	1806.29	18.20	1788.09	
RD-29	Chatsworth	10/08/2009	1806.29	20.51	1785.78	
RD-30	Chatsworth	02/02/2009	1768.69	UTM	---	(*)
RD-30	Chatsworth	04/21/2009	1768.69	UTM	---	(*)
RD-30	Chatsworth	07/07/2009	1768.69	UTM	---	(*)
RD-30	Chatsworth	10/08/2009	1768.69	UTM	---	(*)
RD-31	Chatsworth	02/02/2009	1944.55	WESTBAY		(2)
RD-31	Chatsworth	04/21/2009	1944.55	WESTBAY		(2)
RD-31	Chatsworth	07/07/2009	1944.55	WESTBAY		(2)
RD-31	Chatsworth	10/08/2009	1944.55	WESTBAY		(2)

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RD-32	Chatsworth	02/05/2009	1808.47	30.50	1777.97	
RD-32	Chatsworth	04/22/2009	1808.47	29.22	1779.25	
RD-32	Chatsworth	07/07/2009	1808.47	30.33	1778.14	
RD-32	Chatsworth	10/08/2009	1808.47	32.01	1776.46	
RD-33A	Chatsworth	02/02/2009	1792.97	FLUTe		(1)
RD-33A	Chatsworth	04/21/2009	1792.97	FLUTe		(1)
RD-33A	Chatsworth	07/07/2009	1792.97	FLUTe		(1)
RD-33A	Chatsworth	10/07/2009	1792.97	FLUTe		(1)
RD-33B	Chatsworth	02/05/2009	1793.21	287.09	1506.12	
RD-33B	Chatsworth	04/21/2009	1793.21	286.22	1506.99	
RD-33B	Chatsworth	07/07/2009	1793.21	285.08	1508.13	
RD-33B	Chatsworth	10/07/2009	1793.21	284.74	1508.47	
RD-33C	Chatsworth	02/05/2009	1793.54	288.08	1505.46	
RD-33C	Chatsworth	04/21/2009	1793.54	287.42	1506.12	
RD-33C	Chatsworth	07/07/2009	1793.54	286.63	1506.91	
RD-33C	Chatsworth	10/07/2009	1793.54	285.86	1507.68	
RD-34A	Chatsworth	02/03/2009	1761.83	44.74	1717.09	
RD-34A	Chatsworth	04/22/2009	1761.83	44.63	1717.20	
RD-34A	Chatsworth	07/07/2009	1761.83	45.99	1715.84	
RD-34A	Chatsworth	10/07/2009	1761.83	47.42	1714.41	
RD-34B	Chatsworth	02/03/2009	1762.51	47.54	1714.97	
RD-34B	Chatsworth	04/22/2009	1762.51	48.20	1714.31	
RD-34B	Chatsworth	07/07/2009	1762.51	49.25	1713.26	
RD-34B	Chatsworth	10/07/2009	1762.51	51.37	1711.14	
RD-34C	Chatsworth	02/03/2009	1762.60	12.46	1750.14	
RD-34C	Chatsworth	04/22/2009	1762.60	12.25	1750.35	
RD-34C	Chatsworth	07/07/2009	1762.60	12.57	1750.03	
RD-34C	Chatsworth	10/07/2009	1762.60	13.54	1749.06	
RD-35A	Chatsworth	02/06/2009	1908.62	91.21	1817.41	
RD-35A	Chatsworth	04/22/2009	1908.62	89.81	1818.81	
RD-35A	Chatsworth	07/07/2009	1908.62	91.08	1817.54	
RD-35A	Chatsworth	10/08/2009	1908.62	93.29	1815.33	
RD-35B	Chatsworth	02/06/2009	1905.65	89.84	1815.81	
RD-35B	Chatsworth	04/22/2009	1905.65	90.04	1815.61	
RD-35B	Chatsworth	07/07/2009	1905.65	90.60	1815.05	
RD-35B	Chatsworth	10/08/2009	1905.65	91.74	1813.91	
RD-36A	Chatsworth	02/05/2009	1913.09	Dry	---	(C)
RD-36A	Chatsworth	04/22/2009	1913.09	Dry	---	(C)
RD-36A	Chatsworth	07/08/2009	1913.09	Dry	---	(C)
RD-36A	Chatsworth	10/08/2009	1913.09	Dry	---	(C)
RD-36B	Chatsworth	02/05/2009	1915.26	146.44	1768.82	
RD-36B	Chatsworth	04/22/2009	1915.26	147.83	1767.43	
RD-36B	Chatsworth	07/08/2009	1915.26	148.90	1766.36	
RD-36B	Chatsworth	10/08/2009	1915.26	150.42	1764.84	
RD-36C	Chatsworth	02/05/2009	1913.82	205.08	1708.74	
RD-36C	Chatsworth	04/22/2009	1913.82	206.81	1707.01	
RD-36C	Chatsworth	07/08/2009	1913.82	208.25	1705.57	
RD-36C	Chatsworth	10/08/2009	1913.82	210.16	1703.66	
RD-36D	Chatsworth	02/05/2009	1920.08	350.70	1569.38	
RD-36D	Chatsworth	04/22/2009	1920.08	348.71	1571.37	
RD-36D	Chatsworth	07/08/2009	1920.08	347.69	1572.39	
RD-36D	Chatsworth	10/08/2009	1920.08	348.26	1571.82	

See last page of table for notes and abbreviations.

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BOEING SANTA SUSANA FIELD LABORATORY
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Well Identifier	Geological Unit	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
RD-37	Chatsworth	02/05/2009	1870.01	292.05	1577.96	
RD-37	Chatsworth	04/20/2009	1870.01	291.42	1578.59	
RD-37	Chatsworth	07/08/2009	1870.01	290.55	1579.46	
RD-37	Chatsworth	10/07/2009	1870.01	290.26	1579.75	
RD-38A	Chatsworth	02/05/2009	1879.47	114.92	1764.55	
RD-38A	Chatsworth	04/22/2009	1879.47	116.34	1763.13	
RD-38A	Chatsworth	07/07/2009	1879.47	117.88	1761.59	
RD-38A	Chatsworth	10/08/2009	1879.47	Dry	---	
RD-38B	Chatsworth	02/05/2009	1881.45	313.54	1567.91	
RD-38B	Chatsworth	04/22/2009	1881.45	311.31	1570.14	
RD-38B	Chatsworth	07/09/2009	1881.45	310.84	1570.61	
RD-38B	Chatsworth	10/08/2009	1881.45	310.69	1570.76	
RD-39A	Chatsworth	02/05/2009	1960.23	154.75	1805.48	
RD-39A	Chatsworth	04/22/2009	1960.23	Dry	---	
RD-39A	Chatsworth	07/07/2009	1960.23	Dry	---	
RD-39A	Chatsworth	10/08/2009	1960.23	Dry	---	
RD-39B	Chatsworth	02/05/2009	1959.48	300.21	1659.27	
RD-39B	Chatsworth	04/22/2009	1959.48	303.95	1655.53	
RD-39B	Chatsworth	07/07/2009	1959.48	306.73	1652.75	
RD-39B	Chatsworth	10/08/2009	1959.48	309.52	1649.96	
RD-40	Chatsworth	02/03/2009	1972.02	286.56	1685.46	(C)
RD-40	Chatsworth	04/22/2009	1972.02	276.78	1695.24	(C)
RD-40	Chatsworth	07/09/2009	1972.02	275.43	1696.59	(C)
RD-40	Chatsworth	10/08/2009	1972.02	274.29	1697.73	(C)
RD-41A	Chatsworth	02/03/2009	1774.48	74.92	1699.56	
RD-41A	Chatsworth	04/22/2009	1774.48	76.06	1698.42	
RD-41A	Chatsworth	07/08/2009	1774.48	78.03	1696.45	
RD-41A	Chatsworth	10/08/2009	1774.48	80.82	1693.66	
RD-41B	Chatsworth	02/03/2009	1774.71	131.50	1643.21	
RD-41B	Chatsworth	04/22/2009	1774.71	130.61	1644.10	
RD-41B	Chatsworth	07/08/2009	1774.71	128.18	1646.53	
RD-41B	Chatsworth	10/08/2009	1774.71	128.71	1646.00	
RD-41C	Chatsworth	02/03/2009	1773.73	128.82	1644.91	
RD-41C	Chatsworth	04/22/2009	1773.73	131.04	1642.69	
RD-41C	Chatsworth	07/08/2009	1773.73	130.21	1643.52	
RD-41C	Chatsworth	10/08/2009	1773.73	127.99	1645.74	
RD-42	Chatsworth	02/03/2009	1945.46	54.64	1890.82	
RD-42	Chatsworth	04/22/2009	1945.46	51.72	1893.74	
RD-42	Chatsworth	07/08/2009	1945.46	52.78	1892.68	
RD-42	Chatsworth	10/06/2009	1945.46	54.55	1890.91	
RD-43A	Chatsworth	02/05/2009	1680.16	43.26	1636.90	
RD-43A	Chatsworth	04/22/2009	1680.16	39.40	1640.76	
RD-43A	Chatsworth	07/07/2009	1680.16	42.51	1637.65	
RD-43A	Chatsworth	10/08/2009	1680.16	45.68	1634.48	
RD-43B	Chatsworth	02/05/2009	1680.21	91.43	1588.78	
RD-43B	Chatsworth	04/22/2009	1680.21	90.65	1589.56	
RD-43B	Chatsworth	07/07/2009	1680.21	91.40	1588.81	
RD-43B	Chatsworth	10/08/2009	1680.21	92.84	1587.37	
RD-43C	Chatsworth	02/05/2009	1679.31	95.76	1583.55	
RD-43C	Chatsworth	04/22/2009	1679.31	95.06	1584.25	
RD-43C	Chatsworth	07/07/2009	1679.31	96.03	1583.28	
RD-43C	Chatsworth	10/08/2009	1679.31	97.34	1581.97	

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Well Identifier	Geological Unit	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
RD-44	Chatsworth	02/04/2009	2035.92	400.08	1635.84	
RD-44	Chatsworth	04/22/2009	2035.92	399.84	1636.08	
RD-44	Chatsworth	07/08/2009	2035.92	400.02	1635.90	
RD-44	Chatsworth	10/06/2009	2035.92	399.67	1636.25	
RD-45A	Chatsworth	02/06/2009	1841.59	UTM	---	(*)
RD-45A	Chatsworth	04/22/2009	1841.59	240.51	1601.08	(C)
RD-45A	Chatsworth	07/08/2009	1841.59	238.03	1603.56	(C)
RD-45A	Chatsworth	10/07/2009	1841.59	239.09	1602.50	(C)
RD-45B	Chatsworth	02/06/2009	1840.09	242.47	1597.62	
RD-45B	Chatsworth	04/22/2009	1840.09	241.31	1598.78	
RD-45B	Chatsworth	07/08/2009	1840.09	240.70	1599.39	
RD-45B	Chatsworth	10/07/2009	1840.09	240.00	1600.09	
RD-45C	Chatsworth	02/06/2009	1835.74	237.97	1597.77	
RD-45C	Chatsworth	04/22/2009	1835.74	236.84	1598.90	
RD-45C	Chatsworth	07/08/2009	1835.74	236.23	1599.51	
RD-45C	Chatsworth	10/07/2009	1835.74	235.61	1600.13	
RD-46A	Chatsworth	02/04/2009	1806.13	80.46	1725.67	
RD-46A	Chatsworth	04/22/2009	1806.13	78.74	1727.39	
RD-46A	Chatsworth	07/08/2009	1806.13	80.66	1725.47	
RD-46A	Chatsworth	10/06/2009	1806.13	82.60	1723.53	
RD-46B	Chatsworth	02/04/2009	1807.19	74.21	1732.98	
RD-46B	Chatsworth	04/22/2009	1807.19	74.44	1732.75	
RD-46B	Chatsworth	07/08/2009	1807.19	75.55	1731.64	
RD-46B	Chatsworth	10/06/2009	1807.19	76.81	1730.38	
RD-47	Chatsworth	02/04/2009	2045.72	448.35	1597.37	
RD-47	Chatsworth	04/22/2009	2045.72	447.63	1598.09	
RD-47	Chatsworth	07/08/2009	2045.72	446.52	1599.20	
RD-47	Chatsworth	10/07/2009	2045.72	446.36	1599.36	
RD-48A	Chatsworth	02/04/2009	1736.54	105.98	1630.56	
RD-48A	Chatsworth	04/23/2009	1736.54	105.58	1630.96	
RD-48A	Chatsworth	07/07/2009	1736.54	106.42	1630.12	
RD-48A	Chatsworth	10/06/2009	1736.54	106.98	1629.56	
RD-48B	Chatsworth	02/04/2009	1735.40	130.63	1604.77	
RD-48B	Chatsworth	04/23/2009	1735.40	130.50	1604.90	
RD-48B	Chatsworth	07/07/2009	1735.40	130.51	1604.89	
RD-48B	Chatsworth	10/06/2009	1735.40	130.62	1604.78	
RD-48C	Chatsworth	02/04/2009	1734.95	173.95	1561.00	
RD-48C	Chatsworth	04/23/2009	1734.95	172.71	1562.24	
RD-48C	Chatsworth	07/07/2009	1734.95	172.52	1562.43	
RD-48C	Chatsworth	10/06/2009	1734.95	172.29	1562.66	
RD-49A	Chatsworth	02/03/2009	1867.25	25.99	1841.26	
RD-49A	Chatsworth	04/22/2009	1867.25	22.49	1844.76	
RD-49A	Chatsworth	07/08/2009	1867.25	25.85	1841.40	(C)
RD-49A	Chatsworth	10/06/2009	1867.25	26.13	1841.12	(C)
RD-49B	Chatsworth	02/03/2009	1867.95	223.56	1644.39	
RD-49B	Chatsworth	04/22/2009	1867.95	223.39	1644.56	
RD-49B	Chatsworth	07/08/2009	1867.95	222.53	1645.42	
RD-49B	Chatsworth	10/06/2009	1867.95	222.33	1645.62	
RD-49C	Chatsworth	02/03/2009	1869.45	265.31	1604.14	
RD-49C	Chatsworth	04/22/2009	1869.45	263.93	1605.52	
RD-49C	Chatsworth	07/08/2009	1869.45	262.98	1606.47	
RD-49C	Chatsworth	10/06/2009	1869.45	262.31	1607.14	

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Well Identifier	Geological Unit	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
RD-50	Chatsworth	02/02/2009	1914.88	FLUTe		(1)
RD-50	Chatsworth	04/21/2009	1914.88	FLUTe		(1)
RD-50	Chatsworth	07/07/2009	1914.88	FLUTe		(1)
RD-50	Chatsworth	10/08/2009	1914.88	FLUTe		(1)
RD-51A	Chatsworth	02/02/2009	1832.51	249.54	1582.97	
RD-51A	Chatsworth	04/21/2009	1832.51	247.93	1584.58	
RD-51A	Chatsworth	07/07/2009	1832.51	248.13	1584.38	
RD-51A	Chatsworth	10/06/2009	1832.51	247.70	1584.81	
RD-51B	Chatsworth	02/02/2009	1832.68	249.59	1583.09	
RD-51B	Chatsworth	04/21/2009	1832.68	248.18	1584.50	
RD-51B	Chatsworth	07/07/2009	1832.68	248.25	1584.43	
RD-51B	Chatsworth	10/06/2009	1832.68	248.66	1584.02	
RD-51C	Chatsworth	02/02/2009	1831.65	235.08	1596.57	
RD-51C	Chatsworth	04/21/2009	1831.65	233.90	1597.75	
RD-51C	Chatsworth	07/07/2009	1831.65	233.19	1598.46	
RD-51C	Chatsworth	10/06/2009	1831.65	232.86	1598.79	
RD-52A	Chatsworth	02/04/2009	1755.09	127.11	1627.98	
RD-52A	Chatsworth	04/21/2009	1755.09	127.19	1627.90	
RD-52A	Chatsworth	07/08/2009	1755.09	127.13	1627.96	
RD-52A	Chatsworth	10/07/2009	1755.09	127.62	1627.47	
RD-52B	Chatsworth	02/04/2009	1712.15	115.13	1597.02	
RD-52B	Chatsworth	04/21/2009	1712.15	114.20	1597.95	
RD-52B	Chatsworth	07/08/2009	1712.15	113.37	1598.78	
RD-52B	Chatsworth	10/07/2009	1712.15	113.06	1599.09	
RD-52C	Chatsworth	02/04/2009	1712.83	115.50	1597.33	
RD-52C	Chatsworth	04/22/2009	1712.83	114.50	1598.33	
RD-52C	Chatsworth	07/08/2009	1712.83	113.67	1599.16	
RD-52C	Chatsworth	10/07/2009	1712.83	113.32	1599.51	
RD-53	Chatsworth	02/06/2009	1909.19	145.08	1764.11	
RD-53	Chatsworth	04/22/2009	1909.19	146.56	1762.63	
RD-53	Chatsworth	07/07/2009	1909.19	148.12	1761.07	
RD-53	Chatsworth	10/08/2009	1909.19	150.70	1758.49	
RD-54A	Chatsworth	02/02/2009	1841.72	FLUTe		(1)
RD-54A	Chatsworth	04/21/2009	1841.72	FLUTe		(1)
RD-54A	Chatsworth	07/07/2009	1841.72	FLUTe		(1)
RD-54A	Chatsworth	10/08/2009	1841.64	FLUTe		(1)
RD-54B	Chatsworth	02/02/2009	1842.54	245.87	1596.67	
RD-54B	Chatsworth	04/21/2009	1842.54	246.19	1596.35	
RD-54B	Chatsworth	07/07/2009	1842.54	246.33	1596.21	
RD-54B	Chatsworth	10/08/2009	1842.54	247.16	1595.38	
RD-54C	Chatsworth	02/02/2009	1843.77	226.28	1617.49	
RD-54C	Chatsworth	04/21/2009	1843.77	226.21	1617.56	
RD-54C	Chatsworth	07/07/2009	1843.77	226.13	1617.64	
RD-54C	Chatsworth	10/08/2009	1843.77	226.42	1617.35	
RD-55A	Chatsworth	02/04/2009	1756.87	33.04	1723.83	
RD-55A	Chatsworth	04/21/2009	1756.87	27.78	1729.09	
RD-55A	Chatsworth	07/07/2009	1756.87	34.06	1722.81	
RD-55A	Chatsworth	10/08/2009	1756.87	42.92	1713.95	
RD-55B	Chatsworth	02/04/2009	1757.19	54.33	1702.86	
RD-55B	Chatsworth	04/21/2009	1757.19	52.25	1704.94	
RD-55B	Chatsworth	07/07/2009	1757.19	53.88	1703.31	
RD-55B	Chatsworth	10/08/2009	1757.19	57.86	1699.33	

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Well Identifier	Geological Unit	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
RD-56A	Chatsworth	02/03/2009	1758.62	319.91	1438.71	
RD-56A	Chatsworth	04/21/2009	1758.62	319.93	1438.69	
RD-56A	Chatsworth	07/08/2009	1758.62	320.35	1438.27	
RD-56A	Chatsworth	10/07/2009	1758.62	319.64	1438.98	
RD-56B	Chatsworth	02/03/2009	1761.83	178.92	1582.91	
RD-56B	Chatsworth	04/21/2009	1761.83	177.53	1584.30	
RD-56B	Chatsworth	07/08/2009	1761.83	177.62	1584.21	
RD-56B	Chatsworth	10/07/2009	1761.83	177.61	1584.22	
RD-57	Chatsworth	02/02/2009	1774.15	FLUTe		(1)
RD-57	Chatsworth	04/21/2009	1774.15	FLUTe		(1)
RD-57	Chatsworth	07/07/2009	1774.15	FLUTe		(1)
RD-57	Chatsworth	10/07/2009	1774.15	FLUTe		(1)
RD-58A	Chatsworth	02/04/2009	1756.11	81.75	1674.36	
RD-58A	Chatsworth	04/28/2009	1756.11	81.01	1675.10	
RD-58A	Chatsworth	07/07/2009	1756.11	80.97	1675.14	
RD-58A	Chatsworth	10/08/2009	1756.11	82.84	1673.27	
RD-58B	Chatsworth	02/04/2009	1761.34	104.23	1657.11	
RD-58B	Chatsworth	04/21/2009	1761.34	102.70	1658.64	
RD-58B	Chatsworth	07/07/2009	1761.34	102.88	1658.46	
RD-58B	Chatsworth	10/08/2009	1761.34	106.11	1655.23	
RD-58C	Chatsworth	02/04/2009	1759.59	119.39	1640.20	
RD-58C	Chatsworth	04/28/2009	1759.59	118.17	1641.42	
RD-58C	Chatsworth	07/07/2009	1759.59	118.55	1641.04	
RD-58C	Chatsworth	10/08/2009	1759.59	120.18	1639.41	
RD-59A	Chatsworth	03/03/2009	1340.50	27.11	1313.39	
RD-59A	Chatsworth	05/13/2009	1340.50	26.89	1313.61	
RD-59A	Chatsworth	08/04/2009	1340.50	27.24	1313.26	
RD-59A	Chatsworth	11/04/2009	1340.50	26.89	1313.61	
RD-59B	Chatsworth	03/03/2009	1342.49	-48.13	1390.62	(A)
RD-59B	Chatsworth	05/13/2009	1342.49	-46.13	1388.62	(A)
RD-59B	Chatsworth	08/04/2009	1342.49	-50.75	1393.24	(A)
RD-59B	Chatsworth	11/04/2009	1342.49	-57.67	1400.16	(A)
RD-59C	Chatsworth	03/03/2009	1345.41	-50.44	1395.85	(A)
RD-59C	Chatsworth	05/13/2009	1345.41	-48.44	1393.85	(A)
RD-59C	Chatsworth	08/04/2009	1345.41	-48.44	1393.85	(A)
RD-59C	Chatsworth	11/04/2009	1345.41	-62.28	1407.69	(A)
RD-60	Chatsworth	02/03/2009	1870.40	87.82	1782.58	
RD-60	Chatsworth	04/21/2009	1870.40	84.43	1785.97	
RD-60	Chatsworth	07/07/2009	1870.40	83.26	1787.14	
RD-60	Chatsworth	10/06/2009	1870.40	85.02	1785.38	
RD-61	Chatsworth	02/04/2009	1845.87	110.70	1735.17	
RD-61	Chatsworth	04/22/2009	1845.87	111.70	1734.17	
RD-61	Chatsworth	07/07/2009	1845.87	112.42	1733.45	
RD-61	Chatsworth	10/06/2009	1845.87	113.18	1732.69	
RD-62	Chatsworth	02/04/2009	1837.20	206.84	1630.36	
RD-62	Chatsworth	04/23/2009	1837.20	207.16	1630.04	
RD-62	Chatsworth	07/07/2009	1837.20	207.20	1630.00	
RD-62	Chatsworth	10/06/2009	1837.20	207.47	1629.73	
RD-63	Chatsworth	02/05/2009	1764.85	26.87	1737.98	
RD-63	Chatsworth	04/22/2009	1764.85	26.01	1738.84	
RD-63	Chatsworth	07/07/2009	1764.85	27.21	1737.64	
RD-63	Chatsworth	10/07/2009	1764.85	29.11	1735.74	

See last page of table for notes and abbreviations.

TABLE II
SUMMARY OF WATER LEVEL DATA, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
RD-64	Chatsworth	02/02/2009	1857.04	FLUTe		(1)
RD-64	Chatsworth	04/21/2009	1857.04	FLUTe		(1)
RD-64	Chatsworth	07/07/2009	1857.04	FLUTe		(1)
RD-64	Chatsworth	10/08/2009	1857.04	FLUTe		(1)
RD-65	Chatsworth	02/02/2009	1819.14	FLUTe		(1)
RD-65	Chatsworth	04/21/2009	1819.14	FLUTe		(1)
RD-65	Chatsworth	07/07/2009	1819.14	FLUTe		(1)
RD-65	Chatsworth	10/08/2009	1819.14	FLUTe		(1)
RD-66	Chatsworth	02/05/2009	1730.79	162.72	1568.07	
RD-66	Chatsworth	04/22/2009	1730.79	160.60	1570.19	
RD-66	Chatsworth	07/07/2009	1730.79	159.46	1571.33	
RD-66	Chatsworth	10/08/2009	1730.79	159.51	1571.28	
RD-67	Chatsworth	02/04/2009	1901.71	58.84	1842.87	
RD-67	Chatsworth	04/21/2009	1901.71	59.85	1841.86	
RD-67	Chatsworth	07/07/2009	1901.71	60.90	1840.81	
RD-67	Chatsworth	10/08/2009	1901.71	62.59	1839.12	
RD-68A	Chatsworth	03/03/2009	1307.64	NM	---	(A)
RD-68A	Chatsworth	05/12/2009	1307.64	-11.53	1319.17	(A)
RD-68A	Chatsworth	08/04/2009	1307.64	-13.84	1321.48	(A)
RD-68A	Chatsworth	11/04/2009	1307.64	-9.23	1316.87	(A)
RD-68B	Chatsworth	03/03/2009	1312.44	UTM	---	(A,*)
RD-68B	Chatsworth	05/12/2009	1312.44	-9.23	1321.67	(A)
RD-68B	Chatsworth	08/04/2009	1312.44	-9.23	1321.67	(A)
RD-68B	Chatsworth	11/04/2009	1312.44	-11.53	1323.97	(A)
RD-69	Chatsworth	02/04/2009	1831.28	51.72	1779.56	
RD-69	Chatsworth	04/21/2009	1831.28	53.19	1778.09	
RD-69	Chatsworth	07/08/2009	1831.28	54.16	1777.12	
RD-69	Chatsworth	10/07/2009	1831.28	56.56	1774.72	
RD-70	Chatsworth	02/02/2009	1732.26	149.29	1582.97	
RD-70	Chatsworth	04/21/2009	1732.26	147.68	1584.58	
RD-70	Chatsworth	07/07/2009	1732.26	148.15	1584.11	
RD-70	Chatsworth	10/07/2009	1732.26	148.51	1583.75	
RD-71	Chatsworth	02/05/2009	1740.02	172.20	1567.82	
RD-71	Chatsworth	04/22/2009	1740.02	170.07	1569.95	
RD-71	Chatsworth	07/07/2009	1740.02	168.97	1571.05	
RD-71	Chatsworth	10/08/2009	1740.02	169.00	1571.02	
RD-72	Chatsworth	02/02/2009	1907.25	FLUTe		(1)
RD-72	Chatsworth	04/21/2009	1907.25	FLUTe		(1)
RD-72	Chatsworth	07/07/2009	1907.25	FLUTe		(1)
RD-72	Chatsworth	10/08/2009	1907.25	FLUTe		(1)
RD-73	Chatsworth	02/06/2009	1901.60	84.34	1817.26	
RD-73	Chatsworth	04/22/2009	1901.60	84.39	1817.21	
RD-73	Chatsworth	07/06/2009	1901.60	85.15	1816.45	
RD-73	Chatsworth	10/08/2009	1901.60	86.24	1815.36	
RD-74	Chatsworth	02/02/2009	1810.90	Dry	---	
RD-74	Chatsworth	04/21/2009	1810.90	63.16	1747.74	
RD-74	Chatsworth	07/07/2009	1810.90	71.14	1739.76	
RD-74	Chatsworth	10/12/2009	1810.90	70.81	1740.09	
RD-75	Chatsworth	02/05/2009	1613.30	388.91	1224.39	
RD-75	Chatsworth	04/22/2009	1613.30	388.62	1224.68	
RD-75	Chatsworth	07/07/2009	1613.30	388.64	1224.66	
RD-75	Chatsworth	10/07/2009	1613.30	388.69	1224.61	

See last page of table for notes and abbreviations.

TABLE II
SUMMARY OF WATER LEVEL DATA, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
RD-76	Chatsworth	02/05/2009	1772.27	127.34	1644.93	(C)
RD-76	Chatsworth	04/22/2009	1772.27	127.24	1645.03	(C)
RD-76	Chatsworth	07/07/2009	1772.27	127.52	1644.75	(C)
RD-76	Chatsworth	10/07/2009	1772.27	127.49	1644.78	(C)
RD-77	Chatsworth	02/06/2009	1918.48	102.93	1815.55	
RD-77	Chatsworth	04/22/2009	1918.48	103.02	1815.46	
RD-77	Chatsworth	07/06/2009	1918.48	103.72	1814.76	
RD-77	Chatsworth	10/07/2009	1918.48	104.65	1813.83	
RD-78	Chatsworth	02/05/2009	1819.84	241.92	1577.92	
RD-78	Chatsworth	04/20/2009	1819.84	241.17	1578.67	
RD-78	Chatsworth	07/08/2009	1819.84	240.29	1579.55	
RD-78	Chatsworth	10/07/2009	1819.84	240.10	1579.74	
RD-80	Chatsworth	02/05/2009	1740.18	142.53	1597.65	
RD-80	Chatsworth	04/21/2009	1740.18	141.61	1598.57	
RD-80	Chatsworth	07/08/2009	1740.18	140.75	1599.43	
RD-80	Chatsworth	10/07/2009	1740.18	140.36	1599.82	
RD-81	Chatsworth	02/04/2009	1705.77	108.28	1597.49	
RD-81	Chatsworth	04/21/2009	1705.77	107.18	1598.59	
RD-81	Chatsworth	07/08/2009	1705.77	106.54	1599.23	
RD-81	Chatsworth	10/07/2009	1705.77	106.23	1599.54	
RD-82	Chatsworth	02/04/2009	1676.73	79.17	1597.56	
RD-82	Chatsworth	04/21/2009	1676.73	78.11	1598.62	
RD-82	Chatsworth	07/07/2009	1676.73	77.37	1599.36	
RD-82	Chatsworth	10/07/2009	1676.73	77.06	1599.67	
RD-83	Chatsworth	02/03/2009	1661.18	64.54	1596.64	
RD-83	Chatsworth	04/21/2009	1661.18	63.41	1597.77	
RD-83	Chatsworth	07/07/2009	1661.18	62.70	1598.48	
RD-83	Chatsworth	10/07/2009	1661.18	62.46	1598.72	
RD-84	Chatsworth	02/05/2009	1907.82	142.99	1764.83	
RD-84	Chatsworth	04/22/2009	1907.82	144.41	1763.41	
RD-84	Chatsworth	07/07/2009	1907.82	146.00	1761.82	
RD-84	Chatsworth	10/08/2009	1907.83	148.53	1759.30	
RD-85	Chatsworth	02/03/2009	1849.09	66.55	1782.54	
RD-85	Chatsworth	04/22/2009	1849.09	66.24	1782.85	
RD-85	Chatsworth	07/07/2009	1849.09	65.63	1783.46	
RD-85	Chatsworth	10/06/2009	1849.09	65.97	1783.12	
RD-86	Chatsworth	02/03/2009	1830.51	61.53	1768.98	
RD-86	Chatsworth	04/21/2009	1830.51	54.88	1775.63	
RD-86	Chatsworth	07/07/2009	1830.51	62.04	1768.47	
RD-86	Chatsworth	10/06/2009	1832.31	63.38	1768.93	
RD-87	Chatsworth	02/03/2009	1789.09	Dry	---	
RD-87	Chatsworth	04/22/2009	1789.09	Dry	---	
RD-87	Chatsworth	07/07/2009	1789.09	Dry	---	
RD-87	Chatsworth	10/08/2009	1789.09	48.23	1740.86	
RD-88	Chatsworth	02/03/2009	1774.62	27.22	1747.40	
RD-88	Chatsworth	04/22/2009	1774.62	26.30	1748.32	
RD-88	Chatsworth	07/07/2009	1774.62	27.47	1747.15	
RD-88	Chatsworth	10/08/2009	1774.62	28.52	1746.10	
RD-89	Chatsworth	02/02/2009	1814.18	Dry	---	
RD-89	Chatsworth	04/22/2009	1814.18	43.83	1770.35	
RD-89	Chatsworth	07/07/2009	1814.18	42.24	1771.94	
RD-89	Chatsworth	10/08/2009	1814.18	Dry	---	

See last page of table for notes and abbreviations.

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SUMMARY OF WATER LEVEL DATA, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
RD-90	Chatsworth	02/02/2009	1784.75	34.36	1750.39	
RD-90	Chatsworth	04/22/2009	1784.75	33.83	1750.92	
RD-90	Chatsworth	07/07/2009	1784.75	34.65	1750.10	
RD-90	Chatsworth	10/08/2009	1784.75	35.72	1749.03	
RD-91	Chatsworth	02/02/2009	1818.04	74.72	1743.32	
RD-91	Chatsworth	04/21/2009	1818.04	63.31	1754.73	
RD-91	Chatsworth	07/07/2009	1818.04	73.92	1744.12	
RD-91	Chatsworth	10/08/2009	1818.04	85.58	1732.46	
RD-92	Chatsworth	02/03/2009	1833.74	58.58	1775.16	
RD-92	Chatsworth	04/22/2009	1833.74	58.98	1774.76	
RD-92	Chatsworth	07/07/2009	1833.74	59.52	1774.22	
RD-92	Chatsworth	10/08/2009	1833.74	60.29	1773.45	
RD-93	Chatsworth	02/02/2009	1810.48	37.21	1773.27	
RD-93	Chatsworth	04/22/2009	1810.48	38.18	1772.30	
RD-93	Chatsworth	07/07/2009	1810.48	36.45	1774.03	
RD-93	Chatsworth	10/07/2009	1810.48	36.82	1773.66	
RD-94	Chatsworth	02/03/2009	1744.38	19.39	1724.99	
RD-94	Chatsworth	04/22/2009	1744.38	20.39	1723.99	
RD-94	Chatsworth	07/07/2009	1744.38	20.30	1724.08	
RD-94	Chatsworth	10/08/2009	1744.38	22.18	1722.20	
RD-95	Chatsworth	02/02/2009	1811.36	52.89	1758.47	
RD-95	Chatsworth	04/22/2009	1811.36	54.93	1756.43	
RD-95	Chatsworth	07/07/2009	1811.36	53.26	1758.10	
RD-95	Chatsworth	10/07/2009	1811.36	54.15	1757.21	
RD-96	Chatsworth	02/02/2009	1805.14	60.86	1744.28	
RD-96	Chatsworth	04/21/2009	1805.14	60.02	1745.12	
RD-96	Chatsworth	07/07/2009	1805.14	59.74	1745.40	
RD-96	Chatsworth	10/12/2009	1805.14	62.06	1743.08	
RD-97	Chatsworth	02/03/2009	1792.22	51.58	1740.64	
RD-97	Chatsworth	04/21/2009	1792.22	51.78	1740.44	
RD-97	Chatsworth	07/07/2009	1792.22	50.51	1741.71	
RD-97	Chatsworth	10/12/2009	1792.22	51.56	1740.66	
RD-98	Chatsworth	02/03/2009	1808.73	44.83	1763.90	
RD-98	Chatsworth	04/22/2009	1808.73	45.01	1763.72	
RD-98	Chatsworth	07/07/2009	1808.73	44.27	1764.46	
RD-98	Chatsworth	10/06/2009	1808.73	45.27	1763.46	
RS-01	Shallow	02/05/2009	1879.68	Dry	---	
RS-01	Shallow	04/20/2009	1879.68	Dry	---	
RS-01	Shallow	07/08/2009	1879.68	Dry	---	
RS-01	Shallow	10/07/2009	1879.68	Dry	---	
RS-02	Shallow	02/06/2009	1901.08	Dry	---	
RS-02	Shallow	04/22/2009	1901.08	Dry	---	
RS-02	Shallow	07/07/2009	1901.08	Dry	---	
RS-02	Shallow	10/08/2009	1901.08	Dry	---	
RS-03	Shallow	02/06/2009	1834.22	Dry	---	
RS-03	Shallow	04/22/2009	1834.22	Dry	---	
RS-03	Shallow	07/08/2009	1834.22	Dry	---	
RS-03	Shallow	10/07/2009	1834.22	Dry	---	
RS-04	Shallow	02/06/2009	1826.56	Dry	---	
RS-04	Shallow	04/22/2009	1826.56	Dry	---	
RS-04	Shallow	07/08/2009	1826.56	Dry	---	
RS-04	Shallow	10/07/2009	1826.56	Dry	---	

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SUMMARY OF WATER LEVEL DATA, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
RS-05	Shallow	02/04/2009	1783.73	Dry	---	
RS-05	Shallow	04/22/2009	1783.73	Dry	---	
RS-05	Shallow	07/08/2009	1783.73	Dry	---	
RS-05	Shallow	10/06/2009	1783.73	Dry	---	
RS-06	Shallow	02/04/2009	1757.43	Dry	---	
RS-06	Shallow	04/23/2009	1757.43	Dry	---	
RS-06	Shallow	07/08/2009	1757.43	Dry	---	
RS-06	Shallow	10/06/2009	1757.43	Dry	---	
RS-07	Shallow	02/04/2009	1732.27	6.45	1725.82	
RS-07	Shallow	04/23/2009	1732.27	Dry	---	
RS-07	Shallow	07/08/2009	1732.27	Dry	---	
RS-07	Shallow	10/08/2009	1732.27	Dry	---	
RS-08	Shallow	02/03/2009	1821.57	Dry	---	
RS-08	Shallow	04/21/2009	1821.57	11.77	1809.80	
RS-08	Shallow	07/07/2009	1821.57	Dry	---	
RS-08	Shallow	10/06/2009	1821.57	Dry	---	
RS-09	Shallow	02/04/2009	1735.52	Dry	---	
RS-09	Shallow	04/21/2009	1735.52	23.16	1712.36	
RS-09	Shallow	07/07/2009	1735.52	Dry	---	
RS-09	Shallow	10/08/2009	1735.52	Dry	---	
RS-10	Shallow	02/04/2009	1762.08	Dry	---	
RS-10	Shallow	04/22/2009	1762.08	Dry	---	
RS-10	Shallow	07/09/2009	1762.08	Dry	---	
RS-10	Shallow	10/08/2009	1762.08	Dry	---	
RS-11	Shallow	02/04/2009	1790.39	Dry	---	
RS-11	Shallow	04/21/2009	1790.39	Dry	---	
RS-11	Shallow	07/07/2009	1790.39	Dry	---	
RS-11	Shallow	10/07/2009	1790.39	Dry	---	
RS-12	Shallow	02/04/2009	1727.48	Dry	---	
RS-12	Shallow	04/21/2009	1727.48	Dry	---	
RS-12	Shallow	07/07/2009	1727.48	Dry	---	
RS-12	Shallow	10/08/2009	1727.48	Dry	---	
RS-13	Shallow	02/04/2009	1645.13	Dry	---	
RS-13	Shallow	04/21/2009	1645.13	22.13	1623.00	
RS-13	Shallow	07/07/2009	1645.13	22.84	1622.29	
RS-13	Shallow	10/08/2009	1645.13	Dry	---	
RS-14	Shallow	02/04/2009	1734.78	Dry	---	
RS-14	Shallow	04/21/2009	1734.78	Dry	---	
RS-14	Shallow	07/07/2009	1734.78	Dry	---	
RS-14	Shallow	10/09/2009	1734.78	Dry	---	
RS-15	Shallow	02/04/2009	1764.86	9.54	1755.32	
RS-15	Shallow	04/21/2009	1764.86	8.42	1756.44	
RS-15	Shallow	07/07/2009	1764.86	10.60	1754.26	
RS-15	Shallow	10/08/2009	1764.86	Dry	---	
RS-16	Shallow	02/02/2009	1811.05	Dry	---	
RS-16	Shallow	04/21/2009	1811.05	Dry	---	
RS-16	Shallow	07/07/2009	1811.05	Dry	---	
RS-16	Shallow	10/12/2009	1811.05	Dry	---	
RS-17	Shallow	02/04/2009	1766.52	13.38	1753.14	
RS-17	Shallow	04/21/2009	1766.52	12.75	1753.77	
RS-17	Shallow	07/07/2009	1766.52	14.94	1751.58	
RS-17	Shallow	10/08/2009	1766.52	Dry	---	

See last page of table for notes and abbreviations.

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BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
RS-18	Shallow	02/02/2009	1802.86	9.42	1793.44	
RS-18	Shallow	04/21/2009	1802.86	8.51	1794.35	
RS-18	Shallow	07/07/2009	1802.86	13.22	1789.64	
RS-18	Shallow	10/08/2009	1802.86	Dry	---	
RS-19	Shallow	02/04/2009	1812.42	Dry	---	
RS-19	Shallow	04/23/2009	1812.42	Dry	---	
RS-19	Shallow	07/07/2009	1812.42	Dry	---	
RS-19	Shallow	10/07/2009	1812.42	Dry	---	
RS-20	Shallow	02/06/2009	1823.77	Dry	---	
RS-20	Shallow	04/23/2009	1823.77	Dry	---	
RS-20	Shallow	07/08/2009	1823.77	Dry	---	
RS-20	Shallow	10/07/2009	1823.77	Dry	---	
RS-21	Shallow	02/03/2009	1767.36	Dry	---	
RS-21	Shallow	04/21/2009	1767.36	Dry	---	
RS-21	Shallow	07/07/2009	1767.36	Dry	---	
RS-21	Shallow	10/06/2009	1767.36	Dry	---	
RS-22	Shallow	02/03/2009	1771.23	30.48	1740.75	
RS-22	Shallow	04/21/2009	1771.23	30.79	1740.44	
RS-22	Shallow	07/07/2009	1771.23	Dry	---	
RS-22	Shallow	10/06/2009	1771.23	Dry	---	
RS-23	Shallow	02/02/2009	1887.25	Dry	---	
RS-23	Shallow	04/21/2009	1887.25	Dry	---	
RS-23	Shallow	07/07/2009	1887.25	Dry	---	
RS-23	Shallow	10/08/2009	1887.25	Dry	---	
RS-24	Shallow	02/03/2009	1809.24	Dry	---	
RS-24	Shallow	04/22/2009	1809.24	Dry	---	
RS-24	Shallow	07/07/2009	1809.24	Dry	---	
RS-24	Shallow	10/07/2009	1809.24	Dry	---	
RS-25	Shallow	02/03/2009	1862.71	14.66	1848.05	
RS-25	Shallow	04/22/2009	1862.71	14.10	1848.61	
RS-25	Shallow	07/07/2009	1862.71	14.34	1848.37	
RS-25	Shallow	10/12/2009	1862.71	Dry	---	
RS-27	Shallow	02/02/2009	1804.78	Dry	---	
RS-27	Shallow	04/21/2009	1804.78	Dry	---	
RS-27	Shallow	07/07/2009	1804.78	Dry	---	
RS-27	Shallow	10/08/2009	1804.78	Dry	---	
RS-28	Shallow	02/02/2009	1768.59	UTM	---	(*)
RS-28	Shallow	04/21/2009	1768.59	UTM	---	(*)
RS-28	Shallow	07/07/2009	1768.59	UTM	---	(*)
RS-28	Shallow	10/08/2009	1768.59	UTM	---	(*)
RS-29	Shallow	02/02/2009	1833.09	Dry	---	
RS-29	Shallow	04/21/2009	1833.09	Dry	---	
RS-29	Shallow	07/07/2009	1833.09	Dry	---	
RS-29	Shallow	10/06/2009	1833.09	Dry	---	
RS-30	Shallow	02/06/2009	1909.01	Dry	---	
RS-30	Shallow	04/22/2009	1909.01	21.32	1887.69	
RS-30	Shallow	07/07/2009	1909.01	Dry	---	
RS-30	Shallow	10/08/2009	1909.01	Dry	---	
RS-31	Shallow	02/06/2009	1909.03	Dry	---	
RS-31	Shallow	04/22/2009	1909.03	Dry	---	
RS-31	Shallow	07/07/2009	1909.03	Dry	---	
RS-31	Shallow	10/08/2009	1909.03	Dry	---	

See last page of table for notes and abbreviations.

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VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
RS-32	Shallow	02/06/2009	1908.99	Dry	---	
RS-32	Shallow	04/22/2009	1908.99	15.64	1893.35	
RS-32	Shallow	07/07/2009	1908.99	Dry	---	
RS-32	Shallow	10/08/2009	1908.99	Dry	---	
RS-54	Shallow	02/02/2009	1846.66	31.72	1814.94	
RS-54	Shallow	04/21/2009	1846.66	Dry	---	
RS-54	Shallow	07/07/2009	1846.66	Dry	---	
RS-54	Shallow	10/08/2009	1843.76	Dry	---	
SH-01	Shallow	02/03/2009	1772.84	Dry	---	
SH-01	Shallow	04/21/2009	1772.84	Dry	---	
SH-01	Shallow	07/07/2009	1772.84	Dry	---	
SH-01	Shallow	10/08/2009	1772.84	Dry	---	
SH-02	Shallow	02/03/2009	1762.76	Dry	---	
SH-02	Shallow	04/21/2009	1762.76	8.21	1754.55	
SH-02	Shallow	07/07/2009	1762.76	10.49	1752.27	
SH-02	Shallow	10/08/2009	1762.76	Dry	---	
SH-03	Shallow	02/03/2009	1762.53	Dry	---	
SH-03	Shallow	04/21/2009	1762.53	8.00	1754.53	
SH-03	Shallow	07/07/2009	1762.53	Dry	---	
SH-03	Shallow	10/08/2009	1762.53	Dry	---	
SH-04	Shallow	02/03/2009	1765.08	12.99	1752.09	
SH-04	Shallow	04/21/2009	1765.08	9.99	1755.09	
SH-04	Shallow	07/07/2009	1765.08	Dry	---	
SH-04	Shallow	10/08/2009	1765.08	Dry	---	
SH-05	Shallow	02/03/2009	1762.97	Dry	---	
SH-05	Shallow	04/21/2009	1762.97	10.66	1752.31	
SH-05	Shallow	07/07/2009	1762.97	Dry	---	
SH-05	Shallow	10/08/2009	1762.97	Dry	---	
SH-06	Shallow	02/05/2009	1776.99	Dry	---	
SH-06	Shallow	04/21/2009	1776.99	Dry	---	
SH-06	Shallow	07/07/2009	1776.99	Dry	---	
SH-06	Shallow	10/08/2009	1776.99	Dry	---	
SH-07	Shallow	02/03/2009	1775.11	Dry	---	
SH-07	Shallow	04/21/2009	1775.11	Dry	---	
SH-07	Shallow	07/07/2009	1775.11	Dry	---	
SH-07	Shallow	10/08/2009	1775.11	Dry	---	
SH-08	Shallow	02/03/2009	1763.25	Dry	---	
SH-08	Shallow	04/21/2009	1763.25	9.29	1753.96	
SH-08	Shallow	07/07/2009	1763.25	Dry	---	
SH-08	Shallow	10/08/2009	1763.25	Dry	---	
SH-09	Shallow	02/03/2009	1761.19	Dry	---	
SH-09	Shallow	04/21/2009	1761.19	Dry	---	
SH-09	Shallow	07/07/2009	1761.19	Dry	---	
SH-09	Shallow	10/08/2009	1761.19	Dry	---	
SH-10	Shallow	02/05/2009	1757.69	Dry	---	
SH-10	Shallow	04/21/2009	1757.69	Dry	---	
SH-10	Shallow	07/07/2009	1757.69	Dry	---	
SH-10	Shallow	10/08/2009	1757.69	Dry	---	
SH-11	Shallow	02/04/2009	1756.00	Dry	---	
SH-11	Shallow	04/21/2009	1756.00	16.78	1739.22	
SH-11	Shallow	07/07/2009	1756.00	Dry	---	
SH-11	Shallow	10/08/2009	1756.00	Dry	---	

See last page of table for notes and abbreviations.

TABLE II
SUMMARY OF WATER LEVEL DATA, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
WS-04A	Chatsworth	02/05/2009	1749.77	153.05	1596.72	
WS-04A	Chatsworth	04/21/2009	1749.77	152.01	1597.76	
WS-04A	Chatsworth	07/08/2009	1749.77	157.42	1592.35	
WS-04A	Chatsworth	10/07/2009	1749.77	151.52	1598.25	
WS-05	Chatsworth	02/06/2009	1830.20	231.67	1598.53	
WS-05	Chatsworth	04/22/2009	1830.20	230.47	1599.73	
WS-05	Chatsworth	07/08/2009	1830.20	229.85	1600.35	
WS-05	Chatsworth	10/07/2009	1830.20	229.16	1601.04	
WS-06	Chatsworth	02/03/2009	1932.72	334.76	1597.96	
WS-06	Chatsworth	04/22/2009	1932.72	333.62	1599.10	
WS-06	Chatsworth	07/08/2009	1932.72	332.80	1599.92	
WS-06	Chatsworth	10/06/2009	1932.72	332.59	1600.13	
WS-07	Chatsworth	02/03/2009	1826.19	61.50	1764.69	
WS-07	Chatsworth	04/21/2009	1826.19	60.53	1765.66	
WS-07	Chatsworth	07/07/2009	1826.19	61.61	1764.58	
WS-07	Chatsworth	10/06/2009	1826.19	63.29	1762.90	
WS-08	Chatsworth	02/05/2009	1794.39	144.94	1649.45	
WS-08	Chatsworth	04/21/2009	1794.39	141.34	1653.05	
WS-08	Chatsworth	07/07/2009	1794.39	141.06	1653.33	
WS-08	Chatsworth	10/09/2009	1794.39	141.23	1653.16	
WS-09	Chatsworth	02/03/2009	1883.99	282.71	1601.28	
WS-09	Chatsworth	04/21/2009	1883.99	281.64	1602.35	
WS-09	Chatsworth	07/07/2009	1883.99	280.59	1603.40	
WS-09	Chatsworth	10/06/2009	1883.99	279.68	1604.31	
WS-09A	Chatsworth	02/04/2009	1647.61	24.52	1623.09	
WS-09A	Chatsworth	04/21/2009	1647.61	23.39	1624.22	
WS-09A	Chatsworth	07/07/2009	1647.61	24.08	1623.53	
WS-09A	Chatsworth	10/08/2009	1647.61	25.01	1622.60	
WS-09B	Chatsworth	02/04/2009	1796.89	134.93	1661.96	
WS-09B	Chatsworth	04/21/2009	1796.89	134.67	1662.22	
WS-09B	Chatsworth	07/07/2009	1796.89	135.02	1661.87	
WS-09B	Chatsworth	10/07/2009	1796.89	137.06	1659.83	
WS-11	Chatsworth	02/04/2009	1748.70	47.98	1700.72	
WS-11	Chatsworth	04/21/2009	1748.70	42.25	1706.45	
WS-11	Chatsworth	07/07/2009	1748.70	46.71	1701.99	
WS-11	Chatsworth	10/12/2009	1748.70	54.92	1693.78	
WS-12	Chatsworth	02/04/2009	1705.98	108.81	1597.17	
WS-12	Chatsworth	04/21/2009	1705.98	107.91	1598.07	
WS-12	Chatsworth	07/08/2009	1705.98	106.98	1599.00	
WS-12	Chatsworth	10/07/2009	1705.98	106.76	1599.22	
WS-13	Chatsworth	02/03/2009	1658.62	61.56	1597.06	
WS-13	Chatsworth	04/21/2009	1658.62	60.38	1598.24	
WS-13	Chatsworth	07/07/2009	1658.62	59.72	1598.90	
WS-13	Chatsworth	10/07/2009	1658.62	59.27	1599.35	
WS-14	Chatsworth	02/05/2009	1878.23	319.56	1558.67	
WS-14	Chatsworth	04/20/2009	1878.23	319.00	1559.23	
WS-14	Chatsworth	07/08/2009	1878.23	318.40	1559.83	
WS-14	Chatsworth	10/07/2009	1878.23	318.46	1559.77	
WS-SP	Chatsworth	02/03/2009	1766.76	29.16	1737.60	
WS-SP	Chatsworth	04/21/2009	1766.76	29.10	1737.66	
WS-SP	Chatsworth	07/07/2009	1766.76	30.15	1736.61	
WS-SP	Chatsworth	10/06/2009	1766.76	31.86	1734.90	

See last page of table for notes and abbreviations.

TABLE II
NOTES AND ABBREVIATIONS

1. (A) = Artesian with hydrostatic head above land surface.

2. (C) = Depth to water measured from top of casing. During the monitoring period, pumps had been removed from several wells to allow hydrogeologic testing. Measuring point elevation not adjusted.

3. (ft btc) = Feet below top of casing.

4. MSL = Mean Sea Level.

5. NM = Not measured.

6. PZ = piezometer

7. UTM = Unable to measure.

8. --- = No data available or not applicable.

9. Chatsworth = Chatsworth Formation geological unit.

10. Shallow = Near-surface groundwater geological unit.

11. (*) = Unable to measure due to the following:
    - OS-24 The partially removed FLUTe system prevented water level measurement.
    - PZ-084 Access restrictions.
    - PZ-085A Access restrictions.
    - PZ-085B Access restrictions.
    - PZ-087A Access restrictions.
    - PZ-087B Access restrictions.
    - RD-02 Access restrictions.
    - RD-14 Obstruction in casing prevented water level measurement.
    - RD-30 Vault welded shut to prevent surface water from infiltrating the well.
    - RD-45A Partial collapse prevented water level measurement.
    - RD-68B Open valve prevented pressure reading of artesian water level.
    - RS-28 Vault welded shut to prevent surface water from infiltrating the well.

12. Static water level elevations were calculated using the following equation:
    $E_W = E - D + C$

    Where:
    - E_W = Elevation of water above mean sea level (feet)
    - E = *Elevation above sea level at point of measurement (feet)*
    - D = *Depth to water (feet)*
    - C = *Calibration correction factor (feet)*

13. (1) = FLUTe installed in well. Water levels recorded by dataloggers at saturated ports were provided by MWH for the following wells:

Well	Date / Time	Port	Spacer Interval (ft btc)	Depth to Water (ft btc)
RD-07	No datalogger installed in 2009			
RD-21	02/04/2009	Battery malfunction		
	4/21/2009 12:16	1	85 - 95	Dry
	4/21/2009 12:16	2	105 - 115	91.134
	4/21/2009 12:16	3	125 - 135	92.162
	4/21/2009 12:16	4	145 - 155	107.944
	4/21/2009 12:16	5	165 - 175	90.115
	07/08/2009 12:16	1	85 - 95	Dry
	07/08/2009 12:16	2	105 - 115	92.007
	07/08/2009 12:16	3	125 - 135	92.468
	07/08/2009 12:16	4	145 - 155	108.844
	07/08/2009 12:16	5	165 - 175	90.960
	10/07/2009 12:16	1	85 - 95	Dry
	10/07/2009 12:16	2	105 - 115	93.098
	10/07/2009 12:16	3	125 - 135	92.992
	10/07/2009 12:16	4	145 - 155	110.387
	10/07/2009 12:16	5	165 - 175	91.977
RD-22	2/4/2009 12:20	1	310 - 320	296.846
	2/4/2009 12:20	2	330 - 340	296.881
	2/4/2009 12:20	3	350 - 360	298.433
	2/4/2009 12:20	4	370 - 380	332.114
	2/4/2009 12:20	5	390 - 400	298.340
	2/4/2009 12:20	6	410 - 420	---
	2/4/2009 12:20	7	430 - 440	---
	4/21/2009 13:11	1	310 - 320	296.903
	4/21/2009 13:11	2	330 - 340	296.939
	4/21/2009 13:11	3	350 - 360	298.648
	4/21/2009 13:11	4	370 - 380	---
	4/21/2009 13:11	5	390 - 400	298.485
	4/21/2009 13:11	6	410 - 420	---
	4/21/2009 13:11	7	430 - 440	---
	07/08/2009 14:03	1	310 - 320	296.932
	07/08/2009 14:03	2	330 - 340	297.040
	07/08/2009 14:03	3	350 - 360	---
	07/08/2009 14:03	4	370 - 380	---
	07/08/2009 14:03	5	390 - 400	298.615
	07/08/2009 14:03	6	410 - 420	---
	07/08/2009 14:03	7	430 - 440	---
	10/07/2009 15:04	1	310 - 320	296.932
	10/07/2009 15:04	2	330 - 340	297.069
	10/07/2009 15:04	3	350 - 360	---
	10/07/2009 15:04	4	370 - 380	---
	10/07/2009 15:04	5	390 - 400	298.731
	10/07/2009 15:04	6	410 - 420	---
	10/07/2009 15:04	7	430 - 440	435.727

Well	Date / Time	Port	Spacer Interval (ft btc)	Depth to Water (ft btc)
RD-23	2/4/2009 11:39	1	231 - 241	231.751
	2/4/2009 11:39	2	251 - 261	226.156
	2/4/2009 11:39	3	271 - 281	---
	2/4/2009 11:39	4	291 - 301	---
	2/4/2009 11:39	5	311 - 321	248.305
	2/4/2009 11:39	6	331 - 341	245.436
	2/4/2009 11:39	7	351 - 361	---
	2/4/2009 11:39	8	371 - 381	---
	2/4/2009 11:39	9	391 - 396.5	---
	4/21/2009 11:39	1	231 - 241	234.271
	4/21/2009 11:39	2	251 - 261	227.432
	4/21/2009 11:39	3	271 - 281	---
	4/21/2009 11:39	4	291 - 301	---
	4/21/2009 11:39	5	311 - 321	249.531
	4/21/2009 11:39	6	331 - 341	244.132
	4/21/2009 11:39	7	351 - 361	---
	4/21/2009 11:39	8	371 - 381	---
	4/21/2009 11:39	9	391 - 396.5	---
	07/08/2009 11:39	1	231 - 241	---
	07/08/2009 11:39	2	251 - 261	---
	07/08/2009 11:39	3	271 - 281	---
	07/08/2009 11:39	4	291 - 301	---
	07/08/2009 11:39	5	311 - 321	244.714
	07/08/2009 11:39	6	331 - 341	---
	07/08/2009 11:39	7	351 - 361	---
	07/08/2009 11:39	8	371 - 381	---
	07/08/2009 11:39	9	391 - 396.5	---
	10/07/2009 11:39	1	231 - 241	---
	10/07/2009 11:39	2	251 - 261	226.844
	10/07/2009 11:39	3	271 - 281	---
	10/07/2009 11:39	4	291 - 301	---
	10/07/2009 11:39	5	311 - 321	---
	10/07/2009 11:39	6	331 - 341	---
	10/07/2009 11:39	7	351 - 361	---
	10/07/2009 11:39	8	371 - 381	---
	10/07/2009 11:39	9	391 - 396.5	---
RD-33A	2/4/2009 15:31	1	211 - 221	208.272
	2/4/2009 15:31	2	231 - 241	208.781
	2/4/2009 15:31	3	251 - 261	209.561
	2/4/2009 15:31	4	271 - 281	209.097
	2/4/2009 15:31	5	291 - 301	209.021
	2/4/2009 15:31	6	311 - 321	207.467
	4/21/2009 15:31	1	211 - 221	208.461
	4/21/2009 15:31	2	231 - 241	208.957
	4/21/2009 15:31	3	251 - 261	209.882
	4/21/2009 15:31	4	271 - 281	209.257
	4/21/2009 15:31	5	291 - 301	209.181
	4/21/2009 15:31	6	311 - 321	207.948
	07/08/2009 15:31	1	211 - 221	208.651
	07/08/2009 15:31	2	231 - 241	209.118
	07/08/2009 15:31	3	251 - 261	210.217
	07/08/2009 15:31	4	271 - 281	209.330

Well	Date / Time	Port	Spacer Interval (ft btc)	Depth to Water (ft btc)
RD-33A	07/08/2009 15:31	5	291 - 301	209.269
	07/08/2009 15:31	6	311 - 321	208.386
	10/07/2009 15:31	1	211 - 221	208.87
	10/07/2009 15:31	2	231 - 241	209.25
	10/07/2009 15:31	3	251 - 261	210.597
	10/07/2009 15:31	4	271 - 281	209.432
	10/07/2009 15:31	5	291 - 301	209.385
	10/07/2009 15:31	6	311 - 321	208.604
RD-50	2/4/2009 11:05	1	106 - 116	107.538
	2/5/2009 11:05	2	126 - 136	108.482
	2/6/2009 11:05	3	146 - 156	107.137
	2/7/2009 11:05	4	166 - 176	107.856
	2/8/2009 11:05	5	186 - 196	108.792
	4/21/2009 11:05	1	106 - 116	108.606
	4/21/2009 11:05	2	126 - 136	109.526
	4/21/2009 11:05	3	146 - 156	108.245
	4/21/2009 11:05	4	166 - 176	109.090
	4/21/2009 11:05	5	186 - 196	109.887
	07/08/2009 11:05	1	106 - 116	109.689
	07/08/2009 11:05	2	126 - 136	110.469
	07/08/2009 11:05	3	146 - 156	109.253
	07/08/2009 11:05	4	166 - 176	110.193
	07/08/2009 11:05	5	186 - 196	110.882
	10/07/2009 11:05	1	106 - 116	110.816
	10/07/2009 11:05	2	126 - 136	111.556
	10/07/2009 11:05	3	146 - 156	110.347
	10/07/2009 11:05	4	166 - 176	111.355
	10/07/2009 11:05	5	186 - 196	112.006
RD-54A	2/4/2009 16:20	1	150.5 - 160.5	Dry
	2/4/2009 16:20	2	170.5 - 180.5	150.221
	2/4/2009 16:20	3	190.5 - 200.5	---
	2/4/2009 16:20	4	210.5 - 220.5	154.014
	2/4/2009 16:20	5	230.5 - 240.5	---
	2/4/2009 16:20	6	250.5 - 260.5	---
	2/4/2009 16:20	7	270.5 - 280.5	181.298
	4/21/2009 10:20	1	150.5 - 160.5	Dry
	4/21/2009 10:20	2	170.5 - 180.5	150.798
	4/21/2009 10:20	3	190.5 - 200.5	---
	4/21/2009 10:20	4	210.5 - 220.5	154.524
	4/21/2009 10:20	5	230.5 - 240.5	---
	4/21/2009 10:20	6	250.5 - 260.5	---
	4/21/2009 10:20	7	270.5 - 280.5	181.831
	07/08/2009 11:56	1	150.5 - 160.5	Dry
	07/08/2009 11:56	2	170.5 - 180.5	151.446
	07/08/2009 11:56	3	190.5 - 200.5	---
	07/08/2009 11:56	4	210.5 - 220.5	155.616
	07/08/2009 11:56	5	230.5 - 240.5	---
	07/08/2009 11:56	6	250.5 - 260.5	---
	07/08/2009 11:56	7	270.5 - 280.5	182.450

Well	Date / Time	Port	Spacer Interval (ft btc)	Depth to Water (ft btc)
RD-54A	10/07/2009 11:56	1	150.5 - 160.5	Dry
	10/07/2009 11:56	2	170.5 - 180.5	152.398
	10/07/2009 11:56	3	190.5 - 200.5	---
	10/07/2009 11:56	4	210.5 - 220.5	156.374
	10/07/2009 11:56	5	230.5 - 240.5	---
	10/07/2009 11:56	6	250.5 - 260.5	---
	10/07/2009 11:56	7	270.5 - 280.5	183.659
RD-57	2/4/2009 11:23	1	228 - 238	Dry
	2/4/2009 11:23	2	248 - 258	Dry
	2/4/2009 11:23	3	268 - 278	Dry
	2/4/2009 11:23	4	288 - 298	Dry
	2/4/2009 11:23	5	308 - 318	Dry
	2/4/2009 11:23	6	328 - 338	Dry
	2/4/2009 11:23	7	348 - 358	342.264
	2/4/2009 11:23	8	368 - 378	336.974
	2/4/2009 11:23	9	388 - 398	350.828
	2/4/2009 11:23	10	408 - 418	349.007
	4/21/2009 11:23	1	228 - 238	Dry
	4/21/2009 11:23	2	248 - 258	Dry
	4/21/2009 11:23	3	268 - 278	Dry
	4/21/2009 11:23	4	288 - 298	Dry
	4/21/2009 11:23	5	308 - 318	Dry
	4/21/2009 11:23	6	328 - 338	Dry
	4/21/2009 11:23	7	348 - 358	340.357
	4/21/2009 11:23	8	368 - 378	335.047
	4/21/2009 11:23	9	388 - 398	349.724
	4/21/2009 11:23	10	408 - 418	347.838
	07/08/2009 11:23	1	228 - 238	Dry
	07/08/2009 11:23	2	248 - 258	Dry
	07/08/2009 11:23	3	268 - 278	Dry
	07/08/2009 11:23	4	288 - 298	Dry
	07/08/2009 11:23	5	308 - 318	Dry
	07/08/2009 11:23	6	328 - 338	Dry
	07/08/2009 11:23	7	348 - 358	339.446
	07/08/2009 11:23	8	368 - 378	---
	07/08/2009 11:23	9	388 - 398	349.681
	07/08/2009 11:23	10	408 - 418	347.708
	10/07/2009 11:23	1	228 - 238	Dry
	10/07/2009 11:23	2	248 - 258	Dry
	10/07/2009 11:23	3	268 - 278	Dry
	10/07/2009 11:23	4	288 - 298	Dry
	10/07/2009 11:23	5	308 - 318	Dry
	10/07/2009 11:23	6	328 - 338	Dry
	10/07/2009 11:23	7	348 - 358	339.793
	10/07/2009 11:23	8	368 - 378	---
	10/07/2009 11:23	9	388 - 398	348.863
	10/07/2009 11:23	10	408 - 418	346.812
RD-64	2/4/2009 12:07	1	170.5 - 180.5	Dry
	2/4/2009 12:07	2	190.5 - 200.5	---
	2/4/2009 12:07	3	210.5 - 220.5	---
	2/4/2009 12:07	4	230.5 - 240.5	---

Well	Date / Time	Port	Spacer Interval (ft btc)	Depth to Water (ft btc)
RD-64	2/4/2009 12:07	5	250.5 - 260.5	---
	2/4/2009 12:07	6	270.5 - 280.5	---
	2/4/2009 12:07	7	290.5 - 300.5	---
	2/4/2009 12:07	8	310.5 - 320.5	238.078
	2/4/2009 12:07	9	330.5 - 340.5	---
	2/4/2009 12:07	10	350.5 - 360.5	---
	2/4/2009 12:07	11	370.5 - 380.5	---
	2/4/2009 12:07	12	390.5 - 400.5	---
	4/21/2009 12:57	1	170.5 - 180.5	---
	4/21/2009 12:57	2	190.5 - 200.5	Dry
	4/21/2009 12:57	3	210.5 - 220.5	---
	4/21/2009 12:57	4	230.5 - 240.5	---
	4/21/2009 12:57	5	250.5 - 260.5	---
	4/21/2009 12:57	6	270.5 - 280.5	---
	4/21/2009 12:57	7	290.5 - 300.5	---
	4/21/2009 12:57	8	310.5 - 320.5	242.860
	4/21/2009 12:57	9	330.5 - 340.5	---
	4/21/2009 12:57	10	350.5 - 360.5	---
	4/21/2009 12:57	11	370.5 - 380.5	---
	4/21/2009 12:57	12	390.5 - 400.5	---
	07/08/2009 13:49	1	170.5 - 180.5	---
	07/08/2009 13:49	2	190.5 - 200.5	Dry
	07/08/2009 13:49	3	210.5 - 220.5	---
	07/08/2009 13:49	4	230.5 - 240.5	---
	07/08/2009 13:49	5	250.5 - 260.5	---
	07/08/2009 13:49	6	270.5 - 280.5	---
	07/08/2009 13:49	7	290.5 - 300.5	---
	07/08/2009 13:49	8	310.5 - 320.5	---
	07/08/2009 13:49	9	330.5 - 340.5	---
	07/08/2009 13:49	10	350.5 - 360.5	---
	07/08/2009 13:49	11	370.5 - 380.5	---
	07/08/2009 13:49	12	390.5 - 400.5	---
	10/07/2009 13:49	1	170.5 - 180.5	---
	10/07/2009 13:49	2	190.5 - 200.5	---
	10/07/2009 13:49	3	210.5 - 220.5	---
	10/07/2009 13:49	4	230.5 - 240.5	---
	10/07/2009 13:49	5	250.5 - 260.5	---
	10/07/2009 13:49	6	270.5 - 280.5	---
	10/07/2009 13:49	7	290.5 - 300.5	---
	10/07/2009 13:49	8	310.5 - 320.5	---
	10/07/2009 13:49	9	330.5 - 340.5	---
	10/07/2009 13:49	10	350.5 - 360.5	---
	10/07/2009 13:49	11	370.5 - 380.5	---
	10/07/2009 13:49	12	390.5 - 400.5	---
RD-65	2/4/2009 14:51	1	167 - 177	---
	2/4/2009 14:51	2	187 - 197	---
	2/4/2009 14:51	3	207 - 217	---
	2/4/2009 14:51	4	227 - 237	---
	2/4/2009 14:51	5	247 - 257	---
	2/4/2009 14:51	6	267 - 277	---
	2/4/2009 14:51	7	287 - 297	---
	2/4/2009 14:51	8	307 - 317	---

Well	Date / Time	Port	Spacer Interval (ft btc)	Depth to Water (ft btc)
RD-65	2/4/2009 14:51	9	327 - 337	254.303
	2/4/2009 14:51	10	347 - 357	---
	2/4/2009 14:51	11	367 - 377	---
	2/4/2009 14:51	12	387 - 397	---
	4/21/2009 13:31	1	167 - 177	---
	4/21/2009 13:31	2	187 - 197	---
	4/21/2009 13:31	3	207 - 217	---
	4/21/2009 13:31	4	227 - 237	---
	4/21/2009 13:31	5	247 - 257	219.914
	4/21/2009 13:31	6	267 - 277	---
	4/21/2009 13:31	7	287 - 297	---
	4/21/2009 13:31	8	307 - 317	232.576
	4/21/2009 13:31	9	327 - 337	---
	4/21/2009 13:31	10	347' - 357'	---
	4/21/2009 13:31	11	367' - 377'	---
	4/21/2009 13:31	12	387' - 397'	---
	07/08/2009 13:31	1	167 - 177	---
	07/08/2009 13:31	2	187 - 197	---
	07/08/2009 13:31	3	207 - 217	---
	07/08/2009 13:31	4	227 - 237	---
	07/08/2009 13:31	5	247 - 257	220.265
	07/08/2009 13:31	6	267 - 277	---
	07/08/2009 13:31	7	287 - 297	---
	07/08/2009 13:31	8	307 - 317	232.547
	07/08/2009 14:51	9	327 - 337	---
	07/08/2009 14:51	10	347 - 357	249.675
	07/08/2009 14:51	11	367 - 377	---
	07/08/2009 14:51	12	387 - 397	---
	10/07/2009 13:31	1	167 - 177	---
	10/07/2009 13:31	2	187 - 197	---
	10/07/2009 13:31	3	207 - 217	---
	10/07/2009 13:31	4	227 - 237	---
	10/07/2009 13:31	5	247 - 257	220.719
	10/07/2009 13:31	6	267 - 277	---
	10/07/2009 13:31	7	287 - 297	---
	10/07/2009 13:31	8	307 - 317	232.504
	10/07/2009 14:51	9	327 - 337	---
	10/07/2009 14:51	10	347 - 357	249.486
	10/07/2009 14:51	11	367 - 377	---
	10/07/2009 14:51	12	387 - 397	---
RD-72	2/4/2009 0:00	Battery malfunction		
	4/21/2009 12:08	1	45 - 55	Dry
	4/21/2009 12:08	2	65 - 75	Dry
	4/21/2009 12:08	3	85 - 95	Dry
	4/21/2009 12:08	4	105 - 115	---
	4/21/2009 12:08	5	125 - 135	112.494
	4/21/2009 12:08	6	145 - 155	119.429
	4/21/2009 12:08	7	165 - 175	114.192
	4/21/2009 12:08	8	185 - 195	114.390
	07/08/2009 13:00	1	45 - 55	Dry
	07/08/2009 13:00	2	65 - 75	Dry

Well	Date / Time	Port	Spacer Interval (ft btc)	Depth to Water (ft btc)
RD-72	07/08/2009 13:00	3	85 - 95	Dry
	07/08/2009 13:00	4	105 - 115	Dry
	07/08/2009 13:00	5	125 - 135	113.093
	07/08/2009 13:00	6	145 - 155	110.811
	07/08/2009 13:00	7	165 - 175	114.937
	07/08/2009 13:00	8	185 - 195	115.163
	10/07/2009 14:00	1	45 - 55	Dry
	10/07/2009 14:00	2	65 - 75	Dry
	10/07/2009 14:00	3	85 - 95	Dry
	10/07/2009 14:00	4	105 - 115	Dry
	10/07/2009 14:00	5	125 - 135	113.809
	10/07/2009 14:00	6	145 - 155	113.825
	10/07/2009 14:00	7	165 - 175	115.769
	10/07/2009 14:00	8	185 - 195	116.097

14. (2) = Westbay installed in well. Water levels recorded by cable probe were provided by MWH for the wells listed below.

A "Zone" is the designation given to a section of the Westbay that includes a measuring port and a pumping port. A pumping port enables the zone to be purged.

A "QA" is a section of the Westbay that only has a measuring port. This interval can be sampled, but not purged.

Well	Date	Port	Zone Length (ft btc)	Depth to Water (ft btc)
RD-31	1/16/2009	Zone 12	524 - 533	212.9
	1/16/2009	QA-22	519 - 521	213.2
	1/16/2009	QA-21	510 - 516	212.7
	1/16/2009	Zone 11	500 - 507	212.5
	1/16/2009	QA-20	494 - 497	212.0
	1/16/2009	QA-19	486 - 491	212.3
	1/16/2009	QA-18	479 - 482	212.2
	1/16/2009	Zone 10	466 - 476	211.7
	1/16/2009	QA-17	459 - 463	206.0
	1/16/2009	Zone 09	444 - 456	175.7
	1/16/2009	QA-16	432 - 441	175.6
	1/16/2009	QA-15	422 - 429	175.5
	1/16/2009	QA-14	408 - 419	175.2
	1/16/2009	Zone 08	396 - 405	175.4
	1/16/2009	QA-13	390 - 393	175.2
	1/16/2009	Zone 07	373 - 387	175.4
	1/16/2009	QA-12	361 - 370	175.4
	1/16/2009	QA-11	354 - 358	175.3
	1/16/2009	QA-10	339 - 351	129.1
	1/16/2009	Zone 06	323 - 336	129.1
	1/16/2009	QA-09	313 - 320	129.1
	1/16/2009	QA-08	308 - 310	129.2
	1/16/2009	QA-07	298 - 305	129.1
	1/16/2009	QA-06	293 - 295	129.1

Well	Date	Port	Zone Length (ft btc)	Depth to Water (ft btc)
RD-31	1/16/2009	Zone 05	282 - 290	129.2
	1/16/2009	QA-05	275 - 279	129.0
	1/16/2009	QA-04	268 - 272	129.0
	1/16/2009	Zone 04	252 - 265	129.0
	1/16/2009	QA-03	246 - 249	129.1
	1/16/2009	Zone 03	232 - 243	129.0
	1/16/2009	QA-02	222 - 229	129.0
	1/16/2009	Zone 02	204 - 219	129.0
	1/16/2009	Zone 01	186 - 201	129.0
	1/16/2009	QA-01	182 - 30	129.0
	4/20/2009	Zone 12	524 - 533	215.3
	4/20/2009	QA-22	519 - 521	213.8
	4/20/2009	QA-21	510 - 516	211.5
	4/20/2009	Zone 11	500 - 507	211.3
	4/20/2009	QA-20	494 - 497	212.1
	4/20/2009	QA-19	486 - 491	212.8
	4/20/2009	QA-18	479 - 482	212.7
	4/20/2009	Zone 10	466 - 476	212.4
	4/20/2009	QA-17	459 - 463	206.1
	4/20/2009	Zone 09	444 - 456	176.2
	4/20/2009	QA-16	432 - 441	176.1
	4/20/2009	QA-15	422 - 429	176.1
	4/20/2009	QA-14	408 - 419	175.4
	4/20/2009	Zone 08	396 - 405	176.1
	4/20/2009	QA-13	390 - 393	175.9
	4/20/2009	Zone 07	373 - 387	176.0
	4/20/2009	QA-12	361 - 370	176.0
	4/20/2009	QA-11	354 - 358	176.0
	4/20/2009	QA-10	339 - 351	129.6
	4/20/2009	Zone 06	323 - 336	129.5
	4/20/2009	QA-09	313 - 320	129.5
	4/20/2009	QA-08	308 - 310	129.5
	4/20/2009	QA-07	298 - 305	129.5
	4/20/2009	QA-06	293 - 295	129.6
	4/20/2009	Zone 05	282 - 290	129.5
	4/20/2009	QA-05	275 - 279	129.4
	4/20/2009	QA-04	268 - 272	129.5
	4/20/2009	Zone 04	252 - 265	129.5
	4/20/2009	QA-03	246 - 249	129.5
	4/20/2009	Zone 03	232 - 243	129.5
	4/20/2009	QA-02	222 - 229	129.4
	4/20/2009	Zone 02	204 - 219	129.4
	4/20/2009	Zone 01	186 - 201	129.5
	4/20/2009	QA-01	182 - 30	129.4
	08/05/09	Zone 12	524 - 533	215.2
	08/05/09	QA-22	519 - 521	215.2
	08/05/09	QA-21	510 - 516	212.9
	08/05/09	Zone 11	500 - 507	212.7
	08/05/09	QA-20	494 - 497	212.4
	08/05/09	QA-19	486 - 491	212.6
	08/05/09	QA-18	479 - 482	212.5
	08/05/09	Zone 10	466 - 476	212.2

Well	Date	Port	Zone Length (ft btc)	Depth to Water (ft btc)
RD-31	08/05/09	QA-17	459 - 463	204.7
	08/05/09	Zone 09	444 - 456	175.9
	08/05/09	QA-16	432 - 441	175.8
	08/05/09	QA-15	422 - 429	175.8
	08/05/09	QA-14	408 - 419	175.7
	08/05/09	Zone 08	396 - 405	175.7
	08/05/09	QA-13	390 - 393	175.6
	08/05/09	Zone 07	373 - 387	175.6
	08/05/09	QA-12	361 - 370	175.6
	08/05/09	QA-11	354 - 358	175.6
	08/05/09	QA-10	339 - 351	129.7
	08/05/09	Zone 06	323 - 336	129.6
	08/05/09	QA-09	313 - 320	129.6
	08/05/09	QA-08	308 - 310	129.4
	08/05/09	QA-07	298 - 305	129.7
	08/05/09	QA-06	293 - 295	129.7
	08/05/09	Zone 05	282 - 290	129.5
	08/05/09	QA-05	275 - 279	129.4
	08/05/09	QA-04	268 - 272	129.5
	08/05/09	Zone 04	252 - 265	129.6
	08/05/09	QA-03	246 - 249	129.6
	08/05/09	Zone 03	232 - 243	129.6
	08/05/09	QA-02	222 - 229	129.5
	08/05/09	Zone 02	204 - 219	129.5
	08/05/09	Zone 01	186 - 201	129.5
	08/05/09	QA-01	182 - 30	129.5
	10/15/09	Zone 12	524 - 533	215.5
	10/15/09	QA-22	519 - 521	215.1
	10/15/09	QA-21	510 - 516	212.1
	10/15/09	Zone 11	500 - 507	212.4
	10/15/09	QA-20	494 - 497	211.9
	10/15/09	QA-19	486 - 491	212.5
	10/15/09	QA-18	479 - 482	212.5
	10/15/09	Zone 10	466 - 476	212.2
	10/15/09	QA-17	459 - 463	204.4
	10/15/09	Zone 09	444 - 456	176.1
	10/15/09	QA-16	432 - 441	176.0
	10/15/09	QA-15	422 - 429	176.1
	10/15/09	QA-14	408 - 419	175.8
	10/15/09	Zone 08	396 - 405	176.0
	10/15/09	QA-13	390 - 393	175.8
	10/15/09	Zone 07	373 - 387	175.9
	10/15/09	QA-12	361 - 370	175.9
	10/15/09	QA-11	354 - 358	175.8
	10/15/09	QA-10	339 - 351	130.3
	10/15/09	Zone 06	323 - 336	130.3
	10/15/09	QA-09	313 - 320	130.2
	10/15/09	QA-08	308 - 310	130.2
	10/15/09	QA-07	298 - 305	130.3
	10/15/09	QA-06	293 - 295	130.3
	10/15/09	Zone 05	282 - 290	130.3
	10/15/09	QA-05	275 - 279	130.1

Well	Date	Port	Zone Length (ft btc)	Depth to Water (ft btc)
RD-31	10/15/09	QA-04	268 - 272	130.2
	10/15/09	Zone 04	252 - 265	130.3
	10/15/09	QA-03	246 - 249	130.2
	10/15/09	Zone 03	232 - 243	130.3
	10/15/09	QA-02	222 - 229	130.2
	10/15/09	Zone 02	204 - 219	130.2
	10/15/09	Zone 01	186 - 201	130.2
	10/15/09	QA-01	182 - 30	130.2

TABLE III
WATER QUALITY FOOTNOTES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

LCS/LCSD	=	Laboratory control sample/Laboratory control sample duplicate.
LNAPL	=	Light non-aqueous phase liquid.
MCL	=	Maximum Contaminant Level, California primary drinking water standard.
MDA	=	Minimum detectable activity.
NA	=	Not applicable; no MCL promulgated.
ND	=	Not detected. Constituent not detected in one or both samples. RPD calculation not applicable.
NL	=	Advisory California Notification Level for unregulated chemical contaminants.
NV	=	Not valid. An RPD calculation is not valid since at least one of the laboratories reported a detected concentration less than or equal to the product of five times the reporting limit times the dilution factor.
RAL	=	Regulatory Action Level to be met at a customer tap.
RPD	=	Replicate percent difference. RPDs were calculated only if the detected concentration exceeded the product of five times the reporting limit times the dilution factor.

$$\left|((X_1 - X_2)/X_{ave})\right| \times 100$$

X_1 = primary concentration observed;
X_2 = split concentration observed; and
X_{ave} = average concentration = $((X_1 - X_2)/ 2)$

Well OS-09 has been also referred to as Brandeis-Bardin Campus "Bathtub Well No. 1".

n-Nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for n-Nitrosodiphenylamine represents the combined total of both compounds.

Any radionuclide activity detected is reported by the laboratory, though the reported activity may be less than the overall laboratory error.
Radionuclide analytical results that are less than the instrument background count are shown as negative values.

As discussed in Appendix D, project specific MDAs were not always attained due in part to matrix conditions
(e.g., dissolved and suspended solids) and limitations in the prescribed analytical methods (e.g., sample volumes, counting times).

Laboratory

Eberline	=	Eberline Services of Richmond, California.
GEL	=	General Engineering Laboratories of Charleston, South Carolina.
Lancaster	=	Lancaster Laboratories of Lancaster, Pennsylvania.
TA-Denver	=	TestAmerica of Arvada, Colorado.
TA-Irvine	=	TestAmerica of Irvine, California.
TA-Knoxville	=	TestAmerica of Knoxville, Tennessee.
TA-N.Canton	=	TestAmerica of North Canton, Ohio.
Truesdail	=	Truesdail Laboratories, Inc. of Tustin, California.
Weck	=	Weck Laboratories of City of Industry, California.

TABLE III
WATER QUALITY FOOTNOTES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Sample Preparation

Dissolved sample	=	Dissolved metal and radionuclide samples were filtered using a 0.45 micron filter and preserved in the field.
Total sample	=	Total metal and radionuclide samples were preserved in the field, but were not filtered. Tritium samples were not filtered and were not preserved in the field.

Cyanide samples were not filtered.

Qualifier and Analysis Codes

---	=	Analysis not performed.
*	=	First time detected and first time analyzed for the detected analyte.
B	=	Analyte was detected in the associated method blank.
F	=	Sampled through multi-level FLUTe ports. Footnoted results are not representative of past groundwater samples, and may have been introduced in the FLUTe samples by compressed nitrogen gas, electrical tape and/or FLUTe components.
J	=	Estimated value. Result may receive a J flag for the following reasons: - Analyte (non-radiological) is detected at a level less than the RL and greater than or equal to the MDL. - Analyte (radiological) is detected at a level less than contract-required MDA and greater than or equal to the MDA. - Quality control deficiencies have compromised result accuracy (see Appendix D for details).
L	=	Laboratory contaminant.
Q	=	Estimated maximum concentration.
R	=	Rejected result (see Appendix D for details).
S	=	Suspect result. Result is not representative of past groundwater samples.
U	=	Not detected above the MDL or MDA. Numerical value represents the MDL for non-radiological data and the radionuclide activity for radiological data.
UJ	=	Not detected. Estimated detection limit as a result of analytical quality control deficiencies (see Appendix D for details).
Z	=	FLUTe sample port number.

Geological Unit

Chatsworth	=	Chatsworth Formation geological unit.
Shallow	=	Near-surface groundwater geological unit.

Units

mg/L	=	Milligrams per liter.
NTU	=	Nephelometric turbidity units.
pCi/L	=	PicoCuries per liter.
pg/L	=	Picograms per liter.
ug/L	=	Micrograms per liter.

TABLE III
WATER QUALITY FOOTNOTES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Water Quality Criteria

AAL	=	Archived Advisory Level.
MCL	=	Maximum Contaminant Level, California primary drinking water standard.
NA	=	Not applicable; no MCL promulgated.
NL	=	Advisory California Notification Level for unregulated chemical contaminants.
RAL	=	Regulatory Action Level to be met at a customer tap.
SMCL	=	California Secondary Drinking Water MCL. SMCL limits for chloride and sulfate are listed in order of Recommended, Upper, and Short Term limits.
Total	=	MCL for sum of xylene isomers, PCBs, 1,3-dichloropropene isomers, uranium isotopes or all chromium valences.
TTHM	=	MCL for total trihalomethanes including bromoform, chloroform, bromodichloromethane, and dibromochloromethane.

AALs, MCLs, SMCLs, RALs, and NLs are from the California Department of Public Health (2006, 2007a, 2007b, 2008).

The pH SMCL is from the Environmental Protection Agency (2009).

Bolded results on Table V First-Time Detects, Table VI Updated Maximum Concentrations, Table IX Radionuclide, Table X Metals, and Table XV Inorganics are detected greater than the MCL or NL.

Monitoring Program

AreaIV	Area IV general monitoring (non-permit). Variable monitoring parameters and frequency.
Background	Background Wells, Post-Closure Permit. Monitored for VOCs on a quarterly basis.
CFOU RFI	Chatsworth Formation Operable Unit RCRA Facility Investigation. Constituents of Concern and Perchlorate monitored on a quarterly basis.
Detection	Detection Monitoring Program, Post-Closure Permit. Monitored for VOCs on a quarterly basis.
Evaluation	Evaluation Monitoring Program, Post-Closure Permit. Monitored for VOCs on a semiannual basis.
POC-AppIX	Point of Compliance Wells, Post-Closure Permit. Monitored for Appendix IX constituents on an annual basis and VOCs on a semiannual basis.
ICA	Interim Corrective Action Wells, Post-Closure Permit. Monitored for VOCs on a semiannual basis.
LUFT	Leaking Underground Fuel Tank sampling. Monitored for VOCs and fuels on a semiannual basis.
Off-site	Non-permit offsite wells. Variable monitoring parameters and frequency.
Perimeter	Perimeter Wells, Non-Permit. Monitored for VOCs on a quarterly or semiannual basis.
POC	Point of Compliance Wells, Post-Closure Permit. Monitored for Appendix IX constituents on an annual basis and VOCs on a semiannual basis.
SMOU RFI	Surficial Media Operable Unit RCRA Facility Investigation. Variable monitoring parameters and frequency.
Voluntary	Other non-permit sampling. Variable monitoring parameters and frequency.

TABLE III
WATER QUALITY FOOTNOTES, 2009
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Analysis Abbreviations

App IX	Appendix IX monitoring
COCs	Constituents of Concern
Dioxins	Dioxins and furans (EPA 8290)
DRO	Diesel Range Organics (EPA 8015B)
Energetics	Nitroaromatics and nitramines (EPA 8330)
GRO	Gasoline Range Organics (EPA 8015B)
Herbicides	Chlorinated herbicides (EPA 8151A)
Hexachrome	Hexavalent chromium (EPA 7196A)
NDMA	n-Nitrosodimethylamine (EPA 1625M)
PAHs	Polycyclic aromatic hydrocarbons (EPA 8270C)
PCBs	Polychlorinated Biphenyls (EPA 8082)
PCP	Pentachlorophenol (EPA 8270SIM)
Pesticides	Organochlorine pesticides (EPA 8081A)
Rad	Radionuclides
SVOCs	Semi-Volatile Organic Compounds (EPA 8270C)
VOCs	Volatile Organic Compounds (EPA 8260B)

TABLE III
WATER QUALITY FOOTNOTES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
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		Laboratory Performing Analyses							
		1st Qtr		2nd Qtr		3rd Qtr		4th Qtr	
Analyses*	**EPA Method**	**Primary**	**Split**	**Primary**	**Split**	**Primary**	**Split**	**Primary**	**Split**
1,4-Dioxane, low level	8260SIM	Lancaster	TA-Denver	Lancaster	TA-Denver	Lancaster	None	TA-Denver	TA-Irvine
Ammonia-N	350.3	Lancaster	None	Lancaster	None	Lancaster	None	TA-Denver	TA-Irvine
Bromide, chloride, fluoride, nitrate-NO3, and sulfate	300.0	Lancaster	TA-Denver	Lancaster	TA-Denver	Lancaster	TA-Denver	TA-Denver	TA-Irvine
Cyanide	9012A	Lancaster	TA-Denver	None	None	Lancaster	None	None	None
Diesel Range Organics (DROs)	8015B	Lancaster	TA-Denver	Lancaster	TA-Denver	Lancaster	TA-Denver	TA-Denver	TA-Irvine
Dioxins and Furans	8290	TA-Knoxville	GEL	TA-Knoxville	GEL	TA-Knoxville	GEL	TA-Denver	TA-Irvine
Formaldehyde	8315A	Lancaster	TA-N.Canton	Lancaster	None	Lancaster	None	TA-Denver	TA-Irvine
Gamma-emitting radionuclides	901.1	Eberline	GEL	Eberline	None	Eberline	GEL	TA-Denver	TA-Irvine
Gasoline Range Organics (GRO)	8015B	Lancaster	TA-Denver	None	None	Lancaster	TA-Denver	TA-Denver	None
Gross Alpha and Gross Beta	900.0	Eberline	GEL	Eberline	None	Eberline	GEL	TA-Denver	TA-Irvine
Hexavalent chromium (hexachrome)	7196A	Lancaster	None	Lancaster	None	Lancaster	None	TA-Denver	TA-Irvine
Hydrazines	8315M	Truesdail	None	Truesdail	None	Truesdail	None	TA-Denver	None
Mercury	7470A	Lancaster	TA-Denver	Lancaster	TA-Denver	Lancaster	TA-Denver	TA-Denver	TA-Irvine
Metals: Aluminum, barium, boron, cobalt, iron, magnesium, manganese, molybdenum, strontium, tin, vanadium, zinc, and zirconium	6010B	Lancaster	TA-Denver	Lancaster	TA-Denver	Lancaster	TA-Denver	TA-Denver	TA-Irvine
Metals: Antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, and thallium	6020	Lancaster	TA-Denver	Lancaster	TA-Denver	Lancaster	TA-Denver	TA-Denver	TA-Irvine
Nitrate-NO3	300.0	Lancaster	None	None	None	Lancaster	None	TA-Denver	TA-Irvine
Nitroaromatics and nitramines	8330	Lancaster	TA-Denver	Lancaster	TA-Denver	Lancaster	TA-Denver	TA-Denver	None
n-Nitrosodimethylamine (NDMA), low-level	1625M	TA-Denver	Weck	TA-Denver	Weck	TA-Denver	Weck	TA-Denver	TA-Irvine
Organochlorine pesticides	8081A	Lancaster	TA-Denver	Lancaster	TA-Denver	TA-Denver	Lancaster	None	None
Perchlorate	314.0	Lancaster	TA-Denver	Lancaster	TA-Denver	Lancaster	TA-Denver	TA-Denver	TA-Irvine
pH	9040B	Lancaster	TA-Denver	Lancaster	TA-Denver	Lancaster	TA-Denver	TA-Denver	TA-Irvine
Polychlorinated biphenyl (PCBs)	8082	TA-Denver	None	None	None	TA-Denver	None	TA-Denver	TA-Irvine
Polycyclic aromatic hydrocarbons (PAHs)	8270C	Lancaster	TA-Denver	Lancaster	TA-Denver	Lancaster	TA-Denver	TA-Denver	TA-Irvine
Semi-volatile organic compounds (SVOCs)	8270C	Lancaster	TA-Denver	Lancaster	TA-Denver	Lancaster	TA-Denver	TA-Denver	TA-Irvine
Strontium-90 (Sr-90)	905.0	Eberline	GEL	Eberline	None	Eberline	GEL	TA-Denver	TA-Irvine
Tritium	906.0	Eberline	GEL	Eberline	None	Eberline	GEL	TA-Denver	TA-Irvine
Uranium	908.0	Eberline	GEL	Eberline	None	Eberline	GEL	TA-Denver	TA-Irvine
Volatile organic compounds (VOCs)	8260B	Lancaster	TA-Denver	Lancaster	TA-Denver	Lancaster	TA-Denver	TA-Denver	TA-Irvine

* Analyses lists for Constituents of Concern and Appendix IX are presented below.

TABLE III
WATER QUALITY FOOTNOTES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Background Parameters	EPA Method
Alkalinity as CaCO3	SM2320B
Ammonia-N	350.3
Chloride, Fluoride, Nitrate, Sulfate	300.0
Metals (dissolved): Calcium, Iron, Magnesium, Manganese, Potassium, Sodium, Strontium, Zinc	6010B
pH	9040B
Specific conductivity	120.1
Total Dissolved Solids	160.1
Turbidity	180.1

Dioxin and Furan Analytes		
1,2,3,4,6,7,8-HpCDF	=	1,2,3,4,6,7,8-Heptachlorodibenzofuran
1,2,3,4,6,7,8-HpCDD	=	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin
1,2,3,4,7,8,9-HpCDF	=	1,2,3,4,7,8,9-Heptachlorodibenzofuran
1,2,3,4,7,8-HxCDF	=	1,2,3,4,7,8-Hexachlorodibenzofuran
1,2,3,4,7,8-HxCDD	=	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin
1,2,3,6,7,8-HxCDF	=	1,2,3,6,7,8-Hexachlorodibenzofuran
1,2,3,6,7,8-HxCDD	=	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin
1,2,3,7,8,9-HxCDF	=	1,2,3,7,8,9-Hexachlorodibenzofuran
1,2,3,7,8,9-HxCDD	=	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin
1,2,3,7,8-PeCDF	=	1,2,3,7,8-Pentachlorodibenzofuran
1,2,3,7,8-PeCDD	=	1,2,3,7,8-Pentachlorodibenzo-p-dioxin
2,3,4,6,7,8-HxCDF	=	2,3,4,6,7,8-Hexachlorodibenzofuran
2,3,4,7,8-PeCDF	=	2,3,4,7,8-Pentachlorodibenzofuran
2,3,7,8-TCDD	=	2,3,7,8-Tetrachlorodibenzo-p-dioxin
2,3,7,8-TCDD TEQ	=	2,3,7,8-Tetrachlorodibenzo-p-dioxin toxic equivalency
2,3,7,8-TCDF	=	2,3,7,8-Tetrachlorodibenzofuran
OCDF	=	1,2,3,4,6,7,8,9-Octachlorodibenzofuran
OCDD	=	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin

2,3,7,8-TCDD TEQs were calculated using 2005 toxic equivalency factors (van den Berg et al., 2006).

When one or more dioxin congeners are detected, the 2,3,7,8-TCDD TEQ is the sum of the products of the detected dioxin congener concentration multiplied by that congener's toxic equivalency factor (TEF). When all dioxin congeners are not detected, the TEQ is the sum of the products of dioxin congener concentration at the MDL multiplied by that congener's TEF.

TABLE III
WATER QUALITY FOOTNOTES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Constituents of Concern	EPA Method	Laboratory Performing Analyses			
		Qtr 1-3		4th Qtr	
		Primary	Split	Primary	Split
1,4-Dioxane, low level	8260SIM	Lancaster	TA-Denver	TA-Denver	TA-Irvine
Ammonia-N*	350.3	Lancaster	None	TA-Denver	TA-Irvine
Fluoride and nitrate-NO3	300.0	Lancaster	TA-Denver	TA-Denver	TA-Irvine
Formaldehyde	8315A	Lancaster	None	TA-Denver	TA-Irvine
n-Nitrosodimethylamine (NDMA), low level	1625M	TA-Denver	Weck	TA-Denver	TA-Irvine
Semi-volatile organic compounds (SVOCs)**	8270C	Lancaster	TA-Denver	TA-Denver	TA-Irvine
Volatile organic compounds (VOCs)	8260B	Lancaster	TA-Denver	TA-Denver	TA-Irvine

* Analyses not conducted for HAR-07 water samples in second quarter 2009.
** Analyses were conducted by EPA Method 8330 for 1,3-Dinitrobenzene and Nitrobenzene in RD-13 water samples during the third quarter 2009

Appendix IX Analyses	EPA Method	Laboratory Performing Analyses							
		1st Qtr		2nd Qtr		3rd Qtr		4th Qtr	
		Primary	Split	Primary	Split	Primary	Split	Primary	Split
1,2,3-Trichloropropane	SRL 524M	TA-Denver	Weck	TA-Denver	Weck	TA-Denver	Weck	---	---
1,4-Dioxane, low level	8260SIM	TA-Denver	Lancaster	TA-Denver	None	TA-Denver	Lancaster	---	---
1,2-Dibromo-3-chloropropane (DBCP) and 1,2-Dibromoethane (EDB)	504.1	TA-Denver	Lancaster	TA-Denver	Lancaster	TA-Denver	Lancaster	---	---
Chlorinated herbicides*	8151A	TA-Denver	Lancaster	TA-Denver	Lancaster	TA-Denver	Lancaster	TA-Denver	---
Cyanide*	9012A	TA-Denver	Lancaster	TA-Denver	Lancaster	TA-Denver	Lancaster	---	---
Dioxins and Furans*	8290	TA-Knoxville	GEL	TA-Knoxville	GEL	TA-Knoxville	GEL	TA-Denver	---
Hexachlorophene	8321A	TA-Denver	None	TA-Denver	None	TA-Denver	None	---	---
Mercury	7470A	TA-Denver	Lancaster	TA-Denver	Lancaster	TA-Denver	None	---	---
Metals: Barium, cobalt, tin, vanadium, and zinc	6010B	TA-Denver	Lancaster	TA-Denver	Lancaster	TA-Denver	None	---	---
Metals: Antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver,	6020	TA-Denver	Lancaster	TA-Denver	Lancaster	---	---	---	---
n-Nitrosodimethylamine (NDMA), low-level	1625M	TA-Denver	Weck	TA-Denver	None	TA-Denver	Weck	---	---
Organochlorine pesticides	8081A	TA-Denver	Lancaster	TA-Denver	Lancaster	TA-Denver	Lancaster	---	---
Organophosphorous compounds	8141A	TA-Denver	Lancaster	TA-Denver	Lancaster	TA-Denver	Lancaster	---	---
Pentachlorophenol*	8270SIM	TA-Denver	None	TA-Denver	None	TA-Denver	None	---	---
Polychlorinated biphenyl (PCBs)	8082	TA-Denver	Lancaster	TA-Denver	Lancaster	TA-Denver	Lancaster	---	---
Semi-volatile organic compounds (SVOCs)	8270C	TA-Denver	Lancaster	TA-Denver	Lancaster	TA-Denver	Lancaster	---	---
Sulfide	376.2	TA-Denver	Lancaster	TA-Denver	Lancaster	TA-Denver	Lancaster	---	---
Volatile organic compounds (VOCs)	8260B	TA-Denver	Lancaster	TA-Denver	Lancaster	TA-Denver	Lancaster	---	---

Primary samples collected during the second quarter at point of compliance well HAR-07 for fluoride, nitrate, and perchlorate were analyzed by TA-Denver.
Primary samples collected during the third quarter at point of compliance well HAR-07 for 1,4-dioxane, VOCs, and SVOCs were analyzed by Lancaster.
*These analyses were conducted for HAR-07 water samples in the third quarter 2009 because there was insufficient sample volume to collect these analyses in the second quarter 2009.

TABLE IV
SUMMARY OF SAMPLES ANALYZED, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

		MONITORING PROGRAM																		
		Post-Closure Permit											SMOU RFI Group						
WellID	Quarter	Background	Detection	Evaluation	ICA	POC	Area IV	CFOU RFI	LUFT	Off-site	Other	Perimeter	2	3	4	5	6	7	8
ES-17	2				VOCs														
ES-21	1				VOCs														
	2				VOCs														
ES-23	1				VOCs														
	3				VOCs														
ES-24	2				VOCs														
ES-26	2				VOCs														
	3				VOCs														
ES-27	1				VOCs														
	3				VOCs														
ES-30	2				VOCs														
	3				VOCs														
ES-31	1						Rad												
	1						VOCs												
	3						RAD												
HAR-03	2			VOCs															
HAR-04	1				VOCs														
	3				VOCs														
HAR-07	1				VOCs			COCs							Hexachrome				
	1							Perchlorate							Metals				
	2					App IX		COCs							Hexachrome				
	2							Perchlorate							Metals				
	3				VOCs	Cyanide		COCs											
	3					Dioxins		Perchlorate											
	3					Herbicides													
	3					PCP													
	4							COCs											
	4							Perchlorate											
HAR-08	1							COCs							Hexachrome				
	1							Perchlorate							Metals				
	2							COCs							Hexachrome				
	2							Perchlorate							Metals				
	3							COCs											
	3							Perchlorate											
	4							COCs											
	4							Perchlorate											
HAR-11	1			VOCs															
	3			VOCs															
HAR-14	2					App IX													
	4					VOCs													
HAR-15	2					App IX													
	4					VOCs													
HAR-16	1					VOCs													
	2					App IX													
	4					VOCs													
HAR-17	2					App IX													
	3					Dioxins													
	4					VOCs													

See Table III for notes and abbreviations.
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BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

		MONITORING PROGRAM																	
		Post-Closure Permit											SMOU RFI Group						
WellID	Quarter	Background	Detection	Evaluation	ICA	POC	Area IV	CFOU RFI	LUFT	Off-site	Other	Perimeter	2	3	4	5	6	7	8
HAR-18	1				VOCs			COCs											
	1							Perchlorate											
	3							COCs											
	3							Perchlorate											
	3				VOCs			COCs											
	3							Perchlorate											
	4							COCs											
	4							Perchlorate											
HAR-20	1							COCs											
	1							Perchlorate											
	2							COCs											
	2							Perchlorate											
	3							COCs											
	3							Perchlorate											
	4							COCs											
	4							Perchlorate											
HAR-22	1			VOCs															
	3			VOCs															
HAR-23	1			VOCs															
	3			VOCs															
HAR-24	1			VOCs															
	3			VOCs															
HAR-26	1			VOCs												Formaldehyde			
	1															PAHs			
	2															Formaldehyde			
	2															PAHs			
	3			VOCs												Formaldehyde			
	3															PAHs			
	4															Formaldehyde			
	4															PAHs			
HAR-27	1			VOCs											Hexachrome				
	1														Metals				
	2														Hexachrome				
	2														Metals				
	2			VOCs															
HAR-28	1														Hexachrome				
	1														Metals				
	2														Hexachrome				
	2														Metals				
HAR-29	1														Metals				
	2														Metals				
OS-02	1									VOCs									
OS-04	1									VOCs									
OS-09	1									VOCs									
	3									VOCs									
OS-16	1									VOCs									
	3									VOCs									

See Table III for notes and abbreviations.
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SUMMARY OF SAMPLES ANALYZED, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

		MONITORING PROGRAM																		
		Post-Closure Permit											SMOU RFI Group						
WellID	Quarter	Background	Detection	Evaluation	ICA	POC	Area IV	CFOU RFI	LUFT	Off-site	Other	Perimeter	2	3	4	5	6	7	8
OS-17	1									VOCs									
	3									VOCs									
OS-25	1									VOCs									
	3									VOCs									
OS-26	1									VOCs									
	3									VOCs									
OS-27	1									VOCs									
OS-28	1									NDMA									
	1									VOCs									
	3									NDMA									
	3									VOCs									
PZ-004A	1														Hexachrome				
	1														Metals				
PZ-006C	1															Formaldehyde			
	1															PAHs			
	2															Formaldehyde			
	2															PAHs			
	3															Formaldehyde			
	3															PAHs			
PZ-006D	1															Formaldehyde			
	1															PAHs			
	2															Formaldehyde			
	2															PAHs			
	3															Formaldehyde			
	3															PAHs			
	4															Formaldehyde			
	4															PAHs			
PZ-006E	1															Formaldehyde			
	1															PAHs			
	2															Formaldehyde			
	2															PAHs			
	3															Formaldehyde			
	3															PAHs			
	4															Formaldehyde			
	4															PAHs			
PZ-025	1															Formaldehyde			
	1															PAHs			
	2															Formaldehyde			
	2															PAHs			
	3															Formaldehyde			
	3															PAHs			

See Table III for notes and abbreviations.

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SUMMARY OF SAMPLES ANALYZED, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

		MONITORING PROGRAM																	
		Post-Closure Permit											SMOU RFI Group						
WellID	Quarter	Background	Detection	Evaluation	ICA	POC	Area IV	CFOU RFI	LUFT	Off-site	Other	Perimeter	2	3	4	5	6	7	8
PZ-026	1															Formaldehyde			
	1															PAHs			
	2															Formaldehyde			
	2															PAHs			
	3															Formaldehyde			
	3															PAHs			
	4															Formaldehyde			
	4															PAHs			
PZ-027	1															Formaldehyde			
	1															PAHs			
	2															Formaldehyde			
	2															PAHs			
	3															Formaldehyde			
	3															PAHs			
PZ-048	2														Metals				
PZ-050	1															DRO			
	1															Metals			
	1															SVOCs			
PZ-058	2													1,4-Dioxane					
	2													Dioxins					
	2													DRO					
	2													Hexachrome					
	2													Metals					
	2													PCBs					
	2													SVOCs					
	2													VOCs					
PZ-071	2													1,4-Dioxane					
	2													Dioxins					
	2													DRO					
	2													Hexachrome					
	2													Metals					
	2													PCBs					
	2													SVOCs					
	2													VOCs					
	3													1,4-Dioxane					
	3													Dioxins					
	3													Hexachrome					
	3													Metals					
	3													PCBs					
	3													SVOCs					
	3													DRO					
	3													VOCs					

See Table III for notes and abbreviations.

TABLE IV
SUMMARY OF SAMPLES ANALYZED, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

		MONITORING PROGRAM																	
		Post-Closure Permit											SMOU RFI Group						
WellID	Quarter	Background	Detection	Evaluation	ICA	POC	Area IV	CFOU RFI	LUFT	Off-site	Other	Perimeter	2	3	4	5	6	7	8
PZ-076	4															Dioxins			
	4															DRO			
	4															Metals			
	4															SVOCs			
	4															VOCs			
PZ-091	4															DRO			
	4															Metals			
	4															SVOCs			
PZ-103	1															Bromide			
	1															Chloride			
	1															Fluoride			
	1															Nitrate			
	1															Sulfate			
	2															Bromide			
	2															Chloride			
	2															Fluoride			
	2															Nitrate			
	2															Sulfate			
	3															Bromide			
	3															Chloride			
	3															Fluoride			
	3															Nitrate			
	3															Sulfate			
	4															Bromide			
	4															Chloride			
	4															Fluoride			
	4															Nitrate			
	4															Sulfate			
PZ-105	1															DRO			
	1															Metals			
	1															VOCs			
	2															DRO			
	2															Metals			
	2															VOCs			
	3															Metals			
	3															DRO			
	3															VOCs			
	4															DRO			
	4															Metals			
	4															VOCs			
PZ-108	1															Bromide			
	1															Chloride			
	1															Fluoride			
	1															Hydrazines			
	1															Nitrate			
	1															Perchlorate			
	1															Sulfate			

See Table III for notes and abbreviations.

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SUMMARY OF SAMPLES ANALYZED, 2009
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VENTURA COUNTY, CALIFORNIA

		MONITORING PROGRAM																		
		Post-Closure Permit											SMOU RFI Group						
WellID	Quarter	Background	Detection	Evaluation	ICA	POC	Area IV	CFOU RFI	LUFT	Off-site	Other	Perimeter	2	3	4	5	6	7	8
PZ-108	2															Bromide			
	2															Chloride			
	2															Fluoride			
	2															Hydrazines			
	2															Nitrate			
	2															Perchlorate			
	2															Sulfate			
	3															Bromide			
	3															Chloride			
	3															Fluoride			
	3															Hydrazines			
	3															Nitrate			
	3															Perchlorate			
	3															Sulfate			
	4															Bromide			
	4															Chloride			
	4															Fluoride			
	4															Hydrazines			
	4															Nitrate			
	4															Perchlorate			
	4															Sulfate			
PZ-109	1															Bromide			
	1															Chloride			
	1															Fluoride			
	1															Metals			
	1															Nitrate			
	1															Sulfate			
	2															Bromide			
	2															Chloride			
	2															Fluoride			
	2															Metals			
	2															Nitrate			
	2															Sulfate			
	3															Bromide			
	3															Chloride			
	3															Fluoride			
	3															Metals			
	3															Nitrate			
	3															Sulfate			
	4															Bromide			
	4															Chloride			
	4															Fluoride			
	4															Metals			
	4															Nitrate			
	4															Sulfate			

See Table III for notes and abbreviations.

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SUMMARY OF SAMPLES ANALYZED, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

		MONITORING PROGRAM																	
		Post-Closure Permit											SMOU RFI Group						
WellID	Quarter	Background	Detection	Evaluation	ICA	POC	Area IV	CFOU RFI	LUFT	Off-site	Other	Perimeter	2	3	4	5	6	7	8
PZ-120	1															VOCs			
	2															VOCs			
	3															VOCs			
	4															VOCs			
PZ-122	1															Bromide			
	1															Chloride			
	1															DRO			
	1															Fluoride			
	1															Hydrazines			
	1															Metals			
	1															Nitrate			
	1															Perchlorate			
	1															pH			
	1															Sulfate			
	2															Bromide			
	2															Chloride			
	2															Fluoride			
	2															Hydrazines			
	2															Metals			
	2															Nitrate			
	2															Perchlorate			
	2															pH			
	2															Sulfate			
	2															DRO			
	3															Bromide			
	3															Chloride			
	3															Fluoride			
	3															Hydrazines			
	3															Metals			
	3															Nitrate			
	3															Perchlorate			
	3															pH			
	3															Sulfate			
	3															DRO			
	4															Bromide			
	4															Chloride			
	4															DRO			
	4															Fluoride			
	4															Hydrazines			
	4															Metals			
	4															Nitrate			
	4															Perchlorate			
	4															pH			
	4															Sulfate			

See Table III for notes and abbreviations.
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BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

		MONITORING PROGRAM																	
		Post-Closure Permit											SMOU RFI Group						
WellID	Quarter	Background	Detection	Evaluation	ICA	POC	Area IV	CFOU RFI	LUFT	Off-site	Other	Perimeter	2	3	4	5	6	7	8
PZ-139	4												1,4-Dioxane						
	4												Dioxins						
	4												DRO						
	4												Formaldehyde						
	4												GRO						
	4												Hexachrome						
	4												Metals						
	4												NDMA						
	4												PCBs						
	4												SVOCs						
	4												VOCs						
PZ-140	4												1,4-Dioxane						
	4												Dioxins						
	4												DRO						
	4												Formaldehyde						
	4												GRO						
	4												Hexachrome						
	4												Metals						
	4												NDMA						
	4												PCBs						
	4												SVOCs						
	4												VOCs						
PZ-141	4												1,4-Dioxane						
	4												Dioxins						
	4												DRO						
	4												Formaldehyde						
	4												GRO						
	4												Hexachrome						
	4												Metals						
	4												NDMA						
	4												PCBs						
	4												SVOCs						
	4												VOCs						
RD-01	1				VOCs			COCs											
	1							Perchlorate											
	2							COCs											
	2							Perchlorate											
	3				VOCs			COCs											
	3							Perchlorate											
	4							COCs											
	4							Perchlorate											

See Table III for notes and abbreviations.

TABLE IV
SUMMARY OF SAMPLES ANALYZED, 2009
BOEING SANTA SUSANA FIELD LABORATORY
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		MONITORING PROGRAM																	
		Post-Closure Permit											SMOU RFI Group						
WellID	Quarter	Background	Detection	Evaluation	ICA	POC	Area IV	CFOU RFI	LUFT	Off-site	Other	Perimeter	2	3	4	5	6	7	8
RD-02	1				VOCs			COCs											
	1							Perchlorate											
	2							COCs											
	2							Perchlorate											
RD-03	3			VOCs															
	4															Dioxins			
	4															DRO			
	4															Metals			
	4															PCBs			
	4															Perchlorate			
	4															SVOCs			
RD-04	1				VOCs			COCs											
	1							Perchlorate											
	2							COCs											
	2							Perchlorate											
	3				VOCs			COCs											
	3							Perchlorate											
	4							COCs											
	4							Perchlorate											
RD-05A	1			VOCs															
	3			VOCs															
RD-05B	1		VOCs																
	2		VOCs																
	3		VOCs																
	4		VOCs																
RD-05C	1		VOCs																
	2		VOCs																
	3		VOCs																
	4		VOCs																
RD-06	1	VOCs																	
	2	VOCs																	
	3			ApplX															
RD-07	1						Rad												Dioxins
	1						VOCs												
	2																		Dioxins
	3						RAD												
	3						VOCs												
RD-08	1															Formaldehyde			
	1															PAHs			
	2															Formaldehyde			
	2															PAHs			
	3															Formaldehyde			
	3															PAHs			

See Table III for notes and abbreviations.
Haley & Aldrich, Inc.
G:\Projects\26472\Reports\M-513 2009 Annual\Tables\M513_T04_Analyzed-F.xls

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		MONITORING PROGRAM																	
		Post-Closure Permit											SMOU RFI Group						
WellID	Quarter	Background	Detection	Evaluation	ICA	POC	Area IV	CFOU RFI	LUFT	Off-site	Other	Perimeter	2	3	4	5	6	7	8
RD-08	4															Formaldehyde			
	4															PAHs			
RD-09	1				VOCs			COCs											
	1							Perchlorate											
	2							COCs											
	2							Perchlorate											
	3				VOCs			COCs											
	3							Perchlorate											
	4							COCs											
	4							Perchlorate											
RD-10	1			VOCs				COCs											
	1							Perchlorate											
	2							COCs											
	2							Perchlorate											
	3			VOCs				COCs											
	3							Perchlorate											
	4							COCs											
	4							Perchlorate											
RD-11	1															Formaldehyde			
	1															PAHs			
	2															Formaldehyde			
	2															PAHs			
	4															Formaldehyde			
	4															PAHs			
RD-12	1															Formaldehyde			
	1															PAHs			
	2															Formaldehyde			
	2															PAHs			
RD-13	1	VOCs														Energetics			
	1															Formaldehyde			
	1															Hydrazines			
	1															NDMA			
	1															Perchlorate			
	2	VOCs														Energetics			
	2															Formaldehyde			
	2															Hydrazines			
	2															NDMA			
	2															Perchlorate			
	3	VOCs														Energetics			
	3															Formaldehyde			
	3															Hydrazines			
	3															NDMA			
	3															Perchlorate			
	4	VOCs														Energetics			
	4															Formaldehyde			
	4															Hydrazines			
	4															NDMA			
	4															Perchlorate			

See Table III for notes and abbreviations.

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		MONITORING PROGRAM																	
		Post-Closure Permit											SMOU RFI Group						
WellID	Quarter	Background	Detection	Evaluation	ICA	POC	Area IV	CFOU RFI	LUFT	Off-site	Other	Perimeter	2	3	4	5	6	7	8
RD-15	1						Metals												
	1						Rad												
	1						VOCs												
	2																Metals		
	3						RAD												
RD-16	1		VOCs																
	2		VOCs																
	3		VOCs																
	4		VOCs																
RD-17	1						Rad												
	1						VOCs												
	3						RAD												
RD-18	1											VOCs					IPA		
	1																VOCs		
	2											VOCs							
	3											VOCs							
	4											VOCs							
RD-19	1											VOCs							
	2											VOCs							
	3											VOCs							
	4											VOCs							
RD-20	1															Dioxins			
	2															Dioxins			
	3															Dioxins			
	4															Dioxins			
RD-21	1						Metals												DRO
	1						Rad												
	1						VOCs												
	2																		DRO
	3						Metals												
	3						RAD												
	3						VOCs												
RD-22	1						Cyanide					VOCs							
	1						Metals												
	1						Rad												
	1						VOCs												
	2											VOCs							
	3						RAD					VOCs							
	3						VOCs												
	4											VOCs							
RD-23	1						Metals												
	1						Rad												
	1						VOCs												
	3						Metals												
	3						RAD												
	3						VOCs												
RD-24	4						Rad												
	4						VOCs												

See Table III for notes and abbreviations.

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		MONITORING PROGRAM																	
		Post-Closure Permit											SMOU RFI Group						
WellID	Quarter	Background	Detection	Evaluation	ICA	POC	Area IV	CFOU RFI	LUFT	Off-site	Other	Perimeter	2	3	4	5	6	7	8
RD-26	1			VOCs															
	2			VOCs															
	3			VOCs															
RD-27	1						Rad											Metals	
	1						VOCs												
	3						RAD												
	3						VOCs												
RD-29	1						Rad												
	1						VOCs												
	3						RAD												
RD-32	1		VOCs						GRO										
	1								VOCs										
	2		VOCs																
	3		VOCs						GRO										
	3								VOCs										
	4		VOCs																
RD-33A	1						Metals												
	1						Rad												
	1						VOCs												
	3						Cyanide												
	3						RAD												
	3						VOCs												
RD-33B	1						Cyanide					VOCs							
	1						Metals												
	1						Rad												
	1						VOCs												
	2											VOCs							
	3						RAD					VOCs							
	3						VOCs												
	4											VOCs							
RD-33C	1						Cyanide					VOCs							
	1						Metals												
	1						Rad												
	1						VOCs												
	2											VOCs							
	3						RAD					VOCs							
	3						VOCs												
	4											VOCs							
RD-34A	1						Cyanide												
	1						Metals												
	1						Rad												
	1						VOCs												
	3						RAD												
	3						VOCs												
RD-34B	1						Cyanide												
	1						Metals												
	1						Rad												
	1						VOCs												

See Table III for notes and abbreviations.

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		MONITORING PROGRAM																	
		Post-Closure Permit											SMOU RFI Group						
WellID	Quarter	Background	Detection	Evaluation	ICA	POC	Area IV	CFOU RFI	LUFT	Off-site	Other	Perimeter	2	3	4	5	6	7	8
RD-34B	3						RAD												
	3						VOCs												
RD-34C	1						Cyanide												
	1						Metals												
	1						Rad												
	1						VOCs												
	3						RAD												
	3						VOCs												
RD-36B	1								GRO										
	1			VOCs					VOCs										
	3			VOCs					GRO										
	3								VOCs										
RD-36C	1								GRO										
	1			VOCs					VOCs										
	3			VOCs					GRO										
	3								VOCs										
RD-36D	1								GRO										
	1								VOCs										
	3								GRO										
	3								VOCs										
RD-37	1								GRO										
	1		VOCs						VOCs										
	2		VOCs																
	3			ApplX					GRO										
	3								VOCs										
	4			Dioxins															
	4			Herbicides															
	4			VOCs															
RD-38B	1								GRO										
	1								VOCs										
	3								GRO										
	3								VOCs										
RD-39B	1											VOCs							
	2											VOCs							
	3											VOCs							
	4											VOCs							
RD-41A	1							1,4-Dioxane											
	1							VOCs											
	3							1,4-Dioxane											
	3							Ammonia											
	3							Fluoride											
	3							Nitrate											
	3							Perchlorate											
	3							VOCs											
RD-41B	1							COCs											
	1							Perchlorate							Metals				
	2							COCs							Metals				
	2							Perchlorate											

See Table III for notes and abbreviations.

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		MONITORING PROGRAM																	
		Post-Closure Permit											SMOU RFI Group						
WellID	Quarter	Background	Detection	Evaluation	ICA	POC	Area IV	CFOU RFI	LUFT	Off-site	Other	Perimeter	2	3	4	5	6	7	8
RD-41B	3							COCs											
	3							Perchlorate											
	4							COCs											
	4							Perchlorate											
RD-41C	1														Metals				
	2														Metals				
RD-43A	1		VOCs																
	2		VOCs																
	3		VOCs																
	4		VOCs																
RD-43B	1		VOCs																
	2		VOCs																
	3		VOCs																
	4		VOCs																
RD-43C	1		VOCs																
	2		VOCs																
	3		VOCs																
	4		VOCs																
RD-44	1		VOCs					COCs											
	1							Perchlorate											
	2		VOCs					COCs											
	2							Perchlorate											
	3		VOCs					COCs											
	3							Perchlorate											
	4		VOCs					COCs								DRO			
	4							Perchlorate								Metals			
RD-45B	1			VOCs															
	3			VOCs															
RD-45C	1			VOCs															
	3			VOCs															
RD-46A	1			VOCs															
	3			VOCs															
RD-46B	4															DRO			
	4															SVOCs			
RD-47	1			VOCs															
	3			VOCs															
RD-48B	1			VOCs															
	3			VOCs															
	4															DRO			
	4															Perchlorate			
RD-48C	1	VOCs																	
	2	VOCs																	
	3	VOCs																	
	4	VOCs														DRO			
	4															Perchlorate			

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		MONITORING PROGRAM																		
		Post-Closure Permit											SMOU RFI Group						
WellID	Quarter	Background	Detection	Evaluation	ICA	POC	Area IV	CFOU RFI	LUFT	Off-site	Other	Perimeter	2	3	4	5	6	7	8
RD-49A	1							COCs											
	1							Perchlorate											
	2							COCs											
	2							Perchlorate											
	3										DRO								
RD-49B	1							COCs											
	1							Perchlorate											
	2							COCs											
	2							Perchlorate											
	3							COCs											
	3							Perchlorate											
	4							COCs			DRO								
	4							Perchlorate											
RD-49C	1							COCs											
	1							Perchlorate											
	2							COCs											
	2							Perchlorate											
	3							COCs											
	3							Perchlorate											
	4							COCs			DRO								
	4							Perchlorate											
RD-50	1											VOCs							DRO
	2																		DRO
	3											VOCs							
RD-51B	1							COCs											
	1			VOCs				Perchlorate											
	2			VOCs				COCs											
	2							Perchlorate											
	3			VOCs				COCs											
	3							Perchlorate											
	4							COCs											
	4							Perchlorate											
RD-51C	1							COCs											
	1		VOCs					Perchlorate											
	2		VOCs					COCs											
	2							Perchlorate											
	3		VOCs					COCs											
	3							Perchlorate											
	4		VOCs					COCs											
	4							Perchlorate											
RD-52B	1			VOCs															
	3			VOCs															
RD-52C	1		VOCs																
	2		VOCs																
	3		VOCs																
	4		VOCs																

See Table III for notes and abbreviations.

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		MONITORING PROGRAM																		
		Post-Closure Permit											SMOU RFI Group						
WellID	Quarter	Background	Detection	Evaluation	ICA	POC	Area IV	CFOU RFI	LUFT	Off-site	Other	Perimeter	2	3	4	5	6	7	8
RD-53	1								GRO										
	1								VOCs										
	3								GRO										
	3								VOCs										
RD-54A	1						Metals												
	1						Rad												
	1						VOCs												
	3						Metals												
	3						RAD												
	3						VOCs												
RD-54B	1						Metals												
	1						Rad												
	1						VOCs												
	4						Metals												
	4						Rad												
	4						VOCs												
RD-54C	1						Rad												
	1						VOCs												
	1						Metals												
	3						Metals												
	3						RAD												
	3						VOCs												
RD-55A	1							COCs											
	1			VOCs				Perchlorate											
	2							COCs											
	2							Perchlorate											
	3			VOCs				COCs											
	3							Perchlorate											
	4							COCs											
	4							Perchlorate											
RD-55B	1							COCs											
	1			VOCs				Perchlorate											
	2							COCs											
	2							Perchlorate											
	3			VOCs				COCs											
	3							Perchlorate											
	4							COCs											
	4							Perchlorate											
RD-56B	1											VOCs							
	2											VOCs							
	3											VOCs							
	4											VOCs							
RD-57	1						RAD												
	1						Metals												
	1						VOCs					VOCs							Metals
	2											VOCs							

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		MONITORING PROGRAM																		
		Post-Closure Permit											SMOU RFI Group						
WellID	Quarter	Background	Detection	Evaluation	ICA	POC	Area IV	CFOU RFI	LUFT	Off-site	Other	Perimeter	2	3	4	5	6	7	8
RD-57	3						RAD					VOCs							
	3						VOCs												
	4											VOCs							
RD-58A	1							COCs											
	1			VOCs				Perchlorate											
	2							COCs											
	2							Perchlorate											
	3			VOCs				COCs											
	3							Perchlorate											
	4							COCs											
	4							Perchlorate											
RD-58B	1							COCs											
	1			VOCs				Perchlorate											
	2							COCs											
	2							Perchlorate											
	3			VOCs				COCs											
	3							Perchlorate											
	4							COCs											
	4							Perchlorate											
RD-58C	1			VOCs															
	3			VOCs															
RD-59A	1						Metals												
	1						RAD												
	1						VOCs					VOCs							
	2											VOCs							
	3						Metals					VOCs							
	3						RAD												
	3						VOCs												
	4											VOCs							
RD-59B	1						Metals												
	1						RAD												
	1						VOCs					VOCs							
	2											VOCs							
	3						Metals					VOCs							
	3						RAD												
	3						VOCs												
	4											VOCs							
RD-59C	1						Metals												
	1						RAD												
	1						VOCs					VOCs							
	2											VOCs							
	3						Metals					VOCs							
	3						RAD												
	3						VOCs												
	4											VOCs							
RD-60	1			VOCs							GRO								
	3			VOCs															

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		MONITORING PROGRAM																	
		Post-Closure Permit											SMOU RFI Group						
WellID	Quarter	Background	Detection	Evaluation	ICA	POC	Area IV	CFOU RFI	LUFT	Off-site	Other	Perimeter	2	3	4	5	6	7	8
RD-61	1		VOCs																
	2		VOCs																
	3		VOCs																
	4		VOCs													DRO			
	4															Metals			
	4															SVOCs			
RD-62	1		VOCs																
	2		VOCs																
	3		VOCs																
	4		VOCs													DRO			
	4															Metals			
	4															SVOCs			
RD-63	1						RAD												
	1						VOCs												
	3						RAD												
	3						VOCs												
RD-64	1						VOCs												
	1						Rad												Metals
	2																		Metals
	3						RAD												
RD-65	1						VOCs												
RD-66	2											VOCs							
	3											VOCs							
	4											VOCs							
RD-67	1	VOCs																	
	2	VOCs																	
	3	VOCs																	
	4	VOCs																	
RD-68A	1											VOCs							
	2											VOCs							
	3											VOCs							
	4											VOCs							
RD-68B	1											VOCs							
	2											VOCs							
	3											VOCs							
	4											VOCs							
RD-69	1											VOCs							
	3											VOCs							
	4	Background										VOCs							
	4	COCs																	
RD-70	1											VOCs							
	2											VOCs							
	3											VOCs							
	4		VOCs																
RD-71	1											VOCs							
	2											VOCs							
	3											VOCs							
	4											VOCs							

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		MONITORING PROGRAM																		
		Post-Closure Permit											SMOU RFI Group						
WellID	Quarter	Background	Detection	Evaluation	ICA	POC	Area IV	CFOU RFI	LUFT	Off-site	Other	Perimeter	2	3	4	5	6	7	8
RD-73	1								GRO										
	1								VOCs										
RD-85	1																VOCs		
	1																IPA		
RD-86	1																VOCs		
	1																IPA		
RD-91	1																		SVOCs
	1																		VOCs
	1																		Metals
	2																		Metals
	2																		SVOCs
	2																		VOCs
RD-92	1																Metals		
	2																Metals		
RD-98	1																	VOCs	
	1																	Metals	
RS-18	1						Rad												Metals
	1						VOCs												
	1						Metals												
	2						Rad												Metals
SH-08	2															Formaldehyde			
	2															PAHs			
	2															Pesticides			
WS-04A	1			VOCs															
	3			VOCs															
WS-05	1							COCs											
	1				VOCs			Perchlorate											
	2							COCs											
	2							Perchlorate											
	3				VOCs			COCs											
	3							Perchlorate											
	4							COCs											
	4							Perchlorate											
WS-06	1							COCs											
	1				VOCs			Perchlorate											
	2							COCs											
	2							Perchlorate											
	3				VOCs			COCs											
	3							Perchlorate											
	4							COCs											
	4							Perchlorate											
WS-09	1							COCs											
	1				VOCs			Perchlorate											
	2							COCs											
	2							Perchlorate											

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		MONITORING PROGRAM																		
		Post-Closure Permit											SMOU RFI Group						
WellID	Quarter	Background	Detection	Evaluation	ICA	POC	Area IV	CFOU RFI	LUFT	Off-site	Other	Perimeter	2	3	4	5	6	7	8
WS-09	3				VOCs			COCs			Dioxins								
	3							Perchlorate			Hexachrome								
	3										Metals								
	3										Gross alpha								
	3										Gross beta								
	3										Tritium								
	4							COCs			Metals								
	4							Perchlorate			Gross alpha								
	4										Gross beta								
	4										Strontium-90								
WS-09A	1							COCs											
	1				VOCs			Perchlorate											
	2							COCs											
	2							Perchlorate											
	3				VOCs			COCs			Iron								
	3							Perchlorate			Manganese								
	4							COCs											
	4							Perchlorate											

See Table III for notes and abbreviations.
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TABLE V
SUMMARY OF FIRST-TIME DETECTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Analyte	Well Identifier	Quarter	Sample Type	Result	Regulatory Limit	Units	Geological Unit	Monitoring Program											
								Area IV	Background	CFOU RFI	Detection	Evaluation	ICA	LUFT	Off-site	Other	Perimeter	POC	SMOU RFI
1,1-Dichloroethene	PZ-105	1	Primary	0.1 J	6 MCL	ug/L	Shallow												X
	PZ-105	1	Duplicate	0.1 J	6 MCL	ug/L	Shallow												X
	PZ-139*	4	Primary	0.76 J	6 MCL	ug/L	Shallow												X
1,2,3,4,6,7,8-Heptachlorodibenzofuran	HAR-17	2	Duplicate	2.9 J	NA	pg/L	Chatsworth											X	
	RD-20	2	Primary	2 J	NA	pg/L	Chatsworth												X
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	PZ-071	3	Primary	280	NA	pg/L	Shallow												X
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	PZ-071	3	Primary	2.7 J	NA	pg/L	Shallow												X
1,4-Dioxane	RD-37	3	Primary	1.5 J	3 NL	ug/L	Chatsworth					X							
	RD-37	3	Split	0.9 J	3 NL	ug/L	Chatsworth					X							
2,3,7,8-Tetrachlorodibenzofuran	PZ-071	3	Primary	3.6 J	NA	pg/L	Shallow												X
2,4,5-TP (Silvex)	RD-37*	3	Split	0.01 J	50 MCL	ug/L	Chatsworth					X							
Alkalinity as CaCO3	RD-69*	4	Primary	360	NA	mg/L	Chatsworth		X										
	RD-69*	4	Duplicate	330	NA	mg/L	Chatsworth		X										
	RD-69*	4	Split	320	NA	mg/L	Chatsworth		X										
Aluminum, Dissolved	PZ-071*	2	Primary	0.145 J	1 MCL	mg/L	Shallow												X
	PZ-071*	2	Duplicate	0.155 J	1 MCL	mg/L	Shallow												X
	PZ-071*	2	Split	0.15	1 MCL	mg/L	Shallow												X
	PZ-076*	4	Primary	0.023 J	1 MCL	mg/L	Shallow												X
	PZ-105	1	Primary	**1.98**	1 MCL	mg/L	Shallow												X
	PZ-122	1	Split	0.024 J	1 MCL	mg/L	Shallow												X
	RD-62*	4	Primary	0.16	1 MCL	mg/L	Chatsworth												X
Antimony, Dissolved	HAR-08	1	Primary	0.00033 J	0.006 MCL	mg/L	Chatsworth												X
	PZ-076*	4	Primary	0.00078 J	0.006 MCL	mg/L	Shallow												X
	PZ-109	2	Primary	0.00085 J	0.006 MCL	mg/L	Shallow												X
	PZ-122	1	Split	0.000093 J	0.006 MCL	mg/L	Shallow												X
	PZ-140*	4	Split	0.00032 J	0.006 MCL	mg/L	Shallow												X
	RD-41B	1	Split	0.0001 J	0.006 MCL	mg/L	Chatsworth												X
	RD-64 (Z4)	2	Primary	0.00063 J	0.006 MCL	mg/L	Chatsworth												X
	RD-64 (Z4)	2	Duplicate	0.00068 J	0.006 MCL	mg/L	Chatsworth												X
Antimony, Total	PZ-004A	1	Split	0.00023 J	0.006 MCL	mg/L	Shallow												X
Arsenic, Dissolved	PZ-004A*	1	Primary	0.005	0.01 MCL	mg/L	Shallow												X
	PZ-048*	2	Primary	0.0078	0.01 MCL	mg/L	Shallow												X
	PZ-058*	2	Primary	0.0039	0.01 MCL	mg/L	Shallow												X
	PZ-076*	4	Primary	0.0014 J	0.01 MCL	mg/L	Shallow												X
	PZ-091*	4	Primary	**0.019**	0.01 MCL	mg/L	Shallow												X
	PZ-122	1	Split	0.001 J	0.01 MCL	mg/L	Shallow												X
	PZ-139*	4	Primary	0.0013 J	0.01 MCL	mg/L	Shallow												X
	PZ-140*	4	Primary	0.00076 J	0.01 MCL	mg/L	Shallow												X
	PZ-140*	4	Duplicate	0.00072 J	0.01 MCL	mg/L	Shallow												X
	PZ-140*	4	Split	0.0011	0.01 MCL	mg/L	Shallow												X

See Table III for notes and abbreviations.
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TABLE V
SUMMARY OF FIRST-TIME DETECTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Analyte	Well Identifier	Quarter	Sample Type	Result	Regulatory Limit	Units	Geological Unit	Monitoring Program											
								Area IV	Background	CFOU RFI	Detection	Evaluation	ICA	LUFT	Off-site	Other	Perimeter	POC	SMOU RFI
Arsenic, Dissolved	PZ-141*	4	Primary	0.0042 J	0.01 MCL	mg/L	Shallow												X
	RD-03	4	Split	0.00095 J	0.01 MCL	mg/L	Chatsworth												X
	RD-44	4	Primary	0.00025 J	0.01 MCL	mg/L	Chatsworth												X
	RD-64 (Z8)*	1	Primary	0.0039 J	0.01 MCL	mg/L	Chatsworth												X
Arsenic, Total	PZ-004A	1	Primary	0.0051	0.01 MCL	mg/L	Shallow												X
	PZ-004A*	1	Duplicate	0.0057	0.01 MCL	mg/L	Shallow												X
	PZ-004A	1	Split	0.0052	0.01 MCL	mg/L	Shallow												X
Barium, Dissolved	PZ-004A*	1	Primary	0.0449	1 MCL	mg/L	Shallow												X
	PZ-048*	2	Primary	0.0321	1 MCL	mg/L	Shallow												X
	PZ-058*	2	Primary	0.0394	1 MCL	mg/L	Shallow												X
	PZ-076*	4	Primary	0.009	1 MCL	mg/L	Shallow												X
	PZ-091*	4	Primary	0.061	1 MCL	mg/L	Shallow												X
	PZ-139*	4	Primary	0.017	1 MCL	mg/L	Shallow												X
	PZ-140*	4	Primary	0.055	1 MCL	mg/L	Shallow												X
	PZ-140*	4	Duplicate	0.053	1 MCL	mg/L	Shallow												X
	PZ-140*	4	Split	0.056	1 MCL	mg/L	Shallow												X
	PZ-141*	4	Primary	0.017	1 MCL	mg/L	Shallow												X
	RD-03	4	Primary	0.057	1 MCL	mg/L	Chatsworth												X
	RD-03	4	Split	0.053	1 MCL	mg/L	Chatsworth												X
	RD-64 (Z8)*	1	Primary	0.0458	1 MCL	mg/L	Chatsworth												X
Barium, Total	PZ-004A*	1	Duplicate	0.0448	1 MCL	mg/L	Shallow												X
Beryllium, Dissolved	PZ-004A*	1	Primary	0.00018 J	0.004 MCL	mg/L	Shallow												X
Beryllium, Total	PZ-004A*	1	Duplicate	0.0002 J	0.004 MCL	mg/L	Shallow												X
beta-BHC	SH-08	2	Split	0.022 J	0.025 AAL	ug/L	Shallow												X
Boron, Dissolved	PZ-076*	4	Primary	0.13	1 NL	mg/L	Shallow												X
	PZ-091*	4	Primary	0.19	1 NL	mg/L	Shallow												X
	RD-03	4	Primary	0.054	1 NL	mg/L	Chatsworth												X
	RD-03	4	Split	0.044 J	1 NL	mg/L	Chatsworth												X
	RD-44*	4	Primary	0.065	1 NL	mg/L	Chatsworth												X
	RD-61*	4	Primary	0.09	1 NL	mg/L	Chatsworth												X
	RD-62*	4	Primary	0.072	1 NL	mg/L	Chatsworth												X
	RD-62*	4	Duplicate	0.072	1 NL	mg/L	Chatsworth												X
Bromoform	RD-43A	3	Primary	0.3 J	80 TTHM MCL	ug/L	Chatsworth				X								
Cadmium, Dissolved	PZ-091*	4	Primary	0.00075 J	0.005 MCL	mg/L	Shallow												X
	PZ-122	3	Split	0.000064 J	0.005 MCL	mg/L	Shallow												X
	PZ-140*	4	Split	0.00011 J	0.005 MCL	mg/L	Shallow												X
Cadmium, Total	PZ-004A	1	Split	0.000063 J	0.005 MCL	mg/L	Shallow												X
Cesium-137, Dissolved	RD-17	1	Primary	1.79 +/- 0.9 J	NA	pCi/L	Chatsworth	X											
	RD-23	1	Primary	3.01 +/- 1.25 J	NA	pCi/L	Chatsworth	X											
Cesium-137, Total	RD-27	1	Primary	3.08 +/- 0.95 J	NA	pCi/L	Chatsworth	X											

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TABLE V
SUMMARY OF FIRST-TIME DETECTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Analyte	Well Identifier	Quarter	Sample Type	Result	Regulatory Limit	Units	Geological Unit	Monitoring Program											
								Area IV	Background	CFOU RFI	Detection	Evaluation	ICA	LUFT	Off-site	Other	Perimeter	POC	SMOU RFI
Chloroethane	ES-21	1	Primary	1 J	NA	ug/L	Shallow						X						
	PZ-120	1	Primary	0.1 J	NA	ug/L	Shallow												X
	RD-34A	3	Primary	0.1 J	NA	ug/L	Chatsworth	X											
Chloroform	RD-91	1	Split	0.26 J	80 TTHM MCL	ug/L	Chatsworth												X
Chloromethane	RD-26	1	Primary	0.4 J	NA	ug/L	Chatsworth					X							
	RD-49C	2	Duplicate	0.3 J	NA	ug/L	Chatsworth			X									
	RD-51B	1	Primary	0.4 J	NA	ug/L	Chatsworth			X		X							
	RD-51C	1	Primary	0.3 J	NA	ug/L	Chatsworth			X	X								
Chromium, Dissolved	PZ-004A*	1	Primary	0.0009 J	0.05 MCL	mg/L	Shallow												X
	PZ-109	1	Primary	0.00071 J	0.05 MCL	mg/L	Shallow												X
Chromium, Total	PZ-004A*	1	Duplicate	0.00073 J	0.05 MCL	mg/L	Shallow												X
cis-1,2-Dichloroethene	PZ-139*	4	Primary	**13**	6 MCL	ug/L	Shallow												X
	PZ-140*	4	Primary	4.1	6 MCL	ug/L	Shallow												X
	PZ-141*	4	Primary	2.1 J	6 MCL	ug/L	Shallow												X
	RD-37	1	Primary	0.1 J	6 MCL	ug/L	Chatsworth				X			X					
Cobalt, Dissolved	PZ-004A*	1	Primary	0.0081	NA	mg/L	Shallow												X
	RD-06	3	Primary	0.00014 J	NA	mg/L	Chatsworth					X							
	RD-06	3	Duplicate	0.00016 J	NA	mg/L	Chatsworth					X							
	RD-37*	3	Primary	0.00025 J	NA	mg/L	Chatsworth					X							
Cobalt, Total	PZ-004A*	1	Duplicate	0.0074	NA	mg/L	Shallow												X
Copper, Dissolved	PZ-004A*	1	Primary	0.00066 J	1.3 RAL	mg/L	Shallow												X
	PZ-058*	2	Primary	0.0011 J	1.3 RAL	mg/L	Shallow												X
	PZ-091*	4	Primary	0.00091 J	1.3 RAL	mg/L	Shallow												X
	PZ-139*	4	Primary	0.0011 J	1.3 RAL	mg/L	Shallow												X
	PZ-140*	4	Primary	0.00062 J	1.3 RAL	mg/L	Shallow												X
	PZ-140*	4	Duplicate	0.00059 J	1.3 RAL	mg/L	Shallow												X
	PZ-140*	4	Split	0.0012 J	1.3 RAL	mg/L	Shallow												X
	PZ-141*	4	Primary	0.00064 J	1.3 RAL	mg/L	Shallow												X
	RD-03	4	Split	0.0008 J	1.3 RAL	mg/L	Chatsworth												X
	RD-41C	2	Primary	0.00058 J	1.3 RAL	mg/L	Chatsworth												X
	RD-61*	4	Primary	0.00077 J	1.3 RAL	mg/L	Chatsworth												X
	RD-64 (Z8)*	1	Primary	0.00089 J	1.3 RAL	mg/L	Chatsworth												X
Copper, Total	PZ-004A*	1	Duplicate	0.0016 J	1.3 RAL	mg/L	Shallow												X
Cyanide	RD-06*	3	Duplicate	0.0031 J	0.15 MCL	mg/L	Chatsworth					X							
	RD-33C	1	Split	0.0053 J	0.15 MCL	mg/L	Chatsworth	X											
Dibromochloromethane	RD-43A	3	Primary	0.2 J	80 TTHM MCL	ug/L	Chatsworth				X								
Dieldrin	SH-08	2	Primary	0.005 J	0.002 AAL	ug/L	Shallow												X
	SH-08	2	Duplicate	0.0068 J	0.002 AAL	ug/L	Shallow												X
Diesel Range Organics (C12-C14)	RD-49A LNAPL*	3	Primary	1200 J	NA	mg/L	Chatsworth									X			

See Table III for notes and abbreviations.
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TABLE V
SUMMARY OF FIRST-TIME DETECTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Analyte	Well Identifier	Quarter	Sample Type	Result	Regulatory Limit	Units	Geological Unit	Monitoring Program											
								Area IV	Background	CFOU RFI	Detection	Evaluation	ICA	LUFT	Off-site	Other	Perimeter	POC	SMOU RFI
Diesel Range Organics (C15-C20)	PZ-071	2	Primary	0.11 J	NA	mg/L	Shallow												X
	RD-21 (Z4)*	1	Primary	18 J	NA	mg/L	Chatsworth												X
	RD-49A LNAPL*	3	Primary	1600 J	NA	mg/L	Chatsworth									X			
	RD-50 (Z2)*	1	Primary	19 J	NA	mg/L	Chatsworth												X
	RD-50 (Z2)*	1	Duplicate	16 J	NA	mg/L	Chatsworth												X
	RD-50 (Z2)*	1	Split	6.4	NA	mg/L	Chatsworth												X
Diesel Range Organics (C21-C30)	RD-49A LNAPL*	3	Primary	290 J	NA	mg/L	Chatsworth									X			
Diesel Range Organics (C8-C11)	RD-49A LNAPL*	3	Primary	53 J	NA	mg/L	Chatsworth									X			
Diesel Range Organics (C8-C30)	RD-21 (Z4)*	1	Primary	18 J	NA	mg/L	Chatsworth												X
	RD-49A LNAPL*	3	Primary	3100	NA	mg/L	Chatsworth									X			
	RD-50 (Z2)*	1	Primary	19 J	NA	mg/L	Chatsworth												X
	RD-50 (Z2)*	1	Duplicate	16 J	NA	mg/L	Chatsworth												X
Ethylbenzene	RD-54A (Z2)	3	Primary	0.9 J,S	300 MCL	ug/L	Chatsworth	X											
Formaldehyde	PZ-027	2	Primary	16 J	100 NL	ug/L	Shallow												X
	RD-12	2	Primary	16 J	100 NL	ug/L	Chatsworth												X
	RD-69*	4	Primary	**110**	100 NL	ug/L	Chatsworth		X										
gamma-BHC	RD-06	3	Duplicate	0.021 J	0.2 MCL	ug/L	Chatsworth					X							
Gasoline Range Organics (C6-C12)	PZ-139*	4	Primary	85	NA	ug/L	Shallow												X
	PZ-140*	4	Primary	56	NA	ug/L	Shallow												X
Gross alpha, Total	RD-54B	4	Duplicate	5.01 +/- 2.4	15 MCL	pci/L	Chatsworth	X											
	RD-54C	3	Primary	2.5 J +/- 1.7	15 MCL	pCi/L	Chatsworth	X											
	RD-59A	3	Primary	2.53 J +/- 1.5	15 MCL	pCi/L	Chatsworth	X											
	RD-59B	3	Primary	1.49 J +/- 1.31	15 MCL	pCi/L	Chatsworth	X											
	RD-59C	3	Primary	1.71 J +/- 1.3	15 MCL	pCi/L	Chatsworth	X											
Gross beta, Total	RD-59C	3	Primary	3.14 J +/- 1.6	50 MCL	pCi/L	Chatsworth	X											
Hydrazine	PZ-108	3	Primary	0.648 J	NA	ug/L	Shallow												X
Iron, Dissolved	HAR-08*	1	Primary	0.0612 J	0.3 SMCL	mg/L	Chatsworth												X
	HAR-28	2	Primary	0.103 J	0.3 SMCL	mg/L	Shallow												X
	PZ-004A*	1	Primary	2.47	0.3 SMCL	mg/L	Shallow												X
	PZ-048*	2	Primary	1.12	0.3 SMCL	mg/L	Shallow												X
	PZ-076*	4	Primary	0.034 J	0.3 SMCL	mg/L	Shallow												X
	PZ-091*	4	Primary	1.4	0.3 SMCL	mg/L	Shallow												X
	PZ-122	1	Split	0.034 J	0.3 SMCL	mg/L	Shallow												X
	PZ-141*	4	Primary	0.05 J	0.3 SMCL	mg/L	Shallow												X
	RD-03	4	Primary	0.31	0.3 SMCL	mg/L	Chatsworth												X
	RD-03	4	Split	0.31	0.3 SMCL	mg/L	Chatsworth												X
	RD-27	1	Primary	0.0584 J	0.3 SMCL	mg/L	Chatsworth												X
	RD-61	4	Primary	16	0.3 SMCL	mg/L	Chatsworth												X

See Table III for notes and abbreviations.
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TABLE V
SUMMARY OF FIRST-TIME DETECTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Analyte	Well Identifier	Quarter	Sample Type	Result	Regulatory Limit	Units	Geological Unit	Monitoring Program											
								Area IV	Background	CFOU RFI	Detection	Evaluation	ICA	LUFT	Off-site	Other	Perimeter	POC	SMOU RFI
Iron, Dissolved	RD-62	4	Primary	0.36	0.3 SMCL	mg/L	Chatsworth												X
	RD-62	4	Duplicate	0.22	0.3 SMCL	mg/L	Chatsworth												X
	RD-64 (Z8)*	1	Primary	0.0881 J	0.3 SMCL	mg/L	Chatsworth												X
Iron, Total	PZ-004A*	1	Duplicate	2.47	0.3 SMCL	mg/L	Shallow												X
Lead, Dissolved	HAR-08	1	Primary	0.0011	0.015 RAL	mg/L	Chatsworth												X
	HAR-28	2	Primary	0.000087 J	0.015 RAL	mg/L	Shallow												X
	PZ-058*	2	Primary	0.000057 J	0.015 RAL	mg/L	Shallow												X
	RD-03	4	Primary	0.00018 J	0.015 RAL	mg/L	Chatsworth												X
	RD-03	4	Split	0.00024 J	0.015 RAL	mg/L	Chatsworth												X
	RD-37	3	Primary	0.0015	0.015 RAL	mg/L	Chatsworth					X							
	RD-41B	1	Primary	0.00039 J	0.015 RAL	mg/L	Chatsworth												X
	RD-41B	1	Split	0.00037 J	0.015 RAL	mg/L	Chatsworth												X
	RD-41C	1	Primary	0.000052 J	0.015 RAL	mg/L	Chatsworth												X
	RD-64 (Z4)	2	Primary	0.00024 J	0.015 RAL	mg/L	Chatsworth												X
	RD-64 (Z4)	2	Duplicate	0.00019 J	0.015 RAL	mg/L	Chatsworth												X
Lead, Total	PZ-004A	1	Primary	0.00014 J	0.015 RAL	mg/L	Shallow												X
	PZ-004A*	1	Duplicate	0.00016 J	0.015 RAL	mg/L	Shallow												X
	PZ-004A	1	Split	0.00026 J	0.015 RAL	mg/L	Shallow												X
Magnesium, Dissolved	PZ-076*	4	Primary	34	NA	mg/L	Shallow												X
	PZ-091*	4	Primary	59	NA	mg/L	Shallow												X
Manganese, Dissolved	HAR-08*	1	Primary	0.0954	0.5 NL	mg/L	Chatsworth												X
	HAR-28*	1	Primary	0.0121	0.5 NL	mg/L	Shallow												X
	PZ-004A*	1	Primary	0.225	0.5 NL	mg/L	Shallow												X
	PZ-048*	2	Primary	**4.47**	0.5 NL	mg/L	Shallow												X
	PZ-058*	2	Primary	0.488	0.5 NL	mg/L	Shallow												X
	PZ-076*	4	Primary	0.028	0.5 NL	mg/L	Shallow												X
	PZ-091*	4	Primary	**2.2**	0.5 NL	mg/L	Shallow												X
	PZ-139*	4	Primary	0.22	0.5 NL	mg/L	Shallow												X
	PZ-140*	4	Primary	0.087	0.5 NL	mg/L	Shallow												X
	PZ-140*	4	Duplicate	0.086	0.5 NL	mg/L	Shallow												X
	PZ-140*	4	Split	0.088	0.5 NL	mg/L	Shallow												X
	PZ-141*	4	Primary	0.13	0.5 NL	mg/L	Shallow												X
	RD-41C	1	Primary	0.168	0.5 NL	mg/L	Chatsworth												X
	RD-64 (Z8)*	1	Primary	0.0043 J	0.5 NL	mg/L	Chatsworth												X
Manganese, Total	PZ-004A*	1	Duplicate	0.223	0.5 NL	mg/L	Shallow												X
Mercury, Dissolved	RD-64 (Z4)	2	Primary	0.000059 J	0.002 MCL	mg/L	Chatsworth												X
	RD-64 (Z4)	2	Duplicate	0.000071 J	0.002 MCL	mg/L	Chatsworth												X
Methyl ethyl ketone	PZ-120	2	Primary	1.2 J	NA	ug/L	Shallow												X

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TABLE V
SUMMARY OF FIRST-TIME DETECTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Analyte	Well Identifier	Quarter	Sample Type	Result	Regulatory Limit	Units	Geological Unit	Monitoring Program											
								Area IV	Background	CFOU RFI	Detection	Evaluation	ICA	LUFT	Off-site	Other	Perimeter	POC	SMOU RFI
Molybdenum, Dissolved	PZ-048*	2	Primary	0.0076 J	NA	mg/L	Shallow												X
	PZ-058*	2	Primary	0.039	NA	mg/L	Shallow												X
	PZ-076*	4	Primary	0.0045 J	NA	mg/L	Shallow												X
	PZ-091*	4	Primary	0.0075 J	NA	mg/L	Shallow												X
	PZ-140*	4	Primary	0.0044 J	NA	mg/L	Shallow												X
	PZ-140*	4	Split	0.0057 J	NA	mg/L	Shallow												X
	PZ-141*	4	Primary	0.013 J	NA	mg/L	Shallow												X
	RD-03	4	Split	0.0053 J	NA	mg/L	Chatsworth												X
Nickel, Dissolved	HAR-08	1	Primary	0.00098 J	0.1 MCL	mg/L	Chatsworth												X
	HAR-28	1	Primary	0.0014 J	0.1 MCL	mg/L	Shallow												X
	PZ-004A*	1	Primary	0.0096	0.1 MCL	mg/L	Shallow												X
	PZ-048*	2	Primary	0.0012 J	0.1 MCL	mg/L	Shallow												X
	PZ-058*	2	Primary	0.0043	0.1 MCL	mg/L	Shallow												X
	PZ-076*	4	Primary	0.0012 J	0.1 MCL	mg/L	Shallow												X
	PZ-091*	4	Primary	0.017	0.1 MCL	mg/L	Shallow												X
	PZ-139*	4	Primary	0.0059	0.1 MCL	mg/L	Shallow												X
	PZ-140*	4	Primary	0.0047	0.1 MCL	mg/L	Shallow												X
	PZ-140*	4	Duplicate	0.0043	0.1 MCL	mg/L	Shallow												X
	PZ-140*	4	Split	0.0029	0.1 MCL	mg/L	Shallow												X
	PZ-141*	4	Primary	0.0024	0.1 MCL	mg/L	Shallow												X
	RD-03	4	Primary	0.0018 J	0.1 MCL	mg/L	Chatsworth												X
	RD-03	4	Split	0.0012 J	0.1 MCL	mg/L	Chatsworth												X
	RD-37*	3	Primary	0.002	0.1 MCL	mg/L	Chatsworth					X							
	RD-44	4	Primary	0.0023	0.1 MCL	mg/L	Chatsworth												X
	RD-61*	4	Primary	0.0021	0.1 MCL	mg/L	Chatsworth												X
	RD-62*	4	Primary	0.0013 J	0.1 MCL	mg/L	Chatsworth												X
	RD-62*	4	Duplicate	0.0013 J	0.1 MCL	mg/L	Chatsworth												X
	RD-64 (Z8)*	1	Primary	0.0169	0.1 MCL	mg/L	Chatsworth												X
Nickel, Total	PZ-004A*	1	Duplicate	0.0095	0.1 MCL	mg/L	Shallow												X
n-Nitrosodimethylamine	PZ-141	4	Duplicate	0.0051	0.01 NL	ug/L	Shallow												X
Octachlorodibenzofuran	RD-20	1	Duplicate	5.7 J	NA	pg/L	Chatsworth												X
Octachlorodibenzo-p-dioxin	PZ-071	3	Primary	4100 J	NA	pg/L	Shallow												X
	RD-37*	3	Split	13.2 J	NA	pg/L	Chatsworth					X							
Perchlorate	HAR-20	1	Split	0.33 J	6 MCL	ug/L	Chatsworth			X									
Phenol	HAR-07	4	Primary	2.8 J	4200 AAL	ug/L	Chatsworth			X									
Selenium, Dissolved	PZ-076*	4	Primary	0.0047 J	0.05 MCL	mg/L	Shallow												X
	PZ-091*	4	Primary	0.00096 J	0.05 MCL	mg/L	Shallow												X
	PZ-139*	4	Primary	0.00077 J	0.05 MCL	mg/L	Shallow												X

See Table III for notes and abbreviations.

TABLE V
SUMMARY OF FIRST-TIME DETECTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Analyte	Well Identifier	Quarter	Sample Type	Result	Regulatory Limit	Units	Geological Unit	Monitoring Program												
								Area IV	Background	CFOU RFI	Detection	Evaluation	ICA	LUFT	Off-site	Other	Perimeter	POC	SMOU RFI
Selenium, Dissolved	PZ-140*	4	Primary	0.0011 J	0.05 MCL	mg/L	Shallow												X
	PZ-140*	4	Duplicate	0.00084 J	0.05 MCL	mg/L	Shallow												X
	PZ-140*	4	Split	0.0012 J	0.05 MCL	mg/L	Shallow												X
	RD-03	4	Split	0.0014 J	0.05 MCL	mg/L	Chatsworth												X
Selenium, Total	PZ-004A	1	Split	0.001 J	0.05 MCL	mg/L	Shallow												X
Silver, Dissolved	RD-34B	1	Split	0.00017 J	0.1 SMCL	mg/L	Chatsworth	X											
	RD-41C	1	Primary	0.00013 J	0.1 SMCL	mg/L	Chatsworth												X
Strontium, Dissolved	PZ-076*	4	Primary	0.36	NA	mg/L	Shallow												X
	PZ-091*	4	Primary	0.75	NA	mg/L	Shallow												X
	RD-44*	4	Primary	0.59	NA	mg/L	Chatsworth												X
	RD-61*	4	Primary	0.43	NA	mg/L	Chatsworth												X
	RD-62*	4	Primary	0.31	NA	mg/L	Chatsworth												X
	RD-62*	4	Duplicate	0.32	NA	mg/L	Chatsworth												X
	RD-69*	4	Primary	0.85	NA	mg/L	Chatsworth		X										
	RD-69*	4	Duplicate	0.83	NA	mg/L	Chatsworth		X										
	RD-69*	4	Split	0.81	NA	mg/L	Chatsworth		X										
Strontium-90, Total	WS-09*	4	Primary	4.59	8 MCL	pci/L	Chatsworth									X			
Sulfide	RD-37*	3	Primary	0.21	250, 500, 600 SMCL	mg/L	Chatsworth					X							
	RD-37*	3	Split	0.23	250, 500, 600 SMCL	mg/L	Chatsworth					X							
Tetrachloroethene	RD-43C	4	Primary	0.23 J	5 MCL	ug/L	Chatsworth				X								
Thallium, Dissolved	PZ-122	1	Split	0.000029 J	0.002 MCL	mg/L	Shallow												X
	PZ-140*	4	Split	0.00032 J	0.002 MCL	mg/L	Shallow												X
	RD-37*	3	Primary	0.000038 J	0.002 MCL	mg/L	Chatsworth					X							
	RD-41B	1	Split	0.000025 J	0.002 MCL	mg/L	Chatsworth												X
Thallium, Total	PZ-004A	1	Split	0.000038 J	0.002 MCL	mg/L	Shallow												X
Toluene	PZ-105	1	Duplicate	0.1 J	150 MCL	ug/L	Shallow												X
trans-1,2-Dichloroethene	PZ-139*	4	Primary	0.53 J	10 MCL	ug/L	Shallow												X
	RD-91	1	Split	0.33 J	10 MCL	ug/L	Chatsworth												X
Trichloroethene	PZ-139*	4	Primary	**200**	5 MCL	ug/L	Shallow												X
	PZ-140*	4	Primary	**130**	5 MCL	ug/L	Shallow												X
	PZ-141*	4	Primary	**52**	5 MCL	ug/L	Shallow												X
Turbidity	RD-69*	4	Primary	100	5 SMCL	ntu	Chatsworth		X										
	RD-69*	4	Duplicate	81	5 SMCL	ntu	Chatsworth		X										
	RD-69*	4	Split	77	5 SMCL	ntu	Chatsworth		X										
Vanadium, Dissolved	PZ-071	2	Split	0.0023 J	0.05 NL	mg/L	Shallow												X
	PZ-076*	4	Primary	0.0019 J	0.05 NL	mg/L	Shallow												X
	PZ-122	1	Split	0.0017 J	0.05 NL	mg/L	Shallow												X
	PZ-139*	4	Primary	0.0018 J	0.05 NL	mg/L	Shallow												X

See Table III for notes and abbreviations.
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TABLE V
SUMMARY OF FIRST-TIME DETECTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Analyte	Well Identifier	Quarter	Sample Type	Result	Regulatory Limit	Units	Geological Unit	Monitoring Program											
								Area IV	Background	CFOU RFI	Detection	Evaluation	ICA	LUFT	Off-site	Other	Perimeter	POC	SMOU RFI
Vanadium, Dissolved	PZ-140*	4	Primary	0.0014 J	0.05 NL	mg/L	Shallow												X
	PZ-140*	4	Duplicate	0.0017 J	0.05 NL	mg/L	Shallow												X
	PZ-141*	4	Primary	0.0021 J	0.05 NL	mg/L	Shallow												X
	RD-41B	1	Split	0.0011 J	0.05 NL	mg/L	Chatsworth												X
Zinc, Dissolved	PZ-004A*	1	Primary	0.0112 J	5 SMCL	mg/L	Shallow												X
	PZ-048*	2	Primary	0.0103 J	5 SMCL	mg/L	Shallow												X
	RD-37*	3	Primary	0.66	5 SMCL	mg/L	Chatsworth					X							
	RD-41C*	1	Primary	0.0624	5 SMCL	mg/L	Chatsworth												X
	RD-62*	4	Primary	0.42	5 SMCL	mg/L	Chatsworth												X
	RD-62*	4	Duplicate	0.42	5 SMCL	mg/L	Chatsworth												X
	RD-64 (Z8)*	1	Primary	0.0491	5 SMCL	mg/L	Chatsworth												X
Zinc, Total	PZ-004A*	1	Duplicate	0.0096 J	5 SMCL	mg/L	Shallow												X

See Table III for notes and abbreviations.
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TABLE VI
SUMMARY OF UPDATED MAXIMUM CONCENTRATIONS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Analyte	Well Identifier	Quarter	Sample Type	Result	Regulatory Limit	Units	Geological Unit	Monitoring Program											
								Area IV	Background	CFOU RFI	Detection	Evaluation	ICA	LUFT	Off-site	Other	Perimeter	POC	SMOU RFI
1,1,2-Trichloro-1,2,2-trifluoroethane	PZ-120	1	Primary	3.3	1200 MCL	ug/L	Shallow												X
	PZ-120	2	Primary	3.8	1200 MCL	ug/L	Shallow												X
	RD-98	1	Primary	1.7	1200 MCL	ug/L	Chatsworth												X
1,1-Dichloroethane	PZ-120	1	Primary	1.8	5 MCL	ug/L	Shallow												X
1,1-Dichloroethene	PZ-120	1	Primary	0.8	6 MCL	ug/L	Shallow												X
	RD-45B	1	Primary	0.2 J	6 MCL	ug/L	Chatsworth					X							
1,4-Dioxane	RD-04	4	Primary	2.1 J	3 NL	ug/L	Chatsworth												
Aldrin	SH-08	2	Primary	0.0079 J	0.002 AAL	ug/L	Shallow												X
alpha-BHC	SH-08	2	Primary	0.0033 J	0.015 AAL	ug/L	Shallow												X
Aluminum, Dissolved	PZ-109	1	Primary	0.369	1 MCL	mg/L	Shallow												X
	PZ-122	3	Split	0.049 J	1 MCL	mg/L	Shallow												X
Ammonia-N	RD-01	2	Primary	0.24	NA	mg/L	Chatsworth			X									
	RD-04	3	Primary	1.4	NA	mg/L	Chatsworth			X									
	RD-49A	1	Primary	0.41	NA	mg/L	Chatsworth			X									
	WS-09A	1	Duplicate	0.17	NA	mg/L	Chatsworth			X									
Antimony, Dissolved	PZ-071	2	Split	0.00016 J	0.006 MCL	mg/L	Shallow												X
Barium, Dissolved	PZ-050	1	Primary	0.0935	1 MCL	mg/L	Shallow												X
	PZ-071	2	Split	0.073	1 MCL	mg/L	Shallow												X
	PZ-105	1	Primary	0.0343	1 MCL	mg/L	Shallow												X
	PZ-109	1	Primary	0.0286	1 MCL	mg/L	Shallow												X
	PZ-122	1	Split	0.055	1 MCL	mg/L	Shallow												X
	PZ-122	4	Primary	0.059	1 MCL	mg/L	Shallow												X
	RD-37	3	Primary	0.074	1 MCL	mg/L	Chatsworth					X							
	RD-41B	1	Primary	0.0484	1 MCL	mg/L	Chatsworth												X
	RD-41C	2	Primary	0.0185	1 MCL	mg/L	Chatsworth												X
	RD-61	4	Primary	0.074	1 MCL	mg/L	Chatsworth												X
	RD-62	4	Primary	0.04	1 MCL	mg/L	Chatsworth												X
	RD-92	1	Primary	0.0432	1 MCL	mg/L	Chatsworth												X
	RD-98	1	Primary	0.0432	1 MCL	mg/L	Chatsworth												X
Boron, Dissolved	PZ-050	1	Primary	0.122	1 NL	mg/L	Shallow												X
	PZ-105	2	Primary	0.158	1 NL	mg/L	Shallow												X
Bromide	PZ-103	3	Primary	1	NA	mg/L	Shallow												X
	PZ-122	1	Primary	0.64	NA	mg/L	Shallow												X
Bromodichloromethane	HAR-16	4	Split	47	80 TTHM MCL	ug/L	Chatsworth											X	
Cadmium, Dissolved	HAR-28	2	Primary	0.00027 J	0.005 MCL	mg/L	Shallow												X
	PZ-050	1	Primary	0.00022 J	0.005 MCL	mg/L	Shallow												X
	PZ-071	2	Split	0.0002 J	0.005 MCL	mg/L	Shallow												X

See Table III for notes and abbreviations.
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TABLE VI
SUMMARY OF UPDATED MAXIMUM CONCENTRATIONS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Analyte	Well Identifier	Quarter	Sample Type	Result	Regulatory Limit	Units	Geological Unit	Monitoring Program											
								Area IV	Background	CFOU RFI	Detection	Evaluation	ICA	LUFT	Off-site	Other	Perimeter	POC	SMOU RFI
Carbon Disulfide	RD-05B	2	Primary	0.8	160 NL	ug/L	Chatsworth				X								
	RD-39B	4	Primary	0.94 J	160 NL	ug/L	Chatsworth										X		
	RD-52C	2	Primary	0.7	160 NL	ug/L	Chatsworth				X								
	RD-66	4	Primary	0.52 J	160 NL	ug/L	Chatsworth										X		
Chloride	PZ-122	4	Split	37	250, 500, 600 SMCL	mg/L	Shallow												X
	RD-69	4	Split	47	250, 500, 600 SMCL	mg/L	Chatsworth		X										
Chloroform	PZ-120	1	Primary	0.2 J	80 TTHM MCL	ug/L	Shallow												X
	RD-36B	1	Split	0.22 J	80 TTHM MCL	ug/L	Chatsworth					X		X					
	RD-91	2	Split	0.35 J	80 TTHM MCL	ug/L	Chatsworth												X
Chloromethane	WS-05	1	Primary	0.4 J	NA	ug/L	Chatsworth			X			X						
cis-1,2-Dichloroethene	PZ-120	1	Primary	**12**	6 MCL	ug/L	Shallow												X
	RD-04	3	Primary	**260**	6 MCL	ug/L	Chatsworth			X			X						
	RD-09	1	Primary	**95**	6 MCL	ug/L	Chatsworth			X			X						
	RD-09	3	Primary	**96**	6 MCL	ug/L	Chatsworth			X			X						
	RD-45B	3	Primary	**36**	6 MCL	ug/L	Chatsworth					X							
	RD-65 (Z5)	1	Primary	**53**	6 MCL	ug/L	Chatsworth	X											
	RD-91	1	Primary	**32**	6 MCL	ug/L	Chatsworth												X
	RD-91	2	Split	**36**	6 MCL	ug/L	Chatsworth												X
Cobalt, Dissolved	PZ-071	2	Split	0.0015 J	NA	mg/L	Shallow												X
Copper, Dissolved	HAR-07	1	Primary	0.0153	1.3 RAL	mg/L	Chatsworth												X
	HAR-08	1	Primary	0.0028	1.3 RAL	mg/L	Chatsworth												X
	HAR-08	2	Primary	0.0032	1.3 RAL	mg/L	Chatsworth												X
	RD-23 (Z3)	3	Primary	0.0131	1.3 RAL	mg/L	Chatsworth	X											
	RD-34C	1	Primary	0.00088 J	1.3 RAL	mg/L	Chatsworth	X											
	RD-64 (Z4)	2	Duplicate	0.0081	1.3 RAL	mg/L	Chatsworth												X
	RD-91	2	Primary	0.01	1.3 RAL	mg/L	Chatsworth												X
Diesel Range Organics (C15-C20)	PZ-071	3	Primary	0.12 J	NA	mg/L	Shallow												X
Diesel Range Organics (C8-C30)	PZ-071	2	Primary	0.19 J	NA	mg/L	Shallow												X
	PZ-071	3	Primary	0.2 J	NA	mg/L	Shallow												X
Fluoride	PZ-103	1	Duplicate	0.82	2 MCL	mg/L	Shallow												X
	PZ-122	2	Primary	0.47	2 MCL	mg/L	Shallow												X
	RD-69	4	Split	0.39 J	2 MCL	mg/L	Chatsworth		X										
Formaldehyde	PZ-006E	2	Primary	79	100 NL	ug/L	Shallow												X
	RD-11	1	Primary	19 J	100 NL	ug/L	Chatsworth												X
Gasoline Range Organics (C6-C12)	RD-36B	1	Primary	50 J	NA	ug/L	Chatsworth							X					
	RD-36C	1	Split	75	NA	ug/L	Chatsworth							X					
Gross alpha, Dissolved	WS-09	3	Primary	9.86 +/- 3.8	15 MCL	pCi/L	Chatsworth									X			
	WS-09	4	Primary	11 +/- 4.9	15 MCL	pci/L	Chatsworth									X			

See Table III for notes and abbreviations.

TABLE VI
SUMMARY OF UPDATED MAXIMUM CONCENTRATIONS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Analyte	Well Identifier	Quarter	Sample Type	Result	Regulatory Limit	Units	Geological Unit	Monitoring Program											
								Area IV	Background	CFOU RFI	Detection	Evaluation	ICA	LUFT	Off-site	Other	Perimeter	POC	SMOU RFI
Gross alpha, Total	RD-15	3	Duplicate	10.6 +/- 4.2	15 MCL	pCi/L	Chatsworth	X											
	RD-34C	3	Split	4.29 +/- 2.53	15 MCL	pCi/L	Chatsworth	X											
	RD-57 (Z7)	3	Primary	4.76 +/- 1.7	15 MCL	pCi/L	Chatsworth	X											
Gross beta, Total	RD-54B	4	Primary	7.06 +/-2.3	50 MCL	pci/L	Chatsworth	X											
	RD-15	3	Duplicate	10.1 +/- 2.0	50 MCL	pCi/L	Chatsworth	X											
	RD-33A (Z2)	3	Primary	6.6 +/- 1.5	50 MCL	pCi/L	Chatsworth	X											
	RD-33C	3	Split	6.42 +/- 2.48	50 MCL	pCi/L	Chatsworth	X											
	RD-57 (Z7)	3	Primary	4.90 +/- 1.5	50 MCL	pCi/L	Chatsworth	X											
	RD-59B	3	Primary	2.94 J +/- 1.3	50 MCL	pCi/L	Chatsworth	X											
	RD-63	3	Primary	11.1 +/- 3	50 MCL	pCi/L	Chatsworth	X											
Iron, Dissolved	HAR-27	2	Primary	8.19	0.3 SMCL	mg/L	Shallow												X
	PZ-105	1	Primary	2.48	0.3 SMCL	mg/L	Shallow												X
	PZ-109	1	Primary	0.53	0.3 SMCL	mg/L	Shallow												X
	PZ-122	3	Split	0.069 J	0.3 SMCL	mg/L	Shallow												X
	RD-33B	1	Primary	1.95	0.3 SMCL	mg/L	Chatsworth	X											
	RD-34A	1	Primary	1.72	0.3 SMCL	mg/L	Chatsworth	X											
	RD-41B	1	Primary	5.88	0.3 SMCL	mg/L	Chatsworth												X
	RD-41B	2	Primary	10.1	0.3 SMCL	mg/L	Chatsworth												X
	RD-41C	2	Primary	2.27	0.3 SMCL	mg/L	Chatsworth												X
	RD-54A (Z2)	3	Primary	0.409	0.3 SMCL	mg/L	Chatsworth	X											
	RD-64 (Z4)	2	Duplicate	0.372	0.3 SMCL	mg/L	Chatsworth												X
	RD-69	4	Split	8.8	0.3 SMCL	mg/L	Chatsworth		X										
	WS-09A	3	Primary	2.2	0.3 SMCL	mg/L	Chatsworth									X			
Lead, Dissolved	RD-41C	2	Primary	0.0002 J	0.015 RAL	mg/L	Chatsworth												X
Magnesium, Dissolved	PZ-050	1	Primary	16.6	NA	mg/L	Shallow												X
	RD-44	4	Primary	63	NA	mg/L	Chatsworth												X
	RD-61	4	Primary	61	NA	mg/L	Chatsworth												X
	RD-62	4	Primary	50	NA	mg/L	Chatsworth												X
	RD-69	4	Split	51	NA	mg/L	Chatsworth		X										
Manganese, Dissolved	HAR-07	1	Primary	**1.39**	0.5 NL	mg/L	Chatsworth												X
	HAR-27	1	Primary	**4.82**	0.5 NL	mg/L	Shallow												X
	HAR-27	2	Primary	**5.36**	0.5 NL	mg/L	Shallow												X
	HAR-28	2	Primary	0.0204	0.5 NL	mg/L	Shallow												X
	HAR-29	1	Primary	0.0865	0.5 NL	mg/L	Shallow												X
	PZ-105	1	Primary	0.0435	0.5 NL	mg/L	Shallow												X
	PZ-109	1	Primary	0.207	0.5 NL	mg/L	Shallow												X
	RD-03	4	Primary	0.28	0.5 NL	mg/L	Chatsworth												X

See Table III for notes and abbreviations.
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TABLE VI
SUMMARY OF UPDATED MAXIMUM CONCENTRATIONS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Analyte	Well Identifier	Quarter	Sample Type	Result	Regulatory Limit	Units	Geological Unit	Monitoring Program											
								Area IV	Background	CFOU RFI	Detection	Evaluation	ICA	LUFT	Off-site	Other	Perimeter	POC	SMOU RFI
Manganese, Dissolved	RD-41B	1	Primary	0.223	0.5 NL	mg/L	Chatsworth												X
	RD-41B	2	Primary	0.266	0.5 NL	mg/L	Chatsworth												X
	RD-41C	2	Primary	0.337	0.5 NL	mg/L	Chatsworth												X
	RD-59A	1	Primary	0.41	0.5 NL	mg/L	Chatsworth	X											
	RD-61	4	Primary	**0.72**	0.5 NL	mg/L	Chatsworth												X
	RD-62	4	Primary	0.084	0.5 NL	mg/L	Chatsworth												X
	RD-64 (Z4)	2	Duplicate	0.159	0.5 NL	mg/L	Chatsworth												X
	RD-69	4	Primary	0.12	0.5 NL	mg/L	Chatsworth		X										
	RD-91	1	Primary	0.0081	0.5 NL	mg/L	Chatsworth												X
Molybdenum, Dissolved	HAR-29	2	Primary	0.01	NA	mg/L	Shallow												X
	PZ-071	2	Primary	0.0255	NA	mg/L	Shallow												X
	PZ-109	1	Primary	0.0914	NA	mg/L	Shallow												X
	PZ-109	2	Primary	0.0918	NA	mg/L	Shallow												X
	RD-54B	4	Primary	0.0038 J	NA	mg/L	Chatsworth	X											
	RD-54C	1	Primary	0.0087 J	NA	mg/L	Chatsworth	X											
	RD-91	2	Primary	0.0073 J	NA	mg/L	Chatsworth												X
Nickel, Dissolved	HAR-08	2	Primary	0.0014 J	0.1 MCL	mg/L	Chatsworth												X
	HAR-28	2	Primary	0.002 J	0.1 MCL	mg/L	Shallow												X
	PZ-071	2	Split	0.0049	0.1 MCL	mg/L	Shallow												X
	PZ-122	3	Split	0.0031	0.1 MCL	mg/L	Shallow												X
	PZ-122	4	Primary	0.0033	0.1 MCL	mg/L	Shallow												X
	RD-41B	1	Split	0.00087 J	0.1 MCL	mg/L	Chatsworth												X
	RD-91	1	Primary	0.0115	0.1 MCL	mg/L	Chatsworth												X
Nitrate-NO3	PZ-122	4	Split	14	45 MCL	mg/L	Shallow												X
	RD-49C	1	Primary	0.24 J	45 MCL	mg/L	Chatsworth			X									
	WS-09	3	Primary	0.4 J	45 MCL	mg/L	Chatsworth			X									
n-Nitrosodimethylamine	HAR-18	1	Primary	**3 J**	0.01 NL	ug/L	Chatsworth			X									
	HAR-18	4	Primary	**3.6**	0.01 NL	ug/L	Chatsworth			X									
	WS-09	2	Primary	0.0063	0.01 NL	ug/L	Chatsworth			X									
Octachlorodibenzo-p-dioxin	RD-20	1	Primary	4.9 J	NA	pg/L	Chatsworth												X
	RD-37	4	Primary	31 J,L	NA	pg/L	Chatsworth					X							
pH	RD-69	4	Primary	7.4	6.5-8.5 USEPA SMCL	pH Units	Chatsworth		X										
Selenium, Dissolved	HAR-28	1	Primary	0.001 J	0.05 MCL	mg/L	Shallow												X
	HAR-29	1	Primary	0.0175	0.05 MCL	mg/L	Shallow												X
	PZ-071	2	Split	0.00072 J	0.05 MCL	mg/L	Shallow												X
	RD-41B	1	Split	0.00096 J	0.05 MCL	mg/L	Chatsworth												X
	RD-54B	4	Split	0.0015 J	0.05 MCL	mg/L	Chatsworth	X											

See Table III for notes and abbreviations.
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TABLE VI
SUMMARY OF UPDATED MAXIMUM CONCENTRATIONS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Analyte	Well Identifier	Quarter	Sample Type	Result	Regulatory Limit	Units	Geological Unit	Monitoring Program											
								Area IV	Background	CFOU RFI	Detection	Evaluation	ICA	LUFT	Off-site	Other	Perimeter	POC	SMOU RFI
Sodium, Dissolved	RD-69	4	Primary	55	NA	mg/L	Chatsworth		X										
Strontium, Dissolved	PZ-050	1	Primary	0.829	NA	mg/L	Shallow												X
	PZ-105	1	Primary	0.405	NA	mg/L	Shallow												X
	PZ-105	4	Primary	0.41	NA	mg/L	Shallow												X
	PZ-109	1	Primary	0.261	NA	mg/L	Shallow												X
	PZ-122	1	Split	0.34	NA	mg/L	Shallow												X
	RD-03	4	Primary	0.32	NA	mg/L	Chatsworth												X
Sulfate	RD-69	4	Split	170	250, 500, 600 SMCL	mg/L	Chatsworth		X										
Tetrachloroethene	RD-36B	1	Primary	**10**	5 MCL	ug/L	Chatsworth					X		X					
	RD-36B	3	Primary	**10**	5 MCL	ug/L	Chatsworth					X							
trans-1,2-Dichloroethene	RD-23 (Z2)	1	Primary	**31**	10 MCL	ug/L	Chatsworth	X											
	RD-23 (Z3)	3	Primary	**67**	10 MCL	ug/L	Chatsworth	X											
	RD-33A (Z2)	3	Primary	0.9	10 MCL	ug/L	Chatsworth	X											
	RD-65 (Z5)	1	Primary	2 J	10 MCL	ug/L	Chatsworth	X											
	RD-91	2	Split	0.96 J	10 MCL	ug/L	Chatsworth												X
Trichloroethene	PZ-120	1	Primary	**45**	5 MCL	ug/L	Shallow												X
	PZ-120	3	Primary	**50**	5 MCL	ug/L	Shallow												X
	PZ-120	4	Primary	**53**	5 MCL	ug/L	Shallow												X
	RD-23 (Z3)	3	Primary	**630**	5 MCL	ug/L	Chatsworth	X											
	RD-91	1	Primary	**260**	5 MCL	ug/L	Chatsworth												X
	RD-91	2	Split	**280**	5 MCL	ug/L	Chatsworth												X
Trichlorofluoromethane	PZ-120	2	Primary	0.4 J	150 MCL	ug/L	Shallow												X
Uranium-233/234, Total	RD-21 (Z2)	3	Primary	6.27 +/- 0.62	20 MCL (total)	pCi/L	Chatsworth	X											
Uranium-235, Total	RD-21 (Z2)	3	Primary	0.296 J +/- 0.080	20 MCL (total)	pCi/L	Chatsworth	X											
Uranium-238, Total	RD-21 (Z2)	3	Primary	5.47 +/- 0.55	20 MCL (total)	pCi/L	Chatsworth	X											
Vanadium, Dissolved	PZ-050	1	Primary	0.0042 J	0.05 NL	mg/L	Shallow												X
	PZ-105	1	Primary	0.0087	0.05 NL	mg/L	Shallow												X
Vinyl chloride	ES-21	1	Primary	**5**	0.5 MCL	ug/L	Shallow						X						
	HAR-18	3	Primary	**200**	0.5 MCL	ug/L	Chatsworth			X			X						
Zinc, Dissolved	PZ-122	3	Primary	0.037	5 SMCL	mg/L	Shallow												X
	RD-41B	1	Split	0.68	5 SMCL	mg/L	Chatsworth												X
	RD-41C	2	Primary	0.615	5 SMCL	mg/L	Chatsworth												X
	RD-91	1	Primary	0.328	5 SMCL	mg/L	Chatsworth												X
	RD-92	1	Primary	0.0933	5 SMCL	mg/L	Chatsworth												X

See Table III for notes and abbreviations.
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TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**ES-17**	**ES-21**	**ES-21**	**ES-21**	**ES-21**	**ES-23**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Duplicate	Split	Primary
Geological Unit:	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:	Lancaster	Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster
Collection Date:	05/01/2009	03/04/2009	05/28/2009	05/28/2009	05/28/2009	03/04/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	2 U	0.8 U	0.8 U	0.8 U	0.32 U	0.8 U
1,1,2,2-Tetrachloroethane	1 U	0.5 U	0.5 U	0.5 U	0.4 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	3100	2 U	2 U	2 U	1.6 U	2 U
1,1,2-Trichloroethane	2 U	0.8 U	0.8 U	0.8 U	0.64 U	0.8 U
1,1-Dichloroethane	2 J	1 U	1 U	1 U	0.32 U	1 U
1,1-Dichloroethene	13	0.8 U	0.8 U	0.8 U	0.32 J	0.8 U
1,2-Dichlorobenzene	2 U	1 U	1 U	1 U	0.26 U	1 U
1,2-Dichloroethane	1 U	0.5 U	0.5 U	0.5 U	0.26 U	0.5 U
1,2-Dichloropropane	2 U	1 U	1 U	1 U	0.26 U	1 U
1,3-Dichlorobenzene	2 U	1 U	1 U	1 U	0.32 U	1 U
1,4-Dichlorobenzene	2 U	1 U	1 U	1 U	0.32 U	1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	6 U	3 U	3 U	3 U	2.8 U	3 U
Acetone	83	6 U	6 U	6 U	3.8 U	6 U
Benzene	1 U	0.5 U	0.5 U	0.5 U	0.32 U	0.5 U
Bromodichloromethane	2 U	1 U	1 U	1 U	0.34 U	1 U
Bromoform	2 U	1 U	1 U	1 U	0.38 U	1 U
Bromomethane	2 U	1 U	1 U	1 U	0.42 U	1 U
Carbon Disulfide	2 U	1 U	1 U	1 U	0.9 U	1 U
Carbon Tetrachloride	1 U	0.5 U	0.5 U	0.5 U	0.38 U	0.5 U
Chlorobenzene	2 U	0.8 U	0.8 U	0.8 U	0.34 U	0.8 U
Chloroethane	2 U	1 J	1 U	1 U	0.82 U	1 U
Chloroform	2 U	0.8 U	0.8 U	0.8 U	0.32 U	0.8 U
Chloromethane	2 U	1 U	1 U	1 U	0.6 U	1 U
cis-1,2-Dichloroethene	98	200	190	190	130	11
cis-1,3-Dichloropropene	2 U	1 U	1 U	1 U	0.32 U	1 U
Dibromochloromethane	2 U	1 U	1 U	1 U	0.34 U	1 U
Ethylbenzene	2 U	0.8 U	0.8 U	0.8 U	0.32 U	0.8 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	6 U	3 U	3 U	3 U	3.7 U	3 U
Methyl isobutyl ketone (MIBK)	6 U	3 U	3 U	3 U	2.1 U	3 U
Methylene chloride	4 U	2 U	2 U	2 U	1.4 U	2 U
m-Xylene & p-Xylene	2 U	0.8 U	0.8 U	0.8 U	0.68 U	0.8 U
o-Xylene	2 U	0.8 U	0.8 U	0.8 U	0.38 U	0.8 U
Tetrachloroethene	2 U	0.8 U	0.8 U	0.8 U	0.4 U	0.8 U
Toluene	1 U	0.7 U	0.7 U	0.7 U	0.34 U	0.7 U
trans-1,2-Dichloroethene	2 U	18	23	22	15	0.8 U
trans-1,3-Dichloropropene	2 U	1 U	1 U	1 U	0.38 U	1 U
Trichloroethene	610	350	340	350	230	27
Trichlorofluoromethane	1 U	0.5 U	0.5 U	0.5 U	0.58 U	0.5 U
Vinyl chloride	1 U	5	5	5	4.2	0.5 U

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**ES-23**	**ES-24**	**ES-26**	**ES-26**	**ES-27**	**ES-27**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:	07/17/2009	05/04/2009	05/01/2009	07/17/2009	03/04/2009	07/17/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.8 U	8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1,2,2-Tetrachloroethane	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	2 U	20 U	42	72	260	130
1,1,2-Trichloroethane	0.8 U	8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1-Dichloroethane	1 U	43 J	1 U	1 U	1 U	1 U
1,1-Dichloroethene	0.8 U	87	0.8 U	0.8 U	0.8 U	0.8 U
1,2-Dichlorobenzene	1 U	10 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1 U	10 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	10 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	10 U	1 U	1 U	1 U	1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	3 U	30 U	3 U	3 U	3 U	3 U
Acetone	6 U	60 U	6 U	6 U	6 U	6 U
Benzene	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	1 U	10 U	1 U	1 U	1 U	1 U
Bromoform	1 U	10 U	1 U	1 U	1 U	1 U
Bromomethane	1 U	10 U	1 U	1 U	1 U	1 U
Carbon Disulfide	1 U	10 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.8 U	8 U	0.8 U	0.8 U	0.8 U	0.8 U
Chloroethane	1 U	10 U	1 U	1 U	1 U	1 U
Chloroform	0.8 U	8 U	0.8 U	0.8 U	0.8 U	0.8 U
Chloromethane	1 U	10 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	21	360	0.8 U	0.8 U	6	3 J
cis-1,3-Dichloropropene	1 U	10 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1 U	10 U	1 U	1 U	1 U	1 U
Ethylbenzene	0.8 U	8 U	0.8 U	0.8 U	0.8 U	0.8 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	3 U	30 U	3 U	3 U	3 U	3 U
Methyl isobutyl ketone (MIBK)	3 U	30 U	3 U	3 U	3 U	3 U
Methylene chloride	2 U	20 U	2 U	2 U	2 U	2 U
m-Xylene & p-Xylene	0.8 U	8 U	0.8 U	0.8 U	0.8 U	0.8 U
o-Xylene	0.8 U	8 U	0.8 U	0.8 U	0.8 U	0.8 U
Tetrachloroethene	0.8 U	8 U	0.8 U	0.8 U	0.8 U	0.8 U
Toluene	0.7 U	7 U	0.7 U	0.7 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	0.8 U	21 J	0.8 U	0.8 U	0.8 U	0.8 U
trans-1,3-Dichloropropene	1 U	10 U	1 U	1 U	1 U	1 U
Trichloroethene	20	3400	22	41	78	58
Trichlorofluoromethane	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**ES-30**	**ES-30**	**ES-31**	**ES-31**	**HAR-03**	**HAR-04**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Duplicate	Primary	Primary
Geological Unit:	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:	04/27/2009	07/17/2009	03/04/2009	03/04/2009	05/06/2009	02/18/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.8 U	0.8 U	0.1 U	0.1 U	1 J	4 J
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.1 U	0.1 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	2 U	2 U	0.2 U	0.2 U	2 U	2 U
1,1,2-Trichloroethane	0.8 U	0.8 U	0.1 U	0.1 U	0.8 U	0.8 U
1,1-Dichloroethane	1 U	1 U	0.1 U	0.1 U	1 U	1 U
1,1-Dichloroethene	0.8 U	0.8 U	0.1 U	0.1 U	0.8 U	0.8 U
1,2-Dichlorobenzene	1 U	1 U	0.1 U	0.1 U	1 U	1 U
1,2-Dichloroethane	0.5 U	0.5 U	0.1 U	0.1 U	0.5 U	0.5 U
1,2-Dichloropropane	1 U	1 U	0.1 U	0.1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	0.1 U	0.1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	0.1 U	0.1 U	1 U	1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	3 U	3 U	1 U	1 U	3 U	3 U
Acetone	6 U	6 U	3 U	3 U	6 U	6 U
Benzene	0.5 U	0.5 U	0.1 U	0.1 U	0.5 U	0.5 U
Bromodichloromethane	1 U	1 U	0.1 U	0.1 U	1 U	1 U
Bromoform	1 U	1 U	0.1 U	0.1 U	1 U	1 U
Bromomethane	1 U	1 U	0.1 U	0.1 U	1 U	1 U
Carbon Disulfide	1 U	1 U	0.4 U	0.4 U	1 U	1 U
Carbon Tetrachloride	0.5 U	0.5 U	0.1 U	0.1 U	0.5 U	0.5 U
Chlorobenzene	0.8 U	0.8 U	0.1 U	0.1 U	0.8 U	0.8 U
Chloroethane	1 U	1 U	0.1 U	0.1 U	1 U	1 U
Chloroform	0.8 U	0.8 U	0.1 U	0.1 U	0.8 U	0.8 U
Chloromethane	1 U	1 U	0.2 U	0.2 U	1 U	1 U
cis-1,2-Dichloroethene	1 J	0.8 U	0.1 U	0.1 U	6	12
cis-1,3-Dichloropropene	1 U	1 U	0.1 U	0.1 U	1 U	1 U
Dibromochloromethane	1 U	1 U	0.1 U	0.1 U	1 U	1 U
Ethylbenzene	0.8 U	0.8 U	0.1 U	0.1 U	0.8 U	0.8 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	3 U	3 U	1 U	1 U	3 U	3 U
Methyl isobutyl ketone (MIBK)	3 U	3 U	1 U	1 U	3 U	3 U
Methylene chloride	2 U	2 U	0.2 U	0.2 U	2 U	2 U
m-Xylene & p-Xylene	0.8 U	0.8 U	0.1 U	0.1 U	0.8 U	0.8 U
o-Xylene	0.8 U	0.8 U	0.1 U	0.1 U	0.8 U	0.8 U
Tetrachloroethene	0.8 U	0.8 U	0.1 U	0.1 U	0.8 U	0.8 U
Toluene	0.7 U	0.7 U	0.1 U	0.1 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	0.8 U	0.8 U	0.1 U	0.1 U	0.8 U	0.8 U
trans-1,3-Dichloropropene	1 U	1 U	0.1 U	0.1 U	1 U	1 U
Trichloroethene	45	38	0.3 J	0.3 J	280	630
Trichlorofluoromethane	0.5 U	0.5 U	0.1 U	0.1 U	0.5 U	0.5 U
Vinyl chloride	0.5 U	0.5 U	0.1 U	0.1 U	0.5 U	0.5 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**HAR-04**	**HAR-07**	**HAR-07**	**HAR-07**	**HAR-07**	**HAR-08**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Shallow	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	Lancaster	TA-Denver	Lancaster	TA-Denver	Lancaster
Collection Date:	07/21/2009	03/05/2009	05/11/2009	07/21/2009	10/15/2009	02/19/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	3 J	4 U	1.6 U	4 U	0.16 U	0.1 U
1,1,2,2-Tetrachloroethane	0.5 U	3 U	2 U	3 U	0.2 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	2 U	10 U	---	10 U	0.79 U	0.2 U
1,1,2-Trichloroethane	0.8 U	4 U	3.2 U	4 U	0.32 U	0.1 U
1,1-Dichloroethane	1 U	5 U	1.6 U	5 U	0.22 J	0.1 U
1,1-Dichloroethene	0.8 U	6 J	3.2 J	5 J	8.2	0.1 U
1,2-Dichlorobenzene	1 U	5 U	1.3 U	5 U	0.13 U	0.1 U
1,2-Dichloroethane	0.5 U	3 U	1.3 U	3 U	0.13 U	0.1 U
1,2-Dichloropropane	1 U	5 U	1.3 U	5 U	0.13 U	0.1 U
1,3-Dichlorobenzene	1 U	5 U	1.6 U	5 U	0.16 U	0.1 U
1,4-Dichlorobenzene	1 U	5 U	1.6 U	5 U	0.16 U	0.1 U
1,4-Dioxane	---	1 U	1 U	1 U	0.65 U	1 J
2-Hexanone	3 U	15 U	14 U	15 U	1.4 U	1 U
Acetone	6 U	30 U	19 U	30 U	1.9 U	3 U
Benzene	0.5 U	3 U	1.6 U	3 U	0.16 U	0.1 U
Bromodichloromethane	1 U	5 U	1.7 U	5 U	0.17 U	0.1 U
Bromoform	1 U	5 U	1.9 U	5 U	0.19 U	0.1 U
Bromomethane	1 U	5 U	2.1 U	5 U	0.21 U	0.1 U
Carbon Disulfide	1 U	5 U	4.5 U	5 U	0.45 U	0.4 U
Carbon Tetrachloride	0.5 U	3 U	1.9 U	3 U	0.19 U	0.1 U
Chlorobenzene	0.8 U	4 U	1.7 U	4 U	0.17 U	0.1 U
Chloroethane	1 U	5 U	4.1 U	5 U	0.41 U	0.1 U
Chloroform	0.8 U	4 U	1.6 U	4 U	0.16 U	0.1 U
Chloromethane	1 U	5 U	3 U	5 U	0.3 U	0.2 U
cis-1,2-Dichloroethene	18	1900	1400	1800	2500	17
cis-1,3-Dichloropropene	1 U	5 U	1.6 U	5 U	0.16 U	0.1 U
Dibromochloromethane	1 U	5 U	1.7 U	5 U	0.17 U	0.1 U
Ethylbenzene	0.8 U	4 U	1.6 U	4 U	0.16 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	3 U	15 U	18 U	15 U	1.8 U	1 U
Methyl isobutyl ketone (MIBK)	3 U	15 U	10 U	15 U	1 U	1 U
Methylene chloride	2 U	10 U	8 U	10 U	0.32 U	0.2 U
m-Xylene & p-Xylene	0.8 U	4 U	3.4 U	4 U	0.34 U	0.1 U
o-Xylene	0.8 U	4 U	1.9 U	4 U	0.19 U	0.1 U
Tetrachloroethene	0.8 U	4 U	2 U	4 U	0.2 U	0.1 U
Toluene	0.7 U	4 U	1.7 U	4 U	0.17 U	0.1 U
trans-1,2-Dichloroethene	0.8 U	63	73	90	150	2.5
trans-1,3-Dichloropropene	1 U	5 U	1.9 U	5 U	0.19 U	0.1 U
Trichloroethene	740	4900	2800	3400	2900	2.7
Trichlorofluoromethane	0.5 U	3 U	2.9 U	3 U	0.29 U	0.1 U
Vinyl chloride	0.5 U	23	24	5	94	4.7

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**HAR-08**	**HAR-08**	**HAR-08**	**HAR-11**	**HAR-11**	**HAR-11**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Primary	Duplicate	Split
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Shallow	Shallow	Shallow
Lab Name:	Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster	TA-Denver
Collection Date:	04/30/2009	07/21/2009	10/22/2009	02/26/2009	02/26/2009	02/26/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U	0.16 U
1,1,2,2-Tetrachloroethane	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.79 U	0.2 U	0.2 U	0.79 U
1,1,2-Trichloroethane	0.1 U	0.1 U	0.32 U	0.1 U	0.1 U	0.32 U
1,1-Dichloroethane	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U	0.16 U
1,1-Dichloroethene	0.1 U	0.1 U	0.14 U	0.1 U	0.1 U	0.14 U
1,2-Dichlorobenzene	0.1 U	0.1 U	0.13 U	0.1 U	0.1 U	0.13 U
1,2-Dichloroethane	0.1 U	0.1 U	0.13 U	0.1 U	0.1 U	0.13 U
1,2-Dichloropropane	0.1 U	0.1 U	0.13 U	0.1 U	0.1 U	0.13 U
1,3-Dichlorobenzene	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U	0.16 U
1,4-Dichlorobenzene	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U	0.16 U
1,4-Dioxane	1 J	0.9 J	0.65 U	---	---	---
2-Hexanone	1 U	1 U	1.4 U	1 U	1 U	1.4 U
Acetone	3 U	3 U	1.9 U	3 U	3 U	1.9 U
Benzene	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U	0.16 U
Bromodichloromethane	0.1 U	0.1 U	0.17 U	0.1 U	0.1 U	0.17 U
Bromoform	0.1 U	0.1 U	0.19 U	0.1 U	0.1 U	0.19 U
Bromomethane	0.1 U	0.1 U	0.21 U	0.1 U	0.1 U	0.21 U
Carbon Disulfide	0.4 U	0.4 U	0.45 U	0.4 U	0.4 U	0.45 U
Carbon Tetrachloride	0.1 U	0.1 U	0.19 U	0.1 U	0.1 U	0.19 U
Chlorobenzene	0.1 U	0.1 U	0.17 U	0.1 U	0.1 U	0.17 U
Chloroethane	0.1 U	0.1 U	0.41 U	0.1 U	0.1 U	0.41 U
Chloroform	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U	0.16 U
Chloromethane	0.2 U	0.2 U	0.3 U	0.2 U	0.2 U	0.3 U
cis-1,2-Dichloroethene	17	18	16	1.9	1.9	1.5
cis-1,3-Dichloropropene	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U	0.16 U
Dibromochloromethane	0.1 U	0.1 U	0.17 U	0.1 U	0.1 U	0.17 U
Ethylbenzene	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U	0.16 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1 U	1.8 U	1 U	1 U	1.8 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	0.2 U	0.2 U	1.6 U	0.2 U	0.2 U	0.35 U
m-Xylene & p-Xylene	0.1 U	0.1 U	0.34 U	0.1 U	0.1 U	0.34 U
o-Xylene	0.1 U	0.1 U	0.19 U	0.1 U	0.1 U	0.19 U
Tetrachloroethene	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	0.2 U
Toluene	0.1 U	0.1 U	0.17 U	0.1 U	0.1 U	0.17 U
trans-1,2-Dichloroethene	1.7	1.4	1.1	0.1 U	0.1 U	0.15 U
trans-1,3-Dichloropropene	0.1 U	0.1 U	0.19 U	0.1 U	0.1 U	0.19 U
Trichloroethene	1.7	1.5	1.3 U	0.1 U	0.1 U	0.16 U
Trichlorofluoromethane	0.1 U	0.1 U	0.29 U	0.1 U	0.1 U	0.29 U
Vinyl chloride	4.9	3.1	2.9	0.1 U	0.1 U	0.4 U

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**HAR-11**	**HAR-14**	**HAR-14**	**HAR-15**	**HAR-15**	**HAR-16**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Shallow	Shallow	Shallow	Shallow	Shallow	Chatsworth
Lab Name:	Lancaster	TA-Denver	TA-Denver	TA-Denver	TA-Denver	Lancaster
Collection Date:	07/20/2009	04/23/2009	10/13/2009	04/23/2009	10/13/2009	02/27/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.41 J	0.6 J	0.16 U	0.16 U	16 U
1,1,2,2-Tetrachloroethane	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	---	6.6	---	0.79 U	40 U
1,1,2-Trichloroethane	0.1 U	0.32 U	0.32 U	0.32 U	0.32 U	16 U
1,1-Dichloroethane	0.1 U	0.16 U	0.17 J	0.16 U	0.16 U	20 U
1,1-Dichloroethene	0.1 U	7.2	7.8	0.14 U	0.14 U	22 J
1,2-Dichlorobenzene	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	20 U
1,2-Dichloroethane	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	10 U
1,2-Dichloropropane	0.1 U	0.13 U	0.13 U	0.13 U	0.13 U	20 U
1,3-Dichlorobenzene	0.1 U	0.16 U	0.16 U	0.16 U	0.16 U	20 U
1,4-Dichlorobenzene	0.1 U	0.16 U	0.16 U	0.16 U	0.16 U	20 U
1,4-Dioxane	---	66	---	1 U	---	---
2-Hexanone	1 U	1.4 U	1.4 U	1.4 U	1.4 U	60 U
Acetone	3 U	1.9 U	1.9 U	1.9 U	2.7 U	120 U
Benzene	0.1 U	0.16 U	0.16 U	0.16 U	0.16 U	10 U
Bromodichloromethane	0.1 U	0.17 U	0.17 U	0.17 U	0.17 U	20 U
Bromoform	0.1 U	0.19 U	0.19 U	0.19 U	0.19 U	20 U
Bromomethane	0.1 U	0.21 U	0.21 U	0.21 U	0.21 U	20 U
Carbon Disulfide	0.4 U	0.45 U	0.45 U	0.45 U	0.45 U	20 U
Carbon Tetrachloride	0.1 U	1	1.3	0.19 U	0.19 U	10 U
Chlorobenzene	0.1 U	0.17 U	0.17 U	0.17 U	0.17 U	16 U
Chloroethane	0.1 U	0.41 U	0.41 U	0.41 U	0.41 U	20 U
Chloroform	0.1 U	1.4	1.9 U	0.16 U	0.16 U	16 U
Chloromethane	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	20 U
cis-1,2-Dichloroethene	0.9	0.15 U	0.15 U	0.39 J	0.88 U	150
cis-1,3-Dichloropropene	0.1 U	0.16 U	0.16 U	0.16 U	0.16 U	20 U
Dibromochloromethane	0.1 U	0.17 U	0.17 U	0.17 U	0.17 U	20 U
Ethylbenzene	0.1 U	0.16 U	0.16 U	0.16 U	0.16 U	16 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1.8 U	1.8 U	1.8 U	1.8 U	60 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	60 U
Methylene chloride	0.2 U	0.47 U	0.32 U	0.47 U	0.32 U	40 U
m-Xylene & p-Xylene	0.1 U	0.34 U	0.34 U	0.34 U	0.34 U	16 U
o-Xylene	0.1 U	0.19 U	0.19 U	0.19 U	0.19 U	16 U
Tetrachloroethene	0.1 U	0.2 U	0.2 U	0.2 U	0.2 U	16 U
Toluene	0.1 U	0.17 U	0.17 U	0.17 U	0.17 U	14 U
trans-1,2-Dichloroethene	0.1 U	0.15 U	0.15 U	0.15 U	0.15 U	16 U
trans-1,3-Dichloropropene	0.1 U	0.19 U	0.19 U	0.19 U	0.19 U	20 U
Trichloroethene	0.1 U	3.6	4.3	1.3	2.5	11000
Trichlorofluoromethane	0.1 U	0.29 U	0.29 U	0.29 U	0.29 U	21
Vinyl chloride	0.1 U	0.4 U	0.4 U	0.4 U	0.4 U	10 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**HAR-16**	**HAR-16**	**HAR-16**	**HAR-16**	**HAR-16**	**HAR-17**
Sample Port:						
Sample Type:	Primary	Split	Primary	Duplicate	Split	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TA-Denver	Lancaster	TA-Denver	TA-Denver	TA-Irvine	TA-Denver
Collection Date:	04/23/2009	04/23/2009	10/23/2009	10/23/2009	10/23/2009	04/29/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	8 U	16 U	6.4 U	6.4 U	0.3 U	0.16 U
1,1,2,2-Tetrachloroethane	10 U	10 U	8 U	8 U	0.3 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	---	---	32 U	32 U	1.6 J	---
1,1,2-Trichloroethane	16 U	16 U	13 U	13 U	1.5	0.32 U
1,1-Dichloroethane	8 U	20 U	6.4 U	6.4 U	2.5	0.55 J
1,1-Dichloroethene	28 J	27 J	24 J	22 J	22	0.44 J
1,2-Dichlorobenzene	6.5 U	20 U	5.2 U	5.2 U	0.32 U	0.13 U
1,2-Dichloroethane	6.5 U	10 U	5.2 U	5.2 U	0.28 U	0.13 U
1,2-Dichloropropane	6.5 U	20 U	5.2 U	5.2 U	0.35 U	0.13 U
1,3-Dichlorobenzene	8 U	20 U	6.4 U	6.4 U	0.35 U	0.16 U
1,4-Dichlorobenzene	8 U	20 U	6.4 U	6.4 U	0.37 U	0.16 U
1,4-Dioxane	27	---	---	---	---	3
2-Hexanone	70 U	60 U	56 U	56 U	2.6 U	1.4 U
Acetone	95 U	120 U	76 U	76 U	4.5 U	1.9 U
Benzene	8 U	10 U	6.4 U	6.4 U	0.36 J	0.16 U
Bromodichloromethane	8.5 U	20 U	6.8 U	6.8 U	47	0.17 U
Bromoform	9.5 U	20 U	7.6 U	7.6 U	0.4 U	0.19 U
Bromomethane	10 U	20 U	8.4 U	8.4 U	0.42 U	0.21 U
Carbon Disulfide	22 U	20 U	29 U	23 U	0.48 U	0.45 U
Carbon Tetrachloride	9.5 U	10 U	7.6 U	7.6 U	0.67	0.19 U
Chlorobenzene	8.5 U	16 U	6.8 U	6.8 U	0.36 U	0.17 U
Chloroethane	20 U	20 U	16 U	16 U	0.4 U	0.41 U
Chloroform	8 U	16 U	7.2 U	7 U	6.9	0.16 U
Chloromethane	15 U	20 U	12 U	12 U	0.4 U	0.3 U
cis-1,2-Dichloroethene	160	150	170	170	200	16
cis-1,3-Dichloropropene	8 U	20 U	6.4 U	6.4 U	0.22 U	0.16 U
Dibromochloromethane	8.5 U	20 U	6.8 U	6.8 U	0.4 U	0.17 U
Ethylbenzene	8 U	16 U	6.4 U	6.4 U	0.25 U	0.16 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	92 U	60 U	73 U	73 U	4.7 U	1.8 U
Methyl isobutyl ketone (MIBK)	52 U	60 U	42 U	42 U	3.5 U	1 U
Methylene chloride	29 U	40 U	36 U	34 U	0.95 U	0.32 U
m-Xylene & p-Xylene	17 U	16 U	14 U	14 U	0.6 U	0.34 U
o-Xylene	9.5 U	16 U	7.6 U	7.6 U	0.3 U	0.19 U
Tetrachloroethene	16 J	16 J	14 J	15 J	14	0.2 U
Toluene	8.5 U	14 U	6.8 U	6.8 U	0.36 U	0.17 U
trans-1,2-Dichloroethene	7.5 U	16 U	6 U	6 U	2	0.34 J
trans-1,3-Dichloropropene	9.5 U	20 U	7.6 U	7.6 U	0.32 U	0.19 U
Trichloroethene	15000	12000	14000	13000	12000	83
Trichlorofluoromethane	30 J	21	19 J	18 J	15	0.29 U
Vinyl chloride	20 U	10 U	16 U	16 U	0.4 U	0.4 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**HAR-17**	**HAR-17**	**HAR-17**	**HAR-17**	**HAR-18**	**HAR-18**
Sample Port:						
Sample Type:	Duplicate	Primary	Duplicate	Split	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TA-Denver	TA-Denver	TA-Denver	TA-Irvine	Lancaster	Lancaster
Collection Date:	04/29/2009	11/03/2009	11/03/2009	11/03/2009	03/04/2009	04/30/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.16 U	0.16 U	0.16 U	0.3 U	2 U	2 U
1,1,2,2-Tetrachloroethane	0.2 U	0.2 U	0.2 U	0.3 U	1 U	2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	---	42	41	47	480	400
1,1,2-Trichloroethane	0.32 U	0.32 U	0.32 U	0.3 U	2 U	2 U
1,1-Dichloroethane	0.6 J	0.67 J	0.63 J	0.57 J	2 J	3 J
1,1-Dichloroethene	0.51 J	0.7 J	0.67 J	0.42 U	22	42
1,2-Dichlorobenzene	0.13 U	0.13 U	0.13 U	0.32 U	2 U	2 U
1,2-Dichloroethane	0.13 U	0.13 U	0.13 U	0.28 U	1 U	2 U
1,2-Dichloropropane	0.13 U	0.13 U	0.13 U	0.35 U	2 U	2 U
1,3-Dichlorobenzene	0.16 U	0.16 U	0.16 U	0.35 U	2 U	2 U
1,4-Dichlorobenzene	0.16 U	0.16 U	0.16 U	0.37 U	2 U	2 U
1,4-Dioxane	3.1	---	---	---	4.3	6.1
2-Hexanone	1.4 U	1.4 U	1.4 U	2.6 U	6 U	20 U
Acetone	1.9 U	1.9 R	8.8 R	4.5 U	12 U	60 U
Benzene	0.16 U	0.16 U	0.16 U	0.28 U	1 U	2 U
Bromodichloromethane	0.17 U	0.17 U	0.17 U	0.3 U	2 U	2 U
Bromoform	0.19 U	0.19 U	0.19 U	0.4 U	2 U	2 U
Bromomethane	0.21 U	0.21 U	0.21 U	0.42 U	2 U	2 U
Carbon Disulfide	0.45 U	0.45 U	0.45 U	0.48 U	2 U	8 U
Carbon Tetrachloride	0.19 U	0.19 U	0.19 U	0.28 U	1 U	2 U
Chlorobenzene	0.17 U	0.17 U	0.17 U	0.36 U	2 U	2 U
Chloroethane	0.41 U	0.41 U	0.41 U	0.4 U	2 U	2 U
Chloroform	0.16 U	0.16 U	0.16 U	0.33 U	2 U	2 U
Chloromethane	0.3 U	0.3 U	0.3 U	0.4 U	2 U	4 U
cis-1,2-Dichloroethene	18	19 J	19 J	17	610	1200
cis-1,3-Dichloropropene	0.16 U	0.16 U	0.16 U	0.22 U	2 U	2 U
Dibromochloromethane	0.17 U	0.17 U	0.17 U	0.4 U	2 U	2 U
Ethylbenzene	0.16 U	0.16 U	0.16 U	0.25 U	2 U	2 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1.8 U	1.8 U	1.8 U	4.7 U	6 U	20 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	3.5 U	6 U	20 U
Methylene chloride	0.32 U	0.32 U	0.32 U	0.95 U	4 U	4.4 U
m-Xylene & p-Xylene	0.34 U	0.34 U	0.34 U	0.6 U	2 U	2 U
o-Xylene	0.19 U	0.19 U	0.19 U	0.3 U	2 U	2 U
Tetrachloroethene	0.2 U	0.2 U	0.2 U	0.32 U	3 J	2.4 J
Toluene	0.17 U	0.17 U	0.17 U	0.36 U	1 U	2 U
trans-1,2-Dichloroethene	0.35 J	0.37 J	0.34 J	0.3 U	8 J	23
trans-1,3-Dichloropropene	0.19 U	0.25 R	0.19 U	0.32 U	2 U	2 U
Trichloroethene	95	110	87	84	1200	1200
Trichlorofluoromethane	0.29 U	0.29 U	0.29 U	0.34 U	1 J	2 U
Vinyl chloride	0.4 U	0.4 U	0.4 U	0.4 U	24	130

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**HAR-18**	**HAR-18**	**HAR-18**	**HAR-18**	**HAR-20**	**HAR-20**
Sample Port:						
Sample Type:	Split	Primary	Duplicate	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TA-Denver	Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster
Collection Date:	04/30/2009	07/16/2009	07/16/2009	10/29/2009	02/17/2009	04/30/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.64 U	0.8 U	---	0.8 U	0.8 U	0.1 U
1,1,2,2-Tetrachloroethane	0.8 U	0.5 U	---	1 U	0.5 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	710	270	---	370	2 U	0.2 U
1,1,2-Trichloroethane	1.3 U	0.8 U	---	1.6 U	0.8 U	0.1 U
1,1-Dichloroethane	2.7 J	3 J	---	2.1 J	1 U	0.1 U
1,1-Dichloroethene	43	51	---	12	0.8 U	0.4 J
1,2-Dichlorobenzene	0.52 U	1 U	---	0.65 U	1 U	0.1 U
1,2-Dichloroethane	0.52 U	0.5 U	---	0.65 U	0.5 U	0.1 U
1,2-Dichloropropane	0.52 U	1 U	---	0.65 U	1 U	0.1 U
1,3-Dichlorobenzene	0.64 U	1 U	---	0.8 U	1 U	0.1 U
1,4-Dichlorobenzene	0.64 U	1 U	---	0.8 U	1 U	0.1 U
1,4-Dioxane	7.3	4.8	6.9	8.5	2.9	2.7
2-Hexanone	5.6 U	3 U	---	7 U	3 U	1 U
Acetone	7.6 U	6 J,L	---	66 U	6 U	3 U
Benzene	0.64 U	0.5 U	---	0.8 U	0.5 U	0.1 U
Bromodichloromethane	0.68 U	1 U	---	0.85 U	1 U	0.1 U
Bromoform	0.76 U	1 U	---	0.95 U	1 U	0.1 U
Bromomethane	0.84 U	1 U	---	1 U	1 U	0.1 U
Carbon Disulfide	1.8 U	1 U	---	2.2 U	1 U	0.4 U
Carbon Tetrachloride	0.76 U	0.5 U	---	0.95 U	0.5 U	0.1 U
Chlorobenzene	0.68 U	0.8 U	---	0.85 U	0.8 U	0.1 U
Chloroethane	1.6 U	1 U	---	2 U	1 U	0.1 U
Chloroform	0.98 J	0.8 J	---	1.4 U	0.8 U	0.1 U
Chloromethane	1.2 U	1 U	---	1.5 U	1 U	0.2 U
cis-1,2-Dichloroethene	1000	1900	---	640	150	110
cis-1,3-Dichloropropene	0.64 U	1 U	---	0.8 U	1 U	0.1 U
Dibromochloromethane	0.68 U	1 U	---	0.85 U	1 U	0.1 U
Ethylbenzene	0.64 U	0.8 U	---	0.8 U	0.8 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	7.3 U	3 U	---	9.2 U	3 U	1 U
Methyl isobutyl ketone (MIBK)	4.2 U	3 U	---	5.2 U	3 U	1 U
Methylene chloride	1.3 U	2 U	---	1.6 U	2 U	0.2 U
m-Xylene & p-Xylene	1.4 U	0.8 U	---	1.7 U	0.8 U	0.1 U
o-Xylene	0.76 U	0.8 U	---	0.95 U	0.8 U	0.1 U
Tetrachloroethene	2.5 J	2 J	---	2.7 J	0.8 U	0.1 U
Toluene	0.68 U	0.7 U	---	0.85 U	0.7 U	0.1 U
trans-1,2-Dichloroethene	19	55	---	8.5	10	8.6
trans-1,3-Dichloropropene	0.76 U	1 U	---	0.95 U	1 U	0.1 U
Trichloroethene	1400	1200	---	1200	260	220
Trichlorofluoromethane	1.2 U	0.5 J	---	1.4 U	0.5 U	0.1 U
Vinyl chloride	120	200	---	18	0.9 J	0.8

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**HAR-20**	**HAR-20**	**HAR-22**	**HAR-22**	**HAR-22**	**HAR-22**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Primary	Duplicate	Split
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	TA-Denver	Lancaster	Lancaster	Lancaster	TA-Denver
Collection Date:	07/15/2009	10/29/2009	02/19/2009	07/21/2009	07/21/2009	07/21/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.8 U	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U
1,1,2,2-Tetrachloroethane	0.5 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	2 U	0.79 U	0.2 U	0.2 U	0.2 U	0.79 U
1,1,2-Trichloroethane	0.8 U	0.32 U	0.1 U	0.1 U	0.1 U	0.32 U
1,1-Dichloroethane	1 U	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U
1,1-Dichloroethene	0.8 U	0.24 J	0.1 U	0.1 U	0.1 U	0.14 U
1,2-Dichlorobenzene	1 U	0.13 U	0.1 U	0.1 U	0.1 U	0.13 U
1,2-Dichloroethane	0.5 U	0.13 U	0.1 U	0.1 U	0.1 U	0.13 U
1,2-Dichloropropane	1 U	0.13 U	0.1 U	0.1 U	0.1 U	0.13 U
1,3-Dichlorobenzene	1 U	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U
1,4-Dichlorobenzene	1 U	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U
1,4-Dioxane	2.6	4.2	---	---	---	---
2-Hexanone	3 U	1.4 U	1 U	1 U	1 U	1.4 U
Acetone	6 U	1.9 U	3 U	3 U	3 U	1.9 U
Benzene	0.5 U	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U
Bromodichloromethane	1 U	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U
Bromoform	1 U	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U
Bromomethane	1 U	0.21 U	0.1 U	0.1 U	0.1 U	0.21 U
Carbon Disulfide	1 U	0.45 U	0.4 U	0.4 U	0.4 U	0.45 U
Carbon Tetrachloride	0.5 U	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U
Chlorobenzene	0.8 U	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U
Chloroethane	1 U	0.41 U	0.1 U	0.1 U	0.1 U	0.41 U
Chloroform	0.8 U	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U
Chloromethane	1 U	0.3 U	0.2 U	0.2 U	0.2 U	0.3 U
cis-1,2-Dichloroethene	160	100	5.5	4.8	5.2	5.2
cis-1,3-Dichloropropene	1 U	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U
Dibromochloromethane	1 U	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U
Ethylbenzene	0.8 U	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	3 U	1.8 U	1 U	1 U	1 U	1.8 U
Methyl isobutyl ketone (MIBK)	3 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	2 U	0.32 U	0.2 U	0.2 U	0.2 U	0.32 U
m-Xylene & p-Xylene	0.8 U	0.34 U	0.1 U	0.1 U	0.1 U	0.34 U
o-Xylene	0.8 U	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U
Tetrachloroethene	0.8 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U
Toluene	0.7 U	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U
trans-1,2-Dichloroethene	11	6	0.3 J	0.2 J	0.2 J	0.22 J
trans-1,3-Dichloropropene	1 U	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U
Trichloroethene	290	180	1.3	1.1	1.2	1.2
Trichlorofluoromethane	0.5 U	0.29 U	0.1 U	0.1 U	0.1 U	0.29 U
Vinyl chloride	0.7 J	0.4 U	0.1 J	0.1 J	0.1 J	0.4 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**HAR-23**	**HAR-23**	**HAR-24**	**HAR-24**	**HAR-24**	**HAR-26**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Duplicate	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:	03/09/2009	07/20/2009	03/09/2009	03/09/2009	07/21/2009	03/02/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.1 U	0.8 U	0.8 U	0.8 U	0.1 U
1,1,2,2-Tetrachloroethane	0.1 U	0.1 U	0.5 U	0.5 U	0.5 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	9 J	9 J	8 J	0.2 U
1,1,2-Trichloroethane	0.1 U	0.1 U	0.8 U	0.8 U	0.8 U	0.1 U
1,1-Dichloroethane	0.1 U	0.1 U	1 U	1 U	1 U	0.1 U
1,1-Dichloroethene	0.1 U	0.1 U	0.8 U	0.8 U	0.8 U	0.1 U
1,2-Dichlorobenzene	0.1 U	0.1 U	1 U	1 U	1 U	0.1 U
1,2-Dichloroethane	0.1 U	0.1 U	0.5 U	0.5 U	0.5 U	0.1 U
1,2-Dichloropropane	0.1 U	0.1 U	1 U	1 U	1 U	0.1 U
1,3-Dichlorobenzene	0.1 U	0.1 U	1 U	1 U	1 U	0.1 U
1,4-Dichlorobenzene	0.1 U	0.1 U	1 U	1 U	1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	1 U	3 U	3 U	3 U	1 U
Acetone	3 U	3 U	6 U	6 U	6 U	3 U
Benzene	0.1 U	0.1 U	0.5 U	0.5 U	0.5 U	0.1 U
Bromodichloromethane	0.1 U	0.1 U	1 U	1 U	1 U	0.1 U
Bromoform	0.1 U	0.1 U	1 U	1 U	1 U	0.1 U
Bromomethane	0.1 U	0.1 U	1 U	1 U	1 U	0.1 U
Carbon Disulfide	0.4 U	0.4 U	1 U	1 U	1 U	0.4 U
Carbon Tetrachloride	0.1 U	0.1 U	0.5 U	0.5 U	0.5 U	0.1 U
Chlorobenzene	0.1 U	0.1 U	0.8 U	0.8 U	0.8 U	0.1 U
Chloroethane	0.1 U	0.1 U	1 U	1 U	1 U	0.1 U
Chloroform	0.1 U	0.1 U	2 J	2 J	2 J	0.1 U
Chloromethane	0.2 U	0.2 U	1 U	1 U	1 U	0.2 U
cis-1,2-Dichloroethene	0.2 J	0.2 J	5 J	5	5	0.1 U
cis-1,3-Dichloropropene	0.1 U	0.1 U	1 U	1 U	1 U	0.1 U
Dibromochloromethane	0.1 U	0.1 U	1 U	1 U	1 U	0.1 U
Ethylbenzene	0.1 U	0.1 U	0.8 U	0.8 U	0.8 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1 U	3 U	3 U	3 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	3 U	3 U	3 U	1 U
Methylene chloride	0.2 U	0.2 U	2 U	2 U	2 U	0.2 U
m-Xylene & p-Xylene	0.1 U	0.1 U	0.8 U	0.8 U	0.8 U	0.1 U
o-Xylene	0.1 U	0.1 U	0.8 U	0.8 U	0.8 U	0.1 U
Tetrachloroethene	0.1 U	0.1 U	0.8 U	0.8 U	0.8 U	0.1 U
Toluene	0.1 U	0.1 U	0.7 U	0.7 U	0.7 U	0.1 U
trans-1,2-Dichloroethene	0.1 U	0.1 U	0.8 U	0.8 U	0.8 U	0.1 U
trans-1,3-Dichloropropene	0.1 U	0.1 U	1 U	1 U	1 U	0.1 U
Trichloroethene	1.7	2.3	130	130	130	0.1 U
Trichlorofluoromethane	0.1 U	0.1 U	0.5 U	0.5 U	0.5 U	0.1 U
Vinyl chloride	0.1 U	0.1 U	0.5 U	0.5 U	0.5 U	0.1 U

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**HAR-26**	**HAR-27**	**HAR-27**	**HAR-27**	**OS-02**	**OS-04**
Sample Port:						
Sample Type:	Primary	Primary	Duplicate	Primary	Primary	Primary
Geological Unit:	Chatsworth	Shallow	Shallow	Shallow	Chatsworth	Chatsworth
Lab Name:	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:	07/20/2009	02/18/2009	02/18/2009	07/21/2009	03/03/2009	03/03/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	1 U	1 U	1 U	1 U	1 U
Acetone	3 U	8.4 U	30 U	3 U	3 U	3 U
Benzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromodichloromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromoform	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromomethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Carbon Disulfide	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Carbon Tetrachloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloroform	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	0.1 U	4.8	3	3.1	0.1 U	0.1 U
cis-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibromochloromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1 U	1 U	1 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
o-Xylene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Tetrachloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Toluene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	0.1 U	3.2	2	0.9	0.1 U	0.1 U
trans-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Trichloroethene	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U
Trichlorofluoromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Vinyl chloride	0.1 U	2	1.4	0.7	0.1 U	0.1 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**OS-04**	**OS-09**	**OS-09**	**OS-16**	**OS-16**	**OS-16**
Sample Port:						
Sample Type:	Split	Primary	Primary	Primary	Duplicate	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TA-Denver	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:	03/03/2009	03/03/2009	08/04/2009	02/17/2009	02/17/2009	07/29/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.2 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.79 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.32 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethene	0.14 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichlorobenzene	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloroethane	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1.4 U	1 U	1 U	1 U	1 U	1 U
Acetone	1.9 U	3 U	3 U	3 U	3 U	3 U
Benzene	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromodichloromethane	0.17 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromoform	0.19 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromomethane	0.21 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Carbon Disulfide	0.45 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Carbon Tetrachloride	0.19 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.17 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloroethane	0.41 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloroform	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloromethane	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	0.15 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
cis-1,3-Dichloropropene	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibromochloromethane	0.17 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Ethylbenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1.8 U	1 U	1 U	1 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	0.32 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.34 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
o-Xylene	0.19 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Tetrachloroethene	0.2 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Toluene	0.17 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	0.15 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	0.19 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Trichloroethene	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Trichlorofluoromethane	0.29 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Vinyl chloride	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**OS-17**	**OS-17**	**OS-25**	**OS-25**	**OS-26**	**OS-26**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:	03/10/2009	07/30/2009	03/06/2009	08/05/2009	02/11/2009	08/03/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	1 U	1 U	1 U	1 U	1 U
Acetone	3 U	3 U	3 U	3 U	3 U	3 U
Benzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromodichloromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromoform	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromomethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Carbon Disulfide	0.4 U	0.4 U	0.4 U	0.9 U	0.4 U	0.4 U
Carbon Tetrachloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloroform	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
cis-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibromochloromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1 U	1 U	1 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
o-Xylene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Tetrachloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Toluene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Trichloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Trichlorofluoromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Vinyl chloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**OS-27**	**OS-27**	**OS-28**	**OS-28**	**PZ-058**	**PZ-071**
Sample Port:						
Sample Type:	Primary	Duplicate	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Shallow	Shallow
Lab Name:	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:	03/09/2009	03/09/2009	03/10/2009	07/30/2009	05/04/2009	05/07/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.6	0.2 U
1,1,2-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	---	1.3 J	0.5 U
2-Hexanone	1 U	1 U	1 U	1 U	1 U	1 U
Acetone	3 U	3 U	3 U	3 U	3 U	3 U
Benzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromodichloromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromoform	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromomethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Carbon Disulfide	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Carbon Tetrachloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloroform	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J
cis-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibromochloromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1 U	1 U	1 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
o-Xylene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Tetrachloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Toluene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Trichloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J
Trichlorofluoromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Vinyl chloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**PZ-071**	**PZ-071**	**PZ-071**	**PZ-071**	**PZ-076**	**PZ-105**
Sample Port:						
Sample Type:	Duplicate	Split	Primary	Duplicate	Primary	Primary
Geological Unit:	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:	Lancaster	TA-Denver	Lancaster	Lancaster	TA-Denver	Lancaster
Collection Date:	05/07/2009	05/07/2009	07/16/2009	07/16/2009	11/02/2009	02/11/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	---	---	0.1 U	0.1 U	0.16 U	0.1 U
1,1,2,2-Tetrachloroethane	---	---	0.1 U	0.1 U	0.2 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	---	---	0.2 U	0.2 U	0.79 U	0.2 U
1,1,2-Trichloroethane	---	---	0.1 U	0.1 U	0.32 U	0.1 U
1,1-Dichloroethane	---	---	0.1 U	0.1 U	0.16 U	0.1 U
1,1-Dichloroethene	---	---	0.1 U	0.1 U	0.14 U	0.1 J
1,2-Dichlorobenzene	---	---	0.1 U	0.1 U	0.13 U	0.1 U
1,2-Dichloroethane	---	---	0.1 U	0.1 U	0.13 U	0.1 U
1,2-Dichloropropane	---	---	0.1 U	0.1 U	0.13 U	0.1 U
1,3-Dichlorobenzene	---	---	0.1 U	0.1 U	0.16 U	0.1 U
1,4-Dichlorobenzene	---	---	0.1 U	0.1 U	0.16 U	0.1 U
1,4-Dioxane	0.5 U	1 U	0.5 U	0.5 U	---	---
2-Hexanone	---	---	1 U	1 U	1.4 U	1 U
Acetone	---	---	3 U	3 U	1.9 U	3 U
Benzene	---	---	0.1 U	0.1 U	0.16 U	0.1 U
Bromodichloromethane	---	---	0.1 U	0.1 U	0.17 U	0.1 U
Bromoform	---	---	0.1 U	0.1 U	0.19 U	0.1 U
Bromomethane	---	---	0.1 U	0.1 U	0.21 U	0.1 U
Carbon Disulfide	---	---	0.4 U	0.4 U	0.45 U	0.4 U
Carbon Tetrachloride	---	---	0.1 U	0.1 U	0.19 U	0.1 U
Chlorobenzene	---	---	0.1 U	0.1 U	0.17 U	0.1 U
Chloroethane	---	---	0.1 U	0.1 U	0.41 U	0.1 U
Chloroform	---	---	0.1 U	0.1 U	0.16 U	0.1 U
Chloromethane	---	---	0.2 U	0.2 U	0.3 U	0.2 U
cis-1,2-Dichloroethene	---	---	0.6	0.4 J	0.15 U	0.1 U
cis-1,3-Dichloropropene	---	---	0.1 U	0.1 U	0.16 U	0.1 U
Dibromochloromethane	---	---	0.1 U	0.1 U	0.17 U	0.1 U
Ethylbenzene	---	---	0.1 U	0.1 U	0.16 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	---	---	1 U	1 U	1.8 U	1 U
Methyl isobutyl ketone (MIBK)	---	---	1 U	1 U	1 U	1 U
Methylene chloride	---	---	0.2 U	0.2 U	0.32 U	0.2 U
m-Xylene & p-Xylene	---	---	0.1 U	0.1 U	0.34 U	0.1 U
o-Xylene	---	---	0.1 U	0.1 U	0.19 U	0.1 U
Tetrachloroethene	---	---	0.1 U	0.1 U	0.2 U	0.1 U
Toluene	---	---	0.1 U	0.1 U	0.17 U	0.1 U
trans-1,2-Dichloroethene	---	---	0.1 U	0.1 U	0.15 U	0.1 U
trans-1,3-Dichloropropene	---	---	0.1 U	0.1 U	0.19 U	0.1 U
Trichloroethene	---	---	0.4 J	0.2 J	2.3 U	10
Trichlorofluoromethane	---	---	0.1 U	0.1 U	0.29 U	0.1 U
Vinyl chloride	---	---	0.1 U	0.1 U	0.4 U	0.1 U

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**PZ-105**	**PZ-105**	**PZ-105**	**PZ-105**	**PZ-105**	**PZ-105**
Sample Port:						
Sample Type:	Duplicate	Split	Primary	Primary	Split	Primary
Geological Unit:	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:	Lancaster	TA-Denver	Lancaster	Lancaster	TA-Denver	TA-Denver
Collection Date:	02/11/2009	02/11/2009	04/29/2009	07/10/2009	07/10/2009	10/12/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.16 U	0.1 U	0.1 U	0.16 U	0.16 U
1,1,2,2-Tetrachloroethane	0.1 U	0.2 U	0.1 U	0.1 U	0.2 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.79 U	0.2 U	0.2 U	0.79 U	0.79 U
1,1,2-Trichloroethane	0.1 U	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U
1,1-Dichloroethane	0.1 U	0.16 U	0.1 U	0.1 U	0.16 U	0.16 U
1,1-Dichloroethene	0.1 J	0.14 U	0.1 U	0.1 U	0.14 U	0.14 U
1,2-Dichlorobenzene	0.1 U	0.13 U	0.1 U	0.1 U	0.13 U	0.13 U
1,2-Dichloroethane	0.1 U	0.13 U	0.1 U	0.1 U	0.13 U	0.13 U
1,2-Dichloropropane	0.1 U	0.13 U	0.1 U	0.1 U	0.13 U	0.13 U
1,3-Dichlorobenzene	0.1 U	0.16 U	0.1 U	0.1 U	0.16 U	0.16 U
1,4-Dichlorobenzene	0.1 U	0.16 U	0.1 U	0.1 U	0.16 U	0.16 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	1.4 U	1 U	1 U	1.4 U	1.4 U
Acetone	3 U	1.9 U	3 U	3 U	1.9 U	4.9 U
Benzene	0.1 U	0.16 U	0.1 U	0.1 U	0.16 U	0.16 U
Bromodichloromethane	0.1 U	0.17 U	0.1 U	0.1 U	0.17 U	0.17 U
Bromoform	0.1 U	0.19 U	0.1 U	0.1 U	0.19 U	0.19 U
Bromomethane	0.1 U	0.21 U	0.1 U	0.1 U	0.21 U	0.21 U
Carbon Disulfide	0.4 U	0.45 U	0.4 U	0.4 U	0.45 U	0.45 U
Carbon Tetrachloride	0.1 U	0.19 U	0.1 U	0.1 U	0.19 U	0.19 U
Chlorobenzene	0.1 U	0.17 U	0.1 U	0.1 U	0.17 U	0.17 U
Chloroethane	0.1 U	0.41 U	0.1 U	0.1 U	0.41 U	0.41 U
Chloroform	0.1 U	0.16 U	0.1 U	0.1 U	0.16 U	0.16 U
Chloromethane	0.2 U	0.3 U	0.2 U	0.2 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	0.1 U	0.15 U	0.1 U	0.1 U	0.15 U	0.15 U
cis-1,3-Dichloropropene	0.1 U	0.16 U	0.1 U	0.1 U	0.16 U	0.16 U
Dibromochloromethane	0.1 U	0.17 U	0.1 U	0.1 U	0.17 U	0.17 U
Ethylbenzene	0.1 U	0.16 U	0.1 U	0.1 U	0.16 U	0.16 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1.8 U	1 U	1 U	1.8 U	1.8 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	0.2 U	0.32 U	0.2 U	0.2 U	0.32 U	0.32 U
m-Xylene & p-Xylene	0.1 U	0.34 U	0.1 U	0.1 U	0.34 U	0.34 U
o-Xylene	0.1 U	0.19 U	0.1 U	0.1 U	0.19 U	0.19 U
Tetrachloroethene	0.1 U	0.2 U	0.1 U	0.1 U	0.2 U	0.2 U
Toluene	0.1 J	0.17 U	0.1 U	0.1 U	0.17 U	0.17 U
trans-1,2-Dichloroethene	0.1 U	0.15 U	0.1 U	0.1 U	0.15 U	0.15 U
trans-1,3-Dichloropropene	0.1 U	0.19 U	0.1 U	0.1 U	0.19 U	0.19 U
Trichloroethene	9.8	11	9.7	5.8	4.5	10
Trichlorofluoromethane	0.1 U	0.29 U	0.1 U	0.1 U	0.29 U	0.29 U
Vinyl chloride	0.1 U	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**PZ-105**	**PZ-120**	**PZ-120**	**PZ-120**	**PZ-120**	**PZ-139**
Sample Port:						
Sample Type:	Duplicate	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:	TA-Denver	Lancaster	Lancaster	Lancaster	TA-Denver	TA-Denver
Collection Date:	10/12/2009	02/10/2009	04/29/2009	07/09/2009	10/07/2009	10/15/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.16 U
1,1,2,2-Tetrachloroethane	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.79 U	3.3	3.8	3.4	2.8 J	0.79 U
1,1,2-Trichloroethane	0.32 U	0.1 U	0.1 U	0.1 U	0.32 U	0.32 U
1,1-Dichloroethane	0.16 U	1.8	1.3	1.4	1.3	0.16 U
1,1-Dichloroethene	0.14 U	0.8	0.3 J	0.4 U	0.24 J	0.76 J
1,2-Dichlorobenzene	0.13 U	0.1 U	0.1 U	0.1 U	0.13 U	0.13 U
1,2-Dichloroethane	0.13 U	0.1 U	0.1 U	0.1 U	0.13 U	0.13 U
1,2-Dichloropropane	0.13 U	0.1 U	0.1 U	0.1 U	0.13 U	0.13 U
1,3-Dichlorobenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.16 U
1,4-Dichlorobenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.16 U
1,4-Dioxane	---	---	---	---	---	0.65 U
2-Hexanone	1.4 U	1 U	1 U	1 U	1.4 U	1.4 U
Acetone	1.9 U	3 U	3 U	3 U	3.4 U	1.9 U
Benzene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.16 U
Bromodichloromethane	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U	0.17 U
Bromoform	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U	0.19 U
Bromomethane	0.21 U	0.1 U	0.1 U	0.1 U	0.21 U	0.21 U
Carbon Disulfide	0.45 U	0.4 U	0.4 U	0.4 U	0.45 U	0.45 U
Carbon Tetrachloride	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U	0.19 U
Chlorobenzene	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U	0.17 U
Chloroethane	0.41 U	0.1 J	0.1 U	0.1 U	0.41 U	0.41 U
Chloroform	0.16 U	0.2 J	0.1 J	0.2 J	0.16 U	0.16 U
Chloromethane	0.3 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	0.15 U	12	8.1	9.6	7.9	13
cis-1,3-Dichloropropene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.16 U
Dibromochloromethane	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U	0.17 U
Ethylbenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.16 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1.8 U	1 U	1.2 J	1 U	1.8 U	1.8 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	0.32 U	0.2 U	0.2 U	0.2 U	0.55 U	0.32 U
m-Xylene & p-Xylene	0.34 U	0.1 U	0.1 U	0.1 U	0.34 U	0.34 U
o-Xylene	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U	0.19 U
Tetrachloroethene	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.2 U
Toluene	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U	0.17 U
trans-1,2-Dichloroethene	0.15 U	0.1 U	0.1 U	0.1 U	0.15 U	0.53 J
trans-1,3-Dichloropropene	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U	0.19 U
Trichloroethene	9.3	45	39	50	53	200
Trichlorofluoromethane	0.29 U	0.1 J	0.4 J	0.2 J	0.29 U	0.29 U
Vinyl chloride	0.4 U	0.1 U	0.1 U	0.1 U	0.4 U	0.4 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**PZ-140**	**PZ-141**	**PZ-141**	**RD-01**	**RD-01**	**RD-01**
Sample Port:						
Sample Type:	Primary	Primary	Split	Primary	Primary	Primary
Geological Unit:	Shallow	Shallow	Shallow	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TA-Denver	TA-Denver	TA-Irvine	Lancaster	Lancaster	Lancaster
Collection Date:	10/20/2009	11/03/2009	11/03/2009	02/25/2009	05/12/2009	07/14/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.16 U	0.16 U	---	0.8 U	1 U	0.8 U
1,1,2,2-Tetrachloroethane	0.2 U	0.2 U	---	0.5 U	1 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.79 U	0.79 U	---	2 U	2 U	2 U
1,1,2-Trichloroethane	0.32 U	0.32 U	---	0.8 U	1 U	0.8 U
1,1-Dichloroethane	0.16 U	0.16 U	---	1 U	1 U	1 U
1,1-Dichloroethene	0.14 U	0.14 U	---	2 J	2.4 J	3 J
1,2-Dichlorobenzene	0.13 U	0.13 U	---	1 U	1 U	1 U
1,2-Dichloroethane	0.13 U	0.13 U	---	0.5 U	1 U	0.5 U
1,2-Dichloropropane	0.13 U	0.13 U	---	1 U	1 U	1 U
1,3-Dichlorobenzene	0.16 U	0.16 U	---	1 U	1 U	1 U
1,4-Dichlorobenzene	0.16 U	0.16 U	---	1 U	1 U	1 U
1,4-Dioxane	0.65 U	0.19 U	1 U	1.8 J	1.8 J	1.2 J
2-Hexanone	1.4 U	1.4 U	---	3 U	10 U	3 U
Acetone	1.9 U	1.9 R	---	6 U	30 U	6 U
Benzene	0.16 U	0.16 U	---	0.5 U	1 U	0.5 U
Bromodichloromethane	0.17 U	0.17 U	---	1 U	1 U	1 U
Bromoform	0.19 U	0.19 U	---	1 U	1 U	1 U
Bromomethane	0.21 U	0.21 U	---	1 U	1 U	1 U
Carbon Disulfide	0.45 U	0.45 U	---	1 U	4 U	1 U
Carbon Tetrachloride	0.19 U	0.19 U	---	0.5 U	1 U	0.5 U
Chlorobenzene	0.17 U	0.17 U	---	0.8 U	1 U	0.8 U
Chloroethane	0.41 U	0.41 U	---	1 U	1 U	1 U
Chloroform	0.16 U	0.16 U	---	0.8 U	1 U	0.8 U
Chloromethane	0.3 U	0.3 U	---	1 U	2 U	1 U
cis-1,2-Dichloroethene	4.1	2.1 J	---	740	710	650
cis-1,3-Dichloropropene	0.16 U	0.16 U	---	1 U	1 U	1 U
Dibromochloromethane	0.17 U	0.17 U	---	1 U	1 U	1 U
Ethylbenzene	0.16 U	0.16 U	---	0.8 U	1 U	0.8 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1.8 U	1.8 U	---	3 U	10 U	3 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	---	3 U	10 U	3 U
Methylene chloride	0.32 U	0.32 U	---	2 U	4.3 J,L	2 U
m-Xylene & p-Xylene	0.34 U	0.34 U	---	0.8 U	1 U	0.8 U
o-Xylene	0.19 U	0.19 U	---	0.8 U	1 U	0.8 U
Tetrachloroethene	0.2 U	0.2 U	---	0.8 U	1 U	0.8 U
Toluene	0.17 U	0.17 U	---	0.7 U	1 U	0.7 U
trans-1,2-Dichloroethene	0.15 U	0.15 U	---	69	28	31
trans-1,3-Dichloropropene	0.19 U	0.19 U	---	1 U	1 U	1 U
Trichloroethene	130	52	---	660	670	540
Trichlorofluoromethane	0.29 U	0.29 U	---	0.5 U	1 U	0.5 U
Vinyl chloride	0.4 U	0.4 U	---	31	26	24

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-01**	**RD-02**	**RD-02**	**RD-02**	**RD-03**	**RD-04**
Sample Port:						
Sample Type:	Primary	Primary	Duplicate	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TA-Denver	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:	10/27/2009	02/26/2009	02/26/2009	05/12/2009	07/29/2009	02/09/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.32 U	0.8 U	0.8 U	0.5 U	0.1 U	0.8 U
1,1,2,2-Tetrachloroethane	0.4 U	0.5 U	0.5 U	0.5 U	0.1 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.6 U	2 U	2 U	1 U	0.2 U	2 U
1,1,2-Trichloroethane	0.64 U	0.8 U	0.8 U	0.5 U	0.1 U	0.8 U
1,1-Dichloroethane	0.32 U	1 U	1 U	0.5 U	0.1 U	1 U
1,1-Dichloroethene	3.4	2 J	1 J	1.2 J	0.1 U	1 J
1,2-Dichlorobenzene	0.26 U	1 U	1 U	0.5 U	0.1 U	1 U
1,2-Dichloroethane	0.26 U	0.5 U	0.5 U	0.5 U	0.1 U	0.5 U
1,2-Dichloropropane	0.26 U	1 U	1 U	0.5 U	0.1 U	1 U
1,3-Dichlorobenzene	0.32 U	1 U	1 U	0.5 U	0.1 U	1 U
1,4-Dichlorobenzene	0.32 U	1 U	1 U	0.5 U	0.1 U	1 U
1,4-Dioxane	0.65 U	1.6 J	---	1.7 J	---	0.6 J
2-Hexanone	2.8 U	3 U	3 U	5 U	1 U	3 U
Acetone	3.8 U	6 U	6 U	15 U	3 U	6 U
Benzene	0.32 U	0.5 U	0.5 U	0.5 U	0.1 U	0.5 U
Bromodichloromethane	0.34 U	1 U	1 U	0.5 U	0.1 U	1 U
Bromoform	0.38 U	1 U	1 U	0.5 U	0.1 U	1 U
Bromomethane	0.42 U	1 U	1 U	0.5 U	0.1 U	1 U
Carbon Disulfide	0.9 U	1 U	1 U	2 U	0.6 U	1 U
Carbon Tetrachloride	0.38 U	0.5 U	0.5 U	0.5 U	0.1 U	0.5 U
Chlorobenzene	0.34 U	0.8 U	0.8 U	0.5 U	0.1 U	0.8 U
Chloroethane	0.82 U	1 U	1 U	0.5 U	0.1 U	1 U
Chloroform	0.32 U	0.8 U	0.8 U	0.5 U	0.1 U	0.8 U
Chloromethane	0.6 U	1 U	1 U	1 U	0.2 U	1 U
cis-1,2-Dichloroethene	690	320	320	330	0.7	180
cis-1,3-Dichloropropene	0.32 U	1 U	1 U	0.5 U	0.1 U	1 U
Dibromochloromethane	0.34 U	1 U	1 U	0.5 U	0.1 U	1 U
Ethylbenzene	0.32 U	0.8 U	0.8 U	0.5 U	0.1 U	0.8 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	3.7 U	3 U	3 U	5 U	1 U	3 U
Methyl isobutyl ketone (MIBK)	2.1 U	3 U	3 U	5 U	1 U	3 U
Methylene chloride	0.64 U	2 U	2 U	1.6 J,L	0.2 U	2 U
m-Xylene & p-Xylene	0.68 U	0.8 U	0.8 U	0.5 U	0.1 U	0.8 U
o-Xylene	0.38 U	0.8 U	0.8 U	0.5 U	0.1 U	0.8 U
Tetrachloroethene	0.4 U	0.8 U	0.8 U	0.5 U	0.1 U	0.8 U
Toluene	0.34 U	0.7 U	0.7 U	0.5 U	0.1 U	0.7 U
trans-1,2-Dichloroethene	28	25	24	20	0.2 J	4 J
trans-1,3-Dichloropropene	0.38 U	1 U	1 U	0.5 U	0.1 U	1 U
Trichloroethene	700	260	250	220	0.4 J	1100
Trichlorofluoromethane	0.58 U	0.5 U	0.5 U	0.5 U	0.1 U	0.5 U
Vinyl chloride	36	1	1	1 J	0.1 U	0.5 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-04**	**RD-04**	**RD-04**	**RD-04**	**RD-04**	**RD-05A**
Sample Port:						
Sample Type:	Duplicate	Primary	Primary	Duplicate	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster
Collection Date:	02/09/2009	05/05/2009	07/28/2009	07/28/2009	10/28/2009	02/12/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.8 U	1 U	0.8 U	---	1.6 U	0.1 U
1,1,2,2-Tetrachloroethane	0.5 U	1 U	0.5 U	---	2 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	2 U	2 U	2 U	---	7.9 U	0.2 U
1,1,2-Trichloroethane	0.8 U	1 U	0.8 U	---	3.2 U	0.1 U
1,1-Dichloroethane	1 U	1 U	1 U	---	1.6 U	0.1 U
1,1-Dichloroethene	2 J	1.6 J	2 U	---	1.4 U	0.1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	---	1.3 U	0.1 U
1,2-Dichloroethane	0.5 U	1 U	0.5 U	---	1.3 U	0.1 U
1,2-Dichloropropane	1 U	1 U	1 U	---	1.3 U	0.1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	---	1.6 U	0.1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	---	1.6 U	0.1 U
1,4-Dioxane	---	0.5 U	0.5 U	0.5 J	2.1 J	---
2-Hexanone	3 U	10 U	3 U	---	14 U	1 U
Acetone	6 U	30 U	6 U	---	19 U	3 U
Benzene	0.5 U	1 U	0.5 U	---	1.6 U	0.1 U
Bromodichloromethane	1 U	1 U	1 U	---	1.7 U	0.1 U
Bromoform	1 U	1 U	1 U	---	1.9 U	0.1 U
Bromomethane	1 U	1 U	1 U	---	2.1 U	0.1 U
Carbon Disulfide	1 U	4 U	1 U	---	4.5 U	0.4 U
Carbon Tetrachloride	0.5 U	1 U	0.5 U	---	1.9 U	0.1 U
Chlorobenzene	0.8 U	1 U	0.8 U	---	1.7 U	0.1 U
Chloroethane	1 U	1 U	1 U	---	4.1 U	0.1 U
Chloroform	0.8 U	1 U	0.8 U	---	1.6 U	0.1 U
Chloromethane	1 U	2 U	1 U	---	3 U	0.2 U
cis-1,2-Dichloroethene	180	190	260	---	260	0.1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	---	1.6 U	0.1 U
Dibromochloromethane	1 U	1 U	1 U	---	1.7 U	0.1 U
Ethylbenzene	0.8 U	1 U	0.8 U	---	1.6 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	3 U	10 U	3 U	---	18 U	1 U
Methyl isobutyl ketone (MIBK)	3 U	10 U	3 U	---	10 U	1 U
Methylene chloride	2 U	2 U	2 U	---	3.2 U	0.2 U
m-Xylene & p-Xylene	0.8 U	1 U	0.8 U	---	3.4 U	0.1 U
o-Xylene	0.8 U	1 U	0.8 U	---	1.9 U	0.1 U
Tetrachloroethene	0.8 U	1 U	0.8 U	---	2 U	0.1 U
Toluene	0.7 U	1 U	0.7 U	---	1.7 U	0.1 U
trans-1,2-Dichloroethene	4 J	3.9 J	5	---	4.3 J	0.1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U	---	1.9 U	0.1 U
Trichloroethene	1100	1400	1400	---	1800	0.1 U
Trichlorofluoromethane	0.5 U	1 U	0.5 U	---	2.9 U	0.1 U
Vinyl chloride	0.5 U	1 U	0.5 U	---	4 U	0.1 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-05A**	**RD-05B**	**RD-05B**	**RD-05B**	**RD-05B**	**RD-05B**
Sample Port:						
Sample Type:	Primary	Primary	Duplicate	Split	Primary	Duplicate
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster
Collection Date:	07/20/2009	02/13/2009	02/13/2009	02/13/2009	05/12/2009	05/12/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.2 U	0.79 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.1 U	0.1 U	0.1 U	0.32 U	0.1 U	0.1 U
1,1-Dichloroethane	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U
1,1-Dichloroethene	0.1 U	0.1 U	0.1 U	0.14 U	0.1 U	0.1 U
1,2-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U	0.1 U
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U	0.1 U
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	1 U	1 U	1.4 U	1 U	1 U
Acetone	3 U	3 U	3 U	1.9 U	3 U	3 U
Benzene	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U
Bromodichloromethane	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U	0.1 U
Bromoform	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U	0.1 U
Bromomethane	0.1 U	0.1 U	0.1 U	0.21 U	0.1 U	0.1 U
Carbon Disulfide	0.4 U	0.5	0.5 J	0.45 U	0.8	0.4 U
Carbon Tetrachloride	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U	0.1 U
Chloroethane	0.1 U	0.1 U	0.1 U	0.41 U	0.1 U	0.1 U
Chloroform	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U
Chloromethane	0.2 U	0.2 U	0.3 U	0.3 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	0.1 U	0.1 U	0.1 U	0.15 U	0.1 U	0.1 U
cis-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U
Dibromochloromethane	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U	0.1 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1 U	1 U	1.8 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.32 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.1 U	0.1 U	0.1 U	0.34 U	0.1 U	0.1 U
o-Xylene	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U	0.1 U
Tetrachloroethene	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U
Toluene	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	0.1 U	0.1 U	0.1 U	0.15 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U	0.1 U
Trichloroethene	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U
Trichlorofluoromethane	0.1 U	0.1 U	0.1 U	0.29 U	0.1 U	0.1 U
Vinyl chloride	0.1 U	0.1 U	0.1 U	0.4 U	0.1 U	0.1 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-05B**	**RD-05B**	**RD-05B**	**RD-05C**	**RD-05C**	**RD-05C**
Sample Port:						
Sample Type:	Primary	Primary	Duplicate	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	TA-Denver	TA-Denver	Lancaster	Lancaster	Lancaster
Collection Date:	07/22/2009	10/22/2009	10/22/2009	02/13/2009	05/08/2009	07/20/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.1 U	0.2 U	0.2 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.79 U	0.79 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.1 U	0.32 U	0.32 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.1 U	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethene	0.1 U	0.14 U	0.14 U	0.1 U	0.1 U	0.1 U
1,2-Dichlorobenzene	0.1 U	0.13 U	0.13 U	0.1 U	0.1 U	0.1 U
1,2-Dichloroethane	0.1 U	0.13 U	0.13 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	0.1 U	0.13 U	0.13 U	0.1 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.1 U	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.1 U	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	1.4 U	1.4 U	1 U	1 U	1 U
Acetone	3 U	1.9 U	1.9 U	3 U	3 U	3 U
Benzene	0.1 U	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U
Bromodichloromethane	0.1 U	0.17 U	0.17 U	0.1 U	0.1 U	0.1 U
Bromoform	0.1 U	0.19 U	0.19 U	0.1 U	0.1 U	0.1 U
Bromomethane	0.1 U	0.21 U	0.21 U	0.1 U	0.1 U	0.1 U
Carbon Disulfide	0.4 U	0.45 U	0.45 U	0.4 U	0.4 U	0.4 U
Carbon Tetrachloride	0.1 U	0.19 U	0.19 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.17 U	0.17 U	0.1 U	0.1 U	0.1 U
Chloroethane	0.1 U	0.41 U	0.41 U	0.1 U	0.1 U	0.1 U
Chloroform	0.1 U	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U
Chloromethane	0.3 U	0.3 U	0.3 U	0.4 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	0.1 U	0.15 U	0.15 U	0.1 U	0.1 U	0.1 U
cis-1,3-Dichloropropene	0.1 U	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U
Dibromochloromethane	0.1 U	0.17 U	0.17 U	0.1 U	0.1 U	0.1 U
Ethylbenzene	0.1 U	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1.8 U	1.8 U	1 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	0.2 U	0.32 U	1.7 U	0.2 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.1 U	0.34 U	0.34 U	0.1 U	0.1 U	0.1 U
o-Xylene	0.1 U	0.19 U	0.19 U	0.1 U	0.1 U	0.1 U
Tetrachloroethene	0.1 U	0.2 U	0.2 U	0.1 U	0.1 U	0.1 U
Toluene	0.1 U	0.17 U	0.17 U	0.1 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	0.1 U	0.15 U	0.15 U	0.1 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	0.1 U	0.19 U	0.19 U	0.1 U	0.1 U	0.1 U
Trichloroethene	0.1 U	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U
Trichlorofluoromethane	0.1 U	0.29 U	0.29 U	0.1 U	0.1 U	0.1 U
Vinyl chloride	0.1 U	0.4 U	0.4 U	0.1 U	0.1 U	0.1 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-05C**	**RD-05C**	**RD-06**	**RD-06**	**RD-06**	**RD-06**
Sample Port:						
Sample Type:	Primary	Duplicate	Primary	Primary	Duplicate	Split
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TA-Denver	TA-Denver	Lancaster	Lancaster	Lancaster	TA-Denver
Collection Date:	10/22/2009	10/22/2009	02/12/2009	05/04/2009	05/04/2009	05/04/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U
1,1,2,2-Tetrachloroethane	0.2 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.79 U	0.79 U	0.2 U	0.2 U	0.2 U	0.79 U
1,1,2-Trichloroethane	0.32 U	0.32 U	0.1 U	0.1 U	0.1 U	0.32 U
1,1-Dichloroethane	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U
1,1-Dichloroethene	0.14 U	0.14 U	0.1 U	0.1 U	0.1 U	0.14 U
1,2-Dichlorobenzene	0.13 U	0.13 U	0.1 U	0.1 U	0.1 U	0.13 U
1,2-Dichloroethane	0.13 U	0.13 U	0.1 U	0.1 U	0.1 U	0.13 U
1,2-Dichloropropane	0.13 U	0.13 U	0.1 U	0.1 U	0.1 U	0.13 U
1,3-Dichlorobenzene	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U
1,4-Dichlorobenzene	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1.4 U	1.4 U	1 U	1 U	1 U	1.4 UJ
Acetone	1.9 U	1.9 U	3 U	3 U	3 U	1.9 U
Benzene	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U
Bromodichloromethane	0.17 U	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U
Bromoform	0.19 U	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U
Bromomethane	0.21 U	0.21 U	0.1 U	0.1 U	0.1 U	0.21 U
Carbon Disulfide	0.45 U	0.45 U	0.8	0.4 J	0.5 J	0.63 J
Carbon Tetrachloride	0.19 U	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U
Chlorobenzene	0.17 U	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U
Chloroethane	0.41 U	0.41 U	0.1 U	0.1 U	0.1 U	0.41 U
Chloroform	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U
Chloromethane	0.3 U	0.3 U	0.2 U	0.2 U	0.3 J	0.3 U
cis-1,2-Dichloroethene	0.15 U	0.15 U	0.1 U	0.1 U	0.1 U	0.15 U
cis-1,3-Dichloropropene	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U
Dibromochloromethane	0.17 U	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U
Ethylbenzene	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1.8 U	1.8 U	1 U	1 U	1 U	1.8 UJ
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	0.32 U	0.32 U	0.2 U	0.2 U	0.2 U	0.32 U
m-Xylene & p-Xylene	0.34 U	0.34 U	0.1 U	0.1 U	0.1 U	0.34 U
o-Xylene	0.19 U	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U
Tetrachloroethene	0.2 U	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U
Toluene	0.17 U	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U
trans-1,2-Dichloroethene	0.15 U	0.15 U	0.1 U	0.1 U	0.1 U	0.15 U
trans-1,3-Dichloropropene	0.19 U	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U
Trichloroethene	0.16 U	0.16 U	0.9	0.1 U	0.1 U	0.16 U
Trichlorofluoromethane	0.29 U	0.29 U	0.1 U	0.1 U	0.1 U	0.29 U
Vinyl chloride	0.4 U	0.4 U	0.1 U	0.1 U	0.1 U	0.4 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-06**	**RD-06**	**RD-07**	**RD-07**	**RD-09**	**RD-09**
Sample Port:			Z3	Z3		
Sample Type:	Primary	Duplicate	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TA-Denver	TA-Denver	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:	07/13/2009	07/13/2009	02/20/2009	07/16/2009	02/19/2009	05/07/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.16 U	0.16 U	0.1 U	0.8 U	0.8 U	1 U
1,1,2,2-Tetrachloroethane	0.2 U	0.2 U	0.1 U	0.5 U	0.5 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	---	---	0.2 U	2 U	2 U	2 U
1,1,2-Trichloroethane	0.32 U	0.32 U	0.1 U	0.8 U	0.8 U	1 U
1,1-Dichloroethane	0.16 U	0.16 U	0.1 U	1 U	1 U	1 U
1,1-Dichloroethene	0.14 U	0.14 U	0.1 J	0.8 U	0.8 U	1 U
1,2-Dichlorobenzene	0.13 U	0.13 U	0.1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.13 U	0.13 U	0.1 U	0.5 U	0.5 U	1 U
1,2-Dichloropropane	0.13 U	0.13 U	0.1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	0.16 U	0.16 U	0.1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	0.16 U	0.16 U	0.1 U	1 U	1 U	1 U
1,4-Dioxane	1 U	1 U	---	---	1.3 J	1.4 J
2-Hexanone	1.4 U	1.4 U	1 U	3 U	3 U	10 U
Acetone	1.9 U	1.9 U	3 U	6 U	6 U	30 U
Benzene	0.16 U	0.16 U	0.1 U	0.5 U	0.5 U	1 U
Bromodichloromethane	0.17 U	0.17 U	0.1 U	1 U	1 U	1 U
Bromoform	0.19 U	0.19 U	0.1 U	1 U	1 U	1 U
Bromomethane	0.21 U	0.21 U	0.1 U	1 U	1 U	1 U
Carbon Disulfide	0.45 U	0.45 U	0.4 U	1 U	1 U	4 U
Carbon Tetrachloride	0.19 U	0.19 U	0.1 U	0.5 U	0.5 U	1 U
Chlorobenzene	0.17 U	0.17 U	0.1 U	0.8 U	0.8 U	1 U
Chloroethane	0.41 U	0.41 U	0.1 U	1 U	1 U	1 U
Chloroform	0.16 U	0.16 U	0.1 U	0.8 U	0.8 U	1 U
Chloromethane	0.3 U	0.3 U	0.2 U	1 U	1 U	2 U
cis-1,2-Dichloroethene	0.15 U	0.15 U	37	49	95	66
cis-1,3-Dichloropropene	0.16 U	0.16 U	0.1 U	1 U	1 U	1 U
Dibromochloromethane	0.17 U	0.17 U	0.1 U	1 U	1 U	1 U
Ethylbenzene	0.16 U	0.16 U	0.1 U	0.8 U	0.8 U	1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1.8 U	1.8 U	1 U	3 U	3 U	10 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	3 U	3 U	10 U
Methylene chloride	0.32 U	0.32 U	0.2 U	2 U	2 U	2 U
m-Xylene & p-Xylene	0.34 U	0.34 U	0.1 U	0.8 U	0.8 U	1 U
o-Xylene	0.19 U	0.19 U	0.1 U	0.8 U	0.8 U	1 U
Tetrachloroethene	0.2 U	0.2 U	0.1 U	0.8 U	0.8 U	1 U
Toluene	0.17 U	0.17 U	0.1 U	0.7 U	0.7 U	1 U
trans-1,2-Dichloroethene	0.15 U	0.15 U	0.1 J	0.8 U	21	13
trans-1,3-Dichloropropene	0.19 U	0.19 U	0.1 U	1 U	1 U	1 U
Trichloroethene	0.16 U	0.16 U	16	25	350	320
Trichlorofluoromethane	0.29 U	0.29 U	0.1 U	0.5 U	0.5 U	1 U
Vinyl chloride	0.4 U	0.4 U	0.1 U	0.5 U	0.5 U	1 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-09**	**RD-09**	**RD-09**	**RD-10**	**RD-10**	**RD-10**
Sample Port:						
Sample Type:	Duplicate	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster	Lancaster
Collection Date:	05/07/2009	07/28/2009	10/19/2009	02/26/2009	05/11/2009	07/14/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	1 U	0.8 U	0.16 U	0.8 U	0.1 U	0.8 U
1,1,2,2-Tetrachloroethane	1 U	0.5 U	0.2 U	0.5 U	0.1 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	2 U	2 U	0.79 U	2 U	0.2 U	2 U
1,1,2-Trichloroethane	1 U	0.8 U	0.32 U	0.8 U	0.1 U	0.8 U
1,1-Dichloroethane	1 U	1 U	0.16 U	1 U	0.1 U	1 U
1,1-Dichloroethene	1 U	0.8 U	0.17 J	0.8 U	0.1 J	0.8 U
1,2-Dichlorobenzene	1 U	1 U	0.13 U	1 U	0.1 U	1 U
1,2-Dichloroethane	1 U	0.5 U	0.13 U	0.5 U	0.1 U	0.5 U
1,2-Dichloropropane	1 U	1 U	0.13 U	1 U	0.1 U	1 U
1,3-Dichlorobenzene	1 U	1 U	0.16 U	1 U	0.1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	0.16 U	1 U	0.1 U	1 U
1,4-Dioxane	1.1 J	1.1 J	1.1 J	0.5 U	0.5 U	0.7 J
2-Hexanone	10 U	3 U	1.4 U	3 U	1 U	3 U
Acetone	30 U	6 U	1.9 U	6 U	3 U	6 U
Benzene	1 U	0.5 U	0.16 U	0.5 U	0.1 U	0.5 U
Bromodichloromethane	1 U	1 U	0.17 U	1 U	0.1 U	1 U
Bromoform	1 U	1 U	0.19 U	1 U	0.1 U	1 U
Bromomethane	1 U	1 U	0.21 U	1 U	0.1 U	1 U
Carbon Disulfide	4 U	1 U	0.45 U	1 U	0.4 U	1 U
Carbon Tetrachloride	1 U	0.5 U	0.19 U	0.5 U	0.1 U	0.5 U
Chlorobenzene	1 U	0.8 U	0.17 U	0.8 U	0.1 U	0.8 U
Chloroethane	1 U	1 U	0.41 U	1 U	0.1 U	1 U
Chloroform	1 U	0.8 U	0.16 U	0.8 U	0.1 U	0.8 U
Chloromethane	2 U	1 U	0.3 U	1 U	0.2 U	1 U
cis-1,2-Dichloroethene	68	96	80	11	11	12
cis-1,3-Dichloropropene	1 U	1 U	0.16 U	1 U	0.1 U	1 U
Dibromochloromethane	1 U	1 U	0.17 U	1 U	0.1 U	1 U
Ethylbenzene	1 U	0.8 U	0.16 U	0.8 U	0.1 U	0.8 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	10 U	3 U	1.8 U	3 U	1 U	3 U
Methyl isobutyl ketone (MIBK)	10 U	3 U	1 U	3 U	1 U	3 U
Methylene chloride	2 U	2 U	0.32 U	2 U	0.2 U	2 U
m-Xylene & p-Xylene	1 U	0.8 U	0.34 U	0.8 U	0.1 U	0.8 U
o-Xylene	1 U	0.8 U	0.19 U	0.8 U	0.1 U	0.8 U
Tetrachloroethene	1 U	0.8 U	0.2 U	0.8 U	0.1 U	0.8 U
Toluene	1 U	0.7 U	0.17 U	0.7 U	0.1 U	0.7 U
trans-1,2-Dichloroethene	13	20	19	0.9 J	0.8	0.8 U
trans-1,3-Dichloropropene	1 U	1 U	0.19 U	1 U	0.1 U	1 U
Trichloroethene	320	360	360	14	14	14
Trichlorofluoromethane	1 U	0.5 U	0.29 U	0.5 U	0.1 U	0.5 U
Vinyl chloride	1 U	0.5 U	0.4 U	0.5 U	0.2 J	0.5 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-10**	**RD-13**	**RD-13**	**RD-13**	**RD-13**	**RD-13**
Sample Port:						
Sample Type:	Primary	Primary	Duplicate	Primary	Duplicate	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TA-Denver	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:	10/27/2009	03/09/2009	03/09/2009	05/06/2009	05/06/2009	07/15/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.2 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.79 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.32 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethene	0.14 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichlorobenzene	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloroethane	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,4-Dioxane	0.65 U	---	---	---	---	---
2-Hexanone	1.4 U	1 U	1 U	1 U	1 U	1 U
Acetone	1.9 U	3 U	3 U	3 U	3 U	3 U
Benzene	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromodichloromethane	0.17 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromoform	0.19 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromomethane	0.21 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Carbon Disulfide	0.45 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Carbon Tetrachloride	0.19 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.17 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloroethane	0.41 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloroform	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloromethane	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	10	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
cis-1,3-Dichloropropene	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibromochloromethane	0.17 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Ethylbenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1.8 U	1 U	1 U	1 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	0.32 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.34 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
o-Xylene	0.19 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Tetrachloroethene	0.2 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Toluene	0.17 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	0.64 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	0.19 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Trichloroethene	13	0.2 J	0.2 J	0.3 J	0.3 J	0.2 J
Trichlorofluoromethane	0.29 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Vinyl chloride	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-13**	**RD-13**	**RD-15**	**RD-16**	**RD-16**	**RD-16**
Sample Port:						
Sample Type:	Primary	Duplicate	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TA-Denver	TA-Denver	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:	10/21/2009	10/21/2009	02/24/2009	02/24/2009	05/07/2009	07/21/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.2 U	0.2 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.79 U	0.79 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.32 U	0.32 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethene	0.14 U	0.14 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichlorobenzene	0.13 U	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloroethane	0.13 U	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	0.13 U	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1.4 U	1.4 U	1 U	1 U	1 U	1 U
Acetone	1.9 U	1.9 U	3 U	3 U	3 U	3 U
Benzene	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromodichloromethane	0.17 U	0.17 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromoform	0.19 U	0.19 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromomethane	0.21 U	0.21 U	0.1 U	0.1 U	0.1 U	0.1 U
Carbon Disulfide	0.45 U	0.45 U	0.4 U	0.4 U	0.4 U	0.4 U
Carbon Tetrachloride	0.19 U	0.19 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.17 U	0.17 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloroethane	0.41 U	0.41 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloroform	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloromethane	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	0.15 U	0.15 U	0.1 U	0.1 U	0.1 U	0.1 U
cis-1,3-Dichloropropene	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibromochloromethane	0.17 U	0.17 U	0.1 U	0.1 U	0.1 U	0.1 U
Ethylbenzene	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1.8 U	1.8 U	1 U	1 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	1.9 U	1.7 U	0.2 U	0.2 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.34 U	0.34 U	0.1 U	0.1 U	0.1 U	0.1 U
o-Xylene	0.19 U	0.19 U	0.1 U	0.1 U	0.1 U	0.1 U
Tetrachloroethene	0.2 U	0.2 U	0.1 U	0.1 U	0.1 U	0.1 U
Toluene	0.17 U	0.17 U	0.1 U	0.1 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	0.15 U	0.15 U	0.1 U	0.1 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	0.19 U	0.19 U	0.1 U	0.1 U	0.1 U	0.1 U
Trichloroethene	0.27 U	0.25 U	0.1 J	0.1 U	0.1 U	0.1 U
Trichlorofluoromethane	0.29 U	0.29 U	0.1 U	0.1 U	0.1 U	0.1 U
Vinyl chloride	0.4 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-16**	**RD-16**	**RD-16**	**RD-17**	**RD-18**	**RD-18**
Sample Port:						
Sample Type:	Duplicate	Primary	Split	Primary	Primary	Split
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	TA-Denver	TA-Irvine	Lancaster	Lancaster	TA-Denver
Collection Date:	07/21/2009	10/20/2009	10/20/2009	02/25/2009	03/02/2009	03/02/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.16 U	0.3 U	0.1 U	0.1 U	---
1,1,2,2-Tetrachloroethane	0.1 U	0.2 U	0.3 U	0.1 U	0.1 U	---
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.79 U	0.5 U	0.2 U	0.2 U	---
1,1,2-Trichloroethane	0.1 U	0.32 U	0.3 U	0.1 U	0.1 U	---
1,1-Dichloroethane	0.1 U	0.16 U	0.4 U	0.1 U	0.1 U	---
1,1-Dichloroethene	0.1 U	0.14 U	0.42 U	0.1 U	0.1 U	---
1,2-Dichlorobenzene	0.1 U	0.13 U	0.32 U	0.1 U	0.1 U	---
1,2-Dichloroethane	0.1 U	0.13 U	0.28 U	0.1 U	0.1 U	---
1,2-Dichloropropane	0.1 U	0.13 U	0.35 U	0.1 U	0.1 U	---
1,3-Dichlorobenzene	0.1 U	0.16 U	0.35 U	0.1 U	0.1 U	---
1,4-Dichlorobenzene	0.1 U	0.16 U	0.37 U	0.1 U	0.1 U	---
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	1.4 U	2.6 U	1 U	1 U	---
Acetone	3 U	1.9 U	4.5 U	3 U	3 U	---
Benzene	0.1 U	0.16 U	0.28 U	0.1 U	0.1 U	---
Bromodichloromethane	0.1 U	0.17 U	0.3 U	0.1 U	0.1 U	---
Bromoform	0.1 U	0.19 U	0.4 U	0.1 U	0.1 U	---
Bromomethane	0.1 U	0.21 U	0.42 U	0.1 U	0.1 U	---
Carbon Disulfide	0.4 U	0.45 U	0.48 U	0.4 U	0.4 U	---
Carbon Tetrachloride	0.1 U	0.19 U	0.28 U	0.1 U	0.1 U	---
Chlorobenzene	0.1 U	0.17 U	0.36 U	0.1 U	0.1 U	---
Chloroethane	0.1 U	0.41 U	0.4 U	0.1 U	0.1 U	---
Chloroform	0.1 U	0.16 U	0.33 U	0.1 U	0.1 U	---
Chloromethane	0.2 U	0.3 U	0.4 U	0.2 U	0.2 U	---
cis-1,2-Dichloroethene	0.1 U	0.15 U	0.32 U	0.1 U	0.1 U	---
cis-1,3-Dichloropropene	0.1 U	0.16 U	0.22 U	0.1 U	0.1 U	---
Dibromochloromethane	0.1 U	0.17 U	0.4 U	0.1 U	0.1 U	---
Ethylbenzene	0.1 U	0.16 U	0.25 U	0.1 U	0.1 U	---
Isopropanol	---	---	---	---	50 U	13 U
Methyl ethyl ketone	1 U	1.8 U	4.7 U	1 U	1 U	---
Methyl isobutyl ketone (MIBK)	1 U	1 U	3.5 U	1 U	1 U	---
Methylene chloride	0.2 U	0.32 U	0.95 U	0.2 U	0.2 U	---
m-Xylene & p-Xylene	0.1 U	0.34 U	0.6 U	0.1 U	0.1 U	---
o-Xylene	0.1 U	0.19 U	0.3 U	0.1 U	0.1 U	---
Tetrachloroethene	0.1 U	0.2 U	0.32 U	0.1 U	0.1 U	---
Toluene	0.1 U	0.17 U	0.36 U	0.1 U	0.1 U	---
trans-1,2-Dichloroethene	0.1 U	0.15 U	0.3 U	0.1 U	0.1 U	---
trans-1,3-Dichloropropene	0.1 U	0.19 U	0.32 U	0.1 U	0.1 U	---
Trichloroethene	0.1 U	0.16 U	0.26 U	0.8	0.1 U	---
Trichlorofluoromethane	0.1 U	0.29 U	0.34 U	0.1 U	0.1 U	---
Vinyl chloride	0.1 U	0.4 U	0.4 U	0.1 U	0.1 U	---

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-18**	**RD-18**	**RD-18**	**RD-18**	**RD-18**	**RD-19**
Sample Port:						
Sample Type:	Primary	Duplicate	Split	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	Lancaster	TA-Denver	Lancaster	TA-Denver	Lancaster
Collection Date:	05/05/2009	05/05/2009	05/05/2009	07/24/2009	10/22/2009	02/24/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.1 U	0.16 U	0.1 U	0.16 U	0.1 U
1,1,2,2-Tetrachloroethane	0.1 U	0.1 U	0.2 U	0.1 U	0.2 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.79 U	0.2 U	0.79 U	0.2 U
1,1,2-Trichloroethane	0.1 U	0.1 U	0.32 U	0.1 U	0.32 U	0.1 U
1,1-Dichloroethane	0.1 U	0.1 U	0.16 U	0.1 U	0.16 U	0.1 U
1,1-Dichloroethene	0.1 U	0.1 U	0.14 U	0.1 U	0.14 U	0.1 U
1,2-Dichlorobenzene	0.1 U	0.1 U	0.13 U	0.1 U	0.13 U	0.1 U
1,2-Dichloroethane	0.1 U	0.1 U	0.13 U	0.1 U	0.13 U	0.1 U
1,2-Dichloropropane	0.1 U	0.1 U	0.13 U	0.1 U	0.13 U	0.1 U
1,3-Dichlorobenzene	0.1 U	0.1 U	0.16 U	0.1 U	0.16 U	0.1 U
1,4-Dichlorobenzene	0.1 U	0.1 U	0.16 U	0.1 U	0.16 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	1 U	1.4 U	1 U	1.4 U	1 U
Acetone	3 U	3 U	1.9 U	3 U	1.9 U	3 U
Benzene	0.1 U	0.1 U	0.16 U	0.1 U	0.16 U	0.1 U
Bromodichloromethane	0.1 U	0.1 U	0.17 U	0.1 U	0.17 U	0.1 U
Bromoform	0.1 U	0.1 U	0.19 U	0.1 U	0.19 U	0.1 U
Bromomethane	0.1 U	0.1 U	0.21 U	0.1 U	0.21 U	0.1 U
Carbon Disulfide	0.4 U	0.4 U	0.45 U	0.4 U	0.45 U	0.4 U
Carbon Tetrachloride	0.1 U	0.1 U	0.19 U	0.1 U	0.19 U	0.1 U
Chlorobenzene	0.1 U	0.1 U	0.17 U	0.1 U	0.17 U	0.1 U
Chloroethane	0.1 U	0.1 U	0.41 U	0.1 U	0.41 U	0.1 U
Chloroform	0.1 U	0.1 U	0.16 U	0.1 U	0.16 U	0.1 U
Chloromethane	0.2 U	0.2 U	0.3 U	0.2 U	0.3 U	0.2 U
cis-1,2-Dichloroethene	0.1 U	0.1 U	0.15 U	0.1 U	0.15 U	0.1 U
cis-1,3-Dichloropropene	0.1 U	0.1 U	0.16 U	0.1 U	0.16 U	0.1 U
Dibromochloromethane	0.1 U	0.1 U	0.17 U	0.1 U	0.17 U	0.1 U
Ethylbenzene	0.1 U	0.1 U	0.16 U	0.1 U	0.16 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1 U	1.8 U	1 U	1.8 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	0.2 U	0.2 U	0.86 U	0.2 U	0.34 U	0.2 U
m-Xylene & p-Xylene	0.1 U	0.1 U	0.34 U	0.1 U	0.34 U	0.1 U
o-Xylene	0.1 U	0.1 U	0.19 U	0.1 U	0.19 U	0.1 U
Tetrachloroethene	0.1 U	0.1 U	0.2 U	0.1 U	0.2 U	0.1 U
Toluene	0.1 U	0.1 U	0.17 U	0.1 U	0.17 U	0.1 U
trans-1,2-Dichloroethene	0.1 U	0.1 U	0.15 U	0.1 U	0.15 U	0.1 U
trans-1,3-Dichloropropene	0.1 U	0.1 U	0.19 U	0.1 U	0.19 U	0.1 U
Trichloroethene	0.1 U	0.1 U	0.16 U	0.1 U	0.16 U	0.1 U
Trichlorofluoromethane	0.1 U	0.1 U	0.29 U	0.1 U	0.29 U	0.1 U
Vinyl chloride	0.1 U	0.1 U	0.4 U	0.1 U	0.4 U	0.1 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-19**	**RD-19**	**RD-19**	**RD-21**	**RD-21**	**RD-22**
Sample Port:				Z4	Z2	Z2
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster	Lancaster
Collection Date:	05/01/2009	07/14/2009	10/14/2009	02/24/2009	07/16/2009	02/23/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.1 U	0.16 U	0.8 U	0.8 U	0.1 U
1,1,2,2-Tetrachloroethane	0.1 U	0.1 U	0.2 U	0.5 U	0.5 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.79 U	2 U	2 U	0.2 U
1,1,2-Trichloroethane	0.1 U	0.1 U	0.32 U	0.8 U	0.8 U	0.1 U
1,1-Dichloroethane	0.1 U	0.1 U	0.16 U	1 U	1 U	0.1 U
1,1-Dichloroethene	0.1 U	0.1 U	0.14 U	0.8 U	0.8 U	0.1 U
1,2-Dichlorobenzene	0.1 U	0.1 U	0.13 U	1 U	1 U	0.1 U
1,2-Dichloroethane	0.1 U	0.1 U	0.13 U	0.5 U	0.5 U	0.1 U
1,2-Dichloropropane	0.1 U	0.1 U	0.13 U	1 U	1 U	0.1 U
1,3-Dichlorobenzene	0.1 U	0.1 U	0.16 U	1 U	1 U	0.1 U
1,4-Dichlorobenzene	0.1 U	0.1 U	0.16 U	1 U	1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	1 U	1.4 U	3 U	3 U	1 U
Acetone	3 U	3 U	5.8 U	6 U	6 U	3 U
Benzene	0.1 U	0.1 U	0.16 U	0.5 U	0.5 U	0.1 U
Bromodichloromethane	0.1 U	0.1 U	0.17 U	1 U	1 U	0.1 U
Bromoform	0.1 U	0.1 U	0.19 U	1 U	1 U	0.1 U
Bromomethane	0.1 U	0.1 U	0.21 U	1 U	1 U	0.1 U
Carbon Disulfide	0.4 U	0.4 U	0.45 U	1 U	1 U	0.4 U
Carbon Tetrachloride	0.1 U	0.1 U	0.19 U	8	4	0.1 U
Chlorobenzene	0.1 U	0.1 U	0.17 U	0.8 U	0.8 U	0.1 U
Chloroethane	0.1 U	0.1 U	0.41 U	1 U	1 U	0.1 U
Chloroform	0.1 U	0.1 U	0.16 U	3 J	3 J	0.1 U
Chloromethane	0.2 U	0.2 U	0.3 U	1 U	1 U	0.2 U
cis-1,2-Dichloroethene	0.1 U	0.1 U	0.15 U	200	260	0.1 U
cis-1,3-Dichloropropene	0.1 U	0.1 U	0.16 U	1 U	1 U	0.1 U
Dibromochloromethane	0.1 U	0.1 U	0.17 U	1 U	1 U	0.1 U
Ethylbenzene	0.1 U	0.1 U	0.16 U	0.8 U	0.8 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1 U	1.8 U	3 U	3 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	3 U	3 U	1 U
Methylene chloride	0.2 U	0.2 U	0.32 U	2 U	2 U	0.2 U
m-Xylene & p-Xylene	0.1 U	0.1 U	0.34 U	0.8 U	0.8 U	0.1 U
o-Xylene	0.1 U	0.1 U	0.19 U	0.8 U	0.8 U	0.1 U
Tetrachloroethene	0.1 U	0.1 U	0.2 U	0.8 U	0.8 U	0.1 U
Toluene	0.1 U	0.1 U	0.17 U	0.9 J,F	3 J,F	0.1 U
trans-1,2-Dichloroethene	0.1 U	0.1 U	0.15 U	0.8 U	0.8 U	0.1 U
trans-1,3-Dichloropropene	0.1 U	0.1 U	0.19 U	1 U	1 U	0.1 U
Trichloroethene	0.1 U	0.1 U	0.16 U	340	200	0.1 U
Trichlorofluoromethane	0.1 U	0.1 U	0.29 U	0.5 U	0.5 U	0.1 U
Vinyl chloride	0.1 U	0.1 U	0.4 U	0.5 U	0.5 U	0.1 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-22**	**RD-22**	**RD-22**	**RD-22**	**RD-23**	**RD-23**
Sample Port:	Z2	Z2	Z2	Z2	Z2	Z3
Sample Type:	Primary	Primary	Primary	Duplicate	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	Lancaster	TA-Denver	TA-Denver	Lancaster	Lancaster
Collection Date:	04/29/2009	07/16/2009	10/21/2009	10/21/2009	02/24/2009	07/16/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.1 U	0.16 U	0.16 U	0.8 U	0.8 U
1,1,2,2-Tetrachloroethane	0.1 U	0.1 U	0.2 U	0.2 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.79 U	0.79 U	2 U	2 U
1,1,2-Trichloroethane	0.1 U	0.1 U	0.32 U	0.32 U	0.8 U	0.8 U
1,1-Dichloroethane	0.1 U	0.1 U	0.16 U	0.16 U	1 J	3 J
1,1-Dichloroethene	0.1 U	0.1 U	0.14 U	0.14 U	6	5
1,2-Dichlorobenzene	0.1 U	0.1 U	0.13 U	0.13 U	1 U	1 U
1,2-Dichloroethane	0.1 U	0.1 U	0.13 U	0.13 U	0.5 U	0.6 J
1,2-Dichloropropane	0.1 U	0.1 U	0.13 U	0.13 U	1 U	1 U
1,3-Dichlorobenzene	0.1 U	0.1 U	0.16 U	0.16 U	1 U	1 U
1,4-Dichlorobenzene	0.1 U	0.1 U	0.16 U	0.16 U	1 U	1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	1 U	1.4 U	1.4 U	3 U	3 U
Acetone	3 U	3 U	1.9 U	1.9 U	6 U	6 U
Benzene	0.1 U	0.1 U	0.16 U	0.16 U	0.5 U	0.5 U
Bromodichloromethane	0.1 U	0.1 U	0.17 U	0.17 U	1 U	1 U
Bromoform	0.1 U	0.1 U	0.19 U	0.19 U	1 U	1 U
Bromomethane	0.1 U	0.1 U	0.21 U	0.21 U	1 U	1 U
Carbon Disulfide	0.4 U	0.4 U	0.45 U	0.45 U	1 U	1 U
Carbon Tetrachloride	0.1 U	0.1 U	0.19 U	0.19 U	0.5 U	0.5 U
Chlorobenzene	0.1 U	1.1 S	0.17 U	0.17 U	0.8 U	0.8 U
Chloroethane	0.1 U	0.1 U	0.41 U	0.41 U	1 U	1 U
Chloroform	0.1 U	0.1 U	0.16 U	0.16 U	0.8 U	0.8 U
Chloromethane	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U
cis-1,2-Dichloroethene	0.1 U	0.1 U	0.15 U	0.15 U	43	140
cis-1,3-Dichloropropene	0.1 U	0.1 U	0.16 U	0.16 U	1 U	1 U
Dibromochloromethane	0.1 U	0.1 U	0.17 U	0.17 U	1 U	1 U
Ethylbenzene	0.1 U	0.1 U	0.16 U	0.16 U	0.8 U	0.8 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1 U	1.8 U	1.8 U	3 U	3 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	3 U	3 U
Methylene chloride	0.2 U	0.2 U	1.6 U	2 U	2 U	2 U
m-Xylene & p-Xylene	0.1 U	0.1 U	0.34 U	0.34 U	0.8 U	0.8 U
o-Xylene	0.1 U	0.1 U	0.19 U	0.19 U	0.8 U	0.8 U
Tetrachloroethene	0.1 U	0.1 U	0.2 U	0.2 U	0.8 U	0.8 U
Toluene	0.1 U	0.1 U	0.17 U	0.17 U	1 J,F	0.7 U
trans-1,2-Dichloroethene	0.1 U	0.1 U	0.15 U	0.15 U	31	67
trans-1,3-Dichloropropene	0.1 U	0.1 U	0.19 U	0.19 U	1 U	1 U
Trichloroethene	0.1 U	0.1 U	0.16 U	0.16 U	400	630
Trichlorofluoromethane	0.1 U	0.1 U	0.29 U	0.29 U	0.5 U	0.5 U
Vinyl chloride	0.1 U	0.1 U	0.4 U	0.4 U	0.5 U	0.5 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-24**	**RD-26**	**RD-26**	**RD-26**	**RD-26**	**RD-26**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Duplicate	Split	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TA-Denver	Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster
Collection Date:	10/27/2009	02/17/2009	05/27/2009	05/27/2009	05/27/2009	07/24/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,1,2,2-Tetrachloroethane	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.79 U	0.2 U	0.2 U	0.2 U	0.79 U	0.2 U
1,1,2-Trichloroethane	0.32 U	0.1 U	0.1 U	0.1 U	0.32 U	0.1 U
1,1-Dichloroethane	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,1-Dichloroethene	0.14 U	0.1 U	0.1 U	0.1 U	0.14 U	0.1 U
1,2-Dichlorobenzene	0.13 U	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U
1,2-Dichloroethane	0.13 U	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U
1,2-Dichloropropane	0.13 U	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U
1,3-Dichlorobenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,4-Dichlorobenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1.4 U	1 U	1 U	1 U	1.4 U	1 U
Acetone	1.9 U	3 U	3 U	3 U	1.9 U	3 U
Benzene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Bromodichloromethane	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
Bromoform	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Bromomethane	0.21 U	0.1 U	0.1 U	0.1 U	0.21 U	0.1 U
Carbon Disulfide	0.45 U	0.4 U	0.4 U	0.4 U	0.45 U	0.4 U
Carbon Tetrachloride	0.19 U	0.2 J	0.2 J	0.2 J	0.24 J	0.2 J
Chlorobenzene	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
Chloroethane	0.41 U	0.1 U	0.1 U	0.1 U	0.41 U	0.1 U
Chloroform	0.16 U	0.2 J	0.2 J	0.2 J	0.27 J	0.2 J
Chloromethane	0.3 U	0.4 J	0.2 U	0.2 U	0.3 U	0.2 U
cis-1,2-Dichloroethene	0.33 U	0.1 U	0.1 U	0.1 U	0.15 U	0.1 U
cis-1,3-Dichloropropene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Dibromochloromethane	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
Ethylbenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1.8 U	1 U	1 U	1 U	1.8 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	0.32 U	0.2 U	0.2 U	0.2 U	0.38 U	0.2 U
m-Xylene & p-Xylene	0.34 U	0.1 U	0.1 U	0.1 U	0.34 U	0.1 U
o-Xylene	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Tetrachloroethene	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U
Toluene	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
trans-1,2-Dichloroethene	0.15 U	0.1 U	0.1 U	0.1 U	0.15 U	0.1 U
trans-1,3-Dichloropropene	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Trichloroethene	0.16 U	2.9	4.9	4.9	5	3.9
Trichlorofluoromethane	0.29 U	0.1 U	0.1 U	0.1 U	0.29 U	0.1 U
Vinyl chloride	0.4 U	0.1 U	0.1 U	0.1 U	0.4 U	0.1 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-27**	**RD-27**	**RD-29**	**RD-32**	**RD-32**	**RD-32**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:	03/06/2009	07/30/2009	03/05/2009	02/18/2009	05/13/2009	07/29/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	1 U	1 U	1 U	1 U	1 U
Acetone	3 U	3 U	3 U	3 U	3 U	3 U
Benzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromodichloromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromoform	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromomethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Carbon Disulfide	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Carbon Tetrachloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloroform	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
cis-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibromochloromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1 U	1 U	1 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
o-Xylene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Tetrachloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Toluene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Trichloroethene	0.1 U	0.1 U	2.2	0.1 U	0.1 U	0.1 U
Trichlorofluoromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Vinyl chloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-32**	**RD-32**	**RD-32**	**RD-33A**	**RD-33A**	**RD-33B**
Sample Port:				Z2	Z2	
Sample Type:	Duplicate	Primary	Split	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	TA-Denver	TA-Irvine	Lancaster	Lancaster	Lancaster
Collection Date:	07/29/2009	10/23/2009	10/23/2009	02/25/2009	07/17/2009	03/05/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.16 U	0.3 U	0.1 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.1 U	0.2 U	0.3 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.79 U	0.5 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.1 U	0.32 U	0.3 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.1 U	0.16 U	0.4 U	0.2 J	0.3 J	0.1 U
1,1-Dichloroethene	0.1 U	0.14 U	0.42 U	0.6	0.9 U	0.1 U
1,2-Dichlorobenzene	0.1 U	0.13 U	0.32 U	0.1 U	0.1 U	0.1 U
1,2-Dichloroethane	0.1 U	0.13 U	0.28 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	0.1 U	0.13 U	0.35 U	0.1 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.1 U	0.16 U	0.35 U	0.1 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.1 U	0.16 U	0.37 U	0.1 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	1.4 U	2.6 U	1 U	1 U	1 U
Acetone	3 U	1.9 U	4.5 U	4.5 J,L	3 U	3 U
Benzene	0.1 U	0.16 U	0.28 U	0.3 J,F	0.3 U	0.1 U
Bromodichloromethane	0.1 U	0.17 U	0.3 U	0.1 U	0.1 U	0.1 U
Bromoform	0.1 U	0.19 U	0.4 U	0.1 U	0.1 U	0.1 U
Bromomethane	0.1 U	0.21 U	0.42 U	0.1 U	0.1 U	0.1 U
Carbon Disulfide	0.4 U	0.65 U	0.48 U	0.4 U	0.4 U	0.4 J
Carbon Tetrachloride	0.1 U	0.19 U	0.28 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.17 U	0.36 U	0.2 J,S	0.1 U	0.1 U
Chloroethane	0.1 U	0.41 U	0.4 U	0.1 U	0.1 U	0.1 U
Chloroform	0.1 U	0.16 U	0.33 U	0.1 U	0.1 U	0.1 U
Chloromethane	0.2 U	0.3 U	0.4 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	0.1 U	0.15 U	0.32 U	2.9	4.2	0.1 U
cis-1,3-Dichloropropene	0.1 U	0.16 U	0.22 U	0.1 U	0.1 U	0.1 U
Dibromochloromethane	0.1 U	0.17 U	0.4 U	0.1 U	0.1 U	0.1 U
Ethylbenzene	0.1 U	0.16 U	0.25 U	0.1 U	0.1 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1.8 U	4.7 U	1 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	3.5 U	1 U	1 U	1 U
Methylene chloride	0.2 U	0.53 U	0.95 U	0.2 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.1 U	0.34 U	0.6 U	0.1 U	0.1 U	0.1 U
o-Xylene	0.1 U	0.19 U	0.3 U	0.1 U	0.1 U	0.1 U
Tetrachloroethene	0.1 U	0.2 U	0.32 U	0.1 U	0.1 U	0.1 U
Toluene	0.1 U	0.17 U	0.36 U	0.3 J,F	0.7 F	0.1 U
trans-1,2-Dichloroethene	0.1 U	0.15 U	0.3 U	0.5 J	0.9	0.1 U
trans-1,3-Dichloropropene	0.1 U	0.19 U	0.32 U	0.1 U	0.1 U	0.1 U
Trichloroethene	0.1 U	0.41 U	0.26 U	0.2 J	0.1 U	0.1 U
Trichlorofluoromethane	0.1 U	0.29 U	0.34 U	0.1 U	0.1 U	0.1 U
Vinyl chloride	0.1 U	0.4 U	0.4 U	0.1 U	0.1 U	0.1 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-33B**	**RD-33B**	**RD-33B**	**RD-33C**	**RD-33C**	**RD-33C**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Primary	Primary	Duplicate
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster	Lancaster
Collection Date:	05/14/2009	08/04/2009	10/22/2009	02/24/2009	05/13/2009	05/13/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.79 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.1 U	0.1 U	0.32 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethene	0.1 U	0.1 U	0.14 U	0.1 U	0.1 U	0.1 U
1,2-Dichlorobenzene	0.1 U	0.1 U	0.13 U	0.1 U	0.1 U	0.1 U
1,2-Dichloroethane	0.1 U	0.1 U	0.13 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	0.1 U	0.1 U	0.13 U	0.1 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	1 U	1.4 U	1 U	1 U	1 U
Acetone	3 U	3 U	2.9 U	3 U	3 U	3 U
Benzene	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U
Bromodichloromethane	0.1 U	0.1 U	0.17 U	0.1 U	0.1 U	0.1 U
Bromoform	0.1 U	0.1 U	0.19 U	0.1 U	0.1 U	0.1 U
Bromomethane	0.1 U	0.1 U	0.21 U	0.1 U	0.1 U	0.1 U
Carbon Disulfide	0.4 U	0.4 U	0.45 U	0.4 U	0.4 U	0.4 U
Carbon Tetrachloride	0.1 U	0.1 U	0.19 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.1 U	0.17 U	0.1 U	0.1 U	0.1 U
Chloroethane	0.1 U	0.1 U	0.41 U	0.1 U	0.1 U	0.1 U
Chloroform	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U
Chloromethane	0.2 U	0.2 U	0.3 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	0.1 U	0.1 U	0.15 U	0.1 U	0.1 U	0.1 U
cis-1,3-Dichloropropene	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U
Dibromochloromethane	0.1 U	0.1 U	0.17 U	0.1 U	0.1 U	0.1 U
Ethylbenzene	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1 U	1.8 U	1 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	0.2 U	0.2 U	0.35 U	0.2 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.1 U	0.1 U	0.34 U	0.1 U	0.1 U	0.1 U
o-Xylene	0.1 U	0.1 U	0.19 U	0.1 U	0.1 U	0.1 U
Tetrachloroethene	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U
Toluene	0.1 U	0.1 U	0.17 U	0.1 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	0.1 U	0.1 U	0.15 U	0.1 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	0.1 U	0.1 U	0.19 U	0.1 U	0.1 U	0.1 U
Trichloroethene	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U
Trichlorofluoromethane	0.1 U	0.1 U	0.29 U	0.1 U	0.1 U	0.1 U
Vinyl chloride	0.1 U	0.1 U	0.4 U	0.1 U	0.1 U	0.1 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-33C**	**RD-33C**	**RD-34A**	**RD-34A**	**RD-34B**	**RD-34B**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	TA-Denver	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:	07/24/2009	10/21/2009	03/05/2009	07/28/2009	02/20/2009	07/28/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.79 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.1 U	0.32 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.1 U	0.16 U	0.3 J	0.3 J	0.1 U	0.1 U
1,1-Dichloroethene	0.1 U	0.14 U	0.7	0.5 U	0.1 J	0.1 U
1,2-Dichlorobenzene	0.1 U	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloroethane	0.1 U	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	0.1 U	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	1.4 U	1 U	1 U	1 U	1 U
Acetone	3 U	1.9 U	3 U	3 U	3 U	3 U
Benzene	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromodichloromethane	0.1 U	0.17 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromoform	0.1 U	0.19 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromomethane	0.1 U	0.21 U	0.1 U	0.1 U	0.1 U	0.1 U
Carbon Disulfide	0.4 U	0.45 U	0.4 U	0.4 U	0.4 U	0.4 U
Carbon Tetrachloride	0.1 U	0.19 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.17 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloroethane	0.1 U	0.41 U	0.1 U	0.1 J	0.1 U	0.1 U
Chloroform	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloromethane	0.2 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	0.1 U	0.15 U	1.3	1.1	0.3 J	0.3 J
cis-1,3-Dichloropropene	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibromochloromethane	0.1 U	0.17 U	0.1 U	0.1 U	0.1 U	0.1 U
Ethylbenzene	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1.8 U	1 U	1 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	0.2 U	1.6 U	0.2 U	0.2 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.1 U	0.34 U	0.1 U	0.1 U	0.1 U	0.1 U
o-Xylene	0.1 U	0.19 U	0.1 U	0.1 U	0.1 U	0.1 U
Tetrachloroethene	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.1 U
Toluene	0.1 U	0.17 U	0.1 U	0.1 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	0.1 U	0.15 U	0.1 U	0.1 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	0.1 U	0.19 U	0.1 U	0.1 U	0.1 U	0.1 U
Trichloroethene	0.1 U	0.16 U	4.6	4.4	0.4 J	0.4 J
Trichlorofluoromethane	0.1 U	0.29 U	0.1 U	0.1 U	0.1 U	0.1 U
Vinyl chloride	0.1 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-34C**	**RD-34C**	**RD-36B**	**RD-36B**	**RD-36B**	**RD-36B**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Split	Primary	Duplicate
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster
Collection Date:	02/19/2009	07/23/2009	02/18/2009	02/18/2009	07/30/2009	07/30/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.1 U	0.8 U	0.16 U	0.8 U	0.8 U
1,1,2,2-Tetrachloroethane	0.1 U	0.1 U	0.5 U	0.2 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	2 U	0.79 U	2 U	2 U
1,1,2-Trichloroethane	0.1 U	0.1 U	0.8 U	0.32 U	0.8 U	0.8 U
1,1-Dichloroethane	0.1 U	0.1 U	1 U	0.16 U	1 U	1 U
1,1-Dichloroethene	0.1 U	0.1 U	0.8 U	0.14 U	0.8 U	0.8 U
1,2-Dichlorobenzene	0.1 U	0.1 U	1 U	0.13 U	1 U	1 U
1,2-Dichloroethane	0.1 U	0.1 U	0.5 U	0.13 U	0.5 U	0.5 U
1,2-Dichloropropane	0.1 U	0.1 U	1 U	0.13 U	1 U	1 U
1,3-Dichlorobenzene	0.1 U	0.1 U	1 U	0.16 U	1 U	1 U
1,4-Dichlorobenzene	0.1 U	0.1 U	1 U	0.16 U	1 U	1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	1 U	3 U	1.4 U	3 U	3 U
Acetone	3 U	3 U	6 U	1.9 U	6 U	6 U
Benzene	0.1 U	0.1 U	0.5 U	0.16 U	0.5 U	0.5 U
Bromodichloromethane	0.1 U	0.1 U	1 U	0.17 U	1 U	1 U
Bromoform	0.1 U	0.1 U	1 U	0.19 U	1 U	1 U
Bromomethane	0.1 U	0.1 U	1 U	0.21 U	1 U	1 U
Carbon Disulfide	0.4 U	0.4 U	1 U	0.45 U	1 U	1 U
Carbon Tetrachloride	0.1 U	0.1 U	0.5 U	0.19 U	0.5 U	0.5 U
Chlorobenzene	0.1 U	0.1 U	0.8 U	0.17 U	0.8 U	0.8 U
Chloroethane	0.1 U	0.1 U	1 U	0.41 U	1 U	1 U
Chloroform	0.1 U	0.1 U	0.8 U	0.22 J	0.8 U	0.8 U
Chloromethane	0.2 U	0.2 U	1 U	0.3 U	1 U	1 U
cis-1,2-Dichloroethene	0.1 U	0.1 U	0.8 U	0.37 J	0.8 U	0.8 U
cis-1,3-Dichloropropene	0.1 U	0.1 U	1 U	0.16 U	1 U	1 U
Dibromochloromethane	0.1 U	0.1 U	1 U	0.17 U	1 U	1 U
Ethylbenzene	0.1 U	0.1 U	0.8 U	0.16 U	0.8 U	0.8 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1 U	3 U	1.8 U	3 U	3 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	3 U	1 U	3 U	3 U
Methylene chloride	0.2 U	0.2 U	2 U	0.32 U	2 U	2 U
m-Xylene & p-Xylene	0.1 U	0.1 U	0.8 U	0.34 U	0.8 U	0.8 U
o-Xylene	0.1 U	0.1 U	0.8 U	0.19 U	0.8 U	0.8 U
Tetrachloroethene	0.1 U	0.1 U	10	9.6	10	10
Toluene	0.1 U	0.1 U	0.7 U	0.17 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	0.1 U	0.1 U	0.8 U	0.15 U	0.8 U	0.8 U
trans-1,3-Dichloropropene	0.1 U	0.1 U	1 U	0.19 U	1 U	1 U
Trichloroethene	0.1 U	0.1 U	130	120	130	130
Trichlorofluoromethane	0.1 U	0.1 U	0.5 U	0.29 U	0.5 U	0.5 U
Vinyl chloride	0.1 U	0.1 U	0.5 U	0.4 U	0.5 U	0.5 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-36C**	**RD-36C**	**RD-36C**	**RD-36D**	**RD-36D**	**RD-36D**
Sample Port:						
Sample Type:	Primary	Primary	Duplicate	Primary	Duplicate	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:	02/23/2009	08/03/2009	08/03/2009	02/18/2009	02/18/2009	07/30/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.8 U	0.8 U	0.8 U	0.1 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.8 U	0.8 U	0.8 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethene	3 J	3 J	3 J	0.1 U	0.1 U	0.1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	3 U	3 U	3 U	1 U	1 U	1 U
Acetone	6 U	6 U	6 U	3 U	3 U	3 U
Benzene	0.5 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U
Bromodichloromethane	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U
Bromoform	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U
Bromomethane	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U
Carbon Disulfide	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U
Carbon Tetrachloride	0.5 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.8 U	0.8 U	0.8 U	0.1 U	0.1 U	0.1 U
Chloroethane	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U
Chloroform	0.8 U	0.8 U	0.8 U	0.1 U	0.1 U	0.1 U
Chloromethane	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	66	64	61	0.1 J	0.1 J	0.1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U
Dibromochloromethane	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U
Ethylbenzene	0.8 U	0.8 U	0.8 U	0.1 U	0.1 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	3 U	3 U	3 U	1 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	3 U	3 U	3 U	1 U	1 U	1 U
Methylene chloride	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.8 U	0.8 U	0.8 U	0.1 U	0.1 U	0.1 U
o-Xylene	0.8 U	0.8 U	0.8 U	0.1 U	0.1 U	0.1 U
Tetrachloroethene	0.8 U	2 J	1 J	0.1 U	0.1 U	0.1 U
Toluene	0.7 U	0.7 U	0.7 U	0.1 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	34	13	13	0.1 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U
Trichloroethene	6	49	45	0.4 J	0.4 J	1.2
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-37**	**RD-37**	**RD-37**	**RD-37**	**RD-37**	**RD-37**
Sample Port:						
Sample Type:	Primary	Primary	Duplicate	Split	Primary	Split
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	Lancaster	Lancaster	TA-Denver	TA-Denver	Lancaster
Collection Date:	02/19/2009	05/13/2009	05/13/2009	05/13/2009	07/13/2009	07/13/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.16 U	0.16 U	0.8 U
1,1,2,2-Tetrachloroethane	0.1 U	0.1 U	0.1 U	0.2 U	0.2 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.2 U	0.79 U	---	---
1,1,2-Trichloroethane	0.1 U	0.1 U	0.1 U	0.32 U	0.32 U	0.8 U
1,1-Dichloroethane	0.1 U	0.1 U	0.1 U	0.16 U	0.16 U	1 U
1,1-Dichloroethene	0.1 U	0.1 U	0.1 U	0.14 U	0.14 U	0.8 U
1,2-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.13 U	0.13 U	1 U
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.13 U	0.13 U	0.5 U
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.13 U	0.13 U	1 U
1,3-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.16 U	0.16 U	1 U
1,4-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.16 U	0.16 U	1 U
1,4-Dioxane	---	---	---	---	1.5 J	0.9 J
2-Hexanone	1 U	1 U	1 U	1.4 U	1.4 U	3 U
Acetone	3 U	3 U	3 U	2.7 U	1.9 U	6 U
Benzene	0.1 U	0.1 U	0.1 U	0.16 U	0.16 U	0.5 U
Bromodichloromethane	0.1 U	0.1 U	0.1 U	0.17 U	0.17 U	1 U
Bromoform	0.1 U	0.1 U	0.1 U	0.19 U	0.19 U	1 U
Bromomethane	0.1 U	0.1 U	0.1 U	0.21 U	0.21 U	1 U
Carbon Disulfide	0.4 U	0.4 U	0.4 J	0.45 U	0.45 U	1 U
Carbon Tetrachloride	0.1 U	0.1 U	0.1 U	0.19 U	0.19 U	0.5 U
Chlorobenzene	0.1 U	0.1 U	0.1 U	0.17 U	0.17 U	0.8 U
Chloroethane	0.1 U	0.1 U	0.1 U	0.41 U	0.41 U	1 U
Chloroform	0.1 U	0.1 U	0.1 U	0.16 U	0.16 U	0.8 U
Chloromethane	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U
cis-1,2-Dichloroethene	0.1 J	0.1 J	0.1 J	0.15 U	0.15 U	0.8 U
cis-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	0.16 U	0.16 U	1 U
Dibromochloromethane	0.1 U	0.1 U	0.1 U	0.17 U	0.17 U	1 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.16 U	0.16 U	0.8 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1 U	1 U	1.8 U	1.8 U	3 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	3 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.32 U	0.32 U	2 U
m-Xylene & p-Xylene	0.1 U	0.1 U	0.1 U	0.34 U	0.34 U	0.8 U
o-Xylene	0.1 U	0.1 U	0.1 U	0.19 U	0.19 U	0.8 U
Tetrachloroethene	0.1 U	0.1 U	0.1 U	0.2 U	0.2 U	0.8 U
Toluene	0.1 U	0.1 U	0.1 U	0.17 U	0.17 U	0.7 U
trans-1,2-Dichloroethene	0.1 U	0.1 U	0.1 U	0.15 U	0.15 U	0.8 U
trans-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	0.19 U	0.19 U	1 U
Trichloroethene	0.1 U	0.1 U	0.1 U	0.16 U	0.16 U	0.5 U
Trichlorofluoromethane	0.1 U	0.1 U	0.1 U	0.29 U	0.29 U	0.5 U
Vinyl chloride	0.1 U	0.1 U	0.1 U	0.4 U	0.4 U	0.5 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-37**	**RD-38B**	**RD-38B**	**RD-39B**	**RD-39B**	**RD-39B**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TA-Denver	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:	10/28/2009	02/27/2009	08/03/2009	03/10/2009	05/13/2009	08/03/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.2 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.79 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.32 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethene	0.14 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichlorobenzene	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloroethane	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1.4 U	1 U	1 U	1 U	1 U	1 U
Acetone	1.9 U	3 U	3 U	3 U	3 U	3 U
Benzene	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromodichloromethane	0.17 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromoform	0.19 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromomethane	0.21 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Carbon Disulfide	0.45 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Carbon Tetrachloride	0.19 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.17 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloroethane	0.41 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloroform	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloromethane	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	0.15 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
cis-1,3-Dichloropropene	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibromochloromethane	0.17 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Ethylbenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1.8 U	1 U	1 U	1 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	0.32 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.34 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
o-Xylene	0.19 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Tetrachloroethene	0.2 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Toluene	0.17 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	0.15 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	0.19 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Trichloroethene	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Trichlorofluoromethane	0.29 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Vinyl chloride	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-39B**	**RD-41A**	**RD-41A**	**RD-41B**	**RD-41B**	**RD-41B**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Primary	Primary	Split
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TA-Denver	Lancaster	Lancaster	Lancaster	Lancaster	TA-Denver
Collection Date:	11/03/2009	02/18/2009	07/28/2009	02/12/2009	05/04/2009	05/04/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.16 U	0.1 U	0.1 U	2 R	1 U	---
1,1,2,2-Tetrachloroethane	0.2 U	0.1 U	0.1 U	1 U	1 U	---
1,1,2-Trichloro-1,2,2-trifluoroethane	0.79 U	0.2 U	0.2 U	4 U	2 U	---
1,1,2-Trichloroethane	0.32 U	0.1 U	0.1 U	2 U	1 U	---
1,1-Dichloroethane	0.16 U	0.1 U	0.1 U	2 U	1 U	---
1,1-Dichloroethene	0.14 U	0.1 U	0.1 U	3 J	4.1 J	---
1,2-Dichlorobenzene	0.13 U	0.1 U	0.1 U	2 U	1 U	---
1,2-Dichloroethane	0.13 U	0.1 U	0.1 U	1 U	1 U	---
1,2-Dichloropropane	0.13 U	0.1 U	0.1 U	2 U	1 U	---
1,3-Dichlorobenzene	0.16 U	0.1 U	0.1 U	2 U	1 U	---
1,4-Dichlorobenzene	0.16 U	0.1 U	0.1 U	2 U	1 U	---
1,4-Dioxane	---	0.5 U	0.5 U	1 J	1.1 J	1.2 J
2-Hexanone	1.4 U	1 U	1 U	6 U	10 U	---
Acetone	1.9 R	3 U	3 U	12 U	30 U	---
Benzene	0.16 U	0.1 U	0.1 U	1 U	1 U	---
Bromodichloromethane	0.17 U	0.1 U	0.1 U	2 U	1 U	---
Bromoform	0.19 U	0.1 U	0.1 U	2 U	1 U	---
Bromomethane	0.21 U	0.1 U	0.1 U	2 U	1 U	---
Carbon Disulfide	0.94 J	0.4 U	0.4 U	2 U	4 U	---
Carbon Tetrachloride	0.19 U	0.1 U	0.1 U	1 U	1 U	---
Chlorobenzene	0.17 U	0.1 U	0.1 U	2 U	1 U	---
Chloroethane	0.41 U	0.1 U	0.1 U	2 U	1 U	---
Chloroform	0.16 U	0.1 U	0.1 U	2 U	1 U	---
Chloromethane	0.3 U	0.2 U	0.2 U	2 U	2 U	---
cis-1,2-Dichloroethene	0.15 U	8.7	8.6	670	870	---
cis-1,3-Dichloropropene	0.16 U	0.1 U	0.1 U	2 U	1 U	---
Dibromochloromethane	0.17 U	0.1 U	0.1 U	2 U	1 U	---
Ethylbenzene	0.16 U	0.1 U	0.1 U	2 U	1 U	---
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1.8 U	1 U	1 U	6 U	10 U	---
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	6 U	10 U	---
Methylene chloride	0.32 U	0.2 U	0.2 U	4 U	2 U	---
m-Xylene & p-Xylene	0.34 U	0.1 U	0.1 U	2 U	1 U	---
o-Xylene	0.19 U	0.1 U	0.1 U	2 U	1 U	---
Tetrachloroethene	0.2 U	0.1 U	0.1 U	2 U	1 U	---
Toluene	0.17 U	0.1 U	0.1 U	1 U	1 U	---
trans-1,2-Dichloroethene	0.15 U	3.6	3.1	38	44	---
trans-1,3-Dichloropropene	0.19 U	0.1 U	0.1 U	2 U	1 U	---
Trichloroethene	0.16 U	1.5	0.8	1000	900	---
Trichlorofluoromethane	0.29 U	0.1 U	0.1 U	1 U	1 U	---
Vinyl chloride	0.4 U	2.3	1.8	20	21	---

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-41B**	**RD-41B**	**RD-41B**	**RD-43A**	**RD-43A**	**RD-43A**
Sample Port:						
Sample Type:	Primary	Primary	Duplicate	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	TA-Denver	TA-Denver	Lancaster	Lancaster	Lancaster
Collection Date:	08/04/2009	11/02/2009	11/02/2009	03/04/2009	05/12/2009	07/22/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.8 U	1.1 U	---	0.1 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.5 U	1.3 U	---	0.1 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	2 U	5.3 U	---	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.8 U	2.1 U	---	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	1 U	1.1 U	---	0.1 U	0.1 U	0.1 U
1,1-Dichloroethene	5 J	5.9 J	---	0.1 U	0.1 U	0.1 U
1,2-Dichlorobenzene	1 U	0.87 U	---	0.1 U	0.1 U	0.1 U
1,2-Dichloroethane	0.5 U	0.87 U	---	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	1 U	0.87 U	---	0.1 U	0.1 U	0.1 U
1,3-Dichlorobenzene	1 U	1.1 U	---	0.1 U	0.1 U	0.1 U
1,4-Dichlorobenzene	1 U	1.1 U	---	0.1 U	0.1 U	0.1 U
1,4-Dioxane	0.8 J	19 UJ	65 UJ	---	---	---
2-Hexanone	3 U	9.3 U	---	1 U	1 U	1 U
Acetone	6 U	13 U	---	3 U	3 U	3 U
Benzene	0.5 U	1.1 U	---	0.1 U	0.1 U	0.1 U
Bromodichloromethane	1 U	1.1 U	---	0.1 U	0.1 U	0.1 U
Bromoform	1 U	1.3 U	---	0.1 U	0.1 U	0.3 J
Bromomethane	1 U	1.4 U	---	0.1 U	0.1 U	0.1 U
Carbon Disulfide	1 U	3 U	---	0.4 U	0.4 U	0.4 U
Carbon Tetrachloride	0.5 U	1.3 U	---	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.8 U	1.1 U	---	0.1 U	0.1 U	0.1 U
Chloroethane	1 U	2.7 U	---	0.1 U	0.1 U	0.1 U
Chloroform	0.8 U	1.1 U	---	0.1 U	0.1 U	0.1 U
Chloromethane	1 U	2 U	---	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	1000	1500	---	0.1 U	0.1 U	0.1 U
cis-1,3-Dichloropropene	1 U	1.1 U	---	0.1 U	0.1 U	0.1 U
Dibromochloromethane	1 U	1.1 U	---	0.1 U	0.1 U	0.2 J
Ethylbenzene	0.8 U	1.1 U	---	0.1 U	0.1 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	3 U	12 U	---	1 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	3 U	6.9 U	---	1 U	1 U	1 U
Methylene chloride	2 U	2.5 U	---	0.2 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.8 U	2.3 U	---	0.1 U	0.1 U	0.1 U
o-Xylene	0.8 U	1.3 U	---	0.1 U	0.1 U	0.1 U
Tetrachloroethene	0.8 U	1.3 U	---	0.1 U	0.1 U	0.1 U
Toluene	0.7 U	1.1 U	---	0.1 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	58	58	---	0.1 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	1 U	1.3 U	---	0.1 U	0.1 U	0.1 U
Trichloroethene	940	130	---	0.1 U	0.1 U	0.1 U
Trichlorofluoromethane	0.5 U	1.9 U	---	0.1 U	0.1 U	0.1 U
Vinyl chloride	21	22	---	0.1 U	0.1 U	0.1 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-43A**	**RD-43A**	**RD-43A**	**RD-43B**	**RD-43B**	**RD-43B**
Sample Port:						
Sample Type:	Primary	Duplicate	Split	Primary	Primary	Duplicate
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TA-Denver	TA-Denver	TA-Irvine	Lancaster	Lancaster	Lancaster
Collection Date:	10/21/2009	10/21/2009	10/21/2009	02/18/2009	05/12/2009	05/12/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.16 U	0.16 U	0.3 U	0.1 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.2 U	0.2 U	0.3 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.79 U	0.79 U	0.5 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.32 U	0.32 U	0.3 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.16 U	0.16 U	0.4 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethene	0.14 U	0.14 U	0.42 U	0.1 U	0.1 U	0.1 U
1,2-Dichlorobenzene	0.13 U	0.13 U	0.32 U	0.1 U	0.1 U	0.1 U
1,2-Dichloroethane	0.13 U	0.13 U	0.28 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	0.13 U	0.13 U	0.35 U	0.1 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.16 U	0.16 U	0.35 U	0.1 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.16 U	0.16 U	0.37 U	0.1 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1.4 U	1.4 U	2.6 U	1 U	1 U	1 U
Acetone	1.9 U	1.9 U	4.5 U	3 U	3 U	3 U
Benzene	0.16 U	0.16 U	0.28 U	0.1 U	0.1 U	0.1 U
Bromodichloromethane	0.17 U	0.17 U	0.3 U	0.1 U	0.1 U	0.1 U
Bromoform	0.19 U	0.19 U	0.4 U	0.1 U	0.1 U	0.1 U
Bromomethane	0.21 U	0.21 U	0.42 U	0.1 U	0.1 U	0.1 U
Carbon Disulfide	0.45 U	0.45 U	0.48 U	0.4 U	0.4 U	0.4 U
Carbon Tetrachloride	0.19 U	0.19 U	0.28 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.17 U	0.17 U	0.36 U	0.1 U	0.1 U	0.1 U
Chloroethane	0.41 U	0.41 U	0.4 U	0.1 U	0.1 U	0.1 U
Chloroform	0.16 U	0.16 U	0.33 U	0.1 U	0.1 U	0.1 U
Chloromethane	0.3 U	0.3 U	0.4 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	0.15 U	0.15 U	0.32 U	0.1 U	0.1 U	0.1 U
cis-1,3-Dichloropropene	0.16 U	0.16 U	0.22 U	0.1 U	0.1 U	0.1 U
Dibromochloromethane	0.17 U	0.17 U	0.4 U	0.1 U	0.1 U	0.1 U
Ethylbenzene	0.16 U	0.16 U	0.25 U	0.1 U	0.1 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1.8 U	1.8 U	4.7 U	1 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	3.5 U	1 U	1 U	1 U
Methylene chloride	2.1 U	2 U	0.95 U	0.2 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.34 U	0.34 U	0.6 U	0.1 U	0.1 U	0.1 U
o-Xylene	0.19 U	0.19 U	0.3 U	0.1 U	0.1 U	0.1 U
Tetrachloroethene	0.2 U	0.2 U	0.32 U	0.1 U	0.1 U	0.1 U
Toluene	0.17 U	0.17 U	0.36 U	0.1 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	0.15 U	0.15 U	0.3 U	0.1 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	0.19 U	0.19 U	0.32 U	0.1 U	0.1 U	0.1 U
Trichloroethene	0.16 U	0.18 U	0.26 U	0.1 U	0.1 U	0.1 U
Trichlorofluoromethane	0.29 U	0.29 U	0.34 U	0.1 U	0.1 U	0.1 U
Vinyl chloride	0.4 U	0.4 U	0.4 U	0.1 U	0.1 U	0.1 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-43B**	**RD-43B**	**RD-43B**	**RD-43C**	**RD-43C**	**RD-43C**
Sample Port:						
Sample Type:	Primary	Primary	Duplicate	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	TA-Denver	TA-Denver	Lancaster	Lancaster	Lancaster
Collection Date:	07/22/2009	10/21/2009	10/21/2009	02/18/2009	05/12/2009	07/22/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.1 U	0.2 U	0.2 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.79 U	0.79 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.1 U	0.32 U	0.32 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.1 U	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethene	0.1 U	0.14 U	0.14 U	0.1 U	0.1 U	0.1 U
1,2-Dichlorobenzene	0.1 U	0.13 U	0.13 U	0.1 U	0.1 U	0.1 U
1,2-Dichloroethane	0.1 U	0.13 U	0.13 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	0.1 U	0.13 U	0.13 U	0.1 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.1 U	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.1 U	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	1.4 U	1.4 U	1 U	1 U	1 U
Acetone	3 U	1.9 U	1.9 U	3 U	3 U	3 U
Benzene	0.1 U	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U
Bromodichloromethane	0.1 U	0.17 U	0.17 U	0.1 U	0.1 U	0.1 U
Bromoform	0.1 U	0.19 U	0.19 U	0.1 U	0.1 U	0.1 U
Bromomethane	0.1 U	0.21 U	0.21 U	0.1 U	0.1 U	0.1 U
Carbon Disulfide	0.4 U	0.45 U	0.45 U	0.4 U	0.4 U	0.4 U
Carbon Tetrachloride	0.1 U	0.19 U	0.19 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.17 U	0.17 U	0.1 U	0.1 U	0.1 U
Chloroethane	0.1 U	0.41 U	0.41 U	0.1 U	0.1 U	0.1 U
Chloroform	0.1 U	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U
Chloromethane	0.2 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	0.1 U	0.15 U	0.15 U	0.1 U	0.1 U	0.1 U
cis-1,3-Dichloropropene	0.1 U	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U
Dibromochloromethane	0.1 U	0.17 U	0.17 U	0.1 U	0.1 U	0.1 U
Ethylbenzene	0.1 U	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1.8 U	1.8 U	1 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	0.2 U	1.9 U	1.8 U	0.2 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.1 U	0.34 U	0.34 U	0.1 U	0.1 U	0.1 U
o-Xylene	0.1 U	0.19 U	0.19 U	0.1 U	0.1 U	0.1 U
Tetrachloroethene	0.1 U	0.2 U	0.2 U	0.1 U	0.1 U	0.1 U
Toluene	0.1 U	0.17 U	0.17 U	0.1 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	0.1 U	0.15 U	0.15 U	0.1 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	0.1 U	0.19 U	0.19 U	0.1 U	0.1 U	0.1 U
Trichloroethene	0.1 U	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U
Trichlorofluoromethane	0.1 U	0.29 U	0.29 U	0.1 U	0.1 U	0.1 U
Vinyl chloride	0.1 U	0.4 U	0.4 U	0.1 U	0.1 U	0.1 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-43C**	**RD-43C**	**RD-43C**	**RD-44**	**RD-44**	**RD-44**
Sample Port:						
Sample Type:	Duplicate	Primary	Split	Primary	Primary	Duplicate
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	TA-Denver	TA-Irvine	Lancaster	Lancaster	Lancaster
Collection Date:	07/22/2009	10/21/2009	10/21/2009	03/02/2009	04/30/2009	04/30/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.16 U	0.3 U	0.1 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.1 U	0.2 U	0.3 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.79 U	0.5 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.1 U	0.32 U	0.3 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.1 U	0.16 U	0.4 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethene	0.1 U	0.14 U	0.42 U	0.1 U	0.1 U	0.1 U
1,2-Dichlorobenzene	0.1 U	0.13 U	0.32 U	0.1 U	0.1 U	0.1 U
1,2-Dichloroethane	0.1 U	0.13 U	0.28 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	0.1 U	0.13 U	0.35 U	0.1 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.1 U	0.16 U	0.35 U	0.1 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.1 U	0.16 U	0.37 U	0.1 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	0.5 U	0.5 U	0.5 U
2-Hexanone	1 U	1.4 U	2.6 U	1 U	1 U	1 U
Acetone	3 U	1.9 U	4.5 U	3 U	3 U	3 U
Benzene	0.1 U	0.16 U	0.28 U	0.1 U	0.1 U	0.1 U
Bromodichloromethane	0.1 U	0.17 U	0.3 U	0.1 U	0.1 U	0.1 U
Bromoform	0.1 U	0.19 UJ	0.4 U	0.1 U	0.1 U	0.1 U
Bromomethane	0.1 U	0.21 U	0.42 U	0.1 U	0.1 U	0.1 U
Carbon Disulfide	0.4 U	0.45 U	0.48 U	0.4 U	0.4 U	0.4 U
Carbon Tetrachloride	0.1 U	0.19 U	0.28 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.17 U	0.36 U	0.1 U	0.1 U	0.1 U
Chloroethane	0.1 U	0.41 U	0.4 U	0.1 U	0.1 U	0.1 U
Chloroform	0.1 U	0.16 U	0.33 U	0.1 U	0.1 U	0.1 U
Chloromethane	0.2 U	0.3 U	0.4 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	0.1 U	0.15 U	0.32 U	0.1 U	0.1 U	0.1 U
cis-1,3-Dichloropropene	0.1 U	0.16 U	0.22 U	0.1 U	0.1 U	0.1 U
Dibromochloromethane	0.1 U	0.17 U	0.4 U	0.1 U	0.1 U	0.1 U
Ethylbenzene	0.1 U	0.16 U	0.25 U	0.1 U	0.1 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1.8 U	4.7 U	1 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	3.5 U	1 U	1 U	1 U
Methylene chloride	0.2 U	0.32 U	0.95 U	0.2 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.1 U	0.34 U	0.6 U	0.1 U	0.1 U	0.1 U
o-Xylene	0.1 U	0.19 U	0.3 U	0.1 U	0.1 U	0.1 U
Tetrachloroethene	0.1 U	0.23 J	0.32 U	0.1 U	0.1 U	0.1 U
Toluene	0.1 U	0.17 U	0.36 U	0.1 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	0.1 U	0.15 U	0.3 U	0.1 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	0.1 U	0.19 U	0.32 U	0.1 U	0.1 U	0.1 U
Trichloroethene	0.1 U	0.16 U	0.26 U	0.1 U	0.1 U	0.1 U
Trichlorofluoromethane	0.1 U	0.29 U	0.34 U	0.1 U	0.1 U	0.1 U
Vinyl chloride	0.1 U	0.4 U	0.4 U	0.1 U	0.1 U	0.1 U

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-44**	**RD-44**	**RD-45B**	**RD-45B**	**RD-45B**	**RD-45B**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Primary	Duplicate	Split
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	TA-Denver	Lancaster	Lancaster	Lancaster	TA-Denver
Collection Date:	07/27/2009	10/28/2009	02/20/2009	07/29/2009	07/29/2009	07/29/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.16 U	0.1 U	0.8 U	0.8 U	0.16 U
1,1,2,2-Tetrachloroethane	0.1 U	0.2 U	0.1 U	0.5 U	0.5 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.79 U	0.2 U	2 U	2 U	0.79 U
1,1,2-Trichloroethane	0.1 U	0.32 U	0.1 U	0.8 U	0.8 U	0.32 U
1,1-Dichloroethane	0.1 U	0.16 U	0.1 U	1 U	1 U	0.16 U
1,1-Dichloroethene	0.1 U	0.14 U	0.2 J	0.8 U	0.8 U	0.14 U
1,2-Dichlorobenzene	0.1 U	0.13 U	0.1 U	1 U	1 U	0.13 U
1,2-Dichloroethane	0.1 U	0.13 U	0.1 U	0.5 U	0.5 U	0.13 U
1,2-Dichloropropane	0.1 U	0.13 U	0.1 U	1 U	1 U	0.13 U
1,3-Dichlorobenzene	0.1 U	0.16 U	0.1 U	1 U	1 U	0.16 U
1,4-Dichlorobenzene	0.1 U	0.16 U	0.1 U	1 U	1 U	0.16 U
1,4-Dioxane	0.5 U	0.65 U	---	---	---	---
2-Hexanone	1 U	1.4 U	1 U	3 U	3 U	1.4 U
Acetone	3 U	1.9 U	3 U	6 U	6 U	1.9 U
Benzene	0.1 U	0.16 U	0.1 U	0.5 U	0.5 U	0.16 U
Bromodichloromethane	0.1 U	0.17 U	0.1 U	1 U	1 U	0.17 U
Bromoform	0.1 U	0.19 U	0.1 U	1 U	1 U	0.19 U
Bromomethane	0.1 U	0.21 U	0.1 U	1 U	1 U	0.21 U
Carbon Disulfide	0.4 U	0.45 U	0.4 U	1 U	1 U	0.45 U
Carbon Tetrachloride	0.1 U	0.19 U	0.1 U	0.5 U	0.5 U	0.19 U
Chlorobenzene	0.1 U	0.17 U	0.1 U	0.8 U	0.8 U	0.17 U
Chloroethane	0.1 U	0.41 U	0.1 U	1 U	1 U	0.41 U
Chloroform	0.1 U	0.16 U	0.1 U	0.8 U	0.8 U	0.16 U
Chloromethane	0.2 U	0.3 U	0.2 U	1 U	1 U	0.3 U
cis-1,2-Dichloroethene	0.1 J,C	0.15 U	27	36	36	28
cis-1,3-Dichloropropene	0.1 U	0.16 U	0.1 U	1 U	1 U	0.16 U
Dibromochloromethane	0.1 U	0.17 U	0.1 U	1 U	1 U	0.17 U
Ethylbenzene	0.1 U	0.16 U	0.1 U	0.8 U	0.8 U	0.16 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1.8 U	1 U	3 U	3 U	1.8 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	3 U	3 U	1 U
Methylene chloride	0.2 U	0.32 U	0.2 U	2 U	2 U	0.32 U
m-Xylene & p-Xylene	0.1 U	0.34 U	0.1 U	0.8 U	0.8 U	0.34 U
o-Xylene	0.1 U	0.19 U	0.1 U	0.8 U	0.8 U	0.19 U
Tetrachloroethene	0.1 U	0.2 U	0.1 U	0.8 U	0.8 U	0.2 U
Toluene	0.1 U	0.17 U	0.1 U	0.7 U	0.7 U	0.17 U
trans-1,2-Dichloroethene	0.1 U	0.15 U	2	2 J	2 J	1.7
trans-1,3-Dichloropropene	0.1 U	0.19 U	0.1 U	1 U	1 U	0.19 U
Trichloroethene	0.1 U	0.16 U	1.6	2	2	1.3
Trichlorofluoromethane	0.1 U	0.29 U	0.1 U	0.5 U	0.5 U	0.29 U
Vinyl chloride	0.1 U	0.4 U	0.1 J	0.5 U	0.5 U	0.4 U

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-45C**	**RD-45C**	**RD-45C**	**RD-45C**	**RD-46A**	**RD-46A**
Sample Port:						
Sample Type:	Primary	Primary	Duplicate	Split	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster
Collection Date:	02/23/2009	07/16/2009	07/16/2009	07/16/2009	03/04/2009	08/05/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.16 U	4 U	8 U
1,1,2,2-Tetrachloroethane	0.1 U	0.1 U	0.1 U	0.2 U	3 U	5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.2 U	0.79 U	10 U	20 U
1,1,2-Trichloroethane	0.1 U	0.1 U	0.1 U	0.32 U	4 U	8 U
1,1-Dichloroethane	0.1 U	0.1 U	0.1 U	0.16 U	5 U	10 U
1,1-Dichloroethene	0.1 U	0.1 U	0.1 U	0.14 U	4 U	8 U
1,2-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.13 U	5 U	10 U
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.13 U	3 U	5 U
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.13 U	5 U	10 U
1,3-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.16 U	5 U	10 U
1,4-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.16 U	5 U	10 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	1 U	1 U	1.4 U	15 U	30 U
Acetone	3 U	3 U	3 U	1.9 U	30 U	60 U
Benzene	0.1 U	0.1 U	0.1 U	0.16 U	3 U	5 U
Bromodichloromethane	0.1 U	0.1 U	0.1 U	0.17 U	5 U	10 U
Bromoform	0.1 U	0.1 U	0.1 U	0.19 U	5 U	10 U
Bromomethane	0.1 U	0.1 U	0.1 U	0.21 U	5 U	10 U
Carbon Disulfide	0.4 U	0.4 U	0.4 U	0.45 U	5 U	10 U
Carbon Tetrachloride	0.1 U	0.1 U	0.1 U	0.19 U	3 U	5 U
Chlorobenzene	0.1 U	0.1 U	0.1 U	0.17 U	4 U	8 U
Chloroethane	0.1 U	0.1 U	0.1 U	0.41 U	5 U	10 U
Chloroform	0.1 U	0.1 U	0.1 U	0.16 U	4 U	8 U
Chloromethane	0.2 U	0.2 U	0.2 U	0.3 U	5 U	10 U
cis-1,2-Dichloroethene	0.1 U	0.1 U	0.1 U	0.15 U	370	630
cis-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	0.16 U	5 U	10 U
Dibromochloromethane	0.1 U	0.1 U	0.1 U	0.17 U	5 U	10 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.16 U	4 U	8 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1 U	1 U	1.8 U	15 U	30 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	15 U	30 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.32 U	10 U	20 U
m-Xylene & p-Xylene	0.1 U	0.1 U	0.1 U	0.34 U	4 U	8 U
o-Xylene	0.1 U	0.1 U	0.1 U	0.19 U	4 U	8 U
Tetrachloroethene	0.1 U	0.1 U	0.1 U	0.2 U	4 U	8 U
Toluene	0.1 U	0.1 U	0.1 U	0.17 U	4 U	7 U
trans-1,2-Dichloroethene	0.1 U	0.1 U	0.1 U	0.15 U	4 U	8 U
trans-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	0.19 U	5 U	10 U
Trichloroethene	0.1 U	0.1 U	0.1 U	0.16 U	4000	6800
Trichlorofluoromethane	0.1 U	0.1 U	0.1 U	0.29 U	3 U	5 U
Vinyl chloride	0.1 U	0.1 U	0.1 U	0.4 U	3 U	5 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-46A**	**RD-47**	**RD-47**	**RD-47**	**RD-47**	**RD-48B**
Sample Port:						
Sample Type:	Duplicate	Primary	Primary	Duplicate	Split	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster
Collection Date:	08/05/2009	02/27/2009	07/30/2009	07/30/2009	07/30/2009	03/04/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	8 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,1,2,2-Tetrachloroethane	5 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	20 U	0.2 U	0.2 U	0.2 U	0.79 U	0.2 U
1,1,2-Trichloroethane	8 U	0.1 U	0.1 U	0.1 U	0.32 U	0.1 U
1,1-Dichloroethane	10 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,1-Dichloroethene	8 U	0.1 U	0.1 U	0.1 U	0.14 U	0.1 U
1,2-Dichlorobenzene	10 U	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U
1,2-Dichloroethane	5 U	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U
1,2-Dichloropropane	10 U	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U
1,3-Dichlorobenzene	10 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,4-Dichlorobenzene	10 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	30 U	1 U	1 U	1 U	1.4 U	1 U
Acetone	60 U	3 U	3 U	3 U	1.9 U	3 U
Benzene	5 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Bromodichloromethane	10 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
Bromoform	10 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Bromomethane	10 U	0.1 U	0.1 U	0.1 U	0.21 U	0.1 U
Carbon Disulfide	10 U	0.4 U	0.4 U	0.4 U	0.45 U	0.4 U
Carbon Tetrachloride	5 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Chlorobenzene	8 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
Chloroethane	10 U	0.1 U	0.1 U	0.1 U	0.41 U	0.1 U
Chloroform	8 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Chloromethane	10 U	0.2 U	0.2 U	0.3 U	0.3 U	0.2 U
cis-1,2-Dichloroethene	620	0.5	0.6	0.5	0.54 J	0.1 U
cis-1,3-Dichloropropene	10 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Dibromochloromethane	10 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
Ethylbenzene	8 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	30 U	1 U	1 U	1 U	1.8 U	1 U
Methyl isobutyl ketone (MIBK)	30 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	20 U	0.2 U	0.2 U	0.2 U	0.32 U	0.2 U
m-Xylene & p-Xylene	8 U	0.1 U	0.1 U	0.1 U	0.34 U	0.1 U
o-Xylene	8 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Tetrachloroethene	8 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U
Toluene	7 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
trans-1,2-Dichloroethene	8 U	0.1 U	0.1 U	0.1 U	0.15 U	0.1 U
trans-1,3-Dichloropropene	10 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Trichloroethene	6600	0.1 J	0.1 J	0.1 J	0.16 U	0.1 U
Trichlorofluoromethane	5 U	0.1 U	0.1 U	0.1 U	0.29 U	0.1 U
Vinyl chloride	5 U	0.1 U	0.1 U	0.1 U	0.4 U	0.1 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-48B**	**RD-48C**	**RD-48C**	**RD-48C**	**RD-48C**	**RD-48C**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Duplicate	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	TA-Denver
Collection Date:	08/05/2009	02/26/2009	05/12/2009	05/12/2009	07/21/2009	10/28/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.16 U
1,1,2,2-Tetrachloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.79 U
1,1,2-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.32 U
1,1-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.16 U
1,1-Dichloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.14 U
1,2-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.13 U
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.13 U
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.13 U
1,3-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.16 U
1,4-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.16 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	1 U	1 U	1 U	1 U	1.4 U
Acetone	3 U	3 U	3 U	3 U	3 U	1.9 U
Benzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.16 U
Bromodichloromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.17 U
Bromoform	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.19 U
Bromomethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.21 U
Carbon Disulfide	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.45 U
Carbon Tetrachloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.19 U
Chlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.17 U
Chloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.41 U
Chloroform	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.16 U
Chloromethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
cis-1,2-Dichloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.15 U
cis-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.16 U
Dibromochloromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.17 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.16 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1 U	1 U	1 U	1 U	1.8 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.32 U
m-Xylene & p-Xylene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.34 U
o-Xylene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.19 U
Tetrachloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U
Toluene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.17 U
trans-1,2-Dichloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.15 U
trans-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.19 U
Trichloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.16 U
Trichlorofluoromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.29 U
Vinyl chloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-48C**	**RD-49A**	**RD-49A**	**RD-49B**	**RD-49B**	**RD-49B**
Sample Port:						
Sample Type:	Duplicate	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TA-Denver	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:	10/28/2009	03/05/2009	05/06/2009	02/11/2009	05/06/2009	07/28/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.16 U	2 U	1 U	0.8 R	0.1 U	0.8 U
1,1,2,2-Tetrachloroethane	0.2 U	1 U	1 U	0.5 U	0.1 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.79 U	5 U	2 U	2 U	0.2 U	2 U
1,1,2-Trichloroethane	0.32 U	2 U	1 U	0.8 U	0.1 U	0.8 U
1,1-Dichloroethane	0.16 U	3 U	1 U	1 U	0.1 U	1 U
1,1-Dichloroethene	0.14 U	4 J	2.7 J	0.8 U	0.9	0.8 U
1,2-Dichlorobenzene	0.13 U	3 U	1 U	1 U	0.1 U	1 U
1,2-Dichloroethane	0.13 U	1 U	1 U	0.5 U	0.1 U	0.5 U
1,2-Dichloropropane	0.13 U	3 U	1 U	1 U	0.1 U	1 U
1,3-Dichlorobenzene	0.16 U	3 U	1 U	1 U	0.1 U	1 U
1,4-Dichlorobenzene	0.16 U	3 U	1 U	1 U	0.1 U	1 U
1,4-Dioxane	---	0.5 U	0.5 U	2	1.7 J	1.9 J
2-Hexanone	1.4 U	8 U	10 U	3 U	1 U	3 U
Acetone	1.9 U	15 U	30 U	6 U	3 U	6 U
Benzene	0.16 U	1 U	1 U	0.5 U	0.1 U	0.5 U
Bromodichloromethane	0.17 U	3 U	1 U	1 U	0.1 U	1 U
Bromoform	0.19 U	3 U	1 U	1 U	0.1 U	1 U
Bromomethane	0.21 U	3 U	1 U	1 U	0.1 U	1 U
Carbon Disulfide	0.5 J	3 U	4 U	1 U	0.4 U	1 U
Carbon Tetrachloride	0.19 U	1 U	1 U	0.5 U	0.1 U	0.5 U
Chlorobenzene	0.17 U	2 U	1 U	0.8 U	0.1 U	0.8 U
Chloroethane	0.41 U	3 U	1 U	1 U	0.1 U	1 U
Chloroform	0.16 U	2 U	1 U	0.8 U	0.1 U	0.8 U
Chloromethane	0.3 U	3 U	2 U	1 U	0.2 U	1 U
cis-1,2-Dichloroethene	0.15 U	2400	1900	270	240	290
cis-1,3-Dichloropropene	0.16 U	3 U	1 U	1 U	0.1 U	1 U
Dibromochloromethane	0.17 U	3 U	1 U	1 U	0.1 U	1 U
Ethylbenzene	0.16 U	2 U	1 U	0.8 U	0.1 U	0.8 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1.8 U	8 U	10 U	3 U	1 U	3 U
Methyl isobutyl ketone (MIBK)	1 U	8 U	10 U	3 U	1 U	3 U
Methylene chloride	0.32 U	5 U	2 U	2 U	0.2 U	2 U
m-Xylene & p-Xylene	0.34 U	2 U	1 U	0.8 U	0.1 U	0.8 U
o-Xylene	0.19 U	2 U	1 U	0.8 U	0.1 U	0.8 U
Tetrachloroethene	0.2 U	2 U	1 U	0.8 U	0.1 U	0.8 U
Toluene	0.17 U	2 U	1 U	0.7 U	0.1 U	0.7 U
trans-1,2-Dichloroethene	0.15 U	49	52	13	15	15
trans-1,3-Dichloropropene	0.19 U	3 U	1 U	1 U	0.1 U	1 U
Trichloroethene	0.16 U	110	930	270	260	300
Trichlorofluoromethane	0.29 U	1 U	1 U	0.5 U	0.1 U	0.5 U
Vinyl chloride	0.4 U	1 U	1.2 J	4	3.8	3

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-49B**	**RD-49B**	**RD-49B**	**RD-49C**	**RD-49C**	**RD-49C**
Sample Port:						
Sample Type:	Split	Primary	Duplicate	Primary	Primary	Duplicate
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TA-Denver	TA-Denver	TA-Denver	Lancaster	Lancaster	Lancaster
Collection Date:	07/28/2009	10/30/2009	10/30/2009	02/11/2009	05/06/2009	05/06/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	---	0.16 U	---	0.8 R	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	---	0.2 U	---	0.5 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	---	0.79 U	---	2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	---	0.32 U	---	0.8 U	0.1 U	0.1 U
1,1-Dichloroethane	---	0.16 U	---	1 U	0.1 U	0.1 U
1,1-Dichloroethene	---	0.73 J	---	0.8 U	0.2 J	0.2 J
1,2-Dichlorobenzene	---	0.13 U	---	1 U	0.1 U	0.1 U
1,2-Dichloroethane	---	0.13 U	---	0.5 U	0.1 U	0.1 U
1,2-Dichloropropane	---	0.13 U	---	1 U	0.1 U	0.1 U
1,3-Dichlorobenzene	---	0.16 U	---	1 U	0.1 U	0.1 U
1,4-Dichlorobenzene	---	0.16 U	---	1 U	0.1 U	0.1 U
1,4-Dioxane	2.4	2.2 J	2.3 J	0.9 J	1 J	---
2-Hexanone	---	1.4 U	---	3 U	1 U	1 U
Acetone	---	1.9 U	---	6 U	3 U	3 U
Benzene	---	0.16 U	---	0.5 U	0.1 U	0.1 U
Bromodichloromethane	---	0.17 U	---	1 U	0.1 U	0.1 U
Bromoform	---	0.19 U	---	1 U	0.1 U	0.1 U
Bromomethane	---	0.21 U	---	1 U	0.1 U	0.1 U
Carbon Disulfide	---	0.45 U	---	1 U	0.4 U	0.4 U
Carbon Tetrachloride	---	0.19 U	---	0.5 U	0.1 U	0.1 U
Chlorobenzene	---	0.17 U	---	0.8 U	0.1 U	0.1 U
Chloroethane	---	0.41 U	---	1 U	0.1 U	0.1 U
Chloroform	---	0.16 U	---	0.8 U	0.1 U	0.1 U
Chloromethane	---	0.3 U	---	1 U	0.2 U	0.3 J
cis-1,2-Dichloroethene	---	170	---	88	78	73
cis-1,3-Dichloropropene	---	0.16 U	---	1 U	0.1 U	0.1 U
Dibromochloromethane	---	0.17 U	---	1 U	0.1 U	0.1 U
Ethylbenzene	---	0.16 U	---	0.8 U	0.1 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	---	1.8 U	---	3 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	---	1 U	---	3 U	1 U	1 U
Methylene chloride	---	0.32 U	---	2 U	0.2 U	0.2 U
m-Xylene & p-Xylene	---	0.34 U	---	0.8 U	0.1 U	0.1 U
o-Xylene	---	0.19 U	---	0.8 U	0.1 U	0.1 U
Tetrachloroethene	---	0.2 U	---	0.8 U	0.1 U	0.1 U
Toluene	---	0.17 U	---	0.7 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	---	13	---	3 J	2.5	2.5
trans-1,3-Dichloropropene	---	0.19 U	---	1 U	0.1 U	0.1 U
Trichloroethene	---	170	---	14	13	13
Trichlorofluoromethane	---	0.29 U	---	0.5 U	0.1 U	0.1 U
Vinyl chloride	---	3.2	---	2	1.7	1.7

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-49C**	**RD-49C**	**RD-49C**	**RD-50**	**RD-50**	**RD-51B**
Sample Port:				Z2	Z2	
Sample Type:	Primary	Split	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	TA-Denver	TA-Denver	Lancaster	Lancaster	Lancaster
Collection Date:	07/28/2009	07/28/2009	10/30/2009	02/20/2009	07/16/2009	02/09/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.8 U	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.5 U	0.2 U	0.2 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	2 U	0.79 U	0.79 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.8 U	0.32 U	0.32 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	1 U	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethene	0.8 U	0.14 U	0.19 J	0.1 U	0.1 U	0.1 U
1,2-Dichlorobenzene	1 U	0.13 U	0.13 U	0.1 U	0.1 U	0.1 U
1,2-Dichloroethane	0.5 U	0.13 U	0.13 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	1 U	0.13 U	0.13 U	0.1 U	0.1 U	0.1 U
1,3-Dichlorobenzene	1 U	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U
1,4-Dichlorobenzene	1 U	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U
1,4-Dioxane	1.2 J	---	0.78 J	---	---	0.5 U
2-Hexanone	3 U	1.4 U	1.4 U	1 U	1 U	1 U
Acetone	6 U	1.9 U	1.9 U	3 U	3 U	3 U
Benzene	0.5 U	0.16 U	0.16 U	0.2 J,F	0.1 U	0.1 U
Bromodichloromethane	1 U	0.17 U	0.17 U	0.1 U	0.1 U	0.1 U
Bromoform	1 U	0.19 U	0.19 U	0.1 U	0.1 U	0.1 U
Bromomethane	1 U	0.21 U	0.21 U	0.1 U	0.1 U	0.1 U
Carbon Disulfide	1 U	0.45 U	0.45 U	0.4 U	0.4 U	0.4 U
Carbon Tetrachloride	0.5 U	0.19 U	0.19 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.8 U	0.17 U	0.17 U	0.1 U	0.1 U	0.1 U
Chloroethane	1 U	0.41 U	0.41 U	0.1 U	0.1 U	0.1 U
Chloroform	0.8 U	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U
Chloromethane	1 U	0.3 U	0.3 U	0.2 U	0.2 U	0.4 J
cis-1,2-Dichloroethene	100	78	94	0.1 U	0.1 U	12
cis-1,3-Dichloropropene	1 U	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U
Dibromochloromethane	1 U	0.17 U	0.17 U	0.1 U	0.1 U	0.1 U
Ethylbenzene	0.8 U	0.16 U	0.16 U	0.1 U	0.1 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	3 U	1.8 U	1.8 U	1 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	3 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	2 U	0.32 U	0.32 U	0.2 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.8 U	0.34 U	0.34 U	0.1 U	0.1 U	0.1 U
o-Xylene	0.8 U	0.19 U	0.19 U	0.1 U	0.1 U	0.1 U
Tetrachloroethene	0.8 U	0.2 U	0.2 U	0.1 U	0.1 U	0.1 U
Toluene	0.7 U	0.17 U	0.17 U	4.7 F	1.9 F	0.1 U
trans-1,2-Dichloroethene	3 J	2.4	2.6	0.1 U	0.1 U	1
trans-1,3-Dichloropropene	1 U	0.19 U	0.19 U	0.1 U	0.1 U	0.1 U
Trichloroethene	13	11	12	0.1 J	0.1 U	4.6
Trichlorofluoromethane	0.5 U	0.29 U	0.29 U	0.1 U	0.1 U	0.1 U
Vinyl chloride	1	1.4	1.6	0.1 U	0.1 U	8.1

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-51B**	**RD-51B**	**RD-51B**	**RD-51B**	**RD-51B**	**RD-51B**
Sample Port:						
Sample Type:	Split	Primary	Primary	Duplicate	Split	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TA-Denver	Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster
Collection Date:	02/09/2009	05/04/2009	05/27/2009	05/27/2009	05/27/2009	07/27/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	---	0.8 U	0.1 U	0.1 U	0.16 U	0.1 U
1,1,2,2-Tetrachloroethane	---	0.5 U	0.1 U	0.1 U	0.2 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	---	2 U	0.2 U	0.2 U	0.79 U	0.2 U
1,1,2-Trichloroethane	---	0.8 U	0.1 U	0.1 U	0.32 U	0.1 U
1,1-Dichloroethane	---	1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,1-Dichloroethene	---	0.8 U	0.1 U	0.1 U	0.14 U	0.1 U
1,2-Dichlorobenzene	---	1 U	0.1 U	0.1 U	0.13 U	0.1 U
1,2-Dichloroethane	---	0.5 U	0.1 U	0.1 U	0.13 U	0.1 U
1,2-Dichloropropane	---	1 U	0.1 U	0.1 U	0.13 U	0.1 U
1,3-Dichlorobenzene	---	1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,4-Dichlorobenzene	---	1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,4-Dioxane	1 U	0.5 U	---	---	---	0.5 U
2-Hexanone	---	3 U	1 U	1 U	1.4 U	1 U
Acetone	---	6 U	3 U	3 U	1.9 U	3 U
Benzene	---	0.5 U	0.1 U	0.1 U	0.16 U	0.1 U
Bromodichloromethane	---	1 U	0.1 U	0.1 U	0.17 U	0.1 U
Bromoform	---	1 U	0.1 U	0.1 U	0.19 U	0.1 U
Bromomethane	---	1 U	0.1 U	0.1 U	0.21 U	0.1 U
Carbon Disulfide	---	1 U	0.4 U	0.4 U	0.45 U	0.4 U
Carbon Tetrachloride	---	0.5 U	0.1 U	0.1 U	0.19 U	0.1 U
Chlorobenzene	---	0.8 U	0.1 U	0.1 U	0.17 U	0.1 U
Chloroethane	---	1 U	0.1 U	0.1 U	0.41 U	0.1 U
Chloroform	---	0.8 U	0.1 U	0.1 U	0.16 U	0.1 U
Chloromethane	---	1 U	0.2 U	0.2 U	0.3 U	0.2 U
cis-1,2-Dichloroethene	---	10	9.6	9.8	9.2	10
cis-1,3-Dichloropropene	---	1 U	0.1 U	0.1 U	0.16 U	0.1 U
Dibromochloromethane	---	1 U	0.1 U	0.1 U	0.17 U	0.1 U
Ethylbenzene	---	0.8 U	0.1 U	0.1 U	0.16 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	---	3 U	1 U	1 U	1.8 U	1 U
Methyl isobutyl ketone (MIBK)	---	3 U	1 U	1 U	1 U	1 U
Methylene chloride	---	2 U	0.2 U	0.2 U	0.32 U	0.2 U
m-Xylene & p-Xylene	---	0.8 U	0.1 U	0.1 U	0.34 U	0.1 U
o-Xylene	---	0.8 U	0.1 U	0.1 U	0.19 U	0.1 U
Tetrachloroethene	---	0.8 U	0.1 U	0.1 U	0.2 U	0.1 U
Toluene	---	0.7 U	0.1 U	0.1 U	0.17 U	0.1 U
trans-1,2-Dichloroethene	---	0.9 J	0.8	0.8	0.81 J	0.9
trans-1,3-Dichloropropene	---	1 U	0.1 U	0.1 U	0.19 U	0.1 U
Trichloroethene	---	4	4.3	4.4	4	4.1
Trichlorofluoromethane	---	0.5 U	0.1 U	0.1 U	0.29 U	0.1 U
Vinyl chloride	---	6	5.7	5.7	7.5	5.5

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-51B**	**RD-51C**	**RD-51C**	**RD-51C**	**RD-51C**	**RD-51C**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Duplicate	Split	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TA-Denver	Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster
Collection Date:	10/19/2009	02/10/2009	05/05/2009	05/05/2009	05/05/2009	07/27/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,1,2,2-Tetrachloroethane	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.79 U	0.2 U	0.2 U	0.2 U	0.79 U	0.2 U
1,1,2-Trichloroethane	0.32 U	0.1 U	0.1 U	0.1 U	0.32 U	0.1 U
1,1-Dichloroethane	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,1-Dichloroethene	0.14 U	0.1 U	0.1 U	0.1 U	0.14 U	0.1 U
1,2-Dichlorobenzene	0.13 U	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U
1,2-Dichloroethane	0.13 U	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U
1,2-Dichloropropane	0.13 U	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U
1,3-Dichlorobenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,4-Dichlorobenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,4-Dioxane	0.65 U	0.5 U	0.5 U	---	---	0.5 U
2-Hexanone	1.4 U	1 U	1 U	1 U	1.4 U	1 U
Acetone	1.9 U	3 U	3 U	3 U	1.9 U	3 U
Benzene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Bromodichloromethane	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
Bromoform	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Bromomethane	0.21 U	0.1 U	0.1 U	0.1 U	0.21 U	0.1 U
Carbon Disulfide	0.51 J	0.4 U	0.4 U	0.4 U	0.45 U	0.4 U
Carbon Tetrachloride	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Chlorobenzene	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
Chloroethane	0.41 U	0.1 U	0.1 U	0.1 U	0.41 U	0.1 U
Chloroform	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Chloromethane	0.3 U	0.3 J	0.2 U	0.2 U	0.3 U	0.2 U
cis-1,2-Dichloroethene	9	0.1 U	0.1 U	0.1 U	0.15 U	0.1 U
cis-1,3-Dichloropropene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Dibromochloromethane	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
Ethylbenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1.8 U	1 U	1 U	1 U	1.8 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	0.32 U	0.2 U	0.2 U	0.2 U	1.1 U	0.2 U
m-Xylene & p-Xylene	0.34 U	0.1 U	0.1 U	0.1 U	0.34 U	0.1 U
o-Xylene	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Tetrachloroethene	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U
Toluene	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
trans-1,2-Dichloroethene	0.79 J	0.1 U	0.1 U	0.1 U	0.15 U	0.1 U
trans-1,3-Dichloropropene	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Trichloroethene	3.6	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Trichlorofluoromethane	0.29 U	0.1 U	0.1 U	0.1 U	0.29 U	0.1 U
Vinyl chloride	5.7	0.1 U	0.1 U	0.1 U	0.4 U	0.1 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-51C**	**RD-52B**	**RD-52B**	**RD-52B**	**RD-52B**	**RD-52C**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Duplicate	Split	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TA-Denver	Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster
Collection Date:	10/19/2009	02/12/2009	07/17/2009	07/17/2009	07/17/2009	02/13/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,1,2,2-Tetrachloroethane	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.79 U	0.2 U	0.2 U	0.2 U	0.79 U	0.2 U
1,1,2-Trichloroethane	0.32 U	0.1 U	0.1 U	0.1 U	0.32 U	0.1 U
1,1-Dichloroethane	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,1-Dichloroethene	0.14 U	0.1 U	0.1 U	0.1 U	0.14 U	0.1 U
1,2-Dichlorobenzene	0.13 U	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U
1,2-Dichloroethane	0.13 U	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U
1,2-Dichloropropane	0.13 U	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U
1,3-Dichlorobenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,4-Dichlorobenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,4-Dioxane	0.65 U	---	---	---	---	---
2-Hexanone	1.4 U	1 U	1 U	1 U	1.4 U	1 U
Acetone	1.9 U	3 U	3 U	3 U	1.9 U	3 U
Benzene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Bromodichloromethane	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
Bromoform	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Bromomethane	0.21 U	0.1 U	0.1 U	0.1 U	0.21 U	0.1 U
Carbon Disulfide	0.45 U	0.4 U	0.4 U	0.4 U	0.45 U	0.4 U
Carbon Tetrachloride	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Chlorobenzene	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
Chloroethane	0.41 U	0.1 U	0.1 U	0.1 U	0.41 U	0.1 U
Chloroform	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Chloromethane	0.3 U	0.2 J	0.2 U	0.2 U	0.3 U	0.2 U
cis-1,2-Dichloroethene	0.15 U	4.1	3.3	3.2	3.6	0.1 U
cis-1,3-Dichloropropene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Dibromochloromethane	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
Ethylbenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1.8 U	1 U	1 U	1 U	1.8 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	0.32 U	0.2 U	0.2 U	0.2 U	0.32 U	0.2 U
m-Xylene & p-Xylene	0.34 U	0.1 U	0.1 U	0.1 U	0.34 U	0.1 U
o-Xylene	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Tetrachloroethene	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U
Toluene	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
trans-1,2-Dichloroethene	0.15 U	1.3	0.9	0.9	0.86 J	0.1 U
trans-1,3-Dichloropropene	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Trichloroethene	0.16 U	1.1	1	1	0.94 J	0.1 U
Trichlorofluoromethane	0.29 U	0.1 U	0.1 U	0.1 U	0.29 U	0.1 U
Vinyl chloride	0.4 U	0.1 U	0.1 U	0.1 U	0.4 U	0.1 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-52C**	**RD-52C**	**RD-52C**	**RD-52C**	**RD-52C**	**RD-53**
Sample Port:						
Sample Type:	Primary	Split	Primary	Duplicate	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	TA-Denver	Lancaster	Lancaster	TA-Denver	Lancaster
Collection Date:	05/08/2009	05/08/2009	07/20/2009	07/20/2009	10/22/2009	03/04/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	1.6 U	0.1 U	0.1 U	0.16 U	0.8 U
1,1,2,2-Tetrachloroethane	0.1 U	2 U	0.1 U	0.1 U	0.2 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	7.9 U	0.2 U	0.2 U	0.79 U	4 J
1,1,2-Trichloroethane	0.1 U	3.2 U	0.1 U	0.1 U	0.32 U	0.8 U
1,1-Dichloroethane	0.1 U	1.6 U	0.1 U	0.1 U	0.16 U	1 J
1,1-Dichloroethene	0.1 U	1.4 U	0.1 U	0.1 U	0.14 U	12
1,2-Dichlorobenzene	0.1 U	1.3 U	0.1 U	0.1 U	0.13 U	1 U
1,2-Dichloroethane	0.1 U	1.3 U	0.1 U	0.1 U	0.13 U	0.5 U
1,2-Dichloropropane	0.1 U	1.3 U	0.1 U	0.1 U	0.13 U	1 U
1,3-Dichlorobenzene	0.1 U	1.6 U	0.1 U	0.1 U	0.16 U	1 U
1,4-Dichlorobenzene	0.1 U	1.6 U	0.1 U	0.1 U	0.16 U	1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	14 U	1 U	1 U	1.4 U	3 U
Acetone	3 U	19 U	3 U	3 U	1.9 U	6 U
Benzene	0.1 U	1.6 U	0.1 U	0.1 U	0.16 U	0.5 U
Bromodichloromethane	0.1 U	1.7 U	0.1 U	0.1 U	0.17 U	1 U
Bromoform	0.1 U	1.9 U	0.1 U	0.1 U	0.19 U	1 U
Bromomethane	0.1 U	2.1 U	0.1 U	0.1 U	0.21 U	1 U
Carbon Disulfide	0.7	4.5 U	0.4 U	0.4 U	0.45 U	1 U
Carbon Tetrachloride	0.1 U	1.9 U	0.1 U	0.1 U	0.19 U	0.5 U
Chlorobenzene	0.1 U	1.7 U	0.1 U	0.1 U	0.17 U	0.8 U
Chloroethane	0.1 U	4.1 U	0.1 U	0.1 U	0.41 U	1 U
Chloroform	0.1 U	1.6 U	0.1 U	0.1 U	0.16 U	0.8 U
Chloromethane	0.2 U	3 U	0.5 U	0.3 U	0.3 U	1 U
cis-1,2-Dichloroethene	0.1 U	1.5 U	0.1 U	0.1 U	0.15 U	8
cis-1,3-Dichloropropene	0.1 U	1.6 U	0.1 U	0.1 U	0.16 U	1 U
Dibromochloromethane	0.1 U	1.7 U	0.1 U	0.1 U	0.17 U	1 U
Ethylbenzene	0.1 U	1.6 U	0.1 U	0.1 U	0.16 U	0.8 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	18 U	1 U	1 U	1.8 U	3 U
Methyl isobutyl ketone (MIBK)	1 U	10 U	1 U	1 U	1 U	3 U
Methylene chloride	0.2 U	3.2 U	0.2 U	0.2 U	0.33 U	2 U
m-Xylene & p-Xylene	0.1 U	3.4 U	0.1 U	0.1 U	0.34 U	0.8 U
o-Xylene	0.1 U	1.9 U	0.1 U	0.1 U	0.19 U	0.8 U
Tetrachloroethene	0.1 U	2 U	0.1 U	0.1 U	0.2 U	0.8 U
Toluene	0.1 U	1.7 U	0.1 U	0.1 U	0.17 U	0.7 U
trans-1,2-Dichloroethene	0.1 U	1.5 U	0.1 U	0.1 U	0.15 U	0.8 U
trans-1,3-Dichloropropene	0.1 U	1.9 U	0.1 U	0.1 U	0.19 U	1 U
Trichloroethene	0.1 U	1.6 U	0.1 U	0.1 U	0.16 U	250
Trichlorofluoromethane	0.1 U	2.9 U	0.1 U	0.1 U	0.29 U	0.5 U
Vinyl chloride	0.1 U	4 U	0.1 U	0.1 U	0.4 U	0.5 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-53**	**RD-54A**	**RD-54A**	**RD-54A**	**RD-54B**	**RD-54B**
Sample Port:		Z2	Z2	Z2		
Sample Type:	Primary	Primary	Duplicate	Primary	Primary	Duplicate
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:	07/21/2009	02/24/2009	02/24/2009	07/16/2009	02/23/2009	02/23/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.8 U	0.8 U	0.8 U	0.8 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	3 J	2 U	2 U	2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.8 U	0.8 U	0.8 U	0.8 U	0.1 U	0.1 U
1,1-Dichloroethane	1 J	1 U	1 U	1 U	0.1 U	0.1 U
1,1-Dichloroethene	11	2 J	2 J	0.8 U	0.1 U	0.1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	0.1 U	0.1 U
1,2-Dichloroethane	0.5 U	0.5 U	0.5 U	0.5 U	0.1 U	0.1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U	0.1 U	0.1 U
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	0.1 U	0.1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	3 U	3 U	3 U	3 U	1 U	1 U
Acetone	6 U	6 U	6 U	6 U	3 U	3 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U	0.1 U	0.1 U
Bromodichloromethane	1 U	1 U	1 U	1 U	0.1 U	0.1 U
Bromoform	1 U	1 U	1 U	1 U	0.1 U	0.1 U
Bromomethane	1 U	1 U	1 U	1 U	0.1 U	0.1 U
Carbon Disulfide	1 U	1 U	1 U	1 U	0.4 U	0.4 U
Carbon Tetrachloride	0.5 U	0.5 U	0.5 U	0.5 U	0.1 U	0.1 U
Chlorobenzene	0.8 U	0.8 U	0.8 U	0.8 U	0.1 U	0.1 U
Chloroethane	1 U	1 U	1 U	1 U	0.1 U	0.1 U
Chloroform	0.8 U	0.8 U	0.8 U	0.8 U	0.1 U	0.1 U
Chloromethane	1 U	1 U	1 U	1 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	8	45	44	26	0.1 U	0.1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	0.1 U	0.1 U
Dibromochloromethane	1 U	1 U	1 U	1 U	0.1 U	0.1 U
Ethylbenzene	0.8 U	0.8 U	0.8 U	0.9 J,S	0.1 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	3 U	3 U	3 U	3 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	3 U	3 U	3 U	3 U	1 U	1 U
Methylene chloride	2 U	2 U	2 U	2 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.8 U	0.8 U	0.8 U	0.8 U	0.1 U	0.1 U
o-Xylene	0.8 U	0.8 U	0.8 U	0.8 U	0.1 U	0.1 U
Tetrachloroethene	0.8 U	0.8 U	0.8 U	0.8 U	0.1 U	0.1 U
Toluene	0.7 U	0.7 U	0.7 U	0.7 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	0.8 U	0.8 U	0.8 U	0.8 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	0.1 U	0.1 U
Trichloroethene	250	7	6	15	0.1 U	0.1 U
Trichlorofluoromethane	0.5 U	0.5 U	0.5 U	0.5 U	0.1 U	0.1 U
Vinyl chloride	0.5 U	0.5 U	0.5 U	0.5 U	0.1 U	0.1 U

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-54B**	**RD-54C**	**RD-54C**	**RD-55A**	**RD-55A**	**RD-55A**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Primary	Primary	Split
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TA-Denver	Lancaster	Lancaster	Lancaster	Lancaster	TA-Denver
Collection Date:	10/30/2009	02/24/2009	08/04/2009	02/18/2009	04/30/2009	04/30/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.16 U	0.1 U	0.1 U	0.8 U	0.1 U	0.16 U
1,1,2,2-Tetrachloroethane	0.2 U	0.1 U	0.1 U	0.5 U	0.1 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.79 U	0.2 U	0.2 U	2 U	0.2 U	0.79 U
1,1,2-Trichloroethane	0.32 U	0.1 U	0.1 U	0.8 U	0.1 U	0.32 U
1,1-Dichloroethane	0.16 U	0.1 U	0.1 U	1 U	0.1 U	0.16 U
1,1-Dichloroethene	0.14 U	0.1 U	0.1 U	0.8 U	0.1 U	0.14 U
1,2-Dichlorobenzene	0.13 U	0.1 U	0.1 U	1 U	0.1 U	0.13 U
1,2-Dichloroethane	0.13 U	0.1 U	0.1 U	0.5 U	0.1 U	0.13 U
1,2-Dichloropropane	0.13 U	0.1 U	0.1 U	1 U	0.1 U	0.13 U
1,3-Dichlorobenzene	0.16 U	0.1 U	0.1 U	1 U	0.1 U	0.16 U
1,4-Dichlorobenzene	0.16 U	0.1 U	0.1 U	1 U	0.1 U	0.16 U
1,4-Dioxane	---	---	---	0.5 U	0.5 U	---
2-Hexanone	1.4 U	1 U	1 U	3 U	1 U	1.4 U
Acetone	7 U	3 U	3 U	6 U	3 U	1.9 U
Benzene	0.16 U	0.1 J	0.1 U	0.5 U	0.1 U	0.16 U
Bromodichloromethane	0.17 U	0.1 U	0.1 U	1 U	0.1 U	0.17 U
Bromoform	0.19 U	0.1 U	0.1 U	1 U	0.1 U	0.19 U
Bromomethane	0.21 U	0.1 U	0.1 U	1 U	0.1 U	0.21 U
Carbon Disulfide	0.45 U	0.5 J	0.4 U	1 U	0.4 U	0.45 U
Carbon Tetrachloride	0.19 U	0.1 U	0.1 U	0.5 U	0.1 U	0.19 U
Chlorobenzene	0.17 U	0.1 U	0.1 U	0.8 U	0.1 U	0.17 U
Chloroethane	0.41 U	0.1 U	0.1 U	1 U	0.1 U	0.41 U
Chloroform	0.16 U	0.1 U	0.1 U	0.8 U	0.1 U	0.16 U
Chloromethane	0.3 U	0.2 U	0.2 U	1 U	0.2 U	0.3 U
cis-1,2-Dichloroethene	0.15 U	0.1 U	0.1 U	4 J	2.9	2
cis-1,3-Dichloropropene	0.16 U	0.1 U	0.1 U	1 U	0.1 U	0.16 U
Dibromochloromethane	0.17 U	0.1 U	0.1 U	1 U	0.1 U	0.17 U
Ethylbenzene	0.16 U	0.1 U	0.1 U	0.8 U	0.1 U	0.16 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1.8 U	1 U	1 U	3 U	1 U	1.8 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	3 U	1 U	1 U
Methylene chloride	0.32 U	0.2 U	0.2 U	2 U	0.2 U	0.32 U
m-Xylene & p-Xylene	0.34 U	0.1 U	0.1 U	0.8 U	0.1 U	0.34 U
o-Xylene	0.19 U	0.1 U	0.1 U	0.8 U	0.1 U	0.19 U
Tetrachloroethene	0.2 U	0.1 U	0.1 U	0.8 U	0.1 U	0.2 U
Toluene	0.17 U	0.1 U	0.1 U	0.7 U	0.1 U	0.17 U
trans-1,2-Dichloroethene	0.15 U	0.1 U	0.1 U	0.8 U	0.2 J	0.16 J
trans-1,3-Dichloropropene	0.19 U	0.1 U	0.1 U	1 U	0.1 U	0.19 U
Trichloroethene	0.16 U	0.1 U	0.1 U	5	5.1	4.7
Trichlorofluoromethane	0.29 U	0.1 U	0.1 U	0.5 U	0.1 U	0.29 U
Vinyl chloride	0.4 U	0.1 U	0.1 U	0.5 U	0.4 J	0.4 U

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-55A**	**RD-55A**	**RD-55B**	**RD-55B**	**RD-55B**	**RD-55B**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Duplicate	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	TA-Denver	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:	07/21/2009	11/03/2009	02/12/2009	02/12/2009	04/30/2009	07/21/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.8 U	0.16 U	0.8 R	---	0.1 U	0.8 U
1,1,2,2-Tetrachloroethane	0.5 U	0.2 U	0.5 U	---	0.1 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	2 U	0.79 U	2 U	---	0.2 U	2 U
1,1,2-Trichloroethane	0.8 U	0.32 U	0.8 U	---	0.1 U	0.8 U
1,1-Dichloroethane	1 U	0.16 U	1 U	---	0.1 U	1 U
1,1-Dichloroethene	0.8 U	0.14 U	0.8 U	---	0.3 J	0.8 U
1,2-Dichlorobenzene	1 U	0.13 U	1 U	---	0.1 U	1 U
1,2-Dichloroethane	0.5 U	0.13 U	0.5 U	---	0.1 U	0.5 U
1,2-Dichloropropane	1 U	0.13 U	1 U	---	0.1 U	1 U
1,3-Dichlorobenzene	1 U	0.16 U	1 U	---	0.1 U	1 U
1,4-Dichlorobenzene	1 U	0.16 U	1 U	---	0.1 U	1 U
1,4-Dioxane	0.5 U	0.19 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Hexanone	3 U	1.4 U	3 U	---	1 U	3 U
Acetone	6 U	1.9 U	6 U	---	3 U	6 U
Benzene	0.5 U	0.16 U	0.5 U	---	0.1 U	0.5 U
Bromodichloromethane	1 U	0.17 U	1 U	---	0.1 U	1 U
Bromoform	1 U	0.19 U	1 U	---	0.1 U	1 U
Bromomethane	1 U	0.21 U	1 U	---	0.1 U	1 U
Carbon Disulfide	1 U	0.45 U	1 U	---	0.4 U	1 U
Carbon Tetrachloride	0.5 U	0.19 U	0.5 U	---	0.1 U	0.5 U
Chlorobenzene	0.8 U	0.17 U	0.8 U	---	0.1 U	0.8 U
Chloroethane	1 U	0.41 U	1 U	---	0.1 U	1 U
Chloroform	0.8 U	0.16 U	0.8 U	---	0.1 U	0.8 U
Chloromethane	1 U	0.3 U	1 U	---	0.2 U	1 U
cis-1,2-Dichloroethene	14	54	14	---	15	16
cis-1,3-Dichloropropene	1 U	0.16 U	1 U	---	0.1 U	1 U
Dibromochloromethane	1 U	0.17 U	1 U	---	0.1 U	1 U
Ethylbenzene	0.8 U	0.16 U	0.8 U	---	0.1 U	0.8 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	3 U	1.8 U	3 U	---	1 U	3 U
Methyl isobutyl ketone (MIBK)	3 U	1 U	3 U	---	1 U	3 U
Methylene chloride	2 U	0.32 U	2 U	---	0.2 U	2 U
m-Xylene & p-Xylene	0.8 U	0.34 U	0.8 U	---	0.1 U	0.8 U
o-Xylene	0.8 U	0.19 U	0.8 U	---	0.1 U	0.8 U
Tetrachloroethene	0.8 U	0.31 J	0.8 U	---	0.1 U	0.8 U
Toluene	0.7 U	0.17 U	0.7 U	---	0.1 J	0.7 U
trans-1,2-Dichloroethene	0.8 U	1.3	0.8 U	---	0.1 J	0.8 U
trans-1,3-Dichloropropene	1 U	0.19 U	1 U	---	0.1 U	1 U
Trichloroethene	23	40	25	---	21	26
Trichlorofluoromethane	0.5 U	0.29 U	0.5 U	---	0.1 U	0.5 U
Vinyl chloride	0.5 U	2	0.5 U	---	0.1 J	0.5 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-55B**	**RD-55B**	**RD-56B**	**RD-56B**	**RD-56B**	**RD-56B**
Sample Port:						
Sample Type:	Primary	Split	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TA-Denver	TA-Irvine	Lancaster	Lancaster	Lancaster	TA-Denver
Collection Date:	11/02/2009	11/02/2009	02/23/2009	05/07/2009	07/22/2009	10/21/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.16 U	---	0.1 U	0.1 U	0.1 U	0.16 U
1,1,2,2-Tetrachloroethane	0.2 U	---	0.1 U	0.1 U	0.1 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.79 U	---	0.2 U	0.2 U	0.2 U	0.79 U
1,1,2-Trichloroethane	0.32 U	---	0.1 U	0.1 U	0.1 U	0.32 U
1,1-Dichloroethane	0.16 U	---	0.1 U	0.1 U	0.1 U	0.16 U
1,1-Dichloroethene	0.26 J	---	0.1 U	0.1 U	0.1 U	0.14 U
1,2-Dichlorobenzene	0.13 U	---	0.1 U	0.1 U	0.1 U	0.13 U
1,2-Dichloroethane	0.13 U	---	0.1 U	0.1 U	0.1 U	0.13 U
1,2-Dichloropropane	0.13 U	---	0.1 U	0.1 U	0.1 U	0.13 U
1,3-Dichlorobenzene	0.16 U	---	0.1 U	0.1 U	0.1 U	0.16 U
1,4-Dichlorobenzene	0.16 U	---	0.1 U	0.1 U	0.1 U	0.16 U
1,4-Dioxane	0.65 U	1 U	---	---	---	---
2-Hexanone	1.4 U	---	1 U	1 U	1 U	1.4 U
Acetone	1.9 U	---	3 U	3 U	3 U	1.9 U
Benzene	0.16 U	---	0.1 U	0.1 U	0.1 U	0.16 U
Bromodichloromethane	0.17 U	---	0.1 U	0.1 U	0.1 U	0.17 U
Bromoform	0.19 U	---	0.1 U	0.1 U	0.1 U	0.19 U
Bromomethane	0.21 U	---	0.1 U	0.1 U	0.1 U	0.21 U
Carbon Disulfide	0.45 U	---	0.4 U	0.4 U	0.4 U	0.45 U
Carbon Tetrachloride	0.19 U	---	0.1 U	0.1 U	0.1 U	0.19 U
Chlorobenzene	0.17 U	---	0.1 U	0.1 U	0.1 U	0.17 U
Chloroethane	0.41 U	---	0.1 U	0.1 U	0.1 U	0.41 U
Chloroform	0.16 U	---	0.1 U	0.1 U	0.1 U	0.16 U
Chloromethane	0.3 U	---	0.2 U	0.2 U	0.5 U	0.3 U
cis-1,2-Dichloroethene	14	---	0.1 J	0.1 J	0.1 J	0.15 U
cis-1,3-Dichloropropene	0.16 U	---	0.1 U	0.1 U	0.1 U	0.16 U
Dibromochloromethane	0.17 U	---	0.1 U	0.1 U	0.1 U	0.17 U
Ethylbenzene	0.16 U	---	0.1 U	0.1 U	0.1 U	0.16 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1.8 U	---	1 U	1 U	1 U	1.8 U
Methyl isobutyl ketone (MIBK)	1 U	---	1 U	1 U	1 U	1 U
Methylene chloride	0.32 U	---	0.2 U	0.2 U	0.2 U	2 U
m-Xylene & p-Xylene	0.34 U	---	0.1 U	0.1 U	0.1 U	0.34 U
o-Xylene	0.19 U	---	0.1 U	0.1 U	0.1 U	0.19 U
Tetrachloroethene	0.2 U	---	0.1 U	0.1 U	0.1 U	0.2 U
Toluene	0.17 U	---	0.1 U	0.1 U	0.1 U	0.17 U
trans-1,2-Dichloroethene	0.15 U	---	0.1 U	0.1 U	0.1 U	0.15 U
trans-1,3-Dichloropropene	0.19 U	---	0.1 U	0.1 U	0.1 U	0.19 U
Trichloroethene	22	---	0.4 J	0.4 J	0.4 J	0.43 U
Trichlorofluoromethane	0.29 U	---	0.1 U	0.1 U	0.1 U	0.29 U
Vinyl chloride	0.4 U	---	0.1 U	0.1 U	0.1 U	0.4 U

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-57**	**RD-57**	**RD-57**	**RD-57**	**RD-58A**	**RD-58A**
Sample Port:	Z7	Z7	Z7	Z7		
Sample Type:	Primary	Primary	Primary	Primary	Primary	Duplicate
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster
Collection Date:	02/25/2009	04/29/2009	07/17/2009	10/21/2009	03/05/2009	03/05/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.16 U	0.8 U	---
1,1,2,2-Tetrachloroethane	0.1 U	0.1 U	0.1 U	0.2 U	0.5 U	---
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.2 U	0.79 U	5 J	---
1,1,2-Trichloroethane	0.1 U	0.1 U	0.1 U	0.32 U	0.8 U	---
1,1-Dichloroethane	0.1 U	0.1 U	0.1 U	0.16 U	1 U	---
1,1-Dichloroethene	0.1 U	0.1 U	0.1 U	0.14 U	0.8 U	---
1,2-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.13 U	1 U	---
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.13 U	0.5 U	---
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.13 U	1 U	---
1,3-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.16 U	1 U	---
1,4-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.16 U	1 U	---
1,4-Dioxane	---	---	---	---	0.5 U	0.5 U
2-Hexanone	1 U	1 U	1 U	1.4 U	3 U	---
Acetone	3 U	3 U	3 U	1.9 U	6 U	---
Benzene	0.1 U	0.1 U	0.1 U	0.16 U	0.5 U	---
Bromodichloromethane	0.1 U	0.1 U	0.1 U	0.17 U	1 U	---
Bromoform	0.1 U	0.1 U	0.1 U	0.19 U	1 U	---
Bromomethane	0.1 U	0.1 U	0.1 U	0.21 U	1 U	---
Carbon Disulfide	0.4 U	0.4 U	0.4 U	0.45 U	1 U	---
Carbon Tetrachloride	0.1 U	0.1 U	0.1 U	0.19 U	0.5 U	---
Chlorobenzene	0.3 J,S	0.1 U	0.1 U	0.17 U	0.8 U	---
Chloroethane	0.1 U	0.1 U	0.1 U	0.41 U	1 U	---
Chloroform	0.1 U	0.1 U	0.1 U	0.16 U	0.8 U	---
Chloromethane	0.2 U	0.2 U	0.2 U	0.3 U	1 U	---
cis-1,2-Dichloroethene	0.1 U	0.1 U	0.1 U	0.15 U	8	---
cis-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	0.16 U	1 U	---
Dibromochloromethane	0.1 U	0.1 U	0.1 U	0.17 U	1 U	---
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.16 U	0.8 U	---
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1 U	1 U	1.8 U	3 U	---
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	3 U	---
Methylene chloride	0.2 U	0.2 U	0.2 U	1.9 U	2 U	---
m-Xylene & p-Xylene	0.1 U	0.1 U	0.1 U	0.34 U	0.8 U	---
o-Xylene	0.1 U	0.1 U	0.1 U	0.19 U	0.8 U	---
Tetrachloroethene	0.1 U	0.1 U	0.1 U	0.2 U	0.8 U	---
Toluene	0.1 U	0.1 U	0.1 U	0.17 U	0.7 U	---
trans-1,2-Dichloroethene	0.1 U	0.1 U	0.1 U	0.15 U	0.8 U	---
trans-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	0.19 U	1 U	---
Trichloroethene	0.1 U	0.1 U	0.1 U	0.16 U	150	---
Trichlorofluoromethane	0.1 U	0.1 U	0.1 U	0.29 U	0.5 U	---
Vinyl chloride	0.1 U	0.1 U	0.1 U	0.4 U	0.5 U	---

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-58A**	**RD-58A**	**RD-58A**	**RD-58B**	**RD-58B**	**RD-58B**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster	Lancaster
Collection Date:	05/11/2009	08/04/2009	10/22/2009	02/11/2009	05/11/2009	07/28/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.8 U	0.16 U	0.1 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.1 U	0.5 U	0.2 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	6.5	5 J	4.6 J	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.1 U	0.8 U	0.32 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.1 U	1 U	0.16 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethene	0.1 U	0.8 U	0.14 U	0.1 U	0.1 U	0.1 U
1,2-Dichlorobenzene	0.1 U	1 U	0.13 U	0.1 U	0.1 U	0.1 U
1,2-Dichloroethane	0.1 U	0.5 U	0.13 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	0.1 U	1 U	0.13 U	0.1 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.1 U	1 U	0.16 U	0.1 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.1 U	1 U	0.16 U	0.1 U	0.1 U	0.1 U
1,4-Dioxane	0.5 U	0.5 U	0.65 UJ	0.8 J	0.5 J	0.7 J
2-Hexanone	1 U	3 U	1.4 U	1 U	1 U	1 U
Acetone	3 U	6 U	2.8 U	3 U	3 U	3 U
Benzene	0.1 U	0.5 U	0.16 U	0.1 U	0.1 U	0.1 U
Bromodichloromethane	0.1 U	1 U	0.17 U	0.1 U	0.1 U	0.1 U
Bromoform	0.1 U	1 U	0.19 U	0.1 U	0.1 U	0.1 U
Bromomethane	0.1 U	1 U	0.21 U	0.1 U	0.1 U	0.1 U
Carbon Disulfide	0.4 U	1 U	0.45 U	0.4 U	0.4 U	0.4 U
Carbon Tetrachloride	0.1 U	0.5 U	0.19 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.8 U	0.17 U	0.1 U	0.1 U	0.1 U
Chloroethane	0.1 U	1 U	0.41 U	0.1 U	0.1 U	0.1 U
Chloroform	0.1 U	0.8 U	0.16 U	0.1 U	0.1 U	0.1 U
Chloromethane	0.3 U	1 U	0.3 U	0.2 J	0.2 U	0.2 U
cis-1,2-Dichloroethene	8.4	8	7.8	0.1 U	0.1 U	0.1 U
cis-1,3-Dichloropropene	0.1 U	1 U	0.16 U	0.1 U	0.1 U	0.1 U
Dibromochloromethane	0.1 U	1 U	0.17 U	0.1 U	0.1 U	0.1 U
Ethylbenzene	0.1 U	0.8 U	0.16 U	0.1 U	0.1 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	3 U	1.8 U	1 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	3 U	1 U	1 U	1 U	1 U
Methylene chloride	0.2 U	2 U	0.34 U	0.2 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.1 U	0.8 U	0.34 U	0.1 U	0.1 U	0.1 U
o-Xylene	0.1 U	0.8 U	0.19 U	0.1 U	0.1 U	0.1 U
Tetrachloroethene	0.1 U	0.8 U	0.2 U	0.1 U	0.1 U	0.1 U
Toluene	0.1 U	0.7 U	0.17 U	0.1 J	0.1 U	0.1 U
trans-1,2-Dichloroethene	0.1 J	0.8 U	0.15 U	0.1 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	0.1 U	1 U	0.19 U	0.1 U	0.1 U	0.1 U
Trichloroethene	140	150	220	0.1 U	0.1 U	0.1 U
Trichlorofluoromethane	0.1 U	0.5 U	0.29 U	0.1 U	0.1 U	0.1 U
Vinyl chloride	0.1 U	0.5 U	0.4 U	0.1 U	0.1 U	0.1 U

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-58B**	**RD-58C**	**RD-58C**	**RD-58C**	**RD-58C**	**RD-59A**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Duplicate	Split	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TA-Denver	Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster
Collection Date:	10/22/2009	02/11/2009	07/23/2009	07/23/2009	07/23/2009	03/03/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,1,2,2-Tetrachloroethane	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.79 U	0.2 U	0.2 U	0.2 U	0.79 U	0.2 U
1,1,2-Trichloroethane	0.32 U	0.1 U	0.1 U	0.1 U	0.32 U	0.1 U
1,1-Dichloroethane	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,1-Dichloroethene	0.14 U	0.1 U	0.1 U	0.1 U	0.14 U	0.1 U
1,2-Dichlorobenzene	0.13 U	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U
1,2-Dichloroethane	0.13 U	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U
1,2-Dichloropropane	0.13 U	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U
1,3-Dichlorobenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,4-Dichlorobenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,4-Dioxane	0.65 U	---	---	---	---	---
2-Hexanone	1.4 U	1 U	1 U	1 U	1.4 U	1 U
Acetone	1.9 U	3 U	3 U	3 U	1.9 U	3 U
Benzene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Bromodichloromethane	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
Bromoform	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Bromomethane	0.21 U	0.1 U	0.1 U	0.1 U	0.21 U	0.1 U
Carbon Disulfide	0.45 U	0.4 U	0.4 U	0.4 U	0.45 U	0.4 U
Carbon Tetrachloride	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Chlorobenzene	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
Chloroethane	0.41 U	0.1 U	0.1 U	0.1 U	0.41 U	0.1 U
Chloroform	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Chloromethane	0.3 U	0.2 U	0.2 U	0.3 U	0.3 U	0.2 U
cis-1,2-Dichloroethene	0.15 U	0.8	0.8	0.8	0.75 J	0.1 U
cis-1,3-Dichloropropene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Dibromochloromethane	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
Ethylbenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1.8 U	1 U	1 U	1 U	1.8 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	0.32 U	0.2 U	0.2 U	0.2 U	0.32 U	0.2 U
m-Xylene & p-Xylene	0.34 U	0.1 U	0.1 U	0.1 U	0.34 U	0.1 U
o-Xylene	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Tetrachloroethene	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U
Toluene	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
trans-1,2-Dichloroethene	0.15 U	0.1 U	0.1 U	0.1 U	0.15 U	0.1 U
trans-1,3-Dichloropropene	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Trichloroethene	0.27 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Trichlorofluoromethane	0.29 U	0.1 U	0.1 U	0.1 U	0.29 U	0.1 U
Vinyl chloride	0.4 U	1.3	1.3	1.3	1	0.1 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-59A**	**RD-59A**	**RD-59A**	**RD-59B**	**RD-59B**	**RD-59B**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster	Lancaster
Collection Date:	05/13/2009	08/04/2009	11/04/2009	03/03/2009	05/13/2009	08/04/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.79 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.1 U	0.1 U	0.32 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethene	0.1 U	0.1 U	0.14 U	0.1 U	0.1 U	0.1 U
1,2-Dichlorobenzene	0.1 U	0.1 U	0.13 U	0.1 U	0.1 U	0.1 U
1,2-Dichloroethane	0.1 U	0.1 U	0.13 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	0.1 U	0.1 U	0.13 U	0.1 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	1 U	1.4 U	1 U	1 U	1 U
Acetone	3 U	3 U	1.9 U	3 U	3 U	3 U
Benzene	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U
Bromodichloromethane	0.1 U	0.1 U	0.17 U	0.1 U	0.1 U	0.1 U
Bromoform	0.1 U	0.1 U	0.19 U	0.1 U	0.1 U	0.1 U
Bromomethane	0.1 U	0.1 U	0.21 U	0.1 U	0.1 U	0.1 U
Carbon Disulfide	0.4 U	0.4 U	0.45 U	0.4 U	0.4 U	0.4 U
Carbon Tetrachloride	0.1 U	0.1 U	0.19 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.1 U	0.17 U	0.1 U	0.1 U	0.1 U
Chloroethane	0.1 U	0.1 U	0.41 U	0.1 U	0.1 U	0.1 U
Chloroform	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U
Chloromethane	0.2 U	0.2 U	0.3 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	0.1 U	0.1 U	0.15 U	0.1 U	0.1 U	0.1 U
cis-1,3-Dichloropropene	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U
Dibromochloromethane	0.1 U	0.1 U	0.17 U	0.1 U	0.1 U	0.1 U
Ethylbenzene	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1 U	1.8 U	1 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	0.2 U	0.2 U	0.32 U	0.2 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.1 U	0.1 U	0.34 U	0.1 U	0.1 U	0.1 U
o-Xylene	0.1 U	0.1 U	0.19 U	0.1 U	0.1 U	0.1 U
Tetrachloroethene	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U
Toluene	0.1 U	0.1 U	0.17 U	0.1 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	0.1 U	0.1 U	0.15 U	0.1 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	0.1 U	0.1 U	0.19 U	0.1 U	0.1 U	0.1 U
Trichloroethene	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U
Trichlorofluoromethane	0.1 U	0.1 U	0.29 U	0.1 U	0.1 U	0.1 U
Vinyl chloride	0.1 U	0.1 U	0.4 U	0.1 U	0.1 U	0.1 U

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-59B**	**RD-59C**	**RD-59C**	**RD-59C**	**RD-59C**	**RD-60**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TA-Denver	Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster
Collection Date:	11/04/2009	03/03/2009	05/13/2009	08/04/2009	11/04/2009	03/04/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.8 U
1,1,2,2-Tetrachloroethane	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.79 U	0.2 U	0.2 U	0.2 U	0.79 U	2 U
1,1,2-Trichloroethane	0.32 U	0.1 U	0.1 U	0.1 U	0.32 U	0.8 U
1,1-Dichloroethane	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	3 J
1,1-Dichloroethene	0.14 U	0.1 U	0.1 U	0.1 U	0.14 U	3 J
1,2-Dichlorobenzene	0.13 U	0.1 U	0.1 U	0.1 U	0.13 U	1 U
1,2-Dichloroethane	0.13 U	0.1 U	0.1 U	0.1 U	0.13 U	3
1,2-Dichloropropane	0.13 U	0.1 U	0.1 U	0.1 U	0.13 U	1 U
1,3-Dichlorobenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	1 U
1,4-Dichlorobenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1.4 U	1 U	1 U	1 U	1.4 U	3 U
Acetone	1.9 U	3 U	3 U	3 U	1.9 U	6 U
Benzene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.5 U
Bromodichloromethane	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U	1 U
Bromoform	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U	1 U
Bromomethane	0.21 U	0.1 U	0.1 U	0.1 U	0.21 U	1 U
Carbon Disulfide	0.98 U	0.4 U	0.4 U	0.4 U	0.89 U	1 U
Carbon Tetrachloride	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U	0.5 U
Chlorobenzene	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U	0.8 U
Chloroethane	0.41 U	0.1 U	0.1 U	0.1 U	0.41 U	1 U
Chloroform	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.8 U
Chloromethane	0.3 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U
cis-1,2-Dichloroethene	0.15 U	0.1 U	0.1 U	0.1 U	0.15 U	14
cis-1,3-Dichloropropene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	1 U
Dibromochloromethane	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U	1 U
Ethylbenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.8 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1.8 U	1 U	1 U	1 U	1.8 U	3 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	3 U
Methylene chloride	0.32 U	0.2 U	0.2 U	0.2 U	0.32 U	2 U
m-Xylene & p-Xylene	0.34 U	0.1 U	0.1 U	0.1 U	0.34 U	0.8 U
o-Xylene	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U	0.8 U
Tetrachloroethene	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.8 U
Toluene	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U	0.7 U
trans-1,2-Dichloroethene	0.15 U	0.1 U	0.1 U	0.1 U	0.15 U	0.8 U
trans-1,3-Dichloropropene	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U	1 U
Trichloroethene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	270
Trichlorofluoromethane	0.29 U	0.1 U	0.1 U	0.1 U	0.29 U	0.5 U
Vinyl chloride	0.4 U	0.1 U	0.1 U	0.1 U	0.4 U	0.5 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-60**	**RD-61**	**RD-61**	**RD-61**	**RD-61**	**RD-62**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster
Collection Date:	08/03/2009	03/05/2009	05/05/2009	07/14/2009	10/22/2009	02/26/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.8 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,1,2,2-Tetrachloroethane	0.5 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	2 U	0.2 U	0.2 U	0.2 U	0.79 U	0.2 U
1,1,2-Trichloroethane	0.8 U	0.1 U	0.1 U	0.1 U	0.32 U	0.1 U
1,1-Dichloroethane	3 J	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,1-Dichloroethene	2 U	0.1 U	0.1 U	0.1 U	0.14 U	0.1 U
1,2-Dichlorobenzene	1 U	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U
1,2-Dichloroethane	3	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U
1,2-Dichloropropane	1 U	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U
1,3-Dichlorobenzene	1 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,4-Dichlorobenzene	1 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	3 U	1 U	1 U	1 U	1.4 U	1 U
Acetone	6 U	3 U	3 U	3 U	5.5 U	3 U
Benzene	0.5 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Bromodichloromethane	1 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
Bromoform	1 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Bromomethane	1 U	0.1 U	0.1 U	0.1 U	0.21 U	0.1 U
Carbon Disulfide	1 U	0.4 U	0.4 U	0.4 U	0.45 U	0.4 U
Carbon Tetrachloride	0.5 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Chlorobenzene	0.8 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
Chloroethane	1 U	0.1 U	0.1 U	0.1 U	0.41 U	0.1 U
Chloroform	0.8 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Chloromethane	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.2 U
cis-1,2-Dichloroethene	14	0.1 U	0.1 U	0.1 U	0.15 U	0.1 U
cis-1,3-Dichloropropene	1 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Dibromochloromethane	1 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
Ethylbenzene	0.8 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	3 U	1 U	1 U	1 U	1.8 U	1 U
Methyl isobutyl ketone (MIBK)	3 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	2 U	0.2 U	0.2 U	0.2 U	0.32 U	0.2 U
m-Xylene & p-Xylene	0.8 U	0.1 U	0.1 U	0.1 U	0.34 U	0.1 U
o-Xylene	0.8 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Tetrachloroethene	0.8 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U
Toluene	0.7 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
trans-1,2-Dichloroethene	0.8 U	0.1 U	0.1 U	0.1 U	0.15 U	0.1 U
trans-1,3-Dichloropropene	1 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Trichloroethene	280	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Trichlorofluoromethane	0.5 U	0.1 U	0.1 U	0.1 U	0.29 U	0.1 U
Vinyl chloride	0.5 U	0.1 U	0.1 U	0.1 U	0.4 U	0.1 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-62**	**RD-62**	**RD-62**	**RD-62**	**RD-63**	**RD-63**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Duplicate	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	Lancaster	TA-Denver	TA-Denver	Lancaster	Lancaster
Collection Date:	04/30/2009	07/22/2009	10/28/2009	10/28/2009	02/20/2009	07/31/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.1 U	0.16 U	0.16 U	0.8 U	0.8 U
1,1,2,2-Tetrachloroethane	0.1 U	0.1 U	0.2 U	0.2 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.79 U	0.79 U	2 U	2 U
1,1,2-Trichloroethane	0.1 U	0.1 U	0.32 U	0.32 U	0.8 U	0.8 U
1,1-Dichloroethane	0.1 U	0.1 U	0.16 U	0.16 U	1 U	1 U
1,1-Dichloroethene	0.1 U	0.1 U	0.14 U	0.14 U	1 J	1 U
1,2-Dichlorobenzene	0.1 U	0.1 U	0.13 U	0.13 U	1 U	1 U
1,2-Dichloroethane	0.1 U	0.1 U	0.13 U	0.13 U	0.5 U	0.5 U
1,2-Dichloropropane	0.1 U	0.1 U	0.13 U	0.13 U	1 U	1 U
1,3-Dichlorobenzene	0.1 U	0.1 U	0.16 U	0.16 U	1 U	1 U
1,4-Dichlorobenzene	0.1 U	0.1 U	0.16 U	0.16 U	1 U	1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	1 U	1.4 U	1.4 U	3 U	3 U
Acetone	3 U	3 U	1.9 U	1.9 U	6 U	6 U
Benzene	0.1 U	0.1 U	0.16 U	0.16 U	0.5 U	0.5 U
Bromodichloromethane	0.1 U	0.1 U	0.17 U	0.17 U	1 U	1 U
Bromoform	0.1 U	0.1 U	0.19 U	0.19 U	1 U	1 U
Bromomethane	0.1 U	0.1 U	0.21 U	0.21 U	1 U	1 U
Carbon Disulfide	0.4 U	0.4 U	0.45 U	0.45 U	1 U	1 U
Carbon Tetrachloride	0.1 U	0.1 U	0.19 U	0.19 U	0.5 U	0.5 U
Chlorobenzene	0.1 U	0.1 U	0.17 U	0.17 U	0.8 U	0.8 U
Chloroethane	0.1 U	0.1 U	0.41 U	0.41 U	1 U	1 U
Chloroform	0.1 U	0.1 U	0.16 U	0.16 U	0.8 U	0.8 U
Chloromethane	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U
cis-1,2-Dichloroethene	0.1 U	0.1 U	0.15 U	0.15 U	5 J	5 J
cis-1,3-Dichloropropene	0.1 U	0.1 U	0.16 U	0.16 U	1 U	1 U
Dibromochloromethane	0.1 U	0.1 U	0.17 U	0.17 U	1 U	1 U
Ethylbenzene	0.1 U	0.1 U	0.16 U	0.16 U	0.8 U	0.8 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1 U	1.8 U	1.8 U	3 U	3 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	3 U	3 U
Methylene chloride	0.2 U	0.2 U	0.32 U	0.32 U	2 U	2 U
m-Xylene & p-Xylene	0.1 U	0.1 U	0.34 U	0.34 U	0.8 U	0.8 U
o-Xylene	0.1 U	0.1 U	0.19 U	0.19 U	0.8 U	0.8 U
Tetrachloroethene	0.1 U	0.1 U	0.2 U	0.2 U	0.8 U	0.8 U
Toluene	0.1 U	0.1 U	0.17 U	0.17 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	0.1 U	0.1 U	0.15 U	0.15 U	0.8 U	0.8 U
trans-1,3-Dichloropropene	0.1 U	0.1 U	0.19 U	0.19 U	1 U	1 U
Trichloroethene	0.1 U	0.1 U	0.16 U	0.16 U	11	10
Trichlorofluoromethane	0.1 U	0.1 U	0.29 U	0.29 U	0.5 U	0.5 U
Vinyl chloride	0.1 U	0.1 U	0.4 U	0.4 U	0.5 U	0.5 U

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-64**	**RD-65**	**RD-66**	**RD-66**	**RD-66**	**RD-66**
Sample Port:	Z8	Z5				
Sample Type:	Primary	Primary	Primary	Split	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster	TA-Denver
Collection Date:	02/23/2009	02/23/2009	05/01/2009	05/01/2009	07/30/2009	10/16/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.8 U	0.8 U	0.1 U	0.16 U	0.1 U	0.16 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.1 U	0.2 U	0.1 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	2 U	2 U	0.2 U	0.79 U	0.2 U	0.79 U
1,1,2-Trichloroethane	0.8 U	0.8 U	0.1 U	0.32 U	0.1 U	0.32 U
1,1-Dichloroethane	1 U	4 J	0.1 U	0.16 U	0.1 U	0.16 U
1,1-Dichloroethene	3 J	23	0.1 U	0.14 U	0.1 U	0.14 U
1,2-Dichlorobenzene	1 U	1 U	0.1 U	0.13 U	0.1 U	0.13 U
1,2-Dichloroethane	0.5 U	0.5 U	0.1 U	0.13 U	0.1 U	0.13 U
1,2-Dichloropropane	1 U	1 U	0.1 U	0.13 U	0.1 U	0.13 U
1,3-Dichlorobenzene	1 U	1 U	0.1 U	0.16 U	0.1 U	0.16 U
1,4-Dichlorobenzene	1 U	1 U	0.1 U	0.16 U	0.1 U	0.16 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	3 U	3 U	1 U	1.4 U	1 U	1.4 U
Acetone	6 U	6 U	3 U	1.9 U	3 U	1.9 U
Benzene	0.5 U	0.5 U	0.1 U	0.16 U	0.1 U	0.16 U
Bromodichloromethane	1 U	1 U	0.1 U	0.17 U	0.1 U	0.17 U
Bromoform	1 U	1 U	0.1 U	0.19 U	0.1 U	0.19 U
Bromomethane	1 U	1 U	0.1 U	0.21 U	0.1 U	0.21 U
Carbon Disulfide	1 U	1 U	0.4 U	0.45 U	0.4 U	0.52 J
Carbon Tetrachloride	0.5 U	0.5 U	0.1 U	0.19 U	0.1 U	0.19 U
Chlorobenzene	0.8 U	0.8 U	0.1 U	0.17 U	0.1 U	0.17 U
Chloroethane	1 U	1 U	0.1 U	0.41 U	0.1 U	0.41 U
Chloroform	0.8 U	0.8 U	0.1 U	0.16 U	0.1 U	0.16 U
Chloromethane	1 U	1 U	0.2 U	0.3 U	0.2 U	0.3 U
cis-1,2-Dichloroethene	350	53	0.1 U	0.15 U	0.1 U	0.15 U
cis-1,3-Dichloropropene	1 U	1 U	0.1 U	0.16 U	0.1 U	0.16 U
Dibromochloromethane	1 U	1 U	0.1 U	0.17 U	0.1 U	0.17 U
Ethylbenzene	0.8 U	0.8 U	0.1 U	0.16 U	0.1 U	0.16 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	3 U	3 U	1 U	1.8 U	1 U	1.8 U
Methyl isobutyl ketone (MIBK)	3 U	3 U	1 U	1 U	1 U	1 U
Methylene chloride	2 U	2 U	0.2 U	0.95 U	0.2 U	0.32 U
m-Xylene & p-Xylene	0.8 U	0.8 U	0.1 U	0.34 U	0.1 U	0.34 U
o-Xylene	0.8 U	0.8 U	0.1 U	0.19 U	0.1 U	0.19 U
Tetrachloroethene	0.8 U	0.8 U	0.1 U	0.2 U	0.1 U	0.2 U
Toluene	0.7 U	0.7 U	0.1 U	0.17 U	0.1 U	0.17 U
trans-1,2-Dichloroethene	4 J	2 J	0.1 U	0.15 U	0.1 U	0.15 U
trans-1,3-Dichloropropene	1 U	1 U	0.1 U	0.19 U	0.1 U	0.19 U
Trichloroethene	110	110	0.1 U	0.16 U	0.1 U	0.16 U
Trichlorofluoromethane	0.5 U	0.5 U	0.1 U	0.29 U	0.1 U	0.29 U
Vinyl chloride	0.5 U	0.5 U	0.1 U	0.4 U	0.1 U	0.4 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-67**	**RD-67**	**RD-67**	**RD-67**	**RD-67**	**RD-67**
Sample Port:						
Sample Type:	Primary	Primary	Duplicate	Primary	Duplicate	Split
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	TA-Denver
Collection Date:	02/19/2009	05/01/2009	05/01/2009	07/27/2009	07/27/2009	07/27/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.16 U
1,1,2,2-Tetrachloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.79 U
1,1,2-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.32 U
1,1-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.16 U
1,1-Dichloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.14 U
1,2-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.13 U
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.13 U
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.13 U
1,3-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.16 U
1,4-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.16 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	1 U	1 U	1 U	1 U	1.4 U
Acetone	3 U	3 U	3 U	3 U	3 U	1.9 U
Benzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.16 U
Bromodichloromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.17 U
Bromoform	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.19 U
Bromomethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.21 U
Carbon Disulfide	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.45 U
Carbon Tetrachloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.19 U
Chlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.17 U
Chloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.41 U
Chloroform	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.16 U
Chloromethane	0.2 U	0.2 J	0.2 U	0.2 U	0.2 U	0.3 U
cis-1,2-Dichloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.15 U
cis-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.16 U
Dibromochloromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.17 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.16 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1 U	1 U	1 U	1 U	1.8 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.32 U
m-Xylene & p-Xylene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.34 U
o-Xylene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.19 U
Tetrachloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U
Toluene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.17 U
trans-1,2-Dichloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.15 U
trans-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.19 U
Trichloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.16 U
Trichlorofluoromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.29 U
Vinyl chloride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-67**	**RD-68A**	**RD-68A**	**RD-68A**	**RD-68A**	**RD-68A**
Sample Port:						
Sample Type:	Primary	Primary	Duplicate	Split	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TA-Denver	Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster
Collection Date:	10/22/2009	03/03/2009	03/03/2009	03/03/2009	05/12/2009	08/04/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.16 U	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.2 U	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.79 U	0.2 U	0.2 U	0.79 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.32 U	0.1 U	0.1 U	0.32 U	0.1 U	0.1 U
1,1-Dichloroethane	0.16 U	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U
1,1-Dichloroethene	0.14 U	0.1 U	0.1 U	0.14 U	0.1 U	0.1 U
1,2-Dichlorobenzene	0.13 U	0.1 U	0.1 U	0.13 U	0.1 U	0.1 U
1,2-Dichloroethane	0.13 U	0.1 U	0.1 U	0.13 U	0.1 U	0.1 U
1,2-Dichloropropane	0.13 U	0.1 U	0.1 U	0.13 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.16 U	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.16 U	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1.4 U	1 U	1 U	1.4 U	1 U	1 U
Acetone	1.9 U	3 U	3 U	1.9 U	3 U	3 U
Benzene	0.16 U	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U
Bromodichloromethane	0.17 U	0.1 U	0.1 U	0.17 U	0.1 U	0.1 U
Bromoform	0.19 U	0.1 U	0.1 U	0.19 U	0.1 U	0.1 U
Bromomethane	0.21 U	0.1 U	0.1 U	0.21 U	0.1 U	0.1 U
Carbon Disulfide	0.45 U	0.4 U	0.4 U	0.45 U	0.4 U	0.4 U
Carbon Tetrachloride	0.19 U	0.1 U	0.1 U	0.19 U	0.1 U	0.1 U
Chlorobenzene	0.17 U	0.1 U	0.1 U	0.17 U	0.1 U	0.1 U
Chloroethane	0.41 U	0.1 U	0.1 U	0.41 U	0.1 U	0.1 U
Chloroform	0.16 U	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U
Chloromethane	0.3 U	0.2 U	0.2 U	0.3 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	0.15 U	0.1 U	0.1 U	0.15 U	0.1 U	0.1 U
cis-1,3-Dichloropropene	0.16 U	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U
Dibromochloromethane	0.17 U	0.1 U	0.1 U	0.17 U	0.1 U	0.1 U
Ethylbenzene	0.16 U	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1.8 U	1 U	1 U	1.8 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	0.32 U	0.2 U	0.2 U	0.32 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.34 U	0.1 U	0.1 U	0.34 U	0.1 U	0.1 U
o-Xylene	0.19 U	0.1 U	0.1 U	0.19 U	0.1 U	0.1 U
Tetrachloroethene	0.2 U	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U
Toluene	0.17 U	0.1 U	0.1 U	0.17 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	0.15 U	0.1 U	0.1 U	0.15 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	0.19 U	0.1 U	0.1 U	0.19 U	0.1 U	0.1 U
Trichloroethene	0.16 U	0.1 U	0.1 U	0.16 U	0.1 U	0.1 U
Trichlorofluoromethane	0.29 U	0.1 U	0.1 U	0.29 U	0.1 U	0.1 U
Vinyl chloride	0.4 U	0.1 U	0.1 U	0.4 U	0.1 U	0.1 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-68A**	**RD-68B**	**RD-68B**	**RD-68B**	**RD-68B**	**RD-69**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TA-Denver	Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster
Collection Date:	11/04/2009	03/03/2009	05/12/2009	08/04/2009	11/04/2009	03/05/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,1,2,2-Tetrachloroethane	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.79 U	0.2 U	0.2 U	0.2 U	0.79 U	0.2 U
1,1,2-Trichloroethane	0.32 U	0.1 U	0.1 U	0.1 U	0.32 U	0.1 U
1,1-Dichloroethane	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,1-Dichloroethene	0.14 U	0.1 U	0.1 U	0.1 U	0.14 U	0.1 U
1,2-Dichlorobenzene	0.13 U	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U
1,2-Dichloroethane	0.13 U	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U
1,2-Dichloropropane	0.13 U	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U
1,3-Dichlorobenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,4-Dichlorobenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1.4 U	1 U	1 U	1 U	1.4 U	1 U
Acetone	1.9 U	3 U	3 U	3 U	1.9 U	3 U
Benzene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Bromodichloromethane	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
Bromoform	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Bromomethane	0.21 U	0.1 U	0.1 U	0.1 U	0.21 U	0.1 U
Carbon Disulfide	0.45 U	0.4 U	0.4 U	0.4 U	0.45 U	0.4 U
Carbon Tetrachloride	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Chlorobenzene	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
Chloroethane	0.41 U	0.1 U	0.1 U	0.1 U	0.41 U	0.1 U
Chloroform	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Chloromethane	0.3 U	0.2 U	0.2 U	0.2 U	0.3 U	0.2 U
cis-1,2-Dichloroethene	0.15 U	0.1 J	0.1 J	0.1 J	0.15 U	0.1 U
cis-1,3-Dichloropropene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Dibromochloromethane	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
Ethylbenzene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1.8 U	1 U	1 U	1 U	1.8 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	0.32 U	0.2 U	0.2 U	0.2 U	0.73 U	0.2 U
m-Xylene & p-Xylene	0.34 U	0.1 U	0.1 U	0.1 U	0.34 U	0.1 U
o-Xylene	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Tetrachloroethene	0.2 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U
Toluene	0.17 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
trans-1,2-Dichloroethene	0.15 U	0.1 U	0.1 U	0.1 U	0.15 U	0.1 U
trans-1,3-Dichloropropene	0.19 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Trichloroethene	0.16 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Trichlorofluoromethane	0.29 U	0.1 U	0.1 U	0.1 U	0.29 U	0.1 U
Vinyl chloride	0.4 U	0.1 U	0.1 U	0.1 U	0.4 U	0.1 U

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-69**	**RD-69**	**RD-70**	**RD-70**	**RD-70**	**RD-70**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Duplicate	Split	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	TA-Denver	Lancaster	Lancaster	TA-Denver	Lancaster
Collection Date:	07/24/2009	11/04/2009	02/13/2009	02/13/2009	02/13/2009	05/06/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.16 U	0.1 U	0.1 U	0.16 U	0.1 U
1,1,2,2-Tetrachloroethane	0.1 U	0.2 U	0.1 U	0.1 U	0.2 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.79 U	0.2 U	0.2 U	0.79 U	0.2 U
1,1,2-Trichloroethane	0.1 U	0.32 U	0.1 U	0.1 U	0.32 U	0.1 U
1,1-Dichloroethane	0.1 U	0.16 U	0.1 U	0.1 U	0.16 U	0.1 U
1,1-Dichloroethene	0.1 U	0.14 U	0.1 U	0.1 U	0.14 U	0.1 U
1,2-Dichlorobenzene	0.1 U	0.13 U	0.1 U	0.1 U	0.13 U	0.1 U
1,2-Dichloroethane	0.1 U	0.13 U	0.1 U	0.1 U	0.13 U	0.1 U
1,2-Dichloropropane	0.1 U	0.13 U	0.1 U	0.1 U	0.13 U	0.1 U
1,3-Dichlorobenzene	0.1 U	0.16 U	0.1 U	0.1 U	0.16 U	0.1 U
1,4-Dichlorobenzene	0.1 U	0.16 U	0.1 U	0.1 U	0.16 U	0.1 U
1,4-Dioxane	---	0.19 U	---	---	---	---
2-Hexanone	1 U	1.4 U	1 U	1 U	1.4 U	1 U
Acetone	3 U	1.9 R	3 U	3 U	1.9 U	3 U
Benzene	0.1 U	0.16 U	0.1 U	0.1 U	0.16 U	0.1 U
Bromodichloromethane	0.1 U	0.17 U	0.1 U	0.1 U	0.17 U	0.1 U
Bromoform	0.1 U	0.19 U	0.1 U	0.1 U	0.19 U	0.1 U
Bromomethane	0.1 U	0.21 U	0.1 U	0.1 U	0.21 U	0.1 U
Carbon Disulfide	0.4 U	0.45 U	0.4 U	0.4 U	0.45 U	0.4 U
Carbon Tetrachloride	0.1 U	0.19 U	0.1 U	0.1 U	0.19 U	0.1 U
Chlorobenzene	0.1 U	0.17 U	0.1 U	0.1 U	0.17 U	0.1 U
Chloroethane	0.1 U	0.41 U	0.1 U	0.1 U	0.41 U	0.1 U
Chloroform	0.1 U	0.16 U	0.1 U	0.1 U	0.16 U	0.1 U
Chloromethane	0.2 U	0.3 U	0.2 U	0.2 U	0.3 U	0.2 U
cis-1,2-Dichloroethene	0.1 U	0.15 U	0.1 U	0.1 U	0.15 U	0.1 U
cis-1,3-Dichloropropene	0.1 U	0.16 U	0.1 U	0.1 U	0.16 U	0.1 U
Dibromochloromethane	0.1 U	0.17 U	0.1 U	0.1 U	0.17 U	0.1 U
Ethylbenzene	0.1 U	0.16 U	0.1 U	0.1 U	0.16 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1.8 U	1 U	1 U	1.8 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	0.2 U	0.32 U	0.2 U	0.2 U	0.32 U	0.2 U
m-Xylene & p-Xylene	0.1 U	0.34 U	0.1 U	0.1 U	0.34 U	0.1 U
o-Xylene	0.1 U	0.19 U	0.1 U	0.1 U	0.19 U	0.1 U
Tetrachloroethene	0.1 U	0.2 U	0.1 U	0.1 U	0.2 U	0.1 U
Toluene	0.1 U	0.17 U	0.1 U	0.1 U	0.17 U	0.1 U
trans-1,2-Dichloroethene	0.1 U	0.15 U	0.1 U	0.1 U	0.15 U	0.1 U
trans-1,3-Dichloropropene	0.1 U	0.24 R	0.1 U	0.1 U	0.19 U	0.1 U
Trichloroethene	0.1 U	0.16 U	0.1 U	0.1 U	0.16 U	0.1 U
Trichlorofluoromethane	0.1 U	0.29 U	0.1 U	0.1 U	0.29 U	0.1 U
Vinyl chloride	0.1 U	0.4 U	0.2 J	0.1 J	0.4 U	0.1 J

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-70**	**RD-70**	**RD-71**	**RD-71**	**RD-71**	**RD-71**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Primary	Duplicate	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	TA-Denver	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:	07/29/2009	10/09/2009	02/26/2009	04/28/2009	04/28/2009	07/30/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.79 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.1 U	0.32 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethene	0.1 U	0.14 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichlorobenzene	0.1 U	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloroethane	0.1 U	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	0.1 U	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	1.4 U	1 U	1 U	1 U	1 U
Acetone	3 U	6 U	3 U	3 U	3 U	3 U
Benzene	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromodichloromethane	0.1 U	0.17 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromoform	0.1 U	0.19 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromomethane	0.1 U	0.21 U	0.1 U	0.1 U	0.1 U	0.1 U
Carbon Disulfide	0.4 U	0.45 U	0.4 U	0.4 U	0.4 U	0.4 U
Carbon Tetrachloride	0.1 U	0.19 U	0.1 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.17 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloroethane	0.1 U	0.41 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloroform	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U
Chloromethane	0.2 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	0.1 U	0.15 U	0.1 U	0.1 U	0.1 U	0.1 U
cis-1,3-Dichloropropene	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibromochloromethane	0.1 U	0.17 U	0.1 U	0.1 U	0.1 U	0.1 U
Ethylbenzene	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	1.8 U	1 U	1 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	0.2 U	0.32 U	0.2 U	0.2 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.1 U	0.34 U	0.1 U	0.1 U	0.1 U	0.1 U
o-Xylene	0.1 U	0.19 U	0.1 U	0.1 U	0.1 U	0.1 U
Tetrachloroethene	0.1 U	0.2 U	0.1 U	0.1 U	0.1 U	0.1 U
Toluene	0.1 U	0.17 U	0.1 U	0.1 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	0.1 U	0.15 U	0.1 U	0.1 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	0.1 U	0.19 U	0.1 U	0.1 U	0.1 U	0.1 U
Trichloroethene	0.1 U	0.16 U	0.1 U	0.1 U	0.1 U	0.1 U
Trichlorofluoromethane	0.1 U	0.29 U	0.1 U	0.1 U	0.1 U	0.1 U
Vinyl chloride	0.1 J	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-71**	**RD-73**	**RD-85**	**RD-86**	**RD-86**	**RD-91**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Primary	Split	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TA-Denver	Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster
Collection Date:	10/16/2009	02/26/2009	03/10/2009	03/02/2009	03/02/2009	03/05/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.16 U	16 U	0.1 U	0.1 U	---	0.8 U
1,1,2,2-Tetrachloroethane	0.2 U	10 U	0.1 U	0.1 U	---	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.79 U	40 U	0.2 U	0.2 U	---	2 U
1,1,2-Trichloroethane	0.32 U	16 U	0.1 U	0.1 U	---	0.8 U
1,1-Dichloroethane	0.16 U	20 U	0.1 U	0.1 U	---	1 U
1,1-Dichloroethene	0.14 U	320	0.1 U	0.1 U	---	0.8 U
1,2-Dichlorobenzene	0.13 U	20 U	0.1 U	0.1 U	---	1 U
1,2-Dichloroethane	0.13 U	10 U	0.1 U	0.1 U	---	0.5 U
1,2-Dichloropropane	0.13 U	20 U	0.1 U	0.1 U	---	1 U
1,3-Dichlorobenzene	0.16 U	20 U	0.1 U	0.1 U	---	1 U
1,4-Dichlorobenzene	0.16 U	20 U	0.1 U	0.1 U	---	1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1.4 U	60 U	1 U	1 U	---	3 U
Acetone	1.9 U	120 U	3 U	3 U	---	6 U
Benzene	0.16 U	18 J	0.1 U	0.1 U	---	0.5 U
Bromodichloromethane	0.17 U	20 U	0.1 U	0.1 U	---	1 U
Bromoform	0.19 U	20 U	0.1 U	0.1 U	---	1 U
Bromomethane	0.21 U	20 U	0.1 U	0.1 U	---	1 U
Carbon Disulfide	0.54 J	20 U	0.4 U	0.4 U	---	1 U
Carbon Tetrachloride	0.19 U	10 U	0.1 U	0.1 U	---	0.5 U
Chlorobenzene	0.17 U	16 U	0.1 U	0.1 U	---	0.8 U
Chloroethane	0.41 U	20 U	0.1 U	0.1 U	---	1 U
Chloroform	0.16 U	16 U	0.1 U	0.1 U	---	0.8 U
Chloromethane	0.3 U	20 U	0.2 U	0.2 U	---	1 U
cis-1,2-Dichloroethene	0.15 U	360	0.1 U	0.1 U	---	32
cis-1,3-Dichloropropene	0.16 U	20 U	0.1 U	0.1 U	---	1 U
Dibromochloromethane	0.17 U	20 U	0.1 U	0.1 U	---	1 U
Ethylbenzene	0.16 U	16 U	0.1 U	0.1 U	---	0.8 U
Isopropanol	---	---	50 U	50 U	13 U	---
Methyl ethyl ketone	1.8 U	60 U	1 U	1 U	---	3 U
Methyl isobutyl ketone (MIBK)	1 U	60 U	1 U	1 U	---	3 U
Methylene chloride	0.32 U	40 U	0.2 U	0.2 U	---	2 U
m-Xylene & p-Xylene	0.34 U	16 U	0.1 U	0.1 U	---	0.8 U
o-Xylene	0.19 U	16 U	0.1 U	0.1 U	---	0.8 U
Tetrachloroethene	0.2 U	16 U	0.1 U	0.1 U	---	0.8 U
Toluene	0.17 U	14 U	0.1 U	0.1 U	---	0.7 U
trans-1,2-Dichloroethene	0.15 U	16 U	0.1 U	0.1 U	---	0.8 U
trans-1,3-Dichloropropene	0.19 U	20 U	0.1 U	0.1 U	---	1 U
Trichloroethene	0.16 U	9500	0.1 U	0.1 U	---	260
Trichlorofluoromethane	0.29 U	10 U	0.1 U	0.1 U	---	0.5 U
Vinyl chloride	0.4 U	10 U	0.1 U	0.1 U	---	0.5 U

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RD-91**	**RD-91**	**RD-91**	**RD-91**	**RD-98**	**RD-98**
Sample Port:						
Sample Type:	Split	Primary	Duplicate	Split	Primary	Duplicate
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TA-Denver	Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster
Collection Date:	03/05/2009	05/05/2009	05/05/2009	05/05/2009	02/20/2009	02/20/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.16 U	0.8 U	0.8 U	0.16 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.2 U	0.5 U	0.5 U	0.2 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.79 U	2 U	2 U	0.79 U	1.7	1.7
1,1,2-Trichloroethane	0.32 U	0.8 U	0.8 U	0.32 U	0.1 U	0.1 U
1,1-Dichloroethane	0.16 U	1 U	1 U	0.16 U	0.1 U	0.1 U
1,1-Dichloroethene	0.14 U	0.8 U	0.8 U	0.14 U	0.1 U	0.1 U
1,2-Dichlorobenzene	0.13 U	1 U	1 U	0.13 U	0.1 U	0.1 U
1,2-Dichloroethane	0.13 U	0.5 U	0.5 U	0.13 U	0.1 U	0.1 U
1,2-Dichloropropane	0.13 U	1 U	1 U	0.13 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.16 U	1 U	1 U	0.16 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.16 U	1 U	1 U	0.16 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1.4 U	3 U	3 U	1.4 U	1 U	1 U
Acetone	1.9 U	6 U	6 U	1.9 U	3 U	3 U
Benzene	0.16 U	0.5 U	0.5 U	0.16 U	0.1 U	0.1 U
Bromodichloromethane	0.17 U	1 U	1 U	0.17 U	0.1 U	0.1 U
Bromoform	0.19 U	1 U	1 U	0.19 U	0.1 U	0.1 U
Bromomethane	0.21 U	1 U	1 U	0.21 U	0.1 U	0.1 U
Carbon Disulfide	0.45 U	1 U	1 U	0.45 U	0.4 U	0.4 U
Carbon Tetrachloride	0.19 U	0.5 U	0.5 U	0.19 U	0.1 U	0.1 U
Chlorobenzene	0.17 U	0.8 U	0.8 U	0.17 U	0.1 U	0.1 U
Chloroethane	0.41 U	1 U	1 U	0.41 U	0.1 U	0.1 U
Chloroform	0.26 J	0.8 U	0.8 U	0.35 J	0.1 J	0.1 J
Chloromethane	0.3 U	1 U	1 U	0.3 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	28	34	34	36	0.1 U	0.1 U
cis-1,3-Dichloropropene	0.16 U	1 U	1 U	0.16 U	0.1 U	0.1 U
Dibromochloromethane	0.17 U	1 U	1 U	0.17 U	0.1 U	0.1 U
Ethylbenzene	0.16 U	0.8 U	0.8 U	0.16 U	0.1 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1.8 U	3 U	3 U	1.8 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	3 U	3 U	1 U	1 U	1 U
Methylene chloride	0.32 U	2 U	2 U	0.94 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.34 U	0.8 U	0.8 U	0.34 U	0.1 U	0.1 U
o-Xylene	0.19 U	0.8 U	0.8 U	0.19 U	0.1 U	0.1 U
Tetrachloroethene	0.2 U	0.8 U	0.8 U	0.2 U	0.5	0.5
Toluene	0.17 U	0.7 U	0.7 U	0.17 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	0.33 J	0.8 U	0.8 U	0.96 J	0.1 U	0.1 U
trans-1,3-Dichloropropene	0.19 U	1 U	1 U	0.19 U	0.1 U	0.1 U
Trichloroethene	260	270	270	280	10	10
Trichlorofluoromethane	0.29 U	0.5 U	0.5 U	0.29 U	0.1 U	0.1 U
Vinyl chloride	0.4 U	0.5 U	0.5 U	0.4 U	0.1 U	0.1 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**RS-18**	**WS-04A**	**WS-04A**	**WS-04A**	**WS-04A**	**WS-05**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Duplicate	Split	Primary
Geological Unit:	Shallow	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster
Collection Date:	03/04/2009	02/25/2009	07/21/2009	07/21/2009	07/21/2009	02/10/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.8 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,1,2,2-Tetrachloroethane	0.5 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	2 U	0.2 U	0.2 U	0.2 U	0.79 U	0.2 U
1,1,2-Trichloroethane	0.8 U	0.1 U	0.1 U	0.1 U	0.32 U	0.1 U
1,1-Dichloroethane	1 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,1-Dichloroethene	0.8 U	0.1 U	0.1 U	0.1 U	0.14 U	0.1 U
1,2-Dichlorobenzene	1 U	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U
1,2-Dichloroethane	0.5 U	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U
1,2-Dichloropropane	1 U	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U
1,3-Dichlorobenzene	1 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,4-Dichlorobenzene	1 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
1,4-Dioxane	---	---	---	---	---	1.9 J
2-Hexanone	3 U	1 U	1 U	1 U	1.4 U	1 U
Acetone	6 U	3 U	3 U	3 U	1.9 U	3 U
Benzene	0.5 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Bromodichloromethane	1 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
Bromoform	1 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Bromomethane	1 U	0.1 U	0.1 U	0.1 U	0.21 U	0.1 U
Carbon Disulfide	1 U	0.4 U	0.4 U	0.4 U	0.45 U	0.4 U
Carbon Tetrachloride	0.5 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Chlorobenzene	0.8 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
Chloroethane	1 U	0.1 U	0.1 U	0.1 U	0.41 U	0.1 U
Chloroform	0.8 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Chloromethane	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.4 J
cis-1,2-Dichloroethene	0.8 U	0.1 U	0.1 U	0.1 U	0.15 U	1.8
cis-1,3-Dichloropropene	1 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Dibromochloromethane	1 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
Ethylbenzene	0.8 U	0.1 U	0.1 U	0.1 U	0.16 U	0.1 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	3 U	1 U	1 U	1 U	1.8 U	1 U
Methyl isobutyl ketone (MIBK)	3 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride	2 U	0.2 U	0.2 U	0.2 U	0.32 U	0.2 U
m-Xylene & p-Xylene	0.8 U	0.1 U	0.1 U	0.1 U	0.34 U	0.1 U
o-Xylene	0.8 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Tetrachloroethene	0.8 U	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U
Toluene	0.7 U	0.1 U	0.1 U	0.1 U	0.17 U	0.1 U
trans-1,2-Dichloroethene	0.8 U	0.1 U	0.1 U	0.1 U	0.15 U	0.2 J
trans-1,3-Dichloropropene	1 U	0.1 U	0.1 U	0.1 U	0.19 U	0.1 U
Trichloroethene	2	0.1 J	0.1 U	0.1 U	0.16 U	0.6
Trichlorofluoromethane	0.5 U	0.1 U	0.1 U	0.1 U	0.29 U	0.1 U
Vinyl chloride	0.5 U	0.1 U	0.1 U	0.1 U	0.4 U	0.1 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**WS-05**	**WS-05**	**WS-05**	**WS-05**	**WS-05**	**WS-06**
Sample Port:						
Sample Type:	Split	Primary	Primary	Duplicate	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TA-Denver	Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster
Collection Date:	02/10/2009	05/06/2009	07/29/2009	07/29/2009	10/15/2009	02/26/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	---	0.1 U	0.1 U	---	0.16 U	0.8 U
1,1,2,2-Tetrachloroethane	---	0.1 U	0.1 U	---	0.2 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	---	0.2 U	0.2 U	---	0.79 U	2 U
1,1,2-Trichloroethane	---	0.1 U	0.1 U	---	0.32 U	0.8 U
1,1-Dichloroethane	---	0.1 U	0.1 U	---	0.16 U	1 U
1,1-Dichloroethene	---	0.1 U	0.1 U	---	0.14 U	0.8 U
1,2-Dichlorobenzene	---	0.1 U	0.1 U	---	0.13 U	1 U
1,2-Dichloroethane	---	0.1 U	0.1 U	---	0.13 U	0.5 U
1,2-Dichloropropane	---	0.1 U	0.1 U	---	0.13 U	1 U
1,3-Dichlorobenzene	---	0.1 U	0.1 U	---	0.16 U	1 U
1,4-Dichlorobenzene	---	0.1 U	0.1 U	---	0.16 U	1 U
1,4-Dioxane	2.7	1.9 J	2.2	2.5	2.1 J	1.2 J
2-Hexanone	---	1 U	1 U	---	1.4 U	3 U
Acetone	---	3 U	3 U	---	1.9 U	6 U
Benzene	---	0.1 U	0.1 U	---	0.16 U	0.5 U
Bromodichloromethane	---	0.1 U	0.1 U	---	0.17 U	1 U
Bromoform	---	0.1 U	0.1 U	---	0.19 U	1 U
Bromomethane	---	0.1 U	0.1 U	---	0.21 U	1 U
Carbon Disulfide	---	0.4 U	0.4 U	---	0.45 U	1 U
Carbon Tetrachloride	---	0.1 U	0.1 U	---	0.19 U	0.5 U
Chlorobenzene	---	0.1 U	0.1 U	---	0.17 U	0.8 U
Chloroethane	---	0.1 U	0.1 U	---	0.41 U	1 U
Chloroform	---	0.1 U	0.1 U	---	0.16 U	0.8 U
Chloromethane	---	0.2 U	0.2 U	---	0.3 U	1 U
cis-1,2-Dichloroethene	---	1.7	1.7	---	1.9 U	150
cis-1,3-Dichloropropene	---	0.1 U	0.1 U	---	0.16 U	1 U
Dibromochloromethane	---	0.1 U	0.1 U	---	0.17 U	1 U
Ethylbenzene	---	0.1 U	0.1 U	---	0.16 U	0.8 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	---	1 U	1 U	---	1.8 U	3 U
Methyl isobutyl ketone (MIBK)	---	1 U	1 U	---	1 U	3 U
Methylene chloride	---	0.2 U	0.2 U	---	0.32 U	2 U
m-Xylene & p-Xylene	---	0.1 U	0.1 U	---	0.34 U	0.8 U
o-Xylene	---	0.1 U	0.1 U	---	0.19 U	0.8 U
Tetrachloroethene	---	0.1 U	0.1 U	---	0.2 U	0.8 U
Toluene	---	0.1 U	0.1 U	---	0.17 U	0.7 U
trans-1,2-Dichloroethene	---	0.1 J	0.1 J	---	0.15 U	11
trans-1,3-Dichloropropene	---	0.1 U	0.1 U	---	0.19 U	1 U
Trichloroethene	---	0.6	0.6	---	1.1 U	6
Trichlorofluoromethane	---	0.1 U	0.1 U	---	0.29 U	0.5 U
Vinyl chloride	---	0.1 U	0.1 U	---	0.4 U	5

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**WS-06**	**WS-06**	**WS-06**	**WS-09**	**WS-09**	**WS-09**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Primary	Primary	Duplicate
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster	Lancaster
Collection Date:	05/06/2009	07/29/2009	10/29/2009	02/10/2009	05/05/2009	05/05/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	0.1 U	0.8 U	0.16 U	0.8 R	10 U	10 U
1,1,2,2-Tetrachloroethane	0.1 U	0.5 U	0.2 U	0.5 U	10 U	10 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	2 U	0.79 U	2 U	20 U	20 U
1,1,2-Trichloroethane	0.1 U	0.8 U	0.32 U	0.8 U	10 U	10 U
1,1-Dichloroethane	0.1 U	1 U	0.16 U	1 U	10 U	10 U
1,1-Dichloroethene	0.3 J	0.8 U	0.35 J	11	11 J	10 J
1,2-Dichlorobenzene	0.1 U	1 U	0.13 U	1 U	10 U	10 U
1,2-Dichloroethane	0.1 U	0.5 U	0.13 U	0.5 U	10 U	10 U
1,2-Dichloropropane	0.1 U	1 U	0.13 U	1 U	10 U	10 U
1,3-Dichlorobenzene	0.1 U	1 U	0.16 U	1 U	10 U	10 U
1,4-Dichlorobenzene	0.1 U	1 U	0.16 U	1 U	10 U	10 U
1,4-Dioxane	1 J	0.8 J	0.95 J	4.2 J	3.6	4.1
2-Hexanone	1 U	3 U	1.4 U	3 U	100 U	100 U
Acetone	3 U	6 U	1.9 U	6 U	300 U	300 U
Benzene	0.1 U	0.5 U	0.16 U	0.5 U	10 U	10 U
Bromodichloromethane	0.1 U	1 U	0.17 U	1 U	10 U	10 U
Bromoform	0.1 U	1 U	0.19 U	1 U	10 U	10 U
Bromomethane	0.1 U	1 U	0.21 U	1 U	10 U	10 U
Carbon Disulfide	0.4 U	1 U	0.7 J	1 U	40 U	40 U
Carbon Tetrachloride	0.1 U	0.5 U	0.19 U	0.5 U	10 U	10 U
Chlorobenzene	0.1 U	0.8 U	0.17 U	0.8 U	10 U	10 U
Chloroethane	0.1 U	1 U	0.41 U	1 U	10 U	10 U
Chloroform	0.1 U	0.8 U	0.16 U	0.8 U	10 U	10 U
Chloromethane	0.2 U	1 U	0.3 U	1 U	20 U	20 U
cis-1,2-Dichloroethene	120	170	150	840	850	830
cis-1,3-Dichloropropene	0.1 U	1 U	0.16 U	1 U	10 U	10 U
Dibromochloromethane	0.1 U	1 U	0.17 U	1 U	10 U	10 U
Ethylbenzene	0.1 U	0.8 U	0.16 U	0.8 U	10 U	10 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	1 U	3 U	1.8 U	3 U	100 U	100 U
Methyl isobutyl ketone (MIBK)	1 U	3 U	1 U	3 U	100 U	100 U
Methylene chloride	0.2 U	2 U	0.32 U	2 U	20 U	20 U
m-Xylene & p-Xylene	0.1 U	0.8 U	0.34 U	0.8 U	10 U	10 U
o-Xylene	0.1 U	0.8 U	0.19 U	0.8 U	10 U	10 U
Tetrachloroethene	0.1 U	0.8 U	0.2 U	0.9 J	10 U	10 U
Toluene	0.1 U	0.7 U	0.17 U	0.7 U	10 U	10 U
trans-1,2-Dichloroethene	9.1	12	8.9	28	21 J	20 J
trans-1,3-Dichloropropene	0.1 U	1 U	0.19 U	1 U	10 U	10 U
Trichloroethene	6.9	5	6.3	16000	12000	16000
Trichlorofluoromethane	0.1 U	0.5 U	0.29 U	0.5 U	10 U	10 U
Vinyl chloride	5.6	5	4.8	0.9 J	10 U	10 U

See Table III for notes and abbreviations.

TABLE VII

SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**WS-09**	**WS-09**	**WS-09A**	**WS-09A**	**WS-09A**	**WS-09A**
Sample Port:						
Sample Type:	Primary	Primary	Primary	Duplicate	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	Lancaster	TA-Denver	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:	07/23/2009	10/20/2009	02/12/2009	02/12/2009	05/04/2009	07/22/2009
Analyte (ug/L)						
1,1,1-Trichloroethane	8 U	8 U	0.8 R	---	0.1 U	0.8 U
1,1,2,2-Tetrachloroethane	5 U	10 U	0.5 U	---	0.1 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	20 U	40 U	2 U	---	0.2 U	2 U
1,1,2-Trichloroethane	8 U	16 U	0.8 U	---	0.1 U	0.8 U
1,1-Dichloroethane	10 U	8 U	1 U	---	0.1 U	1 U
1,1-Dichloroethene	8 J	7 U	0.8 U	---	0.1 U	0.8 U
1,2-Dichlorobenzene	10 U	6.5 U	1 U	---	0.1 U	1 U
1,2-Dichloroethane	5 U	6.5 U	0.5 U	---	0.1 U	0.5 U
1,2-Dichloropropane	10 U	6.5 U	1 U	---	0.1 U	1 U
1,3-Dichlorobenzene	10 U	8 U	1 U	---	0.1 U	1 U
1,4-Dichlorobenzene	10 U	8 U	1 U	---	0.1 U	1 U
1,4-Dioxane	4.2 J	65 UJ	0.5 U	0.5 U	0.5 U	0.5 U
2-Hexanone	30 U	70 U	3 U	---	1 U	3 U
Acetone	60 U	95 U	6 U	---	3 U	6 U
Benzene	5 U	8 U	0.5 U	---	0.1 U	0.5 U
Bromodichloromethane	10 U	8.5 U	1 U	---	0.1 U	1 U
Bromoform	10 U	9.5 U	1 U	---	0.1 U	1 U
Bromomethane	10 U	10 U	1 U	---	0.1 U	1 U
Carbon Disulfide	10 U	22 U	1 U	---	0.4 U	1 U
Carbon Tetrachloride	5 U	9.5 U	0.5 U	---	0.1 U	0.5 U
Chlorobenzene	8 U	8.5 U	0.8 U	---	0.1 U	0.8 U
Chloroethane	10 U	20 U	1 U	---	0.1 U	1 U
Chloroform	8 U	8 U	0.8 U	---	0.1 U	0.8 U
Chloromethane	10 U	15 U	1 U	---	0.2 U	1 U
cis-1,2-Dichloroethene	900	870	33	---	13	14
cis-1,3-Dichloropropene	10 U	8 U	1 U	---	0.1 U	1 U
Dibromochloromethane	10 U	8.5 U	1 U	---	0.1 U	1 U
Ethylbenzene	8 U	8 U	0.8 U	---	0.1 U	0.8 U
Isopropanol	---	---	---	---	---	---
Methyl ethyl ketone	30 U	92 U	3 U	---	1 U	3 U
Methyl isobutyl ketone (MIBK)	30 U	52 U	3 U	---	1 U	3 U
Methylene chloride	20 U	16 U	2 U	---	0.2 U	2 U
m-Xylene & p-Xylene	8 U	17 U	0.8 U	---	0.1 U	0.8 U
o-Xylene	8 U	9.5 U	0.8 U	---	0.1 U	0.8 U
Tetrachloroethene	8 U	10 U	0.8 U	---	0.1 U	0.8 U
Toluene	7 U	8.5 U	0.7 U	---	0.1 U	0.7 U
trans-1,2-Dichloroethene	19 J	14 J	2 J	---	0.9	1 J
trans-1,3-Dichloropropene	10 U	9.5 U	1 U	---	0.1 U	1 U
Trichloroethene	16000	16000	5	---	3.8	2
Trichlorofluoromethane	5 U	14 U	0.5 U	---	0.1 U	0.5 U
Vinyl chloride	5 U	20 U	0.5 U	---	0.1 U	0.5 U

See Table III for notes and abbreviations.

TABLE VII
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:	**WS-09A**	**WS-09A**
Sample Port:		
Sample Type:	Primary	Duplicate
Geological Unit:	Chatsworth	Chatsworth
Lab Name:	TA-Denver	TA-Denver
Collection Date:	10/14/2009	10/14/2009
Analyte (ug/L)		
1,1,1-Trichloroethane	0.16 U	---
1,1,2,2-Tetrachloroethane	0.2 U	---
1,1,2-Trichloro-1,2,2-trifluoroethane	0.79 U	---
1,1,2-Trichloroethane	0.32 U	---
1,1-Dichloroethane	0.16 U	---
1,1-Dichloroethene	1.3	---
1,2-Dichlorobenzene	0.13 U	---
1,2-Dichloroethane	0.13 U	---
1,2-Dichloropropane	0.13 U	---
1,3-Dichlorobenzene	0.16 U	---
1,4-Dichlorobenzene	0.16 U	---
1,4-Dioxane	0.65 U	0.65 U
2-Hexanone	1.4 U	---
Acetone	1.9 U	---
Benzene	0.16 U	---
Bromodichloromethane	0.17 U	---
Bromoform	0.19 U	---
Bromomethane	0.21 U	---
Carbon Disulfide	0.45 U	---
Carbon Tetrachloride	0.19 U	---
Chlorobenzene	0.17 U	---
Chloroethane	0.41 U	---
Chloroform	0.16 U	---
Chloromethane	0.3 U	---
cis-1,2-Dichloroethene	300	---
cis-1,3-Dichloropropene	0.16 U	---
Dibromochloromethane	0.17 U	---
Ethylbenzene	0.16 U	---
Isopropanol	---	---
Methyl ethyl ketone	1.8 U	---
Methyl isobutyl ketone (MIBK)	1 U	---
Methylene chloride	0.32 U	---
m-Xylene & p-Xylene	0.34 U	---
o-Xylene	0.19 U	---
Tetrachloroethene	0.2 U	---
Toluene	0.17 U	---
trans-1,2-Dichloroethene	12	---
trans-1,3-Dichloropropene	0.19 U	---
Trichloroethene	350	---
Trichlorofluoromethane	0.29 U	---
Vinyl chloride	1.8	---

See Table III for notes and abbreviations.

TABLE VIII
SUMMARY OF ANALYSES FOR FUEL HYDROCARBONS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:		**PZ-050**	**PZ-058**	**PZ-071**	**PZ-071**	**PZ-071**	**PZ-071**	**PZ-076**	**PZ-091**
Sample Port:									
Sample Type:		Primary	Primary	Primary	Primary	Duplicate	Split	Primary	Primary
Geological Unit:		Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:		Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	TA-Denver	TA-Denver	TA-Denver
Collection Date:		02/10/2009	05/04/2009	05/07/2009	07/16/2009	07/16/2009	07/16/2009	11/02/2009	10/09/2009
Analyte	Units								
Diesel Range Organics (C12-C14)	mg/L	0.099 U	0.097 U	0.095 U	0.095 U	0.096 U	0.03 U	0.03 U	0.031 U
Diesel Range Organics (C15-C20)	mg/L	0.099 U	0.097 U	0.11 J	0.12 J	0.096 U	0.03 U	0.03 U	0.093 U
Diesel Range Organics (C21-C30)	mg/L	0.099 U	0.097 U	0.095 U	0.095 U	0.096 U	0.03 U	0.03 U	0.11 U
Diesel Range Organics (C8-C11)	mg/L	0.099 U	0.097 U	0.095 U	0.095 U	0.096 U	0.03 U	0.03 U	0.031 U
Diesel Range Organics (C8-C30)	mg/L	0.099 U	0.097 U	0.19 J	0.2 J	0.15 J	---	---	---
Gasoline Range Organics (C6-C12)	ug/L	---	---	---	---	---	---	---	---

TABLE VIII
SUMMARY OF ANALYSES FOR FUEL HYDROCARBONS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:		**PZ-105**	**PZ-105**	**PZ-105**	**PZ-105**	**PZ-105**	**PZ-105**	**PZ-122**	**PZ-122**
Sample Port:									
Sample Type:		Primary	Primary	Duplicate	Primary	Split	Primary	Primary	Primary
Geological Unit:		Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:		Lancaster	Lancaster	Lancaster	Lancaster	TA-Denver	TA-Denver	Lancaster	Lancaster
Collection Date:		02/11/2009	04/29/2009	04/29/2009	07/10/2009	07/10/2009	10/12/2009	02/19/2009	05/05/2009
Analyte	Units								
Diesel Range Organics (C12-C14)	mg/L	0.095 U	0.099 U	0.095 U	0.095 U	0.03 U	0.03 U	0.099 U	0.096 U
Diesel Range Organics (C15-C20)	mg/L	0.095 U	0.099 U	0.095 U	0.095 U	0.03 U	0.13 U	0.099 U	0.096 U
Diesel Range Organics (C21-C30)	mg/L	0.095 U	0.099 U	0.095 U	0.095 U	0.03 U	0.088 U	0.099 U	0.096 U
Diesel Range Organics (C8-C11)	mg/L	0.095 U	0.099 U	0.095 U	0.095 U	0.041 U	0.03 U	0.099 U	0.096 U
Diesel Range Organics (C8-C30)	mg/L	0.095 U	0.099 U	0.095 U	0.095 U	---	---	0.099 U	0.096 U
Gasoline Range Organics (C6-C12)	ug/L	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.

TABLE VIII
SUMMARY OF ANALYSES FOR FUEL HYDROCARBONS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:		**PZ-122**	**PZ-122**	**PZ-139**	**PZ-140**	**PZ-141**	**RD-03**	**RD-03**	**RD-03**
Sample Port:									
Sample Type:		Primary	Primary	Primary	Primary	Primary	Primary	Duplicate	Split
Geological Unit:		Shallow	Shallow	Shallow	Shallow	Shallow	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	TA-Denver	TA-Denver	TA-Denver	TA-Denver	TA-Denver	TA-Irvine
Collection Date:		07/14/2009	10/13/2009	10/15/2009	10/20/2009	11/03/2009	10/27/2009	10/27/2009	10/27/2009
Analyte	Units								
Diesel Range Organics (C12-C14)	mg/L	0.098 U	0.031 U	0.031 U	0.03 U	0.03 U	0.031 U	0.032 U	0.1 U
Diesel Range Organics (C15-C20)	mg/L	0.098 U	0.031 U	0.031 U	0.03 U	0.03 U	0.031 U	0.032 U	0.1 U
Diesel Range Organics (C21-C30)	mg/L	0.098 U	0.031 U	0.044 U	0.03 U	0.03 U	0.031 U	0.032 U	0.1 U
Diesel Range Organics (C8-C11)	mg/L	0.098 U	0.031 U	0.031 U	0.03 U	0.03 U	0.031 U	0.032 U	0.1 U
Diesel Range Organics (C8-C30)	mg/L	0.098 U	---	---	---	---	---	---	---
Gasoline Range Organics (C6-C12)	ug/L	---	---	85	56	29 U	---	---	---

See Table III for notes and abbreviations.

TABLE VIII
SUMMARY OF ANALYSES FOR FUEL HYDROCARBONS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:		**RD-21**	**RD-21**	**RD-21**	**RD-21**	**RD-32**	**RD-32**	**RD-36B**	**RD-36B**
Sample Port:		Z4	Z2	Z2	Z2				
Sample Type:		Primary	Primary	Duplicate	Split	Primary	Primary	Primary	Duplicate
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:		02/24/2009	04/29/2009	04/29/2009	04/29/2009	02/18/2009	07/29/2009	02/18/2009	02/18/2009
Analyte	Units								
Diesel Range Organics (C12-C14)	mg/L	9.5 U	9.5 U	4.8 U	0.031 U	---	---	---	---
Diesel Range Organics (C15-C20)	mg/L	18 J	13 J	4.9 J	3.4	---	---	---	---
Diesel Range Organics (C21-C30)	mg/L	9.5 U	9.5 U	4.8 U	0.031 U	---	---	---	---
Diesel Range Organics (C8-C11)	mg/L	9.5 U	9.5 U	4.8 U	0.031 U	---	---	---	---
Diesel Range Organics (C8-C30)	mg/L	18 J	13 J	4.9 J	---	---	---	---	---
Gasoline Range Organics (C6-C12)	ug/L	---	---	---	---	50 U	50 U	50 J	50 U

See Table III for notes and abbreviations.

TABLE VIII
SUMMARY OF ANALYSES FOR FUEL HYDROCARBONS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:		**RD-36B**	**RD-36C**	**RD-36C**	**RD-36C**	**RD-36C**	**RD-36D**	**RD-36D**	**RD-37**
Sample Port:									
Sample Type:		Primary	Primary	Split	Primary	Duplicate	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:		07/30/2009	02/23/2009	02/23/2009	08/03/2009	08/03/2009	02/18/2009	07/30/2009	02/19/2009
Analyte	Units								
Diesel Range Organics (C12-C14)	mg/L	---	---	---	---	---	---	---	---
Diesel Range Organics (C15-C20)	mg/L	---	---	---	---	---	---	---	---
Diesel Range Organics (C21-C30)	mg/L	---	---	---	---	---	---	---	---
Diesel Range Organics (C8-C11)	mg/L	---	---	---	---	---	---	---	---
Diesel Range Organics (C8-C30)	mg/L	---	---	---	---	---	---	---	---
Gasoline Range Organics (C6-C12)	ug/L	50 U	50 U	75	50 J	50 U	50 U	50 U	50 U

See Table III for notes and abbreviations.

TABLE VIII
SUMMARY OF ANALYSES FOR FUEL HYDROCARBONS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:		**RD-37**	**RD-37**	**RD-38B**	**RD-38B**	**RD-44**	**RD-46B**	**RD-48B**	**RD-48C**
Sample Port:									
Sample Type:		Duplicate	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	Lancaster	Lancaster	Lancaster	TA-Denver	TA-Denver	TA-Denver	TA-Denver
Collection Date:		02/19/2009	07/13/2009	02/27/2009	08/03/2009	10/28/2009	10/22/2009	11/03/2009	10/28/2009
Analyte	Units								
Diesel Range Organics (C12-C14)	mg/L	---	---	---	---	0.03 U	0.032 U	0.03 U	0.031 U
Diesel Range Organics (C15-C20)	mg/L	---	---	---	---	0.03 U	0.032 U	0.03 U	0.031 U
Diesel Range Organics (C21-C30)	mg/L	---	---	---	---	0.03 U	0.032 U	0.03 U	0.031 U
Diesel Range Organics (C8-C11)	mg/L	---	---	---	---	0.03 U	0.032 U	0.03 U	0.031 U
Diesel Range Organics (C8-C30)	mg/L	---	---	---	---	---	---	---	---
Gasoline Range Organics (C6-C12)	ug/L	50 U	50 U	50 U	50 U	---	---	---	---

See Table III for notes and abbreviations.

TABLE VIII
SUMMARY OF ANALYSES FOR FUEL HYDROCARBONS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:		**RD-48C**	**RD-48C**	**RD-49A (LNAPL)**	**RD-49B**	**RD-49B**	**RD-49B**	**RD-49C**	**RD-50**
Sample Port:									Z2
Sample Type:		Duplicate	Split	Primary	Primary	Duplicate	Split	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	TA-Irvine	Lancaster	TA-Denver	TA-Denver	TA-Irvine	TA-Denver	Lancaster
Collection Date:		10/28/2009	10/28/2009	08/05/2009	10/30/2009	10/30/2009	10/30/2009	10/30/2009	02/20/2009
Analyte	Units								
Diesel Range Organics (C12-C14)	mg/L	0.03 U	0.096 U	1200 J	0.031 U	0.03 U	0.095 U	0.031 U	9.4 U
Diesel Range Organics (C15-C20)	mg/L	0.03 U	0.096 U	1600 J	0.031 U	0.03 U	0.095 U	0.031 U	19 J
Diesel Range Organics (C21-C30)	mg/L	0.03 U	0.096 U	290 J	0.031 U	0.03 U	0.095 U	0.031 U	9.4 U
Diesel Range Organics (C8-C11)	mg/L	0.03 U	0.096 U	53 J	0.031 U	0.03 U	0.095 U	0.031 U	9.4 U
Diesel Range Organics (C8-C30)	mg/L	---	---	3100	---	---	---	---	19 J
Gasoline Range Organics (C6-C12)	ug/L	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.

TABLE VIII
SUMMARY OF ANALYSES FOR FUEL HYDROCARBONS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:		**RD-50**	**RD-50**	**RD-50**	**RD-53**	**RD-53**	**RD-53**	**RD-53**	**RD-60**
Sample Port:		Z2	Z2	Z2					
Sample Type:		Duplicate	Split	Primary	Primary	Split	Primary	Split	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	Lancaster	Lancaster	TA-Denver	Lancaster	TA-Denver	Lancaster
Collection Date:		02/20/2009	02/20/2009	04/29/2009	03/04/2009	03/04/2009	07/21/2009	07/21/2009	03/04/2009
Analyte	Units								
Diesel Range Organics (C12-C14)	mg/L	9.4 U	0.15 U	12 U	---	---	---	---	---
Diesel Range Organics (C15-C20)	mg/L	16 J	0.64	17 J	---	---	---	---	---
Diesel Range Organics (C21-C30)	mg/L	9.4 U	0.15 U	12 U	---	---	---	---	---
Diesel Range Organics (C8-C11)	mg/L	9.4 U	0.15 U	12 U	---	---	---	---	---
Diesel Range Organics (C8-C30)	mg/L	16 J	---	17 J	---	---	---	---	---
Gasoline Range Organics (C6-C12)	ug/L	---	---	---	92 J	130	88 J	46 J	130

See Table III for notes and abbreviations.

TABLE VIII
SUMMARY OF ANALYSES FOR FUEL HYDROCARBONS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:		**RD-61**	**RD-62**	**RD-62**	**RD-73**
Sample Port:					
Sample Type:		Primary	Primary	Duplicate	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	TA-Denver	TA-Denver	Lancaster
Collection Date:		10/22/2009	10/28/2009	10/28/2009	02/26/2009
Analyte	Units				
Diesel Range Organics (C12-C14)	mg/L	0.03 U	0.03 U	0.03 U	---
Diesel Range Organics (C15-C20)	mg/L	0.03 U	0.03 U	0.03 U	---
Diesel Range Organics (C21-C30)	mg/L	0.03 U	0.03 U	0.03 U	---
Diesel Range Organics (C8-C11)	mg/L	0.03 U	0.03 U	0.03 U	---
Diesel Range Organics (C8-C30)	mg/L	---	---	---	---
Gasoline Range Organics (C6-C12)	ug/L	---	---	---	4500 J

See Table III for notes and abbreviations.

TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**ES-31**						**ES-31**					
Sample Port:														
Sample Preparation:			Dissolved			Total			Dissolved			Total		
Geologic Unit:			Shallow			Shallow			Shallow			Shallow		
Sample Type:			Primary			Primary			Primary			Primary		
Lab Name:			Eberline			Eberline			Eberline			Eberline		
Collection Date:			3/4/2009			3/4/2009			7/17/2009			7/17/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	-18.4 U	13	22.9	-0.167 U	1.4	1.73	---	---	---	---	---	---
Antimony-125	901.1	NA	0.069 U	1.9	3.22	-0.012 U	3.2	5.38	-3.21 U	7.1	12.5	3.07 U	7.7	13
Barium-133	901.1	NA	0.048 U	1.3	2.22	-3.36 U	2.9	4.89	0.756 U	1.4	4.76	-1.99 U	4.5	7.68
Cesium-134	901.1	NA	0.184 U	0.98	1.69	-1.38 U	1.5	2.54	-1.67 U	4.2	7.36	-0.571 U	0.99	5.4
Cesium-137	901.1	NA	-0.589 U	0.99	1.74	0.07 U	1.8	3.04	2.08 U	4.6	7.87	1.36 U	4.4	7.51
Cobalt-60	901.1	NA	0.002 U	0.58	1.05	-0.86 U	1.6	2.68	-1.00 U	4.6	8.09	-0.928 U	3.8	6.71
Europium-152	901.1	NA	-0.56 U	2.6	4.47	-1.71 U	3.1	5.35	-5.87 U	12	20	1.96 U	1.9	11.9
Europium-154	901.1	NA	0.747 U	2.4	4.14	-0.124 U	3.9	6.72	-1.49 U	7.7	13.9	2.78 U	7.3	12.6
Europium-155	901.1	NA	1.02 U	4	6.81	0.167 U	3.4	5.8	-1.27 U	7.7	13.2	-4.47 U	7.7	13.3
Manganese-54	901.1	NA	0.29 U	0.98	1.69	-0.083 U	1.3	2.23	0.893 U	3.7	6.35	0.946 U	3.5	5.96
Potassium-40	901.1	NA	26.9 U	18	29.5	-82.1 U	47	47.6	23.1 U	54	92.5	16.9 U	47	80.7
Radium-228	901.1	NA	-4.17 U	4.4	7.84	-5.67 U	6.1	10.5	---	---	---	---	---	---
Sodium-22	901.1	NA	0.255 U	0.81	1.41	-0.042 U	1.3	2.29	-0.505 U	2.6	4.71	0.941 U	2.5	4.28
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	4.63	1.9	2.12	7.53	2.4	1.95	5.48	1.9	1.59	6.62	2.1	1.52
Gross beta	900.0	50	2.9 U	2	3.38	5.45	1.6	2.22	4.36	1.5	2.17	3.89 J	1.3	1.87
Tritium	906.0	20,000	---	---	---	126 J	59	87.8	---	---	---	47.4 U	88	147
Strontium, Uranium														
Strontium-90	905.0	8	-0.024 U	0.26	0.529	0.156 U	0.29	0.533	-0.111 U	0.26	0.532	-0.099 U	0.27	0.566
Uranium-233/234	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Adjusted gross alpha	Calculated	15	---	---	---	---	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
Haley & Aldrich, Inc.
G:\Projects\26472\Reports\M-513 2009 Annual\Tables\M513_T09_Rad-F.xls

TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-07**						**RD-07**					
Sample Port:			Z3						Z3					
Sample Preparation:			Dissolved			Total			Dissolved			Total		
Geologic Unit:			Chatsworth			Chatsworth			Chatsworth			Chatsworth		
Sample Type:			Primary			Primary			Primary			Primary		
Lab Name:			Eberline			Eberline			Eberline			Eberline		
Collection Date:			2/20/2009			2/20/2009			7/16/2009			7/16/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	0.124 U	0.31	0.661	0.401 U	0.96	2.76	---	---	---	---	---	---
Antimony-125	901.1	NA	0.04 U	1.5	2.64	0.568 U	1	1.73	5.14 U	18	30.4	-5.92 U	8.7	15.1
Barium-133	901.1	NA	0.162 U	0.18	0.681	-2.24 U	0.76	0.842	5.46 U	8.3	13.9	-1.50 U	3.6	6.2
Cesium-134	901.1	NA	0.052 U	0.19	0.89	-0.025 U	0.64	1.1	-0.904 U	6.5	11.3	1.28 U	1.4	4.95
Cesium-137	901.1	NA	0.446 U	0.69	1.16	0.924 U	0.65	1.08	-0.908 U	5.9	10.3	1.14 U	3.5	5.95
Cobalt-60	901.1	NA	0.223 U	0.66	1.14	0.1 U	0.62	1.07	2.62 U	5.7	9.76	0.408 U	3.8	6.58
Europium-152	901.1	NA	-0.207 U	1.2	2.02	0.631 U	0.82	2.02	-12.9 U	17	30.1	-2.24 U	9.6	16.5
Europium-154	901.1	NA	1.71 U	1.8	2.97	-0.351 U	0.99	1.79	4.01 U	13	22.1	1.29 U	8.7	15.1
Europium-155	901.1	NA	-1.12 U	2.4	4.1	0.846 U	2.7	4.49	-13.9 U	15	25.6	3.24 U	9.6	16.3
Manganese-54	901.1	NA	0.071 U	0.26	0.423	-0.049 U	0.46	0.797	1.87 U	4.4	7.52	-0.679 U	2.7	4.73
Potassium-40	901.1	NA	-2.01 U	7.7	13.4	5.54 U	15	14.2	58.7 U	100	178	-112 U	84	92.6
Radium-228	901.1	NA	0.633 U	3.2	5.52	1.96 U	2.7	4.57	---	---	---	---	---	---
Sodium-22	901.1	NA	0.581 U	0.6	1.01	-0.119 U	0.34	0.607	1.36 U	4.3	7.48	0.438 U	2.9	5.1
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	24.5	5.8	2.12	23	5.6	2.13	18	5	3.7	14.9	4	1.94
Gross beta	900.0	50	12.2	2.4	2.94	10.4	2.3	3.01	9.95	1.9	1.88	8.83	1.7	1.82
Tritium	906.0	20,000	---	---	---	62.5 U	91	151	---	---	---	-55.0 U	89	154
Strontium, Uranium														
Strontium-90	905.0	8	0.03 U	0.32	0.601	0.054 U	0.24	0.46	-0.073 U	0.28	0.565	-0.176 U	0.24	0.521
Uranium-233/234	908.0-U	20 (total)	17.6	1.8	0.152	18.3	1.9	0.164	18.6	1.8	0.159	---	---	---
Uranium-235	908.0-U	20 (total)	0.71 J	0.21	0.092	0.809 J	0.19	0.086	0.839 J	0.2	0.072	---	---	---
Uranium-238	908.0-U	20 (total)	13.4	1.5	0.143	14.8	1.6	0.15	14.4	1.5	0.143	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	31.71	---	---	33.909	---	---	33.839	---	---	---	---	---
Adjusted gross alpha	Calculated	15	<0	---	---	<0	---	---	<0	---	---	---	---	---

See Table III for notes and abbreviations.

TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-15**											
Sample Port:														
Sample Preparation:			Dissolved						Total					
Geologic Unit:			Chatsworth						Chatsworth					
Sample Type:			Primary			Split			Primary			Split		
Lab Name:			Eberline			GEL			Eberline			GEL		
Collection Date:			2/24/2009			2/24/2009			2/24/2009			2/24/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	1.08 U	2.3	4.02	0 U	7.7	11.6	3.27 U	6.8	11.6	-2.29 U	5.28	9.16
Antimony-125	901.1	NA	-1.14 U	1.9	3.32	2.64 U	3.06	5.29	3.69 U	3.2	5.4	1.71 U	2.89	5
Barium-133	901.1	NA	0.401 U	0.42	1.3	0.277 U	1.66	2.47	0.574 U	1.2	2.12	0.716 U	2.63	2.6
Cesium-134	901.1	NA	-0.942 U	1.2	2.04	1.27 U	1.27	2.18	0.522 U	0.99	1.43	-0.358 U	1.15	1.94
Cesium-137	901.1	NA	-0.112 U	0.63	1.59	0.842 U	1.21	1.82	-2.5 U	1.5	2.6	0.1 U	1.16	1.68
Cobalt-60	901.1	NA	-0.598 U	0.92	1.62	-0.53 U	1.09	1.79	-1.23 U	0.92	1.73	0.735 U	1.05	1.8
Europium-152	901.1	NA	0.542 U	2.2	3.29	4.27 U	3.64	5.83	1.1 U	2	3.39	-1.09 U	3.2	5.47
Europium-154	901.1	NA	-0.886 U	2	3.59	1.78 U	3.47	5.26	-0.281 U	2.3	4.09	1.65 U	3.13	4.69
Europium-155	901.1	NA	0.866 U	5	8.46	1.85 U	4.46	7.43	1.41 U	3.7	6.21	0.19 U	4	6.85
Manganese-54	901.1	NA	0.413 U	0.83	1.42	-1.36 U	1.06	1.63	0.224 U	0.52	0.908	-0.104 U	1.14	1.69
Potassium-40	901.1	NA	-0.7 U	6.63	11.57	-18.1 U	20.6	22.6	4.14 U	16	27.8	-11.3 U	19.8	22.3
Radium-228	901.1	NA	4.02 U	5.4	9.04	-0.0246 U	4.86	6.7	2.02 U	4.3	7.3	-4.13 U	6.01	6.86
Sodium-22	901.1	NA	-0.3 U	0.68	1.22	0.667 U	1.24	1.89	-0.095 U	0.77	1.38	0.572 U	1.11	1.67
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	6.78	2.4	2.33	9.05	1.84	1.27	9.9	3	2.39	10.2	2.57	1.93
Gross beta	900.0	50	6.68	1.6	1.95	6.8	1.39	1.91	7.43	2.1	3.06	7.13	1.72	2.28
Tritium	906.0	20,000	---	---	---	---	---	---	61.2 U	91	151	-47.6 U	87.7	155
Strontium, Uranium														
Strontium-90	905.0	8	0.065 U	0.32	0.592	-0.52 U	0.512	1.2	0.099 U	0.3	0.566	-0.167 U	0.529	1.11
Uranium-233/234	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Adjusted gross alpha	Calculated	15	---	---	---	---	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.

TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-15**									**RD-17**		
Sample Port:														
Sample Preparation:			Dissolved			Total						Dissolved		
Geologic Unit:			Chatsworth			Chatsworth						Chatsworth		
Sample Type:			Primary			Primary			Duplicate			Primary		
Lab Name:			Eberline			Eberline			Eberline			Eberline		
Collection Date:			7/24/2009			7/24/2009			7/24/2009			2/25/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	---	---	---	---	---	---	---	---	---	-0.859 U	2.3	3.9
Antimony-125	901.1	NA	-8.73 U	15	27.3	-2.08 U	14	23.6	3.92 U	11	19.7	2.86 U	3.8	6.33
Barium-133	901.1	NA	-7.89 U	5.8	10.5	-4.18 U	11	18.2	3.85 U	2.5	7.8	0.068 U	0.39	1.66
Cesium-134	901.1	NA	1.7 U	7.5	13.1	0.555 U	6.6	11.4	-2.39 U	6.5	8.01	-1.76 U	1.3	2.17
Cesium-137	901.1	NA	0.036 U	5.7	10	-5.65 U	5.5	10	2.48 U	5.8	9.96	1.79	0.9	1.49
Cobalt-60	901.1	NA	-0.568 U	5.1	9.35	2.04 U	3.1	5.36	-1.03 U	3.6	6.71	-0.088 U	1	1.78
Europium-152	901.1	NA	-2.72 U	15	26.2	18.5 U	32	54	-8.00 U	14	24.2	-5.23 U	4	5.2
Europium-154	901.1	NA	-0.402 U	21	25.8	6.04 U	14	22.7	6.75 U	12	20	2.94 U	4.8	8.03
Europium-155	901.1	NA	-6.46 U	12	20.3	7.89 U	16	26.9	6.13 U	15	25.9	-0.274 U	3.7	6.2
Manganese-54	901.1	NA	-2.51 U	6.5	11.6	-1.27 U	4.1	7.39	0.921 U	5.4	9.32	-0.373 U	0.65	1.13
Potassium-40	901.1	NA	4.73 U	64	113	-6.73 U	77	135	-27.3 U	83	146	23.5 U	29	48.3
Radium-228	901.1	NA	---	---	---	---	---	---	---	---	---	-0.63 U	6.4	11
Sodium-22	901.1	NA	-0.143 U	7.5	9.18	2.04 U	4.9	7.69	-1.07 U	3.6	6.78	0.997 U	1.6	2.72
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	6.04	2.1	1.74	6	2.1	1.43	10.6	3.6	3.68	4.6	1.9	2.17
Gross beta	900.0	50	8.03	1.7	2.19	9.85	1.4	0.901	10.1	2	2.24	5.14	1.9	2.92
Tritium	906.0	20,000	---	---	---	81.5 U	85	140	102 U	87	140	---	---	---
Strontium, Uranium														
Strontium-90	905.0	8	-0.09 U	0.19	0.384	-0.063 U	0.18	0.369	-0.073 U	0.22	0.439	0.014 U	0.31	0.608
Uranium-233/234	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Adjusted gross alpha	Calculated	15	---	---	---	---	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
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TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-17**			**RD-17**			**RD-17**			**RD-21**		
Sample Port:												Z4		
Sample Preparation:			Total			Dissolved			Total			Dissolved		
Geologic Unit:			Chatsworth			Chatsworth			Chatsworth			Chatsworth		
Sample Type:			Primary			Primary			Primary			Primary		
Lab Name:			Eberline			Eberline			Eberline			Eberline		
Collection Date:			2/25/2009			7/27/2009			7/27/2009			2/24/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	0.331 U	0.32	0.868	---	---	---	---	---	---	-14.9 U	6.2	7.55
Antimony-125	901.1	NA	0.128 U	1.7	2.89	1.66 U	14	24.2	9.29 U	19	32.5	0.723 U	2.7	4.5
Barium-133	901.1	NA	0.048 U	0.19	0.935	1.18 U	0.87	6.13	13 U	13	21.3	0.102 U	0.28	1.1
Cesium-134	901.1	NA	-0.105 U	0.52	0.922	3.64 U	5.7	7.96	-11.6 U	8.5	16.6	-0.151 U	1	1.3
Cesium-137	901.1	NA	0.52 U	0.89	1.5	-0.098 U	4.4	7.68	3.04 U	8	13.9	-0.03 U	1.2	1.98
Cobalt-60	901.1	NA	0.028 U	0.43	0.768	-0.826 U	4.5	8.18	6.76 U	9.8	16.7	-0.192 U	0.98	1.69
Europium-152	901.1	NA	-0.087 U	1.6	2.21	-7.12 U	16	27.6	-5.8 U	28	48.8	0.766 U	0.86	2.7
Europium-154	901.1	NA	-0.694 U	1.5	2.68	5.56 U	13	18.7	-1.76 U	21	38.9	0.152 U	2.9	4.98
Europium-155	901.1	NA	0.432 U	1.5	2.61	4.2 U	16	26.7	-17.1 U	31	53.1	-1.32 U	4.5	7.69
Manganese-54	901.1	NA	0.15 U	0.38	0.657	1.08 U	4.3	7.54	3.28 U	5.9	10.2	0.089 U	0.96	1.63
Potassium-40	901.1	NA	6.15 U	7.2	12.1	66 U	79	132	104 U	140	246	-70.3 U	21	35.1
Radium-228	901.1	NA	1.73 U	2.9	4.92	---	---	---	---	---	---	-3.59 U	4.5	7.79
Sodium-22	901.1	NA	-0.235 U	0.5	0.905	1.9 U	4.5	6.39	-0.602 U	7.1	13.3	0.052 U	0.99	1.69
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	5.14	2.1	2.24	2.64 J	1.9	2.45	5.15	2.3	2.39	4.18	2.1	2.44
Gross beta	900.0	50	4.99	1.4	2.01	6.43	2.3	3.3	8.17	2.3	3.04	4.43	1.5	2.13
Tritium	906.0	20,000	106 U	93	151	---	---	---	96.4 U	86	139	---	---	---
Strontium, Uranium														
Strontium-90	905.0	8	0.144 U	0.33	0.619	-0.01 U	0.32	0.601	-0.236 U	0.31	0.676	-0.109 U	0.31	0.614
Uranium-233/234	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	5.78	0.61	0.072
Uranium-235	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	0.284 J	0.088	0.046
Uranium-238	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	4.86	0.52	0.072
Sum of isotopic uranium activity	Calculated	20 (total)	---	---	---	---	---	---	---	---	---	10.924	---	---
Adjusted gross alpha	Calculated	15	---	---	---	---	---	---	---	---	---	<0	---	---

See Table III for notes and abbreviations.
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TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-21**			**RD-21**			**RD-21**			**RD-22**		
Sample Port:			Z4			Z2			Z2			Z2		
Sample Preparation:			Total			Dissolved			Total			Dissolved		
Geologic Unit:			Chatsworth			Chatsworth			Chatsworth			Chatsworth		
Sample Type:			Primary			Primary			Primary			Primary		
Lab Name:			Eberline			Eberline			Eberline			Eberline		
Collection Date:			2/24/2009			7/16/2009			7/16/2009			2/23/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	-3.99 U	3	3.18	---	---	---	---	---	---	0.583 U	3	3.79
Antimony-125	901.1	NA	0.365 U	1.3	2.21	2.01 U	15	25.4	-14.0 U	14	25.2	-0.495 U	4.6	7.87
Barium-133	901.1	NA	-0.318 U	0.64	0.84	-1.14 U	2.4	11	-7.65 U	8.6	15	0.204 U	0.099	1.45
Cesium-134	901.1	NA	0.409 U	0.62	1.05	-0.039 U	2.6	10.7	3.51 U	5.7	9.74	-0.471 U	1.6	2.72
Cesium-137	901.1	NA	0.413 U	0.95	1.6	-0.243 U	7.7	13	-0.943 U	5	8.84	-0.371 U	1	1.78
Cobalt-60	901.1	NA	-0.194 U	0.66	1.15	-5.18 U	9.3	16.1	-1.98 U	4.6	8.47	-1.32 U	0.87	1.59
Europium-152	901.1	NA	-2.24 U	1.8	2.27	-9.41 U	24	30	2.05 U	13	23	0.564 U	1.1	3.98
Europium-154	901.1	NA	0.919 U	1.6	2.77	-1.18 U	16	27.2	1.27 U	8.9	16.2	-0.218 U	3.2	5.44
Europium-155	901.1	NA	2.81 U	2.8	4.7	2.82 U	22	37.6	-4.66 U	15	26.7	0.793 U	4.6	7.68
Manganese-54	901.1	NA	-0.229 U	0.53	0.927	-3.83 U	6.6	11.5	0.43 U	4.7	8.3	-0.357 U	0.75	1.31
Potassium-40	901.1	NA	5.82 U	10	17.6	-310 U	290	267	27.7 U	80	137	-0.52 U	14.91	25.86
Radium-228	901.1	NA	2.2 U	3	4.99	---	---	---	---	---	---	6.05 U	5.9	9.82
Sodium-22	901.1	NA	0.311 U	0.55	0.939	-0.400 U	5.3	9.21	0.436 U	3	5.55	-0.074 U	1.1	1.84
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	10.1	2.8	1.28	6.69	3.4	4.42	5.8	2.3	2.29	3.05	1.9	2.82
Gross beta	900.0	50	5.54	1.7	2.31	7.23	2.1	2.82	4.64	2	2.84	7.17	1.8	2.34
Tritium	906.0	20,000	93.7 U	92	151	---	---	---	32.5 U	88	147	---	---	---
Strontium, Uranium														
Strontium-90	905.0	8	-0.123 U	0.25	0.534	-0.123 U	0.25	0.514	-0.007 U	0.27	0.534	0.066 U	0.26	0.514
Uranium-233/234	908.0-U	20 (total)	4.03	0.42	0.054	7.06	0.72	0.089	6.27	0.62	0.077	---	---	---
Uranium-235	908.0-U	20 (total)	0.18 J	0.062	0.033	0.298 J	0.085	0.056	0.296 J	0.083	0.045	---	---	---
Uranium-238	908.0-U	20 (total)	3.32	0.36	0.047	6.1	0.64	0.074	5.47	0.55	0.063	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	7.53	---	---	13.458	---	---	12.036	---	---	---	---	---
Adjusted gross alpha	Calculated	15	2.57	---	---	<0	---	---	<0	---	---	---	---	---

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TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-22**			**RD-22**			**RD-22**			**RD-23**		
Sample Port:			Z2			Z2			Z2			Z2		
Sample Preparation:			Total			Dissolved			Total			Dissolved		
Geologic Unit:			Chatsworth			Chatsworth			Chatsworth			Chatsworth		
Sample Type:			Primary			Primary			Primary			Primary		
Lab Name:			Eberline			Eberline			Eberline			Eberline		
Collection Date:			2/23/2009			7/16/2009			7/16/2009			2/24/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	-2.64 U	2.4	4.05	---	---	---	---	---	---	0.178 U	0.18	0.98
Antimony-125	901.1	NA	0.675 U	1.7	2.94	-1.18 U	14	23.2	0.623 U	9.9	17	-0.587 U	2.3	3.93
Barium-133	901.1	NA	-2.83 U	1.6	2.05	3.5 U	2.4	9.33	0.31 U	1.1	4.38	0.076 U	0.1	0.954
Cesium-134	901.1	NA	-1.03 U	1.1	2.47	-0.540 U	7.8	13.4	0.724 U	5.1	6.23	-0.025 U	0.63	1.1
Cesium-137	901.1	NA	1.93 U	1.6	2.63	-3.49 U	7.7	13.2	1.68 U	4.5	7.61	3.01	1.25	2.05
Cobalt-60	901.1	NA	1.06 U	1.2	2.04	-0.836 U	6.5	11.2	-1.73 U	5	8.76	-0.043 U	0.46	0.825
Europium-152	901.1	NA	0.488 U	0.71	4.74	4.45 U	5.7	24.6	2.07 U	3.5	15.1	-0.33 U	2.5	4.25
Europium-154	901.1	NA	-3.53 U	3.6	6.25	3.13 U	13	21.9	1.52 U	8	14.1	-0.393 U	0.64	1.52
Europium-155	901.1	NA	0.333 U	4.2	7.12	6.08 U	16	26.6	5.16 U	8.1	13.6	0.359 U	1.3	2.18
Manganese-54	901.1	NA	-0.078 U	0.71	1.22	1.63 U	4.7	8.05	-0.466 U	3.4	6.07	-0.026 U	0.6	1.04
Potassium-40	901.1	NA	-0.56 U	7.49	13.11	-236 U	150	254	-13.2 U	51	89	1.39 U	7.1	12.3
Radium-228	901.1	NA	3.78 U	6.4	10.8	---	---	---		---	---	0.498 U	2.7	4.68
Sodium-22	901.1	NA	-1.2 U	1.2	2.12	1.06 U	4.3	7.4	0.544 U	2.9	5.05	-0.133 U	0.22	0.516
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	2.18 U	2	2.89	2.7 J	1.9	2.3	3.32	1.9	2.36	1.38 U	1.4	2.06
Gross beta	900.0	50	7.08	3.1	4.7	5.88	2.4	3.56	5.96	2.6	3.87	3.63 J	1	1.4
Tritium	906.0	20,000	4.08 U	90	151	---	---	---	-126 U	87	153	---	---	---
Strontium, Uranium														
Strontium-90	905.0	8	-0.073 U	0.27	0.554	0.082 U	0.3	0.556	0.013 U	0.32	0.626	0.153 U	0.37	0.702
Uranium-233/234	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Adjusted gross alpha	Calculated	15	---	---	---	---	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
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TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-23**			**RD-23**			**RD-23**			**RD-24**		
Sample Port:			Z2			Z3								
Sample Preparation:			Total			Dissolved			Total			Dissolved		
Geologic Unit:			Chatsworth			Chatsworth			Chatsworth			Chatsworth		
Sample Type:			Primary			Primary			Primary			Primary		
Lab Name:			Eberline			Eberline			Eberline			TA-Denver		
Collection Date:			2/24/2009			7/16/2009			7/16/2009			10/27/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	-10.3 U	5.9	7.5	---	---	---	---	---	---	---	---	---
Antimony-125	901.1	NA	-2.25 U	2.7	4.59	-0.648 U	13	22.5	0.548 U	5.9	10.2	3.4 U	6.3	10.8
Barium-133	901.1	NA	0.117 U	0.3	1.19	-0.003 U	7.8	9.89	-10.5 U	5.4	5.75	-0.772 U	2.7	4.86
Cesium-134	901.1	NA	-0.803 U	0.96	1.66	0.293 U	4.1	7.5	0.259 U	3.8	6.52	-1.09 U	2.8	5.13
Cesium-137	901.1	NA	-0.037 U	1.1	1.85	-3.05 U	5.1	9.34	2.83 U	3.6	6.03	-2.3 U	2.8	5.13
Cobalt-60	901.1	NA	-0.122 U	1.1	1.95	-3.12 U	4.5	8.93	0.403 U	2.8	4.87	-0.595 U	2.3	4.43
Europium-152	901.1	NA	0.378 U	0.85	3.38	2.55 U	14	23.8	-0.549 U	12	14.8	2.06 U	12	6.89
Europium-154	901.1	NA	0.399 U	2.8	4.76	0.973 U	22	25.7	-0.768 U	8.2	14.7	5.4 U	9.1	14.8
Europium-155	901.1	NA	-0.699 U	3.3	5.54	-2.68 U	11	19.7	7.11 U	7.5	12.7	3.71 U	6	10.2
Manganese-54	901.1	NA	0.275 U	0.53	0.906	0.354 U	3.3	6.1	2.44 U	3.6	6.11	-0.863 U	2.1	3.97
Potassium-40	901.1	NA	-116 U	20	33.3	-84.6 U	87	162	36.7 U	42	70.6	-15.9 U	28	54
Radium-228	901.1	NA	-3.81 U	5.1	8.7	---	---	---	---	---	---	---	---	---
Sodium-22	901.1	NA	0.135 U	0.94	1.61	0.333 U	7.4	8.8	-0.260 U	2.8	4.98	1.86 U	2.5	4.26
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	5.69	2.1	2.15	2.66 J	1.6	2.23	3.3	1.2	0.73	4.57	1.9	1.88
Gross beta	900.0	50	3.85 J	1.1	1.47	2.93 J	0.9	1.24	3.34 J	1.2	1.59	6.77	1.8	2.3
Tritium	906.0	20,000	54.4 U	91	151	---	---	---	-135 U	87	154	---	---	---
Strontium, Uranium														
Strontium-90	905.0	8	0.206 U	0.31	0.575	-0.176 U	0.29	0.58	-0.001 U	0.25	0.506	-0.162 U	0.27	0.539
Uranium-233/234	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Adjusted gross alpha	Calculated	15	---	---	---	---	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
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TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-24**									**RD-27**		
Sample Port:														
Sample Preparation:			Dissolved			Total						Dissolved		
Geologic Unit:			Chatsworth			Chatsworth						Chatsworth		
Sample Type:			Split			Primary			Split			Primary		
Lab Name:			TA-Irvine			TA-Denver			TA-Irvine			Eberline		
Collection Date:			10/27/2009			10/27/2009			10/27/2009			3/6/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	---	---	---	---	---	---	---	---	---	-1.17 U	3	3.3
Antimony-125	901.1	NA	10 U	21	36	-1.42 U	5.9	10.4	5 U	18	33	0.141 U	1.3	2.24
Barium-133	901.1	NA	0.1 U	8.2	15	-0.086 U	0.87	3.54	0.6 U	8.2	15	-0.455 U	0.9	1.55
Cesium-134	901.1	NA	0.8 U	8.9	16	0.371 U	1.2	4.66	-0.5 U	6.7	13	-0.566 U	0.69	1.21
Cesium-137	901.1	NA	1.5 U	9.1	17	-0.962 U	2.6	4.61	0.8 U	9.5	18	-0.049 U	1	1.76
Cobalt-60	901.1	NA	-3 U	16	29	1.33 U	2.4	4.22	0 U	16	30	0.077 U	0.77	1.32
Europium-152	901.1	NA	-10 U	26	46	-6.2 U	7.7	13.6	1 U	17	32	0.499 U	0.63	1.96
Europium-154	901.1	NA	0 U	130	240	1.56 U	8.7	12.7	0 U	70	140	0.539 U	1.7	2.95
Europium-155	901.1	NA	8 U	16	28	0.528 U	5.6	9.57	-2 U	16	29	-0.896 U	2.2	3.72
Manganese-54	901.1	NA	0 U	12	22	1.77 U	2.2	3.7	0 U	7.8	15	0.342 U	0.72	1.22
Potassium-40	901.1	NA	-50 U	280	280	-22.6 U	29	54.3	-80 U	520	250	-0.128 U	9.6	16.5
Radium-228	901.1	NA	---	---	---	---	---	---	---	---	---	2.77 U	3.1	5.13
Sodium-22	901.1	NA	0 U	31	55	0.528 U	2.9	4.31	0 U	2.6	9.7	0.184 U	0.59	1.01
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	12.5	3.8	3.2	4.87	2.9	4.07	7.6	2.8	2.6	2.63 J	1.4	1.68
Gross beta	900.0	50	9.8	2.3	2.7	7.31	2.2	2.96	7	1.7	2.2	6.56	1.5	1.85
Tritium	906.0	20,000	---	---	---	-59 U	65	112	110 U	110	170	---	---	---
Strontium, Uranium														
Strontium-90	905.0	8	0.13 U	0.23	0.39	-0.068 U	0.43	0.711	-0.16 U	0.24	0.45	-0.079 U	0.25	0.493
Uranium-233/234	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Adjusted gross alpha	Calculated	15	---	---	---	---	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
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TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-27**									**RD-27**		
Sample Port:														
Sample Preparation:						Total						Dissolved		
Geologic Unit:						Chatsworth						Chatsworth		
Sample Type:			Primary			Primary-Reanalysis 2			Primary-Reanalysis 3			Primary		
Lab Name:			Eberline			Eberline			Eberline			Eberline		
Collection Date:			3/6/2009			3/6/2009			3/6/2009			7/30/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	-0.255 U	1.1	2.55	---	---	---	---	---	---	---	---	---
Antimony-125	901.1	NA	-0.388 U	3.9	6.56	---	---	---	---	---	---	12.2 U	10	16.7
Barium-133	901.1	NA	0.109 U	0.28	1.45	---	---	---	---	---	---	0.073 U	1.6	6.98
Cesium-134	901.1	NA	-0.197 U	1.5	2.5	---	---	---	---	---	---	-3.48 U	8.2	9.33
Cesium-137	901.1	NA	2.01 U	1.71	2.86	3.08	0.95	1.54	2.49	0.81	1.29	-9.44 U	7.7	14.2
Cobalt-60	901.1	NA	-0.25 U	1.2	2.14	---	---	---	---	---	---	-1.9 U	4.6	8.92
Europium-152	901.1	NA	0.348 U	1	4.69	---	---	---	---	---	---	4.31 U	17	23.9
Europium-154	901.1	NA	-3.77 U	4.2	7.29	---	---	---	---	---	---	1.69 U	21	25.7
Europium-155	901.1	NA	-4.1 U	6.3	10.6	---	---	---	---	---	---	-0.206 U	11	19.1
Manganese-54	901.1	NA	0.525 U	0.88	1.5	---	---	---	---	---	---	1.76 U	4.1	7.1
Potassium-40	901.1	NA	13.1 U	26	44.2	---	---	---	---	---	---	-15.4 U	64	117
Radium-228	901.1	NA	2.69 U	6.2	10.4	---	---	---	---	---	---	---	---	---
Sodium-22	901.1	NA	-1.29 U	1.4	2.49	---	---	---	---	---	---	0.576 U	7.2	8.74
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	3.52	1.4	1.66	---	---	---	---	---	---	2.59 J	1.3	1.53
Gross beta	900.0	50	5.08	1.3	1.7	---	---	---	---	---	---	8.05	2	2.64
Tritium	906.0	20,000	121 U	100	170	---	---	---	---	---	---	---	---	---
Strontium, Uranium														
Strontium-90	905.0	8	-0.029 U	0.28	0.564	---	---	---	---	---	---	-0.147 U	0.31	0.631
Uranium-233/234	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Adjusted gross alpha	Calculated	15	---	---	---	---	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
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TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-27**						**RD-29**					
Sample Port:														
Sample Preparation:			Total						Dissolved			Total		
Geologic Unit:			Chatsworth						Chatsworth			Chatsworth		
Sample Type:			Primary			Duplicate			Primary			Primary		
Lab Name:			Eberline			Eberline			Eberline			Eberline		
Collection Date:			7/30/2009			7/30/2009			3/5/2009			3/5/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	---	---	---	---	---	---	0.037 U	0.33	0.91	0.09 U	0.33	4.75
Antimony-125	901.1	NA	2.81 U	13	22.9	-5.58 U	14	24.6	-0.001 U	1.3	2.29	0.196 U	2.7	4.53
Barium-133	901.1	NA	3.17 U	2.3	7.1	0.958 U	1.8	7.23	0.894 U	1.2	1.95	-0.23 U	1.1	1.94
Cesium-134	901.1	NA	-0.069 U	6.2	8	-3.26 U	6.3	11.1	-0.214 U	0.51	0.913	-0.188 U	0.93	1.8
Cesium-137	901.1	NA	-0.157 U	3.8	6.71	2.31 U	5.1	8.74	0.386 U	0.71	1.21	0.366 U	1.4	2.34
Cobalt-60	901.1	NA	-3.55 U	4.8	9.04	1.21 U	5.4	9.52	-0.06 U	0.63	1.12	0.814 U	1.4	2.28
Europium-152	901.1	NA	0.283 U	15	26.6	-3.77 U	14	23.9	-0.623 U	1.4	2.42	0.424 U	0.43	3.36
Europium-154	901.1	NA	-3.37 U	19	22.5	12.4 U	16	27.9	0.683 U	1.3	2.17	0.004 U	1.5	2.58
Europium-155	901.1	NA	0.307 U	16	26.7	-2.66 U	14	23.9	0.781 U	1.7	2.9	-0.173 U	3.5	5.93
Manganese-54	901.1	NA	0.937 U	5.6	9.78	-0.218 U	4.2	7.42	0.169 U	0.52	0.903	0.756 U	1.3	2.11
Potassium-40	901.1	NA	-84.3 U	82	148	120 U	88	145	-0.717 U	8.8	15.2	7.21 U	19	32
Radium-228	901.1	NA	---	---	---	---	---	---	-1.28 U	3.1	5.34	0.296 U	5.5	9.33
Sodium-22	901.1	NA	-1.14 U	6.4	7.62	4.21 U	5.6	9.5	0.233 U	0.43	0.741	0.001 U	0.5	0.88
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	4.31	1.6	1.44	4.97	1.7	1.18	9.03	3	2.56	16.8	4.4	2.38
Gross beta	900.0	50	7.74	1.6	1.97	7.26	1.8	2.28	10.4	2.3	2.72	11.7	2.3	2.5
Tritium	906.0	20,000	64.9 U	84	138	81.2 U	84	138	---	---	---	99.2 J	55	87.6
Strontium, Uranium														
Strontium-90	905.0	8	0.265 U	0.35	0.638	0.026 U	0.24	0.474	-0.132 U	0.28	0.604	-0.075 U	0.26	0.562
Uranium-233/234	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	9.98	1.1	0.134
Uranium-235	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	0.518 J	0.17	0.086
Uranium-238	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	9.27	1	0.125
Sum of isotopic uranium activity	Calculated	20 (total)	---	---	---	---	---	---	---	---	---	19.768	---	---
Adjusted gross alpha	Calculated	15	---	---	---	---	---	---	---	---	---	<0	---	---

See Table III for notes and abbreviations.
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TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-29**			**RD-29**			**RD-29**			**RD-33A**		
Sample Port:												Z2		
Sample Preparation:			Total			Dissolved			Total			Dissolved		
Geologic Unit:			Chatsworth			Chatsworth			Chatsworth			Chatsworth		
Sample Type:			Duplicate			Primary			Primary			Primary		
Lab Name:			Eberline			Eberline			Eberline			Eberline		
Collection Date:			3/5/2009			7/24/2009			7/24/2009			2/25/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	0.081 U	0.23	0.929	---	---	---	---	---	---	-1.72 U	5	8.59
Antimony-125	901.1	NA	0.93 U	1.7	2.9	-14.2 U	35	59.2	2.76 U	25	42.7	-0.035 U	1.8	3.02
Barium-133	901.1	NA	-0.147 U	0.18	0.747	-5.08 U	17	29.6	2.92 U	4.5	13.3	-0.509 U	1.5	2.56
Cesium-134	901.1	NA	-0.116 U	0.18	0.896	-0.947 U	17	28.5	1.34 U	4.3	17.1	-0.735 U	1.1	1.96
Cesium-137	901.1	NA	0.499 U	0.64	1.07	-13.1 U	11	19.6	-5.39 U	11	18.8	-1.28 U	0.93	1.62
Cobalt-60	901.1	NA	-0.171 U	0.59	1.05	-18.7 U	13	24	-3.37 U	13	23.2	-0.317 U	1.1	1.88
Europium-152	901.1	NA	0.557 U	1.4	2.43	5.2 U	10	40.8	-7.71 U	41	50.2	0.308 U	0.46	3.07
Europium-154	901.1	NA	0.08 U	0.89	1.6	27.5 U	35	58.5	-2.56 U	25	44.9	0.726 U	3.9	6.63
Europium-155	901.1	NA	1.19 U	2.1	3.62	2.94 U	25	41.8	-3.98 U	31	53.3	0.662 U	2.4	4.08
Manganese-54	901.1	NA	0.03 U	0.35	0.612	3.28 U	16	27.2	-2.31 U	8.1	14.2	0.282 U	1.1	1.9
Potassium-40	901.1	NA	3.16 U	7.8	13.3	342 U	320	544	-202 U	250	434	-41.9 U	22	38
Radium-228	901.1	NA	-0.442 U	3.2	5.43	---	---	---	---	---	---	-1.48 U	5.1	8.71
Sodium-22	901.1	NA	0.027 U	0.3	0.545	9.31 U	12	19.8	-0.867 U	8.6	15.2	0.247 U	1.3	2.25
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	18.1	4.8	2.18	8.66	2.7	1.49	8.98	2.9	1.81	3.53	1.3	1.18
Gross beta	900.0	50	12	2.6	2.95	11.8	2.1	2.14	10.2	2.1	2.44	7.2	1.4	1.54
Tritium	906.0	20,000	126 J	72	87.8	---	---	---	55.6 U	84	140	---	---	---
Strontium, Uranium														
Strontium-90	905.0	8	0.062 U	0.27	0.555	-0.054 U	0.2	0.407	-0.049 U	0.23	0.439	-0.148 U	0.31	0.627
Uranium-233/234	908.0-U	20 (total)	9.71	1.1	0.128	---	---	---	---	---	---	---	---	---
Uranium-235	908.0-U	20 (total)	0.53 J	0.16	0.083	---	---	---	---	---	---	---	---	---
Uranium-238	908.0-U	20 (total)	9.56	1.1	0.12	---	---	---	---	---	---	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	19.8	---	---	---	---	---	---	---	---	---	---	---
Adjusted gross alpha	Calculated	15	<0	---	---	---	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
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TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-33A**			**RD-33A**			**RD-33A**			**RD-33B**		
Sample Port:			Z2			Z2								
Sample Preparation:			Total			Dissolved			Total			Dissolved		
Geologic Unit:			Chatsworth			Chatsworth			Chatsworth			Chatsworth		
Sample Type:			Primary			Primary			Primary			Primary		
Lab Name:			Eberline			Eberline			Eberline			Eberline		
Collection Date:			2/25/2009			7/17/2009			7/17/2009			3/5/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	0.306 U	0.28	0.864	---	---	---	---	---	---	-0.34 U	0.9	1
Antimony-125	901.1	NA	0.345 U	0.88	1.51	16.8 U	14	24.2	0.126 U	8.5	14.6	1.14 U	3.1	5.28
Barium-133	901.1	NA	0.047 U	0.17	0.675	-1.01 U	4.2	9.7	-2.70 U	3.9	6.69	-0.562 U	1.5	2.56
Cesium-134	901.1	NA	-0.151 U	0.18	0.827	-3.40 U	8.4	9.04	-3.47 U	4.1	7.18	0.546 U	1	1.7
Cesium-137	901.1	NA	0.132 U	0.72	1.22	-0.741 U	5.4	9.38	-2.85 U	3.2	5.69	-0.708 U	1	1.82
Cobalt-60	901.1	NA	0.289 U	0.63	1.08	3.28 U	8.6	14.7	-0.365 U	2.2	3.85	0.024 U	0.67	1.2
Europium-152	901.1	NA	0.208 U	1.6	2.78	2.96 U	2.5	18.6	-3.61 U	10	13.4	0.273 U	1.7	3.47
Europium-154	901.1	NA	-0.267 U	0.93	1.72	-3.41 U	16	28.8	12.7 U	9.8	16.2	-0.351 U	2.1	3.78
Europium-155	901.1	NA	-0.792 U	1.6	2.8	-10.5 U	17	28.5	3.64 U	9.3	15.8	0.9 U	3.7	6.31
Manganese-54	901.1	NA	0.18 U	0.59	1.01	-0.114 U	5.8	10.1	0.145 U	2.8	4.84	-0.941 U	1.3	2.2
Potassium-40	901.1	NA	1.01 U	9.3	16	53.7 U	95	161	10.6 U	55	94	1.74 U	6.72	11.57
Radium-228	901.1	NA	2.37 U	3.2	5.34	---	---	---	---	---	---	5.83 U	5.3	8.87
Sodium-22	901.1	NA	-0.091 U	0.32	0.584	-1.16 U	5.5	9.78	4.31 U	3.3	5.51	-0.12 U	0.71	1.29
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	4.76	1.4	0.953	3.34	1.3	1.16	4.45	1.3	0.885	0.558 U	1.4	2.27
Gross beta	900.0	50	6.16	1	0.971	5.57	1.1	1.3	6.6	1.3	1.58	6.09	2.5	3.65
Tritium	906.0	20,000	20.8 U	110	189	---	---	---	14.9 U	88	147	---	---	---
Strontium, Uranium														
Strontium-90	905.0	8	-0.165 U	0.25	0.536	-0.039 U	0.26	0.516	0.088 U	0.28	0.532	0.049 U	0.29	0.58
Uranium-233/234	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Adjusted gross alpha	Calculated	15	---	---	---	---	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
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TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-33B**									**RD-33B**		
Sample Port:														
Sample Preparation:			Dissolved			Total						Dissolved		
Geologic Unit:			Chatsworth			Chatsworth						Chatsworth		
Sample Type:			Primary-Reanalysis 2			Primary			Duplicate			Primary		
Lab Name:			Eberline			Eberline			Eberline			Eberline		
Collection Date:			3/5/2009			3/5/2009			3/5/2009			8/4/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	-9.17 U	4.13	4.3	-2.83 U	2.6	4.33	-0.389 U	0.94	1.05	---	---	---
Antimony-125	901.1	NA	---	---	---	1.06 U	2.7	4.49	0.575 U	1.1	1.85	-3.8 U	13	23.4
Barium-133	901.1	NA	---	---	---	0.552 U	0.4	1.82	0.006 U	0.2	0.836	-10.0 U	6.4	11.6
Cesium-134	901.1	NA	---	---	---	-1.11 U	1.6	2.76	-0.059 U	0.48	0.856	-1.01 U	1.7	7.92
Cesium-137	901.1	NA	---	---	---	-0.188 U	2.1	3.5	-0.065 U	0.55	0.952	0.128 U	4.5	7.94
Cobalt-60	901.1	NA	---	---	---	-1.75 U	1.8	3.06	0.308 U	0.76	1.3	3.06 U	6.1	10.6
Europium-152	901.1	NA	---	---	---	0.997 U	1	4.9	1.55 U	2.7	4.6	-0.978 U	14	24.5
Europium-154	901.1	NA	---	---	---	-0.309 U	3.9	6.68	0.131 U	0.92	1.67	12.2 U	14	23.4
Europium-155	901.1	NA	---	---	---	-0.563 U	3.4	5.78	-0.121 U	1	1.72	-9.30 U	11	19.2
Manganese-54	901.1	NA	---	---	---	0.33 U	0.98	1.67	0.092 U	0.53	0.911	-0.619 U	3.6	6.54
Potassium-40	901.1	NA	-228.62 U	25.53	47.67	-108 U	46	47.2	-2.65 U	8.1	14.3	18 U	57	100
Radium-228	901.1	NA	---	---	---	-8.82 U	6.7	11.5	-0.511 U	3.4	5.92	---	---	---
Sodium-22	901.1	NA	---	---	---	-0.105 U	1.3	2.28	0.045 U	0.32	0.571	4.13 U	4.7	7.96
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	---	---	---	-0.081 U	1	1.81	1.03 U	2.1	3.52	1.24 U	1.1	1.7
Gross beta	900.0	50	---	---	---	4.09	1.4	2	4.52	1.6	2.35	4.49	1.9	2.88
Tritium	906.0	20,000	---	---	---	125 J	68	87.6	71.6 U	54	87.7	---	---	---
Strontium, Uranium														
Strontium-90	905.0	8	---	---	---	0.045 U	0.27	0.555	-0.051 U	0.29	0.594	0.217 U	0.35	0.652
Uranium-233/234	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Adjusted gross alpha	Calculated	15	---	---	---	---	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.

TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-33B**			**RD-33C**								
Sample Port:														
Sample Preparation:			Total			Dissolved						Total		
Geologic Unit:			Chatsworth			Chatsworth						Chatsworth		
Sample Type:			Primary			Primary			Split			Primary		
Lab Name:			Eberline			Eberline			GEL			Eberline		
Collection Date:			8/4/2009			2/24/2009			2/24/2009			2/24/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	---	---	---	-1.04 U	0.94	0.996	9.5 U	6.99	10.8	-1.58 U	11	19
Antimony-125	901.1	NA	1.86 U	14	23.9	-0.005 U	1.7	2.93	2.31 U	2.95	4.95	1.04 U	3.6	6.09
Barium-133	901.1	NA	2.59 U	2.5	7.56	0.009 U	0.02	0.684	2.18 U	1.58	2.39	1.13 U	1.4	2.39
Cesium-134	901.1	NA	1.26 U	6	10.4	0.06 U	0.91	1.56	1.26 U	1.15	2	0.478 U	0.83	1.42
Cesium-137	901.1	NA	0.611 U	5.9	10.3	0.24 U	0.61	1.03	1.1 U	1.18	1.82	-6.29 U	1.3	2.37
Cobalt-60	901.1	NA	-1.53 U	4.1	7.6	-0.19 U	0.48	0.857	0.295 U	1.08	1.82	-1.09 U	0.98	1.83
Europium-152	901.1	NA	-10.1 U	15	27	0.263 U	0.056	1.62	-3.07 U	3.18	5.11	-0.701 U	2.3	3.96
Europium-154	901.1	NA	-5.89 U	16	20.1	0.204 U	0.99	1.75	0.433 U	2.77	4.69	0.41 U	1.7	2.98
Europium-155	901.1	NA	3.2 U	15	26	-0.159 U	1.2	2.13	-4.58 U	4.09	6.49	-0.027 U	4	6.84
Manganese-54	901.1	NA	2.96 U	3.4	5.74	0.073 U	0.35	0.606	0.0954 U	1.01	1.68	0.878 U	1.1	1.78
Potassium-40	901.1	NA	1.15 U	76	133	3.42 U	8.3	14.1	-4.15 U	18.2	21.5	2.16 U	15	26.1
Radium-228	901.1	NA	---	---	---	-0.55 U	3.7	6.28	-2.07 U	6.28	6.81	3.28 U	4.2	7.01
Sodium-22	901.1	NA	-2.00 U	5.6	6.82	0.069 U	0.33	0.592	0.197 U	0.991	1.68	0.139 U	0.57	1.01
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	0.562 U	1.1	1.73	1.53 J	1	1.48	6.12	1.53	1.32	0.345 U	1.3	2.2
Gross beta	900.0	50	4.32	2.3	3.39	4.93	1.1	1.43	6.54	1.31	1.77	3.96 J	1.3	1.87
Tritium	906.0	20,000	37.4 U	110	178	---	---	---	---	---	---	25.8 U	90	151
Strontium, Uranium														
Strontium-90	905.0	8	-0.004 U	0.35	0.679	0.092 U	0.29	0.544	0.102 U	0.732	1.37	0.178 U	0.28	0.525
Uranium-233/234	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Adjusted gross alpha	Calculated	15	---	---	---	---	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
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TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-33C**			**RD-33C**					
Sample Port:											
Sample Preparation:			Total			Dissolved			Total		
Geologic Unit:			Chatsworth			Chatsworth			Chatsworth		
Sample Type:			Split			Primary			Primary		
Lab Name:			GEL			Eberline			Eberline		
Collection Date:			2/24/2009			7/24/2009			7/24/2009		
Units:			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides											
Americium-241	901.1	NA	-1.55 U	5.96	8.67	---	---	---	---	---	---
Antimony-125	901.1	NA	0.683 U	2.5	4.3	10 U	11	19.1	7.13 U	12	20.7
Barium-133	901.1	NA	-0.314 U	1.3	1.96	0.878 U	0.8	6.8	0.027 U	2.2	8.34
Cesium-134	901.1	NA	0.7 U	1.06	1.88	-0.536 U	6.6	8.37	2.09 U	7.6	9.65
Cesium-137	901.1	NA	-0.324 U	0.997	1.62	-2.1 U	5.2	9.28	2.26 U	5	8.67
Cobalt-60	901.1	NA	-0.736 U	0.912	1.4	-3.1 U	4.7	8.96	-3.65 U	5	9.8
Europium-152	901.1	NA	1.65 U	2.69	4.74	-1.6 U	11	18.7	-14.7 U	19	33.7
Europium-154	901.1	NA	1.5 U	2.55	4.39	1.79 U	12	21.4	-4.06 U	15	28.8
Europium-155	901.1	NA	0.568 U	3.48	6.03	-17.3 U	12	21.5	0.655 U	13	21.9
Manganese-54	901.1	NA	-1.22 U	0.876	1.39	-0.336 U	3.4	6.28	-7.48 U	6.8	12.6
Potassium-40	901.1	NA	0.698 U	23.5	15.2	-7.58 U	62	111	41.8 U	73	126
Radium-228	901.1	NA	4.76 U	6.96	5.17	---	---	---	---	---	---
Sodium-22	901.1	NA	0.291 U	0.922	1.56	0.606 U	4	7.25	-1.37 U	5.2	9.76
Gross Alpha, Gross Beta, Tritium											
Gross alpha	900.0	15	8.05	1.73	1.3	2.86 J	1.3	1.47	1.72 J	1.2	1.45
Gross beta	900.0	50	6.15	1.3	1.79	5.03	1.2	1.56	4.94	2	2.92
Tritium	906.0	20,000	-40.2 U	88.4	155	---	---	---	72.1 U	85	140
Strontium, Uranium											
Strontium-90	905.0	8	-0.944 U	0.653	1.37	-0.082 U	0.33	0.551	0.027 U	0.22	0.424
Uranium-233/234	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---
Uranium-235	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---
Uranium-238	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	---	---	---	---	---	---	---	---	---
Adjusted gross alpha	Calculated	15	---	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
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TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-33C**			**RD-34A**						**RD-34A**		
Sample Port:														
Sample Preparation:			Total			Dissolved			Total			Dissolved		
Geologic Unit:			Chatsworth			Chatsworth			Chatsworth			Chatsworth		
Sample Type:			Split			Primary			Primary			Primary		
Lab Name:			GEL			Eberline			Eberline			Eberline		
Collection Date:			7/24/2009			3/5/2009			3/5/2009			7/28/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	---	---	---	-4.13 U	6	10.2	2.27 U	5.1	8.52	---	---	---
Antimony-125	901.1	NA	-0.112 U	8.05	13.3	-0.324 U	2.4	4.02	0.729 U	2.8	4.7	7.28 U	20	33.8
Barium-133	901.1	NA	2.96 U	4.37	6.65	-0.831 U	1	1.76	0.024 U	0.23	1.54	1.97 U	9.8	16.9
Cesium-134	901.1	NA	0.864 U	3.58	6.13	-0.476 U	1.3	2.16	-0.152 U	1.4	2.37	-0.752 U	6.8	12.4
Cesium-137	901.1	NA	-1.5 U	3.01	4.95	-0.365 U	1.2	2.12	0.003 U	1	1.75	4.01 U	6.1	10.4
Cobalt-60	901.1	NA	-0.713 U	2.94	4.86	0.358 U	1.3	2.24	0.199 U	1.3	2.22	5.22 U	11	18.8
Europium-152	901.1	NA	-3.76 U	8.86	14.5	-0.051 U	0.77	3.62	-0.657 U	4.7	7.94	10 U	24	40.8
Europium-154	901.1	NA	-5.46 U	8.18	12.9	0.9 U	3	5.13	-0.581 U	2	3.5	20.5 U	19	30.7
Europium-155	901.1	NA	-11.4 U	14	16.5	2.55 U	3.6	6.02	-0.795 U	6.1	10.2	9.42 U	36	61.5
Manganese-54	901.1	NA	-0.814 U	2.88	4.73	0.021 U	0.48	0.834	0.027 U	0.6	1.04	-0.747 U	6.1	11.2
Potassium-40	901.1	NA	-20.2 U	53.8	72	-0.74 U	7.21	12.65	-31.9 U	25	42.7	-45 U	160	282
Radium-228	901.1	NA	---	---	---	6.28 U	5.8	9.7	-2.2 U	5.9	10.1	---	---	---
Sodium-22	901.1	NA	-2.01 U	2.91	4.58	0.307 U	1	1.75	-0.198 U	0.67	1.19	7 U	6.4	10.5
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	4.99	2.98	3.46	7.65	3.2	3.35	13.4	4.6	4.11	10.6	3.8	3.09
Gross beta	900.0	50	6.42	2.48	3.41	10.8	2.9	3.71	15.4	3.4	4	9.61	4.4	6.72
Tritium	906.0	20,000	29.2 U	84.8	145	---	---	---	990	130	87.8	---	---	---
Strontium, Uranium														
Strontium-90	905.0	8	0.617 U	0.685	1.14	0.084 U	0.28	0.557	-0.161 U	0.29	0.618	0.022 U	0.22	0.421
Uranium-233/234	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Adjusted gross alpha	Calculated	15	---	---	---	---	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
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TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-34A**			**RD-34B**						**RD-34B**		
Sample Port:														
Sample Preparation:			Total			Dissolved			Total			Dissolved		
Geologic Unit:			Chatsworth			Chatsworth			Chatsworth			Chatsworth		
Sample Type:			Primary			Primary			Primary			Primary		
Lab Name:			Eberline			Eberline			Eberline			Eberline		
Collection Date:			7/28/2009			2/20/2009			2/20/2009			7/28/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	---	---	---	-0.433 U	1.4	1.76	0.125 U	0.28	0.897	---	---	---
Antimony-125	901.1	NA	-4.87 U	15	26.5	-0.233 U	3.6	6.07	2.19 U	2.1	3.56	5.14 U	17	28.5
Barium-133	901.1	NA	1.6 U	2.5	7.59	0.597 U	2.5	2.38	0.072 U	0.2	0.824	0.287 U	1.5	9.17
Cesium-134	901.1	NA	-0.281 U	6.4	8.18	-2.24 U	1.6	2.74	-0.083 U	0.55	0.959	2.6 U	3.9	6.76
Cesium-137	901.1	NA	-0.472 U	5.4	9.41	0.244 U	1.6	2.67	-0.922 U	0.63	1.14	-1.76 U	6.4	11.4
Cobalt-60	901.1	NA	0.272 U	4.2	7.5	0.75 U	0.99	1.67	0.627 U	0.63	1.06	-1.16 U	4.8	9.01
Europium-152	901.1	NA	8.2 U	41	13.8	0.525 U	1.3	4.63	2.61 U	2.4	4.04	3.21 U	16	28
Europium-154	901.1	NA	0.18 U	16	21.1	-0.76 U	3.7	6.35	0 U	1.9	3.4	-3.02 U	24	26.7
Europium-155	901.1	NA	-11 U	16	27.1	-0.77 U	3.6	6.01	-0.54 U	1.2	2.03	9.21 U	11	18.4
Manganese-54	901.1	NA	0.171 U	3.4	6.01	-0.262 U	1.3	2.26	-0.071 U	0.46	0.82	-0.911 U	6.4	11.3
Potassium-40	901.1	NA	45 U	83	141	-1.4 U	6.87	12.14	4.79 U	6.8	11.6	-12.8 U	64	118
Radium-228	901.1	NA	---	---	---	5.53 U	6.2	10.4	1.34 U	3.7	6.35	---	---	---
Sodium-22	901.1	NA	0.061 U	5.5	7.19	-0.258 U	1.3	2.16	0 U	0.66	1.15	-1.02 U	8.3	9.06
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	11.6	4.1	3.42	1.26 U	2.1	3.38	3.07	1.9	2.69	2.99 J	1.5	1.73
Gross beta	900.0	50	13.2	3.6	4.82	5.58	1.9	2.63	6.84	1.8	2.44	5.65	2	2.86
Tritium	906.0	20,000	859	140	139	---	---	---	100 U	110	112	---	---	---
Strontium, Uranium														
Strontium-90	905.0	8	-0.065 U	0.2	0.415	-0.068 U	0.27	0.547	0.057 U	0.27	0.522	-0.068 U	0.2	0.411
Uranium-233/234	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Adjusted gross alpha	Calculated	15	---	---	---	---	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
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TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-34B**			**RD-34C**			**RD-34C**			**RD-34C**		
Sample Port:														
Sample Preparation:			Total			Dissolved			Total			Dissolved		
Geologic Unit:			Chatsworth			Chatsworth			Chatsworth			Chatsworth		
Sample Type:			Primary			Primary			Primary			Primary		
Lab Name:			Eberline			Eberline			Eberline			Eberline		
Collection Date:			7/28/2009			2/19/2009			2/19/2009			7/23/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	---	---	---	0.288 U	0.96	6.34	-0.341 U	0.65	0.814	---	---	---
Antimony-125	901.1	NA	3.68 U	12	20.9	-1.18 U	2.1	3.6	-0.336 U	1.5	2.5	7.54 U	12	20.1
Barium-133	901.1	NA	-7.41 U	6.7	7.79	-0.429 U	1.2	1.96	0 U	0.019	0.72	2.4 U	1.9	7.57
Cesium-134	901.1	NA	1.35 U	6	7.9	-0.834 U	1.1	1.94	0.013 U	0.19	0.906	-0.201 U	2.6	9.21
Cesium-137	901.1	NA	-0.326 U	5.3	9.39	-0.56 U	1	1.75	0.393 U	0.61	1.04	0.611 U	6.3	11
Cobalt-60	901.1	NA	-5.3 U	4.8	9.49	-0.166 U	0.94	1.62	0.031 U	0.66	1.15	5.11 U	6.3	10.7
Europium-152	901.1	NA	-16.1 U	15	27.4	0.494 U	0.83	3.7	0.518 U	1.3	2.29	15.5 U	13	21
Europium-154	901.1	NA	8.13 U	17	28.8	-0.74 U	2.1	3.66	-0.457 U	1.4	2.46	-3.15 U	20	23.8
Europium-155	901.1	NA	6.98 U	11	19.4	-0.547 U	4.2	7.15	0.792 U	1.7	2.95	-4.01 U	12	20.4
Manganese-54	901.1	NA	-0.643 U	5	8.9	0.012 U	0.52	0.898	0.296 U	0.58	0.981	1.08 U	4.7	8.29
Potassium-40	901.1	NA	11.8 U	57	101	-57.9 U	20	34.1	-0.14 U	7.8	13.4	-36.8 U	69	126
Radium-228	901.1	NA	---	---	---	-3.1 U	5.2	8.84	2.01 U	3	5.01	---	---	---
Sodium-22	901.1	NA	2.76 U	5.6	9.77	-0.252 U	0.72	1.25	-0.156 U	0.47	0.836	-1.06 U	6.7	8.04
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	2.58 J	1.5	1.65	1.04 U	0.94	1.64	2.26 J	1.3	1.63	1.63 J	0.9	1.14
Gross beta	900.0	50	6.11	2	2.76	4.74	1.1	1.36	4.86	1.4	1.88	5.1	1.1	1.46
Tritium	906.0	20,000	231	92	139	---	---	---	-1.76 U	100	111	---	---	---
Strontium, Uranium														
Strontium-90	905.0	8	-0.048 U	0.2	0.417	-0.079 U	0.24	0.492	-0.062 U	0.24	0.498	-0.227 U	0.18	0.42
Uranium-233/234	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Adjusted gross alpha	Calculated	15	---	---	---	---	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.

TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-34C**											
Sample Port:														
Sample Preparation:			Dissolved			Dissolved			Total			Total		
Geologic Unit:			Chatsworth			Chatsworth			Chatsworth			Chatsworth		
Sample Type:			Duplicate			Split			Primary			Duplicate		
Lab Name:			Eberline			GEL			Eberline			Eberline		
Collection Date:			7/23/2009			7/23/2009			7/23/2009			07/23/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	---	---	---	---	---	---	---	---	---	---	---	---
Antimony-125	901.1	NA	-1.7 U	10	18.3	7.54 U	5.03	9.43	5.92 U	20	33.9	3.16 U	12	21.2
Barium-133	901.1	NA	-3.46 U	7	12.4	-0.71 U	2.77	4.01	-7.79 U	14	24.1	0.459 U	1.7	7.03
Cesium-134	901.1	NA	-4.68 U	8.4	9.36	-1.34 U	2.22	3.41	-0.91 U	7.7	14	-0.539 U	4.7	8.44
Cesium-137	901.1	NA	0.174 U	3.9	7.08	1.27 U	2.15	3.78	3.64 U	5.9	10.2	-4.05 U	6.3	11.2
Cobalt-60	901.1	NA	-4.88 U	5.7	11.1	1.65 U	1.99	3.71	4.29 U	9.9	17.4	-4.02 U	5.9	11.1
Europium-152	901.1	NA	0.869 U	14	24.4	1.09 U	5.58	9.67	-2.21 U	26	45.3	4.45 U	14	24.5
Europium-154	901.1	NA	12.8 U	24	30.2	-0.953 U	4.56	7.49	-15.6 U	28	52.2	3.13 U	11	20
Europium-155	901.1	NA	-12.9 U	13	22.9	6.92 U	7.62	12.6	-13.9 U	36	62.5	-2.34 U	11	19
Manganese-54	901.1	NA	-0.926 U	4	7.36	-1.3 U	1.93	2.96	7.8 U	7	11.6	1.53 U	3.7	6.42
Potassium-40	901.1	NA	5.24 U	12	52.3	-20 U	27.2	43.2	128 U	140	228	20.1 U	63	110
Radium-228	901.1	NA	---	---	---	---	---	---	---	---	---	---	---	---
Sodium-22	901.1	NA	1.85 U	4.8	8.52	-0.237 U	1.6	2.65	-5.3 U	9.3	17.7	1.07 U	3.8	6.83
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	0.897 U	0.83	1.27	2.84 U	2.24	3.06	1.14 J	0.82	1.09	2.11 J	1	1.01
Gross beta	900.0	50	4.5	1.4	2.04	5.16	2.47	3.65	4.33	1.1	1.36	4.33	1.2	1.56
Tritium	906.0	20,000	---	---	---	---	---	---	76.1 U	85	140	79.9 U	85	139
Strontium, Uranium														
Strontium-90	905.0	8	0.051 U	0.22	0.424	0.335 U	0.619	1.11	0.088 U	0.26	0.479	-0.018 U	0.21	0.415
Uranium-233/234	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Adjusted gross alpha	Calculated	15	---	---	---	---	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.

TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-34C**			**RD-54A**						**RD-54A**		
Sample Port:						Z2						Z2		
Sample Preparation:			Total			Dissolved			Total			Dissolved		
Geologic Unit:			Chatsworth			Chatsworth			Chatsworth			Chatsworth		
Sample Type:			Split			Primary			Primary			Primary		
Lab Name:			GEL			Eberline			Eberline			Eberline		
Collection Date:			7/23/2009			2/24/2009			2/24/2009			7/16/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	---	---	---	0.689 U	0.95	2.73	-0.103 U	0.9	1	---	---	---
Antimony-125	901.1	NA	-2.65 U	5.21	8.47	-0.046 U	1.9	3.16	-0.187 U	1.2	2.06	-2.72 U	8.3	14.3
Barium-133	901.1	NA	1.16 U	2.63	4.06	0.304 U	0.26	0.742	0.078 U	0.098	0.645	0.407 U	0.91	3.87
Cesium-134	901.1	NA	-0.146 U	2.29	3.73	0.517 U	0.6	0.805	0.349 U	0.49	0.828	0.607 U	4.5	7.67
Cesium-137	901.1	NA	-0.354 U	2.02	3.3	-0.098 U	0.98	1.67	0.683 U	0.52	0.866	2.48 U	4.4	7.51
Cobalt-60	901.1	NA	-0.214 U	2.29	3.79	-0.387 U	0.63	1.11	-0.202 U	0.74	1.29	1.72 U	2.2	3.71
Europium-152	901.1	NA	-1.3 U	5.69	9.31	-1.11 U	1.8	2.29	1.49 U	1.7	2.91	1.15 U	6.2	9.21
Europium-154	901.1	NA	6.25 U	6.45	12	0.377 U	0.77	1.34	0.029 U	0.96	1.73	5.88 U	12	15.4
Europium-155	901.1	NA	3.29 U	7.2	12.3	-1.31 U	2	3.49	0.295 U	1.5	2.46	-2.82 U	6.7	11.6
Manganese-54	901.1	NA	-0.361 U	1.84	3.1	0.224 U	0.43	0.726	-0.094 U	0.62	1.08	1.45 U	3.1	5.36
Potassium-40	901.1	NA	8.47 U	29.1	44.9	12.7 U	9.7	16.2	-1.03 U	9.5	16.3	-16.6 U	49	86.3
Radium-228	901.1	NA	---	---	---	3.46 U	3.5	5.85	-0.328 U	3.2	5.44	---	---	---
Sodium-22	901.1	NA	2.2 U	2.29	4.26	0.128 U	0.26	0.455	0.01 U	0.33	0.592	1.99 U	4.1	5.23
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	4.29	2.53	2.96	5.79	2.3	2.24	5.78	2	1.66	4.64	1.7	1.13
Gross beta	900.0	50	4.5	2.72	4.25	6.33	2.4	3.53	5.76	1.3	1.47	5.7	1.4	1.93
Tritium	906.0	20,000	-3.89 U	83.6	145	---	---	---	-30.2 U	100	111	---	---	---
Strontium, Uranium														
Strontium-90	905.0	8	1.02 U	0.873	1.42	-0.071 U	0.22	0.439	-0.172 U	0.25	0.52	-0.043 U	0.24	0.485
Uranium-233/234	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Adjusted gross alpha	Calculated	15	---	---	---	---	---	---	---	---	---	---	---	---

TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-54A**			**RD-54B**						**RD-54B**		
Sample Port:			Z2											
Sample Preparation:			Total			Dissolved			Total			Dissolved		
Geologic Unit:			Chatsworth			Chatsworth			Chatsworth			Chatsworth		
Sample Type:			Primary			Primary			Primary			Primary		
Lab Name:			Eberline			Eberline			Eberline			TA-Denver		
Collection Date:			7/16/2009			2/23/2009			2/23/2009			10/30/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	---	---	---	0.767 U	1.8	6.82	-2.8 U	2.4	4.07	---	---	---
Antimony-125	901.1	NA	-7.75 U	12	22.1	0.741 U	2	3.4	-0.659 U	2.6	4.36	2.3 U	5.9	10.2
Barium-133	901.1	NA	2.93 U	2.7	7.42	0.472 U	1.9	3.24	0.071 U	0.52	1.84	0.687 U	5.2	3.24
Cesium-134	901.1	NA	0.63 U	2.2	9.27	-0.868 U	1.4	2.39	-1.6 U	1.4	2.49	0.382 U	1.2	4.36
Cesium-137	901.1	NA	-0.292 U	6.4	11.2	0.56 U	1	1.7	-0.594 U	1.4	2.4	-1.13 U	2.4	4.29
Cobalt-60	901.1	NA	1.45 U	4.6	8.2	-0.739 U	0.82	1.54	0.458 U	0.86	1.46	-1.22 U	3	5.45
Europium-152	901.1	NA	4.41 U	11	18.4	1.07 U	1.3	4.93	0.021 U	1.2	4.01	-4.1 U	8	14
Europium-154	901.1	NA	7.60 U	18	24.3	-0.164 U	2.1	3.81	-2.31 U	2.2	4.02	4.22 U	8.8	12.1
Europium-155	901.1	NA	2.79 U	11	19.1	0.666 U	4.1	6.86	-0.794 U	3.4	5.74	1.76 U	5.6	9.5
Manganese-54	901.1	NA	1.44 U	4.4	7.78	0.561 U	0.92	1.56	-0.124 U	1.3	2.18	1.4 U	2.2	3.8
Potassium-40	901.1	NA	-65.7 U	54	105	8.02 U	18	30.4	-76.9 U	29	47.9	14.4 U	31	54.4
Radium-228	901.1	NA	---	---	---	3.41 U	4.8	8.16	-1.48 U	6.3	10.7	---	---	---
Sodium-22	901.1	NA	2.71 U	6.4	8.67	-0.056 U	0.72	1.3	-0.785 U	0.76	1.36	1.44 U	3	4.12
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	4.8	1.8	1.58	6.21	3.8	5.36	2.89 U	2.3	3.26	1.94 U	1.7	2.53
Gross beta	900.0	50	5.23	2.1	3.1	8	2.4	3.23	5.04	2.2	3.29	5.17	2.1	3.02
Tritium	906.0	20,000	-89.4 U	88	154	---	---	---	---	---	---	---	---	---
Strontium, Uranium														
Strontium-90	905.0	8	0.106 U	0.29	0.549	-0.082 U	0.18	0.389	-0.082 U	0.22	0.454	0.036 U	0.29	0.54
Uranium-233/234	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Adjusted gross alpha	Calculated	15	---	---	---	---	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
Haley & Aldrich, Inc.
G:\Projects\26472\Reports\M-513 2009 Annual\Tables\M513_T09_Rad-F.xls

TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-54B**									**RD-54C**		
Sample Port:														
Sample Preparation:			Dissolved			Total						Dissolved		
Geologic Unit:			Chatsworth			Chatsworth						Chatsworth		
Sample Type:			Duplicate			Primary			Duplicate			Primary		
Lab Name:			TA-Denver			TA-Denver			TA-Denver			Eberline		
Collection Date:			10/30/2009			10/30/2009			10/30/2009			2/24/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	---	---	---	---	---	---	---	---	---	0.168 U	0.93	1.06
Antimony-125	901.1	NA	4.85 U	12	20.4	0.43 U	7.3	12.6	-1.44 U	6.8	12	0.404 U	1.5	2.63
Barium-133	901.1	NA	2.16 U	4.4	7.44	0.912 U	1.1	3.95	0.579 U	1.1	3.53	0.064 U	0.054	0.857
Cesium-134	901.1	NA	-1.96 U	5.9	6.87	3.2 U	3.3	5.48	0.933 U	2.4	4.25	-0.06 U	0.53	0.93
Cesium-137	901.1	NA	-0.75 U	4.2	7.46	-1.31 U	1.9	3.55	-0.92 U	2.4	4.39	-0.615 U	0.61	1.09
Cobalt-60	901.1	NA	-1.78 U	4.7	8.87	-1.4 U	2.1	4.02	-2.78 U	3.1	5.91	-0.074 U	0.32	0.602
Europium-152	901.1	NA	2.77 U	11	19.4	0.391 U	8.7	11.8	2.82 U	3.2	8.92	1.09 U	1.8	3.11
Europium-154	901.1	NA	-5.58 U	11	21.9	2.72 U	9.4	12.1	-1.91 U	9.6	17.5	-0.008 U	1.2	2.22
Europium-155	901.1	NA	-1.81 U	14	23.4	0.927 U	7.8	13.3	3.84 U	5.5	9.25	0.176 U	1.4	2.46
Manganese-54	901.1	NA	2.06 U	4.5	7.74	-0.451 U	2.3	4.08	0.758 U	1.8	3.13	-0.021 U	0.38	0.674
Potassium-40	901.1	NA	-29.2 U	73	132	1.82 U	7.6	21.2	33.6 U	37	62.6	6.45 U	7	11.7
Radium-228	901.1	NA	---	---	---	---	---	---	---	---	---	5.06 U	3.8	6.3
Sodium-22	901.1	NA	-1.89 U	3.8	7.4	-0.507 U	2.6	4.61	-0.651 U	3.3	5.94	-0.003 U	0.42	0.754
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	3.62	1.9	2.67	2.22 U	2	2.82	5.01	2.4	2.56	-1.44 U	1.9	3.53
Gross beta	900.0	50	5.48	2	2.85	7.06	2.3	3.31	6.47	2.2	3.08	5.5	2.1	3.1
Tritium	906.0	20,000	---	---	---	-133 U	91	160	-156 U	90	160	---	---	---
Strontium, Uranium														
Strontium-90	905.0	8	-0.009 U	0.31	0.597	-0.108 U	0.23	0.477	-0.105 U	0.26	0.547	0.041 U	0.22	0.413
Uranium-233/234	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Adjusted gross alpha	Calculated	15	---	---	---	---	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.

TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-54C**			**RD-54C**			**RD-54C**			**RD-57**		
Sample Port:												Z7		
Sample Preparation:			Total			Dissolved			Total			Dissolved		
Geologic Unit:			Chatsworth			Chatsworth			Chatsworth			Chatsworth		
Sample Type:			Primary			Primary			Primary			Primary		
Lab Name:			Eberline			Eberline			Eberline			Eberline		
Collection Date:			2/24/2009			8/4/2009			8/4/2009			2/25/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	3.13 U	4.1	5.97	---	---	---	---	---	---	---	---	---
Antimony-125	901.1	NA	0.368 U	1.4	2.43	-0.678 U	12	21.4	12.2 U	12	19.6	---	---	---
Barium-133	901.1	NA	0.086 U	0.33	1.05	1.68 U	1.9	5.52	0.426 U	1.5	6.54	---	---	---
Cesium-134	901.1	NA	0.621 U	0.93	1.3	-1.78 U	4.8	8.78	1.05 U	5	8.79	---	---	---
Cesium-137	901.1	NA	-0.88 U	1.1	1.82	-0.202 U	5.5	9.69	-0.982 U	4.5	8.08	---	---	---
Cobalt-60	901.1	NA	0.065 U	1	1.77	0.222 U	4.2	7.68	1.6 U	4.7	8.38	---	---	---
Europium-152	901.1	NA	0.622 U	1.1	3.34	-12.0 U	15	26	8.74 U	14	24.2	---	---	---
Europium-154	901.1	NA	-0.587 U	3.2	5.42	-1.44 U	17	31.2	-2.18 U	15	27.5	---	---	---
Europium-155	901.1	NA	0.423 U	2.7	4.54	3.73 U	11	18.4	1.75 U	11	18.2	---	---	---
Manganese-54	901.1	NA	0.297 U	0.87	1.47	1.66 U	3.9	6.81	1.57 U	6.3	10.9	---	---	---
Potassium-40	901.1	NA	-33.4 U	20	35.1	4.35 U	64	113	31.1 U	70	122	---	---	---
Radium-228	901.1	NA	-3.26 U	4.9	8.45	---	---	---	---	---	---	---	---	---
Sodium-22	901.1	NA	-0.199 U	1.1	1.84	-0.489 U	5.9	10.6	-0.739 U	5.1	9.32	---	---	---
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	1.25 U	1.7	2.83	0.382 U	1.5	2.46	2.5 J	1.7	2.24	4.89	1.6	1.25
Gross beta	900.0	50	6.58	2.6	3.88	3.71 J	2	3.24	4.96	2.8	4.27	7.44	1.6	1.98
Tritium	906.0	20,000	-84.5 U	100	111	---	---	---	-27.1 U	100	178	---	---	---
Strontium, Uranium														
Strontium-90	905.0	8	-0.064 U	0.25	0.486	-0.133 U	0.26	0.552	0.167 U	0.33	0.623	-0.094 U	0.24	0.507
Uranium-233/234	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Adjusted gross alpha	Calculated	15	---	---	---	---	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
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TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-57**			**RD-57**			**RD-59A**					
Sample Port:			Z7			Z7								
Sample Preparation:			Total			Total			Dissolved			Total		
Geologic Unit:			Chatsworth			Chatsworth			Chatsworth			Chatsworth		
Sample Type:			Primary			Primary			Primary			Primary		
Lab Name:			Eberline			Eberline			Eberline			Eberline		
Collection Date:			2/25/2009			7/17/2009			3/3/2009			3/3/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	---	---	---	---	---	---	0.192 U	0.42	2.66	-0.48 U	4.2	4.68
Antimony-125	901.1	NA	---	---	---	14.3 U	23	39.7	1.48 U	1.9	3.21	0.714 U	3.6	6.05
Barium-133	901.1	NA	---	---	---	6.1 U	9.7	16.5	0.113 U	0.18	0.867	0.64 U	0.47	1.56
Cesium-134	901.1	NA	---	---	---	-10.5 U	11	20.1	-0.098 U	0.22	0.82	0.558 U	0.92	1.55
Cesium-137	901.1	NA	---	---	---	2.67 U	10	17.9	0.018 U	0.74	1.26	0.87 U	1.8	3.11
Cobalt-60	901.1	NA	---	---	---	2.05 U	6.8	12.3	-0.546 U	0.88	1.54	0.132 U	1.7	2.86
Europium-152	901.1	NA	---	---	---	6.38 U	19	32.2	0.732 U	0.91	2.72	1.27 U	3.5	5.9
Europium-154	901.1	NA	---	---	---	8.62 U	21	37	-0.277 U	0.87	1.59	1.06 U	4.3	7.33
Europium-155	901.1	NA	---	---	---	4.52 U	30	50.6	-0.579 U	2.6	4.35	0.91 U	4	6.72
Manganese-54	901.1	NA	---	---	---	4.08 U	7.1	12.3	0.031 U	0.39	0.683	-0.642 U	1.2	2.05
Potassium-40	901.1	NA	---	---	---	-74.2 U	140	258	-2.38 U	11	19	-36 U	33	56.9
Radium-228	901.1	NA	---	---	---	---	---	---	0.537 U	3.7	6.33	-0.593 U	8.1	13.7
Sodium-22	901.1	NA	---	---	---	2.95 U	7.1	12.7	-0.094 U	0.3	0.54	0.361 U	1.5	2.49
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	1.89 J	1.4	1.89	4.76	1.7	1.56	1.26 U	1.7	2.63	0.064 U	2.8	4.89
Gross beta	900.0	50	4.63	2.2	3.33	4.9	1.5	2.08	5.83	2.1	3.04	6.53	2.3	3.37
Tritium	906.0	20,000	10.4 U	110	188	-12.2 U	87	147	---	---	---	-104 U	110	188
Strontium, Uranium														
Strontium-90	905.0	8	0.484 U	0.32	0.526	-0.046 U	0.27	0.517	0.057 U	0.41	0.693	-0.029 U	0.27	0.528
Uranium-233/234	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Adjusted gross alpha	Calculated	15	---	---	---	---	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
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TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-59A**						**RD-59B**					
Sample Port:														
Sample Preparation:			Dissolved			Total			Dissolved			Total		
Geologic Unit:			Chatsworth			Chatsworth			Chatsworth			Chatsworth		
Sample Type:			Primary			Primary			Primary			Primary		
Lab Name:			Eberline			Eberline			Eberline			Eberline		
Collection Date:			8/4/2009			8/4/2009			3/3/2009			3/3/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	---	---	---	---	---	---	-9.18 U	6.7	11.4	-0.277 U	0.94	1.04
Antimony-125	901.1	NA	11.2 U	14	24.4	1.32 U	22	37.7	-0.325 U	3.7	6.29	-1.55 U	2.1	3.71
Barium-133	901.1	NA	4.55 U	7.8	13.2	10.9 U	15	18.4	-0.042 U	0.39	1.55	0.108 U	0.26	0.948
Cesium-134	901.1	NA	3.86 U	5.9	8.02	-0.206 U	7.3	13.3	0.499 U	1	1.73	0.441 U	0.58	0.978
Cesium-137	901.1	NA	-2.48 U	6.5	11.4	5.68 U	5.6	9.37	0.678 U	1.6	2.73	0.23 U	0.96	1.63
Cobalt-60	901.1	NA	-1.62 U	3.7	6.98	0.591 U	7.9	14.4	0.084 U	1.5	2.73	-0.057 U	0.32	0.598
Europium-152	901.1	NA	8.62 U	14	24.1	12.9 U	7.5	27.6	0.388 U	1	4.35	0.344 U	1.4	2.32
Europium-154	901.1	NA	-10.8 U	21	37	-17.4 U	27	51.4	0.072 U	2.1	3.68	0.392 U	0.91	1.6
Europium-155	901.1	NA	8.46 U	16	27	-37.2 U	38	66.5	-6.55 U	6.5	11	-0.156 U	1	1.78
Manganese-54	901.1	NA	1.62 U	5.3	9.12	4.62 U	6.8	11.5	1.06 U	1.8	3.03	-0.215 U	0.39	0.704
Potassium-40	901.1	NA	2.26 U	81	141	61.2 U	150	262	-7.74 U	33	55.8	10.2 U	6.6	10.7
Radium-228	901.1	NA	---	---	---	---	---	---	3.99 U	7.8	13.2	0.25 U	3.6	6.17
Sodium-22	901.1	NA	-3.68 U	7	12.5	-5.9 U	9.2	17.5	0.024 U	0.72	1.25	0.133 U	0.31	0.543
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	2.52 J	1.4	1.79	2.53 J	1.5	1.76	0.66 U	1.2	2.06	-1.56 U	1.3	2.51
Gross beta	900.0	50	4.38	1.9	2.87	5.61	2	2.77	4.16	1.6	2.26	2.75 J	1.5	2.44
Tritium	906.0	20,000	---	---	---	-77 U	100	178	---	---	---	-81.3 U	110	189
Strontium, Uranium														
Strontium-90	905.0	8	-0.243 U	0.28	0.602	0.108 U	0.39	0.758	-0.051 U	0.23	0.455	-0.08 U	0.25	0.511
Uranium-233/234	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Adjusted gross alpha	Calculated	15	---	---	---	---	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
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TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-59B**						**RD-59C**					
Sample Port:														
Sample Preparation:			Dissolved			Total			Dissolved			Total		
Geologic Unit:			Chatsworth			Chatsworth			Chatsworth			Chatsworth		
Sample Type:			Primary			Primary			Primary			Primary		
Lab Name:			Eberline			Eberline			Eberline			Eberline		
Collection Date:			8/4/2009			8/4/2009			3/3/2009			3/3/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	---	---	---	---	---	---	0.029 U	0.037	0.663	1.24 U	1	2.89
Antimony-125	901.1	NA	-4.20 U	13	23.4	11.6 U	14	23.3	0.846 U	1.8	2.98	0.789 U	1.6	2.65
Barium-133	901.1	NA	-4.56 U	5.7	10.1	1.79 U	2.3	7.08	0.081 U	0.17	0.746	0.406 U	0.24	0.779
Cesium-134	901.1	NA	1.1 U	6.6	8.74	-1.60 U	8.1	9.48	-0.014 U	0.62	0.901	0.213 U	1	1.73
Cesium-137	901.1	NA	5.75 U	5.9	9.95	-0.923 U	5.6	10.1	0.666 U	0.96	1.63	0.367 U	0.73	1.24
Cobalt-60	901.1	NA	-2.40 U	5	9.42	-3.84 U	5.5	10.7	-0.109 U	0.58	1.02	-0.163 U	0.64	1.11
Europium-152	901.1	NA	1.32 U	12	20.2	7.39 U	16	27.5	0.213 U	0.89	1.88	0.415 U	6.4	2.16
Europium-154	901.1	NA	6.91 U	18	31	-3.38 U	25	27.4	0.37 U	1.4	2.36	-0.61 U	0.97	1.79
Europium-155	901.1	NA	-1.34 U	11	18.6	4.65 U	11	19.5	-1.4 U	2	3.46	-0.224 U	1.8	3.09
Manganese-54	901.1	NA	5.05 U	4.8	8.01	1.4 U	3.9	6.89	-0.053 U	0.44	0.765	0.143 U	0.77	1.32
Potassium-40	901.1	NA	17 U	61	106	9.76 U	82	144	3.66 U	7.4	12.6	0.601 U	10	17.4
Radium-228	901.1	NA	---	---	---	---	---	---	3.18 U	2.8	4.68	2.34 U	3.4	5.71
Sodium-22	901.1	NA	2.36 U	6.1	10.6	-1.14 U	8.4	9.29	0.126 U	0.46	0.808	-0.209 U	0.33	0.614
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	3.98	2.3	3.15	1.49 J	1	1.31	-0.292 U	1	2	0.808 U	1.1	2.12
Gross beta	900.0	50	3.55 J	1.4	2.06	2.94 J	1.3	1.98	3.94 J	1.9	2.8	2.17 U	2	3.38
Tritium	906.0	20,000	---	---	---	-60.4 U	100	178	---	---	---	-66.6 U	110	188
Strontium, Uranium														
Strontium-90	905.0	8	-0.091 U	0.26	0.541	-0.06 U	0.26	0.534	-0.27 U	0.2	0.477	-0.179 U	0.25	0.519
Uranium-233/234	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Adjusted gross alpha	Calculated	15	---	---	---	---	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
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TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-59C**						**RD-63**					
Sample Port:														
Sample Preparation:			Dissolved			Total			Dissolved					
Geologic Unit:			Chatsworth			Chatsworth			Chatsworth					
Sample Type:			Primary			Primary			Primary			Split		
Lab Name:			Eberline			Eberline			Eberline			GEL		
Collection Date:			8/4/2009			8/4/2009			2/20/2009			2/20/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	---	---	---	---	---	---	-0.003 U	0.31	1.77	0 U	7.38	11.3
Antimony-125	901.1	NA	22.1 U	19	32.4	-7.79 U	22	38.7	0.108 U	1.5	2.54	-0.0616 U	3.41	5.77
Barium-133	901.1	NA	-0.522 U	12	19.9	3.12 U	13	21.5	-1.61 U	0.8	1.08	0.0943 U	1.81	2.68
Cesium-134	901.1	NA	-2.22 U	10	18	-6.29 U	7.3	14.1	0.236 U	0.88	1.49	-0.702 U	1.38	2.22
Cesium-137	901.1	NA	-8.38 U	10	17.8	0.847 U	7.5	13.3	0.087 U	1.2	1.97	0.478 U	1.29	1.89
Cobalt-60	901.1	NA	0.145 U	7.9	13.7	-0.132 U	6.4	12	-0.172 U	0.87	1.51	0.584 U	1.2	2.07
Europium-152	901.1	NA	-3.48 U	23	39.4	-16.6 U	26	45.5	-0.071 U	1.6	2.73	-2.22 U	4.02	6.38
Europium-154	901.1	NA	23.2 U	30	49.8	19.2 U	25	42.4	-0.45 U	1.6	2.87	-0.948 U	3.51	5.81
Europium-155	901.1	NA	5.86 U	22	38.1	1.12 U	29	49.6	0.695 U	9.3	2.37	0.604 U	4.83	8.11
Manganese-54	901.1	NA	4.27 U	8.3	14.2	1.82 U	5.6	10	0.209 U	0.73	1.24	0.318 U	1.23	1.85
Potassium-40	901.1	NA	142 U	180	304	-163 U	140	268	15.2 U	12	20.7	-12.7 U	23.7	24.7
Radium-228	901.1	NA	---	---	---	---	---	---	5.01 U	4.7	7.86	1.26 U	5.16	7.71
Sodium-22	901.1	NA	7.88 U	10	16.9	6.49 U	8.5	14.4	-0.153 U	0.55	0.979	-0.283 U	1.26	2.09
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	0.487 U	1.1	1.84	1.71 J	1.2	1.63	10.6	3.9	3.68	8.72	2.12	1.57
Gross beta	900.0	50	2.87 J	1.3	2.06	3.14 J	1.6	2.46	11.9	2.8	3.18	8.58	1.61	2.04
Tritium	906.0	20,000	---	---	---	-93.7 U	100	178	---	---	---	---	---	---
Strontium, Uranium														
Strontium-90	905.0	8	-0.168 U	0.27	0.58	-0.113 U	0.24	0.512	-0.029 U	0.31	0.609	0.19 U	0.875	1.62
Uranium-233/234	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Adjusted gross alpha	Calculated	15	---	---	---	---	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
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TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-63**						**RD-63**					
Sample Port:														
Sample Preparation:			Total						Dissolved			Total		
Geologic Unit:			Chatsworth						Chatsworth			Chatsworth		
Sample Type:			Primary			Split			Primary			Primary		
Lab Name:			Eberline			GEL			Eberline			Eberline		
Collection Date:			2/20/2009			2/20/2009			7/31/2009			7/31/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	-0.001 U	0.16	2.76	9.73 U	8.25	12.3	---	---	---	---	---	---
Antimony-125	901.1	NA	0.375 U	1.6	2.7	0.0569 U	3.1	5.23	7.56 U	26	44.6	-6.2 U	15	26.6
Barium-133	901.1	NA	0.183 U	0.23	0.681	0.851 U	1.7	2.55	-10.1 U	10	18.8	0.303 U	1.4	8.02
Cesium-134	901.1	NA	0.684 U	0.61	0.829	0.109 U	1.33	2.21	-6.63 U	8.5	15.9	2.66 U	6.1	8.22
Cesium-137	901.1	NA	-0.124 U	0.61	1.04	0.877 U	1.3	1.94	9.52 U	8.9	14.7	-1.63 U	6.4	11.1
Cobalt-60	901.1	NA	-0.374 U	0.52	0.928	0.446 U	1.15	1.99	3.23 U	6.4	11.3	-2.13 U	4	7.49
Europium-152	901.1	NA	0.713 U	0.6	1.7	-1.56 U	4.09	5.94	-6.57 U	29	51.1	2.62 U	5.4	13.5
Europium-154	901.1	NA	0.336 U	1.2	2.06	0.698 U	3.47	5.14	-18.4 U	24	47.1	8.89 U	19	24.7
Europium-155	901.1	NA	-1.97 U	3.5	5.89	-1.28 U	4.76	7.82	-1.52 U	27	46.4	4.16 U	15	26.3
Manganese-54	901.1	NA	0.552 U	0.5	0.838	-0.856 U	1.15	1.83	-2.16 U	5.7	10.8	-6.25 U	6.2	11.1
Potassium-40	901.1	NA	16.18 U	9.81	16.2	-16.7 U	21.3	24.5	-39.7 U	140	249	54.8 U	84	143
Radium-228	901.1	NA	3.15 U	2.8	4.6	2.5 U	5.03	7.19	---	---	---	---	---	---
Sodium-22	901.1	NA	0.114 U	0.4	0.701	0.22 U	1.24	1.83	-6.24 U	8.2	16	3.02 U	6.4	8.38
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	11.2	3.8	3.64	10.8	2.48	1.96	7.64	4.3	5.81	9.62	3.3	2.4
Gross beta	900.0	50	10.5	3.7	5.65	10.9	1.74	2.17	9.97	3	4.09	11.1	3	3.92
Tritium	906.0	20,000	-52 U	100	112	-61 U	87.4	155	---	---	---	100 U	86	138
Strontium, Uranium														
Strontium-90	905.0	8	-0.037 U	0.26	0.499	-0.791 U	0.898	1.89	0.041 U	0.22	0.426	-0.140 U	0.17	0.376
Uranium-233/234	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Adjusted gross alpha	Calculated	15	---	---	---	---	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.

TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RD-64**						**RD-64**					
Sample Port:			Z8						Z4					
Sample Preparation:			Dissolved			Total			Dissolved			Total		
Geologic Unit:			Chatsworth			Chatsworth			Chatsworth			Chatsworth		
Sample Type:			Primary			Primary			Primary			Primary		
Lab Name:			Eberline			Eberline			Eberline			Eberline		
Collection Date:			2/23/2009			2/23/2009			7/16/2009			7/16/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	0.023 U	0.88	3.65	0.73 U	1.3	1.68	---	---	---	---	---	---
Antimony-125	901.1	NA	1.24 U	1.9	3.23	0.338 U	1.9	3.17	0.226 U	9.7	16.6	10.4 U	22	37.8
Barium-133	901.1	NA	0.023 U	0.35	1.37	0.827 U	2.3	3.84	2.48 U	5.9	10	0.745 U	3.6	11.6
Cesium-134	901.1	NA	-0.776 U	1.4	2.39	-1.49 U	1.4	2.44	-0.498 U	5.6	7.89	-3.09 U	11	19.5
Cesium-137	901.1	NA	-0.616 U	0.97	1.69	0.898 U	1.5	2.59	-5.05 U	6.8	11.7	-3.79 U	9.1	15.6
Cobalt-60	901.1	NA	0.006 U	1	1.81	-0.211 U	0.78	1.37	6.08 U	7.3	12.2	2.55 U	7.8	13.2
Europium-152	901.1	NA	2.18 U	2.6	4.35	-0.121 U	3.4	5.8	-5.85 U	19	31.5	-9.82 U	26	30.3
Europium-154	901.1	NA	0.019 U	1.7	2.92	-1.37 U	3.6	6.26	2.65 U	6.5	22.8	57.4 U	42	70.5
Europium-155	901.1	NA	-3.43 U	5.6	9.45	-1.02 U	2.7	3.84	5.77 U	12	20.7	4.28 U	16	26.9
Manganese-54	901.1	NA	-0.238 U	0.64	1.13	0.074 U	1.3	2.25	0.955 U	5	8.46	3.35 U	8.9	15.1
Potassium-40	901.1	NA	4.94 U	10.98	18.6	-50.2 U	27	46.6	-376 U	200	192	32.4 U	200	331
Radium-228	901.1	NA	1.42 U	6.5	11.1	1.08 U	7.6	12.9	---	---	---	---	---	---
Sodium-22	901.1	NA	0.007 U	0.56	0.994	-0.467 U	1.2	2.13	0.896 U	2.2	7.71	19.4 U	14	23.9
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	4.44	2	2.48	6.76	2.1	1.7	0.296 U	0.67	1.1	1.52 U	1.5	2.3
Gross beta	900.0	50	3.6 U	2.3	3.82	6.15	1.6	1.97	4.3	1.1	1.41	4.38	1.2	1.66
Tritium	906.0	20,000	---	---	---	77.8 U	100	111	---	---	---	62.9 U	93	154
Strontium, Uranium														
Strontium-90	905.0	8	-0.117 U	0.24	0.493	0.012 U	0.27	0.516	-0.100 U	0.24	0.497	-0.029 U	0.27	0.538
Uranium-233/234	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Adjusted gross alpha	Calculated	15	---	---	---	---	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
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TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**RS-18**						**RS-18**					
Sample Port:														
Sample Preparation:			Dissolved			Total			Dissolved			Total		
Geologic Unit:			Shallow			Shallow			Shallow			Shallow		
Sample Type:			Primary			Primary			Primary			Primary		
Lab Name:			Eberline			Eberline			Eberline			Eberline		
Collection Date:			3/4/2009			3/4/2009			04/27/2009			04/27/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	0.417 U	0.64	2	0.002 U	0.57	4.21	---	---	---	---	---	---
Antimony-125	901.1	NA	0.854 U	3.7	6.2	0.27 U	1.3	2.14	0.157 U	1.2	2.00	0.448 U	1.5	2.62
Barium-133	901.1	NA	0.555 U	1.6	2.77	0.502 U	0.94	1.35	-0.097 U	0.18	0.724	0.560 U	0.43	0.922
Cesium-134	901.1	NA	-0.76 U	1.4	1.96	-0.279 U	0.93	1.59	0.183 U	0.69	1.17	-0.023 U	0.68	0.940
Cesium-137	901.1	NA	0.293 U	1.2	2.12	-0.882 U	1.1	1.93	0.351 U	0.86	1.46	-0.480 U	0.69	1.21
Cobalt-60	901.1	NA	0.33 U	1.3	2.26	0.111 U	1.1	1.95	0.066 U	0.81	1.39	-0.002 U	0.73	1.28
Europium-152	901.1	NA	-2.82 U	2.8	4.86	-3.22 U	2.5	3.42	0.201 U	1.4	2.34	-0.297 U	1.2	2.13
Europium-154	901.1	NA	0.107 U	3.5	5.96	1.2 U	1.8	3.09	-0.012 U	1.0	1.80	-0.303 U	1.0	1.89
Europium-155	901.1	NA	0.141 U	4.9	8.27	0.864 U	3.9	6.53	-0.088 U	1.6	2.76	1.23 U	1.4	2.38
Manganese-54	901.1	NA	0.404 U	1	1.74	-0.02 U	0.5	0.873	0.006 U	0.41	0.723	0.008 U	0.42	0.742
Potassium-40	901.1	NA	-75.2 U	40	69.2	-32.7 U	21	35.8	0.012 U	6.8	11.9	3.38 U	8.2	14.1
Radium-228	901.1	NA	-1.52 U	7.3	12.5	-3.79 U	4.9	8.37	---	---	---	---	---	---
Sodium-22	901.1	NA	0.037 U	1.2	2.04	0.409 U	0.62	1.06	-0.004 U	0.34	0.610	-0.103 U	0.34	0.643
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	3.66	1.7	2.03	7.53	2.5	2.08	0.622 U	1.4	2.28	4.80	2.3	2.64
Gross beta	900.0	50	2.86 U	2	3.15	5.55	1.8	2.44	3.76 J	1.2	1.57	5.78	1.4	1.71
Tritium	906.0	20,000	---	---	---	107 J	56	88	---	---	---	31.1 U	88	147
Strontium, Uranium														
Strontium-90	905.0	8	-0.05 U	0.28	0.57	0.053 U	0.29	0.558	-0.157 U	0.34	0.681	0.035 U	0.26	0.504
Uranium-233/234	908.0-U	20 (total)	4.13	0.45	0.055	4.46	0.48	0.079	4.16	0.48	0.073	4.29	0.45	0.072
Uranium-235	908.0-U	20 (total)	0.188 J	0.067	0.041	0.2 J	0.067	0.052	0.217 J	0.081	0.050	0.166 J	0.059	0.036
Uranium-238	908.0-U	20 (total)	4.06	0.44	0.064	4.06	0.44	0.068	3.69	0.43	0.073	3.88	0.42	0.056
Sum of isotopic uranium activity	Calculated	20 (total)	8.378	---	---	8.72	---	---	8.07	---	---	8.34	---	---
Adjusted gross alpha	Calculated	15	<0	---	---	<0	---	---	<0	---	---	<0	---	---

See Table III for notes and abbreviations.

TABLE IX
SUMMARY OF ANALYSES FOR RADIONUCLIDES, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**WS-09**						**WS-09**					
Sample Port:														
Sample Preparation:			Dissolved			Total			Dissolved			Total		
Geologic Unit:			Chatsworth			Chatsworth			Chatsworth			Chatsworth		
Sample Type:			Primary			Primary			Primary			Primary		
Lab Name:			Eberline			Eberline			TA-Denver			TA-Denver		
Collection Date:			7/23/2009			7/23/2009			10/20/2009			10/20/2009		
Units:			pCi/L			pCi/L			pCi/L			pCi/L		
Radionuclide	**Method**	**MCL**	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA	Activity	Error	MDA
Gamma-emitting Radionuclides														
Americium-241	901.1	NA	---	---	---	---	---	---	---	---	---	---	---	---
Antimony-125	901.1	NA	---	---	---	---	---	---	---	---	---	---	---	---
Barium-133	901.1	NA	---	---	---	---	---	---	---	---	---	---	---	---
Cesium-134	901.1	NA	---	---	---	---	---	---	---	---	---	---	---	---
Cesium-137	901.1	NA	---	---	---	---	---	---	---	---	---	---	---	---
Cobalt-60	901.1	NA	---	---	---	---	---	---	---	---	---	---	---	---
Europium-152	901.1	NA	---	---	---	---	---	---	---	---	---	---	---	---
Europium-154	901.1	NA	---	---	---	---	---	---	---	---	---	---	---	---
Europium-155	901.1	NA	---	---	---	---	---	---	---	---	---	---	---	---
Manganese-54	901.1	NA	---	---	---	---	---	---	---	---	---	---	---	---
Potassium-40	901.1	NA	---	---	---	---	---	---	---	---	---	---	---	---
Radium-228	901.1	NA	---	---	---	---	---	---	---	---	---	---	---	---
Sodium-22	901.1	NA	---	---	---	---	---	---	---	---	---	---	---	---
Gross Alpha, Gross Beta, Tritium														
Gross alpha	900.0	15	9.86	3.8	4.29	11.8	3.5	1.7	11	4.9	4.2	19.5	7.3	4.86
Gross beta	900.0	50	9.91	2.5	3.11	9.05	2.4	3.14	6.4	1.7	1.97	8.17	2.1	2.39
Tritium	906.0	20,000	---	---	---	67.8 U	85	140	---	---	---	---	---	---
Strontium, Uranium														
Strontium-90	905.0	8	---	---	---	---	---	---	0.11 U	0.39	0.71	4.59	0.77	0.599
Uranium-233/234	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	908.0-U	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Sum of isotopic uranium activity	Calculated	20 (total)	---	---	---	---	---	---	---	---	---	---	---	---
Adjusted gross alpha	Calculated	15	---	---	---	---	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
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TABLE X
SUMMARY OF ANALYSES FOR METALS AND CYANIDE, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:		HAR-07	HAR-07	HAR-07	HAR-07	HAR-08	HAR-08	HAR-14	HAR-15
Sample Port:									
Sample Preparation:		Dissolved	Dissolved	Dissolved	Total	Dissolved	Dissolved	Dissolved	Dissolved
Sample Type:		Primary	Duplicate	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Shallow	Shallow
Lab Name:		Lancaster	Lancaster	TA-Denver	TA-Denver	Lancaster	Lancaster	TA-Denver	TA-Denver
Collection Date:		03/05/2009	03/05/2009	05/11/2009	07/21/2009	02/19/2009	04/30/2009	04/23/2009	04/23/2009
Analyte (mg/L)	**MCL**								
Aluminum	1	---	---	---	---	---	---	---	---
Antimony	0.006	0.0003 U	---	0.00028 U	---	0.00033 J	0.0003 U	0.00017 J	0.00013 J
Arsenic	0.01	0.00095 U	---	0.0004 J	---	0.00095 U	0.00095 U	0.00085 J	0.003 J
Barium	1	0.027	---	0.02	---	0.0627	0.0586	0.035	0.029
Beryllium	0.004	0.00013 U	---	0.00008 U	---	0.00013 U	0.00013 U	0.00008 U	0.00008 U
Boron	1 NL	---	---	---	---	---	---	---	---
Cadmium	0.005	0.00021 U	---	0.00004 U	---	0.00021 U	0.00021 U	0.00004 U	0.00016 J
Chromium	0.05 (total)	0.00068 U	---	0.0005 U	---	0.00068 U	0.00068 U	0.0005 U	0.0005 U
Cobalt	NA	0.0021 U	---	0.000078 U	---	0.0021 U	0.0021 U	0.0004 J	0.00019 J
Copper	1.3 RAL	0.0153	---	0.0033	---	0.0028	0.0032	0.00068 J	0.00072 J
Cyanide	0.15	---	---	---	0.0024 U	---	---	0.0024 U	0.0024 U
Hexavalent Chromium	0.05 (total)	0.005 U	0.005 U	0.005 U	---	0.005 U	0.005 U	---	---
Iron	0.30 SMCL	0.0522 U	---	0.018 J	---	0.0612 J	0.0522 U	---	---
Lead	0.015 RAL	0.00052 J	---	0.00045 J	---	0.0011	0.001	0.00018 U	0.00018 U
Magnesium	NA	---	---	---	---	---	---	---	---
Manganese	0.5 NL	**1.39**	---	0.035	---	0.0954	0.0858	---	---
Mercury	0.002	0.000056 U	---	0.000072 U	---	0.000056 U	0.000056 U	0.000027 U	0.000027 U
Molybdenum	NA	0.0049 U	---	0.0031 U	---	0.0049 U	0.0049 U	---	---
Nickel	0.1	0.0034	---	0.00092 J	---	0.00098 J	0.0014 J	0.0053	0.0028
Selenium	0.05	0.00099 U	---	0.0007 U	---	0.00099 U	0.00099 U	0.0014 J	0.0007 U
Silver	0.1 SMCL	0.00008 U	---	0.00016 U	---	0.00008 U	0.00008 U	0.00016 U	0.00016 U
Strontium	NA	---	---	---	---	---	---	---	---
Thallium	0.002	0.00015 U	---	0.000028 J	---	0.00015 U	0.00015 U	0.000047 J	0.000021 J
Tin	NA	---	---	0.0058 U	---	---	---	0.0058 U	0.0058 U
Vanadium	0.05 NL	0.0025 U	---	0.0002 J	---	0.0025 U	0.0025 U	0.0015 J	0.0025
Zinc	5 SMCL	0.0919	---	0.074	---	0.147	0.13	0.0041 J	0.004 J
Zirconium	NA	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
Haley & Aldrich, Inc.
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TABLE X
SUMMARY OF ANALYSES FOR METALS AND CYANIDE, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:		HAR-16	HAR-16	HAR-17	HAR-17	HAR-27	HAR-27	HAR-27	HAR-28
Sample Port:									
Sample Preparation:		Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
Sample Type:		Primary	Split	Primary	Duplicate	Primary	Primary	Duplicate	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Shallow	Shallow	Shallow	Shallow
Lab Name:		TA-Denver	Lancaster	TA-Denver	TA-Denver	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:		04/23/2009	04/23/2009	04/29/2009	04/29/2009	02/18/2009	05/05/2009	05/05/2009	03/04/2009
Analyte (mg/L)	**MCL**								
Aluminum	1	---	---	---	---	---	---	---	---
Antimony	0.006	0.00007 U	0.0003 U	0.00007 U	0.00007 U	0.0003 U	0.0003 U	---	0.0003 U
Arsenic	0.01	0.00047 J	0.00095 U	0.00028 J	0.00024 J	**0.0184**	**0.0293**	---	0.00095 U
Barium	1	0.025	0.023	0.074	0.071	0.105	0.0928	---	0.0556
Beryllium	0.004	0.00008 U	0.00013 U	0.00008 U	0.00008 U	0.00013 U	0.00013 U	---	0.00013 U
Boron	1 NL	---	---	---	---	---	---	---	---
Cadmium	0.005	0.00004 U	0.00021 U	0.00004 U	0.00004 U	0.00021 U	0.00021 U	---	0.00021 U
Chromium	0.05 (total)	0.0005 U	0.00068 U	0.0005 U	0.0005 U	0.00068 U	0.00068 U	---	0.00068 U
Cobalt	NA	0.000054 J	0.0021 U	0.00046 J	0.00045 J	0.0021 U	0.0021 U	---	0.0021 U
Copper	1.3 RAL	0.0056	0.0042	0.0087	0.0083	0.00038 U	0.00038 U	---	0.00062 J
Cyanide	0.15	0.0024 U	0.005 U	0.0024 U	0.0024 U	---	---	---	---
Hexavalent Chromium	0.05 (total)	---	---	---	---	0.005 U	0.005 U	0.005 U	0.005 U
Iron	0.30 SMCL	---	---	---	---	1.78	8.19	---	0.0522 U
Lead	0.015 RAL	0.0014	0.0011	0.00044 J	0.00096 J	0.00005 U	0.00005 U	---	0.00005 U
Magnesium	NA	---	---	---	---	---	---	---	---
Manganese	0.5 NL	---	---	---	---	**4.82**	**5.36**	---	0.0121
Mercury	0.002	0.000027 U	0.000056 U	0.000027 U	0.000027 U	0.000056 U	0.000056 U	---	0.000056 U
Molybdenum	NA	---	---	---	---	0.0049 U	0.0049 U	---	0.0049 U
Nickel	0.1	0.0018 J	0.0015 J	0.0047	0.0046	0.0013 J	0.00093 J	---	0.0014 J
Selenium	0.05	0.0029 J	0.0025	0.0007 U	0.0007 U	0.00099 U	0.00099 U	---	0.001 J
Silver	0.1 SMCL	0.00016 U	0.00008 U	0.00016 U	0.00016 U	0.00008 U	0.00008 U	---	0.00008 U
Strontium	NA	---	---	---	---	---	---	---	---
Thallium	0.002	0.00002 U	0.00015 U	0.000024 J	0.00002 J	0.00015 U	0.00015 U	---	0.00015 U
Tin	NA	0.0058 U	0.0088 U	0.0058 U	0.0058 U	---	---	---	---
Vanadium	0.05 NL	0.00096 J	0.0025 U	0.00032 J	0.0003 J	0.0025 U	0.0025 U	---	0.0025 U
Zinc	5 SMCL	0.85	0.719	0.15	0.12	0.0081 U	0.0081 U	---	0.0081 U
Zirconium	NA	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
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TABLE X
SUMMARY OF ANALYSES FOR METALS AND CYANIDE, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:		HAR-28	HAR-28	HAR-29	HAR-29	PZ-004A	PZ-004A	PZ-004A	PZ-004A
Sample Port:									
Sample Preparation:		Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Total	Total	Total
Sample Type:		Primary	Duplicate	Primary	Primary	Primary	Primary	Duplicate	Split
Geological Unit:		Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:		Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	TA-Denver
Collection Date:		05/05/2009	05/05/2009	03/04/2009	05/13/2009	02/26/2009	02/26/2009	02/26/2009	02/26/2009
Analyte (mg/L)	**MCL**								
Aluminum	1	---	---	---	---	---	---	---	---
Antimony	0.006	0.0003 U	---	0.0012	0.00068 J	0.0003 U	0.0003 U	0.0003 U	0.00023 J
Arsenic	0.01	0.00095 U	---	0.0052	0.0031	0.005	0.0051	0.0057	0.0052
Barium	1	0.0559	---	0.0749	0.0668	0.0449	0.043	0.0448	0.043
Beryllium	0.004	0.00013 U	---	0.00013 U	0.00013 U	0.00018 J	0.00017 J	0.0002 J	0.00018 J
Boron	1 NL	---	---	---	---	---	---	---	---
Cadmium	0.005	0.00027 J	---	0.00021 U	0.00021 U	0.00021 U	0.00021 U	0.00021 U	0.000063 J
Chromium	0.05 (total)	0.00068 U	---	0.00068 U	0.00068 U	0.0009 J	0.00074 J	0.00073 J	0.0012 J
Cobalt	NA	0.0021 U	---	0.0021 U	0.0021 U	0.0081	0.0069	0.0074	0.0066 J
Copper	1.3 RAL	0.00079 J	---	0.0028	0.0016 J	0.00066 J	0.0017 J	0.0016 J	0.0016 J
Cyanide	0.15	---	---	---	---	---	---	---	---
Hexavalent Chromium	0.05 (total)	0.005 U	0.005 U	---	---	0.005 U	---	---	---
Iron	0.30 SMCL	0.103 J	---	0.0522 U	0.0522 U	2.47	2.35	2.47	2.4
Lead	0.015 RAL	0.000087 J	---	0.00005 U	0.000061 J	0.00005 U	0.00014 J	0.00016 J	0.00026 J
Magnesium	NA	---	---	---	---	---	---	---	---
Manganese	0.5 NL	0.0204	---	0.0865	0.052	0.225	0.213	0.223	0.21
Mercury	0.002	0.000056 U	---	0.000056 U	0.000056 U	0.000056 U	0.000056 U	0.000056 U	0.000027 U
Molybdenum	NA	0.0049 U	---	0.0049 U	0.01	0.0049 U	0.0049 U	0.0049 U	0.0031 U
Nickel	0.1	0.002 J	---	0.003	0.0023	0.0096	0.0098	0.0095	0.01
Selenium	0.05	0.00099 U	---	0.0175	0.0144	0.00099 U	0.00099 U	0.00099 U	0.001 J
Silver	0.1 SMCL	0.00008 U	---	0.00008 U	0.00008 U	0.00008 U	0.00008 U	0.00008 U	0.00016 U
Strontium	NA	---	---	---	---	---	---	---	---
Thallium	0.002	0.00015 U	---	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.000038 J
Tin	NA	---	---	---	---	---	---	---	---
Vanadium	0.05 NL	0.0025 U	---	0.0089	0.0048 J	0.0025 U	0.0025 U	0.0025 U	0.002 J
Zinc	5 SMCL	0.009 J	---	0.0081 U	0.0081 U	0.0112 J	0.0107 J	0.0096 J	0.011 J
Zirconium	NA	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
Haley & Aldrich, Inc.
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TABLE X
SUMMARY OF ANALYSES FOR METALS AND CYANIDE, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:		PZ-048	PZ-050	PZ-058	PZ-071	PZ-071	PZ-071	PZ-071	PZ-071
Sample Port:									
Sample Preparation:		Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
Sample Type:		Primary	Primary	Primary	Primary	Duplicate	Split	Primary	Duplicate
Geological Unit:		Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:		Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster
Collection Date:		04/30/2009	02/10/2009	05/04/2009	05/07/2009	05/07/2009	05/07/2009	07/16/2009	07/16/2009
Analyte (mg/L)	**MCL**								
Aluminum	1	---	0.0802 U	0.0802 U	0.145 J	0.155 J	0.15	0.0802 U	---
Antimony	0.006	0.0003 U	0.0003 U	0.0003 U	0.0003 U	0.0003 U	0.00016 J	0.0003 U	---
Arsenic	0.01	0.0078	0.00095 U	0.0039	0.00095 U	0.00096 J	0.00092 J	0.003	---
Barium	1	0.0321	0.0935	0.0394	0.067	0.0704	0.073	0.0685	---
Beryllium	0.004	0.00013 U	0.00013 U	0.00013 U	0.00013 U	0.00013 U	0.00008 U	0.00013 U	---
Boron	1 NL	---	0.122	---	---	---	---	---	---
Cadmium	0.005	0.00021 U	0.00022 J	0.00021 U	0.00021 U	0.00021 U	0.0002 J	0.0002 U	---
Chromium	0.05 (total)	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.0005 U	0.0006 U	---
Cobalt	NA	0.0021 U	0.0021 U	0.0021 U	0.0021 U	0.0021 U	0.0015 J	0.0021 U	---
Copper	1.3 RAL	0.00038 U	0.00076 U	0.0011 J	0.00081 J	0.00069 J	0.00069 J	0.0018 U	---
Cyanide	0.15	---	---	---	---	---	---	---	---
Hexavalent Chromium	0.05 (total)	---	---	0.005 U	0.005 U	---	---	0.005 U	0.005 U
Iron	0.30 SMCL	1.12	0.0522 U	0.0522 U	0.345	0.367	0.28	0.519	---
Lead	0.015 RAL	0.00005 U	0.00007 J	0.000057 J	0.00013 J	0.00011 J	0.00018 U	0.00007 U	---
Magnesium	NA	---	16.6	---	---	---	---	---	---
Manganese	0.5 NL	**4.47**	0.0509	0.488	0.44	0.483	**0.52**	**1.39**	---
Mercury	0.002	0.000056 U	0.000056 U	0.000056 U	0.000056 U	0.000056 U	0.000027 U	0.000056 U	---
Molybdenum	NA	0.0076 J	0.0049 U	0.039	0.0255	0.0171	0.016 J	0.0263 U	---
Nickel	0.1	0.0012 J	0.0012 J	0.0043	0.0048	0.0048	0.0049	0.0063 U	---
Selenium	0.05	0.00099 U	0.00099 U	0.00099 U	0.00099 U	0.00099 U	0.00072 J	0.00099 U	---
Silver	0.1 SMCL	0.00008 U	0.00008 U	0.00008 U	0.00008 U	0.00008 U	0.00016 U	0.00008 U	---
Strontium	NA	---	0.829	---	---	---	---	---	---
Thallium	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.000036 U	0.00015 U	---
Tin	NA	---	0.0088 U	---	---	---	---	---	---
Vanadium	0.05 NL	0.0025 U	0.0042 J	0.0025 U	0.0025 U	0.0025 U	0.0023 J	0.0025 U	---
Zinc	5 SMCL	0.0103 J	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0045 U	0.0081 U	---
Zirconium	NA	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.

TABLE X
SUMMARY OF ANALYSES FOR METALS AND CYANIDE, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:		PZ-076	PZ-091	PZ-105	PZ-105	PZ-105	PZ-105	PZ-105	PZ-105
Sample Port:									
Sample Preparation:		Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
Sample Type:		Primary	Primary	Primary	Primary	Duplicate	Split	Primary	Primary
Geological Unit:		Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:		TA-Denver	TA-Denver	Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster	TA-Denver
Collection Date:		11/02/2009	10/09/2009	02/11/2009	04/29/2009	04/29/2009	04/29/2009	07/10/2009	10/12/2009
Analyte (mg/L)	**MCL**								
Aluminum	1	0.023 J	0.018 U	1.98	0.0802 U	0.0802 U	0.018 U	0.0847 J	0.018 U
Antimony	0.006	0.00078 J	0.000077 U	0.0003 U	0.00032 J	0.00031 J	0.00032 J	0.00036 J	0.00036 U
Arsenic	0.01	0.0014 J	**0.019**	0.0024	0.0017 J	0.0018 J	0.0018 J	0.0019 J	0.002 J
Barium	1	0.009	0.061	0.0343	0.015	0.015	0.015	0.0152	0.013
Beryllium	0.004	0.00008 U	0.00008 U	0.00013 U	0.00013 U	0.00013 U	0.00008 U	0.00013 U	0.00008 U
Boron	1 NL	0.13	0.19	0.139	0.158	0.158	0.15	0.141	0.14
Cadmium	0.005	0.00011 U	0.00075 J	0.00021 U	0.00021 U	0.00021 U	0.00018 J	0.0002 U	0.00021 U
Chromium	0.05 (total)	0.0005 U	0.0005 U	0.0041	0.00068 U	0.00068 U	0.00066 J	0.0006 U	0.0015 J
Cobalt	NA	0.0012 U	0.0043 U	0.0021 U	0.0021 U	0.0021 U	0.0012 U	0.0021 U	0.0012 U
Copper	1.3 RAL	0.00056 U	0.00091 J	0.0029	0.00042 J	0.0005 J	0.00056 U	0.00062 U	0.00091 J
Cyanide	0.15	---	---	---	---	---	---	---	---
Hexavalent Chromium	0.05 (total)	---	---	---	---	---	---	---	---
Iron	0.30 SMCL	0.034 J	1.4	2.48	0.0522 U	0.0522 U	0.027 J	0.0953 J	0.022 U
Lead	0.015 RAL	0.00018 U	0.00018 U	0.00068 J	0.00005 U	0.000053 U	0.00018 U	0.00008 U	0.00018 U
Magnesium	NA	34	59	17.9	17.3	17.7	17	16.9	18
Manganese	0.5 NL	0.028	**2.2**	0.0435	0.0031 J	0.0034 J	0.0036 J	0.0028 J	0.0049 J
Mercury	0.002	0.000027 U	0.000027 U	0.000056 U	0.000056 U	0.000056 U	0.000027 U	0.000056 U	0.000027 U
Molybdenum	NA	0.0045 J	0.0075 J	0.0214	0.0331 U	0.0233 U	0.022	0.0233 U	0.023
Nickel	0.1	0.0012 J	0.017	0.0021	0.0005 U	0.004	0.0006 J	0.00066 U	0.0012 J
Selenium	0.05	0.0047 J	0.00096 J	0.0011 J	0.00099 U	0.00099 U	0.0007 U	0.00099 U	0.0013 J
Silver	0.1 SMCL	0.000016 U	0.000015 U	0.00008 U	0.00008 U	0.00008 U	0.00016 U	0.00008 U	0.000015 U
Strontium	NA	0.36	0.75	0.405	0.397	0.403	0.4	0.391	0.41
Thallium	0.002	0.000057 U	0.00002 U	0.00015 U	0.00015 U	0.00015 U	0.00002 U	0.00015 U	0.000034 U
Tin	NA	0.0058 U	0.0058 U	0.0088 U	0.0088 U	0.0088 U	0.0058 U	0.0098 U	0.0058 U
Vanadium	0.05 NL	0.0019 J	0.0011 U	0.0087	0.0029 J	0.0029 J	0.0029 J	0.0025 U	0.0032 J
Zinc	5 SMCL	0.0028 U	0.0038 U	0.0102 J	0.0081 U	0.0081 U	0.0061 J	0.0081 U	0.0025 U
Zirconium	NA	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
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TABLE X
SUMMARY OF ANALYSES FOR METALS AND CYANIDE, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:		PZ-109	PZ-109	PZ-109	PZ-109	PZ-109	PZ-122	PZ-122	PZ-122
Sample Port:									
Sample Preparation:		Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
Sample Type:		Primary	Primary	Primary	Duplicate	Primary	Primary	Split	Primary
Geological Unit:		Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:		Lancaster	Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster	TA-Denver	Lancaster
Collection Date:		02/17/2009	04/30/2009	07/17/2009	07/17/2009	10/07/2009	02/19/2009	02/19/2009	05/05/2009
Analyte (mg/L)	**MCL**								
Aluminum	1	0.369	0.0802 U	0.084 J	0.116 J	0.018 U	0.0802 U	0.024 J	0.0802 U
Antimony	0.006	0.0003 U	0.00085 J	0.00061 J	0.00045 J	0.00028 U	0.0003 U	0.000093 J	0.0003 U
Arsenic	0.01	0.0016 J	0.0018 J	0.0015 J	0.0013 J	0.0016 J	0.00095 U	0.001 J	0.00095 U
Barium	1	0.0286	0.023	0.0196	0.0189	0.022	0.046	0.055	0.0533
Beryllium	0.004	0.00013 U	0.00013 U	0.00013 U	0.00013 U	0.00008 U	0.00013 U	0.00008 U	0.00013 U
Boron	1 NL	0.136	0.126	0.131	0.129	0.12	0.192	0.21	0.218
Cadmium	0.005	0.00021 U	0.00021 U	0.0002 U	0.0002 U	0.00018 U	0.00021 U	0.00004 U	0.00021 U
Chromium	0.05 (total)	0.00071 J	0.00068 U	0.0006 U	0.0006 U	0.0005 U	0.00068 U	0.0005 U	0.00068 U
Cobalt	NA	0.0021 U	0.0021 U	0.0021 U	0.0021 U	0.0012 U	0.0021 U	0.0012 U	0.0021 U
Copper	1.3 RAL	0.0026	0.00084 J	0.00047 U	0.00063 U	0.00066 J	0.00038 U	0.00056 U	0.00039 J
Cyanide	0.15	---	---	---	---	---	---	---	---
Hexavalent Chromium	0.05 (total)	---	---	---	---	---	---	---	---
Iron	0.30 SMCL	0.53	0.0522 U	0.104 J	0.145 J	0.022 U	0.0522 U	0.034 J	0.0522 U
Lead	0.015 RAL	0.00026 J	0.00005 U	0.000083 U	0.00012 U	0.00018 U	0.00005 U	0.00018 U	0.00005 U
Magnesium	NA	26.7	25.3	25.8	25.6	24	17.5	20	20.4
Manganese	0.5 NL	0.207	0.0315	0.0957	0.0951	0.088	0.0074	0.0094 J	0.0041 J
Mercury	0.002	0.000056 U	0.000056 U	0.000056 U	0.000056 U	0.000027 U	0.000056 U	0.000027 U	0.000056 U
Molybdenum	NA	0.0914	0.0918	0.0875	0.0872	0.082	0.0049 U	0.0031 U	0.0049 U
Nickel	0.1	0.0017 J	0.0009 J	0.001 U	0.0011 U	0.0021	0.0019 J	0.0025	0.0019 J
Selenium	0.05	0.00099 U	0.00099 U	0.00099 U	0.00099 U	0.0007 U	0.00099 U	0.0007 U	0.00099 U
Silver	0.1 SMCL	0.00008 U	0.00008 U	0.00008 U	0.00008 U	0.000016 U	0.00008 U	0.00016 U	0.00008 U
Strontium	NA	0.261	0.24	0.249	0.244	0.24	0.279	0.34	0.327
Thallium	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.000032 U	0.00015 U	0.000029 J	0.00015 U
Tin	NA	0.0088 U	0.0088 U	0.0098 U	0.0098 U	0.0058 U	0.0088 U	0.0058 U	0.0088 U
Vanadium	0.05 NL	0.0026 J	0.0025 U	0.0025 U	0.0025 U	0.0019 J	0.0025 U	0.0017 J	0.0025 U
Zinc	5 SMCL	0.0081 U	0.0081 U	0.0081 U	0.0081 U	0.0033 U	0.0081 U	0.0045 U	0.0081 U
Zirconium	NA	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
Haley & Aldrich, Inc.
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TABLE X
SUMMARY OF ANALYSES FOR METALS AND CYANIDE, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:		PZ-122	PZ-122	PZ-122	PZ-139	PZ-139	PZ-139	PZ-140	PZ-140
Sample Port:									
Sample Preparation:		Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
Sample Type:		Primary	Split	Primary	Primary	Duplicate	Split	Primary	Duplicate
Geological Unit:		Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:		Lancaster	TA-Denver	TA-Denver	TA-Denver	TA-Denver	TA-Irvine	TA-Denver	TA-Denver
Collection Date:		07/14/2009	07/14/2009	10/13/2009	10/15/2009	10/15/2009	10/15/2009	10/20/2009	10/20/2009
Analyte (mg/L)	**MCL**								
Aluminum	1	0.0802 U	0.049 J	0.018 U	0.018 U	---	---	0.018 U	0.018 U
Antimony	0.006	0.0003 U	0.000077 J	0.000079 U	0.00013 U	---	---	0.00017 U	0.00012 U
Arsenic	0.01	0.00095 U	0.00051 J	0.00044 J	0.0013 J	---	---	0.00076 J	0.00072 J
Barium	1	0.0523	0.053	0.059	0.017	---	---	0.055	0.053
Beryllium	0.004	0.00013 U	0.00008 U	0.00008 U	0.00008 U	---	---	0.00008 U	0.00008 U
Boron	1 NL	0.22	0.23	0.22	---	---	---	---	---
Cadmium	0.005	0.0002 U	0.000064 J	0.000065 U	0.00015 U	---	---	0.00013 U	0.00012 U
Chromium	0.05 (total)	0.0006 U	0.0005 U	0.0005 U	0.0005 U	---	---	0.0005 U	0.0005 U
Cobalt	NA	0.0021 U	0.0012 U	0.0012 U	0.0012 U	---	---	0.0012 U	0.0012 U
Copper	1.3 RAL	0.00038 U	0.00056 U	0.00056 U	0.0011 J	---	---	0.00062 J	0.00059 J
Cyanide	0.15	---	---	---	---		---	---	---
Hexavalent Chromium	0.05 (total)	---	---	---	0.0044 U	0.0044 U	0.005 U	0.0044 U	---
Iron	0.30 SMCL	0.0522 U	0.069 J	0.022 U	0.022 U	---	---	0.022 U	0.022 U
Lead	0.015 RAL	0.00005 U	0.00018 U	0.00018 U	0.00018 U	---	---	0.00018 U	0.00018 U
Magnesium	NA	19.9	20	21		---	---	---	---
Manganese	0.5 NL	0.0139	0.015	0.022	0.22	---	---	0.087	0.086
Mercury	0.002	0.000056 U	0.000027 U	0.000027 U	0.000027 U	---	---	0.000027 U	0.000027 U
Molybdenum	NA	0.0072 U	0.0031 U	0.0031 U	0.0031 U	---	---	0.0044 J	0.0031 U
Nickel	0.1	0.0018 U	0.0031	0.0033	0.0059	---	---	0.0047	0.0043
Selenium	0.05	0.00099 U	0.0007 U	0.0007 U	0.00077 J	---	---	0.0011 J	0.00084 J
Silver	0.1 SMCL	0.00008 U	0.000015 U	0.000018 U	0.000015 U	---	---	0.000015 U	0.000015 U
Strontium	NA	0.33	0.34	0.33	---	---	---	---	---
Thallium	0.002	0.00015 U	0.000046 U	0.000034 U	0.00002 U	---	---	0.000049 U	0.000045 U
Tin	NA	0.0098 U	0.0058 U	0.0058 U	---	---	---	---	---
Vanadium	0.05 NL	0.0025 U	0.0013 J	0.0011 U	0.0018 J	---	---	0.0014 J	0.0017 J
Zinc	5 SMCL	0.037	0.0052 J	0.002 U	0.0033 U	---	---	0.0036 U	0.002 U
Zirconium	NA	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.

TABLE X
SUMMARY OF ANALYSES FOR METALS AND CYANIDE, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:		PZ-140	PZ-141	RD-03	RD-03	RD-06	RD-06	RD-15	RD-15
Sample Port:									
Sample Preparation:		Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
Sample Type:		Split	Primary	Primary	Split	Primary	Duplicate	Primary	Split
Geological Unit:		Shallow	Shallow	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Irvine	TA-Denver	TA-Denver	TA-Irvine	TA-Denver	TA-Denver	Lancaster	TA-Denver
Collection Date:		10/20/2009	11/03/2009	10/27/2009	10/27/2009	07/13/2009	07/13/2009	02/24/2009	02/24/2009
Analyte (mg/L)	**MCL**								
Aluminum	1	0.04 U	0.018 U	0.018 U	0.04 U	---	---	---	---
Antimony	0.006	0.00032 J	0.00036 U	0.000073 U	0.0003 U	0.00007 U	0.00007 U	0.0003 U	0.00016 J
Arsenic	0.01	0.0011	0.0042 J	0.00021 U	0.00095 J	0.00021 U	0.00021 U	0.00095 U	0.00043 J
Barium	1	0.056	0.017	0.057	0.053	0.039	0.04	0.0498	0.052
Beryllium	0.004	0.0001 U	0.00008 U	0.00008 U	0.0001 U	0.00008 U	0.00008 U	0.00013 U	0.00008 U
Boron	1 NL	---	---	0.054	0.044 J	---	---	---	---
Cadmium	0.005	0.00011 J	0.0002 U	0.00004 U	0.0001 U	0.00004 U	0.00004 U	0.00021 U	0.00004 U
Chromium	0.05 (total)	0.0009 U	0.0005 U	0.0005 U	0.0009 U	0.0005 U	0.0005 U	0.00068 U	0.0005 U
Cobalt	NA	0.002 U	0.0012 U	0.0012 U	0.002 U	0.00014 J	0.00016 J	0.0021 U	0.0012 U
Copper	1.3 RAL	0.0012 J	0.00064 J	0.00056 U	0.0008 J	0.00056 U	0.00056 U	0.0024	0.0028
Cyanide	0.15	---	---	---	---	0.0024 U	0.0031 J	---	---
Hexavalent Chromium	0.05 (total)	---	0.0044 U	---	---	---	---	---	---
Iron	0.30 SMCL	0.015 U	0.05 J	0.31	0.31	---	---	0.219	0.27
Lead	0.015 RAL	0.0002 U	0.00018 U	0.00018 J	0.00024 J	0.00018 U	0.00018 U	0.0017	0.0018
Magnesium	NA	---	---	28	27	---	---	---	---
Manganese	0.5 NL	0.088	0.13	0.28	0.28	---	---	0.0696	0.071
Mercury	0.002	0.000073 U	0.000027 U	0.000027 U	0.000073 U	0.000027 U	0.000027 U	0.000056 U	0.000027 U
Molybdenum	NA	0.0057 J	0.013 J	0.0031 U	0.0053 J	---	---	0.0049 U	0.0031 U
Nickel	0.1	0.0029	0.0024	0.0018 J	0.0012 J	0.0012 J	0.0013 J	0.0016 J	0.0021
Selenium	0.05	0.0012 J	0.0007 U	0.0007 U	0.0014 J	0.0007 U	0.0007 U	0.00099 U	0.0007 U
Silver	0.1 SMCL	0.0001 U	0.000015 U	0.000015 U	0.0001 U	0.000015 U	0.000015 U	0.00008 U	0.00016 U
Strontium	NA	---	---	0.32	0.31	---	---	---	---
Thallium	0.002	0.00032 J	0.000037 U	0.000047 U	0.0002 U	0.00002 U	0.000046 U	0.00015 U	0.000045 J
Tin	NA	---	---	0.0058 U	0.012 U	0.00017 U	0.00017 U	---	---
Vanadium	0.05 NL	0.003 U	0.0021 J	0.0011 U	0.003 U	0.00014 U	0.00014 U	0.0025 U	0.0011 U
Zinc	5 SMCL	0.005 U	0.007 U	0.047	0.041	0.057	0.058	0.599	0.64
Zirconium	NA	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
Haley & Aldrich, Inc.
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TABLE X
SUMMARY OF ANALYSES FOR METALS AND CYANIDE, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:		RD-15	RD-21	RD-21	RD-22	RD-23	RD-23	RD-27	RD-33A
Sample Port:			Z4	Z2	Z2	Z2	Z3		Z2
Sample Preparation:		Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
Sample Type:		Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:		05/07/2009	02/24/2009	07/16/2009	02/23/2009	02/24/2009	07/16/2009	03/06/2009	02/25/2009
Analyte (mg/L)	**MCL**								
Aluminum	1	---	---	---	---	---	---	---	---
Antimony	0.006	0.0003 U	0.0003 U	0.0003 U	0.0003 U	0.0003 U	0.0003 U	0.0003 U	0.0003 U
Arsenic	0.01	0.00095 U	0.0024	0.0013 J	0.00095 U	0.00095 U	0.0016 J	0.00095 U	0.0018 J
Barium	1	0.0503	0.044	0.0452	0.0522	0.0321	0.0331	0.0823	0.0481
Beryllium	0.004	0.00013 U	0.00013 U	0.00013 U	0.00013 U	0.00013 U	0.00013 U	0.00013 U	0.00013 U
Boron	1 NL	---	---	---	---	---	---	---	---
Cadmium	0.005	0.00021 U	0.00021 U	0.0002 U	0.00021 U	0.00021 U	0.0002 U	0.00021 U	0.00021 U
Chromium	0.05 (total)	0.00068 U	0.00068 U	0.0006 U	0.00068 U	0.00068 U	0.0006 U	0.00068 U	0.00068 U
Cobalt	NA	0.0021 U	0.0021 U	0.0021 U	0.0021 U	0.0021 U	0.0021 U	0.0021 U	0.0021 U
Copper	1.3 RAL	0.0035	0.0016 J	0.0014 U	0.00038 U	0.0013 J	0.0131	0.0009 U	0.00038 U
Cyanide	0.15	---	---	---	0.005 U	---	---	---	---
Hexavalent Chromium	0.05 (total)	---	---	---	---	---	---	---	---
Iron	0.30 SMCL	0.0522 U	0.0522 U	0.0522 U	0.35	0.0522 U	0.0522 U	0.0584 J	0.0522 U
Lead	0.015 RAL	0.0035	0.0012	0.0047	0.00011 U	0.003	0.0031	0.0015	0.000069 U
Magnesium	NA	---	---	---	---	---	---	---	---
Manganese	0.5 NL	0.0662	0.00084 U	0.0023 J	0.0315	0.00086 J	0.0125	0.01	0.0145
Mercury	0.002	0.000056 U	0.000056 U	0.000056 U	0.000056 U	0.000056 U	0.000056 U	0.000056 U	0.000056 U
Molybdenum	NA	0.0049 U	0.0049 U	0.005 U	0.0049 U	0.0049 U	0.005 U	0.0049 U	0.0049 U
Nickel	0.1	0.0017 J	0.00054 J	0.0005 U	0.0005 U	0.00065 J	0.00077 U	0.0005 U	0.0005 U
Selenium	0.05	0.00099 U	0.0026	0.0029	0.00099 U	0.00099 U	0.00099 U	0.00099 U	0.00099 U
Silver	0.1 SMCL	0.00008 U	0.00008 U	0.00008 U	0.00008 U	0.00008 U	0.00008 U	0.00008 U	0.00008 U
Strontium	NA	---	---	---	---	---	---	---	---
Thallium	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Tin	NA	---	---	---	---	---	---	---	---
Vanadium	0.05 NL	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
Zinc	5 SMCL	0.373	0.0529	0.0691	0.0088 J	0.0364	0.0107 J	0.131	0.0081 U
Zirconium	NA	---	---	---	---	---	---	0.01 U	---

See Table III for notes and abbreviations.
Haley & Aldrich, Inc.
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TABLE X
SUMMARY OF ANALYSES FOR METALS AND CYANIDE, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:		RD-33A	RD-33B	RD-33C	RD-33C	RD-33C	RD-34A	RD-34A	RD-34B
Sample Port:		Z2							
Sample Preparation:		Total	Dissolved	Dissolved	Total	Total	Dissolved	Total	Dissolved
Sample Type:		Primary	Primary	Primary	Duplicate	Split	Primary	Split	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster	TA-Denver	Lancaster
Collection Date:		07/17/2009	03/05/2009	02/24/2009	02/24/2009	02/24/2009	03/05/2009	03/05/2009	02/20/2009
Analyte (mg/L)	**MCL**								
Aluminum	1	---	---	---	---	---	---	---	---
Antimony	0.006	---	0.0003 U	0.0003 U	---	---	0.0003 U	---	0.0003 U
Arsenic	0.01	---	0.00095 U	0.00095 U	---	---	0.00095 U	---	0.00095 U
Barium	1	---	0.0563	0.078	---	---	0.0348	---	0.0906
Beryllium	0.004	---	0.00013 U	0.00013 U	---	---	0.00013 U	---	0.00013 U
Boron	1 NL	---	---	---	---	---	---	---	---
Cadmium	0.005	---	0.00021 U	0.00021 U	---	---	0.00021 U	---	0.00021 U
Chromium	0.05 (total)	---	0.00068 U	0.00068 U	---	---	0.00068 U	---	0.00068 U
Cobalt	NA	---	0.0021 U	0.0021 U	---	---	0.0021 U	---	0.0021 U
Copper	1.3 RAL	---	0.00038 U	0.00038 U	---	---	0.00062 U	---	0.00038 U
Cyanide	0.15	0.005 U	0.005 U	0.005 U	0.005 U	0.0053 J	0.005 U	0.0024 U	0.005 U
Hexavalent Chromium	0.05 (total)	---	---	---	---	---	---	---	---
Iron	0.30 SMCL	---	1.95	0.596	---	---	1.72	---	1.02
Lead	0.015 RAL	---	0.00026 J	0.0011	---	---	0.00019 J	---	0.00019 U
Magnesium	NA	---	---	---	---	---	---	---	---
Manganese	0.5 NL	---	0.139	0.0642	---	---	0.0453	---	0.102
Mercury	0.002	---	0.000056 U	0.000056 U	---	---	0.000056 U	---	0.000056 U
Molybdenum	NA	---	0.0049 U	0.0049 U	---	---	0.0049 U	---	0.0049 U
Nickel	0.1	---	0.00059 J	0.0005 U	---	---	0.0014 J	---	0.00057 J
Selenium	0.05	---	0.00099 U	0.00099 U	---	---	0.00099 U	---	0.00099 U
Silver	0.1 SMCL	---	0.00008 U	0.00008 U	---	---	0.00008 U	---	0.00008 U
Strontium	NA	---	---	---	---	---	---	---	---
Thallium	0.002	---	0.00015 U	0.00015 U	---	---	0.00015 U	---	0.00015 U
Tin	NA	---	---	---	---	---	---	---	---
Vanadium	0.05 NL	---	0.0025 U	0.0025 U	---	---	0.0025 U	---	0.0025 U
Zinc	5 SMCL	---	0.333	0.14	---	---	0.534	---	0.373
Zirconium	NA	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.

TABLE X
SUMMARY OF ANALYSES FOR METALS AND CYANIDE, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:		RD-34B	RD-34C	RD-34C	RD-37	RD-37	RD-41B	RD-41B	RD-41B
Sample Port:									
Sample Preparation:		Dissolved	Dissolved	Dissolved	Dissolved	Total	Dissolved	Dissolved	Dissolved
Sample Type:		Split	Primary	Duplicate	Primary	Split	Primary	Split	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	Lancaster	TA-Denver	TA-Denver	Lancaster	TA-Denver	Lancaster
Collection Date:		02/20/2009	02/19/2009	02/19/2009	07/13/2009	07/13/2009	02/12/2009	02/12/2009	05/04/2009
Analyte (mg/L)	**MCL**								
Aluminum	1	---	---	---	---	---	---	---	---
Antimony	0.006	0.00015 J	0.0003 U	0.0003 U	0.00007 U	---	0.0003 U	0.0001 J	0.0003 U
Arsenic	0.01	0.00023 J	0.00095 U	0.00095 U	0.0027 J	---	0.00095 U	0.00062 J	0.00095 U
Barium	1	0.092	0.0676	0.0692	0.074	---	0.0484	0.048	0.0461
Beryllium	0.004	0.00008 U	0.00013 U	0.00013 U	0.00008 U	---	0.00013 U	0.00008 U	0.00013 U
Boron	1 NL	---	---	---	---	---	---	---	---
Cadmium	0.005	0.00004 U	0.00021 U	0.00021 U	0.00004 U	---	0.00021 U	0.00004 U	0.00021 U
Chromium	0.05 (total)	0.0005 U	0.00068 U	0.00068 U	0.0005 U	---	0.00068 U	0.0005 U	0.00068 U
Cobalt	NA	0.0012 U	0.0021 U	0.0021 U	0.00025 J	---	0.0021 U	0.0012 U	0.0021 U
Copper	1.3 RAL	0.00056 U	0.00088 J	0.00038 U	0.00056 U	---	0.00038 U	0.00056 U	0.00042 J
Cyanide	0.15	---	0.005 U	---	0.0024 U	0.005 U	---	---	---
Hexavalent Chromium	0.05 (total)	---	---	---	---	---	---	---	---
Iron	0.30 SMCL	1.1	0.197 J	0.216	---	---	5.88	5.5	10.1
Lead	0.015 RAL	0.00018 U	0.00015 J	0.00017 J	0.0015	---	0.00039 J	0.00037 J	0.000098 J
Magnesium	NA	---	---	---	---	---	---	---	---
Manganese	0.5 NL	0.1	0.0126	0.0127	---	---	0.223	0.21	0.266
Mercury	0.002	0.000027 U	0.000056 U	0.000056 U	0.000027 U	---	0.000056 U	0.000027 U	0.000056 U
Molybdenum	NA	0.0031 U	0.0049 U	0.0049 U	---	---	0.0049 U	0.0031 U	0.0049 U
Nickel	0.1	0.0009 J	0.0005 U	0.0005 U	0.002	---	0.0005 U	0.00087 J	0.0005 U
Selenium	0.05	0.0007 U	0.00099 U	0.00099 U	0.0007 U	---	0.00099 U	0.00096 J	0.00099 U
Silver	0.1 SMCL	0.00017 J	0.00008 U	0.00008 U	0.000015 U	---	0.00008 U	0.00016 U	0.00008 U
Strontium	NA	---	---	---	---	---	---	---	---
Thallium	0.002	0.000023 J	0.00015 U	0.00015 U	0.000038 J	---	0.00015 U	0.000025 J	0.00015 U
Tin	NA	---	---	---	0.00017 U	---	---	---	---
Vanadium	0.05 NL	0.0011 U	0.0025 U	0.0025 U	0.00014 U	---	0.0025 U	0.0011 J	0.0025 U
Zinc	5 SMCL	0.37	0.0597	0.0687	0.66	---	0.661	0.68	0.576
Zirconium	NA	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.

TABLE X
SUMMARY OF ANALYSES FOR METALS AND CYANIDE, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:		RD-41C	RD-41C	RD-41C	RD-44	RD-54A	RD-54A	RD-54B	RD-54B
Sample Port:						Z2	Z2		
Sample Preparation:		Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
Sample Type:		Primary	Primary	Duplicate	Primary	Primary	Primary	Primary	Duplicate
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:		03/02/2009	05/14/2009	05/14/2009	10/28/2009	02/24/2009	07/16/2009	02/23/2009	02/23/2009
Analyte (mg/L)	**MCL**								
Aluminum	1	---	---	---	0.018 U	---	---	---	---
Antimony	0.006	0.0003 U	0.0003 U	0.0003 U	0.00007 U	0.0003 U	0.0003 U	0.0003 U	0.0003 U
Arsenic	0.01	0.00095 U	0.00095 U	0.00095 U	0.00025 J	0.003	0.0027	0.00095 U	0.00095 U
Barium	1	0.0134	0.0185	0.0182	0.019	0.0377	0.04	0.059	0.0613
Beryllium	0.004	0.00013 U	0.00013 U	0.00013 U	0.00008 U	0.00013 U	0.00013 U	0.00013 U	0.00013 U
Boron	1 NL	---	---	---	0.065	---	---	---	---
Cadmium	0.005	0.00021 U	0.00021 U	0.00021 U	0.00004 U	0.00021 U	0.0002 U	0.00021 U	0.00021 U
Chromium	0.05 (total)	0.00068 U	0.00068 U	0.00068 U	0.0005 U	0.00068 U	0.0006 U	0.00068 U	0.00068 U
Cobalt	NA	0.0021 U	0.0021 U	0.0021 U	0.0012 U	0.0021 U	0.0021 U	0.0021 U	0.0021 U
Copper	1.3 RAL	0.00038 U	0.00058 J	0.00038 U	0.00056 U	0.00081 J	0.00061 U	0.00038 U	0.00038 U
Cyanide	0.15	---	---	---	---	---	---	---	---
Hexavalent Chromium	0.05 (total)	---	---	---	---	---	---	---	---
Iron	0.30 SMCL	0.0522 U	2.27	2.25	0.062 J	0.22	0.409	2.94	3.06
Lead	0.015 RAL	0.000052 J	0.0002 J	0.00014 J	0.00033 J	0.00023 J	0.00016 U	0.00075 J	0.00066 J
Magnesium	NA	---	---	---	63	---	---	---	---
Manganese	0.5 NL	0.168	0.337	0.337	0.037	0.218	0.308	0.0938	0.0946
Mercury	0.002	0.000056 U	0.000056 U	0.000056 U	0.000027 U	0.000056 U	0.000056 U	0.000056 U	0.000056 U
Molybdenum	NA	0.0049 U	0.0049 U	0.0049 U	0.0031 U	0.0049 U	0.0049 U	0.0049 U	0.0049 U
Nickel	0.1	0.0005 U	0.0005 U	0.0005 U	0.0023	0.0005 U	0.0011 U	0.0005 U	0.0005 U
Selenium	0.05	0.00099 U	0.00099 U	0.00099 U	0.0007 U	0.00099 U	0.00099 U	0.00099 U	0.00099 U
Silver	0.1 SMCL	0.00013 J	0.00008 U	0.00008 U	0.000015 U	0.00008 U	0.00008 U	0.00008 U	0.00008 U
Strontium	NA	---	---	---	0.59	---	---	---	---
Thallium	0.002	0.00015 U	0.00015 U	0.00015 U	0.000034 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Tin	NA	---	---	---	0.0058 U	---	---	---	---
Vanadium	0.05 NL	0.0025 U	0.0025 U	0.0025 U	0.0011 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
Zinc	5 SMCL	0.0624	0.615	0.606	0.45	0.0081 U	0.0081 U	1.35	1.29
Zirconium	NA	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
Haley & Aldrich, Inc.
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TABLE X
SUMMARY OF ANALYSES FOR METALS AND CYANIDE, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:		RD-54B	RD-54B	RD-54B	RD-54C	RD-54C	RD-54C	RD-54C	RD-57
Sample Port:									Z7
Sample Preparation:		Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
Sample Type:		Primary	Duplicate	Split	Primary	Primary	Duplicate	Split	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	TA-Denver	TA-Irvine	Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster
Collection Date:		10/30/2009	10/30/2009	10/30/2009	02/24/2009	08/04/2009	08/04/2009	08/04/2009	02/25/2009
Analyte (mg/L)	**MCL**								
Aluminum	1	---	---	0.04 U	---	---	---	---	---
Antimony	0.006	0.000097 U	0.00007 U	0.0003 UJ	0.0003 U	0.0003 U	0.0003 U	0.00007 U	0.00063 J
Arsenic	0.01	0.00021 U	0.00021 U	0.0009 U	0.00095 U	0.00095 U	0.00095 U	0.00079 J	0.0036
Barium	1	0.051	0.051	0.054	0.0777	0.076	0.0734	0.074	0.0407
Beryllium	0.004	0.00008 U	0.00008 U	0.0001 U	0.00013 U	0.00013 U	0.00013 U	0.00008 U	0.00013 U
Boron	1 NL	---	---	---	---	---	---	---	---
Cadmium	0.005	0.00004 U	0.00004 U	0.0001 U	0.00021 U	0.0002 U	0.0002 U	0.00004 U	0.00021 U
Chromium	0.05 (total)	0.0005 U	0.0005 U	0.0009 U	0.00068 U	0.0006 U	0.0006 U	0.0005 U	0.00068 U
Cobalt	NA	0.0012 U	0.0012 U	0.002 U	0.0021 U	0.0021 U	0.0021 U	0.0012 U	0.0021 U
Copper	1.3 RAL	0.00099 J	0.0013 J	0.002 U	0.00083 J	0.00062 U	0.00051 U	0.00056 U	0.0018 J
Cyanide	0.15	---	---	---	---	---	---	---	---
Hexavalent Chromium	0.05 (total)	---	---	---	---	---	---	---	---
Iron	0.30 SMCL	1.9	1.8	1.8	1.29	1.33	1.47	1.4	0.0522 U
Lead	0.015 RAL	0.00073 J	0.00069 J	0.00084 J	0.00058 J	0.00026 U	0.00024 U	0.00019 J	0.0037
Magnesium	NA	---	---	---	---	---	---	---	---
Manganese	0.5 NL	0.1	0.095	0.096	0.203	0.224	0.215	0.21	0.0021 J
Mercury	0.002	0.000027 U	0.000027 U	0.000073 U	0.000056 U	0.000056 U	0.000056 U	0.000028 U	0.000056 U
Molybdenum	NA	0.0038 J	0.0031 U	0.0035 J	0.0087 J	0.0049 U	0.0049 U	0.0064 J	0.0049 U
Nickel	0.1	0.0027	0.0024	0.0045	0.0009 J	0.00063 U	0.0006 U	0.0019 U	0.0013 J
Selenium	0.05	0.0007 U	0.0007 U	0.0015 J	0.00099 U	0.00099 U	0.00099 U	0.0007 U	0.0012 J
Silver	0.1 SMCL	0.000028 U	0.000016 U	0.0001 U	0.00008 U	0.00008 U	0.00008 U	0.000015 U	0.00008 U
Strontium	NA	---	---	---	---	---	---	---	---
Thallium	0.002	0.000049 U	0.00002 U	0.0002 U	0.00015 U	0.00015 U	0.00015 U	0.000053 U	0.00015 U
Tin	NA	---	---	---	---	---	---	---	---
Vanadium	0.05 NL	0.0011 U	0.0011 U	0.003 U	0.0025 U	0.0025 U	0.0025 U	0.0011 U	0.0025 U
Zinc	5 SMCL	0.92 J	0.93 J	0.83	2.08	1.64	1.62	1.6	0.134
Zirconium	NA	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.

TABLE X
SUMMARY OF ANALYSES FOR METALS AND CYANIDE, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:		RD-59A	RD-59A	RD-59B	RD-59B	RD-59C	RD-59C	RD-61	RD-62
Sample Port:									
Sample Preparation:		Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
Sample Type:		Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	TA-Denver	TA-Denver
Collection Date:		03/03/2009	08/04/2009	03/03/2009	08/04/2009	03/03/2009	08/04/2009	10/22/2009	10/28/2009
Analyte (mg/L)	**MCL**								
Aluminum	1	---	---	---	---	---	---	0.018 U	0.16
Antimony	0.006	0.0003 U	0.0003 U	0.0003 U	0.0003 U	0.0003 U	0.0003 U	0.00007 U	0.00007 U
Arsenic	0.01	0.0011 J	0.0012 J	0.00095 U	0.00095 U	0.00095 U	0.00095 U	0.00021 U	0.00021 U
Barium	1	0.0605	0.0603	0.0428	0.0437	0.0489	0.0505	0.074	0.04
Beryllium	0.004	0.00013 U	0.00013 U	0.00013 U	0.00013 U	0.00013 U	0.00013 U	0.00008 U	0.00008 U
Boron	1 NL	---	---	---	---	---	---	0.09	0.072
Cadmium	0.005	0.00021 U	0.0002 U	0.00021 U	0.0002 U	0.00021 U	0.0002 U	0.000049 U	0.00004 U
Chromium	0.05 (total)	0.00068 U	0.0006 U	0.00068 U	0.0006 U	0.00068 U	0.0006 U	0.0005 U	0.0005 U
Cobalt	NA	0.0021 U	0.0021 U	0.0021 U	0.0021 U	0.0021 U	0.0021 U	0.0012 U	0.0012 U
Copper	1.3 RAL	0.0017 J	0.0019 U	0.00038 U	0.00038 U	0.00099 J	0.00073 U	0.00077 J	0.00056 U
Cyanide	0.15	---	---	---	---	---	---	---	---
Hexavalent Chromium	0.05 (total)	---	---	---	---	---	---	---	---
Iron	0.30 SMCL	0.0522 U	0.0522 U	0.0522 U	0.077 J	0.0522 U	0.0522 U	16	0.36
Lead	0.015 RAL	0.00072 J	0.002	0.00023 J	0.00031 U	0.00064 J	0.00052 U	0.001	0.00031 J
Magnesium	NA	---	---	---	---	---	---	61	50
Manganese	0.5 NL	0.41	0.377	0.0237	0.0244	0.0173	0.0182	**0.72**	0.084
Mercury	0.002	0.000056 U	0.000056 U	0.000056 U	0.000056 U	0.000056 U	0.000056 U	0.000027 U	0.000027 U
Molybdenum	NA	0.0049 U	0.0049 U	0.0049 U	0.0049 U	0.0049 U	0.0049 U	0.0031 U	0.0031 U
Nickel	0.1	0.0018 J	0.0014 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0021	0.0013 J
Selenium	0.05	0.00099 U	0.00099 U	0.00099 U	0.00099 U	0.00099 U	0.00099 U	0.0007 U	0.0007 U
Silver	0.1 SMCL	0.00008 U	0.00008 U	0.00008 U	0.00008 U	0.00008 U	0.00008 U	0.000016 U	0.000015 U
Strontium	NA	---	---	---	---	---	---	0.43	0.31
Thallium	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.000041 U	0.00002 U
Tin	NA	---	---	---	---	---	---	0.0058 U	0.0058 U
Vanadium	0.05 NL	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0011 U	0.0011 U
Zinc	5 SMCL	0.029	0.0224	0.0081 U	0.009 J	0.0081 U	0.0081 U	1 U	0.42
Zirconium	NA	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.

TABLE X
SUMMARY OF ANALYSES FOR METALS AND CYANIDE, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:		RD-62	RD-64	RD-64	RD-64	RD-69	RD-69	RD-69	RD-91
Sample Port:			Z8	Z4	Z4				
Sample Preparation:		Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
Sample Type:		Duplicate	Primary	Primary	Duplicate	Primary	Duplicate	Split	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	Lancaster	Lancaster	TA-Denver	TA-Denver	TA-Irvine	Lancaster
Collection Date:		10/28/2009	02/23/2009	04/29/2009	04/29/2009	11/04/2009	11/04/2009	11/04/2009	03/05/2009
Analyte (mg/L)	**MCL**								
Aluminum	1	0.018 U	---	---	---	---	---	---	---
Antimony	0.006	0.00007 U	0.0003 U	0.00063 J	0.00068 J	---	---	---	0.0003 U
Arsenic	0.01	0.00021 U	0.0039 J	0.0024	0.0028	---	---	---	0.00095 U
Barium	1	0.04	0.0458	0.0069	0.0078	---	---	---	0.0926
Beryllium	0.004	0.00008 U	0.00013 U	0.00013 U	0.00013 U	---	---	---	0.00013 U
Boron	1 NL	0.072	---	---	---	---	---	---	---
Cadmium	0.005	0.00004 U	0.00021 U	0.00021 U	0.00021 U	---	---	---	0.00021 U
Chromium	0.05 (total)	0.0005 U	0.00068 U	0.00068 U	0.00068 U	---	---	---	0.00068 U
Cobalt	NA	0.0012 U	0.0021 U	0.0021 U	0.0021 U	---	---	---	0.0021 U
Copper	1.3 RAL	0.00056 U	0.00089 J	0.0078	0.0081	---	---	---	0.0068 U
Cyanide	0.15	---	---	---	---	---	---	---	---
Hexavalent Chromium	0.05 (total)	---	---	---	---	---	---	---	---
Iron	0.30 SMCL	0.22	0.0881 J	0.355	0.372	8.5	8.3	8.8	0.0522 U
Lead	0.015 RAL	0.00028 J	0.00029 U	0.00024 J	0.00019 J	---	---	---	0.0121
Magnesium	NA	50	---	---	---	50	50	51	---
Manganese	0.5 NL	0.084	0.0043 J	0.155	0.159	0.12	0.12	0.12	0.0081
Mercury	0.002	0.000027 U	0.000056 U	0.000059 J	0.000071 J	---	---	---	0.000056 U
Molybdenum	NA	0.0031 U	0.0049 U	0.0049 U	0.0049 U	---	---	---	0.0049 U
Nickel	0.1	0.0013 J	0.0169	0.0066	0.0086	---	---	---	0.0115
Selenium	0.05	0.0007 U	0.00099 U	0.00099 U	0.00099 U	---	---	---	0.0015 J
Silver	0.1 SMCL	0.000015 U	0.00008 U	0.00008 U	0.00008 U	---	---	---	0.00008 U
Strontium	NA	0.32	---	---	---	0.85	0.83	0.81	---
Thallium	0.002	0.00002 U	0.00015 U	0.00015 U	0.00015 U	---	---	---	0.00015 U
Tin	NA	0.0058 U	---	---	---	---	---	---	---
Vanadium	0.05 NL	0.0011 U	0.0025 U	0.0025 U	0.0025 U	---	---	---	0.0025 U
Zinc	5 SMCL	0.42	0.0491	0.0138 J	0.0112 J	0.43	0.42	0.43	0.328
Zirconium	NA	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.

TABLE X
SUMMARY OF ANALYSES FOR METALS AND CYANIDE, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:		RD-91	RD-92	RD-92	RD-92	RD-98	RS-18	RS-18	WS-09
Sample Port:									
Sample Preparation:		Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
Sample Type:		Primary	Primary	Primary	Duplicate	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Shallow	Shallow	Chatsworth
Lab Name:		Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:		05/05/2009	03/04/2009	05/01/2009	05/01/2009	02/20/2009	03/04/2009	04/27/2009	07/23/2009
Analyte (mg/L)	**MCL**								
Aluminum	1	---	---	---	---	---	---	---	---
Antimony	0.006	0.0003 U	0.0003 U	0.0003 U	0.0003 U	0.0003 U	0.00036 J	0.0003 U	0.0003 U
Arsenic	0.01	0.00095 U	0.00095 U	0.00095 U	0.00095 U	0.00095 U	0.00095 U	0.00095 U	0.00095 U
Barium	1	0.0914	0.0432	0.0414	0.0393	0.0432	0.0577	0.0534	0.0367
Beryllium	0.004	0.00013 U	0.00013 U	0.00013 U	0.00013 U	0.00013 U	0.00013 U	0.00013 U	0.00013 U
Boron	1 NL	---	---	---	---	---	---	---	---
Cadmium	0.005	0.00021 U	0.00021 U	0.00021 U	0.00021 U	0.00021 U	0.00021 U	0.00021 U	0.0002 U
Chromium	0.05	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.00068 U	0.0006 U
Cobalt	NA	0.0021 U	0.0021 U	0.0021 U	0.0021 U	0.0021 U	0.0021 U	0.0021 U	0.0021 U
Copper	1.3 RAL	0.01	0.0022	0.0029	0.0017 J	0.00038 U	0.00074 J	0.00064 J	0.00038 U
Cyanide	0.15	---	---	---	---	---	---	---	---
Hexavalent Chromium	0.05	---	---	---	---	---	---	---	0.005 U
Iron	0.30 SMCL	0.0522 U	0.0522 U	0.0522 U	0.0522 U	0.0522 U	0.0522 U	0.0522 U	0.239
Lead	0.015 RAL	0.0109	0.0012	0.00058 J	0.00042 J	0.000074 U	0.00005 U	0.000069 J	0.00071 J
Magnesium	NA	---	---	---	---	---	---	---	---
Manganese	0.5 NL	0.0015 J	0.0033 J	0.002 J	0.0018 J	0.0026 J	0.00084 U	0.00084 U	0.0161
Mercury	0.002	0.000056 U	0.000056 U	0.000056 U	0.000056 U	0.000056 U	0.000056 U	0.000056 U	0.000056 U
Molybdenum	NA	0.0073 J	0.0049 U	0.0049 U	0.0049 U	0.0049 U	0.0049 U	0.0049 U	0.0049 U
Nickel	0.1	0.0095	0.0005 U	0.0005 U	0.0005 U	0.00082 J	0.0031	0.0041	0.00094 U
Selenium	0.05	0.0015 J	0.00099 U	0.00099 U	0.00099 U	0.00099 U	0.00099 U	0.0025	0.00099 U
Silver	0.1 SMCL	0.00008 U	0.00008 U	0.00008 U	0.00008 U	0.00008 U	0.00008 U	0.00008 U	0.00008 U
Strontium	NA	---	---	---	---	---	---	---	---
Thallium	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Tin	NA	---	---	---	---	---	---	---	---
Vanadium	0.05 NL	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U	0.0025 U
Zinc	5 SMCL	0.21	0.0933	0.0821	0.0698	0.0081 U	0.0081 U	0.0081 U	0.0802
Zirconium	NA	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.

TABLE X
SUMMARY OF ANALYSES FOR METALS AND CYANIDE, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:		**WS-09**	**WS-09A**	**WS-09A**
Sample Port:				
Sample Preparation:		Dissolved	Dissolved	Total
Sample Type:		Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	Lancaster
Collection Date:		10/20/2009	07/22/2009	07/22/2009
Analyte (mg/L)	**MCL**			
Aluminum	1	---	---	---
Antimony	0.006	0.000077 U	---	---
Arsenic	0.01	0.00038 J	---	---
Barium	1	0.039	---	---
Beryllium	0.004	0.00008 U	---	---
Boron	1 NL	---	---	---
Cadmium	0.005	0.00004 U	---	---
Chromium	0.05	0.0005 U	---	---
Cobalt	NA	0.0012 U	---	---
Copper	1.3 RAL	0.00094 J	---	---
Cyanide	0.15	---	---	---
Hexavalent Chromium	0.05	---	---	---
Iron	0.30 SMCL	0.23	2.2	2.93
Lead	0.015 RAL	0.0011	---	---
Magnesium	NA	---	---	---
Manganese	0.5 NL	0.016 J	0.261	0.262
Mercury	0.002	0.000027 U	---	---
Molybdenum	NA	0.0031 U	---	---
Nickel	0.1	0.0037	---	---
Selenium	0.05	0.0007 U	---	---
Silver	0.1 SMCL	0.000015 U	---	---
Strontium	NA	0.75	---	---
Thallium	0.002	0.000051 U	---	---
Tin	NA	---	---	---
Vanadium	0.05 NL	0.0011 U	---	---
Zinc	5 SMCL	0.082	---	---
Zirconium	NA	---	---	---

See Table III for notes and abbreviations.
Haley & Aldrich, Inc.
G:\Projects\26472\Reports\M-513 2009 Annual\Tables\M513_T10_Metals-F.xls

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**HAR-07**	**HAR-07**	**HAR-07**	**HAR-07**	**HAR-07**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	Weck	TA-Denver	TA-Denver	Lancaster
Collection Date:		03/05/2009	03/05/2009	05/11/2009	05/11/2009	07/21/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	1 U	---	0.27 U	---	1 U
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	1 U	---	---	---	1 U
1,3-Dinitrobenzene	8270C, 8330	2 U	---	1.9 U	---	2 U
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	1 U	---	0.28 U	---	1 U
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	1 U	---	0.61 U	---	1 U
2,4-Dimethylphenol	8270C	3 U	---	0.55 U	---	3 U
2,4-Dinitrophenol	8270C	19 U	---	9.5 U	---	19 U
2,4-Dinitrotoluene	8270C, 8330	1 U	---	1.6 U	---	1 U
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	1 U	---	1.8 U	---	1 U
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	2 U	---	0.25 U	---	2 U
2-Chlorophenol	8270C	1 U	---	1.9 U	---	1 U
2-Methylnaphthalene	8270C PAHs	---	---	0.28 U	---	---
2-Nitrophenol	8270C	1 U	---	0.37 U	---	1 U
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	2 U	---	1.9 U	---	2 U
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	5 U	---	3.8 U	---	5 U
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	1 U	---	0.41 U	---	1 U
4-Chlorophenylphenyl ether	8270C	2 U	---	1.6 U	---	2 U
4-Nitrophenol	8270C	10 U	---	1.2 U	---	10 U
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	1 U	---	0.27 U	---	1 U
Acenaphthylene	8270C, 8270C PAHs	1 U	---	0.47 U	---	1 U
Anthracene	8270C, 8270C PAHs	1 U	---	0.4 U	---	1 U
Benzidine	8270C	19 U	---	---	---	19 U
Benzo(a)anthracene	8270C, 8270C PAHs	1 U	---	0.33 U	---	1 U
Benzo(a)pyrene	8270C, 8270C PAHs	1 U	---	0.29 U	---	1 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	1 U	---	0.5 U	---	1 U
Benzo(ghi)perylene	8270C, 8270C PAHs	1 U	---	0.48 U	---	1 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	1 U	---	0.44 U	---	1 U
bis(2-Chloroethoxy)methane	8270C	1 U	---	0.92 U	---	1 U
bis(2-Chloroethyl) ether	8270C	1 U	---	0.39 U	---	1 U
bis(2-Chloroisopropyl) ether	8270C	1 U	---	0.27 U	---	1 U
bis(2-Ethylhexyl) phthalate	8270C	2 U	---	3 U	---	6 U
Butyl benzyl phthalate	8270C	2 U	---	0.95 U	---	2 U
Chrysene	8270C, 8270C PAHs	1 U	---	0.56 U	---	1 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	1 U	---	0.48 U	---	1 U
Diethyl phthalate	8270C	2 U	---	0.36 U	---	2 U
Dimethyl phthalate	8270C	2 U	---	0.2 U	---	2 U
Di-n-butyl phthalate	8270C	2 U	---	1.1 U	---	2 U
Di-n-octyl phthalate	8270C	2 U	---	0.33 U	---	2 U
Fluoranthene	8270C, 8270C PAHs	1 U	---	0.19 U	---	1 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**HAR-07**	**HAR-07**	**HAR-07**	**HAR-07**	**HAR-07**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	Weck	TA-Denver	TA-Denver	Lancaster
Collection Date:		03/05/2009	03/05/2009	05/11/2009	05/11/2009	07/21/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	1 U	---	0.29 U	---	1 U
Hexachlorobenzene	8270C	1 U	---	0.63 U	---	1 U
Hexachlorobutadiene	8270C	1 U	---	3.1 U	---	1 U
Hexachloroethane	8270C	1 U	---	2 U	---	1 U
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	1 U	---	0.62 U	---	1 U
Isophorone	8270C	1 U	---	0.2 U	---	1 U
Naphthalene	8270C, 8270C PAHs	1 U	---	0.28 U	---	1 U
Nitrobenzene	8270C, 8330	1 U	---	0.77 U	---	1 U
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	2 U	0.031	0.28 U	0.037	2 U
n-Nitrosodi-n-propylamine	8270C	1 U	---	0.33 U	---	1 U
n-Nitrosodiphenylamine	8270C	2 U	---	0.42 U	---	2 U
p-Chloro-m-cresol	8270C	1 U	---	2.3 U	---	1 U
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	3 U	---	---	---	3 U
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	1 U	---	0.25 U	---	1 U
Phenol	8270C	1 U	---	1.9 U	---	1 U
Pyrene	8270C, 8270C PAHs	---	---	0.35 U	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	3.8 U	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**HAR-07**	**HAR-07**	**HAR-07**	**HAR-08**	**HAR-08**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	TA-Denver	TA-Denver	Lancaster	Weck
Collection Date:		07/21/2009	10/15/2009	10/15/2009	02/19/2009	02/19/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	0.27 U	---	1 U	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	0.22 U	---	1 U	---
1,3-Dinitrobenzene	8270C, 8330	---	2 U	---	2 U	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	0.28 U	---	1 U	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	0.61 U	---	1 U	---
2,4-Dimethylphenol	8270C	---	0.55 U	---	3 U	---
2,4-Dinitrophenol	8270C	---	9.5 U	---	19 U	---
2,4-Dinitrotoluene	8270C, 8330	---	1.6 U	---	1 U	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	1.8 U	---	1 U	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	0.25 U	---	2 U	---
2-Chlorophenol	8270C	---	1.9 U	---	1 U	---
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	---	0.37 U	---	1 U	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	1.9 U	---	2 U	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	3.8 U	---	5 U	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	0.41 U	---	1 U	---
4-Chlorophenylphenyl ether	8270C	---	1.6 U	---	2 U	---
4-Nitrophenol	8270C	---	1.2 U	---	10 U	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	---	0.27 U	---	1 U	---
Acenaphthylene	8270C, 8270C PAHs	---	0.47 U	---	1 U	---
Anthracene	8270C, 8270C PAHs	---	0.4 U	---	1 U	---
Benzidine	8270C	---	48 U	---	19 U	---
Benzo(a)anthracene	8270C, 8270C PAHs	---	0.33 U	---	1 U	---
Benzo(a)pyrene	8270C, 8270C PAHs	---	0.29 U	---	1 U	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	0.5 U	---	1 U	---
Benzo(ghi)perylene	8270C, 8270C PAHs	---	0.48 U	---	1 U	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	0.44 U	---	1 U	---
bis(2-Chloroethoxy)methane	8270C	---	0.92 U	---	1 U	---
bis(2-Chloroethyl) ether	8270C	---	0.39 U	---	1 U	---
bis(2-Chloroisopropyl) ether	8270C	---	0.27 U	---	1 U	---
bis(2-Ethylhexyl) phthalate	8270C	---	2.7 U	---	2 U	---
Butyl benzyl phthalate	8270C	---	0.95 U	---	2 U	---
Chrysene	8270C, 8270C PAHs	---	0.56 U	---	1 U	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	0.48 U	---	1 U	---
Diethyl phthalate	8270C	---	0.36 U	---	2 U	---
Dimethyl phthalate	8270C	---	0.2 U	---	2 U	---
Di-n-butyl phthalate	8270C	---	1.1 U	---	2 U	---
Di-n-octyl phthalate	8270C	---	0.33 U	---	2 U	---
Fluoranthene	8270C, 8270C PAHs	---	0.19 U	---	1 U	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**HAR-07**	**HAR-07**	**HAR-07**	**HAR-08**	**HAR-08**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	TA-Denver	TA-Denver	Lancaster	Weck
Collection Date:		07/21/2009	10/15/2009	10/15/2009	02/19/2009	02/19/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	0.29 U	---	1 U	---
Hexachlorobenzene	8270C	---	0.63 U	---	1 U	---
Hexachlorobutadiene	8270C	---	3.1 U	---	1 U	---
Hexachloroethane	8270C	---	2 U	---	1 U	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	0.62 U	---	1 U	---
Isophorone	8270C	---	0.2 U	---	1 U	---
Naphthalene	8270C, 8270C PAHs	---	0.28 U	---	1 U	---
Nitrobenzene	8270C, 8330	---	0.77 U	---	1 U	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.029	0.28 U	0.039	2 U	0.022
n-Nitrosodi-n-propylamine	8270C	---	0.33 U	---	1 U	---
n-Nitrosodiphenylamine	8270C	---	0.42 U	---	2 U	---
p-Chloro-m-cresol	8270C	---	2.3 U	---	1 U	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	0.77 U	19 U	---	3 U	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	---	0.25 U	---	1 U	---
Phenol	8270C	---	2.8 J	---	1 U	---
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**HAR-08**	**HAR-08**	**HAR-08**	**HAR-08**	**HAR-08**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	Lancaster	TA-Denver	TA-Denver
Collection Date:		04/30/2009	04/30/2009	07/21/2009	07/21/2009	10/22/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	1 U	---	1 U	---	0.27 U
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	1 U	---	1 U	---	0.22 U
1,3-Dinitrobenzene	8270C, 8330	2 U	---	2 U	---	1.9 U
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	1 U	---	1 U	---	0.28 U
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	1 U	---	1 U	---	0.61 U
2,4-Dimethylphenol	8270C	3 U	---	3 U	---	0.55 U
2,4-Dinitrophenol	8270C	20 U	---	19 U	---	9.5 U
2,4-Dinitrotoluene	8270C, 8330	1 U	---	1 U	---	1.6 U
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	1 U	---	1 U	---	1.8 U
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	2 U	---	2 U	---	0.25 U
2-Chlorophenol	8270C	1 U	---	1 U	---	1.9 U
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	1 U	---	1 U	---	0.37 U
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	2 U	---	2 U	---	1.9 U
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	5 U	---	5 U	---	3.8 U
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	1 U	---	1 U	---	0.41 U
4-Chlorophenylphenyl ether	8270C	2 U	---	2 U	---	1.6 U
4-Nitrophenol	8270C	10 U	---	10 U	---	1.2 U
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	1 U	---	1 U	---	0.27 U
Acenaphthylene	8270C, 8270C PAHs	1 U	---	1 U	---	0.47 U
Anthracene	8270C, 8270C PAHs	1 U	---	1 U	---	0.4 U
Benzidine	8270C	20 U	---	19 U	---	48 U
Benzo(a)anthracene	8270C, 8270C PAHs	1 U	---	1 U	---	0.33 U
Benzo(a)pyrene	8270C, 8270C PAHs	1 U	---	1 U	---	0.29 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	1 U	---	1 U	---	0.5 U
Benzo(ghi)perylene	8270C, 8270C PAHs	1 U	---	1 U	---	0.48 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	1 U	---	1 U	---	0.44 U
bis(2-Chloroethoxy)methane	8270C	1 U	---	1 U	---	0.92 U
bis(2-Chloroethyl) ether	8270C	1 U	---	1 U	---	0.39 U
bis(2-Chloroisopropyl) ether	8270C	1 U	---	1 U	---	0.27 U
bis(2-Ethylhexyl) phthalate	8270C	2 U	---	2 U	---	2 U
Butyl benzyl phthalate	8270C	2 U	---	2 U	---	0.95 U
Chrysene	8270C, 8270C PAHs	1 U	---	1 U	---	0.64 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	1 U	---	1 U	---	0.48 U
Diethyl phthalate	8270C	2 U	---	2 U	---	0.36 U
Dimethyl phthalate	8270C	2 U	---	2 U	---	0.2 U
Di-n-butyl phthalate	8270C	2 U	---	2 U	---	1.1 U
Di-n-octyl phthalate	8270C	2 U	---	2 U	---	0.33 U
Fluoranthene	8270C, 8270C PAHs	1 U	---	1 U	---	0.19 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**HAR-08**	**HAR-08**	**HAR-08**	**HAR-08**	**HAR-08**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	Lancaster	TA-Denver	TA-Denver
Collection Date:		04/30/2009	04/30/2009	07/21/2009	07/21/2009	10/22/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	1 U	---	1 U	---	0.29 U
Hexachlorobenzene	8270C	1 U	---	1 U	---	0.63 U
Hexachlorobutadiene	8270C	1 U	---	1 U	---	3.1 U
Hexachloroethane	8270C	1 U	---	1 U	---	2 U
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	1 U	---	1 U	---	0.62 U
Isophorone	8270C	1 U	---	1 U	---	0.2 U
Naphthalene	8270C, 8270C PAHs	1 U	---	1 U	---	0.28 U
Nitrobenzene	8270C, 8330	1 U	---	1 U	---	0.77 U
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	2 U	0.016	2 U	0.017	0.28 U
n-Nitrosodi-n-propylamine	8270C	1 U	---	1 U	---	0.33 U
n-Nitrosodiphenylamine	8270C	2 U	---	2 U	---	0.42 U
p-Chloro-m-cresol	8270C	1 U	---	1 U	---	2.3 U
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	3 U	---	3 U	---	19 U
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	1 U	---	1 U	---	0.25 U
Phenol	8270C	1 U	---	1 U	---	1.9 U
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**HAR-08**	**HAR-14**	**HAR-14**	**HAR-15**	**HAR-15**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Shallow	Shallow	Shallow	Shallow
Lab Name:		TA-Denver	TA-Denver	TA-Denver	TA-Denver	TA-Denver
Collection Date:		10/22/2009	04/23/2009	04/23/2009	04/23/2009	04/23/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	0.27 U	---	0.27 U	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	---	---	---	---
1,3-Dinitrobenzene	8270C, 8330	---	1.9 U	---	1.9 U	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	0.28 U	---	0.28 U	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	0.61 U	---	0.61 U	---
2,4-Dimethylphenol	8270C	---	0.55 U	---	0.56 U	---
2,4-Dinitrophenol	8270C	---	9.5 U	---	9.6 U	---
2,4-Dinitrotoluene	8270C, 8330	---	1.6 U	---	1.6 U	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	1.8 U	---	1.8 U	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	0.25 U	---	0.25 U	---
2-Chlorophenol	8270C	---	1.9 U	---	1.9 U	---
2-Methylnaphthalene	8270C PAHs	---	0.28 U	---	0.28 U	---
2-Nitrophenol	8270C	---	0.37 U	---	0.37 U	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	1.9 U	---	1.9 U	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	3.8 U	---	3.8 U	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	0.41 U	---	0.41 U	---
4-Chlorophenylphenyl ether	8270C	---	1.6 U	---	1.6 U	---
4-Nitrophenol	8270C	---	1.2 U	---	1.2 U	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	---	0.27 U	---	0.27 U	---
Acenaphthylene	8270C, 8270C PAHs	---	0.47 U	---	0.47 U	---
Anthracene	8270C, 8270C PAHs	---	0.4 U	---	0.4 U	---
Benzidine	8270C	---	---	---	---	---
Benzo(a)anthracene	8270C, 8270C PAHs	---	0.33 U	---	0.34 U	---
Benzo(a)pyrene	8270C, 8270C PAHs	---	0.29 U	---	0.3 U	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	0.5 U	---	0.51 U	---
Benzo(ghi)perylene	8270C, 8270C PAHs	---	0.48 U	---	0.48 U	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	0.44 U	---	0.44 U	---
bis(2-Chloroethoxy)methane	8270C	---	0.92 U	---	0.93 U	---
bis(2-Chloroethyl) ether	8270C	---	0.39 U	---	0.39 U	---
bis(2-Chloroisopropyl) ether	8270C	---	0.27 U	---	0.27 U	---
bis(2-Ethylhexyl) phthalate	8270C	---	4.1 J,L	---	1.8 U	---
Butyl benzyl phthalate	8270C	---	0.95 U	---	0.96 U	---
Chrysene	8270C, 8270C PAHs	---	0.59 U	---	0.52 U	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	0.48 U	---	0.49 U	---
Diethyl phthalate	8270C	---	0.36 U	---	0.36 U	---
Dimethyl phthalate	8270C	---	0.2 U	---	0.2 U	---
Di-n-butyl phthalate	8270C	---	1.1 U	---	1.1 U	---
Di-n-octyl phthalate	8270C	---	0.33 U	---	0.34 U	---
Fluoranthene	8270C, 8270C PAHs	---	0.19 U	---	0.19 U	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**HAR-08**	**HAR-14**	**HAR-14**	**HAR-15**	**HAR-15**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Shallow	Shallow	Shallow	Shallow
Lab Name:		TA-Denver	TA-Denver	TA-Denver	TA-Denver	TA-Denver
Collection Date:		10/22/2009	04/23/2009	04/23/2009	04/23/2009	04/23/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	0.29 U	---	0.3 U	---
Hexachlorobenzene	8270C	---	0.63 U	---	0.63 U	---
Hexachlorobutadiene	8270C	---	3.1 U	---	3.2 U	---
Hexachloroethane	8270C	---	2 U	---	2 U	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	0.62 U	---	0.62 U	---
Isophorone	8270C	---	0.2 U	---	0.2 U	---
Naphthalene	8270C, 8270C PAHs	---	0.28 U	---	0.28 U	---
Nitrobenzene	8270C, 8330	---	0.77 U	---	0.78 U	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.015	1.7 J	1.4	0.28 U	0.005 U
n-Nitrosodi-n-propylamine	8270C	---	0.33 U	---	0.34 U	---
n-Nitrosodiphenylamine	8270C	---	0.42 U	---	0.42 U	---
p-Chloro-m-cresol	8270C	---	2.3 U	---	2.3 U	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	0.77 U	---	0.78 U	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	---	0.25 U	---	0.25 U	---
Phenol	8270C	---	1.9 U	---	1.9 U	---
Pyrene	8270C, 8270C PAHs	---	0.35 U	---	0.36 U	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	3.8 U	---	3.8 U	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**HAR-16**	**HAR-16**	**HAR-16**	**HAR-17**	**HAR-17**
Sample Type:		Primary	Primary	Split	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	TA-Denver	Lancaster	TA-Denver	TA-Denver
Collection Date:		04/23/2009	04/23/2009	04/23/2009	04/29/2009	04/29/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	0.27 U	---	0.9 U	0.27 U	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	---	---		---
1,3-Dinitrobenzene	8270C, 8330	1.9 U	---	2 U	1.9 U	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	0.28 U	---	0.9 U	0.28 U	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	0.61 U	---	0.9 U	0.61 U	---
2,4-Dimethylphenol	8270C	0.56 U	---	3 U	0.56 U	---
2,4-Dinitrophenol	8270C	9.6 U	---	19 U	9.6 U	---
2,4-Dinitrotoluene	8270C, 8330	1.6 U	---	0.9 U	1.6 U	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	1.8 U	---	0.9 U	1.8 U	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	0.25 U	---	2 U	0.25 U	---
2-Chlorophenol	8270C	1.9 U	---	0.9 U	1.9 U	---
2-Methylnaphthalene	8270C PAHs	0.28 U	---	0.9 U	0.28 U	---
2-Nitrophenol	8270C	0.37 U	---	0.9 U	0.37 U	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	1.9 U	---	2 U	1.9 U	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	3.8 U	---	5 U	3.8 U	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	0.41 U	---	0.9 U	0.41 U	---
4-Chlorophenylphenyl ether	8270C	1.6 U	---	2 U	1.6 U	---
4-Nitrophenol	8270C	1.2 U	---	9 U	1.2 U	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	0.27 U	---	0.9 U	0.27 U	---
Acenaphthylene	8270C, 8270C PAHs	0.47 U	---	0.9 U	0.47 U	---
Anthracene	8270C, 8270C PAHs	0.4 U	---	0.9 U	0.4 U	---
Benzidine	8270C	---	---	---	---	---
Benzo(a)anthracene	8270C, 8270C PAHs	0.34 U	---	0.9 U	0.34 U	---
Benzo(a)pyrene	8270C, 8270C PAHs	0.3 U	---	0.9 U	0.3 U	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	0.51 U	---	0.9 U	0.51 U	---
Benzo(ghi)perylene	8270C, 8270C PAHs	0.48 U	---	0.9 U	0.48 U	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	0.44 U	---	0.9 U	0.44 U	---
bis(2-Chloroethoxy)methane	8270C	0.93 U	---	0.9 U	0.93 U	---
bis(2-Chloroethyl) ether	8270C	0.39 U	---	0.9 U	0.39 U	---
bis(2-Chloroisopropyl) ether	8270C	0.27 U	---	0.9 U	0.27 U	---
bis(2-Ethylhexyl) phthalate	8270C	1.8 U	---	2 U	0.54 U	---
Butyl benzyl phthalate	8270C	0.96 U	---	2 U	0.96 U	---
Chrysene	8270C, 8270C PAHs	0.6 U	---	0.9 U	0.52 U	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	0.49 U	---	0.9 U	0.49 U	---
Diethyl phthalate	8270C	0.36 U	---	2 U	0.36 U	---
Dimethyl phthalate	8270C	0.2 U	---	2 U	0.2 U	---
Di-n-butyl phthalate	8270C	1.1 U	---	2 U	1.1 U	---
Di-n-octyl phthalate	8270C	0.34 U	---	2 U	0.34 U	---
Fluoranthene	8270C, 8270C PAHs	0.19 U	---	0.9 U	0.19 U	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**HAR-16**	**HAR-16**	**HAR-16**	**HAR-17**	**HAR-17**
Sample Type:		Primary	Primary	Split	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	TA-Denver	Lancaster	TA-Denver	TA-Denver
Collection Date:		04/23/2009	04/23/2009	04/23/2009	04/29/2009	04/29/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	0.3 U	---	0.9 U	0.3 U	---
Hexachlorobenzene	8270C	0.63 U	---	0.9 U	0.63 U	---
Hexachlorobutadiene	8270C	3.2 U	---	0.9 U	3.2 U	---
Hexachloroethane	8270C	2 U	---	0.9 U	2 U	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	0.62 U	---	0.9 U	0.62 U	---
Isophorone	8270C	0.2 U	---	0.9 U	0.2 U	---
Naphthalene	8270C, 8270C PAHs	0.28 U	---	0.9 U	0.28 U	---
Nitrobenzene	8270C, 8330	0.78 U	---	0.9 U	0.78 U	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	21	17	18	0.28 U	0.067
n-Nitrosodi-n-propylamine	8270C	0.34 U	---	---	0.34 U	---
n-Nitrosodiphenylamine	8270C	0.42 U	---	2 U	0.42 U	---
p-Chloro-m-cresol	8270C	2.3 U	---	0.9 U	2.3 U	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	0.85 U	---	---	0.76 U	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	0.25 U	---	0.9 U	0.25 U	---
Phenol	8270C	1.9 U	---	0.9 U	1.9 U	---
Pyrene	8270C, 8270C PAHs	0.36 U	---	0.9 U	0.36 U	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	3.8 U	---	---	3.8 U	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**HAR-17**	**HAR-18**	**HAR-18**	**HAR-18**	**HAR-18**
Sample Type:		Duplicate	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	Weck	Lancaster	TA-Denver
Collection Date:		04/29/2009	03/04/2009	03/04/2009	04/30/2009	04/30/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	0.27 U	0.9 U	---	1 U	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	0.9 U	---	1 U	---
1,3-Dinitrobenzene	8270C, 8330	1.9 U	2 U	---	2 U	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	0.28 U	0.9 U	---	1 U	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	0.61 U	0.9 U	---	1 U	---
2,4-Dimethylphenol	8270C	0.56 U	3 U	---	3 U	---
2,4-Dinitrophenol	8270C	9.6 U	19 U	---	19 U	---
2,4-Dinitrotoluene	8270C, 8330	1.6 U	0.9 U	---	1 U	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	1.8 U	0.9 U	---	1 U	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	0.25 U	2 U	---	2 U	---
2-Chlorophenol	8270C	1.9 U	0.9 U	---	1 U	---
2-Methylnaphthalene	8270C PAHs	0.28 U	---	---	---	---
2-Nitrophenol	8270C	0.37 U	0.9 U	---	1 U	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	1.9 U	2 U	---	2 U	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	3.8 U	5 U	---	5 U	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	0.41 U	0.9 U	---	1 U	---
4-Chlorophenylphenyl ether	8270C	1.6 U	2 U	---	2 U	---
4-Nitrophenol	8270C	1.2 U	9 U	---	10 U	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	0.27 U	0.9 U	---	1 U	---
Acenaphthylene	8270C, 8270C PAHs	0.47 U	0.9 U	---	1 U	---
Anthracene	8270C, 8270C PAHs	0.4 U	0.9 U	---	1 U	---
Benzidine	8270C	---	19 U	---	19 U	---
Benzo(a)anthracene	8270C, 8270C PAHs	0.34 U	0.9 U	---	1 U	---
Benzo(a)pyrene	8270C, 8270C PAHs	0.3 U	0.9 U	---	1 U	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	0.51 U	0.9 U	---	1 U	---
Benzo(ghi)perylene	8270C, 8270C PAHs	0.48 U	0.9 U	---	1 U	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	0.44 U	0.9 U	---	1 U	---
bis(2-Chloroethoxy)methane	8270C	0.93 U	0.9 U	---	1 U	---
bis(2-Chloroethyl) ether	8270C	0.39 U	0.9 U	---	1 U	---
bis(2-Chloroisopropyl) ether	8270C	0.27 U	0.9 U	---	1 U	---
bis(2-Ethylhexyl) phthalate	8270C	0.54 U	4 J,L	---	2 U	---
Butyl benzyl phthalate	8270C	0.96 U	2 U	---	2 U	---
Chrysene	8270C, 8270C PAHs	0.52 U	0.9 U	---	1 U	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	0.49 U	0.9 U	---	1 U	---
Diethyl phthalate	8270C	0.36 U	2 U	---	2 U	---
Dimethyl phthalate	8270C	0.2 U	2 U	---	2 U	---
Di-n-butyl phthalate	8270C	1.1 U	2 U	---	2 U	---
Di-n-octyl phthalate	8270C	0.34 U	2 U	---	2 U	---
Fluoranthene	8270C, 8270C PAHs	0.19 U	0.9 U	---	1 U	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**HAR-17**	**HAR-18**	**HAR-18**	**HAR-18**	**HAR-18**
Sample Type:		Duplicate	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	Weck	Lancaster	TA-Denver
Collection Date:		04/29/2009	03/04/2009	03/04/2009	04/30/2009	04/30/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	0.3 U	0.9 U	---	1 U	---
Hexachlorobenzene	8270C	0.63 U	0.9 U	---	1 U	---
Hexachlorobutadiene	8270C	3.2 U	0.9 U	---	1 U	---
Hexachloroethane	8270C	2 U	0.9 U	---	1 U	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	0.62 U	0.9 U	---	1 U	---
Isophorone	8270C	0.2 U	0.9 U	---	1 U	---
Naphthalene	8270C, 8270C PAHs	0.28 U	0.9 U	---	1 U	---
Nitrobenzene	8270C, 8330	0.78 U	0.9 U	---	1 U	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.28 U	3 J	0.51 J	2 U	2.1
n-Nitrosodi-n-propylamine	8270C	0.34 U	0.9 U	---	1 U	---
n-Nitrosodiphenylamine	8270C	0.42 U	2 U	---	2 U	---
p-Chloro-m-cresol	8270C	2.3 U	0.9 U	---	1 U	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	0.77 U	3 U	---	3 U	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	0.25 U	0.9 U	---	1 U	---
Phenol	8270C	1.9 U	0.9 U	---	1 U	---
Pyrene	8270C, 8270C PAHs	0.36 U	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	3.8 U	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**HAR-18**	**HAR-18**	**HAR-18**	**HAR-18**	**HAR-18**
Sample Type:		Split	Primary	Primary	Duplicate	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	TA-Denver	Lancaster	TA-Denver
Collection Date:		04/30/2009	07/16/2009	07/16/2009	07/16/2009	10/29/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	0.27 U	1 U	---	1 U	0.27 U
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	0.22 U	1 U	---	1 U	0.22 U
1,3-Dinitrobenzene	8270C, 8330	1.9 U	2 U	---	2 U	1.9 U
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	0.28 U	1 U	---	1 U	0.28 U
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	0.61 U	1 U	---	1 U	0.61 U
2,4-Dimethylphenol	8270C	0.55 U	3 U	---	3 U	0.55 U
2,4-Dinitrophenol	8270C	9.5 U	19 U	---	19 U	9.5 U
2,4-Dinitrotoluene	8270C, 8330	1.6 U	1 U	---	1 U	1.6 U
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	1.8 U	1 U	---	1 U	1.8 U
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	0.25 U	2 U	---	2 U	0.25 U
2-Chlorophenol	8270C	1.9 U	1 U	---	1 U	1.9 U
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	0.37 U	1 U	---	1 U	0.37 U
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	1.9 U	2 U	---	2 U	1.9 U
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	3.8 U	5 U	---	5 U	3.8 U
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	0.41 U	1 U	---	1 U	0.41 U
4-Chlorophenylphenyl ether	8270C	1.6 U	2 U	---	2 U	1.6 U
4-Nitrophenol	8270C	1.2 U	10 U	---	10 U	1.2 U
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	0.27 U	1 U	---	1 U	0.27 U
Acenaphthylene	8270C, 8270C PAHs	0.47 U	1 U	---	1 U	0.47 U
Anthracene	8270C, 8270C PAHs	0.4 U	1 U	---	1 U	0.4 U
Benzidine	8270C	48 U	19 U	---	19 U	48 U
Benzo(a)anthracene	8270C, 8270C PAHs	0.33 U	1 U	---	1 U	0.33 U
Benzo(a)pyrene	8270C, 8270C PAHs	0.29 U	1 U	---	1 U	0.29 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	0.5 U	1 U	---	1 U	0.5 U
Benzo(ghi)perylene	8270C, 8270C PAHs	0.48 U	1 U	---	1 U	0.48 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	0.44 U	1 U	---	1 U	0.44 U
bis(2-Chloroethoxy)methane	8270C	0.92 U	1 U	---	1 U	0.92 U
bis(2-Chloroethyl) ether	8270C	0.39 U	1 U	---	1 U	0.39 U
bis(2-Chloroisopropyl) ether	8270C	0.27 U	1 U	---	1 U	0.27 U
bis(2-Ethylhexyl) phthalate	8270C	2.3 U	4 U	---	2 U	0.53 U
Butyl benzyl phthalate	8270C	0.95 U	2 U	---	2 U	0.95 U
Chrysene	8270C, 8270C PAHs	0.51 U	1 U	---	1 U	0.51 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	0.48 U	1 U	---	1 U	0.48 U
Diethyl phthalate	8270C	0.36 U	2 U	---	2 U	0.36 U
Dimethyl phthalate	8270C	0.2 U	2 U	---	2 U	0.2 U
Di-n-butyl phthalate	8270C	1.1 U	2 U	---	2 U	1.1 U
Di-n-octyl phthalate	8270C	0.33 U	2 U	---	2 U	0.33 U
Fluoranthene	8270C, 8270C PAHs	0.19 U	1 U	---	1 U	0.19 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**HAR-18**	**HAR-18**	**HAR-18**	**HAR-18**	**HAR-18**
Sample Type:		Split	Primary	Primary	Duplicate	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	TA-Denver	Lancaster	TA-Denver
Collection Date:		04/30/2009	07/16/2009	07/16/2009	07/16/2009	10/29/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	0.29 U	1 U	---	1 U	0.29 U
Hexachlorobenzene	8270C	0.63 U	1 U	---	1 U	0.63 U
Hexachlorobutadiene	8270C	3.1 U	1 U	---	1 U	3.1 U
Hexachloroethane	8270C	2 U	1 U	---	1 U	2 U
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	0.62 U	1 U	---	1 U	0.62 U
Isophorone	8270C	0.2 U	1 U	---	1 U	0.2 U
Naphthalene	8270C, 8270C PAHs	0.28 U	1 U	---	1 U	0.28 U
Nitrobenzene	8270C, 8330	0.77 U	1 U	---	1 U	0.77 U
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	1.6 J	2 U	1.6	2 J	2.5 J
n-Nitrosodi-n-propylamine	8270C	0.33 U	1 U	---	1 U	0.33 U
n-Nitrosodiphenylamine	8270C	0.42 U	2 U	---	2 U	0.42 U
p-Chloro-m-cresol	8270C	2.3 U	1 U	---	1 U	2.3 U
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	19 U	3 U	---	3 U	19 U
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	0.25 U	1 U	---	1 U	0.25 U
Phenol	8270C	1.9 U	1 U	---	1 U	1.9 U
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**HAR-18**	**HAR-20**	**HAR-20**	**HAR-20**	**HAR-20**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	Weck	Lancaster	TA-Denver
Collection Date:		10/29/2009	02/17/2009	02/17/2009	04/30/2009	04/30/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	1 U	---	1 U	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	1 U	---	1 U	---
1,3-Dinitrobenzene	8270C, 8330	---	2 U	---	2 U	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	1 U	---	1 U	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	1 U	---	1 U	---
2,4-Dimethylphenol	8270C	---	3 U	---	3 U	---
2,4-Dinitrophenol	8270C	---	19 U	---	19 U	---
2,4-Dinitrotoluene	8270C, 8330	---	1 U	---	1 U	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	1 U	---	1 U	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	2 U	---	2 U	---
2-Chlorophenol	8270C	---	1 U	---	1 U	---
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	---	1 U	---	1 U	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	2 U	---	2 U	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	5 U	---	5 U	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	1 U	---	1 U	---
4-Chlorophenylphenyl ether	8270C	---	2 U	---	2 U	---
4-Nitrophenol	8270C	---	10 U	---	10 U	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Acenaphthylene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Anthracene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Benzidine	8270C	---	19 U	---	19 U	---
Benzo(a)anthracene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Benzo(a)pyrene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Benzo(ghi)perylene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	1 U	---	1 U	---
bis(2-Chloroethoxy)methane	8270C	---	1 U	---	1 U	---
bis(2-Chloroethyl) ether	8270C	---	1 U	---	1 U	---
bis(2-Chloroisopropyl) ether	8270C	---	1 U	---	1 U	---
bis(2-Ethylhexyl) phthalate	8270C	---	7 L	---	2 U	---
Butyl benzyl phthalate	8270C	---	2 U	---	2 U	---
Chrysene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Diethyl phthalate	8270C	---	2 U	---	2 U	---
Dimethyl phthalate	8270C	---	2 U	---	2 U	---
Di-n-butyl phthalate	8270C	---	2 U	---	2 U	---
Di-n-octyl phthalate	8270C	---	2 U	---	2 U	---
Fluoranthene	8270C, 8270C PAHs	---	1 U	---	1 U	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**HAR-18**	**HAR-20**	**HAR-20**	**HAR-20**	**HAR-20**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	Weck	Lancaster	TA-Denver
Collection Date:		10/29/2009	02/17/2009	02/17/2009	04/30/2009	04/30/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Hexachlorobenzene	8270C	---	1 U	---	1 U	---
Hexachlorobutadiene	8270C	---	1 U	---	1 U	---
Hexachloroethane	8270C	---	1 U	---	1 U	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Isophorone	8270C	---	1 U	---	1 U	---
Naphthalene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Nitrobenzene	8270C, 8330	---	1 U	---	1 U	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	3.6	2 U	0.071	2 U	0.045
n-Nitrosodi-n-propylamine	8270C	---	1 U	---	1 U	---
n-Nitrosodiphenylamine	8270C	---	2 U	---	2 U	---
p-Chloro-m-cresol	8270C	---	1 U	---	1 U	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	3 U	---	3 U	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Phenol	8270C	---	1 U	---	1 U	---
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**HAR-20**	**HAR-20**	**HAR-20**	**HAR-20**	**HAR-26**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	TA-Denver	TA-Denver	Lancaster
Collection Date:		07/15/2009	07/15/2009	10/29/2009	10/29/2009	03/02/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	1 U	---	0.27 U	---	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	1 U	---	0.22 U	---	---
1,3-Dinitrobenzene	8270C, 8330	2 U	---	1.9 U	---	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	1 U
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	1 U	---	0.28 U	---	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	1 U	---	0.61 U	---	---
2,4-Dimethylphenol	8270C	3 U	---	0.56 U	---	---
2,4-Dinitrophenol	8270C	19 U	---	9.6 U	---	---
2,4-Dinitrotoluene	8270C, 8330	1 U	---	1.6 U	---	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	1 U	---	1.8 U	---	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	2 U	---	0.25 U	---	---
2-Chlorophenol	8270C	1 U	---	1.9 U	---	---
2-Methylnaphthalene	8270C PAHs	---	---	---	---	1 U
2-Nitrophenol	8270C	1 U	---	0.37 U	---	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	2 U	---	1.9 U	---	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	5 U	---	3.8 U	---	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	1 U	---	0.41 U	---	---
4-Chlorophenylphenyl ether	8270C	2 U	---	1.6 U	---	---
4-Nitrophenol	8270C	10 U	---	1.2 U	---	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	1 U	---	0.27 U	---	1 U
Acenaphthylene	8270C, 8270C PAHs	1 U	---	0.47 U	---	1 U
Anthracene	8270C, 8270C PAHs	1 U	---	0.4 U	---	1 U
Benzidine	8270C	19 U	---	48 U	---	---
Benzo(a)anthracene	8270C, 8270C PAHs	1 U	---	0.34 U	---	1 U
Benzo(a)pyrene	8270C, 8270C PAHs	1 U	---	0.3 U	---	1 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	1 U	---	0.51 U	---	1 U
Benzo(ghi)perylene	8270C, 8270C PAHs	1 U	---	0.48 U	---	1 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	1 U	---	0.44 U	---	1 U
bis(2-Chloroethoxy)methane	8270C	1 U	---	0.93 U	---	---
bis(2-Chloroethyl) ether	8270C	1 U	---	0.39 U	---	---
bis(2-Chloroisopropyl) ether	8270C	1 U	---	0.27 U	---	---
bis(2-Ethylhexyl) phthalate	8270C	6 U	---	0.95 U	---	---
Butyl benzyl phthalate	8270C	2 U	---	0.96 U	---	---
Chrysene	8270C, 8270C PAHs	1 U	---	0.52 U	---	1 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	1 U	---	0.49 U	---	1 U
Diethyl phthalate	8270C	2 U	---	0.36 U	---	---
Dimethyl phthalate	8270C	2 U	---	0.2 U	---	---
Di-n-butyl phthalate	8270C	2 U	---	1.1 U	---	---
Di-n-octyl phthalate	8270C	2 U	---	0.34 U	---	---
Fluoranthene	8270C, 8270C PAHs	1 U	---	0.19 U	---	1 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**HAR-20**	**HAR-20**	**HAR-20**	**HAR-20**	**HAR-26**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	TA-Denver	TA-Denver	Lancaster
Collection Date:		07/15/2009	07/15/2009	10/29/2009	10/29/2009	03/02/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	1 U	---	0.3 U	---	1 U
Hexachlorobenzene	8270C	1 U	---	0.63 U	---	---
Hexachlorobutadiene	8270C	1 U	---	3.2 U	---	---
Hexachloroethane	8270C	1 U	---	2 U	---	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	1 U	---	0.62 U	---	1 U
Isophorone	8270C	1 U	---	0.2 U	---	---
Naphthalene	8270C, 8270C PAHs	1 U	---	0.28 U	---	1 U
Nitrobenzene	8270C, 8330	1 U	---	0.78 U	---	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	2 U	0.06	0.28 U	0.066	---
n-Nitrosodi-n-propylamine	8270C	1 U	---	0.34 U	---	---
n-Nitrosodiphenylamine	8270C	2 U	---	0.42 U	---	---
p-Chloro-m-cresol	8270C	1 U	---	2.3 U	---	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	3 U	---	19 U	---	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	1 U	---	0.25 U	---	1 U
Phenol	8270C	1 U	---	1.9 U	---	---
Pyrene	8270C, 8270C PAHs	---	---	---	---	1 U
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**HAR-26**	**HAR-26**	**HAR-26**	**HAR-26**	**HAR-26**
Sample Type:		Duplicate	Split	Primary	Primary	Duplicate
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	Lancaster	Lancaster	Lancaster
Collection Date:		03/02/2009	03/02/2009	05/01/2009	07/20/2009	07/20/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	---	---	---	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	---	---	---	---
1,3-Dinitrobenzene	8270C, 8330	---	---	---	---	---
1-Methyl naphthalene	8270C PAHs	1 U	0.22 U	1 U	1 U	1 U
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	---	---	---	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	---	---	---	---
2,4-Dimethylphenol	8270C	---	---	---	---	---
2,4-Dinitrophenol	8270C	---	---	---	---	---
2,4-Dinitrotoluene	8270C, 8330	---	---	---	---	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	---	---	---	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	---	---	---	---
2-Chlorophenol	8270C	---	---	---	---	---
2-Methylnaphthalene	8270C PAHs	1 U	0.27 U	1 U	1 U	1 U
2-Nitrophenol	8270C	---	---	---	---	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	---	---	---	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	---	---	---	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	---	---	---	---
4-Chlorophenylphenyl ether	8270C	---	---	---	---	---
4-Nitrophenol	8270C	---	---	---	---	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	1 U	0.26 U	1 U	1 U	1 U
Acenaphthylene	8270C, 8270C PAHs	1 U	0.46 U	1 U	1 U	1 U
Anthracene	8270C, 8270C PAHs	1 U	0.39 U	1 U	1 U	1 U
Benzidine	8270C	---	---	---	---	---
Benzo(a)anthracene	8270C, 8270C PAHs	1 U	0.33 U	1 U	1 U	1 U
Benzo(a)pyrene	8270C, 8270C PAHs	1 U	0.29 U	1 U	1 U	1 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	1 U	0.5 U	1 U	1 U	1 U
Benzo(ghi)perylene	8270C, 8270C PAHs	1 U	0.47 U	1 U	1 U	1 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	1 U	0.43 U	1 U	1 U	1 U
bis(2-Chloroethoxy)methane	8270C	---	---	---	---	---
bis(2-Chloroethyl) ether	8270C	---	---	---	---	---
bis(2-Chloroisopropyl) ether	8270C	---	---	---	---	---
bis(2-Ethylhexyl) phthalate	8270C	---	---	---	---	---
Butyl benzyl phthalate	8270C	---	---	---	---	---
Chrysene	8270C, 8270C PAHs	1 U	0.51 U	1 U	1 U	1 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	1 U	0.48 U	1 U	1 U	1 U
Diethyl phthalate	8270C	---	---	---	---	---
Dimethyl phthalate	8270C	---	---	---	---	---
Di-n-butyl phthalate	8270C	---	---	---	---	---
Di-n-octyl phthalate	8270C	---	---	---	---	---
Fluoranthene	8270C, 8270C PAHs	1 U	0.19 U	1 U	1 U	1 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**HAR-26**	**HAR-26**	**HAR-26**	**HAR-26**	**HAR-26**
Sample Type:		Duplicate	Split	Primary	Primary	Duplicate
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	Lancaster	Lancaster	Lancaster
Collection Date:		03/02/2009	03/02/2009	05/01/2009	07/20/2009	07/20/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	1 U	0.29 U	1 U	1 U	1 U
Hexachlorobenzene	8270C	---	---	---	---	---
Hexachlorobutadiene	8270C	---	---	---	---	---
Hexachloroethane	8270C	---	---	---	---	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	1 U	0.61 U	1 U	1 U	1 U
Isophorone	8270C	---	---	---	---	---
Naphthalene	8270C, 8270C PAHs	1 U	0.27 U	1 U	1 U	1 U
Nitrobenzene	8270C, 8330	---	---	---	---	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	---	---	---	---	---
n-Nitrosodi-n-propylamine	8270C	---	---	---	---	---
n-Nitrosodiphenylamine	8270C	---	---	---	---	---
p-Chloro-m-cresol	8270C	---	---	---	---	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	---	---	---	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	1 U	0.24 U	1 U	1 U	1 U
Phenol	8270C	---	---	---	---	---
Pyrene	8270C, 8270C PAHs	1 U	0.35 U	1 U	1 U	1 U
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**HAR-26**	**HAR-26**	**OS-28**	**OS-28**	**OS-28**
Sample Type:		Split	Primary	Primary	Duplicate	Split
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	TA-Denver	Weck	Weck	TA-Denver
Collection Date:		07/20/2009	10/29/2009	03/10/2009	03/10/2009	03/10/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	---	---	---	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	---	---	---	---
1,3-Dinitrobenzene	8270C, 8330	---	---	---	---	---
1-Methyl naphthalene	8270C PAHs	0.22 U	0.22 U	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	---	---	---	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	---	---	---	---
2,4-Dimethylphenol	8270C	---	---	---	---	---
2,4-Dinitrophenol	8270C	---	---	---	---	---
2,4-Dinitrotoluene	8270C, 8330	---	---	---	---	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	---	---	---	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	---	---	---	---
2-Chlorophenol	8270C	---	---	---	---	---
2-Methylnaphthalene	8270C PAHs	0.28 U	0.28 U	---	---	---
2-Nitrophenol	8270C	---	---	---	---	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	---	---	---	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	---	---	---	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	---	---	---	---
4-Chlorophenylphenyl ether	8270C	---	---	---	---	---
4-Nitrophenol	8270C	---	---	---	---	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	0.27 U	0.27 U	---	---	---
Acenaphthylene	8270C, 8270C PAHs	0.47 U	0.47 U	---	---	---
Anthracene	8270C, 8270C PAHs	0.4 U	0.4 U	---	---	---
Benzidine	8270C	---	---	---	---	---
Benzo(a)anthracene	8270C, 8270C PAHs	0.33 U	0.33 U	---	---	---
Benzo(a)pyrene	8270C, 8270C PAHs	0.29 U	0.29 U	---	---	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	0.5 U	0.5 U	---	---	---
Benzo(ghi)perylene	8270C, 8270C PAHs	0.48 U	0.48 U	---	---	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	0.44 U	0.44 U	---	---	---
bis(2-Chloroethoxy)methane	8270C	---	---	---	---	---
bis(2-Chloroethyl) ether	8270C	---	---	---	---	---
bis(2-Chloroisopropyl) ether	8270C	---	---	---	---	---
bis(2-Ethylhexyl) phthalate	8270C	---	---	---	---	---
Butyl benzyl phthalate	8270C	---	---	---	---	---
Chrysene	8270C, 8270C PAHs	0.51 U	0.55 U	---	---	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	0.48 U	0.48 U	---	---	---
Diethyl phthalate	8270C	---	---	---	---	---
Dimethyl phthalate	8270C	---	---	---	---	---
Di-n-butyl phthalate	8270C	---	---	---	---	---
Di-n-octyl phthalate	8270C	---	---	---	---	---
Fluoranthene	8270C, 8270C PAHs	0.19 U	0.19 U	---	---	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**HAR-26**	**HAR-26**	**OS-28**	**OS-28**	**OS-28**
Sample Type:		Split	Primary	Primary	Duplicate	Split
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	TA-Denver	Weck	Weck	TA-Denver
Collection Date:		07/20/2009	10/29/2009	03/10/2009	03/10/2009	03/10/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	0.29 U	0.29 U	---	---	---
Hexachlorobenzene	8270C	---	---	---	---	---
Hexachlorobutadiene	8270C	---	---	---	---	---
Hexachloroethane	8270C	---	---	---	---	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	0.62 U	0.62 U	---	---	---
Isophorone	8270C	---	---	---	---	---
Naphthalene	8270C, 8270C PAHs	0.28 U	0.28 U	---	---	---
Nitrobenzene	8270C, 8330	---	---	---	---	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	---	---	0.005 U	0.005 U	0.005 U
n-Nitrosodi-n-propylamine	8270C	---	---	---	---	---
n-Nitrosodiphenylamine	8270C	---	---	---	---	---
p-Chloro-m-cresol	8270C	---	---	---	---	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	---	---	---	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	0.25 U	0.25 U	---	---	---
Phenol	8270C	---	---	---	---	---
Pyrene	8270C, 8270C PAHs	0.35 U	0.35 U	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**OS-28**	**OS-28**	**OS-28**	**PZ-006C**	**PZ-006C**
Sample Type:		Primary	Duplicate	Split	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Shallow	Shallow
Lab Name:		TA-Denver	TA-Denver	Weck	Lancaster	Lancaster
Collection Date:		07/30/2009	07/30/2009	07/30/2009	02/19/2009	05/06/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	---	---	---	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	---	---	---	---
1,3-Dinitrobenzene	8270C, 8330	---	---	---	---	---
1-Methyl naphthalene	8270C PAHs	---	---	---	2 U	1 U
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	---	---	---	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	---	---	---	---
2,4-Dimethylphenol	8270C	---	---	---	---	---
2,4-Dinitrophenol	8270C	---	---	---	---	---
2,4-Dinitrotoluene	8270C, 8330	---	---	---	---	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	---	---	---	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	---	---	---	---
2-Chlorophenol	8270C	---	---	---	---	---
2-Methylnaphthalene	8270C PAHs	---	---	---	2 U	1 U
2-Nitrophenol	8270C	---	---	---	---	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	---	---	---	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	---	---	---	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	---	---	---	---
4-Chlorophenylphenyl ether	8270C	---	---	---	---	---
4-Nitrophenol	8270C	---	---	---	---	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	---	---	---	2 U	1 U
Acenaphthylene	8270C, 8270C PAHs	---	---	---	2 U	1 U
Anthracene	8270C, 8270C PAHs	---	---	---	2 U	1 U
Benzidine	8270C	---	---	---	---	---
Benzo(a)anthracene	8270C, 8270C PAHs	---	---	---	2 U	1 U
Benzo(a)pyrene	8270C, 8270C PAHs	---	---	---	2 U	1 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	---	---	2 U	1 U
Benzo(ghi)perylene	8270C, 8270C PAHs	---	---	---	2 U	1 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	---	---	2 U	1 U
bis(2-Chloroethoxy)methane	8270C	---	---	---	---	---
bis(2-Chloroethyl) ether	8270C	---	---	---	---	---
bis(2-Chloroisopropyl) ether	8270C	---	---	---	---	---
bis(2-Ethylhexyl) phthalate	8270C	---	---	---	---	---
Butyl benzyl phthalate	8270C	---	---	---	---	---
Chrysene	8270C, 8270C PAHs	---	---	---	2 U	1 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	---	---	2 U	1 U
Diethyl phthalate	8270C	---	---	---	---	---
Dimethyl phthalate	8270C	---	---	---	---	---
Di-n-butyl phthalate	8270C	---	---	---	---	---
Di-n-octyl phthalate	8270C	---	---	---	---	---
Fluoranthene	8270C, 8270C PAHs	---	---	---	2 U	1 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**OS-28**	**OS-28**	**OS-28**	**PZ-006C**	**PZ-006C**
Sample Type:		Primary	Duplicate	Split	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Shallow	Shallow
Lab Name:		TA-Denver	TA-Denver	Weck	Lancaster	Lancaster
Collection Date:		07/30/2009	07/30/2009	07/30/2009	02/19/2009	05/06/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	---	---	2 U	1 U
Hexachlorobenzene	8270C	---	---	---	---	---
Hexachlorobutadiene	8270C	---	---	---	---	---
Hexachloroethane	8270C	---	---	---	---	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	---	---	2 U	1 U
Isophorone	8270C	---	---	---	---	---
Naphthalene	8270C, 8270C PAHs	---	---	---	2 U	1 U
Nitrobenzene	8270C, 8330	---	---	---	---	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.005 U	0.005 U	0.005 U	---	---
n-Nitrosodi-n-propylamine	8270C	---	---	---	---	---
n-Nitrosodiphenylamine	8270C	---	---	---	---	---
p-Chloro-m-cresol	8270C	---	---	---	---	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	---	---	---	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	---	---	---	2 U	1 U
Phenol	8270C	---	---	---	---	---
Pyrene	8270C, 8270C PAHs	---	---	---	2 U	1 U
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**PZ-006C**	**PZ-006D**	**PZ-006D**	**PZ-006D**	**PZ-006D**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:		Lancaster	Lancaster	Lancaster	Lancaster	TA-Denver
Collection Date:		07/15/2009	02/23/2009	05/06/2009	07/15/2009	10/29/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	---	---	---	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	---	---	---	---
1,3-Dinitrobenzene	8270C, 8330	---	---	---	---	---
1-Methyl naphthalene	8270C PAHs	1 U	1 U	1 U	1 U	0.22 U
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	---	---	---	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	---	---	---	---
2,4-Dimethylphenol	8270C	---	---	---	---	---
2,4-Dinitrophenol	8270C	---	---	---	---	---
2,4-Dinitrotoluene	8270C, 8330	---	---	---	---	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	---	---	---	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	---	---	---	---
2-Chlorophenol	8270C	---	---	---	---	---
2-Methylnaphthalene	8270C PAHs	1 U	1 U	1 U	1 U	0.28 U
2-Nitrophenol	8270C	---	---	---	---	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	---	---	---	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	---	---	---	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	---	---	---	---
4-Chlorophenylphenyl ether	8270C	---	---	---	---	---
4-Nitrophenol	8270C	---	---	---	---	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	0.27 U
Acenaphthylene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	0.48 U
Anthracene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	0.41 U
Benzidine	8270C	---	---	---	---	---
Benzo(a)anthracene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	0.34 U
Benzo(a)pyrene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	0.3 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	0.52 U
Benzo(ghi)perylene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	0.48 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	0.45 U
bis(2-Chloroethoxy)methane	8270C	---	---	---	---	---
bis(2-Chloroethyl) ether	8270C	---	---	---	---	---
bis(2-Chloroisopropyl) ether	8270C	---	---	---	---	---
bis(2-Ethylhexyl) phthalate	8270C	---	---	---	---	---
Butyl benzyl phthalate	8270C	---	---	---	---	---
Chrysene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	0.52 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	0.49 U
Diethyl phthalate	8270C	---	---	---	---	---
Dimethyl phthalate	8270C	---	---	---	---	---
Di-n-butyl phthalate	8270C	---	---	---	---	---
Di-n-octyl phthalate	8270C	---	---	---	---	---
Fluoranthene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	0.19 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**PZ-006C**	**PZ-006D**	**PZ-006D**	**PZ-006D**	**PZ-006D**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:		Lancaster	Lancaster	Lancaster	Lancaster	TA-Denver
Collection Date:		07/15/2009	02/23/2009	05/06/2009	07/15/2009	10/29/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	0.3 U
Hexachlorobenzene	8270C	---	---	---	---	---
Hexachlorobutadiene	8270C	---	---	---	---	---
Hexachloroethane	8270C	---	---	---	---	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	0.63 U
Isophorone	8270C	---	---	---	---	---
Naphthalene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	0.28 U
Nitrobenzene	8270C, 8330	---	---	---	---	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	---	---	---	---	---
n-Nitrosodi-n-propylamine	8270C	---	---	---	---	---
n-Nitrosodiphenylamine	8270C	---	---	---	---	---
p-Chloro-m-cresol	8270C	---	---	---	---	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	---	---	---	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	0.25 U
Phenol	8270C	---	---	---	---	---
Pyrene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	0.36 U
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**PZ-006E**	**PZ-006E**	**PZ-006E**	**PZ-006E**	**PZ-025**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:		Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster
Collection Date:		02/23/2009	05/06/2009	07/15/2009	10/29/2009	02/13/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	---	---	---	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	---	---	---	---
1,3-Dinitrobenzene	8270C, 8330	---	---	---	---	---
1-Methyl naphthalene	8270C PAHs	1 U	1 U	1 U	0.22 U	1 U
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	---	---	---	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	---	---	---	---
2,4-Dimethylphenol	8270C	---	---	---	---	---
2,4-Dinitrophenol	8270C	---	---	---	---	---
2,4-Dinitrotoluene	8270C, 8330	---	---	---	---	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	---	---	---	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	---	---	---	---
2-Chlorophenol	8270C	---	---	---	---	---
2-Methylnaphthalene	8270C PAHs	1 U	1 U	1 U	0.28 U	1 U
2-Nitrophenol	8270C	---	---	---	---	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	---	---	---	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	---	---	---	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	---	---	---	---
4-Chlorophenylphenyl ether	8270C	---	---	---	---	---
4-Nitrophenol	8270C	---	---	---	---	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	1 U	1 U	1 U	0.27 U	1 U
Acenaphthylene	8270C, 8270C PAHs	1 U	1 U	1 U	0.47 U	1 U
Anthracene	8270C, 8270C PAHs	1 U	1 U	1 U	0.4 U	1 U
Benzidine	8270C	---	---	---	---	---
Benzo(a)anthracene	8270C, 8270C PAHs	1 U	1 U	1 U	0.34 U	1 U
Benzo(a)pyrene	8270C, 8270C PAHs	1 U	1 U	1 U	0.3 U	1 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	1 U	1 U	1 U	0.51 U	1 U
Benzo(ghi)perylene	8270C, 8270C PAHs	1 U	1 U	1 U	0.48 U	1 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	1 U	1 U	1 U	0.44 U	1 U
bis(2-Chloroethoxy)methane	8270C	---	---	---	---	---
bis(2-Chloroethyl) ether	8270C	---	---	---	---	---
bis(2-Chloroisopropyl) ether	8270C	---	---	---	---	---
bis(2-Ethylhexyl) phthalate	8270C	---	---	---	---	---
Butyl benzyl phthalate	8270C	---	---	---	---	---
Chrysene	8270C, 8270C PAHs	1 U	1 U	1 U	0.52 U	1 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	1 U	1 U	1 U	0.49 U	1 U
Diethyl phthalate	8270C	---	---	---	---	---
Dimethyl phthalate	8270C	---	---	---	---	---
Di-n-butyl phthalate	8270C	---	---	---	---	---
Di-n-octyl phthalate	8270C	---	---	---	---	---
Fluoranthene	8270C, 8270C PAHs	1 U	1 U	1 U	0.19 U	1 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**PZ-006E**	**PZ-006E**	**PZ-006E**	**PZ-006E**	**PZ-025**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:		Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster
Collection Date:		02/23/2009	05/06/2009	07/15/2009	10/29/2009	02/13/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	1 U	1 U	1 U	0.3 U	1 U
Hexachlorobenzene	8270C	---	---	---	---	---
Hexachlorobutadiene	8270C	---	---	---	---	---
Hexachloroethane	8270C	---	---	---	---	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	1 U	1 U	1 U	0.62 U	1 U
Isophorone	8270C	---	---	---	---	---
Naphthalene	8270C, 8270C PAHs	1 U	1 U	1 U	0.28 U	1 U
Nitrobenzene	8270C, 8330	---	---	---	---	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	---	---	---	---	---
n-Nitrosodi-n-propylamine	8270C	---	---	---	---	---
n-Nitrosodiphenylamine	8270C	---	---	---	---	---
p-Chloro-m-cresol	8270C	---	---	---	---	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	---	---	---	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	1 U	1 U	1 U	0.25 U	1 U
Phenol	8270C	---	---	---	---	---
Pyrene	8270C, 8270C PAHs	1 U	1 U	1 U	0.36 U	1 U
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**PZ-025**	**PZ-025**	**PZ-026**	**PZ-026**	**PZ-026**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:		Lancaster	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:		04/29/2009	07/08/2009	02/12/2009	04/28/2009	07/09/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	---	---	---	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	---	---	---	---
1,3-Dinitrobenzene	8270C, 8330	---	---	---	---	---
1-Methyl naphthalene	8270C PAHs	1 U	1 U	1 U	1 U	1 U
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	---	---	---	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	---	---	---	---
2,4-Dimethylphenol	8270C	---	---	---	---	---
2,4-Dinitrophenol	8270C	---	---	---	---	---
2,4-Dinitrotoluene	8270C, 8330	---	---	---	---	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	---	---	---	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	---	---	---	---
2-Chlorophenol	8270C	---	---	---	---	---
2-Methylnaphthalene	8270C PAHs	1 U	1 U	1 U	1 U	1 U
2-Nitrophenol	8270C	---	---	---	---	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	---	---	---	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	---	---	---	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	---	---	---	---
4-Chlorophenylphenyl ether	8270C	---	---	---	---	---
4-Nitrophenol	8270C	---	---	---	---	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	1 U
Acenaphthylene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	1 U
Anthracene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	1 U
Benzidine	8270C	---	---	---	---	---
Benzo(a)anthracene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	1 U
Benzo(a)pyrene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	1 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	1 U
Benzo(ghi)perylene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	1 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	1 U
bis(2-Chloroethoxy)methane	8270C	---	---	---	---	---
bis(2-Chloroethyl) ether	8270C	---	---	---	---	---
bis(2-Chloroisopropyl) ether	8270C	---	---	---	---	---
bis(2-Ethylhexyl) phthalate	8270C	---	---	---	---	---
Butyl benzyl phthalate	8270C	---	---	---	---	---
Chrysene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	1 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	1 U
Diethyl phthalate	8270C	---	---	---	---	---
Dimethyl phthalate	8270C	---	---	---	---	---
Di-n-butyl phthalate	8270C	---	---	---	---	---
Di-n-octyl phthalate	8270C	---	---	---	---	---
Fluoranthene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	1 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**PZ-025**	**PZ-025**	**PZ-026**	**PZ-026**	**PZ-026**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:		Lancaster	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:		04/29/2009	07/08/2009	02/12/2009	04/28/2009	07/09/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	1 U
Hexachlorobenzene	8270C	---	---	---	---	---
Hexachlorobutadiene	8270C	---	---	---	---	---
Hexachloroethane	8270C	---	---	---	---	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	1 U
Isophorone	8270C	---	---	---	---	---
Naphthalene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	1 U
Nitrobenzene	8270C, 8330	---	---	---	---	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	---	---	---	---	---
n-Nitrosodi-n-propylamine	8270C	---	---	---	---	---
n-Nitrosodiphenylamine	8270C	---	---	---	---	---
p-Chloro-m-cresol	8270C	---	---	---	---	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	---	---	---	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	1 U
Phenol	8270C	---	---	---	---	---
Pyrene	8270C, 8270C PAHs	1 U	1 U	1 U	1 U	1 U
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**PZ-026**	**PZ-027**	**PZ-027**	**PZ-027**	**PZ-050**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:		TA-Denver	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:		10/16/2009	02/12/2009	04/28/2009	07/08/2009	02/10/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	---	---	---	1 U
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	---	---	---	1 U
1,3-Dinitrobenzene	8270C, 8330	---	---	---	---	2 U
1-Methyl naphthalene	8270C PAHs	0.23 U	1 U	1 U	1 U	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	---	---	---	1 U
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	---	---	---	1 U
2,4-Dimethylphenol	8270C	---	---	---	---	3 U
2,4-Dinitrophenol	8270C	---	---	---	---	20 U
2,4-Dinitrotoluene	8270C, 8330	---	---	---	---	1 U
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	---	---	---	1 U
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	---	---	---	2 U
2-Chlorophenol	8270C	---	---	---	---	1 U
2-Methylnaphthalene	8270C PAHs	0.29 U	1 U	1 U	1 U	---
2-Nitrophenol	8270C	---	---	---	---	1 U
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	---	---	---	2 U
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	---	---	---	5 U
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	---	---	---	1 U
4-Chlorophenylphenyl ether	8270C	---	---	---	---	2 U
4-Nitrophenol	8270C	---	---	---	---	10 U
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	0.28 U	1 U	1 U	1 U	1 U
Acenaphthylene	8270C, 8270C PAHs	0.49 U	1 U	1 U	1 U	1 U
Anthracene	8270C, 8270C PAHs	0.42 U	1 U	1 U	1 U	1 U
Benzidine	8270C	---	---	---	---	20 U
Benzo(a)anthracene	8270C, 8270C PAHs	0.35 U	1 U	1 U	1 U	1 U
Benzo(a)pyrene	8270C, 8270C PAHs	0.31 U	1 U	1 U	1 U	1 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	0.53 U	1 U	1 U	1 U	1 U
Benzo(ghi)perylene	8270C, 8270C PAHs	0.5 U	1 U	1 U	1 U	1 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	0.46 U	1 U	1 U	1 U	1 U
bis(2-Chloroethoxy)methane	8270C	---	---	---	---	1 U
bis(2-Chloroethyl) ether	8270C	---	---	---	---	1 U
bis(2-Chloroisopropyl) ether	8270C	---	---	---	---	1 U
bis(2-Ethylhexyl) phthalate	8270C	---	---	---	---	2 U
Butyl benzyl phthalate	8270C	---	---	---	---	2 U
Chrysene	8270C, 8270C PAHs	0.54 U	1 U	1 U	1 U	1 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	0.51 U	1 U	1 U	1 U	1 U
Diethyl phthalate	8270C	---	---	---	---	2 U
Dimethyl phthalate	8270C	---	---	---	---	2 U
Di-n-butyl phthalate	8270C	---	---	---	---	2 U
Di-n-octyl phthalate	8270C	---	---	---	---	2 U
Fluoranthene	8270C, 8270C PAHs	0.2 U	1 U	1 U	1 U	1 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**PZ-026**	**PZ-027**	**PZ-027**	**PZ-027**	**PZ-050**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:		TA-Denver	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:		10/16/2009	02/12/2009	04/28/2009	07/08/2009	02/10/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	0.31 U	1 U	1 U	1 U	1 U
Hexachlorobenzene	8270C	---	---	---	---	1 U
Hexachlorobutadiene	8270C	---	---	---	---	1 U
Hexachloroethane	8270C	---	---	---	---	1 U
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	0.65 U	1 U	1 U	1 U	1 U
Isophorone	8270C	---	---	---	---	1 U
Naphthalene	8270C, 8270C PAHs	0.29 U	1 U	1 U	1 U	1 U
Nitrobenzene	8270C, 8330	---	---	---	---	1 U
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	---	---	---	---	2 U
n-Nitrosodi-n-propylamine	8270C	---	---	---	---	1 U
n-Nitrosodiphenylamine	8270C	---	---	---	---	2 U
p-Chloro-m-cresol	8270C	---	---	---	---	1 U
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	---	---	---	3 U
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	0.26 U	1 U	1 U	1 U	1 U
Phenol	8270C	---	---	---	---	1 U
Pyrene	8270C, 8270C PAHs	0.37 U	1 U	1 U	1 U	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**PZ-058**	**PZ-071**	**PZ-071**	**PZ-076**	**PZ-091**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:		Lancaster	Lancaster	Lancaster	TA-Denver	TA-Denver
Collection Date:		05/04/2009	05/07/2009	07/16/2009	11/02/2009	10/09/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	0.9 U	1 U	1 U	0.27 U	0.27 U
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	0.9 U	1 U	1 U	0.22 U	0.22 U
1,3-Dinitrobenzene	8270C, 8330	2 U	2 U	2 U	1.9 U	1.9 U
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	0.9 U	1 U	1 U	0.28 U	0.28 U
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	0.9 U	1 U	1 U	0.61 U	0.61 U
2,4-Dimethylphenol	8270C	3 U	3 U	3 U	0.55 U	0.55 U
2,4-Dinitrophenol	8270C	19 U	20 U	20 U	9.5 U	9.5 U
2,4-Dinitrotoluene	8270C, 8330	0.9 U	1 U	1 U	1.6 U	1.6 U
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	0.9 U	1 U	1 U	1.8 U	1.8 U
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	2 U	2 U	2 U	0.25 U	0.25 U
2-Chlorophenol	8270C	0.9 U	1 U	1 U	1.9 U	1.9 U
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	0.9 U	1 U	1 U	0.37 U	0.37 U
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	2 U	2 U	2 U	1.9 U	1.9 U
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	5 U	5 U	5 U	3.8 U	3.8 U
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	0.9 U	1 U	1 U	0.41 U	0.41 U
4-Chlorophenylphenyl ether	8270C	2 U	2 U	2 U	1.6 U	1.6 U
4-Nitrophenol	8270C	9 U	10 U	10 U	1.2 U	1.2 U
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	0.9 U	1 U	1 U	0.27 U	0.27 U
Acenaphthylene	8270C, 8270C PAHs	0.9 U	1 U	1 U	0.47 U	0.47 U
Anthracene	8270C, 8270C PAHs	0.9 U	1 U	1 U	0.4 U	0.4 U
Benzidine	8270C	19 U	20 U	20 U	48 U	48 U
Benzo(a)anthracene	8270C, 8270C PAHs	0.9 U	1 U	1 U	0.33 U	0.33 U
Benzo(a)pyrene	8270C, 8270C PAHs	0.9 U	1 U	1 U	0.29 U	0.29 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	0.9 U	1 U	1 U	0.5 U	0.5 U
Benzo(ghi)perylene	8270C, 8270C PAHs	0.9 U	1 U	1 U	0.48 U	0.48 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	0.9 U	1 U	1 U	0.44 U	0.44 U
bis(2-Chloroethoxy)methane	8270C	0.9 U	1 U	1 U	0.92 U	0.92 U
bis(2-Chloroethyl) ether	8270C	0.9 U	1 U	1 U	0.39 U	0.39 U
bis(2-Chloroisopropyl) ether	8270C	0.9 U	1 U	1 U	0.27 U	0.27 U
bis(2-Ethylhexyl) phthalate	8270C	2 U	2 U	2 U	3.1 U	3.4 U
Butyl benzyl phthalate	8270C	2 U	2 U	2 U	0.95 U	0.95 U
Chrysene	8270C, 8270C PAHs	0.9 U	1 U	1 U	0.55 U	0.65 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	0.9 U	1 U	1 U	0.48 U	0.48 U
Diethyl phthalate	8270C	2 U	2 U	2 U	0.36 U	0.75 J,L
Dimethyl phthalate	8270C	2 U	2 U	2 U	0.2 U	0.2 U
Di-n-butyl phthalate	8270C	2 U	2 U	2 U	1.1 U	1.1 U
Di-n-octyl phthalate	8270C	2 U	2 U	2 U	0.33 U	2.8 J,L
Fluoranthene	8270C, 8270C PAHs	0.9 U	1 U	1 U	0.19 U	0.19 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**PZ-058**	**PZ-071**	**PZ-071**	**PZ-076**	**PZ-091**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:		Lancaster	Lancaster	Lancaster	TA-Denver	TA-Denver
Collection Date:		05/04/2009	05/07/2009	07/16/2009	11/02/2009	10/09/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	0.9 U	1 U	1 U	0.29 U	0.29 U
Hexachlorobenzene	8270C	0.9 U	1 U	1 U	0.63 U	0.63 U
Hexachlorobutadiene	8270C	0.9 U	1 U	1 U	3.1 U	3.1 U
Hexachloroethane	8270C	0.9 U	1 U	1 U	2 U	2 U
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	0.9 U	1 U	1 U	0.62 U	0.62 U
Isophorone	8270C	0.9 U	1 U	1 U	0.2 U	0.2 U
Naphthalene	8270C, 8270C PAHs	0.9 U	1 U	1 U	0.28 U	0.28 U
Nitrobenzene	8270C, 8330	0.9 U	1 U	1 U	0.77 U	0.77 U
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	2 U	2 U	2 U	0.28 U	0.28 U
n-Nitrosodi-n-propylamine	8270C	0.9 U	1 U	1 U	0.33 U	0.33 U
n-Nitrosodiphenylamine	8270C	2 U	2 U	2 U	0.42 U	0.42 U
p-Chloro-m-cresol	8270C	0.9 U	1 U	1 U	2.3 U	2.3 U
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	3 U	3 U	3 U	19 U	19 U
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	0.9 U	1 U	1 U	0.25 U	0.25 U
Phenol	8270C	0.9 U	1 U	1 U	1.9 U	1.9 U
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**PZ-139**	**PZ-139**	**PZ-139**	**PZ-139**	**PZ-140**
Sample Type:		Primary	Primary	Duplicate	Split	Primary
Geological Unit:		Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:		TA-Denver	TA-Denver	TA-Denver	TA-Irvine	TA-Denver
Collection Date:		10/15/2009	10/15/2009	10/15/2009	10/15/2009	10/20/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	0.27 U	---	---	---	0.26 U
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	0.22 U	---	---	---	0.22 U
1,3-Dinitrobenzene	8270C, 8330	2 U	---	---	---	1.9 U
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	0.28 U	---	---	---	0.27 U
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	0.62 U	---	---	---	0.6 U
2,4-Dimethylphenol	8270C	0.56 U	---	---	---	0.55 U
2,4-Dinitrophenol	8270C	9.7 U	---	---	---	9.4 U
2,4-Dinitrotoluene	8270C, 8330	1.6 U	---	---	---	1.6 U
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	1.8 U	---	---	---	1.8 U
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	0.25 U	---	---	---	0.24 U
2-Chlorophenol	8270C	1.9 U	---	---	---	1.9 U
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	0.38 U	---	---	---	0.37 U
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	1.9 U	---	---	---	1.9 U
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	3.9 U	---	---	---	3.8 U
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	0.42 U	---	---	---	0.4 U
4-Chlorophenylphenyl ether	8270C	1.6 U	---	---	---	1.6 U
4-Nitrophenol	8270C	1.2 U	---	---	---	1.2 U
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	0.27 U	---	---	---	0.26 U
Acenaphthylene	8270C, 8270C PAHs	0.48 U	---	---	---	0.46 U
Anthracene	8270C, 8270C PAHs	0.41 U	---	---	---	0.39 U
Benzidine	8270C	48 U	---	---	---	47 U
Benzo(a)anthracene	8270C, 8270C PAHs	0.34 U	---	---	---	0.33 U
Benzo(a)pyrene	8270C, 8270C PAHs	0.3 U	---	---	---	0.29 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	0.52 U	---	---	---	0.5 U
Benzo(ghi)perylene	8270C, 8270C PAHs	0.48 U	---	---	---	0.47 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	0.45 U	---	---	---	0.43 U
bis(2-Chloroethoxy)methane	8270C	0.94 U	---	---	---	0.91 U
bis(2-Chloroethyl) ether	8270C	0.4 U	---	---	---	0.39 U
bis(2-Chloroisopropyl) ether	8270C	0.27 U	---	---	---	0.26 U
bis(2-Ethylhexyl) phthalate	8270C	2.7 U	---	---	---	2.3 U
Butyl benzyl phthalate	8270C	0.97 U	---	---	---	0.94 U
Chrysene	8270C, 8270C PAHs	0.52 U	---	---	---	0.51 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	0.49 U	---	---	---	0.48 U
Diethyl phthalate	8270C	0.37 U	---	---	---	0.36 U
Dimethyl phthalate	8270C	0.2 U	---	---	---	0.2 U
Di-n-butyl phthalate	8270C	1.1 U	---	---	---	1.1 U
Di-n-octyl phthalate	8270C	0.34 U	---	---	---	0.33 U
Fluoranthene	8270C, 8270C PAHs	0.19 U	---	---	---	0.19 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**PZ-139**	**PZ-139**	**PZ-139**	**PZ-139**	**PZ-140**
Sample Type:		Primary	Primary	Duplicate	Split	Primary
Geological Unit:		Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:		TA-Denver	TA-Denver	TA-Denver	TA-Irvine	TA-Denver
Collection Date:		10/15/2009	10/15/2009	10/15/2009	10/15/2009	10/20/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	0.3 U	---	---	---	0.29 U
Hexachlorobenzene	8270C	0.64 U	---	---	---	0.62 U
Hexachlorobutadiene	8270C	3.2 U	---	---	---	3.1 U
Hexachloroethane	8270C	2 U	---	---	---	2 U
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	0.63 U	---	---	---	0.61 U
Isophorone	8270C	0.2 U	---	---	---	0.2 U
Naphthalene	8270C, 8270C PAHs	0.28 U	---	---	---	0.27 U
Nitrobenzene	8270C, 8330	0.79 U	---	---	---	0.76 U
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.28 U	0.005 U	0.005 U	0.005 U	0.27 U
n-Nitrosodi-n-propylamine	8270C	0.34 U	---	---	---	0.33 U
n-Nitrosodiphenylamine	8270C	0.43 U	---	---	---	0.41 U
p-Chloro-m-cresol	8270C	2.3 U	---	---	---	2.3 U
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	19 U	---	---	---	19 U
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	0.25 U	---	---	---	0.24 U
Phenol	8270C	1.9 U	---	---	---	1.9 U
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**PZ-140**	**PZ-140**	**PZ-141**	**PZ-141**	**PZ-141**
Sample Type:		Primary	Duplicate	Primary	Primary	Duplicate
Geological Unit:		Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:		TA-Denver	TA-Denver	TA-Denver	TA-Denver	TA-Denver
Collection Date:		10/20/2009	10/20/2009	11/03/2009	11/03/2009	11/03/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	---	0.27 U	---	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	---	0.22 U	---	---
1,3-Dinitrobenzene	8270C, 8330	---	---	1.9 U	---	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	---	0.28 U	---	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	---	0.61 U	---	---
2,4-Dimethylphenol	8270C	---	---	0.56 U	---	---
2,4-Dinitrophenol	8270C	---	---	9.6 U	---	---
2,4-Dinitrotoluene	8270C, 8330	---	---	1.6 U	---	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	---	1.8 U	---	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	---	0.25 U	---	---
2-Chlorophenol	8270C	---	---	1.9 U	---	---
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	---	---	0.37 U	---	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	---	1.9 U	---	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	---	3.8 U	---	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	---	0.41 U	---	---
4-Chlorophenylphenyl ether	8270C	---	---	1.6 U	---	---
4-Nitrophenol	8270C	---	---	1.2 U	---	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	---	---	0.27 U	---	---
Acenaphthylene	8270C, 8270C PAHs	---	---	0.47 U	---	---
Anthracene	8270C, 8270C PAHs	---	---	0.4 U	---	---
Benzidine	8270C	---	---	48 U	---	---
Benzo(a)anthracene	8270C, 8270C PAHs	---	---	0.34 U	---	---
Benzo(a)pyrene	8270C, 8270C PAHs	---	---	0.3 U	---	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	---	0.51 U	---	---
Benzo(ghi)perylene	8270C, 8270C PAHs	---	---	0.48 U	---	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	---	0.44 U	---	---
bis(2-Chloroethoxy)methane	8270C	---	---	0.93 U	---	---
bis(2-Chloroethyl) ether	8270C	---	---	0.39 U	---	---
bis(2-Chloroisopropyl) ether	8270C	---	---	0.27 U	---	---
bis(2-Ethylhexyl) phthalate	8270C	---	---	0.54 U	---	---
Butyl benzyl phthalate	8270C	---	---	0.96 U	---	---
Chrysene	8270C, 8270C PAHs	---	---	0.52 U	---	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	---	0.49 U	---	---
Diethyl phthalate	8270C	---	---	0.36 U	---	---
Dimethyl phthalate	8270C	---	---	0.2 U	---	---
Di-n-butyl phthalate	8270C	---	---	1.1 U	---	---
Di-n-octyl phthalate	8270C	---	---	0.34 U	---	---
Fluoranthene	8270C, 8270C PAHs	---	---	0.19 U	---	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**PZ-140**	**PZ-140**	**PZ-141**	**PZ-141**	**PZ-141**
Sample Type:		Primary	Duplicate	Primary	Primary	Duplicate
Geological Unit:		Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:		TA-Denver	TA-Denver	TA-Denver	TA-Denver	TA-Denver
Collection Date:		10/20/2009	10/20/2009	11/03/2009	11/03/2009	11/03/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	---	0.3 U	---	---
Hexachlorobenzene	8270C	---	---	0.63 U	---	---
Hexachlorobutadiene	8270C	---	---	3.2 U	---	---
Hexachloroethane	8270C	---	---	2 U	---	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	---	0.62 U	---	---
Isophorone	8270C	---	---	0.2 U	---	---
Naphthalene	8270C, 8270C PAHs	---	---	0.28 U	---	---
Nitrobenzene	8270C, 8330	---	---	0.78 U	---	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.005 U	0.005 U	0.28 U	0.005 U	0.0051
n-Nitrosodi-n-propylamine	8270C	---	---	0.34 U	---	---
n-Nitrosodiphenylamine	8270C	---	---	0.42 U	---	---
p-Chloro-m-cresol	8270C	---	---	2.3 U	---	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	---	19 U	---	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	---	---	0.25 U	---	---
Phenol	8270C	---	---	1.9 U	---	---
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-01**	**RD-01**	**RD-01**	**RD-01**	**RD-01**
Sample Type:		Primary	Primary	Duplicate	Split	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	Weck	Lancaster	TA-Denver	Lancaster
Collection Date:		02/25/2009	02/25/2009	02/25/2009	02/25/2009	05/12/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	1 U	---	1 U	---	1 U
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	1 U	---	1 U	---	1 U
1,3-Dinitrobenzene	8270C, 8330	2 U	---	2 U	---	2 U
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	1 U	---	1 U	---	1 U
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	1 U	---	1 U	---	1 U
2,4-Dimethylphenol	8270C	3 U	---	3 U	---	3 U
2,4-Dinitrophenol	8270C	19 U	---	19 U	---	19 U
2,4-Dinitrotoluene	8270C, 8330	1 U	---	1 U	---	1 U
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	1 U	---	1 U	---	1 U
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	2 U	---	2 U	---	2 U
2-Chlorophenol	8270C	1 U	---	1 U	---	1 U
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	1 U	---	1 U	---	1 U
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	2 U	---	2 U	---	2 U
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	5 U	---	5 U	---	5 U
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	1 U	---	1 U	---	1 U
4-Chlorophenylphenyl ether	8270C	2 U	---	2 U	---	2 U
4-Nitrophenol	8270C	10 U	---	10 U	---	10 U
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U
Acenaphthylene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U
Anthracene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U
Benzidine	8270C	19 U	---	19 U	---	19 U
Benzo(a)anthracene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U
Benzo(a)pyrene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U
Benzo(ghi)perylene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U
bis(2-Chloroethoxy)methane	8270C	1 U	---	1 U	---	1 U
bis(2-Chloroethyl) ether	8270C	1 U	---	1 U	---	1 U
bis(2-Chloroisopropyl) ether	8270C	1 U	---	1 U	---	1 U
bis(2-Ethylhexyl) phthalate	8270C	4 J,L	---	2 U	---	7 L
Butyl benzyl phthalate	8270C	2 U	---	2 U	---	2 U
Chrysene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U
Diethyl phthalate	8270C	2 U	---	2 U	---	2 U
Dimethyl phthalate	8270C	2 U	---	2 U	---	2 U
Di-n-butyl phthalate	8270C	2 U	---	2 U	---	2 U
Di-n-octyl phthalate	8270C	2 U	---	2 U	---	2 U
Fluoranthene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-01**	**RD-01**	**RD-01**	**RD-01**	**RD-01**
Sample Type:		Primary	Primary	Duplicate	Split	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	Weck	Lancaster	TA-Denver	Lancaster
Collection Date:		02/25/2009	02/25/2009	02/25/2009	02/25/2009	05/12/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U
Hexachlorobenzene	8270C	1 U	---	1 U	---	1 U
Hexachlorobutadiene	8270C	1 U	---	1 U	---	1 U
Hexachloroethane	8270C	1 U	---	1 U	---	1 U
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U
Isophorone	8270C	1 U	---	1 U	---	1 U
Naphthalene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U
Nitrobenzene	8270C, 8330	1 U	---	1 U	---	1 U
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	2 U	0.015	2 U	0.017	2 U
n-Nitrosodi-n-propylamine	8270C	1 U	---	1 U	---	1 U
n-Nitrosodiphenylamine	8270C	2 U	---	2 U	---	2 U
p-Chloro-m-cresol	8270C	1 U	---	1 U	---	1 U
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	3 U	---	3 U	---	3 U
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U
Phenol	8270C	1 U	---	1 U	---	1 U
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-01**	**RD-01**	**RD-01**	**RD-01**	**RD-01**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	TA-Denver	TA-Denver	TA-Denver
Collection Date:		05/12/2009	07/14/2009	07/14/2009	10/27/2009	10/27/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	1 U	---	0.27 U	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	1 U	---	0.22 U	---
1,3-Dinitrobenzene	8270C, 8330	---	2 U	---	1.9 U	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	1 U	---	0.28 U	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	1 U	---	0.61 U	---
2,4-Dimethylphenol	8270C	---	3 U	---	0.56 U	---
2,4-Dinitrophenol	8270C	---	19 U	---	9.6 U	---
2,4-Dinitrotoluene	8270C, 8330	---	1 U	---	1.6 U	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	1 U	---	1.8 U	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	2 U	---	0.25 U	---
2-Chlorophenol	8270C	---	1 U	---	1.9 U	---
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	---	1 U	---	0.37 U	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	2 U	---	1.9 U	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	5 U	---	3.8 U	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	1 U	---	0.41 U	---
4-Chlorophenylphenyl ether	8270C	---	2 U	---	1.6 U	---
4-Nitrophenol	8270C	---	10 U	---	1.2 U	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	---	1 U	---	0.27 U	---
Acenaphthylene	8270C, 8270C PAHs	---	1 U	---	0.47 U	---
Anthracene	8270C, 8270C PAHs	---	1 U	---	0.4 U	---
Benzidine	8270C	---	19 U	---	48 U	---
Benzo(a)anthracene	8270C, 8270C PAHs	---	1 U	---	0.34 U	---
Benzo(a)pyrene	8270C, 8270C PAHs	---	1 U	---	0.3 U	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	1 U	---	0.51 U	---
Benzo(ghi)perylene	8270C, 8270C PAHs	---	1 U	---	0.48 U	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	1 U	---	0.44 U	---
bis(2-Chloroethoxy)methane	8270C	---	1 U	---	0.93 U	---
bis(2-Chloroethyl) ether	8270C	---	1 U	---	0.39 U	---
bis(2-Chloroisopropyl) ether	8270C	---	1 U	---	0.27 U	---
bis(2-Ethylhexyl) phthalate	8270C	---	2 U	---	0.54 U	---
Butyl benzyl phthalate	8270C	---	2 U	---	0.96 U	---
Chrysene	8270C, 8270C PAHs	---	1 U	---	0.52 U	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	1 U	---	0.49 U	---
Diethyl phthalate	8270C	---	2 U	---	0.36 U	---
Dimethyl phthalate	8270C	---	2 U	---	0.2 U	---
Di-n-butyl phthalate	8270C	---	2 U	---	1.1 U	---
Di-n-octyl phthalate	8270C	---	2 U	---	0.34 U	---
Fluoranthene	8270C, 8270C PAHs	---	1 U	---	0.19 U	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-01**	**RD-01**	**RD-01**	**RD-01**	**RD-01**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	TA-Denver	TA-Denver	TA-Denver
Collection Date:		05/12/2009	07/14/2009	07/14/2009	10/27/2009	10/27/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	1 U	---	0.3 U	---
Hexachlorobenzene	8270C	---	1 U	---	0.63 U	---
Hexachlorobutadiene	8270C	---	1 U	---	3.2 U	---
Hexachloroethane	8270C	---	1 U	---	2 U	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	1 U	---	0.62 U	---
Isophorone	8270C	---	1 U	---	0.2 U	---
Naphthalene	8270C, 8270C PAHs	---	1 U	---	0.28 U	---
Nitrobenzene	8270C, 8330	---	1 U	---	0.78 U	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.012	2 U	0.012	0.28 U	0.013
n-Nitrosodi-n-propylamine	8270C	---	1 U	---	0.34 U	---
n-Nitrosodiphenylamine	8270C	---	2 U	---	0.42 U	---
p-Chloro-m-cresol	8270C	---	1 U	---	2.3 U	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	3 U	---	19 U	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	---	1 U	---	0.25 U	---
Phenol	8270C	---	1 U	---	1.9 U	---
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-01**	**RD-02**	**RD-02**	**RD-02**	**RD-02**
Sample Type:		Split	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Irvine	Lancaster	Weck	Lancaster	TA-Denver
Collection Date:		10/27/2009	02/26/2009	02/26/2009	05/12/2009	05/12/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	2.5 U	1 U	---	1 U	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	2.5 U	1 U	---	1 U	---
1,3-Dinitrobenzene	8270C, 8330	3.4 U	2 U	---	2 U	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	4.4 U	1 U	---	1 U	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	3.4 U	1 U	---	1 U	---
2,4-Dimethylphenol	8270C	3.4 UJ	3 U	---	3 U	---
2,4-Dinitrophenol	8270C	7.8 U	19 U	---	19 U	---
2,4-Dinitrotoluene	8270C, 8330	3.4 U	1 U	---	1 U	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	2 U	1 U	---	1 U	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	2.9 U	2 U	---	2 U	---
2-Chlorophenol	8270C	2.9 U	1 U	---	1 U	---
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	3.4 U	1 U	---	1 U	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	7.4 U	2 U	---	2 U	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	3.9 U	5 U	---	5 U	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	2.9 U	1 U	---	1 U	---
4-Chlorophenylphenyl ether	8270C	2.5 U	2 U	---	2 U	---
4-Nitrophenol	8270C	5.4 U	10 U	---	10 U	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	2.9 U	1 U	---	1 U	---
Acenaphthylene	8270C, 8270C PAHs	2.9 U	1 U	---	1 U	---
Anthracene	8270C, 8270C PAHs	2.5 U	1 U	---	1 U	---
Benzidine	8270C	9.8 R	19 U	---	19 U	---
Benzo(a)anthracene	8270C, 8270C PAHs	2.5 U	1 U	---	1 U	---
Benzo(a)pyrene	8270C, 8270C PAHs	2.9 U	1 U	---	1 U	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	2 U	1 U	---	1 U	---
Benzo(ghi)perylene	8270C, 8270C PAHs	3.9 U	1 U	---	1 U	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	2.5 U	1 U	---	1 U	---
bis(2-Chloroethoxy)methane	8270C	2.9 U	1 U	---	1 U	---
bis(2-Chloroethyl) ether	8270C	2.9 U	1 U	---	1 U	---
bis(2-Chloroisopropyl) ether	8270C	2.5 U	1 U	---	1 U	---
bis(2-Ethylhexyl) phthalate	8270C	3.9 U	2 U	---	15 L	---
Butyl benzyl phthalate	8270C	3.9 U	2 U	---	2 U	---
Chrysene	8270C, 8270C PAHs	2.5 U	1 U	---	1 U	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	2.9 U	1 U	---	1 U	---
Diethyl phthalate	8270C	3.4 U	2 U	---	2 U	---
Dimethyl phthalate	8270C	2.5 U	2 U	---	2 U	---
Di-n-butyl phthalate	8270C	2.9 U	2 U	---	2 U	---
Di-n-octyl phthalate	8270C	3.4 U	2 U	---	2 U	---
Fluoranthene	8270C, 8270C PAHs	2.9 U	1 U	---	1 U	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-01**	**RD-02**	**RD-02**	**RD-02**	**RD-02**
Sample Type:		Split	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Irvine	Lancaster	Weck	Lancaster	TA-Denver
Collection Date:		10/27/2009	02/26/2009	02/26/2009	05/12/2009	05/12/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	2.9 U	1 U	---	1 U	---
Hexachlorobenzene	8270C	2.9 U	1 U	---	1 U	---
Hexachlorobutadiene	8270C	3.9 U	1 U	---	1 U	---
Hexachloroethane	8270C	3.4 U	1 U	---	1 U	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	3.4 U	1 U	---	1 U	---
Isophorone	8270C	2.9 U	1 U	---	1 U	---
Naphthalene	8270C, 8270C PAHs	2.9 U	1 U	---	1 U	---
Nitrobenzene	8270C, 8330	2.9 U	1 U	---	1 U	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	2.5 U	2 U	0.005 U	2 U	0.005 U
n-Nitrosodi-n-propylamine	8270C	3.4 U	1 U	---	1 U	---
n-Nitrosodiphenylamine	8270C	2 U	2 U	---	2 U	---
p-Chloro-m-cresol	8270C	2.5 U	1 U	---	1 U	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	3.4 U	3 U	---	3 U	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	3.4 U	1 U	---	1 U	---
Phenol	8270C	2 U	1 U	---	1 U	---
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-03**	**RD-04**	**RD-04**	**RD-04**	**RD-04**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	Weck	Lancaster	TA-Denver
Collection Date:		10/27/2009	02/09/2009	02/09/2009	05/05/2009	05/05/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	0.27 U	1 U	---	1 U	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	0.23 U	1 U	---	1 U	---
1,3-Dinitrobenzene	8270C, 8330	2 U	2 U	---	2 U	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	0.28 U	1 U	---	1 U	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	0.63 U	1 U	---	1 U	---
2,4-Dimethylphenol	8270C	0.57 U	3 U	---	3 U	---
2,4-Dinitrophenol	8270C	9.8 U	19 U	---	19 U	---
2,4-Dinitrotoluene	8270C, 8330	1.6 U	1 U	---	1 U	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	1.9 U	1 U	---	1 U	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	0.25 U	2 U	---	2 U	---
2-Chlorophenol	8270C	2 U	1 U	---	1 U	---
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	0.38 U	1 U	---	1 U	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	2 U	2 U	---	2 U	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	3.9 U	5 U	---	5 U	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	0.42 U	1 U	---	1 U	---
4-Chlorophenylphenyl ether	8270C	1.6 U	2 U	---	2 U	---
4-Nitrophenol	8270C	1.2 U	10 U	---	10 U	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	0.27 U	1 U	---	1 U	---
Acenaphthylene	8270C, 8270C PAHs	0.48 U	1 U	---	1 U	---
Anthracene	8270C, 8270C PAHs	0.41 U	1 U	---	1 U	---
Benzidine	8270C	49 U	19 U	---	19 U	---
Benzo(a)anthracene	8270C, 8270C PAHs	0.34 U	1 U	---	1 U	---
Benzo(a)pyrene	8270C, 8270C PAHs	0.3 U	1 U	---	1 U	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	0.52 U	1 U	---	1 U	---
Benzo(ghi)perylene	8270C, 8270C PAHs	0.49 U	1 U	---	1 U	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	0.45 U	1 U	---	1 U	---
bis(2-Chloroethoxy)methane	8270C	0.95 U	1 U	---	1 U	---
bis(2-Chloroethyl) ether	8270C	0.4 U	1 U	---	1 U	---
bis(2-Chloroisopropyl) ether	8270C	0.27 U	1 U	---	1 U	---
bis(2-Ethylhexyl) phthalate	8270C	0.55 U	2 U	---	2 U	---
Butyl benzyl phthalate	8270C	0.98 U	2 U	---	2 U	---
Chrysene	8270C, 8270C PAHs	0.53 U	1 U	---	1 U	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	0.5 U	1 U	---	1 U	---
Diethyl phthalate	8270C	0.37 U	2 U	---	2 U	---
Dimethyl phthalate	8270C	0.21 U	2 U	---	2 U	---
Di-n-butyl phthalate	8270C	1.1 U	2 U	---	2 U	---
Di-n-octyl phthalate	8270C	0.34 U	2 U	---	2 U	---
Fluoranthene	8270C, 8270C PAHs	0.2 U	1 U	---	1 U	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-03**	**RD-04**	**RD-04**	**RD-04**	**RD-04**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	Weck	Lancaster	TA-Denver
Collection Date:		10/27/2009	02/09/2009	02/09/2009	05/05/2009	05/05/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	0.3 U	1 U	---	1 U	---
Hexachlorobenzene	8270C	0.65 U	1 U	---	1 U	---
Hexachlorobutadiene	8270C	3.2 U	1 U	---	1 U	---
Hexachloroethane	8270C	2.1 U	1 U	---	1 U	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	0.64 U	1 U	---	1 U	---
Isophorone	8270C	0.21 U	1 U	---	1 U	---
Naphthalene	8270C, 8270C PAHs	0.28 U	1 U	---	1 U	---
Nitrobenzene	8270C, 8330	0.79 U	1 U	---	1 U	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.28 U	2 U	0.005 U	2 U	0.005 U
n-Nitrosodi-n-propylamine	8270C	0.34 U	1 U	---	1 U	---
n-Nitrosodiphenylamine	8270C	0.43 U	2 U	---	2 U	---
p-Chloro-m-cresol	8270C	2.4 U	1 U	---	1 U	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	20 U	3 U	---	3 U	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	0.25 U	1 U	---	1 U	---
Phenol	8270C	2 U	1 U	---	1 U	---
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-04**	**RD-04**	**RD-04**	**RD-04**	**RD-06**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	TA-Denver	TA-Denver	TA-Denver
Collection Date:		07/28/2009	07/28/2009	10/28/2009	10/28/2009	07/13/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	0.9 U	---	0.27 U	---	0.27 U
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	0.9 U	---	0.22 U	---	---
1,3-Dinitrobenzene	8270C, 8330	2 U	---	1.9 U	---	1.9 U
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	0.9 U	---	0.28 U	---	0.28 U
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	0.9 U	---	0.62 U	---	0.61 U
2,4-Dimethylphenol	8270C	3 U	---	0.56 U	---	0.56 U
2,4-Dinitrophenol	8270C	19 U	---	9.7 U	---	9.6 U
2,4-Dinitrotoluene	8270C, 8330	0.9 U	---	1.6 U	---	1.6 U
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	0.9 U	---	1.8 U	---	1.8 U
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	2 U	---	0.25 U	---	0.25 U
2-Chlorophenol	8270C	0.9 U	---	1.9 U	---	1.9 U
2-Methylnaphthalene	8270C PAHs	---	---	---	---	0.28 U
2-Nitrophenol	8270C	0.9 U	---	0.38 U	---	0.37 U
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	2 U	---	1.9 U	---	1.9 U
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	5 U	---	3.9 U	---	3.8 U
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	0.9 U	---	0.42 U	---	0.41 U
4-Chlorophenylphenyl ether	8270C	2 U	---	1.6 U	---	1.6 U
4-Nitrophenol	8270C	9 U	---	1.2 U	---	1.2 U
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	0.9 U	---	0.27 U	---	0.27 U
Acenaphthylene	8270C, 8270C PAHs	0.9 U	---	0.48 U	---	0.47 U
Anthracene	8270C, 8270C PAHs	0.9 U	---	0.41 U	---	0.4 U
Benzidine	8270C	19 U	---	48 U	---	---
Benzo(a)anthracene	8270C, 8270C PAHs	0.9 U	---	0.34 U	---	0.34 U
Benzo(a)pyrene	8270C, 8270C PAHs	0.9 U	---	0.3 U	---	0.3 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	0.9 U	---	0.52 U	---	0.51 U
Benzo(ghi)perylene	8270C, 8270C PAHs	0.9 U	---	0.48 U	---	0.48 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	0.9 U	---	0.45 U	---	0.44 U
bis(2-Chloroethoxy)methane	8270C	0.9 U	---	0.94 U	---	0.93 U
bis(2-Chloroethyl) ether	8270C	0.9 U	---	0.4 U	---	0.39 U
bis(2-Chloroisopropyl) ether	8270C	0.9 U	---	0.27 U	---	0.27 U
bis(2-Ethylhexyl) phthalate	8270C	2 U	---	0.54 U	---	0.54 U
Butyl benzyl phthalate	8270C	2 U	---	0.97 U	---	0.96 U
Chrysene	8270C, 8270C PAHs	0.9 U	---	0.52 U	---	0.52 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	0.9 U	---	0.49 U	---	0.49 U
Diethyl phthalate	8270C	2 U	---	0.37 U	---	0.36 U
Dimethyl phthalate	8270C	2 U	---	0.2 U	---	0.2 U
Di-n-butyl phthalate	8270C	2 U	---	1.1 U	---	1.1 U
Di-n-octyl phthalate	8270C	2 U	---	0.34 U	---	0.34 U
Fluoranthene	8270C, 8270C PAHs	0.9 U	---	0.19 U	---	0.19 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-04**	**RD-04**	**RD-04**	**RD-04**	**RD-06**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	TA-Denver	TA-Denver	TA-Denver
Collection Date:		07/28/2009	07/28/2009	10/28/2009	10/28/2009	07/13/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	0.9 U	---	0.3 U	---	0.3 U
Hexachlorobenzene	8270C	0.9 U	---	0.64 U	---	0.63 U
Hexachlorobutadiene	8270C	0.9 U	---	3.2 U	---	3.2 U
Hexachloroethane	8270C	0.9 U	---	2 U	---	2 U
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	0.9 U	---	0.63 U	---	0.62 U
Isophorone	8270C	0.9 U	---	0.2 U	---	0.2 U
Naphthalene	8270C, 8270C PAHs	0.9 U	---	0.28 U	---	0.28 U
Nitrobenzene	8270C, 8330	0.9 U	---	0.79 U	---	0.78 U
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	2 U	0.005 U	0.28 U	0.005 U	0.28 U
n-Nitrosodi-n-propylamine	8270C	0.9 U	---	0.34 U	---	0.34 U
n-Nitrosodiphenylamine	8270C	2 U	---	0.43 U	---	0.42 U
p-Chloro-m-cresol	8270C	0.9 U	---	2.3 U	---	2.3 U
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	3 U	---	19 U	---	0.77 U
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	0.9 U	---	0.25 U	---	0.25 U
Phenol	8270C	0.9 U	---	1.9 U	---	1.9 U
Pyrene	8270C, 8270C PAHs	---	---	---	---	0.36 U
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	3.8 U
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-06**	**RD-06**	**RD-06**	**RD-08**	**RD-08**
Sample Type:		Primary	Duplicate	Duplicate	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	TA-Denver	TA-Denver	Lancaster	Lancaster
Collection Date:		07/13/2009	07/13/2009	07/13/2009	03/05/2009	05/13/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	0.27 U	---	---	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	---	---	---	---
1,3-Dinitrobenzene	8270C, 8330	---	1.9 U	---	---	---
1-Methyl naphthalene	8270C PAHs	---	---	---	0.9 U	1 U
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	0.28 U	---	---	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	0.61 U	---	---	---
2,4-Dimethylphenol	8270C	---	0.55 U	---	---	---
2,4-Dinitrophenol	8270C	---	9.5 U	---	---	---
2,4-Dinitrotoluene	8270C, 8330	---	1.6 U	---	---	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	1.8 U	---	---	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	0.25 U	---	---	---
2-Chlorophenol	8270C	---	1.9 U	---	---	---
2-Methylnaphthalene	8270C PAHs	---	0.28 U	---	0.9 U	1 U
2-Nitrophenol	8270C	---	0.37 U	---	---	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	1.9 U	---	---	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	3.8 U	---	---	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	0.41 U	---	---	---
4-Chlorophenylphenyl ether	8270C	---	1.6 U	---	---	---
4-Nitrophenol	8270C	---	1.2 U	---	---	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	---	0.27 U	---	0.9 U	1 U
Acenaphthylene	8270C, 8270C PAHs	---	0.47 U	---	0.9 U	1 U
Anthracene	8270C, 8270C PAHs	---	0.4 U	---	0.9 U	1 U
Benzidine	8270C	---	---	---	---	---
Benzo(a)anthracene	8270C, 8270C PAHs	---	0.33 U	---	0.9 U	1 U
Benzo(a)pyrene	8270C, 8270C PAHs	---	0.29 U	---	0.9 U	1 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	0.5 U	---	0.9 U	1 U
Benzo(ghi)perylene	8270C, 8270C PAHs	---	0.48 U	---	0.9 U	1 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	0.44 U	---	0.9 U	1 U
bis(2-Chloroethoxy)methane	8270C	---	0.92 U	---	---	---
bis(2-Chloroethyl) ether	8270C	---	0.39 U	---	---	---
bis(2-Chloroisopropyl) ether	8270C	---	0.27 U	---	---	---
bis(2-Ethylhexyl) phthalate	8270C	---	0.53 U	---	---	---
Butyl benzyl phthalate	8270C	---	0.95 U	---	---	---
Chrysene	8270C, 8270C PAHs	---	0.51 U	---	0.9 U	1 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	0.48 U	---	0.9 U	1 U
Diethyl phthalate	8270C	---	0.36 U	---	---	---
Dimethyl phthalate	8270C	---	0.2 U	---	---	---
Di-n-butyl phthalate	8270C	---	1.1 U	---	---	---
Di-n-octyl phthalate	8270C	---	0.33 U	---	---	---
Fluoranthene	8270C, 8270C PAHs	---	0.19 U	---	0.9 U	1 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-06**	**RD-06**	**RD-06**	**RD-08**	**RD-08**
Sample Type:		Primary	Duplicate	Duplicate	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	TA-Denver	TA-Denver	Lancaster	Lancaster
Collection Date:		07/13/2009	07/13/2009	07/13/2009	03/05/2009	05/13/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	0.29 U	---	0.9 U	1 U
Hexachlorobenzene	8270C	---	0.63 U	---	---	---
Hexachlorobutadiene	8270C	---	3.1 U	---	---	---
Hexachloroethane	8270C	---	2 U	---	---	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	0.62 U	---	0.9 U	1 U
Isophorone	8270C	---	0.2 U	---	---	---
Naphthalene	8270C, 8270C PAHs	---	0.28 U	---	0.9 U	1 U
Nitrobenzene	8270C, 8330	---	0.77 U	---	---	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.005 U	0.28 U	0.005 U	---	---
n-Nitrosodi-n-propylamine	8270C	---	0.33 U	---	---	---
n-Nitrosodiphenylamine	8270C	---	0.42 U	---	---	---
p-Chloro-m-cresol	8270C	---	2.3 U	---	---	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	0.78 U	---	---	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	---	0.25 U	---	0.9 U	1 U
Phenol	8270C	---	1.9 U	---	---	---
Pyrene	8270C, 8270C PAHs	---	0.35 U	---	0.9 U	1 U
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	3.8 U	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-08**	**RD-08**	**RD-08**	**RD-08**	**RD-08**
Sample Type:		Duplicate	Primary	Primary	Duplicate	Split
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	Lancaster	TA-Denver	TA-Denver	TA-Irvine
Collection Date:		05/13/2009	08/05/2009	11/04/2009	11/04/2009	11/04/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	---	---	---	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	---	---	---	---
1,3-Dinitrobenzene	8270C, 8330	---	---	---	---	---
1-Methyl naphthalene	8270C PAHs	1 U	1 U	0.22 U	0.22 U	3.3 U
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	---	---	---	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	---	---	---	---
2,4-Dimethylphenol	8270C	---	---	---	---	---
2,4-Dinitrophenol	8270C	---	---	---	---	---
2,4-Dinitrotoluene	8270C, 8330	---	---	---	---	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	---	---	---	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	---	---	---	---
2-Chlorophenol	8270C	---	---	---	---	---
2-Methylnaphthalene	8270C PAHs	1 U	1 U	0.28 U	0.28 U	1.9 U
2-Nitrophenol	8270C	---	---	---	---	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	---	---	---	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	---	---	---	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	---	---	---	---
4-Chlorophenylphenyl ether	8270C	---	---	---	---	---
4-Nitrophenol	8270C	---	---	---	---	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	1 U	1 U	0.27 U	0.27 U	2.8 U
Acenaphthylene	8270C, 8270C PAHs	1 U	1 U	0.47 U	0.47 U	2.8 U
Anthracene	8270C, 8270C PAHs	1 U	1 U	0.4 U	0.4 U	2.4 U
Benzidine	8270C	---	---	---	---	---
Benzo(a)anthracene	8270C, 8270C PAHs	1 U	1 U	0.33 U	0.34 U	2.4 U
Benzo(a)pyrene	8270C, 8270C PAHs	1 U	1 U	0.29 U	0.3 U	2.8 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	1 U	1 U	0.5 U	0.51 U	1.9 U
Benzo(ghi)perylene	8270C, 8270C PAHs	1 U	1 U	0.48 U	0.48 U	3.8 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	1 U	1 U	0.44 U	0.44 U	2.4 U
bis(2-Chloroethoxy)methane	8270C	---	---	---	---	---
bis(2-Chloroethyl) ether	8270C	---	---	---	---	---
bis(2-Chloroisopropyl) ether	8270C	---	---	---	---	---
bis(2-Ethylhexyl) phthalate	8270C	---	---	---	---	---
Butyl benzyl phthalate	8270C	---	---	---	---	---
Chrysene	8270C, 8270C PAHs	1 U	1 U	0.51 U	0.52 U	2.4 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	1 U	1 U	0.48 U	0.49 U	2.8 U
Diethyl phthalate	8270C	---	---	---	---	---
Dimethyl phthalate	8270C	---	---	---	---	---
Di-n-butyl phthalate	8270C	---	---	---	---	---
Di-n-octyl phthalate	8270C	---	---	---	---	---
Fluoranthene	8270C, 8270C PAHs	1 U	1 U	0.19 U	0.19 U	2.8 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-08**	**RD-08**	**RD-08**	**RD-08**	**RD-08**
Sample Type:		Duplicate	Primary	Primary	Duplicate	Split
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	Lancaster	TA-Denver	TA-Denver	TA-Irvine
Collection Date:		05/13/2009	08/05/2009	11/04/2009	11/04/2009	11/04/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	1 U	1 U	0.29 U	0.3 U	2.8 U
Hexachlorobenzene	8270C	---	---	---	---	---
Hexachlorobutadiene	8270C	---	---	---	---	---
Hexachloroethane	8270C	---	---	---	---	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	1 U	1 U	0.62 U	0.62 U	3.3 U
Isophorone	8270C	---	---	---	---	---
Naphthalene	8270C, 8270C PAHs	1 U	1 U	0.28 U	0.28 U	2.8 U
Nitrobenzene	8270C, 8330	---	---	---	---	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	---	---	---	---	---
n-Nitrosodi-n-propylamine	8270C	---	---	---	---	---
n-Nitrosodiphenylamine	8270C	---	---	---	---	---
p-Chloro-m-cresol	8270C	---	---	---	---	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	---	---	---	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	1 U	1 U	0.25 U	0.25 U	3.3 U
Phenol	8270C	---	---	---	---	---
Pyrene	8270C, 8270C PAHs	1 U	1 U	0.35 U	0.36 U	3.8 U
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-09**	**RD-09**	**RD-09**	**RD-09**	**RD-09**
Sample Type:		Primary	Primary	Primary	Primary	Duplicate
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	Weck	Lancaster	TA-Denver	Lancaster
Collection Date:		02/19/2009	02/19/2009	05/07/2009	05/07/2009	05/07/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	1 U	---	1 U	---	0.9 U
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	1 U	---	1 U	---	0.9 U
1,3-Dinitrobenzene	8270C, 8330	2 U	---	2 U	---	2 U
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	1 U	---	1 U	---	0.9 U
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	1 U	---	1 U	---	0.9 U
2,4-Dimethylphenol	8270C	3 U	---	3 U	---	3 U
2,4-Dinitrophenol	8270C	20 U	---	19 U	---	19 U
2,4-Dinitrotoluene	8270C, 8330	1 U	---	1 U	---	0.9 U
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	1 U	---	1 U	---	0.9 U
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	2 U	---	2 U	---	2 U
2-Chlorophenol	8270C	1 U	---	1 U	---	0.9 U
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	1 U	---	1 U	---	0.9 U
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	2 U	---	2 U	---	2 U
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	5 U	---	5 U	---	5 U
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	1 U	---	1 U	---	0.9 U
4-Chlorophenylphenyl ether	8270C	2 U	---	2 U	---	2 U
4-Nitrophenol	8270C	10 U	---	10 U	---	9 U
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	1 U	---	1 U	---	0.9 U
Acenaphthylene	8270C, 8270C PAHs	1 U	---	1 U	---	0.9 U
Anthracene	8270C, 8270C PAHs	1 U	---	1 U	---	0.9 U
Benzidine	8270C	20 U	---	19 U	---	19 U
Benzo(a)anthracene	8270C, 8270C PAHs	1 U	---	1 U	---	0.9 U
Benzo(a)pyrene	8270C, 8270C PAHs	1 U	---	1 U	---	0.9 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	1 U	---	1 U	---	0.9 U
Benzo(ghi)perylene	8270C, 8270C PAHs	1 U	---	1 U	---	0.9 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	1 U	---	1 U	---	0.9 U
bis(2-Chloroethoxy)methane	8270C	1 U	---	1 U	---	0.9 U
bis(2-Chloroethyl) ether	8270C	1 U	---	1 U	---	0.9 U
bis(2-Chloroisopropyl) ether	8270C	1 U	---	1 U	---	0.9 U
bis(2-Ethylhexyl) phthalate	8270C	2 U	---	2 U	---	2 U
Butyl benzyl phthalate	8270C	2 U	---	2 U	---	2 U
Chrysene	8270C, 8270C PAHs	1 U	---	1 U	---	0.9 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	1 U	---	1 U	---	0.9 U
Diethyl phthalate	8270C	2 U	---	2 U	---	2 U
Dimethyl phthalate	8270C	2 U	---	2 U	---	2 U
Di-n-butyl phthalate	8270C	2 U	---	2 U	---	2 U
Di-n-octyl phthalate	8270C	2 U	---	2 U	---	2 U
Fluoranthene	8270C, 8270C PAHs	1 U	---	1 U	---	0.9 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-09**	**RD-09**	**RD-09**	**RD-09**	**RD-09**
Sample Type:		Primary	Primary	Primary	Primary	Duplicate
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	Weck	Lancaster	TA-Denver	Lancaster
Collection Date:		02/19/2009	02/19/2009	05/07/2009	05/07/2009	05/07/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	1 U	---	1 U	---	0.9 U
Hexachlorobenzene	8270C	1 U	---	1 U	---	0.9 U
Hexachlorobutadiene	8270C	1 U	---	1 U	---	0.9 U
Hexachloroethane	8270C	1 U	---	1 U	---	0.9 U
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	1 U	---	1 U	---	0.9 U
Isophorone	8270C	1 U	---	1 U	---	0.9 U
Naphthalene	8270C, 8270C PAHs	1 U	---	1 U	---	0.9 U
Nitrobenzene	8270C, 8330	1 U	---	1 U	---	0.9 U
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	2 U	0.005 U	2 U	0.005 U	2 U
n-Nitrosodi-n-propylamine	8270C	1 U	---	1 U	---	0.9 U
n-Nitrosodiphenylamine	8270C	2 U	---	2 U	---	2 U
p-Chloro-m-cresol	8270C	1 U	---	1 U	---	0.9 U
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	3 U	---	3 U	---	3 U
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	1 U	---	1 U	---	0.9 U
Phenol	8270C	1 U	---	1 U	---	0.9 U
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-09**	**RD-09**	**RD-09**	**RD-09**	**RD-09**
Sample Type:		Duplicate	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	TA-Denver	TA-Denver	TA-Denver
Collection Date:		05/07/2009	07/28/2009	07/28/2009	10/19/2009	10/19/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	1 U	---	0.27 U	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	1 U	---	0.22 U	---
1,3-Dinitrobenzene	8270C, 8330	---	2 U	---	1.9 U	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	1 U	---	0.28 U	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	1 U	---	0.61 U	---
2,4-Dimethylphenol	8270C	---	3 U	---	0.56 U	---
2,4-Dinitrophenol	8270C	---	19 U	---	9.6 U	---
2,4-Dinitrotoluene	8270C, 8330	---	1 U	---	1.6 U	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	1 U	---	1.8 U	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	2 U	---	0.25 U	---
2-Chlorophenol	8270C	---	1 U	---	1.9 U	---
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	---	1 U	---	0.37 U	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	2 U	---	1.9 U	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	5 U	---	3.8 U	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	1 U	---	0.41 U	---
4-Chlorophenylphenyl ether	8270C	---	2 U	---	1.6 U	---
4-Nitrophenol	8270C	---	10 U	---	1.2 U	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	---	1 U	---	0.27 U	---
Acenaphthylene	8270C, 8270C PAHs	---	1 U	---	0.47 U	---
Anthracene	8270C, 8270C PAHs	---	1 U	---	0.4 U	---
Benzidine	8270C	---	19 U	---	48 U	---
Benzo(a)anthracene	8270C, 8270C PAHs	---	1 U	---	0.34 U	---
Benzo(a)pyrene	8270C, 8270C PAHs	---	1 U	---	0.3 U	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	1 U	---	0.51 U	---
Benzo(ghi)perylene	8270C, 8270C PAHs	---	1 U	---	0.48 U	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	1 U	---	0.44 U	---
bis(2-Chloroethoxy)methane	8270C	---	1 U	---	0.93 U	---
bis(2-Chloroethyl) ether	8270C	---	1 U	---	0.39 U	---
bis(2-Chloroisopropyl) ether	8270C	---	1 U	---	0.27 U	---
bis(2-Ethylhexyl) phthalate	8270C	---	2 U	---	2.1 U	---
Butyl benzyl phthalate	8270C	---	2 U	---	0.96 U	---
Chrysene	8270C, 8270C PAHs	---	1 U	---	0.52 U	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	1 U	---	0.49 U	---
Diethyl phthalate	8270C	---	2 U	---	0.36 U	---
Dimethyl phthalate	8270C	---	2 U	---	0.2 U	---
Di-n-butyl phthalate	8270C	---	2 U	---	1.1 U	---
Di-n-octyl phthalate	8270C	---	2 U	---	0.34 U	---
Fluoranthene	8270C, 8270C PAHs	---	1 U	---	0.19 U	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-09**	**RD-09**	**RD-09**	**RD-09**	**RD-09**
Sample Type:		Duplicate	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	TA-Denver	TA-Denver	TA-Denver
Collection Date:		05/07/2009	07/28/2009	07/28/2009	10/19/2009	10/19/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	1 U	---	0.3 U	---
Hexachlorobenzene	8270C	---	1 U	---	0.63 U	---
Hexachlorobutadiene	8270C	---	1 U	---	3.2 U	---
Hexachloroethane	8270C	---	1 U	---	2 U	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	1 U	---	0.62 U	---
Isophorone	8270C	---	1 U	---	0.2 U	---
Naphthalene	8270C, 8270C PAHs	---	1 U	---	0.28 U	---
Nitrobenzene	8270C, 8330	---	1 U	---	0.78 U	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.005 U	2 U	0.005 U	0.28 U	0.005 U
n-Nitrosodi-n-propylamine	8270C	---	1 U	---	0.34 U	---
n-Nitrosodiphenylamine	8270C	---	2 U	---	0.42 U	---
p-Chloro-m-cresol	8270C	---	1 U	---	2.3 U	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	3 U	---	19 U	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	---	1 U	---	0.25 U	---
Phenol	8270C	---	1 U	---	1.9 U	---
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-10**	**RD-10**	**RD-10**	**RD-10**	**RD-10**
Sample Type:		Primary	Primary	Primary	Primary	Duplicate
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	Weck	Lancaster	TA-Denver	TA-Denver
Collection Date:		02/26/2009	02/26/2009	05/11/2009	05/11/2009	05/11/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	0.9 U	---	1 U	---	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	0.9 U	---	1 U	---	---
1,3-Dinitrobenzene	8270C, 8330	2 U	---	2 U	---	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	0.9 U	---	1 U	---	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	0.9 U	---	1 U	---	---
2,4-Dimethylphenol	8270C	3 U	---	3 U	---	---
2,4-Dinitrophenol	8270C	19 U	---	20 U	---	---
2,4-Dinitrotoluene	8270C, 8330	0.9 U	---	1 U	---	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	0.9 U	---	1 U	---	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	2 U	---	2 U	---	---
2-Chlorophenol	8270C	0.9 U	---	1 U	---	---
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	0.9 U	---	1 U	---	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	2 U	---	2 U	---	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	5 U	---	5 U	---	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	0.9 U	---	1 U	---	---
4-Chlorophenylphenyl ether	8270C	2 U	---	2 U	---	---
4-Nitrophenol	8270C	9 U	---	10 U	---	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	0.9 U	---	1 U	---	---
Acenaphthylene	8270C, 8270C PAHs	0.9 U	---	1 U	---	---
Anthracene	8270C, 8270C PAHs	0.9 U	---	1 U	---	---
Benzidine	8270C	19 U	---	20 U	---	---
Benzo(a)anthracene	8270C, 8270C PAHs	0.9 U	---	1 U	---	---
Benzo(a)pyrene	8270C, 8270C PAHs	0.9 U	---	1 U	---	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	0.9 U	---	1 U	---	---
Benzo(ghi)perylene	8270C, 8270C PAHs	0.9 U	---	1 U	---	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	0.9 U	---	1 U	---	---
bis(2-Chloroethoxy)methane	8270C	0.9 U	---	1 U	---	---
bis(2-Chloroethyl) ether	8270C	0.9 U	---	1 U	---	---
bis(2-Chloroisopropyl) ether	8270C	0.9 U	---	1 U	---	---
bis(2-Ethylhexyl) phthalate	8270C	2 U	---	2 U	---	---
Butyl benzyl phthalate	8270C	2 U	---	2 U	---	---
Chrysene	8270C, 8270C PAHs	0.9 U	---	1 U	---	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	0.9 U	---	1 U	---	---
Diethyl phthalate	8270C	2 U	---	2 U	---	---
Dimethyl phthalate	8270C	2 U	---	2 U	---	---
Di-n-butyl phthalate	8270C	2 U	---	2 U	---	---
Di-n-octyl phthalate	8270C	2 U	---	2 U	---	---
Fluoranthene	8270C, 8270C PAHs	0.9 U	---	1 U	---	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-10**	**RD-10**	**RD-10**	**RD-10**	**RD-10**
Sample Type:		Primary	Primary	Primary	Primary	Duplicate
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	Weck	Lancaster	TA-Denver	TA-Denver
Collection Date:		02/26/2009	02/26/2009	05/11/2009	05/11/2009	05/11/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	0.9 U	---	1 U	---	---
Hexachlorobenzene	8270C	0.9 U	---	1 U	---	---
Hexachlorobutadiene	8270C	0.9 U	---	1 U	---	---
Hexachloroethane	8270C	0.9 U	---	1 U	---	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	0.9 U	---	1 U	---	---
Isophorone	8270C	0.9 U	---	1 U	---	---
Naphthalene	8270C, 8270C PAHs	0.9 U	---	1 U	---	---
Nitrobenzene	8270C, 8330	0.9 U	---	1 U	---	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	2 U	0.005 U	2 U	0.005 U	0.005 U
n-Nitrosodi-n-propylamine	8270C	0.9 U	---	1 U	---	---
n-Nitrosodiphenylamine	8270C	2 U	---	2 U	---	---
p-Chloro-m-cresol	8270C	0.9 U	---	1 U	---	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	3 U	---	3 U	---	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	0.9 U	---	1 U	---	---
Phenol	8270C	0.9 U	---	1 U	---	---
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-10**	**RD-10**	**RD-10**	**RD-10**	**RD-11**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	TA-Denver	TA-Denver	Lancaster
Collection Date:		07/14/2009	07/14/2009	10/27/2009	10/27/2009	03/10/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	1 U	---	0.28 U	---	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	1 U	---	0.23 U	---	---
1,3-Dinitrobenzene	8270C, 8330	2 U	---	2 U	---	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	1 U
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	1 U	---	0.29 U	---	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	1 U	---	0.64 U	---	---
2,4-Dimethylphenol	8270C	3 U	---	0.58 U	---	---
2,4-Dinitrophenol	8270C	19 U	---	10 U	---	---
2,4-Dinitrotoluene	8270C, 8330	1 U	---	1.7 U	---	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	1 U	---	1.9 U	---	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	2 U	---	0.26 U	---	---
2-Chlorophenol	8270C	1 U	---	2 U	---	---
2-Methylnaphthalene	8270C PAHs	---	---	---	---	1 U
2-Nitrophenol	8270C	1 U	---	0.39 U	---	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	2 U	---	2 U	---	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	5 U	---	4 U	---	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	1 U	---	0.43 U	---	---
4-Chlorophenylphenyl ether	8270C	2 U	---	1.7 U	---	---
4-Nitrophenol	8270C	10 U	---	1.2 U	---	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	1 U	---	0.28 U	---	1 U
Acenaphthylene	8270C, 8270C PAHs	1 U	---	0.49 U	---	1 U
Anthracene	8270C, 8270C PAHs	1 U	---	0.42 U	---	1 U
Benzidine	8270C	19 U	---	50 U	---	---
Benzo(a)anthracene	8270C, 8270C PAHs	1 U	---	0.35 U	---	1 U
Benzo(a)pyrene	8270C, 8270C PAHs	1 U	---	0.31 U	---	1 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	1 U	---	0.53 U	---	1 U
Benzo(ghi)perylene	8270C, 8270C PAHs	1 U	---	0.5 U	---	1 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	1 U	---	0.46 U	---	1 U
bis(2-Chloroethoxy)methane	8270C	1 U	---	0.97 U	---	---
bis(2-Chloroethyl) ether	8270C	1 U	---	0.41 U	---	---
bis(2-Chloroisopropyl) ether	8270C	1 U	---	0.28 U	---	---
bis(2-Ethylhexyl) phthalate	8270C	3 U	---	0.56 U	---	---
Butyl benzyl phthalate	8270C	2 U	---	1 U	---	---
Chrysene	8270C, 8270C PAHs	1 U	---	0.54 U	---	1 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	1 U	---	0.51 U	---	1 U
Diethyl phthalate	8270C	2 U	---	0.38 U	---	---
Dimethyl phthalate	8270C	2 U	---	0.21 U	---	---
Di-n-butyl phthalate	8270C	2 U	---	1.2 U	---	---
Di-n-octyl phthalate	8270C	2 U	---	0.35 U	---	---
Fluoranthene	8270C, 8270C PAHs	1 U	---	0.2 U	---	1 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-10**	**RD-10**	**RD-10**	**RD-10**	**RD-11**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	TA-Denver	TA-Denver	Lancaster
Collection Date:		07/14/2009	07/14/2009	10/27/2009	10/27/2009	03/10/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	1 U	---	0.31 U	---	1 U
Hexachlorobenzene	8270C	1 U	---	0.66 U	---	---
Hexachlorobutadiene	8270C	1 U	---	3.3 U	---	---
Hexachloroethane	8270C	1 U	---	2.1 U	---	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	1 U	---	0.65 U	---	1 U
Isophorone	8270C	1 U	---	0.21 U	---	---
Naphthalene	8270C, 8270C PAHs	1 U	---	0.29 U	---	1 U
Nitrobenzene	8270C, 8330	1 U	---	0.81 U	---	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	2 U	0.005 U	0.29 U	0.005 U	---
n-Nitrosodi-n-propylamine	8270C	1 U	---	0.35 U	---	---
n-Nitrosodiphenylamine	8270C	2 U	---	0.44 U	---	---
p-Chloro-m-cresol	8270C	1 U	---	2.4 U	---	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	3 U	---	20 U	---	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	1 U	---	0.26 U	---	1 U
Phenol	8270C	1 U	---	2 U	---	---
Pyrene	8270C, 8270C PAHs	---	---	---	---	1 U
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-11**	**RD-11**	**RD-11**	**RD-12**	**RD-12**
Sample Type:		Primary	Split	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	TA-Denver	Lancaster	Lancaster
Collection Date:		05/14/2009	05/14/2009	11/04/2009	03/05/2009	04/28/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	---	---	---	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	---	---	---	---
1,3-Dinitrobenzene	8270C, 8330	---	---	---	---	---
1-Methyl naphthalene	8270C PAHs	1 U	0.23 U	0.22 U	1 U	0.9 U
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	---	---	---	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	---	---	---	---
2,4-Dimethylphenol	8270C	---	---	---	---	---
2,4-Dinitrophenol	8270C	---	---	---	---	---
2,4-Dinitrotoluene	8270C, 8330	---	---	---	---	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	---	---	---	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	---	---	---	---
2-Chlorophenol	8270C	---	---	---	---	---
2-Methylnaphthalene	8270C PAHs	1 U	0.29 U	0.28 U	1 U	0.9 U
2-Nitrophenol	8270C	---	---	---	---	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	---	---	---	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	---	---	---	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	---	---	---	---
4-Chlorophenylphenyl ether	8270C	---	---	---	---	---
4-Nitrophenol	8270C	---	---	---	---	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	1 U	0.28 U	0.27 U	1 U	0.9 U
Acenaphthylene	8270C, 8270C PAHs	1 U	0.49 U	0.47 U	1 U	0.9 U
Anthracene	8270C, 8270C PAHs	1 U	0.42 U	0.4 U	1 U	0.9 U
Benzidine	8270C	---	---	---	---	---
Benzo(a)anthracene	8270C, 8270C PAHs	1 U	0.35 U	0.33 U	1 U	0.9 U
Benzo(a)pyrene	8270C, 8270C PAHs	1 U	0.31 U	0.29 U	1 U	0.9 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	1 U	0.53 U	0.5 U	1 U	0.9 U
Benzo(ghi)perylene	8270C, 8270C PAHs	1 U	0.5 U	0.48 U	1 U	0.9 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	1 U	0.46 U	0.44 U	1 U	0.9 U
bis(2-Chloroethoxy)methane	8270C	---	---	---	---	---
bis(2-Chloroethyl) ether	8270C	---	---	---	---	---
bis(2-Chloroisopropyl) ether	8270C	---	---	---	---	---
bis(2-Ethylhexyl) phthalate	8270C	---	---	---	---	---
Butyl benzyl phthalate	8270C	---	---	---	---	---
Chrysene	8270C, 8270C PAHs	1 U	0.6 U	0.51 U	1 U	0.9 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	1 U	0.5 U	0.48 U	1 U	0.9 U
Diethyl phthalate	8270C	---	---	---	---	---
Dimethyl phthalate	8270C	---	---	---	---	---
Di-n-butyl phthalate	8270C	---	---	---	---	---
Di-n-octyl phthalate	8270C	---	---	---	---	---
Fluoranthene	8270C, 8270C PAHs	1 U	0.2 U	0.19 U	1 U	0.9 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-11**	**RD-11**	**RD-11**	**RD-12**	**RD-12**
Sample Type:		Primary	Split	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	TA-Denver	Lancaster	Lancaster
Collection Date:		05/14/2009	05/14/2009	11/04/2009	03/05/2009	04/28/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	1 U	0.31 U	0.29 U	1 U	0.9 U
Hexachlorobenzene	8270C	---	---	---	---	---
Hexachlorobutadiene	8270C	---	---	---	---	---
Hexachloroethane	8270C	---	---	---	---	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	1 U	0.64 U	0.62 U	1 U	0.9 U
Isophorone	8270C	---	---	---	---	---
Naphthalene	8270C, 8270C PAHs	1 U	0.29 U	0.28 U	1 U	0.9 U
Nitrobenzene	8270C, 8330	---	---	---	---	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	---	---	---	---	---
n-Nitrosodi-n-propylamine	8270C	---	---	---	---	---
n-Nitrosodiphenylamine	8270C	---	---	---	---	---
p-Chloro-m-cresol	8270C	---	---	---	---	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	---	---	---	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	1 U	0.26 U	0.25 U	1 U	0.9 U
Phenol	8270C	---	---	---	---	---
Pyrene	8270C, 8270C PAHs	1 U	0.37 U	0.35 U	1 U	0.9 U
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-12**	**RD-13**	**RD-13**	**RD-13**	**RD-13**
Sample Type:		Duplicate	Primary	Primary	Duplicate	Split
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	Lancaster	Weck	Weck	TA-Denver
Collection Date:		04/28/2009	03/09/2009	03/09/2009	03/09/2009	03/09/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	---	---	---	---
1,2-Dinitrobenzene	8330	---	0.2 U	---	---	---
1,2-Diphenylhydrazine	8270C	---	---	---	---	---
1,3-Dinitrobenzene	8270C, 8330	---	0.2 U	---	---	0.089 U
1-Methyl naphthalene	8270C PAHs	0.9 U	---	---	---	---
1-Nitronaphthalene	8330	---	0.2 U	---	---	---
2,4,6-Trichlorophenol	8270C	---	---	---	---	---
2,4,6-Trinitrotoluene	8330	---	0.2 U	---	---	0.072 U
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	0.36 U
2,4-Dichlorophenol	8270C	---	---	---	---	---
2,4-Dimethylphenol	8270C	---	---	---	---	---
2,4-Dinitrophenol	8270C	---	---	---	---	---
2,4-Dinitrotoluene	8270C, 8330	---	0.2 U	---	---	0.084 U
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	0.32 U
2,6-Dinitrotoluene	8270C, 8330	---	0.45 U	---	---	0.064 U
2-Amino-4,6-Dinitrotoluene	8330	---	0.2 U	---	---	0.051 U
2-Chloronaphthalene	8270C	---	---	---	---	---
2-Chlorophenol	8270C	---	---	---	---	---
2-Methylnaphthalene	8270C PAHs	0.9 U	---	---	---	---
2-Nitrophenol	8270C	---	---	---	---	---
2-Nitrotoluene	8330	---	0.25 U	---	---	0.086 U
3,3'-Dichlorobenzidine	8270C	---	---	---	---	---
3-Nitrotoluene	8330	---	0.4 U	---	---	0.083 U
4,6-Dinitro-o-cresol	8270C	---	---	---	---	---
4-Amino-2,6-Dinitrotoluene	8330	---	0.3 U	---	---	0.058 U
4-Bromophenyl phenyl ether	8270C	---	---	---	---	---
4-Chlorophenylphenyl ether	8270C	---	---	---	---	---
4-Nitrophenol	8270C	---	---	---	---	---
4-Nitrotoluene	8330	---	0.6 U	---	---	0.2 U
Acenaphthene	8270C, 8270C PAHs	0.9 U	---	---	---	---
Acenaphthylene	8270C, 8270C PAHs	0.9 U	---	---	---	---
Anthracene	8270C, 8270C PAHs	0.9 U	---	---	---	---
Benzidine	8270C	---	---	---	---	---
Benzo(a)anthracene	8270C, 8270C PAHs	0.9 U	---	---	---	---
Benzo(a)pyrene	8270C, 8270C PAHs	0.9 U	---	---	---	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	0.9 U	---	---	---	---
Benzo(ghi)perylene	8270C, 8270C PAHs	0.9 U	---	---	---	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	0.9 U	---	---	---	---
bis(2-Chloroethoxy)methane	8270C	---	---	---	---	---
bis(2-Chloroethyl) ether	8270C	---	---	---	---	---
bis(2-Chloroisopropyl) ether	8270C	---	---	---	---	---
bis(2-Ethylhexyl) phthalate	8270C	---	---	---	---	---
Butyl benzyl phthalate	8270C	---	---	---	---	---
Chrysene	8270C, 8270C PAHs	0.9 U	---	---	---	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	0.9 U	---	---	---	---
Diethyl phthalate	8270C	---	---	---	---	---
Dimethyl phthalate	8270C	---	---	---	---	---
Di-n-butyl phthalate	8270C	---	---	---	---	---
Di-n-octyl phthalate	8270C	---	---	---	---	---
Fluoranthene	8270C, 8270C PAHs	0.9 U	---	---	---	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-12**	**RD-13**	**RD-13**	**RD-13**	**RD-13**
Sample Type:		Duplicate	Primary	Primary	Duplicate	Split
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	Lancaster	Weck	Weck	TA-Denver
Collection Date:		04/28/2009	03/09/2009	03/09/2009	03/09/2009	03/09/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	0.9 U	---	---	---	---
Hexachlorobenzene	8270C	---	---	---	---	---
Hexachlorobutadiene	8270C	---	---	---	---	---
Hexachloroethane	8270C	---	---	---	---	---
HMX	8330	---	0.65 U	---	---	0.088 U
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	0.9 U	---	---	---	---
Isophorone	8270C	---	---	---	---	---
Naphthalene	8270C, 8270C PAHs	0.9 U	---	---	---	---
Nitrobenzene	8270C, 8330	---	0.2 U	---	---	0.091 U
Nitroglycerin	8330	---	5.2 U	---	---	0.92 U
n-Nitrosodimethylamine	1625M, 8270C	---	---	0.005 U	0.005 U	0.005 U
n-Nitrosodi-n-propylamine	8270C	---	---	---	---	---
n-Nitrosodiphenylamine	8270C	---	---	---	---	---
p-Chloro-m-cresol	8270C	---	---	---	---	---
p-Dinitrobenzene	8330	---	0.2 U	---	---	---
Pentachlorophenol	8270C	---	---	---	---	---
PETN	8330	---	6 U	---	---	0.42 U
Phenanthrene	8270C, 8270C PAHs	0.9 U	---	---	---	---
Phenol	8270C	---	---	---	---	---
Pyrene	8270C, 8270C PAHs	0.9 U	---	---	---	---
RDX	8330	---	0.2 U	---	---	0.052 U
sym-Trinitrobenzene	8330	---	0.2 U	---	---	0.2 U
Tetryl	8330	---	0.3 U	---	---	0.079 U

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-13**	**RD-13**	**RD-13**	**RD-13**	**RD-13**
Sample Type:		Primary	Primary	Duplicate	Duplicate	Split
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	Lancaster	TA-Denver	TA-Denver
Collection Date:		05/06/2009	05/06/2009	05/06/2009	05/06/2009	05/06/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	---	---	---	---
1,2-Dinitrobenzene	8330	0.2 U	---	0.2 U	---	---
1,2-Diphenylhydrazine	8270C	---	---	---	---	---
1,3-Dinitrobenzene	8270C, 8330	0.2 U	---	0.2 U	---	0.089 U
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	0.2 U	---	0.2 U	---	---
2,4,6-Trichlorophenol	8270C	---	---	---	---	---
2,4,6-Trinitrotoluene	8330	0.2 U	---	0.2 U	---	0.072 U
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	0.36 U
2,4-Dichlorophenol	8270C	---	---	---	---	---
2,4-Dimethylphenol	8270C	---	---	---	---	---
2,4-Dinitrophenol	8270C	---	---	---	---	---
2,4-Dinitrotoluene	8270C, 8330	0.2 U	---	0.2 U	---	0.084 U
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	0.32 U
2,6-Dinitrotoluene	8270C, 8330	0.45 U	---	0.45 U	---	0.064 U
2-Amino-4,6-Dinitrotoluene	8330	0.2 U	---	0.2 U	---	0.051 U
2-Chloronaphthalene	8270C	---	---	---	---	---
2-Chlorophenol	8270C	---	---	---	---	---
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	---	---	---	---	---
2-Nitrotoluene	8330	0.25 U	---	0.25 U	---	0.086 U
3,3'-Dichlorobenzidine	8270C	---	---	---	---	---
3-Nitrotoluene	8330	0.4 U	---	0.4 U	---	0.083 U
4,6-Dinitro-o-cresol	8270C	---	---	---	---	---
4-Amino-2,6-Dinitrotoluene	8330	0.3 U	---	0.3 U	---	0.058 U
4-Bromophenyl phenyl ether	8270C	---	---	---	---	---
4-Chlorophenylphenyl ether	8270C	---	---	---	---	---
4-Nitrophenol	8270C	---	---	---	---	---
4-Nitrotoluene	8330	0.6 U	---	0.6 U	---	0.2 U
Acenaphthene	8270C, 8270C PAHs	---	---	---	---	---
Acenaphthylene	8270C, 8270C PAHs	---	---	---	---	---
Anthracene	8270C, 8270C PAHs	---	---	---	---	---
Benzidine	8270C	---	---	---	---	---
Benzo(a)anthracene	8270C, 8270C PAHs	---	---	---	---	---
Benzo(a)pyrene	8270C, 8270C PAHs	---	---	---	---	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	---	---	---	---
Benzo(ghi)perylene	8270C, 8270C PAHs	---	---	---	---	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	---	---	---	---
bis(2-Chloroethoxy)methane	8270C	---	---	---	---	---
bis(2-Chloroethyl) ether	8270C	---	---	---	---	---
bis(2-Chloroisopropyl) ether	8270C	---	---	---	---	---
bis(2-Ethylhexyl) phthalate	8270C	---	---	---	---	---
Butyl benzyl phthalate	8270C	---	---	---	---	---
Chrysene	8270C, 8270C PAHs	---	---	---	---	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	---	---	---	---
Diethyl phthalate	8270C	---	---	---	---	---
Dimethyl phthalate	8270C	---	---	---	---	---
Di-n-butyl phthalate	8270C	---	---	---	---	---
Di-n-octyl phthalate	8270C	---	---	---	---	---
Fluoranthene	8270C, 8270C PAHs	---	---	---	---	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-13**	**RD-13**	**RD-13**	**RD-13**	**RD-13**
Sample Type:		Primary	Primary	Duplicate	Duplicate	Split
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	Lancaster	TA-Denver	TA-Denver
Collection Date:		05/06/2009	05/06/2009	05/06/2009	05/06/2009	05/06/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	---	---	---	---
Hexachlorobenzene	8270C	---	---	---	---	---
Hexachlorobutadiene	8270C	---	---	---	---	---
Hexachloroethane	8270C	---	---	---	---	---
HMX	8330	0.65 U	---	0.65 U	---	0.088 U
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	---	---	---	---
Isophorone	8270C	---	---	---	---	---
Naphthalene	8270C, 8270C PAHs	---	---	---	---	---
Nitrobenzene	8270C, 8330	0.2 U	---	0.2 U	---	0.091 U
Nitroglycerin	8330	5.2 U	---	5.2 U	---	0.92 U
n-Nitrosodimethylamine	1625M, 8270C	---	0.005 U	---	0.005 U	---
n-Nitrosodi-n-propylamine	8270C	---	---	---	---	---
n-Nitrosodiphenylamine	8270C	---	---	---	---	---
p-Chloro-m-cresol	8270C	---	---	---	---	---
p-Dinitrobenzene	8330	0.2 U	---	0.2 U	---	---
Pentachlorophenol	8270C	---	---	---	---	---
PETN	8330	6 U	---	6 U	---	0.42 U
Phenanthrene	8270C, 8270C PAHs	---	---	---	---	---
Phenol	8270C	---	---	---	---	---
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	0.2 U	---	0.2 U	---	0.052 U
sym-Trinitrobenzene	8330	0.2 U	---	0.2 U	---	0.2 U
Tetryl	8330	0.3 U	---	0.3 U	---	0.079 U

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-13**	**RD-13**	**RD-13**	**RD-13**	**RD-13**
Sample Type:		Split	Primary	Primary	Duplicate	Split
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Weck	Lancaster	TA-Denver	Lancaster	TA-Denver
Collection Date:		05/06/2009	07/15/2009	07/15/2009	07/15/2009	07/15/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	---	---	---	---
1,2-Dinitrobenzene	8330	---	0.2 U	---	0.2 U	---
1,2-Diphenylhydrazine	8270C	---	---	---	---	---
1,3-Dinitrobenzene	8270C, 8330	---	0.2 U	---	0.2 U	0.089 U
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	0.2 U	---	0.2 U	---
2,4,6-Trichlorophenol	8270C	---	---	---	---	---
2,4,6-Trinitrotoluene	8330	---	0.2 U	---	0.2 U	0.072 U
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	0.36 U
2,4-Dichlorophenol	8270C	---	---	---	---	---
2,4-Dimethylphenol	8270C	---	---	---	---	---
2,4-Dinitrophenol	8270C	---	---	---	---	---
2,4-Dinitrotoluene	8270C, 8330	---	0.2 U	---	0.2 U	0.084 U
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	0.32 U
2,6-Dinitrotoluene	8270C, 8330	---	0.45 U	---	0.45 U	0.064 U
2-Amino-4,6-Dinitrotoluene	8330	---	0.2 U	---	0.2 U	0.051 U
2-Chloronaphthalene	8270C	---	---	---	---	---
2-Chlorophenol	8270C	---	---	---	---	---
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	---	---	---	---	---
2-Nitrotoluene	8330	---	0.25 U	---	0.25 U	0.086 U
3,3'-Dichlorobenzidine	8270C	---	---	---	---	---
3-Nitrotoluene	8330	---	0.4 U	---	0.4 U	0.083 U
4,6-Dinitro-o-cresol	8270C	---	---	---	---	---
4-Amino-2,6-Dinitrotoluene	8330	---	0.3 U	---	0.3 U	0.058 U
4-Bromophenyl phenyl ether	8270C	---	---	---	---	---
4-Chlorophenylphenyl ether	8270C	---	---	---	---	---
4-Nitrophenol	8270C	---	---	---	---	---
4-Nitrotoluene	8330	---	0.6 U	---	0.6 U	0.2 U
Acenaphthene	8270C, 8270C PAHs	---	---	---	---	---
Acenaphthylene	8270C, 8270C PAHs	---	---	---	---	---
Anthracene	8270C, 8270C PAHs	---	---	---	---	---
Benzidine	8270C	---	---	---	---	---
Benzo(a)anthracene	8270C, 8270C PAHs	---	---	---	---	---
Benzo(a)pyrene	8270C, 8270C PAHs	---	---	---	---	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	---	---	---	---
Benzo(ghi)perylene	8270C, 8270C PAHs	---	---	---	---	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	---	---	---	---
bis(2-Chloroethoxy)methane	8270C	---	---	---	---	---
bis(2-Chloroethyl) ether	8270C	---	---	---	---	---
bis(2-Chloroisopropyl) ether	8270C	---	---	---	---	---
bis(2-Ethylhexyl) phthalate	8270C	---	---	---	---	---
Butyl benzyl phthalate	8270C	---	---	---	---	---
Chrysene	8270C, 8270C PAHs	---	---	---	---	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	---	---	---	---
Diethyl phthalate	8270C	---	---	---	---	---
Dimethyl phthalate	8270C	---	---	---	---	---
Di-n-butyl phthalate	8270C	---	---	---	---	---
Di-n-octyl phthalate	8270C	---	---	---	---	---
Fluoranthene	8270C, 8270C PAHs	---	---	---	---	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-13**	**RD-13**	**RD-13**	**RD-13**	**RD-13**
Sample Type:		Split	Primary	Primary	Duplicate	Split
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Weck	Lancaster	TA-Denver	Lancaster	TA-Denver
Collection Date:		05/06/2009	07/15/2009	07/15/2009	07/15/2009	07/15/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	---	---	---	---
Hexachlorobenzene	8270C	---	---	---	---	---
Hexachlorobutadiene	8270C	---	---	---	---	---
Hexachloroethane	8270C	---	---	---	---	---
HMX	8330	---	0.65 U	---	0.65 U	0.088 U
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	---	---	---	---
Isophorone	8270C	---	---	---	---	---
Naphthalene	8270C, 8270C PAHs	---	---	---	---	---
Nitrobenzene	8270C, 8330	---	0.2 U	---	0.2 U	0.091 U
Nitroglycerin	8330	---	5.2 U	---	5.2 U	0.92 U
n-Nitrosodimethylamine	1625M, 8270C	0.005 U	---	0.005 U	0.005 U	0.005 U
n-Nitrosodi-n-propylamine	8270C	---	---	---	---	---
n-Nitrosodiphenylamine	8270C	---	---	---	---	---
p-Chloro-m-cresol	8270C	---	---	---	---	---
p-Dinitrobenzene	8330	---	0.2 U	---	0.2 U	---
Pentachlorophenol	8270C	---	---	---	---	---
PETN	8330	---	6 U	---	6 U	0.42 U
Phenanthrene	8270C, 8270C PAHs	---	---	---	---	---
Phenol	8270C	---	---	---	---	---
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	0.5 U	---	0.2 U	0.052 U
sym-Trinitrobenzene	8330	---	0.2 U	---	0.2 U	0.2 U
Tetryl	8330	---	0.3 U	---	0.3 U	0.079 U

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-13**	**RD-13**	**RD-13**	**RD-37**	**RD-37**
Sample Type:		Primary	Duplicate	Split	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	TA-Denver	TA-Irvine	TA-Denver	TA-Denver
Collection Date:		10/21/2009	10/21/2009	10/21/2009	07/13/2009	07/13/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	---	---	0.27 U	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	---	---	---	---
1,3-Dinitrobenzene	8270C, 8330	0.097 U	0.095 U	0.048 U	1.9 U	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	---	---	0.28 U	---
2,4,6-Trinitrotoluene	8330	0.079 U	0.077 U	0.048 U	---	---
2,4-diamino-6-nitrotoluene	8330	0.39 U	0.39 U	---	---	---
2,4-Dichlorophenol	8270C	---	---	---	0.61 U	---
2,4-Dimethylphenol	8270C	---	---	---	0.55 U	---
2,4-Dinitrophenol	8270C	---	---	---	9.5 U	---
2,4-Dinitrotoluene	8270C, 8330	0.091 U	0.09 U	0.048 U	1.6 U	---
2,6-diamino-4-nitrotoluene	8330	0.35 U	0.34 U	---	---	---
2,6-Dinitrotoluene	8270C, 8330	0.07 U	0.069 U	0.048 U	1.8 U	---
2-Amino-4,6-Dinitrotoluene	8330	0.055 U	0.054 U	0.097 U	---	---
2-Chloronaphthalene	8270C	---	---	---	0.25 U	---
2-Chlorophenol	8270C	---	---	---	1.9 U	---
2-Methylnaphthalene	8270C PAHs	---	---	---	0.28 U	---
2-Nitrophenol	8270C	---	---	---	0.37 U	---
2-Nitrotoluene	8330	0.093 U	0.091 U	0.085 U	---	---
3,3'-Dichlorobenzidine	8270C	---	---	---	1.9 U	---
3-Nitrotoluene	8330	0.091 U	0.089 U	0.055 U	---	---
4,6-Dinitro-o-cresol	8270C	---	---	---	3.8 U	---
4-Amino-2,6-Dinitrotoluene	8330	0.063 U	0.062 U	0.048 U	---	---
4-Bromophenyl phenyl ether	8270C	---	---	---	0.41 U	---
4-Chlorophenylphenyl ether	8270C	---	---	---	1.6 U	---
4-Nitrophenol	8270C	---	---	---	1.2 U	---
4-Nitrotoluene	8330	0.22 U	0.21 U	0.085 U	---	---
Acenaphthene	8270C, 8270C PAHs	---	---	---	0.27 U	---
Acenaphthylene	8270C, 8270C PAHs	---	---	---	0.47 U	---
Anthracene	8270C, 8270C PAHs	---	---	---	0.4 U	---
Benzidine	8270C	---	---	---	---	---
Benzo(a)anthracene	8270C, 8270C PAHs	---	---	---	0.33 U	---
Benzo(a)pyrene	8270C, 8270C PAHs	---	---	---	0.29 U	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	---	---	0.5 U	---
Benzo(ghi)perylene	8270C, 8270C PAHs	---	---	---	0.48 U	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	---	---	0.44 U	---
bis(2-Chloroethoxy)methane	8270C	---	---	---	0.92 U	---
bis(2-Chloroethyl) ether	8270C	---	---	---	0.39 U	---
bis(2-Chloroisopropyl) ether	8270C	---	---	---	0.27 U	---
bis(2-Ethylhexyl) phthalate	8270C	---	---	---	1.4 J,L	---
Butyl benzyl phthalate	8270C	---	---	---	0.95 U	---
Chrysene	8270C, 8270C PAHs	---	---	---	0.51 U	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	---	---	0.48 U	---
Diethyl phthalate	8270C	---	---	---	0.36 U	---
Dimethyl phthalate	8270C	---	---	---	0.2 U	---
Di-n-butyl phthalate	8270C	---	---	---	1.1 U	---
Di-n-octyl phthalate	8270C	---	---	---	0.33 U	---
Fluoranthene	8270C, 8270C PAHs	---	---	---	0.19 U	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-13**	**RD-13**	**RD-13**	**RD-37**	**RD-37**
Sample Type:		Primary	Duplicate	Split	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	TA-Denver	TA-Irvine	TA-Denver	TA-Denver
Collection Date:		10/21/2009	10/21/2009	10/21/2009	07/13/2009	07/13/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	---	---	0.29 U	---
Hexachlorobenzene	8270C	---	---	---	0.63 U	---
Hexachlorobutadiene	8270C	---	---	---	3.1 U	---
Hexachloroethane	8270C	---	---	---	2 U	---
HMX	8330	0.095 U	0.094 U	0.035 U	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	---	---	0.62 U	---
Isophorone	8270C	---	---	---	0.2 U	---
Naphthalene	8270C, 8270C PAHs	---	---	---	0.28 U	---
Nitrobenzene	8270C, 8330	0.099 U	0.097 U	0.048 U	0.77 U	---
Nitroglycerin	8330	1 U	0.99 U	0.32 U	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.005 U	0.005 U	0.005 U	0.28 U	0.005 U
n-Nitrosodi-n-propylamine	8270C	---	---	---	0.33 U	---
n-Nitrosodiphenylamine	8270C	---	---	---	0.42 U	---
p-Chloro-m-cresol	8270C	---	---	---	2.3 U	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	---	---	0.76 U	---
PETN	8330	0.45 U	0.45 U	0.29 U	---	---
Phenanthrene	8270C, 8270C PAHs	---	---	---	0.25 U	---
Phenol	8270C	---	---	---	1.9 U	---
Pyrene	8270C, 8270C PAHs	---	---	---	0.35 U	---
RDX	8330	0.057 U	0.056 U	0.035 U	---	---
sym-Trinitrobenzene	8330	0.22 U	0.21 U	0.03 U	3.8 U	---
Tetryl	8330	0.086 U	0.085 U	0.048 U	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-37**	**RD-37**	**RD-37**	**RD-41B**	**RD-41B**
Sample Type:		Duplicate	Split	Split	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	Weck	Lancaster	Weck
Collection Date:		07/13/2009	07/13/2009	07/13/2009	02/12/2009	02/12/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	1 U	---	1 U	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	---	---	1 U	---
1,3-Dinitrobenzene	8270C, 8330	---	2 U	---	2 U	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	1 U	---	1 U	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	1 U	---	1 U	---
2,4-Dimethylphenol	8270C	---	3 U	---	3 U	---
2,4-Dinitrophenol	8270C	---	19 U	---	19 U	---
2,4-Dinitrotoluene	8270C, 8330	---	1 U	---	1 U	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	1 U	---	1 U	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	2 U	---	2 U	---
2-Chlorophenol	8270C	---	1 U	---	1 U	---
2-Methylnaphthalene	8270C PAHs	---	1 U	---	---	---
2-Nitrophenol	8270C	---	1 U	---	1 U	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	2 U	---	2 U	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	5 U	---	5 U	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	1 U	---	1 U	---
4-Chlorophenylphenyl ether	8270C	---	2 U	---	2 U	---
4-Nitrophenol	8270C	---	10 U	---	10 U	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Acenaphthylene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Anthracene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Benzidine	8270C	---	---	---	19 U	---
Benzo(a)anthracene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Benzo(a)pyrene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Benzo(ghi)perylene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	1 U	---	1 U	---
bis(2-Chloroethoxy)methane	8270C	---	1 U	---	1 U	---
bis(2-Chloroethyl) ether	8270C	---	1 U	---	1 U	---
bis(2-Chloroisopropyl) ether	8270C	---	1 U	---	1 U	---
bis(2-Ethylhexyl) phthalate	8270C	---	8 U	---	2 U	---
Butyl benzyl phthalate	8270C	---	2 U	---	2 U	---
Chrysene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Diethyl phthalate	8270C	---	2 U	---	2 U	---
Dimethyl phthalate	8270C	---	2 U	---	2 U	---
Di-n-butyl phthalate	8270C	---	2 U	---	2 U	---
Di-n-octyl phthalate	8270C	---	2 U	---	2 U	---
Fluoranthene	8270C, 8270C PAHs	---	1 U	---	1 U	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-37**	**RD-37**	**RD-37**	**RD-41B**	**RD-41B**
Sample Type:		Duplicate	Split	Split	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	Weck	Lancaster	Weck
Collection Date:		07/13/2009	07/13/2009	07/13/2009	02/12/2009	02/12/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Hexachlorobenzene	8270C	---	1 U	---	1 U	---
Hexachlorobutadiene	8270C	---	1 U	---	1 U	---
Hexachloroethane	8270C	---	1 U	---	1 U	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Isophorone	8270C	---	1 U	---	1 U	---
Naphthalene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Nitrobenzene	8270C, 8330	---	1 U	---	1 U	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.005 U	2 U	0.005 U	2 U	0.005 U
n-Nitrosodi-n-propylamine	8270C	---	---	---	1 U	---
n-Nitrosodiphenylamine	8270C	---	2 U	---	2 U	---
p-Chloro-m-cresol	8270C	---	1 U	---	1 U	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	---	---	3 U	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Phenol	8270C	---	1 U	---	1 U	---
Pyrene	8270C, 8270C PAHs	---	1 U	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-41B**	**RD-41B**	**RD-41B**	**RD-41B**	**RD-41B**
Sample Type:		Primary	Primary	Split	Split	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	TA-Denver	Weck	Lancaster
Collection Date:		05/04/2009	05/04/2009	05/04/2009	05/04/2009	08/04/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	0.9 U	---	0.27 U	---	0.9 U
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	0.9 U	---	0.22 U	---	0.9 U
1,3-Dinitrobenzene	8270C, 8330	2 U	---	1.9 U	---	2 U
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	0.9 U	---	0.28 U	---	0.9 U
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	0.9 U	---	0.61 U	---	0.9 U
2,4-Dimethylphenol	8270C	3 U	---	0.56 U	---	3 U
2,4-Dinitrophenol	8270C	19 U	---	9.6 U	---	19 U
2,4-Dinitrotoluene	8270C, 8330	0.9 U	---	1.6 U	---	0.9 U
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	0.9 U	---	1.8 U	---	0.9 U
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	2 U	---	0.25 U	---	2 U
2-Chlorophenol	8270C	0.9 U	---	1.9 U	---	0.9 U
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	0.9 U	---	0.37 U	---	0.9 U
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	2 U	---	1.9 U	---	2 U
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	5 U	---	3.8 U	---	5 U
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	0.9 U	---	0.41 U	---	0.9 U
4-Chlorophenylphenyl ether	8270C	2 U	---	1.6 U	---	2 U
4-Nitrophenol	8270C	9 U	---	1.2 U	---	9 U
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	0.9 U	---	0.27 UJ	---	0.9 U
Acenaphthylene	8270C, 8270C PAHs	0.9 U	---	0.47 U	---	0.9 U
Anthracene	8270C, 8270C PAHs	0.9 U	---	0.4 U	---	0.9 U
Benzidine	8270C	19 U	---	48 U	---	19 U
Benzo(a)anthracene	8270C, 8270C PAHs	0.9 U	---	0.34 U	---	0.9 U
Benzo(a)pyrene	8270C, 8270C PAHs	0.9 U	---	0.3 U	---	0.9 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	0.9 U	---	0.51 U	---	0.9 U
Benzo(ghi)perylene	8270C, 8270C PAHs	0.9 U	---	0.48 U	---	0.9 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	0.9 U	---	0.44 U	---	0.9 U
bis(2-Chloroethoxy)methane	8270C	0.9 U	---	0.93 U	---	0.9 U
bis(2-Chloroethyl) ether	8270C	0.9 U	---	0.39 U	---	0.9 U
bis(2-Chloroisopropyl) ether	8270C	0.9 U	---	0.27 U	---	0.9 U
bis(2-Ethylhexyl) phthalate	8270C	2 U	---	0.54 U	---	2 U
Butyl benzyl phthalate	8270C	2 U	---	0.96 U	---	2 U
Chrysene	8270C, 8270C PAHs	0.9 U	---	0.64 U	---	0.9 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	0.9 U	---	0.49 U	---	0.9 U
Diethyl phthalate	8270C	2 U	---	0.36 U	---	2 U
Dimethyl phthalate	8270C	2 U	---	0.2 U	---	2 U
Di-n-butyl phthalate	8270C	2 U	---	1.1 U	---	2 U
Di-n-octyl phthalate	8270C	2 U	---	0.34 U	---	2 U
Fluoranthene	8270C, 8270C PAHs	0.9 U	---	0.19 U	---	0.9 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-41B**	**RD-41B**	**RD-41B**	**RD-41B**	**RD-41B**
Sample Type:		Primary	Primary	Split	Split	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	TA-Denver	Weck	Lancaster
Collection Date:		05/04/2009	05/04/2009	05/04/2009	05/04/2009	08/04/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	0.9 U	---	0.3 U	---	0.9 U
Hexachlorobenzene	8270C	0.9 U	---	0.63 U	---	0.9 U
Hexachlorobutadiene	8270C	0.9 U	---	3.2 U	---	0.9 U
Hexachloroethane	8270C	0.9 U	---	2 U	---	0.9 U
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	0.9 U	---	0.62 U	---	0.9 U
Isophorone	8270C	0.9 U	---	0.2 U	---	0.9 U
Naphthalene	8270C, 8270C PAHs	0.9 U	---	0.28 U	---	0.9 U
Nitrobenzene	8270C, 8330	0.9 U	---	0.78 U	---	0.9 U
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	2 U	0.005 U	0.28 U	0.005 U	2 U
n-Nitrosodi-n-propylamine	8270C	0.9 U	---	0.34 U	---	0.9 U
n-Nitrosodiphenylamine	8270C	2 U	---	0.42 U	---	2 U
p-Chloro-m-cresol	8270C	0.9 U	---	2.3 U	---	0.9 U
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	3 U	---	19 U	---	3 U
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	0.9 U	---	0.25 U	---	0.9 U
Phenol	8270C	0.9 U	---	1.9 U	---	0.9 U
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-41B**	**RD-41B**	**RD-41B**	**RD-44**	**RD-44**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	TA-Denver	TA-Denver	Lancaster	Weck
Collection Date:		08/04/2009	11/02/2009	11/02/2009	03/02/2009	03/02/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	0.27 U	---	0.9 U	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	0.23 U	---	0.9 U	---
1,3-Dinitrobenzene	8270C, 8330	---	2 U	---	2 U	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	0.28 U	---	0.9 U	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	0.63 U	---	0.9 U	---
2,4-Dimethylphenol	8270C	---	0.57 U	---	3 U	---
2,4-Dinitrophenol	8270C	---	9.8 U	---	19 U	---
2,4-Dinitrotoluene	8270C, 8330	---	1.6 U	---	0.9 U	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	1.9 U	---	0.9 U	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	0.25 U	---	2 U	---
2-Chlorophenol	8270C	---	2 U	---	0.9 U	---
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	---	0.38 U	---	0.9 U	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	2 U	---	2 U	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	3.9 U	---	5 U	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	0.42 U	---	0.9 U	---
4-Chlorophenylphenyl ether	8270C	---	1.6 U	---	2 U	---
4-Nitrophenol	8270C	---	1.2 U	---	9 U	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	---	0.27 U	---	0.9 U	---
Acenaphthylene	8270C, 8270C PAHs	---	0.48 U	---	0.9 U	---
Anthracene	8270C, 8270C PAHs	---	0.41 U	---	0.9 U	---
Benzidine	8270C	---	49 U	---	19 U	---
Benzo(a)anthracene	8270C, 8270C PAHs	---	0.34 U	---	0.9 U	---
Benzo(a)pyrene	8270C, 8270C PAHs	---	0.3 U	---	0.9 U	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	0.52 U	---	0.9 U	---
Benzo(ghi)perylene	8270C, 8270C PAHs	---	0.49 U	---	0.9 U	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	0.45 U	---	0.9 U	---
bis(2-Chloroethoxy)methane	8270C	---	0.95 U	---	0.9 U	---
bis(2-Chloroethyl) ether	8270C	---	0.4 U	---	0.9 U	---
bis(2-Chloroisopropyl) ether	8270C	---	0.27 U	---	0.9 U	---
bis(2-Ethylhexyl) phthalate	8270C	---	2.8 U	---	2 U	---
Butyl benzyl phthalate	8270C	---	0.98 U	---	2 U	---
Chrysene	8270C, 8270C PAHs	---	0.53 U	---	0.9 U	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	0.5 U	---	0.9 U	---
Diethyl phthalate	8270C	---	0.37 U	---	2 U	---
Dimethyl phthalate	8270C	---	0.21 U	---	2 U	---
Di-n-butyl phthalate	8270C	---	1.1 U	---	2 U	---
Di-n-octyl phthalate	8270C	---	0.34 U	---	2 U	---
Fluoranthene	8270C, 8270C PAHs	---	0.2 U	---	0.9 U	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-41B**	**RD-41B**	**RD-41B**	**RD-44**	**RD-44**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	TA-Denver	TA-Denver	Lancaster	Weck
Collection Date:		08/04/2009	11/02/2009	11/02/2009	03/02/2009	03/02/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	0.3 U	---	0.9 U	---
Hexachlorobenzene	8270C	---	0.65 U	---	0.9 U	---
Hexachlorobutadiene	8270C	---	3.2 U	---	0.9 U	---
Hexachloroethane	8270C	---	2.1 U	---	0.9 U	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	0.64 U	---	0.9 U	---
Isophorone	8270C	---	0.21 U	---	0.9 U	---
Naphthalene	8270C, 8270C PAHs	---	0.28 U	---	0.9 U	---
Nitrobenzene	8270C, 8330	---	0.79 U	---	0.9 U	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.005 U	0.28 U	0.005 U	2 U	0.005 U
n-Nitrosodi-n-propylamine	8270C	---	0.34 U	---	0.9 U	---
n-Nitrosodiphenylamine	8270C	---	0.43 U	---	2 U	---
p-Chloro-m-cresol	8270C	---	2.4 U	---	0.9 U	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	20 U	---	3 U	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	---	0.25 U	---	0.9 U	---
Phenol	8270C	---	2 U	---	0.9 U	---
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-44**	**RD-44**	**RD-44**	**RD-44**	**RD-44**
Sample Type:		Duplicate	Primary	Primary	Duplicate	Duplicate
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Weck	Lancaster	TA-Denver	Lancaster	TA-Denver
Collection Date:		03/02/2009	04/30/2009	04/30/2009	04/30/2009	04/30/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	1 U	---	1 U	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	1 U	---	1 U	---
1,3-Dinitrobenzene	8270C, 8330	---	2 U	---	2 U	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	1 U	---	1 U	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	1 U	---	1 U	---
2,4-Dimethylphenol	8270C	---	3 U	---	3 U	---
2,4-Dinitrophenol	8270C	---	20 U	---	19 U	---
2,4-Dinitrotoluene	8270C, 8330	---	1 U	---	1 U	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	1 U	---	1 U	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	2 U	---	2 U	---
2-Chlorophenol	8270C	---	1 U	---	1 U	---
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	---	1 U	---	1 U	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	2 U	---	2 U	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	5 U	---	5 U	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	1 U	---	1 U	---
4-Chlorophenylphenyl ether	8270C	---	2 U	---	2 U	---
4-Nitrophenol	8270C	---	10 U	---	10 U	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Acenaphthylene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Anthracene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Benzidine	8270C	---	20 U	---	19 U	---
Benzo(a)anthracene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Benzo(a)pyrene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Benzo(ghi)perylene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	1 U	---	1 U	---
bis(2-Chloroethoxy)methane	8270C	---	1 U	---	1 U	---
bis(2-Chloroethyl) ether	8270C	---	1 U	---	1 U	---
bis(2-Chloroisopropyl) ether	8270C	---	1 U	---	1 U	---
bis(2-Ethylhexyl) phthalate	8270C	---	2 U	---	2 U	---
Butyl benzyl phthalate	8270C	---	2 U	---	2 U	---
Chrysene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Diethyl phthalate	8270C	---	2 U	---	2 U	---
Dimethyl phthalate	8270C	---	2 U	---	2 U	---
Di-n-butyl phthalate	8270C	---	2 U	---	2 U	---
Di-n-octyl phthalate	8270C	---	2 U	---	2 U	---
Fluoranthene	8270C, 8270C PAHs	---	1 U	---	1 U	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-44**	**RD-44**	**RD-44**	**RD-44**	**RD-44**
Sample Type:		Duplicate	Primary	Primary	Duplicate	Duplicate
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Weck	Lancaster	TA-Denver	Lancaster	TA-Denver
Collection Date:		03/02/2009	04/30/2009	04/30/2009	04/30/2009	04/30/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Hexachlorobenzene	8270C	---	1 U	---	1 U	---
Hexachlorobutadiene	8270C	---	1 U	---	1 U	---
Hexachloroethane	8270C	---	1 U	---	1 U	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Isophorone	8270C	---	1 U	---	1 U	---
Naphthalene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Nitrobenzene	8270C, 8330	---	1 U	---	1 U	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.005 U	2 U	0.005 U	2 U	0.005 U
n-Nitrosodi-n-propylamine	8270C	---	1 U	---	1 U	---
n-Nitrosodiphenylamine	8270C	---	2 U	---	2 U	---
p-Chloro-m-cresol	8270C	---	1 U	---	1 U	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	3 U	---	3 U	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Phenol	8270C	---	1 U	---	1 U	---
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-44**	**RD-44**	**RD-44**	**RD-44**	**RD-44**
Sample Type:		Primary	Primary	Duplicate	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	TA-Denver	TA-Denver	TA-Denver
Collection Date:		07/27/2009	07/27/2009	07/27/2009	10/28/2009	10/28/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	1 U	---	---	0.27 U	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	1 U	---	---	0.22 U	---
1,3-Dinitrobenzene	8270C, 8330	2 U	---	---	1.9 U	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	1 U	---	---	0.28 U	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	1 U	---	---	0.61 U	---
2,4-Dimethylphenol	8270C	3 U	---	---	0.55 U	---
2,4-Dinitrophenol	8270C	20 U	---	---	9.5 U	---
2,4-Dinitrotoluene	8270C, 8330	1 U	---	---	1.6 U	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	1 U	---	---	1.8 U	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	2 U	---	---	0.25 U	---
2-Chlorophenol	8270C	1 U	---	---	1.9 U	---
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	1 U	---	---	0.37 U	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	2 U	---	---	1.9 U	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	5 U	---	---	3.8 U	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	1 U	---	---	0.41 U	---
4-Chlorophenylphenyl ether	8270C	2 U	---	---	1.6 U	---
4-Nitrophenol	8270C	10 U	---	---	1.2 U	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	1 U	---	---	0.27 U	---
Acenaphthylene	8270C, 8270C PAHs	1 U	---	---	0.47 U	---
Anthracene	8270C, 8270C PAHs	1 U	---	---	0.4 U	---
Benzidine	8270C	20 U	---	---	48 U	---
Benzo(a)anthracene	8270C, 8270C PAHs	1 U	---	---	0.33 U	---
Benzo(a)pyrene	8270C, 8270C PAHs	1 U	---	---	0.29 U	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	1 U	---	---	0.5 U	---
Benzo(ghi)perylene	8270C, 8270C PAHs	1 U	---	---	0.48 U	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	1 U	---	---	0.44 U	---
bis(2-Chloroethoxy)methane	8270C	1 U	---	---	0.92 U	---
bis(2-Chloroethyl) ether	8270C	1 U	---	---	0.39 U	---
bis(2-Chloroisopropyl) ether	8270C	1 U	---	---	0.27 U	---
bis(2-Ethylhexyl) phthalate	8270C	2 U	---	---	0.53 U	---
Butyl benzyl phthalate	8270C	2 U	---	---	0.95 U	---
Chrysene	8270C, 8270C PAHs	1 U	---	---	0.51 U	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	1 U	---	---	0.48 U	---
Diethyl phthalate	8270C	2 U	---	---	0.36 U	---
Dimethyl phthalate	8270C	2 U	---	---	0.2 U	---
Di-n-butyl phthalate	8270C	2 U	---	---	1.1 U	---
Di-n-octyl phthalate	8270C	2 U	---	---	0.33 U	---
Fluoranthene	8270C, 8270C PAHs	1 U	---	---	0.19 U	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-44**	**RD-44**	**RD-44**	**RD-44**	**RD-44**
Sample Type:		Primary	Primary	Duplicate	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	TA-Denver	TA-Denver	TA-Denver
Collection Date:		07/27/2009	07/27/2009	07/27/2009	10/28/2009	10/28/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	1 U	---	---	0.29 U	---
Hexachlorobenzene	8270C	1 U	---	---	0.63 U	---
Hexachlorobutadiene	8270C	1 U	---	---	3.1 U	---
Hexachloroethane	8270C	1 U	---	---	2 U	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	1 U	---	---	0.62 U	---
Isophorone	8270C	1 U	---	---	0.2 U	---
Naphthalene	8270C, 8270C PAHs	1 U	---	---	0.28 U	---
Nitrobenzene	8270C, 8330	1 U	---	---	0.77 U	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	2 U	0.005 U	0.005 U	0.28 U	0.005 U
n-Nitrosodi-n-propylamine	8270C	1 U	---	---	0.33 U	---
n-Nitrosodiphenylamine	8270C	2 U	---	---	0.42 U	---
p-Chloro-m-cresol	8270C	1 U	---	---	2.3 U	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	3 U	---	---	19 U	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	1 U	---	---	0.25 U	---
Phenol	8270C	1 U	---	---	1.9 U	---
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-44**	**RD-44**	**RD-46B**	**RD-46B**	**RD-46B**
Sample Type:		Duplicate	Split	Primary	Duplicate	Split
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	TA-Irvine	TA-Denver	TA-Denver	TA-Irvine
Collection Date:		10/28/2009	10/28/2009	10/22/2009	10/22/2009	10/22/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	---	0.29 U	0.27 U	2.5 U
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	---	0.23 U	0.22 U	2.5 U
1,3-Dinitrobenzene	8270C, 8330	---	---	2 U	1.9 U	3.5 U
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	---	0.3 U	0.28 U	4.5 U
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	---	0.65 U	0.62 U	3.5 U
2,4-Dimethylphenol	8270C	---	---	0.59 U	0.56 U	3.5 U
2,4-Dinitrophenol	8270C	---	---	10 U	9.7 U	7.9 U
2,4-Dinitrotoluene	8270C, 8330	---	---	1.7 U	1.6 U	3.5 U
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	---	1.9 U	1.8 U	2 U
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	---	0.27 U	0.25 U	3 U
2-Chlorophenol	8270C	---	---	2 U	1.9 U	3 U
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	---	---	0.4 U	0.38 U	3.5 U
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	---	2 U	1.9 U	7.4 U
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	---	4.1 U	3.9 U	4 U
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	---	0.44 U	0.42 U	3 U
4-Chlorophenylphenyl ether	8270C	---	---	1.7 U	1.6 U	2.5 U
4-Nitrophenol	8270C	---	---	1.3 U	1.2 U	5.4 U
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	---	---	0.29 U	0.27 U	3 U
Acenaphthylene	8270C, 8270C PAHs	---	---	0.5 U	0.48 U	3 U
Anthracene	8270C, 8270C PAHs	---	---	0.43 U	0.41 U	2.5 U
Benzidine	8270C	---	---	51 U	48 U	9.9 U
Benzo(a)anthracene	8270C, 8270C PAHs	---	---	0.36 U	0.34 U	2.5 U
Benzo(a)pyrene	8270C, 8270C PAHs	---	---	0.32 U	0.3 U	3 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	---	0.54 U	0.52 U	2 U
Benzo(ghi)perylene	8270C, 8270C PAHs	---	---	0.51 U	0.48 U	4 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	---	0.47 U	0.45 U	2.5 U
bis(2-Chloroethoxy)methane	8270C	---	---	0.99 U	0.94 U	3 U
bis(2-Chloroethyl) ether	8270C	---	---	0.42 U	0.4 U	3 U
bis(2-Chloroisopropyl) ether	8270C	---	---	0.29 U	0.27 U	2.5 U
bis(2-Ethylhexyl) phthalate	8270C	---	---	1.9 U	1.8 U	4 U
Butyl benzyl phthalate	8270C	---	---	1 U	0.97 U	4 U
Chrysene	8270C, 8270C PAHs	---	---	0.55 U	0.56 U	2.5 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	---	0.52 U	0.49 U	3 U
Diethyl phthalate	8270C	---	---	0.39 U	0.37 U	3.5 U
Dimethyl phthalate	8270C	---	---	0.21 U	0.2 U	2.5 U
Di-n-butyl phthalate	8270C	---	---	1.2 U	1.1 U	3 U
Di-n-octyl phthalate	8270C	---	---	0.36 U	0.34 U	3.5 U
Fluoranthene	8270C, 8270C PAHs	---	---	0.2 U	0.19 U	3 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-44**	**RD-44**	**RD-46B**	**RD-46B**	**RD-46B**
Sample Type:		Duplicate	Split	Primary	Duplicate	Split
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	TA-Irvine	TA-Denver	TA-Denver	TA-Irvine
Collection Date:		10/28/2009	10/28/2009	10/22/2009	10/22/2009	10/22/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	---	0.32 U	0.3 U	3 U
Hexachlorobenzene	8270C	---	---	0.67 U	0.64 U	3 U
Hexachlorobutadiene	8270C	---	---	3.4 U	3.2 U	4 U
Hexachloroethane	8270C	---	---	2.1 U	2 U	3.5 U
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	---	0.66 U	0.63 U	3.5 U
Isophorone	8270C	---	---	0.21 U	0.2 U	3 U
Naphthalene	8270C, 8270C PAHs	---	---	0.3 U	0.28 U	3 U
Nitrobenzene	8270C, 8330	---	---	0.83 U	0.79 U	3 U
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.005 U	0.005 U	0.3 U	0.28 U	2.5 U
n-Nitrosodi-n-propylamine	8270C	---	---	0.36 U	0.34 U	3.5 U
n-Nitrosodiphenylamine	8270C	---	---	0.45 U	0.43 U	2 U
p-Chloro-m-cresol	8270C	---	---	2.5 U	2.3 U	2.5 U
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	---	20 U	19 U	3.5 U
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	---	---	0.27 U	0.25 U	3.5 U
Phenol	8270C	---	---	2 U	1.9 U	2 U
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-49A**	**RD-49A**	**RD-49A**	**RD-49A**	**RD-49A**
Sample Type:		Primary	Primary	Split	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	Weck	TA-Denver	Lancaster	TA-Denver
Collection Date:		03/05/2009	03/05/2009	03/05/2009	05/06/2009	05/06/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	1 U	---	---	1 U	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	1 U	---	---	1 U	---
1,3-Dinitrobenzene	8270C, 8330	2 U	---	---	2 U	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	1 U	---	---	1 U	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	1 U	---	---	1 U	---
2,4-Dimethylphenol	8270C	3 U	---	---	3 U	---
2,4-Dinitrophenol	8270C	20 U	---	---	19 U	---
2,4-Dinitrotoluene	8270C, 8330	1 U	---	---	1 U	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	1 U	---	---	1 U	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	2 U	---	---	2 U	---
2-Chlorophenol	8270C	1 U	---	---	1 U	---
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	1 U	---	---	1 U	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	2 U	---	---	2 U	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	5 U	---	---	5 U	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	1 U	---	---	1 U	---
4-Chlorophenylphenyl ether	8270C	2 U	---	---	2 U	---
4-Nitrophenol	8270C	10 U	---	---	10 U	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	1 U	---	---	1 U	---
Acenaphthylene	8270C, 8270C PAHs	1 U	---	---	1 U	---
Anthracene	8270C, 8270C PAHs	1 U	---	---	1 U	---
Benzidine	8270C	20 U	---	---	19 U	---
Benzo(a)anthracene	8270C, 8270C PAHs	1 U	---	---	1 U	---
Benzo(a)pyrene	8270C, 8270C PAHs	1 U	---	---	1 U	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	1 U	---	---	1 U	---
Benzo(ghi)perylene	8270C, 8270C PAHs	1 U	---	---	1 U	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	1 U	---	---	1 U	---
bis(2-Chloroethoxy)methane	8270C	1 U	---	---	1 U	---
bis(2-Chloroethyl) ether	8270C	1 U	---	---	1 U	---
bis(2-Chloroisopropyl) ether	8270C	1 U	---	---	1 U	---
bis(2-Ethylhexyl) phthalate	8270C	2 J,L	---	---	6 U	---
Butyl benzyl phthalate	8270C	2 U	---	---	2 U	---
Chrysene	8270C, 8270C PAHs	1 U	---	---	1 U	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	1 U	---	---	1 U	---
Diethyl phthalate	8270C	2 U	---	---	2 U	---
Dimethyl phthalate	8270C	2 U	---	---	2 U	---
Di-n-butyl phthalate	8270C	2 U	---	---	2 U	---
Di-n-octyl phthalate	8270C	2 U	---	---	2 U	---
Fluoranthene	8270C, 8270C PAHs	1 U	---	---	1 U	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-49A**	**RD-49A**	**RD-49A**	**RD-49A**	**RD-49A**
Sample Type:		Primary	Primary	Split	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	Weck	TA-Denver	Lancaster	TA-Denver
Collection Date:		03/05/2009	03/05/2009	03/05/2009	05/06/2009	05/06/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	1 U	---	---	1 U	---
Hexachlorobenzene	8270C	1 U	---	---	1 U	---
Hexachlorobutadiene	8270C	1 U	---	---	1 U	---
Hexachloroethane	8270C	1 U	---	---	1 U	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	1 U	---	---	1 U	---
Isophorone	8270C	1 U	---	---	1 U	---
Naphthalene	8270C, 8270C PAHs	1 U	---	---	1 U	---
Nitrobenzene	8270C, 8330	1 U	---	---	1 U	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	2 U	0.005 U	0.005 U	2 U	0.005 U
n-Nitrosodi-n-propylamine	8270C	1 U	---	---	1 U	---
n-Nitrosodiphenylamine	8270C	2 U	---	---	2 U	---
p-Chloro-m-cresol	8270C	1 U	---	---	1 U	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	3 U	---	---	3 U	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	1 U	---	---	1 U	---
Phenol	8270C	1 U	---	---	1 U	---
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-49B**	**RD-49B**	**RD-49B**	**RD-49B**	**RD-49B**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	Weck	Lancaster	TA-Denver	Lancaster
Collection Date:		02/11/2009	02/11/2009	05/06/2009	05/06/2009	07/28/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	1 U	---	1 U	---	1 U
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	1 U	---	1 U	---	1 U
1,3-Dinitrobenzene	8270C, 8330	2 U	---	2 U	---	2 U
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	1 U	---	1 U	---	1 U
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	1 U	---	1 U	---	1 U
2,4-Dimethylphenol	8270C	3 U	---	3 U	---	3 U
2,4-Dinitrophenol	8270C	19 U	---	19 U	---	19 U
2,4-Dinitrotoluene	8270C, 8330	1 U	---	1 U	---	1 U
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	1 U	---	1 U	---	1 U
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	2 U	---	2 U	---	2 U
2-Chlorophenol	8270C	1 U	---	1 U	---	1 U
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	1 U	---	1 U	---	1 U
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	2 U	---	2 U	---	2 U
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	5 U	---	5 U	---	5 U
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	1 U	---	1 U	---	1 U
4-Chlorophenylphenyl ether	8270C	2 U	---	2 U	---	2 U
4-Nitrophenol	8270C	10 U	---	10 U	---	10 U
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U
Acenaphthylene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U
Anthracene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U
Benzidine	8270C	19 U	---	19 U	---	19 U
Benzo(a)anthracene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U
Benzo(a)pyrene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U
Benzo(ghi)perylene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U
bis(2-Chloroethoxy)methane	8270C	1 U	---	1 U	---	1 U
bis(2-Chloroethyl) ether	8270C	1 U	---	1 U	---	1 U
bis(2-Chloroisopropyl) ether	8270C	1 U	---	1 U	---	1 U
bis(2-Ethylhexyl) phthalate	8270C	2 U	---	2 U	---	2 U
Butyl benzyl phthalate	8270C	2 U	---	2 U	---	2 U
Chrysene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U
Diethyl phthalate	8270C	2 U	---	2 U	---	2 U
Dimethyl phthalate	8270C	2 U	---	2 U	---	2 U
Di-n-butyl phthalate	8270C	2 U	---	2 U	---	2 U
Di-n-octyl phthalate	8270C	2 U	---	2 U	---	2 U
Fluoranthene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-49B**	**RD-49B**	**RD-49B**	**RD-49B**	**RD-49B**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	Weck	Lancaster	TA-Denver	Lancaster
Collection Date:		02/11/2009	02/11/2009	05/06/2009	05/06/2009	07/28/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U
Hexachlorobenzene	8270C	1 U	---	1 U	---	1 U
Hexachlorobutadiene	8270C	1 U	---	1 U	---	1 U
Hexachloroethane	8270C	1 U	---	1 U	---	1 U
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U
Isophorone	8270C	1 U	---	1 U	---	1 U
Naphthalene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U
Nitrobenzene	8270C, 8330	1 U	---	1 U	---	1 U
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	2 U	0.057	2 U	0.039	2 U
n-Nitrosodi-n-propylamine	8270C	1 U	---	1 U	---	1 U
n-Nitrosodiphenylamine	8270C	2 U	---	2 U	---	2 U
p-Chloro-m-cresol	8270C	1 U	---	1 U	---	1 U
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	3 U	---	3 U	---	3 U
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	1 U	---	1 U	---	1 U
Phenol	8270C	1 U	---	1 U	---	1 U
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-49B**	**RD-49B**	**RD-49B**	**RD-49B**	**RD-49C**
Sample Type:		Primary	Primary	Primary	Duplicate	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	TA-Denver	TA-Denver	TA-Denver	Lancaster
Collection Date:		07/28/2009	10/30/2009	10/30/2009	10/30/2009	02/11/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	0.27 U	---	0.27 U	1 U
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	0.22 U	---	0.22 U	1 U
1,3-Dinitrobenzene	8270C, 8330	---	1.9 U	---	1.9 U	2 U
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	0.28 U	---	0.28 U	1 U
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	0.62 U	---	0.61 U	1 U
2,4-Dimethylphenol	8270C	---	0.56 U	---	0.55 U	3 U
2,4-Dinitrophenol	8270C	---	9.7 U	---	9.5 U	19 U
2,4-Dinitrotoluene	8270C, 8330	---	1.6 U	---	1.6 U	1 U
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	1.8 U	---	1.8 U	1 U
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	0.25 U	---	0.25 U	2 U
2-Chlorophenol	8270C	---	1.9 U	---	1.9 U	1 U
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	---	0.38 U	---	0.37 U	1 U
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	1.9 U	---	1.9 U	2 U
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	3.9 U	---	3.8 U	5 U
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	0.42 U	---	0.41 U	1 U
4-Chlorophenylphenyl ether	8270C	---	1.6 U	---	1.6 U	2 U
4-Nitrophenol	8270C	---	1.2 U	---	1.2 U	10 U
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	---	0.27 U	---	0.27 U	1 U
Acenaphthylene	8270C, 8270C PAHs	---	0.48 U	---	0.47 U	1 U
Anthracene	8270C, 8270C PAHs	---	0.41 U	---	0.4 U	1 U
Benzidine	8270C	---	48 U	---	48 U	19 U
Benzo(a)anthracene	8270C, 8270C PAHs	---	0.34 U	---	0.33 U	1 U
Benzo(a)pyrene	8270C, 8270C PAHs	---	0.3 U	---	0.29 U	1 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	0.52 U	---	0.5 U	1 U
Benzo(ghi)perylene	8270C, 8270C PAHs	---	0.48 U	---	0.48 U	1 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	0.45 U	---	0.44 U	1 U
bis(2-Chloroethoxy)methane	8270C	---	0.94 U	---	0.92 U	1 U
bis(2-Chloroethyl) ether	8270C	---	0.4 U	---	0.39 U	1 U
bis(2-Chloroisopropyl) ether	8270C	---	0.27 U	---	0.27 U	1 U
bis(2-Ethylhexyl) phthalate	8270C	---	0.54 U	---	0.53 U	27 U
Butyl benzyl phthalate	8270C	---	0.97 U	---	0.95 U	2 U
Chrysene	8270C, 8270C PAHs	---	0.52 U	---	0.51 U	1 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	0.49 U	---	0.48 U	1 U
Diethyl phthalate	8270C	---	0.37 U	---	0.36 U	2 U
Dimethyl phthalate	8270C	---	0.2 U	---	0.2 U	2 U
Di-n-butyl phthalate	8270C	---	1.1 U	---	1.1 U	2 U
Di-n-octyl phthalate	8270C	---	0.34 U	---	0.33 U	2 U
Fluoranthene	8270C, 8270C PAHs	---	0.19 U	---	0.19 U	1 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-49B**	**RD-49B**	**RD-49B**	**RD-49B**	**RD-49C**
Sample Type:		Primary	Primary	Primary	Duplicate	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	TA-Denver	TA-Denver	TA-Denver	Lancaster
Collection Date:		07/28/2009	10/30/2009	10/30/2009	10/30/2009	02/11/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	0.3 U	---	0.29 U	1 U
Hexachlorobenzene	8270C	---	0.64 U	---	0.63 U	1 U
Hexachlorobutadiene	8270C	---	3.2 U	---	3.1 U	1 U
Hexachloroethane	8270C	---	2 U	---	2 U	1 U
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	0.63 U	---	0.62 U	1 U
Isophorone	8270C	---	0.2 U	---	0.2 U	1 U
Naphthalene	8270C, 8270C PAHs	---	0.28 U	---	0.28 U	1 U
Nitrobenzene	8270C, 8330	---	0.79 U	---	0.77 U	1 U
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.042	0.28 U	0.039	0.28 U	2 U
n-Nitrosodi-n-propylamine	8270C	---	0.34 U	---	0.33 U	1 U
n-Nitrosodiphenylamine	8270C	---	0.43 U	---	0.42 U	2 U
p-Chloro-m-cresol	8270C	---	2.3 U	---	2.3 U	1 U
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	19 U	---	19 U	3 U
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	---	0.25 U	---	0.25 U	1 U
Phenol	8270C	---	1.9 U	---	1.9 U	1 U
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-49C**	**RD-49C**	**RD-49C**	**RD-49C**	**RD-49C**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Weck	Lancaster	TA-Denver	Lancaster	TA-Denver
Collection Date:		02/11/2009	05/06/2009	05/06/2009	07/28/2009	07/28/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	1 U	---	0.9 U	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	1 U	---	0.9 U	---
1,3-Dinitrobenzene	8270C, 8330	---	2 U	---	2 U	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	1 U	---	0.9 U	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	1 U	---	0.9 U	---
2,4-Dimethylphenol	8270C	---	3 U	---	3 U	---
2,4-Dinitrophenol	8270C	---	19 U	---	19 U	---
2,4-Dinitrotoluene	8270C, 8330	---	1 U	---	0.9 U	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	1 U	---	0.9 U	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	2 U	---	2 U	---
2-Chlorophenol	8270C	---	1 U	---	0.9 U	---
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	---	1 U	---	0.9 U	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	2 U	---	2 U	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	5 U	---	5 U	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	1 U	---	0.9 U	---
4-Chlorophenylphenyl ether	8270C	---	2 U	---	2 U	---
4-Nitrophenol	8270C	---	10 U	---	9 U	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---
Acenaphthylene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---
Anthracene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---
Benzidine	8270C	---	19 U	---	19 U	---
Benzo(a)anthracene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---
Benzo(a)pyrene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---
Benzo(ghi)perylene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---
bis(2-Chloroethoxy)methane	8270C	---	1 U	---	0.9 U	---
bis(2-Chloroethyl) ether	8270C	---	1 U	---	0.9 U	---
bis(2-Chloroisopropyl) ether	8270C	---	1 U	---	0.9 U	---
bis(2-Ethylhexyl) phthalate	8270C	---	3 U	---	25 L	---
Butyl benzyl phthalate	8270C	---	2 U	---	2 U	---
Chrysene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---
Diethyl phthalate	8270C	---	2 U	---	2 U	---
Dimethyl phthalate	8270C	---	2 U	---	2 U	---
Di-n-butyl phthalate	8270C	---	2 U	---	2 U	---
Di-n-octyl phthalate	8270C	---	2 U	---	2 U	---
Fluoranthene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-49C**	**RD-49C**	**RD-49C**	**RD-49C**	**RD-49C**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Weck	Lancaster	TA-Denver	Lancaster	TA-Denver
Collection Date:		02/11/2009	05/06/2009	05/06/2009	07/28/2009	07/28/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---
Hexachlorobenzene	8270C	---	1 U	---	0.9 U	---
Hexachlorobutadiene	8270C	---	1 U	---	0.9 U	---
Hexachloroethane	8270C	---	1 U	---	0.9 U	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---
Isophorone	8270C	---	1 U	---	0.9 U	---
Naphthalene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---
Nitrobenzene	8270C, 8330	---	1 U	---	0.9 U	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.0069	2 U	0.0059	2 U	0.0092
n-Nitrosodi-n-propylamine	8270C	---	1 U	---	0.9 U	---
n-Nitrosodiphenylamine	8270C	---	2 U	---	2 U	---
p-Chloro-m-cresol	8270C	---	1 U	---	0.9 U	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	3 U	---	3 U	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---
Phenol	8270C	---	1 U	---	0.9 U	---
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-49C**	**RD-49C**	**RD-49C**	**RD-49C**	**RD-51B**
Sample Type:		Split	Primary	Primary	Duplicate	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	TA-Denver	TA-Denver	TA-Denver	Lancaster
Collection Date:		07/28/2009	10/30/2009	10/30/2009	10/30/2009	02/09/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	0.27 U	0.27 U	---	0.27 U	1 U
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	0.22 U	0.22 U	---	0.22 U	1 U
1,3-Dinitrobenzene	8270C, 8330	2 U	1.9 U	---	1.9 U	2 U
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	0.28 U	0.28 U	---	0.28 U	1 U
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	0.61 U	0.61 U	---	0.61 U	1 U
2,4-Dimethylphenol	8270C	0.55 U	0.55 U	---	0.56 U	3 U
2,4-Dinitrophenol	8270C	9.5 U	9.5 U	---	9.6 U	19 U
2,4-Dinitrotoluene	8270C, 8330	1.6 U	1.6 U	---	1.6 U	1 U
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	1.8 U	1.8 U	---	1.8 U	1 U
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	0.25 U	0.25 U	---	0.25 U	2 U
2-Chlorophenol	8270C	1.9 U	1.9 U	---	1.9 U	1 U
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	0.37 U	0.37 U	---	0.37 U	1 U
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	1.9 U	1.9 U	---	1.9 U	2 U
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	3.8 U	3.8 U	---	3.8 U	5 U
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	0.41 U	0.41 U	---	0.41 U	1 U
4-Chlorophenylphenyl ether	8270C	1.6 U	1.6 U	---	1.6 U	2 U
4-Nitrophenol	8270C	1.2 U	1.2 U	---	1.2 U	10 U
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	0.27 U	0.27 U	---	0.27 U	1 U
Acenaphthylene	8270C, 8270C PAHs	0.47 U	0.47 U	---	0.47 U	1 U
Anthracene	8270C, 8270C PAHs	0.4 U	0.4 U	---	0.4 U	1 U
Benzidine	8270C	48 U	48 U	---	48 U	19 U
Benzo(a)anthracene	8270C, 8270C PAHs	0.33 U	0.33 U	---	0.34 U	1 U
Benzo(a)pyrene	8270C, 8270C PAHs	0.29 U	0.29 U	---	0.3 U	1 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	0.5 U	0.5 U	---	0.51 U	1 U
Benzo(ghi)perylene	8270C, 8270C PAHs	0.48 U	0.48 U	---	0.48 U	1 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	0.44 U	0.44 U	---	0.44 U	1 U
bis(2-Chloroethoxy)methane	8270C	0.92 U	0.92 U	---	0.93 U	1 U
bis(2-Chloroethyl) ether	8270C	0.39 U	0.39 U	---	0.39 U	1 U
bis(2-Chloroisopropyl) ether	8270C	0.27 U	0.27 U	---	0.27 U	1 U
bis(2-Ethylhexyl) phthalate	8270C	0.53 U	0.53 U	---	0.54 U	2 U
Butyl benzyl phthalate	8270C	0.95 U	0.95 U	---	0.96 U	2 U
Chrysene	8270C, 8270C PAHs	0.51 U	0.51 U	---	0.52 U	1 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	0.48 U	0.48 U	---	0.49 U	1 U
Diethyl phthalate	8270C	0.36 U	0.36 U	---	0.36 U	2 U
Dimethyl phthalate	8270C	0.2 U	0.2 U	---	0.2 U	2 U
Di-n-butyl phthalate	8270C	1.1 U	1.1 U	---	1.1 U	2 U
Di-n-octyl phthalate	8270C	0.33 U	0.33 U	---	0.34 U	2 U
Fluoranthene	8270C, 8270C PAHs	0.19 U	0.19 U	---	0.19 U	1 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-49C**	**RD-49C**	**RD-49C**	**RD-49C**	**RD-51B**
Sample Type:		Split	Primary	Primary	Duplicate	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	TA-Denver	TA-Denver	TA-Denver	Lancaster
Collection Date:		07/28/2009	10/30/2009	10/30/2009	10/30/2009	02/09/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	0.29 U	0.29 U	---	0.3 U	1 U
Hexachlorobenzene	8270C	0.63 U	0.63 U	---	0.63 U	1 U
Hexachlorobutadiene	8270C	3.1 U	3.1 U	---	3.2 U	1 U
Hexachloroethane	8270C	2 U	2 U	---	2 U	1 U
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	0.62 U	0.62 U	---	0.62 U	1 U
Isophorone	8270C	0.2 U	0.2 U	---	0.2 U	1 U
Naphthalene	8270C, 8270C PAHs	0.28 U	0.28 U	---	0.28 U	1 U
Nitrobenzene	8270C, 8330	0.77 U	0.77 U	---	0.78 U	1 U
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.28 U	0.28 U	0.0077	0.28 U	2 U
n-Nitrosodi-n-propylamine	8270C	0.33 U	0.33 U	---	0.34 U	1 U
n-Nitrosodiphenylamine	8270C	0.42 U	0.42 U	---	0.42 U	2 U
p-Chloro-m-cresol	8270C	2.3 U	2.3 U	---	2.3 U	1 U
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	19 U	19 U	---	19 U	3 U
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	0.25 U	0.25 U	---	0.25 U	1 U
Phenol	8270C	1.9 U	1.9 U	---	1.9 U	1 U
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-51B**	**RD-51B**	**RD-51B**	**RD-51B**	**RD-51B**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Weck	Lancaster	TA-Denver	Lancaster	TA-Denver
Collection Date:		02/09/2009	05/04/2009	05/04/2009	07/27/2009	07/27/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	1 U	---	1 U	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	1 U	---	1 U	---
1,3-Dinitrobenzene	8270C, 8330	---	2 U	---	2 U	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	1 U	---	1 U	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	1 U	---	1 U	---
2,4-Dimethylphenol	8270C	---	3 U	---	3 U	---
2,4-Dinitrophenol	8270C	---	20 U	---	19 U	---
2,4-Dinitrotoluene	8270C, 8330	---	1 U	---	1 U	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	1 U	---	1 U	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	2 U	---	2 U	---
2-Chlorophenol	8270C	---	1 U	---	1 U	---
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	---	1 U	---	1 U	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	2 U	---	2 U	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	5 U	---	5 U	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	1 U	---	1 U	---
4-Chlorophenylphenyl ether	8270C	---	2 U	---	2 U	---
4-Nitrophenol	8270C	---	10 U	---	10 U	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Acenaphthylene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Anthracene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Benzidine	8270C	---	20 U	---	19 U	---
Benzo(a)anthracene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Benzo(a)pyrene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Benzo(ghi)perylene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	1 U	---	1 U	---
bis(2-Chloroethoxy)methane	8270C	---	1 U	---	1 U	---
bis(2-Chloroethyl) ether	8270C	---	1 U	---	1 U	---
bis(2-Chloroisopropyl) ether	8270C	---	1 U	---	1 U	---
bis(2-Ethylhexyl) phthalate	8270C	---	2 U	---	2 U	---
Butyl benzyl phthalate	8270C	---	2 U	---	2 U	---
Chrysene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Diethyl phthalate	8270C	---	2 U	---	2 U	---
Dimethyl phthalate	8270C	---	2 U	---	2 U	---
Di-n-butyl phthalate	8270C	---	2 U	---	2 U	---
Di-n-octyl phthalate	8270C	---	2 U	---	2 U	---
Fluoranthene	8270C, 8270C PAHs	---	1 U	---	1 U	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-51B**	**RD-51B**	**RD-51B**	**RD-51B**	**RD-51B**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Weck	Lancaster	TA-Denver	Lancaster	TA-Denver
Collection Date:		02/09/2009	05/04/2009	05/04/2009	07/27/2009	07/27/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Hexachlorobenzene	8270C	---	1 U	---	1 U	---
Hexachlorobutadiene	8270C	---	1 U	---	1 U	---
Hexachloroethane	8270C	---	1 U	---	1 U	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Isophorone	8270C	---	1 U	---	1 U	---
Naphthalene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Nitrobenzene	8270C, 8330	---	1 U	---	1 U	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.005 U	2 U	0.005 U	2 U	0.005 U
n-Nitrosodi-n-propylamine	8270C	---	1 U	---	1 U	---
n-Nitrosodiphenylamine	8270C	---	2 U	---	2 U	---
p-Chloro-m-cresol	8270C	---	1 U	---	1 U	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	3 U	---	3 U	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	---	1 U	---	1 U	---
Phenol	8270C	---	1 U	---	1 U	---
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-51B**	**RD-51B**	**RD-51B**	**RD-51C**	**RD-51C**
Sample Type:		Duplicate	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	TA-Denver	Lancaster	Weck
Collection Date:		07/27/2009	10/19/2009	10/19/2009	02/10/2009	02/10/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	1 U	0.27 U	---	0.9 U	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	1 U	0.22 U	---	0.9 U	---
1,3-Dinitrobenzene	8270C, 8330	2 U	1.9 U	---	2 U	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	1 U	0.28 U	---	0.9 U	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	1 U	0.61 U	---	0.9 U	---
2,4-Dimethylphenol	8270C	3 U	0.56 U	---	3 U	---
2,4-Dinitrophenol	8270C	19 U	9.6 U	---	19 U	---
2,4-Dinitrotoluene	8270C, 8330	1 U	1.6 U	---	0.9 U	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	1 U	1.8 U	---	0.9 U	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	2 U	0.25 U	---	2 U	---
2-Chlorophenol	8270C	1 U	1.9 U	---	0.9 U	---
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	1 U	0.37 U	---	0.9 U	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	2 U	1.9 U	---	2 U	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	5 U	3.8 U	---	5 U	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	1 U	0.41 U	---	0.9 U	---
4-Chlorophenylphenyl ether	8270C	2 U	1.6 U	---	2 U	---
4-Nitrophenol	8270C	10 U	1.2 U	---	9 U	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	1 U	0.27 U	---	0.9 U	---
Acenaphthylene	8270C, 8270C PAHs	1 U	0.47 U	---	0.9 U	---
Anthracene	8270C, 8270C PAHs	1 U	0.4 U	---	0.9 U	---
Benzidine	8270C	19 U	48 U	---	19 U	---
Benzo(a)anthracene	8270C, 8270C PAHs	1 U	0.34 U	---	0.9 U	---
Benzo(a)pyrene	8270C, 8270C PAHs	1 U	0.3 U	---	0.9 U	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	1 U	0.51 U	---	0.9 U	---
Benzo(ghi)perylene	8270C, 8270C PAHs	1 U	0.48 U	---	0.9 U	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	1 U	0.44 U	---	0.9 U	---
bis(2-Chloroethoxy)methane	8270C	1 U	0.93 U	---	0.9 U	---
bis(2-Chloroethyl) ether	8270C	1 U	0.39 U	---	0.9 U	---
bis(2-Chloroisopropyl) ether	8270C	1 U	0.27 U	---	0.9 U	---
bis(2-Ethylhexyl) phthalate	8270C	2 U	2.1 U	---	2 U	---
Butyl benzyl phthalate	8270C	2 U	0.96 U	---	2 U	---
Chrysene	8270C, 8270C PAHs	1 U	0.52 U	---	0.9 U	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	1 U	0.49 U	---	0.9 U	---
Diethyl phthalate	8270C	2 U	0.36 U	---	2 U	---
Dimethyl phthalate	8270C	2 U	0.2 U	---	2 U	---
Di-n-butyl phthalate	8270C	2 U	1.1 U	---	2 U	---
Di-n-octyl phthalate	8270C	2 U	0.34 U	---	2 U	---
Fluoranthene	8270C, 8270C PAHs	1 U	0.19 U	---	0.9 U	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-51B**	**RD-51B**	**RD-51B**	**RD-51C**	**RD-51C**
Sample Type:		Duplicate	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	TA-Denver	Lancaster	Weck
Collection Date:		07/27/2009	10/19/2009	10/19/2009	02/10/2009	02/10/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	1 U	0.3 U	---	0.9 U	---
Hexachlorobenzene	8270C	1 U	0.63 U	---	0.9 U	---
Hexachlorobutadiene	8270C	1 U	3.2 U	---	0.9 U	---
Hexachloroethane	8270C	1 U	2 U	---	0.9 U	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	1 U	0.62 U	---	0.9 U	---
Isophorone	8270C	1 U	0.2 U	---	0.9 U	---
Naphthalene	8270C, 8270C PAHs	1 U	0.28 U	---	0.9 U	---
Nitrobenzene	8270C, 8330	1 U	0.78 U	---	0.9 U	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	2 U	0.28 U	0.005 U	2 U	0.005 U
n-Nitrosodi-n-propylamine	8270C	1 U	0.34 U	---	0.9 U	---
n-Nitrosodiphenylamine	8270C	2 U	0.42 U	---	2 U	---
p-Chloro-m-cresol	8270C	1 U	2.3 U	---	0.9 U	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	3 U	19 U	---	3 U	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	1 U	0.25 U	---	0.9 U	---
Phenol	8270C	1 U	1.9 U	---	0.9 U	---
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-51C**	**RD-51C**	**RD-51C**	**RD-51C**	**RD-51C**
Sample Type:		Duplicate	Primary	Primary	Duplicate	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Weck	Lancaster	TA-Denver	TA-Denver	Lancaster
Collection Date:		02/10/2009	05/05/2009	05/05/2009	05/05/2009	07/27/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	1 U	---	---	1 U
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	1 U	---	---	1 U
1,3-Dinitrobenzene	8270C, 8330	---	2 U	---	---	2 U
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	1 U	---	---	1 U
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	1 U	---	---	1 U
2,4-Dimethylphenol	8270C	---	3 U	---	---	3 U
2,4-Dinitrophenol	8270C	---	20 U	---	---	19 U
2,4-Dinitrotoluene	8270C, 8330	---	1 U	---	---	1 U
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	1 U	---	---	1 U
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	2 U	---	---	2 U
2-Chlorophenol	8270C	---	1 U	---	---	1 U
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	---	1 U	---	---	1 U
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	2 U	---	---	2 U
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	5 U	---	---	5 U
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	1 U	---	---	1 U
4-Chlorophenylphenyl ether	8270C	---	2 U	---	---	2 U
4-Nitrophenol	8270C	---	10 U	---	---	10 U
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	---	1 U	---	---	1 U
Acenaphthylene	8270C, 8270C PAHs	---	1 U	---	---	1 U
Anthracene	8270C, 8270C PAHs	---	1 U	---	---	1 U
Benzidine	8270C	---	20 U	---	---	19 U
Benzo(a)anthracene	8270C, 8270C PAHs	---	1 U	---	---	1 U
Benzo(a)pyrene	8270C, 8270C PAHs	---	1 U	---	---	1 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	1 U	---	---	1 U
Benzo(ghi)perylene	8270C, 8270C PAHs	---	1 U	---	---	1 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	1 U	---	---	1 U
bis(2-Chloroethoxy)methane	8270C	---	1 U	---	---	1 U
bis(2-Chloroethyl) ether	8270C	---	1 U	---	---	1 U
bis(2-Chloroisopropyl) ether	8270C	---	1 U	---	---	1 U
bis(2-Ethylhexyl) phthalate	8270C	---	2 U	---	---	2 U
Butyl benzyl phthalate	8270C	---	2 U	---	---	2 U
Chrysene	8270C, 8270C PAHs	---	1 U	---	---	1 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	1 U	---	---	1 U
Diethyl phthalate	8270C	---	2 U	---	---	2 U
Dimethyl phthalate	8270C	---	2 U	---	---	2 U
Di-n-butyl phthalate	8270C	---	2 U	---	---	2 U
Di-n-octyl phthalate	8270C	---	2 U	---	---	2 U
Fluoranthene	8270C, 8270C PAHs	---	1 U	---	---	1 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-51C**	**RD-51C**	**RD-51C**	**RD-51C**	**RD-51C**
Sample Type:		Duplicate	Primary	Primary	Duplicate	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Weck	Lancaster	TA-Denver	TA-Denver	Lancaster
Collection Date:		02/10/2009	05/05/2009	05/05/2009	05/05/2009	07/27/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	1 U	---	---	1 U
Hexachlorobenzene	8270C	---	1 U	---	---	1 U
Hexachlorobutadiene	8270C	---	1 U	---	---	1 U
Hexachloroethane	8270C	---	1 U	---	---	1 U
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	1 U	---	---	1 U
Isophorone	8270C	---	1 U	---	---	1 U
Naphthalene	8270C, 8270C PAHs	---	1 U	---	---	1 U
Nitrobenzene	8270C, 8330	---	1 U	---	---	1 U
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.005 U	2 U	0.005 U	0.005 U	2 U
n-Nitrosodi-n-propylamine	8270C	---	1 U	---	---	1 U
n-Nitrosodiphenylamine	8270C	---	2 U	---	---	2 U
p-Chloro-m-cresol	8270C	---	1 U	---	---	1 U
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	3 U	---	---	3 U
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	---	1 U	---	---	1 U
Phenol	8270C	---	1 U	---	---	1 U
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-51C**	**RD-51C**	**RD-51C**	**RD-51C**	**RD-51C**
Sample Type:		Primary	Duplicate	Primary	Primary	Duplicate
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	TA-Denver	TA-Denver	TA-Denver	TA-Denver
Collection Date:		07/27/2009	07/27/2009	10/19/2009	10/19/2009	10/19/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	---	0.27 U	---	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	---	0.22 U	---	---
1,3-Dinitrobenzene	8270C, 8330	---	---	1.9 U	---	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	---	0.28 U	---	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	---	0.61 U	---	---
2,4-Dimethylphenol	8270C	---	---	0.55 U	---	---
2,4-Dinitrophenol	8270C	---	---	9.5 U	---	---
2,4-Dinitrotoluene	8270C, 8330	---	---	1.6 U	---	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	---	1.8 U	---	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	---	0.25 U	---	---
2-Chlorophenol	8270C	---	---	1.9 U	---	---
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	---	---	0.37 U	---	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	---	1.9 U	---	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	---	3.8 U	---	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	---	0.41 U	---	---
4-Chlorophenylphenyl ether	8270C	---	---	1.6 U	---	---
4-Nitrophenol	8270C	---	---	1.2 U	---	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	---	---	0.27 U	---	---
Acenaphthylene	8270C, 8270C PAHs	---	---	0.47 U	---	---
Anthracene	8270C, 8270C PAHs	---	---	0.4 U	---	---
Benzidine	8270C	---	---	48 U	---	---
Benzo(a)anthracene	8270C, 8270C PAHs	---	---	0.33 U	---	---
Benzo(a)pyrene	8270C, 8270C PAHs	---	---	0.29 U	---	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	---	0.5 U	---	---
Benzo(ghi)perylene	8270C, 8270C PAHs	---	---	0.48 U	---	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	---	0.44 U	---	---
bis(2-Chloroethoxy)methane	8270C	---	---	0.92 U	---	---
bis(2-Chloroethyl) ether	8270C	---	---	0.39 U	---	---
bis(2-Chloroisopropyl) ether	8270C	---	---	0.27 U	---	---
bis(2-Ethylhexyl) phthalate	8270C	---	---	2 U	---	---
Butyl benzyl phthalate	8270C	---	---	0.95 U	---	---
Chrysene	8270C, 8270C PAHs	---	---	0.51 U	---	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	---	0.48 U	---	---
Diethyl phthalate	8270C	---	---	0.36 U	---	---
Dimethyl phthalate	8270C	---	---	0.2 U	---	---
Di-n-butyl phthalate	8270C	---	---	1.1 U	---	---
Di-n-octyl phthalate	8270C	---	---	0.33 U	---	---
Fluoranthene	8270C, 8270C PAHs	---	---	0.19 U	---	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-51C**	**RD-51C**	**RD-51C**	**RD-51C**	**RD-51C**
Sample Type:		Primary	Duplicate	Primary	Primary	Duplicate
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	TA-Denver	TA-Denver	TA-Denver	TA-Denver
Collection Date:		07/27/2009	07/27/2009	10/19/2009	10/19/2009	10/19/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	---	0.29 U	---	---
Hexachlorobenzene	8270C	---	---	0.63 U	---	---
Hexachlorobutadiene	8270C	---	---	3.1 U	---	---
Hexachloroethane	8270C	---	---	2 U	---	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	---	0.62 U	---	---
Isophorone	8270C	---	---	0.2 U	---	---
Naphthalene	8270C, 8270C PAHs	---	---	0.28 U	---	---
Nitrobenzene	8270C, 8330	---	---	0.77 U	---	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.005 U	0.005 U	0.28 U	0.005 U	0.005 U
n-Nitrosodi-n-propylamine	8270C	---	---	0.33 U	---	---
n-Nitrosodiphenylamine	8270C	---	---	0.42 U	---	---
p-Chloro-m-cresol	8270C	---	---	2.3 U	---	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	---	19 U	---	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	---	---	0.25 U	---	---
Phenol	8270C	---	---	1.9 U	---	---
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-51C**	**RD-55A**	**RD-55A**	**RD-55A**	**RD-55A**
Sample Type:		Split	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Irvine	Lancaster	Weck	Lancaster	TA-Denver
Collection Date:		10/19/2009	02/18/2009	02/18/2009	04/30/2009	04/30/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	0.9 U	---	1 U	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	0.9 U	---	1 U	---
1,3-Dinitrobenzene	8270C, 8330	---	2 U	---	2 U	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	0.9 U	---	1 U	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	0.9 U	---	1 U	---
2,4-Dimethylphenol	8270C	---	3 U	---	3 U	---
2,4-Dinitrophenol	8270C	---	19 U	---	20 U	---
2,4-Dinitrotoluene	8270C, 8330	---	0.9 U	---	1 U	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	0.9 U	---	1 U	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	2 U	---	2 U	---
2-Chlorophenol	8270C	---	0.9 U	---	1 U	---
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	---	0.9 U	---	1 U	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	2 U	---	2 U	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	5 U	---	5 U	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	0.9 U	---	1 U	---
4-Chlorophenylphenyl ether	8270C	---	2 U	---	2 U	---
4-Nitrophenol	8270C	---	9 U	---	10 U	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Acenaphthylene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Anthracene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Benzidine	8270C	---	19 U	---	20 U	---
Benzo(a)anthracene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Benzo(a)pyrene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Benzo(ghi)perylene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
bis(2-Chloroethoxy)methane	8270C	---	0.9 U	---	1 U	---
bis(2-Chloroethyl) ether	8270C	---	0.9 U	---	1 U	---
bis(2-Chloroisopropyl) ether	8270C	---	0.9 U	---	1 U	---
bis(2-Ethylhexyl) phthalate	8270C	---	2 U	---	2 U	---
Butyl benzyl phthalate	8270C	---	2 U	---	2 U	---
Chrysene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Diethyl phthalate	8270C	---	2 U	---	2 U	---
Dimethyl phthalate	8270C	---	2 U	---	2 U	---
Di-n-butyl phthalate	8270C	---	2 U	---	2 U	---
Di-n-octyl phthalate	8270C	---	2 U	---	2 U	---
Fluoranthene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-51C**	**RD-55A**	**RD-55A**	**RD-55A**	**RD-55A**
Sample Type:		Split	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Irvine	Lancaster	Weck	Lancaster	TA-Denver
Collection Date:		10/19/2009	02/18/2009	02/18/2009	04/30/2009	04/30/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Hexachlorobenzene	8270C	---	0.9 U	---	1 U	---
Hexachlorobutadiene	8270C	---	0.9 U	---	1 U	---
Hexachloroethane	8270C	---	0.9 U	---	1 U	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Isophorone	8270C	---	0.9 U	---	1 U	---
Naphthalene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Nitrobenzene	8270C, 8330	---	0.9 U	---	1 U	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.005 U	2 U	0.005 U	2 U	0.005 U
n-Nitrosodi-n-propylamine	8270C	---	0.9 U	---	1 U	---
n-Nitrosodiphenylamine	8270C	---	2 U	---	2 U	---
p-Chloro-m-cresol	8270C	---	0.9 U	---	1 U	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	3 U	---	3 U	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Phenol	8270C	---	0.9 U	---	1 U	---
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-55A**	**RD-55A**	**RD-55A**	**RD-55A**	**RD-55B**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	TA-Denver	TA-Denver	Lancaster
Collection Date:		07/21/2009	07/21/2009	11/03/2009	11/03/2009	02/12/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	1 U	---	0.27 U	---	1 U
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	1 U	---	0.22 U	---	1 U
1,3-Dinitrobenzene	8270C, 8330	2 U	---	1.9 U	---	2 U
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	1 U	---	0.28 U	---	1 U
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	1 U	---	0.61 U	---	1 U
2,4-Dimethylphenol	8270C	3 U	---	0.56 U	---	3 U
2,4-Dinitrophenol	8270C	19 U	---	9.6 U	---	20 U
2,4-Dinitrotoluene	8270C, 8330	1 U	---	1.6 U	---	1 U
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	1 U	---	1.8 U	---	1 U
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	2 U	---	0.25 U	---	2 U
2-Chlorophenol	8270C	1 U	---	1.9 U	---	1 U
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	1 U	---	0.37 U	---	1 U
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	2 U	---	1.9 U	---	2 U
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	5 U	---	3.8 U	---	5 U
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	1 U	---	0.41 U	---	1 U
4-Chlorophenylphenyl ether	8270C	2 U	---	1.6 U	---	2 U
4-Nitrophenol	8270C	10 U	---	1.2 U	---	10 U
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	1 U	---	0.27 U	---	1 U
Acenaphthylene	8270C, 8270C PAHs	1 U	---	0.47 U	---	1 U
Anthracene	8270C, 8270C PAHs	1 U	---	0.4 U	---	1 U
Benzidine	8270C	19 U	---	48 U	---	20 U
Benzo(a)anthracene	8270C, 8270C PAHs	1 U	---	0.34 U	---	1 U
Benzo(a)pyrene	8270C, 8270C PAHs	1 U	---	0.3 U	---	1 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	1 U	---	0.51 U	---	1 U
Benzo(ghi)perylene	8270C, 8270C PAHs	1 U	---	0.48 U	---	1 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	1 U	---	0.44 U	---	1 U
bis(2-Chloroethoxy)methane	8270C	1 U	---	0.93 U	---	1 U
bis(2-Chloroethyl) ether	8270C	1 U	---	0.39 U	---	1 U
bis(2-Chloroisopropyl) ether	8270C	1 U	---	0.27 U	---	1 U
bis(2-Ethylhexyl) phthalate	8270C	2 U	---	0.54 U	---	2 U
Butyl benzyl phthalate	8270C	2 U	---	0.96 U	---	2 U
Chrysene	8270C, 8270C PAHs	1 U	---	0.52 U	---	1 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	1 U	---	0.49 U	---	1 U
Diethyl phthalate	8270C	2 U	---	0.36 U	---	2 U
Dimethyl phthalate	8270C	2 U	---	0.2 U	---	2 U
Di-n-butyl phthalate	8270C	2 U	---	1.1 U	---	2 U
Di-n-octyl phthalate	8270C	2 U	---	0.34 U	---	2 U
Fluoranthene	8270C, 8270C PAHs	1 U	---	0.19 U	---	1 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-55A**	**RD-55A**	**RD-55A**	**RD-55A**	**RD-55B**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	TA-Denver	TA-Denver	Lancaster
Collection Date:		07/21/2009	07/21/2009	11/03/2009	11/03/2009	02/12/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	1 U	---	0.3 U	---	1 U
Hexachlorobenzene	8270C	1 U	---	0.63 U	---	1 U
Hexachlorobutadiene	8270C	1 U	---	3.2 U	---	1 U
Hexachloroethane	8270C	1 U	---	2 U	---	1 U
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	1 U	---	0.62 U	---	1 U
Isophorone	8270C	1 U	---	0.2 U	---	1 U
Naphthalene	8270C, 8270C PAHs	1 U	---	0.28 U	---	1 U
Nitrobenzene	8270C, 8330	1 U	---	0.78 U	---	1 U
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	2 U	0.005 U	0.28 U	0.005 U	2 U
n-Nitrosodi-n-propylamine	8270C	1 U	---	0.34 U	---	1 U
n-Nitrosodiphenylamine	8270C	2 U	---	0.42 U	---	2 U
p-Chloro-m-cresol	8270C	1 U	---	2.3 U	---	1 U
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	3 U	---	19 U	---	3 U
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	1 U	---	0.25 U	---	1 U
Phenol	8270C	1 U	---	1.9 U	---	1 U
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-55B**	**RD-55B**	**RD-55B**	**RD-55B**	**RD-55B**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Weck	Lancaster	TA-Denver	Lancaster	TA-Denver
Collection Date:		02/12/2009	04/30/2009	04/30/2009	07/21/2009	07/21/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	0.9 U	---	1 U	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	0.9 U	---	1 U	---
1,3-Dinitrobenzene	8270C, 8330	---	2 U	---	2 U	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	0.9 U	---	1 U	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	0.9 U	---	1 U	---
2,4-Dimethylphenol	8270C	---	3 U	---	3 U	---
2,4-Dinitrophenol	8270C	---	19 U	---	19 U	---
2,4-Dinitrotoluene	8270C, 8330	---	0.9 U	---	1 U	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	0.9 U	---	1 U	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	2 U	---	2 U	---
2-Chlorophenol	8270C	---	0.9 U	---	1 U	---
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	---	0.9 U	---	1 U	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	2 U	---	2 U	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	5 U	---	5 U	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	0.9 U	---	1 U	---
4-Chlorophenylphenyl ether	8270C	---	2 U	---	2 U	---
4-Nitrophenol	8270C	---	9 U	---	10 U	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Acenaphthylene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Anthracene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Benzidine	8270C	---	19 U	---	19 U	---
Benzo(a)anthracene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Benzo(a)pyrene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Benzo(ghi)perylene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
bis(2-Chloroethoxy)methane	8270C	---	0.9 U	---	1 U	---
bis(2-Chloroethyl) ether	8270C	---	0.9 U	---	1 U	---
bis(2-Chloroisopropyl) ether	8270C	---	0.9 U	---	1 U	---
bis(2-Ethylhexyl) phthalate	8270C	---	2 U	---	2 U	---
Butyl benzyl phthalate	8270C	---	2 U	---	2 U	---
Chrysene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Diethyl phthalate	8270C	---	2 U	---	2 U	---
Dimethyl phthalate	8270C	---	2 U	---	2 U	---
Di-n-butyl phthalate	8270C	---	2 U	---	2 U	---
Di-n-octyl phthalate	8270C	---	2 U	---	2 U	---
Fluoranthene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-55B**	**RD-55B**	**RD-55B**	**RD-55B**	**RD-55B**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Weck	Lancaster	TA-Denver	Lancaster	TA-Denver
Collection Date:		02/12/2009	04/30/2009	04/30/2009	07/21/2009	07/21/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Hexachlorobenzene	8270C	---	0.9 U	---	1 U	---
Hexachlorobutadiene	8270C	---	0.9 U	---	1 U	---
Hexachloroethane	8270C	---	0.9 U	---	1 U	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Isophorone	8270C	---	0.9 U	---	1 U	---
Naphthalene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Nitrobenzene	8270C, 8330	---	0.9 U	---	1 U	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.005 U	2 U	0.005 U	2 U	0.005 U
n-Nitrosodi-n-propylamine	8270C	---	0.9 U	---	1 U	---
n-Nitrosodiphenylamine	8270C	---	2 U	---	2 U	---
p-Chloro-m-cresol	8270C	---	0.9 U	---	1 U	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	3 U	---	3 U	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Phenol	8270C	---	0.9 U	---	1 U	---
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-55B**	**RD-55B**	**RD-58A**	**RD-58A**	**RD-58A**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	TA-Denver	Lancaster	Weck	Lancaster
Collection Date:		11/02/2009	11/02/2009	03/05/2009	03/05/2009	05/11/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	0.27 U	---	1 U	---	0.9 U
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	0.23 U	---	1 U	---	0.9 U
1,3-Dinitrobenzene	8270C, 8330	2 U	---	2 U	---	2 U
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	0.28 U	---	1 U	---	0.9 U
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	0.63 U	---	1 U	---	0.9 U
2,4-Dimethylphenol	8270C	0.57 U	---	3 U	---	3 U
2,4-Dinitrophenol	8270C	9.8 U	---	19 U	---	19 U
2,4-Dinitrotoluene	8270C, 8330	1.6 U	---	1 U	---	0.9 U
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	1.9 U	---	1 U	---	0.9 U
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	0.25 U	---	2 U	---	2 U
2-Chlorophenol	8270C	2 U	---	1 U	---	0.9 U
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	0.38 U	---	1 U	---	0.9 U
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	2 U	---	2 U	---	2 U
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	3.9 U	---	5 U	---	5 U
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	0.42 U	---	1 U	---	0.9 U
4-Chlorophenylphenyl ether	8270C	1.6 U	---	2 U	---	2 U
4-Nitrophenol	8270C	1.2 U	---	10 U	---	9 U
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	0.27 U	---	1 U	---	0.9 U
Acenaphthylene	8270C, 8270C PAHs	0.48 U	---	1 U	---	0.9 U
Anthracene	8270C, 8270C PAHs	0.41 U	---	1 U	---	0.9 U
Benzidine	8270C	49 U	---	19 U	---	19 U
Benzo(a)anthracene	8270C, 8270C PAHs	0.34 U	---	1 U	---	0.9 U
Benzo(a)pyrene	8270C, 8270C PAHs	0.3 U	---	1 U	---	0.9 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	0.52 U	---	1 U	---	0.9 U
Benzo(ghi)perylene	8270C, 8270C PAHs	0.49 U	---	1 U	---	0.9 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	0.45 U	---	1 U	---	0.9 U
bis(2-Chloroethoxy)methane	8270C	0.95 U	---	1 U	---	0.9 U
bis(2-Chloroethyl) ether	8270C	0.4 U	---	1 U	---	0.9 U
bis(2-Chloroisopropyl) ether	8270C	0.27 U	---	1 U	---	0.9 U
bis(2-Ethylhexyl) phthalate	8270C	2.8 U	---	2 U	---	2 J,L
Butyl benzyl phthalate	8270C	0.98 U	---	2 U	---	2 U
Chrysene	8270C, 8270C PAHs	0.53 U	---	1 U	---	0.9 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	0.5 U	---	1 U	---	0.9 U
Diethyl phthalate	8270C	0.37 U	---	2 U	---	2 U
Dimethyl phthalate	8270C	0.21 U	---	2 U	---	2 U
Di-n-butyl phthalate	8270C	1.1 U	---	2 U	---	2 U
Di-n-octyl phthalate	8270C	0.34 U	---	2 U	---	2 U
Fluoranthene	8270C, 8270C PAHs	0.2 U	---	1 U	---	0.9 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-55B**	**RD-55B**	**RD-58A**	**RD-58A**	**RD-58A**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	TA-Denver	Lancaster	Weck	Lancaster
Collection Date:		11/02/2009	11/02/2009	03/05/2009	03/05/2009	05/11/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	0.3 U	---	1 U	---	0.9 U
Hexachlorobenzene	8270C	0.65 U	---	1 U	---	0.9 U
Hexachlorobutadiene	8270C	3.2 U	---	1 U	---	0.9 U
Hexachloroethane	8270C	2.1 U	---	1 U	---	0.9 U
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	0.64 U	---	1 U	---	0.9 U
Isophorone	8270C	0.21 U	---	1 U	---	0.9 U
Naphthalene	8270C, 8270C PAHs	0.28 U	---	1 U	---	0.9 U
Nitrobenzene	8270C, 8330	0.79 U	---	1 U	---	0.9 U
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.28 U	0.005 U	2 U	0.005 U	2 U
n-Nitrosodi-n-propylamine	8270C	0.34 U	---	1 U	---	0.9 U
n-Nitrosodiphenylamine	8270C	0.43 U	---	2 U	---	2 U
p-Chloro-m-cresol	8270C	2.4 U	---	1 U	---	0.9 U
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	20 U	---	3 U	---	3 U
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	0.25 U	---	1 U	---	0.9 U
Phenol	8270C	2 U	---	1 U	---	0.9 U
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-58A**	**RD-58A**	**RD-58A**	**RD-58A**	**RD-58A**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	TA-Denver	TA-Denver	TA-Denver
Collection Date:		05/11/2009	08/04/2009	08/04/2009	10/22/2009	10/22/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	0.9 U	---	0.27 U	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	0.9 U	---	0.22 U	---
1,3-Dinitrobenzene	8270C, 8330	---	2 U	---	1.9 U	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	0.9 U	---	0.28 U	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	0.9 U	---	0.61 U	---
2,4-Dimethylphenol	8270C	---	3 U	---	0.56 U	---
2,4-Dinitrophenol	8270C	---	19 U	---	9.6 U	---
2,4-Dinitrotoluene	8270C, 8330	---	0.9 U	---	1.6 U	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	0.9 U	---	1.8 U	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	2 U	---	0.25 U	---
2-Chlorophenol	8270C	---	0.9 U	---	1.9 U	---
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	---	0.9 U	---	0.37 U	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	2 U	---	1.9 U	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	5 U	---	3.8 U	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	0.9 U	---	0.41 U	---
4-Chlorophenylphenyl ether	8270C	---	2 U	---	1.6 U	---
4-Nitrophenol	8270C	---	9 U	---	1.2 U	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	---	0.9 U	---	0.27 U	---
Acenaphthylene	8270C, 8270C PAHs	---	0.9 U	---	0.47 U	---
Anthracene	8270C, 8270C PAHs	---	0.9 U	---	0.4 U	---
Benzidine	8270C	---	19 U	---	48 U	---
Benzo(a)anthracene	8270C, 8270C PAHs	---	0.9 U	---	0.34 U	---
Benzo(a)pyrene	8270C, 8270C PAHs	---	0.9 U	---	0.3 U	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	0.9 U	---	0.51 U	---
Benzo(ghi)perylene	8270C, 8270C PAHs	---	0.9 U	---	0.48 U	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	0.9 U	---	0.44 U	---
bis(2-Chloroethoxy)methane	8270C	---	0.9 U	---	0.93 U	---
bis(2-Chloroethyl) ether	8270C	---	0.9 U	---	0.39 U	---
bis(2-Chloroisopropyl) ether	8270C	---	0.9 U	---	0.27 U	---
bis(2-Ethylhexyl) phthalate	8270C	---	2 U	---	2.1 U	---
Butyl benzyl phthalate	8270C	---	2 U	---	0.96 U	---
Chrysene	8270C, 8270C PAHs	---	0.9 U	---	0.52 U	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	0.9 U	---	0.49 U	---
Diethyl phthalate	8270C	---	2 U	---	0.36 U	---
Dimethyl phthalate	8270C	---	2 U	---	0.2 U	---
Di-n-butyl phthalate	8270C	---	2 U	---	1.1 U	---
Di-n-octyl phthalate	8270C	---	2 U	---	0.34 U	---
Fluoranthene	8270C, 8270C PAHs	---	0.9 U	---	0.19 U	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-58A**	**RD-58A**	**RD-58A**	**RD-58A**	**RD-58A**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	TA-Denver	TA-Denver	TA-Denver
Collection Date:		05/11/2009	08/04/2009	08/04/2009	10/22/2009	10/22/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	0.9 U	---	0.3 U	---
Hexachlorobenzene	8270C	---	0.9 U	---	0.63 U	---
Hexachlorobutadiene	8270C	---	0.9 U	---	3.2 U	---
Hexachloroethane	8270C	---	0.9 U	---	2 U	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	0.9 U	---	0.62 U	---
Isophorone	8270C	---	0.9 U	---	0.2 U	---
Naphthalene	8270C, 8270C PAHs	---	0.9 U	---	0.28 U	---
Nitrobenzene	8270C, 8330	---	0.9 U	---	0.78 U	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.005 U	2 U	0.005 U	0.28 U	0.005 U
n-Nitrosodi-n-propylamine	8270C	---	0.9 U	---	0.34 U	---
n-Nitrosodiphenylamine	8270C	---	2 U	---	0.42 U	---
p-Chloro-m-cresol	8270C	---	0.9 U	---	2.3 U	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	3 U	---	19 U	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	---	0.9 U	---	0.25 U	---
Phenol	8270C	---	0.9 U	---	1.9 U	---
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-58B**	**RD-58B**	**RD-58B**	**RD-58B**	**RD-58B**
Sample Type:		Primary	Primary	Duplicate	Split	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	Weck	Lancaster	TA-Denver	Lancaster
Collection Date:		02/11/2009	02/11/2009	02/11/2009	02/11/2009	05/11/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	1 U	---	1 U	0.27 U	0.9 U
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	1 U	---	1 U	0.22 U	0.9 U
1,3-Dinitrobenzene	8270C, 8330	2 U	---	2 U	1.9 U	2 U
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	1 U	---	1 U	0.28 U	0.9 U
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	1 U	---	1 U	0.62 U	0.9 U
2,4-Dimethylphenol	8270C	3 U	---	3 U	0.56 U	3 U
2,4-Dinitrophenol	8270C	19 U	---	19 U	9.7 U	19 U
2,4-Dinitrotoluene	8270C, 8330	1 U	---	1 U	1.6 U	0.9 U
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	1 U	---	1 U	1.8 U	0.9 U
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	2 U	---	2 U	0.25 U	2 U
2-Chlorophenol	8270C	1 U	---	1 U	1.9 U	0.9 U
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	1 U	---	1 U	0.38 U	0.9 U
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	2 U	---	2 U	1.9 U	2 U
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	5 U	---	5 U	3.9 U	5 U
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	1 U	---	1 U	0.42 U	0.9 U
4-Chlorophenylphenyl ether	8270C	2 U	---	2 U	1.6 U	2 U
4-Nitrophenol	8270C	10 U	---	10 U	1.2 U	9 U
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	1 U	---	1 U	0.27 U	0.9 U
Acenaphthylene	8270C, 8270C PAHs	1 U	---	1 U	0.48 U	0.9 U
Anthracene	8270C, 8270C PAHs	1 U	---	1 U	0.41 U	0.9 U
Benzidine	8270C	19 U	---	19 U	48 U	19 U
Benzo(a)anthracene	8270C, 8270C PAHs	1 U	---	1 U	0.34 U	0.9 U
Benzo(a)pyrene	8270C, 8270C PAHs	1 U	---	1 U	0.3 U	0.9 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	1 U	---	1 U	0.52 U	0.9 U
Benzo(ghi)perylene	8270C, 8270C PAHs	1 U	---	1 U	0.48 U	0.9 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	1 U	---	1 U	0.45 U	0.9 U
bis(2-Chloroethoxy)methane	8270C	1 U	---	1 U	0.94 U	0.9 U
bis(2-Chloroethyl) ether	8270C	1 U	---	1 U	0.4 U	0.9 U
bis(2-Chloroisopropyl) ether	8270C	1 U	---	1 U	0.27 U	0.9 U
bis(2-Ethylhexyl) phthalate	8270C	2 U	---	18 U	0.69 J,L	2 U
Butyl benzyl phthalate	8270C	2 U	---	2 U	0.97 U	2 U
Chrysene	8270C, 8270C PAHs	1 U	---	1 U	0.52 U	0.9 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	1 U	---	1 U	0.49 U	0.9 U
Diethyl phthalate	8270C	2 U	---	2 U	0.37 U	2 U
Dimethyl phthalate	8270C	2 U	---	2 U	0.2 U	2 U
Di-n-butyl phthalate	8270C	2 U	---	2 U	1.1 U	2 U
Di-n-octyl phthalate	8270C	2 U	---	2 U	0.34 U	2 U
Fluoranthene	8270C, 8270C PAHs	1 U	---	1 U	0.19 U	0.9 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-58B**	**RD-58B**	**RD-58B**	**RD-58B**	**RD-58B**
Sample Type:		Primary	Primary	Duplicate	Split	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	Weck	Lancaster	TA-Denver	Lancaster
Collection Date:		02/11/2009	02/11/2009	02/11/2009	02/11/2009	05/11/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	1 U	---	1 U	0.3 U	0.9 U
Hexachlorobenzene	8270C	1 U	---	1 U	0.64 U	0.9 U
Hexachlorobutadiene	8270C	1 U	---	1 U	3.2 U	0.9 U
Hexachloroethane	8270C	1 U	---	1 U	2 U	0.9 U
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	1 U	---	1 U	0.63 U	0.9 U
Isophorone	8270C	1 U	---	1 U	0.2 U	0.9 U
Naphthalene	8270C, 8270C PAHs	1 U	---	1 U	0.28 U	0.9 U
Nitrobenzene	8270C, 8330	1 U	---	1 U	0.79 U	0.9 U
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	2 U	0.005 U	2 U	0.28 U	2 U
n-Nitrosodi-n-propylamine	8270C	1 U	---	1 U	0.34 U	0.9 U
n-Nitrosodiphenylamine	8270C	2 U	---	2 U	0.43 U	2 U
p-Chloro-m-cresol	8270C	1 U	---	1 U	2.3 U	0.9 U
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	3 U	---	3 U	19 U	3 U
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	1 U	---	1 U	0.25 U	0.9 U
Phenol	8270C	1 U	---	1 U	1.9 U	0.9 U
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-58B**	**RD-58B**	**RD-58B**	**RD-58B**	**RD-58B**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	TA-Denver	TA-Denver	TA-Denver
Collection Date:		05/11/2009	07/28/2009	07/28/2009	10/22/2009	10/22/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	0.9 U	---	0.27 U	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	0.9 U	---	0.22 U	---
1,3-Dinitrobenzene	8270C, 8330	---	2 U	---	1.9 U	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	0.9 U	---	0.28 U	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	0.9 U	---	0.61 U	---
2,4-Dimethylphenol	8270C	---	3 U	---	0.56 U	---
2,4-Dinitrophenol	8270C	---	19 U	---	9.6 U	---
2,4-Dinitrotoluene	8270C, 8330	---	0.9 U	---	1.6 U	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	0.9 U	---	1.8 U	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	2 U	---	0.25 U	---
2-Chlorophenol	8270C	---	0.9 U	---	1.9 U	---
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	---	0.9 U	---	0.37 U	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	2 U	---	1.9 U	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	5 U	---	3.8 U	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	0.9 U	---	0.41 U	---
4-Chlorophenylphenyl ether	8270C	---	2 U	---	1.6 U	---
4-Nitrophenol	8270C	---	9 U	---	1.2 U	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	---	0.9 U	---	0.27 U	---
Acenaphthylene	8270C, 8270C PAHs	---	0.9 U	---	0.47 U	---
Anthracene	8270C, 8270C PAHs	---	0.9 U	---	0.4 U	---
Benzidine	8270C	---	19 U	---	48 U	---
Benzo(a)anthracene	8270C, 8270C PAHs	---	0.9 U	---	0.34 U	---
Benzo(a)pyrene	8270C, 8270C PAHs	---	0.9 U	---	0.3 U	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	0.9 U	---	0.51 U	---
Benzo(ghi)perylene	8270C, 8270C PAHs	---	0.9 U	---	0.48 U	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	0.9 U	---	0.44 U	---
bis(2-Chloroethoxy)methane	8270C	---	0.9 U	---	0.93 U	---
bis(2-Chloroethyl) ether	8270C	---	0.9 U	---	0.39 U	---
bis(2-Chloroisopropyl) ether	8270C	---	0.9 U	---	0.27 U	---
bis(2-Ethylhexyl) phthalate	8270C	---	2 U	---	1.8 U	---
Butyl benzyl phthalate	8270C	---	2 U	---	0.96 U	---
Chrysene	8270C, 8270C PAHs	---	0.9 U	---	0.56 U	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	0.9 U	---	0.49 U	---
Diethyl phthalate	8270C	---	2 U	---	0.36 U	---
Dimethyl phthalate	8270C	---	2 U	---	0.2 U	---
Di-n-butyl phthalate	8270C	---	2 U	---	1.1 U	---
Di-n-octyl phthalate	8270C	---	2 U	---	0.34 U	---
Fluoranthene	8270C, 8270C PAHs	---	0.9 U	---	0.19 U	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-58B**	**RD-58B**	**RD-58B**	**RD-58B**	**RD-58B**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	TA-Denver	TA-Denver	TA-Denver
Collection Date:		05/11/2009	07/28/2009	07/28/2009	10/22/2009	10/22/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	0.9 U	---	0.3 U	---
Hexachlorobenzene	8270C	---	0.9 U	---	0.63 U	---
Hexachlorobutadiene	8270C	---	0.9 U	---	3.2 U	---
Hexachloroethane	8270C	---	0.9 U	---	2 U	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	0.9 U	---	0.62 U	---
Isophorone	8270C	---	0.9 U	---	0.2 U	---
Naphthalene	8270C, 8270C PAHs	---	0.9 U	---	0.28 U	---
Nitrobenzene	8270C, 8330	---	0.9 U	---	0.78 U	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.005 U	2 U	0.005 U	0.28 U	0.005 U
n-Nitrosodi-n-propylamine	8270C	---	0.9 U	---	0.34 U	---
n-Nitrosodiphenylamine	8270C	---	2 U	---	0.42 U	---
p-Chloro-m-cresol	8270C	---	0.9 U	---	2.3 U	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	3 U	---	19 U	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	---	0.9 U	---	0.25 U	---
Phenol	8270C	---	0.9 U	---	1.9 U	---
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-61**	**RD-62**	**RD-62**	**RD-69**	**RD-69**
Sample Type:		Primary	Primary	Split	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	TA-Denver	TA-Irvine	TA-Denver	TA-Denver
Collection Date:		10/22/2009	10/28/2009	10/28/2009	11/04/2009	11/04/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	0.26 U	0.27 U	2.4 U	0.27 U	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	0.22 U	0.22 U	2.4 U	0.22 U	---
1,3-Dinitrobenzene	8270C, 8330	1.9 U	1.9 U	3.3 U	1.9 U	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	0.27 U	0.28 U	4.2 U	0.28 U	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	0.6 U	0.61 U	3.3 U	0.61 U	---
2,4-Dimethylphenol	8270C	0.55 U	0.56 U	3.3 U	0.56 U	---
2,4-Dinitrophenol	8270C	9.4 U	9.6 U	7.5 U	9.6 U	---
2,4-Dinitrotoluene	8270C, 8330	1.6 U	1.6 U	3.3 U	1.6 U	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	1.8 U	1.8 U	1.9 U	1.8 U	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	0.24 U	0.25 U	2.8 U	0.25 U	---
2-Chlorophenol	8270C	1.9 U	1.9 U	2.8 U	1.9 U	---
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	0.37 U	0.37 U	3.3 U	0.37 U	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	1.9 U	1.9 U	7.1 U	1.9 U	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	3.8 U	3.8 U	3.8 U	3.8 U	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	0.4 U	0.41 U	2.8 U	0.41 U	---
4-Chlorophenylphenyl ether	8270C	1.6 U	1.6 U	2.4 U	1.6 U	---
4-Nitrophenol	8270C	1.2 U	1.2 U	5.2 U	1.2 U	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	0.26 U	0.27 U	2.8 U	0.27 U	---
Acenaphthylene	8270C, 8270C PAHs	0.46 U	0.47 U	2.8 U	0.47 U	---
Anthracene	8270C, 8270C PAHs	0.39 U	0.4 U	2.4 U	0.4 U	---
Benzidine	8270C	47 U	48 U	9.4 U	48 U	---
Benzo(a)anthracene	8270C, 8270C PAHs	0.33 U	0.34 U	2.4 U	0.34 U	---
Benzo(a)pyrene	8270C, 8270C PAHs	0.29 U	0.3 U	2.8 U	0.3 U	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	0.5 U	0.51 U	1.9 U	0.51 U	---
Benzo(ghi)perylene	8270C, 8270C PAHs	0.47 U	0.48 U	3.8 U	0.48 U	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	0.43 U	0.44 U	2.4 U	0.44 U	---
bis(2-Chloroethoxy)methane	8270C	0.91 U	0.93 U	2.8 U	0.93 U	---
bis(2-Chloroethyl) ether	8270C	0.39 U	0.39 U	2.8 U	0.39 U	---
bis(2-Chloroisopropyl) ether	8270C	0.26 U	0.27 U	2.4 U	0.27 U	---
bis(2-Ethylhexyl) phthalate	8270C	2.5 U	0.54 U	3.8 U	0.54 U	---
Butyl benzyl phthalate	8270C	0.94 U	0.96 U	3.8 U	0.96 U	---
Chrysene	8270C, 8270C PAHs	0.51 U	0.52 U	2.4 U	0.52 U	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	0.48 U	0.49 U	2.8 U	0.49 U	---
Diethyl phthalate	8270C	0.36 U	0.36 U	3.3 U	0.36 U	---
Dimethyl phthalate	8270C	0.2 U	0.2 U	2.4 U	0.2 U	---
Di-n-butyl phthalate	8270C	1.1 U	1.1 U	2.8 U	1.1 U	---
Di-n-octyl phthalate	8270C	0.33 U	0.34 U	3.3 U	0.34 U	---
Fluoranthene	8270C, 8270C PAHs	0.19 U	0.19 U	2.8 U	0.19 U	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-61**	**RD-62**	**RD-62**	**RD-69**	**RD-69**
Sample Type:		Primary	Primary	Split	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	TA-Denver	TA-Irvine	TA-Denver	TA-Denver
Collection Date:		10/22/2009	10/28/2009	10/28/2009	11/04/2009	11/04/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	0.29 U	0.3 U	2.8 U	0.3 U	---
Hexachlorobenzene	8270C	0.62 U	0.63 U	2.8 U	0.63 U	---
Hexachlorobutadiene	8270C	3.1 U	3.2 U	3.8 U	3.2 U	---
Hexachloroethane	8270C	2 U	2 U	3.3 U	2 U	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	0.61 U	0.62 U	3.3 U	0.62 U	---
Isophorone	8270C	0.2 U	0.2 U	2.8 U	0.2 U	---
Naphthalene	8270C, 8270C PAHs	0.27 U	0.28 U	2.8 U	0.28 U	---
Nitrobenzene	8270C, 8330	0.76 U	0.78 U	2.8 U	0.78 U	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.27 U	0.28 U	2.4 U	0.28 U	0.005 U
n-Nitrosodi-n-propylamine	8270C	0.33 U	0.34 U	3.3 U	0.34 U	---
n-Nitrosodiphenylamine	8270C	0.41 U	0.42 U	1.9 U	0.42 U	---
p-Chloro-m-cresol	8270C	2.3 U	2.3 U	2.4 U	2.3 U	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	19 U	19 U	3.3 U	19 U	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	0.24 U	0.25 U	3.3 U	0.25 U	---
Phenol	8270C	1.9 U	1.9 U	1.9 U	1.9 U	---
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-69**	**RD-91**	**RD-91**	**RD-91**	**RD-91**
Sample Type:		Duplicate	Primary	Duplicate	Split	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	Lancaster	TA-Denver	Lancaster
Collection Date:		11/04/2009	03/05/2009	03/05/2009	03/05/2009	05/05/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	1 U	1 U	0.28 U	1 U
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	1 U	1 U	0.23 U	1 U
1,3-Dinitrobenzene	8270C, 8330	---	2 U	2 U	2 U	2 U
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	1 U	1 U	0.29 U	1 U
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	1 U	1 U	0.64 U	1 U
2,4-Dimethylphenol	8270C	---	3 U	3 U	0.58 U	3 U
2,4-Dinitrophenol	8270C	---	19 U	19 U	10 U	20 U
2,4-Dinitrotoluene	8270C, 8330	---	1 U	1 U	1.7 U	1 U
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	1 U	1 U	1.9 U	1 U
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	2 U	2 U	0.26 U	2 U
2-Chlorophenol	8270C	---	1 U	1 U	2 U	1 U
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	---	1 U	1 U	0.39 U	1 U
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	2 U	2 U	2 U	2 U
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	5 U	5 U	4 U	5 U
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	1 U	1 U	0.43 U	1 U
4-Chlorophenylphenyl ether	8270C	---	2 U	2 U	1.7 U	2 U
4-Nitrophenol	8270C	---	10 U	10 U	1.2 U	10 U
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	---	1 U	1 U	0.28 U	1 U
Acenaphthylene	8270C, 8270C PAHs	---	1 U	1 U	0.49 U	1 U
Anthracene	8270C, 8270C PAHs	---	1 U	1 U	0.42 U	1 U
Benzidine	8270C	---	19 U	19 U	50 U	20 U
Benzo(a)anthracene	8270C, 8270C PAHs	---	1 U	1 U	0.35 U	1 U
Benzo(a)pyrene	8270C, 8270C PAHs	---	1 U	1 U	0.31 U	1 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	1 U	1 U	0.53 U	1 U
Benzo(ghi)perylene	8270C, 8270C PAHs	---	1 U	1 U	0.5 U	1 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	1 U	1 U	0.46 U	1 U
bis(2-Chloroethoxy)methane	8270C	---	1 U	1 U	0.97 U	1 U
bis(2-Chloroethyl) ether	8270C	---	1 U	1 U	0.41 U	1 U
bis(2-Chloroisopropyl) ether	8270C	---	1 U	1 U	0.28 U	1 U
bis(2-Ethylhexyl) phthalate	8270C	---	2 U	2 U	2.3 U	2 U
Butyl benzyl phthalate	8270C	---	2 U	2 U	1 U	2 U
Chrysene	8270C, 8270C PAHs	---	1 U	1 U	0.54 U	1 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	1 U	1 U	0.51 U	1 U
Diethyl phthalate	8270C	---	2 U	2 U	0.38 U	2 U
Dimethyl phthalate	8270C	---	2 U	2 U	0.21 U	2 U
Di-n-butyl phthalate	8270C	---	2 U	2 U	1.2 U	2 U
Di-n-octyl phthalate	8270C	---	2 U	2 U	0.35 U	2 U
Fluoranthene	8270C, 8270C PAHs	---	1 U	1 U	0.2 U	1 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-69**	**RD-91**	**RD-91**	**RD-91**	**RD-91**
Sample Type:		Duplicate	Primary	Duplicate	Split	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	Lancaster	TA-Denver	Lancaster
Collection Date:		11/04/2009	03/05/2009	03/05/2009	03/05/2009	05/05/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	1 U	1 U	0.31 U	1 U
Hexachlorobenzene	8270C	---	1 U	1 U	0.66 U	1 U
Hexachlorobutadiene	8270C	---	1 U	1 U	3.3 U	1 U
Hexachloroethane	8270C	---	1 U	1 U	2.1 U	1 U
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	1 U	1 U	0.65 U	1 U
Isophorone	8270C	---	1 U	1 U	0.21 U	1 U
Naphthalene	8270C, 8270C PAHs	---	1 U	1 U	0.29 U	1 U
Nitrobenzene	8270C, 8330	---	1 U	1 U	0.81 U	1 U
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.005 U	2 U	2 U	0.29 U	2 U
n-Nitrosodi-n-propylamine	8270C	---	1 U	1 U	0.35 U	1 U
n-Nitrosodiphenylamine	8270C	---	2 U	2 U	0.44 U	2 U
p-Chloro-m-cresol	8270C	---	1 U	1 U	2.4 U	1 U
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	3 U	3 U	20 U	3 U
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	---	1 U	1 U	0.26 U	1 U
Phenol	8270C	---	1 U	1 U	2 U	1 U
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-91**	**SH-08**	**WS-05**	**WS-05**	**WS-05**
Sample Type:		Duplicate	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Shallow	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	Lancaster	Lancaster	Weck	Lancaster
Collection Date:		05/05/2009	05/14/2009	02/10/2009	02/10/2009	05/06/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	1 U	---	1 U	---	1 U
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	1 U	---	1 U	---	1 U
1,3-Dinitrobenzene	8270C, 8330	2 U	---	2 U	---	2 U
1-Methyl naphthalene	8270C PAHs	---	0.9 U	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	1 U	---	1 U	---	1 U
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	1 U	---	1 U	---	1 U
2,4-Dimethylphenol	8270C	3 U	---	3 U	---	3 U
2,4-Dinitrophenol	8270C	19 U	---	20 U	---	19 U
2,4-Dinitrotoluene	8270C, 8330	1 U	---	1 U	---	1 U
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	1 U	---	1 U	---	1 U
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	2 U	---	2 U	---	2 U
2-Chlorophenol	8270C	1 U	---	1 U	---	1 U
2-Methylnaphthalene	8270C PAHs	---	0.9 U	---	---	---
2-Nitrophenol	8270C	1 U	---	1 U	---	1 U
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	2 U	---	2 U	---	2 U
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	5 U	---	5 U	---	5 U
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	1 U	---	1 U	---	1 U
4-Chlorophenylphenyl ether	8270C	2 U	---	2 U	---	2 U
4-Nitrophenol	8270C	10 U	---	10 U	---	10 U
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	1 U	0.9 U	1 U	---	1 U
Acenaphthylene	8270C, 8270C PAHs	1 U	0.9 U	1 U	---	1 U
Anthracene	8270C, 8270C PAHs	1 U	0.9 U	1 U	---	1 U
Benzidine	8270C	19 U	---	20 U	---	19 U
Benzo(a)anthracene	8270C, 8270C PAHs	1 U	0.9 U	1 U	---	1 U
Benzo(a)pyrene	8270C, 8270C PAHs	1 U	0.9 U	1 U	---	1 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	1 U	0.9 U	1 U	---	1 U
Benzo(ghi)perylene	8270C, 8270C PAHs	1 U	0.9 U	1 U	---	1 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	1 U	0.9 U	1 U	---	1 U
bis(2-Chloroethoxy)methane	8270C	1 U	---	1 U	---	1 U
bis(2-Chloroethyl) ether	8270C	1 U	---	1 U	---	1 U
bis(2-Chloroisopropyl) ether	8270C	1 U	---	1 U	---	1 U
bis(2-Ethylhexyl) phthalate	8270C	2 U	---	16 U	---	11 U
Butyl benzyl phthalate	8270C	2 U	---	2 U	---	2 U
Chrysene	8270C, 8270C PAHs	1 U	0.9 U	1 U	---	1 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	1 U	0.9 U	1 U	---	1 U
Diethyl phthalate	8270C	2 U	---	2 U	---	2 U
Dimethyl phthalate	8270C	2 U	---	2 U	---	2 U
Di-n-butyl phthalate	8270C	2 U	---	2 U	---	2 U
Di-n-octyl phthalate	8270C	2 U	---	2 U	---	2 U
Fluoranthene	8270C, 8270C PAHs	1 U	0.9 U	1 U	---	1 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**RD-91**	**SH-08**	**WS-05**	**WS-05**	**WS-05**
Sample Type:		Duplicate	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Shallow	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	Lancaster	Lancaster	Weck	Lancaster
Collection Date:		05/05/2009	05/14/2009	02/10/2009	02/10/2009	05/06/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	1 U	0.9 U	1 U	---	1 U
Hexachlorobenzene	8270C	1 U	---	1 U	---	1 U
Hexachlorobutadiene	8270C	1 U	---	1 U	---	1 U
Hexachloroethane	8270C	1 U	---	1 U	---	1 U
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	1 U	0.9 U	1 U	---	1 U
Isophorone	8270C	1 U	---	1 U	---	1 U
Naphthalene	8270C, 8270C PAHs	1 U	0.9 U	1 U	---	1 U
Nitrobenzene	8270C, 8330	1 U	---	1 U	---	1 U
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	2 U	---	2 U	0.005 U	2 U
n-Nitrosodi-n-propylamine	8270C	1 U	---	1 U	---	1 U
n-Nitrosodiphenylamine	8270C	2 U	---	2 U	---	2 U
p-Chloro-m-cresol	8270C	1 U	---	1 U	---	1 U
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	3 U	---	3 U	---	3 U
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	1 U	0.9 U	1 U	---	1 U
Phenol	8270C	1 U	---	1 U	---	1 U
Pyrene	8270C, 8270C PAHs	---	0.9 U	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**WS-05**	**WS-05**	**WS-05**	**WS-05**	**WS-05**
Sample Type:		Primary	Primary	Primary	Duplicate	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	TA-Denver	Lancaster	TA-Denver
Collection Date:		05/06/2009	07/29/2009	07/29/2009	07/29/2009	10/15/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	0.9 U	---	0.9 U	0.28 U
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	0.9 U	---	0.9 U	0.23 U
1,3-Dinitrobenzene	8270C, 8330	---	2 U	---	2 U	2 U
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	0.9 U	---	0.9 U	0.29 U
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	0.9 U	---	0.9 U	0.65 U
2,4-Dimethylphenol	8270C	---	3 U	---	3 U	0.59 U
2,4-Dinitrophenol	8270C	---	19 U	---	19 U	10 U
2,4-Dinitrotoluene	8270C, 8330	---	0.9 U	---	0.9 U	1.7 U
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	0.9 U	---	0.9 U	1.9 U
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	2 U	---	2 U	0.26 U
2-Chlorophenol	8270C	---	0.9 U	---	0.9 U	2 U
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	---	0.9 U	---	0.9 U	0.39 U
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	2 U	---	2 U	2 U
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	5 U	---	5 U	4 U
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	0.9 U	---	0.9 U	0.43 U
4-Chlorophenylphenyl ether	8270C	---	2 U	---	2 U	1.7 U
4-Nitrophenol	8270C	---	9 U	---	9 U	1.2 U
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	---	0.9 U	---	0.9 U	0.28 U
Acenaphthylene	8270C, 8270C PAHs	---	0.9 U	---	0.9 U	0.49 U
Anthracene	8270C, 8270C PAHs	---	0.9 U	---	0.9 U	0.42 U
Benzidine	8270C	---	19 U	---	19 U	50 U
Benzo(a)anthracene	8270C, 8270C PAHs	---	0.9 U	---	0.9 U	0.35 U
Benzo(a)pyrene	8270C, 8270C PAHs	---	0.9 U	---	0.9 U	0.31 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	0.9 U	---	0.9 U	0.54 U
Benzo(ghi)perylene	8270C, 8270C PAHs	---	0.9 U	---	0.9 U	0.5 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	0.9 U	---	0.9 U	0.46 U
bis(2-Chloroethoxy)methane	8270C	---	0.9 U	---	0.9 U	0.98 U
bis(2-Chloroethyl) ether	8270C	---	0.9 U	---	0.9 U	0.41 U
bis(2-Chloroisopropyl) ether	8270C	---	0.9 U	---	0.9 U	0.28 U
bis(2-Ethylhexyl) phthalate	8270C	---	2 U	---	2 U	2.6 U
Butyl benzyl phthalate	8270C	---	2 U	---	2 U	1 U
Chrysene	8270C, 8270C PAHs	---	0.9 U	---	0.9 U	0.59 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	0.9 U	---	0.9 U	0.52 U
Diethyl phthalate	8270C	---	2 U	---	2 U	0.38 U
Dimethyl phthalate	8270C	---	2 U	---	2 U	0.21 U
Di-n-butyl phthalate	8270C	---	2 U	---	2 U	1.2 U
Di-n-octyl phthalate	8270C	---	2 U	---	2 U	0.35 U
Fluoranthene	8270C, 8270C PAHs	---	0.9 U	---	0.9 U	0.2 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**WS-05**	**WS-05**	**WS-05**	**WS-05**	**WS-05**
Sample Type:		Primary	Primary	Primary	Duplicate	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	TA-Denver	Lancaster	TA-Denver
Collection Date:		05/06/2009	07/29/2009	07/29/2009	07/29/2009	10/15/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	0.9 U	---	0.9 U	0.31 U
Hexachlorobenzene	8270C	---	0.9 U	---	0.9 U	0.67 U
Hexachlorobutadiene	8270C	---	0.9 U	---	0.9 U	3.3 U
Hexachloroethane	8270C	---	0.9 U	---	0.9 U	2.1 U
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	0.9 U	---	0.9 U	0.66 U
Isophorone	8270C	---	0.9 U	---	0.9 U	0.21 U
Naphthalene	8270C, 8270C PAHs	---	0.9 U	---	0.9 U	0.29 U
Nitrobenzene	8270C, 8330	---	0.9 U	---	0.9 U	0.82 U
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.005 U	2 U	0.005 U	2 U	0.29 U
n-Nitrosodi-n-propylamine	8270C	---	0.9 U	---	0.9 U	0.35 U
n-Nitrosodiphenylamine	8270C	---	2 U	---	2 U	0.44 U
p-Chloro-m-cresol	8270C	---	0.9 U	---	0.9 U	2.4 U
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	3 U	---	3 U	20 U
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	---	0.9 U	---	0.9 U	0.26 U
Phenol	8270C	---	0.9 U	---	0.9 U	2 U
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**WS-05**	**WS-06**	**WS-06**	**WS-06**	**WS-06**
Sample Type:		Primary	Primary	Primary	Duplicate	Split
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	Weck	Lancaster	TA-Denver
Collection Date:		10/15/2009	02/26/2009	02/26/2009	02/26/2009	02/26/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	1 U	---	0.9 U	0.27 U
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	1 U	---	0.9 U	0.22 U
1,3-Dinitrobenzene	8270C, 8330	---	2 U	---	2 U	1.9 U
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	1 U	---	0.9 U	0.28 U
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	1 U	---	0.9 U	0.61 U
2,4-Dimethylphenol	8270C	---	3 U	---	3 U	0.55 U
2,4-Dinitrophenol	8270C	---	19 U	---	19 U	9.5 U
2,4-Dinitrotoluene	8270C, 8330	---	1 U	---	0.9 U	1.6 U
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	1 U	---	0.9 U	1.8 U
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	2 U	---	2 U	0.25 U
2-Chlorophenol	8270C	---	1 U	---	0.9 U	1.9 U
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	---	1 U	---	0.9 U	0.37 U
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	2 U	---	2 U	1.9 U
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	5 U	---	5 U	3.8 U
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	1 U	---	0.9 U	0.41 U
4-Chlorophenylphenyl ether	8270C	---	2 U	---	2 U	1.6 U
4-Nitrophenol	8270C	---	10 U	---	9 U	1.2 U
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	---	1 U	---	0.9 U	0.27 U
Acenaphthylene	8270C, 8270C PAHs	---	1 U	---	0.9 U	0.47 U
Anthracene	8270C, 8270C PAHs	---	1 U	---	0.9 U	0.4 U
Benzidine	8270C	---	19 U	---	19 U	48 U
Benzo(a)anthracene	8270C, 8270C PAHs	---	1 U	---	0.9 U	0.33 U
Benzo(a)pyrene	8270C, 8270C PAHs	---	1 U	---	0.9 U	0.29 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	1 U	---	0.9 U	0.5 U
Benzo(ghi)perylene	8270C, 8270C PAHs	---	1 U	---	0.9 U	0.48 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	1 U	---	0.9 U	0.44 U
bis(2-Chloroethoxy)methane	8270C	---	1 U	---	0.9 U	0.92 U
bis(2-Chloroethyl) ether	8270C	---	1 U	---	0.9 U	0.39 U
bis(2-Chloroisopropyl) ether	8270C	---	1 U	---	0.9 U	0.27 U
bis(2-Ethylhexyl) phthalate	8270C	---	2 U	---	2 U	0.56 J,L
Butyl benzyl phthalate	8270C	---	2 U	---	2 U	0.95 U
Chrysene	8270C, 8270C PAHs	---	1 U	---	0.9 U	0.51 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	1 U	---	0.9 U	0.48 U
Diethyl phthalate	8270C	---	2 U	---	2 U	0.36 U
Dimethyl phthalate	8270C	---	2 U	---	2 U	0.2 U
Di-n-butyl phthalate	8270C	---	2 U	---	2 U	1.1 U
Di-n-octyl phthalate	8270C	---	2 U	---	2 U	0.33 U
Fluoranthene	8270C, 8270C PAHs	---	1 U	---	0.9 U	0.19 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**WS-05**	**WS-06**	**WS-06**	**WS-06**	**WS-06**
Sample Type:		Primary	Primary	Primary	Duplicate	Split
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	Weck	Lancaster	TA-Denver
Collection Date:		10/15/2009	02/26/2009	02/26/2009	02/26/2009	02/26/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	1 U	---	0.9 U	0.29 U
Hexachlorobenzene	8270C	---	1 U	---	0.9 U	0.63 U
Hexachlorobutadiene	8270C	---	1 U	---	0.9 U	3.1 U
Hexachloroethane	8270C	---	1 U	---	0.9 U	2 U
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	1 U	---	0.9 U	0.62 U
Isophorone	8270C	---	1 U	---	0.9 U	0.2 U
Naphthalene	8270C, 8270C PAHs	---	1 U	---	0.9 U	0.28 U
Nitrobenzene	8270C, 8330	---	1 U	---	0.9 U	0.77 U
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.005 U	2 U	0.005 U	2 U	0.28 U
n-Nitrosodi-n-propylamine	8270C	---	1 U	---	0.9 U	0.33 U
n-Nitrosodiphenylamine	8270C	---	2 U	---	2 U	0.42 U
p-Chloro-m-cresol	8270C	---	1 U	---	0.9 U	2.3 U
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	3 U	---	3 U	19 U
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	---	1 U	---	0.9 U	0.25 U
Phenol	8270C	---	1 U	---	0.9 U	1.9 U
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**WS-06**	**WS-06**	**WS-06**	**WS-06**	**WS-06**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	Lancaster	TA-Denver	TA-Denver
Collection Date:		05/06/2009	05/06/2009	07/29/2009	07/29/2009	10/29/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	0.9 U	---	1 U	---	0.27 U
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	0.9 U	---	1 U	---	0.22 U
1,3-Dinitrobenzene	8270C, 8330	2 U	---	2 U	---	1.9 U
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	0.9 U	---	1 U	---	0.28 U
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	0.9 U	---	1 U	---	0.62 U
2,4-Dimethylphenol	8270C	3 U	---	3 U	---	0.56 U
2,4-Dinitrophenol	8270C	19 U	---	19 U	---	9.7 U
2,4-Dinitrotoluene	8270C, 8330	0.9 U	---	1 U	---	1.6 U
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	0.9 U	---	1 U	---	1.8 U
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	2 U	---	2 U	---	0.25 U
2-Chlorophenol	8270C	0.9 U	---	1 U	---	1.9 U
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	0.9 U	---	1 U	---	0.38 U
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	2 U	---	2 U	---	1.9 U
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	5 U	---	5 U	---	3.9 U
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	0.9 U	---	1 U	---	0.42 U
4-Chlorophenylphenyl ether	8270C	2 U	---	2 U	---	1.6 U
4-Nitrophenol	8270C	9 U	---	10 U	---	1.2 U
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	0.9 U	---	1 U	---	0.27 U
Acenaphthylene	8270C, 8270C PAHs	0.9 U	---	1 U	---	0.48 U
Anthracene	8270C, 8270C PAHs	0.9 U	---	1 U	---	0.41 U
Benzidine	8270C	19 U	---	19 U	---	48 U
Benzo(a)anthracene	8270C, 8270C PAHs	0.9 U	---	1 U	---	0.34 U
Benzo(a)pyrene	8270C, 8270C PAHs	0.9 U	---	1 U	---	0.3 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	0.9 U	---	1 U	---	0.52 U
Benzo(ghi)perylene	8270C, 8270C PAHs	0.9 U	---	1 U	---	0.48 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	0.9 U	---	1 U	---	0.45 U
bis(2-Chloroethoxy)methane	8270C	0.9 U	---	1 U	---	0.94 U
bis(2-Chloroethyl) ether	8270C	0.9 U	---	1 U	---	0.4 U
bis(2-Chloroisopropyl) ether	8270C	0.9 U	---	1 U	---	0.27 U
bis(2-Ethylhexyl) phthalate	8270C	2 U	---	2 U	---	0.54 U
Butyl benzyl phthalate	8270C	2 U	---	2 U	---	0.97 U
Chrysene	8270C, 8270C PAHs	0.9 U	---	1 U	---	0.52 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	0.9 U	---	1 U	---	0.49 U
Diethyl phthalate	8270C	2 U	---	2 U	---	0.37 U
Dimethyl phthalate	8270C	2 U	---	2 U	---	0.2 U
Di-n-butyl phthalate	8270C	2 U	---	2 U	---	1.1 U
Di-n-octyl phthalate	8270C	2 U	---	2 U	---	0.34 U
Fluoranthene	8270C, 8270C PAHs	0.9 U	---	1 U	---	0.19 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**WS-06**	**WS-06**	**WS-06**	**WS-06**	**WS-06**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	Lancaster	TA-Denver	TA-Denver
Collection Date:		05/06/2009	05/06/2009	07/29/2009	07/29/2009	10/29/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	0.9 U	---	1 U	---	0.3 U
Hexachlorobenzene	8270C	0.9 U	---	1 U	---	0.64 U
Hexachlorobutadiene	8270C	0.9 U	---	1 U	---	3.2 U
Hexachloroethane	8270C	0.9 U	---	1 U	---	2 U
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	0.9 U	---	1 U	---	0.63 U
Isophorone	8270C	0.9 U	---	1 U	---	0.2 U
Naphthalene	8270C, 8270C PAHs	0.9 U	---	1 U	---	0.28 U
Nitrobenzene	8270C, 8330	0.9 U	---	1 U	---	0.79 U
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	2 U	0.005 U	2 U	0.005 U	0.28 U
n-Nitrosodi-n-propylamine	8270C	0.9 U	---	1 U	---	0.34 U
n-Nitrosodiphenylamine	8270C	2 U	---	2 U	---	0.43 U
p-Chloro-m-cresol	8270C	0.9 U	---	1 U	---	2.3 U
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	3 U	---	3 U	---	19 U
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	0.9 U	---	1 U	---	0.25 U
Phenol	8270C	0.9 U	---	1 U	---	1.9 U
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**WS-06**	**WS-09**	**WS-09**	**WS-09**	**WS-09**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	Weck	Lancaster	TA-Denver
Collection Date:		10/29/2009	02/10/2009	02/10/2009	05/05/2009	05/05/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	0.9 U	---	1 U	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	0.9 U	---	1 U	---
1,3-Dinitrobenzene	8270C, 8330	---	2 U	---	2 U	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	0.9 U	---	1 U	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	0.9 U	---	1 U	---
2,4-Dimethylphenol	8270C	---	3 U	---	3 U	---
2,4-Dinitrophenol	8270C	---	19 U	---	19 U	---
2,4-Dinitrotoluene	8270C, 8330	---	0.9 U	---	1 U	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	0.9 U	---	1 U	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	2 U	---	2 U	---
2-Chlorophenol	8270C	---	0.9 U	---	1 U	---
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	---	0.9 U	---	1 U	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	2 U	---	2 U	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	5 U	---	5 U	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	0.9 U	---	1 U	---
4-Chlorophenylphenyl ether	8270C	---	2 U	---	2 U	---
4-Nitrophenol	8270C	---	9 U	---	10 U	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Acenaphthylene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Anthracene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Benzidine	8270C	---	19 U	---	19 U	---
Benzo(a)anthracene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Benzo(a)pyrene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Benzo(ghi)perylene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
bis(2-Chloroethoxy)methane	8270C	---	0.9 U	---	1 U	---
bis(2-Chloroethyl) ether	8270C	---	0.9 U	---	1 U	---
bis(2-Chloroisopropyl) ether	8270C	---	0.9 U	---	1 U	---
bis(2-Ethylhexyl) phthalate	8270C	---	7 U	---	2 U	---
Butyl benzyl phthalate	8270C	---	2 U	---	2 U	---
Chrysene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Diethyl phthalate	8270C	---	2 U	---	2 U	---
Dimethyl phthalate	8270C	---	2 U	---	2 U	---
Di-n-butyl phthalate	8270C	---	2 U	---	2 U	---
Di-n-octyl phthalate	8270C	---	2 U	---	2 U	---
Fluoranthene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**WS-06**	**WS-09**	**WS-09**	**WS-09**	**WS-09**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	Weck	Lancaster	TA-Denver
Collection Date:		10/29/2009	02/10/2009	02/10/2009	05/05/2009	05/05/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Hexachlorobenzene	8270C	---	0.9 U	---	1 U	---
Hexachlorobutadiene	8270C	---	0.9 U	---	1 U	---
Hexachloroethane	8270C	---	0.9 U	---	1 U	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Isophorone	8270C	---	0.9 U	---	1 U	---
Naphthalene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Nitrobenzene	8270C, 8330	---	0.9 U	---	1 U	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.005 U	2 U	0.005 U	2 U	0.0063
n-Nitrosodi-n-propylamine	8270C	---	0.9 U	---	1 U	---
n-Nitrosodiphenylamine	8270C	---	2 U	---	2 U	---
p-Chloro-m-cresol	8270C	---	0.9 U	---	1 U	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	3 U	---	3 U	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	---	0.9 U	---	1 U	---
Phenol	8270C	---	0.9 U	---	1 U	---
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**WS-09**	**WS-09**	**WS-09**	**WS-09**	**WS-09**
Sample Type:		Duplicate	Duplicate	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	Lancaster	TA-Denver	TA-Denver
Collection Date:		05/05/2009	05/05/2009	07/23/2009	07/23/2009	10/20/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	1 U	---	1 U	---	0.28 U
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	1 U	---	1 U	---	0.23 U
1,3-Dinitrobenzene	8270C, 8330	2 U	---	2 U	---	2 U
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	1 U	---	1 U	---	0.29 U
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	1 U	---	1 U	---	0.63 U
2,4-Dimethylphenol	8270C	3 U	---	3 U	---	0.57 U
2,4-Dinitrophenol	8270C	19 U	---	19 U	---	9.9 U
2,4-Dinitrotoluene	8270C, 8330	1 U	---	1 U	---	1.6 U
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	1 U	---	1 U	---	1.9 U
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	2 U	---	2 U	---	0.26 U
2-Chlorophenol	8270C	1 U	---	1 U	---	2 U
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	1 U	---	1 U	---	0.39 U
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	2 U	---	2 U	---	2 U
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	5 U	---	5 U	---	4 U
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	1 U	---	1 U	---	0.43 U
4-Chlorophenylphenyl ether	8270C	2 U	---	2 U	---	1.6 U
4-Nitrophenol	8270C	10 U	---	10 U	---	1.2 U
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	1 U	---	1 U	---	0.28 U
Acenaphthylene	8270C, 8270C PAHs	1 U	---	1 U	---	0.49 U
Anthracene	8270C, 8270C PAHs	1 U	---	1 U	---	0.42 U
Benzidine	8270C	19 U	---	19 U	---	50 U
Benzo(a)anthracene	8270C, 8270C PAHs	1 U	---	1 U	---	0.35 U
Benzo(a)pyrene	8270C, 8270C PAHs	1 U	---	1 U	---	0.31 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	1 U	---	1 U	---	0.53 U
Benzo(ghi)perylene	8270C, 8270C PAHs	1 U	---	1 U	---	0.5 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	1 U	---	1 U	---	0.46 U
bis(2-Chloroethoxy)methane	8270C	1 U	---	1 U	---	0.96 U
bis(2-Chloroethyl) ether	8270C	1 U	---	1 U	---	0.41 U
bis(2-Chloroisopropyl) ether	8270C	1 U	---	1 U	---	0.28 U
bis(2-Ethylhexyl) phthalate	8270C	2 U	---	2 U	---	2.1 U
Butyl benzyl phthalate	8270C	2 U	---	2 U	---	0.99 U
Chrysene	8270C, 8270C PAHs	1 U	---	1 U	---	0.53 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	1 U	---	1 U	---	0.5 U
Diethyl phthalate	8270C	2 U	---	2 U	---	0.38 U
Dimethyl phthalate	8270C	2 U	---	2 U	---	0.21 U
Di-n-butyl phthalate	8270C	2 U	---	2 U	---	1.1 U
Di-n-octyl phthalate	8270C	2 U	---	2 U	---	0.35 U
Fluoranthene	8270C, 8270C PAHs	1 U	---	1 U	---	0.2 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**WS-09**	**WS-09**	**WS-09**	**WS-09**	**WS-09**
Sample Type:		Duplicate	Duplicate	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	Lancaster	TA-Denver	TA-Denver
Collection Date:		05/05/2009	05/05/2009	07/23/2009	07/23/2009	10/20/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	1 U	---	1 U	---	0.31 U
Hexachlorobenzene	8270C	1 U	---	1 U	---	0.65 U
Hexachlorobutadiene	8270C	1 U	---	1 U	---	3.3 U
Hexachloroethane	8270C	1 U	---	1 U	---	2.1 U
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	1 U	---	1 U	---	0.64 U
Isophorone	8270C	1 U	---	1 U	---	0.21 U
Naphthalene	8270C, 8270C PAHs	1 U	---	1 U	---	0.29 U
Nitrobenzene	8270C, 8330	1 U	---	1 U	---	0.8 U
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	2 U	0.005 U	2 U	0.005 U	0.29 U
n-Nitrosodi-n-propylamine	8270C	1 U	---	1 U	---	0.35 U
n-Nitrosodiphenylamine	8270C	2 U	---	2 U	---	0.44 U
p-Chloro-m-cresol	8270C	1 U	---	1 U	---	2.4 U
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	3 U	---	3 U	---	20 U
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	1 U	---	1 U	---	0.26 U
Phenol	8270C	1 U	---	1 U	---	2 U
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**WS-09**	**WS-09A**	**WS-09A**	**WS-09A**	**WS-09A**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	Weck	Lancaster	TA-Denver
Collection Date:		10/20/2009	02/12/2009	02/12/2009	05/04/2009	05/04/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	---	1 U	---	0.9 U	---
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	---	1 U	---	0.9 U	---
1,3-Dinitrobenzene	8270C, 8330	---	2 U	---	2 U	---
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	---	1 U	---	0.9 U	---
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	---	1 U	---	0.9 U	---
2,4-Dimethylphenol	8270C	---	3 U	---	3 U	---
2,4-Dinitrophenol	8270C	---	19 U	---	19 U	---
2,4-Dinitrotoluene	8270C, 8330	---	1 U	---	0.9 U	---
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	---	1 U	---	0.9 U	---
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	---	2 U	---	2 U	---
2-Chlorophenol	8270C	---	1 U	---	0.9 U	---
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	---	1 U	---	0.9 U	---
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	---	2 U	---	2 U	---
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	---	5 U	---	5 U	---
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	---	1 U	---	0.9 U	---
4-Chlorophenylphenyl ether	8270C	---	2 U	---	2 U	---
4-Nitrophenol	8270C	---	10 U	---	9 U	---
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---
Acenaphthylene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---
Anthracene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---
Benzidine	8270C	---	19 U	---	19 U	---
Benzo(a)anthracene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---
Benzo(a)pyrene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---
Benzo(b)fluoranthene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---
Benzo(ghi)perylene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---
Benzo(k)fluoranthene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---
bis(2-Chloroethoxy)methane	8270C	---	1 U	---	0.9 U	---
bis(2-Chloroethyl) ether	8270C	---	1 U	---	0.9 U	---
bis(2-Chloroisopropyl) ether	8270C	---	1 U	---	0.9 U	---
bis(2-Ethylhexyl) phthalate	8270C	---	2 U	---	2 U	---
Butyl benzyl phthalate	8270C	---	2 U	---	2 U	---
Chrysene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---
Diethyl phthalate	8270C	---	2 U	---	2 U	---
Dimethyl phthalate	8270C	---	2 U	---	2 U	---
Di-n-butyl phthalate	8270C	---	2 U	---	2 U	---
Di-n-octyl phthalate	8270C	---	2 U	---	2 U	---
Fluoranthene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**WS-09**	**WS-09A**	**WS-09A**	**WS-09A**	**WS-09A**
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	Lancaster	Weck	Lancaster	TA-Denver
Collection Date:		10/20/2009	02/12/2009	02/12/2009	05/04/2009	05/04/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---
Hexachlorobenzene	8270C	---	1 U	---	0.9 U	---
Hexachlorobutadiene	8270C	---	1 U	---	0.9 U	---
Hexachloroethane	8270C	---	1 U	---	0.9 U	---
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---
Isophorone	8270C	---	1 U	---	0.9 U	---
Naphthalene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---
Nitrobenzene	8270C, 8330	---	1 U	---	0.9 U	---
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	0.005 U	2 U	0.005 U	2 U	0.005 U
n-Nitrosodi-n-propylamine	8270C	---	1 U	---	0.9 U	---
n-Nitrosodiphenylamine	8270C	---	2 U	---	2 U	---
p-Chloro-m-cresol	8270C	---	1 U	---	0.9 U	---
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	---	3 U	---	3 U	---
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	---	1 U	---	0.9 U	---
Phenol	8270C	---	1 U	---	0.9 U	---
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**WS-09A**	**WS-09A**	**WS-09A**	**WS-09A**	**WS-09A**
Sample Type:		Primary	Primary	Primary	Primary	Duplicate
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	TA-Denver	TA-Denver	TA-Denver
Collection Date:		07/22/2009	07/22/2009	10/14/2009	10/14/2009	10/14/2009
Analyte (ug/L)	**Method**					
1,2,4-Trichlorobenzene	8270C	1 U	---	0.27 U	---	0.27 U
1,2-Dinitrobenzene	8330	---	---	---	---	---
1,2-Diphenylhydrazine	8270C	1 U	---	0.22 U	---	0.22 U
1,3-Dinitrobenzene	8270C, 8330	2 U	---	1.9 U	---	1.9 U
1-Methyl naphthalene	8270C PAHs	---	---	---	---	---
1-Nitronaphthalene	8330	---	---	---	---	---
2,4,6-Trichlorophenol	8270C	1 U	---	0.28 U	---	0.28 U
2,4,6-Trinitrotoluene	8330	---	---	---	---	---
2,4-diamino-6-nitrotoluene	8330	---	---	---	---	---
2,4-Dichlorophenol	8270C	1 U	---	0.61 U	---	0.61 U
2,4-Dimethylphenol	8270C	3 U	---	0.56 U	---	0.56 U
2,4-Dinitrophenol	8270C	19 U	---	9.6 U	---	9.6 U
2,4-Dinitrotoluene	8270C, 8330	1 U	---	1.6 U	---	1.6 U
2,6-diamino-4-nitrotoluene	8330	---	---	---	---	---
2,6-Dinitrotoluene	8270C, 8330	1 U	---	1.8 U	---	1.8 U
2-Amino-4,6-Dinitrotoluene	8330	---	---	---	---	---
2-Chloronaphthalene	8270C	2 U	---	0.25 U	---	0.25 U
2-Chlorophenol	8270C	1 U	---	1.9 U	---	1.9 U
2-Methylnaphthalene	8270C PAHs	---	---	---	---	---
2-Nitrophenol	8270C	1 U	---	0.37 U	---	0.37 U
2-Nitrotoluene	8330	---	---	---	---	---
3,3'-Dichlorobenzidine	8270C	2 U	---	1.9 U	---	1.9 U
3-Nitrotoluene	8330	---	---	---	---	---
4,6-Dinitro-o-cresol	8270C	5 U	---	3.8 U	---	3.8 U
4-Amino-2,6-Dinitrotoluene	8330	---	---	---	---	---
4-Bromophenyl phenyl ether	8270C	1 U	---	0.41 U	---	0.41 U
4-Chlorophenylphenyl ether	8270C	2 U	---	1.6 U	---	1.6 U
4-Nitrophenol	8270C	10 U	---	1.2 U	---	1.2 U
4-Nitrotoluene	8330	---	---	---	---	---
Acenaphthene	8270C, 8270C PAHs	1 U	---	0.27 U	---	0.27 U
Acenaphthylene	8270C, 8270C PAHs	1 U	---	0.47 U	---	0.47 U
Anthracene	8270C, 8270C PAHs	1 U	---	0.4 U	---	0.4 U
Benzidine	8270C	19 U	---	48 U	---	48 U
Benzo(a)anthracene	8270C, 8270C PAHs	1 U	---	0.34 U	---	0.34 U
Benzo(a)pyrene	8270C, 8270C PAHs	1 U	---	0.3 U	---	0.3 U
Benzo(b)fluoranthene	8270C, 8270C PAHs	1 U	---	0.51 U	---	0.51 U
Benzo(ghi)perylene	8270C, 8270C PAHs	1 U	---	0.48 U	---	0.48 U
Benzo(k)fluoranthene	8270C, 8270C PAHs	1 U	---	0.44 U	---	0.44 U
bis(2-Chloroethoxy)methane	8270C	1 U	---	0.93 U	---	0.93 U
bis(2-Chloroethyl) ether	8270C	1 U	---	0.39 U	---	0.39 U
bis(2-Chloroisopropyl) ether	8270C	1 U	---	0.27 U	---	0.27 U
bis(2-Ethylhexyl) phthalate	8270C	3 U	---	2.6 U	---	2.6 U
Butyl benzyl phthalate	8270C	2 U	---	0.96 U	---	0.96 U
Chrysene	8270C, 8270C PAHs	1 U	---	0.64 U	---	0.55 U
Dibenzo(a,h)anthracene	8270C, 8270C PAHs	1 U	---	0.49 U	---	0.49 U
Diethyl phthalate	8270C	2 U	---	0.36 U	---	0.36 U
Dimethyl phthalate	8270C	2 U	---	0.2 U	---	0.2 U
Di-n-butyl phthalate	8270C	2 U	---	1.1 U	---	1.1 U
Di-n-octyl phthalate	8270C	2 U	---	0.34 U	---	0.34 U
Fluoranthene	8270C, 8270C PAHs	1 U	---	0.19 U	---	0.19 U

See Table III for notes and abbreviations.

TABLE XI
SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC COMPOUNDS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:		**WS-09A**	**WS-09A**	**WS-09A**	**WS-09A**	**WS-09A**
Sample Type:		Primary	Primary	Primary	Primary	Duplicate
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		Lancaster	TA-Denver	TA-Denver	TA-Denver	TA-Denver
Collection Date:		07/22/2009	07/22/2009	10/14/2009	10/14/2009	10/14/2009
Analyte (ug/L)	**Method**					
Fluorene	8270C, 8270C PAHs	1 U	---	0.3 U	---	0.3 U
Hexachlorobenzene	8270C	1 U	---	0.63 U	---	0.63 U
Hexachlorobutadiene	8270C	1 U	---	3.2 U	---	3.2 U
Hexachloroethane	8270C	1 U	---	2 U	---	2 U
HMX	8330	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	8270C, 8270C PAHs	1 U	---	0.62 U	---	0.62 U
Isophorone	8270C	1 U	---	0.2 U	---	0.2 U
Naphthalene	8270C, 8270C PAHs	1 U	---	0.28 U	---	0.28 U
Nitrobenzene	8270C, 8330	1 U	---	0.78 U	---	0.78 U
Nitroglycerin	8330	---	---	---	---	---
n-Nitrosodimethylamine	1625M, 8270C	2 U	0.005 U	0.28 U	0.005 U	0.28 U
n-Nitrosodi-n-propylamine	8270C	1 U	---	0.34 U	---	0.34 U
n-Nitrosodiphenylamine	8270C	2 U	---	0.42 U	---	0.42 U
p-Chloro-m-cresol	8270C	1 U	---	2.3 U	---	2.3 U
p-Dinitrobenzene	8330	---	---	---	---	---
Pentachlorophenol	8270C	3 U	---	19 U	---	19 U
PETN	8330	---	---	---	---	---
Phenanthrene	8270C, 8270C PAHs	1 U	---	0.25 U	---	0.25 U
Phenol	8270C	1 U	---	1.9 U	---	1.9 U
Pyrene	8270C, 8270C PAHs	---	---	---	---	---
RDX	8330	---	---	---	---	---
sym-Trinitrobenzene	8330	---	---	---	---	---
Tetryl	8330	---	---	---	---	---

TABLE XII
SUMMARY OF ANALYSES FOR PERCHLORATE, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Geological Unit	Lab Name	Date Collected	Perchlorate Method 314.0 (ug/L)
HAR-07	Primary	Chatsworth	Lancaster	03/05/2009	0.7 U
HAR-07	Primary	Chatsworth	TA-Denver	05/11/2009	0.28 U
HAR-07	Primary	Chatsworth	Lancaster	07/21/2009	0.7 U
HAR-07	Primary	Chatsworth	TA-Denver	10/15/2009	0.28 U
HAR-08	Primary	Chatsworth	Lancaster	02/19/2009	0.7 U
HAR-08	Primary	Chatsworth	Lancaster	04/30/2009	0.7 U
HAR-08	Primary	Chatsworth	Lancaster	07/21/2009	0.7 U
HAR-08	Primary	Chatsworth	TA-Denver	10/22/2009	0.28 U
HAR-18	Primary	Chatsworth	Lancaster	03/04/2009	0.7 U
HAR-18	Primary	Chatsworth	Lancaster	04/30/2009	0.7 U
HAR-18	Primary	Chatsworth	Lancaster	07/16/2009	0.7 U
HAR-18	Primary	Chatsworth	TA-Denver	10/29/2009	0.28 U
HAR-20	Primary	Chatsworth	Lancaster	02/17/2009	0.7 U
HAR-20	Split	Chatsworth	TA-Denver	02/17/2009	0.33 J
HAR-20	Primary	Chatsworth	Lancaster	04/30/2009	0.7 U
HAR-20	Duplicate	Chatsworth	Lancaster	04/30/2009	0.7 U
HAR-20	Split	Chatsworth	TA-Denver	04/30/2009	0.28 U
HAR-20	Primary	Chatsworth	Lancaster	07/15/2009	0.7 U
HAR-20	Primary	Chatsworth	TA-Denver	10/29/2009	0.28 U
PZ-108	Primary	Shallow	Lancaster	02/18/2009	0.7 U
PZ-108	Split	Shallow	TA-Denver	02/18/2009	0.28 U
PZ-108	Primary	Shallow	Lancaster	05/05/2009	0.7 U
PZ-108	Primary	Shallow	Lancaster	07/14/2009	0.7 U
PZ-108	Split	Shallow	TA-Denver	07/14/2009	0.28 U
PZ-108	Primary	Shallow	TA-Denver	10/14/2009	0.28 U
PZ-122	Primary	Shallow	Lancaster	02/19/2009	0.7 U
PZ-122	Primary	Shallow	Lancaster	05/05/2009	0.7 U
PZ-122	Duplicate	Shallow	Lancaster	05/05/2009	0.7 U
PZ-122	Split	Shallow	TA-Denver	05/05/2009	0.28 U
PZ-122	Primary	Shallow	Lancaster	07/14/2009	0.7 U
PZ-122	Primary	Shallow	TA-Denver	10/13/2009	0.28 U
RD-01	Primary	Chatsworth	Lancaster	02/25/2009	0.7 U
RD-01	Split	Chatsworth	TA-Denver	02/25/2009	1.4 U
RD-01	Primary	Chatsworth	Lancaster	05/12/2009	0.7 U
RD-01	Primary	Chatsworth	Lancaster	07/14/2009	0.7 U
RD-01	Primary	Chatsworth	TA-Denver	10/27/2009	0.28 U
RD-02	Primary	Chatsworth	Lancaster	02/26/2009	0.7 U
RD-02	Primary	Chatsworth	Lancaster	05/12/2009	0.7 U
RD-03	Primary	Chatsworth	TA-Denver	10/27/2009	0.28 U
RD-03	Duplicate	Chatsworth	TA-Denver	10/27/2009	0.28 U
RD-03	Split	Chatsworth	TA-Irvine	10/27/2009	0.9 U
RD-04	Primary	Chatsworth	Lancaster	02/09/2009	0.7 U
RD-04	Primary	Chatsworth	Lancaster	05/05/2009	0.7 U
RD-04	Primary	Chatsworth	Lancaster	07/28/2009	0.7 U
RD-04	Primary	Chatsworth	TA-Denver	10/28/2009	0.28 U
RD-09	Primary	Chatsworth	Lancaster	02/19/2009	0.7 U
RD-09	Duplicate	Chatsworth	Lancaster	02/19/2009	0.7 U

See Table III for notes and abbreviations.

TABLE XII
SUMMARY OF ANALYSES FOR PERCHLORATE, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Geological Unit	Lab Name	Date Collected	Perchlorate Method 314.0 (ug/L)
RD-09	Primary	Chatsworth	Lancaster	05/07/2009	0.7 U
RD-09	Duplicate	Chatsworth	Lancaster	05/07/2009	0.7 U
RD-09	Primary	Chatsworth	Lancaster	07/28/2009	0.7 U
RD-09	Primary	Chatsworth	TA-Denver	10/19/2009	0.28 U
RD-10	Primary	Chatsworth	Lancaster	02/26/2009	57.7
RD-10	Primary	Chatsworth	Lancaster	05/11/2009	59.4
RD-10	Primary	Chatsworth	Lancaster	07/14/2009	56.4
RD-10	Primary	Chatsworth	TA-Denver	10/27/2009	49
RD-10	Duplicate	Chatsworth	TA-Denver	10/27/2009	51
RD-13	Primary	Chatsworth	Lancaster	03/09/2009	0.7 U
RD-13	Duplicate	Chatsworth	Lancaster	03/09/2009	0.7 U
RD-13	Primary	Chatsworth	Lancaster	05/06/2009	0.7 U
RD-13	Primary	Chatsworth	Lancaster	07/15/2009	0.7 U
RD-13	Duplicate	Chatsworth	Lancaster	07/15/2009	0.7 U
RD-13	Primary	Chatsworth	TA-Denver	10/21/2009	0.28 U
RD-41A	Primary	Chatsworth	Lancaster	07/28/2009	0.7 U
RD-41B	Primary	Chatsworth	Lancaster	02/12/2009	0.7 U
RD-41B	Primary	Chatsworth	Lancaster	05/04/2009	0.7 U
RD-41B	Duplicate	Chatsworth	Lancaster	05/04/2009	0.7 U
RD-41B	Split	Chatsworth	TA-Denver	05/04/2009	0.28 U
RD-41B	Primary	Chatsworth	Lancaster	08/04/2009	0.7 U
RD-41B	Primary	Chatsworth	TA-Denver	11/02/2009	0.28 U
RD-44	Primary	Chatsworth	Lancaster	03/02/2009	0.7 U
RD-44	Primary	Chatsworth	Lancaster	04/30/2009	0.7 U
RD-44	Primary	Chatsworth	Lancaster	07/27/2009	0.7 U
RD-44	Duplicate	Chatsworth	Lancaster	07/27/2009	0.7 U
RD-44	Primary	Chatsworth	TA-Denver	10/28/2009	0.28 U
RD-44	Split	Chatsworth	TA-Irvine	10/28/2009	0.9 U
RD-48B	Primary	Chatsworth	TA-Denver	11/03/2009	0.28 U
RD-48C	Primary	Chatsworth	TA-Denver	10/28/2009	0.28 U
RD-49A	Primary	Chatsworth	Lancaster	03/05/2009	0.7 U
RD-49A	Primary	Chatsworth	Lancaster	05/06/2009	0.7 U
RD-49B	Primary	Chatsworth	Lancaster	02/11/2009	0.7 U
RD-49B	Primary	Chatsworth	Lancaster	05/06/2009	0.7 U
RD-49B	Primary	Chatsworth	Lancaster	07/28/2009	0.7 U
RD-49B	Primary	Chatsworth	TA-Denver	10/30/2009	0.28 U
RD-49C	Primary	Chatsworth	Lancaster	02/11/2009	0.7 U
RD-49C	Primary	Chatsworth	Lancaster	05/06/2009	0.7 U
RD-49C	Primary	Chatsworth	Lancaster	07/28/2009	0.7 U
RD-49C	Primary	Chatsworth	TA-Denver	10/30/2009	0.28 U
RD-51B	Primary	Chatsworth	Lancaster	02/09/2009	0.7 U
RD-51B	Primary	Chatsworth	Lancaster	05/04/2009	0.7 U
RD-51B	Primary	Chatsworth	Lancaster	07/27/2009	0.7 U
RD-51B	Primary	Chatsworth	TA-Denver	10/19/2009	0.28 U
RD-51C	Primary	Chatsworth	Lancaster	02/10/2009	0.7 U
RD-51C	Duplicate	Chatsworth	Lancaster	02/10/2009	0.7 U
RD-51C	Primary	Chatsworth	Lancaster	05/05/2009	0.7 U

See Table III for notes and abbreviations.
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TABLE XII

SUMMARY OF ANALYSES FOR PERCHLORATE, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Geological Unit	Lab Name	Date Collected	Perchlorate Method 314.0 (ug/L)
RD-51C	Primary	Chatsworth	Lancaster	07/27/2009	0.7 U
RD-51C	Primary	Chatsworth	TA-Denver	10/19/2009	0.28 U
RD-51C	Duplicate	Chatsworth	TA-Denver	10/19/2009	0.28 U
RD-55A	Primary	Chatsworth	Lancaster	02/18/2009	0.7 U
RD-55A	Primary	Chatsworth	Lancaster	04/30/2009	0.7 U
RD-55A	Primary	Chatsworth	Lancaster	07/21/2009	0.7 U
RD-55A	Primary	Chatsworth	TA-Denver	11/03/2009	0.28 U
RD-55B	Primary	Chatsworth	Lancaster	02/12/2009	0.7 U
RD-55B	Primary	Chatsworth	Lancaster	04/30/2009	0.7 U
RD-55B	Primary	Chatsworth	Lancaster	07/21/2009	0.7 U
RD-55B	Primary	Chatsworth	TA-Denver	11/02/2009	0.28 U
RD-58A	Primary	Chatsworth	Lancaster	03/05/2009	0.7 U
RD-58A	Primary	Chatsworth	Lancaster	05/11/2009	0.7 U
RD-58A	Primary	Chatsworth	Lancaster	08/04/2009	0.7 U
RD-58A	Primary	Chatsworth	TA-Denver	10/22/2009	0.28 U
RD-58B	Primary	Chatsworth	Lancaster	02/11/2009	0.7 U
RD-58B	Primary	Chatsworth	Lancaster	05/11/2009	0.7 U
RD-58B	Split	Chatsworth	TA-Denver	05/11/2009	0.28 U
RD-58B	Primary	Chatsworth	Lancaster	07/28/2009	0.7 U
RD-58B	Primary	Chatsworth	TA-Denver	10/22/2009	0.28 U
WS-05	Primary	Chatsworth	Lancaster	02/10/2009	0.7 U
WS-05	Duplicate	Chatsworth	Lancaster	02/10/2009	0.7 U
WS-05	Primary	Chatsworth	Lancaster	05/06/2009	0.7 U
WS-05	Primary	Chatsworth	Lancaster	07/29/2009	0.7 U
WS-05	Duplicate	Chatsworth	Lancaster	07/29/2009	0.7 U
WS-05	Primary	Chatsworth	TA-Denver	10/15/2009	0.28 U
WS-05	Split	Chatsworth	TA-Irvine	10/15/2009	0.9 U
WS-06	Primary	Chatsworth	Lancaster	02/26/2009	0.7 U
WS-06	Split	Chatsworth	TA-Denver	02/26/2009	0.28 U
WS-06	Primary	Chatsworth	Lancaster	05/06/2009	0.7 U
WS-06	Primary	Chatsworth	Lancaster	07/29/2009	0.7 U
WS-06	Primary	Chatsworth	TA-Denver	10/29/2009	0.28 U
WS-06	Split	Chatsworth	TA-Irvine	10/29/2009	0.9 U
WS-09	Primary	Chatsworth	Lancaster	02/10/2009	0.7 U
WS-09	Primary	Chatsworth	Lancaster	05/05/2009	0.7 U
WS-09	Duplicate	Chatsworth	Lancaster	05/05/2009	0.7 U
WS-09	Primary	Chatsworth	Lancaster	07/23/2009	0.7 U
WS-09	Primary	Chatsworth	TA-Denver	10/20/2009	0.28 U
WS-09A	Primary	Chatsworth	Lancaster	02/12/2009	0.7 U
WS-09A	Primary	Chatsworth	Lancaster	05/04/2009	0.7 U
WS-09A	Primary	Chatsworth	Lancaster	07/22/2009	0.7 U
WS-09A	Primary	Chatsworth	TA-Denver	10/14/2009	0.28 U
WS-09A	Duplicate	Chatsworth	TA-Denver	10/14/2009	0.28 U

TABLE XIII

SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Inorganics						
Well Identifier:			**HAR-07**	**HAR-07**	**HAR-14**	**HAR-15**
Sample Type:			Primary	Primary	Primary	Primary
Geological Unit:			Chatsworth	Chatsworth	Shallow	Shallow
Sample Preparation:			Dissolved	Total	Dissolved	Dissolved
Lab Name:			TA-Denver	TA-Denver	TA-Denver	TA-Denver
Collection Date:			05/11/2009	7/21/2009	04/23/2009	04/23/2009
Analyte	**Units**	**MCL**				
Antimony	mg/L	0.006	0.00028 U	---	0.00017 J	0.00013 J
Arsenic	mg/L	0.01	0.0004 J	---	0.00085 J	0.003 J
Barium	mg/L	1	0.02	---	0.035	0.029
Beryllium	mg/L	0.004	0.00008 U	---	0.00008 U	0.00008 U
Cadmium	mg/L	0.005	0.00004 U	---	0.00004 U	0.00016 J
Chromium	mg/L	0.05	0.0005 U	---	0.0005 U	0.0005 U
Cobalt	mg/L	NA	0.000078 U	---	0.0004 J	0.00019 J
Copper	mg/L	1.3 RAL	0.0033	---	0.00068 J	0.00072 J
Cyanide	mg/L	0.15	---	0.0024 U	0.0024 U	0.0024 U
Lead	mg/L	0.015 RAL	0.00045 J	---	0.00018 U	0.00018 U
Mercury	mg/L	0.002	0.000072 U	---	0.000027 U	0.000027 U
Nickel	mg/L	0.1	0.00092 J	---	0.0053	0.0028
Selenium	mg/L	0.05	0.0007 U	---	0.0014 J	0.0007 U
Silver	mg/L	0.1 SMCL	0.00016 U	---	0.00016 U	0.00016 U
Sulfide	mg/L	NA	0.0071 U	---	0.0071 U	0.0071 U
Thallium	mg/L	0.002	0.000028 J	---	0.000047 J	0.000021 J
Tin	mg/L	NA	0.0058 U	---	0.0058 U	0.0058 U
Vanadium	mg/L	0.05 NL	0.0002 J	---	0.0015 J	0.0025
Zinc	mg/L	5 SMCL	0.074	---	0.0041 J	0.004 J

See Table III for notes and abbreviations.

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Inorganics						
Well Identifier:			**HAR-16**	**HAR-16**	**HAR-17**	**HAR-17**
Sample Type:			Primary	Split	Primary	Duplicate
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth
Sample Preparation:			Dissolved	Dissolved	Dissolved	Dissolved
Lab Name:			TA-Denver	Lancaster	TA-Denver	TA-Denver
Collection Date:			04/23/2009	04/23/2009	04/29/2009	04/29/2009
Analyte	**Units**	**MCL**				
Antimony	mg/L	0.006	0.00007 U	0.0003 U	0.00007 U	0.00007 U
Arsenic	mg/L	0.01	0.00047 J	0.00095 U	0.00028 J	0.00024 J
Barium	mg/L	1	0.025	0.023	0.074	0.071
Beryllium	mg/L	0.004	0.00008 U	0.00013 U	0.00008 U	0.00008 U
Cadmium	mg/L	0.005	0.00004 U	0.00021 U	0.00004 U	0.00004 U
Chromium	mg/L	0.05	0.0005 U	0.00068 U	0.0005 U	0.0005 U
Cobalt	mg/L	NA	0.000054 J	0.0021 U	0.00046 J	0.00045 J
Copper	mg/L	1.3 RAL	0.0056	0.0042	0.0087	0.0083
Cyanide	mg/L	0.15	0.0024 U	0.005 U	0.0024 U	0.0024 U
Lead	mg/L	0.015 RAL	0.0014	0.0011	0.00044 J	0.00096 J
Mercury	mg/L	0.002	0.000027 U	0.000056 U	0.000027 U	0.000027 U
Nickel	mg/L	0.1	0.0018 J	0.0015 J	0.0047	0.0046
Selenium	mg/L	0.05	0.0029 J	0.0025	0.0007 U	0.0007 U
Silver	mg/L	0.1 SMCL	0.00016 U	0.00008 U	0.00016 U	0.00016 U
Sulfide	mg/L	NA	0.0071 U	0.054 U	0.0071 U	0.0071 U
Thallium	mg/L	0.002	0.00002 U	0.00015 U	0.000024 J	0.00002 J
Tin	mg/L	NA	0.0058 U	0.0088 U	0.0058 U	0.0058 U
Vanadium	mg/L	0.05 NL	0.00096 J	0.0025 U	0.00032 J	0.0003 J
Zinc	mg/L	5 SMCL	0.85	0.719	0.15	0.12

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Inorganics						
Well Identifier:			**RD-06**	**RD-06**	**RD-37**	**RD-37**
Sample Type:			Primary	Duplicate	Primary	Split
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth
Sample Preparation:			Dissolved	Dissolved	Dissolved	Total
Lab Name:			TA-Denver	TA-Denver	TA-Denver	Lancaster
Collection Date:			7/13/2009	7/13/2009	7/13/2009	7/13/2009
Analyte	**Units**	**MCL**				
Antimony	mg/L	0.006	0.00007 U	0.00007 U	0.00007 U	---
Arsenic	mg/L	0.01	0.00021 U	0.00021 U	0.0027 J	---
Barium	mg/L	1	0.039	0.04	0.074	---
Beryllium	mg/L	0.004	0.00008 U	0.00008 U	0.00008 U	---
Cadmium	mg/L	0.005	0.00004 U	0.00004 U	0.00004 U	---
Chromium	mg/L	0.05	0.0005 U	0.0005 U	0.0005 U	---
Cobalt	mg/L	NA	0.00014 J	0.00016 J	0.00025 J	---
Copper	mg/L	1.3 RAL	0.00056 U	0.00056 U	0.00056 U	---
Cyanide	mg/L	0.15	0.0024 U	0.0031 J	0.0024 U	0.005 U
Lead	mg/L	0.015 RAL	0.00018 U	0.00018 U	0.0015	---
Mercury	mg/L	0.002	0.000027 U	0.000027 U	0.000027 U	---
Nickel	mg/L	0.1	0.0012 J	0.0013 J	0.002	---
Selenium	mg/L	0.05	0.0007 U	0.0007 U	0.0007 U	---
Silver	mg/L	0.1 SMCL	0.000015 U	0.000015 U	0.000015 U	---
Sulfide	mg/L	NA	0.0071 U	0.0071 U	0.21	0.23
Thallium	mg/L	0.002	0.00002 U	0.000046 U	0.000038 J	---
Tin	mg/L	NA	0.00017 U	0.00017 U	0.00017 U	---
Vanadium	mg/L	0.05 NL	0.00014 U	0.00014 U	0.00014 U	---
Zinc	mg/L	5 SMCL	0.057	0.058	0.66	---

See Table III for notes and abbreviations.

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Pesticides						
Well Identifier:			**HAR-07**	**HAR-07**	**HAR-14**	**HAR-15**
Sample Type:			Primary	Primary	Primary	Primary
Geological Unit:			Chatsworth	Chatsworth	Shallow	Shallow
Lab Name:			TA-Denver	TA-Denver	TA-Denver	TA-Denver
Collection Date:			05/11/2009	7/21/2009	04/23/2009	04/23/2009
Analyte	**Units**	**MCL**				
1,2,3,4,6,7,8-Heptachlorodibenzofuran	pg/L	NA	---	0.5 U	1.2 U	0.95 U
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	pg/L	NA	---	1 U	1.4 U	1.6 U
1,2,3,4,7,8,9-Heptachlorodibenzofuran	pg/L	NA	---	0.89 U	1.6 U	1.3 U
1,2,3,4,7,8-Hexachlorodibenzofuran	pg/L	NA	---	0.36 U	0.83 U	0.55 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	pg/L	NA	---	0.59 U	1.4 U	1.4 U
1,2,3,6,7,8-Hexachlorodibenzofuran	pg/L	NA	---	0.37 U	0.78 U	0.56 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	pg/L	NA	---	0.84 U	1.5 U	1.5 U
1,2,3,7,8,9-Hexachlorodibenzofuran	pg/L	NA	---	0.52 U	1.1 U	0.69 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	pg/L	NA	---	0.64 U	1.3 U	1.3 U
1,2,3,7,8-Pentachlorodibenzofuran	pg/L	NA	---	0.56 U	1.4 U	1.7 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	pg/L	NA	---	0.7 U	1.5 U	2 U
2,3,4,6,7,8-Hexachlorodibenzofuran	pg/L	NA	---	0.41 U	0.81 U	0.57 U
2,3,4,7,8-Pentachlorodibenzofuran	pg/L	NA	---	0.45 U	1.2 U	1.4 U
2,3,7,8-TCDD	pg/L	30	---	1.6 U	3.4 U	4 U
2,3,7,8-TCDD TEQ	pg/L	30	---	2.95 U	6.3 U	7.4 U
2,3,7,8-Tetrachlorodibenzofuran	pg/L	NA	---	1 U	2.1 U	2.6 U
Octachlorodibenzofuran	pg/L	NA	---	1.8 U	2.4 U	2.3 U
Octachlorodibenzo-p-dioxin	pg/L	NA	---	4.2 U	4.4 U	2 U
2,4-Dichlorophenoxyacetic Acid (2,4-D)	ug/L	70	---	0.66 U	0.65 U	0.67 U
2,4,5-T	ug/L	NA	---	0.19 U	0.19 U	0.19 U
2,4,5-TP (Silvex)	ug/L	50	---	0.24 U	0.24 U	0.24 U
Dinoseb	ug/L	7	---	0.23 U	0.22 U	0.23 U
Isodrin	ug/L	NA	1.7 U	---	1.7 U	1.7 U
Aroclor 1016	ug/L	0.5 (total)	0.12 U	---	0.12 U	0.12 U
Aroclor 1221	ug/L	0.5 (total)	0.2 U	---	0.21 U	0.21 U
Aroclor 1232	ug/L	0.5 (total)	0.16 U	---	0.16 U	0.16 U
Aroclor 1242	ug/L	0.5 (total)	0.099 U	---	0.1 U	0.1 U
Aroclor 1248	ug/L	0.5 (total)	0.087 U	---	0.088 U	0.089 U
Aroclor 1254	ug/L	0.5 (total)	0.11 U	---	0.11 U	0.11 U
Aroclor 1260	ug/L	0.5 (total)	0.15 U	---	0.15 U	0.16 U
4,4'-DDD	ug/L	NA	0.0073 U	---	0.0074 U	0.0075 U
4,4'-DDE	ug/L	NA	0.0071 U	---	0.0072 U	0.0073 U
4,4'-DDT	ug/L	NA	0.014 U	---	0.014 U	0.014 U
Aldrin	ug/L	0.002 AAL	0.0056 U	---	0.0057 U	0.0057 U
alpha-BHC	ug/L	0.015 AAL	0.005 U	---	0.0051 U	0.0051 U
beta-BHC	ug/L	0.025 AAL	0.0083 U	---	0.0084 U	0.0084 U
Chlordane	ug/L	0.1	0.13 U	---	0.13 U	0.14 U
Chlorobenzilate	ug/L	NA	0.04 U	---	0.041 U	0.041 U
delta-BHC	ug/L	NA	0.0055 U	---	0.0056 U	0.0056 U
Diallate	ug/L	NA	0.18 U	---	0.19 U	0.19 U
Dieldrin	ug/L	0.002 AAL	0.006 U	---	0.006 U	0.0061 U
Endosulfan I	ug/L	NA	0.0055 U	---	0.0056 U	0.0056 U
Endosulfan II	ug/L	NA	0.0066 U	---	0.0067 U	0.0068 U
Endosulfan sulfate	ug/L	NA	0.0054 U	---	0.0055 U	0.0055 U
Endrin	ug/L	2	0.0075 U	---	0.0076 U	0.0077 U
Endrin aldehyde	ug/L	NA	0.0084 U	---	0.0084 U	0.0085 U

See Table III for notes and abbreviations.

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Pesticides						
Well Identifier:			**HAR-07**	**HAR-07**	**HAR-14**	**HAR-15**
Sample Type:			Primary	Primary	Primary	Primary
Geological Unit:			Chatsworth	Chatsworth	Shallow	Shallow
Lab Name:			TA-Denver	TA-Denver	TA-Denver	TA-Denver
Collection Date:			05/11/2009	7/21/2009	04/23/2009	04/23/2009
Analyte	**Units**	**MCL**				
gamma-BHC (Lindane)	ug/L	0.2	0.0066 U	---	0.0066 U	0.0067 U
Heptachlor	ug/L	0.01	0.0073 U	---	0.0074 U	0.0075 U
Heptachlor epoxide	ug/L	0.01	0.0071 U	---	0.0072 U	0.0073 U
Kepone	ug/L	NA	0.33 U	---	0.33 U	0.34 U
p,p'-Methoxychlor	ug/L	30	0.012 U	---	0.012 U	0.013 U
Toxaphene	ug/L	3	0.35 U	---	0.35 U	0.36 U

See Table III for notes and abbreviations.

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Pesticides						
Well Identifier:			**HAR-16**	**HAR-16**	**HAR-17**	**HAR-17**
Sample Type:			Primary	Split	Primary	Duplicate
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			TA-Denver	Lancaster	TA-Denver	TA-Denver
Collection Date:			04/23/2009	04/23/2009	04/29/2009	04/29/2009
Analyte	**Units**	**MCL**				
1,2,3,4,6,7,8-Heptachlorodibenzofuran	pg/L	NA	0.84 U	6.23 U	1.2 U	2.9 J
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	pg/L	NA	1.8 U	17.7 U	2.1 U	1.7 U
1,2,3,4,7,8,9-Heptachlorodibenzofuran	pg/L	NA	1.1 U	7.99 U	1.7 U	1.5 U
1,2,3,4,7,8-Hexachlorodibenzofuran	pg/L	NA	0.7 U	4.85 U	0.78 U	0.98 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	pg/L	NA	1.4 U	11.7 U	1.3 U	1.5 U
1,2,3,6,7,8-Hexachlorodibenzofuran	pg/L	NA	0.64 U	4.85 U	0.75 U	0.9 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	pg/L	NA	1.6 U	11.2 U	1.5 U	1.6 U
1,2,3,7,8,9-Hexachlorodibenzofuran	pg/L	NA	0.85 U	5.1 U	0.99 U	1.2 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	pg/L	NA	1.4 U	11.5 U	1.3 U	1.4 U
1,2,3,7,8-Pentachlorodibenzofuran	pg/L	NA	1.5 U	4.85 U	1.5 U	1.7 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	pg/L	NA	1.8 U	6.41 U	1.9 U	1.8 U
2,3,4,6,7,8-Hexachlorodibenzofuran	pg/L	NA	0.71 U	4.85 U	0.77 U	0.97 U
2,3,4,7,8-Pentachlorodibenzofuran	pg/L	NA	1.3 U	4.85 U	1.2 U	1.5 U
2,3,7,8-TCDD	pg/L	30	3.4 U	4.68 U	4.8 U	4.2 U
2,3,7,8-TCDD TEQ	pg/L	30	6.6 U	18.9 U	8.2 U	0.029 J
2,3,7,8-Tetrachlorodibenzofuran	pg/L	NA	2.3 U	4.74 U	2.5 U	3 U
Octachlorodibenzofuran	pg/L	NA	2 U	18.1 U	2.2 U	2.4 U
Octachlorodibenzo-p-dioxin	pg/L	NA	2.2 U	21.8 U	2.2 U	8.3 U
2,4-Dichlorophenoxyacetic Acid (2,4-D)	ug/L	70	0.64 U	0.16 U	0.65 U	0.65 U
2,4,5-T	ug/L	NA	0.18 U	0.015 U	0.19 U	0.19 U
2,4,5-TP (Silvex)	ug/L	50	0.23 U	0.0099 U	0.24 U	0.24 U
Dinoseb	ug/L	7	0.22 U	0.099 U	0.22 U	0.22 U
Isodrin	ug/L	NA	1.7 U	---	1.7 U	1.7 U
Aroclor 1016	ug/L	0.5 (total)	0.12 U	0.095 U	0.12 U	0.12 U
Aroclor 1221	ug/L	0.5 (total)	0.21 U	0.15 U	0.2 U	0.2 U
Aroclor 1232	ug/L	0.5 (total)	0.16 U	0.095 U	0.16 U	0.16 U
Aroclor 1242	ug/L	0.5 (total)	0.1 U	0.095 U	0.099 U	0.099 U
Aroclor 1248	ug/L	0.5 (total)	0.089 U	0.095 U	0.087 U	0.087 U
Aroclor 1254	ug/L	0.5 (total)	0.11 U	0.095 U	0.11 U	0.11 U
Aroclor 1260	ug/L	0.5 (total)	0.16 U	0.095 U	0.15 U	0.15 U
4,4'-DDD	ug/L	NA	0.0074 U	0.0038 U	0.0073 U	0.0073 U
4,4'-DDE	ug/L	NA	0.0072 U	0.0038 U	0.0071 U	0.0071 U
4,4'-DDT	ug/L	NA	0.014 U	0.0057 U	0.014 U	0.014 U
Aldrin	ug/L	0.002 AAL	0.0057 U	0.0028 U	0.0056 U	0.0056 U
alpha-BHC	ug/L	0.015 AAL	0.0051 U	0.0026 U	0.005 U	0.005 U
beta-BHC	ug/L	0.025 AAL	0.0084 U	0.0036 U	0.0083 U	0.0083 U
Chlordane	ug/L	0.1	0.13 U	0.066 U	0.13 U	0.13 U
Chlorobenzilate	ug/L	NA	0.041 U	---	0.04 U	0.04 U
delta-BHC	ug/L	NA	0.0056 U	0.0028 U	0.0055 U	0.0055 U
Diallate	ug/L	NA	0.19 U	---	0.18 U	0.18 U
Dieldrin	ug/L	0.002 AAL	0.006 U	0.0038 U	0.006 U	0.006 U
Endosulfan I	ug/L	NA	0.0056 U	0.0028 U	0.0055 U	0.0055 U
Endosulfan II	ug/L	NA	0.0067 U	0.0038 U	0.0066 U	0.0066 U
Endosulfan sulfate	ug/L	NA	0.0055 U	0.0038 U	0.0054 U	0.0054 U
Endrin	ug/L	2	0.0076 U	0.0038 U	0.0075 U	0.0075 U
Endrin aldehyde	ug/L	NA	0.0084 U	0.019 U	0.0084 U	0.0084 U

See Table III for notes and abbreviations.

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Pesticides						
Well Identifier:			**HAR-16**	**HAR-16**	**HAR-17**	**HAR-17**
Sample Type:			Primary	Split	Primary	Duplicate
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			TA-Denver	Lancaster	TA-Denver	TA-Denver
Collection Date:			04/23/2009	04/23/2009	04/29/2009	04/29/2009
Analyte	**Units**	**MCL**				
gamma-BHC (Lindane)	ug/L	0.2	0.0066 U	0.0044 U	0.0066 U	0.0066 U
Heptachlor	ug/L	0.01	0.0074 U	0.0038 U	0.0073 U	0.0073 U
Heptachlor epoxide	ug/L	0.01	0.0072 U	0.0035 U	0.0071 U	0.0071 U
Kepone	ug/L	NA	0.33 U	---	0.33 U	0.33 U
p,p'-Methoxychlor	ug/L	30	0.012 U	0.028 U	0.012 U	0.012 U
Toxaphene	ug/L	3	0.35 U	0.95 U	0.35 U	0.35 U

See Table III for notes and abbreviations.

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Pesticides						
Well Identifier:			**HAR-17**	**HAR-17**	**HAR-17**	**RD-06**
Sample Type:			Primary	Duplicate	Split	Primary
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			TA-Knoxville	TA-Knoxville	GEL	TA-Denver
Collection Date:			7/16/2009	7/16/2009	7/16/2009	7/13/2009
Analyte	**Units**	**MCL**				
1,2,3,4,6,7,8-Heptachlorodibenzofuran	pg/L	NA	14 U	67 U	4.86 U	1.2 U
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	pg/L	NA	2.6 U	56 U	4.86 U	2.2 U
1,2,3,4,7,8,9-Heptachlorodibenzofuran	pg/L	NA	2.1 U	3.8 U	4.86 U	1.7 U
1,2,3,4,7,8-Hexachlorodibenzofuran	pg/L	NA	1.6 U	16 U	4.86 U	0.98 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	pg/L	NA	1.6 U	1.2 U	4.86 U	1.3 U
1,2,3,6,7,8-Hexachlorodibenzofuran	pg/L	NA	1.1 U	17 U	4.86 U	0.89 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	pg/L	NA	1.9 U	1.4 U	4.86 U	1.4 U
1,2,3,7,8,9-Hexachlorodibenzofuran	pg/L	NA	1.3 U	1.2 U	4.86 U	1 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	pg/L	NA	1.6 U	1.2 U	4.86 U	1.3 U
1,2,3,7,8-Pentachlorodibenzofuran	pg/L	NA	2.4 U	2.3 U	4.86 U	2.2 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	pg/L	NA	2.3 U	2 U	4.86 U	2.2 U
2,3,4,6,7,8-Hexachlorodibenzofuran	pg/L	NA	1 U	1 U	4.86 U	0.87 U
2,3,4,7,8-Pentachlorodibenzofuran	pg/L	NA	2.1 U	1.9 U	4.86 U	1.8 U
2,3,7,8-TCDD	pg/L	30	3.6 U	2.8 U	3.19 U	3.3 U
2,3,7,8-TCDD TEQ	pg/L	30	8.02 U	11.18 U	13.39 U	7.16 U
2,3,7,8-Tetrachlorodibenzofuran	pg/L	NA	2.1 U	1.9 U	1.85 U	2.2 U
Octachlorodibenzofuran	pg/L	NA	21 U	170 U	9.72 U	3.7 U
Octachlorodibenzo-p-dioxin	pg/L	NA	28 U	1100 U	9.72 U	13 U
2,4-Dichlorophenoxyacetic Acid (2,4-D)	ug/L	70	---	---	---	0.65 U
2,4,5-T	ug/L	NA	---	---	---	0.19 U
2,4,5-TP (Silvex)	ug/L	50	---	---	---	0.24 U
Dinoseb	ug/L	7	---	---	---	0.22 U
Isodrin	ug/L	NA	---	---	---	1.7 U
Aroclor 1016	ug/L	0.5 (total)	---	---	---	0.12 U
Aroclor 1221	ug/L	0.5 (total)	---	---	---	0.2 U
Aroclor 1232	ug/L	0.5 (total)	---	---	---	0.16 U
Aroclor 1242	ug/L	0.5 (total)	---	---	---	0.099 U
Aroclor 1248	ug/L	0.5 (total)	---	---	---	0.087 U
Aroclor 1254	ug/L	0.5 (total)	---	---	---	0.11 U
Aroclor 1260	ug/L	0.5 (total)	---	---	---	0.15 U
4,4'-DDD	ug/L	NA	---	---	---	0.0073 U
4,4'-DDE	ug/L	NA	---	---	---	0.0071 U
4,4'-DDT	ug/L	NA	---	---	---	0.014 U
Aldrin	ug/L	0.002 AAL	---	---	---	0.0056 U
alpha-BHC	ug/L	0.015 AAL	---	---	---	0.005 U
beta-BHC	ug/L	0.025 AAL	---	---	---	0.0083 U
Chlordane	ug/L	0.1	---	---	---	0.13 U
Chlorobenzilate	ug/L	NA	---	---	---	0.04 U
delta-BHC	ug/L	NA	---	---	---	0.0055 U
Diallate	ug/L	NA	---	---	---	0.18 U
Dieldrin	ug/L	0.002 AAL	---	---	---	0.006 U
Endosulfan I	ug/L	NA	---	---	---	0.0055 U
Endosulfan II	ug/L	NA	---	---	---	0.0066 U
Endosulfan sulfate	ug/L	NA	---	---	---	0.0054 U
Endrin	ug/L	2	---	---	---	0.0075 U
Endrin aldehyde	ug/L	NA	---	---	---	0.0084 U

See Table III for notes and abbreviations.

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Pesticides							
Well Identifier:			**HAR-17**	**HAR-17**	**HAR-17**	**RD-06**	
Sample Type:			Primary	Duplicate	Split	Primary	
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	
Lab Name:			TA-Knoxville	TA-Knoxville	GEL	TA-Denver	
Collection Date:			7/16/2009	7/16/2009	7/16/2009	7/13/2009	
Analyte	**Units**	**MCL**					
gamma-BHC (Lindane)	ug/L	0.2	---	---	---	0.0066	U
Heptachlor	ug/L	0.01	---	---	---	0.0073	U
Heptachlor epoxide	ug/L	0.01	---	---	---	0.0071	U
Kepone	ug/L	NA	---	---	---	0.33	U
p,p'-Methoxychlor	ug/L	30	---	---	---	0.012	U
Toxaphene	ug/L	3	---	---	---	0.35	U

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Pesticides						
Well Identifier:			**RD-06**	**RD-37**	**RD-37**	**RD-37**
Sample Type:			Duplicate	Primary	Split	Primary
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			TA-Denver	TA-Denver	Lancaster	TA-Denver
Collection Date:			7/13/2009	7/13/2009	7/13/2009	10/28/2009
Analyte	**Units**	**MCL**				
1,2,3,4,6,7,8-Heptachlorodibenzofuran	pg/L	NA	1.9 U	34 U	4.75 U	0.69 U
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	pg/L	NA	2.2 U	6.8 U	4.75 U	1.6 U
1,2,3,4,7,8,9-Heptachlorodibenzofuran	pg/L	NA	2.2 U	3.2 U	4.75 U	1.1 U
1,2,3,4,7,8-Hexachlorodibenzofuran	pg/L	NA	1.3 U	7.1 U	4.75 U	0.36 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	pg/L	NA	1.4 U	1.7 U	4.75 U	1 U
1,2,3,6,7,8-Hexachlorodibenzofuran	pg/L	NA	1.3 U	4.5 U	4.75 U	0.34 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	pg/L	NA	1.6 U	2.1 U	4.75 U	1.1 U
1,2,3,7,8,9-Hexachlorodibenzofuran	pg/L	NA	1.5 U	1.6 U	4.75 U	0.44 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	pg/L	NA	1.4 U	1.8 U	4.75 U	0.97 U
1,2,3,7,8-Pentachlorodibenzofuran	pg/L	NA	2.3 U	2.8 U	4.75 U	0.76 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	pg/L	NA	2.3 U	2.6 U	4.75 U	1 U
2,3,4,6,7,8-Hexachlorodibenzofuran	pg/L	NA	1.2 U	1.3 U	4.75 U	0.35 U
2,3,4,7,8-Pentachlorodibenzofuran	pg/L	NA	1.8 U	2 U	4.75 U	0.62 U
2,3,7,8-TCDD	pg/L	30	3.5 U	4 U	3.42 U	2 U
2,3,7,8-TCDD TEQ	pg/L	30	7.68 U	10.02 U	0.004 J	0.01 J,L
2,3,7,8-Tetrachlorodibenzofuran	pg/L	NA	2.2 U	2.4 U	1.77 U	1.3 U
Octachlorodibenzofuran	pg/L	NA	6.1 U	38 U	9.51 U	1.1 U
Octachlorodibenzo-p-dioxin	pg/L	NA	64 U	130 U	13.2 J	31 J,L
2,4-Dichlorophenoxyacetic Acid (2,4-D)	ug/L	70	0.66 U	0.67 U	0.15 U	0.67 U
2,4,5-T	ug/L	NA	0.19 U	0.19 U	0.014 U	0.19 U
2,4,5-TP (Silvex)	ug/L	50	0.24 U	0.24 U	0.01 J	0.24 U
Dinoseb	ug/L	7	0.23 U	0.23 U	0.095 U	0.23 U
Isodrin	ug/L	NA	1.7 U	1.7 U	---	---
Aroclor 1016	ug/L	0.5 (total)	0.12 U	0.12 U	0.095 U	---
Aroclor 1221	ug/L	0.5 (total)	0.21 U	0.2 U	0.15 U	---
Aroclor 1232	ug/L	0.5 (total)	0.16 U	0.16 U	0.095 U	---
Aroclor 1242	ug/L	0.5 (total)	0.1 U	0.099 U	0.095 U	---
Aroclor 1248	ug/L	0.5 (total)	0.09 U	0.087 U	0.095 U	---
Aroclor 1254	ug/L	0.5 (total)	0.11 U	0.11 U	0.095 U	---
Aroclor 1260	ug/L	0.5 (total)	0.16 U	0.15 U	0.095 U	---
4,4'-DDD	ug/L	NA	0.0073 U	0.0073 U	0.0038 U	---
4,4'-DDE	ug/L	NA	0.0071 U	0.0071 U	0.0038 U	---
4,4'-DDT	ug/L	NA	0.014 U	0.014 U	0.0057 U	---
Aldrin	ug/L	0.002 AAL	0.0056 U	0.0056 U	0.0028 U	---
alpha-BHC	ug/L	0.015 AAL	0.005 U	0.005 U	0.0026 U	---
beta-BHC	ug/L	0.025 AAL	0.0083 U	0.0083 U	0.0036 U	---
Chlordane	ug/L	0.1	0.13 U	0.13 U	0.066 U	---
Chlorobenzilate	ug/L	NA	0.04 U	0.04 U	---	---
delta-BHC	ug/L	NA	0.0055 U	0.0055 U	0.0028 U	---
Diallate	ug/L	NA	0.18 U	0.18 U	---	---
Dieldrin	ug/L	0.002 AAL	0.006 U	0.006 U	0.0038 U	---
Endosulfan I	ug/L	NA	0.0055 U	0.0055 U	0.0028 U	---
Endosulfan II	ug/L	NA	0.0066 U	0.0066 U	0.0038 U	---
Endosulfan sulfate	ug/L	NA	0.0054 U	0.0054 U	0.0038 U	---
Endrin	ug/L	2	0.0075 U	0.0075 U	0.0038 U	---
Endrin aldehyde	ug/L	NA	0.0084 U	0.0084 U	0.019 U	---

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Pesticides						
Well Identifier:			**RD-06**	**RD-37**	**RD-37**	**RD-37**
Sample Type:			Duplicate	Primary	Split	Primary
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			TA-Denver	TA-Denver	Lancaster	TA-Denver
Collection Date:			7/13/2009	7/13/2009	7/13/2009	10/28/2009
Analyte	**Units**	**MCL**				
gamma-BHC (Lindane)	ug/L	0.2	0.021 J	0.0066 U	0.0044 U	---
Heptachlor	ug/L	0.01	0.0073 U	0.0073 U	0.0038 U	---
Heptachlor epoxide	ug/L	0.01	0.0071 U	0.0071 U	0.0035 U	---
Kepone	ug/L	NA	0.33 U	0.33 U	---	---
p,p'-Methoxychlor	ug/L	30	0.012 U	0.012 U	0.028 U	---
Toxaphene	ug/L	3	0.35 U	0.35 U	0.95 U	---

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Pesticides				
Well Identifier:			**RD-37**	**RD-37**
Sample Type:			Duplicate	Split
Geological Unit:			Chatsworth	Chatsworth
Lab Name:			TA-Denver	TA-Irvine
Collection Date:			10/28/2009	10/28/2009
Analyte	**Units**	**MCL**		
1,2,3,4,6,7,8-Heptachlorodibenzofuran	pg/L	NA	0.64 U	0.52 U
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	pg/L	NA	1.1 U	1.1 U
1,2,3,4,7,8,9-Heptachlorodibenzofuran	pg/L	NA	0.94 U	0.94 U
1,2,3,4,7,8-Hexachlorodibenzofuran	pg/L	NA	0.4 U	0.23 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	pg/L	NA	0.75 U	0.38 U
1,2,3,6,7,8-Hexachlorodibenzofuran	pg/L	NA	0.35 U	0.24 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	pg/L	NA	0.86 U	0.39 U
1,2,3,7,8,9-Hexachlorodibenzofuran	pg/L	NA	0.46 U	0.34 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	pg/L	NA	0.75 U	0.36 U
1,2,3,7,8-Pentachlorodibenzofuran	pg/L	NA	0.65 U	0.35 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	pg/L	NA	0.84 U	1.2 U
2,3,4,6,7,8-Hexachlorodibenzofuran	pg/L	NA	0.38 U	0.2 U
2,3,4,7,8-Pentachlorodibenzofuran	pg/L	NA	0.52 U	0.42 U
2,3,7,8-TCDD	pg/L	30	1.8 U	0.63 U
2,3,7,8-TCDD TEQ	pg/L	30	0.001 J,L	2.24 U
2,3,7,8-Tetrachlorodibenzofuran	pg/L	NA	1.1 U	0.29 U
Octachlorodibenzofuran	pg/L	NA	0.98 U	0.78 U
Octachlorodibenzo-p-dioxin	pg/L	NA	3.5 J,L	3.3 U
2,4-Dichlorophenoxyacetic Acid (2,4-D)	ug/L	70	0.67 U	0.43 U
2,4,5-T	ug/L	NA	0.19 U	0.093 U
2,4,5-TP (Silvex)	ug/L	50	0.24 U	0.1 U
Dinoseb	ug/L	7	0.23 U	0.12 U
Isodrin	ug/L	NA	---	---
Aroclor 1016	ug/L	0.5 (total)	---	---
Aroclor 1221	ug/L	0.5 (total)	---	---
Aroclor 1232	ug/L	0.5 (total)	---	---
Aroclor 1242	ug/L	0.5 (total)	---	---
Aroclor 1248	ug/L	0.5 (total)	---	---
Aroclor 1254	ug/L	0.5 (total)	---	---
Aroclor 1260	ug/L	0.5 (total)	---	---
4,4'-DDD	ug/L	NA	---	---
4,4'-DDE	ug/L	NA	---	---
4,4'-DDT	ug/L	NA	---	---
Aldrin	ug/L	0.002 AAL	---	---
alpha-BHC	ug/L	0.015 AAL	---	---
beta-BHC	ug/L	0.025 AAL	---	---
Chlordane	ug/L	0.1	---	---
Chlorobenzilate	ug/L	NA	---	---
delta-BHC	ug/L	NA	---	---
Diallate	ug/L	NA	---	---
Dieldrin	ug/L	0.002 AAL	---	---
Endosulfan I	ug/L	NA	---	---
Endosulfan II	ug/L	NA	---	---
Endosulfan sulfate	ug/L	NA	---	---
Endrin	ug/L	2	---	---
Endrin aldehyde	ug/L	NA	---	---

See Table III for notes and abbreviations.
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TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Pesticides				
Well Identifier:			**RD-37**	**RD-37**
Sample Type:			Duplicate	Split
Geological Unit:			Chatsworth	Chatsworth
Lab Name:			TA-Denver	TA-Irvine
Collection Date:			10/28/2009	10/28/2009
Analyte	**Units**	**MCL**		
gamma-BHC (Lindane)	ug/L	0.2	---	---
Heptachlor	ug/L	0.01	---	---
Heptachlor epoxide	ug/L	0.01	---	---
Kepone	ug/L	NA	---	---
p,p'-Methoxychlor	ug/L	30	---	---
Toxaphene	ug/L	3	---	---

See Table III for notes and abbreviations.

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Semi-Volatile Organic Compounds							
Well Identifier:			**HAR-07**	**HAR-07**	**HAR-07**	**HAR-07**	**HAR-14**
Sample Type:			Primary	Primary	Primary	Primary	Primary
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Shallow
Lab Name:			TA-Denver	TA-Denver	Lancaster	TA-Denver	TA-Denver
Collection Date:			05/11/2009	05/11/2009	7/21/2009	7/21/2009	04/23/2009
Analyte	**Units**	**MCL**					
1,2-Dichlorobenzene	ug/l	600	1.3 U	---	5 U	---	0.13 U
1,2,4,5-Tetrachlorobenzene	ug/L	NA	1.6 U	---	---	---	1.6 U
1,2,4-Trichlorobenzene	ug/L	5	0.27 U	---	1 U	---	0.27 U
1,3-Dichlorobenzene	ug/L	600 AAL	0.28 U	---	---	---	0.28 U
1,3-Dinitrobenzene	ug/L	NA	1.9 U	---	2 U	---	1.9 U
1,4-Dichlorobenzene	ug/L	5	1.6 U	---	5 U	---	0.16 U
1,3,5-Trinitrobenzene	ug/L	NA	3.8 U	---	---	---	3.8 U
1,4-Phenylenediamine	ug/L	NA	4.8 U	---	---	---	4.8 U
1-Naphthylamine	ug/L	NA	2.9 U	---	---	---	2.9 U
1,4-Naphthoquinone	ug/L	NA	13 U	---	---	---	13 U
2,3,4,6-Tetrachlorophenol	ug/L	NA	1.9 U	---	---	---	1.9 U
2,4,5-Trichlorophenol	ug/L	NA	0.43 U	---	---	---	0.43 U
2,4,6-Trichlorophenol	ug/L	NA	0.28 U	---	1 U	---	0.28 U
2,4-Dichlorophenol	ug/L	NA	0.61 U	---	1 U	---	0.61 U
2,4-Dimethylphenol	ug/L	100 AAL	0.55 U	---	3 U	---	0.55 U
2,4-Dinitrophenol	ug/L	NA	9.5 U	---	19 U	---	9.5 U
2,4-Dinitrotoluene	ug/L	NA	1.6 U	---	1 U	---	1.6 U
2,6-Dichlorophenol	ug/L	NA	1.3 U	---	---	---	1.3 U
2,6-Dinitrotoluene	ug/L	NA	1.8 U	---	1 U	---	1.8 U
2-Acetylaminofluorene	ug/L	NA	6.6 U	---	---	---	6.6 U
2-Chloronaphthalene	ug/L	NA	0.25 U	---	2 U	---	0.25 U
2-Chlorophenol	ug/L	NA	1.9 U	---	1 U	---	1.9 U
2-Methylnaphthalene	ug/L	NA	0.28 U	---	---	---	0.28 U
2-Methylphenol	ug/L	NA	0.93 U	---	---	---	0.93 U
2-Nitroaniline	ug/L	NA	1.6 U	---	---	---	1.6 U
2-Nitrophenol	ug/L	NA	0.37 U	---	1 U	---	0.37 U
3,3'-Dichlorobenzidine	ug/L	NA	1.9 U	---	2 U	---	1.9 U
3,3'-Dimethylbenzidine	ug/L	NA	3.8 U	---	---	---	3.8 U
3-Methylcholanthrene	ug/L	NA	1.6 U	---	---	---	1.6 U
3-Methylphenol	ug/L	NA	0.25 U	---	---	---	0.25 U
3-Nitroaniline	ug/L	NA	0.25 U	---	---	---	0.25 U
4,6-Dinitro-2-Methylphenol	ug/L	NA	3.8 U	---	5 U	---	3.8 U
4-Aminobiphenyl	ug/L	NA	4.3 U	---	---	---	4.3 U
4-Bromophenyl phenyl ether	ug/L	NA	0.41 U	---	1 U	---	0.41 U
4-Chloro-3-methylphenol	ug/L	NA	2.3 U	---	1 U	---	2.3 U
4-Chloroaniline	ug/L	NA	2 U	---	---	---	2 U
4-Chlorophenylphenyl ether	ug/L	NA	1.6 U	---	2 U	---	1.6 U
4-Methylphenol	ug/L	NA	0.24 U	---	---	---	0.24 U
4-Nitroaniline	ug/L	NA	1.9 U	---	---	---	1.9 U
4-Nitrophenol	ug/L	NA	1.2 U	---	10 U	---	1.2 U
4-Nitroquinoline-1-oxide	ug/L	NA	19 U	---	---	---	19 U
5-Nitro-o-toluidine	ug/L	NA	1.3 U	---	---	---	1.3 U
7,12-Dimethylbenz(a)anthracene	ug/L	NA	1.5 U	---	---	---	1.5 U
a,a-Dimethylphenethylamine	ug/L	NA	19 U	---	---	---	19 U
Acenaphthene	ug/L	NA	0.27 U	---	1 U	---	0.27 U
Acenaphthylene	ug/L	NA	0.47 U	---	1 U	---	0.47 U
Acetophenone	ug/L	NA	0.23 U	---	---	---	0.23 U
alpha-Picoline	ug/L	NA	1.1 U	---	---	---	1.1 U
Aniline	ug/L	NA	1.9 U	---	---	---	1.9 U

See Table III for notes and abbreviations.

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Semi-Volatile Organic Compounds							
Well Identifier:			**HAR-07**	**HAR-07**	**HAR-07**	**HAR-07**	**HAR-14**
Sample Type:			Primary	Primary	Primary	Primary	Primary
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Shallow
Lab Name:			TA-Denver	TA-Denver	Lancaster	TA-Denver	TA-Denver
Collection Date:			05/11/2009	05/11/2009	7/21/2009	7/21/2009	04/23/2009
Analyte	**Units**	**MCL**					
Anthracene	ug/L	NA	0.4 U	---	1 U	---	0.4 U
Aramite	ug/L	NA	19 U	---	---	---	19 U
Benzo(a)anthracene	ug/L	NA	0.33 U	---	1 U	---	0.33 U
Benzo(a)pyrene	ug/L	0.2	0.29 U	---	1 U	---	0.29 U
Benzo(b)fluoranthene	ug/L	NA	0.5 U	---	1 U	---	0.5 U
Benzo(ghi)perylene	ug/L	NA	0.48 U	---	1 U	---	0.48 U
Benzo(k)fluoranthene	ug/L	NA	0.44 U	---	1 U	---	0.44 U
Benzyl alcohol	ug/L	NA	0.22 U	---	---	---	0.22 U
beta-Naphthylamine	ug/L	NA	2.9 U	---	---	---	2.9 U
bis(2-Chloroethoxy)methane	ug/L	NA	0.92 U	---	1 U	---	0.92 U
bis(2-Chloroethyl) ether	ug/L	NA	0.39 U	---	1 U	---	0.39 U
bis(2-Chloroisopropyl) ether	ug/L	NA	0.27 U	---	1 U	---	0.27 U
bis(2-Ethylhexyl) phthalate	ug/L	4	3 U	---	6 U	---	4.1 J,L
Butyl benzyl phthalate	ug/L	NA	0.95 U	---	2 U	---	0.95 U
Chrysene	ug/L	NA	0.56 U	---	1 U	---	0.59 U
Dibenzo(a,h)anthracene	ug/L	NA	0.48 U	---	1 U	---	0.48 U
Dibenzofuran	ug/L	NA	0.28 U	---	---	---	0.28 U
Diethyl phthalate	ug/L	NA	0.36 U	---	2 U	---	0.36 U
Dimethoate	ug/L	1 AAL	0.43 U	---	---	---	0.43 U
Dimethyl phthalate	ug/L	NA	0.2 U	---	2 U	---	0.2 U
Di-n-butyl phthalate	ug/L	NA	1.1 U	---	2 U	---	1.1 U
Di-n-octyl phthalate	ug/L	NA	0.33 U	---	2 U	---	0.33 U
Diphenylamine	ug/L	NA	1 U	---	---	---	1 U
Disulfoton	ug/L	NA	0.31 U	---	---	---	0.31 U
Ethyl methanesulfonate	ug/L	NA	0.9 U	---	---	---	0.9 U
Famphur	ug/L	NA	0.17 U	---	---	---	0.17 U
Fluoranthene	ug/L	NA	0.19 U	---	1 U	---	0.19 U
Fluorene	ug/L	NA	0.29 U	---	1 U	---	0.29 U
Hexachlorobenzene	ug/L	1	0.63 U	---	1 U	---	0.63 U
Hexachlorobutadiene	ug/L	NA	3.1 U	---	1 U	---	3.1 U
Hexachlorocyclopentadiene	ug/L	50	1.5 U	---	---	---	1.5 U
Hexachloroethane	ug/L	NA	2 U	---	1 U	---	2 U
Hexachlorophene	ug/L	NA	2.7 U	---	---	---	2.7 U
Hexachloropropene	ug/L	NA	1.9 U	---	---	---	1.9 U
Indeno(1,2,3-cd)pyrene	ug/L	NA	0.62 U	---	1 U	---	0.62 U
Isodrin	ug/L	NA	1.7 U	---	---	---	1.7 U
Isophorone	ug/L	NA	0.2 U	---	1 U	---	0.2 U
Isosafrole	ug/L	NA	1.9 U	---	---	---	1.9 U
Methapyrilene	ug/L	NA	19 U	---	---	---	19 U
Methyl methanesulfonate	ug/L	NA	0.95 U	---	---	---	0.95 U
Methyl parathion	ug/L	2 AAL	0.13 U	---	---	---	0.14 U
Naphthalene	ug/L	17 NL	0.28 U	---	1 U	---	0.28 U
Nitrobenzene	ug/L	NA	0.77 U	---	1 U	---	0.77 U
n-Nitrosodiethylamine	ug/L	0.01 NL	1.6 U	---	---	---	1.6 U
n-Nitrosodimethylamine	ug/L	0.01 NL	0.28 U	0.037	2 U	0.029	1.7 J
n-Nitrosodi-n-butylamine	ug/L	NA	1.2 U	---	---	---	1.2 U
n-Nitrosodiphenylamine	ug/L	NA	0.42 U	---	2 U	---	0.42 U
n-Nitrosodi-n-propylamine	ug/L	0.01 NL	0.33 U	---	1 U	---	0.33 U
n-Nitrosomethylethylamine	ug/L	NA	1.7 U	---	---	---	1.7 U

See Table III for notes and abbreviations.

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Semi-Volatile Organic Compounds							
Well Identifier:			**HAR-07**	**HAR-07**	**HAR-07**	**HAR-07**	**HAR-14**
Sample Type:			Primary	Primary	Primary	Primary	Primary
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Shallow
Lab Name:			TA-Denver	TA-Denver	Lancaster	TA-Denver	TA-Denver
Collection Date:			05/11/2009	05/11/2009	7/21/2009	7/21/2009	04/23/2009
Analyte	**Units**	**MCL**					
n-Nitrosomorpholine	ug/L	NA	1.9 U	---	---	---	1.9 U
n-Nitrosopiperidine	ug/L	NA	1.9 U	---	---	---	1.9 U
n-Nitrosopyrrolidine	ug/L	NA	0.76 U	---	---	---	0.76 U
o,o,o-Triethylphosphorothioate	ug/L	NA	1.9 U	---	---	---	1.9 U
o-Toluidine	ug/L	NA	1.3 U	---	---	---	1.3 U
Parathion	ug/L	40 AAL	0.14 U	---	---	---	0.14 U
p-Dimethylaminoazobenzene	ug/L	NA	1.9 U	---	---	---	1.9 U
Pentachlorobenzene	ug/L	NA	1.9 U	---	---	---	1.9 U
Pentachloroethane	ug/L	NA	1.9 U	---	---	---	1.9 U
Pentachloronitrobenzene	ug/L	20 AAL	1.9 U	---	---	---	1.9 U
Pentachlorophenol	ug/L	1	---	---	3 U	0.77 U	0.77 U
Phenacetin	ug/L	NA	1 U	---	---	---	1 U
Phenanthrene	ug/L	NA	0.25 U	---	1 U	---	0.25 U
Phenol	ug/L	4200 AAL	1.9 U	---	1 U	---	1.9 U
Phorate	ug/L	NA	0.15 U	---	---	---	0.15 U
Pronamide	ug/L	NA	1.9 U	---	---	---	1.9 U
Pyrene	ug/L	NA	0.35 U	---	---	---	0.35 U
Pyridine	ug/L	NA	1.6 U	---	---	---	1.6 U
Safrole	ug/L	NA	1.1 U	---	---	---	1.1 U
Sulfotepp	ug/L	NA	0.16 U	---	---	---	0.16 U
Thionazin	ug/L	NA	0.3 U	---	---	---	0.3 U

See Table III for notes and abbreviations.

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Semi-Volatile Organic Compounds							
Well Identifier:			**HAR-14**	**HAR-15**	**HAR-15**	**HAR-16**	**HAR-16**
Sample Type:			Primary	Primary	Primary	Primary	Primary
Geological Unit:			Shallow	Shallow	Shallow	Chatsworth	Chatsworth
Lab Name:			TA-Denver	TA-Denver	TA-Denver	TA-Denver	TA-Denver
Collection Date:			04/23/2009	04/23/2009	04/23/2009	04/23/2009	04/23/2009
Analyte	**Units**	**MCL**					
1,2-Dichlorobenzene	ug/l	600	---	0.13 U	---	6.5 U	---
1,2,4,5-Tetrachlorobenzene	ug/L	NA	---	1.7 U	---	1.7 U	---
1,2,4-Trichlorobenzene	ug/L	5	---	0.27 U	---	0.27 U	---
1,3-Dichlorobenzene	ug/L	600 AAL	---	0.29 U	---	0.29 U	---
1,3-Dinitrobenzene	ug/L	NA	---	1.9 U	---	1.9 U	---
1,4-Dichlorobenzene	ug/L	5	---	0.16 U	---	8 U	---
1,3,5-Trinitrobenzene	ug/L	NA	---	3.8 U	---	3.8 U	---
1,4-Phenylenediamine	ug/L	NA	---	4.8 U	---	4.8 U	---
1-Naphthylamine	ug/L	NA	---	3 U	---	3 U	---
1,4-Naphthoquinone	ug/L	NA	---	13 U	---	13 U	---
2,3,4,6-Tetrachlorophenol	ug/L	NA	---	1.9 U	---	1.9 U	---
2,4,5-Trichlorophenol	ug/L	NA	---	0.43 U	---	0.43 U	---
2,4,6-Trichlorophenol	ug/L	NA	---	0.28 U	---	0.28 U	---
2,4-Dichlorophenol	ug/L	NA	---	0.61 U	---	0.61 U	---
2,4-Dimethylphenol	ug/L	100 AAL	---	0.56 U	---	0.56 U	---
2,4-Dinitrophenol	ug/L	NA	---	9.6 U	---	9.6 U	---
2,4-Dinitrotoluene	ug/L	NA	---	1.6 U	---	1.6 U	---
2,6-Dichlorophenol	ug/L	NA	---	1.3 U	---	1.3 U	---
2,6-Dinitrotoluene	ug/L	NA	---	1.8 U	---	1.8 U	---
2-Acetylaminofluorene	ug/L	NA	---	6.7 U	---	6.7 U	---
2-Chloronaphthalene	ug/L	NA	---	0.25 U	---	0.25 U	---
2-Chlorophenol	ug/L	NA	---	1.9 U	---	1.9 U	---
2-Methylnaphthalene	ug/L	NA	---	0.28 U	---	0.28 U	---
2-Methylphenol	ug/L	NA	---	0.94 U	---	0.94 U	---
2-Nitroaniline	ug/L	NA	---	1.7 U	---	1.7 U	---
2-Nitrophenol	ug/L	NA	---	0.37 U	---	0.37 U	---
3,3'-Dichlorobenzidine	ug/L	NA	---	1.9 U	---	1.9 U	---
3,3'-Dimethylbenzidine	ug/L	NA	---	3.8 U	---	3.8 U	---
3-Methylcholanthrene	ug/L	NA	---	1.6 U	---	1.6 U	---
3-Methylphenol	ug/L	NA	---	0.25 U	---	0.25 U	---
3-Nitroaniline	ug/L	NA	---	0.26 U	---	0.26 U	---
4,6-Dinitro-2-Methylphenol	ug/L	NA	---	3.8 U	---	3.8 U	---
4-Aminobiphenyl	ug/L	NA	---	4.3 U	---	4.3 U	---
4-Bromophenyl phenyl ether	ug/L	NA	---	0.41 U	---	0.41 U	---
4-Chloro-3-methylphenol	ug/L	NA	---	2.3 U	---	2.3 U	---
4-Chloroaniline	ug/L	NA	---	2.1 U	---	2.1 U	---
4-Chlorophenylphenyl ether	ug/L	NA	---	1.6 U	---	1.6 U	---
4-Methylphenol	ug/L	NA	---	0.24 U	---	0.24 U	---
4-Nitroaniline	ug/L	NA	---	1.9 U	---	1.9 U	---
4-Nitrophenol	ug/L	NA	---	1.2 U	---	1.2 U	---
4-Nitroquinoline-1-oxide	ug/L	NA	---	19 U	---	19 U	---
5-Nitro-o-toluidine	ug/L	NA	---	1.3 U	---	1.3 U	---
7,12-Dimethylbenz(a)anthracene	ug/L	NA	---	1.5 U	---	1.5 U	---
a,a-Dimethylphenethylamine	ug/L	NA	---	19 U	---	19 U	---
Acenaphthene	ug/L	NA	---	0.27 U	---	0.27 U	---
Acenaphthylene	ug/L	NA	---	0.47 U	---	0.47 U	---
Acetophenone	ug/L	NA	---	0.23 U	---	0.23 U	---
alpha-Picoline	ug/L	NA	---	1.2 U	---	1.2 U	---
Aniline	ug/L	NA	---	1.9 U	---	1.9 U	---

See Table III for notes and abbreviations.

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Semi-Volatile Organic Compounds							
Well Identifier:			**HAR-14**	**HAR-15**	**HAR-15**	**HAR-16**	**HAR-16**
Sample Type:			Primary	Primary	Primary	Primary	Primary
Geological Unit:			Shallow	Shallow	Shallow	Chatsworth	Chatsworth
Lab Name:			TA-Denver	TA-Denver	TA-Denver	TA-Denver	TA-Denver
Collection Date:			04/23/2009	04/23/2009	04/23/2009	04/23/2009	04/23/2009
Analyte	**Units**	**MCL**					
Anthracene	ug/L	NA	---	0.4 U	---	0.4 U	---
Aramite	ug/L	NA	---	19 U	---	19 U	---
Benzo(a)anthracene	ug/L	NA	---	0.34 U	---	0.34 U	---
Benzo(a)pyrene	ug/L	0.2	---	0.3 U	---	0.3 U	---
Benzo(b)fluoranthene	ug/L	NA	---	0.51 U	---	0.51 U	---
Benzo(ghi)perylene	ug/L	NA	---	0.48 U	---	0.48 U	---
Benzo(k)fluoranthene	ug/L	NA	---	0.44 U	---	0.44 U	---
Benzyl alcohol	ug/L	NA	---	0.22 U	---	0.22 U	---
beta-Naphthylamine	ug/L	NA	---	3 U	---	3 U	---
bis(2-Chloroethoxy)methane	ug/L	NA	---	0.93 U	---	0.93 U	---
bis(2-Chloroethyl) ether	ug/L	NA	---	0.39 U	---	0.39 U	---
bis(2-Chloroisopropyl) ether	ug/L	NA	---	0.27 U	---	0.27 U	---
bis(2-Ethylhexyl) phthalate	ug/L	4	---	1.8 U	---	1.8 U	---
Butyl benzyl phthalate	ug/L	NA	---	0.96 U	---	0.96 U	---
Chrysene	ug/L	NA	---	0.52 U	---	0.6 U	---
Dibenzo(a,h)anthracene	ug/L	NA	---	0.49 U	---	0.49 U	---
Dibenzofuran	ug/L	NA	---	0.28 U	---	0.28 U	---
Diethyl phthalate	ug/L	NA	---	0.36 U	---	0.36 U	---
Dimethoate	ug/L	1 AAL	---	0.46 U	---	0.45 U	---
Dimethyl phthalate	ug/L	NA	---	0.2 U	---	0.2 U	---
Di-n-butyl phthalate	ug/L	NA	---	1.1 U	---	1.1 U	---
Di-n-octyl phthalate	ug/L	NA	---	0.34 U	---	0.34 U	---
Diphenylamine	ug/L	NA	---	1 U	---	1 U	---
Disulfoton	ug/L	NA	---	0.33 U	---	0.33 U	---
Ethyl methanesulfonate	ug/L	NA	---	0.91 U	---	0.91 U	---
Famphur	ug/L	NA	---	0.18 U	---	0.18 U	---
Fluoranthene	ug/L	NA	---	0.19 U	---	0.19 U	---
Fluorene	ug/L	NA	---	0.3 U	---	0.3 U	---
Hexachlorobenzene	ug/L	1	---	0.63 U	---	0.63 U	---
Hexachlorobutadiene	ug/L	NA	---	3.2 U	---	3.2 U	---
Hexachlorocyclopentadiene	ug/L	50	---	1.5 U	---	1.5 U	---
Hexachloroethane	ug/L	NA	---	2 U	---	2 U	---
Hexachlorophene	ug/L	NA	---	2.7 U	---	2.7 U	---
Hexachloropropene	ug/L	NA	---	1.9 U	---	1.9 U	---
Indeno(1,2,3-cd)pyrene	ug/L	NA	---	0.62 U	---	0.62 U	---
Isodrin	ug/L	NA	---	1.7 U	---	1.7 U	---
Isophorone	ug/L	NA	---	0.2 U	---	0.2 U	---
Isosafrole	ug/L	NA	---	1.9 U	---	1.9 U	---
Methapyrilene	ug/L	NA	---	19 U	---	19 U	---
Methyl methanesulfonate	ug/L	NA	---	0.96 U	---	0.96 U	---
Methyl parathion	ug/L	2 AAL	---	0.15 U	---	0.14 U	---
Naphthalene	ug/L	17 NL	---	0.28 U	---	0.28 U	---
Nitrobenzene	ug/L	NA	---	0.78 U	---	0.78 U	---
n-Nitrosodiethylamine	ug/L	0.01 NL	---	1.7 U	---	1.7 U	---
n-Nitrosodimethylamine	ug/L	0.01 NL	1.4	0.28 U	0.005 U	21	17
n-Nitrosodi-n-butylamine	ug/L	NA	---	1.2 U	---	1.2 U	---
n-Nitrosodiphenylamine	ug/L	NA	---	0.42 U	---	0.42 U	---
n-Nitrosodi-n-propylamine	ug/L	0.01 NL	---	0.34 U	---	0.34 U	---
n-Nitrosomethylethylamine	ug/L	NA	---	1.7 U	---	1.7 U	---

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Semi-Volatile Organic Compounds							
Well Identifier:			**HAR-14**	**HAR-15**	**HAR-15**	**HAR-16**	**HAR-16**
Sample Type:			Primary	Primary	Primary	Primary	Primary
Geological Unit:			Shallow	Shallow	Shallow	Chatsworth	Chatsworth
Lab Name:			TA-Denver	TA-Denver	TA-Denver	TA-Denver	TA-Denver
Collection Date:			04/23/2009	04/23/2009	04/23/2009	04/23/2009	04/23/2009
Analyte	**Units**	**MCL**					
n-Nitrosomorpholine	ug/L	NA	---	1.9 U	---	1.9 U	---
n-Nitrosopiperidine	ug/L	NA	---	1.9 U	---	1.9 U	---
n-Nitrosopyrrolidine	ug/L	NA	---	0.77 U	---	0.77 U	---
o,o,o-Triethylphosphorothioate	ug/L	NA	---	1.9 U	---	1.9 U	---
o-Toluidine	ug/L	NA	---	1.3 U	---	1.3 U	---
Parathion	ug/L	40 AAL	---	0.15 U	---	0.15 U	---
p-Dimethylaminoazobenzene	ug/L	NA	---	1.9 U	---	1.9 U	---
Pentachlorobenzene	ug/L	NA	---	1.9 U	---	1.9 U	---
Pentachloroethane	ug/L	NA	---	1.9 U	---	1.9 U	---
Pentachloronitrobenzene	ug/L	20 AAL	---	1.9 U	---	1.9 U	---
Pentachlorophenol	ug/L	1	---	0.78 U	---	0.85 U	---
Phenacetin	ug/L	NA	---	1 U	---	1 U	---
Phenanthrene	ug/L	NA	---	0.25 U	---	0.25 U	---
Phenol	ug/L	4200 AAL	---	1.9 U	---	1.9 U	---
Phorate	ug/L	NA	---	0.16 U	---	0.16 U	---
Pronamide	ug/L	NA	---	1.9 U	---	1.9 U	---
Pyrene	ug/L	NA	---	0.36 U	---	0.36 U	---
Pyridine	ug/L	NA	---	1.6 U	---	1.6 U	---
Safrole	ug/L	NA	---	1.1 U	---	1.1 U	---
Sulfotepp	ug/L	NA	---	0.17 U	---	0.17 U	---
Thionazin	ug/L	NA	---	0.32 U	---	0.32 U	---

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Semi-Volatile Organic Compounds							
Well Identifier:			**HAR-16**	**HAR-17**	**HAR-17**	**HAR-17**	**RD-06**
Sample Type:			Split	Primary	Primary	Duplicate	Primary
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			Lancaster	TA-Denver	TA-Denver	TA-Denver	TA-Denver
Collection Date:			04/23/2009	04/29/2009	04/29/2009	04/29/2009	7/13/2009
Analyte	**Units**	**MCL**					
1,2-Dichlorobenzene	ug/l	600	20 U	0.13 U	---	0.13 U	0.13 U
1,2,4,5-Tetrachlorobenzene	ug/L	NA	2 U	1.7 U	---	1.7 U	1.7 U
1,2,4-Trichlorobenzene	ug/L	5	0.9 U	0.27 U	---	0.27 U	0.27 U
1,3-Dichlorobenzene	ug/L	600 AAL	---	0.29 U	---	0.29 U	0.29 U
1,3-Dinitrobenzene	ug/L	NA	2 U	1.9 U	---	1.9 U	1.9 U
1,4-Dichlorobenzene	ug/L	5	20 U	0.16 U	---	0.16 U	0.16 U
1,3,5-Trinitrobenzene	ug/L	NA	---	3.8 U	---	3.8 U	3.8 U
1,4-Phenylenediamine	ug/L	NA	---	4.8 U	---	4.8 U	4.8 U
1-Naphthylamine	ug/L	NA	5 U	3 U	---	3 U	3 U
1,4-Naphthoquinone	ug/L	NA	---	13 U	---	13 U	13 U
2,3,4,6-Tetrachlorophenol	ug/L	NA	2 U	1.9 U	---	1.9 U	1.9 U
2,4,5-Trichlorophenol	ug/L	NA	0.9 U	0.43 U	---	0.43 U	0.43 U
2,4,6-Trichlorophenol	ug/L	NA	0.9 U	0.28 U	---	0.28 U	0.28 U
2,4-Dichlorophenol	ug/L	NA	0.9 U	0.61 U	---	0.61 U	0.61 U
2,4-Dimethylphenol	ug/L	100 AAL	3 U	0.56 U	---	0.56 U	0.56 U
2,4-Dinitrophenol	ug/L	NA	19 U	9.6 U	---	9.6 U	9.6 U
2,4-Dinitrotoluene	ug/L	NA	0.9 U	1.6 U	---	1.6 U	1.6 U
2,6-Dichlorophenol	ug/L	NA	---	1.3 U	---	1.3 U	1.3 U
2,6-Dinitrotoluene	ug/L	NA	0.9 U	1.8 U	---	1.8 U	1.8 U
2-Acetylaminofluorene	ug/L	NA	---	6.7 U	---	6.7 U	6.7 U
2-Chloronaphthalene	ug/L	NA	2 U	0.25 U	---	0.25 U	0.25 U
2-Chlorophenol	ug/L	NA	0.9 U	1.9 U	---	1.9 U	1.9 U
2-Methylnaphthalene	ug/L	NA	0.9 U	0.28 U	---	0.28 U	0.28 U
2-Methylphenol	ug/L	NA	0.9 U	0.94 U	---	0.94 U	0.94 U
2-Nitroaniline	ug/L	NA	0.9 U	1.7 U	---	1.7 U	1.7 U
2-Nitrophenol	ug/L	NA	0.9 U	0.37 U	---	0.37 U	0.37 U
3,3'-Dichlorobenzidine	ug/L	NA	2 U	1.9 U	---	1.9 U	1.9 U
3,3'-Dimethylbenzidine	ug/L	NA	---	3.8 U	---	3.8 U	3.8 U
3-Methylcholanthrene	ug/L	NA	---	1.6 U	---	1.6 U	1.6 U
3-Methylphenol	ug/L	NA	---	0.25 U	---	0.25 U	0.24 U
3-Nitroaniline	ug/L	NA	0.9 U	0.26 U	---	0.26 U	0.26 U
4,6-Dinitro-2-Methylphenol	ug/L	NA	5 U	3.8 U	---	3.8 U	3.8 U
4-Aminobiphenyl	ug/L	NA	---	4.3 U	---	4.3 U	4.3 U
4-Bromophenyl phenyl ether	ug/L	NA	0.9 U	0.41 U	---	0.41 U	0.41 U
4-Chloro-3-methylphenol	ug/L	NA	0.9 U	2.3 U	---	2.3 U	2.3 U
4-Chloroaniline	ug/L	NA	0.9 U	2.1 U	---	2.1 U	2.1 U
4-Chlorophenylphenyl ether	ug/L	NA	2 U	1.6 U	---	1.6 U	1.6 U
4-Methylphenol	ug/L	NA	2 U	0.24 U	---	0.24 U	0.24 U
4-Nitroaniline	ug/L	NA	0.9 U	1.9 U	---	1.9 U	1.9 U
4-Nitrophenol	ug/L	NA	9 U	1.2 U	---	1.2 U	1.2 U
4-Nitroquinoline-1-oxide	ug/L	NA	---	19 U	---	19 U	19 U
5-Nitro-o-toluidine	ug/L	NA	---	1.3 U	---	1.3 U	1.3 U
7,12-Dimethylbenz(a)anthracene	ug/L	NA	---	1.5 U	---	1.5 U	1.5 U
a,a-Dimethylphenethylamine	ug/L	NA	---	19 U	---	19 U	19 U
Acenaphthene	ug/L	NA	0.9 U	0.27 U	---	0.27 U	0.27 U
Acenaphthylene	ug/L	NA	0.9 U	0.47 U	---	0.47 U	0.47 U
Acetophenone	ug/L	NA	2 U	0.23 U	---	0.23 U	0.23 U
alpha-Picoline	ug/L	NA	---	1.2 U	---	1.2 U	1.2 U
Aniline	ug/L	NA	0.9 U	1.9 U	---	1.9 U	1.9 U

See Table III for notes and abbreviations.

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Semi-Volatile Organic Compounds							
Well Identifier:			**HAR-16**	**HAR-17**	**HAR-17**	**HAR-17**	**RD-06**
Sample Type:			Split	Primary	Primary	Duplicate	Primary
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			Lancaster	TA-Denver	TA-Denver	TA-Denver	TA-Denver
Collection Date:			04/23/2009	04/29/2009	04/29/2009	04/29/2009	7/13/2009
Analyte	**Units**	**MCL**					
Anthracene	ug/L	NA	0.9 U	0.4 U	---	0.4 U	0.4 U
Aramite	ug/L	NA	---	19 U	---	19 U	19 U
Benzo(a)anthracene	ug/L	NA	0.9 U	0.34 U	---	0.34 U	0.34 U
Benzo(a)pyrene	ug/L	0.2	0.9 U	0.3 U	---	0.3 U	0.3 U
Benzo(b)fluoranthene	ug/L	NA	0.9 U	0.51 U	---	0.51 U	0.51 U
Benzo(ghi)perylene	ug/L	NA	0.9 U	0.48 U	---	0.48 U	0.48 U
Benzo(k)fluoranthene	ug/L	NA	0.9 U	0.44 U	---	0.44 U	0.44 U
Benzyl alcohol	ug/L	NA	5 U	0.22 U	---	0.22 U	0.22 U
beta-Naphthylamine	ug/L	NA	5 U	3 U	---	3 U	3 U
bis(2-Chloroethoxy)methane	ug/L	NA	0.9 U	0.93 U	---	0.93 U	0.93 U
bis(2-Chloroethyl) ether	ug/L	NA	0.9 U	0.39 U	---	0.39 U	0.39 U
bis(2-Chloroisopropyl) ether	ug/L	NA	0.9 U	0.27 U	---	0.27 U	0.27 U
bis(2-Ethylhexyl) phthalate	ug/L	4	2 U	0.54 U	---	0.54 U	0.54 U
Butyl benzyl phthalate	ug/L	NA	2 U	0.96 U	---	0.96 U	0.96 U
Chrysene	ug/L	NA	0.9 U	0.52 U	---	0.52 U	0.52 U
Dibenzo(a,h)anthracene	ug/L	NA	0.9 U	0.49 U	---	0.49 U	0.49 U
Dibenzofuran	ug/L	NA	0.9 U	0.28 U	---	0.28 U	0.28 U
Diethyl phthalate	ug/L	NA	2 U	0.36 U	---	0.36 U	0.36 U
Dimethoate	ug/L	1 AAL	---	0.43 U	---	0.43 U	0.44 U
Dimethyl phthalate	ug/L	NA	2 U	0.2 U	---	0.2 U	0.2 U
Di-n-butyl phthalate	ug/L	NA	2 U	1.1 U	---	1.1 U	1.1 U
Di-n-octyl phthalate	ug/L	NA	2 U	0.34 U	---	0.34 U	0.34 U
Diphenylamine	ug/L	NA	---	1 U	---	1 U	1 U
Disulfoton	ug/L	NA	0.39 U	0.31 U	---	0.31 U	0.31 U
Ethyl methanesulfonate	ug/L	NA	---	0.91 U	---	0.91 U	0.91 U
Famphur	ug/L	NA	---	0.17 U	---	0.17 U	0.17 U
Fluoranthene	ug/L	NA	0.9 U	0.19 U	---	0.19 U	0.19 U
Fluorene	ug/L	NA	0.9 U	0.3 U	---	0.3 U	0.3 U
Hexachlorobenzene	ug/L	1	0.9 U	0.63 U	---	0.63 U	0.63 U
Hexachlorobutadiene	ug/L	NA	0.9 U	3.2 U	---	3.2 U	3.2 U
Hexachlorocyclopentadiene	ug/L	50	5 U	1.5 U	---	1.5 U	1.5 U
Hexachloroethane	ug/L	NA	0.9 U	2 U	---	2 U	2 U
Hexachlorophene	ug/L	NA	---	2.7 U	---	2.7 U	2.7 U
Hexachloropropene	ug/L	NA	---	1.9 U	---	1.9 U	1.9 U
Indeno(1,2,3-cd)pyrene	ug/L	NA	0.9 U	0.62 U	---	0.62 U	0.62 U
Isodrin	ug/L	NA	---	1.7 U	---	1.7 U	1.7 U
Isophorone	ug/L	NA	0.9 U	0.2 U	---	0.2 U	0.2 U
Isosafrole	ug/L	NA	---	1.9 U	---	1.9 U	1.9 U
Methapyrilene	ug/L	NA	---	19 U	---	19 U	19 U
Methyl methanesulfonate	ug/L	NA	---	0.96 U	---	0.96 U	0.96 U
Methyl parathion	ug/L	2 AAL	0.39 U	0.14 U	---	0.13 U	0.14 U
Naphthalene	ug/L	17 NL	0.9 U	0.28 U	---	0.28 U	0.28 U
Nitrobenzene	ug/L	NA	0.9 U	0.78 U	---	0.78 U	0.78 U
n-Nitrosodiethylamine	ug/L	0.01 NL	---	1.7 U	---	1.7 U	1.7 U
n-Nitrosodimethylamine	ug/L	0.01 NL	18	0.28 U	0.067	0.28 U	0.28 U
n-Nitrosodi-n-butylamine	ug/L	NA	---	1.2 U	---	1.2 U	1.2 U
n-Nitrosodiphenylamine	ug/L	NA	2 U	0.42 U	---	0.42 U	0.42 U
n-Nitrosodi-n-propylamine	ug/L	0.01 NL	---	0.34 U	---	0.34 U	0.34 U
n-Nitrosomethylethylamine	ug/L	NA	---	1.7 U	---	1.7 U	1.7 U

See Table III for notes and abbreviations.

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Semi-Volatile Organic Compounds							
Well Identifier:			**HAR-16**	**HAR-17**	**HAR-17**	**HAR-17**	**RD-06**
Sample Type:			Split	Primary	Primary	Duplicate	Primary
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			Lancaster	TA-Denver	TA-Denver	TA-Denver	TA-Denver
Collection Date:			04/23/2009	04/29/2009	04/29/2009	04/29/2009	7/13/2009
Analyte	**Units**	**MCL**					
n-Nitrosomorpholine	ug/L	NA	---	1.9 U	---	1.9 U	1.9 U
n-Nitrosopiperidine	ug/L	NA	---	1.9 U	---	1.9 U	1.9 U
n-Nitrosopyrrolidine	ug/L	NA	---	0.77 U	---	0.77 U	0.77 U
o,o,o-Triethylphosphorothioate	ug/L	NA	---	1.9 U	---	1.9 U	1.9 U
o-Toluidine	ug/L	NA	0.9 U	1.3 U	---	1.3 U	1.3 U
Parathion	ug/L	40 AAL	0.39 U	0.14 U	---	0.14 U	0.14 U
p-Dimethylaminoazobenzene	ug/L	NA	---	1.9 U	---	1.9 U	1.9 U
Pentachlorobenzene	ug/L	NA	---	1.9 U	---	1.9 U	1.9 U
Pentachloroethane	ug/L	NA	---	1.9 U	---	1.9 U	1.9 U
Pentachloronitrobenzene	ug/L	20 AAL	---	1.9 U	---	1.9 U	1.9 U
Pentachlorophenol	ug/L	1	---	0.76 U	---	0.77 U	0.77 U
Phenacetin	ug/L	NA	---	1 U	---	1 U	1 U
Phenanthrene	ug/L	NA	0.9 U	0.25 U	---	0.25 U	0.25 U
Phenol	ug/L	4200 AAL	0.9 U	1.9 U	---	1.9 U	1.9 U
Phorate	ug/L	NA	0.39 U	0.15 U	---	0.15 U	0.15 U
Pronamide	ug/L	NA	---	1.9 U	---	1.9 U	1.9 U
Pyrene	ug/L	NA	0.9 U	0.36 U	---	0.36 U	0.36 U
Pyridine	ug/L	NA	2 U	1.6 U	---	1.6 U	1.6 U
Safrole	ug/L	NA	---	1.1 U	---	1.1 U	1.1 U
Sulfotepp	ug/L	NA	---	0.16 U	---	0.16 U	0.16 U
Thionazin	ug/L	NA	---	0.3 U	---	0.3 U	0.3 U

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Semi-Volatile Organic Compounds							
Well Identifier:			**RD-06**	**RD-06**	**RD-06**	**RD-37**	**RD-37**
Sample Type:			Primary	Duplicate	Duplicate	Primary	Primary
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			TA-Denver	TA-Denver	TA-Denver	TA-Denver	TA-Denver
Collection Date:			7/13/2009	7/13/2009	7/13/2009	7/13/2009	7/13/2009
Analyte	**Units**	**MCL**					
1,2-Dichlorobenzene	ug/l	600	---	0.13 U	---	0.13 U	---
1,2,4,5-Tetrachlorobenzene	ug/L	NA	---	1.6 U	---	1.6 U	---
1,2,4-Trichlorobenzene	ug/L	5	---	0.27 U	---	0.27 U	---
1,3-Dichlorobenzene	ug/L	600 AAL	---	0.28 U	---	0.28 U	---
1,3-Dinitrobenzene	ug/L	NA	---	1.9 U	---	1.9 U	---
1,4-Dichlorobenzene	ug/L	5	---	0.16 U	---	0.16 U	---
1,3,5-Trinitrobenzene	ug/L	NA	---	3.8 U	---	3.8 U	---
1,4-Phenylenediamine	ug/L	NA	---	4.8 U	---	4.8 U	---
1-Naphthylamine	ug/L	NA	---	2.9 U	---	2.9 U	---
1,4-Naphthoquinone	ug/L	NA	---	13 U	---	13 U	---
2,3,4,6-Tetrachlorophenol	ug/L	NA	---	1.9 U	---	1.9 U	---
2,4,5-Trichlorophenol	ug/L	NA	---	0.43 U	---	0.43 U	---
2,4,6-Trichlorophenol	ug/L	NA	---	0.28 U	---	0.28 U	---
2,4-Dichlorophenol	ug/L	NA	---	0.61 U	---	0.61 U	---
2,4-Dimethylphenol	ug/L	100 AAL	---	0.55 U	---	0.55 U	---
2,4-Dinitrophenol	ug/L	NA	---	9.5 U	---	9.5 U	---
2,4-Dinitrotoluene	ug/L	NA	---	1.6 U	---	1.6 U	---
2,6-Dichlorophenol	ug/L	NA	---	1.3 U	---	1.3 U	---
2,6-Dinitrotoluene	ug/L	NA	---	1.8 U	---	1.8 U	---
2-Acetylaminofluorene	ug/L	NA	---	6.6 U	---	6.6 U	---
2-Chloronaphthalene	ug/L	NA	---	0.25 U	---	0.25 U	---
2-Chlorophenol	ug/L	NA	---	1.9 U	---	1.9 U	---
2-Methylnaphthalene	ug/L	NA	---	0.28 U	---	0.28 U	---
2-Methylphenol	ug/L	NA	---	0.93 U	---	0.93 U	---
2-Nitroaniline	ug/L	NA	---	1.6 U	---	1.6 U	---
2-Nitrophenol	ug/L	NA	---	0.37 U	---	0.37 U	---
3,3'-Dichlorobenzidine	ug/L	NA	---	1.9 U	---	1.9 U	---
3,3'-Dimethylbenzidine	ug/L	NA	---	3.8 U	---	3.8 U	---
3-Methylcholanthrene	ug/L	NA	---	1.6 U	---	1.6 U	---
3-Methylphenol	ug/L	NA	---	0.24 U	---	0.25 U	---
3-Nitroaniline	ug/L	NA	---	0.25 U	---	0.25 U	---
4,6-Dinitro-2-Methylphenol	ug/L	NA	---	3.8 U	---	3.8 U	---
4-Aminobiphenyl	ug/L	NA	---	4.3 U	---	4.3 U	---
4-Bromophenyl phenyl ether	ug/L	NA	---	0.41 U	---	0.41 U	---
4-Chloro-3-methylphenol	ug/L	NA	---	2.3 U	---	2.3 U	---
4-Chloroaniline	ug/L	NA	---	2 U	---	2 U	---
4-Chlorophenylphenyl ether	ug/L	NA	---	1.6 U	---	1.6 U	---
4-Methylphenol	ug/L	NA	---	0.24 U	---	0.24 U	---
4-Nitroaniline	ug/L	NA	---	1.9 U	---	1.9 U	---
4-Nitrophenol	ug/L	NA	---	1.2 U	---	1.2 U	---
4-Nitroquinoline-1-oxide	ug/L	NA	---	19 U	---	19 U	---
5-Nitro-o-toluidine	ug/L	NA	---	1.3 U	---	1.3 U	---
7,12-Dimethylbenz(a)anthracene	ug/L	NA	---	1.5 U	---	1.5 U	---
a,a-Dimethylphenethylamine	ug/L	NA	---	19 U	---	19 U	---
Acenaphthene	ug/L	NA	---	0.27 U	---	0.27 U	---
Acenaphthylene	ug/L	NA	---	0.47 U	---	0.47 U	---
Acetophenone	ug/L	NA	---	0.23 U	---	0.23 U	---
alpha-Picoline	ug/L	NA	---	1.1 U	---	1.1 U	---
Aniline	ug/L	NA	---	1.9 U	---	1.9 U	---

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Semi-Volatile Organic Compounds							
Well Identifier:			**RD-06**	**RD-06**	**RD-06**	**RD-37**	**RD-37**
Sample Type:			Primary	Duplicate	Duplicate	Primary	Primary
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			TA-Denver	TA-Denver	TA-Denver	TA-Denver	TA-Denver
Collection Date:			7/13/2009	7/13/2009	7/13/2009	7/13/2009	7/13/2009
Analyte	**Units**	**MCL**					
Anthracene	ug/L	NA	---	0.4 U	---	0.4 U	---
Aramite	ug/L	NA	---	19 U	---	19 U	---
Benzo(a)anthracene	ug/L	NA	---	0.33 U	---	0.33 U	---
Benzo(a)pyrene	ug/L	0.2	---	0.29 U	---	0.29 U	---
Benzo(b)fluoranthene	ug/L	NA	---	0.5 U	---	0.5 U	---
Benzo(ghi)perylene	ug/L	NA	---	0.48 U	---	0.48 U	---
Benzo(k)fluoranthene	ug/L	NA	---	0.44 U	---	0.44 U	---
Benzyl alcohol	ug/L	NA	---	0.22 U	---	0.22 U	---
beta-Naphthylamine	ug/L	NA	---	2.9 U	---	2.9 U	---
bis(2-Chloroethoxy)methane	ug/L	NA	---	0.92 U	---	0.92 U	---
bis(2-Chloroethyl) ether	ug/L	NA	---	0.39 U	---	0.39 U	---
bis(2-Chloroisopropyl) ether	ug/L	NA	---	0.27 U	---	0.27 U	---
bis(2-Ethylhexyl) phthalate	ug/L	4	---	0.53 U	---	1.4 J,L	---
Butyl benzyl phthalate	ug/L	NA	---	0.95 U	---	0.95 U	---
Chrysene	ug/L	NA	---	0.51 U	---	0.51 U	---
Dibenzo(a,h)anthracene	ug/L	NA	---	0.48 U	---	0.48 U	---
Dibenzofuran	ug/L	NA	---	0.28 U	---	0.28 U	---
Diethyl phthalate	ug/L	NA	---	0.36 U	---	0.36 U	---
Dimethoate	ug/L	1 AAL	---	0.44 U	---	0.43 U	---
Dimethyl phthalate	ug/L	NA	---	0.2 U	---	0.2 U	---
Di-n-butyl phthalate	ug/L	NA	---	1.1 U	---	1.1 U	---
Di-n-octyl phthalate	ug/L	NA	---	0.33 U	---	0.33 U	---
Diphenylamine	ug/L	NA	---	1 U	---	1 U	---
Disulfoton	ug/L	NA	---	0.31 U	---	0.31 U	---
Ethyl methanesulfonate	ug/L	NA	---	0.9 U	---	0.9 U	---
Famphur	ug/L	NA	---	0.17 U	---	0.17 U	---
Fluoranthene	ug/L	NA	---	0.19 U	---	0.19 U	---
Fluorene	ug/L	NA	---	0.29 U	---	0.29 U	---
Hexachlorobenzene	ug/L	1	---	0.63 U	---	0.63 U	---
Hexachlorobutadiene	ug/L	NA	---	3.1 U	---	3.1 U	---
Hexachlorocyclopentadiene	ug/L	50	---	1.5 U	---	1.5 U	---
Hexachloroethane	ug/L	NA	---	2 U	---	2 U	---
Hexachlorophene	ug/L	NA	---	2.7 U	---	2.7 U	---
Hexachloropropene	ug/L	NA	---	1.9 U	---	1.9 U	---
Indeno(1,2,3-cd)pyrene	ug/L	NA	---	0.62 U	---	0.62 U	---
Isodrin	ug/L	NA	---	1.7 U	---	1.7 U	---
Isophorone	ug/L	NA	---	0.2 U	---	0.2 U	---
Isosafrole	ug/L	NA	---	1.9 U	---	1.9 U	---
Methapyrilene	ug/L	NA	---	19 U	---	19 U	---
Methyl methanesulfonate	ug/L	NA	---	0.95 U	---	0.95 U	---
Methyl parathion	ug/L	2 AAL	---	0.14 U	---	0.14 U	---
Naphthalene	ug/L	17 NL	---	0.28 U	---	0.28 U	---
Nitrobenzene	ug/L	NA	---	0.77 U	---	0.77 U	---
n-Nitrosodiethylamine	ug/L	0.01 NL	---	1.6 U	---	1.6 U	---
n-Nitrosodimethylamine	ug/L	0.01 NL	0.005 U	0.28 U	0.005 U	0.28 U	0.005 U
n-Nitrosodi-n-butylamine	ug/L	NA	---	1.2 U	---	1.2 U	---
n-Nitrosodiphenylamine	ug/L	NA	---	0.42 U	---	0.42 U	---
n-Nitrosodi-n-propylamine	ug/L	0.01 NL	---	0.33 U	---	0.33 U	---
n-Nitrosomethylethylamine	ug/L	NA	---	1.7 U	---	1.7 U	---

See Table III for notes and abbreviations.

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Semi-Volatile Organic Compounds							
Well Identifier:			**RD-06**	**RD-06**	**RD-06**	**RD-37**	**RD-37**
Sample Type:			Primary	Duplicate	Duplicate	Primary	Primary
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			TA-Denver	TA-Denver	TA-Denver	TA-Denver	TA-Denver
Collection Date:			7/13/2009	7/13/2009	7/13/2009	7/13/2009	7/13/2009
Analyte	**Units**	**MCL**					
n-Nitrosomorpholine	ug/L	NA	---	1.9 U	---	1.9 U	---
n-Nitrosopiperidine	ug/L	NA	---	1.9 U	---	1.9 U	---
n-Nitrosopyrrolidine	ug/L	NA	---	0.76 U	---	0.76 U	---
o,o,o-Triethylphosphorothioate	ug/L	NA	---	1.9 U	---	1.9 U	---
o-Toluidine	ug/L	NA	---	1.3 U	---	1.3 U	---
Parathion	ug/L	40 AAL	---	0.14 U	---	0.14 U	---
p-Dimethylaminoazobenzene	ug/L	NA	---	1.9 U	---	1.9 U	---
Pentachlorobenzene	ug/L	NA	---	1.9 U	---	1.9 U	---
Pentachloroethane	ug/L	NA	---	1.9 U	---	1.9 U	---
Pentachloronitrobenzene	ug/L	20 AAL	---	1.9 U	---	1.9 U	---
Pentachlorophenol	ug/L	1	---	0.78 U	---	0.76 U	---
Phenacetin	ug/L	NA	---	1 U	---	1 U	---
Phenanthrene	ug/L	NA	---	0.25 U	---	0.25 U	---
Phenol	ug/L	4200 AAL	---	1.9 U	---	1.9 U	---
Phorate	ug/L	NA	---	0.15 U	---	0.15 U	---
Pronamide	ug/L	NA	---	1.9 U	---	1.9 U	---
Pyrene	ug/L	NA	---	0.35 U	---	0.35 U	---
Pyridine	ug/L	NA	---	1.6 U	---	1.6 U	---
Safrole	ug/L	NA	---	1.1 U	---	1.1 U	---
Sulfotepp	ug/L	NA	---	0.16 U	---	0.16 U	---
Thionazin	ug/L	NA	---	0.3 U	---	0.3 U	---

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Semi-Volatile Organic Compounds					
Well Identifier:			**RD-37**	**RD-37**	**RD-37**
Sample Type:			Duplicate	Split	Split
Geological Unit:			Chatsworth	Chatsworth	Chatsworth
Lab Name:			TA-Denver	Lancaster	Weck
Collection Date:			7/13/2009	7/13/2009	7/13/2009
Analyte	**Units**	**MCL**			
1,2-Dichlorobenzene	ug/l	600	---	1 U	---
1,2,4,5-Tetrachlorobenzene	ug/L	NA	---	2 U	---
1,2,4-Trichlorobenzene	ug/L	5	---	1 U	---
1,3-Dichlorobenzene	ug/L	600 AAL	---	---	---
1,3-Dinitrobenzene	ug/L	NA	---	2 U	---
1,4-Dichlorobenzene	ug/L	5	---	1 U	---
1,3,5-Trinitrobenzene	ug/L	NA	---	---	---
1,4-Phenylenediamine	ug/L	NA	---	---	---
1-Naphthylamine	ug/L	NA	---	5 U	---
1,4-Naphthoquinone	ug/L	NA	---	---	---
2,3,4,6-Tetrachlorophenol	ug/L	NA	---	2 U	---
2,4,5-Trichlorophenol	ug/L	NA	---	1 U	---
2,4,6-Trichlorophenol	ug/L	NA	---	1 U	---
2,4-Dichlorophenol	ug/L	NA	---	1 U	---
2,4-Dimethylphenol	ug/L	100 AAL	---	3 U	---
2,4-Dinitrophenol	ug/L	NA	---	19 U	---
2,4-Dinitrotoluene	ug/L	NA	---	1 U	---
2,6-Dichlorophenol	ug/L	NA	---	---	---
2,6-Dinitrotoluene	ug/L	NA	---	1 U	---
2-Acetylaminofluorene	ug/L	NA	---	---	---
2-Chloronaphthalene	ug/L	NA	---	2 U	---
2-Chlorophenol	ug/L	NA	---	1 U	---
2-Methylnaphthalene	ug/L	NA	---	1 U	---
2-Methylphenol	ug/L	NA	---	1 U	---
2-Nitroaniline	ug/L	NA	---	1 U	---
2-Nitrophenol	ug/L	NA	---	1 U	---
3,3'-Dichlorobenzidine	ug/L	NA	---	2 U	---
3,3'-Dimethylbenzidine	ug/L	NA	---	---	---
3-Methylcholanthrene	ug/L	NA	---	---	---
3-Methylphenol	ug/L	NA	---	---	---
3-Nitroaniline	ug/L	NA	---	1 U	---
4,6-Dinitro-2-Methylphenol	ug/L	NA	---	5 U	---
4-Aminobiphenyl	ug/L	NA	---	---	---
4-Bromophenyl phenyl ether	ug/L	NA	---	1 U	---
4-Chloro-3-methylphenol	ug/L	NA	---	1 U	---
4-Chloroaniline	ug/L	NA	---	1 U	---
4-Chlorophenylphenyl ether	ug/L	NA	---	2 U	---
4-Methylphenol	ug/L	NA	---	2 U	---
4-Nitroaniline	ug/L	NA	---	1 U	---
4-Nitrophenol	ug/L	NA	---	10 U	---
4-Nitroquinoline-1-oxide	ug/L	NA	---	---	---
5-Nitro-o-toluidine	ug/L	NA	---	---	---
7,12-Dimethylbenz(a)anthracene	ug/L	NA	---	---	---
a,a-Dimethylphenethylamine	ug/L	NA	---	---	---
Acenaphthene	ug/L	NA	---	1 U	---
Acenaphthylene	ug/L	NA	---	1 U	---
Acetophenone	ug/L	NA	---	2 U	---
alpha-Picoline	ug/L	NA	---	---	---
Aniline	ug/L	NA	---	1 U	---

See Table III for notes and abbreviations.

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Semi-Volatile Organic Compounds					
Well Identifier:			**RD-37**	**RD-37**	**RD-37**
Sample Type:			Duplicate	Split	Split
Geological Unit:			Chatsworth	Chatsworth	Chatsworth
Lab Name:			TA-Denver	Lancaster	Weck
Collection Date:			7/13/2009	7/13/2009	7/13/2009
Analyte	**Units**	**MCL**			
Anthracene	ug/L	NA	---	1 U	---
Aramite	ug/L	NA	---	---	---
Benzo(a)anthracene	ug/L	NA	---	1 U	---
Benzo(a)pyrene	ug/L	0.2	---	1 U	---
Benzo(b)fluoranthene	ug/L	NA	---	1 U	---
Benzo(ghi)perylene	ug/L	NA	---	1 U	---
Benzo(k)fluoranthene	ug/L	NA	---	1 U	---
Benzyl alcohol	ug/L	NA	---	5 U	---
beta-Naphthylamine	ug/L	NA	---	5 U	---
bis(2-Chloroethoxy)methane	ug/L	NA	---	1 U	---
bis(2-Chloroethyl) ether	ug/L	NA	---	1 U	---
bis(2-Chloroisopropyl) ether	ug/L	NA	---	1 U	---
bis(2-Ethylhexyl) phthalate	ug/L	4	---	8 U	---
Butyl benzyl phthalate	ug/L	NA	---	2 U	---
Chrysene	ug/L	NA	---	1 U	---
Dibenzo(a,h)anthracene	ug/L	NA	---	1 U	---
Dibenzofuran	ug/L	NA	---	1 U	---
Diethyl phthalate	ug/L	NA	---	2 U	---
Dimethoate	ug/L	1 AAL	---	---	---
Dimethyl phthalate	ug/L	NA	---	2 U	---
Di-n-butyl phthalate	ug/L	NA	---	2 U	---
Di-n-octyl phthalate	ug/L	NA	---	2 U	---
Diphenylamine	ug/L	NA	---	---	---
Disulfoton	ug/L	NA	---	0.38 U	---
Ethyl methanesulfonate	ug/L	NA	---	---	---
Famphur	ug/L	NA	---	---	---
Fluoranthene	ug/L	NA	---	1 U	---
Fluorene	ug/L	NA	---	1 U	---
Hexachlorobenzene	ug/L	1	---	1 U	---
Hexachlorobutadiene	ug/L	NA	---	1 U	---
Hexachlorocyclopentadiene	ug/L	50	---	5 U	---
Hexachloroethane	ug/L	NA	---	1 U	---
Hexachlorophene	ug/L	NA	---	---	---
Hexachloropropene	ug/L	NA	---	---	---
Indeno(1,2,3-cd)pyrene	ug/L	NA	---	1 U	---
Isodrin	ug/L	NA	---	---	---
Isophorone	ug/L	NA	---	1 U	---
Isosafrole	ug/L	NA	---	---	---
Methapyrilene	ug/L	NA	---	---	---
Methyl methanesulfonate	ug/L	NA	---	---	---
Methyl parathion	ug/L	2 AAL	---	0.38 U	---
Naphthalene	ug/L	17 NL	---	1 U	---
Nitrobenzene	ug/L	NA	---	1 U	---
n-Nitrosodiethylamine	ug/L	0.01 NL	---	---	---
n-Nitrosodimethylamine	ug/L	0.01 NL	0.005 U	2 U	0.005 U
n-Nitrosodi-n-butylamine	ug/L	NA	---	---	---
n-Nitrosodiphenylamine	ug/L	NA	---	2 U	---
n-Nitrosodi-n-propylamine	ug/L	0.01 NL	---	---	---
n-Nitrosomethylethylamine	ug/L	NA	---	---	---

See Table III for notes and abbreviations.

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Semi-Volatile Organic Compounds					
Well Identifier:			**RD-37**	**RD-37**	**RD-37**
Sample Type:			Duplicate	Split	Split
Geological Unit:			Chatsworth	Chatsworth	Chatsworth
Lab Name:			TA-Denver	Lancaster	Weck
Collection Date:			7/13/2009	7/13/2009	7/13/2009
Analyte	**Units**	**MCL**			
n-Nitrosomorpholine	ug/L	NA	---	---	---
n-Nitrosopiperidine	ug/L	NA	---	---	---
n-Nitrosopyrrolidine	ug/L	NA	---	---	---
o,o,o-Triethylphosphorothioate	ug/L	NA	---	---	---
o-Toluidine	ug/L	NA	---	1 U	---
Parathion	ug/L	40 AAL	---	0.38 U	---
p-Dimethylaminoazobenzene	ug/L	NA	---	---	---
Pentachlorobenzene	ug/L	NA	---	---	---
Pentachloroethane	ug/L	NA	---	---	---
Pentachloronitrobenzene	ug/L	20 AAL	---	---	---
Pentachlorophenol	ug/L	1	---	---	---
Phenacetin	ug/L	NA	---	---	---
Phenanthrene	ug/L	NA	---	1 U	---
Phenol	ug/L	4200 AAL	---	1 U	---
Phorate	ug/L	NA	---	0.38 U	---
Pronamide	ug/L	NA	---	---	---
Pyrene	ug/L	NA	---	1 U	---
Pyridine	ug/L	NA	---	2 U	---
Safrole	ug/L	NA	---	---	---
Sulfotepp	ug/L	NA	---	---	---
Thionazin	ug/L	NA	---	---	---

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Volatile Organic Compounds						
Well Identifier:			**HAR-07**	**HAR-07**	**HAR-14**	**HAR-15**
Sample Type:			Primary	Primary	Primary	Primary
Geological Unit:			Chatsworth	Chatsworth	Shallow	Shallow
Lab Name:			TA-Denver	Lancaster	TA-Denver	TA-Denver
Collection Date:			05/11/2009	7/21/2009	04/23/2009	04/23/2009
Analyte	**Units**	**MCL**				
1,1,1,2-Tetrachloroethane	ug/L	NA	1.7 U	---	0.17 U	0.17 U
1,1,1-Trichloroethane	ug/L	200	1.6 U	4 U	0.41 J	0.16 U
1,1,2,2-Tetrachloroethane	ug/L	1	2 U	3 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	5	3.2 U	4 U	0.32 U	0.32 U
1,1-Dichloroethane	ug/L	5	1.6 U	5 U	0.16 U	0.16 U
1,1-Dichloroethene	ug/L	6	3.2 J	5 J	7.2	0.14 U
1,2,3-Trichloropropane	ug/L	0.005 NL	0.0017 U	---	0.0017 U	0.0017 U
1,2-Dibromo-3-chloropropane	ug/L	0.2	0.0064 U	---	0.0065 U	0.0065 U
1,2-Dibromoethane	ug/L	0.05	0.0035 U	---	0.0036 U	0.0035 U
1,2-Dichlorobenzene	ug/L	600	1.3 U	5 U	0.13 U	0.13 U
1,2-Dichloroethane	ug/L	0.5	1.3 U	3 U	0.13 U	0.13 U
1,2-Dichloropropane	ug/L	5	1.3 U	5 U	0.13 U	0.13 U
1,3-Dichlorobenzene	ug/L	600 AAL	1.6 U	---	0.16 U	0.16 U
1,4-Dichlorobenzene	ug/L	5	1.6 U	5 U	0.16 U	0.16 U
1,4-Dioxane	ug/L	3 NL	1 U	1 U	66	1 U
2-Hexanone	ug/L	NA	14 U	15 U	1.4 U	1.4 U
Acetone	ug/L	NA	19 U	30 U	1.9 U	1.9 U
Acetonitrile	ug/L	NA	96 U	---	9.6 U	9.6 U
Acrolein	ug/L	NA	28 U	---	2.8 U	2.8 U
Acrylonitrile	ug/L	NA	14 U	---	1.4 U	1.4 U
Allyl chloride	ug/L	NA	1.7 U	---	0.17 U	0.17 U
Benzene	ug/L	1	1.6 U	3 U	0.16 U	0.16 U
Bromodichloromethane	ug/L	80 TTHM	1.7 U	5 U	0.17 U	0.17 U
Bromoform	ug/L	80 TTHM	1.9 U	5 U	0.19 U	0.19 U
Bromomethane	ug/L	NA	2.1 U	5 U	0.21 U	0.21 U
Carbon Disulfide	ug/L	160 NL	4.5 U	5 U	0.45 U	0.45 U
Carbon Tetrachloride	ug/L	0.5	1.9 U	3 U	1	0.19 U
Chlorobenzene	ug/L	70	1.7 U	4 U	0.17 U	0.17 U
Chloroethane	ug/L	NA	4.1 U	5 U	0.41 U	0.41 U
Chloroform	ug/L	80 TTHM	1.6 U	4 U	1.4	0.16 U
Chloromethane	ug/L	NA	3 U	5 U	0.3 U	0.3 U
Chloroprene	ug/L	NA	1.4 U	---	0.14 U	0.14 U
cis-1,2-Dichloroethene	ug/L	6	1400	1800	0.15 U	0.39 J
cis-1,3-Dichloropropene	ug/L	0.5(total)	1.6 U	5 U	0.16 U	0.16 U
Dibromochloromethane	ug/L	80 TTHM	1.7 U	5 U	0.17 U	0.17 U
Dibromomethane	ug/L	NA	1.7 U	---	0.17 U	0.17 U
Dichlorodifluoromethane	ug/L	1000 NL	3.1 U	---	0.31 U	0.31 U
Ethyl cyanide	ug/L	NA	37 U	---	3.7 U	3.7 U
Ethyl methacrylate	ug/L	NA	8.6 U	---	0.86 U	0.86 U
Ethylbenzene	ug/L	300	1.6 U	4 U	0.16 U	0.16 U
Iodomethane	ug/L	NA	2.3 U	---	0.23 U	0.23 U
Isobutanol	ug/L	NA	360 U	---	36 U	36 U
Methacrylonitrile	ug/L	NA	16 U	---	1.6 U	1.6 U
Methyl ethyl ketone	ug/L	NA	18 U	15 U	1.8 U	1.8 U
Methyl isobutyl ketone (MIBK)	ug/L	120 NL	10 U	15 U	1 U	1 U
Methyl methacrylate	ug/L	NA	11 U	---	1.1 U	1.1 U
Methylene chloride	ug/L	5	8 U	10 U	0.47 U	0.47 U
m-Xylene & p-Xylene	ug/L	1750(total)	3.4 U	4 U	0.34 U	0.34 U
o-Xylene	ug/L	1750(total)	1.9 U	4 U	0.19 U	0.19 U
Styrene	ug/L	100	1.7 U	---	0.17 U	0.17 U

See Table III for notes and abbreviations.

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Volatile Organic Compounds						
Well Identifier:			**HAR-07**	**HAR-07**	**HAR-14**	**HAR-15**
Sample Type:			Primary	Primary	Primary	Primary
Geological Unit:			Chatsworth	Chatsworth	Shallow	Shallow
Lab Name:			TA-Denver	Lancaster	TA-Denver	TA-Denver
Collection Date:			05/11/2009	7/21/2009	04/23/2009	04/23/2009
Analyte	**Units**	**MCL**				
Tetrachloroethene	ug/L	5	2 U	4 U	0.2 U	0.2 U
Toluene	ug/L	150	1.7 U	4 U	0.17 U	0.17 U
trans-1,2-Dichloroethene	ug/L	10	73	90	0.15 U	0.15 U
trans-1,3-Dichloropropene	ug/L	0.5(total)	1.9 U	5 U	0.19 U	0.19 U
trans-1,4-Dichloro-2-butene	ug/L	NA	8 U	---	0.8 U	0.8 U
Trichloroethene	ug/L	5	2800	3400	3.6	1.3
Trichlorofluoromethane	ug/L	150	2.9 U	3 U	0.29 U	0.29 U
Vinyl acetate	ug/L	NA	9.4 U	---	0.94 U	0.94 U
Vinyl chloride	ug/L	0.5	24	5	0.4 U	0.4 U

See Table III for notes and abbreviations.

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Volatile Organic Compounds						
Well Identifier:			**HAR-16**	**HAR-16**	**HAR-17**	**HAR-17**
Sample Type:			Primary	Split	Primary	Duplicate
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			TA-Denver	Lancaster	TA-Denver	TA-Denver
Collection Date:			04/23/2009	04/23/2009	04/29/2009	04/29/2009
Analyte	**Units**	**MCL**				
1,1,1,2-Tetrachloroethane	ug/L	NA	8.5 U	20 U	0.17 U	0.17 U
1,1,1-Trichloroethane	ug/L	200	8 U	16 U	0.16 U	0.16 U
1,1,2,2-Tetrachloroethane	ug/L	1	10 U	10 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	5	16 U	16 U	0.32 U	0.32 U
1,1-Dichloroethane	ug/L	5	8 U	20 U	0.55 J	0.6 J
1,1-Dichloroethene	ug/L	6	28 J	27 J	0.44 J	0.51 J
1,2,3-Trichloropropane	ug/L	0.005 NL	0.012	0.005	0.0017 U	0.0017 U
1,2-Dibromo-3-chloropropane	ug/L	0.2	0.0065 U	0.0098 U	0.0065 U	0.0064 U
1,2-Dibromoethane	ug/L	0.05	0.0035 U	0.0098 U	0.0035 U	0.0035 U
1,2-Dichlorobenzene	ug/L	600	6.5 U	20 U	0.13 U	0.13 U
1,2-Dichloroethane	ug/L	0.5	6.5 U	10 U	0.13 U	0.13 U
1,2-Dichloropropane	ug/L	5	6.5 U	20 U	0.13 U	0.13 U
1,3-Dichlorobenzene	ug/L	600 AAL	8 U	20 U	0.16 U	0.16 U
1,4-Dichlorobenzene	ug/L	5	8 U	20 U	0.16 U	0.16 U
1,4-Dioxane	ug/L	3 NL	27	---	3	3.1
2-Hexanone	ug/L	NA	70 U	60 U	1.4 U	1.4 U
Acetone	ug/L	NA	95 U	120 U	1.9 U	1.9 U
Acetonitrile	ug/L	NA	480 U	500 U	9.6 U	9.6 U
Acrolein	ug/L	NA	140 U	800 U	2.8 U	2.8 U
Acrylonitrile	ug/L	NA	70 U	80 U	1.4 U	1.4 U
Allyl chloride	ug/L	NA	8.5 U	20 U	0.17 U	0.17 U
Benzene	ug/L	1	8 U	10 U	0.16 U	0.16 U
Bromodichloromethane	ug/L	80 TTHM	8.5 U	20 U	0.17 U	0.17 U
Bromoform	ug/L	80 TTHM	9.5 U	20 U	0.19 U	0.19 U
Bromomethane	ug/L	NA	10 U	20 U	0.21 U	0.21 U
Carbon Disulfide	ug/L	160 NL	22 U	20 U	0.45 U	0.45 U
Carbon Tetrachloride	ug/L	0.5	9.5 U	10 U	0.19 U	0.19 U
Chlorobenzene	ug/L	70	8.5 U	16 U	0.17 U	0.17 U
Chloroethane	ug/L	NA	20 U	20 U	0.41 U	0.41 U
Chloroform	ug/L	80 TTHM	8 U	16 U	0.16 U	0.16 U
Chloromethane	ug/L	NA	15 U	20 U	0.3 U	0.3 U
Chloroprene	ug/L	NA	7 U	---	0.14 U	0.14 U
cis-1,2-Dichloroethene	ug/L	6	160	150	16	18
cis-1,3-Dichloropropene	ug/L	0.5(total)	8 U	20 U	0.16 U	0.16 U
Dibromochloromethane	ug/L	80 TTHM	8.5 U	20 U	0.17 U	0.17 U
Dibromomethane	ug/L	NA	8.5 U	20 U	0.17 U	0.17 U
Dichlorodifluoromethane	ug/L	1000 NL	16 U	---	0.31 U	0.31 U
Ethyl cyanide	ug/L	NA	180 U	600 U	3.7 U	3.7 U
Ethyl methacrylate	ug/L	NA	43 U	20 U	0.86 U	0.86 U
Ethylbenzene	ug/L	300	8 U	16 U	0.16 U	0.16 U
Iodomethane	ug/L	NA	12 U	---	0.23 U	0.23 U
Isobutanol	ug/L	NA	1800 U	2000 U	36 U	36 U
Methacrylonitrile	ug/L	NA	80 U	200 U	1.6 U	1.6 U
Methyl ethyl ketone	ug/L	NA	92 U	60 U	1.8 U	1.8 U
Methyl isobutyl ketone (MIBK)	ug/L	120 NL	52 U	60 U	1 U	1 U
Methyl methacrylate	ug/L	NA	56 U	20 U	1.1 U	1.1 U
Methylene chloride	ug/L	5	29 U	40 U	0.32 U	0.32 U
m-Xylene & p-Xylene	ug/L	1750(total)	17 U	16 U	0.34 U	0.34 U
o-Xylene	ug/L	1750(total)	9.5 U	16 U	0.19 U	0.19 U
Styrene	ug/L	100	8.5 U	20 U	0.17 U	0.17 U

See Table III for notes and abbreviations.

TABLE XIII

SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Volatile Organic Compounds						
Well Identifier:			**HAR-16**	**HAR-16**	**HAR-17**	**HAR-17**
Sample Type:			Primary	Split	Primary	Duplicate
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			TA-Denver	Lancaster	TA-Denver	TA-Denver
Collection Date:			04/23/2009	04/23/2009	04/29/2009	04/29/2009
Analyte	**Units**	**MCL**				
Tetrachloroethene	ug/L	5	16 J	16 J	0.2 U	0.2 U
Toluene	ug/L	150	8.5 U	14 U	0.17 U	0.17 U
trans-1,2-Dichloroethene	ug/L	10	7.5 U	16 U	0.34 J	0.35 J
trans-1,3-Dichloropropene	ug/L	0.5(total)	9.5 U	20 U	0.19 U	0.19 U
trans-1,4-Dichloro-2-butene	ug/L	NA	40 U	300 U	0.8 U	0.8 U
Trichloroethene	ug/L	5	15000	12000	83	95
Trichlorofluoromethane	ug/L	150	30 J	21	0.29 U	0.29 U
Vinyl acetate	ug/L	NA	47 U	40 U	0.94 U	0.94 U
Vinyl chloride	ug/L	0.5	20 U	10 U	0.4 U	0.4 U

See Table III for notes and abbreviations.

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Volatile Organic Compounds						
Well Identifier:			**RD-06**	**RD-06**	**RD-37**	**RD-37**
Sample Type:			Primary	Duplicate	Primary	Split
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			TA-Denver	TA-Denver	TA-Denver	Lancaster
Collection Date:			7/13/2009	7/13/2009	7/13/2009	7/13/2009
Analyte	**Units**	**MCL**				
1,1,1,2-Tetrachloroethane	ug/L	NA	0.17 U	0.17 U	0.17 U	1 U
1,1,1-Trichloroethane	ug/L	200	0.16 U	0.16 U	0.16 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	1	0.2 U	0.2 U	0.2 U	0.5 U
1,1,2-Trichloroethane	ug/L	5	0.32 U	0.32 U	0.32 U	0.8 U
1,1-Dichloroethane	ug/L	5	0.16 U	0.16 U	0.16 U	1 U
1,1-Dichloroethene	ug/L	6	0.14 U	0.14 U	0.14 U	0.8 U
1,2,3-Trichloropropane	ug/L	0.005 NL	0.0017 U	0.0017 U	0.0017 U	0.0012 U
1,2-Dibromo-3-chloropropane	ug/L	0.2	0.0065 U	0.0064 U	0.0064 U	0.0097 U
1,2-Dibromoethane	ug/L	0.05	0.0035 U	0.0035 U	0.0035 U	0.0097 U
1,2-Dichlorobenzene	ug/L	600	0.13 U	0.13 U	0.13 U	1 U
1,2-Dichloroethane	ug/L	0.5	0.13 U	0.13 U	0.13 U	0.5 U
1,2-Dichloropropane	ug/L	5	0.13 U	0.13 U	0.13 U	1 U
1,3-Dichlorobenzene	ug/L	600 AAL	0.29 U	0.28 U	0.28 U	---
1,4-Dichlorobenzene	ug/L	5	0.16 U	0.16 U	0.16 U	1 U
1,4-Dioxane	ug/L	3 NL	1 U	1 U	1.5 J	0.9 J
2-Hexanone	ug/L	NA	1.4 U	1.4 U	1.4 U	3 U
Acetone	ug/L	NA	1.9 U	1.9 U	1.9 U	6 U
Acetonitrile	ug/L	NA	9.6 U	9.6 U	9.6 U	25 U
Acrolein	ug/L	NA	2.8 U	2.8 U	2.8 U	40 U
Acrylonitrile	ug/L	NA	1.4 U	1.4 U	1.4 U	4 U
Allyl chloride	ug/L	NA	0.17 U	0.17 U	0.17 U	1 U
Benzene	ug/L	1	0.16 U	0.16 U	0.16 U	0.5 U
Bromodichloromethane	ug/L	80 TTHM	0.17 U	0.17 U	0.17 U	1 U
Bromoform	ug/L	80 TTHM	0.19 U	0.19 U	0.19 U	1 U
Bromomethane	ug/L	NA	0.21 U	0.21 U	0.21 U	1 U
Carbon Disulfide	ug/L	160 NL	0.45 U	0.45 U	0.45 U	1 U
Carbon Tetrachloride	ug/L	0.5	0.19 U	0.19 U	0.19 U	0.5 U
Chlorobenzene	ug/L	70	0.17 U	0.17 U	0.17 U	0.8 U
Chloroethane	ug/L	NA	0.41 U	0.41 U	0.41 U	1 U
Chloroform	ug/L	80 TTHM	0.16 U	0.16 U	0.16 U	0.8 U
Chloromethane	ug/L	NA	0.3 U	0.3 U	0.3 U	1 U
Chloroprene	ug/L	NA	0.14 U	0.14 U	0.14 U	---
cis-1,2-Dichloroethene	ug/L	6	0.15 U	0.15 U	0.15 U	0.8 U
cis-1,3-Dichloropropene	ug/L	0.5(total)	0.16 U	0.16 U	0.16 U	1 U
Dibromochloromethane	ug/L	80 TTHM	0.17 U	0.17 U	0.17 U	1 U
Dibromomethane	ug/L	NA	0.17 U	0.17 U	0.17 U	1 U
Dichlorodifluoromethane	ug/L	1000 NL	0.31 U	0.31 U	0.31 U	2 U
Ethyl cyanide	ug/L	NA	3.7 U	3.7 U	3.7 U	30 U
Ethyl methacrylate	ug/L	NA	0.86 U	0.86 U	0.86 U	1 U
Ethylbenzene	ug/L	300	0.16 U	0.16 U	0.16 U	0.8 U
Iodomethane	ug/L	NA	0.23 U	0.23 U	0.23 U	1 U
Isobutanol	ug/L	NA	36 U	36 U	36 U	100 U
Methacrylonitrile	ug/L	NA	1.6 U	1.6 U	1.6 U	10 U
Methyl ethyl ketone	ug/L	NA	1.8 U	1.8 U	1.8 U	3 U
Methyl isobutyl ketone (MIBK)	ug/L	120 NL	1 U	1 U	1 U	3 U
Methyl methacrylate	ug/L	NA	1.1 U	1.1 U	1.1 U	1 U
Methylene chloride	ug/L	5	0.32 U	0.32 U	0.32 U	2 U
m-Xylene & p-Xylene	ug/L	1750(total)	0.34 U	0.34 U	0.34 U	0.8 U
o-Xylene	ug/L	1750(total)	0.19 U	0.19 U	0.19 U	0.8 U
Styrene	ug/L	100	0.17 U	0.17 U	0.17 U	1 U

See Table III for notes and abbreviations.

TABLE XIII
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY CALIFORNIA

Volatile Organic Compounds						
Well Identifier:			**RD-06**	**RD-06**	**RD-37**	**RD-37**
Sample Type:			Primary	Duplicate	Primary	Split
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			TA-Denver	TA-Denver	TA-Denver	Lancaster
Collection Date:			7/13/2009	7/13/2009	7/13/2009	7/13/2009
Analyte	**Units**	**MCL**				
Tetrachloroethene	ug/L	5	0.2 U	0.2 U	0.2 U	0.8 U
Toluene	ug/L	150	0.17 U	0.17 U	0.17 U	0.7 U
trans-1,2-Dichloroethene	ug/L	10	0.15 U	0.15 U	0.15 U	0.8 U
trans-1,3-Dichloropropene	ug/L	0.5(total)	0.19 U	0.19 U	0.19 U	1 U
trans-1,4-Dichloro-2-butene	ug/L	NA	0.8 U	0.8 U	0.8 U	15 U
Trichloroethene	ug/L	5	0.16 U	0.16 U	0.16 U	0.5 U
Trichlorofluoromethane	ug/L	150	0.29 U	0.29 U	0.29 U	0.5 U
Vinyl acetate	ug/L	NA	0.94 U	0.94 U	0.94 U	2 U
Vinyl chloride	ug/L	0.5	0.4 U	0.4 U	0.4 U	0.5 U

See Table III for notes and abbreviations.
Haley & Aldrich, Inc.
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TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**HAR-07**	**HAR-07**	**HAR-07**	**HAR-07**	**HAR-07**	**HAR-08**	**HAR-08**	**HAR-08**
Sample Type:			Primary	Split	Primary	Primary	Primary	Primary	Split	Primary
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			Lancaster	TA-Denver	TA-Denver	Lancaster	TA-Denver	Lancaster	TA-Denver	Lancaster
Collection Date:			03/05/2009	03/05/2009	05/11/2009	07/21/2009	10/15/2009	02/19/2009	02/19/2009	04/30/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	0.15	---	---	0.03 U	0.47 U	0.03 U	---	0.03 U
Fluoride	mg/L	2	0.27	0.27	0.25	0.27	0.27 U	0.27	0.22	0.31
Formaldehyde	ug/L	100 NL	14 J	---	10 U	22 U	10 U	12 J	---	10 U
Nitrate-NO3	mg/L	45	0.22 U	---	0.58 J	0.72	0.19 U	0.22 U	---	0.22 U
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	2 U	---	1.9 U	2 U	2 U	2 U	---	2 U
Nitrobenzene	ug/L	NA	1 U	---	0.77 U	1 U	0.77 U	1 U	---	1 U
n-Nitrosodimethylamine	ug/L	0.01 NL	0.031	---	0.037	0.029	0.039	0.022	---	0.016
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	4 U	---	1.6 U	4 U	0.16 U	0.1 U	---	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	10 U	---	---	10 U	0.79 U	0.2 U	---	0.2 U
1,1,2-Trichloroethane	ug/L	5	4 U	---	3.2 U	4 U	0.32 U	0.1 U	---	0.1 U
1,1-Dichloroethane	ug/L	5	5 U	---	1.6 U	5 U	0.22 J	0.1 U	---	0.1 U
1,1-Dichloroethene	ug/L	6	6 J	---	3.2 J	5 J	8.2	0.1 U	---	0.1 U
1,2-Dichloroethane	ug/L	0.5	3 U	---	1.3 U	3 U	0.13 U	0.1 U	---	0.1 U
1,4-Dioxane	ug/L	3 NL	1 U	---	1 U	1 U	0.65 U	1 J	---	1 J
Acetone	ug/L	NA	30 U	---	19 U	30 U	1.9 U	3 U	---	3 U
Benzene	ug/L	1	3 U	---	1.6 U	3 U	0.16 U	0.1 U	---	0.1 U
Carbon Tetrachloride	ug/L	0.5	3 U	---	1.9 U	3 U	0.19 U	0.1 U	---	0.1 U
Chloroform	ug/L	80 TTHM	4 U	---	1.6 U	4 U	0.16 U	0.1 U	---	0.1 U
cis-1,2-Dichloroethene	ug/L	6	1900	---	1400	1800	2500	17	---	17
Ethylbenzene	ug/L	300	4 U	---	1.6 U	4 U	0.16 U	0.1 U	---	0.1 U
Methyl ethyl ketone	ug/L	NA	15 U	---	18 U	15 U	1.8 U	1 U	---	1 U
Methylene chloride	ug/L	5	10 U	---	8 U	10 U	0.32 U	0.2 U	---	0.2 U
m-Xylene & p-Xylene	ug/L	1750 total	4 U	---	3.4 U	4 U	0.34 U	0.1 U	---	0.1 U
o-Xylene	ug/L	1750 total	4 U	---	1.9 U	4 U	0.19 U	0.1 U	---	0.1 U
Tetrachloroethene	ug/L	5	4 U	---	2 U	4 U	0.2 U	0.1 U	---	0.1 U
Toluene	ug/L	150	4 U	---	1.7 U	4 U	0.17 U	0.1 U	---	0.1 U
trans-1,2-Dichloroethene	ug/L	10	63	---	73	90	150	2.5	---	1.7
Trichloroethene	ug/L	5	4900	---	2800	3400	2900	2.7	---	1.7
Trichlorofluoromethane	ug/L	150	3 U	---	2.9 U	3 U	0.29 U	0.1 U	---	0.1 U
Vinyl chloride	ug/L	0.5	23	---	24	5	94	4.7	---	4.9

See Table III for notes and abbreviations.
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TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**HAR-08**	**HAR-08**	**HAR-18**	**HAR-18**	**HAR-18**	**HAR-18**	**HAR-18**	**HAR-18**
Sample Type:			Primary	Primary	Primary	Duplicate	Primary	Split	Primary	Duplicate
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			Lancaster	TA-Denver	Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster
Collection Date:			07/21/2009	10/22/2009	03/04/2009	03/04/2009	04/30/2009	04/30/2009	07/16/2009	07/16/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	0.03 U	0.47 U	0.03 U	---	0.043 J	---	0.063 U	---
Fluoride	mg/L	2	0.25	0.22 U	0.27	0.39	0.27	0.25	0.21	---
Formaldehyde	ug/L	100 NL	12 U	8.4 U	10 U	---	10 U	---	10 U	---
Nitrate-NO3	mg/L	45	0.22 U	0.19 U	29	---	22	5	13	---
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	2 U	1.9 U	2 U	---	2 U	1.9 U	2 U	2 U
Nitrobenzene	ug/L	NA	1 U	0.77 U	0.9 U	---	1 U	0.77 U	1 U	1 U
n-Nitrosodimethylamine	ug/L	0.01 NL	0.017	0.015	0.51 J	---	2.1	---	1.6	---
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	0.1 U	0.16 U	2 U	---	2 U	0.64 U	0.8 U	---
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	0.2 U	0.79 U	480	---	400	710	270	---
1,1,2-Trichloroethane	ug/L	5	0.1 U	0.32 U	2 U	---	2 U	1.3 U	0.8 U	---
1,1-Dichloroethane	ug/L	5	0.1 U	0.16 U	2 J	---	3 J	2.7 J	3 J	---
1,1-Dichloroethene	ug/L	6	0.1 U	0.14 U	22	---	42	43	51	---
1,2-Dichloroethane	ug/L	0.5	0.1 U	0.13 U	1 U	---	2 U	0.52 U	0.5 U	---
1,4-Dioxane	ug/L	3 NL	0.9 J	0.65 U	4.3	---	6.1	7.3	4.8	6.9
Acetone	ug/L	NA	3 U	1.9 U	12 U	---	60 U	7.6 U	6 J,L	---
Benzene	ug/L	1	0.1 U	0.16 U	1 U	---	2 U	0.64 U	0.5 U	---
Carbon Tetrachloride	ug/L	0.5	0.1 U	0.19 U	1 U	---	2 U	0.76 U	0.5 U	---
Chloroform	ug/L	80 TTHM	0.1 U	0.16 U	2 U	---	2 U	0.98 J	0.8 J	---
cis-1,2-Dichloroethene	ug/L	6	18	16	610	---	1200	1000	1900	---
Ethylbenzene	ug/L	300	0.1 U	0.16 U	2 U	---	2 U	0.64 U	0.8 U	---
Methyl ethyl ketone	ug/L	NA	1 U	1.8 U	6 U	---	20 U	7.3 U	3 U	---
Methylene chloride	ug/L	5	0.2 U	1.6 U	4 U	---	4.4 U	1.3 U	2 U	---
m-Xylene & p-Xylene	ug/L	1750 total	0.1 U	0.34 U	2 U	---	2 U	1.4 U	0.8 U	---
o-Xylene	ug/L	1750 total	0.1 U	0.19 U	2 U	---	2 U	0.76 U	0.8 U	---
Tetrachloroethene	ug/L	5	0.1 U	0.2 U	3 J	---	2.4 J	2.5 J	2 J	---
Toluene	ug/L	150	0.1 U	0.17 U	1 U	---	2 U	0.68 U	0.7 U	---
trans-1,2-Dichloroethene	ug/L	10	1.4	1.1	8 J	---	23	19	55	---
Trichloroethene	ug/L	5	1.5	1.3 U	1200	---	1200	1400	1200	---
Trichlorofluoromethane	ug/L	150	0.1 U	0.29 U	1 J	---	2 U	1.2 U	0.5 J	---
Vinyl chloride	ug/L	0.5	3.1	2.9	24	---	130	120	200	---

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TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**HAR-18**	**HAR-20**	**HAR-20**	**HAR-20**	**HAR-20**	**HAR-20**	**HAR-26**	**HAR-26**
Sample Type:			Primary	Primary	Duplicate	Primary	Primary	Primary	Primary	Primary
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			TA-Denver	Lancaster	Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster
Collection Date:			10/29/2009	02/17/2009	02/17/2009	04/30/2009	07/15/2009	10/29/2009	03/02/2009	05/01/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	0.47 U	0.03 U	---	0.03 U	0.03 U	0.47 U	---	---
Fluoride	mg/L	2	0.3 U	0.23 J	0.23 J	0.25	0.18	0.21 U	---	---
Formaldehyde	ug/L	100 NL	8.4 U	10 U	---	11 J	10 U	8.4 U	10 U	10 U
Nitrate-NO3	mg/L	45	30	0.22 U	---	0.22 U	0.22 U	0.19 U	---	---
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	1.9 U	2 U	---	2 U	2 U	1.9 U	---	---
Nitrobenzene	ug/L	NA	0.77 U	1 U	---	1 U	1 U	0.78 U	---	---
n-Nitrosodimethylamine	ug/L	0.01 NL	3.6	0.071	---	0.045	0.06	0.066	---	---
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	0.8 U	0.8 U	---	0.1 U	0.8 U	0.16 U	0.1 U	---
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	370	2 U	---	0.2 U	2 U	0.79 U	0.2 U	---
1,1,2-Trichloroethane	ug/L	5	1.6 U	0.8 U	---	0.1 U	0.8 U	0.32 U	0.1 U	---
1,1-Dichloroethane	ug/L	5	2.1 J	1 U	---	0.1 U	1 U	0.16 U	0.1 U	---
1,1-Dichloroethene	ug/L	6	12	0.8 U	---	0.4 J	0.8 U	0.24 J	0.1 U	---
1,2-Dichloroethane	ug/L	0.5	0.65 U	0.5 U	---	0.1 U	0.5 U	0.13 U	0.1 U	---
1,4-Dioxane	ug/L	3 NL	8.5	2.9	---	2.7	2.6	4.2	---	---
Acetone	ug/L	NA	66 U	6 U	---	3 U	6 U	1.9 U	3 U	---
Benzene	ug/L	1	0.8 U	0.5 U	---	0.1 U	0.5 U	0.16 U	0.1 U	---
Carbon Tetrachloride	ug/L	0.5	0.95 U	0.5 U	---	0.1 U	0.5 U	0.19 U	0.1 U	---
Chloroform	ug/L	80 TTHM	1.4 U	0.8 U	---	0.1 U	0.8 U	0.16 U	0.1 U	---
cis-1,2-Dichloroethene	ug/L	6	640	150	---	110	160	100	0.1 U	---
Ethylbenzene	ug/L	300	0.8 U	0.8 U	---	0.1 U	0.8 U	0.16 U	0.1 U	---
Methyl ethyl ketone	ug/L	NA	9.2 U	3 U	---	1 U	3 U	1.8 U	1 U	---
Methylene chloride	ug/L	5	1.6 U	2 U	---	0.2 U	2 U	0.32 U	0.2 U	---
m-Xylene & p-Xylene	ug/L	1750 total	1.7 U	0.8 U	---	0.1 U	0.8 U	0.34 U	0.1 U	---
o-Xylene	ug/L	1750 total	0.95 U	0.8 U	---	0.1 U	0.8 U	0.19 U	0.1 U	---
Tetrachloroethene	ug/L	5	2.7 J	0.8 U	---	0.1 U	0.8 U	0.2 U	0.1 U	---
Toluene	ug/L	150	0.85 U	0.7 U	---	0.1 U	0.7 U	0.17 U	0.1 U	---
trans-1,2-Dichloroethene	ug/L	10	8.5	10	---	8.6	11	6	0.1 U	---
Trichloroethene	ug/L	5	1200	260	---	220	290	180	0.1 U	---
Trichlorofluoromethane	ug/L	150	1.4 U	0.5 U	---	0.1 U	0.5 U	0.29 U	0.1 U	---
Vinyl chloride	ug/L	0.5	18	0.9 J	---	0.8	0.7 J	0.4 U	0.1 U	---

See Table III for notes and abbreviations.
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TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**HAR-26**	**HAR-26**	**HAR-26**	**OS-28**	**OS-28**	**OS-28**	**OS-28**	**OS-28**
Sample Type:			Primary	Primary	Duplicate	Primary	Duplicate	Split	Primary	Duplicate
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			Lancaster	TA-Denver	TA-Denver	Weck	Weck	TA-Denver	Lancaster	TA-Denver
Collection Date:			07/20/2009	10/29/2009	10/29/2009	03/10/2009	03/10/2009	03/10/2009	07/30/2009	07/30/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	---	---	---	---	---	---	---	---
Fluoride	mg/L	2	---	---	---	---	---	---	---	---
Formaldehyde	ug/L	100 NL	11 U	8.4 U	8.4 U	---	---	---	---	---
Nitrate-NO3	mg/L	45	---	---	---	---	---	---	---	---
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	---	---	---	---	---	---	---	---
Nitrobenzene	ug/L	NA	---	---	---	---	---	---	---	---
n-Nitrosodimethylamine	ug/L	0.01 NL	---	---	---	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	0.1 U	---	---	0.1 U	---	---	0.1 U	---
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	0.2 U	---	---	0.2 U	---	---	0.2 U	---
1,1,2-Trichloroethane	ug/L	5	0.1 U	---	---	0.1 U	---	---	0.1 U	---
1,1-Dichloroethane	ug/L	5	0.1 U	---	---	0.1 U	---	---	0.1 U	---
1,1-Dichloroethene	ug/L	6	0.1 U	---	---	0.1 U	---	---	0.1 U	---
1,2-Dichloroethane	ug/L	0.5	0.1 U	---	---	0.1 U	---	---	0.1 U	---
1,4-Dioxane	ug/L	3 NL	---	---	---	---	---	---	---	---
Acetone	ug/L	NA	3 U	---	---	3 U	---	---	3 U	---
Benzene	ug/L	1	0.1 U	---	---	0.1 U	---	---	0.1 U	---
Carbon Tetrachloride	ug/L	0.5	0.1 U	---	---	0.1 U	---	---	0.1 U	---
Chloroform	ug/L	80 TTHM	0.1 U	---	---	0.1 U	---	---	0.1 U	---
cis-1,2-Dichloroethene	ug/L	6	0.1 U	---	---	0.1 U	---	---	0.1 U	---
Ethylbenzene	ug/L	300	0.1 U	---	---	0.1 U	---	---	0.1 U	---
Methyl ethyl ketone	ug/L	NA	1 U	---	---	1 U	---	---	1 U	---
Methylene chloride	ug/L	5	0.2 U	---	---	0.2 U	---	---	0.2 U	---
m-Xylene & p-Xylene	ug/L	1750 total	0.1 U	---	---	0.1 U	---	---	0.1 U	---
o-Xylene	ug/L	1750 total	0.1 U	---	---	0.1 U	---	---	0.1 U	---
Tetrachloroethene	ug/L	5	0.1 U	---	---	0.1 U	---	---	0.1 U	---
Toluene	ug/L	150	0.1 U	---	---	0.1 U	---	---	0.1 U	---
trans-1,2-Dichloroethene	ug/L	10	0.1 U	---	---	0.1 U	---	---	0.1 U	---
Trichloroethene	ug/L	5	0.1 U	---	---	0.1 U	---	---	0.1 U	---
Trichlorofluoromethane	ug/L	150	0.1 U	---	---	0.1 U	---	---	0.1 U	---
Vinyl chloride	ug/L	0.5	0.1 U	---	---	0.1 U	---	---	0.1 U	---

See Table III for notes and abbreviations.
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TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**OS-28**	**PZ-006C**	**PZ-006C**	**PZ-006C**	**PZ-006D**	**PZ-006D**	**PZ-006D**	**PZ-006D**
Sample Type:			Split	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:			Chatsworth	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:			Weck	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	TA-Denver
Collection Date:			07/30/2009	02/19/2009	05/06/2009	07/15/2009	02/23/2009	05/06/2009	07/15/2009	10/29/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	---	---	---	---	---	---	---	---
Fluoride	mg/L	2	---	---	---	---	---	---	---	---
Formaldehyde	ug/L	100 NL	---	10 J	13 J	10 U	10 U	14 J	42 U	8.4 U
Nitrate-NO3	mg/L	45	---	---	---	---	---	---	---	---
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	---	---	---	---	---	---	---	---
Nitrobenzene	ug/L	NA	---	---	---	---	---	---	---	---
n-Nitrosodimethylamine	ug/L	0.01 NL	0.005 U	---	---	---	---	---	---	---
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	---	---	---	---	---	---	---	---
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	---	---	---	---	---	---	---	---
1,1,2-Trichloroethane	ug/L	5	---	---	---	---	---	---	---	---
1,1-Dichloroethane	ug/L	5	---	---	---	---	---	---	---	---
1,1-Dichloroethene	ug/L	6	---	---	---	---	---	---	---	---
1,2-Dichloroethane	ug/L	0.5	---	---	---	---	---	---	---	---
1,4-Dioxane	ug/L	3 NL	---	---	---	---	---	---	---	---
Acetone	ug/L	NA	---	---	---	---	---	---	---	---
Benzene	ug/L	1	---	---	---	---	---	---	---	---
Carbon Tetrachloride	ug/L	0.5	---	---	---	---	---	---	---	---
Chloroform	ug/L	80 TTHM	---	---	---	---	---	---	---	---
cis-1,2-Dichloroethene	ug/L	6	---	---	---	---	---	---	---	---
Ethylbenzene	ug/L	300	---	---	---	---	---	---	---	---
Methyl ethyl ketone	ug/L	NA	---	---	---	---	---	---	---	---
Methylene chloride	ug/L	5	---	---	---	---	---	---	---	---
m-Xylene & p-Xylene	ug/L	1750 total	---	---	---	---	---	---	---	---
o-Xylene	ug/L	1750 total	---	---	---	---	---	---	---	---
Tetrachloroethene	ug/L	5	---	---	---	---	---	---	---	---
Toluene	ug/L	150	---	---	---	---	---	---	---	---
trans-1,2-Dichloroethene	ug/L	10	---	---	---	---	---	---	---	---
Trichloroethene	ug/L	5	---	---	---	---	---	---	---	---
Trichlorofluoromethane	ug/L	150	---	---	---	---	---	---	---	---
Vinyl chloride	ug/L	0.5	---	---	---	---	---	---	---	---

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TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**PZ-006E**	**PZ-006E**	**PZ-006E**	**PZ-006E**	**PZ-025**	**PZ-025**	**PZ-025**	**PZ-026**
Sample Type:			Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:			Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:			Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:			02/23/2009	05/06/2009	07/15/2009	10/29/2009	02/13/2009	04/29/2009	07/08/2009	02/12/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	---	---	---	---	---	---	---	---
Fluoride	mg/L	2	---	---	---	---	---	---	---	---
Formaldehyde	ug/L	100 NL	25 J	79	35 U	10 J	10 U	10 U	10 U	10 U
Nitrate-NO3	mg/L	45	---	---	---	---	---	---	---	---
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	---	---	---	---	---	---	---	---
Nitrobenzene	ug/L	NA	---	---	---	---	---	---	---	---
n-Nitrosodimethylamine	ug/L	0.01 NL	---	---	---	---	---	---	---	---
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	---	---	---	---	---	---	---	---
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	---	---	---	---	---	---	---	---
1,1,2-Trichloroethane	ug/L	5	---	---	---	---	---	---	---	---
1,1-Dichloroethane	ug/L	5	---	---	---	---	---	---	---	---
1,1-Dichloroethene	ug/L	6	---	---	---	---	---	---	---	---
1,2-Dichloroethane	ug/L	0.5	---	---	---	---	---	---	---	---
1,4-Dioxane	ug/L	3 NL	---	---	---	---	---	---	---	---
Acetone	ug/L	NA	---	---	---	---	---	---	---	---
Benzene	ug/L	1	---	---	---	---	---	---	---	---
Carbon Tetrachloride	ug/L	0.5	---	---	---	---	---	---	---	---
Chloroform	ug/L	80 TTHM	---	---	---	---	---	---	---	---
cis-1,2-Dichloroethene	ug/L	6	---	---	---	---	---	---	---	---
Ethylbenzene	ug/L	300	---	---	---	---	---	---	---	---
Methyl ethyl ketone	ug/L	NA	---	---	---	---	---	---	---	---
Methylene chloride	ug/L	5	---	---	---	---	---	---	---	---
m-Xylene & p-Xylene	ug/L	1750 total	---	---	---	---	---	---	---	---
o-Xylene	ug/L	1750 total	---	---	---	---	---	---	---	---
Tetrachloroethene	ug/L	5	---	---	---	---	---	---	---	---
Toluene	ug/L	150	---	---	---	---	---	---	---	---
trans-1,2-Dichloroethene	ug/L	10	---	---	---	---	---	---	---	---
Trichloroethene	ug/L	5	---	---	---	---	---	---	---	---
Trichlorofluoromethane	ug/L	150	---	---	---	---	---	---	---	---
Vinyl chloride	ug/L	0.5	---	---	---	---	---	---	---	---

See Table III for notes and abbreviations.

TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**PZ-026**	**PZ-026**	**PZ-026**	**PZ-027**	**PZ-027**	**PZ-027**	**PZ-139**	**PZ-139**
Sample Type:			Primary	Primary	Primary	Primary	Primary	Primary	Primary	Duplicate
Geological Unit:			Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:			Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster	Lancaster	TA-Denver	TA-Denver
Collection Date:			04/28/2009	07/09/2009	10/16/2009	02/12/2009	04/28/2009	07/08/2009	10/15/2009	10/15/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	---	---	---	---	---	---	---	---
Fluoride	mg/L	2	---	---	---	---	---	---	---	---
Formaldehyde	ug/L	100 NL	10 U	10 U	10 U	10 U	16 J	10 U	10 U	---
Nitrate-NO3	mg/L	45	---	---	---	---	---	---	---	---
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	---	---	---	---	---	---	2 U	---
Nitrobenzene	ug/L	NA	---	---	---	---	---	---	0.79 U	---
n-Nitrosodimethylamine	ug/L	0.01 NL	---	---	---	---	---	---	0.005 U	0.005 U
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	---	---	---	---	---	---	0.16 U	---
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	---	---	---	---	---	---	0.79 U	---
1,1,2-Trichloroethane	ug/L	5	---	---	---	---	---	---	0.32 U	---
1,1-Dichloroethane	ug/L	5	---	---	---	---	---	---	0.16 U	---
1,1-Dichloroethene	ug/L	6	---	---	---	---	---	---	0.76 J	---
1,2-Dichloroethane	ug/L	0.5	---	---	---	---	---	---	0.13 U	---
1,4-Dioxane	ug/L	3 NL	---	---	---	---	---	---	0.65 U	---
Acetone	ug/L	NA	---	---	---	---	---	---	1.9 U	---
Benzene	ug/L	1	---	---	---	---	---	---	0.16 U	---
Carbon Tetrachloride	ug/L	0.5	---	---	---	---	---	---	0.19 U	---
Chloroform	ug/L	80 TTHM	---	---	---	---	---	---	0.16 U	---
cis-1,2-Dichloroethene	ug/L	6	---	---	---	---	---	---	13	---
Ethylbenzene	ug/L	300	---	---	---	---	---	---	0.16 U	---
Methyl ethyl ketone	ug/L	NA	---	---	---	---	---	---	1.8 U	---
Methylene chloride	ug/L	5	---	---	---	---	---	---	0.32 U	---
m-Xylene & p-Xylene	ug/L	1750 total	---	---	---	---	---	---	0.34 U	---
o-Xylene	ug/L	1750 total	---	---	---	---	---	---	0.19 U	---
Tetrachloroethene	ug/L	5	---	---	---	---	---	---	0.2 U	---
Toluene	ug/L	150	---	---	---	---	---	---	0.17 U	---
trans-1,2-Dichloroethene	ug/L	10	---	---	---	---	---	---	0.53 J	---
Trichloroethene	ug/L	5	---	---	---	---	---	---	200	---
Trichlorofluoromethane	ug/L	150	---	---	---	---	---	---	0.29 U	---
Vinyl chloride	ug/L	0.5	---	---	---	---	---	---	0.4 U	---

See Table III for notes and abbreviations.

TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**PZ-139**	**PZ-140**	**PZ-140**	**PZ-141**	**PZ-141**	**PZ-141**	**RD-01**	**RD-01**
Sample Type:			Split	Primary	Duplicate	Primary	Duplicate	Split	Primary	Duplicate
Geological Unit:			Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Chatsworth	Chatsworth
Lab Name:			TA-Irvine	TA-Denver	TA-Denver	TA-Denver	TA-Denver	TA-Irvine	Lancaster	Lancaster
Collection Date:			10/15/2009	10/20/2009	10/20/2009	11/03/2009	11/03/2009	11/03/2009	02/25/2009	02/25/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	---	---	---	---	---	---	0.03 U	---
Fluoride	mg/L	2	---	---	---	---	---	---	0.32	---
Formaldehyde	ug/L	100 NL	---	8.4 U	---	8.4 U	---	---	23 J	---
Nitrate-NO3	mg/L	45	---	---	---	---	---	---	0.22 U	---
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	---	1.9 U	---	1.9 U	---	---	2 U	2 U
Nitrobenzene	ug/L	NA	---	0.76 U	---	0.78 U	---	---	1 U	1 U
n-Nitrosodimethylamine	ug/L	0.01 NL	0.005 U	0.005 U	0.005 U	0.005 U	0.0051	---	0.015	---
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	---	0.16 U	---	0.16 U	---	---	0.8 U	---
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	---	0.79 U	---	0.79 U	---	---	2 U	---
1,1,2-Trichloroethane	ug/L	5	---	0.32 U	---	0.32 U	---	---	0.8 U	---
1,1-Dichloroethane	ug/L	5	---	0.16 U	---	0.16 U	---	---	1 U	---
1,1-Dichloroethene	ug/L	6	---	0.14 U	---	0.14 U	---	---	2 J	---
1,2-Dichloroethane	ug/L	0.5	---	0.13 U	---	0.13 U	---	---	0.5 U	---
1,4-Dioxane	ug/L	3 NL	---	0.65 U	---	0.19 U	---	1 U	1.8 J	---
Acetone	ug/L	NA	---	1.9 U	---	1.9 R	---	---	6 U	---
Benzene	ug/L	1	---	0.16 U	---	0.16 U	---	---	0.5 U	---
Carbon Tetrachloride	ug/L	0.5	---	0.19 U	---	0.19 U	---	---	0.5 U	---
Chloroform	ug/L	80 TTHM	---	0.16 U	---	0.16 U	---	---	0.8 U	---
cis-1,2-Dichloroethene	ug/L	6	---	4.1	---	2.1 J	---	---	740	---
Ethylbenzene	ug/L	300	---	0.16 U	---	0.16 U	---	---	0.8 U	---
Methyl ethyl ketone	ug/L	NA	---	1.8 U	---	1.8 U	---	---	3 U	---
Methylene chloride	ug/L	5	---	0.32 U	---	0.32 U	---	---	2 U	---
m-Xylene & p-Xylene	ug/L	1750 total	---	0.34 U	---	0.34 U	---	---	0.8 U	---
o-Xylene	ug/L	1750 total	---	0.19 U	---	0.19 U	---	---	0.8 U	---
Tetrachloroethene	ug/L	5	---	0.2 U	---	0.2 U	---	---	0.8 U	---
Toluene	ug/L	150	---	0.17 U	---	0.17 U	---	---	0.7 U	---
trans-1,2-Dichloroethene	ug/L	10	---	0.15 U	---	0.15 U	---	---	69	---
Trichloroethene	ug/L	5	---	130	---	52	---	---	660	---
Trichlorofluoromethane	ug/L	150	---	0.29 U	---	0.29 U	---	---	0.5 U	---
Vinyl chloride	ug/L	0.5	---	0.4 U	---	0.4 U	---	---	31	---

See Table III for notes and abbreviations.
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TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**RD-01**	**RD-01**	**RD-01**	**RD-01**	**RD-01**	**RD-01**	**RD-02**	**RD-02**
Sample Type:			Split	Primary	Primary	Duplicate	Primary	Split	Primary	Duplicate
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			TA-Denver	Lancaster	Lancaster	Lancaster	TA-Denver	TA-Irvine	Lancaster	Lancaster
Collection Date:			02/25/2009	05/12/2009	07/14/2009	07/14/2009	10/27/2009	10/27/2009	02/26/2009	02/26/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	---	0.24	0.03 U	---	0.47 U	0.22 U	0.03 U	---
Fluoride	mg/L	2	---	0.4	0.34	---	0.33 U	0.5	0.44 J	---
Formaldehyde	ug/L	100 NL	---	57	13 U	---	26 J	---	15 J	---
Nitrate-NO3	mg/L	45	---	0.29 J	0.4 J	0.41 J	0.19 U	0.25 U	0.22 U	---
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	---	2 U	2 U	---	1.9 U	3.4 U	2 U	---
Nitrobenzene	ug/L	NA	---	1 U	1 U	---	0.78 U	2.9 U	1 U	---
n-Nitrosodimethylamine	ug/L	0.01 NL	0.017	0.012	0.012	---	0.013	---	0.005 U	---
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	---	1 U	0.8 U	---	0.32 U	---	0.8 U	0.8 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	---	2 U	2 U	---	1.6 U	---	2 U	2 U
1,1,2-Trichloroethane	ug/L	5	---	1 U	0.8 U	---	0.64 U	---	0.8 U	0.8 U
1,1-Dichloroethane	ug/L	5	---	1 U	1 U	---	0.32 U	---	1 U	1 U
1,1-Dichloroethene	ug/L	6	---	2.4 J	3 J	---	3.4	---	2 J	1 J
1,2-Dichloroethane	ug/L	0.5	---	1 U	0.5 U	---	0.26 U	---	0.5 U	0.5 U
1,4-Dioxane	ug/L	3 NL	---	1.8 J	1.2 J	---	0.65 U	---	1.6 J	---
Acetone	ug/L	NA	---	30 U	6 U	---	3.8 U	---	6 U	6 U
Benzene	ug/L	1	---	1 U	0.5 U	---	0.32 U	---	0.5 U	0.5 U
Carbon Tetrachloride	ug/L	0.5	---	1 U	0.5 U	---	0.38 U	---	0.5 U	0.5 U
Chloroform	ug/L	80 TTHM	---	1 U	0.8 U	---	0.32 U	---	0.8 U	0.8 U
cis-1,2-Dichloroethene	ug/L	6	---	710	650	---	690	---	320	320
Ethylbenzene	ug/L	300	---	1 U	0.8 U	---	0.32 U	---	0.8 U	0.8 U
Methyl ethyl ketone	ug/L	NA	---	10 U	3 U	---	3.7 U	---	3 U	3 U
Methylene chloride	ug/L	5	---	4.3 J,L	2 U	---	0.64 U	---	2 U	2 U
m-Xylene & p-Xylene	ug/L	1750 total	---	1 U	0.8 U	---	0.68 U	---	0.8 U	0.8 U
o-Xylene	ug/L	1750 total	---	1 U	0.8 U	---	0.38 U	---	0.8 U	0.8 U
Tetrachloroethene	ug/L	5	---	1 U	0.8 U	---	0.4 U	---	0.8 U	0.8 U
Toluene	ug/L	150	---	1 U	0.7 U	---	0.34 U	---	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	10	---	28	31	---	28	---	25	24
Trichloroethene	ug/L	5	---	670	540	---	700	---	260	250
Trichlorofluoromethane	ug/L	150	---	1 U	0.5 U	---	0.58 U	---	0.5 U	0.5 U
Vinyl chloride	ug/L	0.5	---	26	24	---	36	---	1	1

See Table III for notes and abbreviations.
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TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**RD-02**	**RD-04**	**RD-04**	**RD-04**	**RD-04**	**RD-04**	**RD-04**	**RD-04**
Sample Type:			Primary	Primary	Duplicate	Primary	Primary	Duplicate	Primary	Duplicate
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	TA-Denver	TA-Denver
Collection Date:			05/12/2009	02/09/2009	02/09/2009	05/05/2009	07/28/2009	07/28/2009	10/28/2009	10/28/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	0.062 J	0.03 U	---	0.17 J	1.4	---	0.47 U	0.47 U
Fluoride	mg/L	2	0.4	0.27	---	0.29	0.25	---	0.24 U	---
Formaldehyde	ug/L	100 NL	39 J	25 J	---	35 J	55 U	---	8.4 U	8.4 U
Nitrate-NO3	mg/L	45	0.22 U	0.22 U	---	0.22 U	0.22 U	---	0.19 U	---
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	2 U	2 U	---	2 U	2 U	---	1.9 U	---
Nitrobenzene	ug/L	NA	1 U	1 U	---	1 U	0.9 U	---	0.79 U	---
n-Nitrosodimethylamine	ug/L	0.01 NL	0.005 U	0.005 U	---	0.005 U	0.005 U	---	0.005 U	---
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	0.5 U	0.8 U	0.8 U	1 U	0.8 U	---	1.6 U	---
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	1 U	2 U	2 U	2 U	2 U	---	7.9 U	---
1,1,2-Trichloroethane	ug/L	5	0.5 U	0.8 U	0.8 U	1 U	0.8 U	---	3.2 U	---
1,1-Dichloroethane	ug/L	5	0.5 U	1 U	1 U	1 U	1 U	---	1.6 U	---
1,1-Dichloroethene	ug/L	6	1.2 J	1 J	2 J	1.6 J	2 U	---	1.4 U	---
1,2-Dichloroethane	ug/L	0.5	0.5 U	0.5 U	0.5 U	1 U	0.5 U	---	1.3 U	---
1,4-Dioxane	ug/L	3 NL	1.7 J	0.6 J	---	0.5 U	0.5 U	0.5 J	2.1 J	---
Acetone	ug/L	NA	15 U	6 U	6 U	30 U	6 U	---	19 U	---
Benzene	ug/L	1	0.5 U	0.5 U	0.5 U	1 U	0.5 U	---	1.6 U	---
Carbon Tetrachloride	ug/L	0.5	0.5 U	0.5 U	0.5 U	1 U	0.5 U	---	1.9 U	---
Chloroform	ug/L	80 TTHM	0.5 U	0.8 U	0.8 U	1 U	0.8 U	---	1.6 U	---
cis-1,2-Dichloroethene	ug/L	6	330	180	180	190	260	---	260	---
Ethylbenzene	ug/L	300	0.5 U	0.8 U	0.8 U	1 U	0.8 U	---	1.6 U	---
Methyl ethyl ketone	ug/L	NA	5 U	3 U	3 U	10 U	3 U	---	18 U	---
Methylene chloride	ug/L	5	1.6 J,L	2 U	2 U	2 U	2 U	---	3.2 U	---
m-Xylene & p-Xylene	ug/L	1750 total	0.5 U	0.8 U	0.8 U	1 U	0.8 U	---	3.4 U	---
o-Xylene	ug/L	1750 total	0.5 U	0.8 U	0.8 U	1 U	0.8 U	---	1.9 U	---
Tetrachloroethene	ug/L	5	0.5 U	0.8 U	0.8 U	1 U	0.8 U	---	2 U	---
Toluene	ug/L	150	0.5 U	0.7 U	0.7 U	1 U	0.7 U	---	1.7 U	---
trans-1,2-Dichloroethene	ug/L	10	20	4 J	4 J	3.9 J	5	---	4.3 J	---
Trichloroethene	ug/L	5	220	1100	1100	1400	1400	---	1800	---
Trichlorofluoromethane	ug/L	150	0.5 U	0.5 U	0.5 U	1 U	0.5 U	---	2.9 U	---
Vinyl chloride	ug/L	0.5	1 J	0.5 U	0.5 U	1 U	0.5 U	---	4 U	---

See Table III for notes and abbreviations.
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TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**RD-06**	**RD-06**	**RD-08**	**RD-08**	**RD-08**	**RD-08**	**RD-08**	**RD-08**
Sample Type:			Primary	Duplicate	Primary	Primary	Duplicate	Primary	Primary	Duplicate
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			TA-Denver	TA-Denver	Lancaster	Lancaster	Lancaster	Lancaster	TA-Denver	TA-Denver
Collection Date:			07/13/2009	07/13/2009	03/05/2009	05/13/2009	05/13/2009	08/05/2009	11/04/2009	11/04/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	---	---	---	---	---	---	---	---
Fluoride	mg/L	2	---	---	---	---	---	---	---	---
Formaldehyde	ug/L	100 NL	---	---	10 U	10 U	10 U	12 U	8.4 U	8.4 U
Nitrate-NO3	mg/L	45	---	---	---	---	---	---	---	---
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	1.9 U	1.9 U	---	---	---	---	---	---
Nitrobenzene	ug/L	NA	0.78 U	0.77 U	---	---	---	---	---	---
n-Nitrosodimethylamine	ug/L	0.01 NL	0.005 U	0.005 U	---	---	---	---	---	---
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	0.16 U	0.16 U	---	---	---	---	---	---
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	---	---	---	---	---	---	---	---
1,1,2-Trichloroethane	ug/L	5	0.32 U	0.32 U	---	---	---	---	---	---
1,1-Dichloroethane	ug/L	5	0.16 U	0.16 U	---	---	---	---	---	---
1,1-Dichloroethene	ug/L	6	0.14 U	0.14 U	---	---	---	---	---	---
1,2-Dichloroethane	ug/L	0.5	0.13 U	0.13 U	---	---	---	---	---	---
1,4-Dioxane	ug/L	3 NL	1 U	1 U	---	---	---	---	---	---
Acetone	ug/L	NA	1.9 U	1.9 U	---	---	---	---	---	---
Benzene	ug/L	1	0.16 U	0.16 U	---	---	---	---	---	---
Carbon Tetrachloride	ug/L	0.5	0.19 U	0.19 U	---	---	---	---	---	---
Chloroform	ug/L	80 TTHM	0.16 U	0.16 U	---	---	---	---	---	---
cis-1,2-Dichloroethene	ug/L	6	0.15 U	0.15 U	---	---	---	---	---	---
Ethylbenzene	ug/L	300	0.16 U	0.16 U	---	---	---	---	---	---
Methyl ethyl ketone	ug/L	NA	1.8 U	1.8 U	---	---	---	---	---	---
Methylene chloride	ug/L	5	0.32 U	0.32 U	---	---	---	---	---	---
m-Xylene & p-Xylene	ug/L	1750 total	0.34 U	0.34 U	---	---	---	---	---	---
o-Xylene	ug/L	1750 total	0.19 U	0.19 U	---	---	---	---	---	---
Tetrachloroethene	ug/L	5	0.2 U	0.2 U	---	---	---	---	---	---
Toluene	ug/L	150	0.17 U	0.17 U	---	---	---	---	---	---
trans-1,2-Dichloroethene	ug/L	10	0.15 U	0.15 U	---	---	---	---	---	---
Trichloroethene	ug/L	5	0.16 U	0.16 U	---	---	---	---	---	---
Trichlorofluoromethane	ug/L	150	0.29 U	0.29 U	---	---	---	---	---	---
Vinyl chloride	ug/L	0.5	0.4 U	0.4 U	---	---	---	---	---	---

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TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**RD-09**	**RD-09**	**RD-09**	**RD-09**	**RD-09**	**RD-09**	**RD-09**	**RD-09**
Sample Type:			Primary	Split	Primary	Duplicate	Primary	Split	Primary	Duplicate
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			Lancaster	TA-N.Canton	Lancaster	Lancaster	Lancaster	TA-Denver	TA-Denver	TA-Denver
Collection Date:			02/19/2009	02/19/2009	05/07/2009	05/07/2009	07/28/2009	07/28/2009	10/19/2009	10/19/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	0.03 U	---	0.03 U	0.03 U	0.06 U	---	0.47 U	---
Fluoride	mg/L	2	0.21	---	0.19	0.21	0.2	0.17 J	0.17 U	0.18 U
Formaldehyde	ug/L	100 NL	10 J	33 U	33 J	33 J	32 U	---	8.4 U	---
Nitrate-NO3	mg/L	45	0.22 U	---	0.22 U	0.22 U	0.22 U	0.19 U	0.19 U	0.19 U
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	2 U	---	2 U	2 U	2 U	---	1.9 U	---
Nitrobenzene	ug/L	NA	1 U	---	1 U	0.9 U	1 U	---	0.78 U	---
n-Nitrosodimethylamine	ug/L	0.01 NL	0.005 U	---	0.005 U	0.005 U	0.005 U	---	0.005 U	---
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	0.8 U	---	1 U	1 U	0.8 U	---	0.16 U	---
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	2 U	---	2 U	2 U	2 U	---	0.79 U	---
1,1,2-Trichloroethane	ug/L	5	0.8 U	---	1 U	1 U	0.8 U	---	0.32 U	---
1,1-Dichloroethane	ug/L	5	1 U	---	1 U	1 U	1 U	---	0.16 U	---
1,1-Dichloroethene	ug/L	6	0.8 U	---	1 U	1 U	0.8 U	---	0.17 J	---
1,2-Dichloroethane	ug/L	0.5	0.5 U	---	1 U	1 U	0.5 U	---	0.13 U	---
1,4-Dioxane	ug/L	3 NL	1.3 J	---	1.4 J	1.1 J	1.1 J	---	1.1 J	---
Acetone	ug/L	NA	6 U	---	30 U	30 U	6 U	---	1.9 U	---
Benzene	ug/L	1	0.5 U	---	1 U	1 U	0.5 U	---	0.16 U	---
Carbon Tetrachloride	ug/L	0.5	0.5 U	---	1 U	1 U	0.5 U	---	0.19 U	---
Chloroform	ug/L	80 TTHM	0.8 U	---	1 U	1 U	0.8 U	---	0.16 U	---
cis-1,2-Dichloroethene	ug/L	6	95	---	66	68	96	---	80	---
Ethylbenzene	ug/L	300	0.8 U	---	1 U	1 U	0.8 U	---	0.16 U	---
Methyl ethyl ketone	ug/L	NA	3 U	---	10 U	10 U	3 U	---	1.8 U	---
Methylene chloride	ug/L	5	2 U	---	2 U	2 U	2 U	---	0.32 U	---
m-Xylene & p-Xylene	ug/L	1750 total	0.8 U	---	1 U	1 U	0.8 U	---	0.34 U	---
o-Xylene	ug/L	1750 total	0.8 U	---	1 U	1 U	0.8 U	---	0.19 U	---
Tetrachloroethene	ug/L	5	0.8 U	---	1 U	1 U	0.8 U	---	0.2 U	---
Toluene	ug/L	150	0.7 U	---	1 U	1 U	0.7 U	---	0.17 U	---
trans-1,2-Dichloroethene	ug/L	10	21	---	13	13	20	---	19	---
Trichloroethene	ug/L	5	350	---	320	320	360	---	360	---
Trichlorofluoromethane	ug/L	150	0.5 U	---	1 U	1 U	0.5 U	---	0.29 U	---
Vinyl chloride	ug/L	0.5	0.5 U	---	1 U	1 U	0.5 U	---	0.4 U	---

See Table III for notes and abbreviations.

TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**RD-10**	**RD-10**	**RD-10**	**RD-10**	**RD-10**	**RD-10**	**RD-10**	**RD-11**
Sample Type:			Primary	Split	Primary	Duplicate	Primary	Duplicate	Primary	Primary
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			Lancaster	TA- N.Canton	Lancaster	TA-Denver	Lancaster	Lancaster	TA-Denver	Lancaster
Collection Date:			02/26/2009	02/26/2009	05/11/2009	05/11/2009	07/14/2009	07/14/2009	10/27/2009	03/10/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	0.04 J	---	0.031 J	---	0.03 U	0.03 U	0.47 U	---
Fluoride	mg/L	2	0.4 U	---	0.42	---	0.34	0.37	0.34 U	---
Formaldehyde	ug/L	100 NL	10 U	30 U	10 U	---	16 U	---	9.2 J	19 J
Nitrate-NO3	mg/L	45	0.56	---	0.48	---	0.79	---	0.41 J	---
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	2 U	---	2 U	---	2 U	---	2 U	---
Nitrobenzene	ug/L	NA	0.9 U	---	1 U	---	1 U	---	0.81 U	---
n-Nitrosodimethylamine	ug/L	0.01 NL	0.005 U	---	0.005 U	0.005 U	0.005 U	---	0.005 U	---
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	0.8 U	---	0.1 U	---	0.8 U	---	0.16 U	---
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	2 U	---	0.2 U	---	2 U	---	0.79 U	---
1,1,2-Trichloroethane	ug/L	5	0.8 U	---	0.1 U	---	0.8 U	---	0.32 U	---
1,1-Dichloroethane	ug/L	5	1 U	---	0.1 U	---	1 U	---	0.16 U	---
1,1-Dichloroethene	ug/L	6	0.8 U	---	0.1 J	---	0.8 U	---	0.14 U	---
1,2-Dichloroethane	ug/L	0.5	0.5 U	---	0.1 U	---	0.5 U	---	0.13 U	---
1,4-Dioxane	ug/L	3 NL	0.5 U	---	0.5 U	---	0.7 J	---	0.65 U	---
Acetone	ug/L	NA	6 U	---	3 U	---	6 U	---	1.9 U	---
Benzene	ug/L	1	0.5 U	---	0.1 U	---	0.5 U	---	0.16 U	---
Carbon Tetrachloride	ug/L	0.5	0.5 U	---	0.1 U	---	0.5 U	---	0.19 U	---
Chloroform	ug/L	80 TTHM	0.8 U	---	0.1 U	---	0.8 U	---	0.16 U	---
cis-1,2-Dichloroethene	ug/L	6	11	---	11	---	12	---	10	---
Ethylbenzene	ug/L	300	0.8 U	---	0.1 U	---	0.8 U	---	0.16 U	---
Methyl ethyl ketone	ug/L	NA	3 U	---	1 U	---	3 U	---	1.8 U	---
Methylene chloride	ug/L	5	2 U	---	0.2 U	---	2 U	---	0.32 U	---
m-Xylene & p-Xylene	ug/L	1750 total	0.8 U	---	0.1 U	---	0.8 U	---	0.34 U	---
o-Xylene	ug/L	1750 total	0.8 U	---	0.1 U	---	0.8 U	---	0.19 U	---
Tetrachloroethene	ug/L	5	0.8 U	---	0.1 U	---	0.8 U	---	0.2 U	---
Toluene	ug/L	150	0.7 U	---	0.1 U	---	0.7 U	---	0.17 U	---
trans-1,2-Dichloroethene	ug/L	10	0.9 J	---	0.8	---	0.8 U	---	0.64 J	---
Trichloroethene	ug/L	5	14	---	14	---	14	---	13	---
Trichlorofluoromethane	ug/L	150	0.5 U	---	0.1 U	---	0.5 U	---	0.29 U	---
Vinyl chloride	ug/L	0.5	0.5 U	---	0.2 J	---	0.5 U	---	0.4 U	---

See Table III for notes and abbreviations.
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TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**RD-11**	**RD-11**	**RD-11**	**RD-12**	**RD-12**	**RD-13**	**RD-13**	**RD-13**
Sample Type:			Primary	Duplicate	Primary	Primary	Primary	Primary	Duplicate	Split
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster	Lancaster	Lancaster	TA-Denver
Collection Date:			05/14/2009	05/14/2009	11/04/2009	03/05/2009	04/28/2009	03/09/2009	03/09/2009	03/09/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	---	---	---	---	---	---	---	---
Fluoride	mg/L	2	---	---	---	---	---	---	---	---
Formaldehyde	ug/L	100 NL	15 J	10 J	8.4 U	10 U	16 J	10 U	10 U	---
Nitrate-NO3	mg/L	45	---	---	---	---	---	---	---	---
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	---	---	---	---	---	0.2 U	---	0.089 U
Nitrobenzene	ug/L	NA	---	---	---	---	---	0.2 U	---	0.091 U
n-Nitrosodimethylamine	ug/L	0.01 NL	---	---	---	---	---	0.005 U	0.005 U	0.005 U
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	---	---	---	---	---	0.1 U	0.1 U	---
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	---	---	---	---	---	0.2 U	0.2 U	---
1,1,2-Trichloroethane	ug/L	5	---	---	---	---	---	0.1 U	0.1 U	---
1,1-Dichloroethane	ug/L	5	---	---	---	---	---	0.1 U	0.1 U	---
1,1-Dichloroethene	ug/L	6	---	---	---	---	---	0.1 U	0.1 U	---
1,2-Dichloroethane	ug/L	0.5	---	---	---	---	---	0.1 U	0.1 U	---
1,4-Dioxane	ug/L	3 NL	---	---	---	---	---	---	---	---
Acetone	ug/L	NA	---	---	---	---	---	3 U	3 U	---
Benzene	ug/L	1	---	---	---	---	---	0.1 U	0.1 U	---
Carbon Tetrachloride	ug/L	0.5	---	---	---	---	---	0.1 U	0.1 U	---
Chloroform	ug/L	80 TTHM	---	---	---	---	---	0.1 U	0.1 U	---
cis-1,2-Dichloroethene	ug/L	6	---	---	---	---	---	0.1 U	0.1 U	---
Ethylbenzene	ug/L	300	---	---	---	---	---	0.1 U	0.1 U	---
Methyl ethyl ketone	ug/L	NA	---	---	---	---	---	1 U	1 U	---
Methylene chloride	ug/L	5	---	---	---	---	---	0.2 U	0.2 U	---
m-Xylene & p-Xylene	ug/L	1750 total	---	---	---	---	---	0.1 U	0.1 U	---
o-Xylene	ug/L	1750 total	---	---	---	---	---	0.1 U	0.1 U	---
Tetrachloroethene	ug/L	5	---	---	---	---	---	0.1 U	0.1 U	---
Toluene	ug/L	150	---	---	---	---	---	0.1 U	0.1 U	---
trans-1,2-Dichloroethene	ug/L	10	---	---	---	---	---	0.1 U	0.1 U	---
Trichloroethene	ug/L	5	---	---	---	---	---	0.2 J	0.2 J	---
Trichlorofluoromethane	ug/L	150	---	---	---	---	---	0.1 U	0.1 U	---
Vinyl chloride	ug/L	0.5	---	---	---	---	---	0.1 U	0.1 U	---

See Table III for notes and abbreviations.

TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**RD-13**	**RD-13**	**RD-13**	**RD-13**	**RD-13**	**RD-13**	**RD-13**	**RD-13**
Sample Type:			Primary	Duplicate	Split	Primary	Duplicate	Split	Primary	Duplicate
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster	TA-Denver	TA-Denver	TA-Denver
Collection Date:			05/06/2009	05/06/2009	05/06/2009	07/15/2009	07/15/2009	07/15/2009	10/21/2009	10/21/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	---	---	---	---	---	---	---	---
Fluoride	mg/L	2	---	---	---	---	---	---	---	---
Formaldehyde	ug/L	100 NL	10 U	---	---	10 U	10 U	---	8.4 U	---
Nitrate-NO3	mg/L	45	---	---	---	---	---	---	---	---
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	0.2 U	0.2 U	0.089 U	0.2 U	0.2 U	0.089 U	0.097 U	0.095 U
Nitrobenzene	ug/L	NA	0.2 U	0.2 U	0.091 U	0.2 U	0.2 U	0.091 U	0.099 U	0.097 U
n-Nitrosodimethylamine	ug/L	0.01 NL	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	0.1 U	0.1 U	---	0.1 U	---	---	0.16 U	0.16 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	0.2 U	0.2 U	---	0.2 U	---	---	0.79 U	0.79 U
1,1,2-Trichloroethane	ug/L	5	0.1 U	0.1 U	---	0.1 U	---	---	0.32 U	0.32 U
1,1-Dichloroethane	ug/L	5	0.1 U	0.1 U	---	0.1 U	---	---	0.16 U	0.16 U
1,1-Dichloroethene	ug/L	6	0.1 U	0.1 U	---	0.1 U	---	---	0.14 U	0.14 U
1,2-Dichloroethane	ug/L	0.5	0.1 U	0.1 U	---	0.1 U	---	---	0.13 U	0.13 U
1,4-Dioxane	ug/L	3 NL	---	---	---	---	---	---	---	---
Acetone	ug/L	NA	3 U	3 U	---	3 U	---	---	1.9 U	1.9 U
Benzene	ug/L	1	0.1 U	0.1 U	---	0.1 U	---	---	0.16 U	0.16 U
Carbon Tetrachloride	ug/L	0.5	0.1 U	0.1 U	---	0.1 U	---	---	0.19 U	0.19 U
Chloroform	ug/L	80 TTHM	0.1 U	0.1 U	---	0.1 U	---	---	0.16 U	0.16 U
cis-1,2-Dichloroethene	ug/L	6	0.1 U	0.1 U	---	0.1 U	---	---	0.15 U	0.15 U
Ethylbenzene	ug/L	300	0.1 U	0.1 U	---	0.1 U	---	---	0.16 U	0.16 U
Methyl ethyl ketone	ug/L	NA	1 U	1 U	---	1 U	---	---	1.8 U	1.8 U
Methylene chloride	ug/L	5	0.2 U	0.2 U	---	0.2 U	---	---	1.9 U	1.7 U
m-Xylene & p-Xylene	ug/L	1750 total	0.1 U	0.1 U	---	0.1 U	---	---	0.34 U	0.34 U
o-Xylene	ug/L	1750 total	0.1 U	0.1 U	---	0.1 U	---	---	0.19 U	0.19 U
Tetrachloroethene	ug/L	5	0.1 U	0.1 U	---	0.1 U	---	---	0.2 U	0.2 U
Toluene	ug/L	150	0.1 U	0.1 U	---	0.1 U	---	---	0.17 U	0.17 U
trans-1,2-Dichloroethene	ug/L	10	0.1 U	0.1 U	---	0.1 U	---	---	0.15 U	0.15 U
Trichloroethene	ug/L	5	0.3 J	0.3 J	---	0.2 J	---	---	0.27 U	0.25 U
Trichlorofluoromethane	ug/L	150	0.1 U	0.1 U	---	0.1 U	---	---	0.29 U	0.29 U
Vinyl chloride	ug/L	0.5	0.1 U	0.1 U	---	0.1 U	---	---	0.4 U	0.4 U

See Table III for notes and abbreviations.
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TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**RD-13**	**RD-37**	**RD-37**	**RD-37**	**RD-41A**	**RD-41A**	**RD-41B**	**RD-41B**
Sample Type:			Split	Primary	Duplicate	Split	Primary	Primary	Primary	Duplicate
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			TA-Irvine	TA-Denver	TA-Denver	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:			10/21/2009	07/13/2009	07/13/2009	07/13/2009	02/18/2009	07/28/2009	02/12/2009	02/12/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	---	---	---	---	---	0.035 U	0.03 U	0.03 U
Fluoride	mg/L	2	---	---	---	---	---	0.31	0.24	---
Formaldehyde	ug/L	100 NL	0.564 U	---	---	---	---	---	35 J	---
Nitrate-NO3	mg/L	45	---	---	---	---	---	0.22 U	0.22 U	---
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	0.048 U	1.9 U	---	2 U	---	---	2 U	---
Nitrobenzene	ug/L	NA	0.048 U	0.77 U	---	1 U	---	---	1 U	---
n-Nitrosodimethylamine	ug/L	0.01 NL	0.005 U	0.005 U	0.005 U	0.005 U	---	---	0.005 U	---
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	---	0.16 U	---	0.8 U	0.1 U	0.1 U	2 R	---
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	---	---	---	---	0.2 U	0.2 U	4 U	---
1,1,2-Trichloroethane	ug/L	5	---	0.32 U	---	0.8 U	0.1 U	0.1 U	2 U	---
1,1-Dichloroethane	ug/L	5	---	0.16 U	---	1 U	0.1 U	0.1 U	2 U	---
1,1-Dichloroethene	ug/L	6	---	0.14 U	---	0.8 U	0.1 U	0.1 U	3 J	---
1,2-Dichloroethane	ug/L	0.5	---	0.13 U	---	0.5 U	0.1 U	0.1 U	1 U	---
1,4-Dioxane	ug/L	3 NL	---	1.5 J	---	0.9 J	0.5 U	0.5 U	1 J	---
Acetone	ug/L	NA	---	1.9 U	---	6 U	3 U	3 U	12 U	---
Benzene	ug/L	1	---	0.16 U	---	0.5 U	0.1 U	0.1 U	1 U	---
Carbon Tetrachloride	ug/L	0.5	---	0.19 U	---	0.5 U	0.1 U	0.1 U	1 U	---
Chloroform	ug/L	80 TTHM	---	0.16 U	---	0.8 U	0.1 U	0.1 U	2 U	---
cis-1,2-Dichloroethene	ug/L	6	---	0.15 U	---	0.8 U	8.7	8.6	670	---
Ethylbenzene	ug/L	300	---	0.16 U	---	0.8 U	0.1 U	0.1 U	2 U	---
Methyl ethyl ketone	ug/L	NA	---	1.8 U	---	3 U	1 U	1 U	6 U	---
Methylene chloride	ug/L	5	---	0.32 U	---	2 U	0.2 U	0.2 U	4 U	---
m-Xylene & p-Xylene	ug/L	1750 total	---	0.34 U	---	0.8 U	0.1 U	0.1 U	2 U	---
o-Xylene	ug/L	1750 total	---	0.19 U	---	0.8 U	0.1 U	0.1 U	2 U	---
Tetrachloroethene	ug/L	5	---	0.2 U	---	0.8 U	0.1 U	0.1 U	2 U	---
Toluene	ug/L	150	---	0.17 U	---	0.7 U	0.1 U	0.1 U	1 U	---
trans-1,2-Dichloroethene	ug/L	10	---	0.15 U	---	0.8 U	3.6	3.1	38	---
Trichloroethene	ug/L	5	---	0.16 U	---	0.5 U	1.5	0.8	1000	---
Trichlorofluoromethane	ug/L	150	---	0.29 U	---	0.5 U	0.1 U	0.1 U	1 U	---
Vinyl chloride	ug/L	0.5	---	0.4 U	---	0.5 U	2.3	1.8	20	---

See Table III for notes and abbreviations.
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TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**RD-41B**	**RD-41B**	**RD-41B**	**RD-41B**	**RD-41B**	**RD-41B**	**RD-41B**	**RD-44**
Sample Type:			Primary	Split	Split	Primary	Duplicate	Primary	Duplicate	Primary
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			Lancaster	TA-Denver	Weck	Lancaster	Lancaster	TA-Denver	TA-Denver	Lancaster
Collection Date:			05/04/2009	05/04/2009	05/04/2009	08/04/2009	08/04/2009	11/02/2009	11/02/2009	03/02/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	0.034 J	---	---	0.11 U	0.097 U	0.47 U	---	0.03 U
Fluoride	mg/L	2	0.24	0.12 J	---	0.22	---	0.2 U	---	0.4
Formaldehyde	ug/L	100 NL	67	---	---	89	---	8.4 U	---	11 J
Nitrate-NO3	mg/L	45	0.22 U	0.19 UJ	---	0.22 U	---	0.19 U	---	0.22 U
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	2 U	1.9 U	---	2 U	---	2 U	---	2 U
Nitrobenzene	ug/L	NA	0.9 U	0.78 U	---	0.9 U	---	0.79 U	---	0.9 U
n-Nitrosodimethylamine	ug/L	0.01 NL	0.005 U	---	0.005 U	0.005 U	---	0.005 U	---	0.005 U
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	1 U	---	---	0.8 U	---	1.1 U	---	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	2 U	---	---	2 U	---	5.3 U	---	0.2 U
1,1,2-Trichloroethane	ug/L	5	1 U	---	---	0.8 U	---	2.1 U	---	0.1 U
1,1-Dichloroethane	ug/L	5	1 U	---	---	1 U	---	1.1 U	---	0.1 U
1,1-Dichloroethene	ug/L	6	4.1 J	---	---	5 J	---	5.9 J	---	0.1 U
1,2-Dichloroethane	ug/L	0.5	1 U	---	---	0.5 U	---	0.87 U	---	0.1 U
1,4-Dioxane	ug/L	3 NL	1.1 J	1.2 J	---	0.8 J	---	19 UJ	65 UJ	0.5 U
Acetone	ug/L	NA	30 U	---	---	6 U	---	13 U	---	3 U
Benzene	ug/L	1	1 U	---	---	0.5 U	---	1.1 U	---	0.1 U
Carbon Tetrachloride	ug/L	0.5	1 U	---	---	0.5 U	---	1.3 U	---	0.1 U
Chloroform	ug/L	80 TTHM	1 U	---	---	0.8 U	---	1.1 U	---	0.1 U
cis-1,2-Dichloroethene	ug/L	6	870	---	---	1000	---	1500	---	0.1 U
Ethylbenzene	ug/L	300	1 U	---	---	0.8 U	---	1.1 U	---	0.1 U
Methyl ethyl ketone	ug/L	NA	10 U	---	---	3 U	---	12 U	---	1 U
Methylene chloride	ug/L	5	2 U	---	---	2 U	---	2.5 U	---	0.2 U
m-Xylene & p-Xylene	ug/L	1750 total	1 U	---	---	0.8 U	---	2.3 U	---	0.1 U
o-Xylene	ug/L	1750 total	1 U	---	---	0.8 U	---	1.3 U	---	0.1 U
Tetrachloroethene	ug/L	5	1 U	---	---	0.8 U	---	1.3 U	---	0.1 U
Toluene	ug/L	150	1 U	---	---	0.7 U	---	1.1 U	---	0.1 U
trans-1,2-Dichloroethene	ug/L	10	44	---	---	58	---	58	---	0.1 U
Trichloroethene	ug/L	5	900	---	---	940	---	130	---	0.1 U
Trichlorofluoromethane	ug/L	150	1 U	---	---	0.5 U	---	1.9 U	---	0.1 U
Vinyl chloride	ug/L	0.5	21	---	---	21	---	22	---	0.1 U

See Table III for notes and abbreviations.
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TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**RD-44**	**RD-44**	**RD-44**	**RD-44**	**RD-44**	**RD-44**	**RD-44**	**RD-44**
Sample Type:			Duplicate	Primary	Duplicate	Primary	Duplicate	Primary	Duplicate	Split
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			Weck	Lancaster	Lancaster	Lancaster	TA-Denver	TA-Denver	TA-Denver	TA-Irvine
Collection Date:			03/02/2009	04/30/2009	04/30/2009	07/27/2009	07/27/2009	10/28/2009	10/28/2009	10/28/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	---	0.03 U	---	0.032 U	---	0.47 U	---	---
Fluoride	mg/L	2	---	0.43	---	0.34	---	0.38 U	0.36 U	---
Formaldehyde	ug/L	100 NL	---	12 J	---	10 U	---	8.4 U	---	---
Nitrate-NO3	mg/L	45	---	0.22 U	0.22 U	0.22 U	---	0.19 U	0.19 U	---
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	---	2 U	2 U	2 U	---	1.9 U	---	---
Nitrobenzene	ug/L	NA	---	1 U	1 U	1 U	---	0.77 U	---	---
n-Nitrosodimethylamine	ug/L	0.01 NL	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	---	0.1 U	0.1 U	0.1 U	---	0.16 U	---	---
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	---	0.2 U	0.2 U	0.2 U	---	0.79 U	---	---
1,1,2-Trichloroethane	ug/L	5	---	0.1 U	0.1 U	0.1 U	---	0.32 U	---	---
1,1-Dichloroethane	ug/L	5	---	0.1 U	0.1 U	0.1 U	---	0.16 U	---	---
1,1-Dichloroethene	ug/L	6	---	0.1 U	0.1 U	0.1 U	---	0.14 U	---	---
1,2-Dichloroethane	ug/L	0.5	---	0.1 U	0.1 U	0.1 U	---	0.13 U	---	---
1,4-Dioxane	ug/L	3 NL	---	0.5 U	0.5 U	0.5 U	---	0.65 U	---	---
Acetone	ug/L	NA	---	3 U	3 U	3 U	---	1.9 U	---	---
Benzene	ug/L	1	---	0.1 U	0.1 U	0.1 U	---	0.16 U	---	---
Carbon Tetrachloride	ug/L	0.5	---	0.1 U	0.1 U	0.1 U	---	0.19 U	---	---
Chloroform	ug/L	80 TTHM	---	0.1 U	0.1 U	0.1 U	---	0.16 U	---	---
cis-1,2-Dichloroethene	ug/L	6	---	0.1 U	0.1 U	0.1 J,C	---	0.15 U	---	---
Ethylbenzene	ug/L	300	---	0.1 U	0.1 U	0.1 U	---	0.16 U	---	---
Methyl ethyl ketone	ug/L	NA	---	1 U	1 U	1 U	---	1.8 U	---	---
Methylene chloride	ug/L	5	---	0.2 U	0.2 U	0.2 U	---	0.32 U	---	---
m-Xylene & p-Xylene	ug/L	1750 total	---	0.1 U	0.1 U	0.1 U	---	0.34 U	---	---
o-Xylene	ug/L	1750 total	---	0.1 U	0.1 U	0.1 U	---	0.19 U	---	---
Tetrachloroethene	ug/L	5	---	0.1 U	0.1 U	0.1 U	---	0.2 U	---	---
Toluene	ug/L	150	---	0.1 U	0.1 U	0.1 U	---	0.17 U	---	---
trans-1,2-Dichloroethene	ug/L	10	---	0.1 U	0.1 U	0.1 U	---	0.15 U	---	---
Trichloroethene	ug/L	5	---	0.1 U	0.1 U	0.1 U	---	0.16 U	---	---
Trichlorofluoromethane	ug/L	150	---	0.1 U	0.1 U	0.1 U	---	0.29 U	---	---
Vinyl chloride	ug/L	0.5	---	0.1 U	0.1 U	0.1 U	---	0.4 U	---	---

See Table III for notes and abbreviations.

TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**RD-49A**	**RD-49A**	**RD-49A**	**RD-49A**	**RD-49B**	**RD-49B**	**RD-49B**	**RD-49B**
Sample Type:			Primary	Duplicate	Split	Primary	Primary	Primary	Primary	Duplicate
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:			03/05/2009	03/05/2009	03/05/2009	05/06/2009	02/11/2009	05/06/2009	07/28/2009	07/28/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	0.41	---	---	0.03 U	0.03 U	0.03 U	0.03 U	---
Fluoride	mg/L	2	0.32	---	---	0.35	0.25	0.22	0.23	---
Formaldehyde	ug/L	100 NL	28 J	---	---	14 J	10 U	10 U	10 U	---
Nitrate-NO3	mg/L	45	0.22 U	0.22 U	---	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	2 U	---	---	2 U	2 U	2 U	2 U	---
Nitrobenzene	ug/L	NA	1 U	---	---	1 U	1 U	1 U	1 U	---
n-Nitrosodimethylamine	ug/L	0.01 NL	0.005 U	---	0.005 U	0.005 U	0.057	0.039	0.042	---
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	2 U	---	---	1 U	0.8 R	0.1 U	0.8 U	---
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	5 U	---	---	2 U	2 U	0.2 U	2 U	---
1,1,2-Trichloroethane	ug/L	5	2 U	---	---	1 U	0.8 U	0.1 U	0.8 U	---
1,1-Dichloroethane	ug/L	5	3 U	---	---	1 U	1 U	0.1 U	1 U	---
1,1-Dichloroethene	ug/L	6	4 J	---	---	2.7 J	0.8 U	0.9	0.8 U	---
1,2-Dichloroethane	ug/L	0.5	1 U	---	---	1 U	0.5 U	0.1 U	0.5 U	---
1,4-Dioxane	ug/L	3 NL	0.5 U	---	---	0.5 U	2	1.7 J	1.9 J	---
Acetone	ug/L	NA	15 U	---	---	30 U	6 U	3 U	6 U	---
Benzene	ug/L	1	1 U	---	---	1 U	0.5 U	0.1 U	0.5 U	---
Carbon Tetrachloride	ug/L	0.5	1 U	---	---	1 U	0.5 U	0.1 U	0.5 U	---
Chloroform	ug/L	80 TTHM	2 U	---	---	1 U	0.8 U	0.1 U	0.8 U	---
cis-1,2-Dichloroethene	ug/L	6	2400	---	---	1900	270	240	290	---
Ethylbenzene	ug/L	300	2 U	---	---	1 U	0.8 U	0.1 U	0.8 U	---
Methyl ethyl ketone	ug/L	NA	8 U	---	---	10 U	3 U	1 U	3 U	---
Methylene chloride	ug/L	5	5 U	---	---	2 U	2 U	0.2 U	2 U	---
m-Xylene & p-Xylene	ug/L	1750 total	2 U	---	---	1 U	0.8 U	0.1 U	0.8 U	---
o-Xylene	ug/L	1750 total	2 U	---	---	1 U	0.8 U	0.1 U	0.8 U	---
Tetrachloroethene	ug/L	5	2 U	---	---	1 U	0.8 U	0.1 U	0.8 U	---
Toluene	ug/L	150	2 U	---	---	1 U	0.7 U	0.1 U	0.7 U	---
trans-1,2-Dichloroethene	ug/L	10	49	---	---	52	13	15	15	---
Trichloroethene	ug/L	5	110	---	---	930	270	260	300	---
Trichlorofluoromethane	ug/L	150	1 U	---	---	1 U	0.5 U	0.1 U	0.5 U	---
Vinyl chloride	ug/L	0.5	1 U	---	---	1.2 J	4	3.8	3	---

See Table III for notes and abbreviations.
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TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**RD-49B**	**RD-49B**	**RD-49B**	**RD-49C**	**RD-49C**	**RD-49C**	**RD-49C**	**RD-49C**
Sample Type:			Split	Primary	Duplicate	Primary	Primary	Duplicate	Primary	Split
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			TA-Denver	TA-Denver	TA-Denver	Lancaster	Lancaster	Lancaster	Lancaster	TA-Denver
Collection Date:			07/28/2009	10/30/2009	10/30/2009	02/11/2009	05/06/2009	05/06/2009	07/28/2009	07/28/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	---	0.47 U	---	0.03 U	0.03 U	---	0.03 U	---
Fluoride	mg/L	2	---	0.23 U	---	0.29	0.33	---	0.29	---
Formaldehyde	ug/L	100 NL	---	8.4 U	---	10 U	21 J	---	28 U	---
Nitrate-NO3	mg/L	45	---	0.19 U	---	0.24 J	0.22 U	---	0.22 U	---
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	---	1.9 U	1.9 U	2 U	2 U	---	2 U	2 U
Nitrobenzene	ug/L	NA	---	0.79 U	0.77 U	1 U	1 U	---	0.9 U	0.77 U
n-Nitrosodimethylamine	ug/L	0.01 NL	---	0.039	---	0.0069	0.0059	---	0.0092	---
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	---	0.16 U	---	0.8 R	0.1 U	0.1 U	0.8 U	0.16 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	---	0.79 U	---	2 U	0.2 U	0.2 U	2 U	0.79 U
1,1,2-Trichloroethane	ug/L	5	---	0.32 U	---	0.8 U	0.1 U	0.1 U	0.8 U	0.32 U
1,1-Dichloroethane	ug/L	5	---	0.16 U	---	1 U	0.1 U	0.1 U	1 U	0.16 U
1,1-Dichloroethene	ug/L	6	---	0.73 J	---	0.8 U	0.2 J	0.2 J	0.8 U	0.14 U
1,2-Dichloroethane	ug/L	0.5	---	0.13 U	---	0.5 U	0.1 U	0.1 U	0.5 U	0.13 U
1,4-Dioxane	ug/L	3 NL	2.4	2.2 J	2.3 J	0.9 J	1 J	---	1.2 J	---
Acetone	ug/L	NA	---	1.9 U	---	6 U	3 U	3 U	6 U	1.9 U
Benzene	ug/L	1	---	0.16 U	---	0.5 U	0.1 U	0.1 U	0.5 U	0.16 U
Carbon Tetrachloride	ug/L	0.5	---	0.19 U	---	0.5 U	0.1 U	0.1 U	0.5 U	0.19 U
Chloroform	ug/L	80 TTHM	---	0.16 U	---	0.8 U	0.1 U	0.1 U	0.8 U	0.16 U
cis-1,2-Dichloroethene	ug/L	6	---	170	---	88	78	73	100	78
Ethylbenzene	ug/L	300	---	0.16 U	---	0.8 U	0.1 U	0.1 U	0.8 U	0.16 U
Methyl ethyl ketone	ug/L	NA	---	1.8 U	---	3 U	1 U	1 U	3 U	1.8 U
Methylene chloride	ug/L	5	---	0.32 U	---	2 U	0.2 U	0.2 U	2 U	0.32 U
m-Xylene & p-Xylene	ug/L	1750 total	---	0.34 U	---	0.8 U	0.1 U	0.1 U	0.8 U	0.34 U
o-Xylene	ug/L	1750 total	---	0.19 U	---	0.8 U	0.1 U	0.1 U	0.8 U	0.19 U
Tetrachloroethene	ug/L	5	---	0.2 U	---	0.8 U	0.1 U	0.1 U	0.8 U	0.2 U
Toluene	ug/L	150	---	0.17 U	---	0.7 U	0.1 U	0.1 U	0.7 U	0.17 U
trans-1,2-Dichloroethene	ug/L	10	---	13	---	3 J	2.5	2.5	3 J	2.4
Trichloroethene	ug/L	5	---	170	---	14	13	13	13	11
Trichlorofluoromethane	ug/L	150	---	0.29 U	---	0.5 U	0.1 U	0.1 U	0.5 U	0.29 U
Vinyl chloride	ug/L	0.5	---	3.2	---	2	1.7	1.7	1	1.4

See Table III for notes and abbreviations.
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TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**RD-49C**	**RD-49C**	**RD-51B**	**RD-51B**	**RD-51B**	**RD-51B**	**RD-51B**	**RD-51B**
Sample Type:			Primary	Duplicate	Primary	Split	Primary	Primary	Duplicate	Split
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			TA-Denver	TA-Denver	Lancaster	TA-Denver	Lancaster	Lancaster	Lancaster	TA-Denver
Collection Date:			10/30/2009	10/30/2009	02/09/2009	02/09/2009	05/04/2009	05/27/2009	05/27/2009	05/27/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	0.47 U	---	0.034 J	---	0.056 J	---	---	---
Fluoride	mg/L	2	0.25 U	---	0.32	---	0.38	---	---	---
Formaldehyde	ug/L	100 NL	8.4 U	8.4 U	12 J	---	13 J	---	---	---
Nitrate-NO3	mg/L	45	0.19 U	---	0.22 U	---	0.22 U	---	---	---
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	1.9 U	1.9 U	2 U	---	2 U	---	---	---
Nitrobenzene	ug/L	NA	0.77 U	0.78 U	1 U	---	1 U	---	---	---
n-Nitrosodimethylamine	ug/L	0.01 NL	0.0077	---	0.005 U	---	0.005 U	---	---	---
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	0.16 U	---	0.1 U	---	0.8 U	0.1 U	0.1 U	0.16 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	0.79 U	---	0.2 U	---	2 U	0.2 U	0.2 U	0.79 U
1,1,2-Trichloroethane	ug/L	5	0.32 U	---	0.1 U	---	0.8 U	0.1 U	0.1 U	0.32 U
1,1-Dichloroethane	ug/L	5	0.16 U	---	0.1 U	---	1 U	0.1 U	0.1 U	0.16 U
1,1-Dichloroethene	ug/L	6	0.19 J	---	0.1 U	---	0.8 U	0.1 U	0.1 U	0.14 U
1,2-Dichloroethane	ug/L	0.5	0.13 U	---	0.1 U	---	0.5 U	0.1 U	0.1 U	0.13 U
1,4-Dioxane	ug/L	3 NL	0.78 J	---	0.5 U	1 U	0.5 U	---	---	
Acetone	ug/L	NA	1.9 U	---	3 U	---	6 U	3 U	3 U	1.9 U
Benzene	ug/L	1	0.16 U	---	0.1 U	---	0.5 U	0.1 U	0.1 U	0.16 U
Carbon Tetrachloride	ug/L	0.5	0.19 U	---	0.1 U	---	0.5 U	0.1 U	0.1 U	0.19 U
Chloroform	ug/L	80 TTHM	0.16 U	---	0.1 U	---	0.8 U	0.1 U	0.1 U	0.16 U
cis-1,2-Dichloroethene	ug/L	6	94	---	12	---	10	9.6	9.8	9.2
Ethylbenzene	ug/L	300	0.16 U	---	0.1 U	---	0.8 U	0.1 U	0.1 U	0.16 U
Methyl ethyl ketone	ug/L	NA	1.8 U	---	1 U	---	3 U	1 U	1 U	1.8 U
Methylene chloride	ug/L	5	0.32 U	---	0.2 U	---	2 U	0.2 U	0.2 U	0.32 U
m-Xylene & p-Xylene	ug/L	1750 total	0.34 U	---	0.1 U	---	0.8 U	0.1 U	0.1 U	0.34 U
o-Xylene	ug/L	1750 total	0.19 U	---	0.1 U	---	0.8 U	0.1 U	0.1 U	0.19 U
Tetrachloroethene	ug/L	5	0.2 U	---	0.1 U	---	0.8 U	0.1 U	0.1 U	0.2 U
Toluene	ug/L	150	0.17 U	---	0.1 U	---	0.7 U	0.1 U	0.1 U	0.17 U
trans-1,2-Dichloroethene	ug/L	10	2.6	---	1	---	0.9 J	0.8	0.8	0.81 J
Trichloroethene	ug/L	5	12	---	4.6	---	4	4.3	4.4	4
Trichlorofluoromethane	ug/L	150	0.29 U	---	0.1 U	---	0.5 U	0.1 U	0.1 U	0.29 U
Vinyl chloride	ug/L	0.5	1.6	---	8.1	---	6	5.7	5.7	7.5

See Table III for notes and abbreviations.
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TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**RD-51B**	**RD-51B**	**RD-51B**	**RD-51B**	**RD-51C**	**RD-51C**	**RD-51C**	**RD-51C**
Sample Type:			Primary	Duplicate	Primary	Duplicate	Primary	Duplicate	Primary	Duplicate
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			Lancaster	Lancaster	TA-Denver	TA-Denver	Lancaster	Weck	Lancaster	Lancaster
Collection Date:			07/27/2009	07/27/2009	10/19/2009	10/19/2009	02/10/2009	02/10/2009	05/05/2009	05/05/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	0.051 U	---	0.47 U	0.47 U	0.11	---	0.031 J	---
Fluoride	mg/L	2	0.3	---	0.29 U	---	0.27	---	0.27	---
Formaldehyde	ug/L	100 NL	20 U	18 U	8.4 U	---	10 U	---	10 U	---
Nitrate-NO3	mg/L	45	0.22 U	---	0.19 U	---	0.22 U	---	0.22 U	---
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	2 U	2 U	1.9 U	---	2 U	---	2 U	---
Nitrobenzene	ug/L	NA	1 U	1 U	0.78 U	---	0.9 U	---	1 U	---
n-Nitrosodimethylamine	ug/L	0.01 NL	0.005 U	---	0.005 U	---	0.005 U	0.005 U	0.005 U	0.005 U
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	0.1 U	---	0.16 U	---	0.1 U	---	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	0.2 U	---	0.79 U	---	0.2 U	---	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	5	0.1 U	---	0.32 U	---	0.1 U	---	0.1 U	0.1 U
1,1-Dichloroethane	ug/L	5	0.1 U	---	0.16 U	---	0.1 U	---	0.1 U	0.1 U
1,1-Dichloroethene	ug/L	6	0.1 U	---	0.14 U	---	0.1 U	---	0.1 U	0.1 U
1,2-Dichloroethane	ug/L	0.5	0.1 U	---	0.13 U	---	0.1 U	---	0.1 U	0.1 U
1,4-Dioxane	ug/L	3 NL	0.5 U	---	0.65 U	---	0.5 U	---	0.5 U	---
Acetone	ug/L	NA	3 U	---	1.9 U	---	3 U	---	3 U	3 U
Benzene	ug/L	1	0.1 U	---	0.16 U	---	0.1 U	---	0.1 U	0.1 U
Carbon Tetrachloride	ug/L	0.5	0.1 U	---	0.19 U	---	0.1 U	---	0.1 U	0.1 U
Chloroform	ug/L	80 TTHM	0.1 U	---	0.16 U	---	0.1 U	---	0.1 U	0.1 U
cis-1,2-Dichloroethene	ug/L	6	10	---	9	---	0.1 U	---	0.1 U	0.1 U
Ethylbenzene	ug/L	300	0.1 U	---	0.16 U	---	0.1 U	---	0.1 U	0.1 U
Methyl ethyl ketone	ug/L	NA	1 U	---	1.8 U	---	1 U	---	1 U	1 U
Methylene chloride	ug/L	5	0.2 U	---	0.32 U	---	0.2 U	---	0.2 U	0.2 U
m-Xylene & p-Xylene	ug/L	1750 total	0.1 U	---	0.34 U	---	0.1 U	---	0.1 U	0.1 U
o-Xylene	ug/L	1750 total	0.1 U	---	0.19 U	---	0.1 U	---	0.1 U	0.1 U
Tetrachloroethene	ug/L	5	0.1 U	---	0.2 U	---	0.1 U	---	0.1 U	0.1 U
Toluene	ug/L	150	0.1 U	---	0.17 U	---	0.1 U	---	0.1 U	0.1 U
trans-1,2-Dichloroethene	ug/L	10	0.9	---	0.79 J	---	0.1 U	---	0.1 U	0.1 U
Trichloroethene	ug/L	5	4.1	---	3.6	---	0.1 U	---	0.1 U	0.1 U
Trichlorofluoromethane	ug/L	150	0.1 U	---	0.29 U	---	0.1 U	---	0.1 U	0.1 U
Vinyl chloride	ug/L	0.5	5.5	---	5.7	---	0.1 U	---	0.1 U	0.1 U

See Table III for notes and abbreviations.
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TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**RD-51C**	**RD-51C**	**RD-51C**	**RD-51C**	**RD-51C**	**RD-51C**	**RD-55A**	**RD-55A**
Sample Type:			Split	Primary	Duplicate	Primary	Duplicate	Split	Primary	Primary
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			TA-Denver	Lancaster	TA-Denver	TA-Denver	TA-Denver	TA-Irvine	Lancaster	Lancaster
Collection Date:			05/05/2009	07/27/2009	07/27/2009	10/19/2009	10/19/2009	10/19/2009	02/18/2009	04/30/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	0.031 J	0.084 U	---	0.47 U	---	---	0.03 U	0.03 U
Fluoride	mg/L	2	0.27	0.24	---	0.19 U	---	---	0.46	0.48
Formaldehyde	ug/L	100 NL	10 U	10 U	---	8.4 U	---	---	10 U	10 U
Nitrate-NO3	mg/L	45	0.22 U	0.22 U	---	0.19 U	---	---	13	11
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	2 U	2 U	---	1.9 U	---	---	2 U	2 U
Nitrobenzene	ug/L	NA	1 U	1 U	---	0.77 U	---	---	0.9 U	1 U
n-Nitrosodimethylamine	ug/L	0.01 NL	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	0.16 U	0.1 U	---	0.16 U	---	---	0.8 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	0.79 U	0.2 U	---	0.79 U	---	---	2 U	0.2 U
1,1,2-Trichloroethane	ug/L	5	0.32 U	0.1 U	---	0.32 U	---	---	0.8 U	0.1 U
1,1-Dichloroethane	ug/L	5	0.16 U	0.1 U	---	0.16 U	---	---	1 U	0.1 U
1,1-Dichloroethene	ug/L	6	0.14 U	0.1 U	---	0.14 U	---	---	0.8 U	0.1 U
1,2-Dichloroethane	ug/L	0.5	0.13 U	0.1 U	---	0.13 U	---	---	0.5 U	0.1 U
1,4-Dioxane	ug/L	3 NL	---	0.5 U	---	0.65 U	---	---	0.5 U	0.5 U
Acetone	ug/L	NA	1.9 U	3 U	---	1.9 U	---	---	6 U	3 U
Benzene	ug/L	1	0.16 U	0.1 U	---	0.16 U	---	---	0.5 U	0.1 U
Carbon Tetrachloride	ug/L	0.5	0.19 U	0.1 U	---	0.19 U	---	---	0.5 U	0.1 U
Chloroform	ug/L	80 TTHM	0.16 U	0.1 U	---	0.16 U	---	---	0.8 U	0.1 U
cis-1,2-Dichloroethene	ug/L	6	0.15 U	0.1 U	---	0.15 U	---	---	4 J	2.9
Ethylbenzene	ug/L	300	0.16 U	0.1 U	---	0.16 U	---	---	0.8 U	0.1 U
Methyl ethyl ketone	ug/L	NA	1.8 U	1 U	---	1.8 U	---	---	3 U	1 U
Methylene chloride	ug/L	5	1.1 U	0.2 U	---	0.32 U	---	---	2 U	0.2 U
m-Xylene & p-Xylene	ug/L	1750 total	0.34 U	0.1 U	---	0.34 U	---	---	0.8 U	0.1 U
o-Xylene	ug/L	1750 total	0.19 U	0.1 U	---	0.19 U	---	---	0.8 U	0.1 U
Tetrachloroethene	ug/L	5	0.2 U	0.1 U	---	0.2 U	---	---	0.8 U	0.1 U
Toluene	ug/L	150	0.17 U	0.1 U	---	0.17 U	---	---	0.7 U	0.1 U
trans-1,2-Dichloroethene	ug/L	10	0.15 U	0.1 U	---	0.15 U	---	---	0.8 U	0.2 J
Trichloroethene	ug/L	5	0.16 U	0.1 U	---	0.16 U	---	---	5	5.1
Trichlorofluoromethane	ug/L	150	0.29 U	0.1 U	---	0.29 U	---	---	0.5 U	0.1 U
Vinyl chloride	ug/L	0.5	0.4 U	0.1 U	---	0.4 U	---	---	0.5 U	0.4 J

See Table III for notes and abbreviations.

TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**RD-55A**	**RD-55A**	**RD-55A**	**RD-55B**	**RD-55B**	**RD-55B**	**RD-55B**	**RD-55B**
Sample Type:			Split	Primary	Primary	Primary	Duplicate	Primary	Primary	Duplicate
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			TA-Denver	Lancaster	TA-Denver	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:			04/30/2009	07/21/2009	11/03/2009	02/12/2009	02/12/2009	04/30/2009	07/21/2009	07/21/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	---	0.03 U	0.47 U	0.03 U	---	0.03 U	0.03 U	0.03 U
Fluoride	mg/L	2	---	0.39	0.38 U	0.62	---	0.62	0.55	---
Formaldehyde	ug/L	100 NL	---	10 U	8.4 U	10 U	10 U	10 U	15 U	---
Nitrate-NO3	mg/L	45	---	9	8.1	0.22 U	---	0.22 U	0.22 U	---
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	---	2 U	1.9 U	2 U	---	2 U	2 U	---
Nitrobenzene	ug/L	NA	---	1 U	0.78 U	1 U	---	0.9 U	1 U	---
n-Nitrosodimethylamine	ug/L	0.01 NL	---	0.005 U	0.005 U	0.005 U	---	0.005 U	0.005 U	---
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	0.16 U	0.8 U	0.16 U	0.8 R	---	0.1 U	0.8 U	---
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	0.79 U	2 U	0.79 U	2 U	---	0.2 U	2 U	---
1,1,2-Trichloroethane	ug/L	5	0.32 U	0.8 U	0.32 U	0.8 U	---	0.1 U	0.8 U	---
1,1-Dichloroethane	ug/L	5	0.16 U	1 U	0.16 U	1 U	---	0.1 U	1 U	---
1,1-Dichloroethene	ug/L	6	0.14 U	0.8 U	0.14 U	0.8 U	---	0.3 J	0.8 U	---
1,2-Dichloroethane	ug/L	0.5	0.13 U	0.5 U	0.13 U	0.5 U	---	0.1 U	0.5 U	---
1,4-Dioxane	ug/L	3 NL	---	0.5 U	0.19 U	0.5 U	0.5 U	0.5 U	0.5 U	---
Acetone	ug/L	NA	1.9 U	6 U	1.9 U	6 U	---	3 U	6 U	---
Benzene	ug/L	1	0.16 U	0.5 U	0.16 U	0.5 U	---	0.1 U	0.5 U	---
Carbon Tetrachloride	ug/L	0.5	0.19 U	0.5 U	0.19 U	0.5 U	---	0.1 U	0.5 U	---
Chloroform	ug/L	80 TTHM	0.16 U	0.8 U	0.16 U	0.8 U	---	0.1 U	0.8 U	---
cis-1,2-Dichloroethene	ug/L	6	2	14	54	14	---	15	16	---
Ethylbenzene	ug/L	300	0.16 U	0.8 U	0.16 U	0.8 U	---	0.1 U	0.8 U	---
Methyl ethyl ketone	ug/L	NA	1.8 U	3 U	1.8 U	3 U	---	1 U	3 U	---
Methylene chloride	ug/L	5	0.32 U	2 U	0.32 U	2 U	---	0.2 U	2 U	---
m-Xylene & p-Xylene	ug/L	1750 total	0.34 U	0.8 U	0.34 U	0.8 U	---	0.1 U	0.8 U	---
o-Xylene	ug/L	1750 total	0.19 U	0.8 U	0.19 U	0.8 U	---	0.1 U	0.8 U	---
Tetrachloroethene	ug/L	5	0.2 U	0.8 U	0.31 J	0.8 U	---	0.1 U	0.8 U	---
Toluene	ug/L	150	0.17 U	0.7 U	0.17 U	0.7 U	---	0.1 J	0.7 U	---
trans-1,2-Dichloroethene	ug/L	10	0.16 J	0.8 U	1.3	0.8 U	---	0.1 J	0.8 U	---
Trichloroethene	ug/L	5	4.7	23	40	25	---	21	26	---
Trichlorofluoromethane	ug/L	150	0.29 U	0.5 U	0.29 U	0.5 U	---	0.1 U	0.5 U	---
Vinyl chloride	ug/L	0.5	0.4 U	0.5 U	2	0.5 U	---	0.1 J	0.5 U	---

See Table III for notes and abbreviations.
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TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**RD-55B**	**RD-55B**	**RD-55B**	**RD-58A**	**RD-58A**	**RD-58A**	**RD-58A**	**RD-58A**
Sample Type:			Primary	Duplicate	Split	Primary	Duplicate	Primary	Primary	Primary
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			TA-Denver	TA-Denver	TA-Irvine	Lancaster	Lancaster	Lancaster	Lancaster	TA-Denver
Collection Date:			11/02/2009	11/02/2009	11/02/2009	03/05/2009	03/05/2009	05/11/2009	08/04/2009	10/22/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	0.47 U	---	---	0.03 U	---	0.03 U	0.03 U	---
Fluoride	mg/L	2	0.56 U	0.52 U	---	0.4	---	0.43	0.41	0.42 U
Formaldehyde	ug/L	100 NL	8.4 U	8.4 U	---	10 U	---	10 U	11 U	8.4 U
Nitrate-NO3	mg/L	45	0.19 U	0.19 U	---	0.22 U	---	0.22 U	0.22 U	0.19 U
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	2 U	---	---	2 U	---	2 U	2 U	1.9 U
Nitrobenzene	ug/L	NA	0.79 U	---	---	1 U	---	0.9 U	0.9 U	0.78 U
n-Nitrosodimethylamine	ug/L	0.01 NL	0.005 U	---	---	0.005 U	---	0.005 U	0.005 U	0.005 U
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	0.16 U	---	---	0.8 U	---	0.1 U	0.8 U	0.16 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	0.79 U	---	---	5 J	---	6.5	5 J	4.6 J
1,1,2-Trichloroethane	ug/L	5	0.32 U	---	---	0.8 U	---	0.1 U	0.8 U	0.32 U
1,1-Dichloroethane	ug/L	5	0.16 U	---	---	1 U	---	0.1 U	1 U	0.16 U
1,1-Dichloroethene	ug/L	6	0.26 J	---	---	0.8 U	---	0.1 U	0.8 U	0.14 U
1,2-Dichloroethane	ug/L	0.5	0.13 U	---	---	0.5 U	---	0.1 U	0.5 U	0.13 U
1,4-Dioxane	ug/L	3 NL	0.65 U	---	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.65 UJ
Acetone	ug/L	NA	1.9 U	---	---	6 U	---	3 U	6 U	2.8 U
Benzene	ug/L	1	0.16 U	---	---	0.5 U	---	0.1 U	0.5 U	0.16 U
Carbon Tetrachloride	ug/L	0.5	0.19 U	---	---	0.5 U	---	0.1 U	0.5 U	0.19 U
Chloroform	ug/L	80 TTHM	0.16 U	---	---	0.8 U	---	0.1 U	0.8 U	0.16 U
cis-1,2-Dichloroethene	ug/L	6	14	---	---	8	---	8.4	8	7.8
Ethylbenzene	ug/L	300	0.16 U	---	---	0.8 U	---	0.1 U	0.8 U	0.16 U
Methyl ethyl ketone	ug/L	NA	1.8 U	---	---	3 U	---	1 U	3 U	1.8 U
Methylene chloride	ug/L	5	0.32 U	---	---	2 U	---	0.2 U	2 U	0.34 U
m-Xylene & p-Xylene	ug/L	1750 total	0.34 U	---	---	0.8 U	---	0.1 U	0.8 U	0.34 U
o-Xylene	ug/L	1750 total	0.19 U	---	---	0.8 U	---	0.1 U	0.8 U	0.19 U
Tetrachloroethene	ug/L	5	0.2 U	---	---	0.8 U	---	0.1 U	0.8 U	0.2 U
Toluene	ug/L	150	0.17 U	---	---	0.7 U	---	0.1 U	0.7 U	0.17 U
trans-1,2-Dichloroethene	ug/L	10	0.15 U	---	---	0.8 U	---	0.1 J	0.8 U	0.15 U
Trichloroethene	ug/L	5	22	---	---	150	---	140	150	220
Trichlorofluoromethane	ug/L	150	0.29 U	---	---	0.5 U	---	0.1 U	0.5 U	0.29 U
Vinyl chloride	ug/L	0.5	0.4 U	---	---	0.5 U	---	0.1 U	0.5 U	0.4 U

See Table III for notes and abbreviations.
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TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**RD-58B**	**RD-58B**	**RD-58B**	**RD-58B**	**RD-58B**	**RD-58B**	**RD-58B**	**RD-69**
Sample Type:			Primary	Duplicate	Split	Primary	Primary	Duplicate	Primary	Primary
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster	Lancaster	TA-Denver	TA-Denver
Collection Date:			02/11/2009	02/11/2009	02/11/2009	05/11/2009	07/28/2009	07/28/2009	10/22/2009	11/04/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	0.03 U	---	---	0.046 J	0.039 U	---	0.47 U	0.47 U
Fluoride	mg/L	2	0.53	---	---	0.47	0.47	0.39	0.43 U	0.19 U
Formaldehyde	ug/L	100 NL	10 U	---	---	15 J	27 U	26 U	8.4 U	110
Nitrate-NO3	mg/L	45	0.22 U	---	0.19 U	0.22 U	0.22 U	---	0.19 U	0.19 U
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	2 U	2 U	1.9 U	2 U	2 U	---	1.9 U	1.9 U
Nitrobenzene	ug/L	NA	1 U	1 U	0.79 U	0.9 U	0.9 U	---	0.78 U	0.78 U
n-Nitrosodimethylamine	ug/L	0.01 NL	0.005 U	---	---	0.005 U	0.005 U	---	0.005 U	0.005 U
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	0.1 U	---	---	0.1 U	0.1 U	---	0.16 U	0.16 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	0.2 U	---	---	0.2 U	0.2 U	---	0.79 U	0.79 U
1,1,2-Trichloroethane	ug/L	5	0.1 U	---	---	0.1 U	0.1 U	---	0.32 U	0.32 U
1,1-Dichloroethane	ug/L	5	0.1 U	---	---	0.1 U	0.1 U	---	0.16 U	0.16 U
1,1-Dichloroethene	ug/L	6	0.1 U	---	---	0.1 U	0.1 U	---	0.14 U	0.14 U
1,2-Dichloroethane	ug/L	0.5	0.1 U	---	---	0.1 U	0.1 U	---	0.13 U	0.13 U
1,4-Dioxane	ug/L	3 NL	0.8 J	---	---	0.5 J	0.7 J	---	0.65 U	0.19 U
Acetone	ug/L	NA	3 U	---	---	3 U	3 U	---	1.9 U	1.9 R
Benzene	ug/L	1	0.1 U	---	---	0.1 U	0.1 U	---	0.16 U	0.16 U
Carbon Tetrachloride	ug/L	0.5	0.1 U	---	---	0.1 U	0.1 U	---	0.19 U	0.19 U
Chloroform	ug/L	80 TTHM	0.1 U	---	---	0.1 U	0.1 U	---	0.16 U	0.16 U
cis-1,2-Dichloroethene	ug/L	6	0.1 U	---	---	0.1 U	0.1 U	---	0.15 U	0.15 U
Ethylbenzene	ug/L	300	0.1 U	---	---	0.1 U	0.1 U	---	0.16 U	0.16 U
Methyl ethyl ketone	ug/L	NA	1 U	---	---	1 U	1 U	---	1.8 U	1.8 U
Methylene chloride	ug/L	5	0.2 U	---	---	0.2 U	0.2 U	---	0.32 U	0.32 U
m-Xylene & p-Xylene	ug/L	1750 total	0.1 U	---	---	0.1 U	0.1 U	---	0.34 U	0.34 U
o-Xylene	ug/L	1750 total	0.1 U	---	---	0.1 U	0.1 U	---	0.19 U	0.19 U
Tetrachloroethene	ug/L	5	0.1 U	---	---	0.1 U	0.1 U	---	0.2 U	0.2 U
Toluene	ug/L	150	0.1 J	---	---	0.1 U	0.1 U	---	0.17 U	0.17 U
trans-1,2-Dichloroethene	ug/L	10	0.1 U	---	---	0.1 U	0.1 U	---	0.15 U	0.15 U
Trichloroethene	ug/L	5	0.1 U	---	---	0.1 U	0.1 U	---	0.27 U	0.16 U
Trichlorofluoromethane	ug/L	150	0.1 U	---	---	0.1 U	0.1 U	---	0.29 U	0.29 U
Vinyl chloride	ug/L	0.5	0.1 U	---	---	0.1 U	0.1 U	---	0.4 U	0.4 U

See Table III for notes and abbreviations.
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TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**RD-69**	**RD-69**	**SH-08**	**WS-05**	**WS-05**	**WS-05**	**WS-05**	**WS-05**
Sample Type:			Duplicate	Split	Primary	Primary	Split	Primary	Primary	Duplicate
Geological Unit:			Chatsworth	Chatsworth	Shallow	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			TA-Denver	TA-Irvine	Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster	Lancaster
Collection Date:			11/04/2009	11/04/2009	05/14/2009	02/10/2009	02/10/2009	05/06/2009	07/29/2009	07/29/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	---	---	---	0.33	---	0.064 J	0.11 U	---
Fluoride	mg/L	2	0.2 U	0.39 J	---	0.3	---	0.29	0.3	---
Formaldehyde	ug/L	100 NL	---	---	10 U	10 U	---	10 U	10 U	---
Nitrate-NO3	mg/L	45	---	---	---	0.22 U	0.19 U	0.22 U	0.22 U	0.22 U
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	---	---	---	2 U	---	2 U	2 U	2 U
Nitrobenzene	ug/L	NA	---	---	---	1 U	---	1 U	0.9 U	0.9 U
n-Nitrosodimethylamine	ug/L	0.01 NL	0.005 U	---	---	0.005 U	---	0.005 U	0.005 U	---
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	---	---	---	0.1 U	---	0.1 U	0.1 U	---
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	---	---	---	0.2 U	---	0.2 U	0.2 U	---
1,1,2-Trichloroethane	ug/L	5	---	---	---	0.1 U	---	0.1 U	0.1 U	---
1,1-Dichloroethane	ug/L	5	---	---	---	0.1 U	---	0.1 U	0.1 U	---
1,1-Dichloroethene	ug/L	6	---	---	---	0.1 U	---	0.1 U	0.1 U	---
1,2-Dichloroethane	ug/L	0.5	---	---	---	0.1 U	---	0.1 U	0.1 U	---
1,4-Dioxane	ug/L	3 NL	---	---	---	1.9 J	2.7	1.9 J	2.2	2.5
Acetone	ug/L	NA	---	---	---	3 U	---	3 U	3 U	---
Benzene	ug/L	1	---	---	---	0.1 U	---	0.1 U	0.1 U	---
Carbon Tetrachloride	ug/L	0.5	---	---	---	0.1 U	---	0.1 U	0.1 U	---
Chloroform	ug/L	80 TTHM	---	---	---	0.1 U	---	0.1 U	0.1 U	---
cis-1,2-Dichloroethene	ug/L	6	---	---	---	1.8	---	1.7	1.7	---
Ethylbenzene	ug/L	300	---	---	---	0.1 U	---	0.1 U	0.1 U	---
Methyl ethyl ketone	ug/L	NA	---	---	---	1 U	---	1 U	1 U	---
Methylene chloride	ug/L	5	---	---	---	0.2 U	---	0.2 U	0.2 U	---
m-Xylene & p-Xylene	ug/L	1750 total	---	---	---	0.1 U	---	0.1 U	0.1 U	---
o-Xylene	ug/L	1750 total	---	---	---	0.1 U	---	0.1 U	0.1 U	---
Tetrachloroethene	ug/L	5	---	---	---	0.1 U	---	0.1 U	0.1 U	---
Toluene	ug/L	150	---	---	---	0.1 U	---	0.1 U	0.1 U	---
trans-1,2-Dichloroethene	ug/L	10	---	---	---	0.2 J	---	0.1 J	0.1 J	---
Trichloroethene	ug/L	5	---	---	---	0.6	---	0.6	0.6	---
Trichlorofluoromethane	ug/L	150	---	---	---	0.1 U	---	0.1 U	0.1 U	---
Vinyl chloride	ug/L	0.5	---	---	---	0.1 U	---	0.1 U	0.1 U	---

See Table III for notes and abbreviations.

TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**WS-05**	**WS-05**	**WS-06**	**WS-06**	**WS-06**	**WS-06**	**WS-06**	**WS-06**
Sample Type:			Primary	Split	Primary	Duplicate	Split	Primary	Primary	Duplicate
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			TA-Denver	TA-Irvine	Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster	Lancaster
Collection Date:			10/15/2009	10/15/2009	02/26/2009	02/26/2009	02/26/2009	05/06/2009	07/29/2009	07/29/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	0.47 U	---	0.035 J	---	---	0.03 U	0.07 U	---
Fluoride	mg/L	2	0.25 U	---	0.43 J	---	---	0.27	0.28	---
Formaldehyde	ug/L	100 NL	11 U	5.57 U	35 J	---	---	31 J	34 U	37 U
Nitrate-NO3	mg/L	45	0.19 U	---	0.22 U	---	---	0.22 U	0.22 U	---
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	2 U	---	2 U	2 U	1.9 U	2 U	2 U	---
Nitrobenzene	ug/L	NA	0.82 U	---	1 U	0.9 U	0.77 U	0.9 U	1 U	---
n-Nitrosodimethylamine	ug/L	0.01 NL	0.005 U	---	0.005 U	---	---	0.005 U	0.005 U	---
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	0.16 U	---	0.8 U	---	---	0.1 U	0.8 U	---
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	0.79 U	---	2 U	---	---	0.2 U	2 U	---
1,1,2-Trichloroethane	ug/L	5	0.32 U	---	0.8 U	---	---	0.1 U	0.8 U	---
1,1-Dichloroethane	ug/L	5	0.16 U	---	1 U	---	---	0.1 U	1 U	---
1,1-Dichloroethene	ug/L	6	0.14 U	---	0.8 U	---	---	0.3 J	0.8 U	---
1,2-Dichloroethane	ug/L	0.5	0.13 U	---	0.5 U	---	---	0.1 U	0.5 U	---
1,4-Dioxane	ug/L	3 NL	2.1 J	---	1.2 J	---	---	1 J	0.8 J	---
Acetone	ug/L	NA	1.9 U	---	6 U	---	---	3 U	6 U	---
Benzene	ug/L	1	0.16 U	---	0.5 U	---	---	0.1 U	0.5 U	---
Carbon Tetrachloride	ug/L	0.5	0.19 U	---	0.5 U	---	---	0.1 U	0.5 U	---
Chloroform	ug/L	80 TTHM	0.16 U	---	0.8 U	---	---	0.1 U	0.8 U	---
cis-1,2-Dichloroethene	ug/L	6	1.9 U	---	150	---	---	120	170	---
Ethylbenzene	ug/L	300	0.16 U	---	0.8 U	---	---	0.1 U	0.8 U	---
Methyl ethyl ketone	ug/L	NA	1.8 U	---	3 U	---	---	1 U	3 U	---
Methylene chloride	ug/L	5	0.32 U	---	2 U	---	---	0.2 U	2 U	---
m-Xylene & p-Xylene	ug/L	1750 total	0.34 U	---	0.8 U	---	---	0.1 U	0.8 U	---
o-Xylene	ug/L	1750 total	0.19 U	---	0.8 U	---	---	0.1 U	0.8 U	---
Tetrachloroethene	ug/L	5	0.2 U	---	0.8 U	---	---	0.1 U	0.8 U	---
Toluene	ug/L	150	0.17 U	---	0.7 U	---	---	0.1 U	0.7 U	---
trans-1,2-Dichloroethene	ug/L	10	0.15 U	---	11	---	---	9.1	12	---
Trichloroethene	ug/L	5	1.1 U	---	6	---	---	6.9	5	---
Trichlorofluoromethane	ug/L	150	0.29 U	---	0.5 U	---	---	0.1 U	0.5 U	---
Vinyl chloride	ug/L	0.5	0.4 U	---	5	---	---	5.6	5	---

See Table III for notes and abbreviations.
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TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**WS-06**	**WS-09**	**WS-09**	**WS-09**	**WS-09**	**WS-09**	**WS-09A**	**WS-09A**
Sample Type:			Primary	Primary	Primary	Duplicate	Primary	Primary	Primary	Duplicate
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			TA-Denver	Lancaster	Lancaster	Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster
Collection Date:			10/29/2009	02/10/2009	05/05/2009	05/05/2009	07/23/2009	10/20/2009	02/12/2009	02/12/2009
Analyte	**Units**	**MCL**								
Naturally Occurring Constituents										
Ammonia-N	mg/L	NA	0.47 U	0.057 J	0.03 U	0.03 U	0.042 U	0.47 U	0.13	0.17
Fluoride	mg/L	2	0.21 U	0.29	0.28	0.27	0.21	0.25 U	0.28	---
Formaldehyde	ug/L	100 NL	8.4 U	11 J	11 J	16 J	10 U	8.4 U	38 J	---
Nitrate-NO3	mg/L	45	0.19 U	0.23 J	0.22 U	0.22 U	0.4 J	0.19 U	0.22 U	---
Semi-Volatile Organic Compounds										
1,3-Dinitrobenzene	ug/L	NA	1.9 U	2 U	2 U	2 U	2 U	2 U	2 U	---
Nitrobenzene	ug/L	NA	0.79 U	0.9 U	1 U	1 U	1 U	0.8 U	1 U	---
n-Nitrosodimethylamine	ug/L	0.01 NL	0.005 U	0.005 U	0.0063	0.005 U	0.005 U	0.005 U	0.005 U	---
Volatile Organic Compounds										
1,1,1-Trichloroethane	ug/L	200	0.16 U	0.8 R	10 U	10 U	8 U	8 U	0.8 R	---
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	0.79 U	2 U	20 U	20 U	20 U	40 U	2 U	---
1,1,2-Trichloroethane	ug/L	5	0.32 U	0.8 U	10 U	10 U	8 U	16 U	0.8 U	---
1,1-Dichloroethane	ug/L	5	0.16 U	1 U	10 U	10 U	10 U	8 U	1 U	---
1,1-Dichloroethene	ug/L	6	0.35 J	11	11 J	10 J	8 J	7 U	0.8 U	---
1,2-Dichloroethane	ug/L	0.5	0.13 U	0.5 U	10 U	10 U	5 U	6.5 U	0.5 U	---
1,4-Dioxane	ug/L	3 NL	0.95 J	4.2 J	3.6	4.1	4.2 J	65 UJ	0.5 U	0.5 U
Acetone	ug/L	NA	1.9 U	6 U	300 U	300 U	60 U	95 U	6 U	---
Benzene	ug/L	1	0.16 U	0.5 U	10 U	10 U	5 U	8 U	0.5 U	---
Carbon Tetrachloride	ug/L	0.5	0.19 U	0.5 U	10 U	10 U	5 U	9.5 U	0.5 U	---
Chloroform	ug/L	80 TTHM	0.16 U	0.8 U	10 U	10 U	8 U	8 U	0.8 U	---
cis-1,2-Dichloroethene	ug/L	6	150	840	850	830	900	870	33	---
Ethylbenzene	ug/L	300	0.16 U	0.8 U	10 U	10 U	8 U	8 U	0.8 U	---
Methyl ethyl ketone	ug/L	NA	1.8 U	3 U	100 U	100 U	30 U	92 U	3 U	---
Methylene chloride	ug/L	5	0.32 U	2 U	20 U	20 U	20 U	16 U	2 U	---
m-Xylene & p-Xylene	ug/L	1750 total	0.34 U	0.8 U	10 U	10 U	8 U	17 U	0.8 U	---
o-Xylene	ug/L	1750 total	0.19 U	0.8 U	10 U	10 U	8 U	9.5 U	0.8 U	---
Tetrachloroethene	ug/L	5	0.2 U	0.9 J	10 U	10 U	8 U	10 U	0.8 U	---
Toluene	ug/L	150	0.17 U	0.7 U	10 U	10 U	7 U	8.5 U	0.7 U	---
trans-1,2-Dichloroethene	ug/L	10	8.9	28	21 J	20 J	19 J	14 J	2 J	---
Trichloroethene	ug/L	5	6.3	16000	12000	16000	16000	16000	5	---
Trichlorofluoromethane	ug/L	150	0.29 U	0.5 U	10 U	10 U	5 U	14 U	0.5 U	---
Vinyl chloride	ug/L	0.5	4.8	0.9 J	10 U	10 U	5 U	20 U	0.5 U	---

See Table III for notes and abbreviations.
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TABLE XIV
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Object Name:			**WS-09A**	**WS-09A**	**WS-09A**	**WS-09A**	**WS-09A**
Sample Type:			Primary	Primary	Duplicate	Primary	Duplicate
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:			Lancaster	Lancaster	Lancaster	TA-Denver	TA-Denver
Collection Date:			05/04/2009	07/22/2009	07/22/2009	10/14/2009	10/14/2009
Analyte	**Units**	**MCL**					
Naturally Occurring Constituents							
Ammonia-N	mg/L	NA	0.077 J	0.16	---	0.47 U	---
Fluoride	mg/L	2	0.27	0.24	0.08 U	0.24 U	---
Formaldehyde	ug/L	100 NL	47 J	10 U	---	36 U	---
Nitrate-NO3	mg/L	45	0.22 U	0.22 U	---	0.19 U	---
Semi-Volatile Organic Compounds							
1,3-Dinitrobenzene	ug/L	NA	2 U	2 U	---	1.9 U	1.9 U
Nitrobenzene	ug/L	NA	0.9 U	1 U	---	0.78 U	0.78 U
n-Nitrosodimethylamine	ug/L	0.01 NL	0.005 U	0.005 U	---	0.005 U	---
Volatile Organic Compounds							
1,1,1-Trichloroethane	ug/L	200	0.1 U	0.8 U	---	0.16 U	---
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	0.2 U	2 U	---	0.79 U	---
1,1,2-Trichloroethane	ug/L	5	0.1 U	0.8 U	---	0.32 U	---
1,1-Dichloroethane	ug/L	5	0.1 U	1 U	---	0.16 U	---
1,1-Dichloroethene	ug/L	6	0.1 U	0.8 U	---	1.3	---
1,2-Dichloroethane	ug/L	0.5	0.1 U	0.5 U	---	0.13 U	---
1,4-Dioxane	ug/L	3 NL	0.5 U	0.5 U	---	0.65 U	0.65 U
Acetone	ug/L	NA	3 U	6 U	---	1.9 U	---
Benzene	ug/L	1	0.1 U	0.5 U	---	0.16 U	---
Carbon Tetrachloride	ug/L	0.5	0.1 U	0.5 U	---	0.19 U	---
Chloroform	ug/L	80 TTHM	0.1 U	0.8 U	---	0.16 U	---
cis-1,2-Dichloroethene	ug/L	6	13	14	---	300	---
Ethylbenzene	ug/L	300	0.1 U	0.8 U	---	0.16 U	---
Methyl ethyl ketone	ug/L	NA	1 U	3 U	---	1.8 U	---
Methylene chloride	ug/L	5	0.2 U	2 U	---	0.32 U	---
m-Xylene & p-Xylene	ug/L	1750 total	0.1 U	0.8 U	---	0.34 U	---
o-Xylene	ug/L	1750 total	0.1 U	0.8 U	---	0.19 U	---
Tetrachloroethene	ug/L	5	0.1 U	0.8 U	---	0.2 U	---
Toluene	ug/L	150	0.1 U	0.7 U	---	0.17 U	---
trans-1,2-Dichloroethene	ug/L	10	0.9	1 J	---	12	---
Trichloroethene	ug/L	5	3.8	2	---	350	---
Trichlorofluoromethane	ug/L	150	0.1 U	0.5 U	---	0.29 U	---
Vinyl chloride	ug/L	0.5	0.1 U	0.5 U	---	1.8	---

See Table III for notes and abbreviations.

TABLE XV
SUMMARY OF ANALYSES FOR INORGANIC CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**PZ-103**	**PZ-103**	**PZ-103**	**PZ-103**	**PZ-103**	**PZ-103**	**PZ-108**
Geological Unit:			Primary	Duplicate	Split	Primary	Shallow	Primary	Primary
Sample Type:			Shallow	Shallow	Shallow	Shallow	Primary	Shallow	Shallow
Lab Name:			Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster	TA-Denver	Lancaster
Collection Date:			02/26/2009	02/26/2009	02/26/2009	04/27/2009	07/09/2009	10/07/2009	02/18/2009
Analyte	**Units**	**MCL**							
Alkalinity as CaCO3	mg/L	NA	---	---	---	---	---	---	---
Bromide	mg/L	NA	0.68	0.59	0.39	0.61	1	0.47 J	0.49 J
Calcium, Dissolved	mg/L	NA	---	---	---	---	---	---	---
Chloride	mg/L	250, 500, 600 SMCL	188	171	160	178	182	190	42.8
Fluoride	mg/L	2	0.79	0.82	0.52	0.7	0.59	0.57 U	0.59
Nitrate-NO3	mg/L	45	40	40	43	44	**55** J	**58**	12
pH	pH Units	6.5-8.5 SMCL	---	---	---	---	---	---	---
Potassium, Dissolved	mg/L	NA	---	---	---	---	---	---	---
Sodium, Dissolved	mg/L	NA	---	---	---	---	---	---	---
Specific conductivity	umhos/cm	900, 1600, 2200 SMCL	---	---	---	---	---	---	---
Sulfate	mg/L	250, 500, 600 SMCL	92.8	93.6	94	88.2	87	78	128
Total Dissolved Solids	mg/L	500, 1000, 1500 SMCL	---	---	---	---	---	---	---
Turbidity	NTU	5 SMCL	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
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TABLE XV
SUMMARY OF ANALYSES FOR INORGANIC CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**PZ-108**	**PZ-108**	**PZ-108**	**PZ-108**	**PZ-108**	**PZ-108**	**PZ-108**
Geological Unit:			Duplicate	Split	Primary	Shallow	Shallow	Primary	Duplicate
Sample Type:			Shallow	Shallow	Shallow	Primary	Split	Shallow	Shallow
Lab Name:			Lancaster	TA-Denver	Lancaster	Lancaster	TA-Denver	TA-Denver	TA-Denver
Collection Date:			02/18/2009	02/18/2009	05/05/2009	07/14/2009	07/14/2009	10/14/2009	10/14/2009
Analyte	**Units**	**MCL**							
Alkalinity as CaCO3	mg/L	NA	---	---	---	---	---	---	---
Bromide	mg/L	NA	0.43 J	0.21	0.4 U	0.46 J	0.19 J	0.41 J	0.42 J
Calcium, Dissolved	mg/L	NA	---	---	---	---	---	---	---
Chloride	mg/L	250, 500, 600 SMCL	46.4	49	50.6	43.5	49	48	48
Fluoride	mg/L	2	0.59	0.6	0.56	0.49	0.53	0.58 U	0.58 U
Nitrate-NO3	mg/L	45	11	12	6.1	6.7	---	7.5	7.6
pH	pH Units	6.5-8.5 SMCL	---	---	---	---	---	---	---
Potassium, Dissolved	mg/L	NA	---	---	---	---	---	---	---
Sodium, Dissolved	mg/L	NA	---	---	---	---	---	---	---
Specific conductivity	umhos/cm	900, 1600, 2200 SMCL	---	---	---	---	---	---	---
Sulfate	mg/L	250, 500, 600 SMCL	131	130	135	118	120	140	140
Total Dissolved Solids	mg/L	500, 1000, 1500 SMCL	---	---	---	---	---	---	---
Turbidity	NTU	5 SMCL	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
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TABLE XV
SUMMARY OF ANALYSES FOR INORGANIC CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			PZ-109	PZ-109	PZ-109	PZ-109	PZ-109	PZ-109	PZ-122
Geological Unit:			Primary	Primary	Split	Shallow	Shallow	Primary	Primary
Sample Type:			Shallow	Shallow	Shallow	Primary	Duplicate	Shallow	Shallow
Lab Name:			Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster	TA-Denver	Lancaster
Collection Date:			02/17/2009	04/30/2009	04/30/2009	07/17/2009	07/17/2009	10/07/2009	02/19/2009
Analyte	**Units**	**MCL**							
Alkalinity as CaCO3	mg/L	NA	---	---	---	---	---	---	---
Bromide	mg/L	NA	0.91	0.91	0.69	0.8	0.81	0.66	0.64
Calcium, Dissolved	mg/L	NA	---	---	---	---	---	---	---
Chloride	mg/L	250, 500, 600 SMCL	58	56.3	59	54.4	52.9	58	32.7
Fluoride	mg/L	2	0.99 J	1	1	0.82	0.87	1.1 U	0.41
Nitrate-NO3	mg/L	45	5.2	7	1.6 J	7.5	6.1	5.9	11
pH	pH Units	6.5-8.5 SMCL	---	---	---	---	---	---	7
Potassium, Dissolved	mg/L	NA	---	---	---	---	---	---	---
Sodium, Dissolved	mg/L	NA	---	---	---	---	---	---	---
Specific conductivity	umhos/cm	900, 1600, 2200 SMCL	---	---	---	---	---	---	---
Sulfate	mg/L	250, 500, 600 SMCL	138	129	130	108	115	130	106
Total Dissolved Solids	mg/L	500, 1000, 1500 SMCL	---	---	---	---	---	---	---
Turbidity	NTU	5 SMCL	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
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TABLE XV
SUMMARY OF ANALYSES FOR INORGANIC CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**PZ-122**	**PZ-122**	**PZ-122**	**PZ-122**	**PZ-122**	**PZ-122**	**PZ-122**
Geological Unit:			Duplicate	Split	Primary	Duplicate	Split	Shallow	Shallow
Sample Type:			Shallow	Shallow	Shallow	Shallow	Shallow	Primary	Duplicate
Lab Name:			Lancaster	TA-Denver	Lancaster	Lancaster	TA-Denver	Lancaster	Lancaster
Collection Date:			02/19/2009	02/19/2009	05/05/2009	05/05/2009	05/05/2009	07/14/2009	07/14/2009
Analyte	**Units**	**MCL**							
Alkalinity as CaCO3	mg/L	NA	---	---	---	---	---	---	---
Bromide	mg/L	NA	---	---	0.46 J	0.42 J	---	0.61	---
Calcium, Dissolved	mg/L	NA	---	---	---	---	---	---	---
Chloride	mg/L	250, 500, 600 SMCL	---	---	33.2	36.1	---	27.8	---
Fluoride	mg/L	2	---	---	0.47	0.45	---	0.38	---
Nitrate-NO3	mg/L	45	---	---	13	13	---	13	---
pH	pH Units	6.5-8.5 SMCL	7.4	7.1	7.1	7.2	7.1	7	7
Potassium, Dissolved	mg/L	NA	---	---	---	---	---	---	---
Sodium, Dissolved	mg/L	NA	---	---	---	---	---	---	---
Specific conductivity	umhos/cm	900, 1600, 2200 SMCL	---	---	---	---	---	---	---
Sulfate	mg/L	250, 500, 600 SMCL	---	---	102	105	---	92.6	---
Total Dissolved Solids	mg/L	500, 1000, 1500 SMCL	---	---	---	---	---	---	---
Turbidity	NTU	5 SMCL	---	---	---	---	---	---	---

See Table III for notes and abbreviations.
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TABLE XV
SUMMARY OF ANALYSES FOR INORGANIC CONSTITUENTS, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:			**PZ-122**	**PZ-122**	**PZ-122**	**PZ-122**	**RD-69**	**RD-69**	**RD-69**
Geological Unit:			Shallow	Primary	Duplicate	Split	Primary	Duplicate	Split
Sample Type:			Split	Shallow	Shallow	Shallow	Chatsworth	Chatsworth	Chatsworth
Lab Name:			TA-Denver	TA-Denver	TA-Denver	TA-Irvine	TA-Denver	TA-Denver	TA-Irvine
Collection Date:			07/14/2009	10/13/2009	10/13/2009	10/13/2009	11/04/2009	11/04/2009	11/04/2009
Analyte	**Units**	**MCL**							
Alkalinity as CaCO3	mg/L	NA	---	---	---	---	360	330	320
Bromide	mg/L	NA	---	0.33 J	---	0.45 J	---	---	---
Calcium, Dissolved	mg/L	NA	---	---	---	---	89	87	92 J
Chloride	mg/L	250, 500, 600 SMCL	---	33	---	37	43	43	47
Fluoride	mg/L	2	---	0.34 U	---	0.36 J	0.19 U	0.2 U	0.39 J
Nitrate-NO3	mg/L	45	---	13	---	14	0.19 U	---	---
pH	pH Units	6.5-8.5 SMCL	7.2	7.2	7.2	7.05 J	7.4	7.4	7.15
Potassium, Dissolved	mg/L	NA	---	---	---	---	3.6 J	3.5 J	3.3
Sodium, Dissolved	mg/L	NA	---	---	---	---	55	53	51
Specific conductivity	umhos/cm	900, 1600, 2200 SMCL	---	---	---	---	1000	1000	930
Sulfate	mg/L	250, 500, 600 SMCL	---	100	---	100	160	160	170
Total Dissolved Solids	mg/L	500, 1000, 1500 SMCL	---	---	---	---	610	600	630
Turbidity	NTU	5 SMCL	---	---	---	---	100	81	77

See Table III for notes and abbreviations.
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TABLE XVI
SUMMARY OF ANALYSES FOR DIOXINS AND FURANS,
CHLORINATED PESTICIDES, AND POLYCHLORINATED BIPHENYLS, 2009
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:				**HAR-07**	**HAR-07**	**HAR-14**	**HAR-15**
Sample Port:							
Sample Type:				Primary	Primary	Shallow	Shallow
Geological Unit:				Chatsworth	Chatsworth	Primary	Primary
Lab Name:				TA-Denver	TA-Knoxville	TA-Denver	TA-Denver
Collection Date:				05/11/2009	07/21/2009	04/23/2009	04/23/2009
Analyte	**Method**	**Units**	**MCL**				
1,2,3,4,6,7,8-Heptachlorodibenzofuran	8290	pg/L	NA	---	0.5 U	1.2 U	0.95 U
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	8290	pg/L	NA	---	1 U	1.4 U	1.6 U
1,2,3,4,7,8,9-Heptachlorodibenzofuran	8290	pg/L	NA	---	0.89 U	1.6 U	1.3 U
1,2,3,4,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	---	0.36 U	0.83 U	0.55 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	---	0.59 U	1.4 U	1.4 U
1,2,3,6,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	---	0.37 U	0.78 U	0.56 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	---	0.84 U	1.5 U	1.5 U
1,2,3,7,8,9-Hexachlorodibenzofuran	8290	pg/L	NA	---	0.52 U	1.1 U	0.69 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	---	0.64 U	1.3 U	1.3 U
1,2,3,7,8-Pentachlorodibenzofuran	8290	pg/L	NA	---	0.56 U	1.4 U	1.7 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	8290	pg/L	NA	---	0.7 U	1.5 U	2 U
2,3,4,6,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	---	0.41 U	0.81 U	0.57 U
2,3,4,7,8-Pentachlorodibenzofuran	8290	pg/L	NA	---	0.45 U	1.2 U	1.4 U
2,3,7,8-TCDD	8290	pg/L	30	---	1.6 U	3.4 U	4 U
2,3,7,8-TCDD TEQ	8290	pg/L	30	---	2.95 U	6.3 U	7.4 U
2,3,7,8-Tetrachlorodibenzofuran	8290	pg/L	NA	---	1 U	2.1 U	2.6 U
Octachlorodibenzofuran	8290	pg/L	NA	---	1.8 U	2.4 U	2.3 U
Octachlorodibenzo-p-dioxin	8290	pg/L	NA	---	4.2 U	4.4 U	2 U
Aroclor 1016	8082	ug/L	0.5 (total)	0.12 U	---	0.12 U	0.12 U
Aroclor 1221	8082	ug/L	0.5 (total)	0.2 U	---	0.21 U	0.21 U
Aroclor 1232	8082	ug/L	0.5 (total)	0.16 U	---	0.16 U	0.16 U
Aroclor 1242	8082	ug/L	0.5 (total)	0.099 U	---	0.1 U	0.1 U
Aroclor 1248	8082	ug/L	0.5 (total)	0.087 U	---	0.088 U	0.089 U
Aroclor 1254	8082	ug/L	0.5 (total)	0.11 U	---	0.11 U	0.11 U
Aroclor 1260	8082	ug/L	0.5 (total)	0.15 U	---	0.15 U	0.16 U
4,4'-DDD	8081A	ug/L	NA	0.0073 U	---	0.0074 U	0.0075 U
4,4'-DDE	8081A	ug/L	NA	0.0071 U	---	0.0072 U	0.0073 U
4,4'-DDT	8081A	ug/L	NA	0.014 U	---	0.014 U	0.014 U
Aldrin	8081A	ug/L	0.002 AAL	0.0056 U	---	0.0057 U	0.0057 U
alpha-BHC	8081A	ug/L	0.015 AAL	0.005 U	---	0.0051 U	0.0051 U
beta-BHC	8081A	ug/L	0.025 AAL	0.0083 U	---	0.0084 U	0.0084 U
Chlordane	8081A	ug/L	0.1	0.13 U	---	0.13 U	0.14 U
Chlorobenzilate	8081A	ug/L	NA	0.04 U	---	0.041 U	0.041 U
delta-BHC	8081A	ug/L	NA	0.0055 U	---	0.0056 U	0.0056 U
Diallate	8081A	ug/L	NA	0.18 U	---	0.19 U	0.19 U
Dieldrin	8081A	ug/L	0.002 AAL	0.006 U	---	0.006 U	0.0061 U
Endosulfan I	8081A	ug/L	NA	0.0055 U	---	0.0056 U	0.0056 U
Endosulfan II	8081A	ug/L	NA	0.0066 U	---	0.0067 U	0.0068 U
Endosulfan sulfate	8081A	ug/L	NA	0.0054 U	---	0.0055 U	0.0055 U
Endrin	8081A	ug/L	2	0.0075 U	---	0.0076 U	0.0077 U
Endrin aldehyde	8081A	ug/L	NA	0.0084 U	---	0.0084 U	0.0085 U
gamma-BHC	8081A	ug/L	0.2	0.0066 U	---	0.0066 U	0.0067 U
Heptachlor	8081A	ug/L	0.01	0.0073 U	---	0.0074 U	0.0075 U
Heptachlor epoxide	8081A	ug/L	0.01	0.0071 U	---	0.0072 U	0.0073 U
Kepone	8081A	ug/L	NA	0.33 U	---	0.33 U	0.34 U
p,p'-Methoxychlor	8081A	ug/L	30	0.012 U	---	0.012 U	0.013 U
Toxaphene	8081A	ug/L	3	0.35 U	---	0.35 U	0.36 U

TABLE XVI
SUMMARY OF ANALYSES FOR DIOXINS AND FURANS,
CHLORINATED PESTICIDES, AND POLYCHLORINATED BIPHENYLS, 2009
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:				**HAR-16**	**HAR-16**	**HAR-17**	**HAR-17**
Sample Port:							
Sample Type:				Chatsworth	Chatsworth	Chatsworth	Chatsworth
Geological Unit:				Primary	Split	Primary	Duplicate
Lab Name:				TA-Denver	Lancaster	TA-Denver	TA-Denver
Collection Date:				04/23/2009	04/23/2009	04/29/2009	04/29/2009
Analyte	**Method**	**Units**	**MCL**				
1,2,3,4,6,7,8-Heptachlorodibenzofuran	8290	pg/L	NA	0.84 U	6.23 U	1.2 U	2.9 J
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	8290	pg/L	NA	1.8 U	17.7 U	2.1 U	1.7 U
1,2,3,4,7,8,9-Heptachlorodibenzofuran	8290	pg/L	NA	1.1 U	7.99 U	1.7 U	1.5 U
1,2,3,4,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	0.7 U	4.85 U	0.78 U	0.98 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	1.4 U	11.7 U	1.3 U	1.5 U
1,2,3,6,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	0.64 U	4.85 U	0.75 U	0.9 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	1.6 U	11.2 U	1.5 U	1.6 U
1,2,3,7,8,9-Hexachlorodibenzofuran	8290	pg/L	NA	0.85 U	5.1 U	0.99 U	1.2 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	1.4 U	11.5 U	1.3 U	1.4 U
1,2,3,7,8-Pentachlorodibenzofuran	8290	pg/L	NA	1.5 U	4.85 U	1.5 U	1.7 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	8290	pg/L	NA	1.8 U	6.41 U	1.9 U	1.8 U
2,3,4,6,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	0.71 U	4.85 U	0.77 U	0.97 U
2,3,4,7,8-Pentachlorodibenzofuran	8290	pg/L	NA	1.3 U	4.85 U	1.2 U	1.5 U
2,3,7,8-TCDD	8290	pg/L	30	3.4 U	4.68 U	4.8 U	4.2 U
2,3,7,8-TCDD TEQ	8290	pg/L	30	6.6 U	18.9 U	8.2 U	0.029 J
2,3,7,8-Tetrachlorodibenzofuran	8290	pg/L	NA	2.3 U	4.74 U	2.5 U	3 U
Octachlorodibenzofuran	8290	pg/L	NA	2 U	18.1 U	2.2 U	2.4 U
Octachlorodibenzo-p-dioxin	8290	pg/L	NA	2.2 U	21.8 U	2.2 U	8.3 U
Aroclor 1016	8082	ug/L	0.5 (total)	0.12 U	0.095 U	0.12 U	0.12 U
Aroclor 1221	8082	ug/L	0.5 (total)	0.21 U	0.15 U	0.2 U	0.2 U
Aroclor 1232	8082	ug/L	0.5 (total)	0.16 U	0.095 U	0.16 U	0.16 U
Aroclor 1242	8082	ug/L	0.5 (total)	0.1 U	0.095 U	0.099 U	0.099 U
Aroclor 1248	8082	ug/L	0.5 (total)	0.089 U	0.095 U	0.087 U	0.087 U
Aroclor 1254	8082	ug/L	0.5 (total)	0.11 U	0.095 U	0.11 U	0.11 U
Aroclor 1260	8082	ug/L	0.5 (total)	0.16 U	0.095 U	0.15 U	0.15 U
4,4'-DDD	8081A	ug/L	NA	0.0074 U	0.0038 U	0.0073 U	0.0073 U
4,4'-DDE	8081A	ug/L	NA	0.0072 U	0.0038 U	0.0071 U	0.0071 U
4,4'-DDT	8081A	ug/L	NA	0.014 U	0.0057 U	0.014 U	0.014 U
Aldrin	8081A	ug/L	0.002 AAL	0.0057 U	0.0028 U	0.0056 U	0.0056 U
alpha-BHC	8081A	ug/L	0.015 AAL	0.0051 U	0.0026 U	0.005 U	0.005 U
beta-BHC	8081A	ug/L	0.025 AAL	0.0084 U	0.0036 U	0.0083 U	0.0083 U
Chlordane	8081A	ug/L	0.1	0.13 U	0.066 U	0.13 U	0.13 U
Chlorobenzilate	8081A	ug/L	NA	0.041 U	---	0.04 U	0.04 U
delta-BHC	8081A	ug/L	NA	0.0056 U	0.0028 U	0.0055 U	0.0055 U
Diallate	8081A	ug/L	NA	0.19 U	---	0.18 U	0.18 U
Dieldrin	8081A	ug/L	0.002 AAL	0.006 U	0.0038 U	0.006 U	0.006 U
Endosulfan I	8081A	ug/L	NA	0.0056 U	0.0028 U	0.0055 U	0.0055 U
Endosulfan II	8081A	ug/L	NA	0.0067 U	0.0038 U	0.0066 U	0.0066 U
Endosulfan sulfate	8081A	ug/L	NA	0.0055 U	0.0038 U	0.0054 U	0.0054 U
Endrin	8081A	ug/L	2	0.0076 U	0.0038 U	0.0075 U	0.0075 U
Endrin aldehyde	8081A	ug/L	NA	0.0084 U	0.019 U	0.0084 U	0.0084 U
gamma-BHC	8081A	ug/L	0.2	0.0066 U	0.0044 U	0.0066 U	0.0066 U
Heptachlor	8081A	ug/L	0.01	0.0074 U	0.0038 U	0.0073 U	0.0073 U
Heptachlor epoxide	8081A	ug/L	0.01	0.0072 U	0.0035 U	0.0071 U	0.0071 U
Kepone	8081A	ug/L	NA	0.33 U	---	0.33 U	0.33 U
p,p'-Methoxychlor	8081A	ug/L	30	0.012 U	0.028 U	0.012 U	0.012 U
Toxaphene	8081A	ug/L	3	0.35 U	0.95 U	0.35 U	0.35 U

TABLE XVI
SUMMARY OF ANALYSES FOR DIOXINS AND FURANS,
CHLORINATED PESTICIDES, AND POLYCHLORINATED BIPHENYLS, 2009
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:				**HAR-17**	**HAR-17**	**HAR-17**	**PZ-058**
Sample Port:							
Sample Type:				Primary	Duplicate	Split	Shallow
Geological Unit:				Chatsworth	Chatsworth	Chatsworth	Primary
Lab Name:				TA-Knoxville	TA-Knoxville	GEL	TA-Denver
Collection Date:				07/16/2009	07/16/2009	07/16/2009	05/04/2009
Analyte	**Method**	**Units**	**MCL**				
1,2,3,4,6,7,8-Heptachlorodibenzofuran	8290	pg/L	NA	14 U	67 U	4.86 U	2.1 U
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	8290	pg/L	NA	2.6 U	56 U	4.86 U	2.2 U
1,2,3,4,7,8,9-Heptachlorodibenzofuran	8290	pg/L	NA	2.1 U	3.8 U	4.86 U	3.1 U
1,2,3,4,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	1.6 U	16 U	4.86 U	1.3 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	1.6 U	1.2 U	4.86 U	1.5 U
1,2,3,6,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	1.1 U	17 U	4.86 U	1.2 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	1.9 U	1.4 U	4.86 U	1.7 U
1,2,3,7,8,9-Hexachlorodibenzofuran	8290	pg/L	NA	1.3 U	1.2 U	4.86 U	1.5 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	1.6 U	1.2 U	4.86 U	1.5 U
1,2,3,7,8-Pentachlorodibenzofuran	8290	pg/L	NA	2.4 U	2.3 U	4.86 U	1.8 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	8290	pg/L	NA	2.3 U	2 U	4.86 U	2 U
2,3,4,6,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	1 U	1 U	4.86 U	1.3 U
2,3,4,7,8-Pentachlorodibenzofuran	8290	pg/L	NA	2.1 U	1.9 U	4.86 U	1.6 U
2,3,7,8-TCDD	8290	pg/L	30	3.6 U	2.8 U	3.19 U	4.1 U
2,3,7,8-TCDD TEQ	8290	pg/L	30	8.02 U	11.18 U	13.39 U	8.0 U
2,3,7,8-Tetrachlorodibenzofuran	8290	pg/L	NA	2.1 U	1.9 U	1.85 U	2.7 U
Octachlorodibenzofuran	8290	pg/L	NA	21 U	170 U	9.72 U	3.2 U
Octachlorodibenzo-p-dioxin	8290	pg/L	NA	28 U	1100 U	9.72 U	2.3 U
Aroclor 1016	8082	ug/L	0.5 (total)	---	---	---	0.12 U
Aroclor 1221	8082	ug/L	0.5 (total)	---	---	---	0.21 U
Aroclor 1232	8082	ug/L	0.5 (total)	---	---	---	0.16 U
Aroclor 1242	8082	ug/L	0.5 (total)	---	---	---	0.1 U
Aroclor 1248	8082	ug/L	0.5 (total)	---	---	---	0.088 U
Aroclor 1254	8082	ug/L	0.5 (total)	---	---	---	0.11 U
Aroclor 1260	8082	ug/L	0.5 (total)	---	---	---	0.15 U
4,4'-DDD	8081A	ug/L	NA	---	---	---	---
4,4'-DDE	8081A	ug/L	NA	---	---	---	---
4,4'-DDT	8081A	ug/L	NA	---	---	---	---
Aldrin	8081A	ug/L	0.002 AAL	---	---	---	---
alpha-BHC	8081A	ug/L	0.015 AAL	---	---	---	---
beta-BHC	8081A	ug/L	0.025 AAL	---	---	---	---
Chlordane	8081A	ug/L	0.1	---	---	---	---
Chlorobenzilate	8081A	ug/L	NA	---	---	---	---
delta-BHC	8081A	ug/L	NA	---	---	---	---
Diallate	8081A	ug/L	NA	---	---	---	---
Dieldrin	8081A	ug/L	0.002 AAL	---	---	---	---
Endosulfan I	8081A	ug/L	NA	---	---	---	---
Endosulfan II	8081A	ug/L	NA	---	---	---	---
Endosulfan sulfate	8081A	ug/L	NA	---	---	---	---
Endrin	8081A	ug/L	2	---	---	---	---
Endrin aldehyde	8081A	ug/L	NA	---	---	---	---
gamma-BHC	8081A	ug/L	0.2	---	---	---	---
Heptachlor	8081A	ug/L	0.01	---	---	---	---
Heptachlor epoxide	8081A	ug/L	0.01	---	---	---	---
Kepone	8081A	ug/L	NA	---	---	---	---
p,p'-Methoxychlor	8081A	ug/L	30	---	---	---	---
Toxaphene	8081A	ug/L	3	---	---	---	---

See Table III for notes and abbreviations.
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TABLE XVI
SUMMARY OF ANALYSES FOR DIOXINS AND FURANS,
CHLORINATED PESTICIDES, AND POLYCHLORINATED BIPHENYLS, 2009
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:				**PZ-071**	**PZ-071**	**PZ-071**	**PZ-071**
Sample Port:							
Sample Type:				Shallow	Shallow	Shallow	Primary
Geological Unit:				Primary	Duplicate	Split	Shallow
Lab Name:				TA-Denver	TA-Denver	GEL	TA-Denver
Collection Date:				05/07/2009	05/07/2009	05/07/2009	07/16/2009
Analyte	**Method**	**Units**	**MCL**				
1,2,3,4,6,7,8-Heptachlorodibenzofuran	8290	pg/L	NA	2.3 U	1.8 U	4.92 U	72 U
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	8290	pg/L	NA	2.6 U	1.7 U	7.41 U	280
1,2,3,4,7,8,9-Heptachlorodibenzofuran	8290	pg/L	NA	3.4 U	2.9 U	5.04 U	7.2 U
1,2,3,4,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	1.3 U	1.2 U	4.92 U	11 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	2 U	1.5 U	5.53 U	2.7 J
1,2,3,6,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	1.2 U	1 U	4.92 U	45 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	2.2 U	1.7 U	5.29 U	4.6 U
1,2,3,7,8,9-Hexachlorodibenzofuran	8290	pg/L	NA	1.8 U	1.5 U	4.92 U	1.7 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	1.9 U	1.5 U	5.43 U	4.6 U
1,2,3,7,8-Pentachlorodibenzofuran	8290	pg/L	NA	2 U	1.5 U	4.92 U	3.6 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	8290	pg/L	NA	2.6 U	1.7 U	4.92 U	2.9 U
2,3,4,6,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	1.3 U	1 U	4.92 U	3.7 U
2,3,4,7,8-Pentachlorodibenzofuran	8290	pg/L	NA	1.9 U	1.3 U	4.92 U	3 U
2,3,7,8-TCDD	8290	pg/L	30	4.2 U	3.3 U	5.14 U	4.2 U
2,3,7,8-TCDD TEQ	8290	pg/L	30	8.9 U	6.7 U	15.9 U	1.23 J
2,3,7,8-Tetrachlorodibenzofuran	8290	pg/L	NA	2.6 U	2.2 U	4.18 U	3.6 J
Octachlorodibenzofuran	8290	pg/L	NA	3.9 U	3.3 U	9.84 U	320 U
Octachlorodibenzo-p-dioxin	8290	pg/L	NA	3.3 U	1.9 U	14.2 U	4100 J
Aroclor 1016	8082	ug/L	0.5 (total)	0.12 U	0.12 U	---	0.12 UJ
Aroclor 1221	8082	ug/L	0.5 (total)	0.2 U	0.21 U	---	0.21 UJ
Aroclor 1232	8082	ug/L	0.5 (total)	0.16 U	0.16 U	---	0.16 UJ
Aroclor 1242	8082	ug/L	0.5 (total)	0.099 U	0.1 U	---	0.1 UJ
Aroclor 1248	8082	ug/L	0.5 (total)	0.087 U	0.091 U	---	0.089 UJ
Aroclor 1254	8082	ug/L	0.5 (total)	0.11 U	0.11 U	---	0.11 UJ
Aroclor 1260	8082	ug/L	0.5 (total)	0.15 U	0.16 U	---	0.16 UJ
4,4'-DDD	8081A	ug/L	NA	---	---	---	---
4,4'-DDE	8081A	ug/L	NA	---	---	---	---
4,4'-DDT	8081A	ug/L	NA	---	---	---	---
Aldrin	8081A	ug/L	0.002 AAL	---	---	---	---
alpha-BHC	8081A	ug/L	0.015 AAL	---	---	---	---
beta-BHC	8081A	ug/L	0.025 AAL	---	---	---	---
Chlordane	8081A	ug/L	0.1	---	---	---	---
Chlorobenzilate	8081A	ug/L	NA	---	---	---	---
delta-BHC	8081A	ug/L	NA	---	---	---	---
Diallate	8081A	ug/L	NA	---	---	---	---
Dieldrin	8081A	ug/L	0.002 AAL	---	---	---	---
Endosulfan I	8081A	ug/L	NA	---	---	---	---
Endosulfan II	8081A	ug/L	NA	---	---	---	---
Endosulfan sulfate	8081A	ug/L	NA	---	---	---	---
Endrin	8081A	ug/L	2	---	---	---	---
Endrin aldehyde	8081A	ug/L	NA	---	---	---	---
gamma-BHC	8081A	ug/L	0.2	---	---	---	---
Heptachlor	8081A	ug/L	0.01	---	---	---	---
Heptachlor epoxide	8081A	ug/L	0.01	---	---	---	---
Kepone	8081A	ug/L	NA	---	---	---	---
p,p'-Methoxychlor	8081A	ug/L	30	---	---	---	---
Toxaphene	8081A	ug/L	3	---	---	---	---

See Table III for notes and abbreviations.
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TABLE XVI
SUMMARY OF ANALYSES FOR DIOXINS AND FURANS,
CHLORINATED PESTICIDES, AND POLYCHLORINATED BIPHENYLS, 2009
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:				**PZ-071**	**PZ-076**	**PZ-139**	**PZ-140**
Sample Port:							
Sample Type:				Split	Primary	Primary	Primary
Geological Unit:				Shallow	Shallow	Shallow	Shallow
Lab Name:				GEL	TA-Denver	TA-Denver	TA-Denver
Collection Date:				07/16/2009	11/02/2009	10/15/2009	10/20/2009
Analyte	**Method**	**Units**	**MCL**				
1,2,3,4,6,7,8-Heptachlorodibenzofuran	8290	pg/L	NA	4.76 U	0.69 U	1.7 U	1.3 U
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	8290	pg/L	NA	4.76 U	1.1 U	2.6 U	3.1 U
1,2,3,4,7,8,9-Heptachlorodibenzofuran	8290	pg/L	NA	4.76 U	1 U	2.3 U	2.5 U
1,2,3,4,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	4.76 U	0.43 U	1.2 U	0.65 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	4.76 U	0.91 U	2 U	1.1 U
1,2,3,6,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	4.76 U	0.41 U	1.1 U	0.6 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	4.76 U	0.99 U	2.2 U	1.2 U
1,2,3,7,8,9-Hexachlorodibenzofuran	8290	pg/L	NA	4.76 U	0.51 U	1.4 U	0.84 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	4.76 U	0.88 U	1.9 U	1.1 U
1,2,3,7,8-Pentachlorodibenzofuran	8290	pg/L	NA	4.76 U	0.94 U	2.1 U	1.1 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	8290	pg/L	NA	4.76 U	1.1 U	2.6 U	1.1 U
2,3,4,6,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	4.76 U	0.43 U	1.2 U	0.68 U
2,3,4,7,8-Pentachlorodibenzofuran	8290	pg/L	NA	4.76 U	0.8 U	1.9 U	1 U
2,3,7,8-TCDD	8290	pg/L	30	4.65 U	2.4 U	5.1 U	2.6 U
2,3,7,8-TCDD TEQ	8290	pg/L	30	14.72 U	4.39 U	0.0013 J,L	4.89 U
2,3,7,8-Tetrachlorodibenzofuran	8290	pg/L	NA	2.56 U	1.4 U	3.6 U	1.7 U
Octachlorodibenzofuran	8290	pg/L	NA	9.51 U	1.5 U	3.2 U	2.3 U
Octachlorodibenzo-p-dioxin	8290	pg/L	NA	9.51 U	1.5 U	4.2 J,L	3.6 U
Aroclor 1016	8082	ug/L	0.5 (total)	---	---	0.12 U	0.13 U
Aroclor 1221	8082	ug/L	0.5 (total)	---	---	0.2 U	0.22 U
Aroclor 1232	8082	ug/L	0.5 (total)	---	---	0.16 U	0.17 U
Aroclor 1242	8082	ug/L	0.5 (total)	---	---	0.099 U	0.11 U
Aroclor 1248	8082	ug/L	0.5 (total)	---	---	0.087 U	0.092 U
Aroclor 1254	8082	ug/L	0.5 (total)	---	---	0.11 U	0.12 U
Aroclor 1260	8082	ug/L	0.5 (total)	---	---	0.15 U	0.16 U
4,4'-DDD	8081A	ug/L	NA	---	---	---	---
4,4'-DDE	8081A	ug/L	NA	---	---	---	---
4,4'-DDT	8081A	ug/L	NA	---	---	---	---
Aldrin	8081A	ug/L	0.002 AAL	---	---	---	---
alpha-BHC	8081A	ug/L	0.015 AAL	---	---	---	---
beta-BHC	8081A	ug/L	0.025 AAL	---	---	---	---
Chlordane	8081A	ug/L	0.1	---	---	---	---
Chlorobenzilate	8081A	ug/L	NA	---	---	---	---
delta-BHC	8081A	ug/L	NA	---	---	---	---
Diallate	8081A	ug/L	NA	---	---	---	---
Dieldrin	8081A	ug/L	0.002 AAL	---	---	---	---
Endosulfan I	8081A	ug/L	NA	---	---	---	---
Endosulfan II	8081A	ug/L	NA	---	---	---	---
Endosulfan sulfate	8081A	ug/L	NA	---	---	---	---
Endrin	8081A	ug/L	2	---	---	---	---
Endrin aldehyde	8081A	ug/L	NA	---	---	---	---
gamma-BHC	8081A	ug/L	0.2	---	---	---	---
Heptachlor	8081A	ug/L	0.01	---	---	---	---
Heptachlor epoxide	8081A	ug/L	0.01	---	---	---	---
Kepone	8081A	ug/L	NA	---	---	---	---
p,p'-Methoxychlor	8081A	ug/L	30	---	---	---	---
Toxaphene	8081A	ug/L	3	---	---	---	---

TABLE XVI
SUMMARY OF ANALYSES FOR DIOXINS AND FURANS,
CHLORINATED PESTICIDES, AND POLYCHLORINATED BIPHENYLS, 2009
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:				**PZ-141**	**RD-03**	**RD-03**	**RD-03**
Sample Port:							
Sample Type:				Primary	Primary	Duplicate	Split
Geological Unit:				Shallow	Chatsworth	Chatsworth	Chatsworth
Lab Name:				TA-Denver	TA-Denver	TA-Denver	TA-Irvine
Collection Date:				11/03/2009	10/27/2009	10/27/2009	10/27/2009
Analyte	**Method**	**Units**	**MCL**				
1,2,3,4,6,7,8-Heptachlorodibenzofuran	8290	pg/L	NA	0.87 U	2.3 U	---	0.85 J
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	8290	pg/L	NA	1.5 U	4.4 U	---	1.4 U
1,2,3,4,7,8,9-Heptachlorodibenzofuran	8290	pg/L	NA	1.3 U	4.7 U	---	1 J
1,2,3,4,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	0.6 U	1.3 U	---	0.75 J
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	1 U	2.1 U	---	1.1 J
1,2,3,6,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	0.56 U	1.2 U	---	0.86 J
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	1.2 U	2.1 U	---	0.38 J
1,2,3,7,8,9-Hexachlorodibenzofuran	8290	pg/L	NA	0.72 U	1.7 U	---	0.8 J
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	1 U	2 U	---	1 J
1,2,3,7,8-Pentachlorodibenzofuran	8290	pg/L	NA	1.1 U	1.9 U	---	0.57 J
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	8290	pg/L	NA	1.5 U	2.2 U	---	0.59 U
2,3,4,6,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	0.56 U	1.3 U	---	0.73 J
2,3,4,7,8-Pentachlorodibenzofuran	8290	pg/L	NA	0.88 U	1.6 U	---	0.53 J
2,3,7,8-TCDD	8290	pg/L	30	2.8 U	4.6 U	---	0.04 U
2,3,7,8-TCDD TEQ	8290	pg/L	30	5.37 U	8.92 UJ	---	0.76 J
2,3,7,8-Tetrachlorodibenzofuran	8290	pg/L	NA	1.7 U	3 U	---	0.51 U
Octachlorodibenzofuran	8290	pg/L	NA	1.9 U	4.4 UJ	---	1.3 J
Octachlorodibenzo-p-dioxin	8290	pg/L	NA	2.2 U	6 U	---	2.5 U
Aroclor 1016	8082	ug/L	0.5 (total)	0.12 U	0.12 U	0.13 U	0.26 U
Aroclor 1221	8082	ug/L	0.5 (total)	0.21 U	0.21 U	0.22 U	0.26 U
Aroclor 1232	8082	ug/L	0.5 (total)	0.17 U	0.16 U	0.17 U	0.26 U
Aroclor 1242	8082	ug/L	0.5 (total)	0.1 U	0.1 U	0.11 U	0.26 U
Aroclor 1248	8082	ug/L	0.5 (total)	0.092 U	0.09 U	0.095 U	0.26 U
Aroclor 1254	8082	ug/L	0.5 (total)	0.11 U	0.11 U	0.12 U	0.26 U
Aroclor 1260	8082	ug/L	0.5 (total)	0.16 U	0.16 U	0.17 U	0.26 U
4,4'-DDD	8081A	ug/L	NA	---	---	---	---
4,4'-DDE	8081A	ug/L	NA	---	---	---	---
4,4'-DDT	8081A	ug/L	NA	---	---	---	---
Aldrin	8081A	ug/L	0.002 AAL	---	---	---	---
alpha-BHC	8081A	ug/L	0.015 AAL	---	---	---	---
beta-BHC	8081A	ug/L	0.025 AAL	---	---	---	---
Chlordane	8081A	ug/L	0.1	---	---	---	---
Chlorobenzilate	8081A	ug/L	NA	---	---	---	---
delta-BHC	8081A	ug/L	NA	---	---	---	---
Diallate	8081A	ug/L	NA	---	---	---	---
Dieldrin	8081A	ug/L	0.002 AAL	---	---	---	---
Endosulfan I	8081A	ug/L	NA	---	---	---	---
Endosulfan II	8081A	ug/L	NA	---	---	---	---
Endosulfan sulfate	8081A	ug/L	NA	---	---	---	---
Endrin	8081A	ug/L	2	---	---	---	---
Endrin aldehyde	8081A	ug/L	NA	---	---	---	---
gamma-BHC	8081A	ug/L	0.2	---	---	---	---
Heptachlor	8081A	ug/L	0.01	---	---	---	---
Heptachlor epoxide	8081A	ug/L	0.01	---	---	---	---
Kepone	8081A	ug/L	NA	---	---	---	---
p,p'-Methoxychlor	8081A	ug/L	30	---	---	---	---
Toxaphene	8081A	ug/L	3	---	---	---	---

See Table III for notes and abbreviations.
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TABLE XVI
SUMMARY OF ANALYSES FOR DIOXINS AND FURANS,
CHLORINATED PESTICIDES, AND POLYCHLORINATED BIPHENYLS, 2009
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:				**RD-06**	**RD-06**	**RD-07**	**RD-07**
Sample Port:						Z3	Z3
Sample Type:				Primary	Duplicate	Primary	Split
Geological Unit:				Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:				TA-Denver	TA-Denver	TA-Knoxville	GEL
Collection Date:				07/13/2009	07/13/2009	02/20/2009	02/20/2009
Analyte	**Method**	**Units**	**MCL**				
1,2,3,4,6,7,8-Heptachlorodibenzofuran	8290	pg/L	NA	1.2 U	1.9 U	1.2 U	4.86 U
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	8290	pg/L	NA	2.2 U	2.2 U	1.9 U	9 U
1,2,3,4,7,8,9-Heptachlorodibenzofuran	8290	pg/L	NA	1.7 U	2.2 U	1.8 U	6.22 U
1,2,3,4,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	0.98 U	1.3 U	0.77 U	4.76 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	1.3 U	1.4 U	1.2 U	4.76 U
1,2,3,6,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	0.89 U	1.3 U	0.66 U	4.76 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	1.4 U	1.6 U	1.4 U	4.76 U
1,2,3,7,8,9-Hexachlorodibenzofuran	8290	pg/L	NA	1 U	1.5 U	0.96 U	4.76 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	1.3 U	1.4 U	1.2 U	4.76 U
1,2,3,7,8-Pentachlorodibenzofuran	8290	pg/L	NA	2.2 U	2.3 U	1.4 U	4.76 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	8290	pg/L	NA	2.2 U	2.3 U	1.7 U	4.76 U
2,3,4,6,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	0.87 U	1.2 U	0.76 U	4.76 U
2,3,4,7,8-Pentachlorodibenzofuran	8290	pg/L	NA	1.8 U	1.8 U	1.2 U	4.76 U
2,3,7,8-TCDD	8290	pg/L	30	3.3 U	3.5 U	4 U	2.36 U
2,3,7,8-TCDD TEQ	8290	pg/L	30	7.16 U	7.68 U	0.00063 J	12.52 U
2,3,7,8-Tetrachlorodibenzofuran	8290	pg/L	NA	2.2 U	2.2 U	2.6 U	2.91 U
Octachlorodibenzofuran	8290	pg/L	NA	3.7 U	6.1 U	1.7 U	16 U
Octachlorodibenzo-p-dioxin	8290	pg/L	NA	13 U	64 U	2.1 J	17.2 U
Aroclor 1016	8082	ug/L	0.5 (total)	0.12 U	0.12 U	---	---
Aroclor 1221	8082	ug/L	0.5 (total)	0.2 U	0.21 U	---	---
Aroclor 1232	8082	ug/L	0.5 (total)	0.16 U	0.16 U	---	---
Aroclor 1242	8082	ug/L	0.5 (total)	0.099 U	0.1 U	---	---
Aroclor 1248	8082	ug/L	0.5 (total)	0.087 U	0.09 U	---	---
Aroclor 1254	8082	ug/L	0.5 (total)	0.11 U	0.11 U	---	---
Aroclor 1260	8082	ug/L	0.5 (total)	0.15 U	0.16 U	---	---
4,4'-DDD	8081A	ug/L	NA	0.0073 U	0.0073 U	---	---
4,4'-DDE	8081A	ug/L	NA	0.0071 U	0.0071 U	---	---
4,4'-DDT	8081A	ug/L	NA	0.014 U	0.014 U	---	---
Aldrin	8081A	ug/L	0.002 AAL	0.0056 U	0.0056 U	---	---
alpha-BHC	8081A	ug/L	0.015 AAL	0.005 U	0.005 U	---	---
beta-BHC	8081A	ug/L	0.025 AAL	0.0083 U	0.0083 U	---	---
Chlordane	8081A	ug/L	0.1	0.13 U	0.13 U	---	---
Chlorobenzilate	8081A	ug/L	NA	0.04 U	0.04 U	---	---
delta-BHC	8081A	ug/L	NA	0.0055 U	0.0055 U	---	---
Diallate	8081A	ug/L	NA	0.18 U	0.18 U	---	---
Dieldrin	8081A	ug/L	0.002 AAL	0.006 U	0.006 U	---	---
Endosulfan I	8081A	ug/L	NA	0.0055 U	0.0055 U	---	---
Endosulfan II	8081A	ug/L	NA	0.0066 U	0.0066 U	---	---
Endosulfan sulfate	8081A	ug/L	NA	0.0054 U	0.0054 U	---	---
Endrin	8081A	ug/L	2	0.0075 U	0.0075 U	---	---
Endrin aldehyde	8081A	ug/L	NA	0.0084 U	0.0084 U	---	---
gamma-BHC	8081A	ug/L	0.2	0.0066 U	0.021 J	---	---
Heptachlor	8081A	ug/L	0.01	0.0073 U	0.0073 U	---	---
Heptachlor epoxide	8081A	ug/L	0.01	0.0071 U	0.0071 U	---	---
Kepone	8081A	ug/L	NA	0.33 U	0.33 U	---	---
p,p'-Methoxychlor	8081A	ug/L	30	0.012 U	0.012 U	---	---
Toxaphene	8081A	ug/L	3	0.35 U	0.35 U	---	---

TABLE XVI
SUMMARY OF ANALYSES FOR DIOXINS AND FURANS,
CHLORINATED PESTICIDES, AND POLYCHLORINATED BIPHENYLS, 2009
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:				**RD-07**	**RD-07**	**RD-20**	**RD-20**
Sample Port:				Z3	Z3		
Sample Type:				Chatsworth	Chatsworth	Primary	Duplicate
Geological Unit:				Primary	Duplicate	Chatsworth	Chatsworth
Lab Name:				TA-Knoxville	TA-Knoxville	TA-Knoxville	TA-Knoxville
Collection Date:				04/29/2009	04/29/2009	02/18/2009	02/18/2009
Analyte	**Method**	**Units**	**MCL**				
1,2,3,4,6,7,8-Heptachlorodibenzofuran	8290	pg/L	NA	1.1 U	1.2 U	1 U	0.95 U
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	8290	pg/L	NA	2 U	1.6 U	2.4 U	1.6 U
1,2,3,4,7,8,9-Heptachlorodibenzofuran	8290	pg/L	NA	1.6 U	1.4 U	1.4 U	1.3 U
1,2,3,4,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	0.86 U	0.87 U	0.69 U	0.67 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	1.4 U	1.4 U	1.5 U	1.3 U
1,2,3,6,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	0.78 U	0.9 U	0.72 U	0.66 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	1.7 U	1.6 U	1.6 U	1.5 U
1,2,3,7,8,9-Hexachlorodibenzofuran	8290	pg/L	NA	1 U	1.1 U	1 U	0.88 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	1.5 U	1.4 U	1.5 U	1.3 U
1,2,3,7,8-Pentachlorodibenzofuran	8290	pg/L	NA	1.8 U	1.7 U	1.6 U	1.1 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	8290	pg/L	NA	1.7 U	2 U	2.3 U	1.6 U
2,3,4,6,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	0.89 U	0.9 U	0.9 U	0.69 U
2,3,4,7,8-Pentachlorodibenzofuran	8290	pg/L	NA	1.5 U	1.4 U	1.4 U	1 U
2,3,7,8-TCDD	8290	pg/L	30	4.5 U	3.5 U	5 U	3.8 U
2,3,7,8-TCDD TEQ	8290	pg/L	30	7.9 U	7.1 U	0.0015 J	0.003 J
2,3,7,8-Tetrachlorodibenzofuran	8290	pg/L	NA	3.1 U	2.6 U	3.4 U	2.4 U
Octachlorodibenzofuran	8290	pg/L	NA	2.4 U	2.3 U	1.8 U	5.7 J
Octachlorodibenzo-p-dioxin	8290	pg/L	NA	2 U	1.7 U	4.9 J	3.2 J
Aroclor 1016	8082	ug/L	0.5 (total)	---	---	---	---
Aroclor 1221	8082	ug/L	0.5 (total)	---	---	---	---
Aroclor 1232	8082	ug/L	0.5 (total)	---	---	---	---
Aroclor 1242	8082	ug/L	0.5 (total)	---	---	---	---
Aroclor 1248	8082	ug/L	0.5 (total)	---	---	---	---
Aroclor 1254	8082	ug/L	0.5 (total)	---	---	---	---
Aroclor 1260	8082	ug/L	0.5 (total)	---	---	---	---
4,4'-DDD	8081A	ug/L	NA	---	---	---	---
4,4'-DDE	8081A	ug/L	NA	---	---	---	---
4,4'-DDT	8081A	ug/L	NA	---	---	---	---
Aldrin	8081A	ug/L	0.002 AAL	---	---	---	---
alpha-BHC	8081A	ug/L	0.015 AAL	---	---	---	---
beta-BHC	8081A	ug/L	0.025 AAL	---	---	---	---
Chlordane	8081A	ug/L	0.1	---	---	---	---
Chlorobenzilate	8081A	ug/L	NA	---	---	---	---
delta-BHC	8081A	ug/L	NA	---	---	---	---
Diallate	8081A	ug/L	NA	---	---	---	---
Dieldrin	8081A	ug/L	0.002 AAL	---	---	---	---
Endosulfan I	8081A	ug/L	NA	---	---	---	---
Endosulfan II	8081A	ug/L	NA	---	---	---	---
Endosulfan sulfate	8081A	ug/L	NA	---	---	---	---
Endrin	8081A	ug/L	2	---	---	---	---
Endrin aldehyde	8081A	ug/L	NA	---	---	---	---
gamma-BHC	8081A	ug/L	0.2	---	---	---	---
Heptachlor	8081A	ug/L	0.01	---	---	---	---
Heptachlor epoxide	8081A	ug/L	0.01	---	---	---	---
Kepone	8081A	ug/L	NA	---	---	---	---
p,p'-Methoxychlor	8081A	ug/L	30	---	---	---	---
Toxaphene	8081A	ug/L	3	---	---	---	---

TABLE XVI
SUMMARY OF ANALYSES FOR DIOXINS AND FURANS,
CHLORINATED PESTICIDES, AND POLYCHLORINATED BIPHENYLS, 2009
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:				**RD-20**	**RD-20**	**RD-20**	**RD-20**
Sample Port:							
Sample Type:				Chatsworth	Chatsworth	Primary	Duplicate
Geological Unit:				Primary	Split	Chatsworth	Chatsworth
Lab Name:				TA-Knoxville	GEL	TA-Knoxville	TA-Knoxville
Collection Date:				05/06/2009	05/06/2009	07/22/2009	07/22/2009
Analyte	**Method**	**Units**	**MCL**				
1,2,3,4,6,7,8-Heptachlorodibenzofuran	8290	pg/L	NA	2 J	4.77 U	0.69 U	0.89 U
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	8290	pg/L	NA	0.76 U	6.62 U	1 U	1.3 U
1,2,3,4,7,8,9-Heptachlorodibenzofuran	8290	pg/L	NA	1.3 U	4.95 U	0.86 U	1.1 U
1,2,3,4,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	0.49 U	4.77 U	0.44 U	0.7 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	0.64 U	5.63 U	0.74 U	1.2 U
1,2,3,6,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	0.46 U	4.77 U	0.42 U	0.74 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	0.75 U	5.38 U	0.82 U	1.3 U
1,2,3,7,8,9-Hexachlorodibenzofuran	8290	pg/L	NA	0.57 U	4.77 U	0.53 U	0.86 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	0.65 U	5.53 U	0.73 U	1.2 U
1,2,3,7,8-Pentachlorodibenzofuran	8290	pg/L	NA	0.77 U	4.77 U	0.76 U	1.1 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	8290	pg/L	NA	0.9 U	4.77 U	0.88 U	1.3 U
2,3,4,6,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	0.48 U	4.77 U	0.44 U	0.72 U
2,3,4,7,8-Pentachlorodibenzofuran	8290	pg/L	NA	0.7 U	4.77 U	0.61 U	0.91 U
2,3,7,8-TCDD	8290	pg/L	30	1.7 U	4.49 U	1.8 U	2.7 U
2,3,7,8-TCDD TEQ	8290	pg/L	30	0.020 J	15.0 U	3.44 U	5.19 U
2,3,7,8-Tetrachlorodibenzofuran	8290	pg/L	NA	1 U	4.19 U	1.2 U	1.8 U
Octachlorodibenzofuran	8290	pg/L	NA	1.3 U	9.53 U	1.1 U	1.6 U
Octachlorodibenzo-p-dioxin	8290	pg/L	NA	3.5 UJ	12.7 U	2.9 U	4.1 U
Aroclor 1016	8082	ug/L	0.5 (total)	---	---	---	---
Aroclor 1221	8082	ug/L	0.5 (total)	---	---	---	---
Aroclor 1232	8082	ug/L	0.5 (total)	---	---	---	---
Aroclor 1242	8082	ug/L	0.5 (total)	---	---	---	---
Aroclor 1248	8082	ug/L	0.5 (total)	---	---	---	---
Aroclor 1254	8082	ug/L	0.5 (total)	---	---	---	---
Aroclor 1260	8082	ug/L	0.5 (total)	---	---	---	---
4,4'-DDD	8081A	ug/L	NA	---	---	---	---
4,4'-DDE	8081A	ug/L	NA	---	---	---	---
4,4'-DDT	8081A	ug/L	NA	---	---	---	---
Aldrin	8081A	ug/L	0.002 AAL	---	---	---	---
alpha-BHC	8081A	ug/L	0.015 AAL	---	---	---	---
beta-BHC	8081A	ug/L	0.025 AAL	---	---	---	---
Chlordane	8081A	ug/L	0.1	---	---	---	---
Chlorobenzilate	8081A	ug/L	NA	---	---	---	---
delta-BHC	8081A	ug/L	NA	---	---	---	---
Diallate	8081A	ug/L	NA	---	---	---	---
Dieldrin	8081A	ug/L	0.002 AAL	---	---	---	---
Endosulfan I	8081A	ug/L	NA	---	---	---	---
Endosulfan II	8081A	ug/L	NA	---	---	---	---
Endosulfan sulfate	8081A	ug/L	NA	---	---	---	---
Endrin	8081A	ug/L	2	---	---	---	---
Endrin aldehyde	8081A	ug/L	NA	---	---	---	---
gamma-BHC	8081A	ug/L	0.2	---	---	---	---
Heptachlor	8081A	ug/L	0.01	---	---	---	---
Heptachlor epoxide	8081A	ug/L	0.01	---	---	---	---
Kepone	8081A	ug/L	NA	---	---	---	---
p,p'-Methoxychlor	8081A	ug/L	30	---	---	---	---
Toxaphene	8081A	ug/L	3	---	---	---	---

See Table III for notes and abbreviations.
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TABLE XVI
SUMMARY OF ANALYSES FOR DIOXINS AND FURANS,
CHLORINATED PESTICIDES, AND POLYCHLORINATED BIPHENYLS, 2009
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:				**RD-20**	**RD-37**	**RD-37**	**RD-37**
Sample Port:							
Sample Type:				Primary	Primary	Split	Primary
Geological Unit:				Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:				TA-Denver	TA-Denver	Lancaster	TA-Denver
Collection Date:				10/13/2009	07/13/2009	07/13/2009	10/28/2009
Analyte	**Method**	**Units**	**MCL**				
1,2,3,4,6,7,8-Heptachlorodibenzofuran	8290	pg/L	NA	0.94 U	34 U	4.75 U	0.69 U
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	8290	pg/L	NA	1.5 U	6.8 U	4.75 U	1.6 U
1,2,3,4,7,8,9-Heptachlorodibenzofuran	8290	pg/L	NA	1.4 U	3.2 U	4.75 U	1.1 U
1,2,3,4,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	0.69 U	7.1 U	4.75 U	0.36 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	1.3 U	1.7 U	4.75 U	1 U
1,2,3,6,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	0.64 U	4.5 U	4.75 U	0.34 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	1.4 U	2.1 U	4.75 U	1.1 U
1,2,3,7,8,9-Hexachlorodibenzofuran	8290	pg/L	NA	0.81 U	1.6 U	4.75 U	0.44 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	1.2 U	1.8 U	4.75 U	0.97 U
1,2,3,7,8-Pentachlorodibenzofuran	8290	pg/L	NA	1.5 U	2.8 U	4.75 U	0.76 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	8290	pg/L	NA	1.4 U	2.6 U	4.75 U	1 U
2,3,4,6,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	0.7 U	1.3 U	4.75 U	0.35 U
2,3,4,7,8-Pentachlorodibenzofuran	8290	pg/L	NA	1.3 U	2 U	4.75 U	0.62 U
2,3,7,8-TCDD	8290	pg/L	30	3.4 U	4 U	3.42 U	2 U
2,3,7,8-TCDD TEQ	8290	pg/L	30	6.18 U	10.02 U	0.004 J	0.01 J,L
2,3,7,8-Tetrachlorodibenzofuran	8290	pg/L	NA	2.3 U	2.4 U	1.77 U	1.3 U
Octachlorodibenzofuran	8290	pg/L	NA	2 U	38 U	9.51 U	1.1 U
Octachlorodibenzo-p-dioxin	8290	pg/L	NA	2.1 U	130 U	13.2 J	31 J,L
Aroclor 1016	8082	ug/L	0.5 (total)	---	0.12 U	0.095 U	---
Aroclor 1221	8082	ug/L	0.5 (total)	---	0.2 U	0.15 U	---
Aroclor 1232	8082	ug/L	0.5 (total)	---	0.16 U	0.095 U	---
Aroclor 1242	8082	ug/L	0.5 (total)	---	0.099 U	0.095 U	---
Aroclor 1248	8082	ug/L	0.5 (total)	---	0.087 U	0.095 U	---
Aroclor 1254	8082	ug/L	0.5 (total)	---	0.11 U	0.095 U	---
Aroclor 1260	8082	ug/L	0.5 (total)	---	0.15 U	0.095 U	---
4,4'-DDD	8081A	ug/L	NA	---	0.0073 U	0.0038 U	---
4,4'-DDE	8081A	ug/L	NA	---	0.0071 U	0.0038 U	---
4,4'-DDT	8081A	ug/L	NA	---	0.014 U	0.0057 U	---
Aldrin	8081A	ug/L	0.002 AAL	---	0.0056 U	0.0028 U	---
alpha-BHC	8081A	ug/L	0.015 AAL	---	0.005 U	0.0026 U	---
beta-BHC	8081A	ug/L	0.025 AAL	---	0.0083 U	0.0036 U	---
Chlordane	8081A	ug/L	0.1	---	0.13 U	0.066 U	---
Chlorobenzilate	8081A	ug/L	NA	---	0.04 U	---	---
delta-BHC	8081A	ug/L	NA	---	0.0055 U	0.0028 U	---
Diallate	8081A	ug/L	NA	---	0.18 U	---	---
Dieldrin	8081A	ug/L	0.002 AAL	---	0.006 U	0.0038 U	---
Endosulfan I	8081A	ug/L	NA	---	0.0055 U	0.0028 U	---
Endosulfan II	8081A	ug/L	NA	---	0.0066 U	0.0038 U	---
Endosulfan sulfate	8081A	ug/L	NA	---	0.0054 U	0.0038 U	---
Endrin	8081A	ug/L	2	---	0.0075 U	0.0038 U	---
Endrin aldehyde	8081A	ug/L	NA	---	0.0084 U	0.019 U	---
gamma-BHC	8081A	ug/L	0.2	---	0.0066 U	0.0044 U	---
Heptachlor	8081A	ug/L	0.01	---	0.0073 U	0.0038 U	---
Heptachlor epoxide	8081A	ug/L	0.01	---	0.0071 U	0.0035 U	---
Kepone	8081A	ug/L	NA	---	0.33 U	---	---
p,p'-Methoxychlor	8081A	ug/L	30	---	0.012 U	0.028 U	---
Toxaphene	8081A	ug/L	3	---	0.35 U	0.95 U	---

See Table III for notes and abbreviations.
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TABLE XVI
SUMMARY OF ANALYSES FOR DIOXINS AND FURANS,
CHLORINATED PESTICIDES, AND POLYCHLORINATED BIPHENYLS, 2009
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:				**RD-37**	**RD-37**	**SH-08**	**SH-08**
Sample Port:							
Sample Type:				Duplicate	Split	Shallow	Shallow
Geological Unit:				Chatsworth	Chatsworth	Primary	Duplicate
Lab Name:				TA-Denver	TA-Irvine	Lancaster	Lancaster
Collection Date:				10/28/2009	10/28/2009	05/14/2009	05/14/2009
Analyte	**Method**	**Units**	**MCL**				
1,2,3,4,6,7,8-Heptachlorodibenzofuran	8290	pg/L	NA	0.64 U	0.52 U	---	---
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	8290	pg/L	NA	1.1 U	1.1 U	---	---
1,2,3,4,7,8,9-Heptachlorodibenzofuran	8290	pg/L	NA	0.94 U	0.94 U	---	---
1,2,3,4,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	0.4 U	0.23 U	---	---
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	0.75 U	0.38 U	---	---
1,2,3,6,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	0.35 U	0.24 U	---	---
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	0.86 U	0.39 U	---	---
1,2,3,7,8,9-Hexachlorodibenzofuran	8290	pg/L	NA	0.46 U	0.34 U	---	---
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	0.75 U	0.36 U	---	---
1,2,3,7,8-Pentachlorodibenzofuran	8290	pg/L	NA	0.65 U	0.35 U	---	---
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	8290	pg/L	NA	0.84 U	1.2 U	---	---
2,3,4,6,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	0.38 U	0.2 U	---	---
2,3,4,7,8-Pentachlorodibenzofuran	8290	pg/L	NA	0.52 U	0.42 U	---	---
2,3,7,8-TCDD	8290	pg/L	30	1.8 U	0.63 U	---	---
2,3,7,8-TCDD TEQ	8290	pg/L	30	0.001 J,L	2.24 U	---	---
2,3,7,8-Tetrachlorodibenzofuran	8290	pg/L	NA	1.1 U	0.29 U	---	---
Octachlorodibenzofuran	8290	pg/L	NA	0.98 U	0.78 U	---	---
Octachlorodibenzo-p-dioxin	8290	pg/L	NA	3.5 J,L	3.3 U	---	---
Aroclor 1016	8082	ug/L	0.5 (total)	---	---	---	---
Aroclor 1221	8082	ug/L	0.5 (total)	---	---	---	---
Aroclor 1232	8082	ug/L	0.5 (total)	---	---	---	---
Aroclor 1242	8082	ug/L	0.5 (total)	---	---	---	---
Aroclor 1248	8082	ug/L	0.5 (total)	---	---	---	---
Aroclor 1254	8082	ug/L	0.5 (total)	---	---	---	---
Aroclor 1260	8082	ug/L	0.5 (total)	---	---	---	---
4,4'-DDD	8081A	ug/L	NA	---	---	0.0038 U	0.0038 U
4,4'-DDE	8081A	ug/L	NA	---	---	0.0038 U	0.0038 U
4,4'-DDT	8081A	ug/L	NA	---	---	0.0057 U	0.0058 U
Aldrin	8081A	ug/L	0.002 AAL	---	---	0.0079 J	0.0068 J
alpha-BHC	8081A	ug/L	0.015 AAL	---	---	0.0033 J	0.0026 U
beta-BHC	8081A	ug/L	0.025 AAL	---	---	0.0036 U	0.0036 U
Chlordane	8081A	ug/L	0.1	---	---	0.066 U	0.067 U
Chlorobenzilate	8081A	ug/L	NA	---	---	---	---
delta-BHC	8081A	ug/L	NA	---	---	0.0028 U	0.0029 U
Diallate	8081A	ug/L	NA	---	---	---	---
Dieldrin	8081A	ug/L	0.002 AAL	---	---	0.005 J	0.0068 J
Endosulfan I	8081A	ug/L	NA	---	---	0.0028 U	0.0029 U
Endosulfan II	8081A	ug/L	NA	---	---	0.0038 U	0.0038 U
Endosulfan sulfate	8081A	ug/L	NA	---	---	0.0038 U	0.0038 U
Endrin	8081A	ug/L	2	---	---	0.0038 U	0.0038 U
Endrin aldehyde	8081A	ug/L	NA	---	---	0.019 U	0.019 U
gamma-BHC	8081A	ug/L	0.2	---	---	0.0044 U	0.0044 U
Heptachlor	8081A	ug/L	0.01	---	---	0.0038 U	0.0038 U
Heptachlor epoxide	8081A	ug/L	0.01	---	---	0.0035 U	0.0035 U
Kepone	8081A	ug/L	NA	---	---	---	---
p,p'-Methoxychlor	8081A	ug/L	30	---	---	0.028 U	0.029 U
Toxaphene	8081A	ug/L	3	---	---	0.95 U	0.96 U

TABLE XVI
SUMMARY OF ANALYSES FOR DIOXINS AND FURANS,
CHLORINATED PESTICIDES, AND POLYCHLORINATED BIPHENYLS, 2009
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:				**SH-08**	**WS-09**
Sample Port:					
Sample Type:				Shallow	Primary
Geological Unit:				Split	Chatsworth
Lab Name:				TA-Denver	TA-Knoxville
Collection Date:				05/14/2009	07/23/2009
Analyte	**Method**	**Units**	**MCL**		
1,2,3,4,6,7,8-Heptachlorodibenzofuran	8290	pg/L	NA	---	4.8 U
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	8290	pg/L	NA	---	23 U
1,2,3,4,7,8,9-Heptachlorodibenzofuran	8290	pg/L	NA	---	1.2 U
1,2,3,4,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	---	0.59 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	---	0.93 U
1,2,3,6,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	---	3.4 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	---	1.1 U
1,2,3,7,8,9-Hexachlorodibenzofuran	8290	pg/L	NA	---	0.71 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	---	0.93 U
1,2,3,7,8-Pentachlorodibenzofuran	8290	pg/L	NA	---	0.85 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	8290	pg/L	NA	---	1.1 U
2,3,4,6,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	---	0.59 U
2,3,4,7,8-Pentachlorodibenzofuran	8290	pg/L	NA	---	0.74 U
2,3,7,8-TCDD	8290	pg/L	30	---	2.1 U
2,3,7,8-TCDD TEQ	8290	pg/L	30	---	4.82 U
2,3,7,8-Tetrachlorodibenzofuran	8290	pg/L	NA	---	1.3 U
Octachlorodibenzofuran	8290	pg/L	NA	---	29 U
Octachlorodibenzo-p-dioxin	8290	pg/L	NA	---	390 U
Aroclor 1016	8082	ug/L	0.5 (total)	---	---
Aroclor 1221	8082	ug/L	0.5 (total)	---	---
Aroclor 1232	8082	ug/L	0.5 (total)	---	---
Aroclor 1242	8082	ug/L	0.5 (total)	---	---
Aroclor 1248	8082	ug/L	0.5 (total)	---	---
Aroclor 1254	8082	ug/L	0.5 (total)	---	---
Aroclor 1260	8082	ug/L	0.5 (total)	---	---
4,4'-DDD	8081A	ug/L	NA	0.0073 U	---
4,4'-DDE	8081A	ug/L	NA	0.0071 U	---
4,4'-DDT	8081A	ug/L	NA	0.014 U	---
Aldrin	8081A	ug/L	0.002 AAL	0.0056 U	---
alpha-BHC	8081A	ug/L	0.015 AAL	0.005 U	---
beta-BHC	8081A	ug/L	0.025 AAL	0.022 J	---
Chlordane	8081A	ug/L	0.1	0.13 U	---
Chlorobenzilate	8081A	ug/L	NA	---	---
delta-BHC	8081A	ug/L	NA	0.0055 U	---
Diallate	8081A	ug/L	NA	---	---
Dieldrin	8081A	ug/L	0.002 AAL	0.006 U	---
Endosulfan I	8081A	ug/L	NA	0.0055 U	---
Endosulfan II	8081A	ug/L	NA	0.0066 U	---
Endosulfan sulfate	8081A	ug/L	NA	0.0054 U	---
Endrin	8081A	ug/L	2	0.0075 U	---
Endrin aldehyde	8081A	ug/L	NA	0.0084 U	---
gamma-BHC	8081A	ug/L	0.2	0.0066 U	---
Heptachlor	8081A	ug/L	0.01	0.0073 U	---
Heptachlor epoxide	8081A	ug/L	0.01	0.0071 U	---
Kepone	8081A	ug/L	NA	---	---
p,p'-Methoxychlor	8081A	ug/L	30	0.012 U	---
Toxaphene	8081A	ug/L	3	0.35 U	---

TABLE XVII
SUMMARY OF ANALYSES FOR HYDRAZINES, 2009
BOEING SANTA SUSANA FIELD LABPORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:		**PZ-108**	**PZ-108**	**PZ-108**	**PZ-108**	**PZ-108**	**PZ-122**	**PZ-122**	**PZ-122**
Sample Type:		Primary	Primary	Duplicate	Primary	Primary	Primary	Primary	Primary
Geological Unit:		Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:		Truesdail	Truesdail	Truesdail	Truesdail	TA-Denver	Truesdail	Truesdail	Truesdail
Collection Date:		02/18/2009	05/05/2009	05/05/2009	07/14/2009	10/14/2009	02/19/2009	05/05/2009	07/14/2009
Analyte	**Units**								
1,1-Dimethylhydrazine	ug/L	0.315 U	0.315 U	0.315 U	1.42 UJ	1.42 U	0.315 U	0.315 U	1.42 UJ
Hydrazine	ug/L	0.15 U	0.15 U	0.15 U	0.648 J	0.452 U	0.15 U	0.15 U	0.452 UJ
Monomethylhydrazine	ug/L	0.561 U	0.561 U	0.561 U	0.857 UJ	0.857 U	0.561 U	0.561 U	0.857 UJ

See Table III for notes and abbreviations.
Haley & Aldrich, Inc.
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TABLE XVII
SUMMARY OF ANALYSES FOR HYDRAZINES, 2009
BOEING SANTA SUSANA FIELD LABPORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier:		**PZ-122**	**PZ-122**	**RD-13**	**RD-13**	**RD-13**	**RD-13**	**RD-13**	**RD-13**
Sample Type:		Primary	Duplicate	Primary	Duplicate	Primary	Primary	Duplicate	Primary
Geological Unit:		Shallow	Shallow	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TA-Denver	TA-Denver	Truesdail	Truesdail	Truesdail	Truesdail	Truesdail	TA-Denver
Collection Date:		10/13/2009	10/13/2009	03/09/2009	03/09/2009	05/06/2009	07/15/2009	07/15/2009	10/21/2009
Analyte	**Units**								
1,1-Dimethylhydrazine	ug/L	1.42 U	1.42 U	0.315 U	0.315 U	0.315 U	1.42 U	1.42 U	1.42 U
Hydrazine	ug/L	0.452 U	0.452 U	0.15 U	0.15 U	0.15 U	0.452 U	0.452 U	0.452 U
Monomethylhydrazine	ug/L	0.857 U	0.857 U	0.561 U	0.561 U	0.561 U	0.857 U	0.857 U	0.857 U

See Table III for notes and abbreviations.

TABLE XVIII
VERIFICATION AND FOLLOW-UP SAMPLING 2009 THROUGH FIRST QUARTER 2010
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

SCHEDULED FIRST QUARTER 2009 VERIFICATION AND FOLLOW-UP

Well	Monitoring Program	Constituent(s)	Samples Scheduled
HAR-11	SMOU RFI	1,1,2-Trichloroethane Chloroform	Verification
RD-05B	Detection	TCE	Verification
RD-39A	Detection	Trichloroethene	Verification
SH-02	SMOU RFI	Chlorinated pesticides	Verification and equipment rinsate
SH-03	SMOU RFI	Chlorinated pesticides	Verification and equipment rinsate
SH-04	SMOU RFI Point of Compliance	Chlorinated pesticides	Verification and equipn
SH-05	SMOU RFI	Chlorinated pesticides	Verification and equipment rinsate
SH-08	SMOU RFI	Chlorinated pesticides	Verification and equipment rinsate
SH-09	SMOU RFI	Chlorinated pesticides	Verification and equipment rinsate

FIRST QUARTER 2009 VERIFICATION AND FOLLOW-UP RESULTS

Well Identifier	Monitoring Program	Constituent(s)	Result Value Units	Sample Concentration					
				Primary Sample	Duplicate Sample	Split Sample	Field Blank Sample	Equipment Rinsate	Equipment Rinsate - Split
HAR-11	SMOU RFI	1,1,2-Trichloroethane	ug/L	0.1 U	0.1 U	0.32 U	0.1 U	---	---
		Chloroform	ug/L	0.1 U	0.1 U	0.16 U	0.1 U	---	---
RD-05B	Detection	Trichloroethene	ug/L	0.1 U	0.1 U	0.16 U	0.1 U	---	---

See Table III for notes and abbreviations.
Haley & Aldrich, Inc.
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TABLE XVIII
VERIFICATION AND FOLLOW-UP SAMPLING 2009 THROUGH FIRST QUARTER 2010
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

SCHEDULED SECOND QUARTER 2009 VERIFICATION AND FOLLOW-UP

Well	Monitoring Program	Constituent(s)	Samples Scheduled
ES-21	Interim Corrective Action	Chloroethane	Verification
HAR-20	CFOU	Perchlorate	Follow-up
RD-06	Background	Trichloroethene	Verification
RD-26	Evaluation	Chloromethane	Verification
RD-37	Detection	cis-1,2-Dichloroethene	Verification
RD-39A	Detection	Trichloroethene	Verification
RD-51B	Evaluation	Chloromethane	Verification
RD-51C	Detection	Chloromethane	Verification
SH-02	SMOU RFI	Chlorinated pesticides	Verification and equipment rinsate
SH-03	SMOU RFI	Chlorinated pesticides	Verification and equipment rinsate
SH-04	SMOU RFI Point of Compliance	Chlorinated pesticides	Verification and equipment rinsate
SH-05	SMOU RFI	Chlorinated pesticides	Verification and equipment rinsate
SH-08	SMOU RFI	Chlorinated pesticides	Verification and equipment rinsate
SH-09	SMOU RFI	Chlorinated pesticides	Verification and equipment rinsate

SECOND QUARTER 2009 VERIFICATION AND FOLLOW-UP RESULTS

Well Identifier	Monitoring Program	Constituent(s)	Units	Sample Concentration					
				Primary Sample	Duplicate Sample	Split Sample	Field Blank Sample	Equipment Rinsate	Equipment Rinsate - Split
ES-21	Interim Corrective Action	Chloroethane	ug/L	1 U	1 U	0.82 U	1 U	---	---
HAR-20	CFOU	Perchlorate	ug/L	0.7 U	0.7 U	0.28 U	---	---	---
RD-06	Background	Trichloroethene	ug/L	0.1 U	0.1 U	0.16 U	0.1 U	---	---
RD-26	Evaluation	Chloromethane	ug/L	0.2 U	0.2 U	0.3 U	0.2 U	---	---
RD-37	Detection	cis-1,2-Dichloroethene	ug/L	0.1 J	0.1 J	0.15 U	0.1 U	---	---
RD-51B	Evaluation	Chloromethane	ug/L	0.2 U	0.2 U	0.3 U	0.2 U	---	---
RD-51C	Detection	Chloromethane	ug/L	0.2 U	0.2 U	0.3 U	0.2 U	---	---
SH-08	SMOU RFI	Chlorinated pesticides:	ug/L						
		4,4'-DDD		0.0038 U	0.0038 U	0.0073 U	0.0038 U	0.0038 U	0.0075 U
		Aldrin		0.0079 J	0.0068 J	0.0056 U	0.0029 U	0.0028 U	0.0058 U
		alpha-BHC		0.0033 J	0.0026 U	0.005 U	0.0026 U	0.0026 U	0.0052 U
		beta-BHC		0.0036 U	0.0036 U	0.022 J	0.0036 U	0.0036 U	0.0085 U
		Dieldrin		0.005 J	0.0068 J	0.0006 U	0.0038 U	0.0038 U	0.0062 U
		Endosulfan I		0.0028 U	0.0029 U	0.0055 U	0.0029 U	0.0028 U	0.0057 U
		gamma-BHC		0.0044 U	0.0044 U	0.0066 U	0.0044 U	0.0044 U	0.0068 U
		Heptachlor		0.0038 U	0.0038 U	0.0073 U	0.0038 U	0.0038 U	0.0075 U

See Table III for notes and abbreviations.

TABLE XVIII
VERIFICATION AND FOLLOW-UP SAMPLING 2009 THROUGH FIRST QUARTER 2010
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

SCHEDULED THIRD QUARTER 2009 VERIFICATION AND FOLLOW-UP

Well	Monitoring Program	Constituent(s)	Samples Scheduled
HAR-17	Point of Compliance	1,2,3,4,6,7,8-HpCDF	Verification
RD-39A	Detection	Trichloroethene	Verification
RD-67	Background	Chloromethane	Verification
SH-02	SMOU RFI	Chlorinated pesticides	Verification and equipment rinsate
SH-03	SMOU RFI	Chlorinated pesticides	Verification and equipment rinsate
SH-04	SMOU RFI Point of Compliance	Chlorinated pesticides	Verification and equipn
SH-05	SMOU RFI	Chlorinated pesticides	Verification and equipment rinsate
SH-09	SMOU RFI	Chlorinated pesticides	Verification and equipment rinsate

THIRD QUARTER 2009 VERIFICATION AND FOLLOW-UP RESULTS

Well Identifier	Monitoring Program	Constituent(s)	Units	Sample Concentration					
				Primary Sample	Duplicate Sample	Split Sample	Field Blank Sample	Equipment Rinsate	Equipment Rinsate - Split
HAR-17	Point of Compliance	1,2,3,4,6,7,8-HpCDF	ug/L	14 U	67 U	4.86 U	79	---	---
RD-67	Background	Chloromethane	ug/L	0.2 U	0.2 U	0.3 U	0.3 J	---	---

See Table III for notes and abbreviations.
Haley & Aldrich, Inc.
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TABLE XVIII
VERIFICATION AND FOLLOW-UP SAMPLING 2009 THROUGH FIRST QUARTER 2010
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

SCHEDULED FOURTH QUARTER 2009 VERIFICATION AND FOLLOW-UP

Well	Monitoring Program	Constituent(s)	Samples Scheduled
RD-06	Evaluation	gamma-BHC (Lindane)	Verification
		Cyanide	Verification
RD-37	Evaluation	2,4,5-TP (Silvex)	Verification
		Dioxins and Furans	Verification
RD-39A	Detection	Trichloroethene	Verification
RD-43A	Detection	Bromoform	Verification
SH-02	SMOU RFI	Chlorinated pesticides	Verification and equipment rinsate
SH-03	SMOU RFI	Chlorinated pesticides	Verification and equipment rinsate
SH-04	SMOU RFI Point of Compliance	Chlorinated pesticides	Verification and equipn
SH-05	SMOU RFI	Chlorinated pesticides	Verification and equipment rinsate
SH-09	SMOU RFI	Chlorinated pesticides	Verification and equipment rinsate

FOURTH QUARTER 2009 VERIFICATION AND FOLLOW-UP RESULTS

Well Identifier	Monitoring Program	Constituent(s)	Units	Sample Concentration					
				Primary Sample	Duplicate Sample	Split Sample	Field Blank Sample	Equipment Rinsate	Equipment Rinsate - Split
RD-37	Evaluation	2,4,5-TP (Silvex)	ug/L	0.19 U	0.19 U	0.1 U	0.19 U	---	---
		OCDD	pg/L	31 J,L	3.5 J,L	3.3 U	0.99 U	---	---
RD-43A	Detection	Bromoform	ug/L	0.19 U	0.19 U	0.4 U	0.19 U	---	---
		Dibromochloromethane	ug/L	0.17 U	0.17 U	0.4 U	0.17 U	---	---

See Table III for notes and abbreviations.

TABLE XVIII
VERIFICATION AND FOLLOW-UP SAMPLING 2009 THROUGH FIRST QUARTER 2010
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

PROPOSED FIRST QUARTER 2010 VERIFICATION AND FOLLOW-UP

Well	Monitoring Program	Constituent(s)	Samples Scheduled
HAR-07	CFOU	Phenol	Verification
RD-06	Evaluation	gamma-BHC (Lindane)	Verification
		Cyanide	Verification
RD-39A	Detection	Trichloroethene	Verification
RD-43C	Detection	Tetrachloroethene	Verification
RD-44	SMOU RFI	Arsenic, Dissolved	Verification
RD-69	Background	Formaldehyde	Verification
SH-02	SMOU RFI	Chlorinated pesticides	Verification and equipment rinsate
SH-03	SMOU RFI	Chlorinated pesticides	Verification and equipment rinsate
SH-04	SMOU RFI Point of Compliance	Chlorinated pesticides	Verification and equipn
SH-05	SMOU RFI	Chlorinated pesticides	Verification and equipment rinsate
SH-09	SMOU RFI	Chlorinated pesticides	Verification and equipment rinsate
WS-09	Voluntary	Strontium-90	Verification

Verification = primary, duplicate, split, and field blank samples.
Follow-up = primary, duplicate, and split samples.

See Table III for notes and abbreviations.
Haley & Aldrich, Inc.
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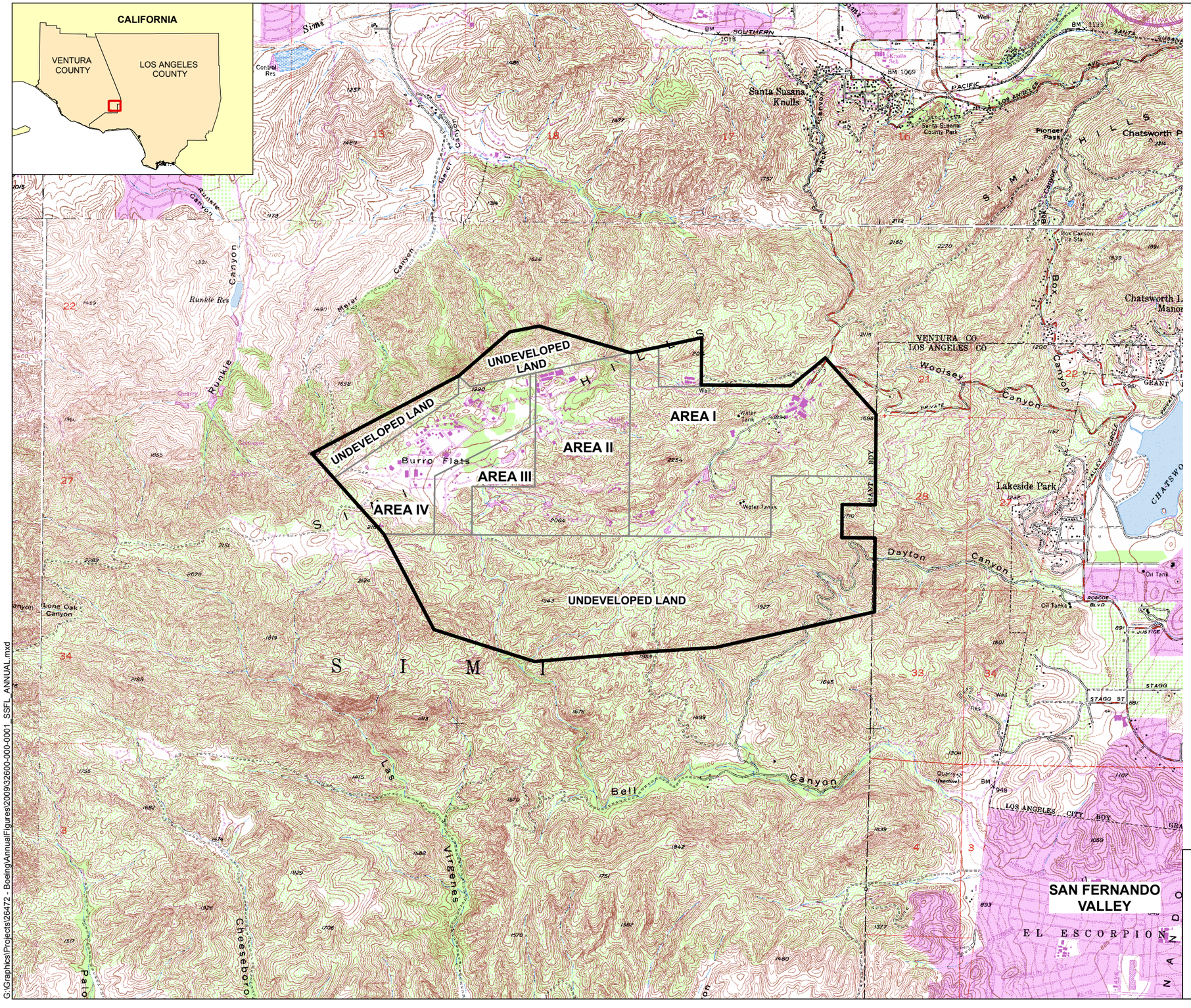

LEGEND

- SSFL PROPERTY BOUNDARY
- SSFL AREA BOUNDARY

NOTE:
ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

REFERENCE: CALABASAS, SIMI VALLEY EAST, SIMI VALLEY WEST AND THOUSAND OAKS USGS TOPO QUADS

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SCALE IN FEET

ANNUAL GROUNDWATER MONITORING REPORT, 2009

HALEY & ALDRICH

THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

FACILITY LOCATION MAP

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 1

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OS-09 & OS-09R ARE LOCATED APPROXIMATELY 3330' NORTH OF MAP EDGE

OS-10 IS LOCATED APPROXIMATELY 1660' NORTH OF MAP EDGE

UNDEVELOPED LAND

NASA PROPERTY AREA I

AREA I

AREA II

AREA III

AREA IV

UNDEVELOPED LAND

UNDEVELOPED LAND

AREA I ROAD ASU

ALFA ASU

BRAVO ASU

DELTA ASU

CANYON ASU

WS-05 AREA UV

RD-09 AREA UV

APTF

CANYON

BOWL

ALFA

BRAVO

COCA

DELTA

STL-IV ASU

STL IV

STL IV-1

STL IV-2

SPA-1

SPA-2

ECL

ABSP

APTF-1

APTF-2

OS-02 OS-03 OS-04 OS-05 OS-08 OS-09 OS-10 OS-12 OS-13 OS-15 OS-16 OS-17 OS-21 OS-24 OS-25 OS-26 OS-27 OS-28

S-17

RD-02 RD-03 RD-04 RD-05A RD-05B RD-05C RD-06 RD-07 RD-10 RD-12 RD-13 RD-14 RD-15 RD-16 RD-17 RD-18 RD-19 RD-20 RD-21 RD-22 RD-23 RD-24 RD-25 RD-26 RD-27 RD-28 RD-29 RD-30 RD-31 RD-32 RD-33A RD-33B RD-33C RD-34A RD-34B RD-34C RD-36A RD-36B RD-36C RD-36D RD-37 RD-38A RD-38B RD-39A RD-39B RD-40 RD-41A RD-41B RD-41C RD-42 RD-43A RD-43B RD-43C RD-44 RD-45B RD-45C RD-46A RD-46B RD-47 RD-48A RD-48B RD-48C RD-49A RD-49B RD-49C RD-50 RD-51A RD-51B RD-51C RD-52A RD-52B RD-52C RD-53 RD-54A RD-54B RD-54C RD-55A RD-55B RD-56A RD-56B RD-57 RD-58A RD-58B RD-58C RD-59A RD-59B RD-59C RD-60 RD-61 RD-62 RD-63 RD-64 RD-65 RD-66 RD-67 RD-68A RD-68B RD-69 RD-70 RD-71 RD-72 RD-73 RD-74 RD-75 RD-76 RD-77 RD-78 RD-80 RD-81 RD-82 RD-83 RD-84 RD-85 RD-86 RD-87 RD-88 RD-89 RD-90 RD-91 RD-92 RD-93 RD-94 RD-95 RD-96 RD-97 RD-98

RS-01 RS-02 RS-03 RS-04 RS-05 RS-06 RS-07 RS-08 RS-09 RS-10 RS-11 RS-12 RS-13 RS-14 RS-15 RS-16 RS-17 RS-18 RS-19 RS-20 RS-21 RS-22 RS-23 RS-24 RS-25 RS-26 RS-27 RS-28 RS-29 RS-30 RS-31 RS-32

WS-04A WS-06 WS-07 WS-08 WS-09 WS-09A WS-09B WS-11 WS-12 WS-13 WS-14 WS-SP

ES-01 ES-02 ES-03 ES-04 ES-05 ES-06 ES-07 ES-08 ES-09 ES-10 ES-11 ES-12 ES-13 ES-14 ES-15 ES-16 ES-17 ES-18 ES-19 ES-20 ES-21 ES-22 ES-23 ES-24 ES-25 ES-26 ES-27 ES-28 ES-29 ES-30 ES-31 ES-32

SH-01 SH-02 SH-03 SH-04 SH-05 SH-06 SH-07 SH-08 SH-09 SH-10 SH-11

HAR-01 HAR-02 HAR-03 HAR-04 HAR-05 HAR-06 HAR-07 HAR-08 HAR-09 HAR-11 HAR-12 HAR-13 HAR-14 HAR-15 HAR-16 HAR-17 HAR-18 HAR-19 HAR-20 HAR-21 HAR-22 HAR-23 HAR-24 HAR-25 HAR-26 HAR-27 HAR-28 HAR-29 HAR-30 HAR-31 HAR-32 HAR-33 HAR-34

C-1

Please Note: The original version of this figure includes colorized features and shading. A black and white copy of the figure should not be used because it may not accurately represent the information presented.

LEGEND

- CHATSWORTH FORMATION MONITOR WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- SHALLOW MONITOR WELL
- SHALLOW EXTRACTION WELL
- C-1 COREHOLE
- SPRING
- PROPERTY BOUNDARY
- FORMER RCRA IMPOUNDMENT
- FORMER OR INACTIVE TEST STAND
- PERMITTED GROUNDWATER TREATMENT SYSTEM - AIR STRIPPING UNIT (ASU)
- PERMITTED GROUNDWATER TREATMENT SYSTEM - UV/H2O2 (UV)

SPA = STORABLE PROPELLANT AREA
ABSP = ALFA BRAVO SKIM POND
ECL = ENGINEERING CHEMISTRY LAB
STL IV = SYSTEMS TEST LABORATORY IV
APTF = ADVANCED PROPULSION TEST FACILITY

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ANNUAL GROUNDWATER MONITORING REPORT, 2009

HALEY & ALDRICH

THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

LOCATIONS OF WELLS, SPRINGS, AND GROUNDWATER RECLAMATION COMPONENTS

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 2

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UNDEVELOPED LAND

NASA PROPERTY AREA I

UNDEVELOPED LAND

AREA I

AREA II

AREA III

AREA IV

UNDEVELOPED LAND

PZ-073 PZ-143 PZ-139 PZ-141 PZ-140 PZ-138 PZ-144 PZ-145 PZ-133 PZ-134 PZ-136 PZ-021 PZ-149 PZ-135 PZ-137 PZ-022 PZ-009 PZ-010 PZ-001 PZ-020 PZ-019 PZ-146 PZ-125 PZ-007 PZ-147 PZ-148 PZ-159 PZ-157 PZ-151 PZ-152 PZ-114 PZ-056 PZ-115 PZ-113 PZ-058 PZ-055 PZ-158 PZ-057 PZ-071 PZ-156 PZ-060 PZ-154 PZ-061 PZ-153 PZ-049 PZ-070 PZ-155 PZ-059 PZ-072 PZ-161 PZ-160 PZ-150 PZ-116 PZ-121 PZ-112 PZ-110 PZ-041 PZ-108 PZ-124 PZ-097 PZ-109 PZ-120 PZ-122 PZ-107 PZ-111 PZ-052 PZ-025 PZ-006 PZ-098 PZ-005 PZ-051 PZ-028 PZ-027 PZ-029 PZ-026 PZ-103 PZ-104 PZ-106 PZ-018 PZ-030 PZ-031 PZ-024 PZ-023 PZ-102 PZ-050 PZ-038 PZ-013 PZ-032 PZ-100 PZ-101 PZ-105 PZ-039 PZ-034 PZ-014 PZ-033 PZ-096 PZ-036 PZ-015 PZ-035 PZ-054 PZ-043 PZ-046 PZ-142 PZ-045 PZ-047 PZ-048 PZ-037 PZ-053 PZ-042 PZ-126 PZ-017B PZ-017A PZ-040 PZ-004B PZ-004A

PZ-128 PZ-132 PZ-062 PZ-095 PZ-131 PZ-130 PZ-129

PZ-094 PZ-119 PZ-118 PZ-063 PZ-075 PZ-064 PZ-066 PZ-065 PZ-068 PZ-011 PZ-069 PZ-067B PZ-088 PZ-67A PZ-081 PZ-089 PZ-003 PZ-083 PZ-008 PZ-012 PZ-086 PZ-127 PZ-093 PZ-016 PZ-117 PZ-080 PZ-082 PZ-087B PZ-087A PZ-084 PZ-074 PZ-091 PZ-085B PZ-090 PZ-002 PZ-085A PZ-079 PZ-078 PZ-077 PZ-076 PZ-123

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ANNUAL GROUNDWATER MONITORING REPORT, 2009

LEGEND

- PIEZOMETER
- PROPERTY BOUNDARY

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SCALE IN FEET

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VENTURA COUNTY, CALIFORNIA

LOCATIONS OF PIEZOMETERS

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 3

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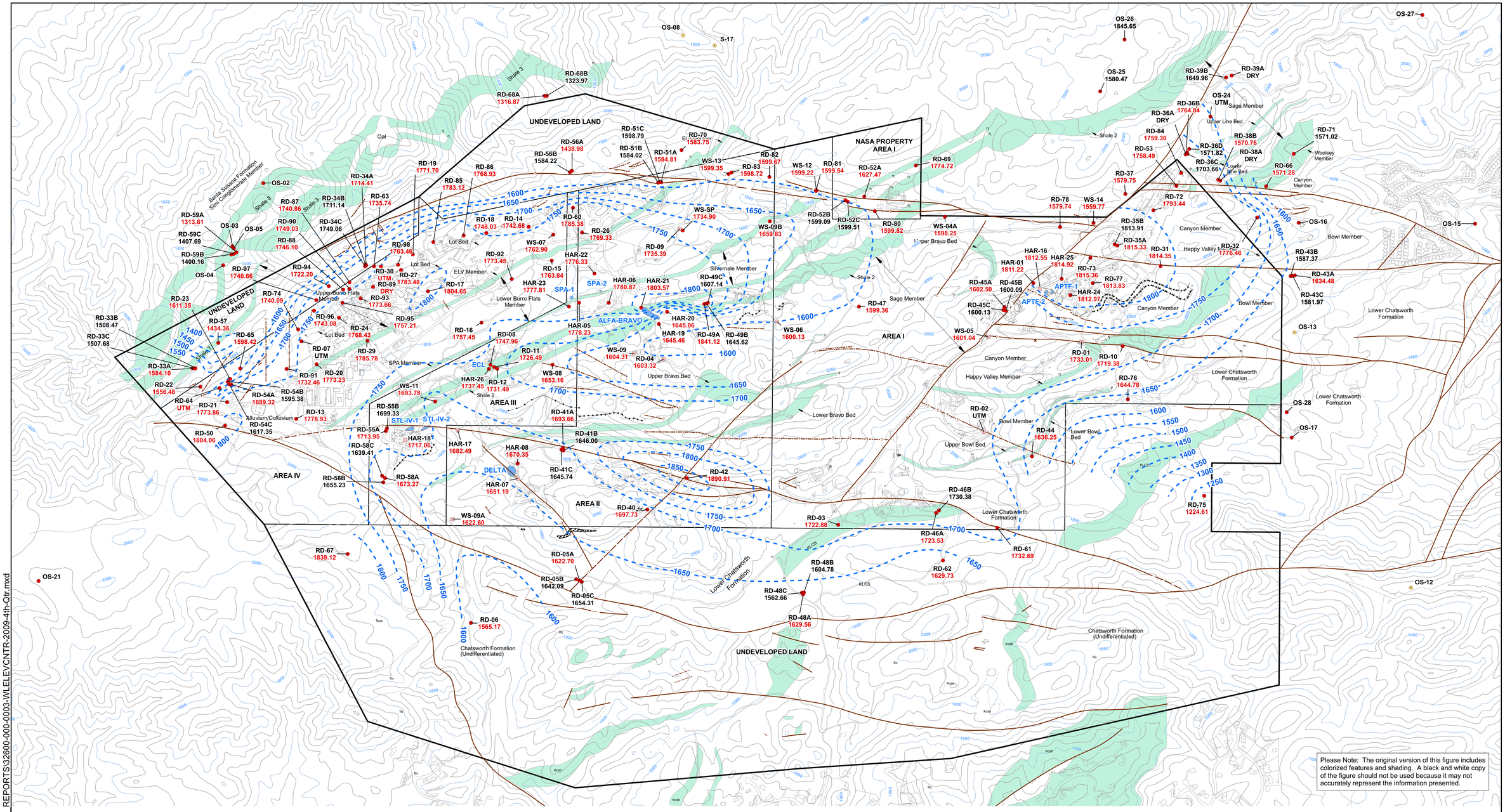

LEGEND

- SPRING
- CHATSWORTH FORMATION MONITOR WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- PROPERTY BOUNDARY
- FAULT, SHEAR ZONE, AND/OR DEFORMATION BAND

1600	APPROXIMATE CONTOUR OF EQUAL WATER LEVEL ELEVATION, IN FEET ABOVE MEAN SEA LEVEL. CONTOUR INTERVAL 50 FEET.
1622.60	WATER LEVEL ELEVATION, IN FEET ABOVE MEAN SEA LEVEL.
1654.31	WATER LEVEL ELEVATION, IN FEET ABOVE MEAN SEA LEVEL. WATER LEVEL NOT USED TO GENERATE CONTOUR LINES.
UTM	UNABLE TO MEASURE

LEGEND FOR GEOLOGY: REFER TO FIGURE 5, GEOLOGIC MAP.

- KUCC — GEOLOGIC UNIT
- MARKER BED
- KLCS — GEOLOGIC UNIT

GEOLOGY PROVIDED BY MWH, *"DRAFT SITE-WIDE GROUNDWATER REMEDIAL INVESTIGATION REPORT, SANTA SUSANA FIELD LABORATORY, VENTURA COUNTY, CALIFORNIA"*, DECEMBER 2009.

WATER LEVEL ELEVATIONS ARE PROVIDED FOR ILLUSTRATIVE PURPOSES ONLY AND ARE NOT INTENDED TO INFER GROUNDWATER FLOW CONDITIONS. THE LATERAL DIRECTION OF GROUNDWATER MOVEMENT CANNOT BE ASCERTAINED FROM THE CONTOUR LINES BECAUSE OF STRATIGRAPHIC AND STRUCTURAL PROPERTIES OF THE BEDROCK.

CONTOURS ARE BASED ON MEASURED WATER LEVELS IN CONVENTIONAL WELLS. ACTUAL WATER LEVELS IN THE SUBSURFACE WILL VARY FROM THOSE SHOWN.

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SCALE IN FEET

ANNUAL GROUNDWATER MONITORING REPORT, 2009

HALEY & ALDRICH

THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

CHATSWORTH FORMATION WATER ELEVATION CONTOUR MAP - OCTOBER 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 4

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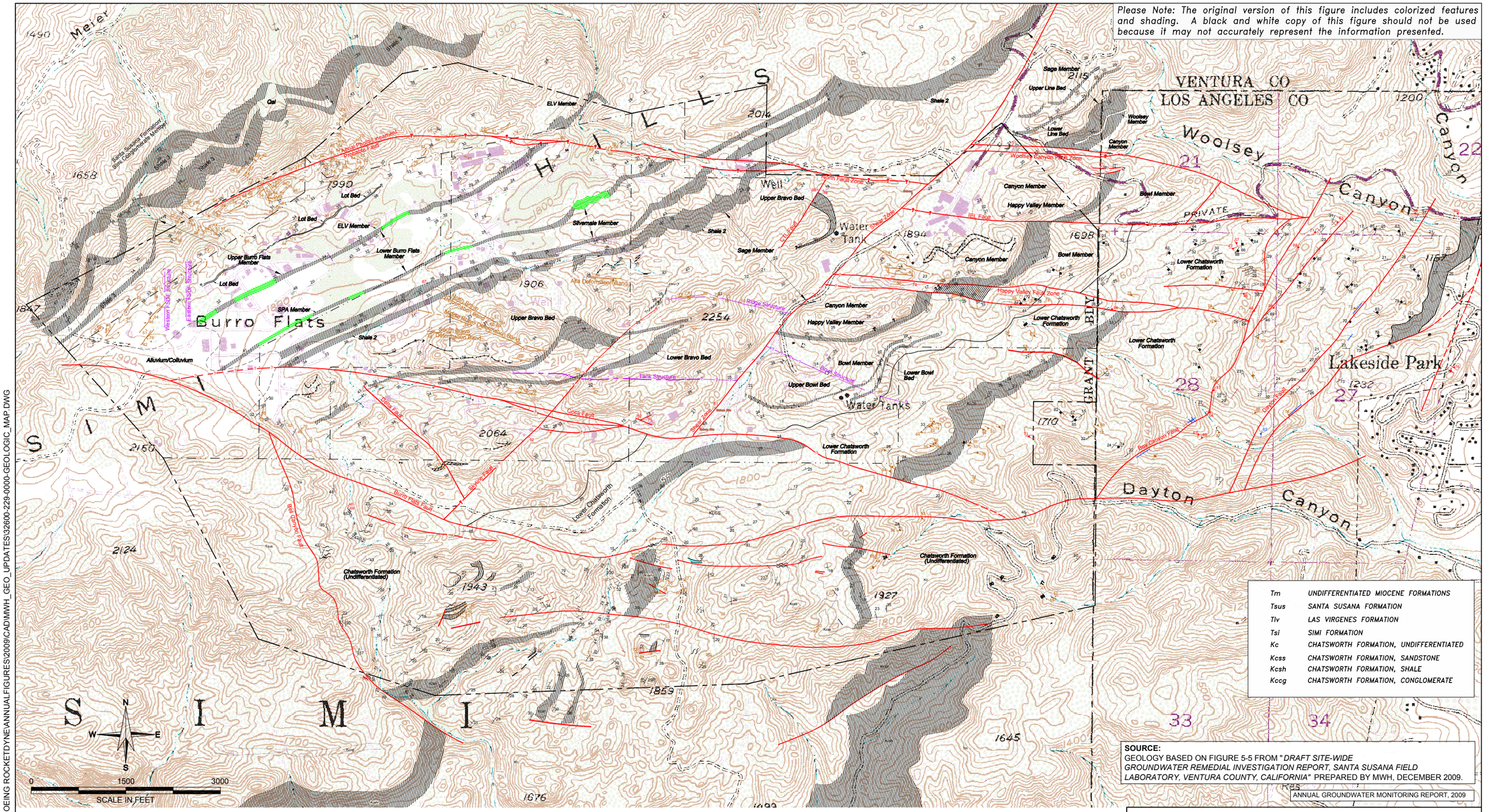
Please Note: The original version of this figure includes colorized features and shading. A black and white copy of this figure should not be used because it may not accurately represent the information presented.



SOURCE:
GEOLOGY BASED ON FIGURE 5-5 FROM "*DRAFT SITE-WIDE GROUNDWATER REMEDIAL INVESTIGATION REPORT, SANTA SUSANA FIELD LABORATORY, VENTURA COUNTY, CALIFORNIA*" PREPARED BY MWH, DECEMBER 2009.

RFS ANNUAL GROUNDWATER MONITORING REPORT, 2009

LEGEND

- PROPERTY BOUNDARY
- ADMINISTRATIVE AREA BOUNDARY
- FINE-GRAINED UNIT
- AREA IN WHICH FINE-GRAIND UNIT MAY BE DISCONTINUOUS
- FAULT LOCATION
- DEFORMATION BAND LOCATION
- STRUCTURE LOCATION
- INFERRED FAULT LOCATION BASED ON ONE OR A NUMBER OF THE FOLLOWING: DISPLACEMENT OF GEOLOGIC CONTACT, LINEAR TOPOGRAPHIC FEATURE ASSOCIATED WITH A DISPLACED GEOLOGIC CONTACT AND/OR SMALL SCALE STRUCTURES OBSERVED IN CORE
- INFERRED FAULT LOCATION BASED PRIMARILY ON AERIAL PHOTO ANALYSIS
- GEOLOGIC CONTACT
- THINNER FINE PEBBLE CONGLOMERATE BED
- THINNER SANDSTONE BED
- CONTINUOUS BED
- OUTCROP OF PROMINENT SANDSTONE BED
- CONGLOMERATE
- SMALL-SCALE FAULT
- SHALE FLOAT OBSERVED
- OUTCROP OF SHALE OBSERVED
- DIABASE DIKE
- CARBONATE VEIN
- BRECCIATED SANDSTONE W/CALCITE FILLING SPACES BETWEEN SANDSTONE FRAGMENTS
- ZONE OF ANASTOMOTIZING FRACTURES AND/OR DEFORMATION BANDS
- MAJOR DIABASE DIKE
- MAJOR CARBONATE VEIN
- 36 STRIKE AND DIP OF BEDDING
- 82 STRIKE AND DIP OF FAULT
- 82 ATTITUDE OF VERTICAL FAULT
- 82 STRIKE AND DIP OF DEFORMATION BAND
- 82 ATTITUDE OF VERTICAL DEFORMATION BAND
- STRIKE AND DIP OF CARBONATE VEIN

HALEY & ALDRICH

THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

GEOLOGIC MAP

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 5

G:\GRAPHICS\PROJECTS\26472 - BOEING ROCKETDYNE\ANNUALFIGURES\2009\CAD\MWH_GEO_UPDATES\32600-229-0000-GEOLOGIC_MAP.DWG

UNDEVELOPED LAND

NASA PROPERTY
AREA I

UNDEVELOPED LAND

UNDEVELOPED LAND

AREA IV

AREA III

AREA II

AREA I

RS-29
PZ-139
200
PZ-141
52
PZ-140
130
ES-20
ES-19
ES-22
RS-21
RS-22
ES-18
ES-21
350
RS-28
RS-25
HAR-15
2.5
HAR-30
HAR-11
HAR-12
RS-08
PZ-058
HAR-31
RS-24
PZ-071
0.4 J
HAR-14
4.3
PZ-120
53
RS-11
SH-06
SH-01
ES-31
0.3 J
SH-07
ECL-FD
HAR-13
HAR-09
RS-18
2
RS-16
SH-03
SH-04
RS-27
SH-08
SH-02
SH-09
ES-23
27
RS-15
ES-28
SH-05
ECL-Sump
ES-30
45
SH-10
RS-17
ES-29
ES-25
SH-11
RS-54
ES-27
78
ES-16
RS-12
HAR-33
PZ-105
10
ES-26
41
ES-24
3400
ES-14
RS-23
ES-15
RS-09
RS-10
HAR-34
RS-14
HAR-28
ES-17
610
HAR-32
HAR-27
0.2 J
HAR-29
ES-32
RS-13
RS-30
RS-31
RS-01
RS-32
HAR-04
740
HAR-03
280
RS-02
ES-12
HAR-02
ES-11
ES-09
ES-10
RS-03
RS-20
RS-04
ES-04
ES-08
ES-02
ES-07
ES-06
ES-05
RS-19
ES-13
ES-03
RS-05
ES-01
RS-06
PZ-076
RS-07

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- SHALLOW MONITOR WELL
- SHALLOW EXTRACTION WELL
- PIEZOMETER
- PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM CONCENTRATION >= 5 UG/L
- MAXIMUM CONCENTRATION < 5 UG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

J = ESTIMATED VALUE. ANALYTE DETECTED AT A LEVEL LESS THAN THE REPORTING LIMIT (RL) AND GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT (MDL), OR CONCENTRATION ESTIMATED DUE TO ANALYTICAL QUALITY CONTROL DEFICIENCIES (SEE APPENDIX D FOR DETAILS).

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR TRICHLOROETHENE IN DRINKING WATER IS 5 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

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SCALE IN FEET

ANNUAL GROUNDWATER MONITORING REPORT, 2009

HALEY & ALDRICH

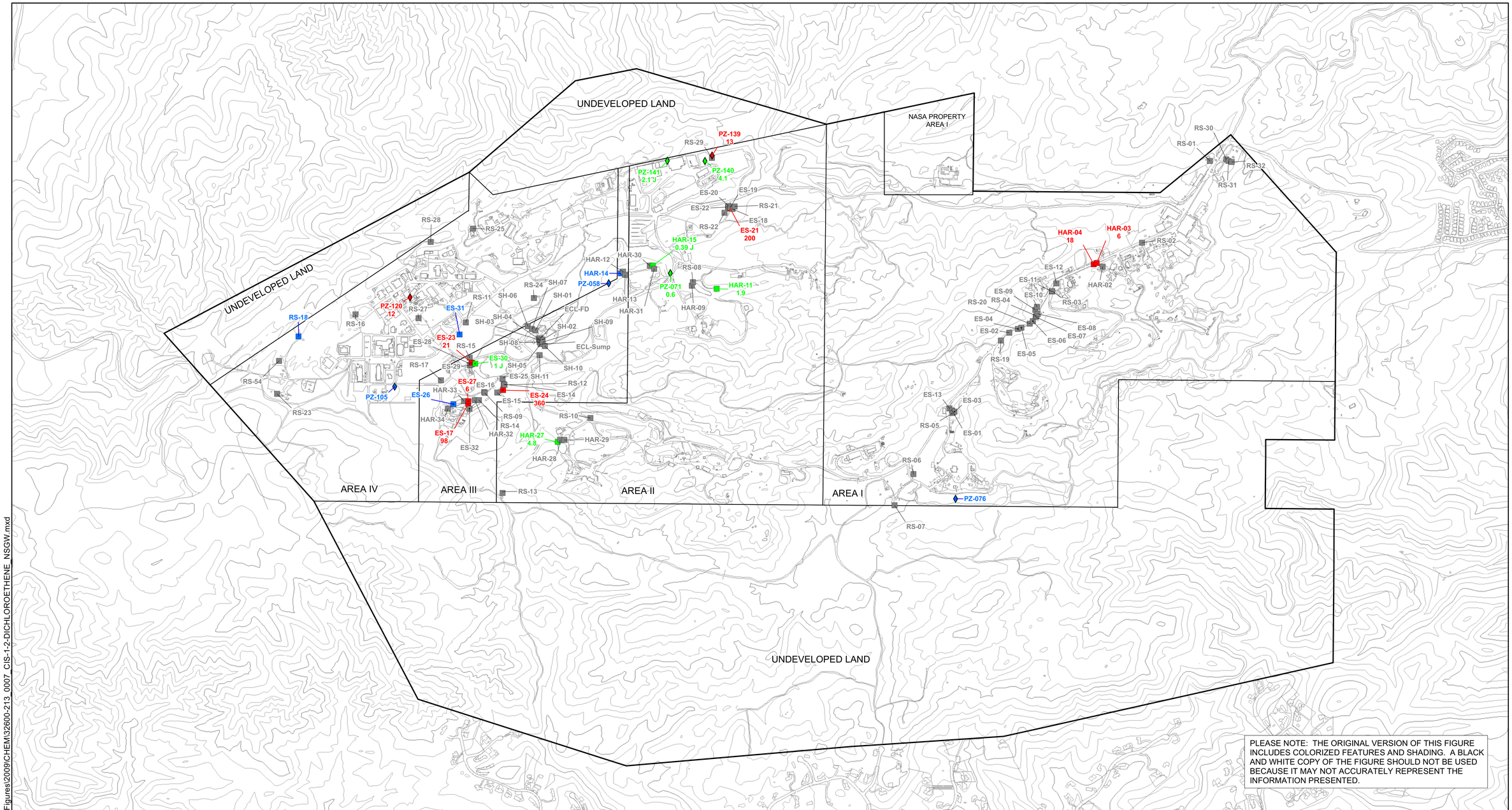
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

MAXIMUM CONCENTRATION OF TRICHLOROETHENE IN NEAR-SURFACE GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 6

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213_0006_TRICHLOROETHENE_NSGW.mxd



PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

ANNUAL GROUNDWATER MONITORING REPORT, 2009

LEGEND

WELL TYPE

- SHALLOW MONITOR WELL
- SHALLOW EXTRACTION WELL
- PIEZOMETER
- PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM CONCENTRATION >= 6 UG/L
- MAXIMUM CONCENTRATION < 6 UG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

J = ESTIMATED VALUE. ANALYTE DETECTED AT A LEVEL LESS THAN THE REPORTING LIMIT (RL) AND GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT (MDL), OR CONCENTRATION ESTIMATED DUE TO ANALYTICAL QUALITY CONTROL DEFICIENCIES (SEE APPENDIX D FOR DETAILS).

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR CIS-1,2-DICHLOROETHENE IN DRINKING WATER IS 6 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

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SCALE IN FEET

HALEY & ALDRICH

THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

MAXIMUM CONCENTRATION OF CIS-1,2-DICHLOROETHENE IN NEAR-SURFACE GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 7

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213_0007_CIS-1-2-DICHLOROETHENE_NSGW.mxd

OS-09 ND
OS-09R AND 0S-10
NOT SAMPLED FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY AREA I

AREA IV

AREA III

AREA II

AREA I

UNDEVELOPED LAND

UNDEVELOPED LAND

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50, RD-54A, RD-57, RD-64, AND RD-65

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- ○ CHATSWORTH FORMATION MONITOR WELL
- ⊙ CHATSWORTH FORMATION EXTRACTION WELL
- △ SPRING
- —— PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM CONCENTRATION >= 5 UG/L
- MAXIMUM CONCENTRATION < 5 UG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

J = ESTIMATED VALUE. ANALYTE DETECTED AT A LEVEL LESS THAN THE REPORTING LIMIT (RL) AND GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT (MDL), OR CONCENTRATION ESTIMATED DUE TO ANALYTICAL QUALITY CONTROL DEFICIENCIES (SEE APPENDIX D FOR DETAILS).

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR TRICHLOROETHENE IN DRINKING WATER IS 5 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

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ANNUAL GROUNDWATER MONITORING REPORT, 2009

HALEY & ALDRICH

THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

MAXIMUM CONCENTRATION OF TRICHLOROETHENE IN CHATSWORTH FORMATION GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 8

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213-0008-TRICHLOROETHENE_CFGW.mxd

OS-09 ND
OS-09R AND 0S-10
NOT SAMPLED FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY AREA I

AREA IV

AREA III

AREA II

AREA I

UNDEVELOPED LAND

UNDEVELOPED LAND

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50, RD-54A, RD-57, RD-64, AND RD-65

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- CHATSWORTH FORMATION MONITOR WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- SPRING
- PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM CONCENTRATION >= 6 UG/L
- MAXIMUM CONCENTRATION < 6 UG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

J = ESTIMATED VALUE. ANALYTE DETECTED AT A LEVEL LESS THAN THE REPORTING LIMIT (RL) AND GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT (MDL), OR CONCENTRATION ESTIMATED DUE TO ANALYTICAL QUALITY CONTROL DEFICIENCIES (SEE APPENDIX D FOR DETAILS).

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR CIS-1,2-DICHLOROETHENE IN DRINKING WATER IS 6 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

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ANNUAL GROUNDWATER MONITORING REPORT, 2009

HALEY & ALDRICH

THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

MAXIMUM CONCENTRATION OF CIS-1,2-DICHLOROETHENE IN CHATSWORTH FORMATION GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 9

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213_0009_CIS-1-2-DICHLOROETHENE_CFGW.mxd

OS-09 ND
OS-09R AND 0S-10
NOT SAMPLED FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY AREA I

AREA IV

AREA III

AREA II

AREA I

UNDEVELOPED LAND

UNDEVELOPED LAND

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50, RD-54A, RD-57, RD-64 AND RD-65.

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- CHATSWORTH FORMATION MONITOR WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- SHALLOW MONITOR WELL
- SHALLOW EXTRACTION WELL
- PIEZOMETER
- SPRING
- PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM CONCENTRATION >= 6 UG/L
- MAXIMUM CONCENTRATION < 6 UG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

J = ESTIMATED VALUE. ANALYTE DETECTED AT A LEVEL LESS THAN THE REPORTING LIMIT (RL) AND GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT (MDL), OR CONCENTRATION ESTIMATED DUE TO ANALYTICAL QUALITY CONTROL DEFICIENCIES (SEE APPENDIX D FOR DETAILS).

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR 1,1-DICHLOROETHENE IN DRINKING WATER IS 6 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

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ANNUAL GROUNDWATER MONITORING REPORT, 2009

HALEY & ALDRICH

THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

MAXIMUM CONCENTRATION OF 1,1-DICHLOROETHENE IN GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 10

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213_0010_1-1-DICHLOROETHENE_GW.mxd

OS-09 ND
OS-09R AND 0S-10
NOT SAMPLED FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY AREA I

AREA IV

AREA III

AREA II

AREA I

UNDEVELOPED LAND

UNDEVELOPED LAND

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50, RD-54A, RD-57, RD-64, AND RD-65

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- CHATSWORTH FORMATION MONITOR WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- SHALLOW MONITOR WELL
- SHALLOW EXTRACTION WELL
- PIEZOMETER
- SPRING
- PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM CONCENTRATION >= 10 UG/L
- MAXIMUM CONCENTRATION < 10 UG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

J = ESTIMATED VALUE. ANALYTE DETECTED AT A LEVEL LESS THAN THE REPORTING LIMIT (RL) AND GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT (MDL), OR CONCENTRATION ESTIMATED DUE TO ANALYTICAL QUALITY CONTROL DEFICIENCIES (SEE APPENDIX D FOR DETAILS).

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR TRANS-1,2-DICHLOROETHENE IN DRINKING WATER IS 10 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

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SCALE IN FEET

ANNUAL GROUNDWATER MONITORING REPORT, 2009

HALEY & ALDRICH

THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

MAXIMUM CONCENTRATION OF TRANS-1,2-DICHLOROETHENE IN GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 11

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213-0011-TRANS-1-2-DICHLOROETHENE_GW.mxd

OS-09 ND
OS-09R AND 0S-10
NOT SAMPLED FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY AREA I

AREA IV

AREA III

AREA II

AREA I

UNDEVELOPED LAND

UNDEVELOPED LAND

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50, RD-54A, RD-57, RD-64, AND RD-65

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- CHATSWORTH FORMATION MONITOR WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- SHALLOW MONITOR WELL
- SHALLOW EXTRACTION WELL
- PIEZOMETER
- SPRING
- PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM CONCENTRATION >= 5 UG/L
- MAXIMUM CONCENTRATION < 5 UG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

J = ESTIMATED VALUE. ANALYTE DETECTED AT A LEVEL LESS THAN THE REPORTING LIMIT (RL) AND GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT (MDL), OR CONCENTRATION ESTIMATED DUE TO ANALYTICAL QUALITY CONTROL DEFICIENCIES (SEE APPENDIX D FOR DETAILS).

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR TETRACHLOROETHENE IN DRINKING WATER IS 5 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

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SCALE IN FEET

ANNUAL GROUNDWATER MONITORING REPORT, 2009

HALEY & ALDRICH

THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

MAXIMUM CONCENTRATION OF TETRACHLOROETHENE IN GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 12

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213-0012-TETRACHLOROETHENE_GW.mxd

OS-09, OS-09R, AND 0S-10
NOT SAMPLED FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY AREA I

AREA IV

AREA III

AREA II

AREA I

UNDEVELOPED LAND

UNDEVELOPED LAND

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50, RD-54A, RD-57, RD-64, AND RD-65

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- ○ CHATSWORTH FORMATION MONITOR WELL
- ⊙ CHATSWORTH FORMATION EXTRACTION WELL
- □ SHALLOW MONITOR WELL
- ⊡ SHALLOW EXTRACTION WELL
- △ SPRING
- PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM CONCENTRATION >= 3 UG/L
- MAXIMUM CONCENTRATION < 3 UG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

J = ESTIMATED VALUE. ANALYTE DETECTED AT A LEVEL LESS THAN THE REPORTING LIMIT (RL) AND GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT (MDL), OR CONCENTRATION ESTIMATED DUE TO ANALYTICAL QUALITY CONTROL DEFICIENCIES (SEE APPENDIX D FOR DETAILS).

THE CALIFORNIA NOTIFICATION LEVEL FOR 1,4-DIOXANE IN DRINKING WATER IS 3 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

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SCALE IN FEET

ANNUAL GROUNDWATER MONITORING REPORT, 2009

HALEY & ALDRICH

THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

MAXIMUM CONCENTRATION OF 1,4-DIOXANE IN GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 13

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213-0013-1-4-DIOXANE_GW.mxd

OS-09, OS-09R AND
OS-10 NOT SAMPLED
FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY
AREA I

AREA IV

AREA III

AREA II

AREA I

UNDEVELOPED LAND

UNDEVELOPED LAND

OS-08 OS-26 OS-27 OS-25 OS-24 OS-02 OS-03 OS-05A OS-05 OS-04 OS-21 OS-16 OS-15 OS-13 OS-28 OS-17 OS-12

RD-68B RD-68A RD-39A RD-39B RD-36B RD-36D RD-84 RD-36A RD-36C RD-30 RD-01 RD-53 RD-38B RD-71 RD-66 RD-37 RD-38A RD-32 RD-72 RD-35B RD-35A RD-43B RD-43C RD-43A RD-73 RD-31 RD-77 RD-25 RD-24 RD-45C RD-45A RD-45B RD-03 RD-02 RD-44 RD-01 RD-10 59.4 RD-76 RD-75 RD-61 RD-46A RD-46B RD-06 RD-07 RD-21 RD-22 RD-23 RD-33A RD-33B RD-33C RD-54B RD-54A RD-54C RD-64 RD-65 RD-91 RD-57 RD-74 RD-50 RD-54 RD-13 RD-55B RD-55A RD-58C RD-58B RD-58A RD-41A RD-41B RD-41C RD-42 RD-40 RD-47 RD-49A RD-49C RD-49B RD-04 RD-09 RD-51C RD-51B RD-56B RD-56A RD-70 RD-85 RD-25 RD-63 RD-28 RD-34A RD-34B RD-34C RD-90 RD-88 RD-87 RD-98 RD-59B RD-59A RD-59C RD-97 RD-95 RD-96 RD-94 RD-89 RD-93 RD-27 RD-17 RD-16 RD-18 RD-19 RD-86 RD-14 RD-60 RD-83 RD-82 RD-81 RD-52B RD-52A RD-80 RD-52C RD-69 RD-78 RD-67 RD-05A RD-05B RD-05C RD-48B RD-48C RD-48A RD-62

PZ-108 PZ-122 WS-13 WS-12 WS-SP WS-09B WS-07 WS-04A WS-14 WS-06 WS-05 WS-09 WS-09A

RS-25 RS-29 RS-21 RS-22 RS-08 RS-11 RS-24 RS-16 RS-18 RS-27 RS-15 RS-17 RS-23 RS-54 RS-12 RS-09 RS-14 RS-32 RS-31 RS-02 RS-03 RS-20 RS-19 RS-05 RS-06 RS-07 RS-13

ES-22 ES-20 ES-18 ES-21 ES-19 ES-31 ES-28 ES-23 ES-29 ES-30 ES-25 ES-16 ES-17 ES-27 ES-15 ES-24 ES-32 ES-26 ES-12 ES-11 ES-09 ES-10 ES-04 ES-02 ES-07 ES-08 ES-06 ES-05 ES-13 ES-01 ES-03

HAR-22 HAR-15 HAR-30 HAR-31 HAR-12 HAR-06 HAR-11 HAR-20 HAR-23 HAR-05 HAR-13 HAR-09 HAR-19 HAR-21 HAR-26 HAR-33 HAR-34 HAR-18 HAR-17 HAR-27 HAR-29 HAR-08 HAR-28 HAR-07 HAR-01 HAR-04 HAR-03 HAR-16 HAR-02 HAR-24

SH-06 SH-07 SH-01 SH-14 SH-03 SH-04 SH-08 SH-02 RD-08 SH-09 RD-11 RD-12 SH-10 WS-08 SH-05 SH-11 ECL-FD ECL-Sump ES-14

RD-92 RD-15 RD-26 RD-18 RD-14 RD-83 RD-82 RD-81 RD-69 RD-80 RD-72 RD-78 RD-84 RD-30 RD-01 RD-37 RD-53 RD-38B RD-38A RD-32 RD-31 RD-73 RD-77 RD-25 RD-24 RD-45C RD-45A RD-45B RD-03 RD-02 RD-44 RD-01 RD-10 59.4 RD-76 RD-75 RD-61 RD-46A RD-46B RD-06 RD-07 RD-21 RD-22 RD-23 RD-33A RD-33B RD-33C RD-54B RD-54A RD-54C RD-64 RD-65 RD-91 RD-57 RD-74 RD-50 RD-54 RD-13 RD-55B RD-55A RD-58C RD-58B RD-58A RD-41A RD-41B RD-41C RD-42 RD-40 RD-47 RD-49A RD-49C RD-49B RD-04 RD-09 RD-51C RD-51B RD-56B RD-56A RD-70 RD-85 RD-25 RD-63 RD-28 RD-34A RD-34B RD-34C RD-90 RD-88 RD-87 RD-98 RD-59B RD-59A RD-59C RD-97 RD-95 RD-96 RD-94 RD-89 RD-93 RD-27 RD-17 RD-16 RD-18 RD-19 RD-86 RD-14 RD-60 RD-83 RD-82 RD-81 RD-52B RD-52A RD-80 RD-52C RD-69 RD-78 RD-67 RD-05A RD-05B RD-05C RD-48B RD-48C RD-48A RD-62

PZ-108 PZ-122 WS-13 WS-12 WS-SP WS-09B WS-07 WS-04A WS-14 WS-06 WS-05 WS-09 WS-09A

RS-25 RS-29 RS-21 RS-22 RS-08 RS-11 RS-24 RS-16 RS-18 RS-27 RS-15 RS-17 RS-23 RS-54 RS-12 RS-09 RS-14 RS-32 RS-31 RS-02 RS-03 RS-20 RS-19 RS-05 RS-06 RS-07 RS-13

ES-22 ES-20 ES-18 ES-21 ES-19 ES-31 ES-28 ES-23 ES-29 ES-30 ES-25 ES-16 ES-17 ES-27 ES-15 ES-24 ES-32 ES-26 ES-12 ES-11 ES-09 ES-10 ES-04 ES-02 ES-07 ES-08 ES-06 ES-05 ES-13 ES-01 ES-03

HAR-22 HAR-15 HAR-30 HAR-31 HAR-12 HAR-06 HAR-11 HAR-20 HAR-23 HAR-05 HAR-13 HAR-09 HAR-19 HAR-21 HAR-26 HAR-33 HAR-34 HAR-18 HAR-17 HAR-27 HAR-29 HAR-08 HAR-28 HAR-07 HAR-01 HAR-04 HAR-03 HAR-16 HAR-02 HAR-24

SH-06 SH-07 SH-01 SH-14 SH-03 SH-04 SH-08 SH-02 RD-08 SH-09 RD-11 RD-12 SH-10 WS-08 SH-05 SH-11 ECL-FD ECL-Sump ES-14

RD-92 RD-15 RD-26 RD-18 RD-14 RD-83 RD-82 RD-81 RD-69 RD-80 RD-72 RD-78 RD-84 RD-30 RD-01 RD-37 RD-53 RD-38B RD-38A RD-32 RD-31 RD-73 RD-77 RD-25 RD-24 RD-45C RD-45A RD-45B RD-03 RD-02 RD-44 RD-01 RD-10 59.4 RD-76 RD-75 RD-61 RD-46A RD-46B RD-06 RD-07 RD-21 RD-22 RD-23 RD-33A RD-33B RD-33C RD-54B RD-54A RD-54C RD-64 RD-65 RD-91 RD-57 RD-74 RD-50 RD-54 RD-13 RD-55B RD-55A RD-58C RD-58B RD-58A RD-41A RD-41B RD-41C RD-42 RD-40 RD-47 RD-49A RD-49C RD-49B RD-04 RD-09 RD-51C RD-51B RD-56B RD-56A RD-70 RD-85 RD-25 RD-63 RD-28 RD-34A RD-34B RD-34C RD-90 RD-88 RD-87 RD-98 RD-59B RD-59A RD-59C RD-97 RD-95 RD-96 RD-94 RD-89 RD-93 RD-27 RD-17 RD-16 RD-18 RD-19 RD-86 RD-14 RD-60 RD-83 RD-82 RD-81 RD-52B RD-52A RD-80 RD-52C RD-69 RD-78 RD-67 RD-05A RD-05B RD-05C RD-48B RD-48C RD-48A RD-62

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A,
RD-50, RD-54A, RD-57, RD-64, AND RD-65

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- CHATSWORTH FORMATION MONITOR WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- SHALLOW MONITOR WELL
- SHALLOW EXTRACTION WELL
- PIEZOMETER
- SPRING
- PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM CONCENTRATION >= 6 UG/L
- MAXIMUM CONCENTRATION < 6 UG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR PERCHLORATE IN DRINKING WATER IS 6 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

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SCALE IN FEET

ANNUAL GROUNDWATER MONITORING REPORT, 2009

HALEY & ALDRICH

THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

MAXIMUM CONCENTRATION OF PERCHLORATE IN GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 14

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OS-09, OS-09R, AND 0S-10
NOT SAMPLED FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY
AREA I

AREA IV

AREA III

AREA II

AREA I

UNDEVELOPED LAND

UNDEVELOPED LAND

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A,
RD-50, RD-54A, RD-57, RD-64, AND RD-65

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- ○ CHATSWORTH FORMATION MONITOR WELL
- ⊙ CHATSWORTH FORMATION EXTRACTION WELL
- □ SHALLOW MONITOR WELL
- ⊡ SHALLOW EXTRACTION WELL
- △ SPRING
- —— PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM CONCENTRATION >= 0.01 UG/L
- MAXIMUM CONCENTRATION < 0.01 UG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

J = ESTIMATED VALUE. ANALYTE DETECTED AT A LEVEL LESS THAN THE REPORTING LIMIT (RL) AND GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT (MDL), OR CONCENTRATION ESTIMATED DUE TO ANALYTICAL QUALITY CONTROL DEFICIENCIES (SEE APPENDIX D FOR DETAILS).

THE CALIFORNIA NOTIFICATION LEVEL FOR N-NITROSODIMETHYLAMINE IN DRINKING WATER IS 0.01 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ANALYZED BY EPA METHOD 1625M ARE PRESENTED ON THIS FIGURE.

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SCALE IN FEET

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VENTURA COUNTY, CALIFORNIA

MAXIMUM CONCENTRATION OF N-NITROSODIMETHYLAMINE (NDMA) IN GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 15

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213-0015-N-NITROSODIMETHYLAMINE_GW.mxd

OS-09 ND
OS-09R AND 0S-10
NOT SAMPLED FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY AREA I

AREA IV

AREA III

AREA II

AREA I

UNDEVELOPED LAND

UNDEVELOPED LAND

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50, RD-54A, RD-57, RD-64, AND RD-65

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- CHATSWORTH FORMATION MONITOR WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- SHALLOW MONITOR WELL
- SHALLOW EXTRACTION WELL
- PIEZOMETER
- SPRING
- PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM CONCENTRATION >= 80 UG/L
- MAXIMUM CONCENTRATION < 80 UG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

J = ESTIMATED VALUE. ANALYTE DETECTED AT A LEVEL LESS THAN THE REPORTING LIMIT (RL) AND GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT (MDL), OR CONCENTRATION ESTIMATED DUE TO ANALYTICAL QUALITY CONTROL DEFICIENCIES (SEE APPENDIX D FOR DETAILS).

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR TOTAL TRIHALOMETHANES INCLUDING CHLOROFORM IS 80 UG/L IN DRINKING WATER.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

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SCALE IN FEET

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MAXIMUM CONCENTRATION OF CHLOROFORM IN GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 16

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213-0016-CHLOROFORM_GW.mxd

OS-09 ND
OS-09R AND 0S-10
NOT SAMPLED FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY AREA I

AREA IV

AREA III

AREA II

AREA I

UNDEVELOPED LAND

UNDEVELOPED LAND

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50, RD-54A, RD-57, RD-64, AND RD-65

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- CHATSWORTH FORMATION MONITOR WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- SHALLOW MONITOR WELL
- SHALLOW EXTRACTION WELL
- PIEZOMETER
- SPRING
- PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM CONCENTRATION >= 0.5 UG/L
- MAXIMUM CONCENTRATION < 0.5 UG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

J = ESTIMATED VALUE. ANALYTE DETECTED AT A LEVEL LESS THAN THE REPORTING LIMIT (RL) AND GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT (MDL), OR CONCENTRATION ESTIMATED DUE TO ANALYTICAL QUALITY CONTROL DEFICIENCIES (SEE APPENDIX D FOR DETAILS).

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR CARBON TETRACHLORIDE IN DRINKING WATER IS 0.5 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

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SCALE IN FEET

ANNUAL GROUNDWATER MONITORING REPORT, 2009

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MAXIMUM CONCENTRATION OF CARBON TETRACHLORIDE IN GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 17

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213-0017-CARBON-TETRACHLORIDE_GW.mxd

OS-09 ND
OS-09R AND 0S-10
NOT SAMPLED FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY AREA I

AREA IV

AREA III

AREA II

AREA I

UNDEVELOPED LAND

UNDEVELOPED LAND

RD-73 18 J

RD-54C 0.1 J

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50, RD-54A, RD-57, RD-64, AND RD-65

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- CHATSWORTH FORMATION MONITOR WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- SHALLOW MONITOR WELL
- SHALLOW EXTRACTION WELL
- PIEZOMETER
- SPRING
- PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM CONCENTRATION >= 1 UG/L
- MAXIMUM CONCENTRATION < 1 UG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

J = ESTIMATED VALUE. ANALYTE DETECTED AT A LEVEL LESS THAN THE REPORTING LIMIT (RL) AND GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT (MDL), OR CONCENTRATION ESTIMATED DUE TO ANALYTICAL QUALITY CONTROL DEFICIENCIES (SEE APPENDIX D FOR DETAILS).

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR BENZENE IN DRINKING WATER IS 1 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

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SCALE IN FEET

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MAXIMUM CONCENTRATION OF BENZENE IN GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 18

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OS-09 ND
OS-09R AND 0S-10
NOT SAMPLED FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY AREA I

AREA IV

AREA III

AREA II

AREA I

UNDEVELOPED LAND

UNDEVELOPED LAND

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50, RD-54A, RD-57, RD-64, AND RD-65

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- CHATSWORTH FORMATION MONITOR WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- SHALLOW MONITOR WELL
- SHALLOW EXTRACTION WELL
- PIEZOMETER
- SPRING
- PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM CONCENTRATION >= 150 UG/L
- MAXIMUM CONCENTRATION < 150 UG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

J = ESTIMATED VALUE. ANALYTE DETECTED AT A LEVEL LESS THAN THE REPORTING LIMIT (RL) AND GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT (MDL), OR CONCENTRATION ESTIMATED DUE TO ANALYTICAL QUALITY CONTROL DEFICIENCIES (SEE APPENDIX D FOR DETAILS).

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR TOLUENE IN DRINKING WATER IS 150 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

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MAXIMUM CONCENTRATION OF TOLUENE IN GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 19

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213-0019-TOLUENE_GW.mxd

OS-09 ND
OS-09R AND 0S-10
NOT SAMPLED FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY AREA I

AREA IV

AREA III

AREA II

AREA I

UNDEVELOPED LAND

UNDEVELOPED LAND

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50, RD-54A, RD-57, RD-64, AND RD-65

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- CHATSWORTH FORMATION MONITOR WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- SHALLOW MONITOR WELL
- SHALLOW EXTRACTION WELL
- PIEZOMETER
- SPRING
- PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM CONCENTRATION >= 300 UG/L
- MAXIMUM CONCENTRATION < 300 UG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR ETHYLBENZENE IN DRINKING WATER IS 300 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

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MAXIMUM CONCENTRATION OF ETHYLBENZENE IN GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 20

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213-0020-ETHYLBENZENE_GW.mxd

OS-09 ND
OS-09R AND 0S-10
NOT SAMPLED FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY AREA I

AREA IV

AREA III

AREA II

AREA I

UNDEVELOPED LAND

UNDEVELOPED LAND

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50, RD-54A, RD-57, RD-64, AND RD-65

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- CHATSWORTH FORMATION MONITOR WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- SHALLOW MONITOR WELL
- SHALLOW EXTRACTION WELL
- PIEZOMETER
- SPRING
- PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM CONCENTRATION >= 1750 UG/L
- MAXIMUM CONCENTRATION < 1750 UG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR TOTAL XYLENES IN DRINKING WATER IS 1750 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

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SCALE IN FEET

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MAXIMUM CONCENTRATION OF M- & P-XYLENES IN GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 21

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213-0021-M-P-XYLENES_GW.mxd

OS-09 ND
OS-09R AND 0S-10
NOT SAMPLED FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY AREA I

AREA IV

AREA III

AREA II

AREA I

UNDEVELOPED LAND

UNDEVELOPED LAND

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50, RD-54A, RD-57, RD-64, AND RD-65

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- CHATSWORTH FORMATION MONITOR WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- SHALLOW MONITOR WELL
- SHALLOW EXTRACTION WELL
- PIEZOMETER
- SPRING
- PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM CONCENTRATION >= 1750 UG/L
- MAXIMUM CONCENTRATION < 1750 UG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR TOTAL XYLENES IN DRINKING WATER IS 1750 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

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SCALE IN FEET

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MAXIMUM CONCENTRATION OF O-XYLENE IN GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 22

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213-0022-O-XYLENE_GW.mxd

OS-09 ND
OS-09R AND 0S-10
NOT SAMPLED FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY AREA I

AREA I

AREA II

AREA III

AREA IV

OS-02 OS-03 OS-05A OS-05 OS-04 OS-08 OS-21 OS-25 OS-26 OS-27 OS-12 OS-13 OS-15 OS-16 OS-17 OS-28

RD-59B RD-59A RD-59C RD-63 RD-34B RD-34C RD-34A 0.3 J RD-68B RD-68A RD-70 RD-56B RD-56A RD-51C RD-51A RD-51B PZ-139 PZ-140 PZ-141 RD-60 3 J RD-85 RD-86 RD-18 RD-19 RD-98 RD-27 RD-17 RD-16 RD-24 PZ-120 1.8 RD-57 RD-33A 0.3 J RD-33C RD-33B RD-54B RD-22 RD-64 RD-21 RD-54C RD-54A RD-50 RD-13 RD-65 4 J RD-23 3 J RD-91 RD-07 RD-18 RD-29 RD-67 RD-55B RD-55A RD-58C RD-58A RD-58B RD-05A RD-05B RD-05C RD-06 RD-09 RD-26 RD-15 RD-14 RD-92 RD-49A RD-49C RD-49B RD-04 RD-41A RD-41B RD-41C RD-42 RD-40 RD-08 RD-11 RD-12 RD-69 RD-52B RD-52C RD-52A RD-80 RD-83 RD-82 RD-81 RD-47 RD-78 RD-72 RD-73 RD-77 RD-45C RD-45A RD-45B RD-10 RD-01 RD-02 RD-44 RD-46A RD-46B RD-03 PZ-076 RD-61 RD-62 RD-48B RD-48C RD-48A RD-07 RD-75 RD-76 RD-39A RD-39B RD-36B RD-36D RD-36A RD-36C RD-84 RD-30 RD-01 RD-53 1 J RD-37 RD-71 RD-38B RD-66 RD-38A RD-32 RD-35B RD-35A RD-31 RD-43B RD-43C RD-43A

WS-13 WS-12 WS-SP WS-07 WS-09B WS-04A WS-06 WS-05 WS-09 WS-09A WS-08 WS-14

RS-25 RS-28 RS-30 RS-29 RS-21 RS-22 RS-18 RS-19 RS-24 RS-11 RS-16 RS-27 RS-15 RS-17 RS-54 RS-23 RS-09 RS-14 RS-12 RS-10 RS-13 RS-06 RS-05 RS-07 RS-01 RS-31 RS-32 RS-02 RS-03 RS-19

ES-20 ES-22 ES-21 ES-31 ES-23 ES-30 ES-17 2 J ES-24 43 J ES-27 ES-16 ES-15 ES-32 ES-26 ES-14 ES-25 ES-29 ES-28 ES-13 ES-01 ES-03 ES-12 ES-11 ES-10 ES-09 ES-04 ES-02 ES-08 ES-07 ES-06 ES-05

SH-06 SH-01 SH-07 SH-03 SH-04 SH-08 SH-02 SH-09 SH-05 SH-10 SH-11 ECL-FD ECL-Sump

HAR-22 HAR-15 HAR-31 HAR-30 HAR-12 HAR-14 0.17 J HAR-06 HAR-23 HAR-05 HAR-09 HAR-13 HAR-19 HAR-21 HAR-20 HAR-11 HAR-26 HAR-33 HAR-17 0.67 J HAR-34 HAR-32 HAR-18 3 J HAR-27 HAR-29 HAR-28 HAR-08 HAR-07 0.22 J HAR-01 HAR-04 HAR-03 HAR-25 HAR-16 HAR-02 HAR-24

PZ-071 PZ-058 PZ-105

RD-90 RD-88 RD-87 RD-94 RD-97 RD-95 RD-96 RD-89 RD-93 RD-74 RD-20 RD-91 RD-64 RD-54A RD-21 RD-54C RD-50 RD-13 RD-55B RD-55A RD-58C RD-58A RD-58B RD-67 RD-05A RD-05B RD-05C RD-06 RD-09 RD-26 RD-15 RD-14 RD-92 RD-49A RD-49C RD-49B RD-04 RD-41A RD-41B RD-41C RD-42 RD-40 RD-08 RD-11 RD-12 RD-69 RD-52B RD-52C RD-52A RD-80 RD-83 RD-82 RD-81 RD-47 RD-78 RD-72 RD-73 RD-77 RD-45C RD-45A RD-45B RD-10 RD-01 RD-02 RD-44 RD-46A RD-46B RD-03 PZ-076 RD-61 RD-62 RD-48B RD-48C RD-48A RD-07 RD-75 RD-76 RD-39A RD-39B RD-36B RD-36D RD-36A RD-36C RD-84 RD-30 RD-01 RD-53 1 J RD-37 RD-71 RD-38B RD-66 RD-38A RD-32 RD-35B RD-35A RD-31 RD-43B RD-43C RD-43A

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50, RD-54A, RD-57, RD-64, AND RD-65

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- CHATSWORTH FORMATION MONITOR WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- SHALLOW MONITOR WELL
- SHALLOW EXTRACTION WELL
- PIEZOMETER
- SPRING
- PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM CONCENTRATION >= 5 UG/L
- MAXIMUM CONCENTRATION < 5 UG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

J = ESTIMATED VALUE. ANALYTE DETECTED AT A LEVEL LESS THAN THE REPORTING LIMIT (RL) AND GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT (MDL), OR CONCENTRATION ESTIMATED DUE TO ANALYTICAL QUALITY CONTROL DEFICIENCIES (SEE APPENDIX D FOR DETAILS).

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR 1,1-DICHLOROETHANE IN DRINKING WATER IS 5 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

N W E S

0 1500 3000

SCALE IN FEET

ANNUAL GROUNDWATER MONITORING REPORT, 2009

HALEY & ALDRICH

THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

MAXIMUM CONCENTRATION OF 1,1-DICHLOROETHANE IN GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 23

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213-0023-1-1-DICHLOROETHANE_GW.mxd

OS-09 ND
OS-09R AND 0S-10
NOT SAMPLED FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY AREA I

AREA I

AREA II

AREA III

AREA IV

OS-02 OS-03 OS-04 OS-05 OS-05A OS-08 OS-09 OS-10 OS-11 OS-12 OS-13 OS-15 OS-16 OS-17 OS-21 OS-25 OS-26 OS-27 OS-28

RD-01 RD-02 RD-03 RD-04 RD-05A RD-05B RD-05C RD-06 RD-07 RD-10 RD-13 RD-15 RD-16 RD-17 RD-18 RD-19 RD-20 RD-21 RD-22 RD-23 0.6 J RD-24 RD-26 RD-27 RD-29 RD-31 RD-32 RD-33A RD-33B RD-33C RD-34A RD-34B RD-34C RD-36A RD-36B RD-36C RD-36D RD-37 RD-38A RD-38B RD-39A RD-39B RD-41A RD-41B RD-41C RD-42 RD-43A RD-43B RD-43C RD-44 RD-45A RD-45B RD-45C RD-46A RD-46B RD-47 RD-48A RD-48B RD-48C RD-49A RD-49B RD-49C RD-50 RD-51A RD-51B RD-51C RD-52A RD-52B RD-52C RD-53 RD-54A RD-54B RD-54C RD-55A RD-55B RD-56A RD-56B RD-57 RD-58A RD-58B RD-58C RD-59A RD-59B RD-59C RD-60 3 RD-61 RD-62 RD-63 RD-64 RD-65 RD-66 RD-67 RD-68A RD-68B RD-69 RD-70 RD-71 RD-72 RD-73 RD-75 RD-76 RD-77 RD-78 RD-80 RD-81 RD-82 RD-83 RD-84 RD-85 RD-86 RD-87 RD-88 RD-89 RD-90 RD-91 RD-92 RD-93 RD-94 RD-95 RD-96 RD-97 RD-98

PZ-071 PZ-076 PZ-105 PZ-120 PZ-139 PZ-140 PZ-141

ES-01 ES-02 ES-03 ES-04 ES-05 ES-06 ES-07 ES-08 ES-09 ES-10 ES-11 ES-12 ES-13 ES-14 ES-15 ES-16 ES-17 ES-18 ES-19 ES-20 ES-21 ES-22 ES-23 ES-24 ES-25 ES-26 ES-27 ES-29 ES-30 ES-31

HAR-01 HAR-02 HAR-03 HAR-04 HAR-05 HAR-06 HAR-07 HAR-08 HAR-09 HAR-11 HAR-12 HAR-13 HAR-14 HAR-15 HAR-16 HAR-17 HAR-18 HAR-19 HAR-20 HAR-21 HAR-22 HAR-23 HAR-24 HAR-25 HAR-26 HAR-27 HAR-28 HAR-29 HAR-30 HAR-31 HAR-32 HAR-33 HAR-34

RS-01 RS-02 RS-03 RS-04 RS-05 RS-06 RS-07 RS-08 RS-09 RS-10 RS-11 RS-12 RS-13 RS-14 RS-15 RS-16 RS-17 RS-19 RS-20 RS-21 RS-22 RS-23 RS-24 RS-25 RS-26 RS-27 RS-28 RS-29 RS-30 RS-31 RS-32 RS-54

WS-04A WS-05 WS-06 WS-07 WS-08 WS-09 WS-09A WS-09B WS-11 WS-12 WS-13 WS-14 WS-SP

SH-01 SH-02 SH-03 SH-04 SH-05 SH-06 SH-07 SH-08 SH-09 SH-10 SH-11

ECL-FD ECL-Sump

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-33B, RD-50, RD-54A, RD-57, RD-64, AND RD-65

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- CHATSWORTH FORMATION MONITOR WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- SHALLOW MONITOR WELL
- SHALLOW EXTRACTION WELL
- PIEZOMETER
- SPRING
- PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM CONCENTRATION >= 0.5 UG/L
- MAXIMUM CONCENTRATION < 0.5 UG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

J = ESTIMATED VALUE. ANALYTE DETECTED AT A LEVEL LESS THAN THE REPORTING LIMIT (RL) AND GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT (MDL), OR CONCENTRATION ESTIMATED DUE TO ANALYTICAL QUALITY CONTROL DEFICIENCIES (SEE APPENDIX D FOR DETAILS).

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR 1,2-DICHLOROETHANE IN DRINKING WATER IS 0.5 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

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SCALE IN FEET

ANNUAL GROUNDWATER MONITORING REPORT, 2009

HALEY & ALDRICH

THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

MAXIMUM CONCENTRATION OF 1,2-DICHLOROETHANE IN GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 24

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213-0024-1-2-DICHLOROETHANE_GW.mxd

OS-09 ND
OS-09R AND 0S-10
NOT SAMPLED FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY AREA I

AREA IV

AREA III

AREA II

AREA I

UNDEVELOPED LAND

UNDEVELOPED LAND

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50, RD-54A, RD-57, RD-64, AND RD-65

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- CHATSWORTH FORMATION MONITOR WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- SHALLOW MONITOR WELL
- SHALLOW EXTRACTION WELL
- PIEZOMETER
- SPRING
- PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM CONCENTRATION >= 5 UG/L
- MAXIMUM CONCENTRATION < 5 UG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR METHYLENE CHLORIDE IN DRINKING WATER IS 5 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

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SCALE IN FEET

ANNUAL GROUNDWATER MONITORING REPORT, 2009

HALEY & ALDRICH

THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

MAXIMUM CONCENTRATION OF METHYLENE CHLORIDE IN GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 25

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213-0025-METHYLENE_CHLORIDE_GW.mxd

OS-09 ND
OS-09R AND 0S-10
NOT SAMPLED FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY AREA I

AREA IV

AREA III

AREA II

AREA I

UNDEVELOPED LAND

UNDEVELOPED LAND

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50, RD-54A, RD-57, RD-64, AND RD-65

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- CHATSWORTH FORMATION MONITOR WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- SHALLOW MONITOR WELL
- SHALLOW EXTRACTION WELL
- PIEZOMETER
- SPRING
- PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM CONCENTRATION >= 200 UG/L
- MAXIMUM CONCENTRATION < 200 UG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

J = ESTIMATED VALUE. ANALYTE DETECTED AT A LEVEL LESS THAN THE REPORTING LIMIT (RL) AND GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT (MDL), OR CONCENTRATION ESTIMATED DUE TO ANALYTICAL QUALITY CONTROL DEFICIENCIES (SEE APPENDIX D FOR DETAILS).

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR 1,1,1-TRICHLOROETHANE IN DRINKING WATER IS 200 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

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SCALE IN FEET

ANNUAL GROUNDWATER MONITORING REPORT, 2009

HALEY & ALDRICH

THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

MAXIMUM CONCENTRATION OF 1,1,1-TRICHLOROETHANE IN GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 26

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213-0026-1-1-1-TRICHLOROETHANE_GW.mxd

OS-09 ND
OS-09R AND 0S-10
NOT SAMPLED FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY AREA I

AREA IV

AREA III

AREA II

AREA I

UNDEVELOPED LAND

UNDEVELOPED LAND

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50, RD-54A, RD-57, RD-64, AND RD-65

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- CHATSWORTH FORMATION MONITOR WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- SHALLOW MONITOR WELL
- SHALLOW EXTRACTION WELL
- PIEZOMETER
- SPRING
- PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM CONCENTRATION >= 5 UG/L
- MAXIMUM CONCENTRATION < 5 UG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR 1,1,2-TRICHLOROETHANE IN DRINKING WATER IS 5 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

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SCALE IN FEET

ANNUAL GROUNDWATER MONITORING REPORT, 2009

HALEY & ALDRICH

THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

MAXIMUM CONCENTRATION OF 1,1,2-TRICHLOROETHANE IN GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 27

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213-0027-1-1-2-TRICHLOROETHANE_GW.mxd

OS-09 ND
OS-09R AND 0S-10
NOT SAMPLED FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY AREA I

AREA IV

AREA III

AREA II

AREA I

UNDEVELOPED LAND

UNDEVELOPED LAND

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50, RD-54A, RD-57, RD-64, AND RD-65

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- CHATSWORTH FORMATION MONITOR WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- SHALLOW MONITOR WELL
- SHALLOW EXTRACTION WELL
- PIEZOMETER
- SPRING
- PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM CONCENTRATION >= 0.5 UG/L
- MAXIMUM CONCENTRATION < 0.5 UG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

J = ESTIMATED VALUE. ANALYTE DETECTED AT A LEVEL LESS THAN THE REPORTING LIMIT (RL) AND GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT (MDL), OR CONCENTRATION ESTIMATED DUE TO ANALYTICAL QUALITY CONTROL DEFICIENCIES (SEE APPENDIX D FOR DETAILS).

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR VINYL CHLORIDE IN DRINKING WATER IS 0.5 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

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SCALE IN FEET

ANNUAL GROUNDWATER MONITORING REPORT, 2009

HALEY & ALDRICH

THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

MAXIMUM CONCENTRATION OF VINYL CHLORIDE IN GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 28

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213-0028-VINYL_CHLORIDE_GW.mxd

OS-09 ND
OS-09R AND 0S-10
NOT SAMPLED FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY AREA I

AREA IV

AREA III

AREA II

AREA I

UNDEVELOPED LAND

UNDEVELOPED LAND

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50, RD-54A, RD-57, RD-64, AND RD-65

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- CHATSWORTH FORMATION MONITOR WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- SHALLOW MONITOR WELL
- SHALLOW EXTRACTION WELL
- PIEZOMETER
- SPRING
- PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM DETECTED CONCENTRATION IN UG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

J = ESTIMATED VALUE. ANALYTE DETECTED AT A LEVEL LESS THAN THE REPORTING LIMIT (RL) AND GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT (MDL), OR CONCENTRATION ESTIMATED DUE TO ANALYTICAL QUALITY CONTROL DEFICIENCIES (SEE APPENDIX D FOR DETAILS).

METHYL ETHYL KETONE DOES NOT HAVE A CALIFORNIA MAXIMUM CONTAMINANT LEVEL OR A CALIFORNIA NOTIFICATION LEVEL FOR DRINKING WATER.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

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SCALE IN FEET

ANNUAL GROUNDWATER MONITORING REPORT, 2009

HALEY & ALDRICH

THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

MAXIMUM CONCENTRATION OF METHYL ETHYL KETONE IN GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 29

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213-0029-2-BUTANONE_GW.mxd

OS-09 ND
OS-09R AND 0S-10
NOT SAMPLED FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY AREA I

AREA IV

AREA III

AREA II

AREA I

UNDEVELOPED LAND

UNDEVELOPED LAND

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50, RD-54A, RD-57, RD-64, AND RD-65

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- CHATSWORTH FORMATION MONITOR WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- SHALLOW MONITOR WELL
- SHALLOW EXTRACTION WELL
- PIEZOMETER
- SPRING
- PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM DETECTED CONCENTRATION IN UG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

ACETONE DOES NOT HAVE A CALIFORNIA MAXIMUM CONTAMINANT LEVEL OR A CALIFORNIA NOTIFICATION LEVEL FOR DRINKING WATER.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

N W E S

0 1500 3000

SCALE IN FEET

ANNUAL GROUNDWATER MONITORING REPORT, 2009

HALEY & ALDRICH

THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

MAXIMUM CONCENTRATION OF ACETONE IN GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 30

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213-0030-ACETONE_GW.mxd

OS-09 ND
OS-09R AND 0S-10
NOT SAMPLED FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY AREA I

AREA IV

AREA III

AREA II

AREA I

UNDEVELOPED LAND

UNDEVELOPED LAND

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50, RD-54A, RD-57, RD-64, AND RD-65

LEGEND

WELL TYPE

- CHATSWORTH FORMATION MONITOR WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- SHALLOW MONITOR WELL
- SHALLOW EXTRACTION WELL
- PIEZOMETER
- SPRING
- PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM CONCENTRATION >= 150 UG/L
- MAXIMUM CONCENTRATION < 150 UG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

J = ESTIMATED VALUE. ANALYTE DETECTED AT A LEVEL LESS THAN THE REPORTING LIMIT (RL) AND GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT (MDL), OR CONCENTRATION ESTIMATED DUE TO ANALYTICAL QUALITY CONTROL DEFICIENCIES (SEE APPENDIX D FOR DETAILS).

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR TRICHLOROFLUOROMETHANE IN DRINKING WATER IS 150 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

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SCALE IN FEET

ANNUAL GROUNDWATER MONITORING REPORT, 2009

HALEY & ALDRICH

THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

MAXIMUM CONCENTRATION OF TRICHLOROFLUOROMETHANE IN GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 31

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213-0031-TRICHLOROFLUOROMETHANE_GW.mxd

OS-09 ND
OS-09R AND 0S-10
NOT SAMPLED FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY AREA I

AREA I

AREA II

AREA III

AREA IV

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50, RD-54A, RD-57, RD-64, AND RD-65

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- CHATSWORTH FORMATION MONITOR WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- SHALLOW MONITOR WELL
- SHALLOW EXTRACTION WELL
- PIEZOMETER
- SPRING
- PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM CONCENTRATION >= 1200 UG/L
- MAXIMUM CONCENTRATION < 1200 UG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

J = ESTIMATED VALUE. ANALYTE DETECTED AT A LEVEL LESS THAN THE REPORTING LIMIT (RL) AND GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT (MDL), OR CONCENTRATION ESTIMATED DUE TO ANALYTICAL QUALITY CONTROL DEFICIENCIES (SEE APPENDIX D FOR DETAILS).

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE IN DRINKING WATER IS 1200 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

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SCALE IN FEET

ANNUAL GROUNDWATER MONITORING REPORT, 2009

HALEY & ALDRICH

THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

MAXIMUM CONCENTRATION OF 1,1,2-TRICHLORO-1,2,2-TRIFLUORO-ETHANE IN GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 32

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213-0032-1-1-2-TRICHLORO-1-2-2-TRIFLUOROETHANE.mxd

OS-09, OS-09R, AND 0S-10
NOT SAMPLED FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY AREA I

AREA IV

AREA III

AREA II

AREA I

UNDEVELOPED LAND

UNDEVELOPED LAND

RD-51C 0.11
RD-51B 0.056 J
RD-09
RD-49A 0.41
RD-49C
HAR-20
RD-49B
WS-06 0.035 J
RD-04 1.4
WS-09 0.057 J
RD-41A
RD-41B 0.034 J
HAR-18 0.043 J
HAR-07 0.15
HAR-08
WS-09A 0.16
RD-58B 0.046 J
RD-58A
RD-55B
RD-55A
RD-69
RD-10 0.04 J
RD-01 0.24
WS-05 0.33
RD-02 0.062 J
RD-44

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50, RD-54A, RD-57, RD-64, AND RD-65

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- CHATSWORTH FORMATION MONITOR WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- SHALLOW MONITOR WELL
- SHALLOW EXTRACTION WELL
- SPRING
- PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM DETECTED CONCENTRATION IN MG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

J = ESTIMATED VALUE. ANALYTE DETECTED AT A LEVEL LESS THAN THE REPORTING LIMIT (RL) AND GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT (MDL), OR CONCENTRATION ESTIMATED DUE TO ANALYTICAL QUALITY CONTROL DEFICIENCIES (SEE APPENDIX D FOR DETAILS).

AMMONIA DOES NOT HAVE A CALIFORNIA MAXIMUM CONTAMINANT LEVEL OR A CALIFORNIA NOTIFICATION LEVEL FOR DRINKING WATER.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

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SCALE IN FEET

ANNUAL GROUNDWATER MONITORING REPORT, 2009

HALEY & ALDRICH

THE BOEING COMPANY
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VENTURA COUNTY, CALIFORNIA

MAXIMUM CONCENTRATION OF AMMONIA AS NITROGEN IN GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 33

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213-0033-AMMONIA-AS-NITROGEN_GW.mxd

OS-09, OS-09R, AND 0S-10
NOT SAMPLED FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY
AREA I

AREA IV

AREA III

AREA II

AREA I

UNDEVELOPED LAND

UNDEVELOPED LAND

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A,
RD-50, RD-54A, RD-57, RD-64, AND RD-65

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- ○ CHATSWORTH FORMATION MONITOR WELL
- ⊙ CHATSWORTH FORMATION EXTRACTION WELL
- □ SHALLOW MONITOR WELL
- ⊡ SHALLOW EXTRACTION WELL
- ◊ PIEZOMETER
- △ SPRING
- —— PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM CONCENTRATION >= 2 MG/L
- MAXIMUM CONCENTRATION < 2 MG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

J = ESTIMATED VALUE. ANALYTE DETECTED AT A LEVEL LESS THAN THE REPORTING LIMIT (RL) AND GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT (MDL), OR CONCENTRATION ESTIMATED DUE TO ANALYTICAL QUALITY CONTROL DEFICIENCIES (SEE APPENDIX D FOR DETAILS).

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR FLUORIDE IN DRINKING WATER IS 2 MG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

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SCALE IN FEET

ANNUAL GROUNDWATER MONITORING REPORT, 2009

HALEY & ALDRICH

THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

MAXIMUM CONCENTRATION OF FLUORIDE IN GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 34

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213-0034-FLUORIDE.mxd

OS-09, OS-09R, AND 0S-10
NOT SAMPLED FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY
AREA I

AREA I

AREA II

AREA III

AREA IV

UNDEVELOPED LAND

UNDEVELOPED LAND

RD-69
110

RD-51C
RD-51B
13 J
RD-51A
PZ-139
PZ-141
PZ-140
RD-09
33 J
RD-49A
28 J
RD-49C
21 J
HAR-20
11 J
RD-49B
WS-06
35 J
RD-04
35 J
WS-09
11 J
PZ-006
79
PZ-027
16 J
RD-08
RD-11
19 J
RD-12
16 J
PZ-025
SH-08
HAR-26
PZ-026
RD-13
RD-55B
RD-55A
HAR-18
RD-58B
15 J
RD-58A
WS-09A
47 J
HAR-07
14 J
HAR-08
12 J
RD-41B
89
RD-10
9.2 J
RD-01
57
RD-02
39 J
RD-44
12 J

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A,
RD-50, RD-54A, RD-57, RD-64, AND RD-65

AT LOCATIONS SAMPLED AT MULTIPLE DEPTH INTERVALS,
ONLY THE HIGHEST CONCENTRATION IS PRESENTED.
PZ-006 WAS THE ONLY MULTI-LEVEL LOCATION SAMPLED IN 2009.

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- CHATSWORTH FORMATION MONITOR WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- SHALLOW MONITOR WELL
- SHALLOW EXTRACTION WELL
- PIEZOMETER
- SPRING
- PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM CONCENTRATION >= 100 UG/L
- MAXIMUM CONCENTRATION < 100 UG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

J = ESTIMATED VALUE. ANALYTE DETECTED AT A LEVEL LESS THAN THE REPORTING LIMIT (RL) AND GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT (MDL), OR CONCENTRATION ESTIMATED DUE TO ANALYTICAL QUALITY CONTROL DEFICIENCIES (SEE APPENDIX D FOR DETAILS).

THE CALIFORNIA NOTIFICATION LEVEL FOR FORMALDEHYDE IN DRINKING WATER IS 100 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

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SCALE IN FEET

ANNUAL GROUNDWATER MONITORING REPORT, 2009

HALEY & ALDRICH

THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

MAXIMUM CONCENTRATION OF FORMALDEHYDE IN GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 35

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213-0035-FORMALDEHYDE_GW.mxd

OS-09 AND 0S-10 ND
OS-09R NOT SAMPLED FOR THIS ANALYTE IN 2009

UNDEVELOPED LAND

NASA PROPERTY AREA I

AREA IV

AREA III

AREA II

AREA I

WELLS WITH FLUTES DURING 2009:
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50, RD-54A, RD-57, RD-64, AND RD-65

PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

LEGEND

WELL TYPE

- CHATSWORTH FORMATION MONITOR WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- SHALLOW MONITOR WELL
- SHALLOW EXTRACTION WELL
- PIEZOMETER
- SPRING
- PROPERTY BOUNDARY LINE

SYMBOL FILL / TEXT COLOR INDICATOR

- MAXIMUM CONCENTRATION >= 45 MG/L
- MAXIMUM CONCENTRATION < 45 MG/L
- NOT DETECTED (ND)
- SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
- NOT SAMPLED

J = ESTIMATED VALUE. ANALYTE DETECTED AT A LEVEL LESS THAN THE REPORTING LIMIT (RL) AND GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT (MDL), OR CONCENTRATION ESTIMATED DUE TO ANALYTICAL QUALITY CONTROL DEFICIENCIES (SEE APPENDIX D FOR DETAILS).

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR NITRATE AS NO3 IN DRINKING WATER IS 45 MG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

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SCALE IN FEET

ANNUAL GROUNDWATER MONITORING REPORT, 2009

HALEY & ALDRICH

THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

MAXIMUM CONCENTRATION OF NITRATE AS NO3 IN GROUNDWATER, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 36

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\CHEM\32600-213-0036-NITRATE-AS-NO3_GW.mxd

UNDEVELOPED LAND

NASA PROPERTY
AREA I

RD-37

SPA-2
HAR-15
HAR-14
SPA-1
ABSP

APTF-2
APTF-1
HAR-16

ECL

AREA III

STL IV-1
STL IV-2
HAR-17

AREA IV

DELTA
HAR-07

AREA II

AREA I

UNDEVELOPED LAND

RD-06

Please Note: The original version of this figure includes colorized features and shading. A black and white copy of the figure should not be used because it may not accurately represent the information presented.

ANNUAL GROUNDWATER MONITORING REPORT, 2009

LEGEND

- SAMPLE LOCATION
- RCRA IMPOUNDMENT

SPA = STORABLE PROPELLANT AREA
ABSP = ALFA BRAVO SKIM POND
ECL = ENGINEERING CHEMISTRY LAB
STL IV = SYSTEMS TEST LABORATORY IV
APTF = ADVANCED PROPULSION TEST FACILITY

GROUNDWATER SAMPLES WERE ALSO COLLECTED FROM PROPOSED INTERIM MEASURE EXTRACTION WELLS IN DECEMBER 2009 FOR THE ANALYSIS OF APPENDIX IX CONSTITUENTS. RESULTS OF THESE ANALYSES WILL BE REPORTED SEPARATELY.

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SCALE IN FEET

HALEY & ALDRICH

THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

LOCATION OF WELLS SAMPLED FOR APPENDIX IX CONSTITUENTS DURING 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 37

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\20090-126-0037-APPIX_SAMPLE_SITES_2009.mxd

HAR-14	4/23/2009 mg/L
Antimony, Dissolved	0.00017 J
Arsenic, Dissolved	0.00085 J
Barium, Dissolved	0.035
Cobalt, Dissolved	0.0004 J
Copper, Dissolved	0.00068 J
Nickel, Dissolved	0.0053
Selenium, Dissolved	0.0014 J
Thallium, Dissolved	0.000047 J
Vanadium, Dissolved	0.0015 J
Zinc, Dissolved	0.0041 J

HAR-15	4/23/2009 mg/L
Antimony, Dissolved	0.00013 J
Arsenic, Dissolved	0.003 J
Barium, Dissolved	0.029
Cadmium, Dissolved	0.00016 J
Cobalt, Dissolved	0.00019 J
Copper, Dissolved	0.00072 J
Nickel, Dissolved	0.0028
Thallium, Dissolved	0.000021 J
Vanadium, Dissolved	0.0025
Zinc, Dissolved	0.004 J

RD-37	7/13/2009 mg/L
Arsenic, Dissolved	0.0027 J
Barium, Dissolved	0.074
Cobalt, Dissolved	0.00025 J
Lead, Dissolved	0.0015
Nickel, Dissolved	0.002
Sulfide	0.21
Thallium, Dissolved	0.000038 J
Zinc, Dissolved	0.66

HAR-17	4/29/2009 mg/L
Arsenic, Dissolved	0.00028 J
Barium, Dissolved	0.074
Cobalt, Dissolved	0.00046 J
Copper, Dissolved	0.0087
Lead, Dissolved	0.00044 J
Nickel, Dissolved	0.0047
Thallium, Dissolved	0.000024 J
Vanadium, Dissolved	0.00032 J
Zinc, Dissolved	0.15

HAR-16	4/23/2009 mg/L
Arsenic, Dissolved	0.00047 J
Barium, Dissolved	0.025
Cobalt, Dissolved	0.000054 J
Copper, Dissolved	0.0056
Lead, Dissolved	0.0014
Nickel, Dissolved	0.0018 J
Selenium, Dissolved	0.0029 J
Vanadium, Dissolved	0.00096 J
Zinc, Dissolved	0.85

HAR-07	5/11/2009 mg/L
Arsenic, Dissolved	0.0004 J
Barium, Dissolved	0.02
Copper, Dissolved	0.0033
Fluoride	0.25
Iron, Dissolved	0.018 J
Lead, Dissolved	0.00045 J
Manganese, Dissolved	0.035
Nickel, Dissolved	0.00092 J
Nitrate-NO3	0.58 J
Thallium, Dissolved	0.000028 J
Vanadium, Dissolved	0.0002 J
Zinc, Dissolved	0.074

RD-06	7/13/2009 mg/L
Barium, Dissolved	0.039
Cobalt, Dissolved	0.00014 J
Nickel, Dissolved	0.0012 J
Zinc, Dissolved	0.057

HAR-14 HAR-15 HAR-16 HAR-17 HAR-07 RD-06 RD-37

SPA-1 SPA-2 ABSP ECL DELTA STL IV-1 STL IV-2 APTF-1 APTF-2

UNDEVELOPED LAND

NASA PROPERTY AREA I

AREA III AREA IV AREA II AREA I

UNDEVELOPED LAND

Please Note: The original version of this figure includes colorized features and shading. A black and white copy of the figure should not be used because it may not accurately represent the information presented.

ANNUAL GROUNDWATER MONITORING REPORT, 2009

LEGEND

- SAMPLE LOCATION
- RCRA IMPOUNDMENT

J = ESTIMATED VALUE. ANALYTE DETECTED AT A LEVEL LESS THAN THE REPORTING LIMIT (RL) AND GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT (MDL), OR CONCENTRATION ESTIMATED DUE TO ANALYTICAL QUALITY CONTROL DEFICIENCIES (SEE APPENDIX D FOR DETAILS).

CONCENTRATIONS OF INORGANICS (METALS, SULFIDE, AND CYANIDE) ARE IN mg/L.

FOR METALS RESULTS, ONLY DETECTED DISSOLVED METALS ARE PRESENTED ON THIS FIGURE.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

SPA = STORABLE PROPELLANT AREA
ABSP = ALFA BRAVO SKIM POND
ECL = ENGINEERING CHEMISTRY LAB
STL IV = SYSTEMS TEST LABORATORY IV
APTF = ADVANCED PROPULSION TEST FACILITY

GROUNDWATER SAMPLES WERE ALSO COLLECTED FROM PROPOSED INTERIM MEASURE EXTRACTION WELLS IN DECEMBER 2009 FOR THE ANALYSIS OF APPENDIX IX CONSTITUENTS. RESULTS OF THESE ANALYSES WILL BE REPORTED SEPARATELY.

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SCALE IN FEET

HALEY & ALDRICH

THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

DETECTED INORGANIC RESULTS FOR APPENDIX IX SAMPLES, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 38

G:\Graphics\Projects\26472 - Boeing\AnnualFigures\2009\20090-126-0038-INORGANIC-APPIX_2009.mxd

HAR-14	4/23/2009 ug/L
1,1,1-Trichloroethane	0.41 J
1,1-Dichloroethene	7.2
1,4-Dioxane	66
bis(2-Ethylhexyl) phthalate	4.1 J,L
Carbon Tetrachloride	1
Chloroform	1.4
n-Nitrosodimethylamine	1.4/1.7 J
Trichloroethene	3.6

HAR-15	4/23/2009 ug/L
cis-1,2-Dichloroethene	0.39 J
Trichloroethene	1.3

RD-37	7/13/2009 ug/L
1,4-Dioxane	1.5 J

HAR-17	4/29/2009 ug/L
1,1-Dichloroethane	0.55 J
1,1-Dichloroethene	0.44 J
1,4-Dioxane	3
cis-1,2-Dichloroethene	16
n-Nitrosodimethylamine	0.067
trans-1,2-Dichloroethene	0.34 J
Trichloroethene	83

HAR-16	4/23/2009 ug/L
1,1-Dichloroethene	28 J
1,2,3-Trichloropropane	0.012
1,4-Dioxane	27
cis-1,2-Dichloroethene	160
n-Nitrosodimethylamine	17/21
Tetrachloroethene	16 J
Trichloroethene	15000
Trichlorofluoromethane	30 J

HAR-07	5/11/2009 ug/L
1,1-Dichloroethene	3.2 J
cis-1,2-Dichloroethene	1400
n-Nitrosodimethylamine	0.037
trans-1,2-Dichloroethene	73
Trichloroethene	2800
Vinyl chloride	24

RD-06	7/13/2009
Analytes Not Detected	

HAR-14 HAR-15 HAR-16 HAR-17 HAR-07 RD-37 RD-06

SPA-1 SPA-2 ABSP ECL APTF-1 APTF-2 STL IV-1 STL IV-2 DELTA

NASA PROPERTY AREA I

UNDEVELOPED LAND

AREA III AREA IV AREA II AREA I

Please Note: The original version of this figure includes colorized features and shading. A black and white copy of the figure should not be used because it may not accurately represent the information presented.

ANNUAL GROUNDWATER MONITORING REPORT, 2009

LEGEND

- SAMPLE LOCATION
- RCRA IMPOUNDMENT

J = ESTIMATED VALUE. ANALYTE DETECTED AT A LEVEL LESS THAN THE REPORTING LIMIT (RL) AND GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT (MDL), OR CONCENTRATION ESTIMATED DUE TO ANALYTICAL QUALITY CONTROL DEFICIENCIES (SEE APPENDIX D FOR DETAILS).

CONCENTRATIONS OF DETECTED ORGANIC CONSTITUENTS ARE IN ug/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

SPA = STORABLE PROPELLANT AREA
ABSP = ALFA BRAVO SKIM POND
ECL = ENGINEERING CHEMISTRY LAB
STL IV = SYSTEMS TEST LABORATORY IV
APTF = ADVANCED PROPULSION TEST FACILITY

GROUNDWATER SAMPLES WERE ALSO COLLECTED FROM PROPOSED INTERIM MEASURE EXTRACTION WELLS IN DECEMBER 2009 FOR THE ANALYSIS OF APPENDIX IX CONSTITUENTS. RESULTS OF THESE ANALYSES WILL BE REPORTED SEPARATELY.

N W E S

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SCALE IN FEET

HALEY & ALDRICH

THE BOEING COMPANY
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VENTURA COUNTY, CALIFORNIA

DETECTED ORGANIC RESULTS FOR APPENDIX IX SAMPLES, 2009

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 39

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UNDEVELOPED LAND

NASA PROPERTY AREA I

6

2

B204

7

UNDEVELOPED LAND

8

7

Burro Flats

9

3

AREA I

AREA II

5

1a

4

1b

AREA IV

AREA III

UNDEVELOPED LAND

10

NPDES OUTFALL 002

NPDES OUTFALL 001

Please Note: The original version of this figure includes colorized features and shading. A black and white copy of the figure should not be used because it may not accurately represent the information presented.

ANNUAL GROUNDWATER MONITORING REPORT, 2009

LEGEND

- SMOU RFI GROUP
- SITE FEATURE
- SITE AREA BOUNDARY

N

W E

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SCALE IN FEET

HALEY & ALDRICH

THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

LOCATION OF REFERENCED SITE FEATURES

SCALE: AS SHOWN
FEBRUARY 2010

FIGURE 40

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APPENDIX A

Water Level Hydrographs

APPENDIX A
WATER LEVEL HYDROGRAPHS

TABLE OF CONTENTS

Figures

Water Level Hydrographs	A-1 through A-257
FLUTe System Hydrographs	A-258 through A-275
Westbay System Hydrograph	A-276

APPENDIX A
WATER LEVEL HYDROGRAPHS

LIST OF HYDROGRAPHS

Shallow Wells

Figure			Well Identifier
A-1	through	A-11	SH-01 through SH-11
A-12	through	A-36	RS-01 through RS-25
A-37	through	A-43	RS-27 through RS-32, and RS-54
A-44	through	A-75	ES-01 through ES-32
A-76	through	A-79	HAR-02 through HAR-04, and HAR-09
A-80	through	A-84	HAR-11 through HAR-15
A-85	through	A-92	HAR-27 through HAR-34

Chatsworth Formation Wells

Figure			Well Identifier
A-93	through	A-96	RD-01 through RD-04
A-97	through	A-99	RD-05A, RD-05B, RD-05C
A-100	through	A-126	RD-06 through RD-32
A-127	through	A-129	RD-33A, RD-33B, RD-33C
A-130	through	A-132	RD-34A, RD-34B, RD-34C
A-133	through	A-134	RD-35A, RD-35B
A-135	through	A-139	RD-36A, RD-36B, RD-36C, RD-36D, and RD-37
A-140	through	A-141	RD-38A, RD-38B
A-142	through	A-144	RD-39A, RD-39B, and RD-40
A-145	through	A-148	RD-41A, RD-41B, RD-41C, and RD-42
A-149	through	A-152	RD-43A, RD-43B, RD-43C, and RD-44
A-153	through	A-155	RD-45A, RD-45B, RD-45C
A-156	through	A-158	RD-46A, RD-46B, and RD-47
A-159	through	A-161	RD-48A, RD-48B, RD-48C
A-162	through	A-165	RD-49A, RD-49B, RD-49C, and RD-50
A-166	through	A-168	RD-51A, RD-51B, RD-51C
A-169	through	A-172	RD-52A, RD-52B, RD-52C, and RD-53
A-173	through	A-175	RD-54A, RD-54B, RD-54C
A-176	through	A-177	RD-55A, RD-55B
A-178	through	A-180	RD-56A, RD-56B, and RD-57
A-181	through	A-183	RD-58A, RD-58B, RD-58C
A-184	through	A-186	RD-59A, RD-59B, RD-59C
A-187	through	A-194	RD-60 through RD-67
A-195	through	A-196	RD-68A, RD-68B
A-197	through	A-206	RD-69 through RD-78
A-207	through	A-225	RD-80 through RD-98
A-226	through	A-230	HAR-01, and HAR-05 through HAR-08

APPENDIX A
WATER LEVEL HYDROGRAPHS

LIST OF HYDROGRAPHS

Chatsworth Formation Wells

Figure	Well Identifier
A-231 through A-241	HAR-16 through HAR-26
A-242 through A-246	WS-04A through WS-08
A-247 through A-249	WS-09, WS-09A, WS-09B
A-250 through A-254	WS-11 through WS-14, and WS-SP
A-255 through A-257	OS-24 through OS-26

FLUTe System Hydrographs

Figure	Well Identifier
A-258	RD-10
A-259	RD-21
A-260	RD-22
A-261	RD-23
A-262	RD-31
A-263	RD-33A
A-264	RD-50
A-265	RD-53
A-266	RD-54A
A-267	RD-57
A-268	RD-64
A-269	RD-65
A-270	RD-72
A-271	RD-73
A-272	HAR-01
A-273	HAR-16
A-274	HAR-24
A-275	OS-24

Westbay System Hydrographs

Figure	Well Identifier
A-276	RD-31

APPENDIX A
WATER LEVEL HYDROGRAPHS

NOTES

1. Hydrographs were created with data downloaded from the Boeing Environmental Data Management System (BEDMS) with the exception of FLUTe or Westbay system hydrographs. FLUTe and Westbay hydrographs were provided by MWH.

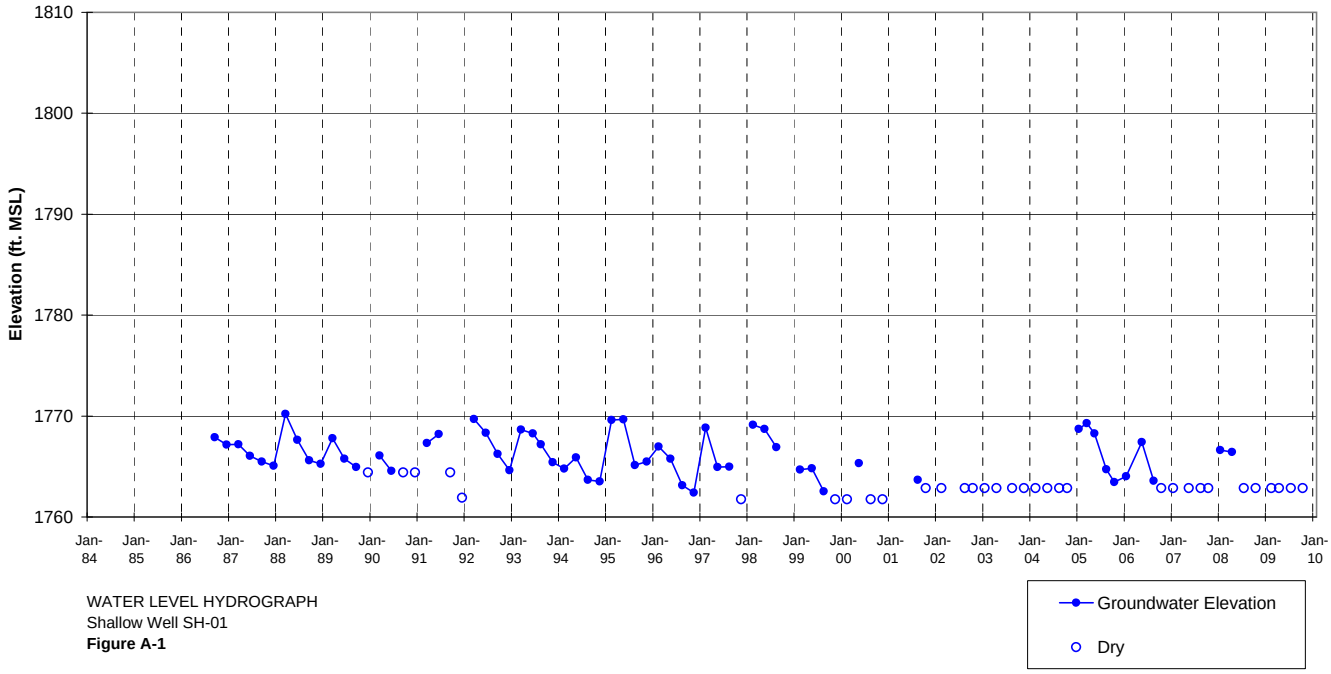
2. Water elevations for wells that were dry at the time of measurement are represented as the approximate elevation of the bottom of the well.

3. A FLUTe system hydrographs were not available for well RD-07 because the transducer was inoperable.

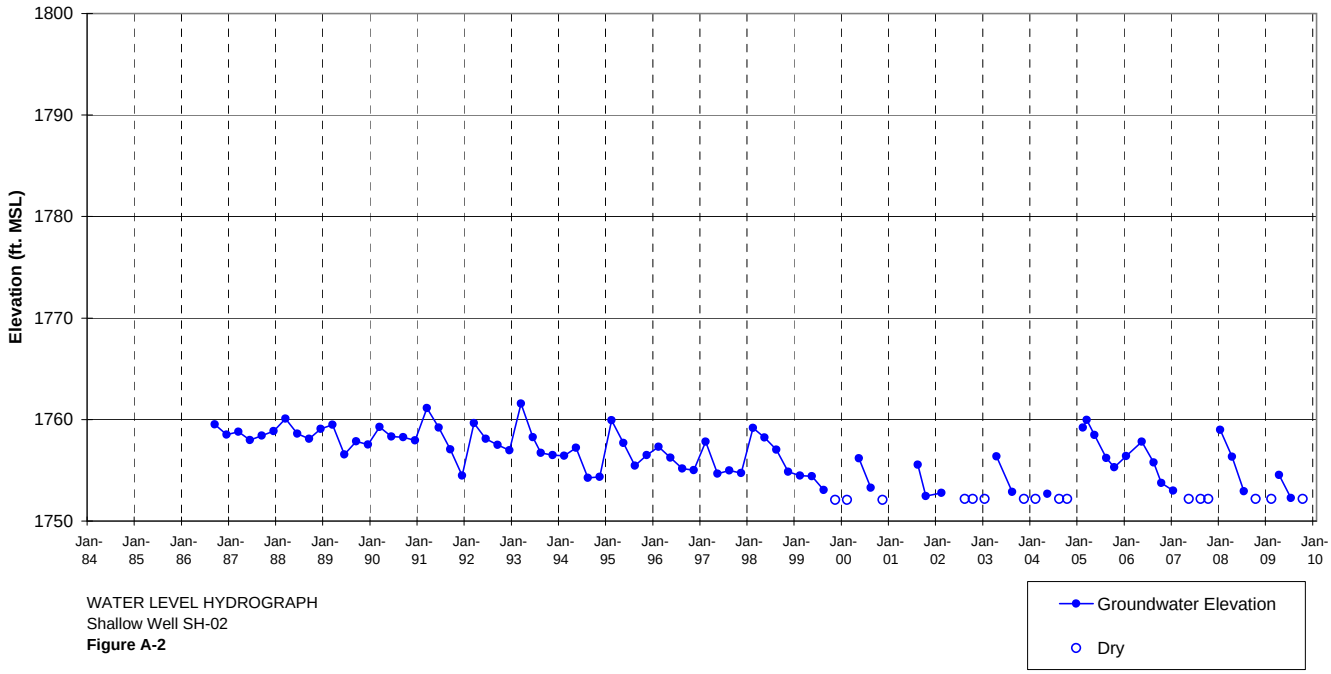
4. Water levels for the following types of ports were not graphed on FLUTe hydrographs:
   - A port that was consistently dry.
   - An uneverted port.
   - A port with a consistently malfunctioning transducer.

5. MPE = Measuring point (MP) elevation.

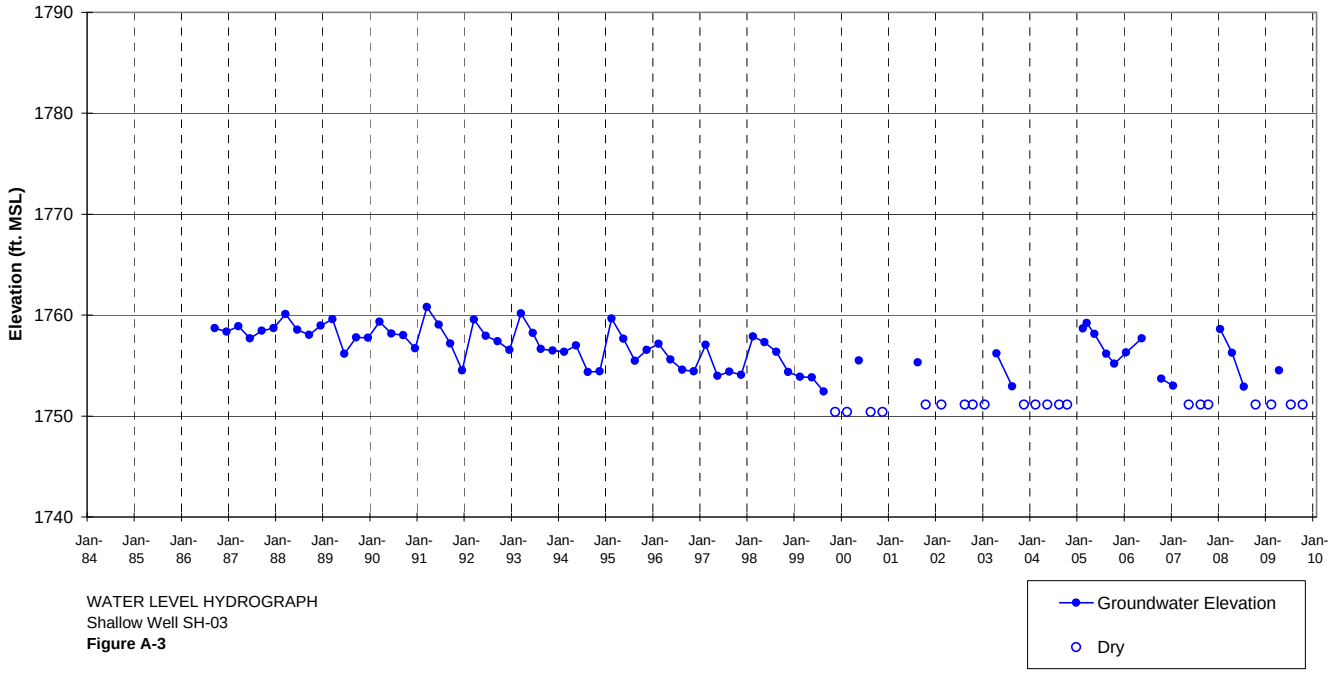
6. ft. MSL = Feet above mean sea level.



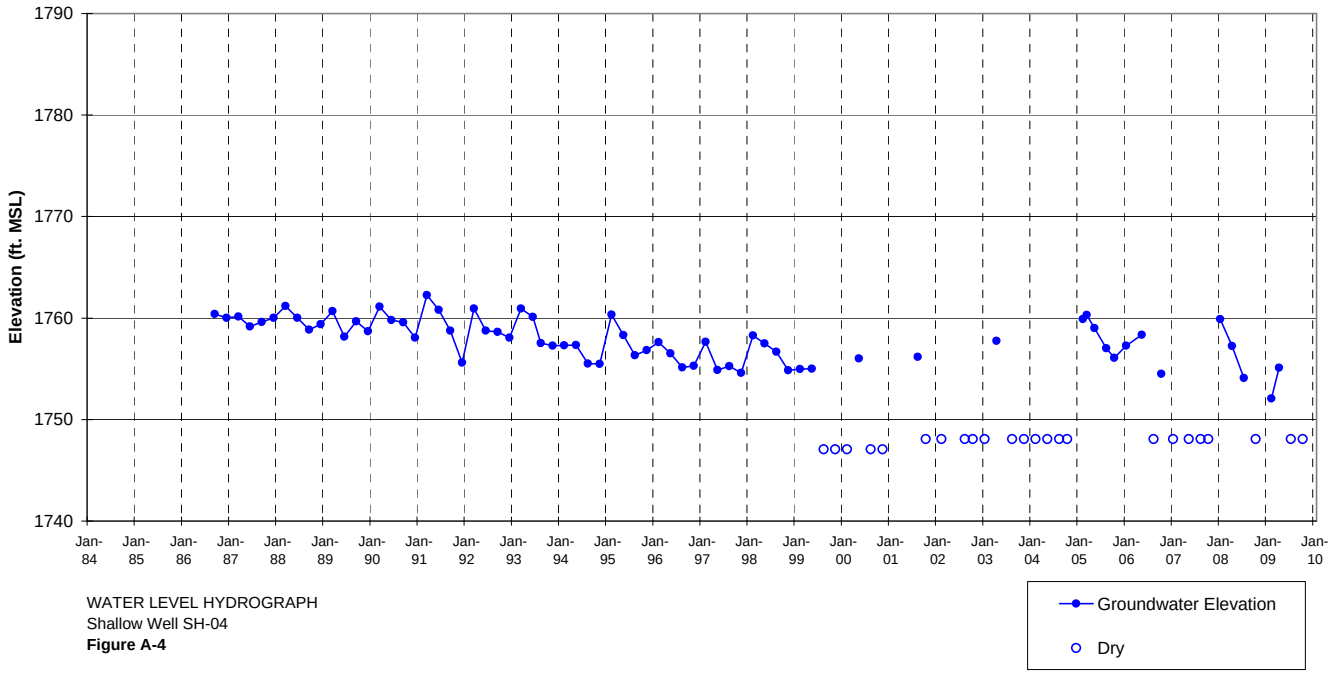
WATER LEVEL HYDROGRAPH
Shallow Well SH-01
Figure A-1



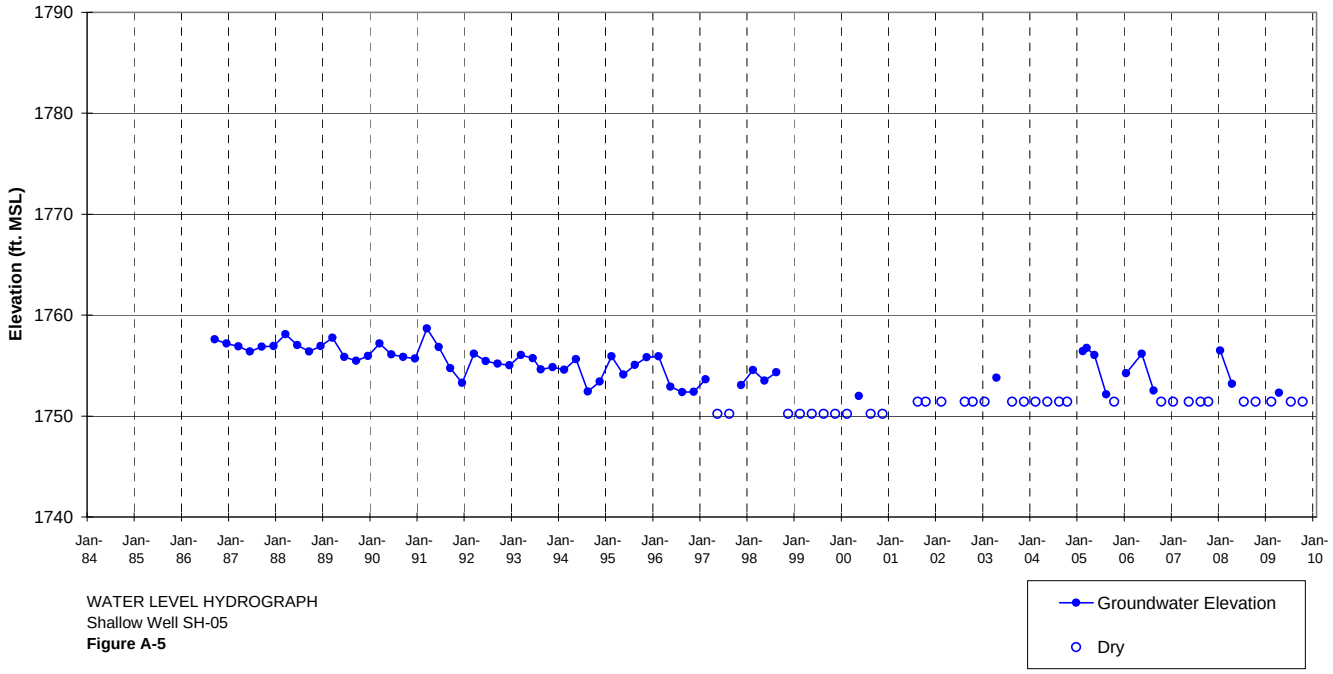
WATER LEVEL HYDROGRAPH
Shallow Well SH-02
Figure A-2



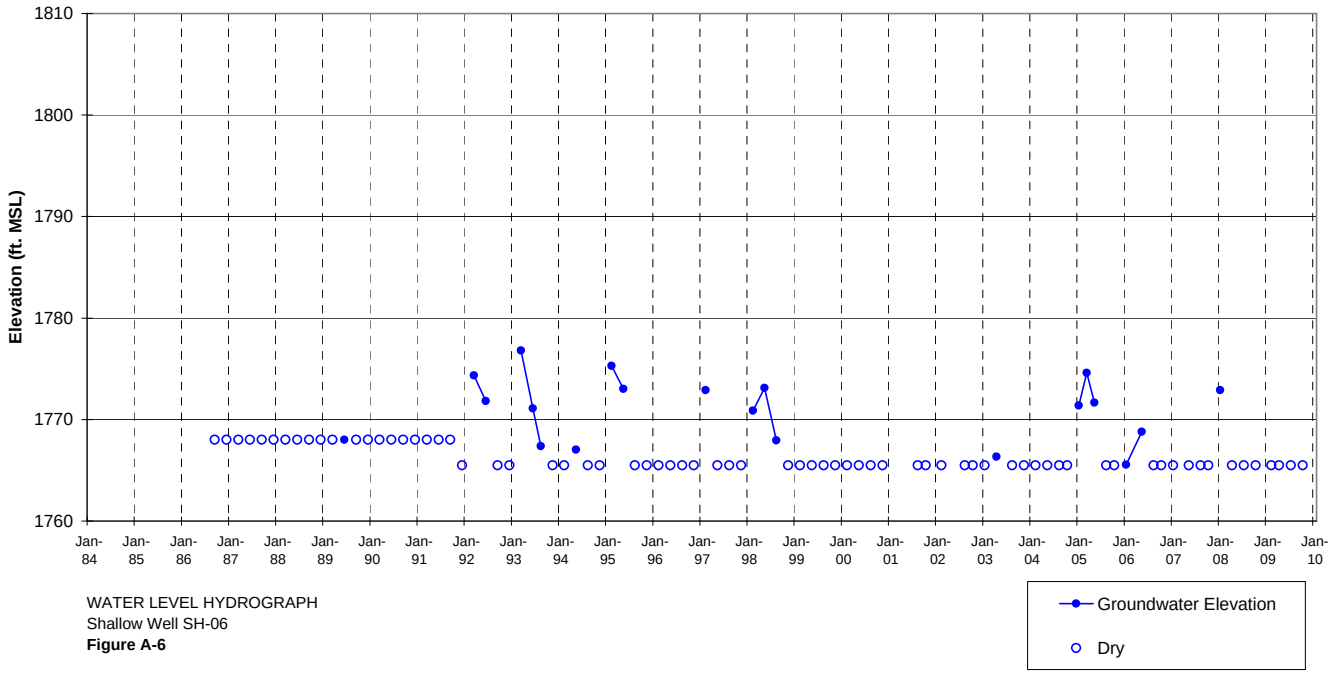
WATER LEVEL HYDROGRAPH
Shallow Well SH-03
Figure A-3



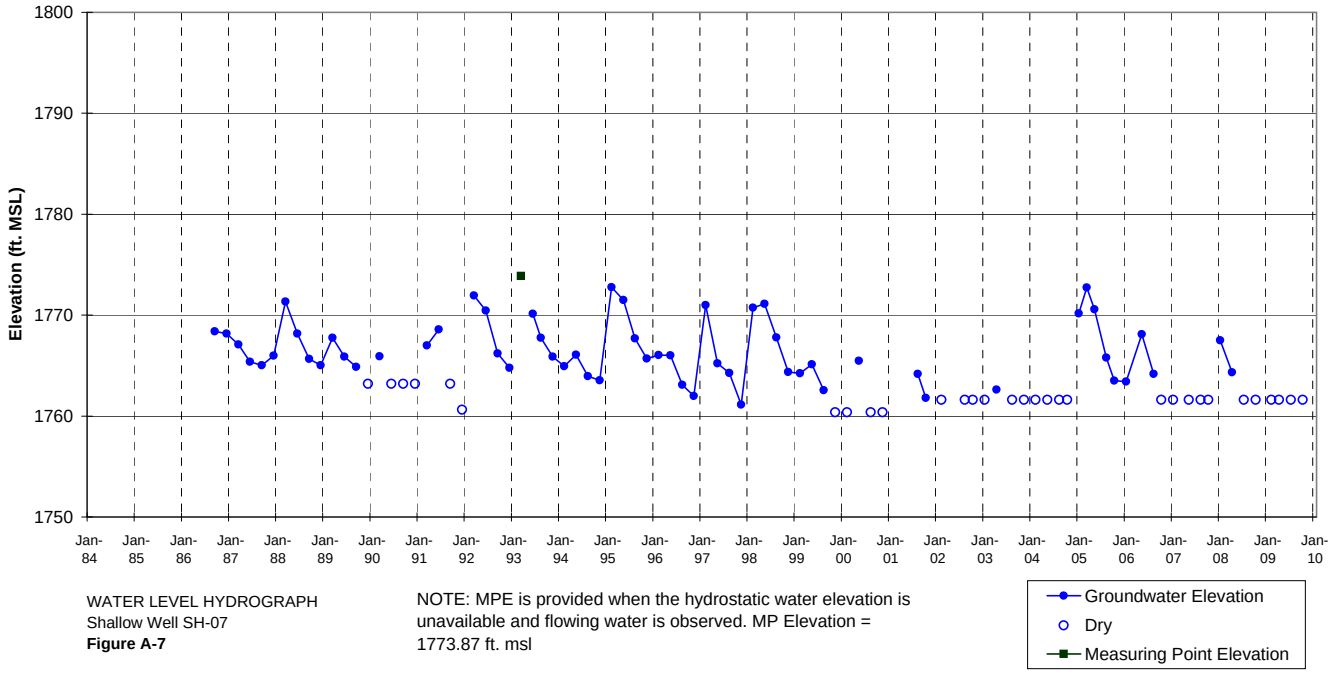
WATER LEVEL HYDROGRAPH
Shallow Well SH-04
Figure A-4



WATER LEVEL HYDROGRAPH
Shallow Well SH-05
Figure A-5

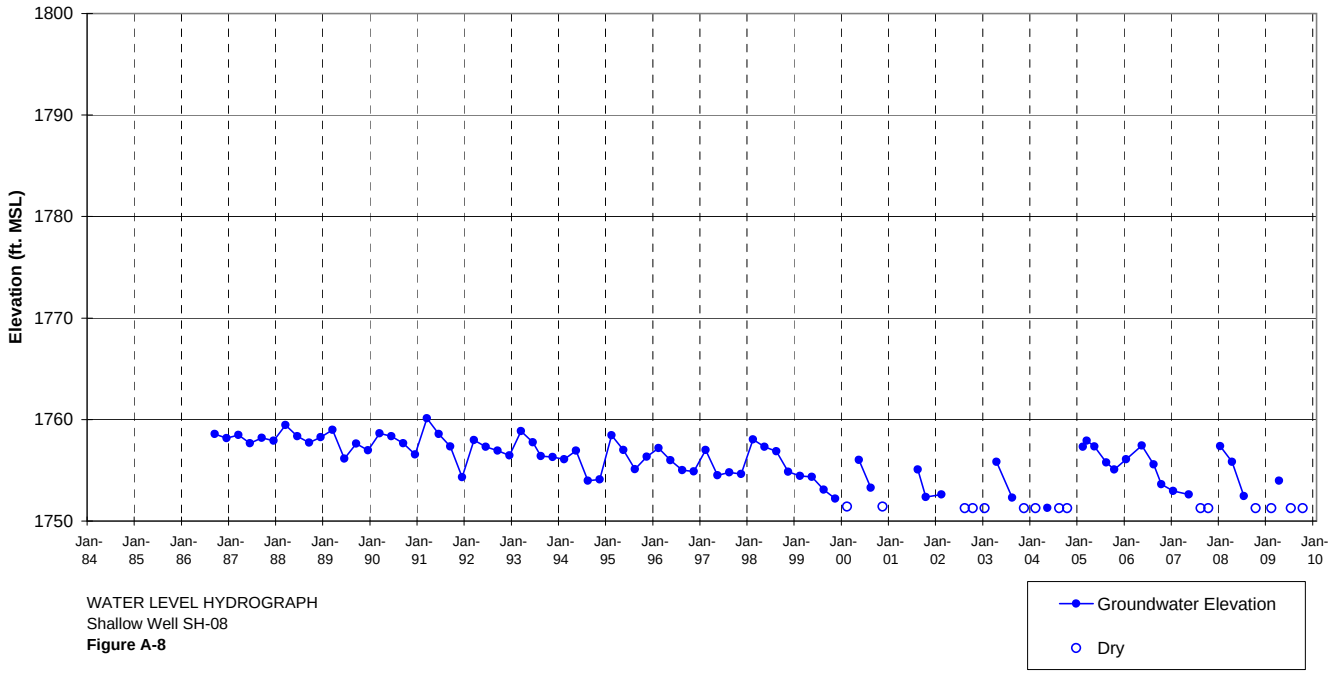


WATER LEVEL HYDROGRAPH
Shallow Well SH-06
Figure A-6

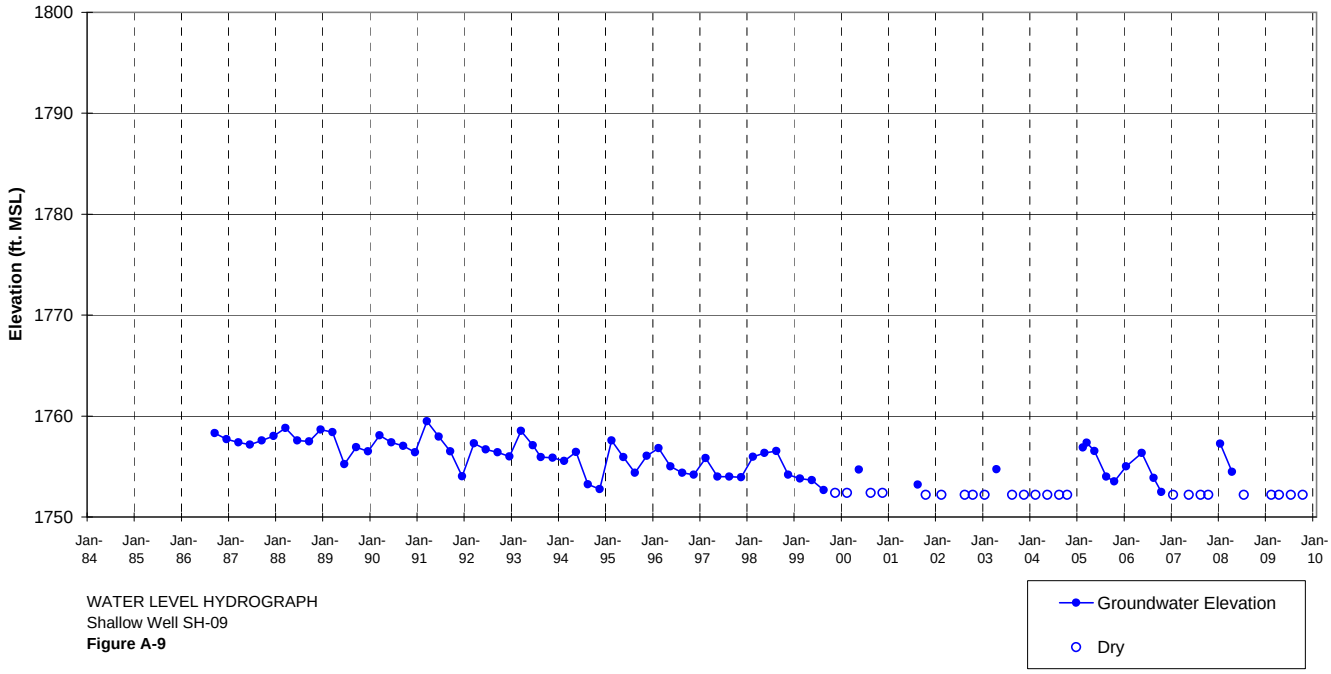


WATER LEVEL HYDROGRAPH
Shallow Well SH-07
Figure A-7

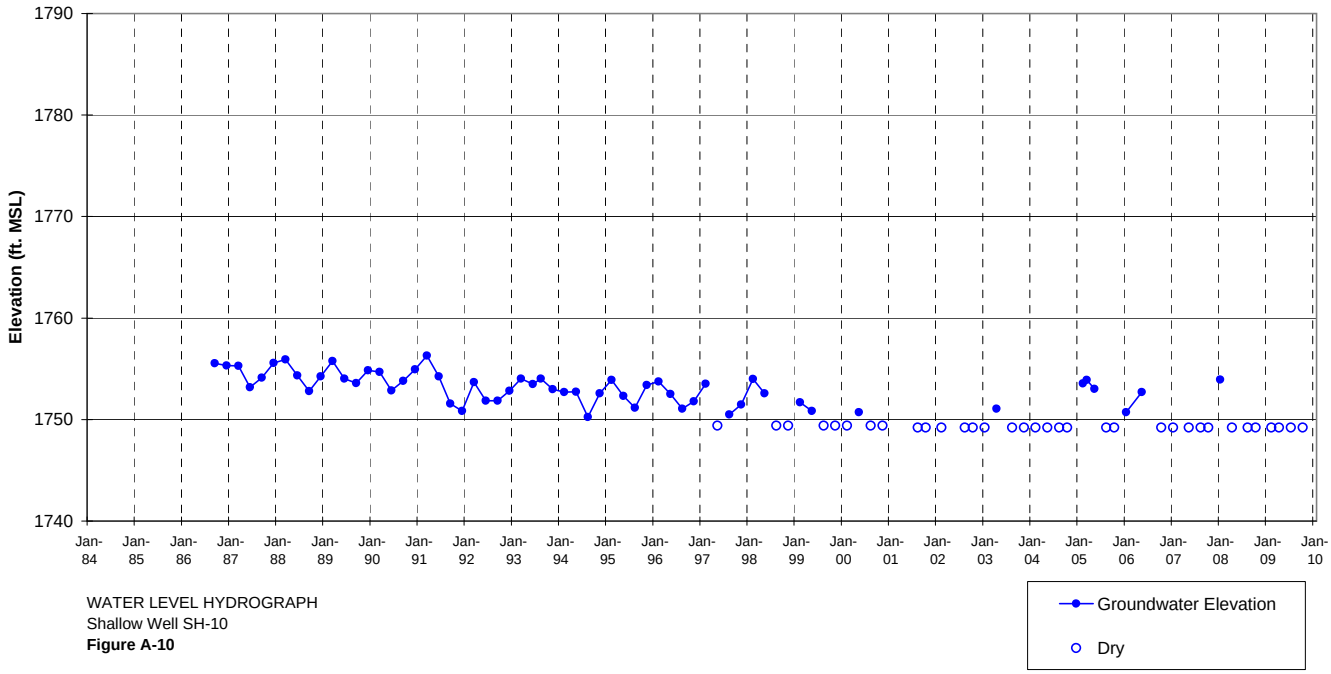
NOTE: MPE is provided when the hydrostatic water elevation is unavailable and flowing water is observed. MP Elevation = 1773.87 ft. msl



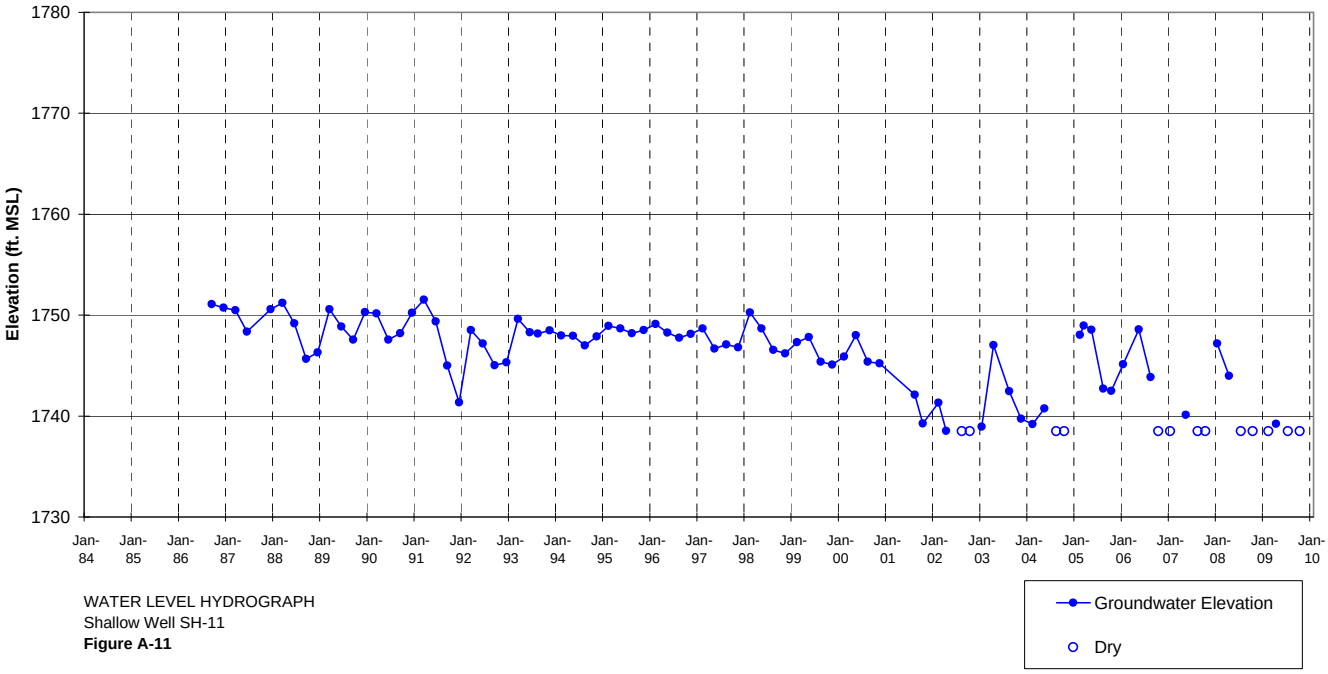
WATER LEVEL HYDROGRAPH
Shallow Well SH-08
Figure A-8



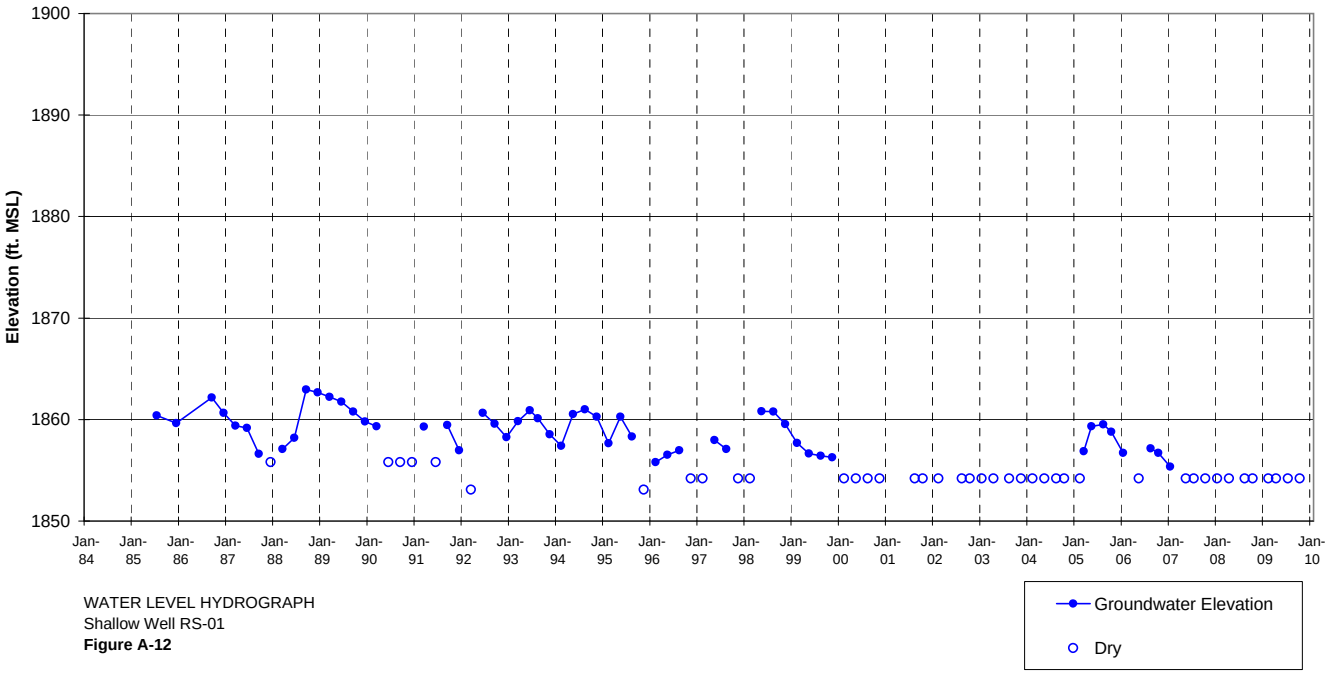
WATER LEVEL HYDROGRAPH
Shallow Well SH-09
Figure A-9



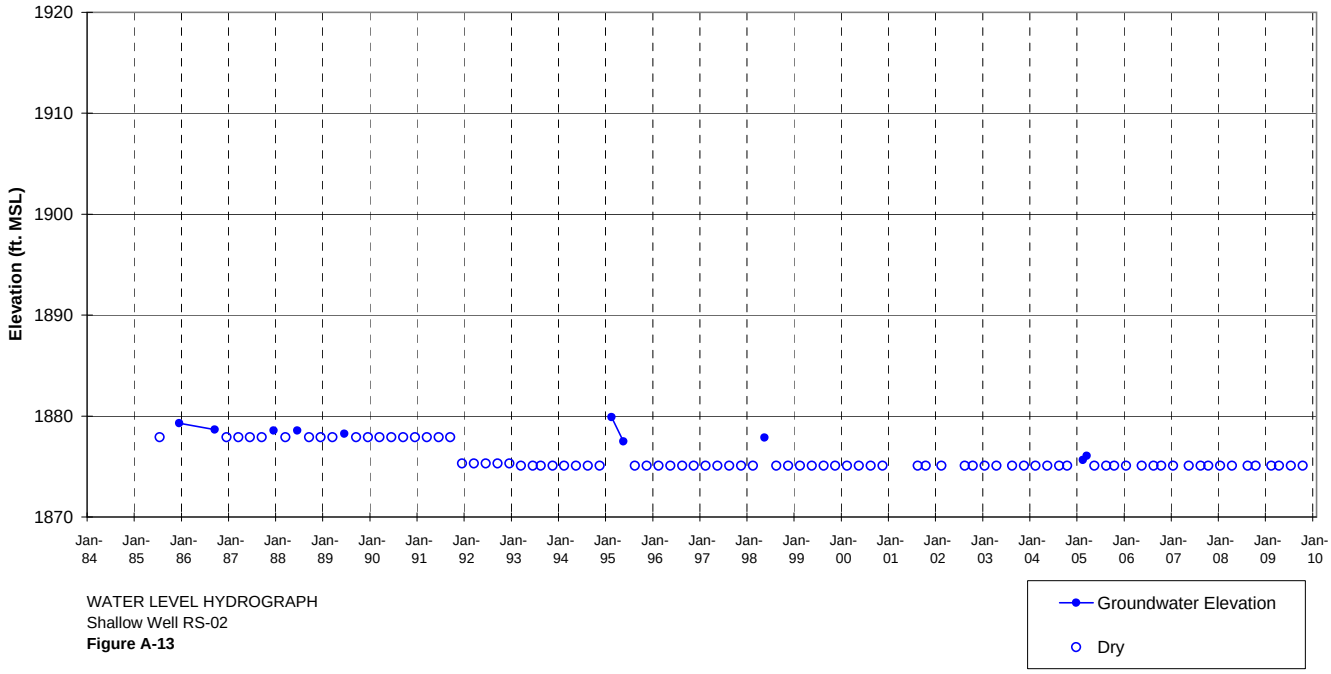
WATER LEVEL HYDROGRAPH
Shallow Well SH-10
Figure A-10



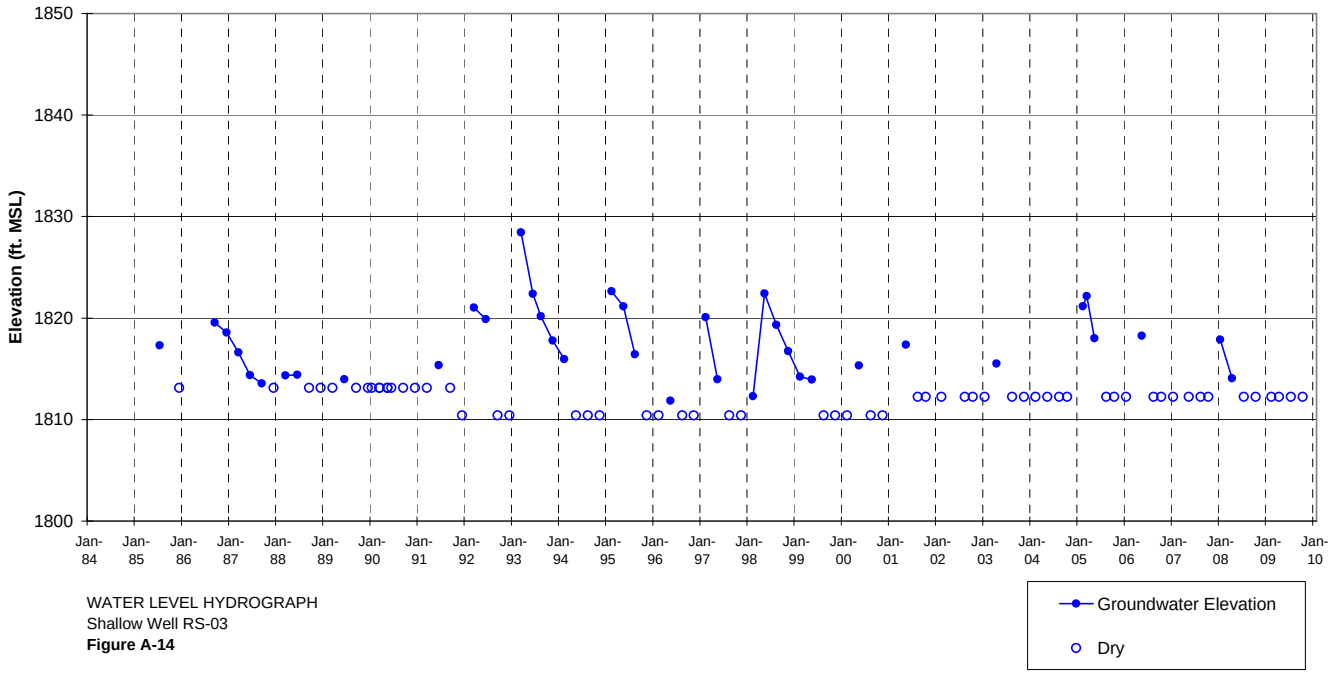
WATER LEVEL HYDROGRAPH
Shallow Well SH-11
Figure A-11



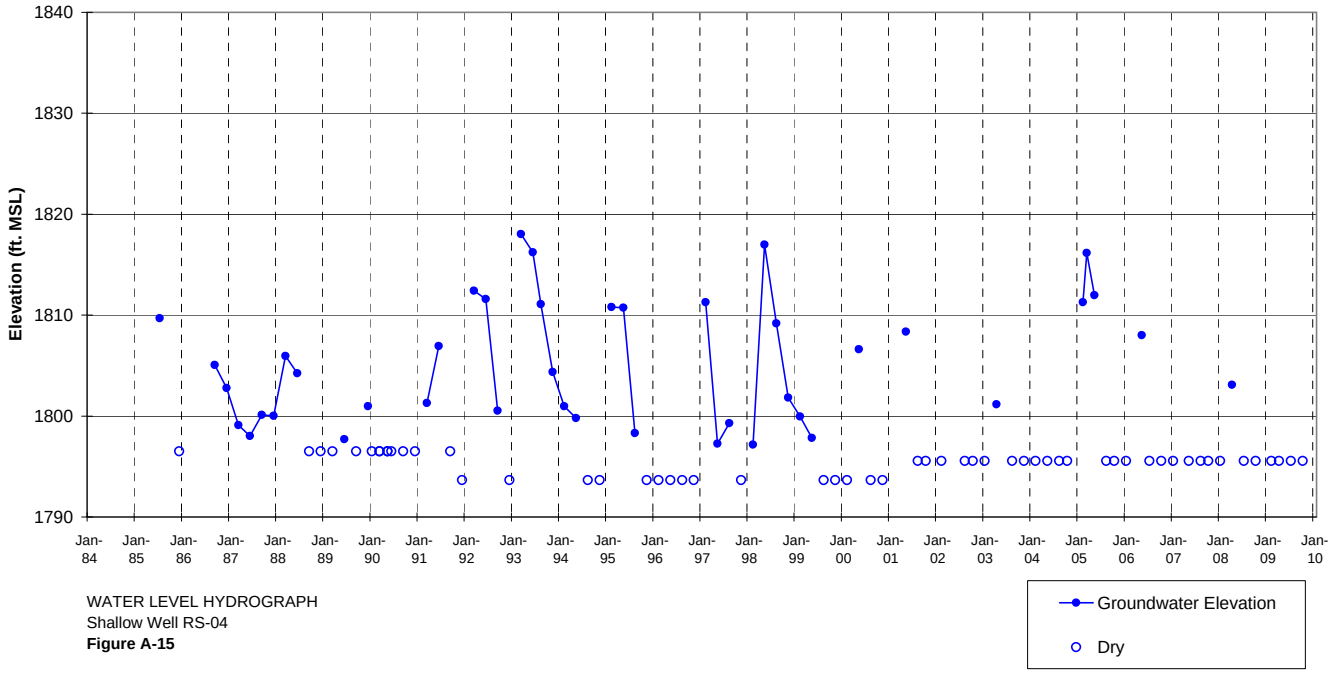
WATER LEVEL HYDROGRAPH
Shallow Well RS-01
Figure A-12



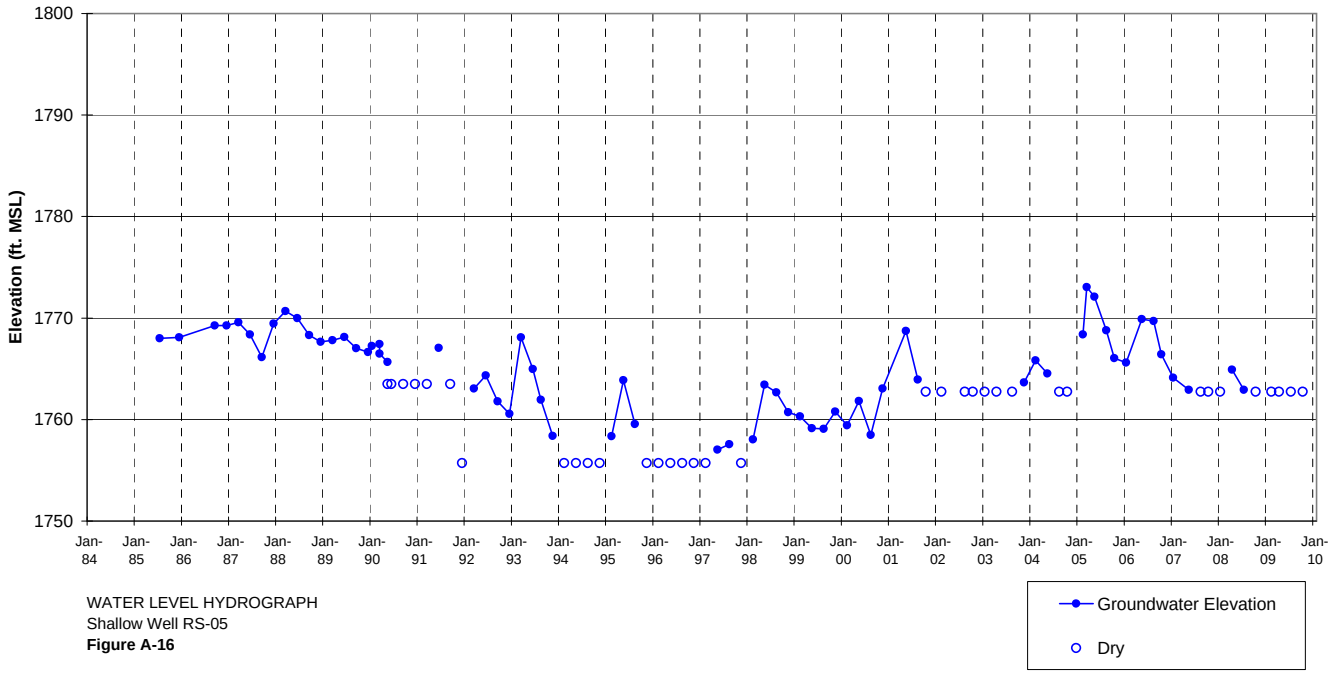
WATER LEVEL HYDROGRAPH
Shallow Well RS-02
Figure A-13



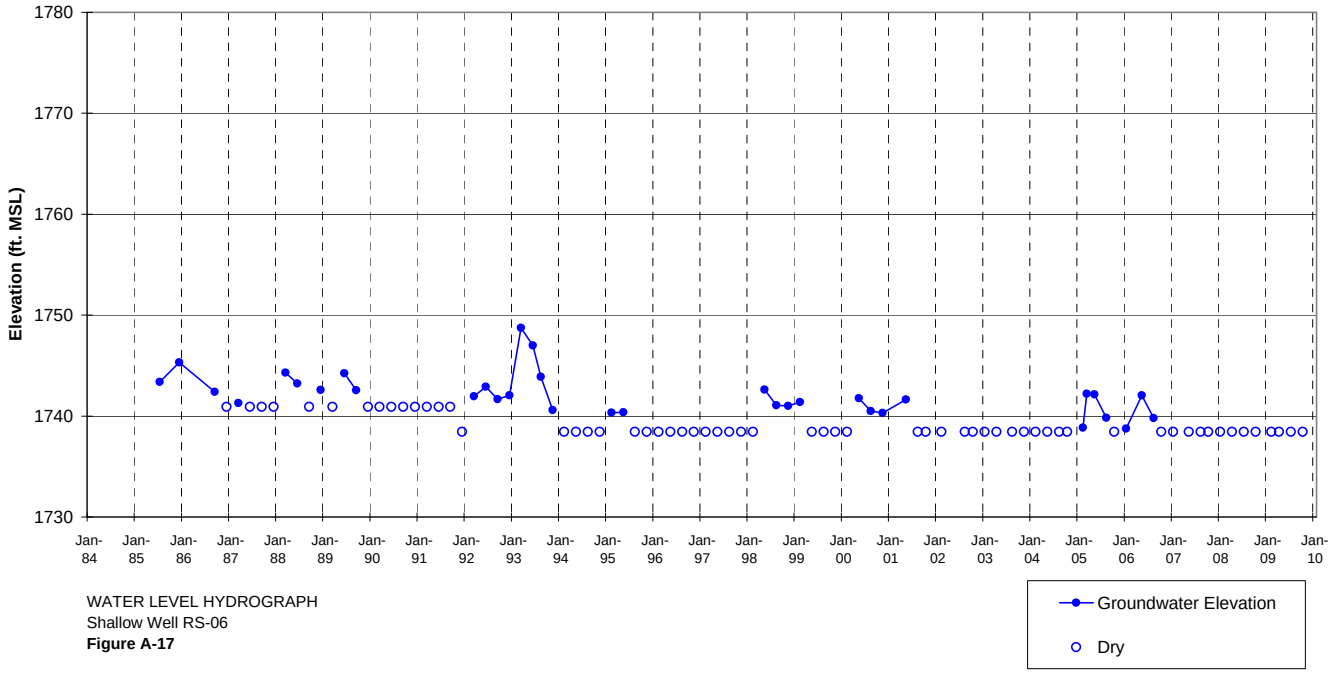
WATER LEVEL HYDROGRAPH
Shallow Well RS-03
Figure A-14



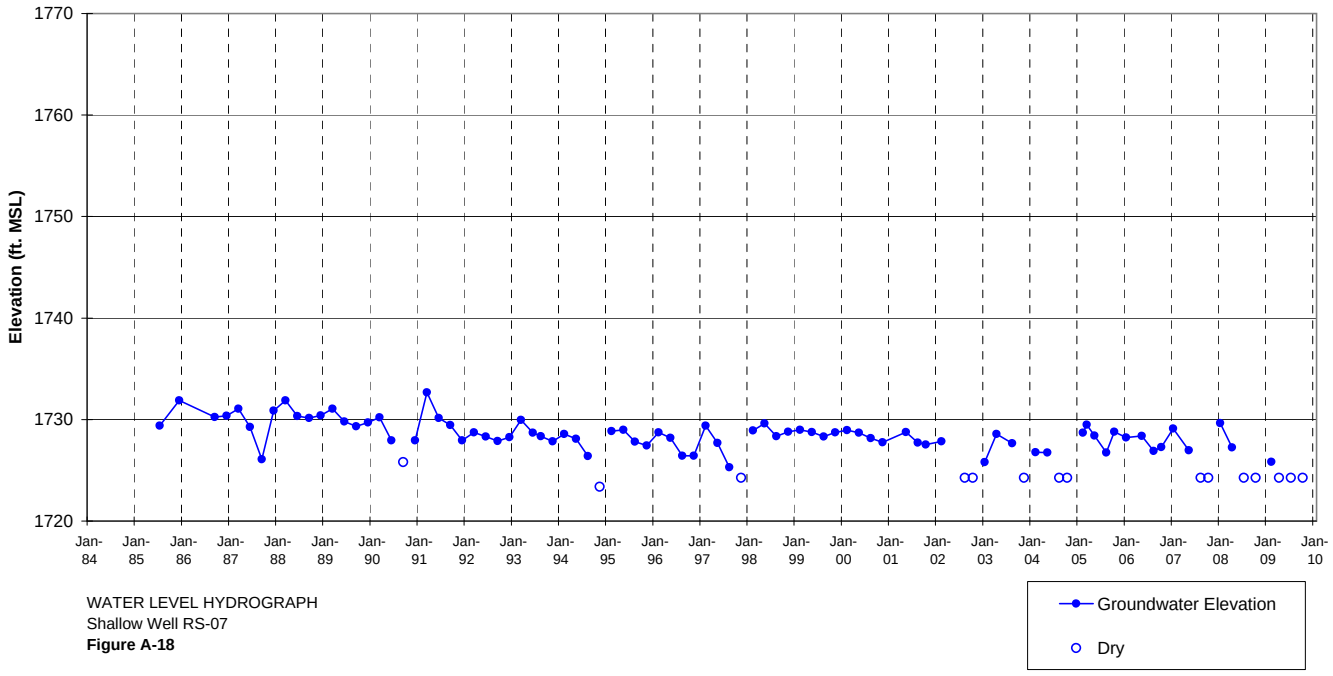
WATER LEVEL HYDROGRAPH
Shallow Well RS-04
Figure A-15



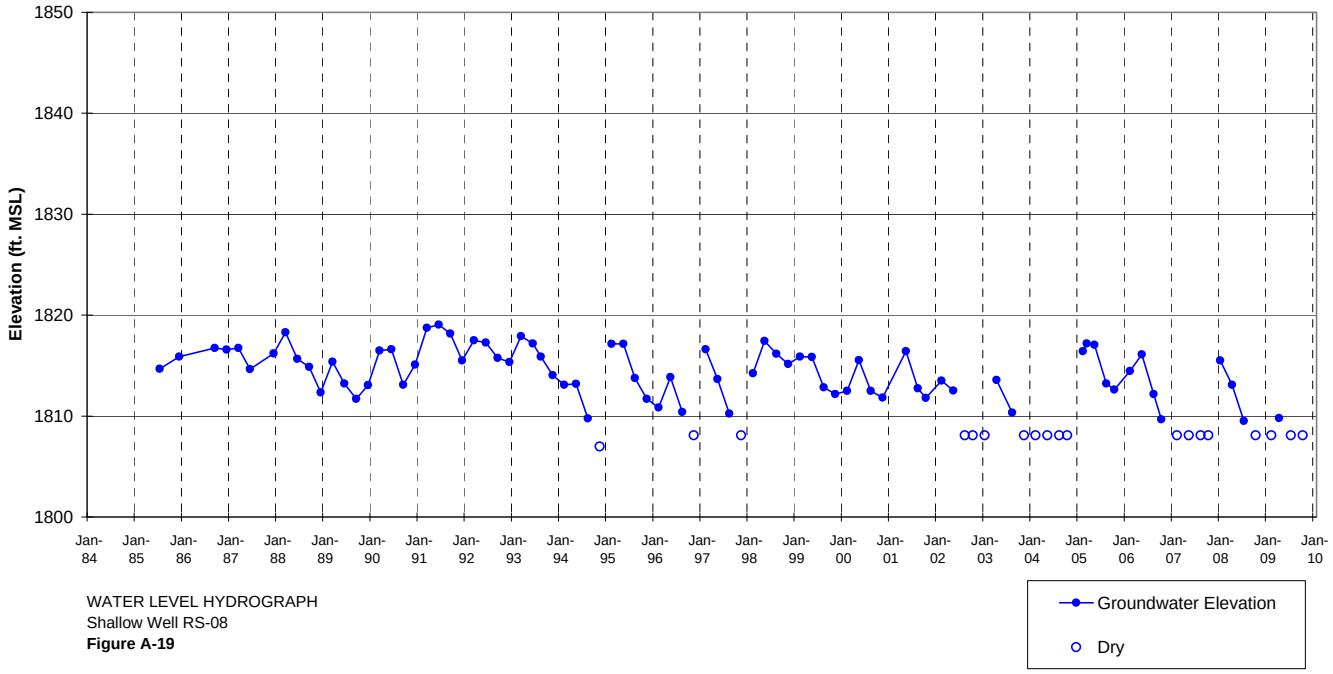
WATER LEVEL HYDROGRAPH
Shallow Well RS-05
Figure A-16



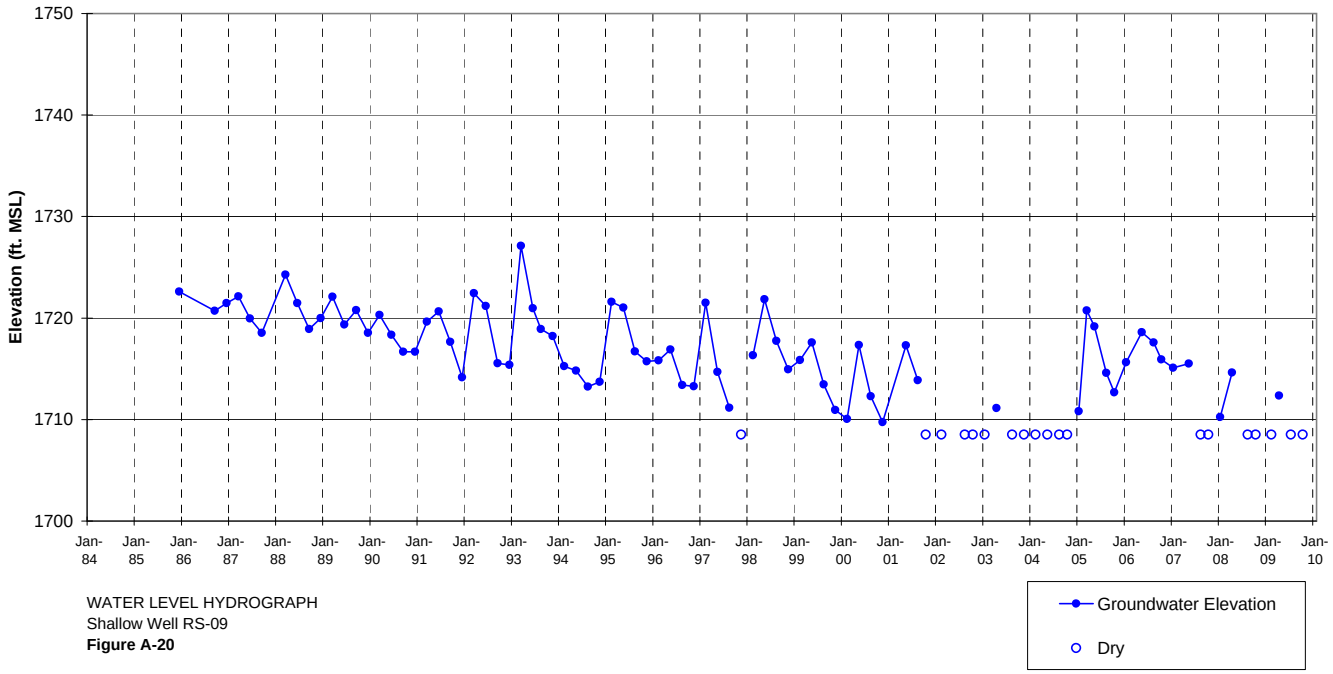
WATER LEVEL HYDROGRAPH
Shallow Well RS-06
Figure A-17



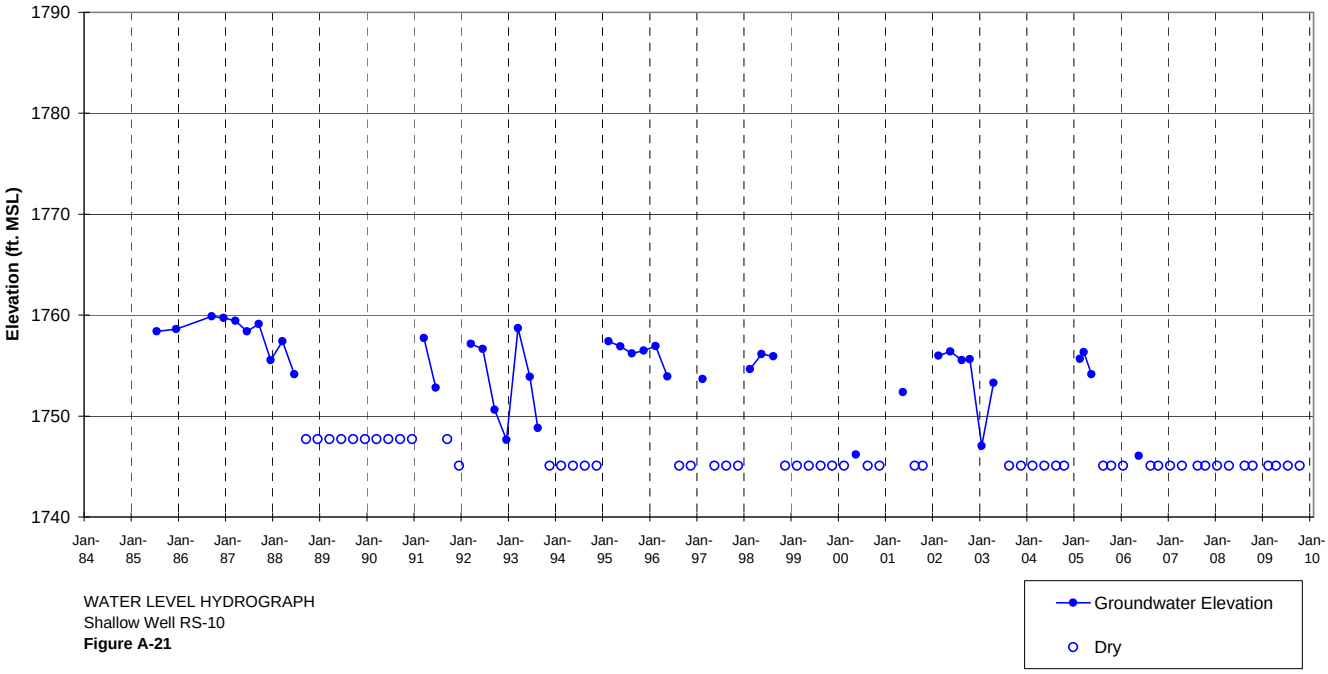
WATER LEVEL HYDROGRAPH
Shallow Well RS-07
Figure A-18



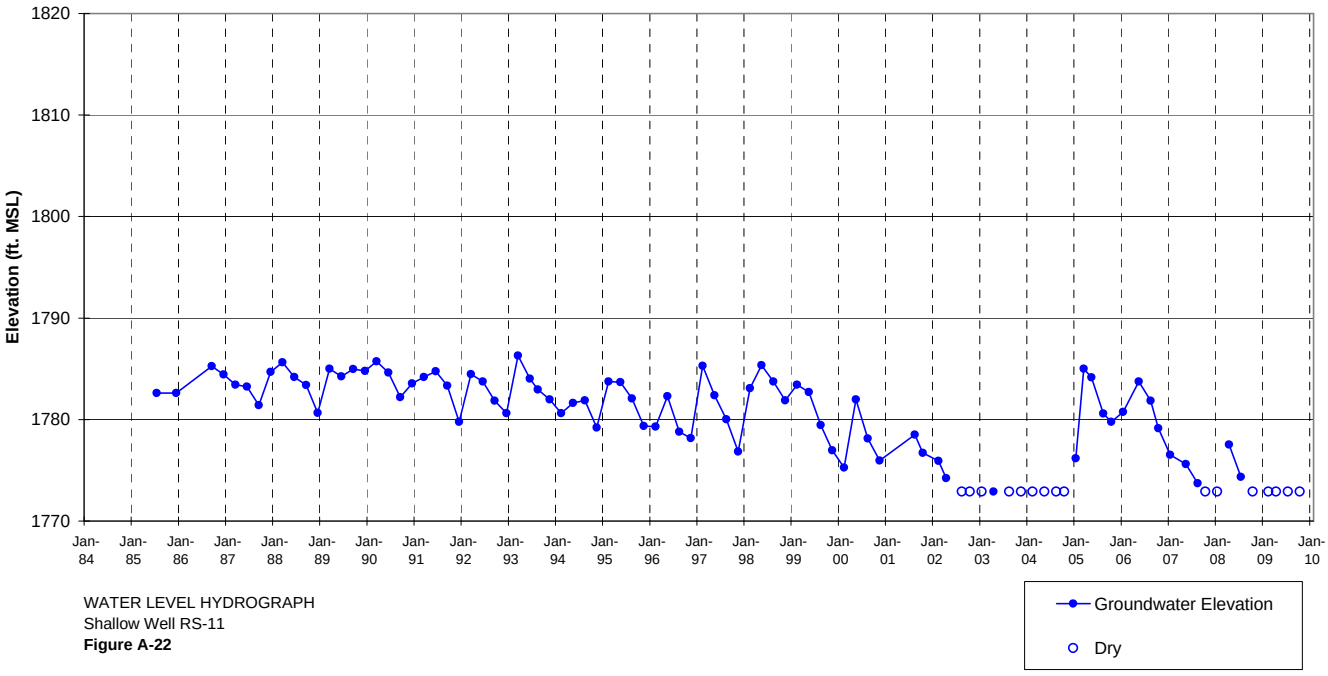
WATER LEVEL HYDROGRAPH
Shallow Well RS-08
Figure A-19



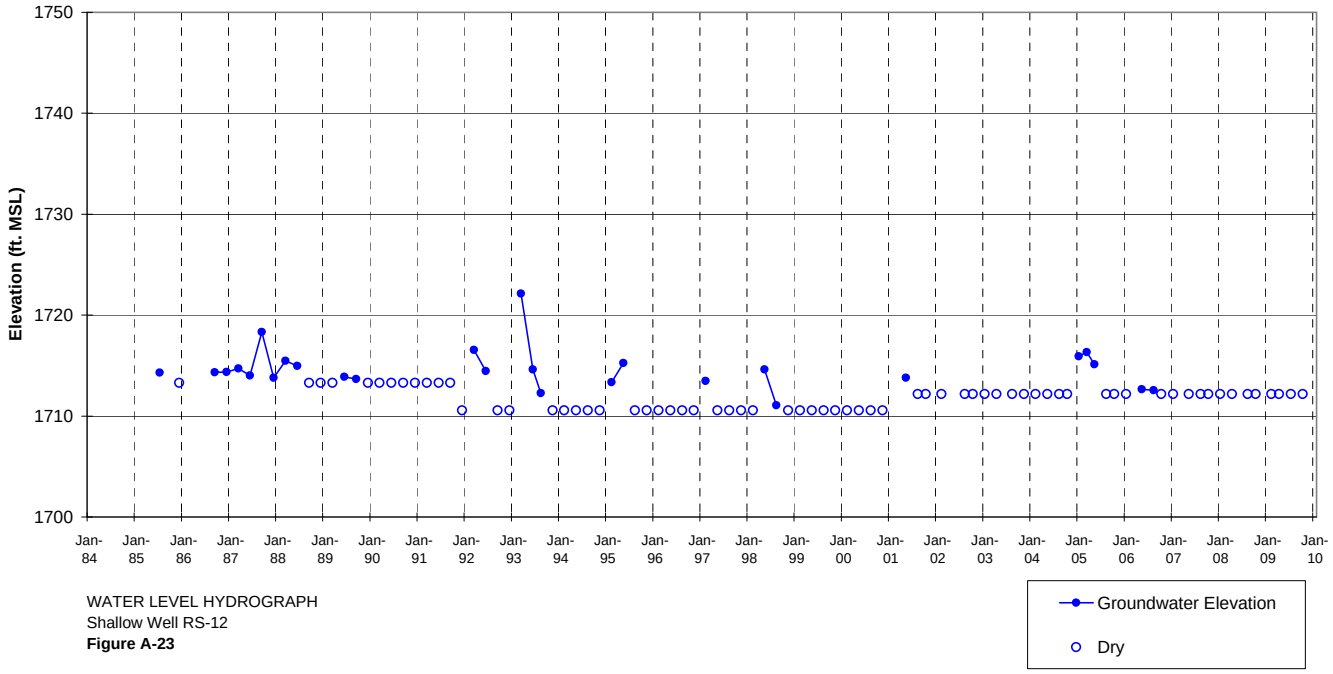
WATER LEVEL HYDROGRAPH
Shallow Well RS-09
Figure A-20



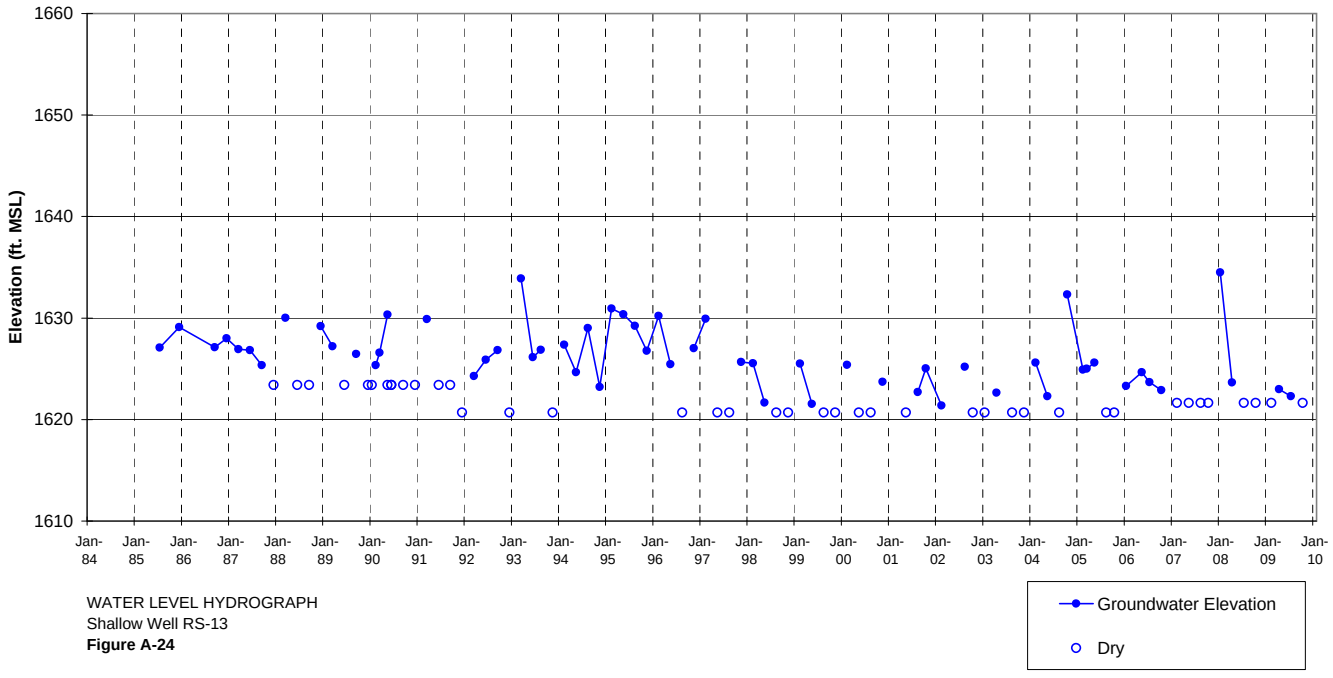
WATER LEVEL HYDROGRAPH
Shallow Well RS-10
Figure A-21



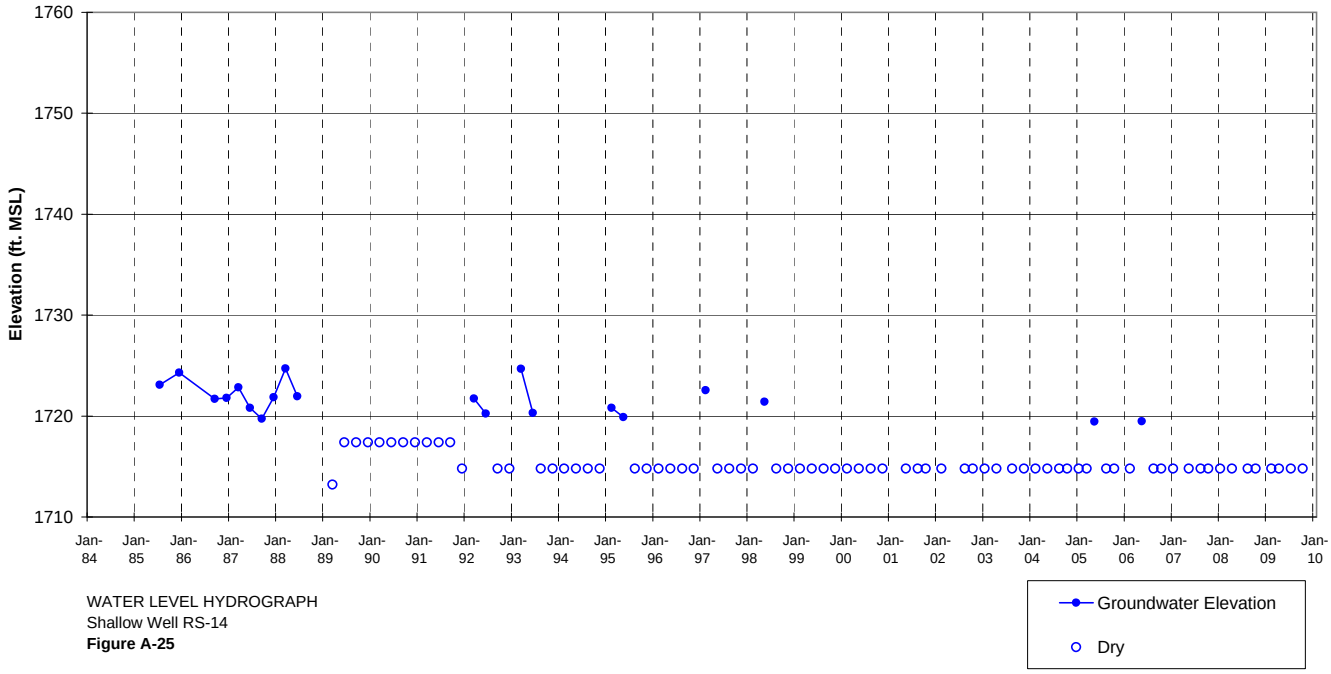
WATER LEVEL HYDROGRAPH
Shallow Well RS-11
Figure A-22



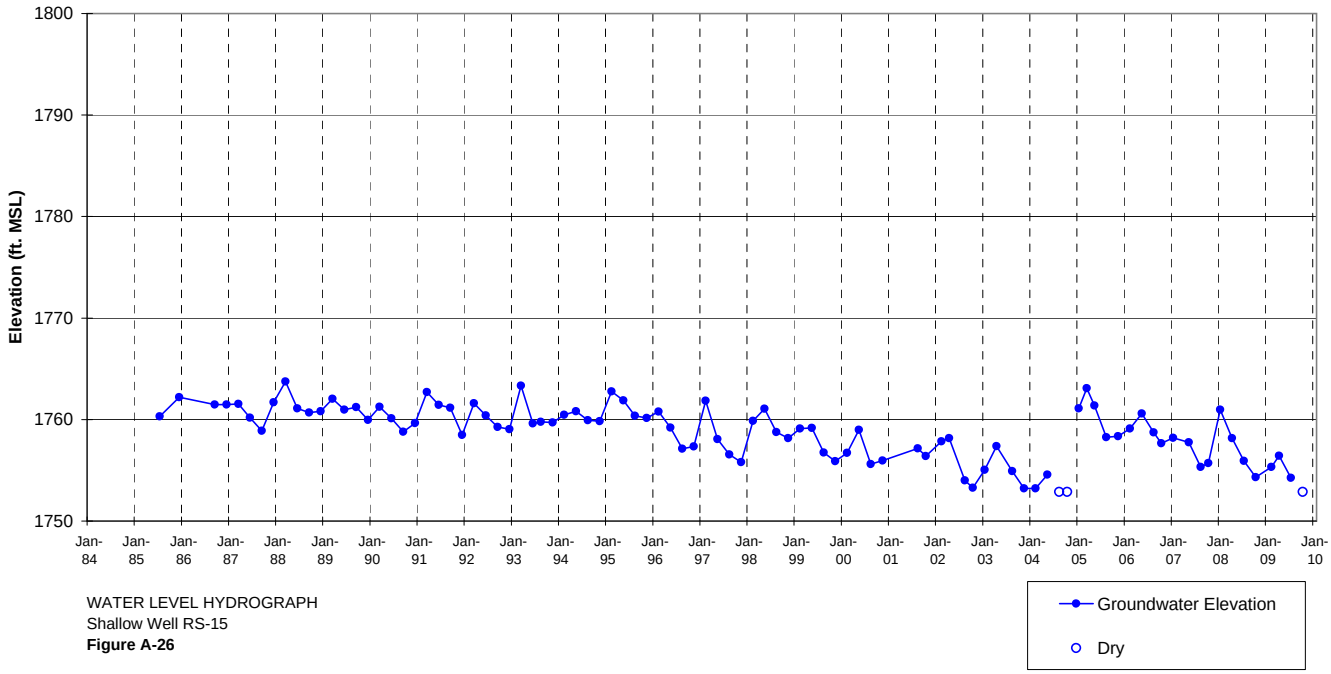
WATER LEVEL HYDROGRAPH
Shallow Well RS-12
Figure A-23



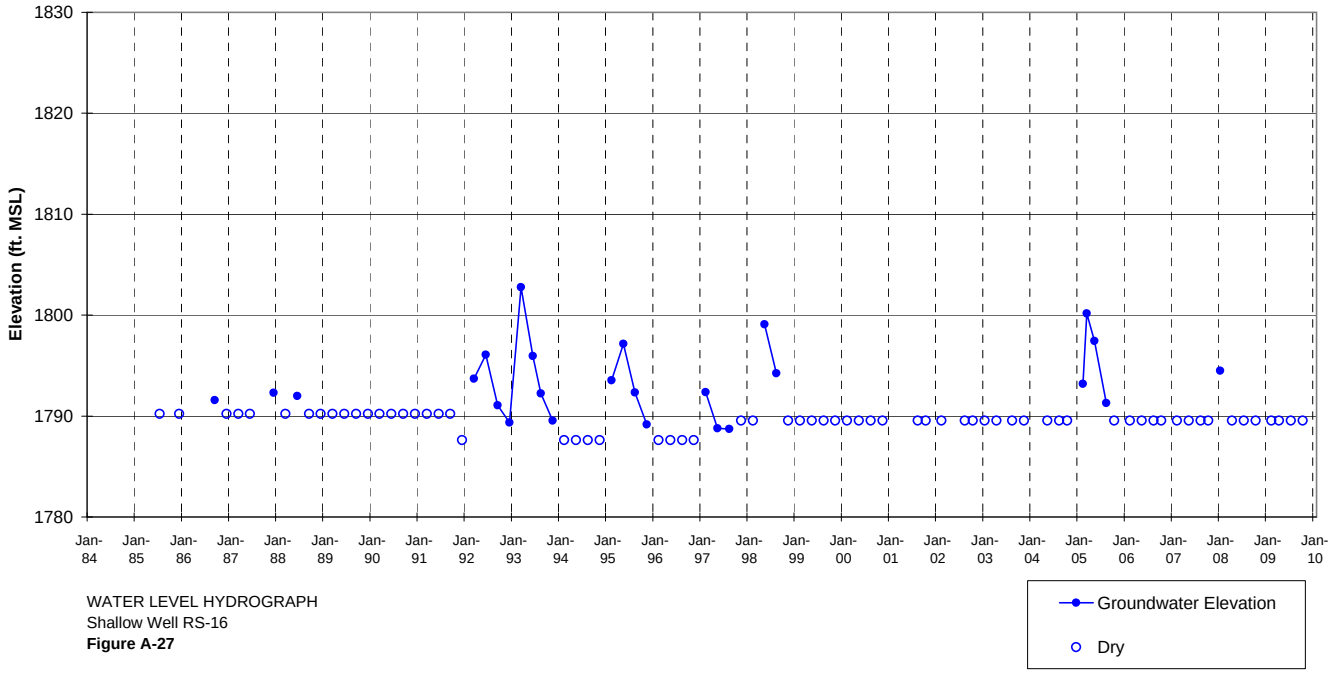
WATER LEVEL HYDROGRAPH
Shallow Well RS-13
Figure A-24



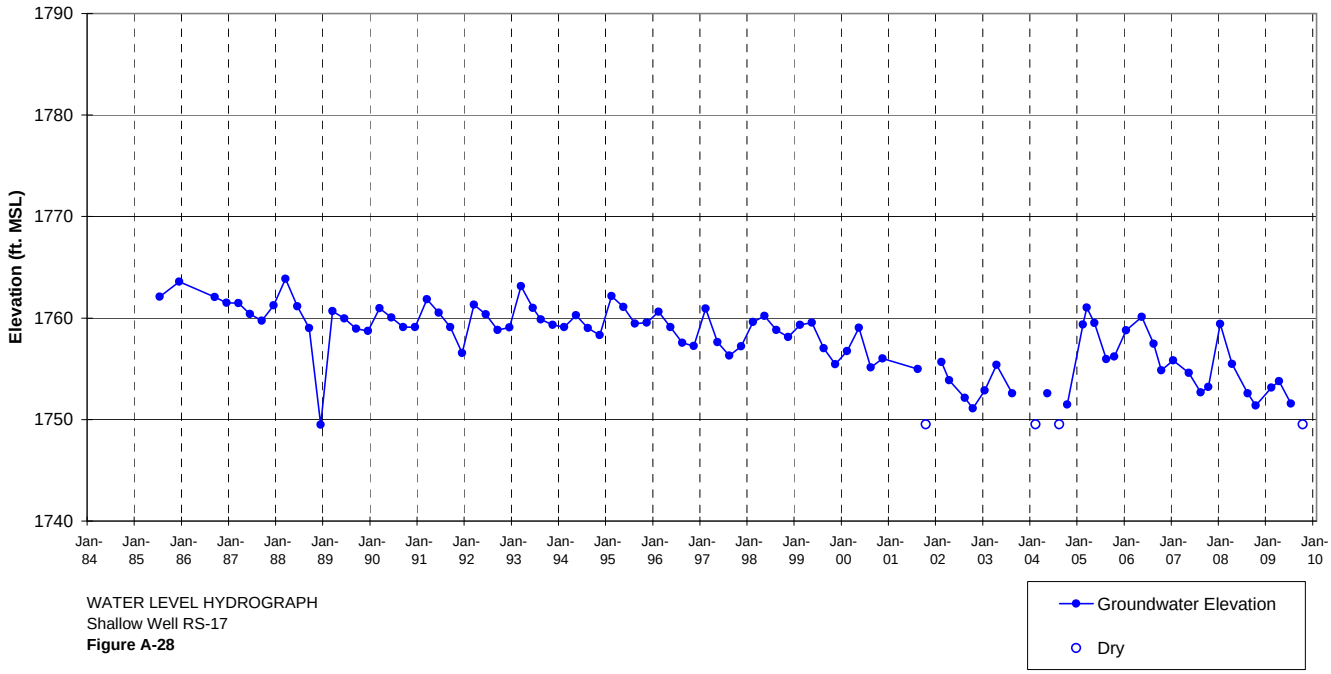
WATER LEVEL HYDROGRAPH
Shallow Well RS-14
Figure A-25



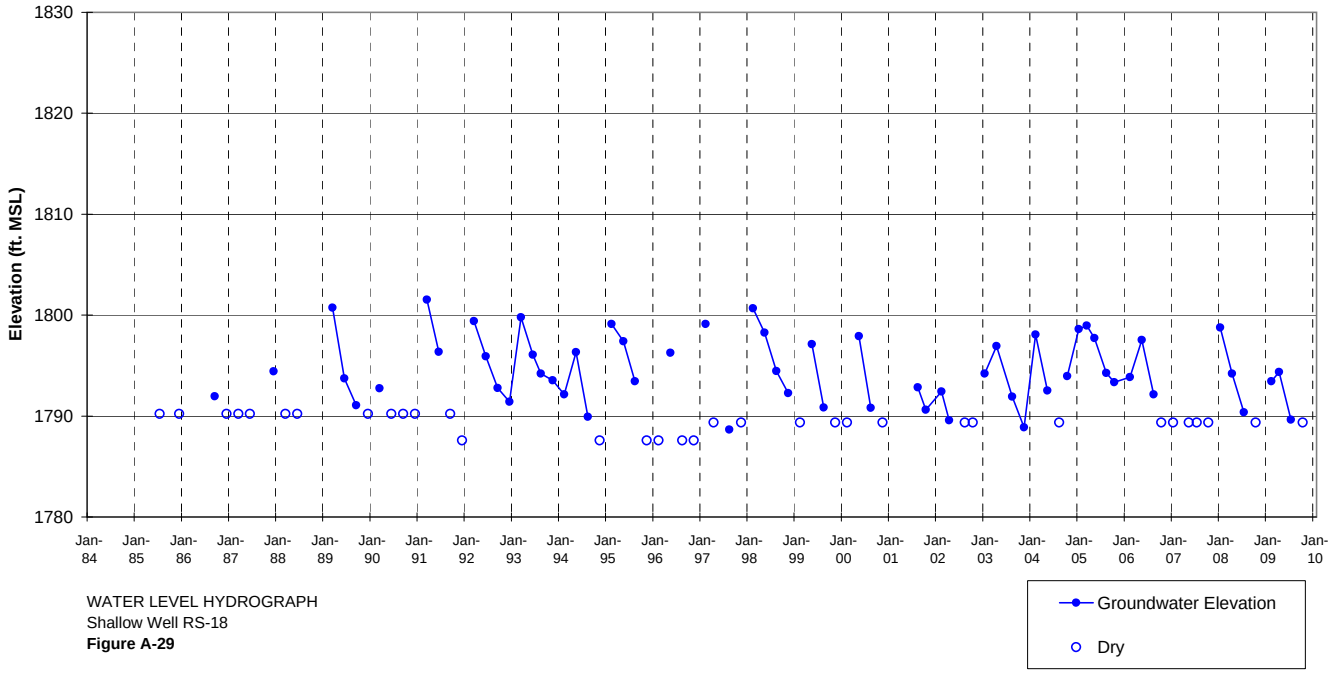
WATER LEVEL HYDROGRAPH
Shallow Well RS-15
Figure A-26



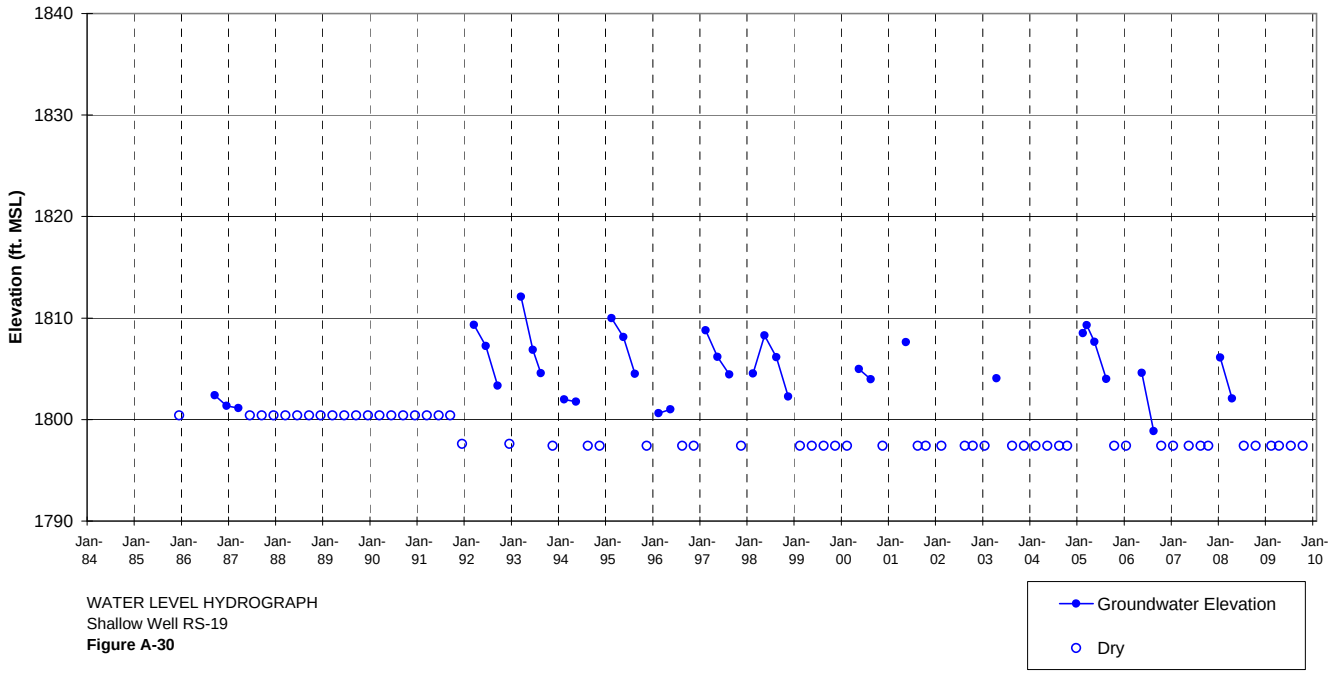
WATER LEVEL HYDROGRAPH
Shallow Well RS-16
Figure A-27



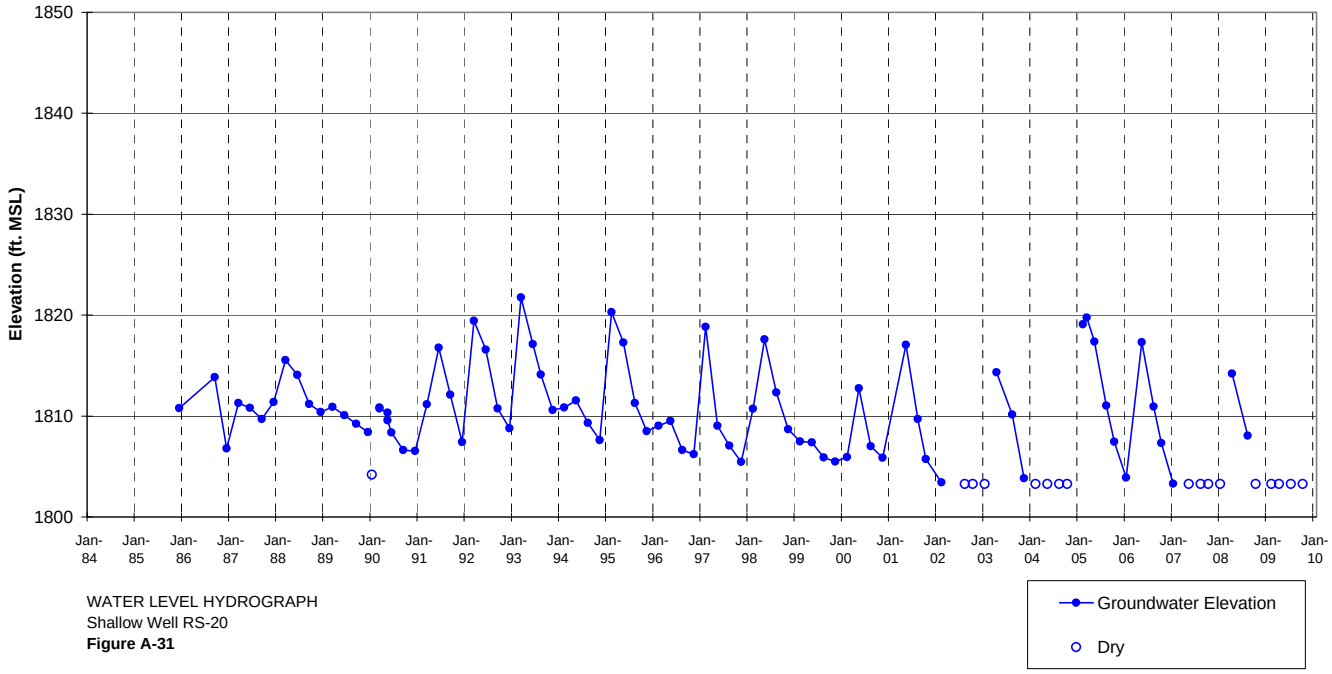
WATER LEVEL HYDROGRAPH
Shallow Well RS-17
Figure A-28



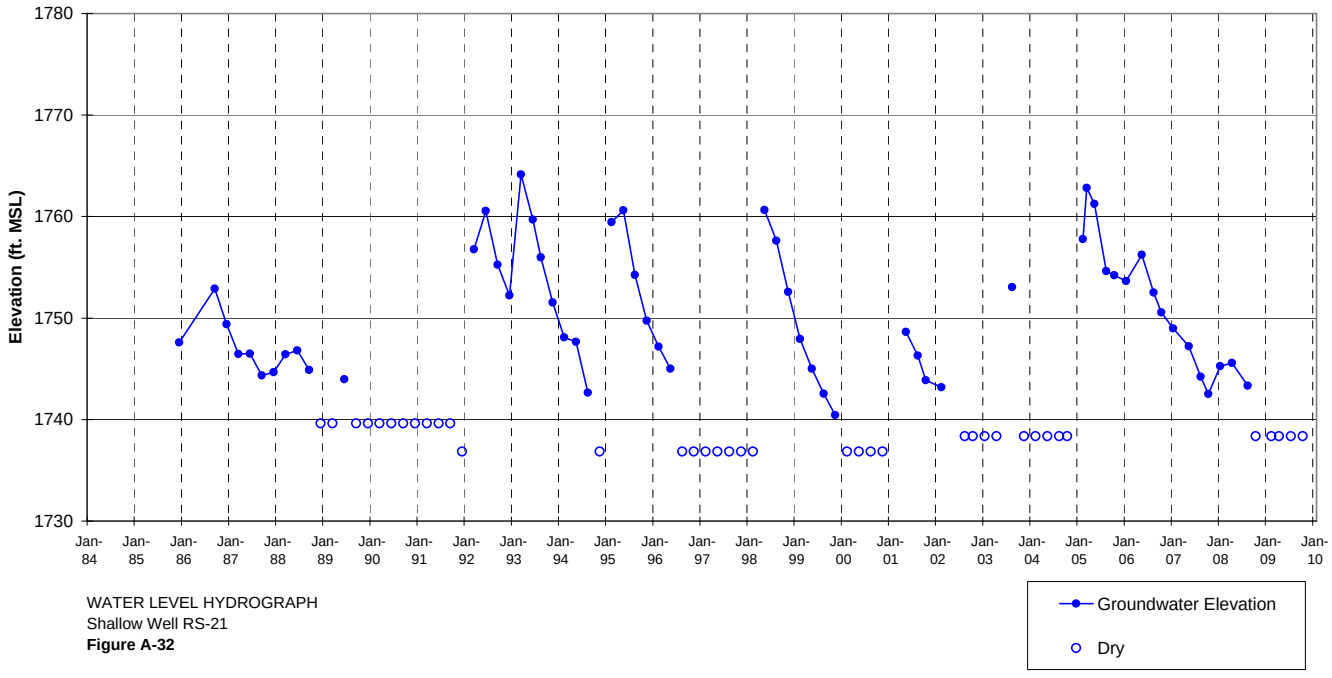
WATER LEVEL HYDROGRAPH
Shallow Well RS-18
Figure A-29



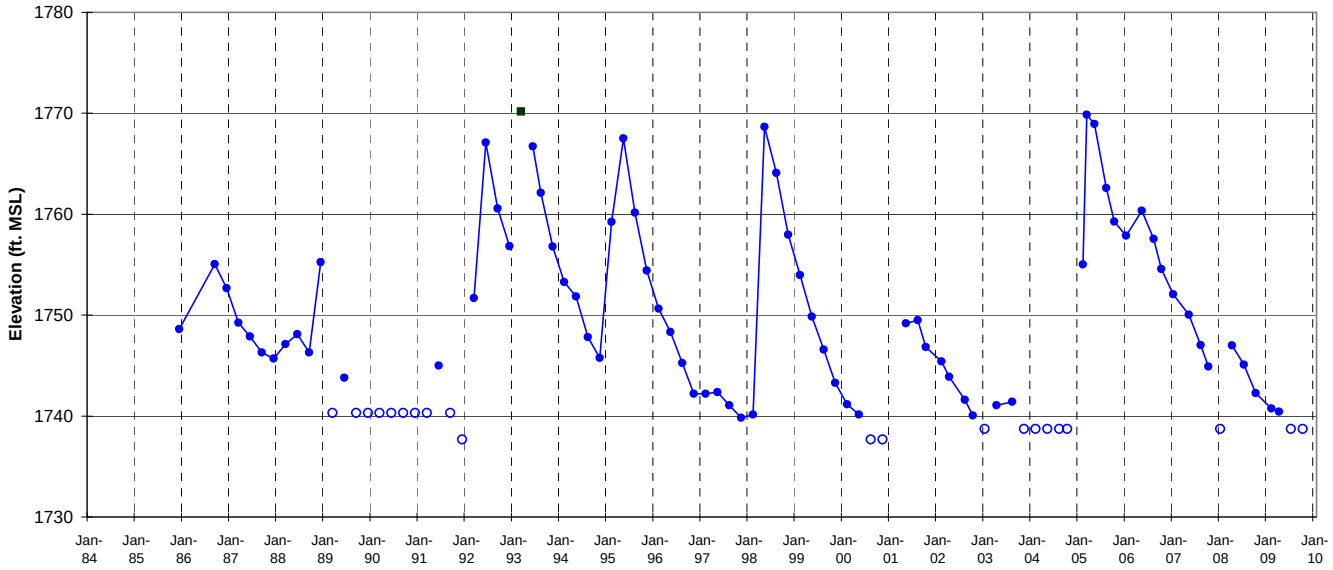
WATER LEVEL HYDROGRAPH
Shallow Well RS-19
Figure A-30



WATER LEVEL HYDROGRAPH
Shallow Well RS-20
Figure A-31

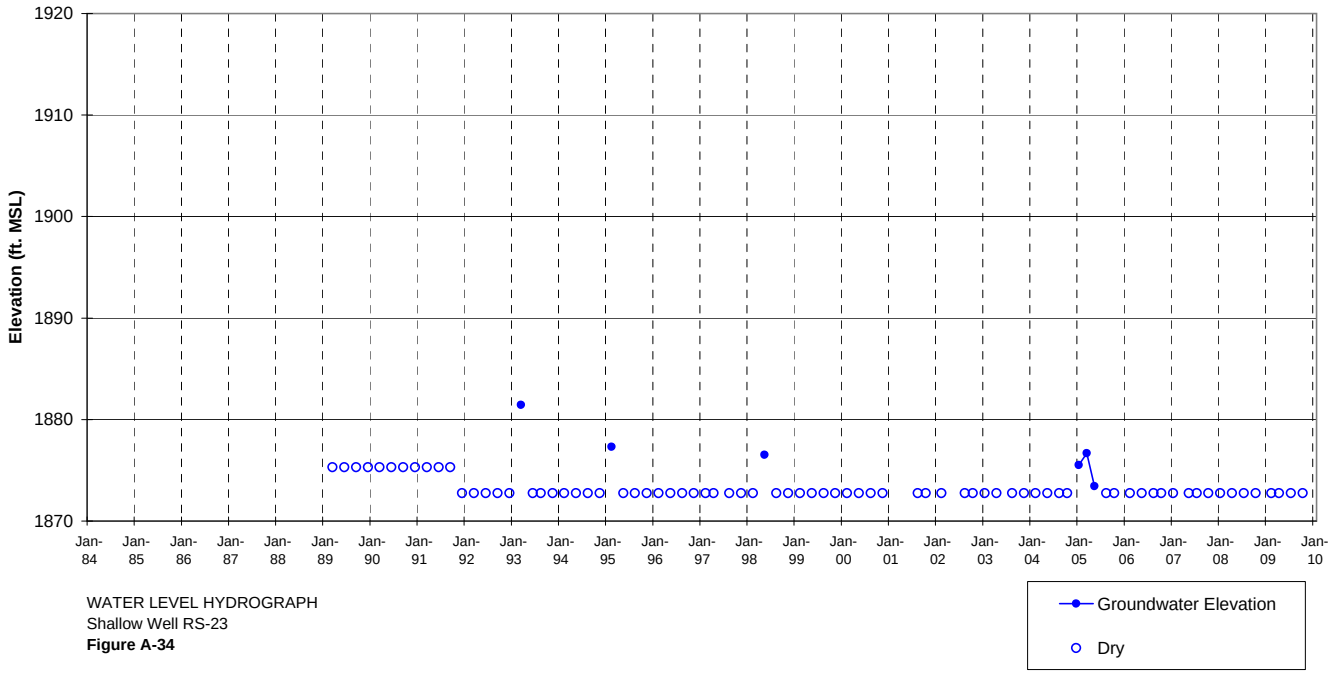


WATER LEVEL HYDROGRAPH
Shallow Well RS-21
Figure A-32

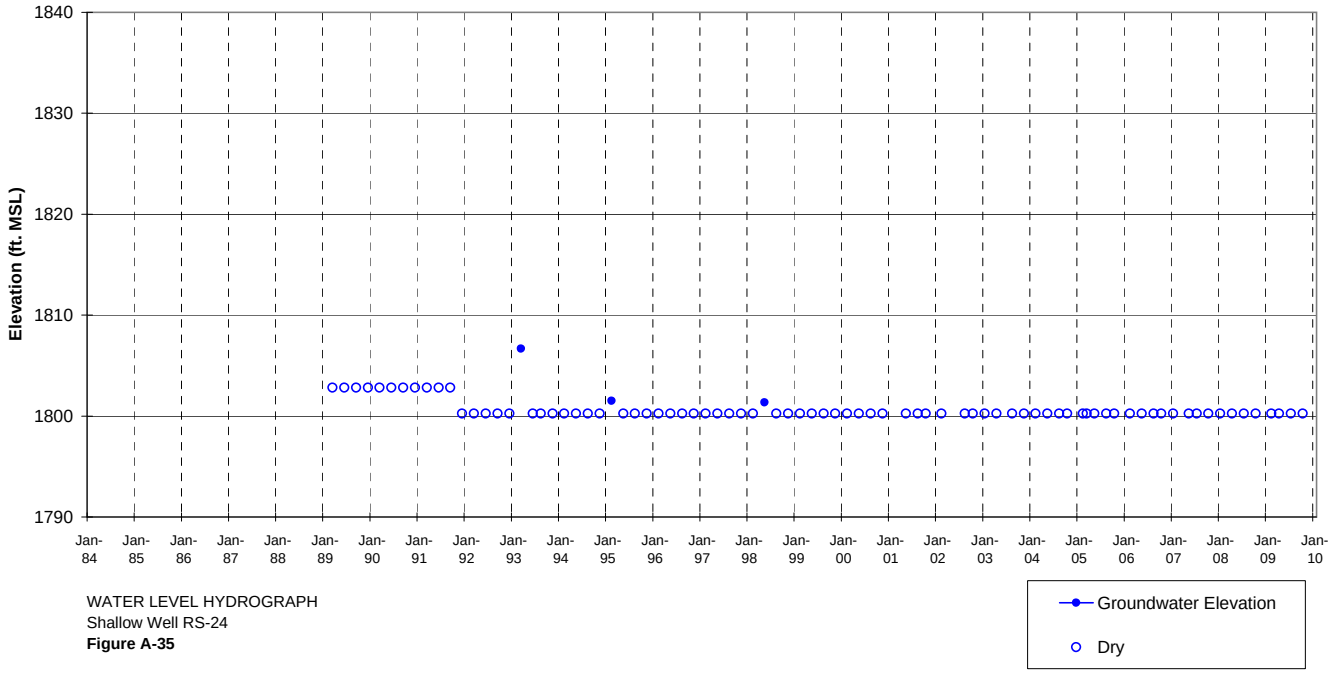


WATER LEVEL HYDROGRAPH
Shallow Well RS-22
Figure A-33

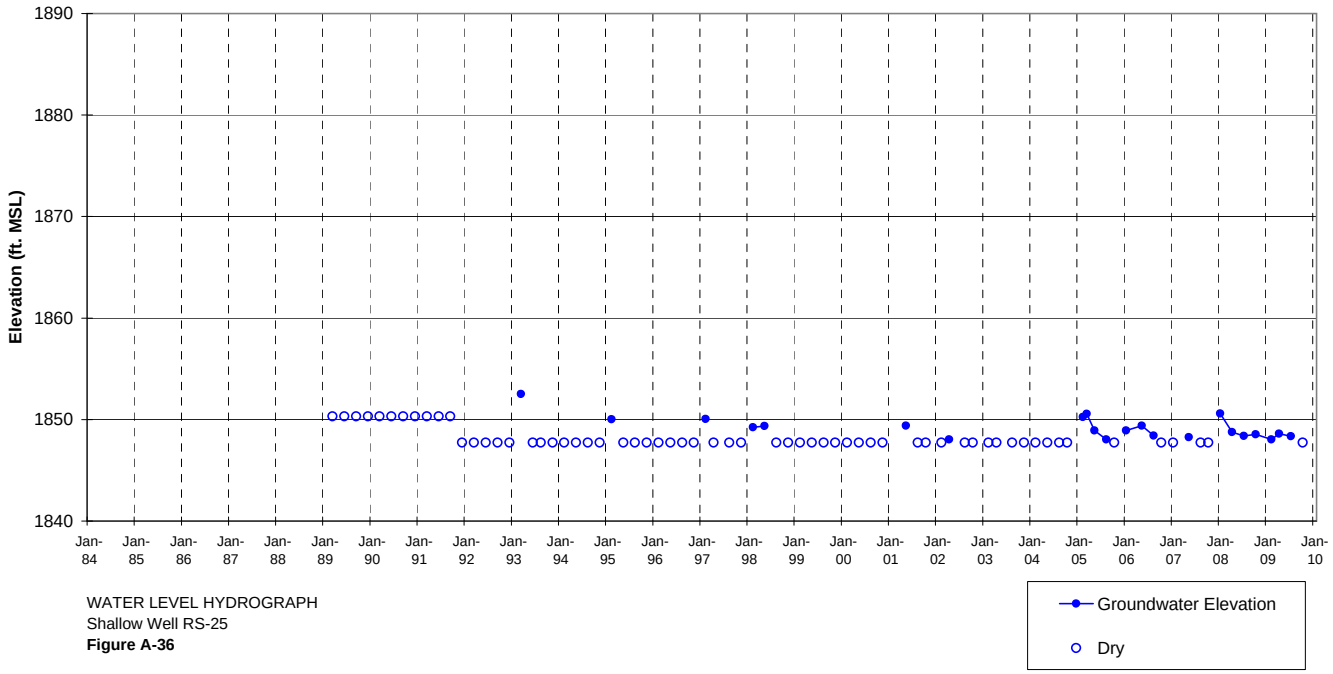
NOTE: MPE is provided when the hydrostatic water elevation is unavailable and flowing water is observed. MP Elevation = 1770.16 ft. msl



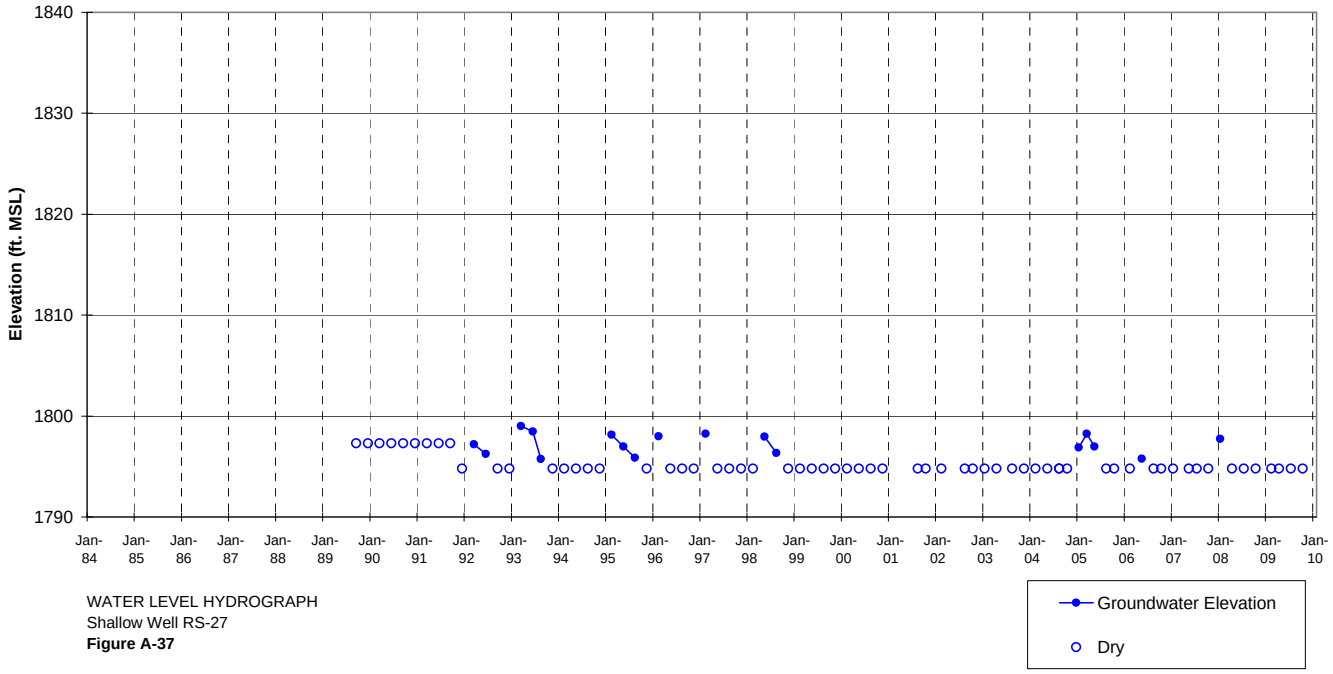
WATER LEVEL HYDROGRAPH
Shallow Well RS-23
Figure A-34



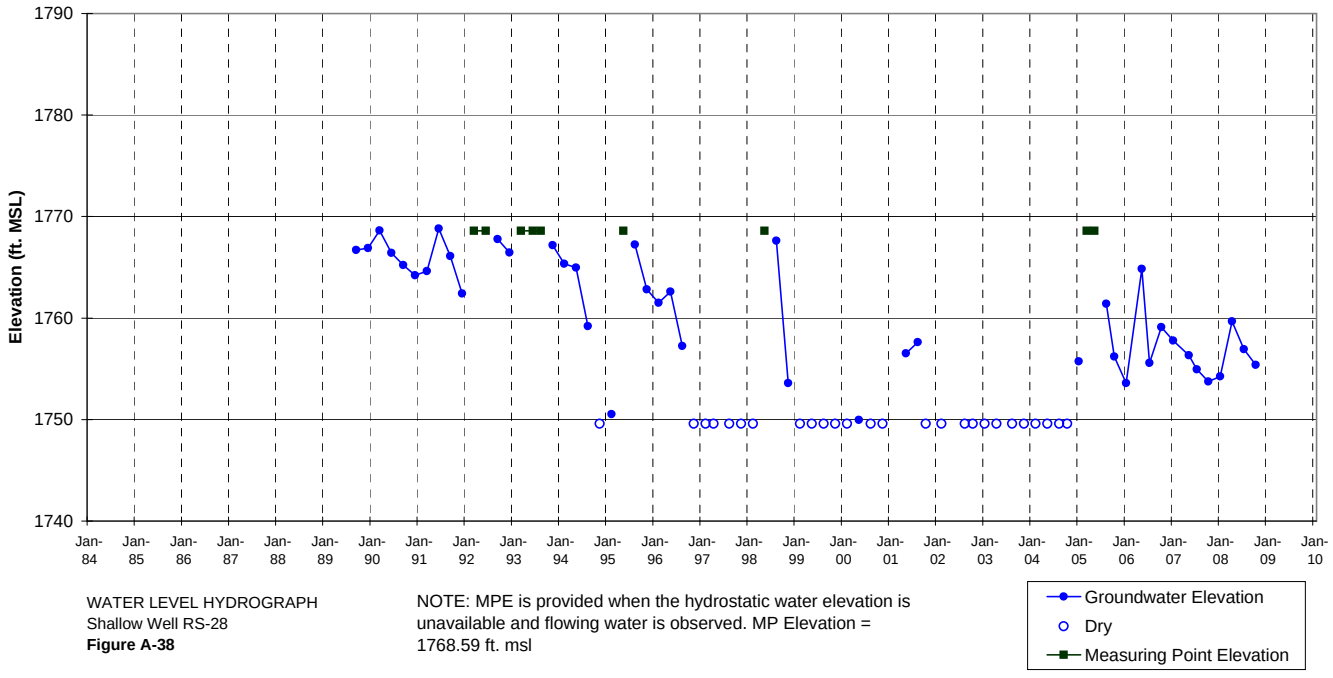
WATER LEVEL HYDROGRAPH
Shallow Well RS-24
Figure A-35



WATER LEVEL HYDROGRAPH
Shallow Well RS-25
Figure A-36

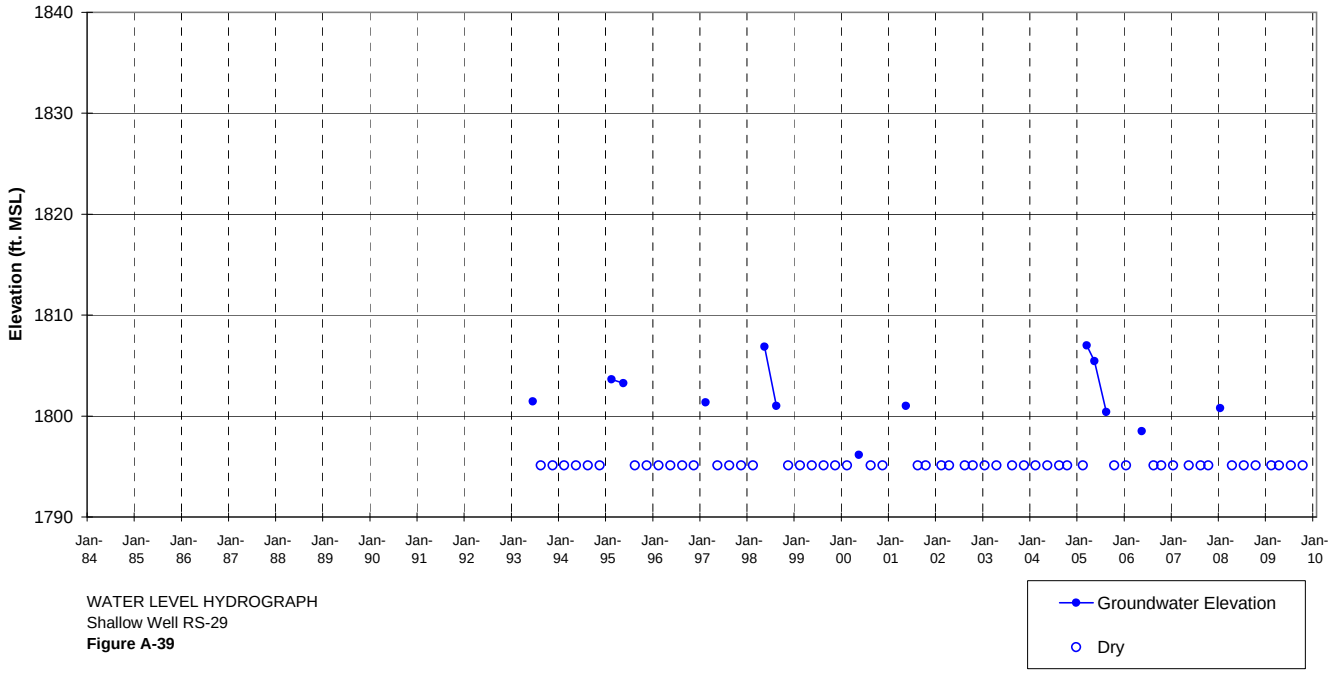


WATER LEVEL HYDROGRAPH
Shallow Well RS-27
Figure A-37

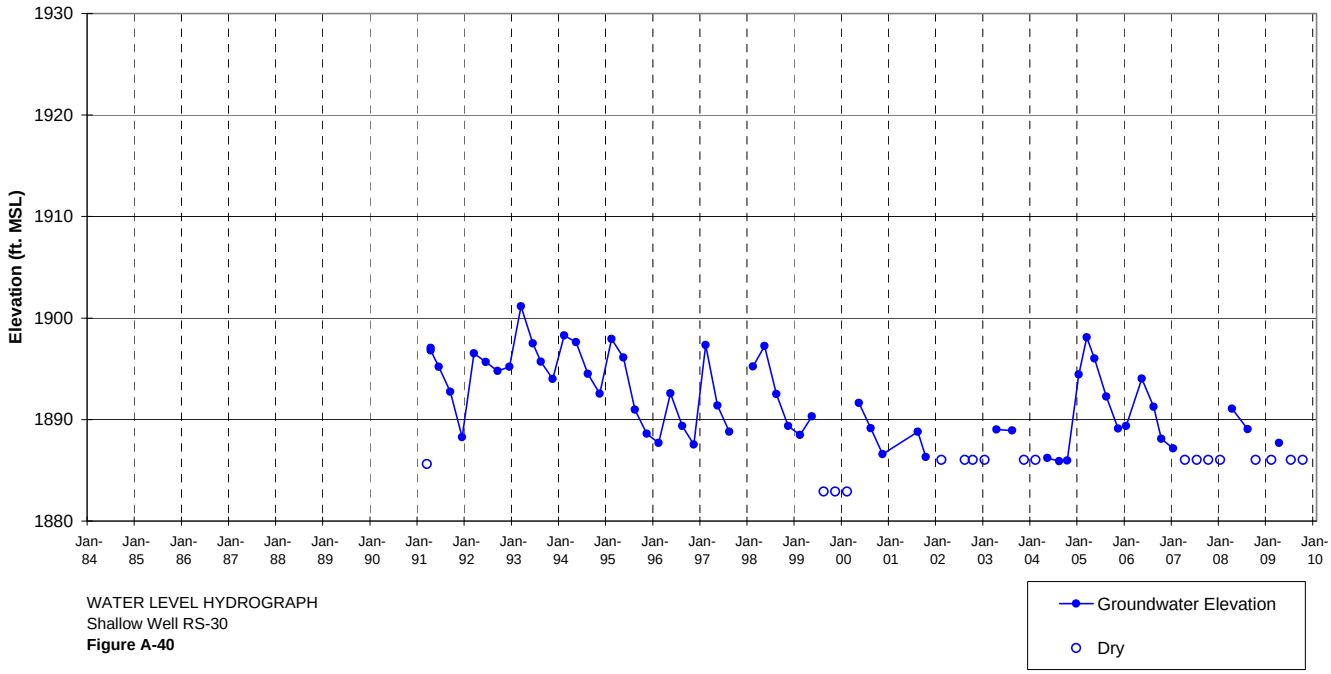


WATER LEVEL HYDROGRAPH
Shallow Well RS-28
Figure A-38

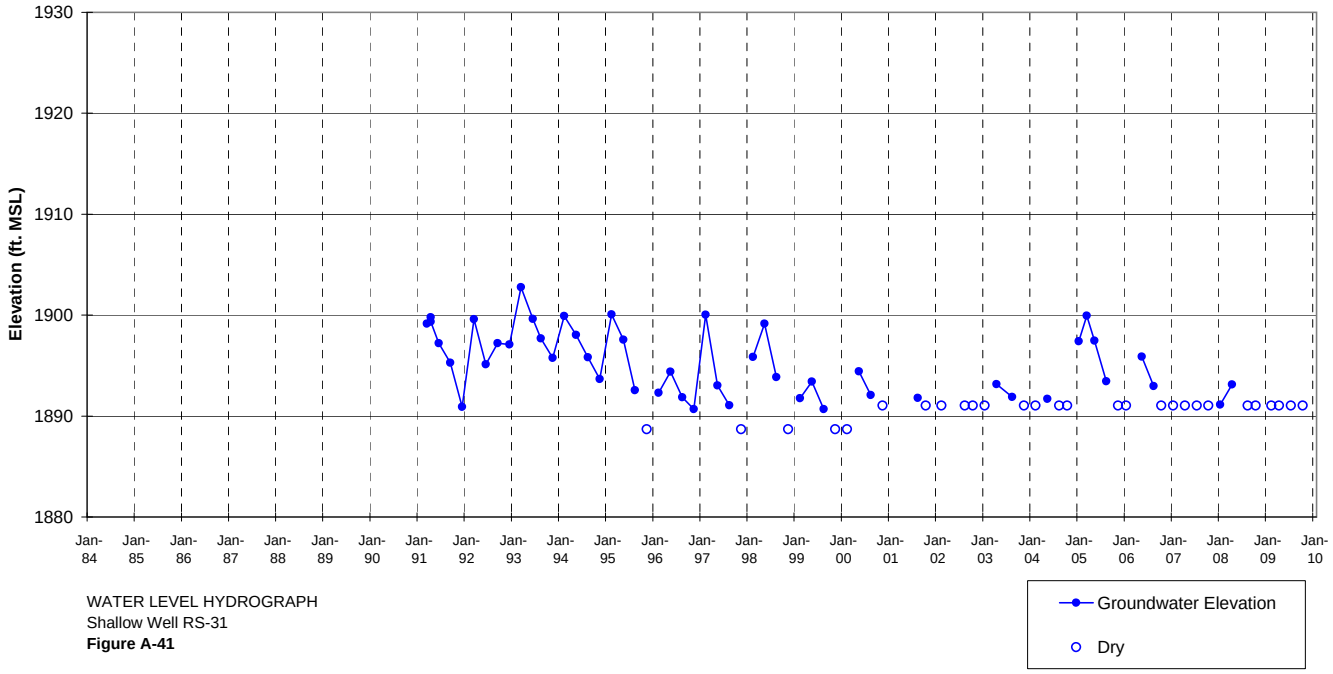
NOTE: MPE is provided when the hydrostatic water elevation is unavailable and flowing water is observed. MP Elevation = 1768.59 ft. msl



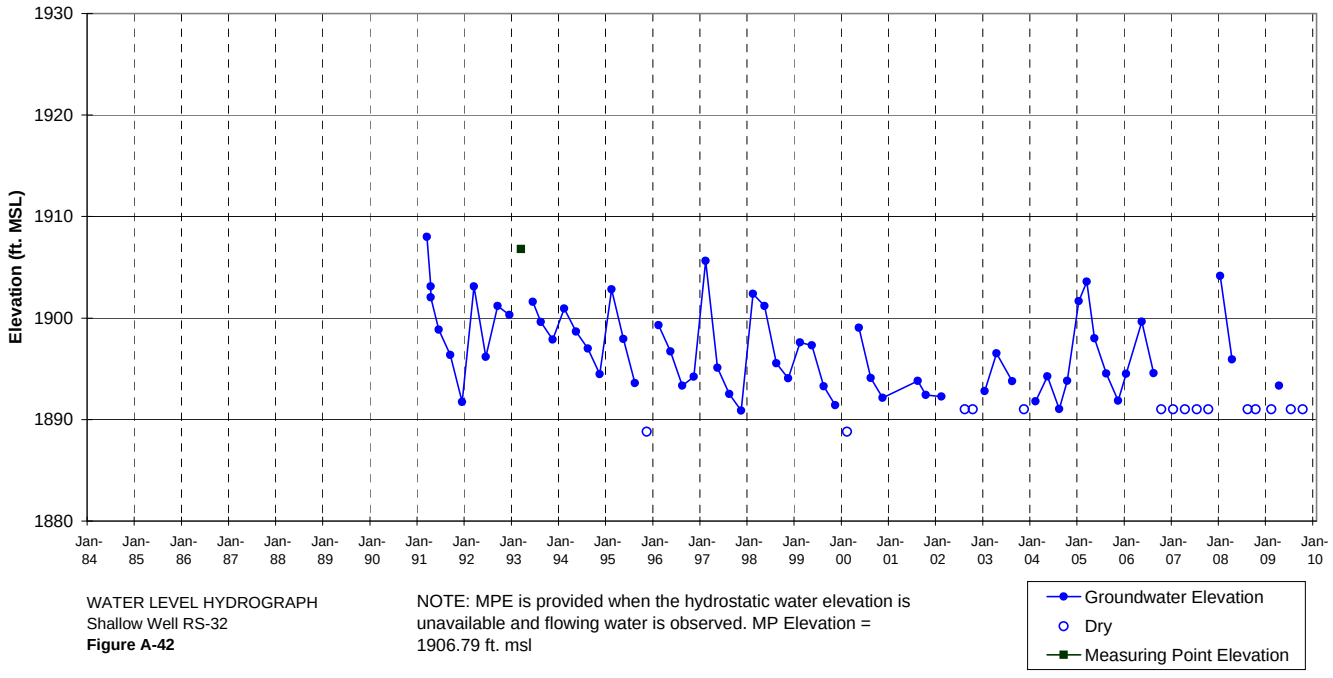
WATER LEVEL HYDROGRAPH
Shallow Well RS-29
Figure A-39



WATER LEVEL HYDROGRAPH
Shallow Well RS-30
Figure A-40

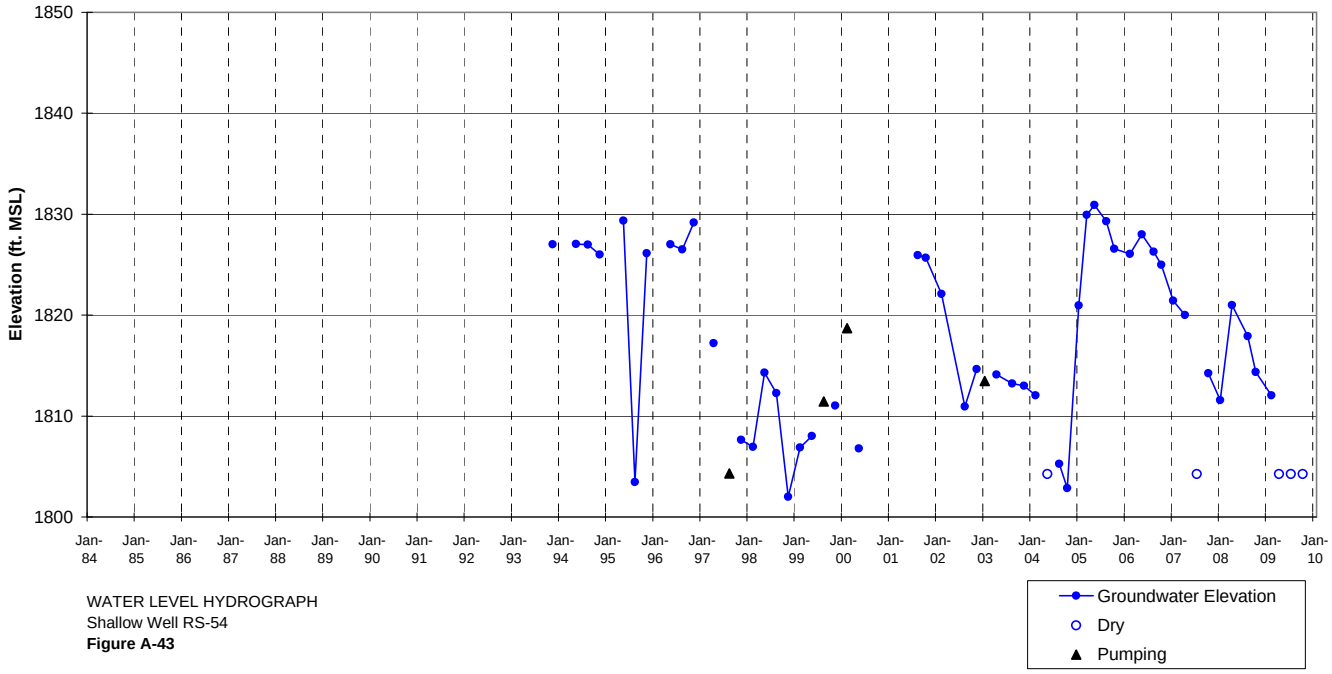


WATER LEVEL HYDROGRAPH
Shallow Well RS-31
Figure A-41

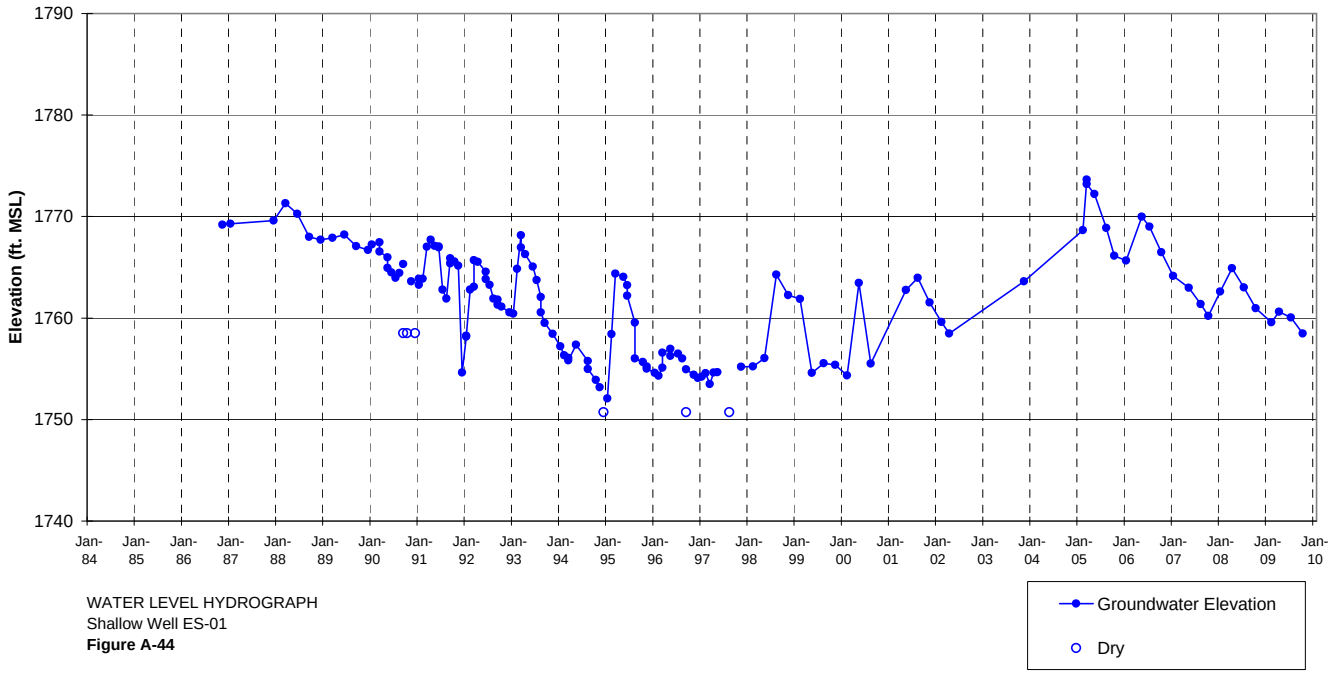


WATER LEVEL HYDROGRAPH
Shallow Well RS-32
Figure A-42

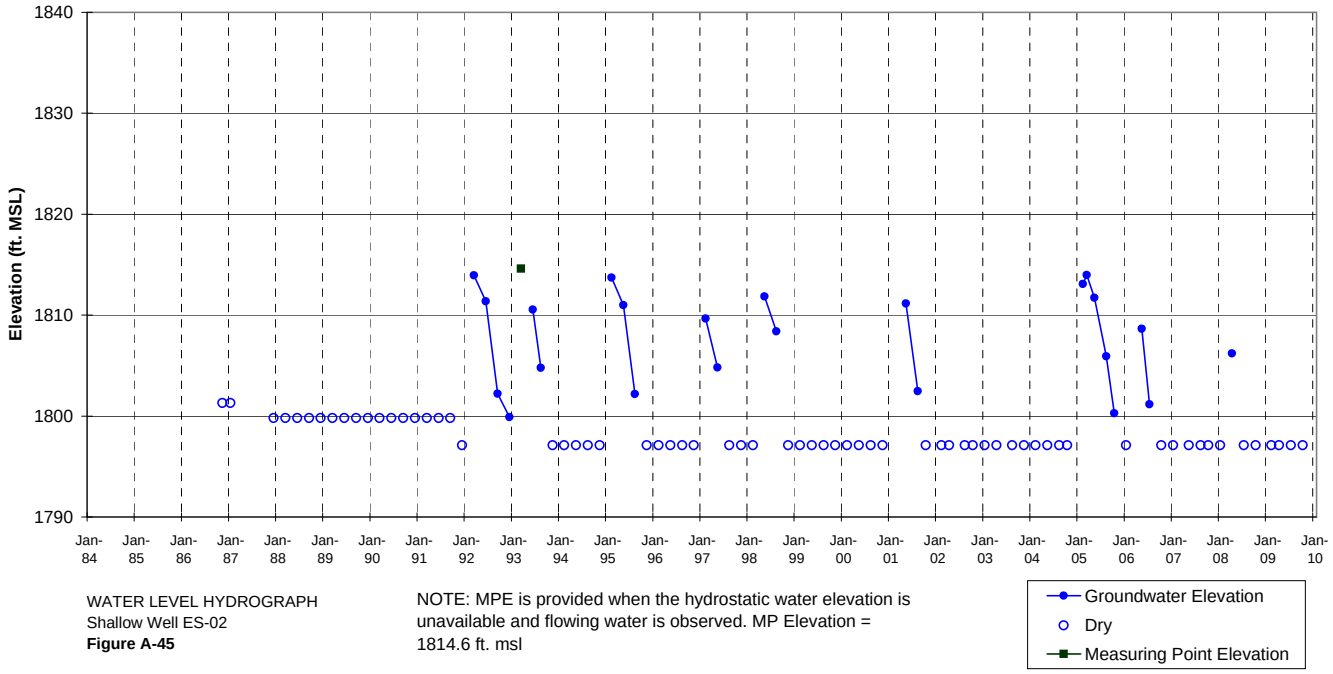
NOTE: MPE is provided when the hydrostatic water elevation is unavailable and flowing water is observed. MP Elevation = 1906.79 ft. msl



WATER LEVEL HYDROGRAPH
Shallow Well RS-54
Figure A-43

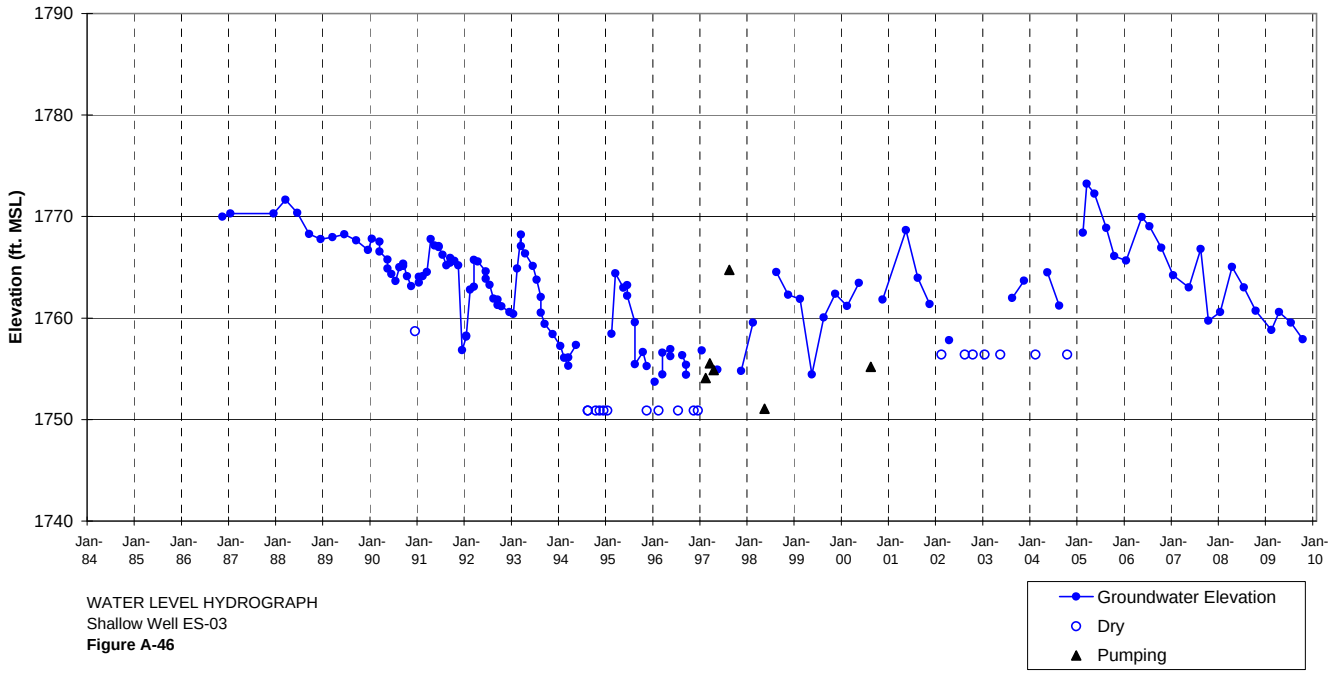


WATER LEVEL HYDROGRAPH
Shallow Well ES-01
Figure A-44

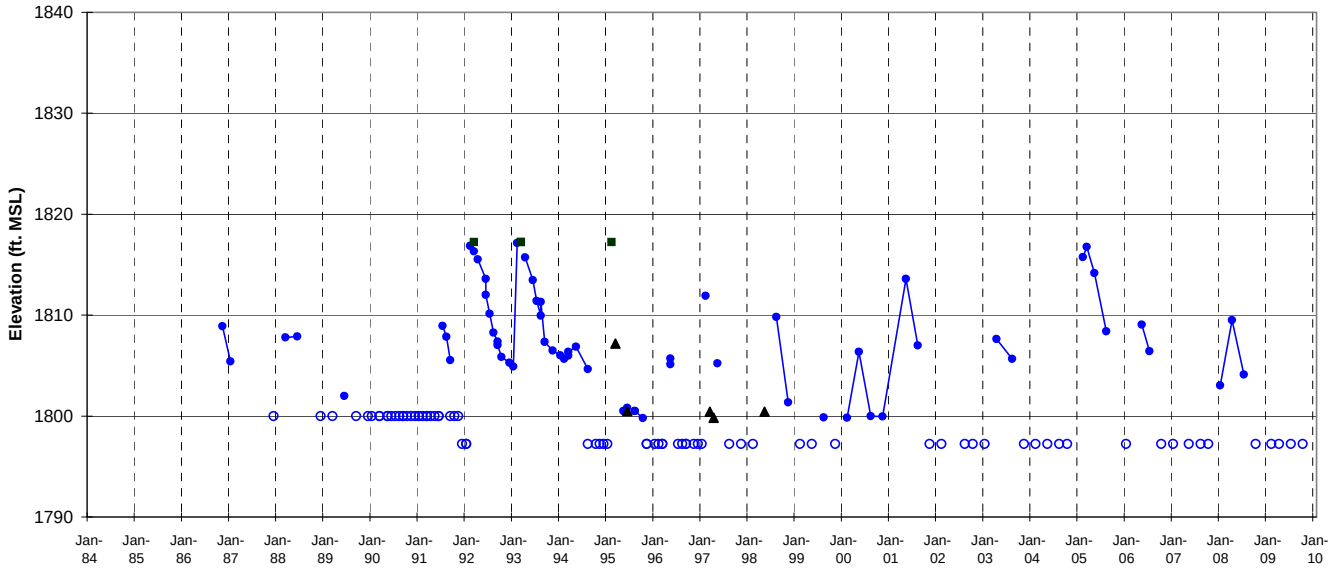


WATER LEVEL HYDROGRAPH
Shallow Well ES-02
Figure A-45

NOTE: MPE is provided when the hydrostatic water elevation is unavailable and flowing water is observed. MP Elevation = 1814.6 ft. msl

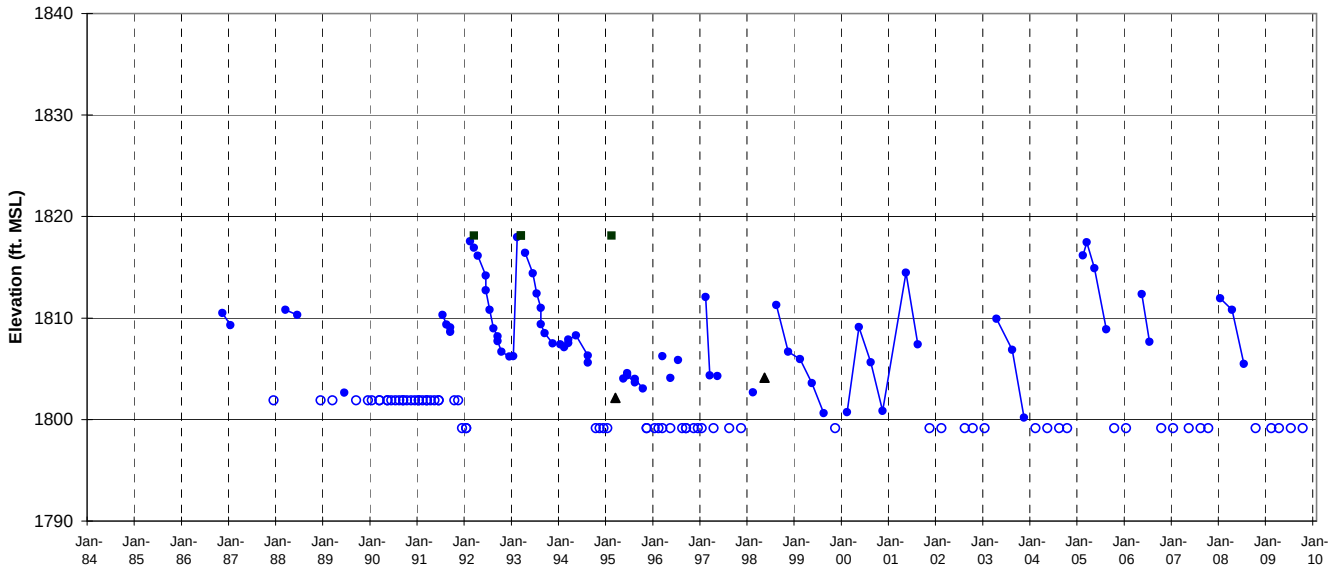


WATER LEVEL HYDROGRAPH
Shallow Well ES-03
Figure A-46



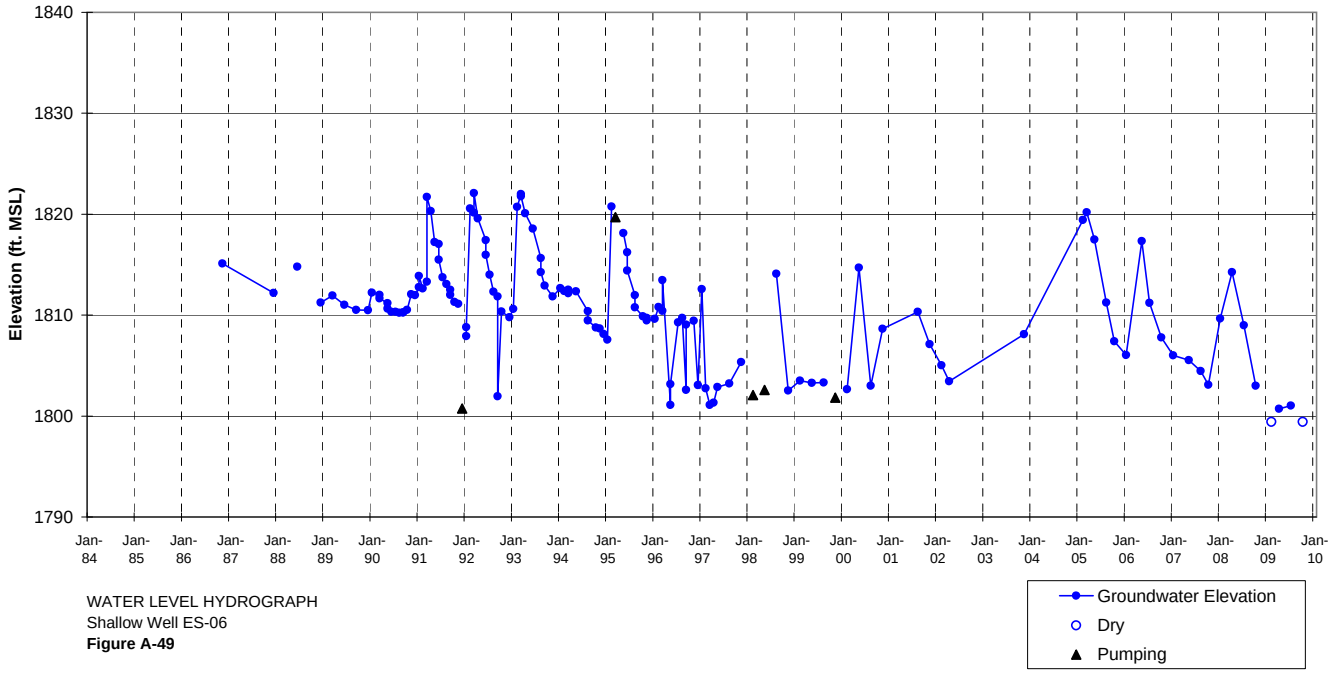
WATER LEVEL HYDROGRAPH
Shallow Well ES-04
Figure A-47

NOTE: MPE is provided when the hydrostatic water elevation is unavailable and flowing water is observed. MP Elevation = 1817.24 ft. msl

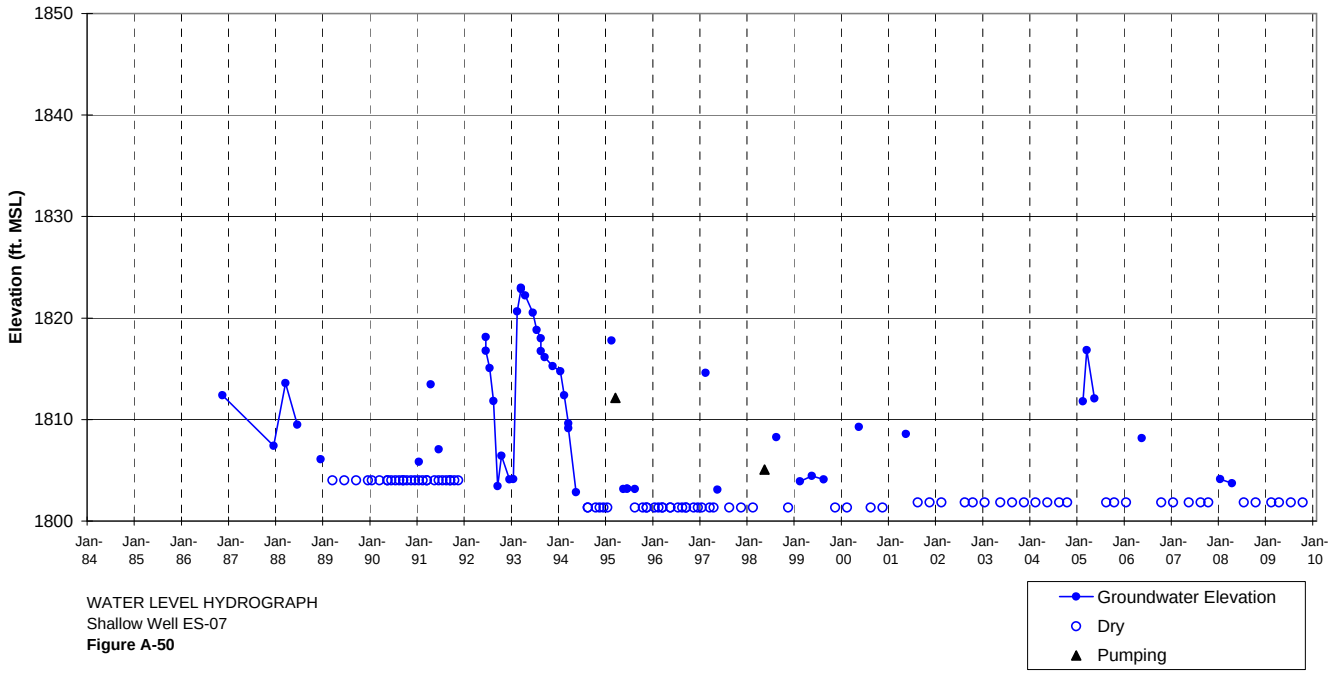


WATER LEVEL HYDROGRAPH
Shallow Well ES-05
Figure A-48

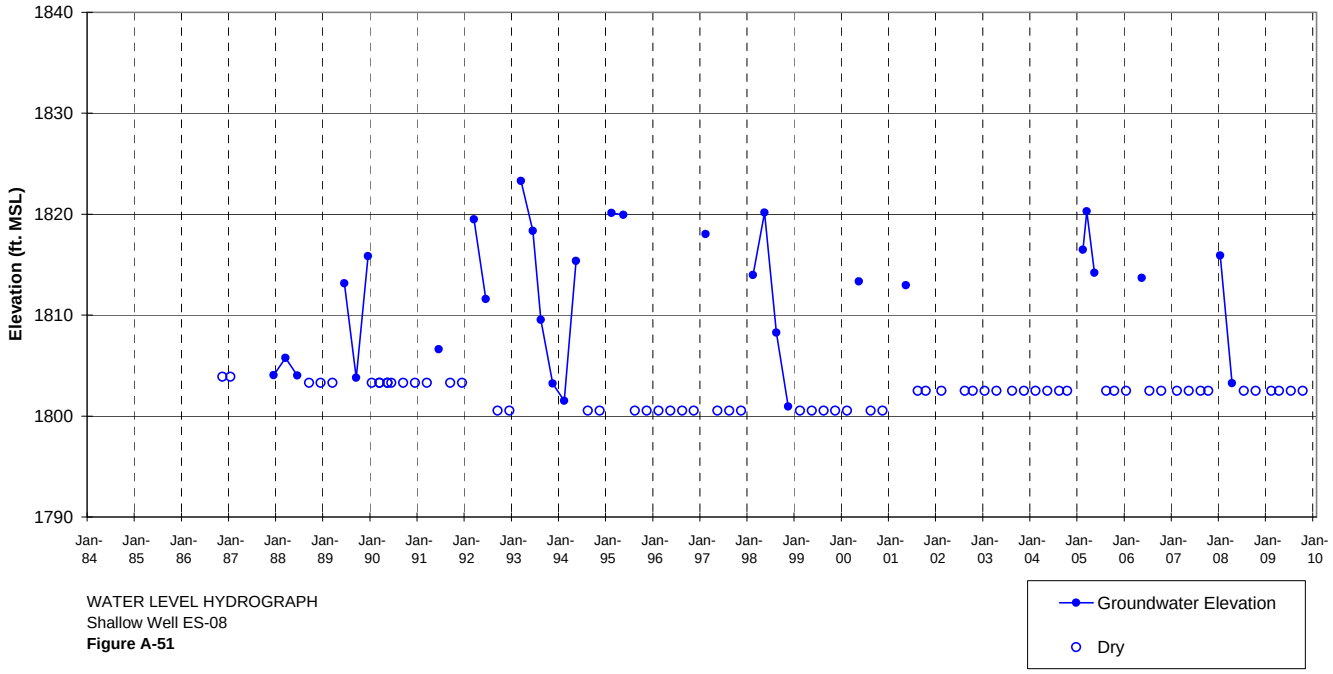
NOTE: MPE is provided when the hydrostatic water elevation is unavailable and flowing water is observed. MP Elevation = 1818.13 ft. msl



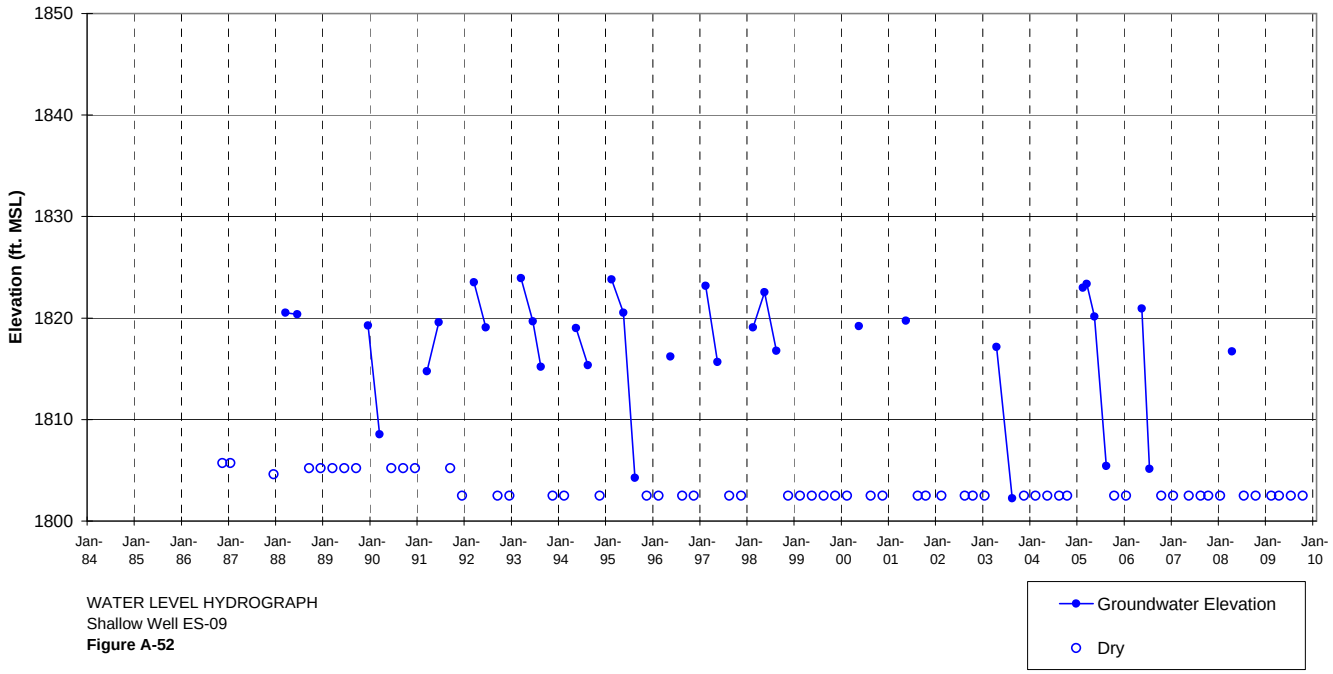
WATER LEVEL HYDROGRAPH
Shallow Well ES-06
Figure A-49



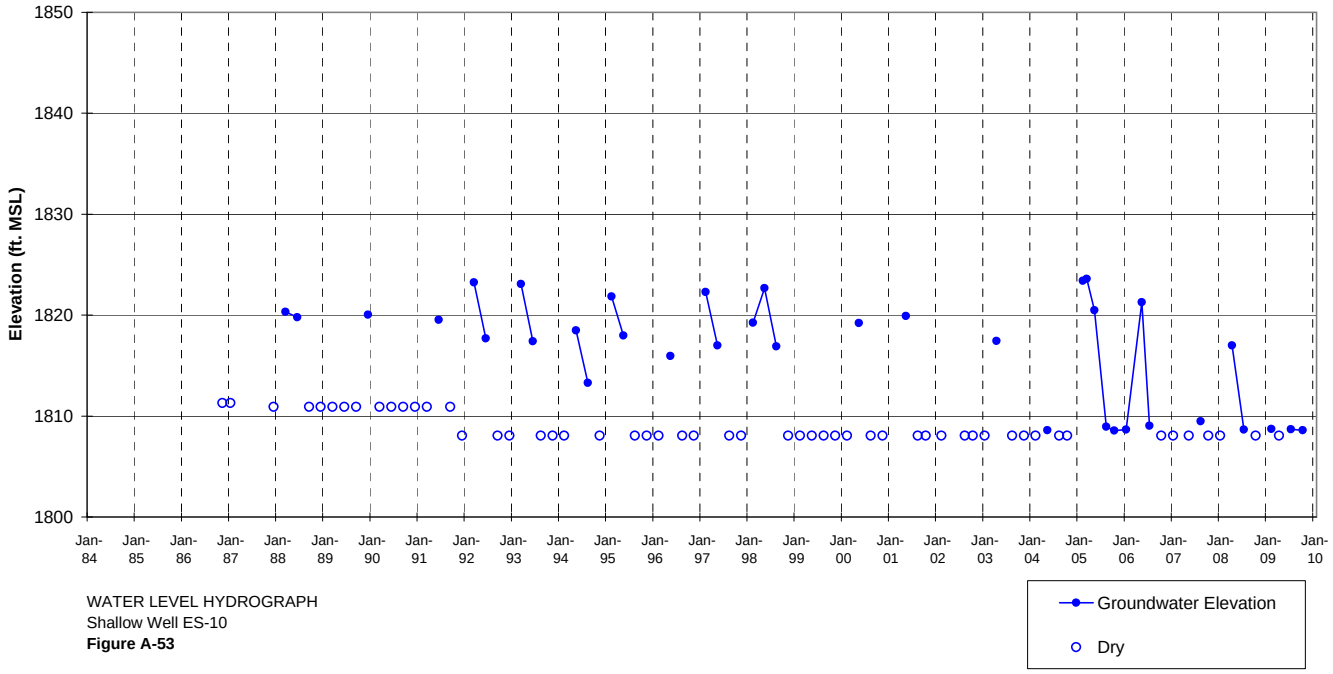
WATER LEVEL HYDROGRAPH
Shallow Well ES-07
Figure A-50



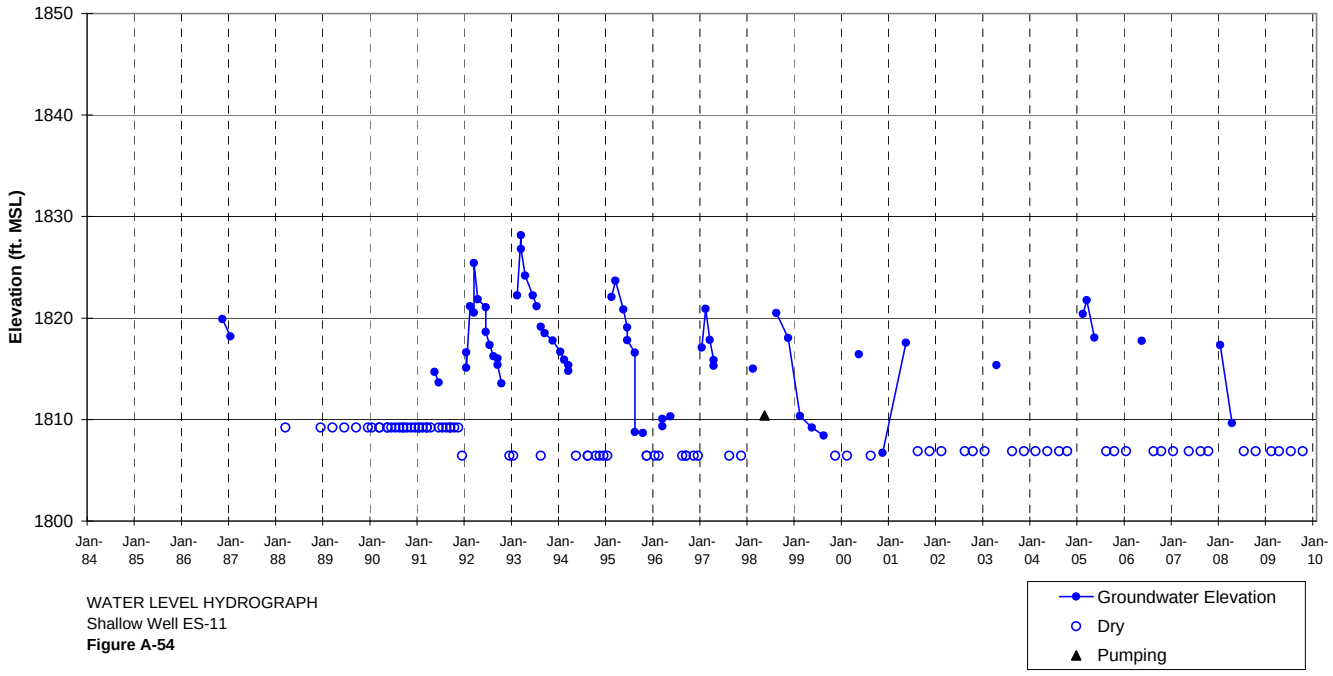
WATER LEVEL HYDROGRAPH
Shallow Well ES-08
Figure A-51



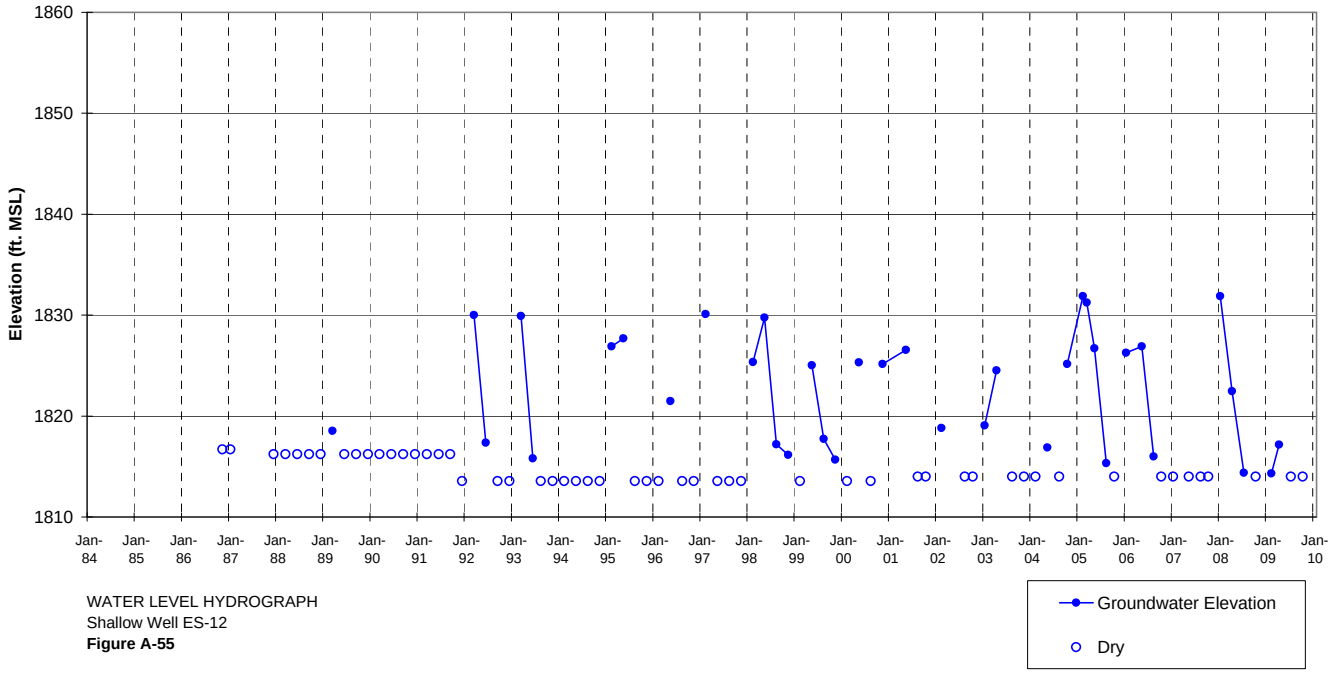
WATER LEVEL HYDROGRAPH
Shallow Well ES-09
Figure A-52



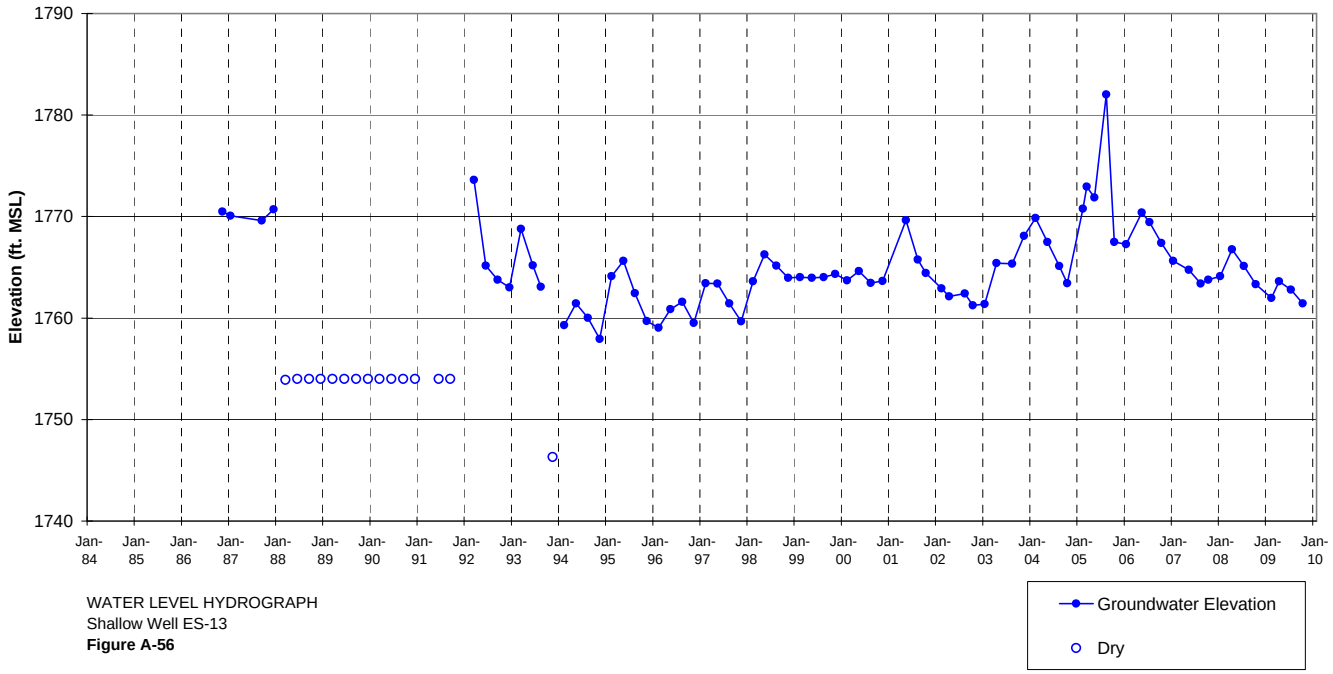
WATER LEVEL HYDROGRAPH
Shallow Well ES-10
Figure A-53



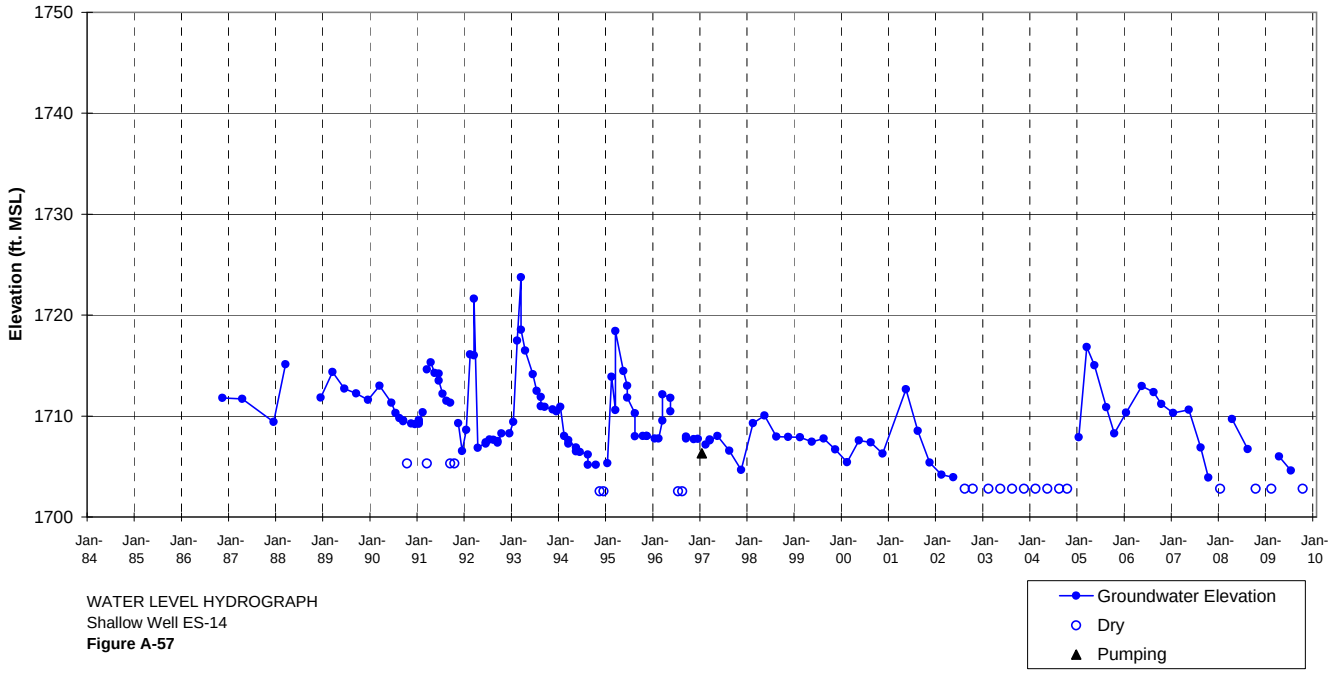
WATER LEVEL HYDROGRAPH
Shallow Well ES-11
Figure A-54



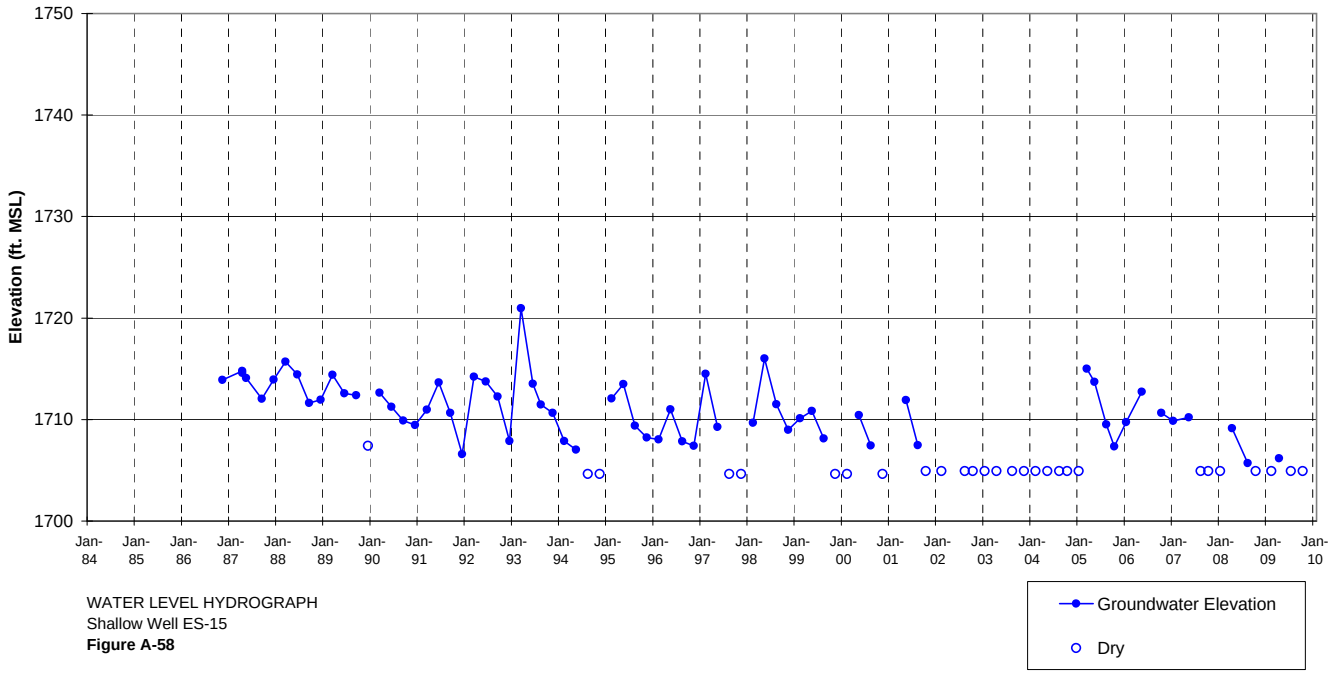
WATER LEVEL HYDROGRAPH
Shallow Well ES-12
Figure A-55



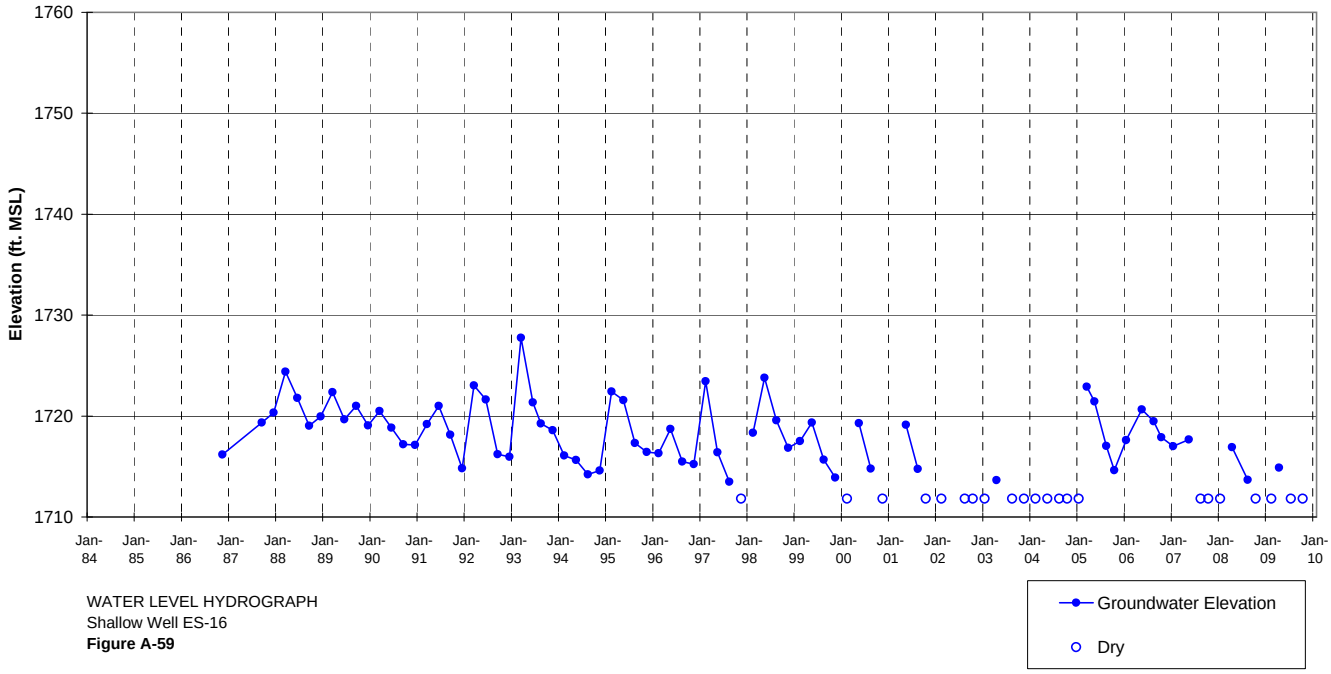
WATER LEVEL HYDROGRAPH
Shallow Well ES-13
Figure A-56



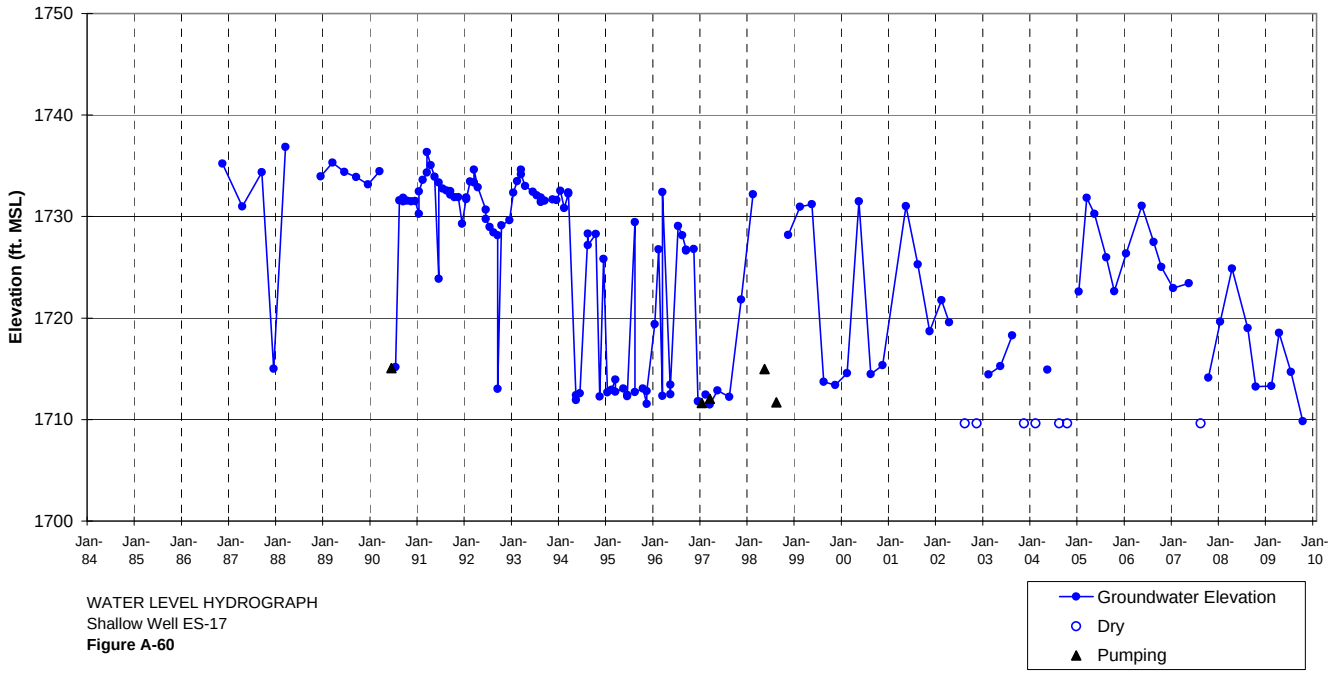
WATER LEVEL HYDROGRAPH
Shallow Well ES-14
Figure A-57



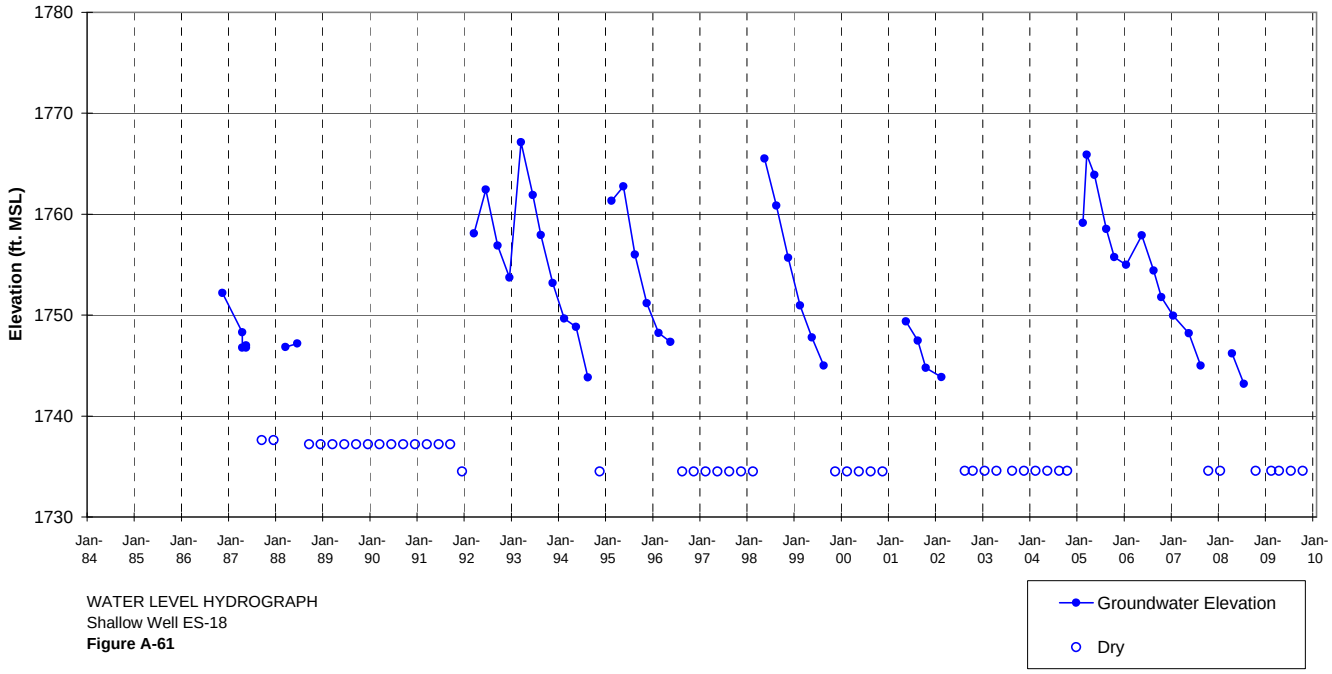
WATER LEVEL HYDROGRAPH
Shallow Well ES-15
Figure A-58



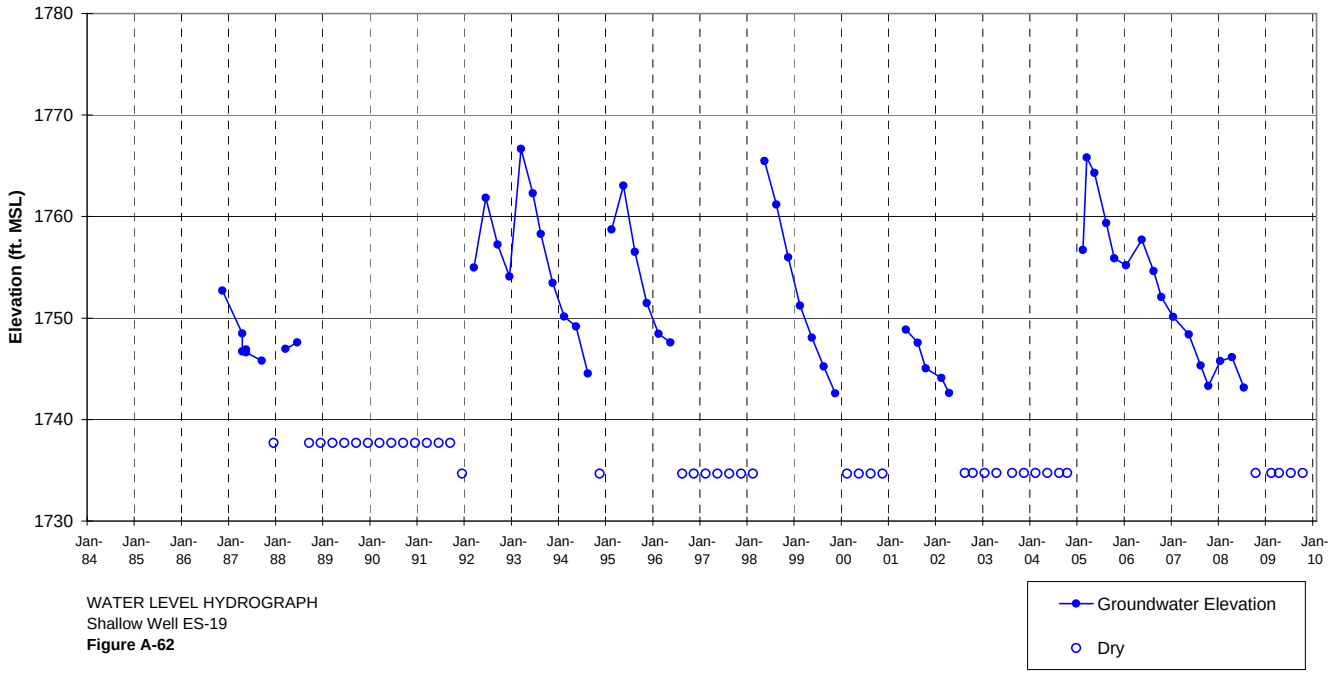
WATER LEVEL HYDROGRAPH
Shallow Well ES-16
Figure A-59



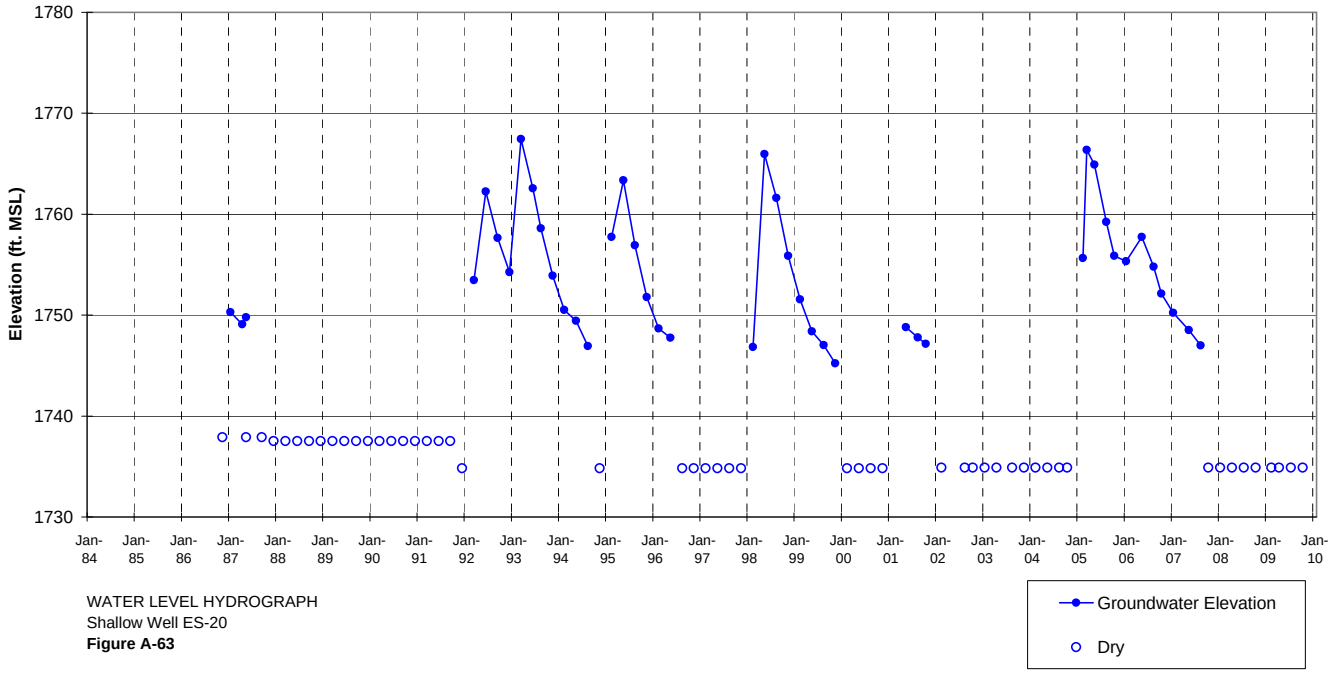
WATER LEVEL HYDROGRAPH
Shallow Well ES-17
Figure A-60



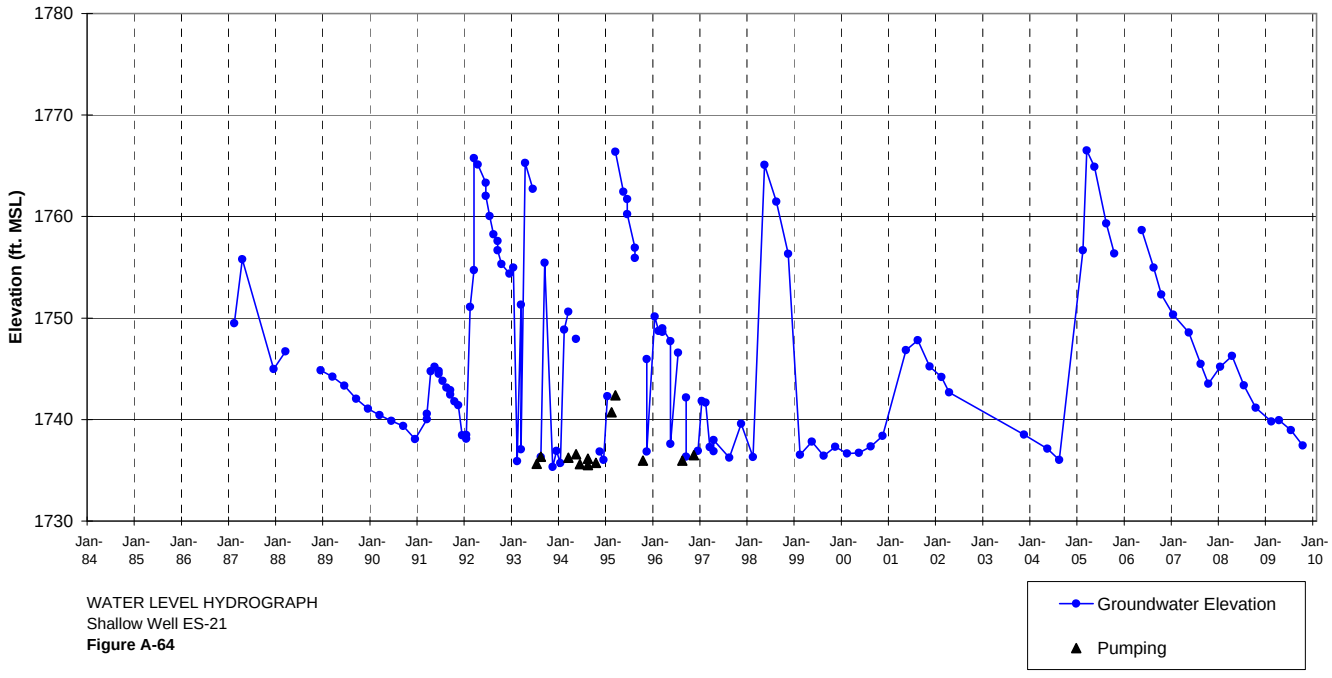
WATER LEVEL HYDROGRAPH
Shallow Well ES-18
Figure A-61



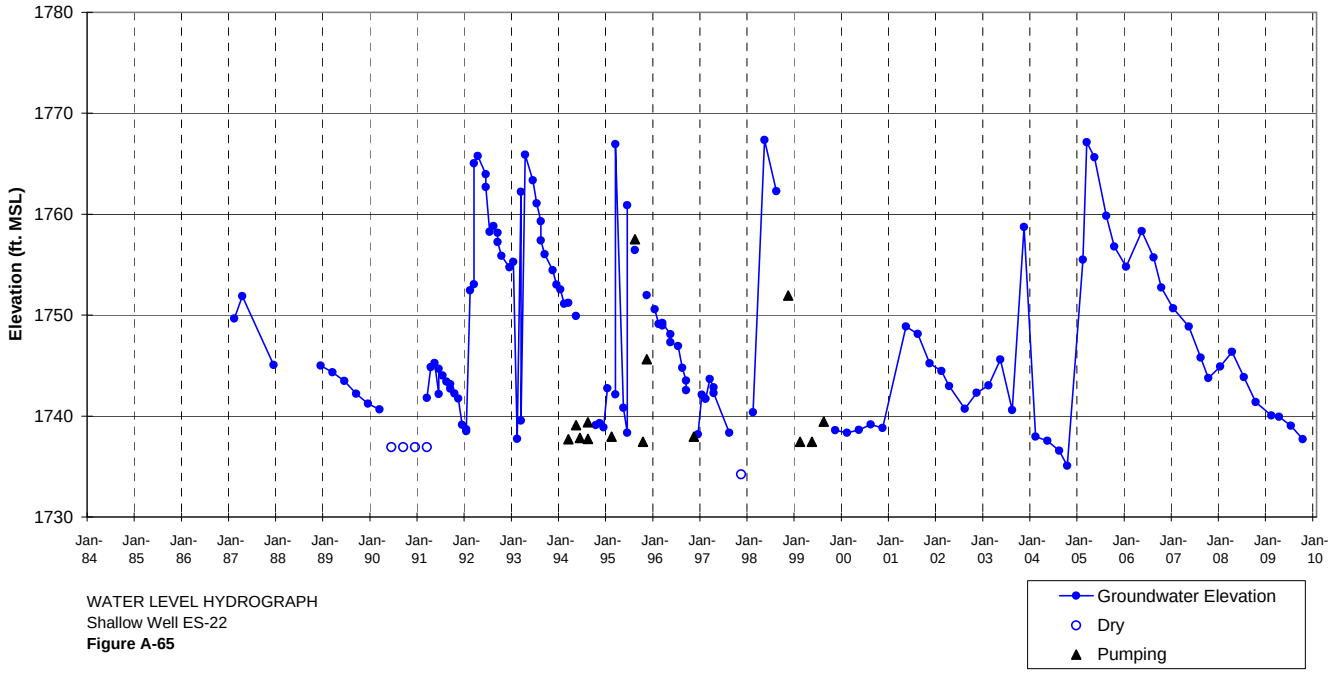
WATER LEVEL HYDROGRAPH
Shallow Well ES-19
Figure A-62



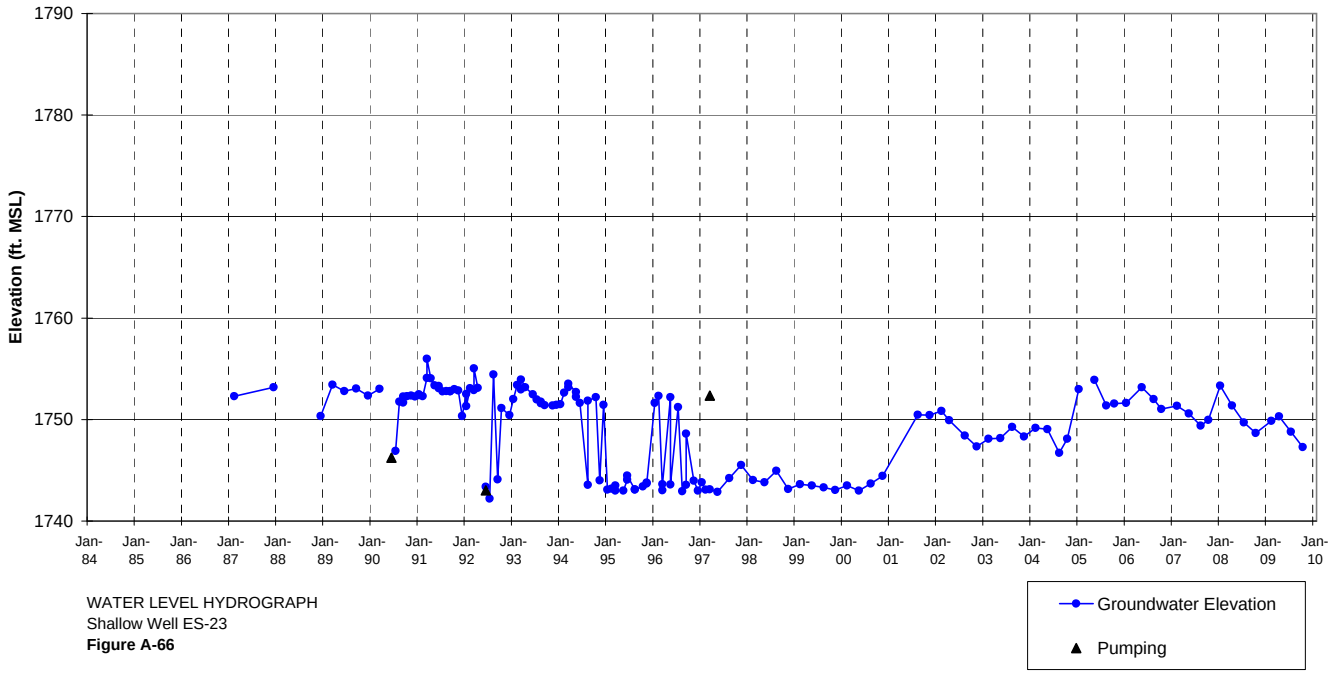
WATER LEVEL HYDROGRAPH
Shallow Well ES-20
Figure A-63



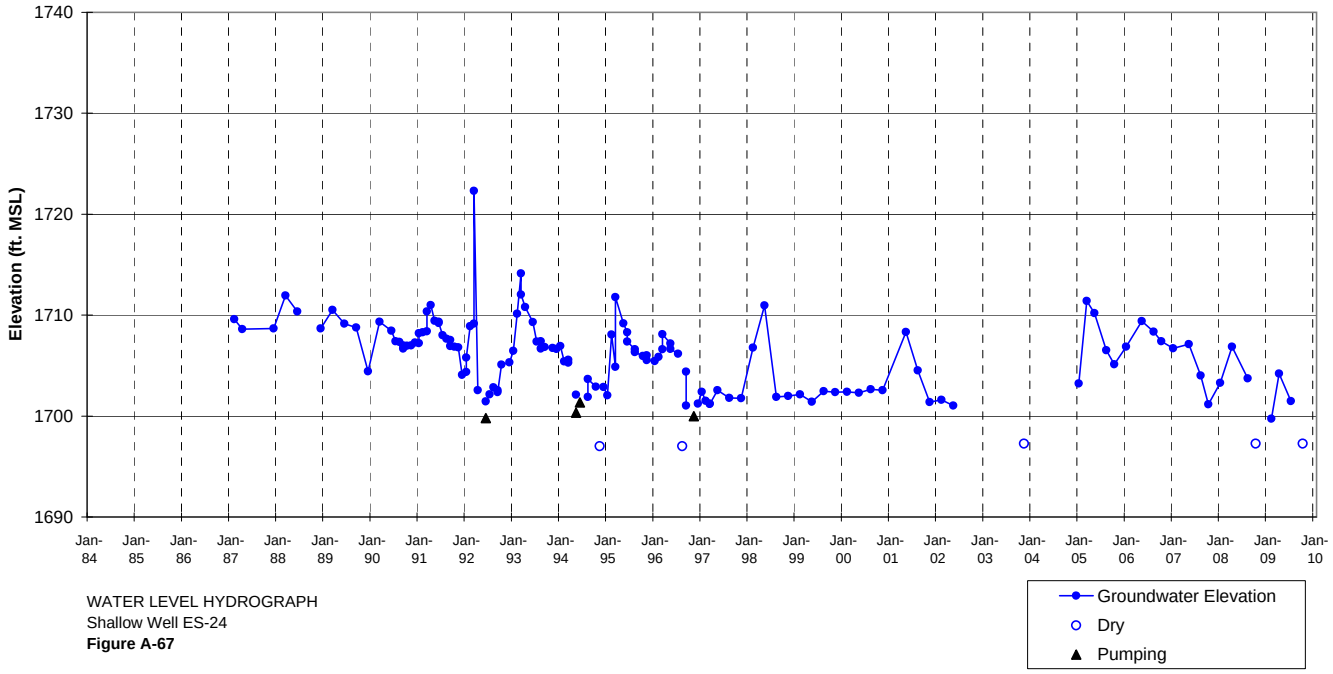
WATER LEVEL HYDROGRAPH
Shallow Well ES-21
Figure A-64



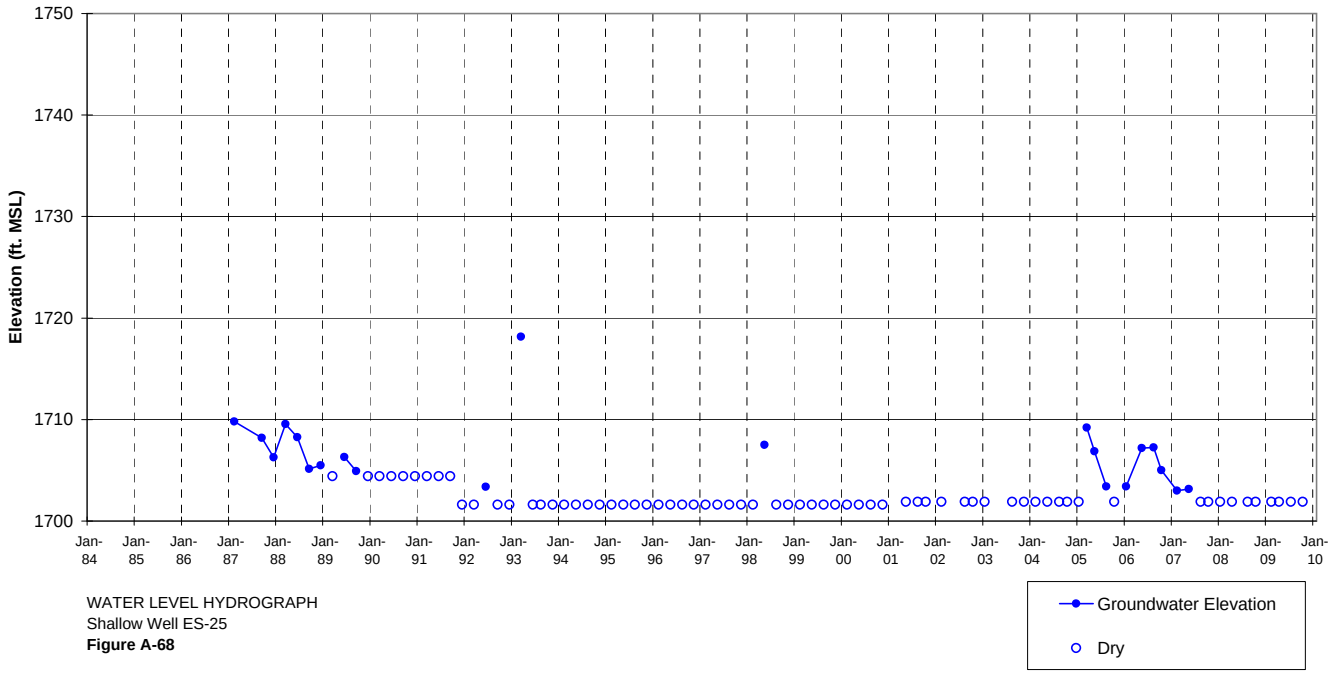
WATER LEVEL HYDROGRAPH
Shallow Well ES-22
Figure A-65



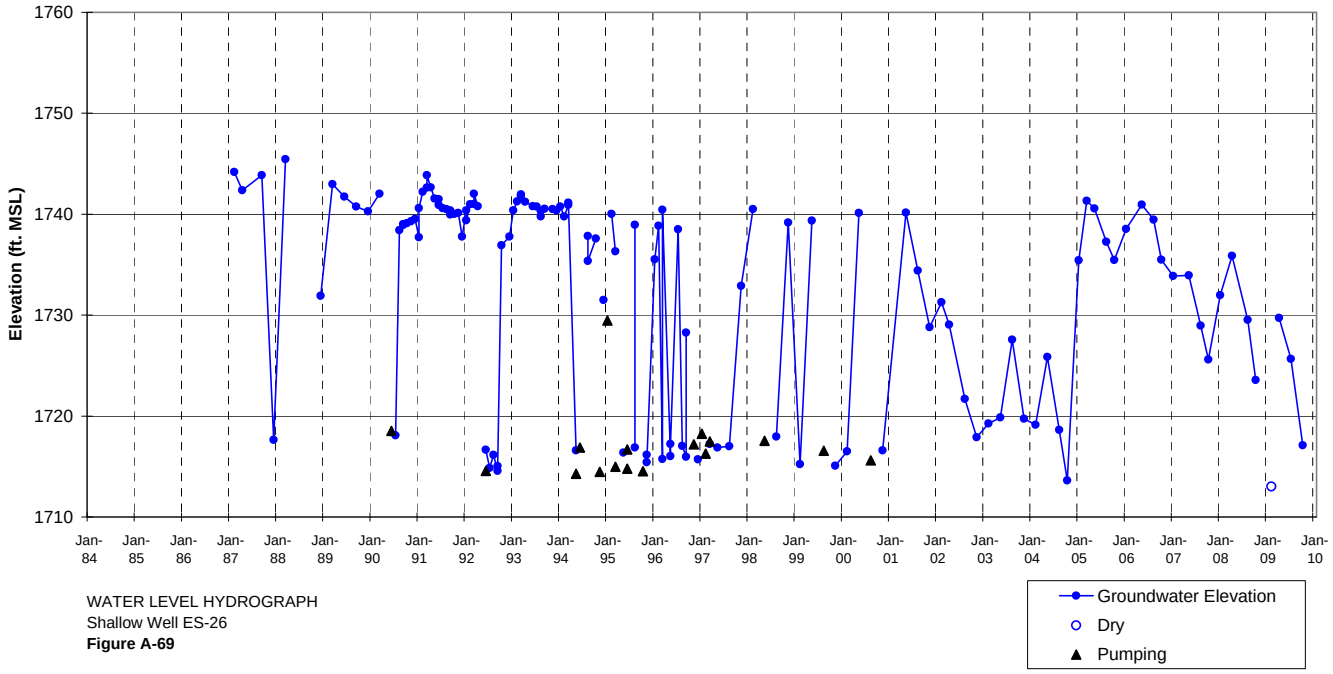
WATER LEVEL HYDROGRAPH
Shallow Well ES-23
Figure A-66



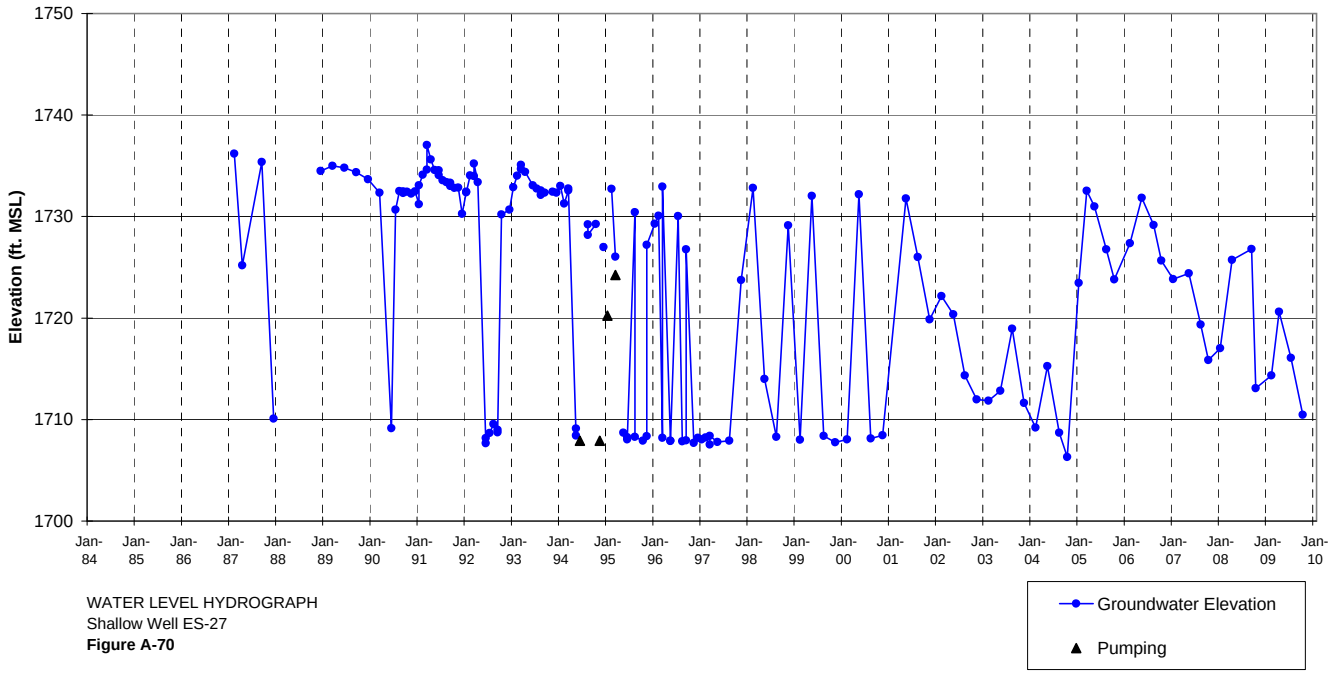
WATER LEVEL HYDROGRAPH
Shallow Well ES-24
Figure A-67



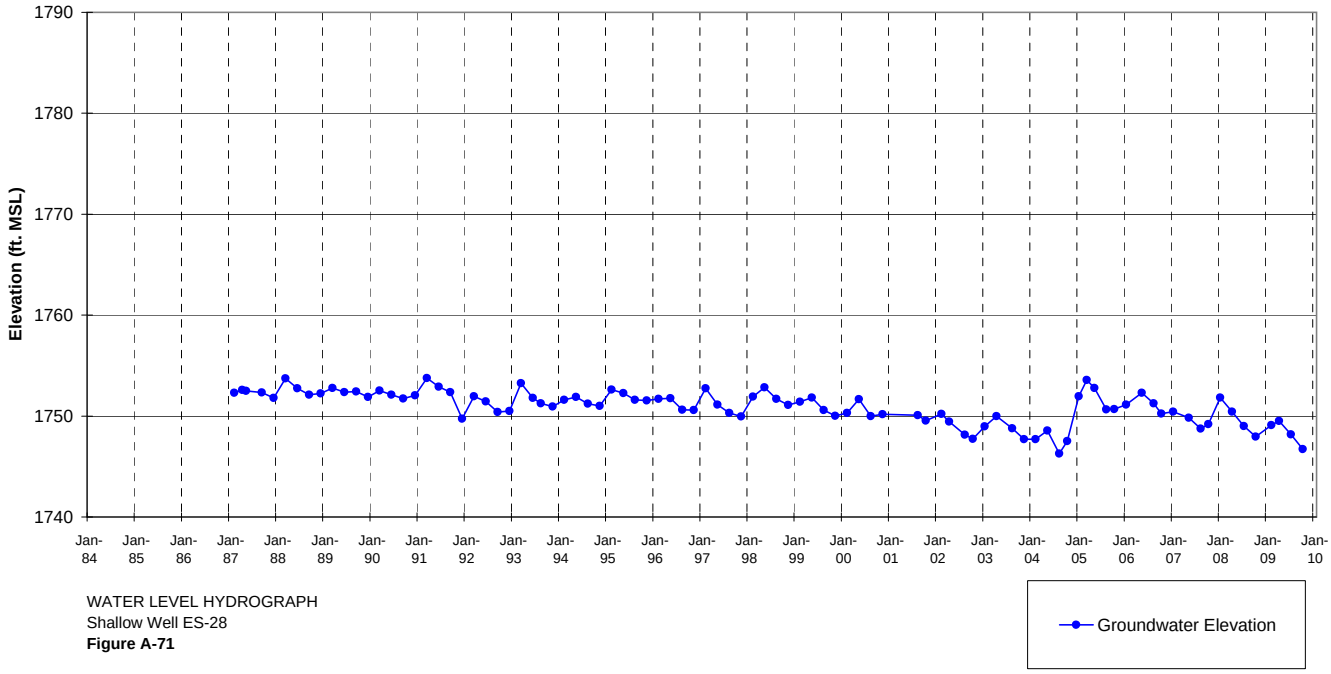
WATER LEVEL HYDROGRAPH
Shallow Well ES-25
Figure A-68



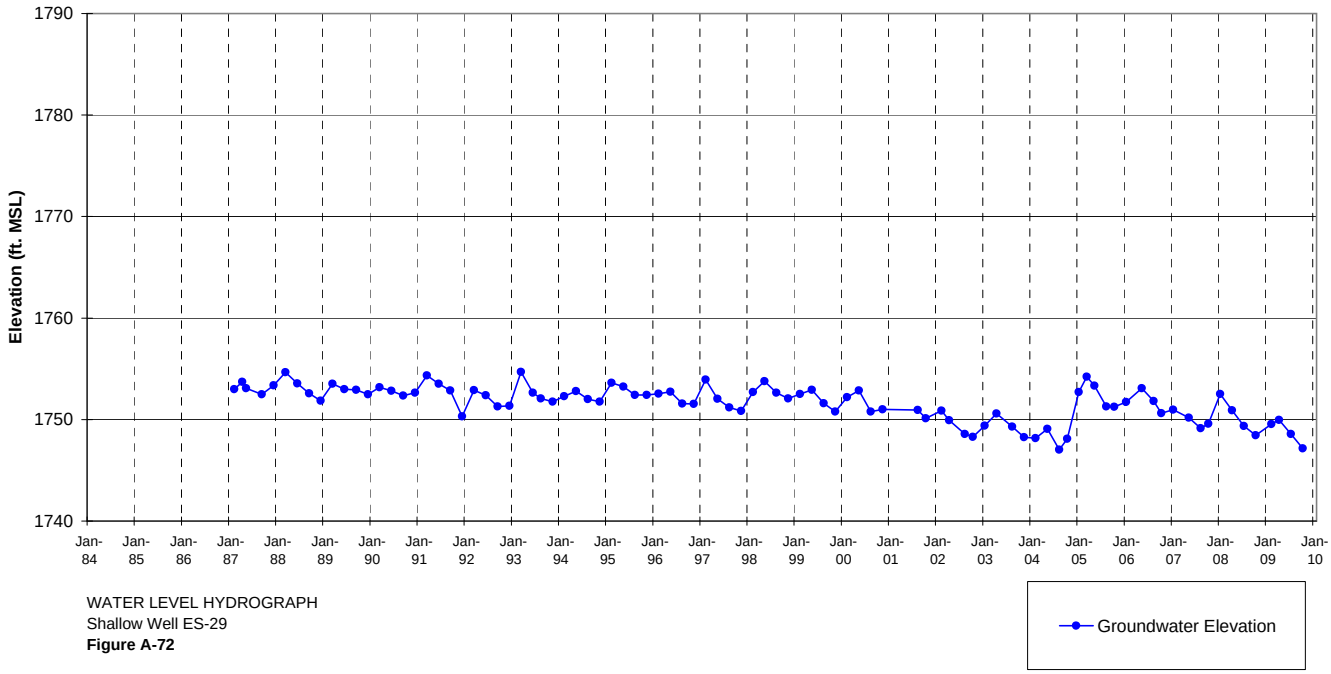
WATER LEVEL HYDROGRAPH
Shallow Well ES-26
Figure A-69



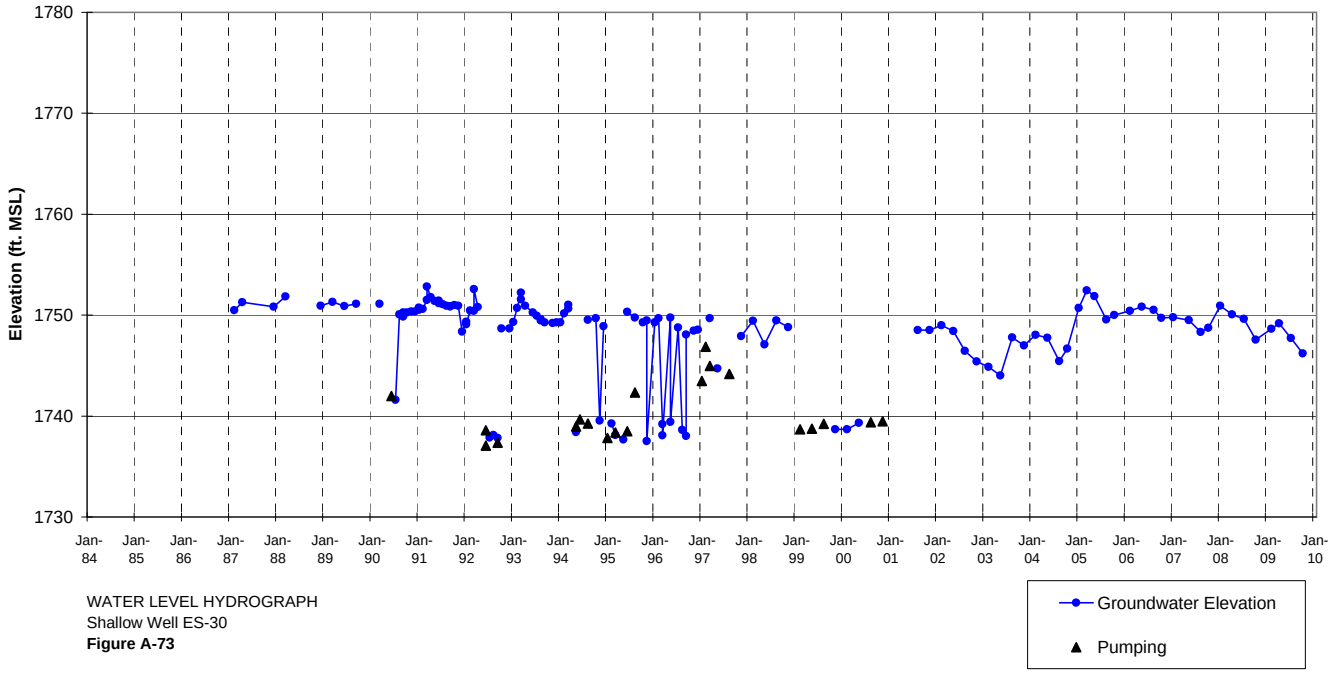
WATER LEVEL HYDROGRAPH
Shallow Well ES-27
Figure A-70



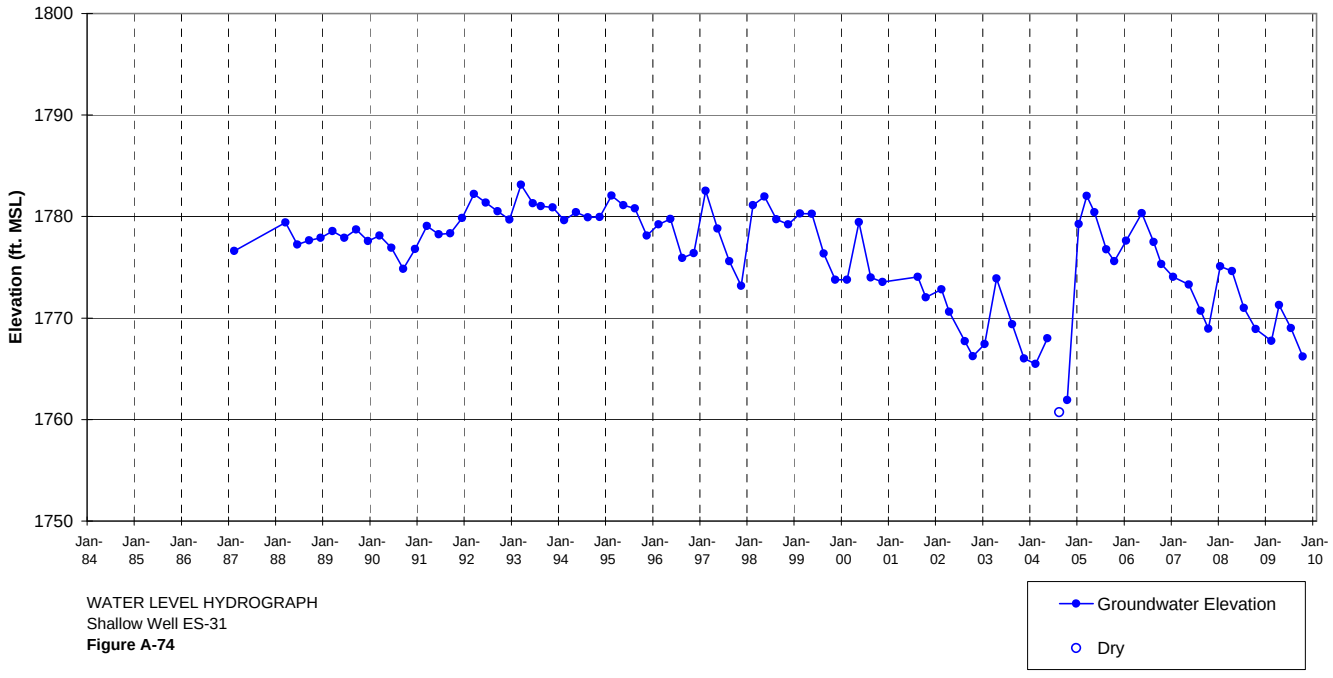
WATER LEVEL HYDROGRAPH
Shallow Well ES-28
Figure A-71



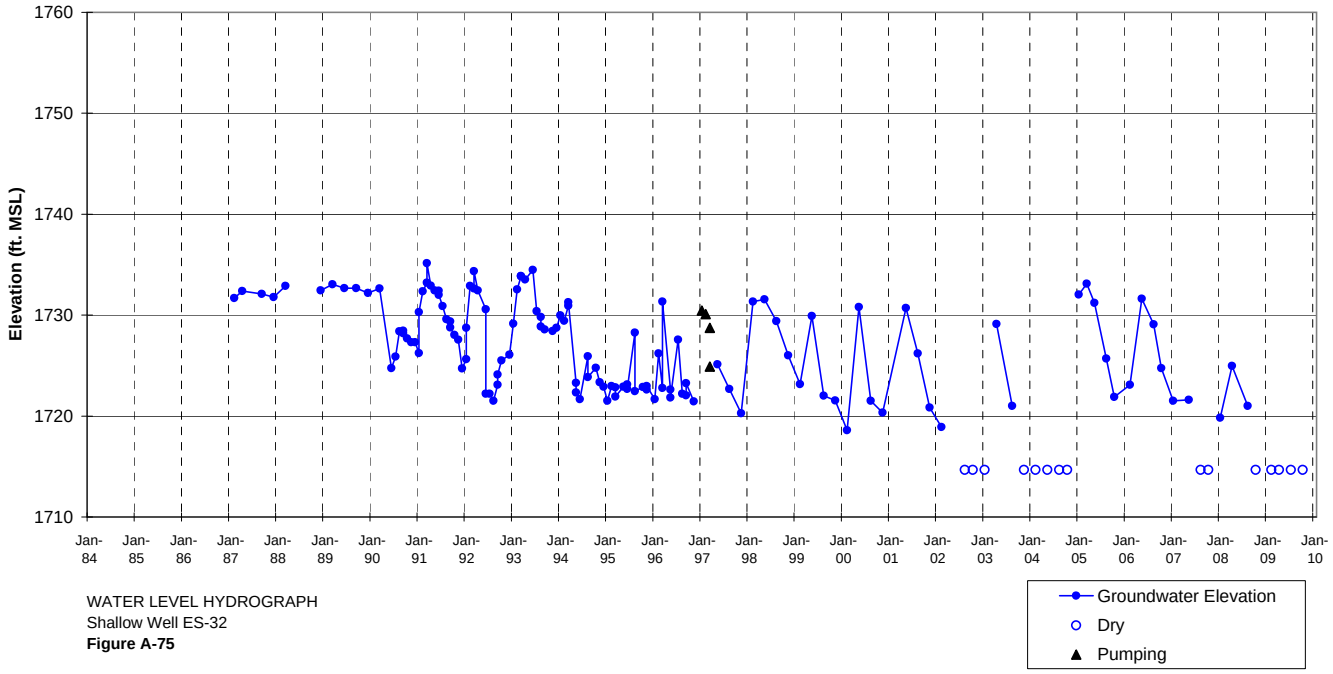
WATER LEVEL HYDROGRAPH
Shallow Well ES-29
Figure A-72



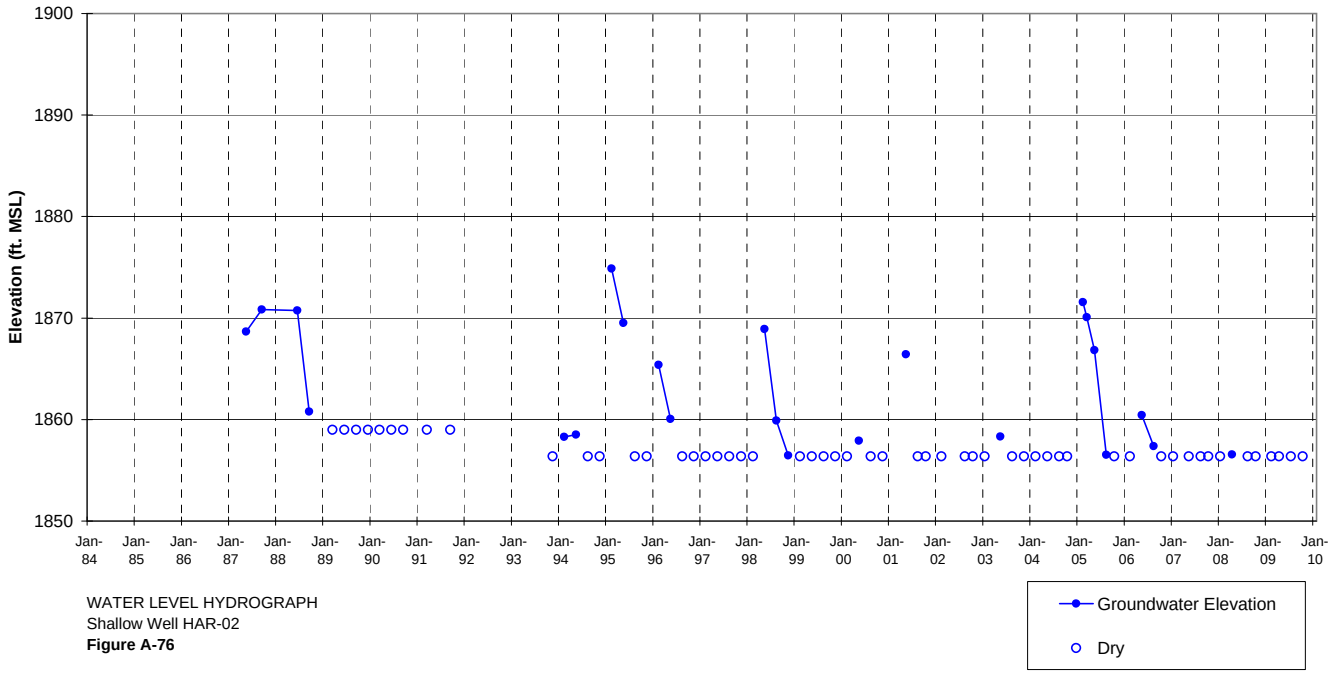
WATER LEVEL HYDROGRAPH
Shallow Well ES-30
Figure A-73



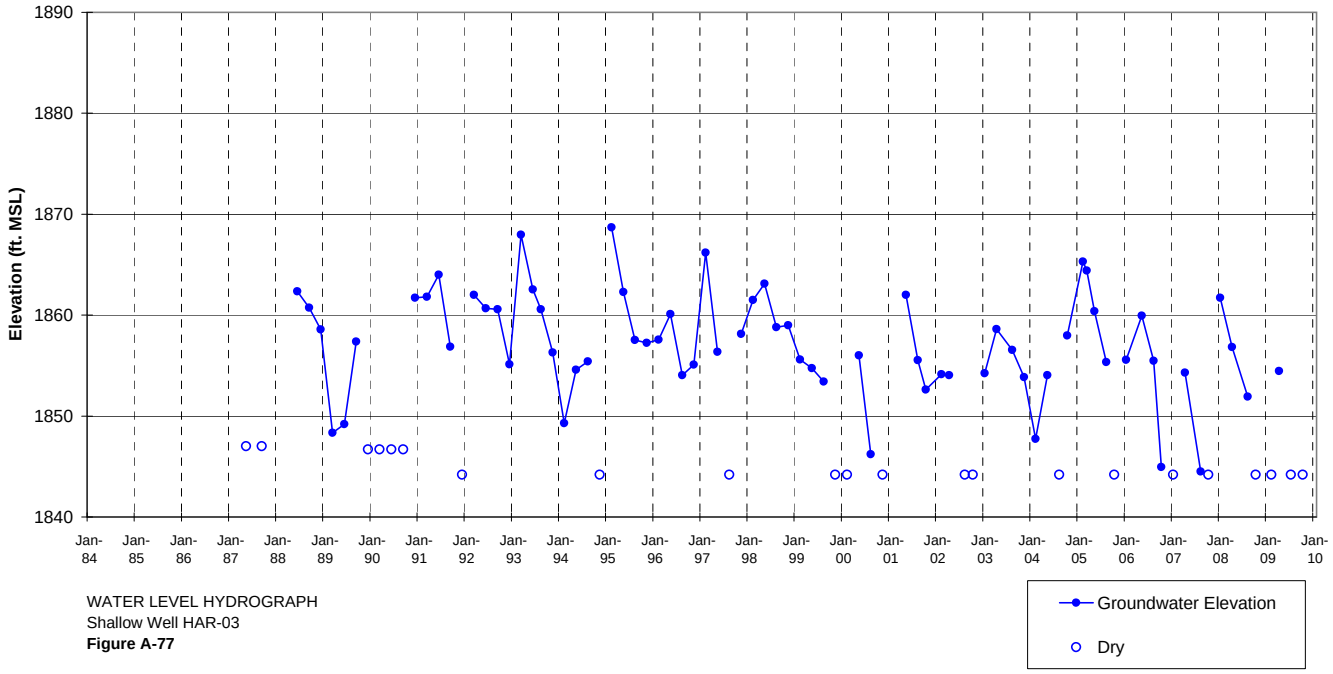
WATER LEVEL HYDROGRAPH
Shallow Well ES-31
Figure A-74



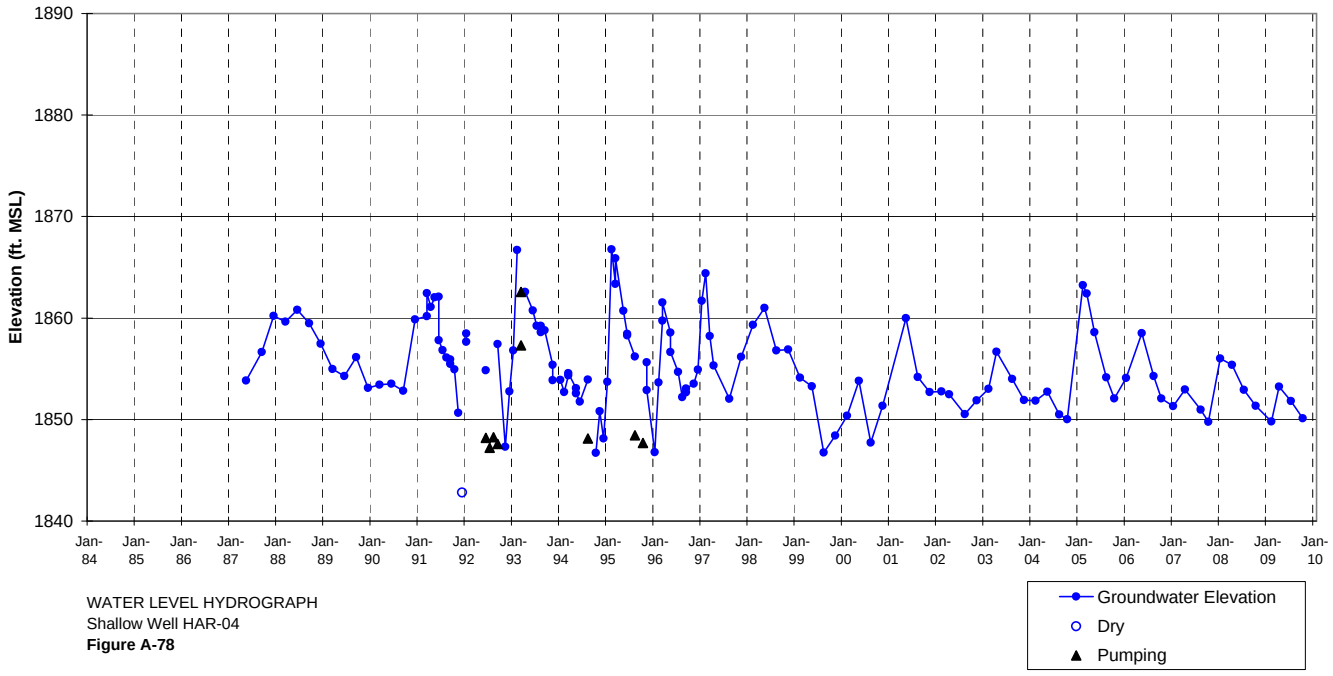
WATER LEVEL HYDROGRAPH
Shallow Well ES-32
Figure A-75



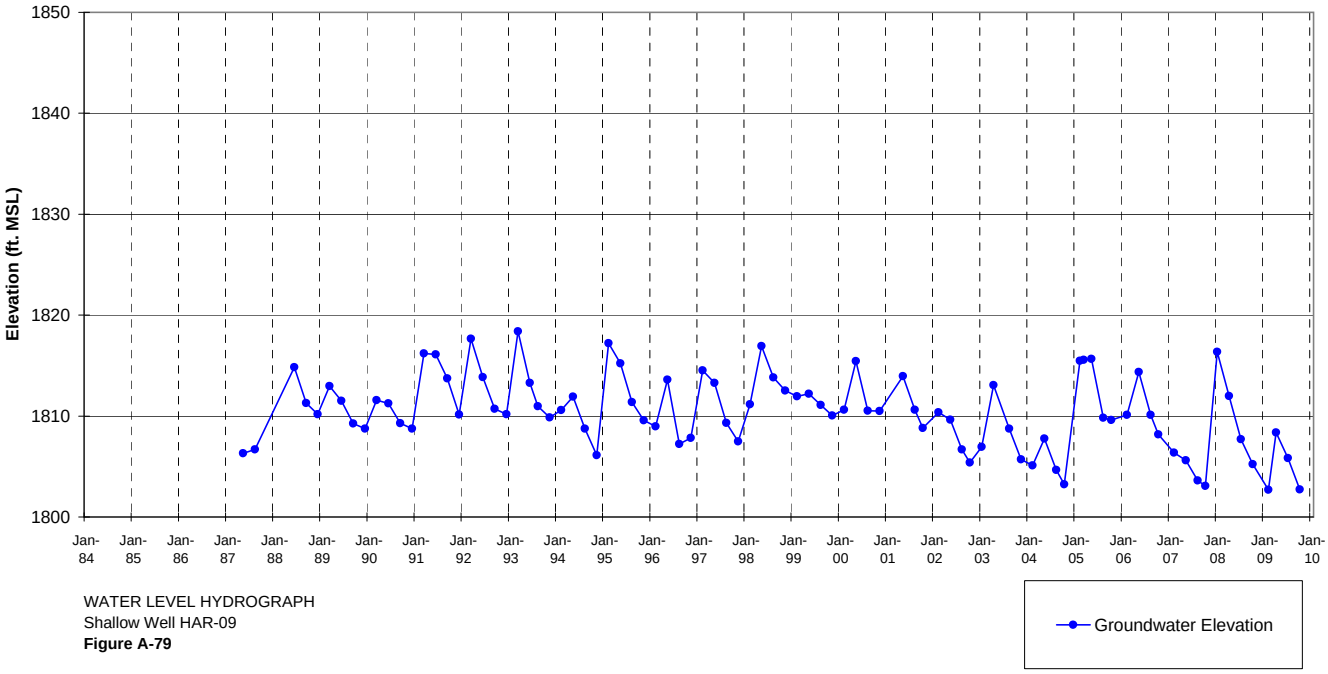
WATER LEVEL HYDROGRAPH
Shallow Well HAR-02
Figure A-76



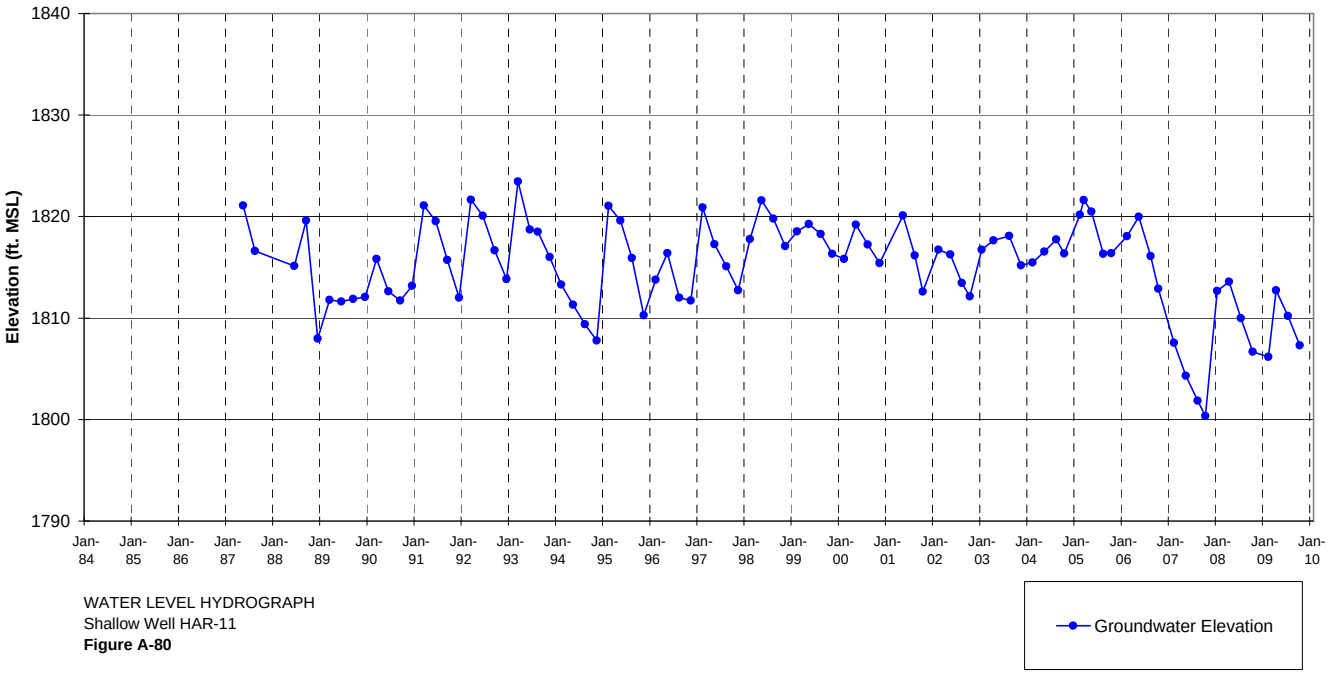
WATER LEVEL HYDROGRAPH
Shallow Well HAR-03
Figure A-77



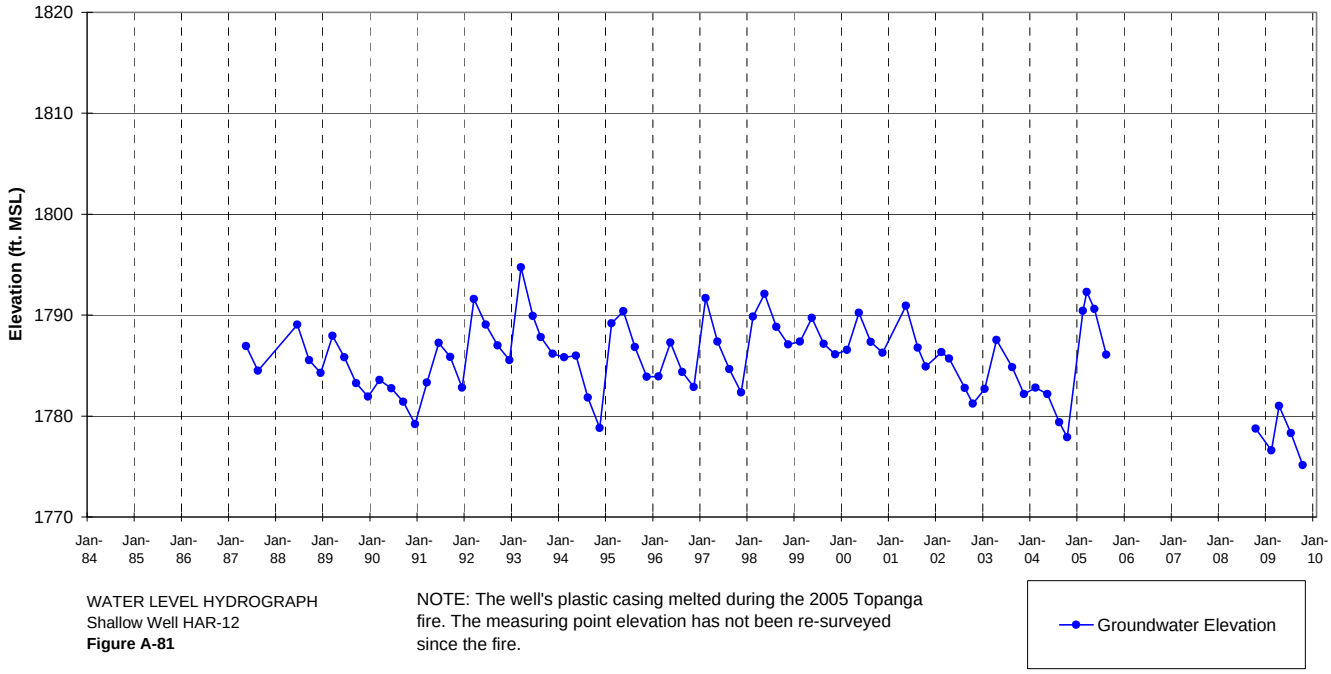
WATER LEVEL HYDROGRAPH
Shallow Well HAR-04
Figure A-78



WATER LEVEL HYDROGRAPH
Shallow Well HAR-09
Figure A-79

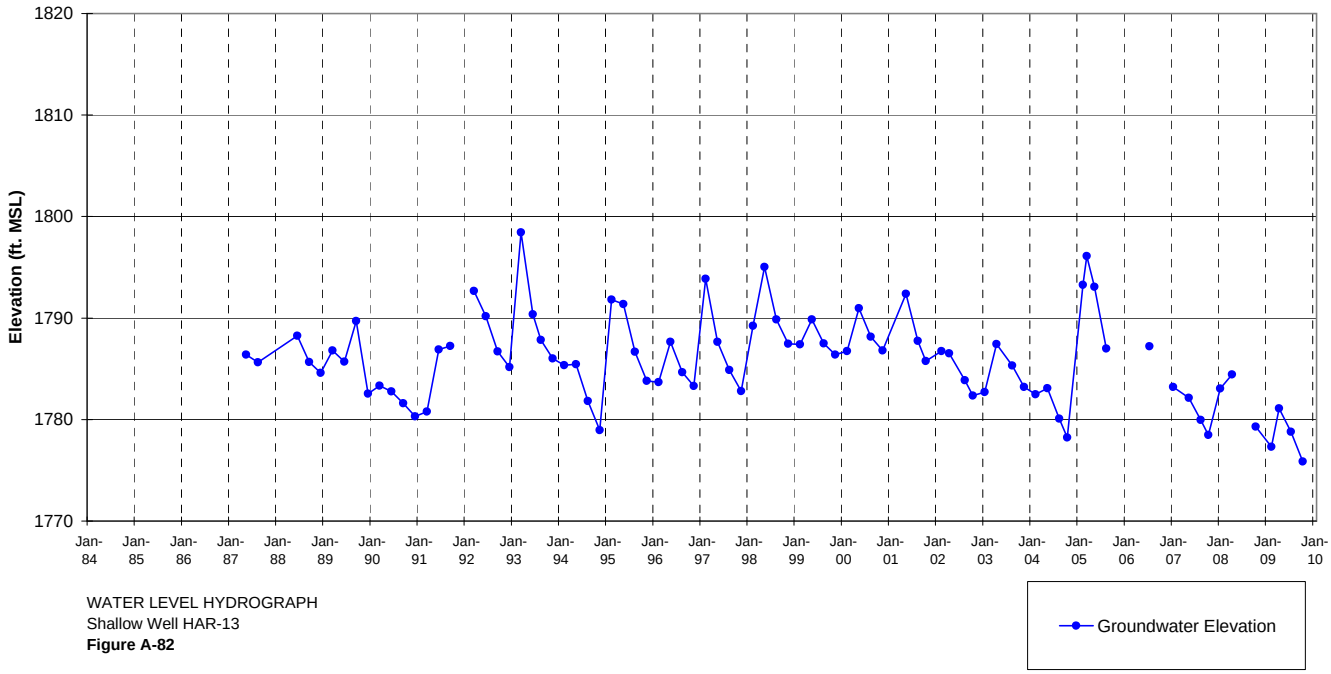


WATER LEVEL HYDROGRAPH
Shallow Well HAR-11
Figure A-80

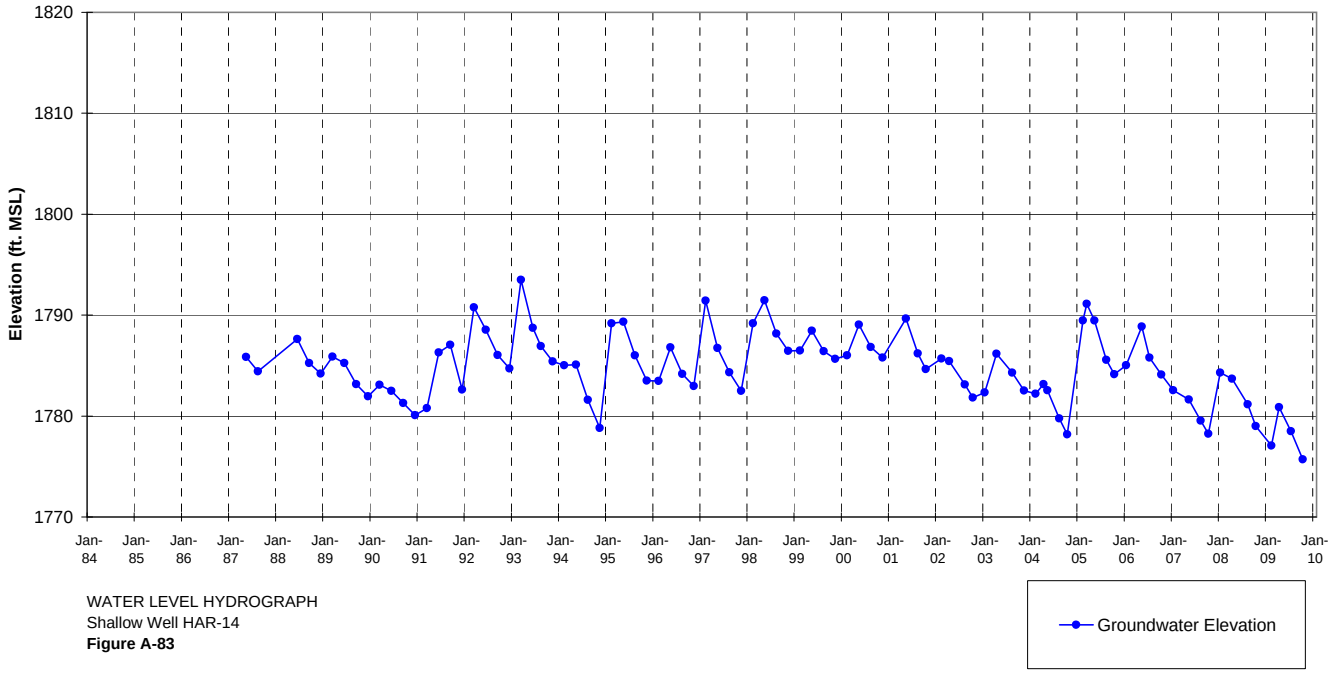


WATER LEVEL HYDROGRAPH
Shallow Well HAR-12
Figure A-81

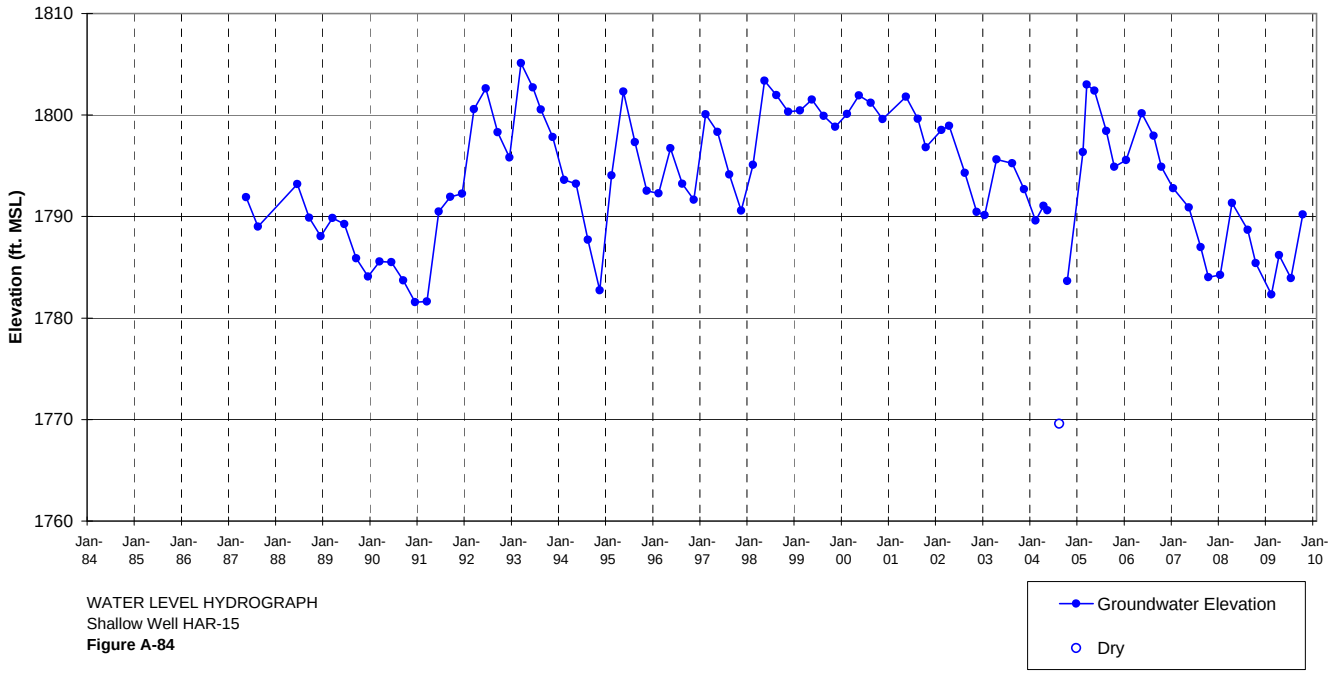
NOTE: The well's plastic casing melted during the 2005 Topanga fire. The measuring point elevation has not been re-surveyed since the fire.



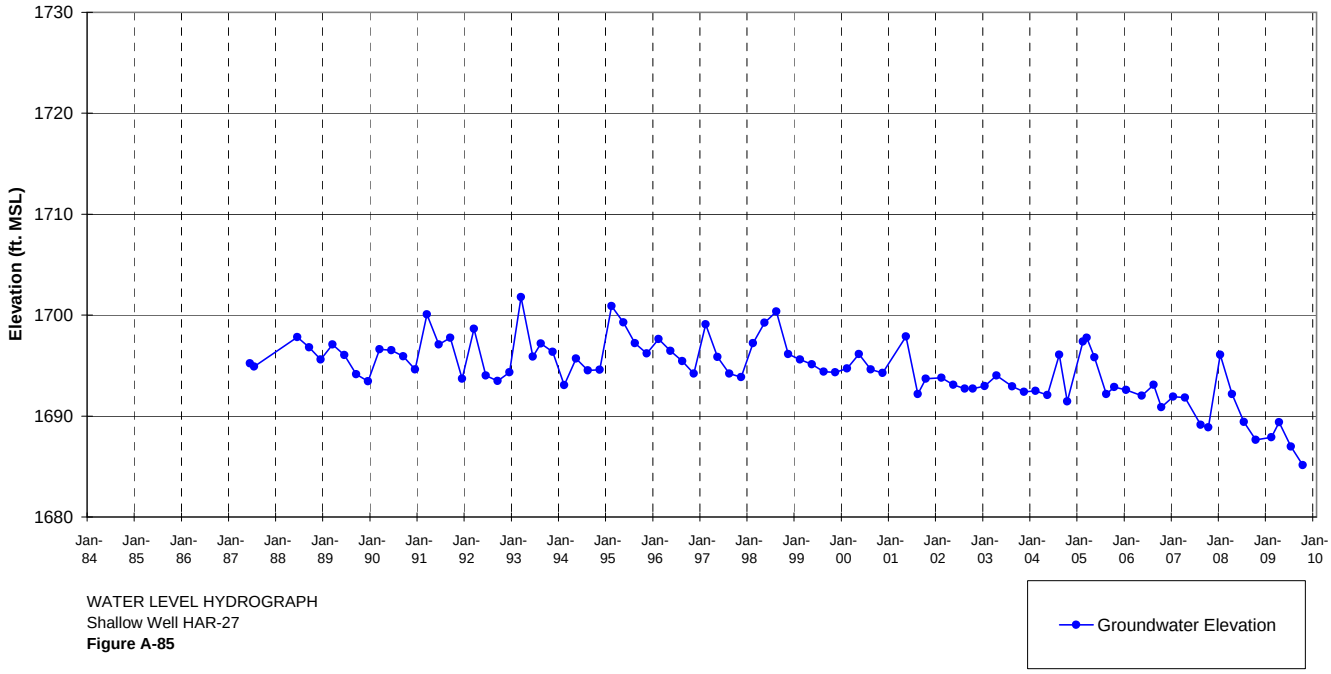
WATER LEVEL HYDROGRAPH
Shallow Well HAR-13
Figure A-82



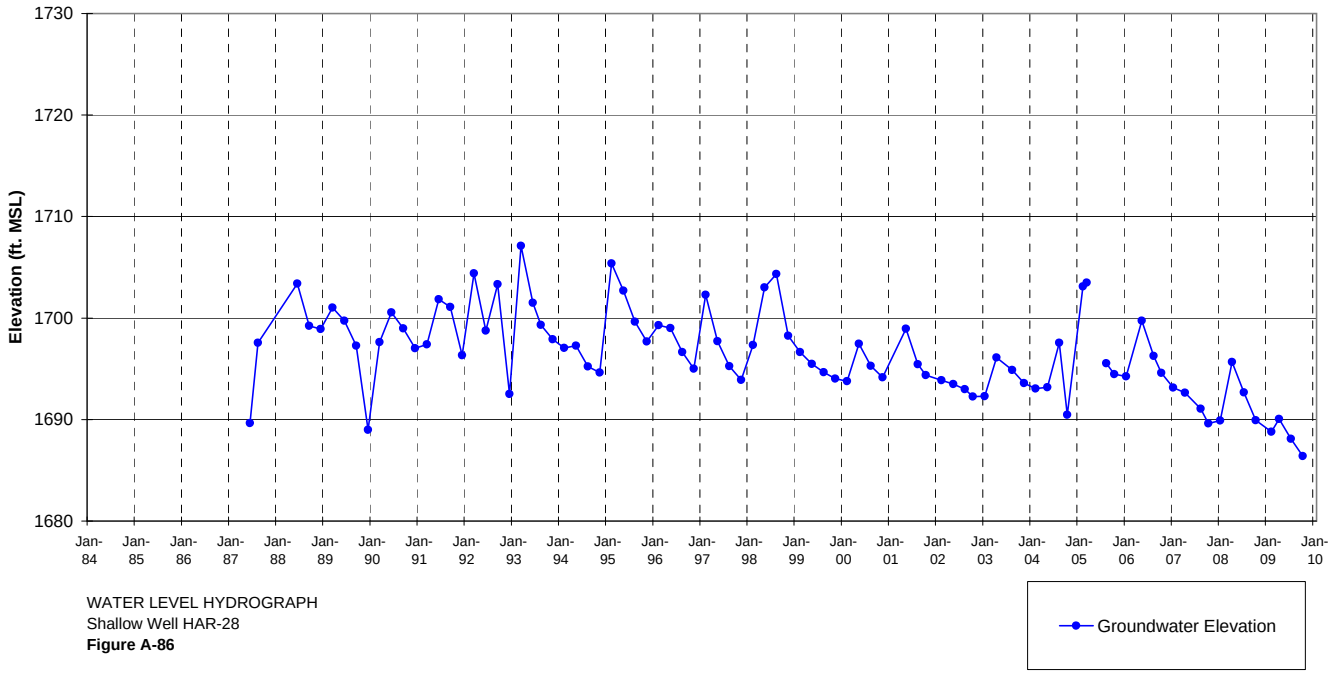
WATER LEVEL HYDROGRAPH
Shallow Well HAR-14
Figure A-83



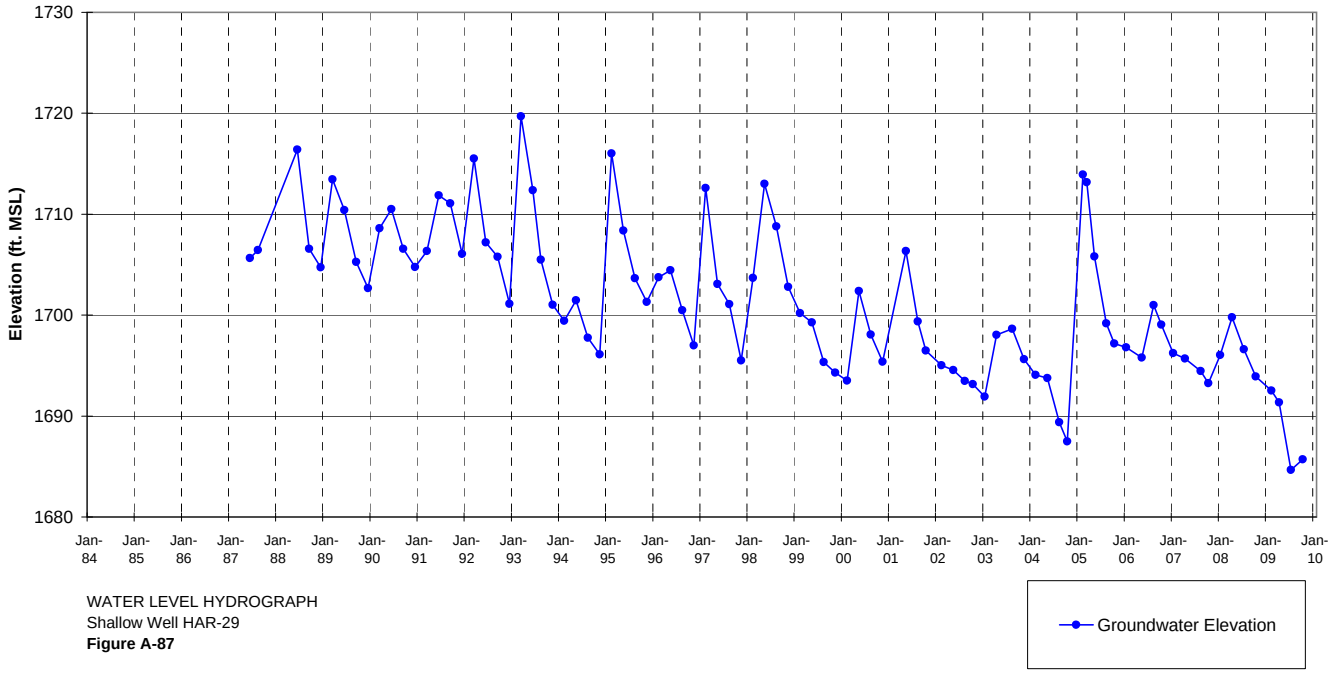
WATER LEVEL HYDROGRAPH
Shallow Well HAR-15
Figure A-84



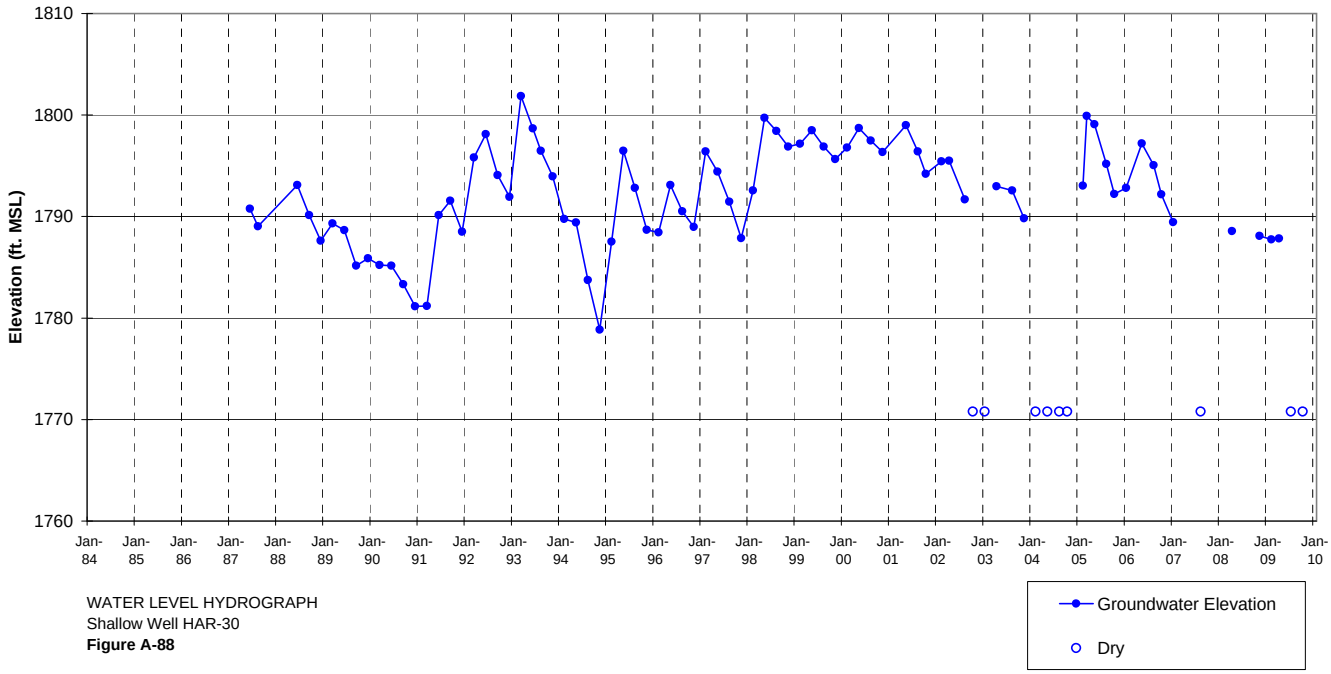
WATER LEVEL HYDROGRAPH
Shallow Well HAR-27
Figure A-85



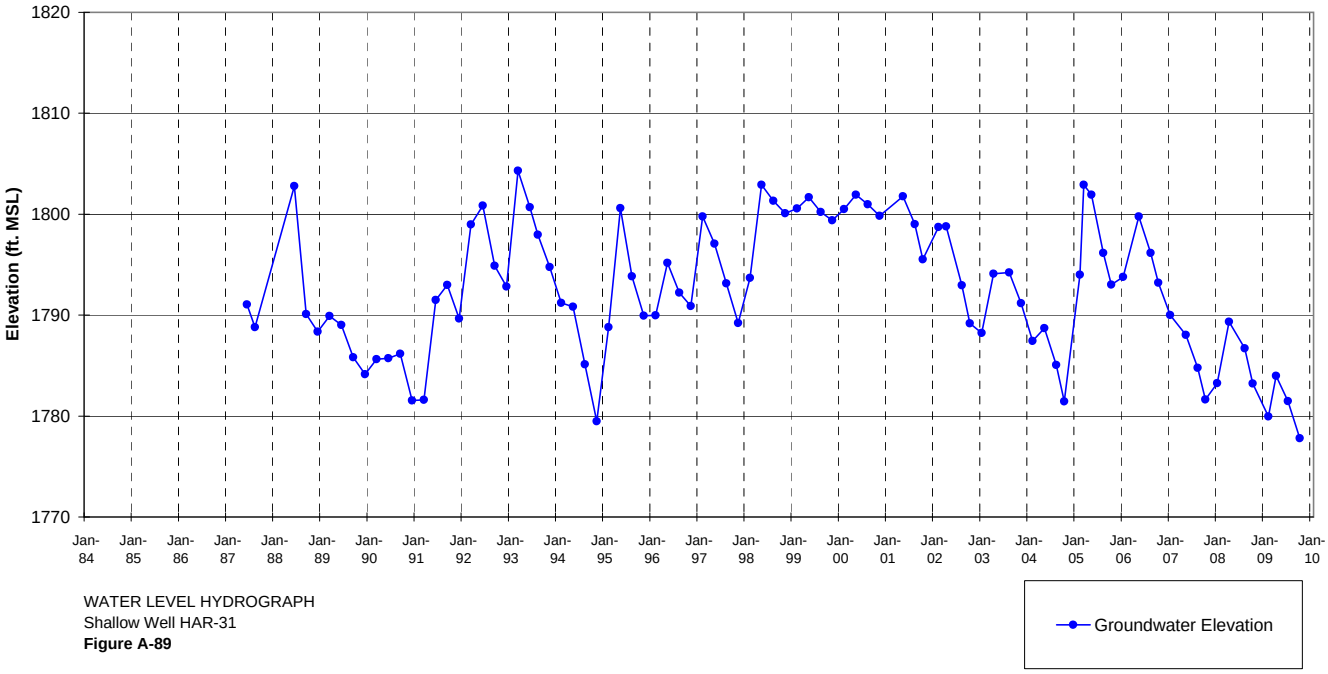
WATER LEVEL HYDROGRAPH
Shallow Well HAR-28
Figure A-86



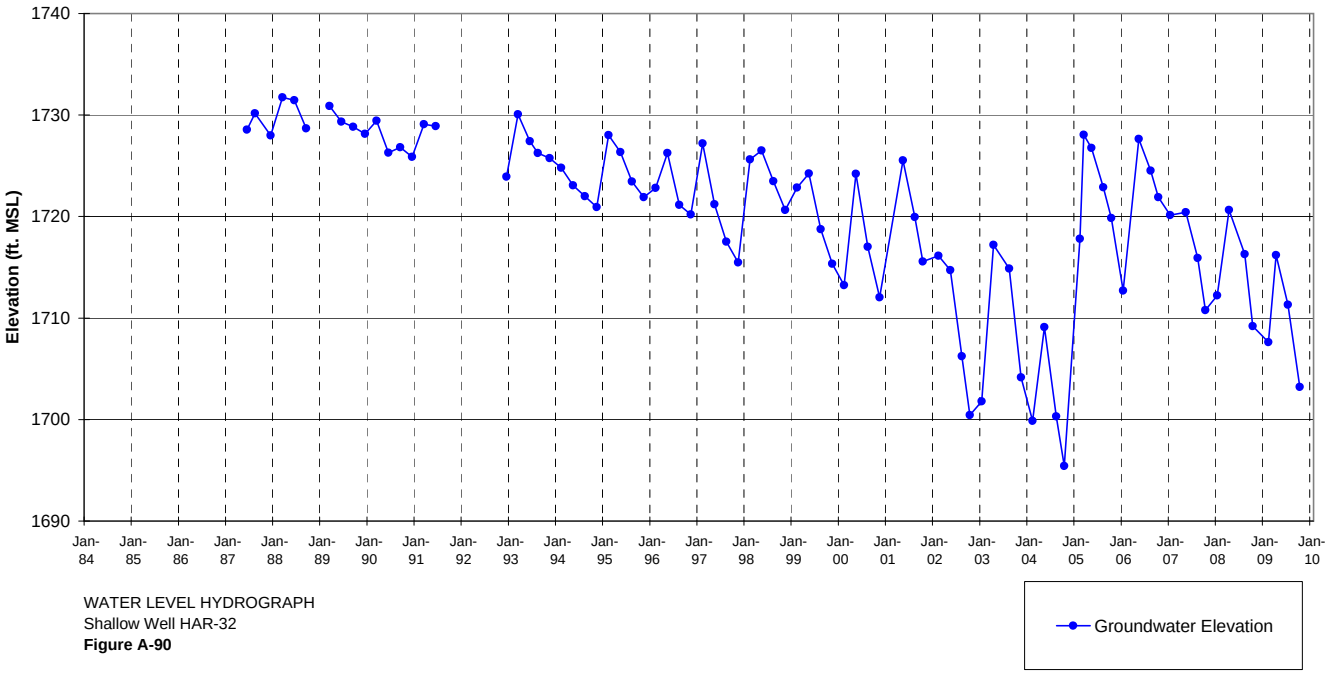
WATER LEVEL HYDROGRAPH
Shallow Well HAR-29
Figure A-87



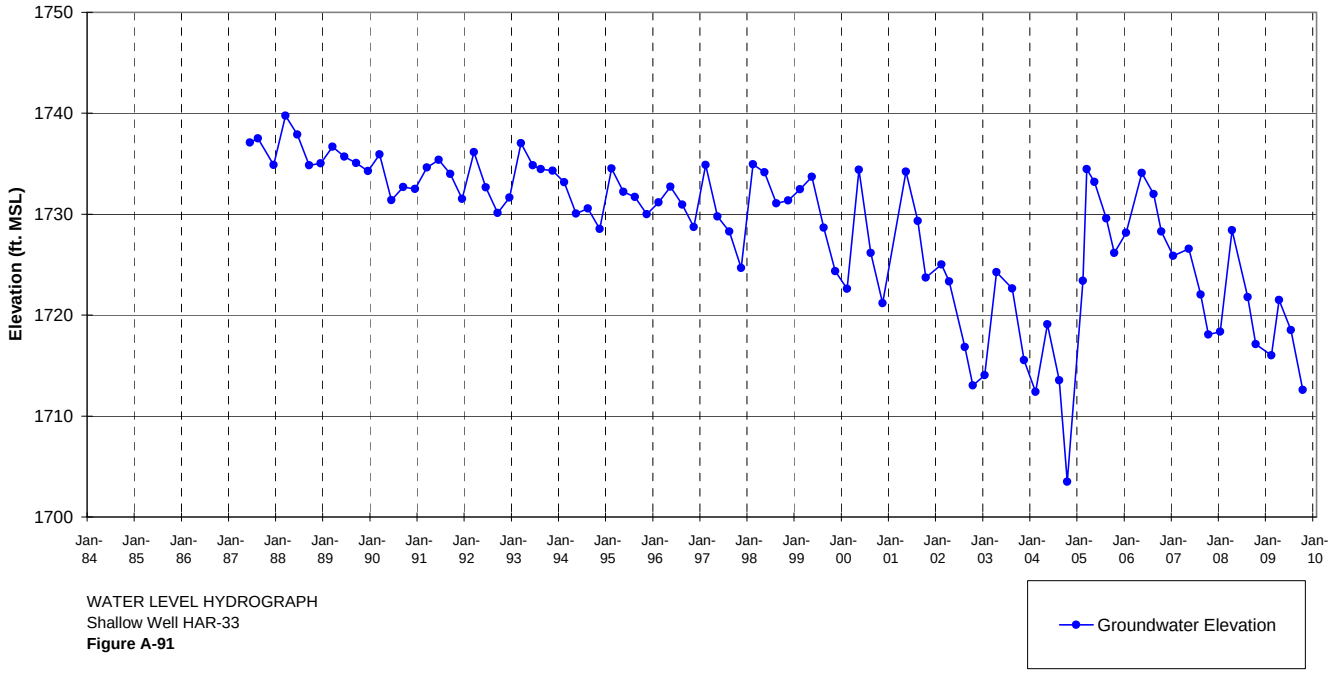
WATER LEVEL HYDROGRAPH
Shallow Well HAR-30
Figure A-88



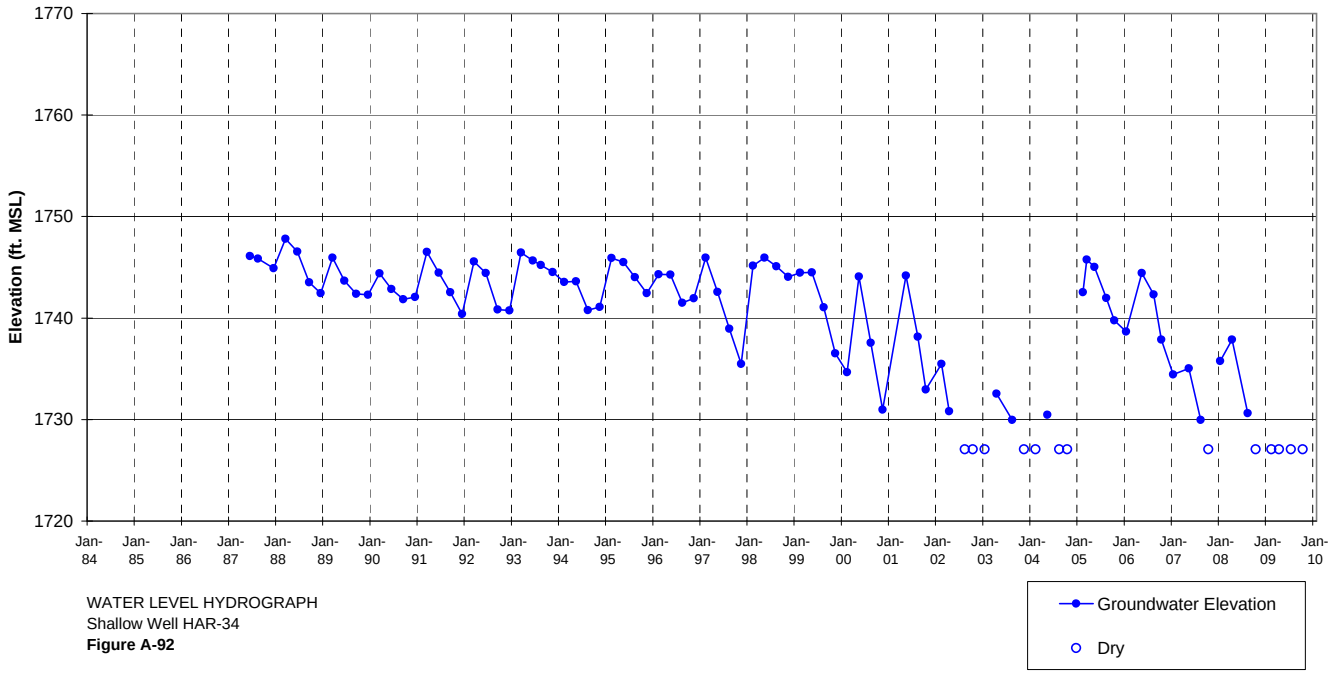
WATER LEVEL HYDROGRAPH
Shallow Well HAR-31
Figure A-89



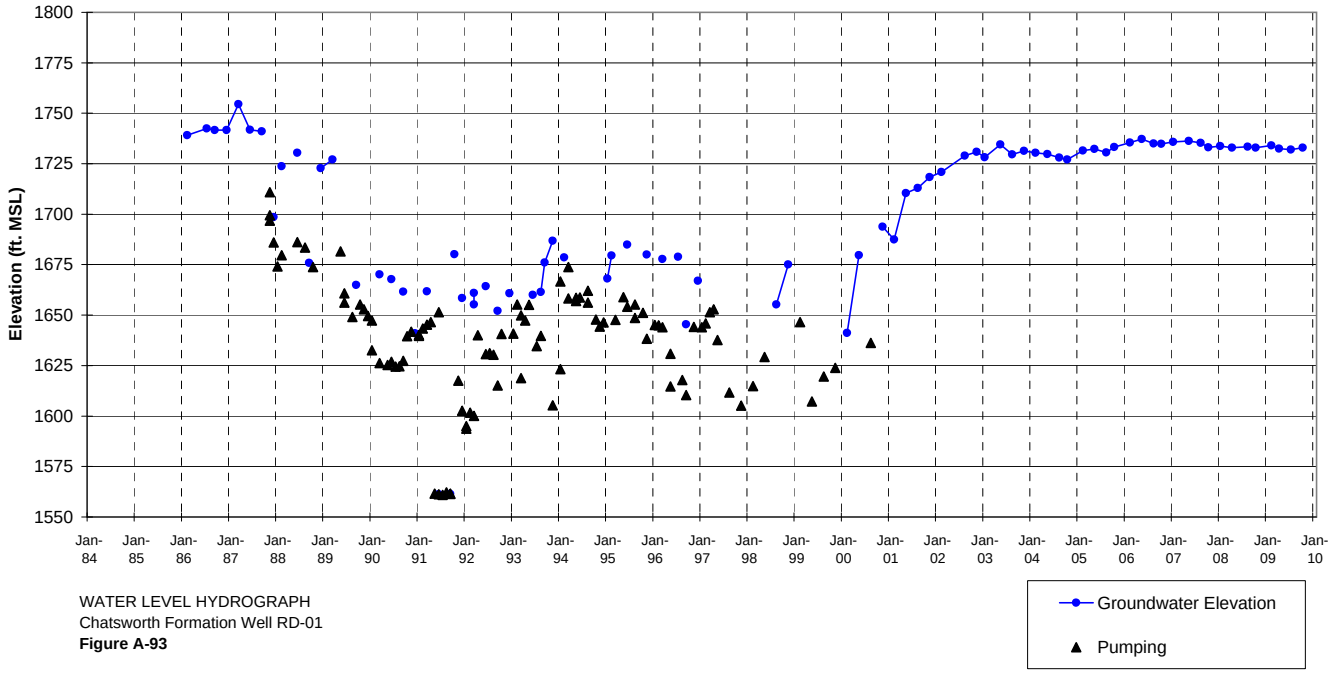
WATER LEVEL HYDROGRAPH
Shallow Well HAR-32
Figure A-90



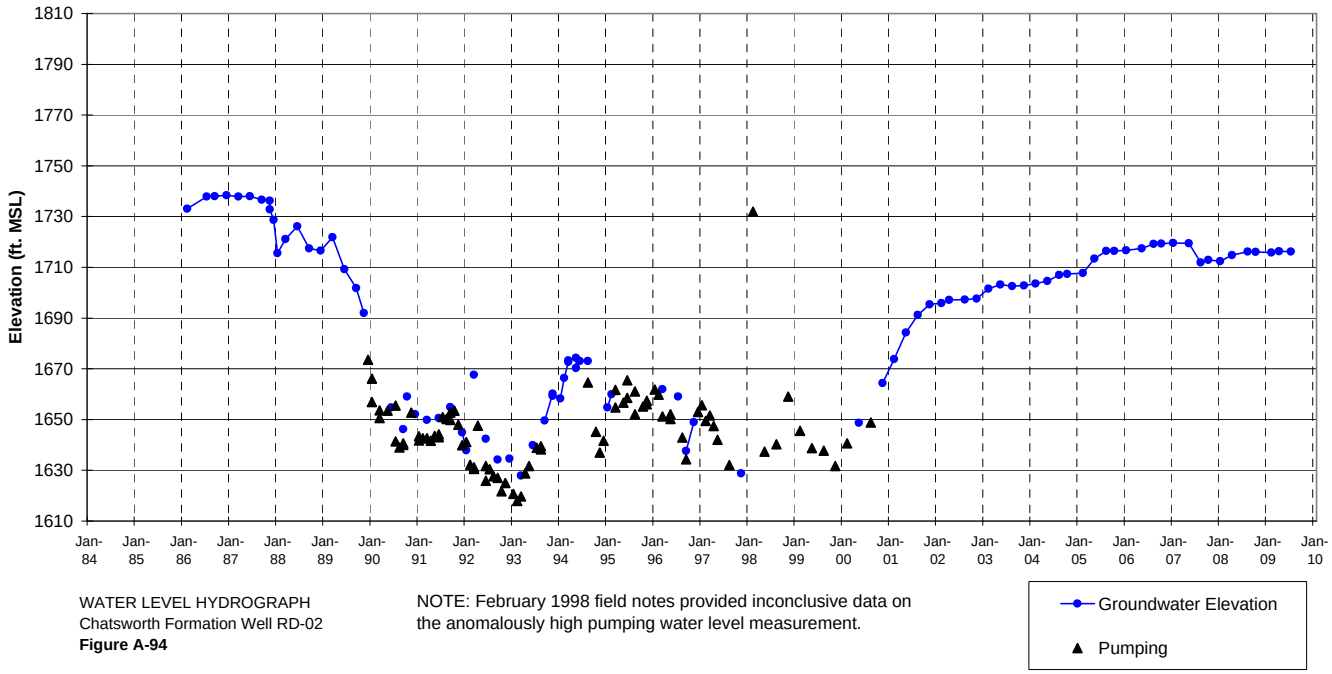
WATER LEVEL HYDROGRAPH
Shallow Well HAR-33
Figure A-91



WATER LEVEL HYDROGRAPH
Shallow Well HAR-34
Figure A-92

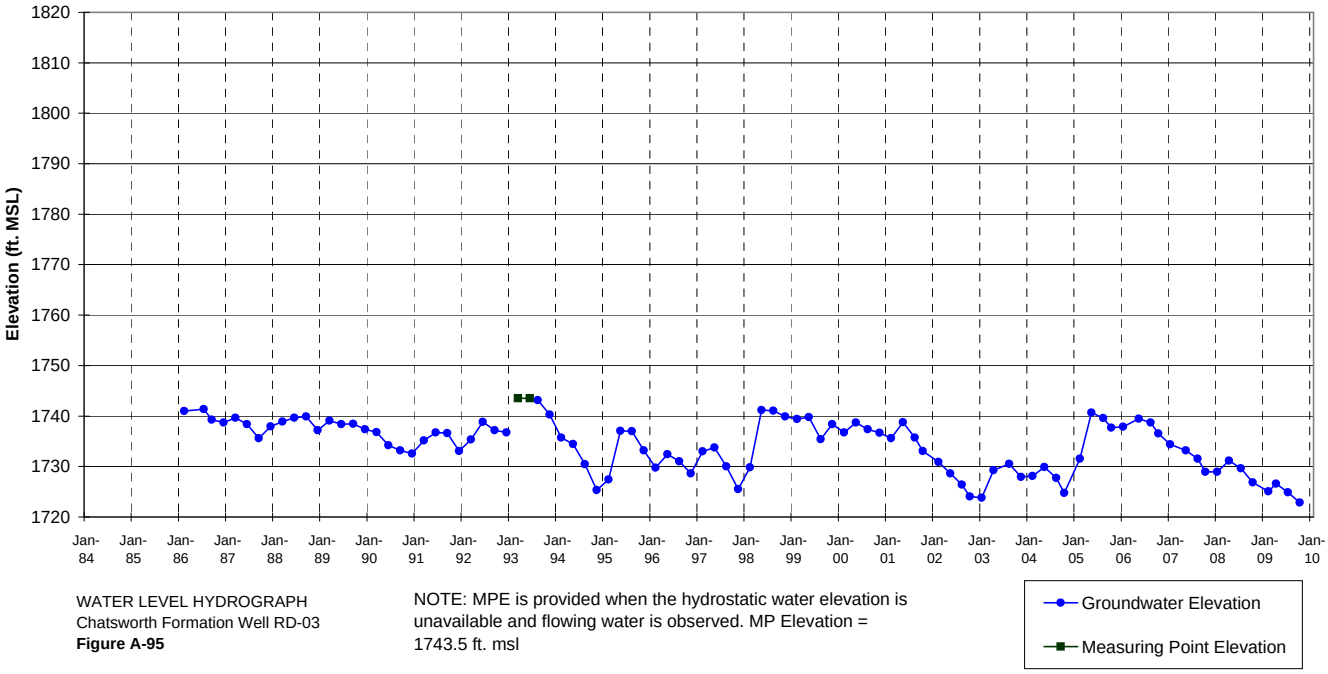


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-01
Figure A-93



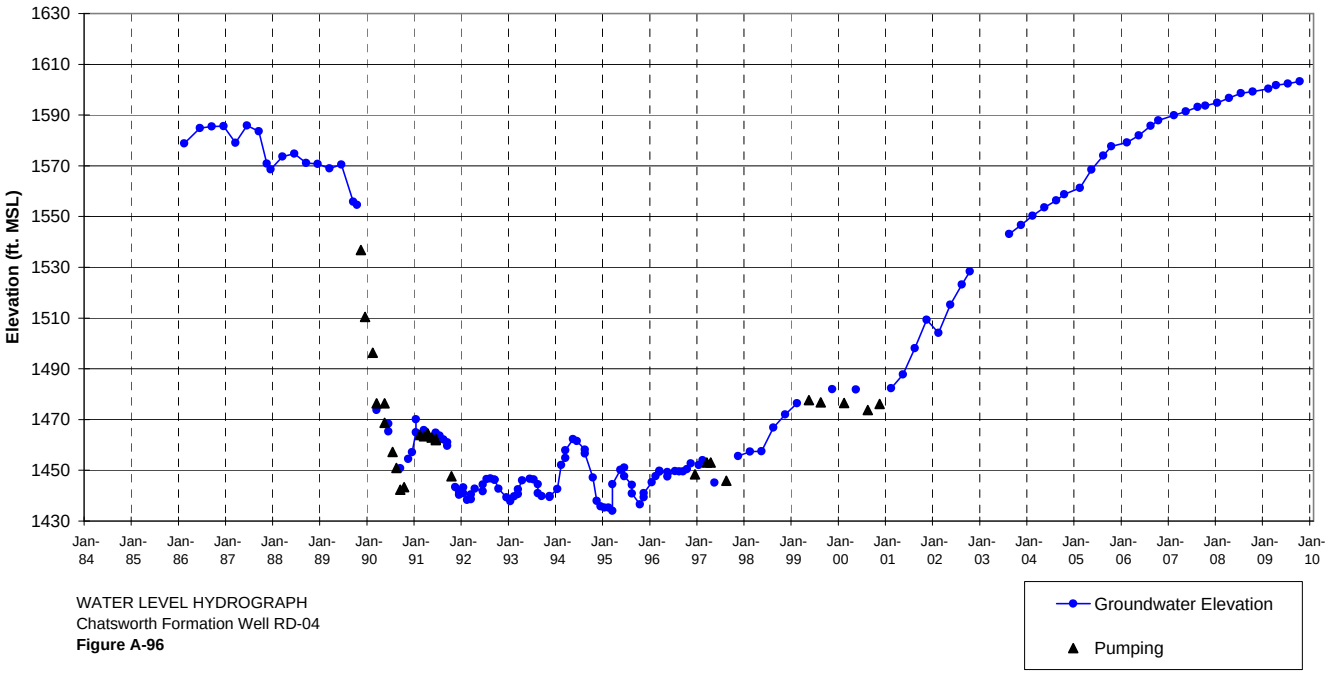
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-02
Figure A-94

NOTE: February 1998 field notes provided inconclusive data on the anomalously high pumping water level measurement.

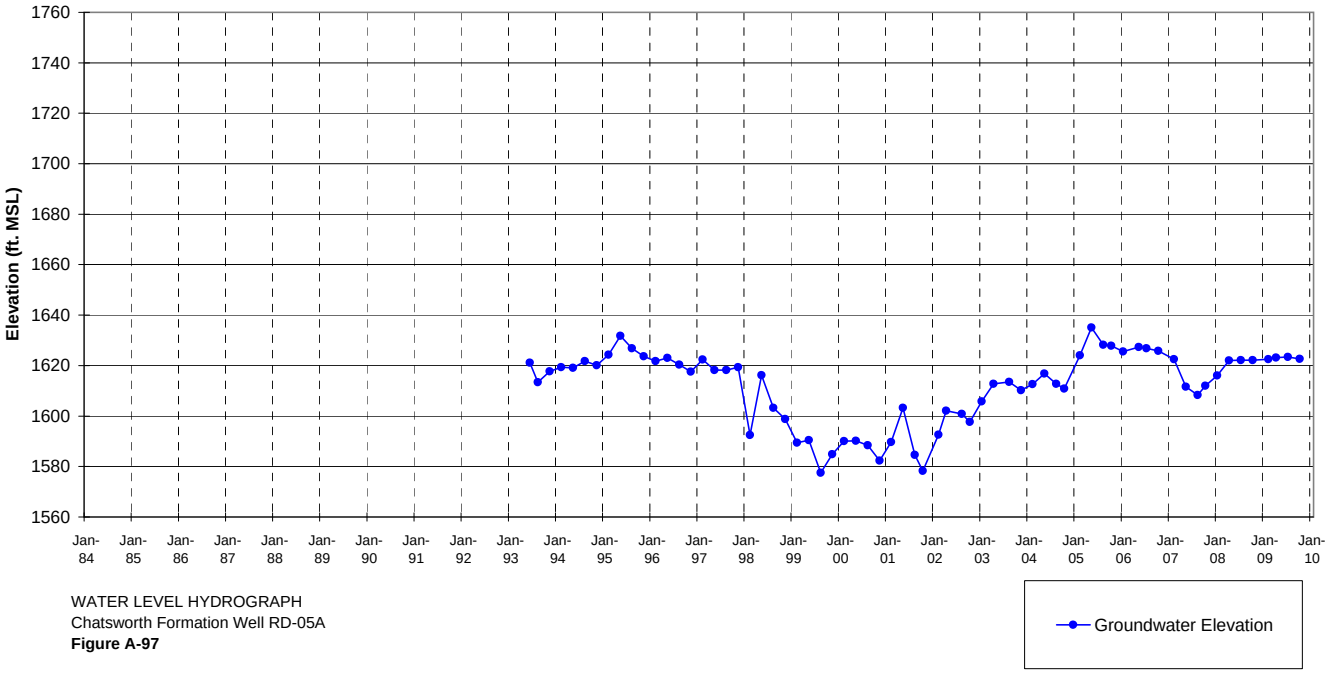


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-03
Figure A-95

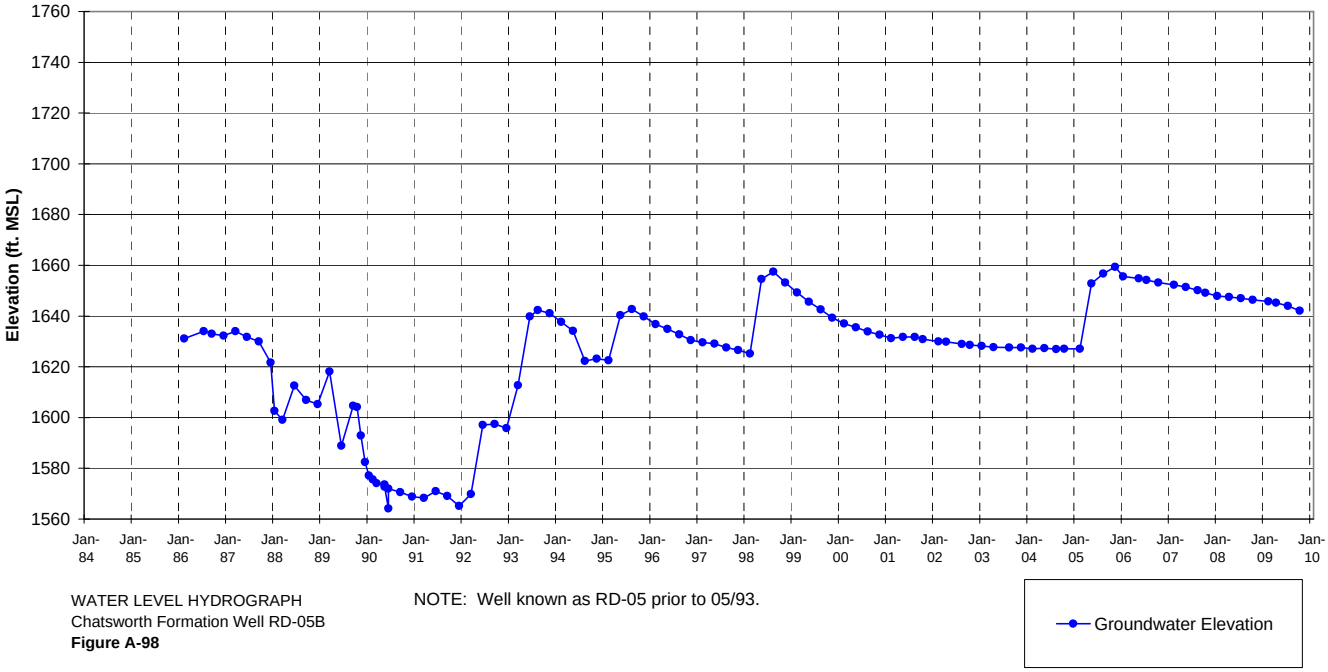
NOTE: MPE is provided when the hydrostatic water elevation is unavailable and flowing water is observed. MP Elevation = 1743.5 ft. msl



WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-04
Figure A-96

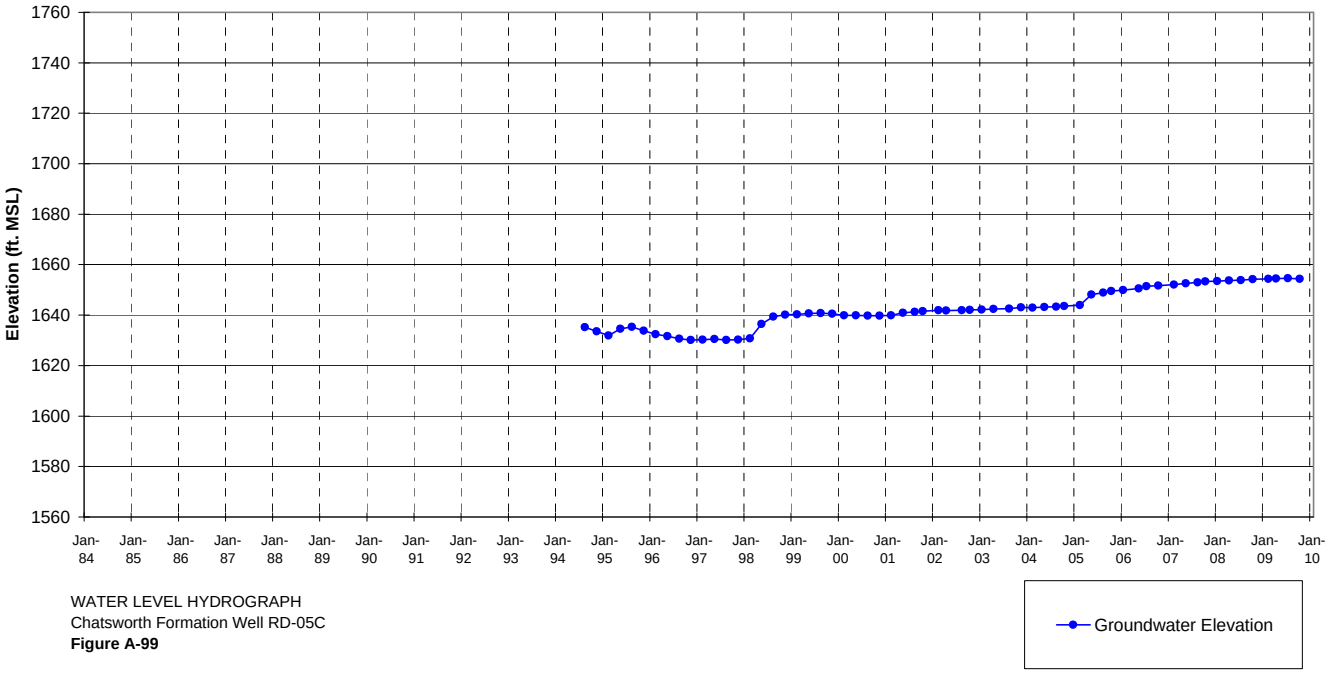


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-05A
Figure A-97

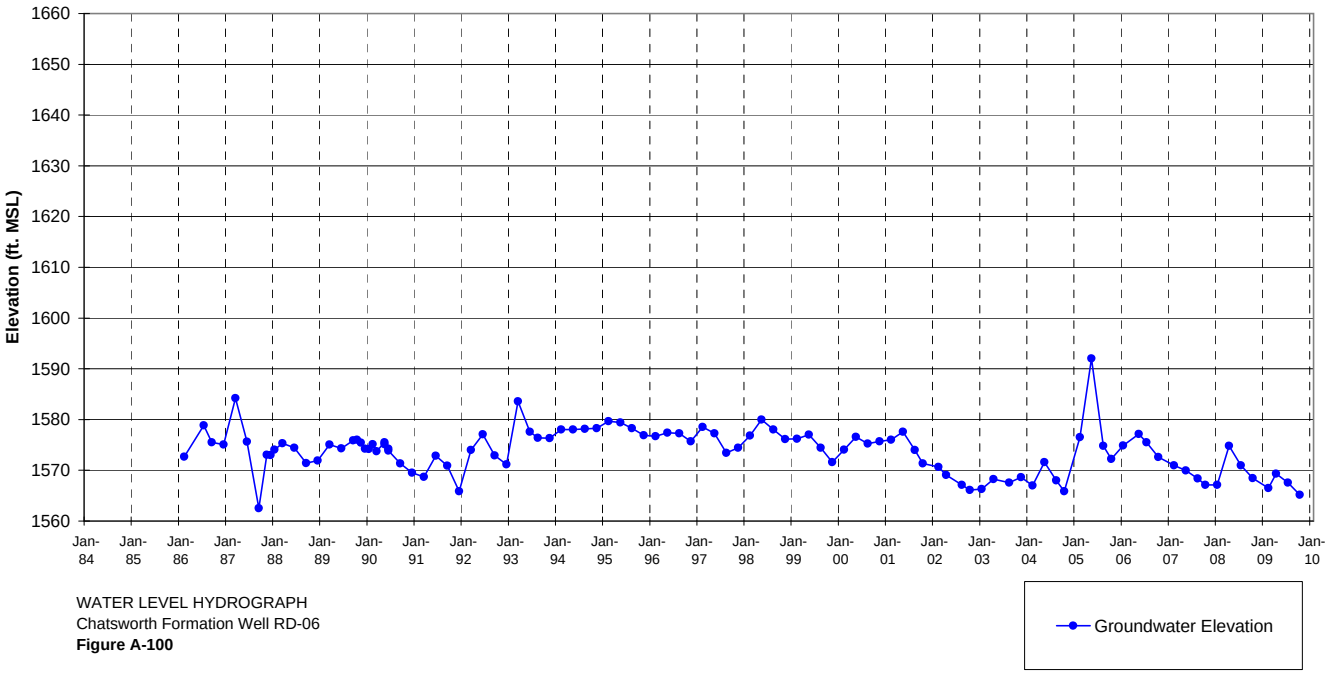


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-05B
Figure A-98

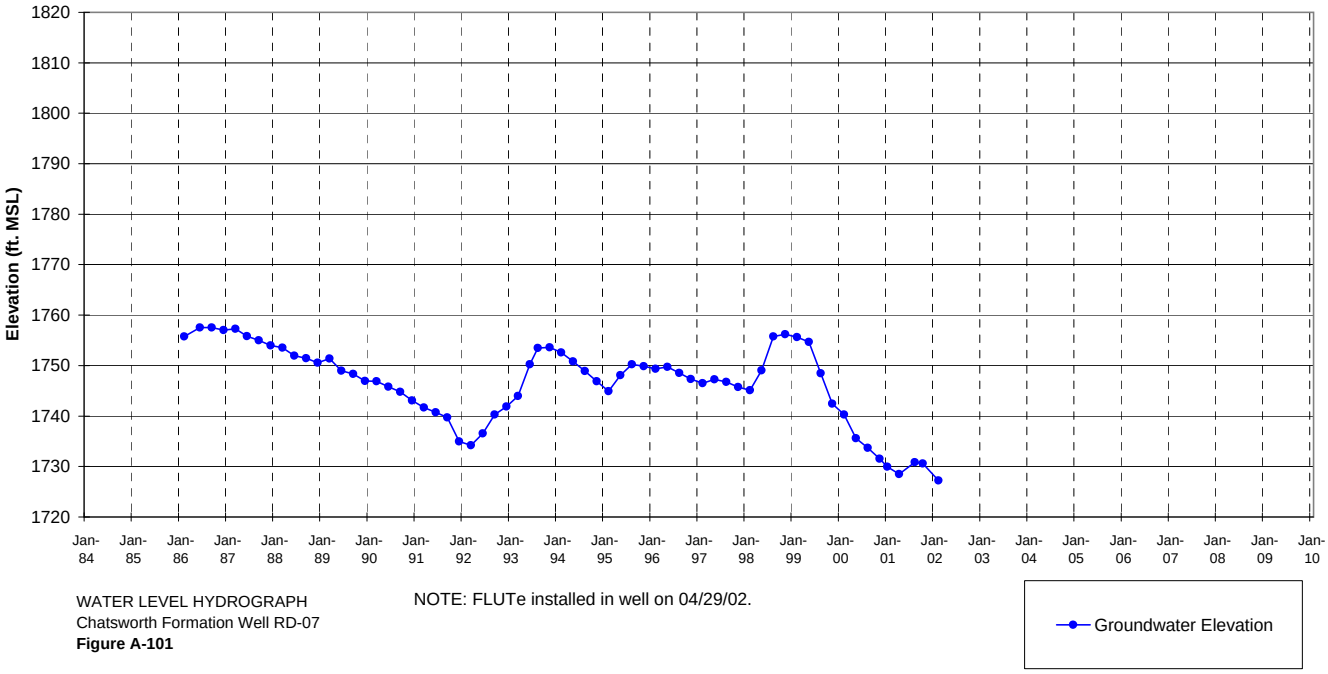
NOTE: Well known as RD-05 prior to 05/93.



WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-05C
Figure A-99

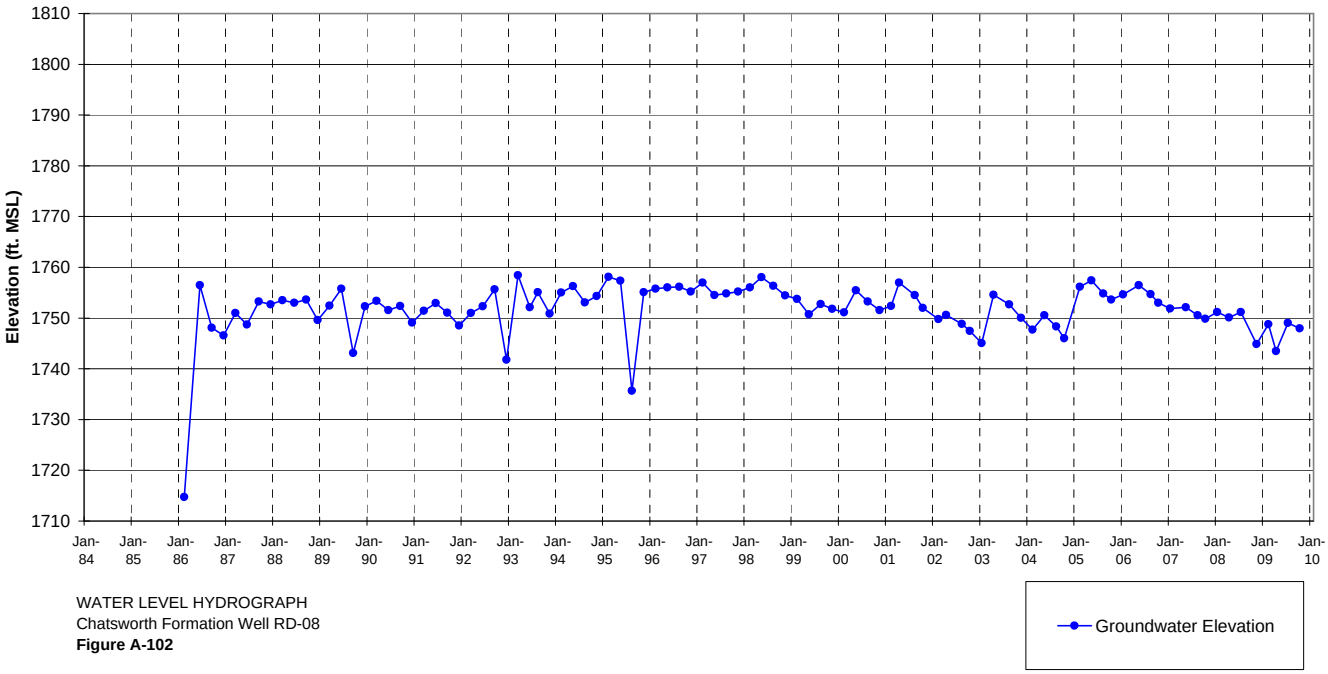


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-06
Figure A-100

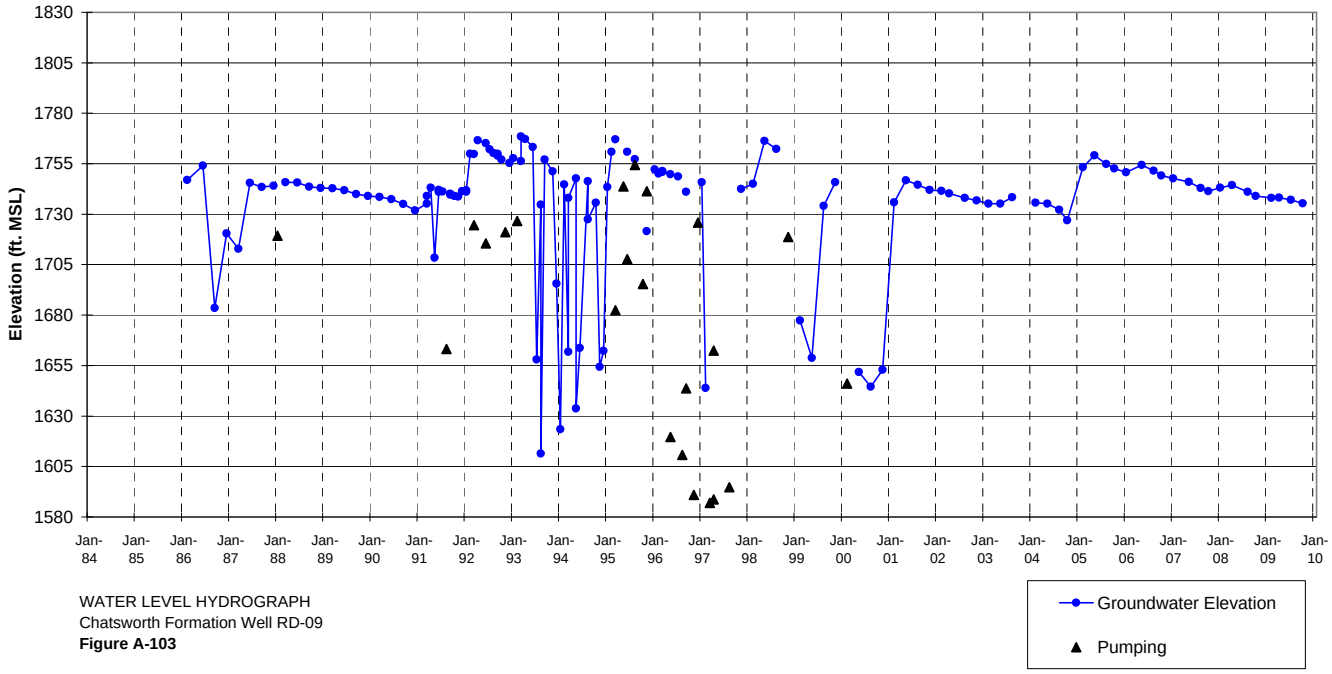


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-07
Figure A-101

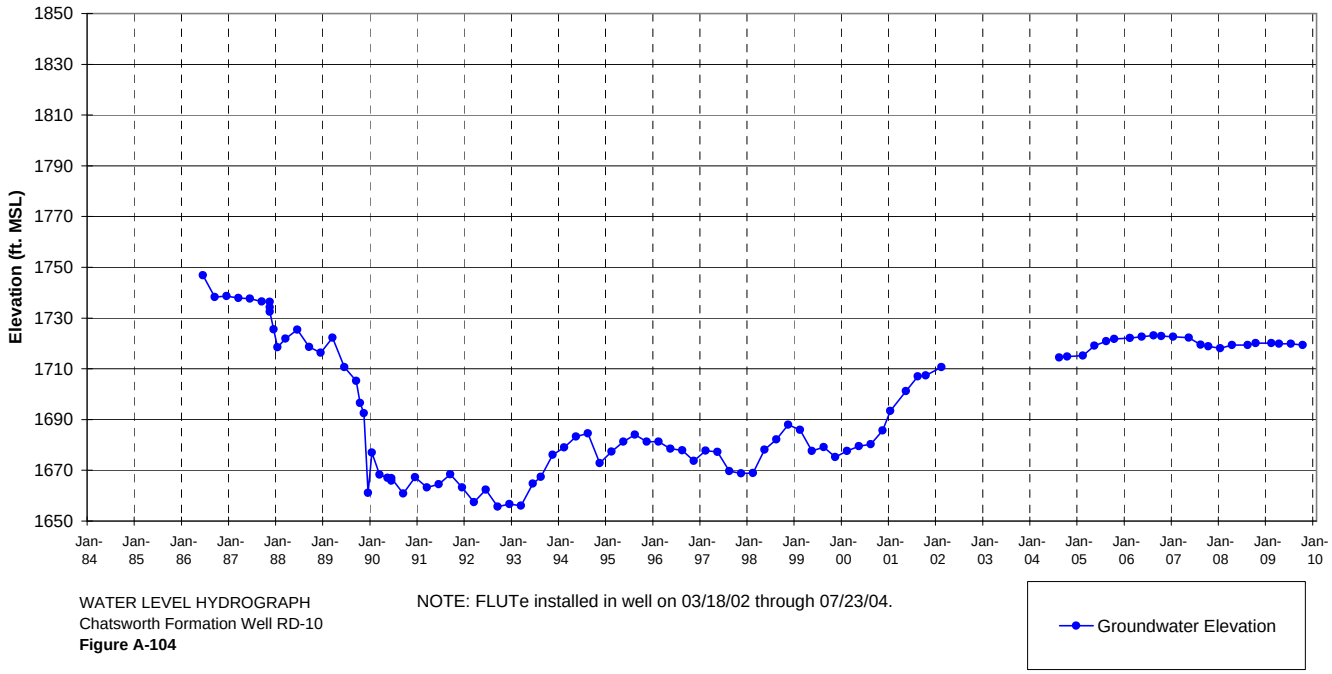
NOTE: FLUTe installed in well on 04/29/02.



WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-08
Figure A-102

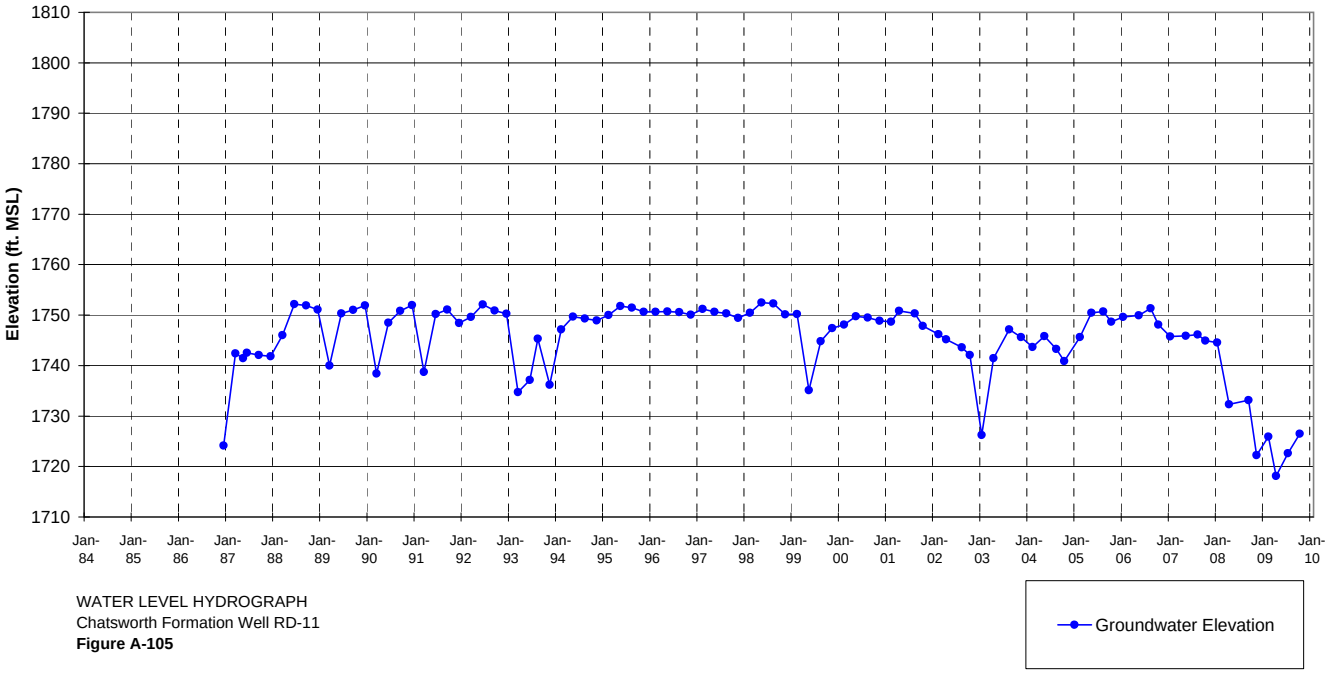


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-09
Figure A-103

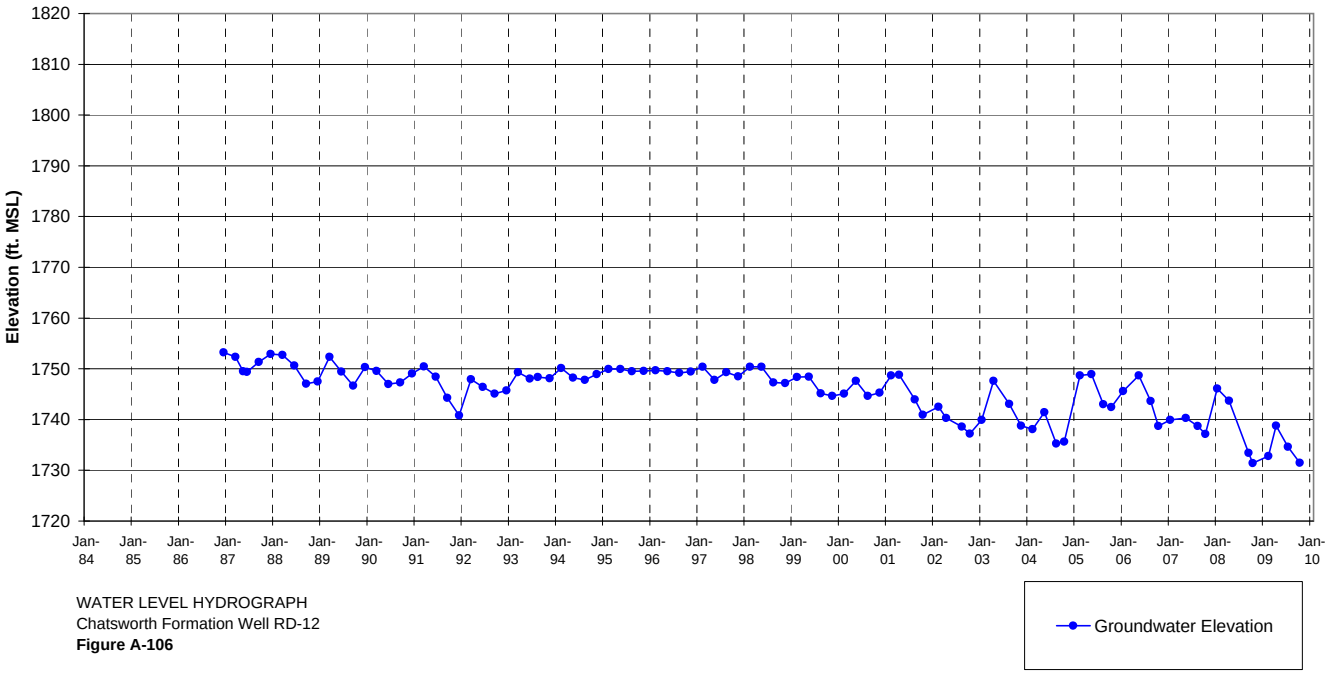


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-10
Figure A-104

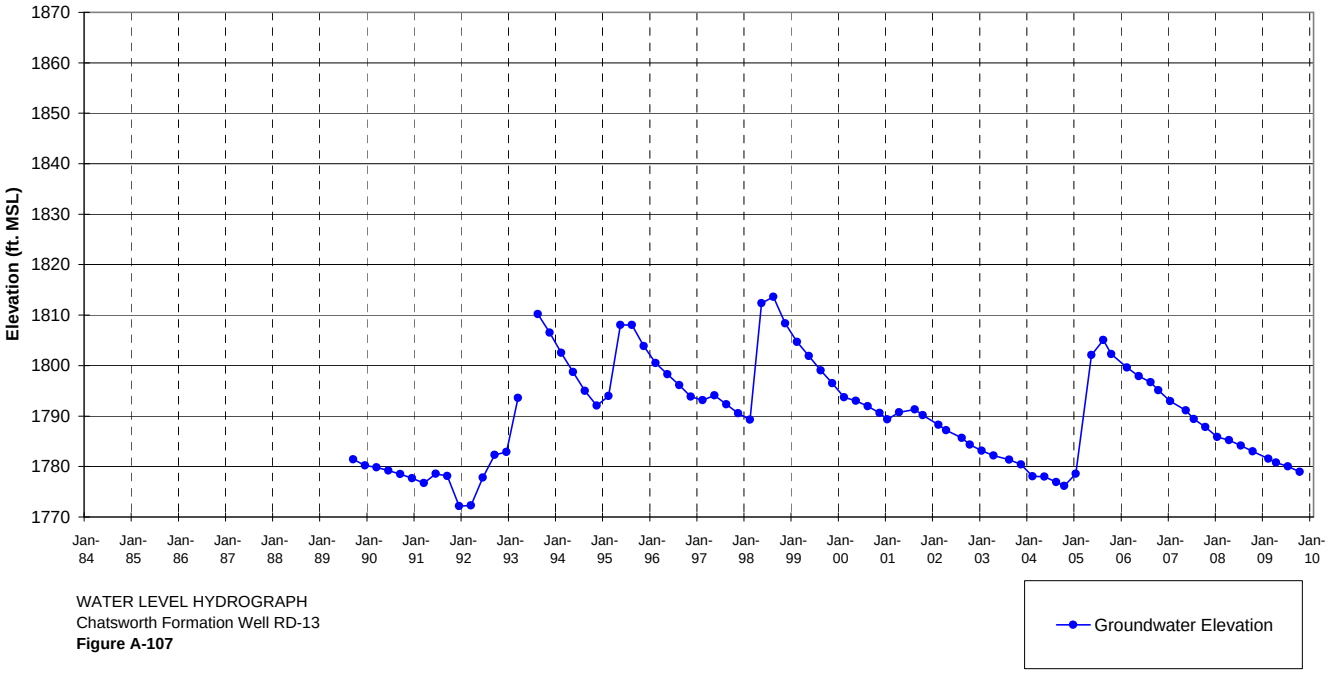
NOTE: FLUTe installed in well on 03/18/02 through 07/23/04.



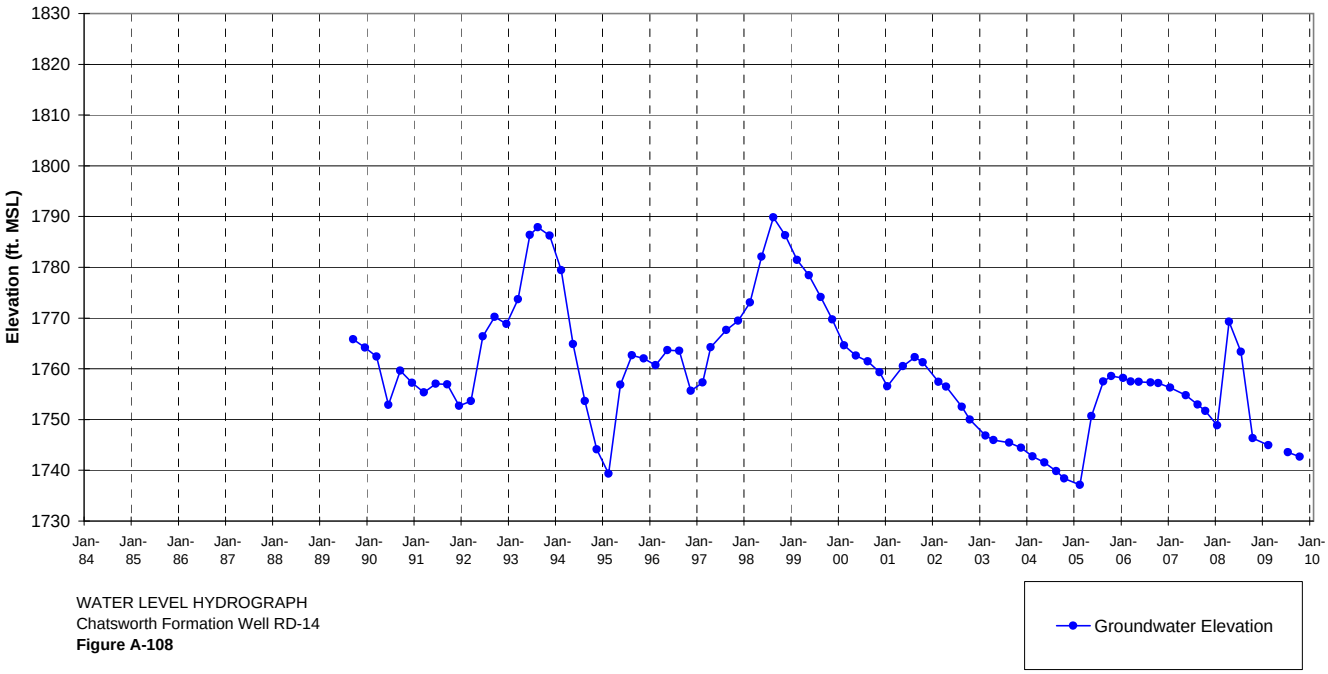
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-11
Figure A-105



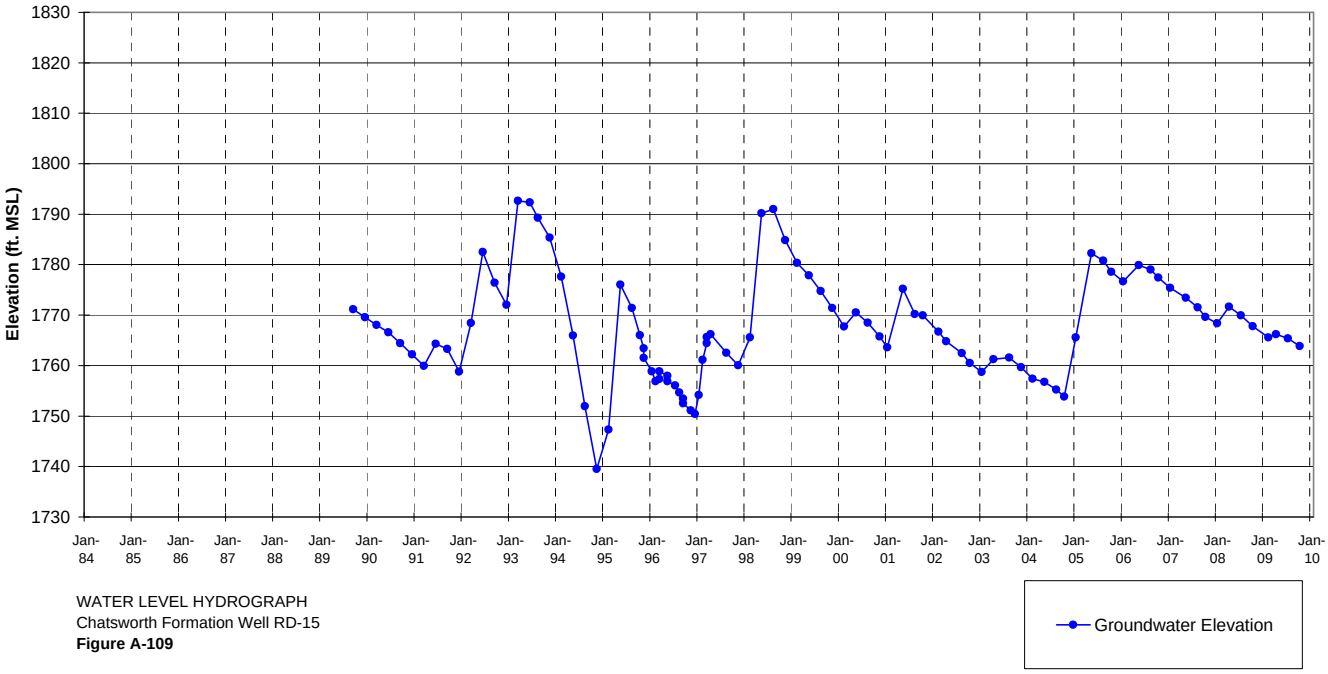
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-12
Figure A-106



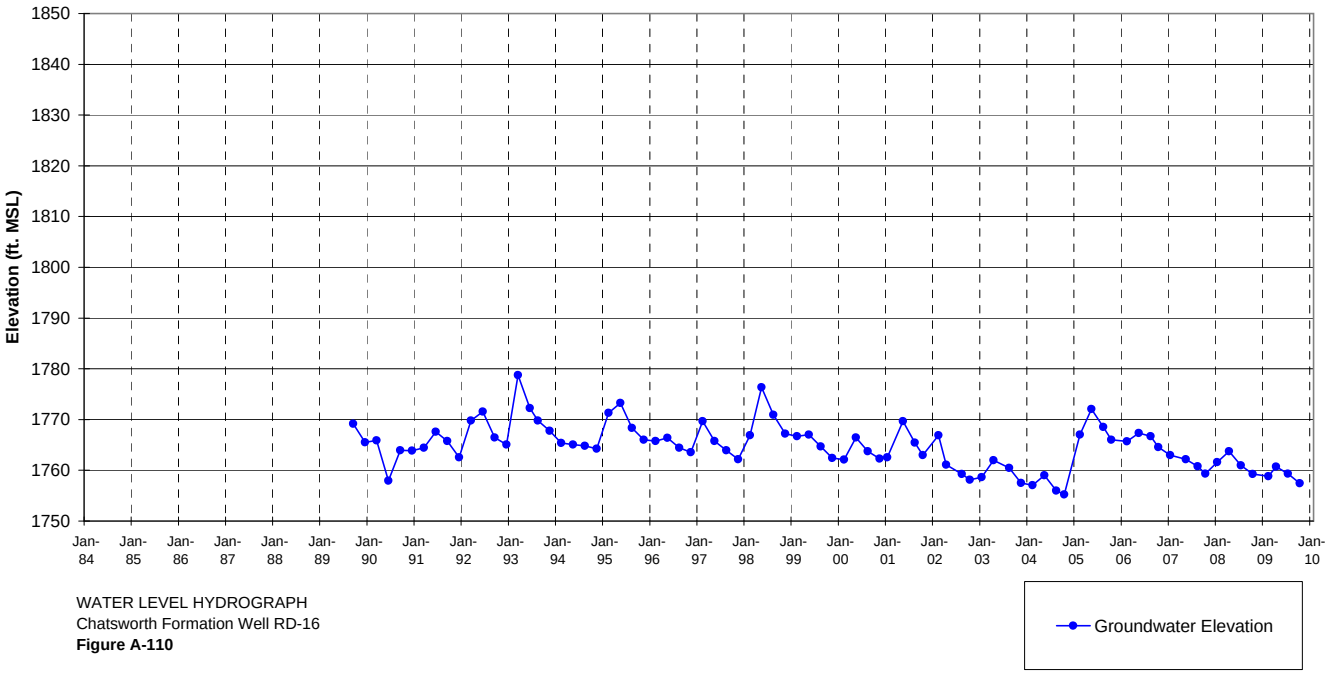
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-13
Figure A-107



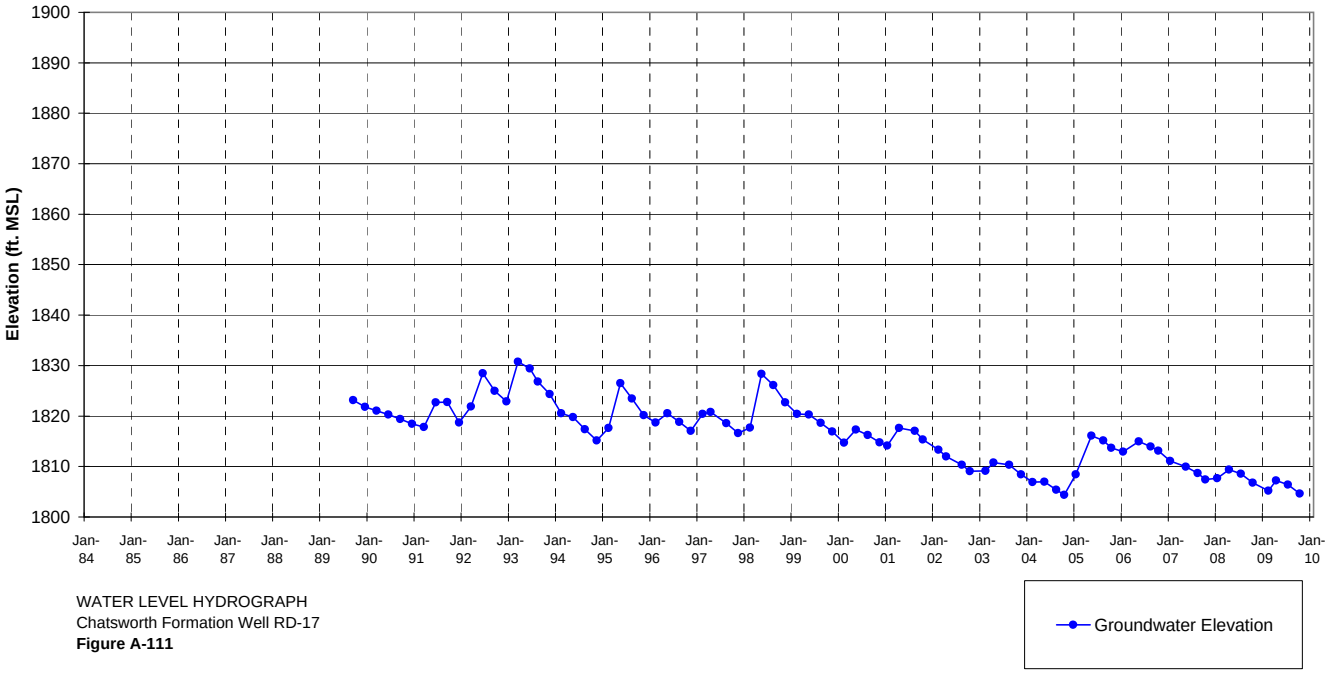
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-14
Figure A-108



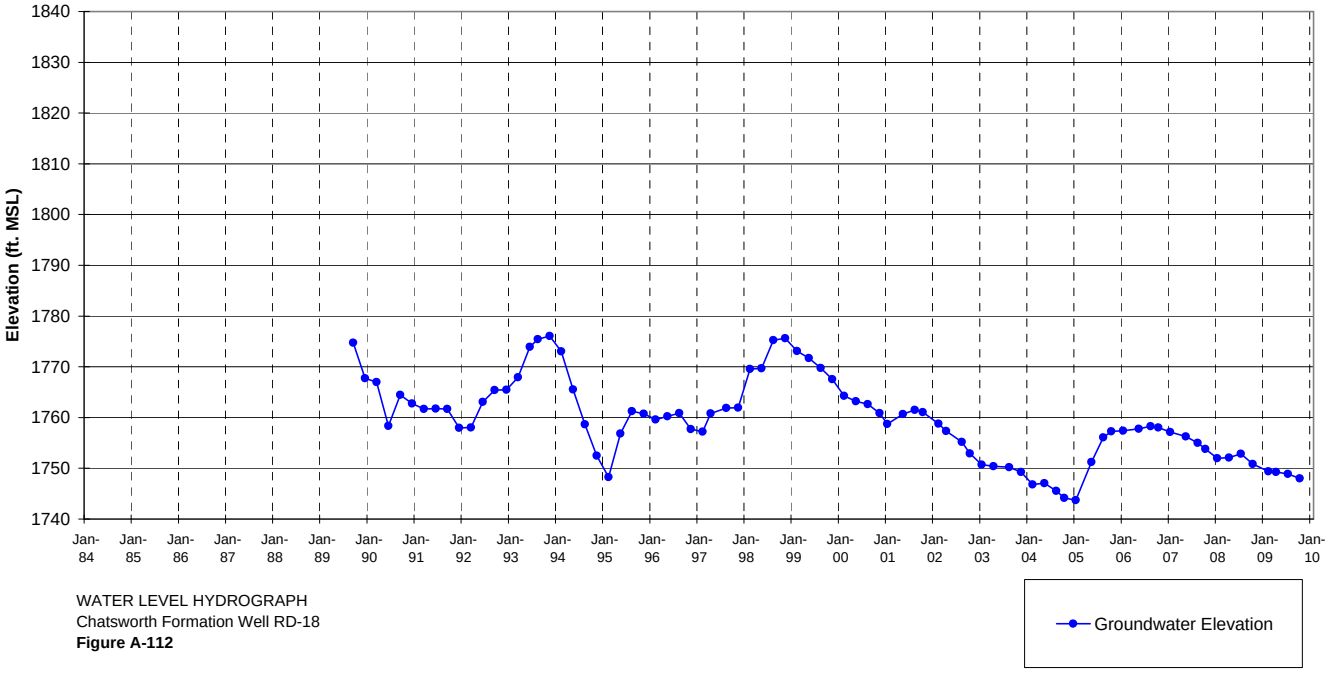
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-15
Figure A-109



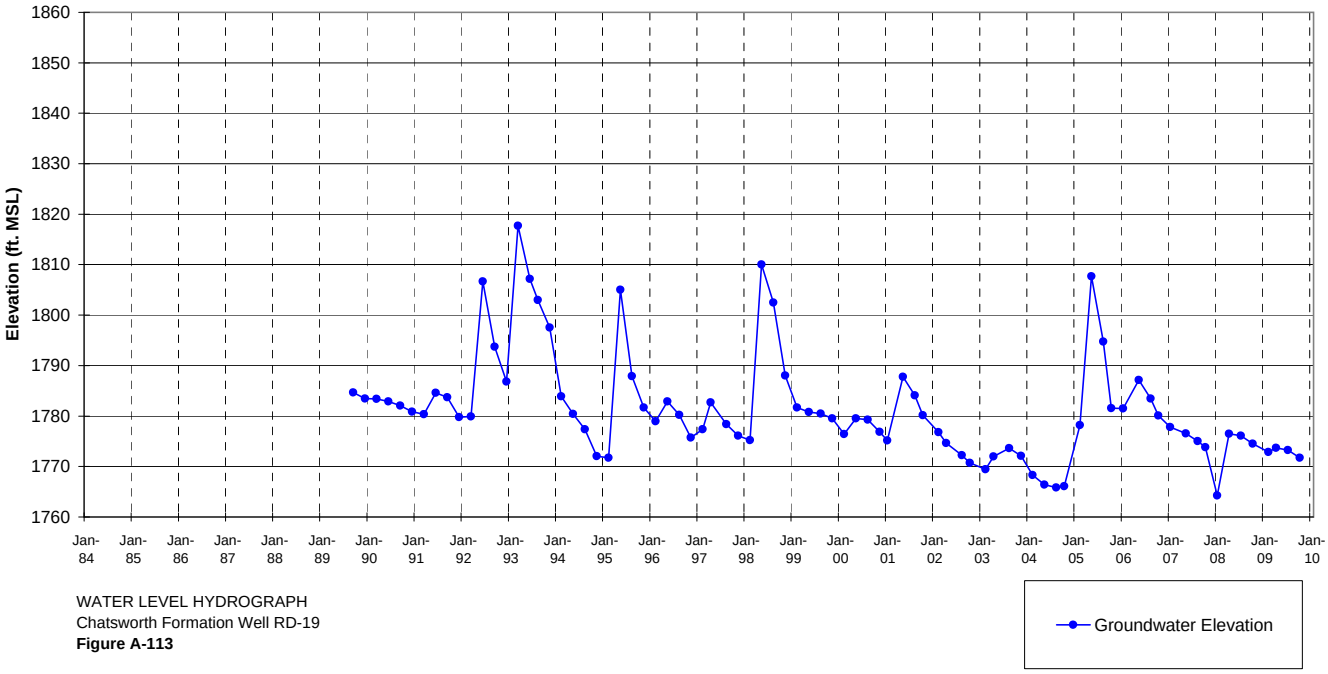
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-16
Figure A-110



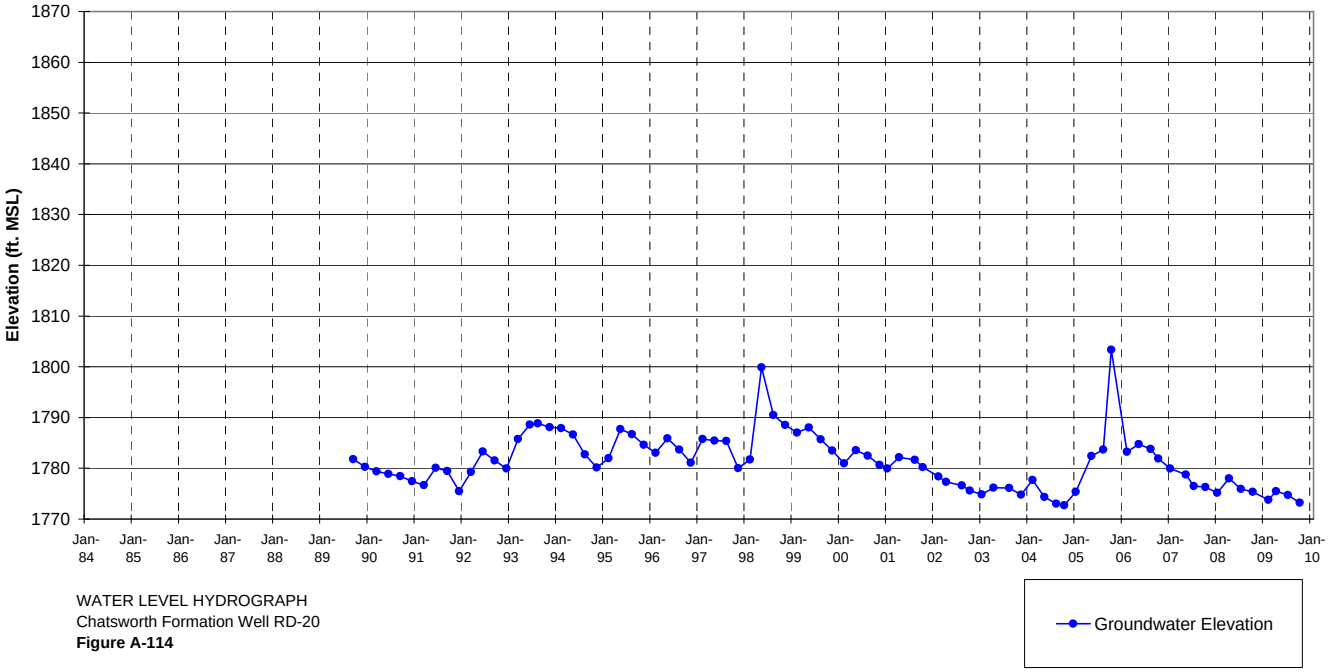
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-17
Figure A-111



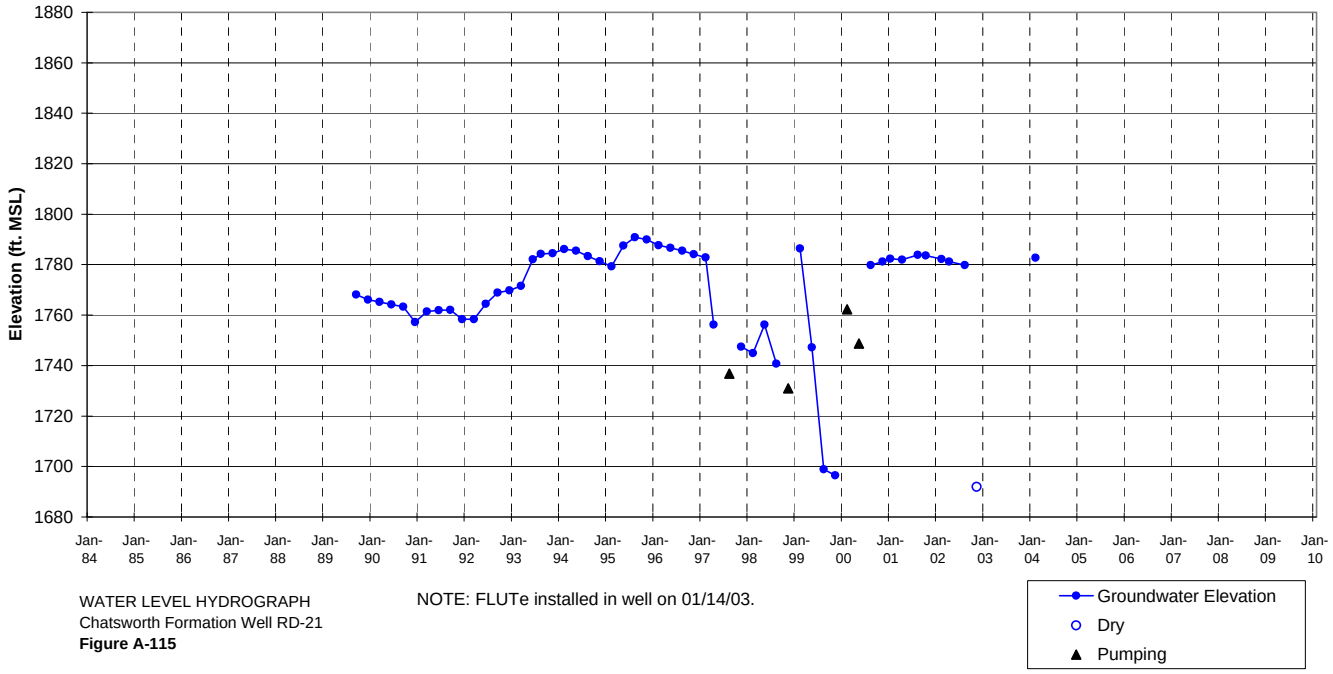
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-18
Figure A-112



WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-19
Figure A-113

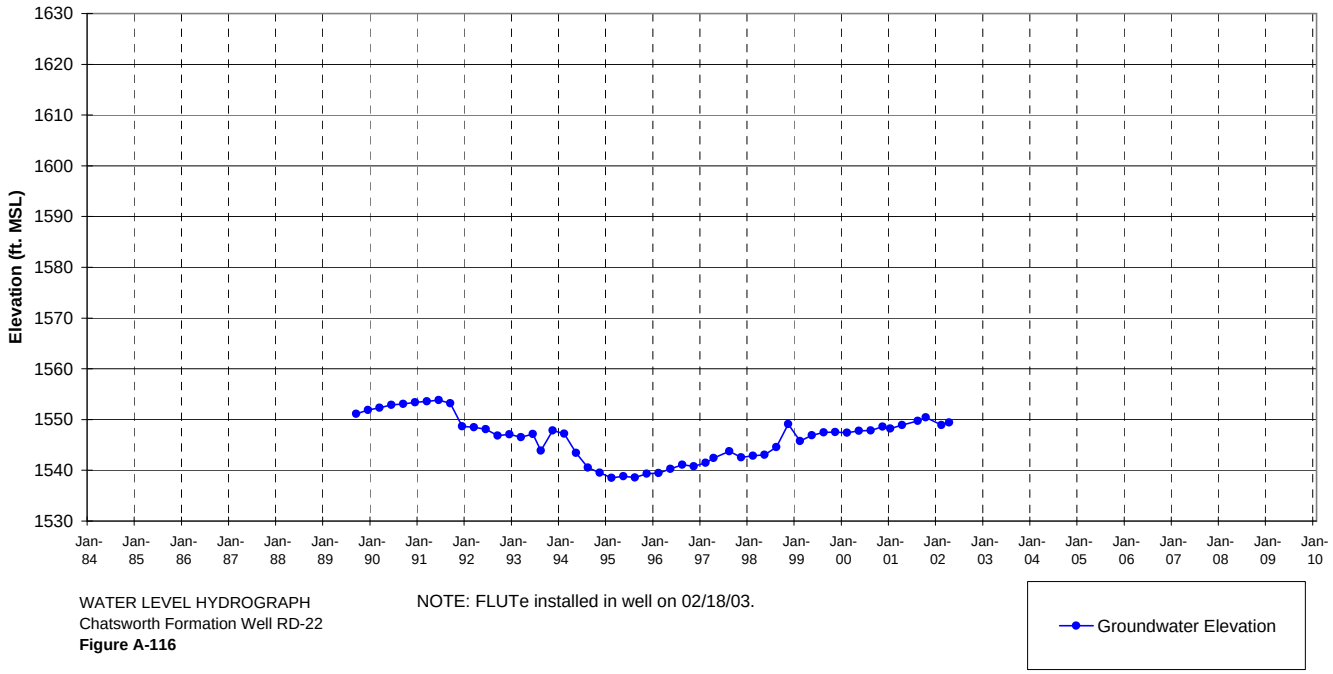


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-20
Figure A-114



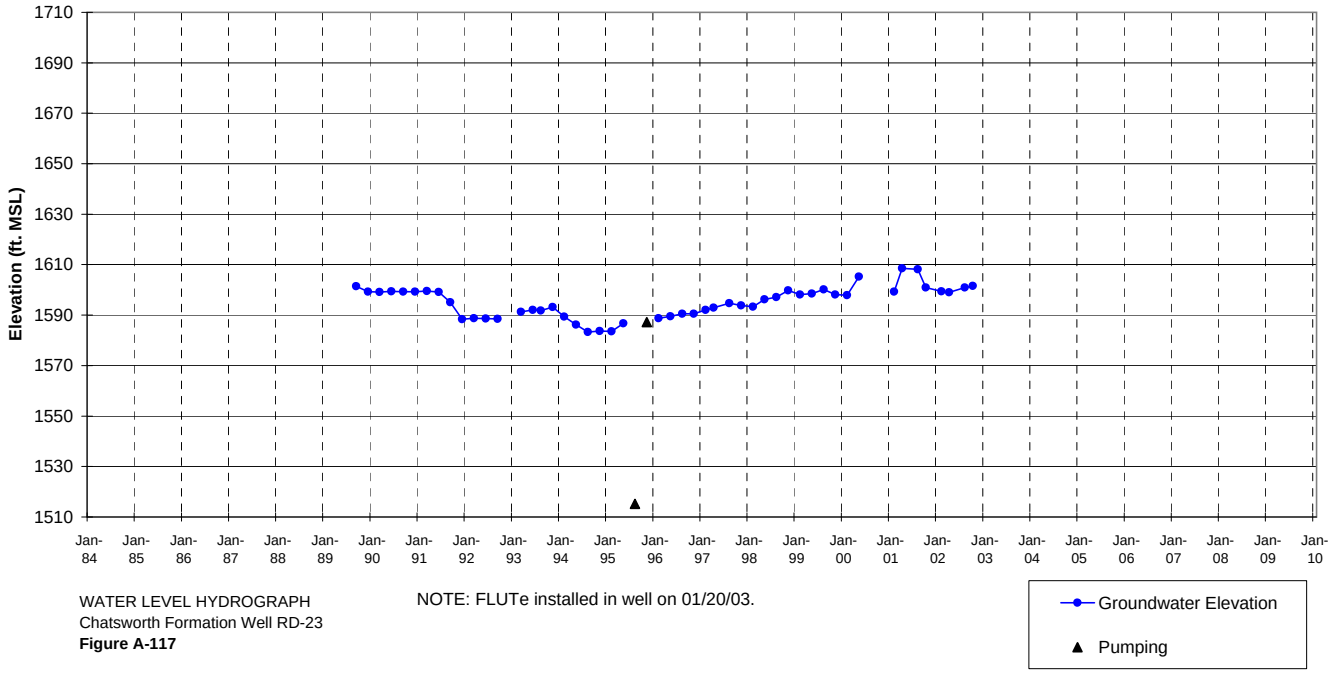
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-21
Figure A-115

NOTE: FLUTe installed in well on 01/14/03.



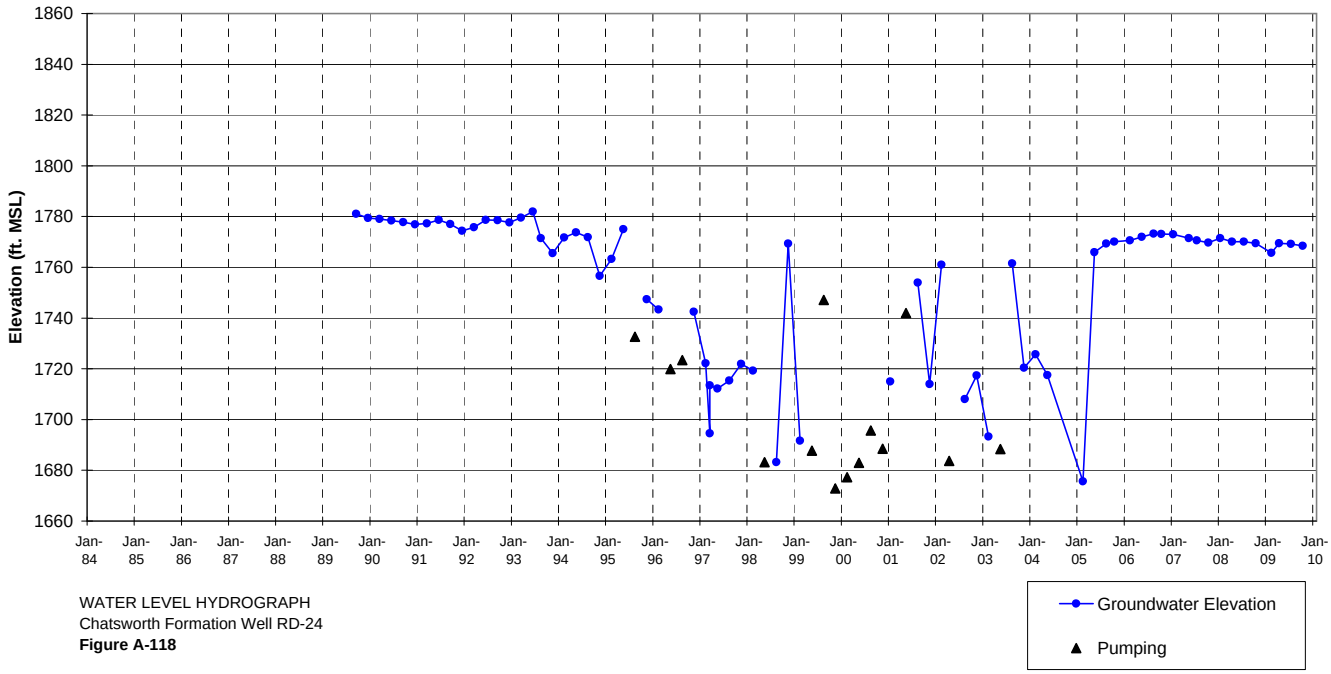
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-22
Figure A-116

NOTE: FLUTe installed in well on 02/18/03.

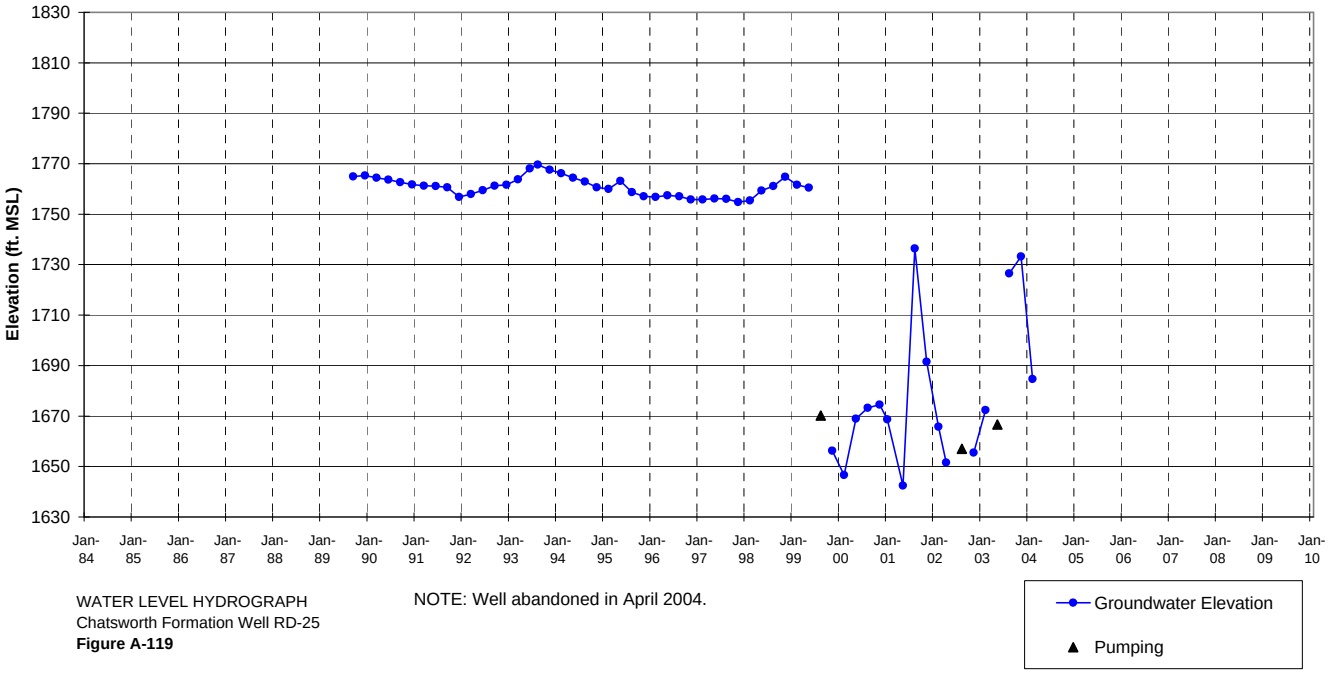


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-23
Figure A-117

NOTE: FLUTe installed in well on 01/20/03.

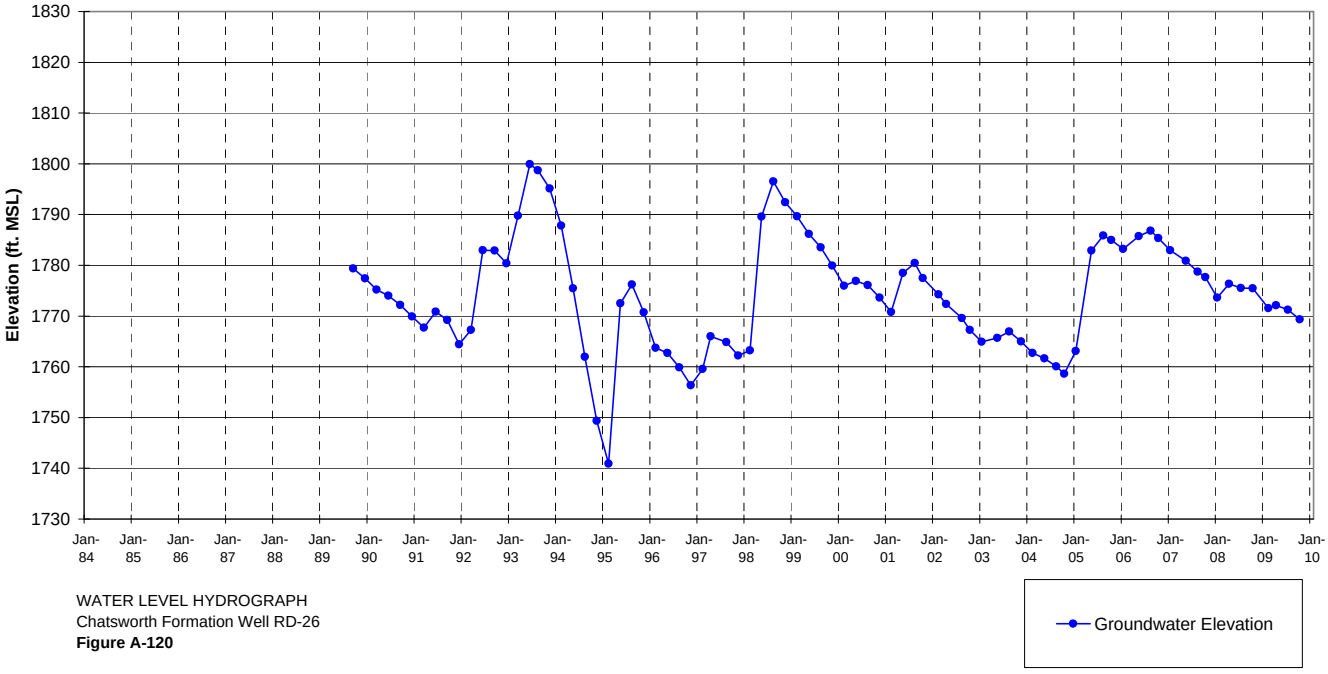


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-24
Figure A-118

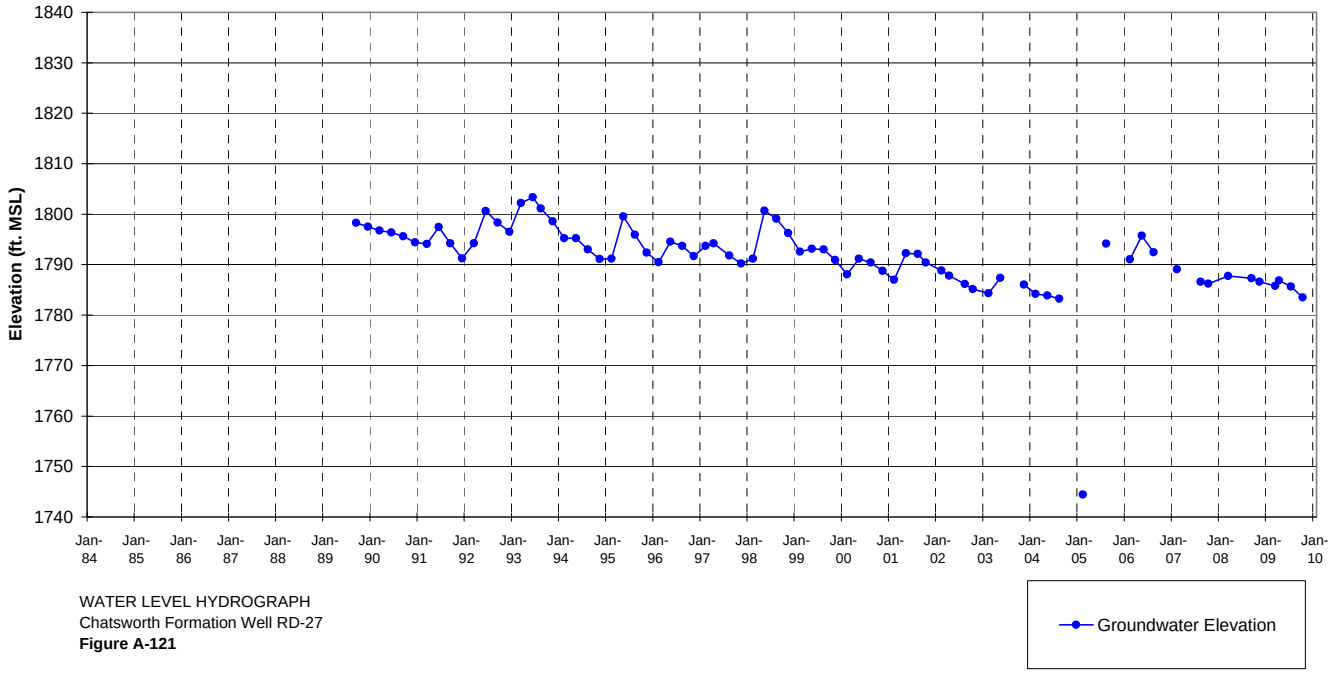


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-25
Figure A-119

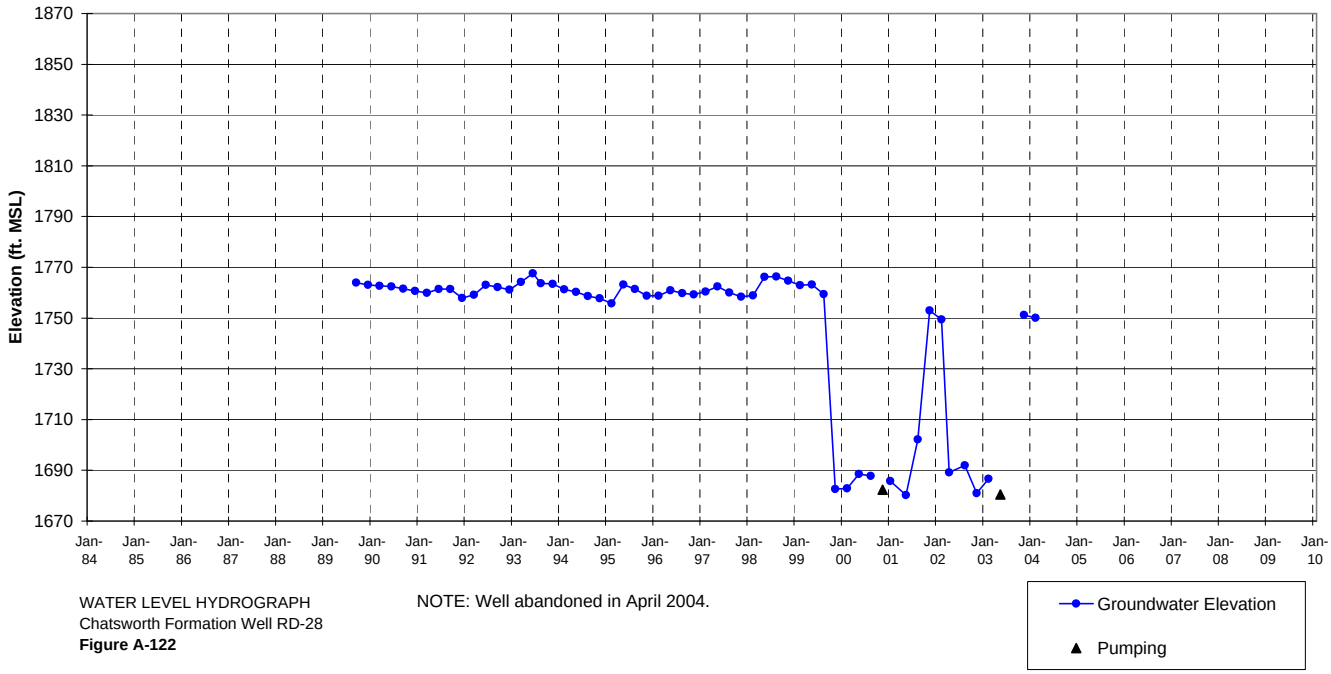
NOTE: Well abandoned in April 2004.



WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-26
Figure A-120

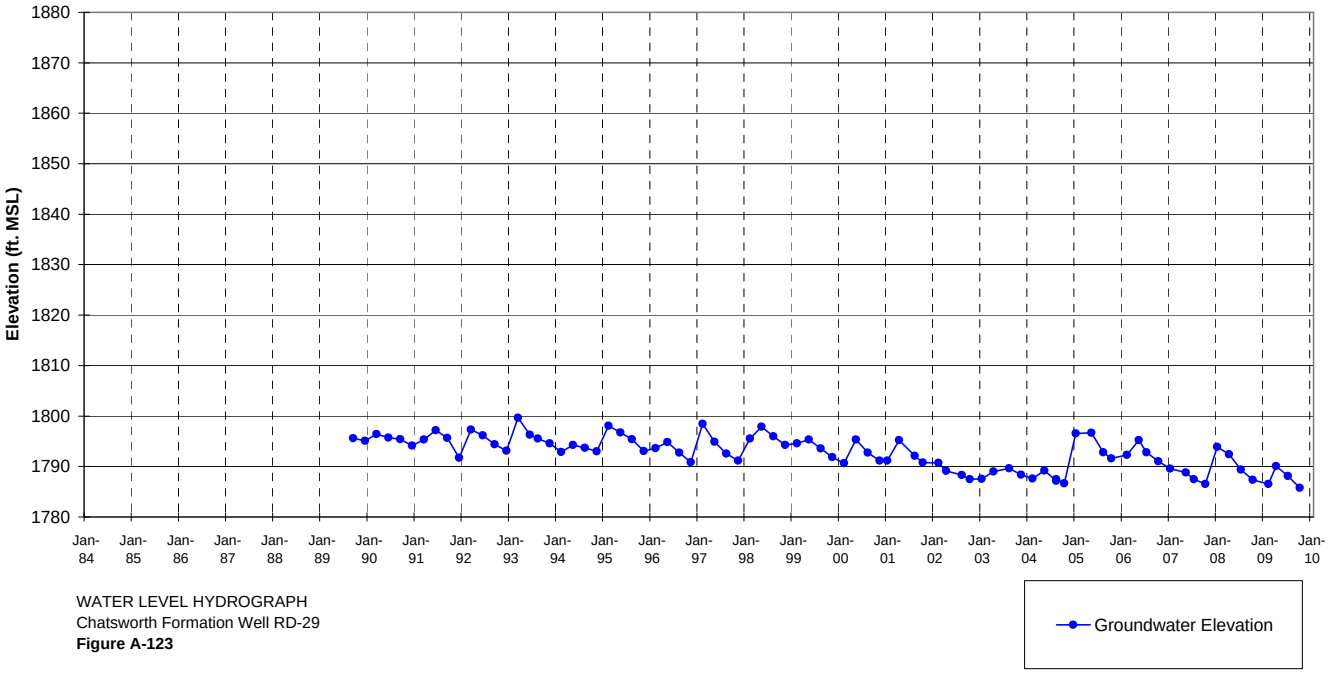


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-27
Figure A-121

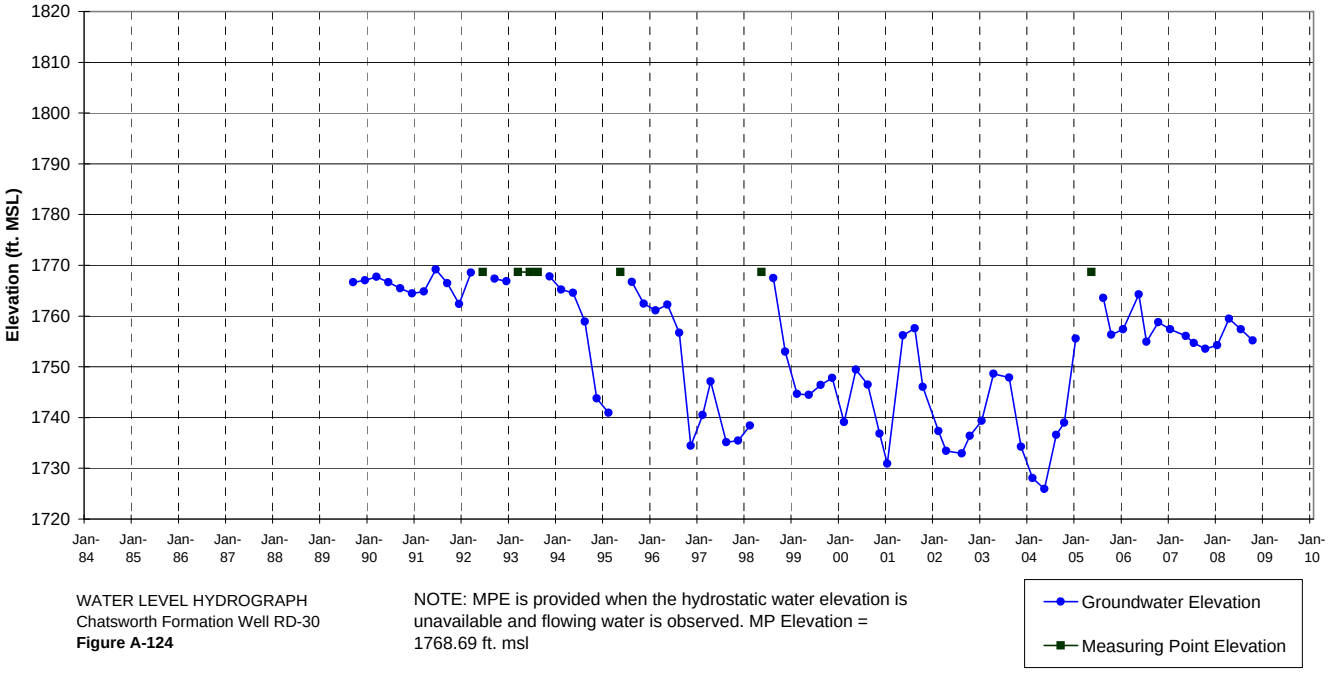


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-28
Figure A-122

NOTE: Well abandoned in April 2004.

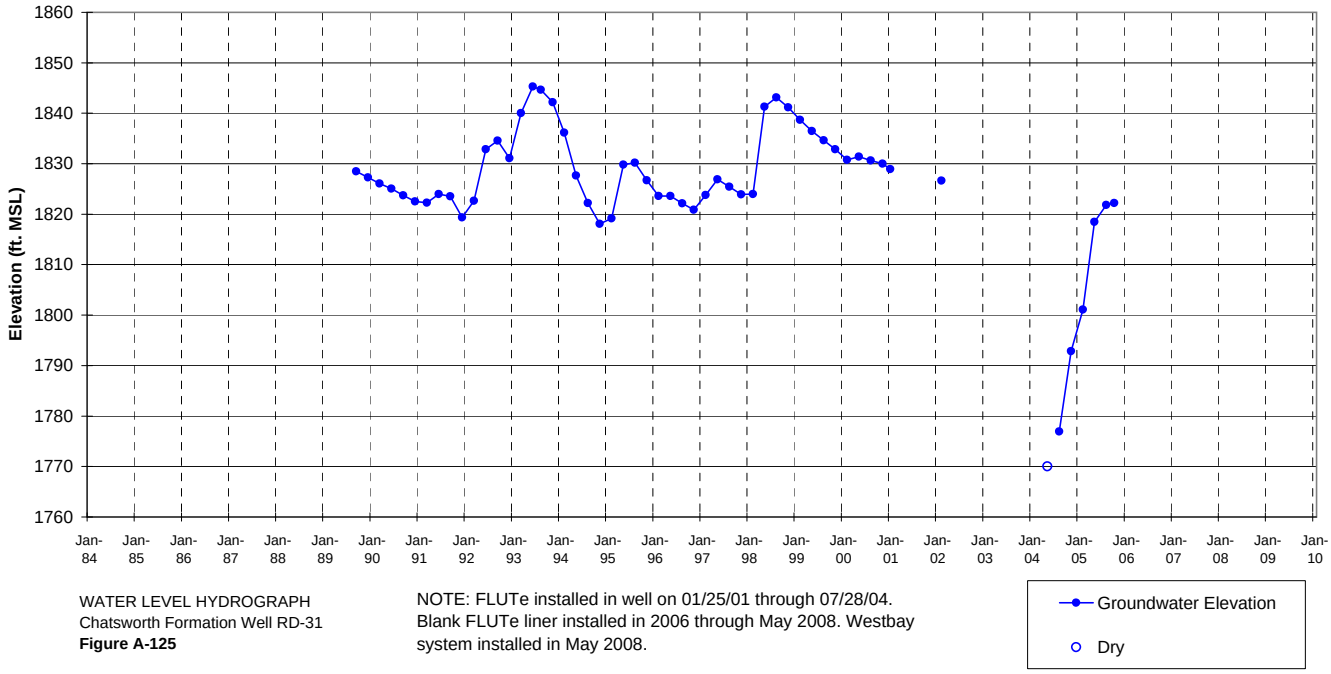


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-29
Figure A-123



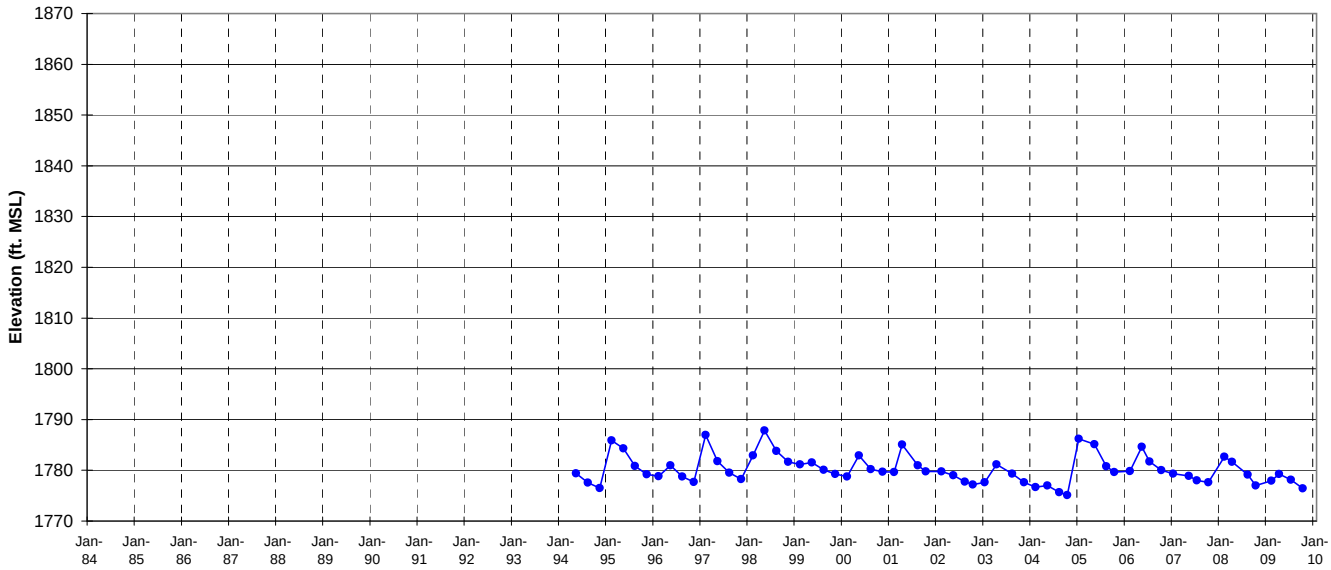
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-30
Figure A-124

NOTE: MPE is provided when the hydrostatic water elevation is unavailable and flowing water is observed. MP Elevation = 1768.69 ft. msl

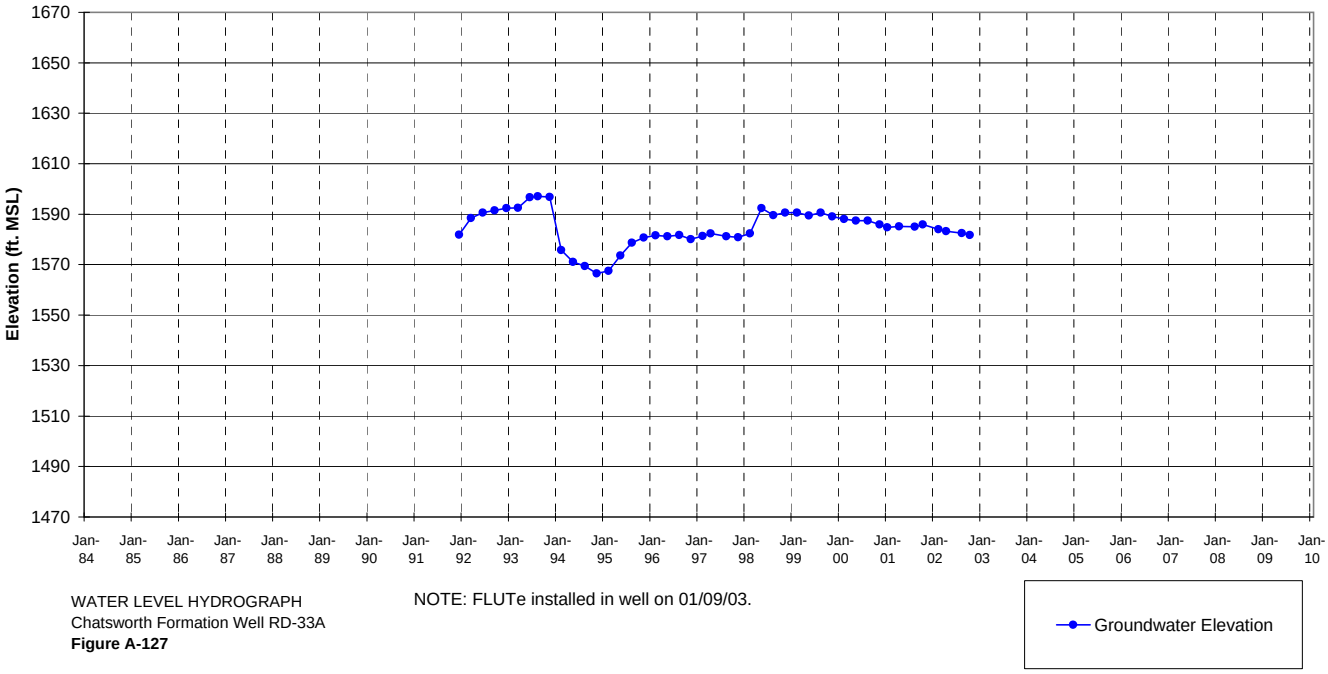


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-31
Figure A-125

NOTE: FLUTe installed in well on 01/25/01 through 07/28/04. Blank FLUTe liner installed in 2006 through May 2008. Westbay system installed in May 2008.

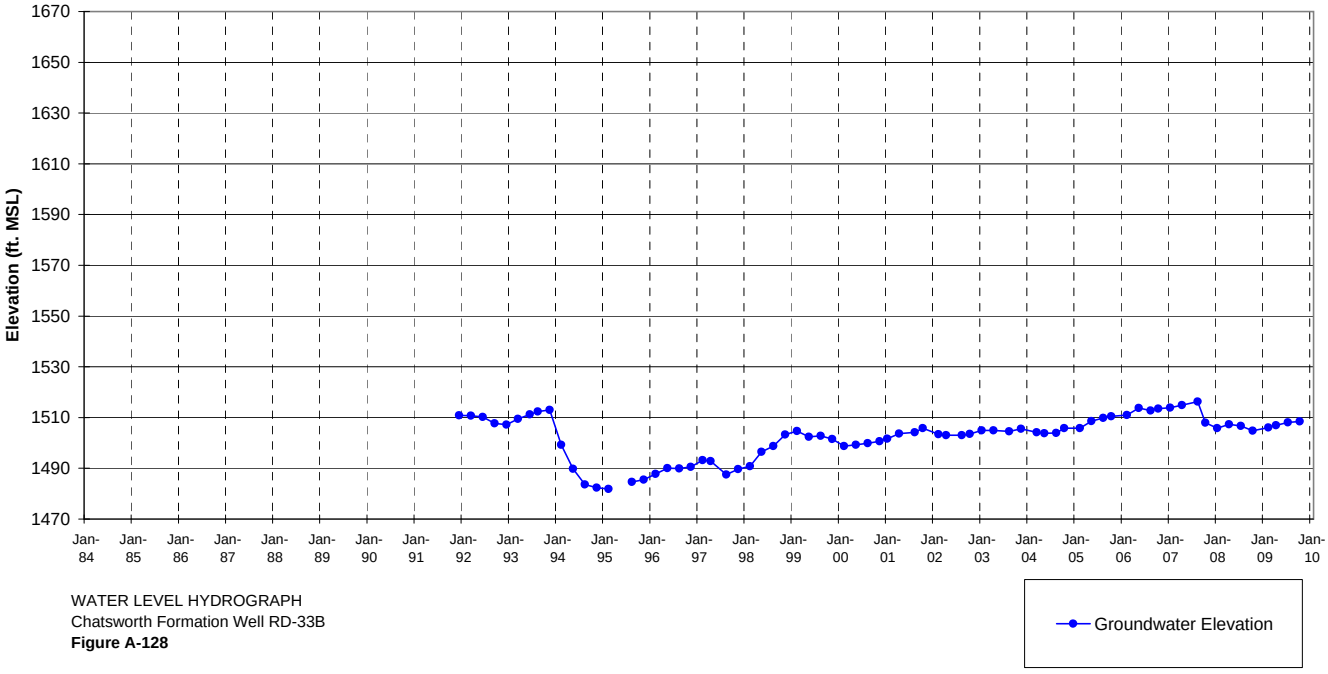


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-32
Figure A-126

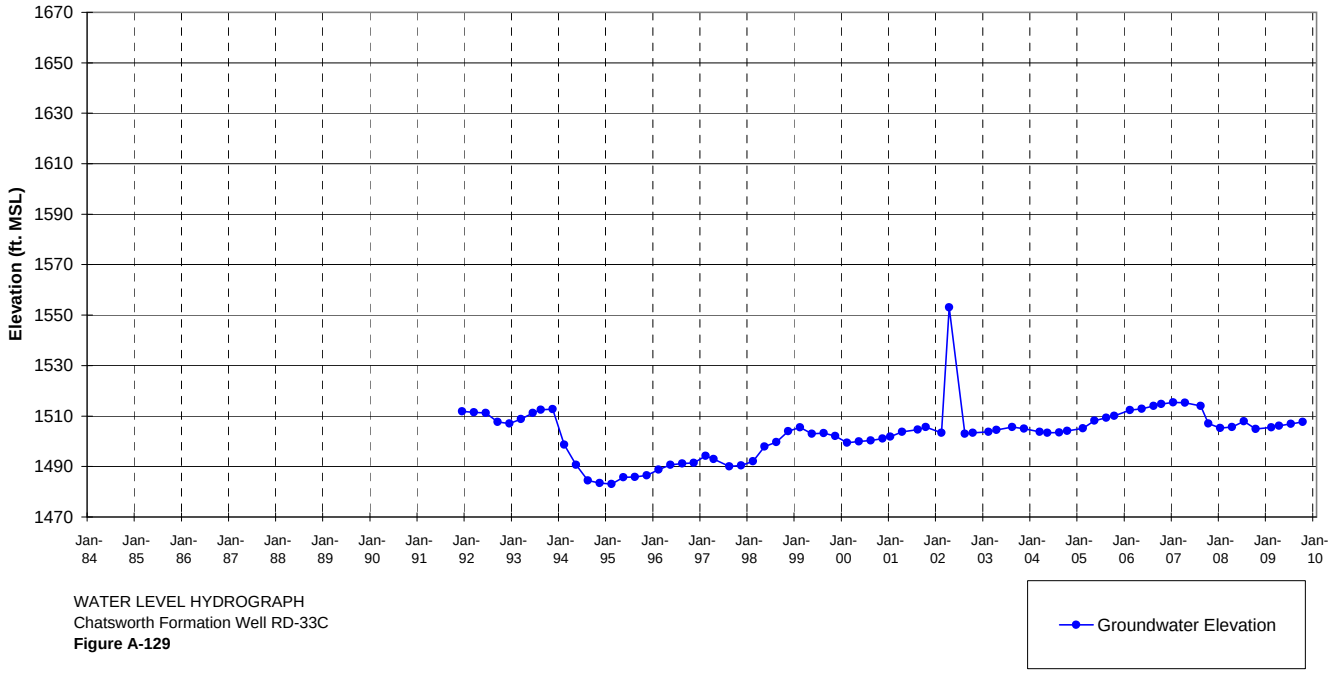


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-33A
Figure A-127

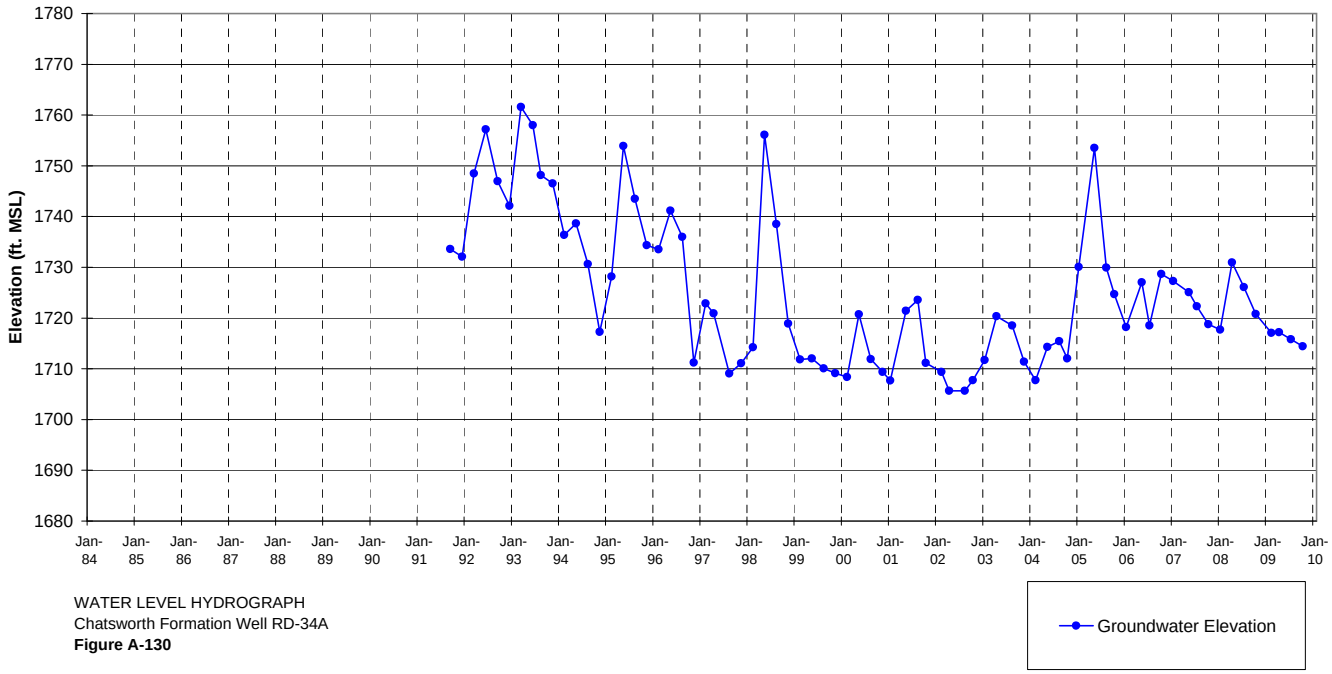
NOTE: FLUTe installed in well on 01/09/03.



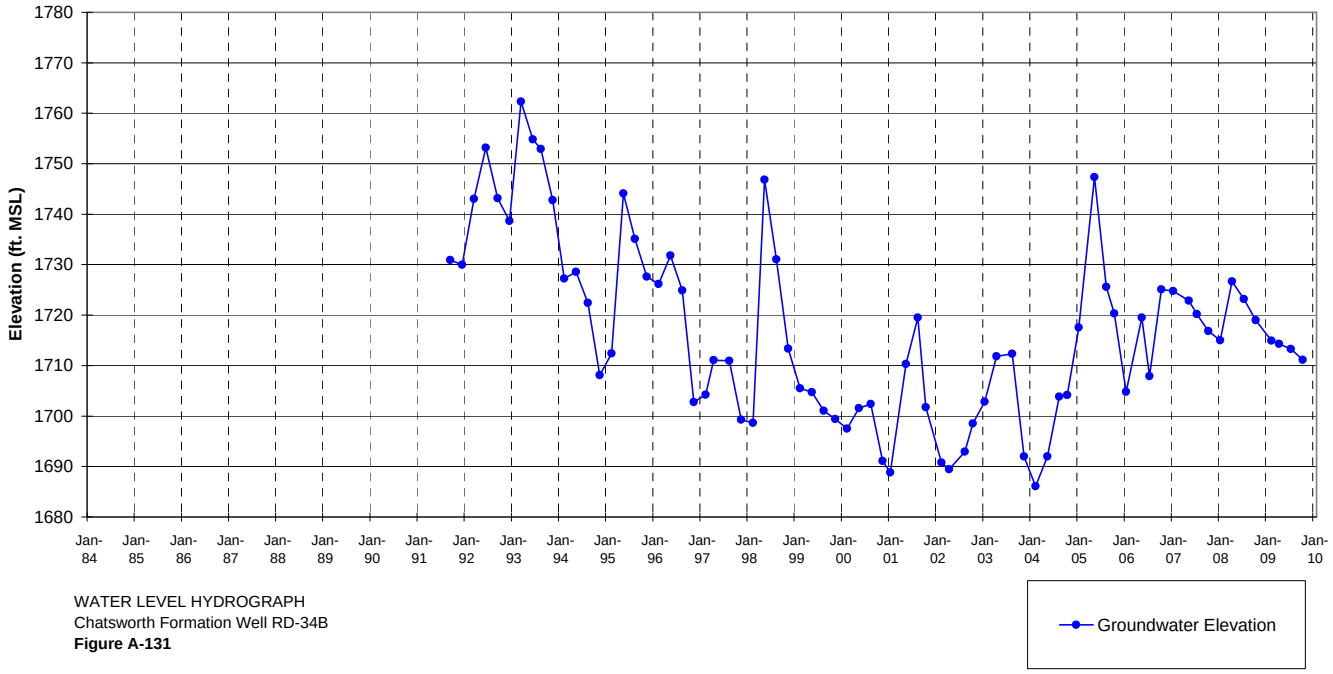
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-33B
Figure A-128



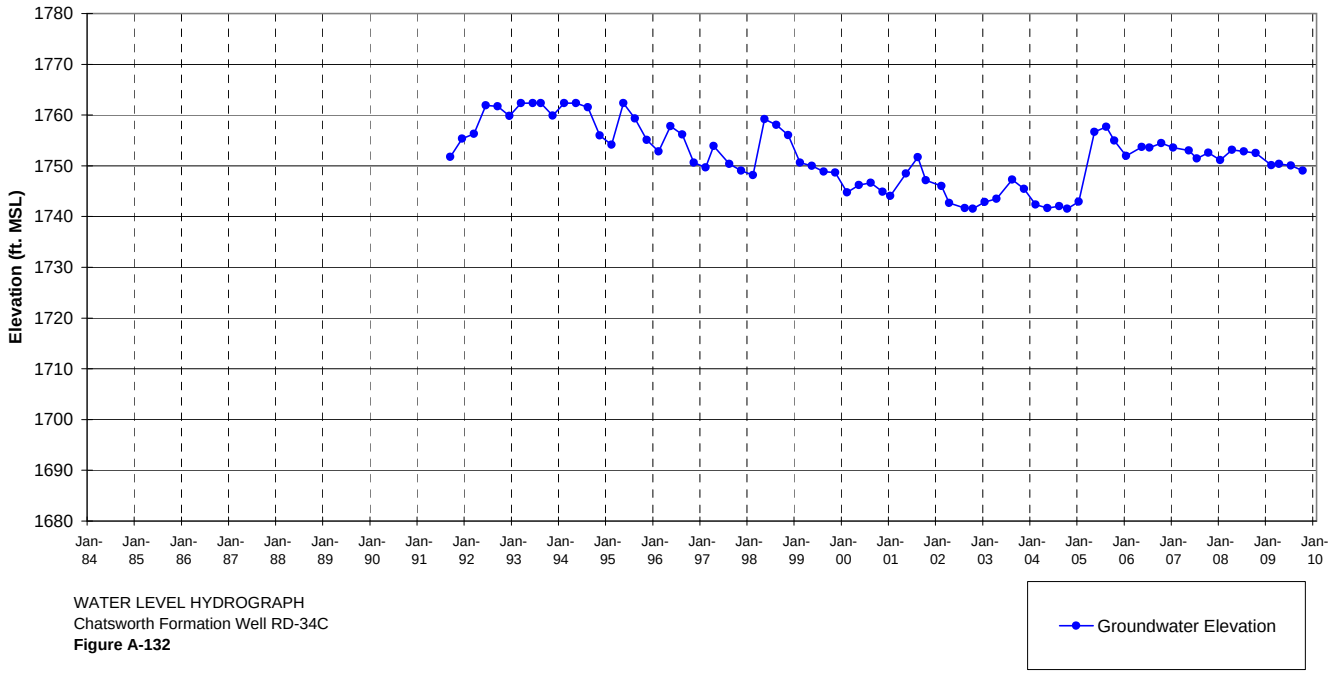
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-33C
Figure A-129



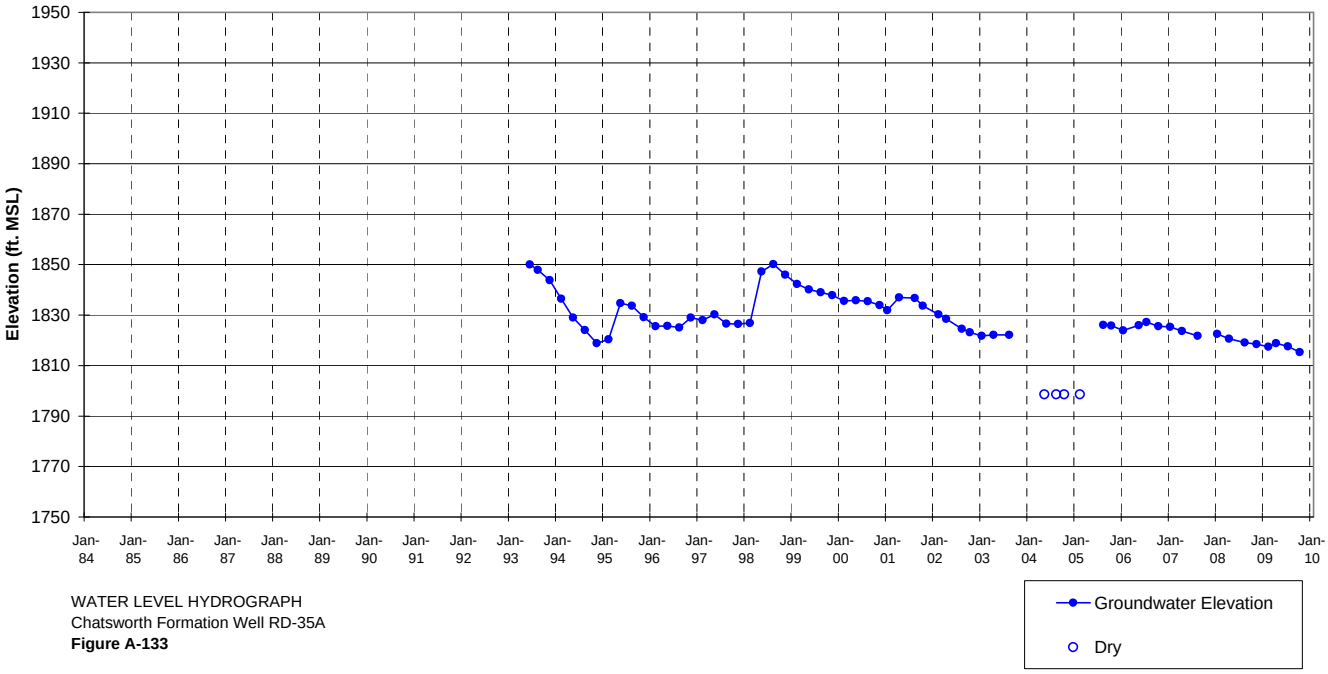
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-34A
Figure A-130



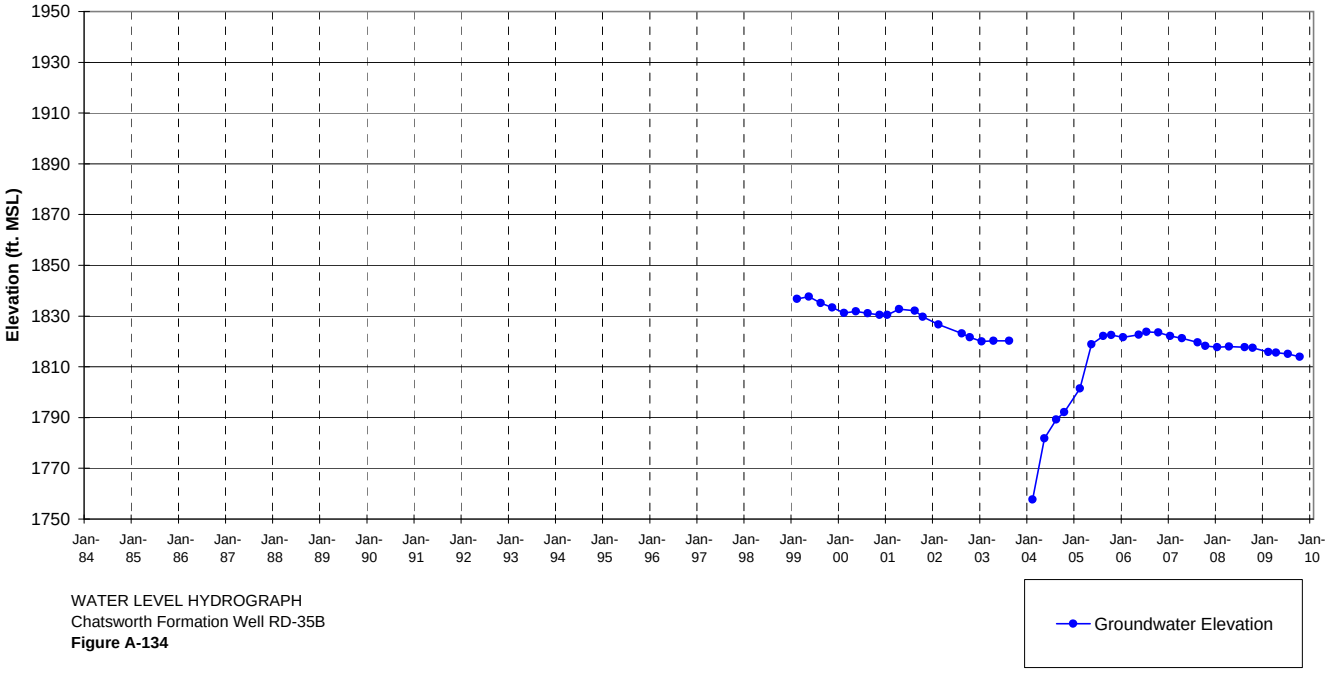
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-34B
Figure A-131



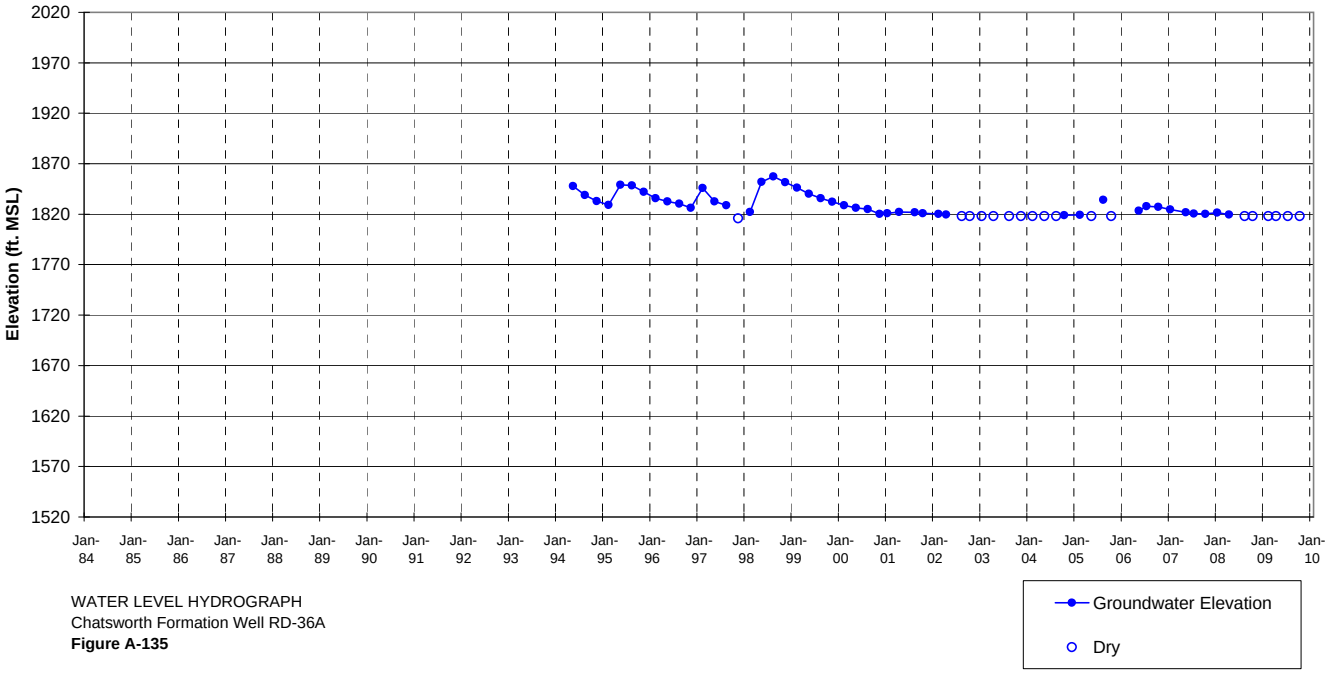
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-34C
Figure A-132



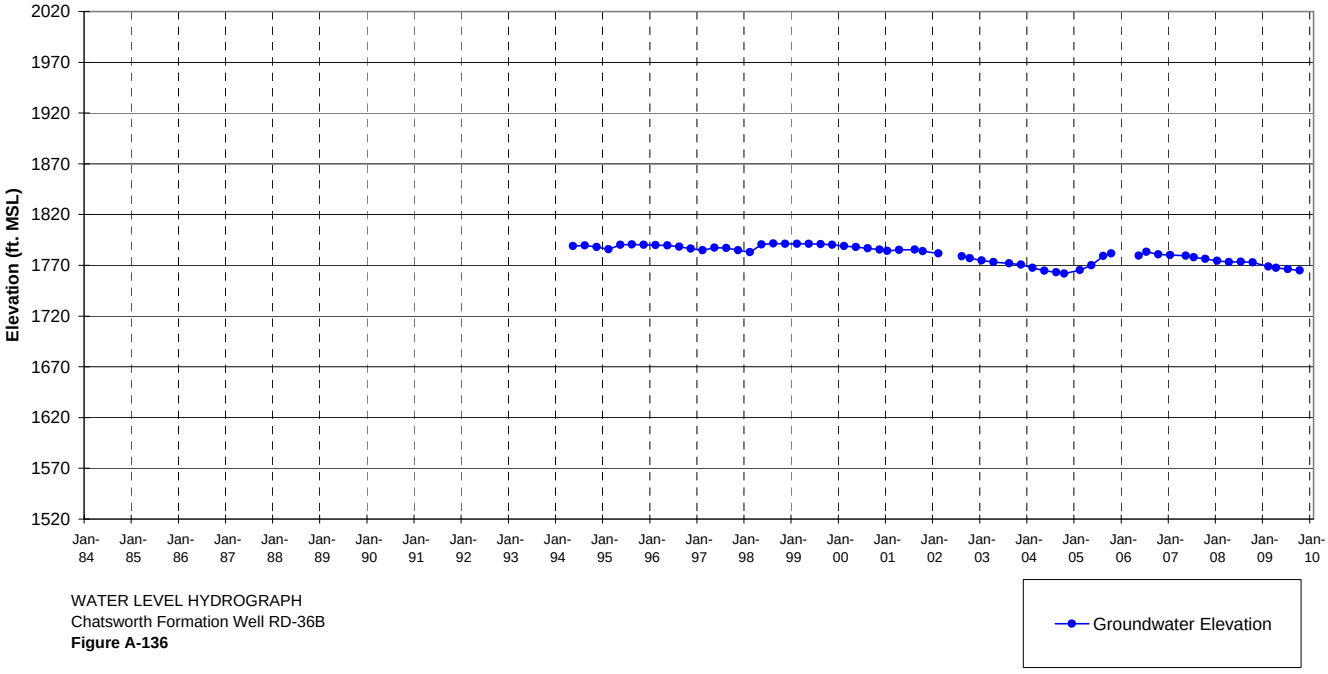
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-35A
Figure A-133



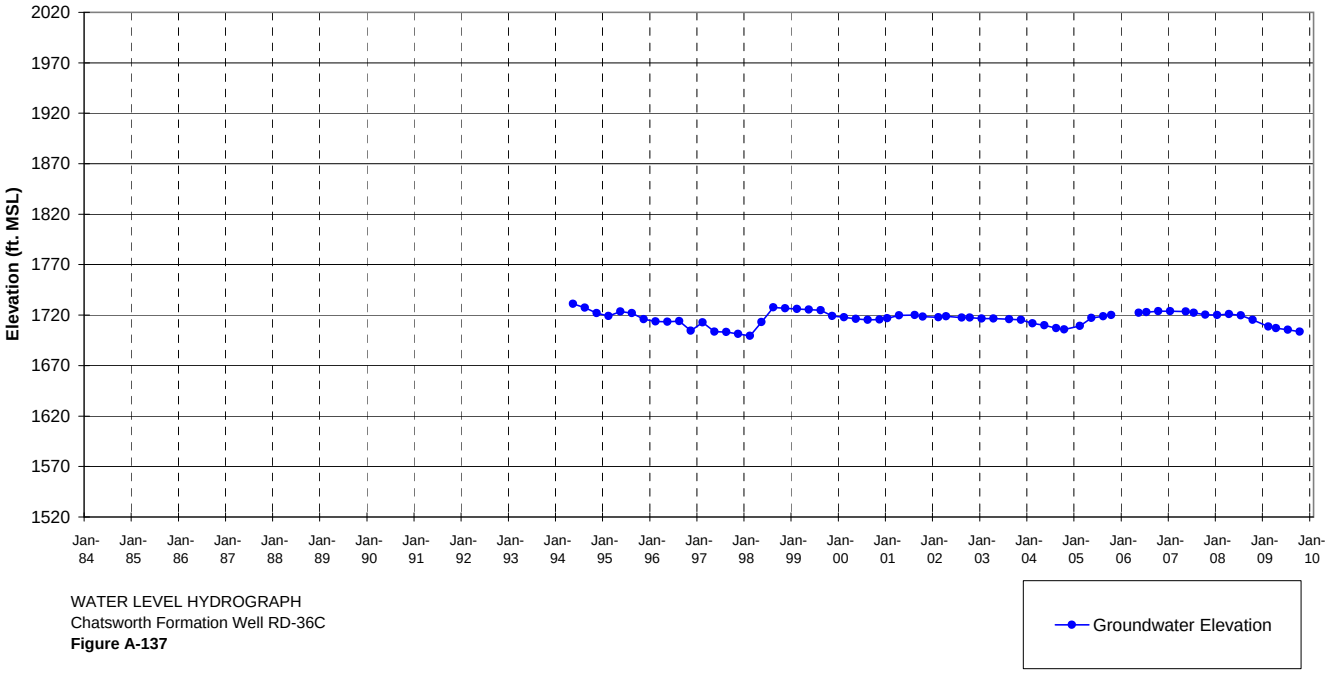
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-35B
Figure A-134



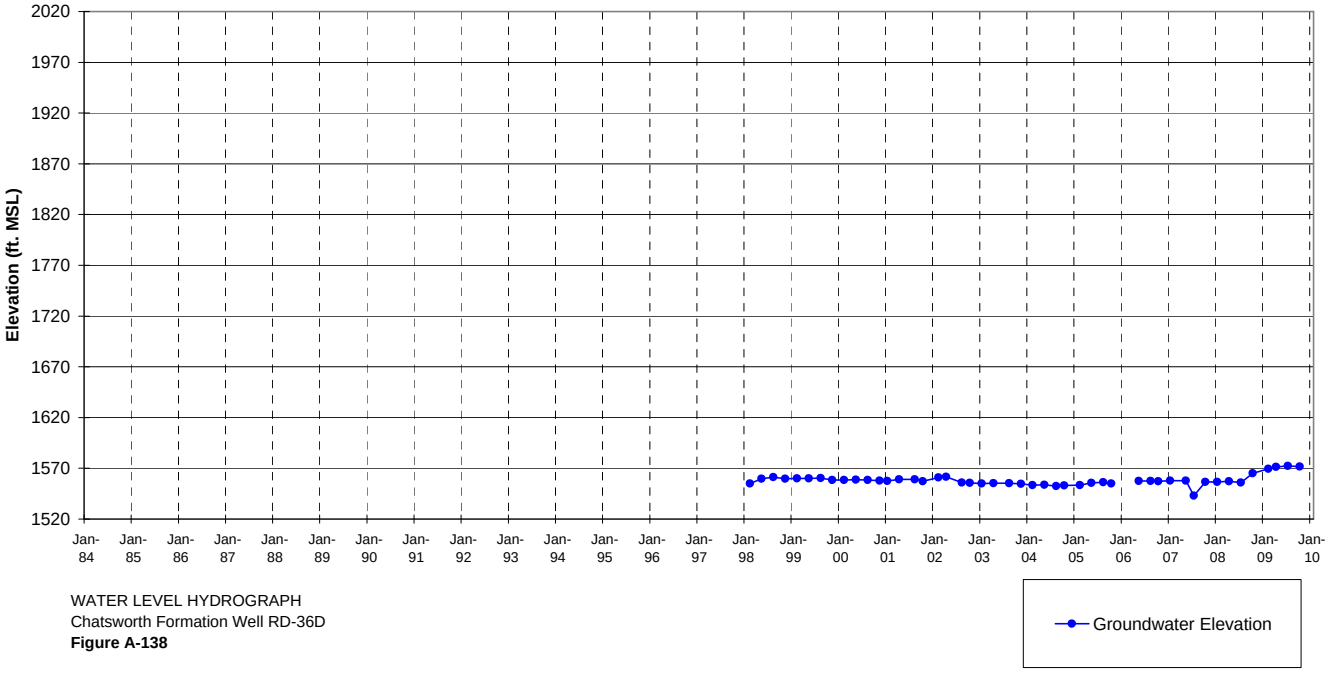
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-36A
Figure A-135



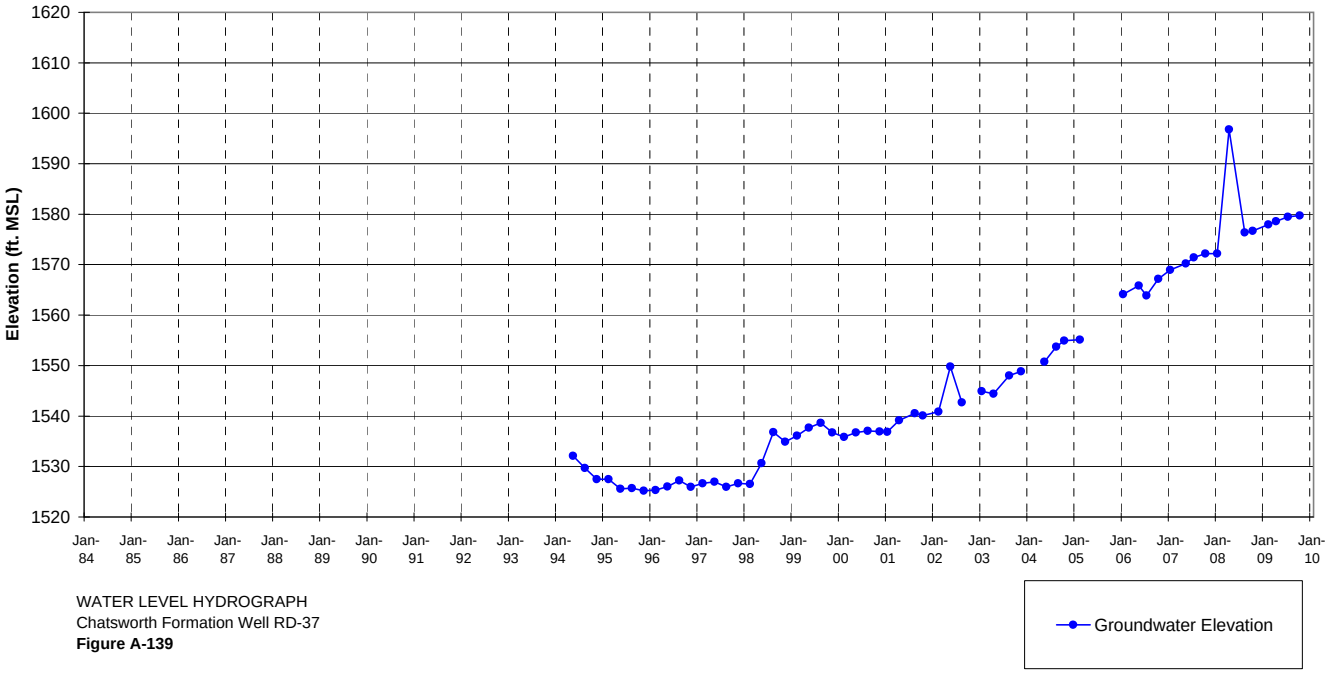
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-36B
Figure A-136



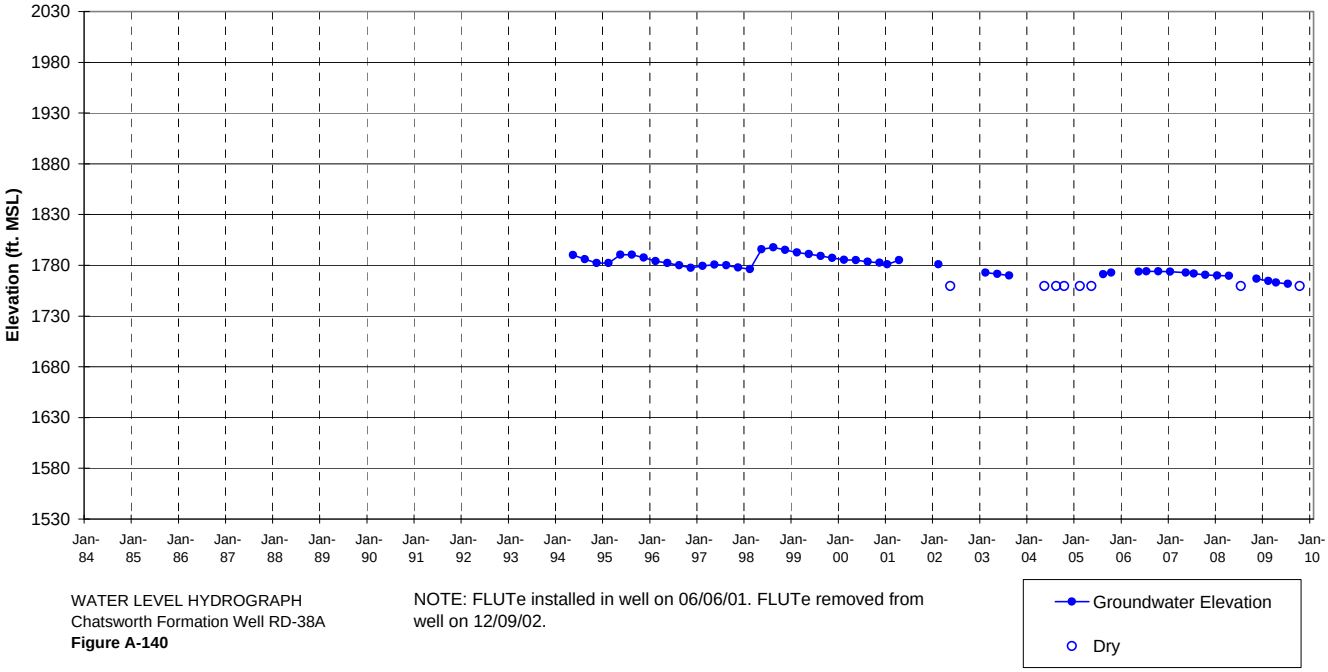
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-36C
Figure A-137



WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-36D
Figure A-138

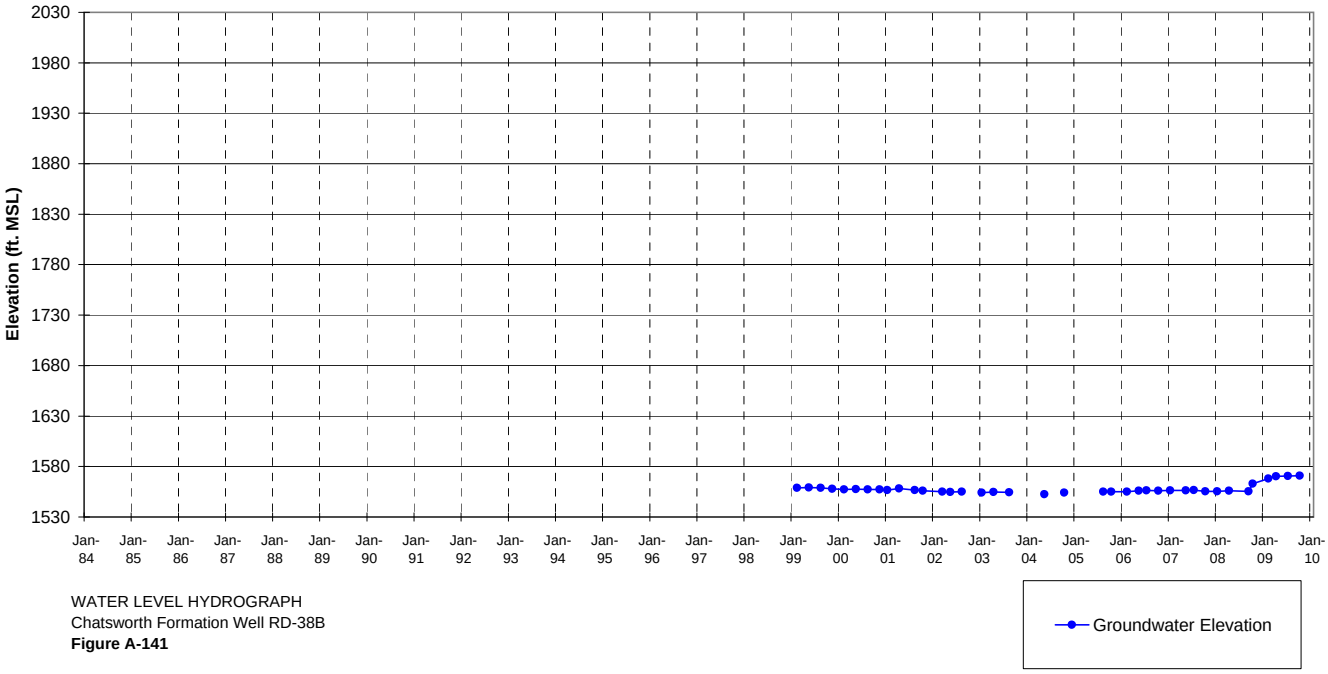


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-37
Figure A-139

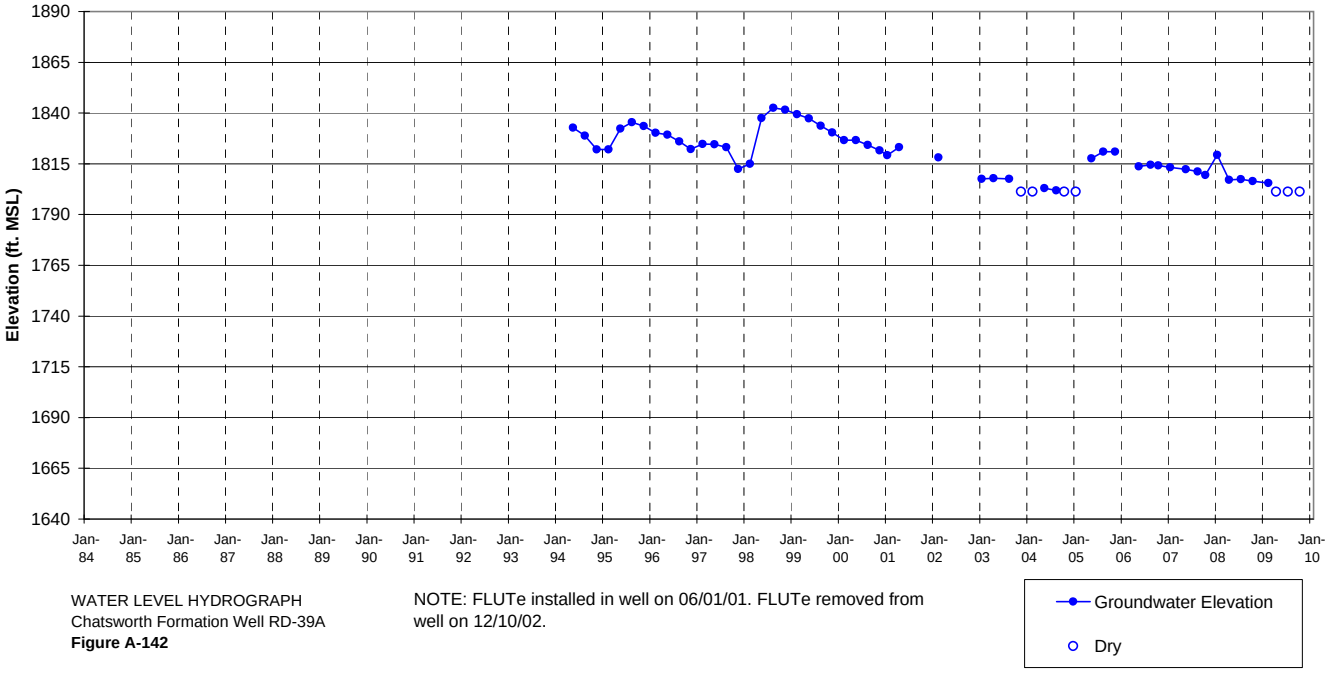


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-38A
Figure A-140

NOTE: FLUTe installed in well on 06/06/01. FLUTe removed from well on 12/09/02.

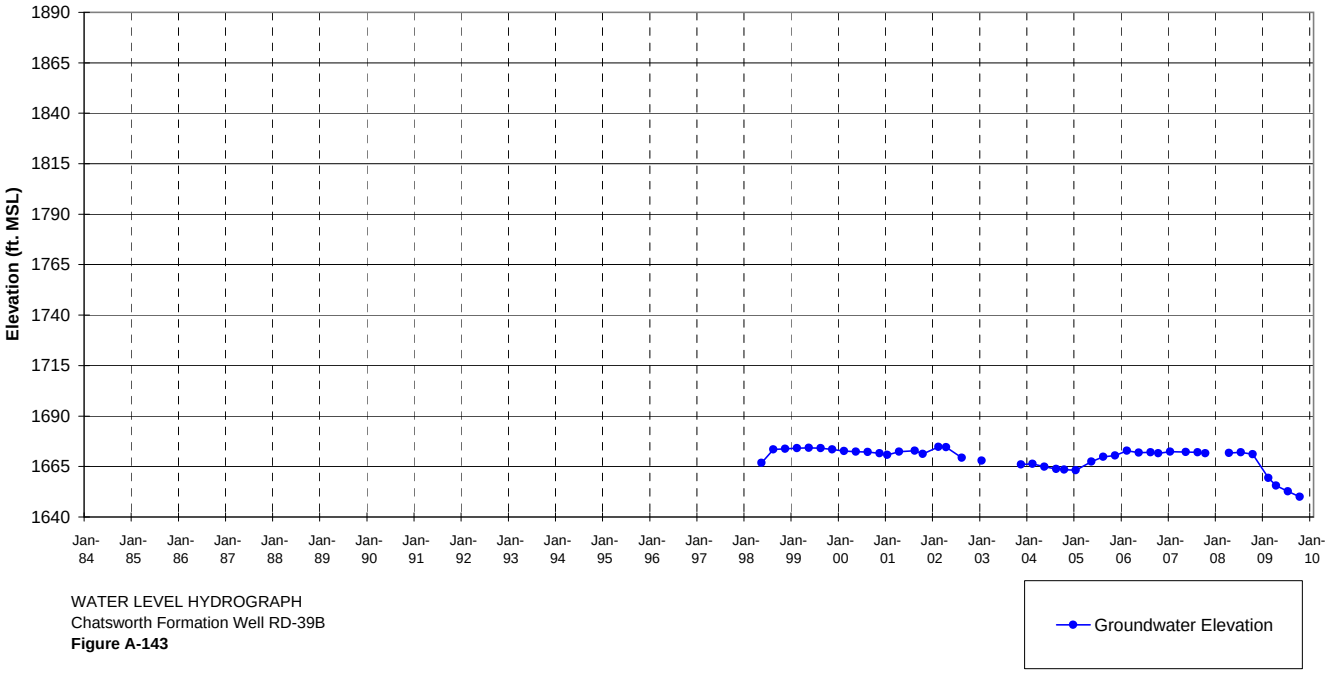


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-38B
Figure A-141

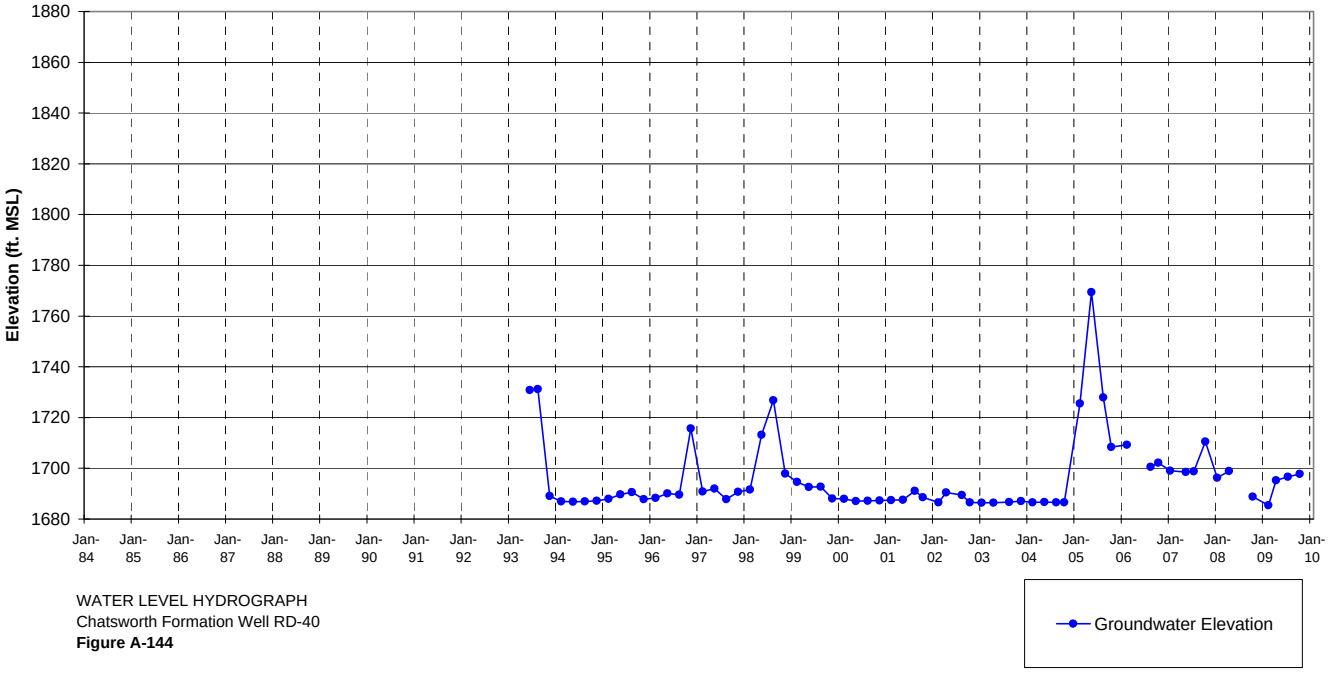


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-39A
Figure A-142

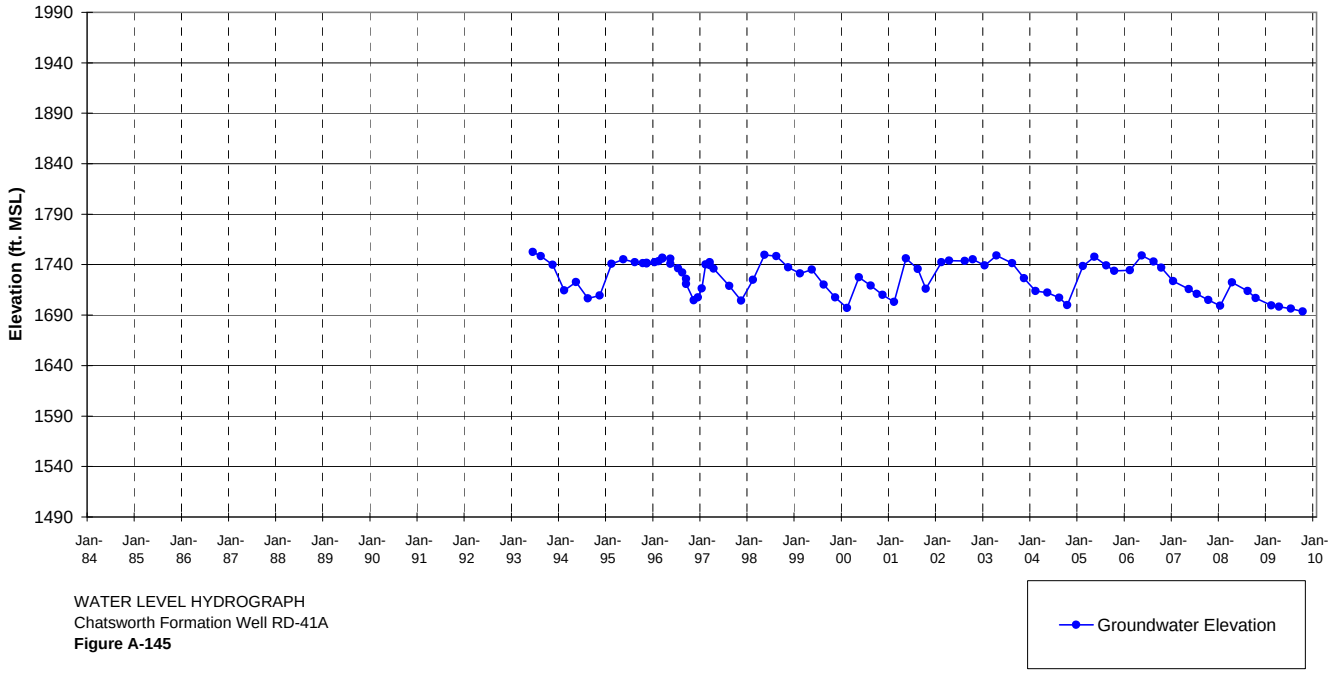
NOTE: FLUTe installed in well on 06/01/01. FLUTe removed from well on 12/10/02.



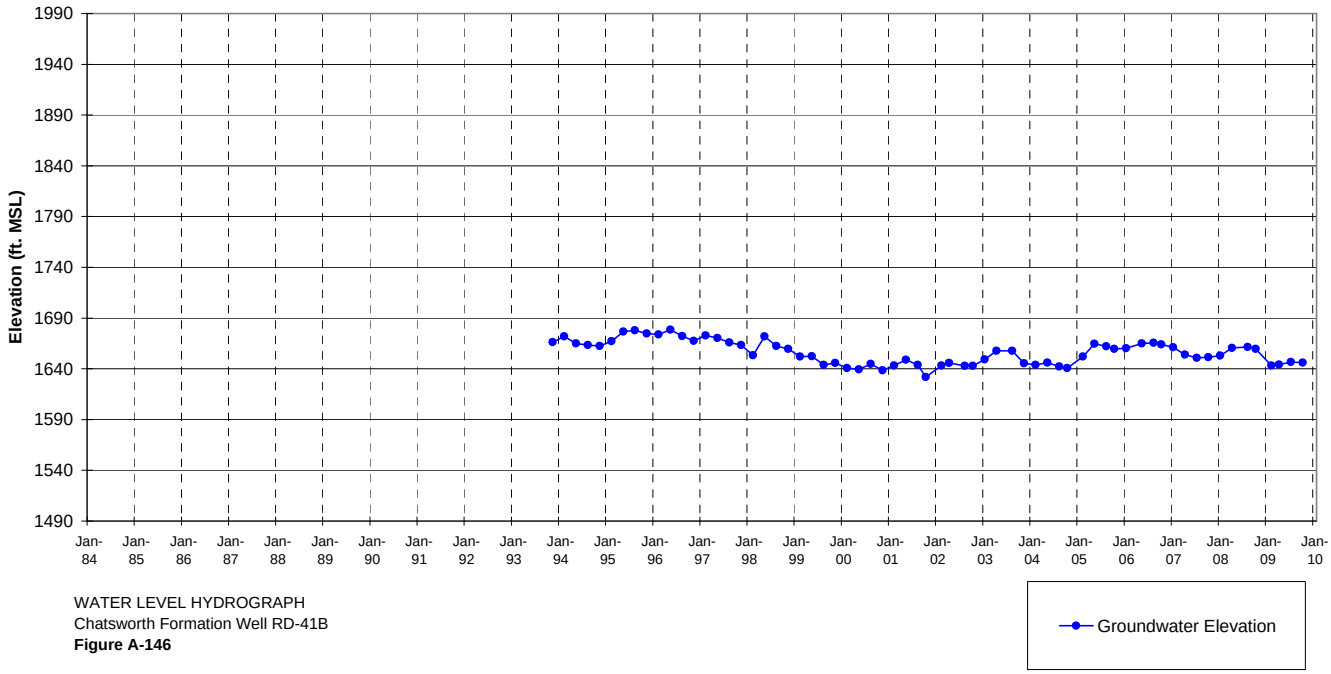
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-39B
Figure A-143



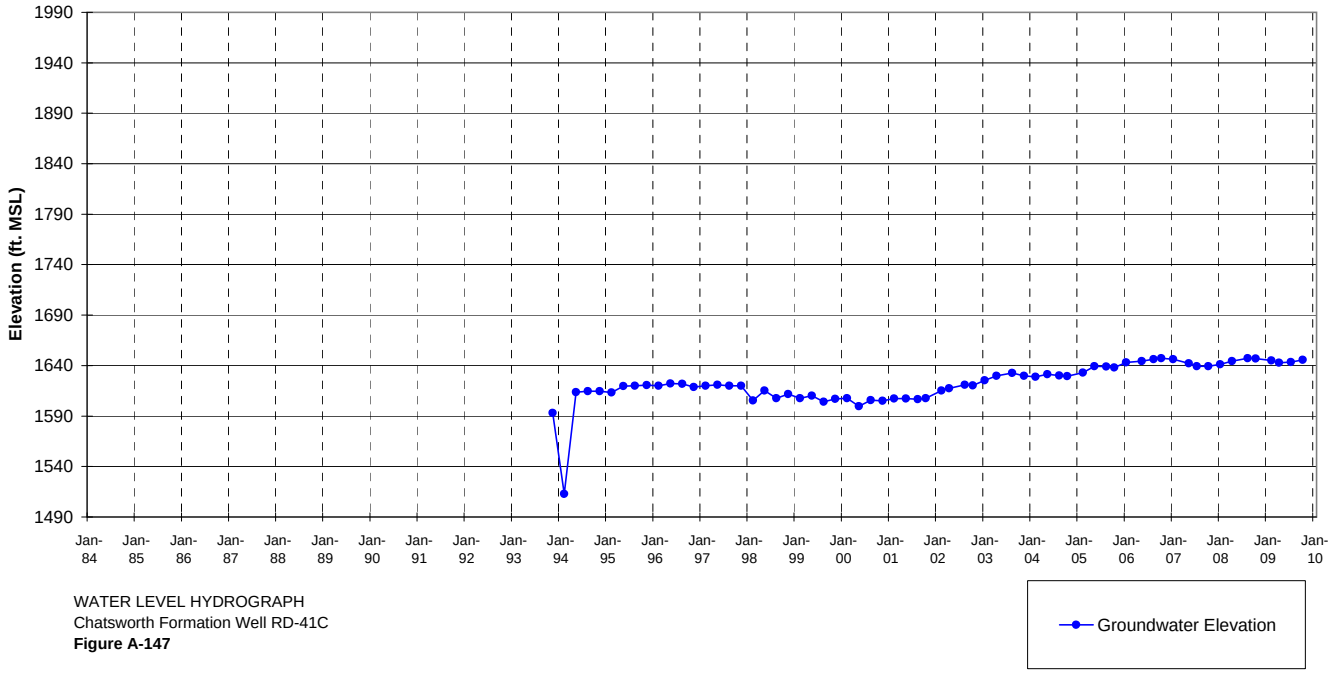
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-40
Figure A-144



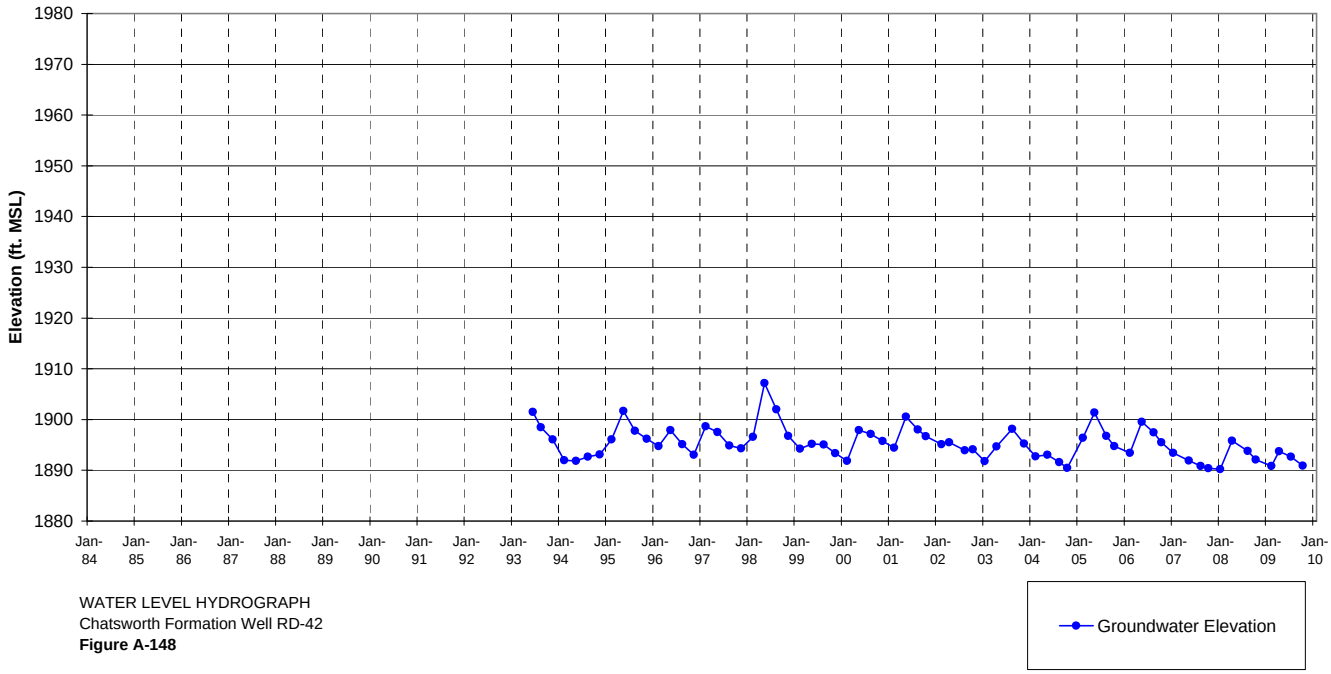
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-41A
Figure A-145



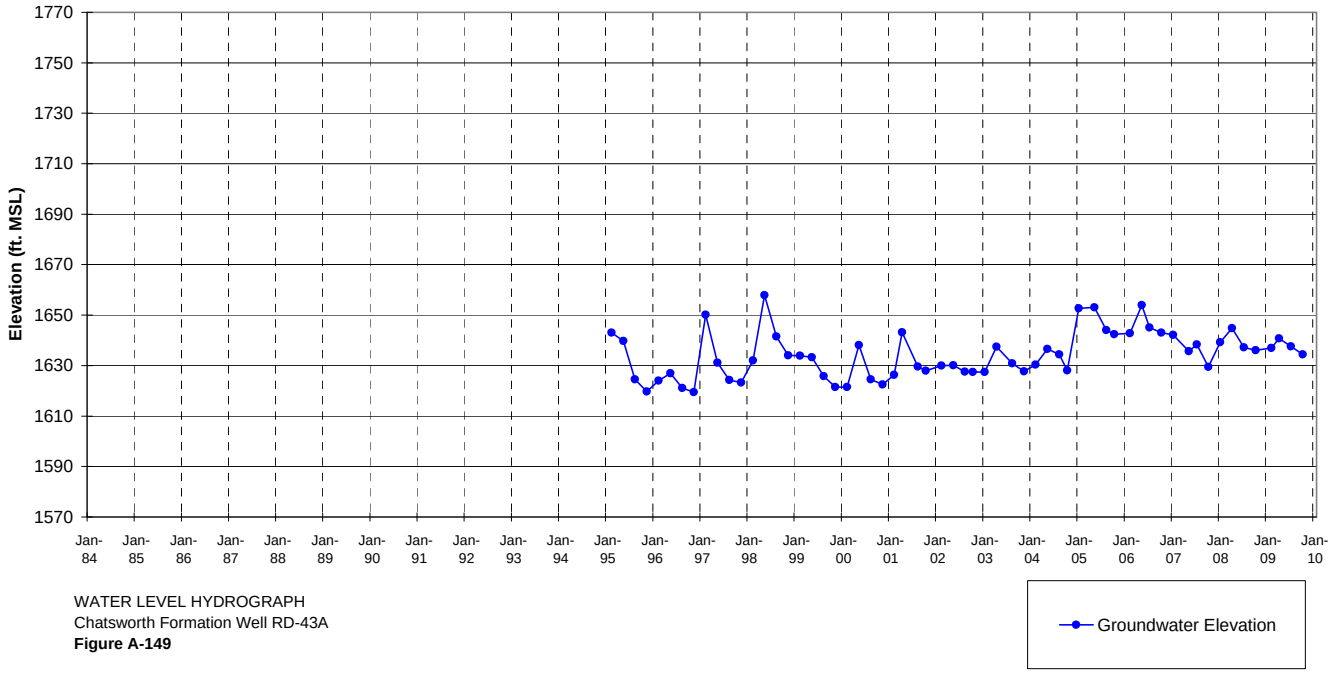
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-41B
Figure A-146



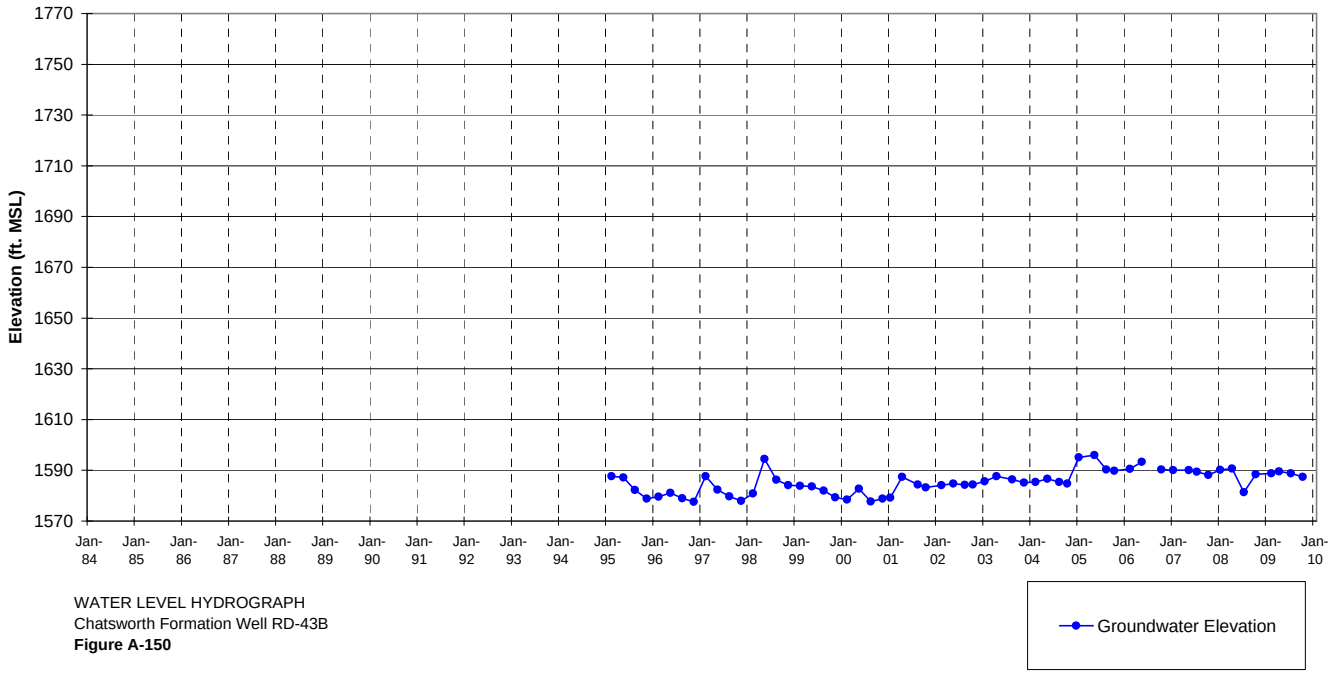
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-41C
Figure A-147



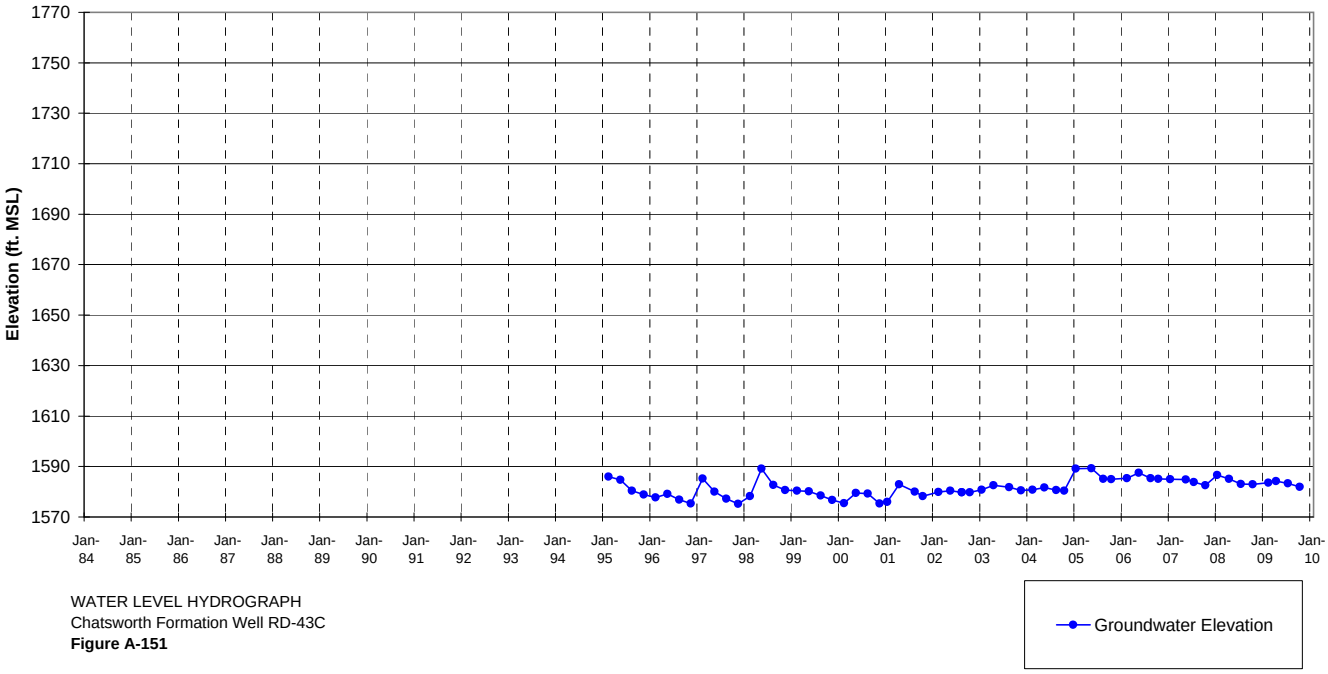
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-42
Figure A-148



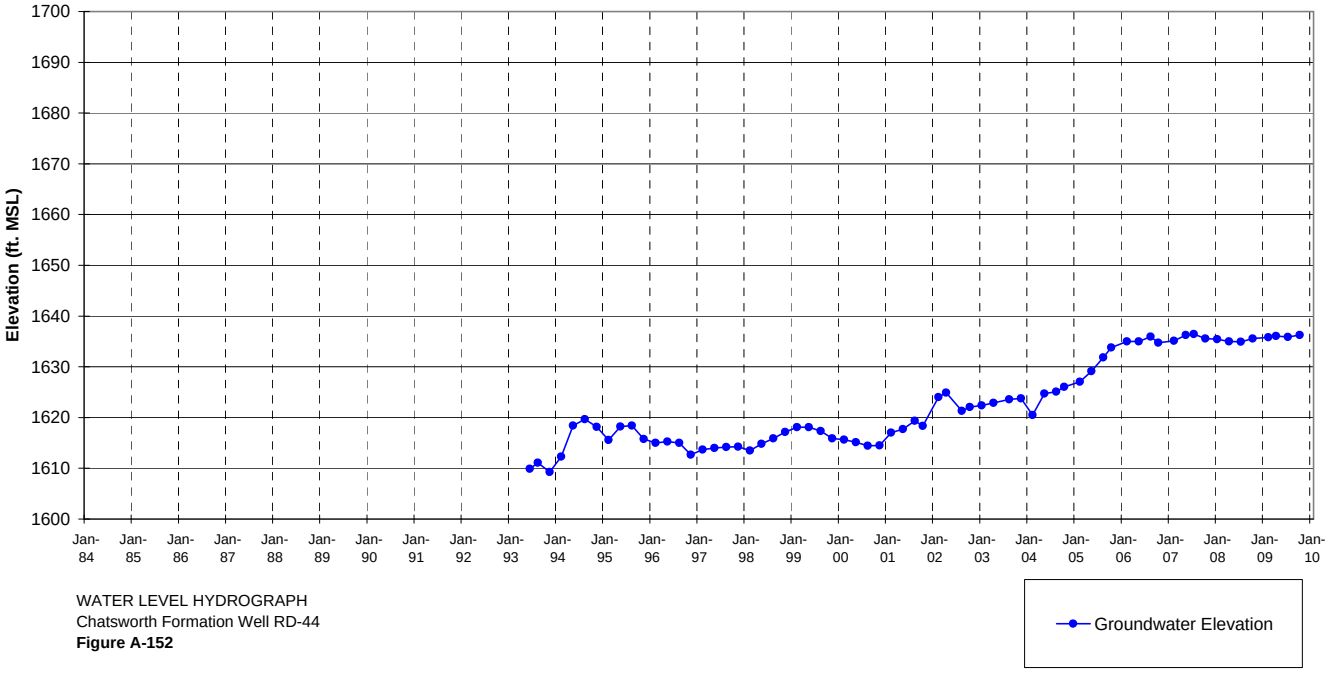
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-43A
Figure A-149



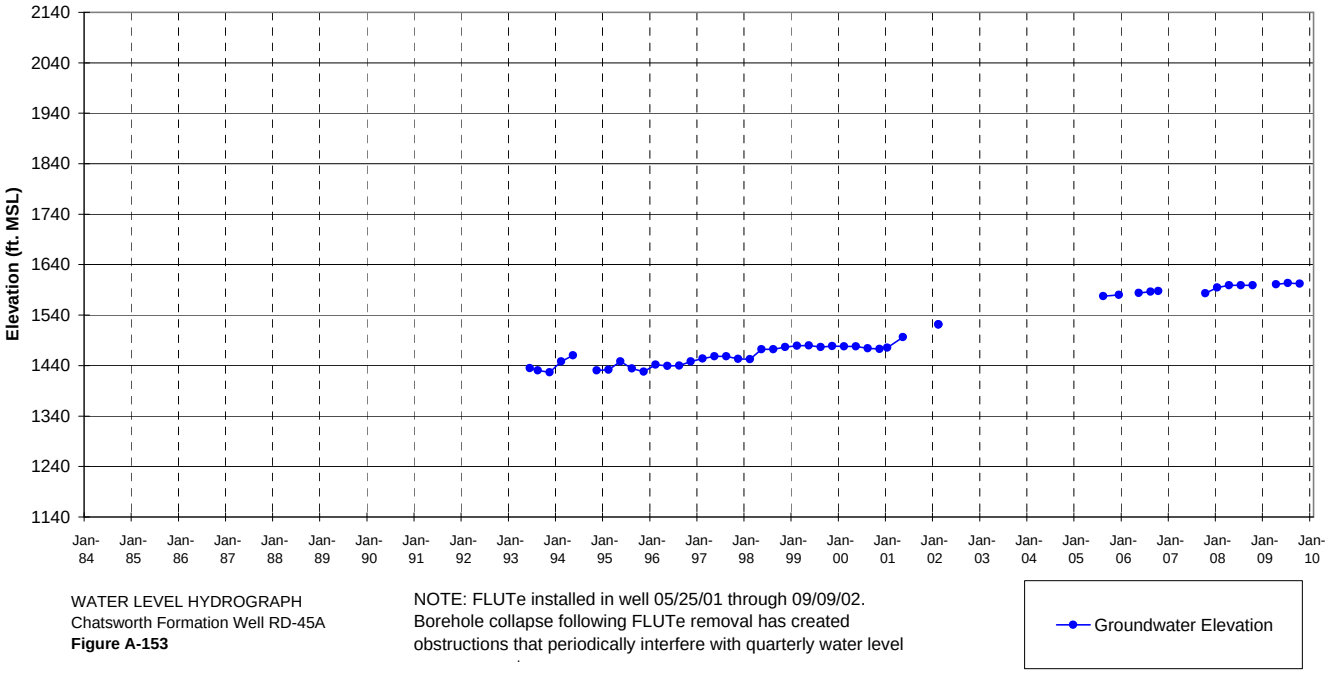
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-43B
Figure A-150



WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-43C
Figure A-151

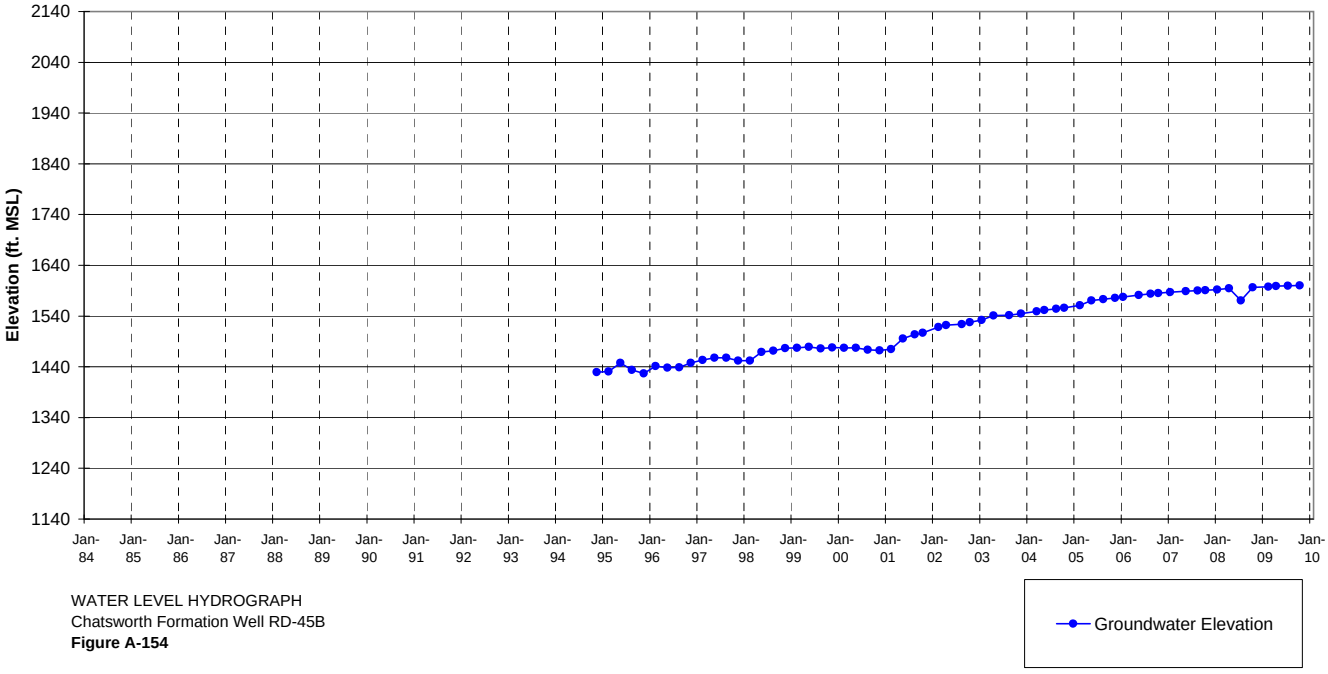


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-44
Figure A-152

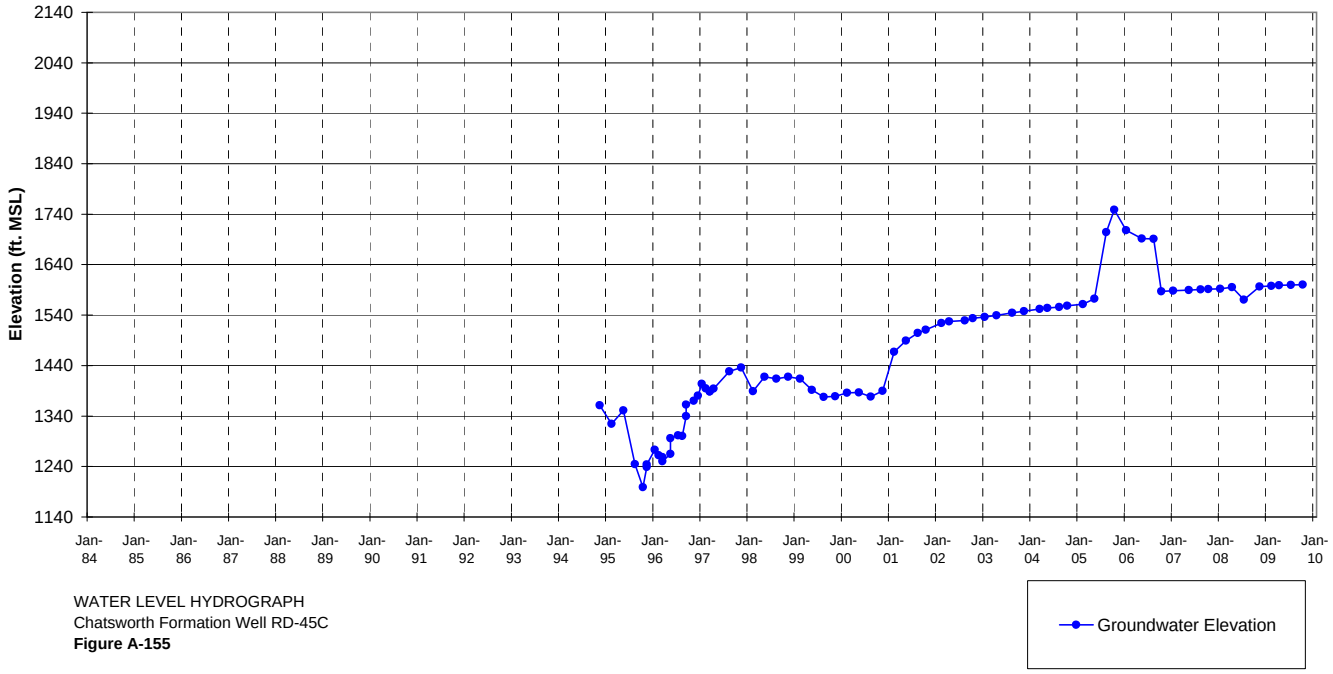


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-45A
Figure A-153

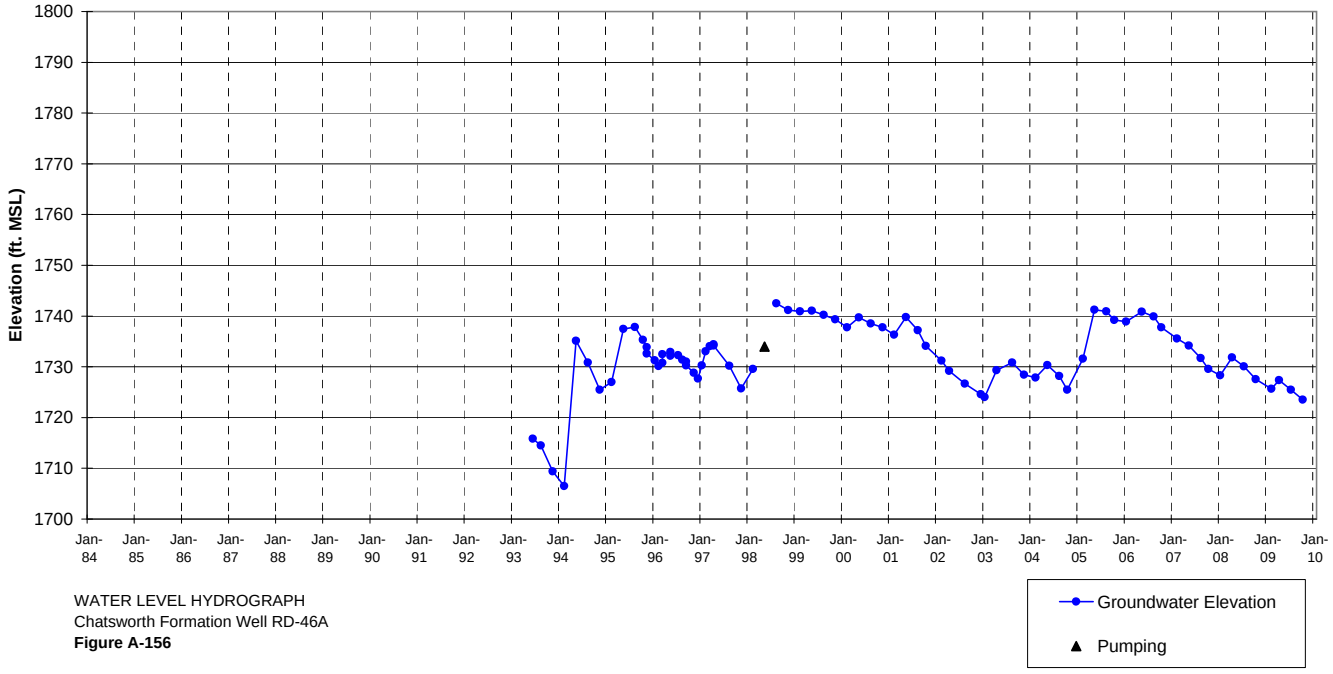
NOTE: FLUTe installed in well 05/25/01 through 09/09/02. Borehole collapse following FLUTe removal has created obstructions that periodically interfere with quarterly water level



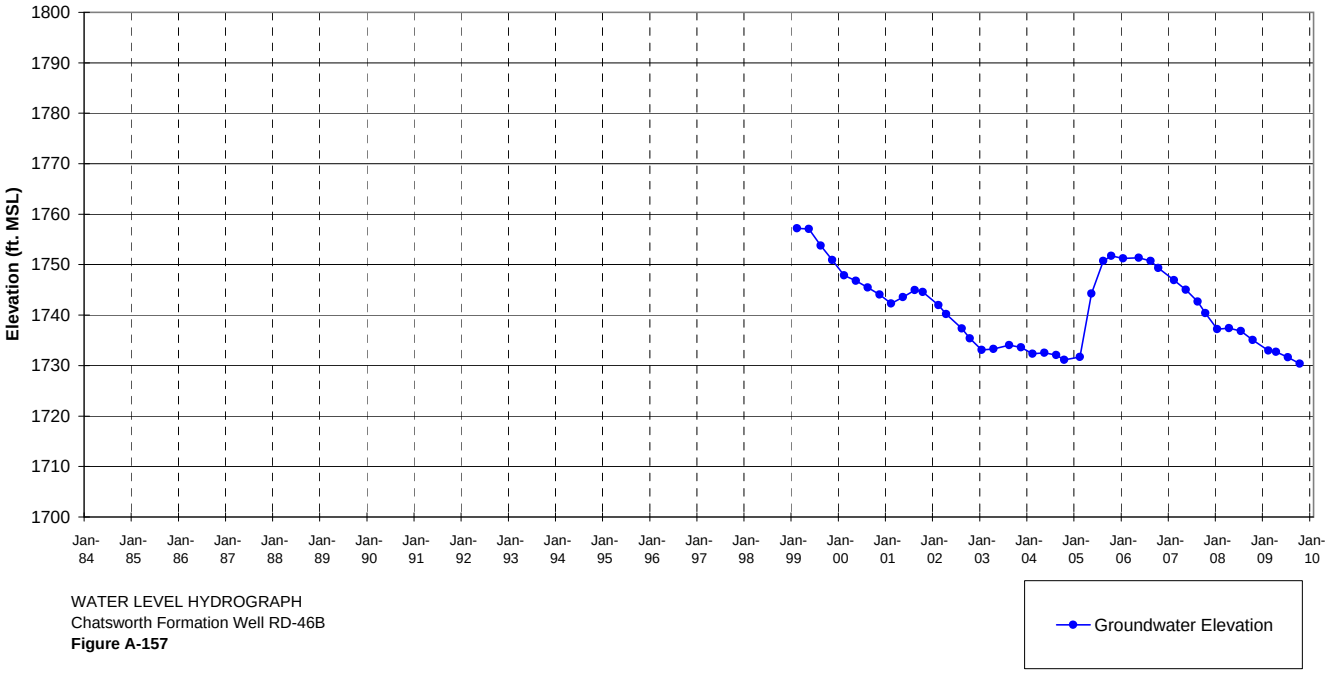
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-45B
Figure A-154



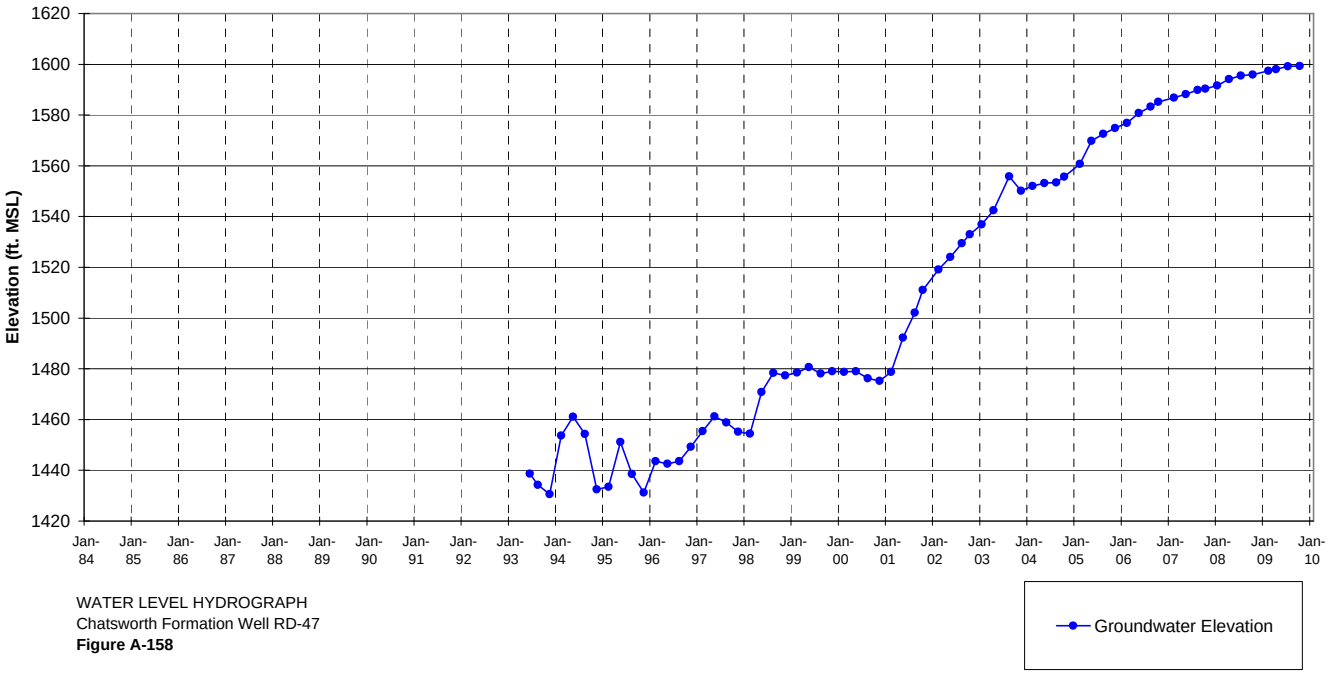
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-45C
Figure A-155



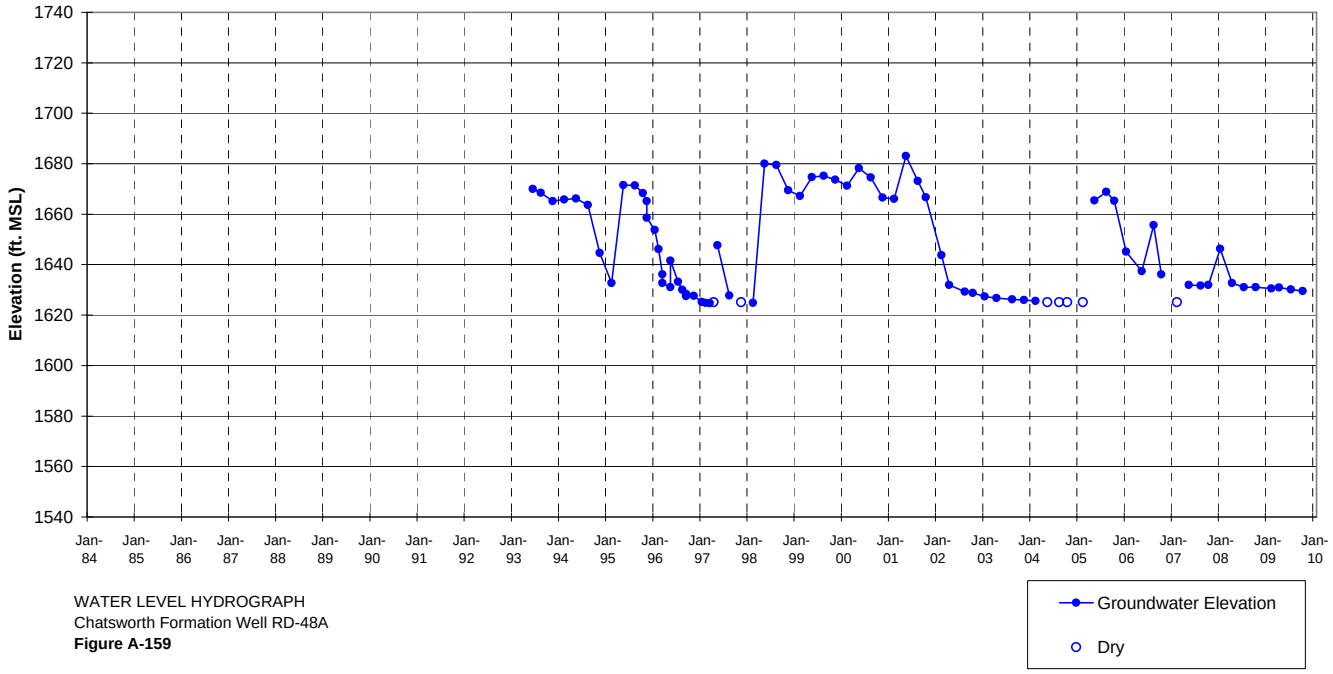
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-46A
Figure A-156



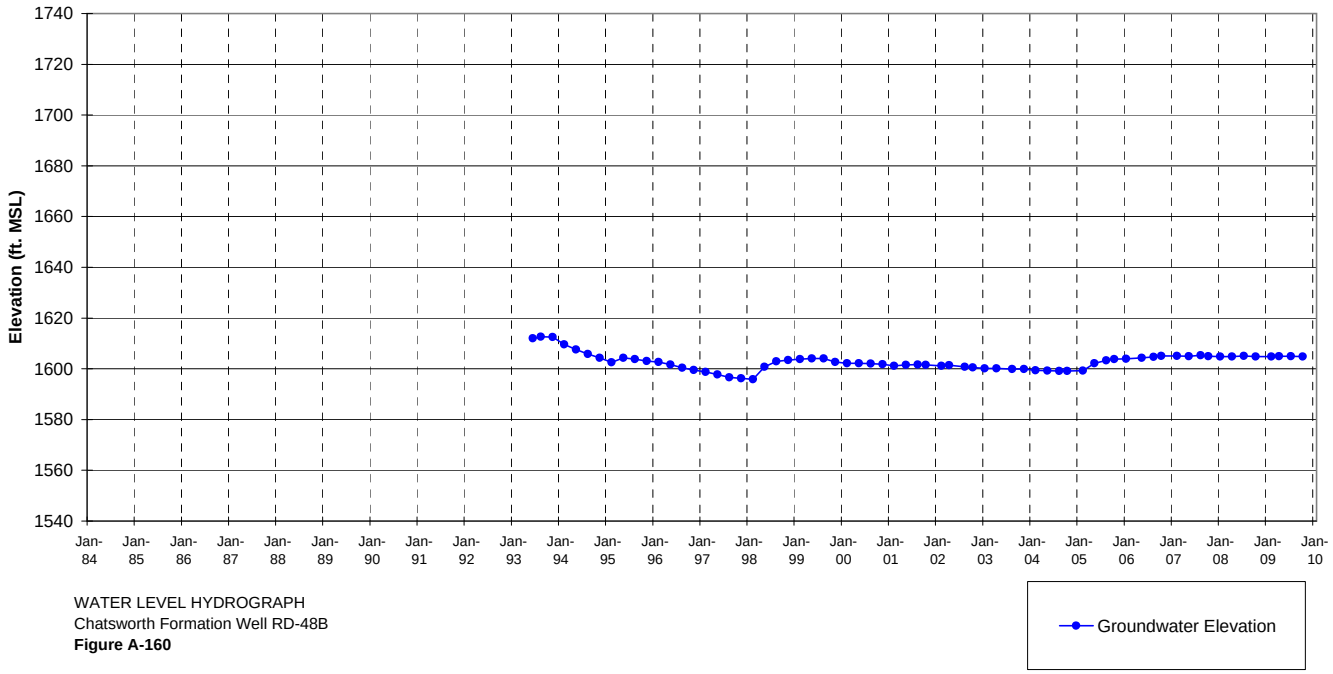
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-46B
Figure A-157



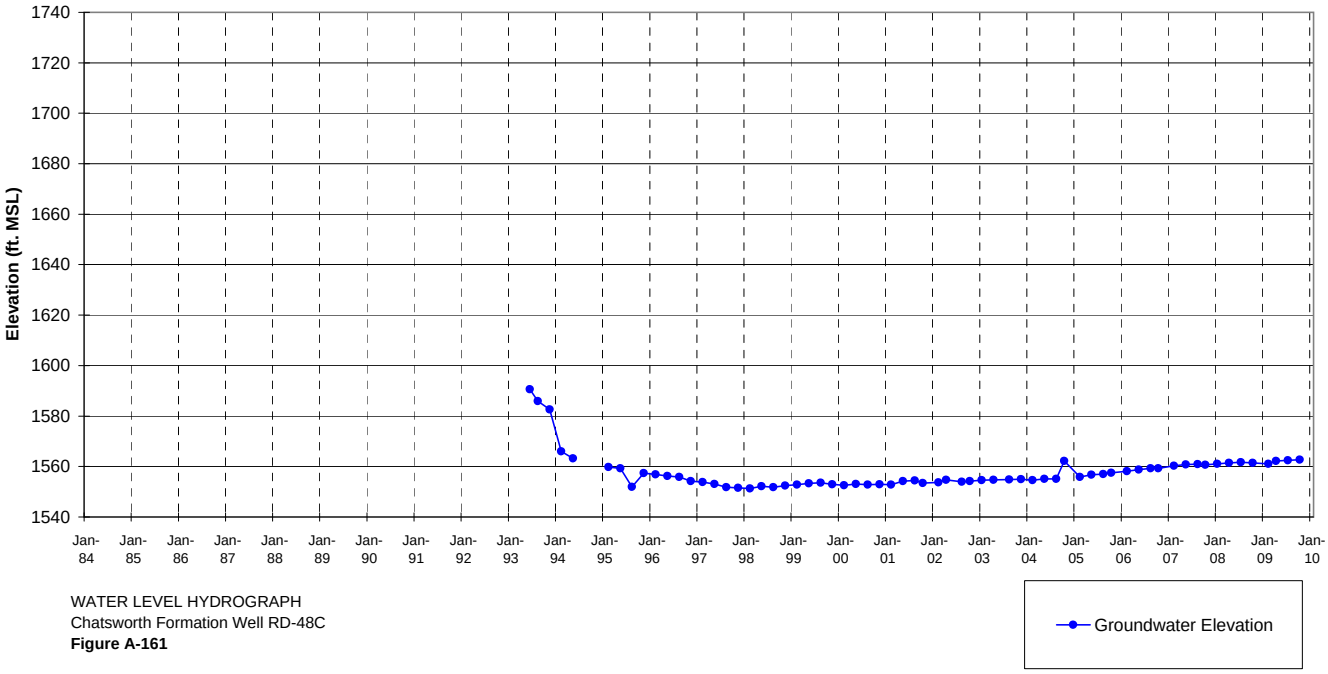
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-47
Figure A-158



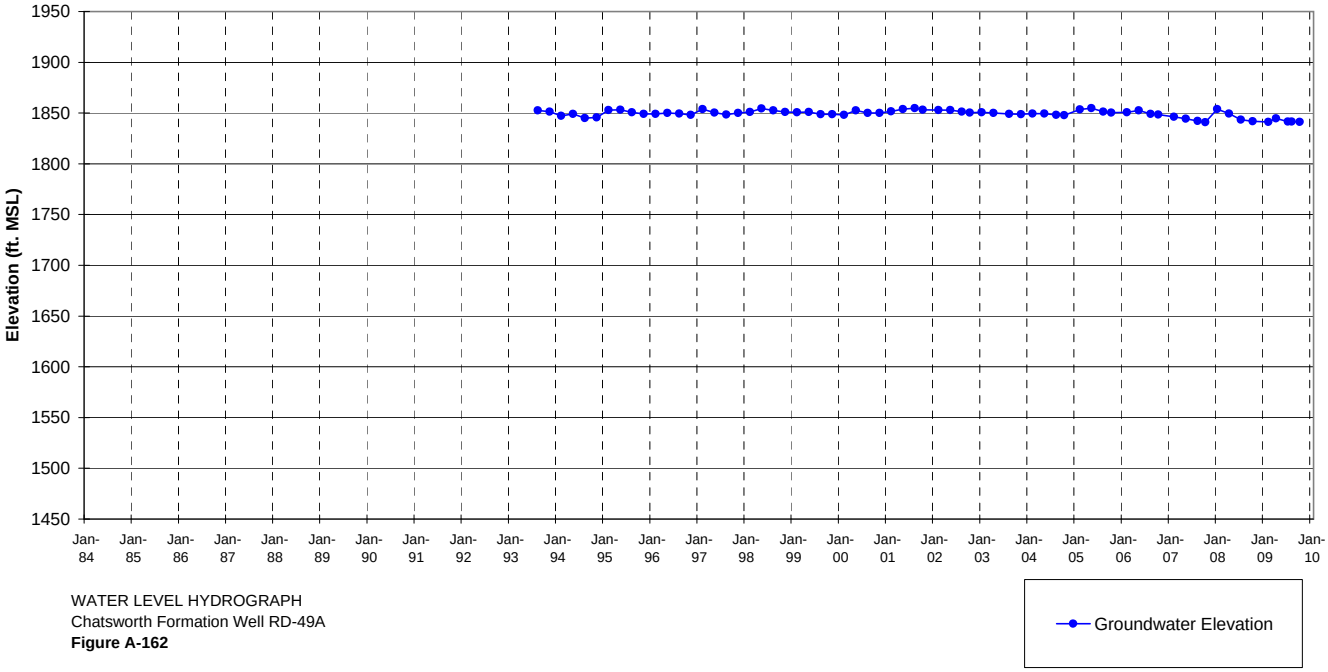
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-48A
Figure A-159



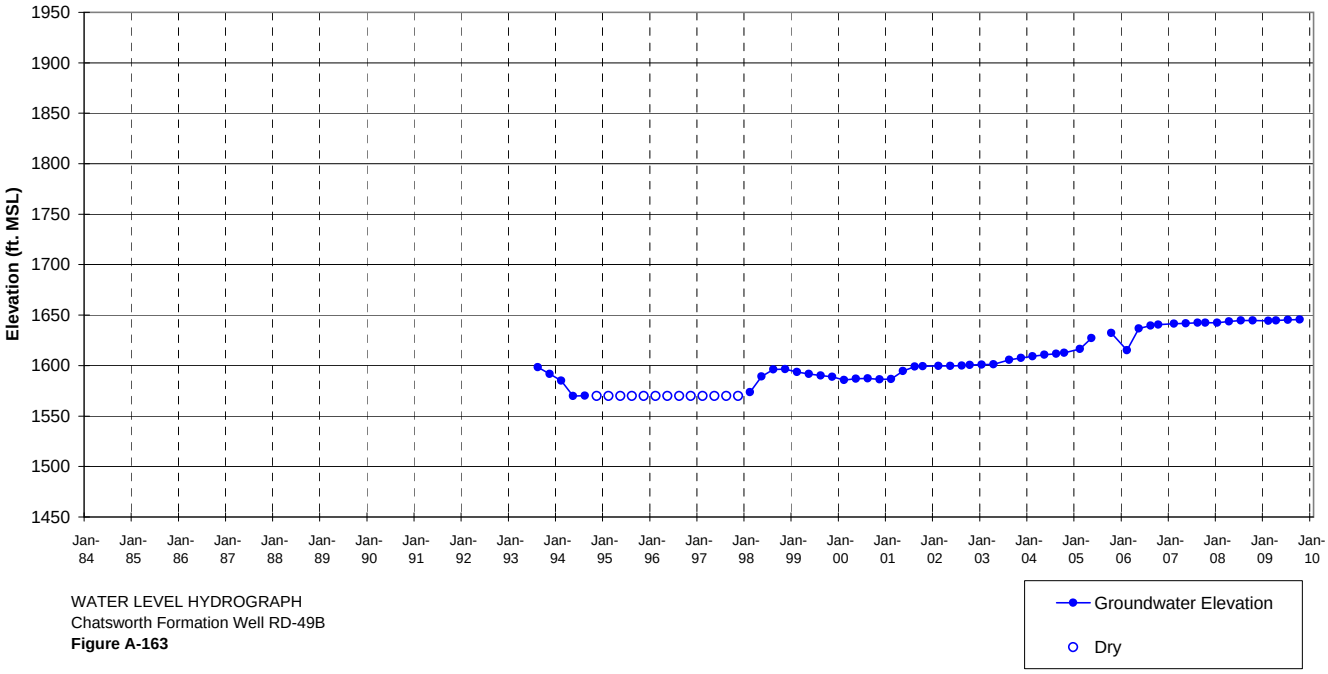
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-48B
Figure A-160



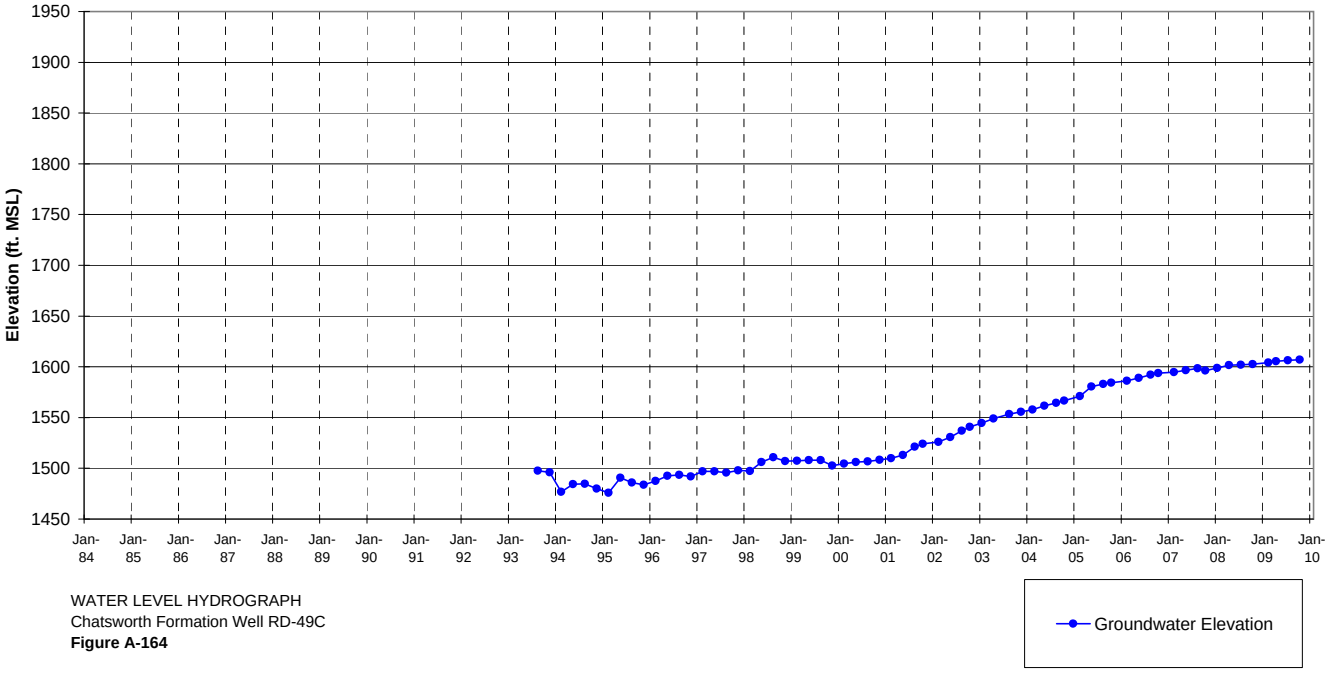
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-48C
Figure A-161



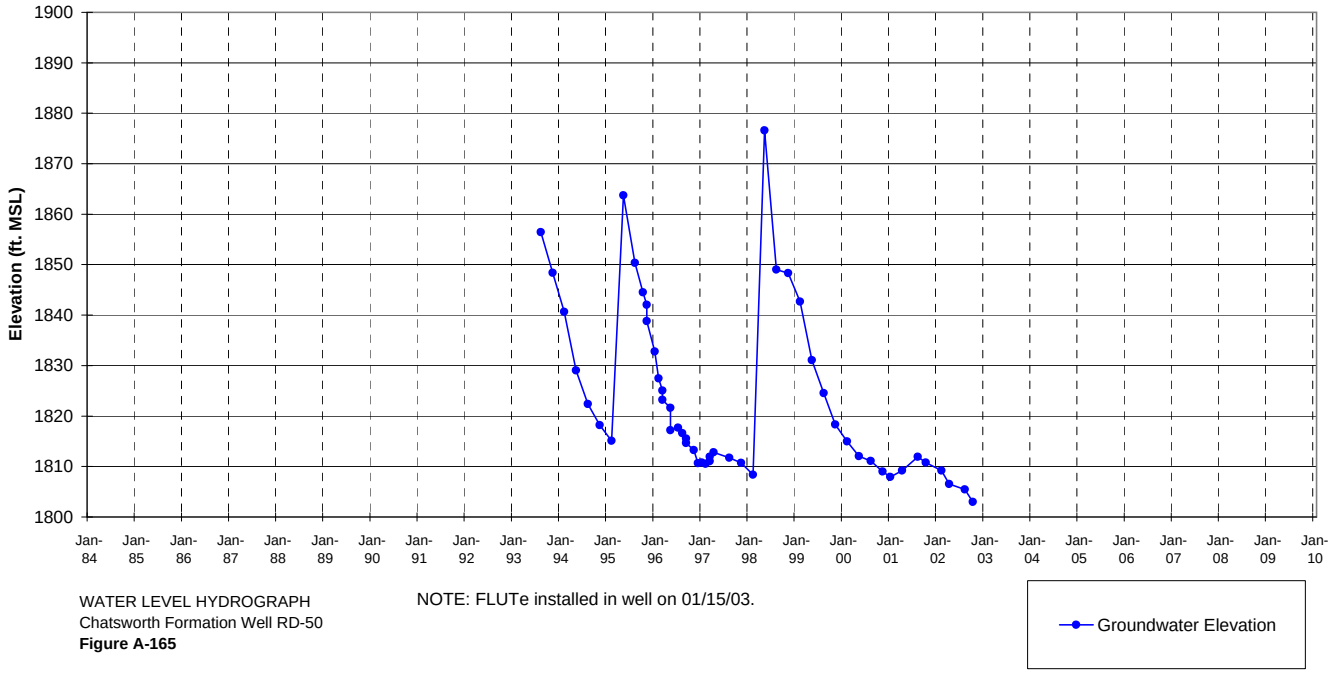
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-49A
Figure A-162



WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-49B
Figure A-163

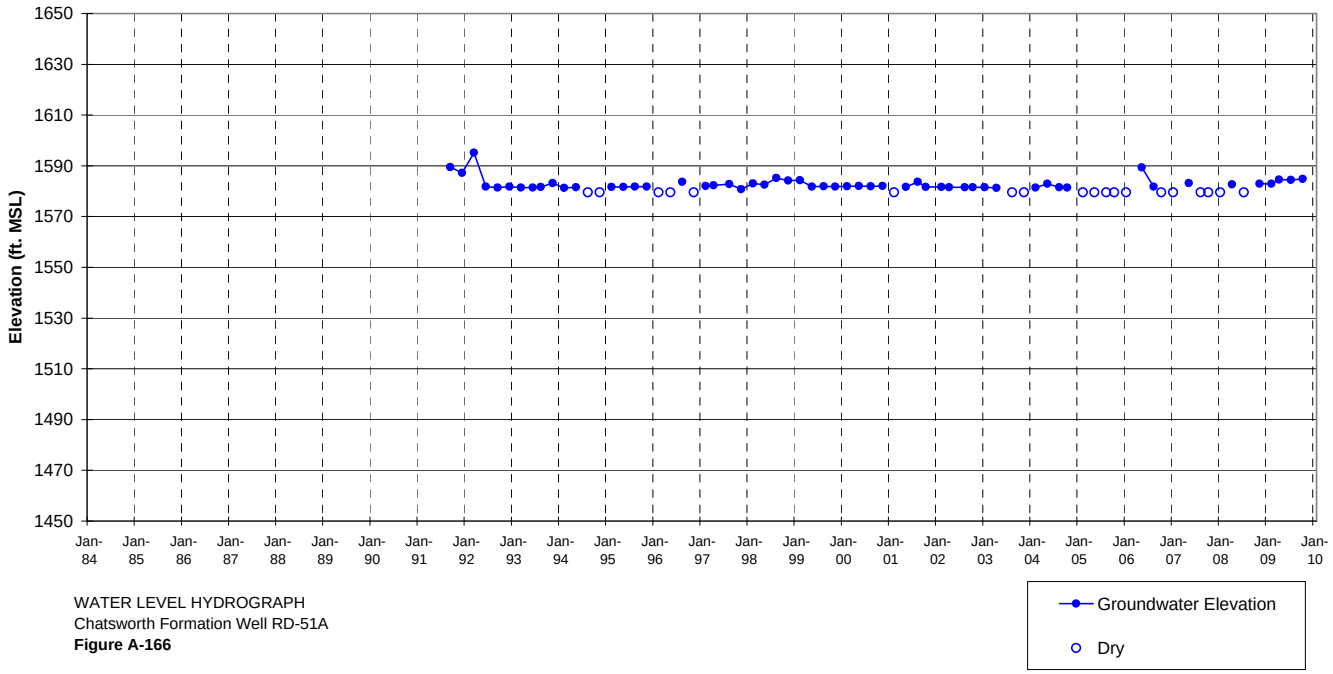


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-49C
Figure A-164

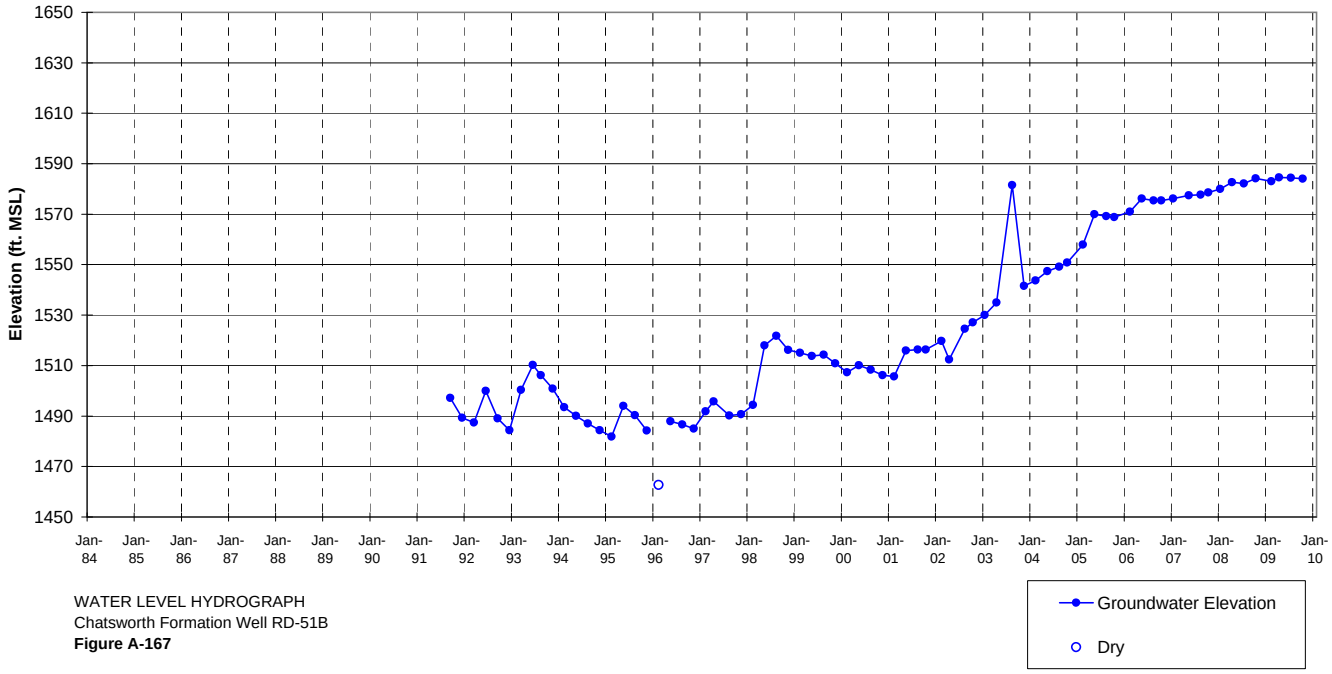


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-50
Figure A-165

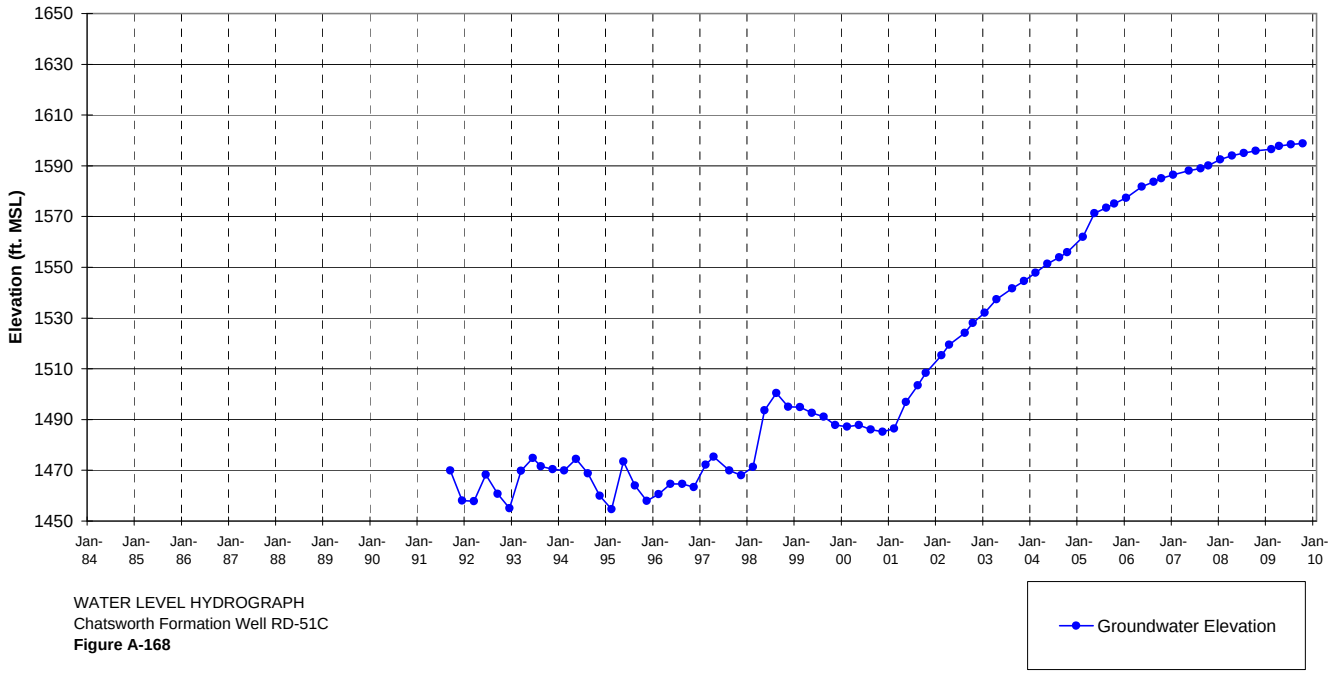
NOTE: FLUTe installed in well on 01/15/03.



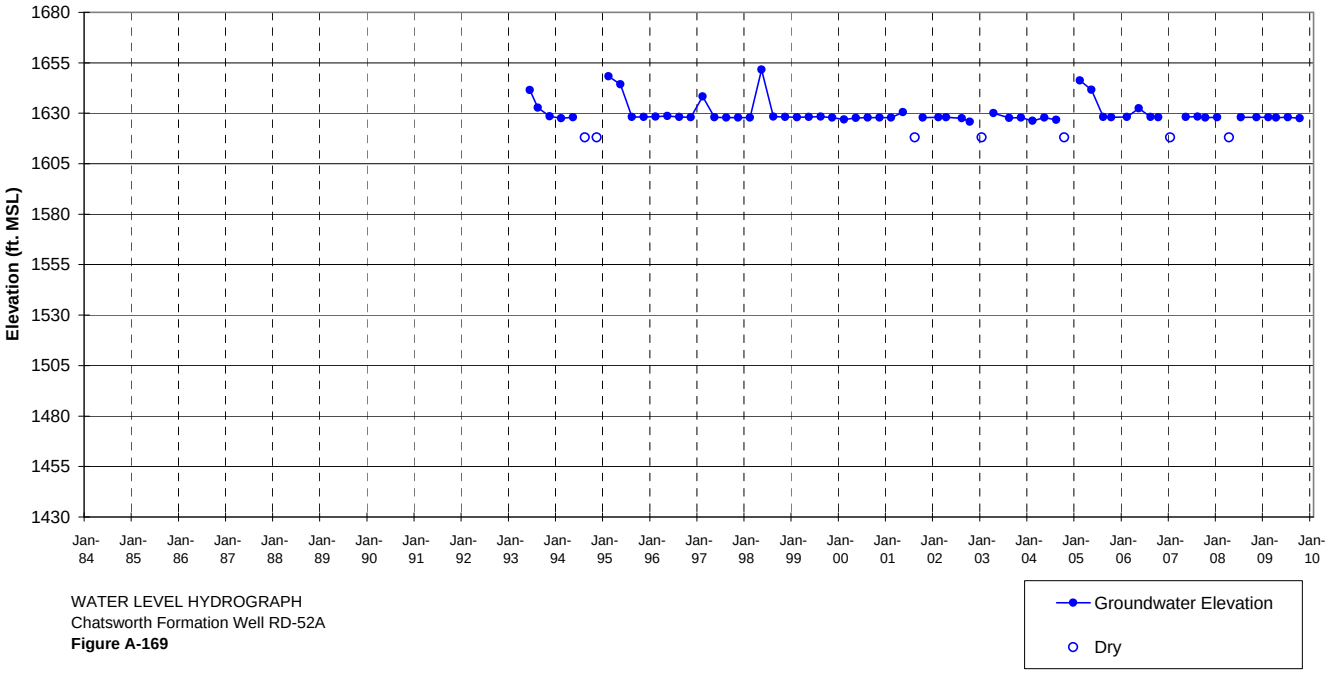
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-51A
Figure A-166



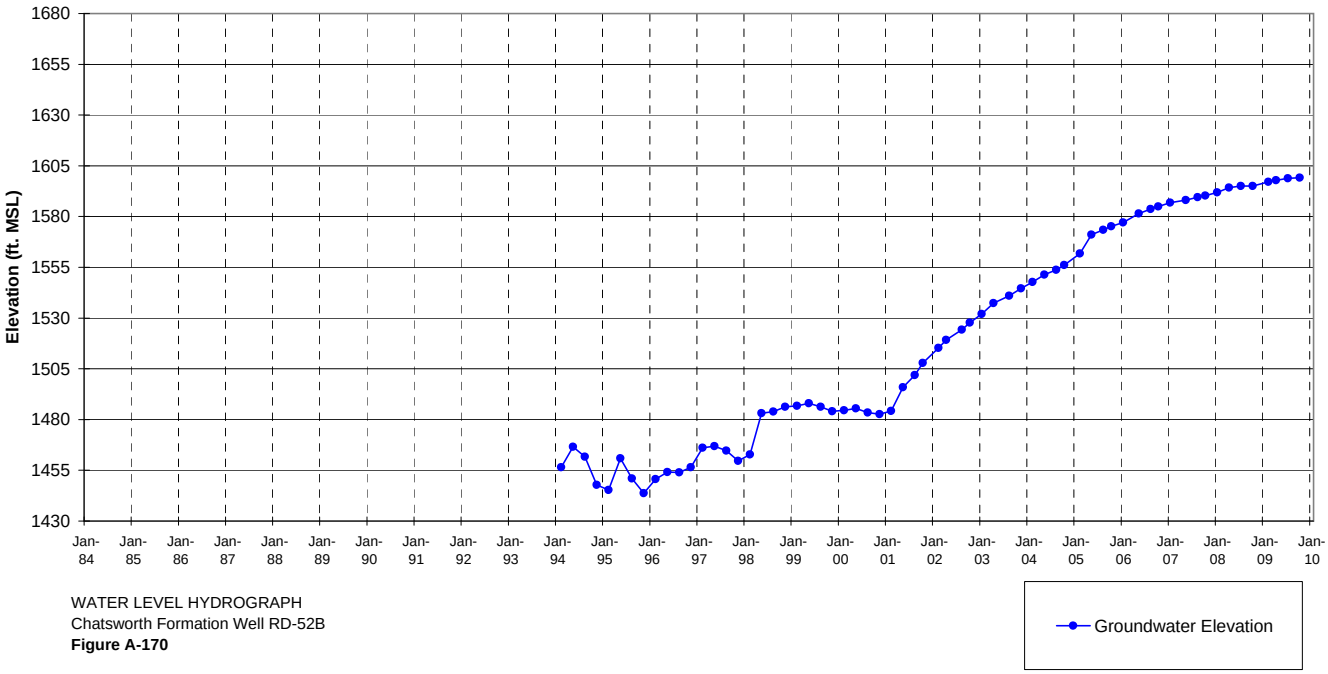
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-51B
Figure A-167



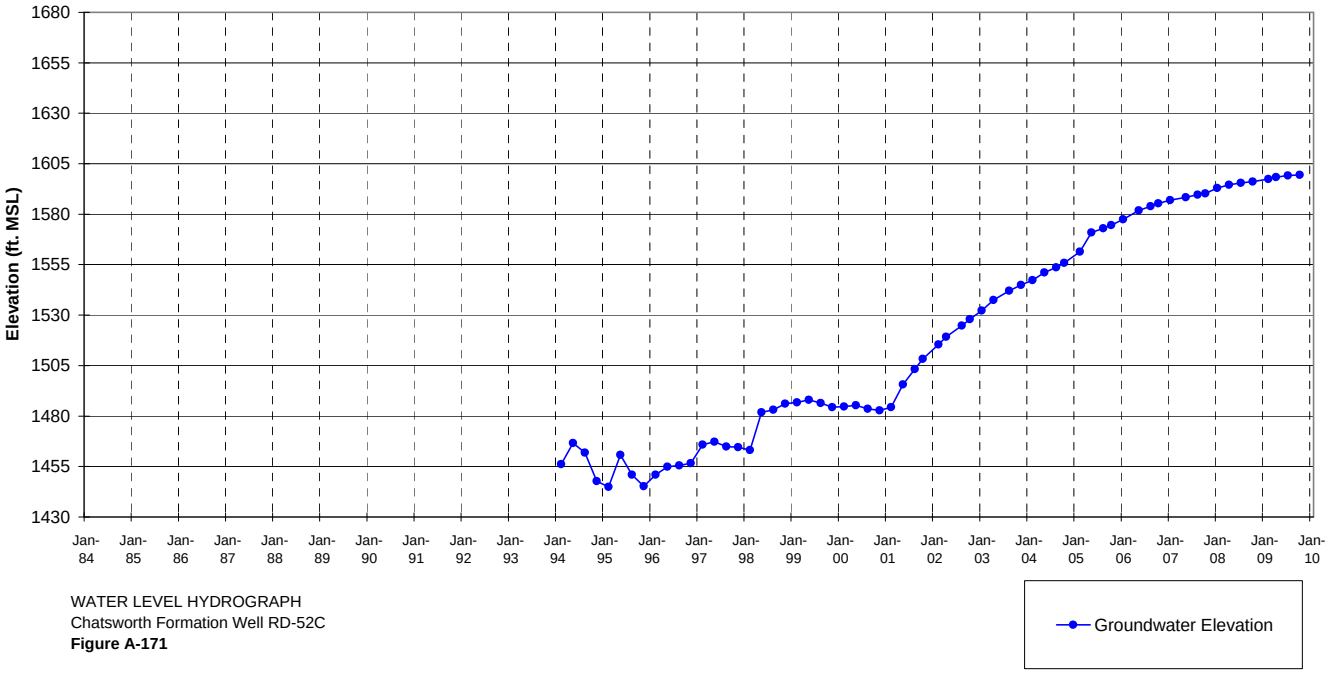
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-51C
Figure A-168



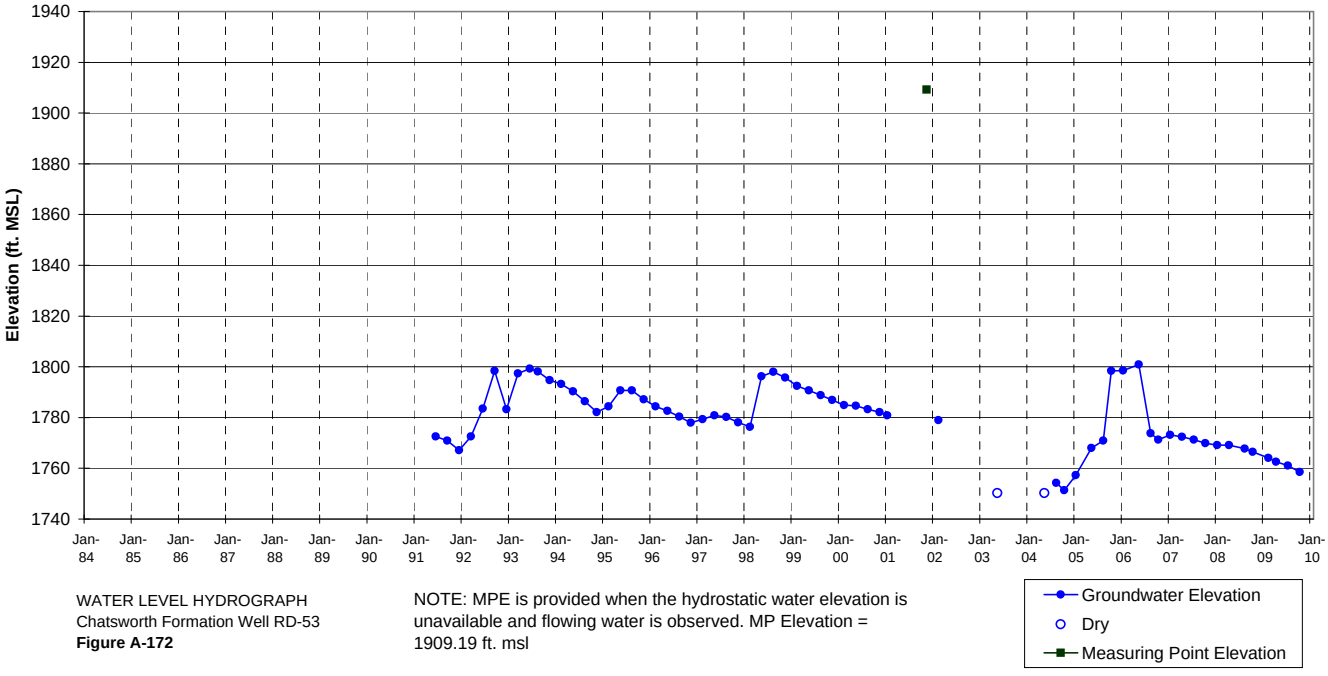
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-52A
Figure A-169



WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-52B
Figure A-170

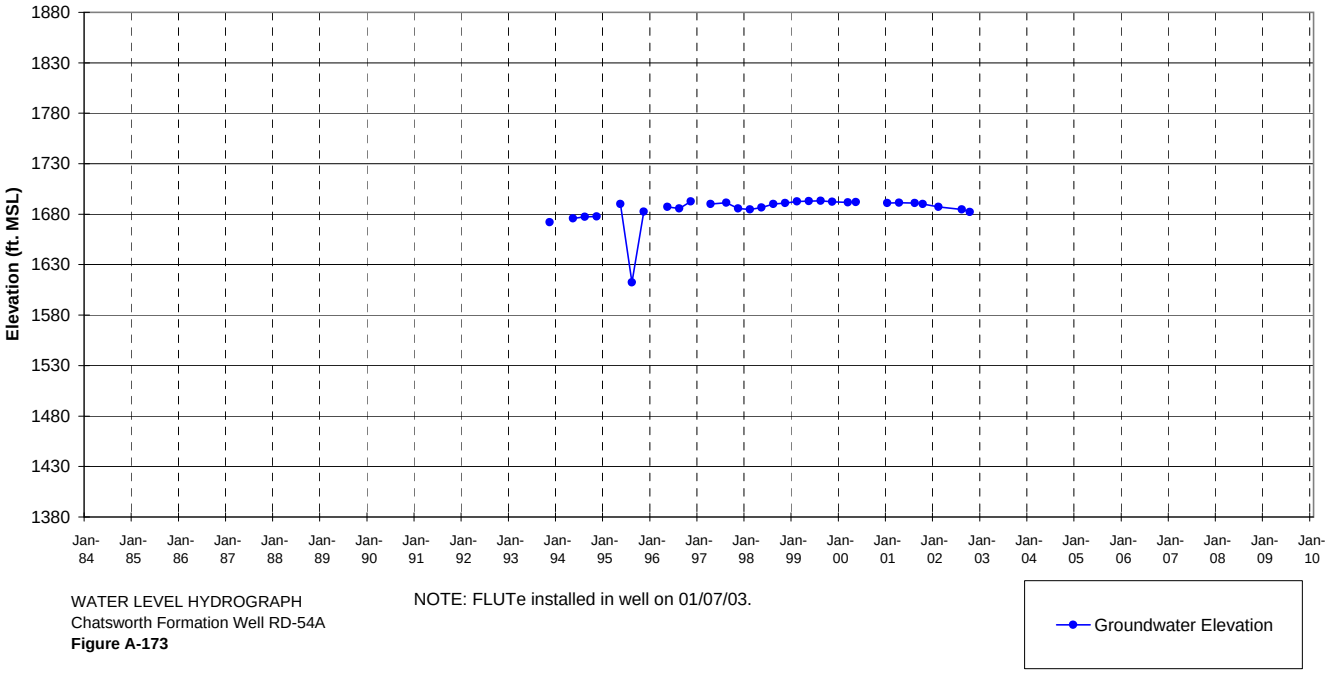


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-52C
Figure A-171



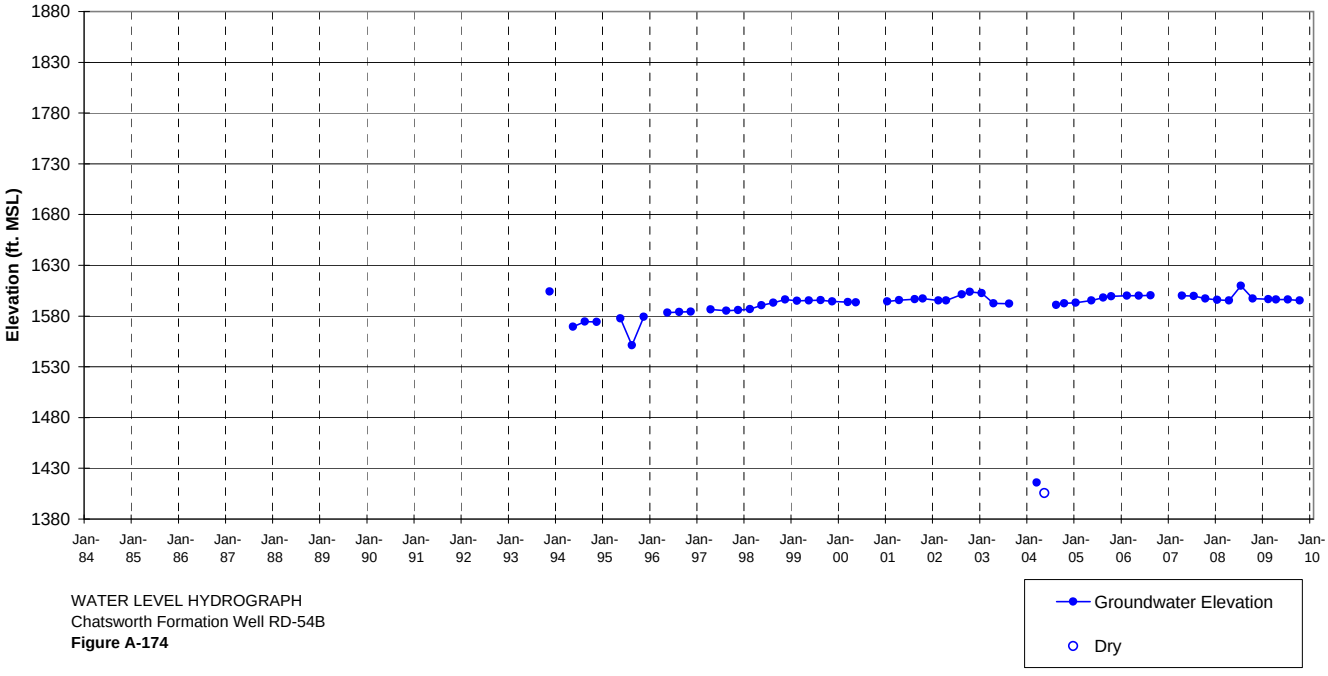
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-53
Figure A-172

NOTE: MPE is provided when the hydrostatic water elevation is unavailable and flowing water is observed. MP Elevation = 1909.19 ft. msl

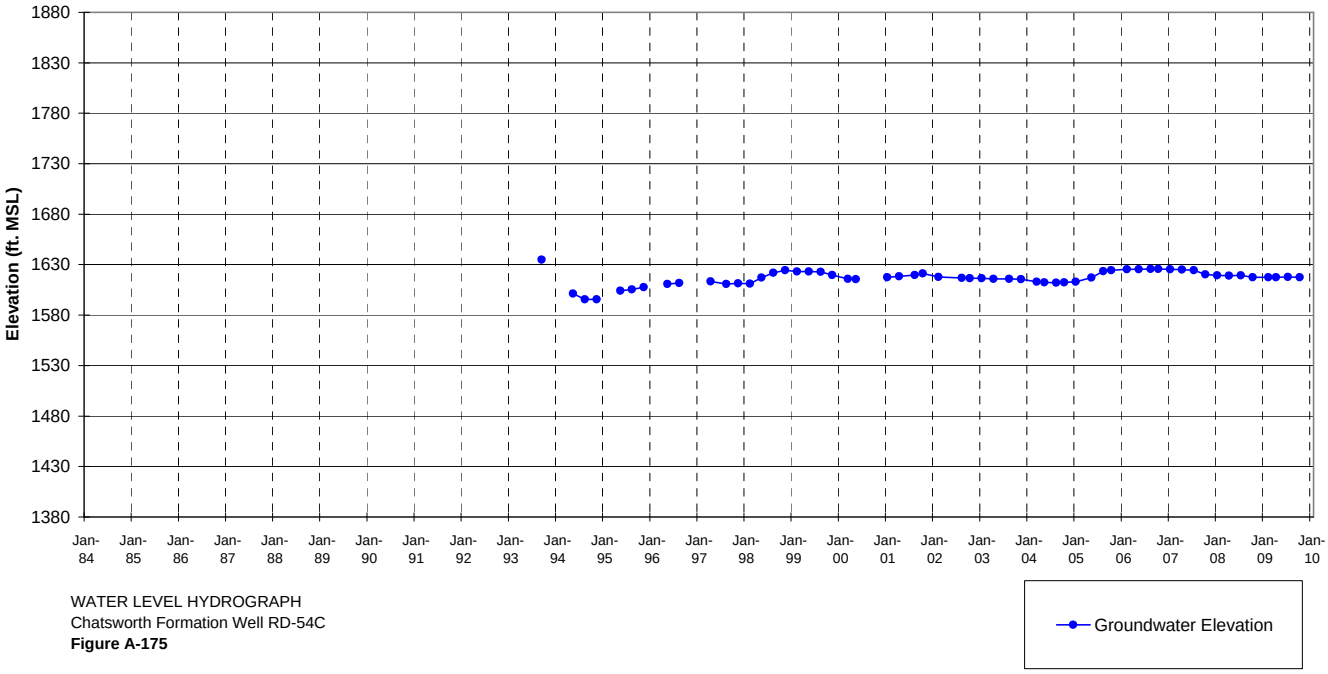


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-54A
Figure A-173

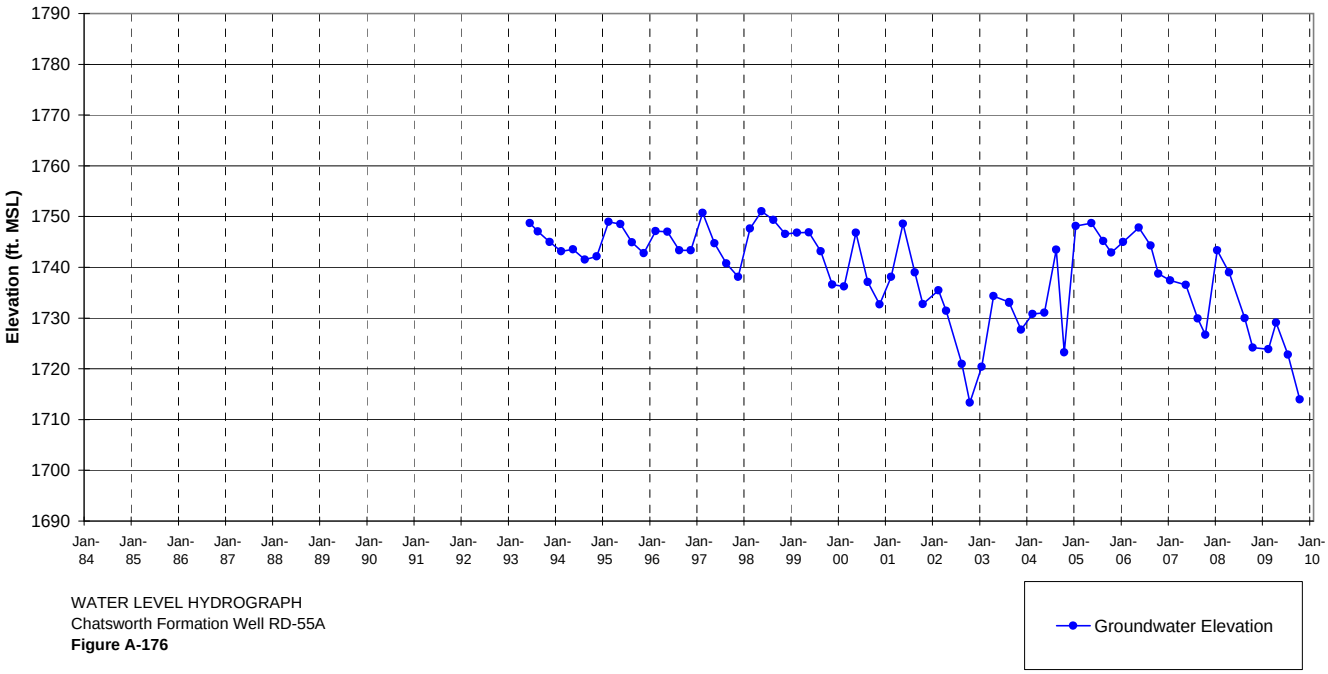
NOTE: FLUTe installed in well on 01/07/03.



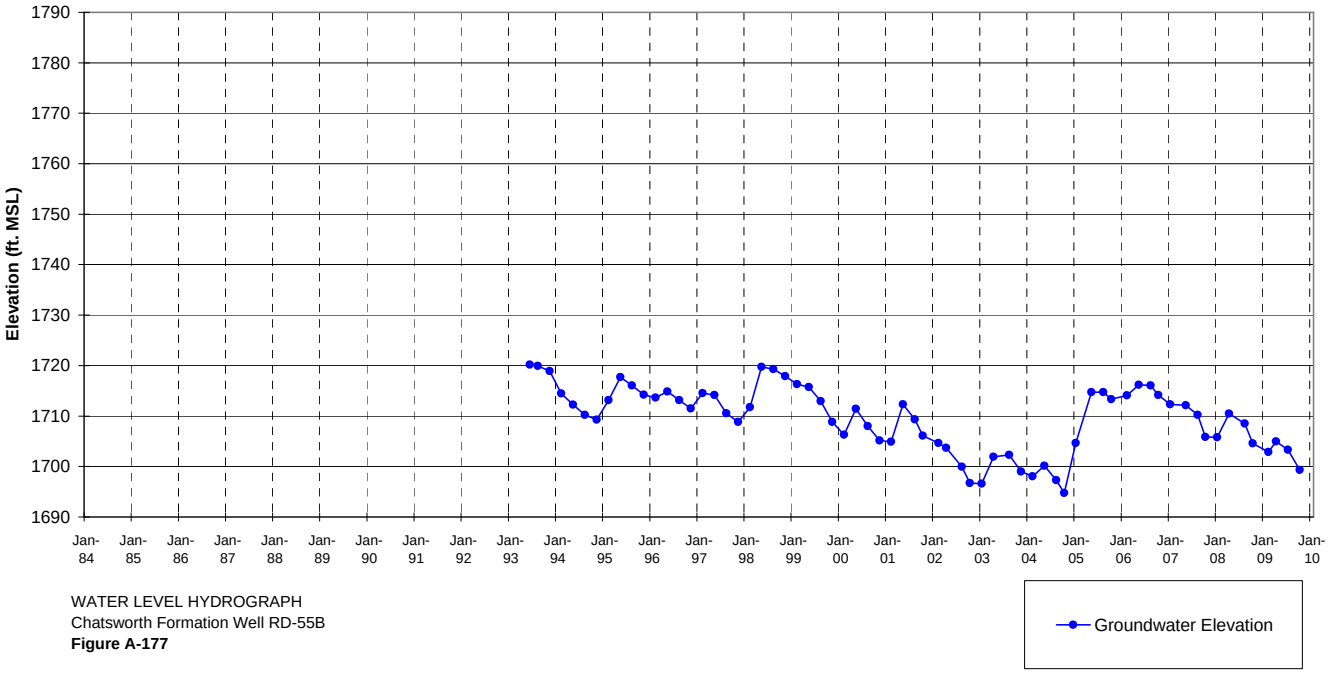
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-54B
Figure A-174



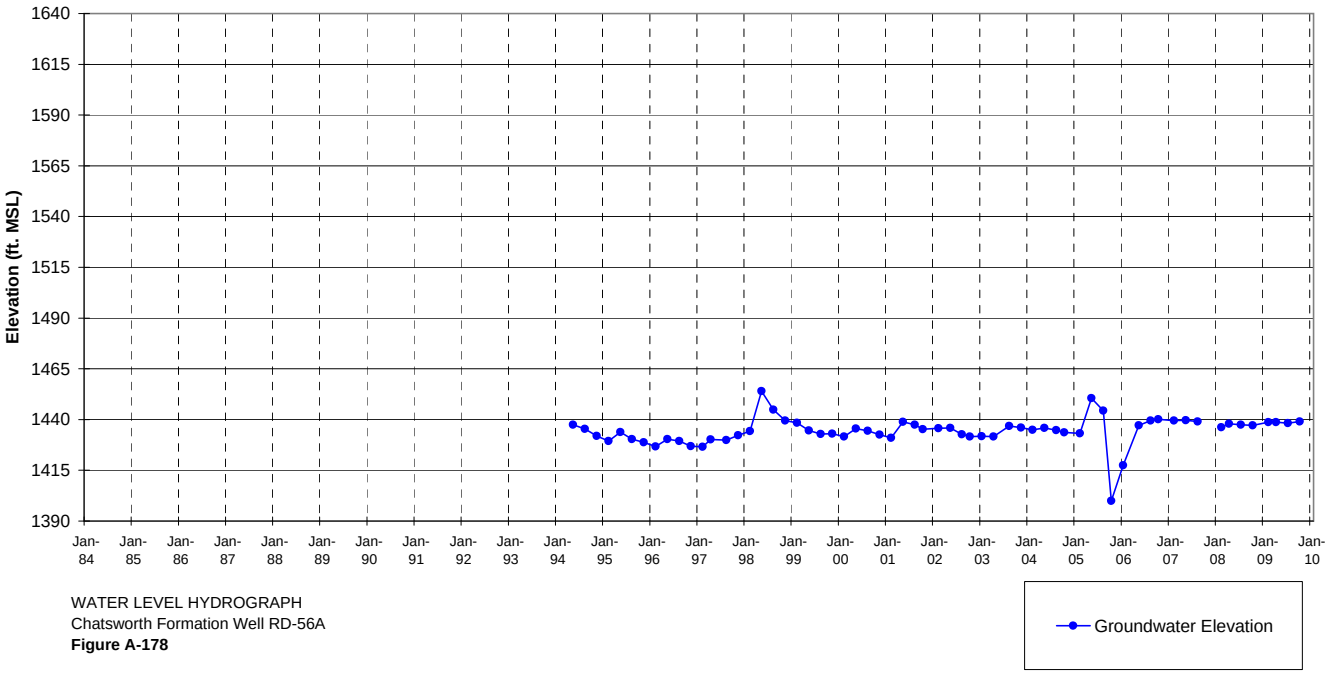
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-54C
Figure A-175



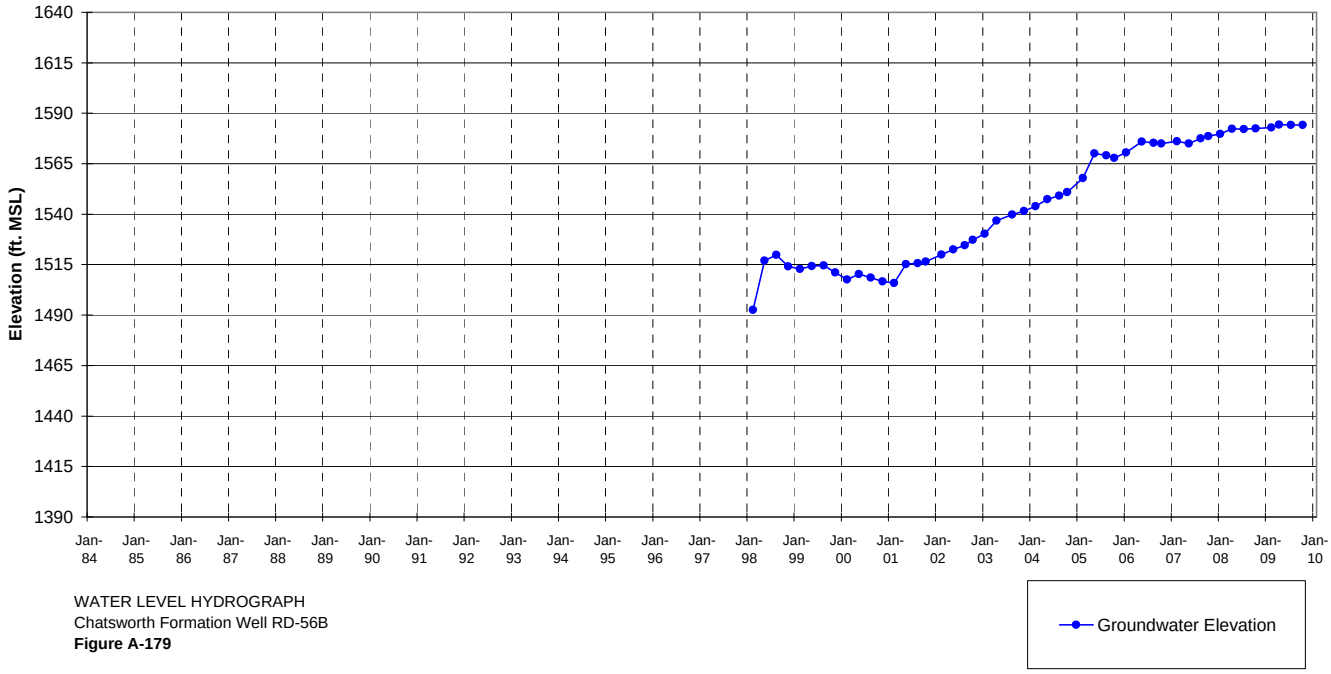
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-55A
Figure A-176



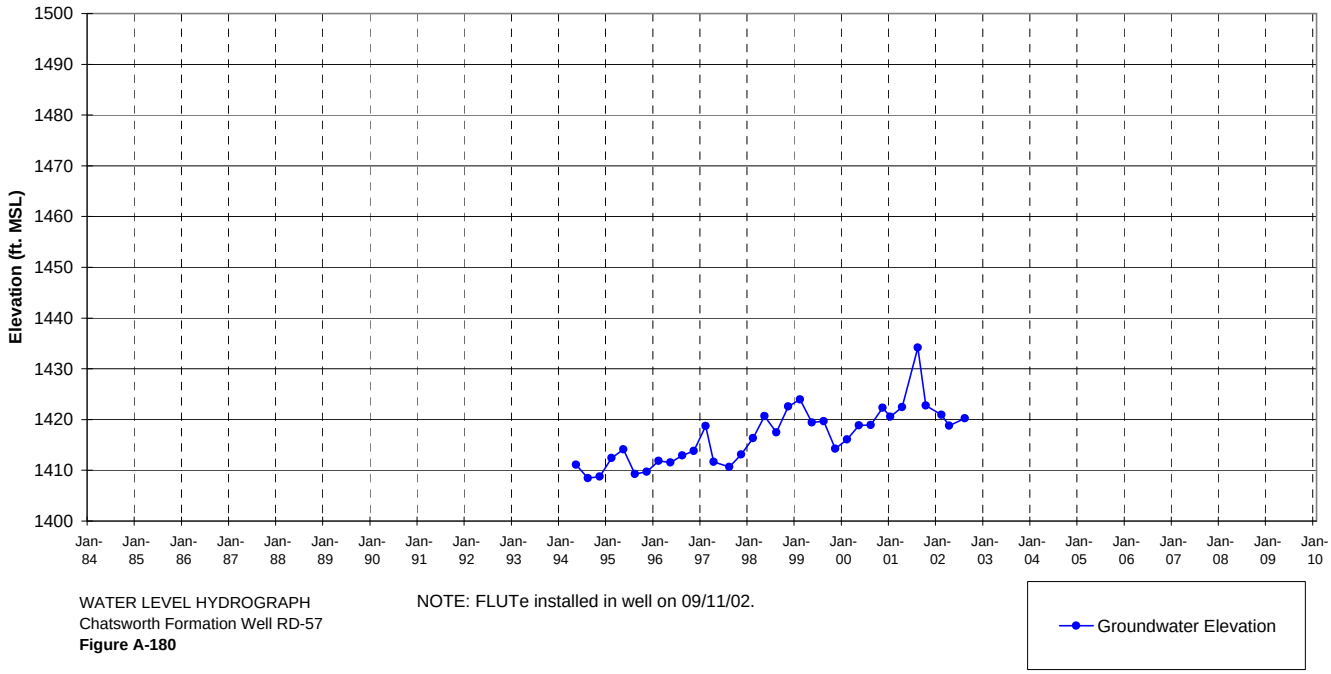
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-55B
Figure A-177



WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-56A
Figure A-178

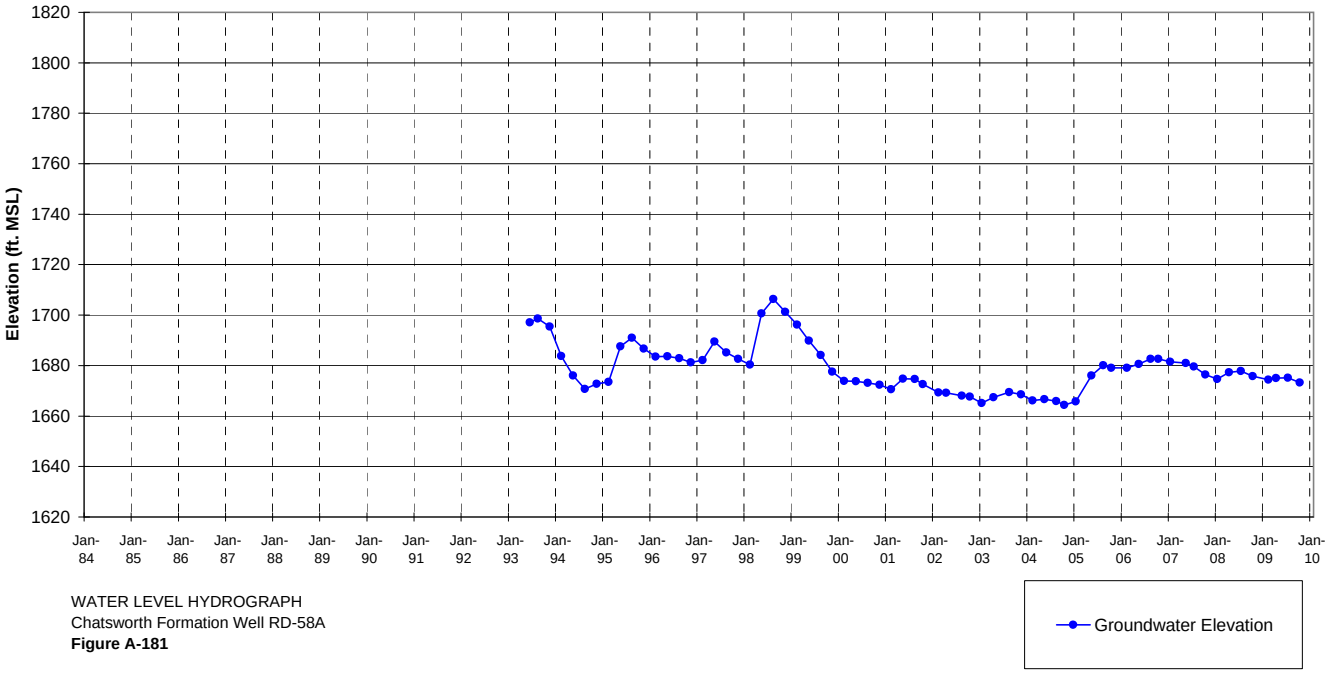


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-56B
Figure A-179

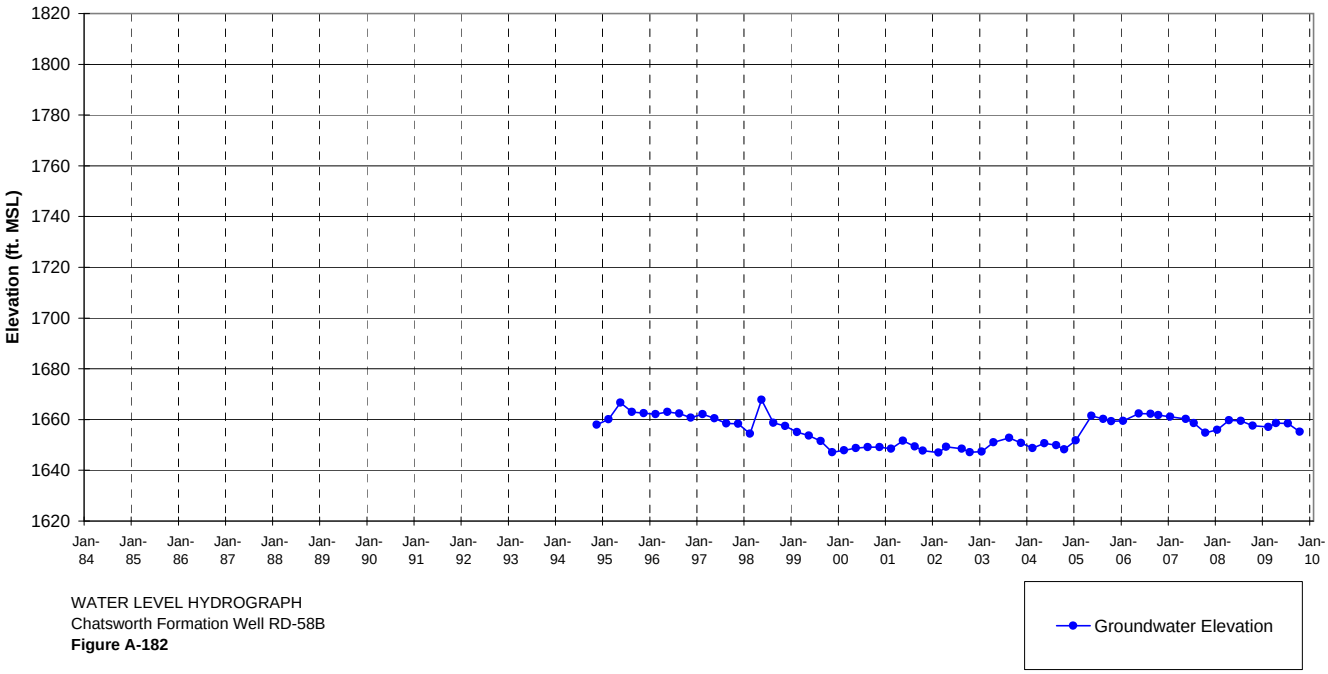


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-57
Figure A-180

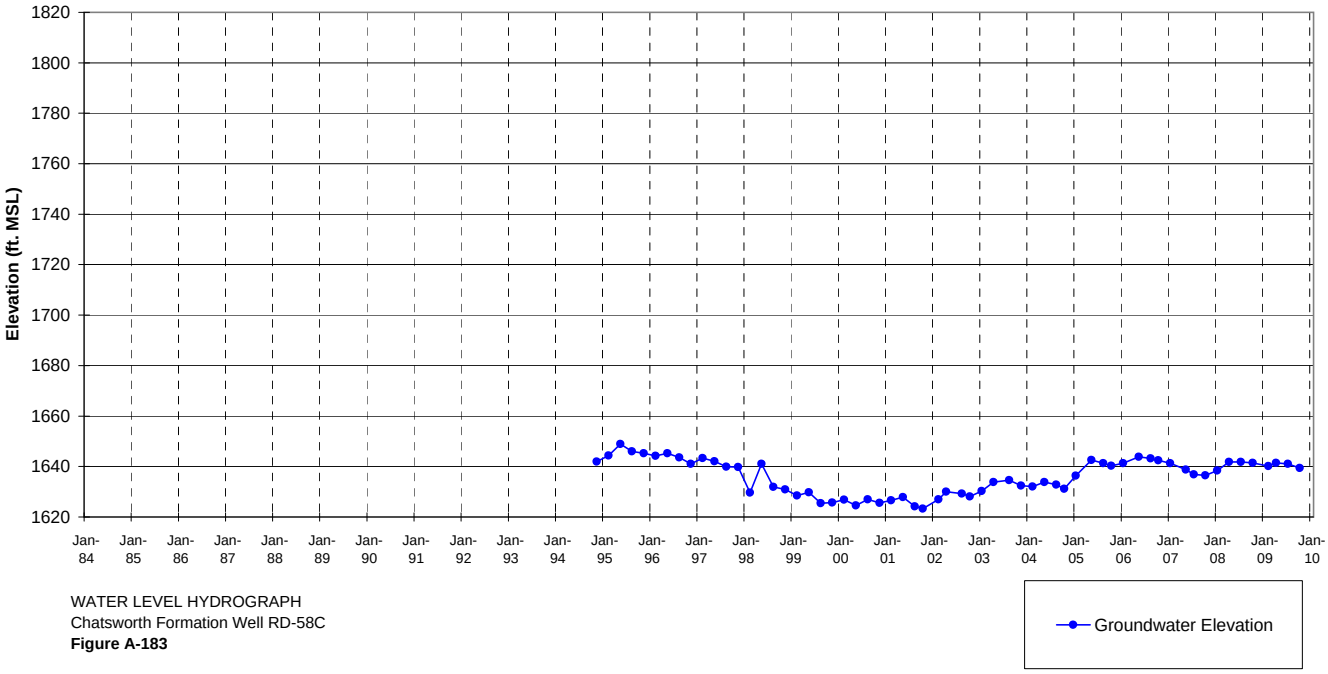
NOTE: FLUTe installed in well on 09/11/02.



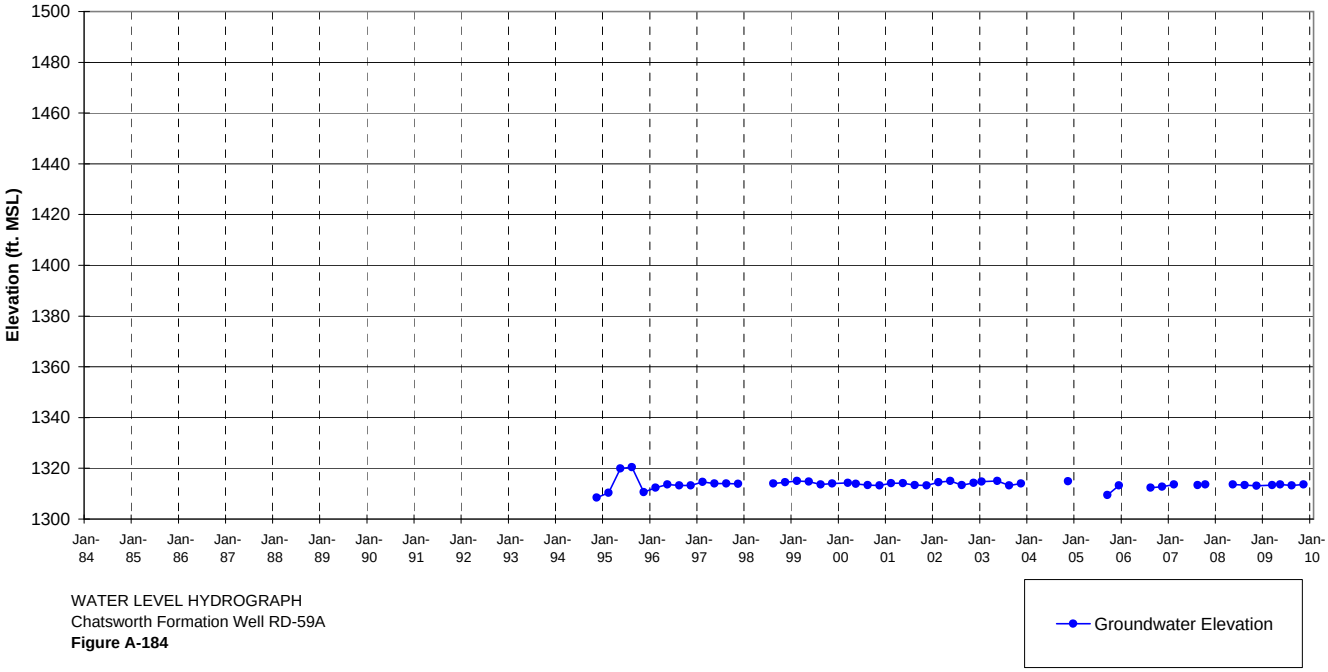
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-58A
Figure A-181



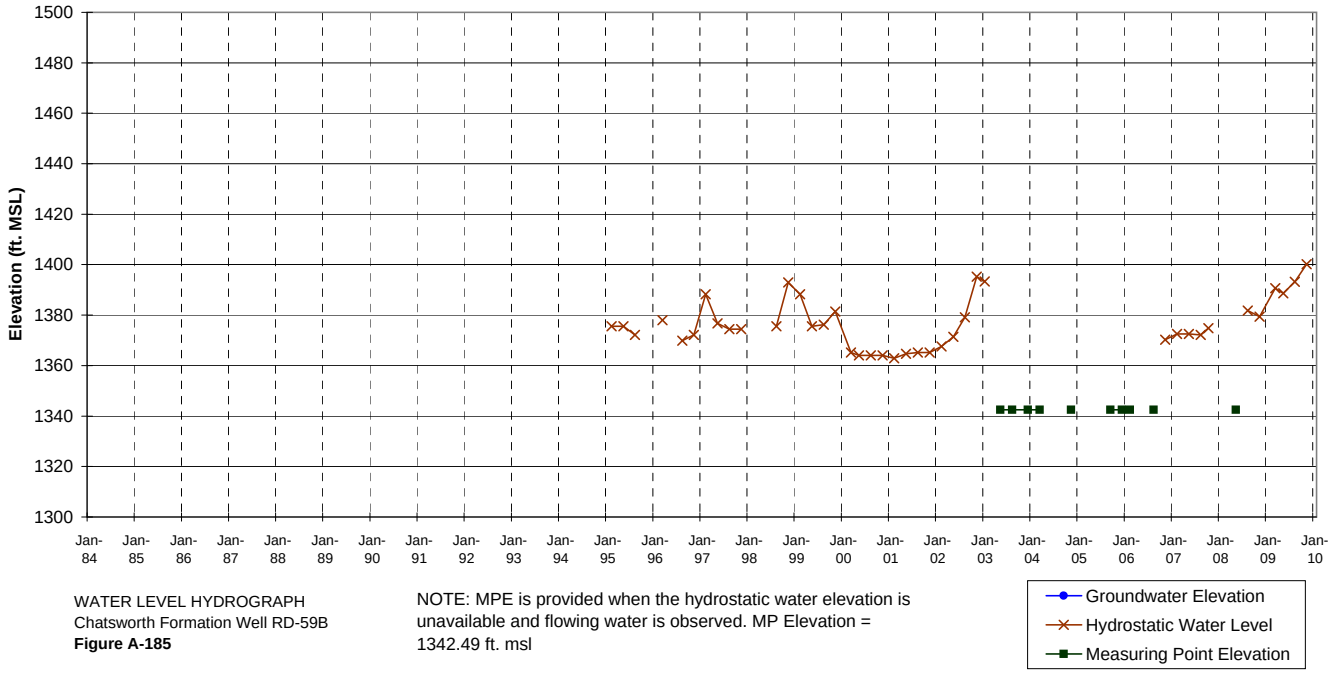
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-58B
Figure A-182



WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-58C
Figure A-183

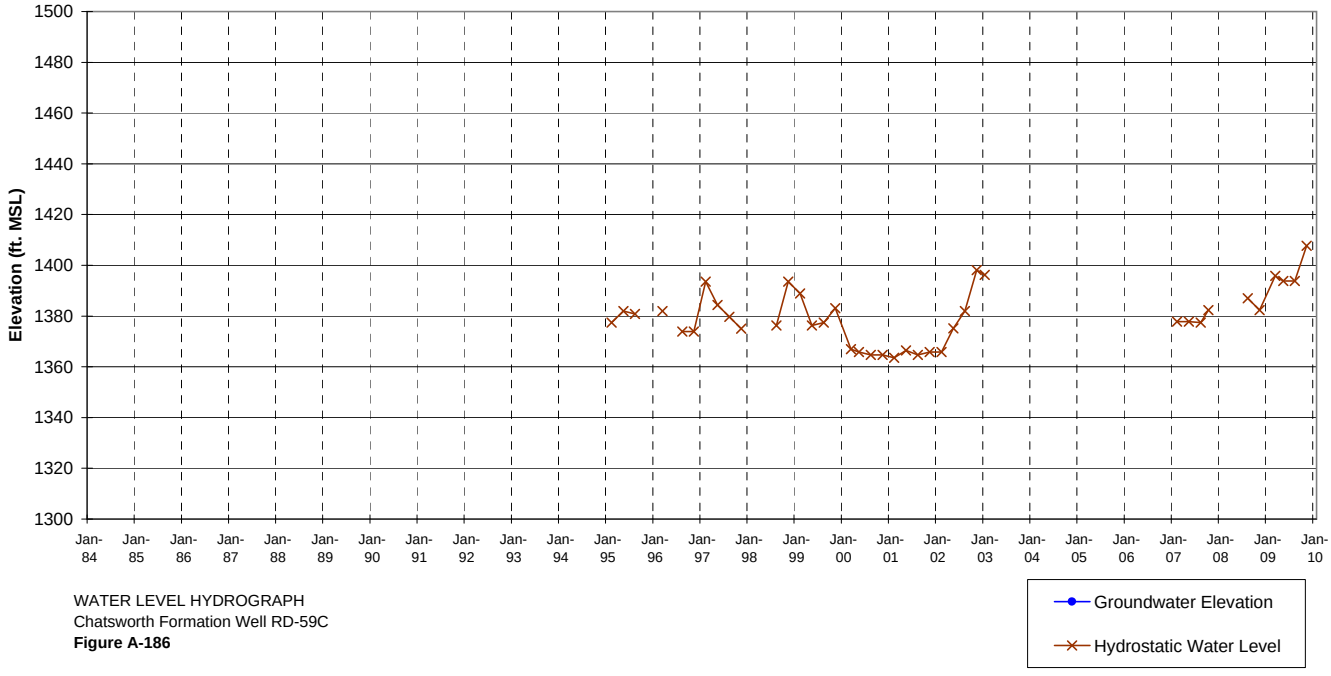


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-59A
Figure A-184

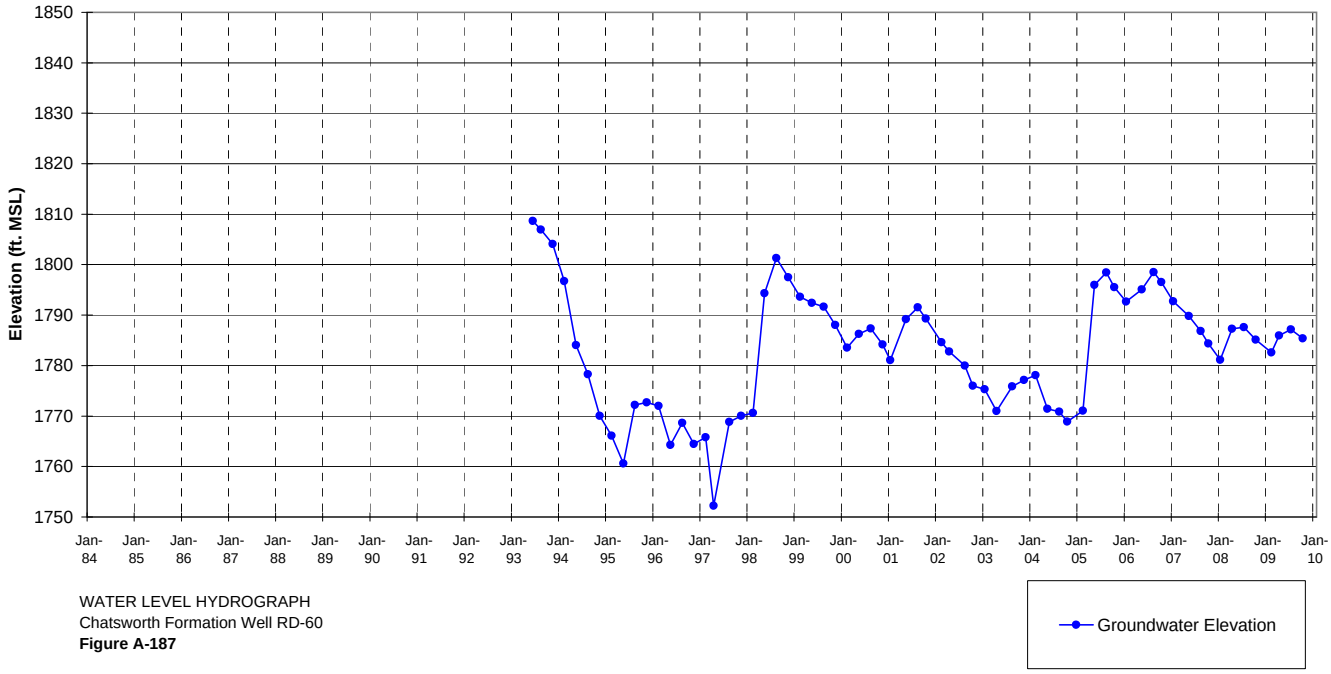


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-59B
Figure A-185

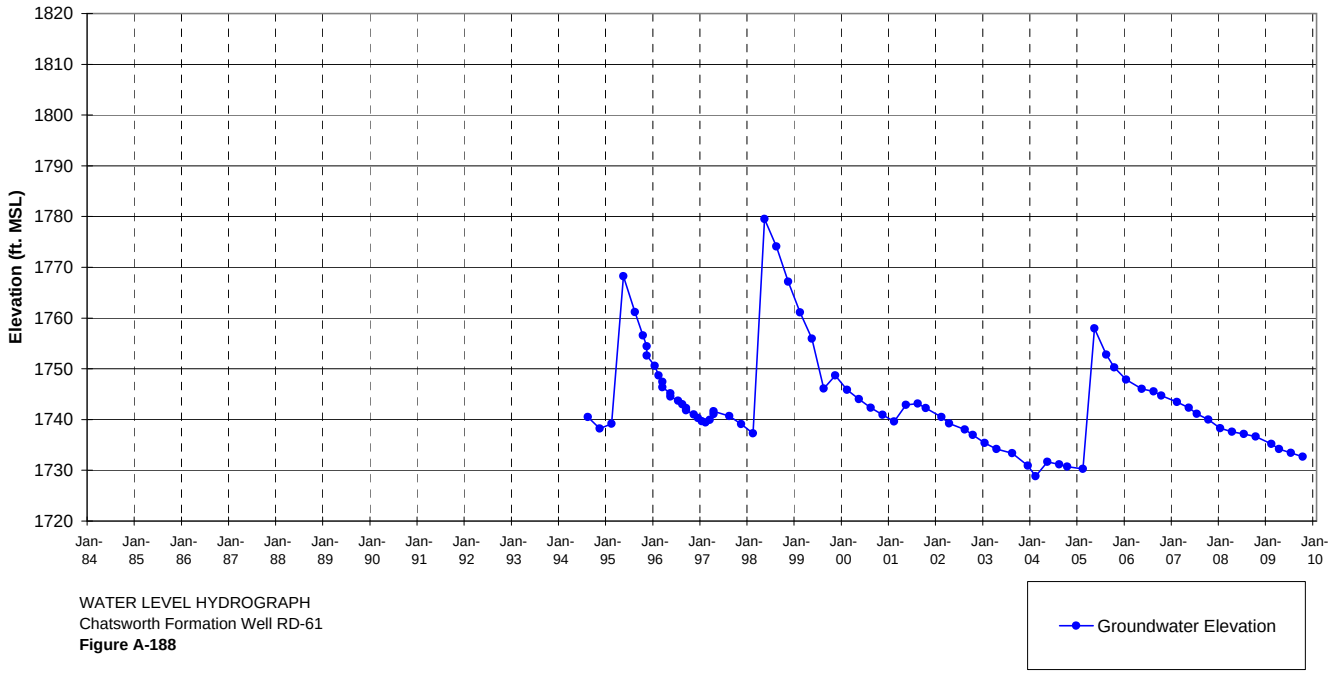
NOTE: MPE is provided when the hydrostatic water elevation is unavailable and flowing water is observed. MP Elevation = 1342.49 ft. msl



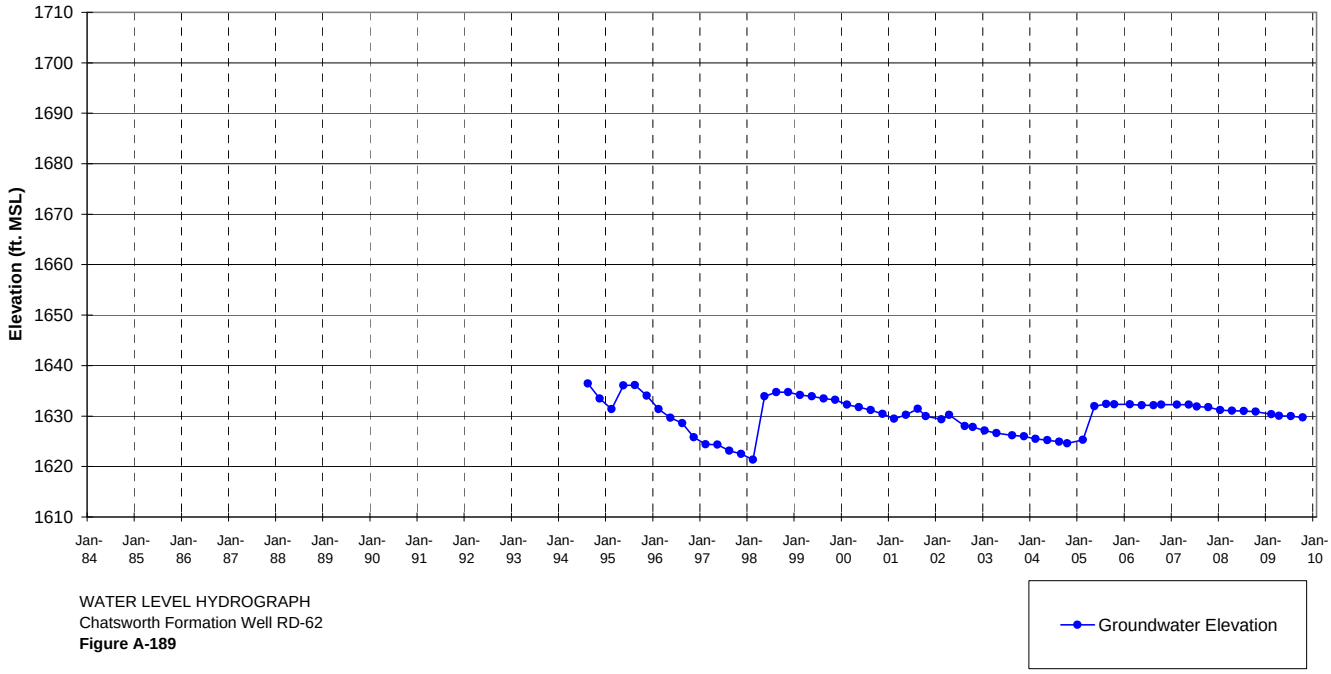
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-59C
Figure A-186



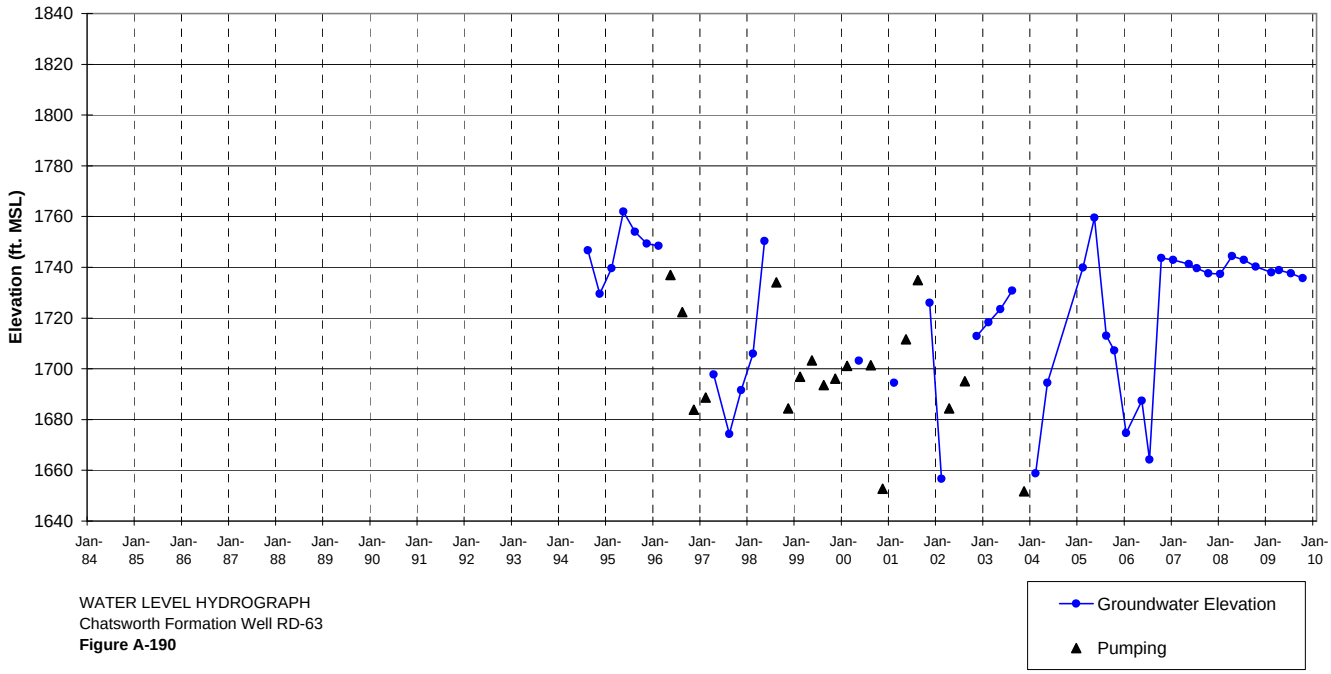
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-60
Figure A-187



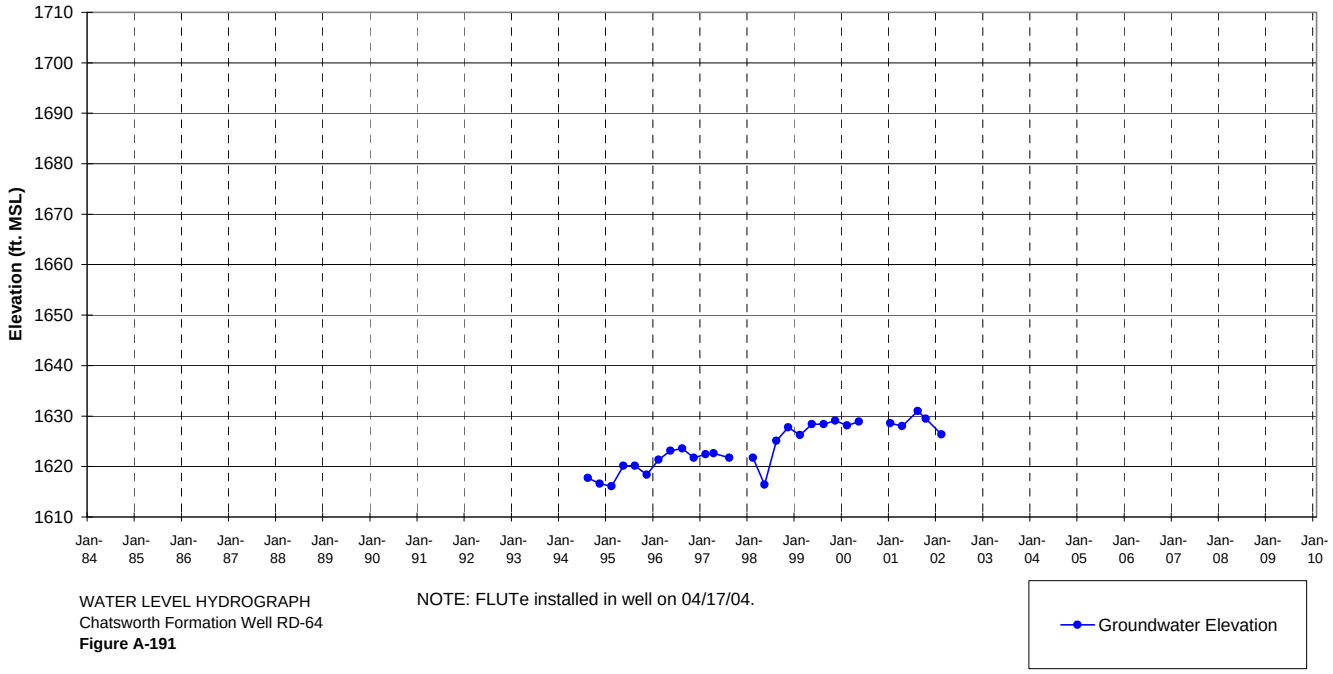
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-61
Figure A-188



WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-62
Figure A-189

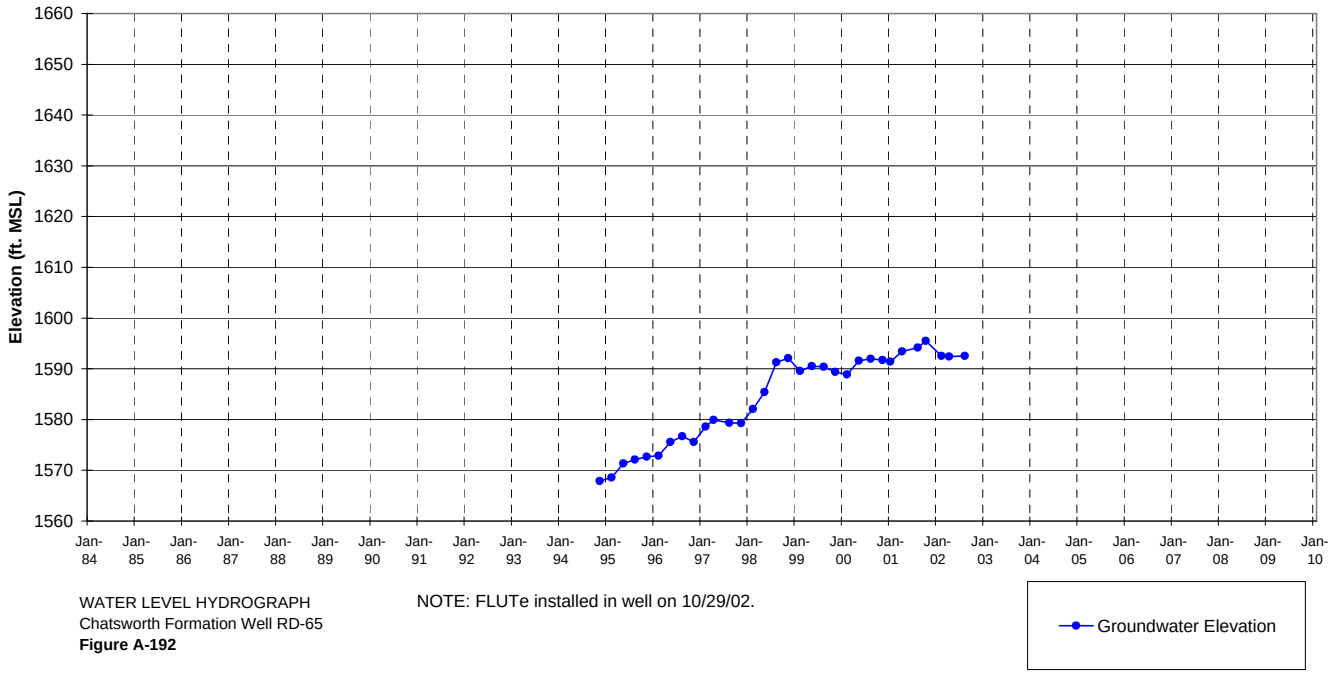


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-63
Figure A-190



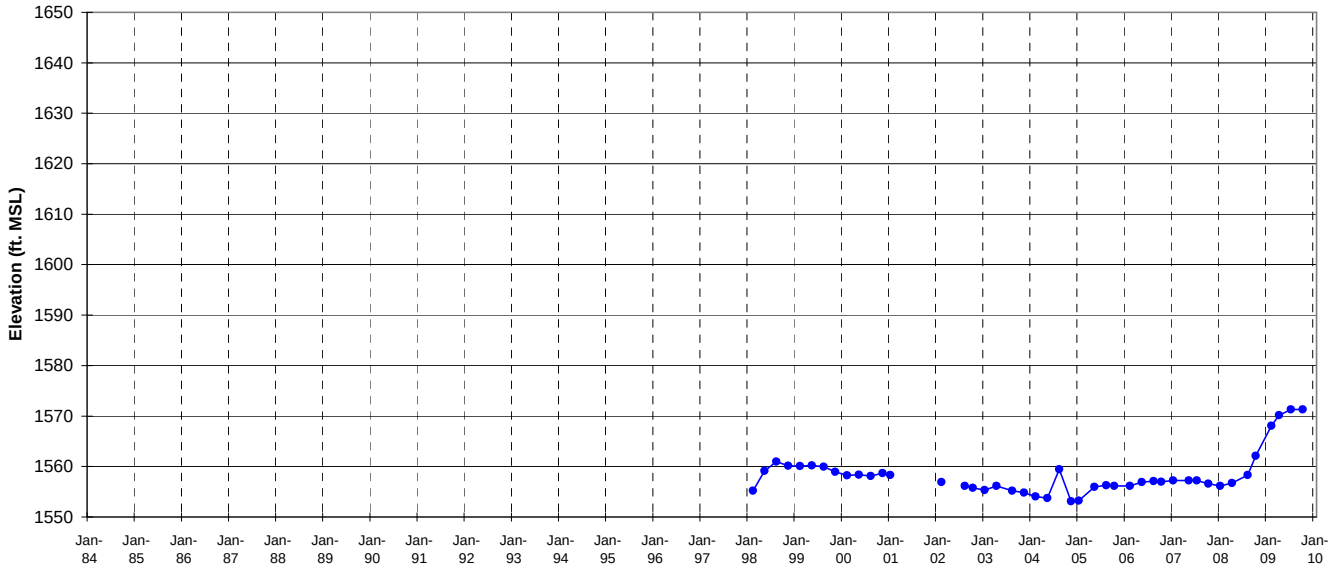
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-64
Figure A-191

NOTE: FLUTe installed in well on 04/17/04.



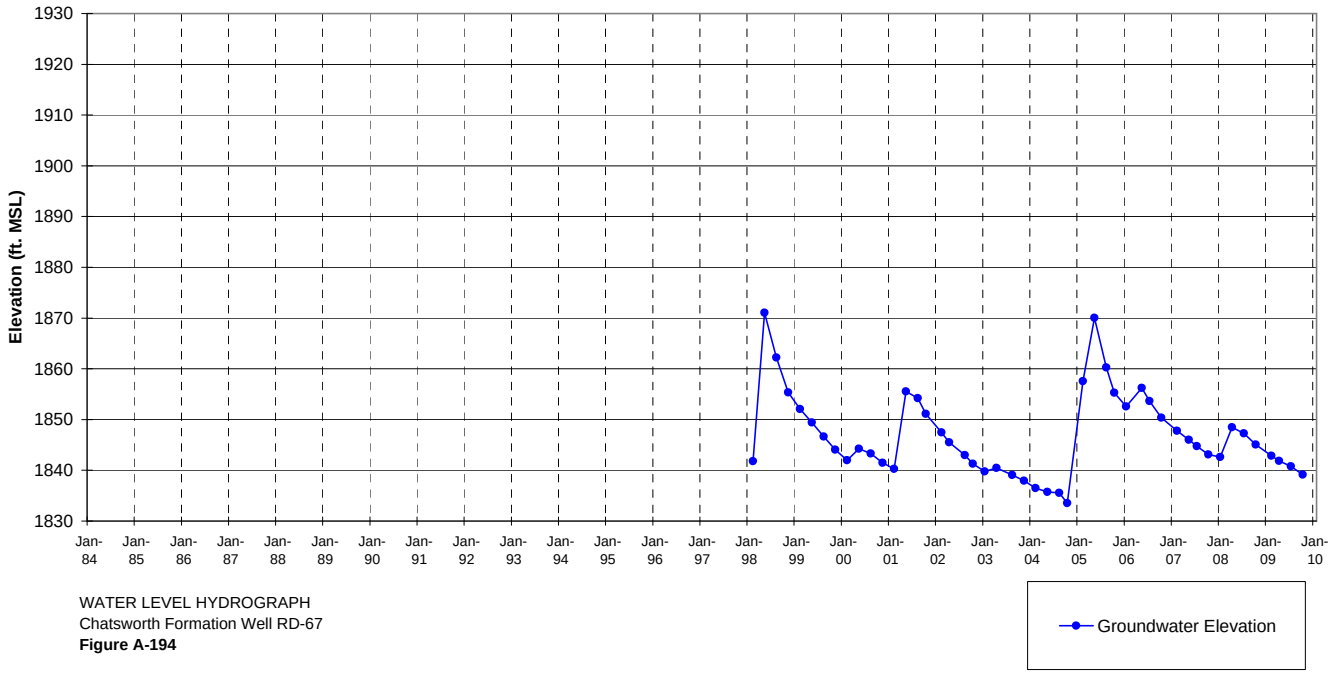
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-65
Figure A-192

NOTE: FLUTe installed in well on 10/29/02.

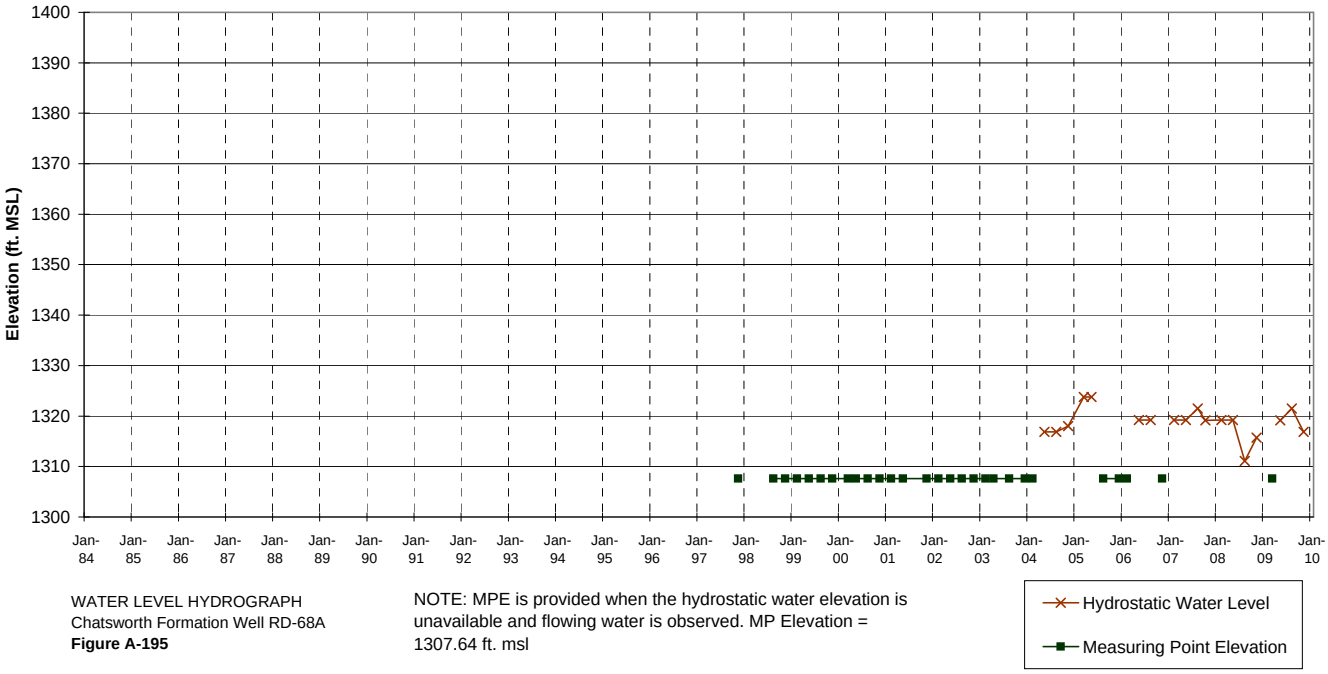


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-66
Figure A-193

NOTE: FLUTe installed in well on 04/30/01. FLUTe removed from well on 07/17/02.

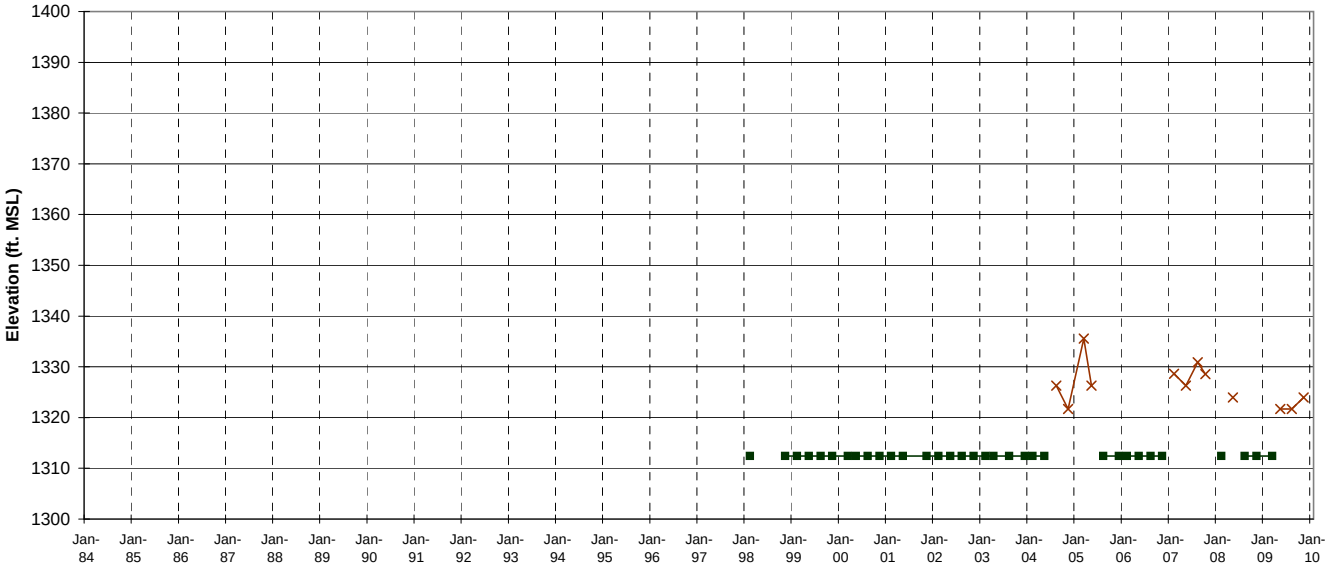


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-67
Figure A-194



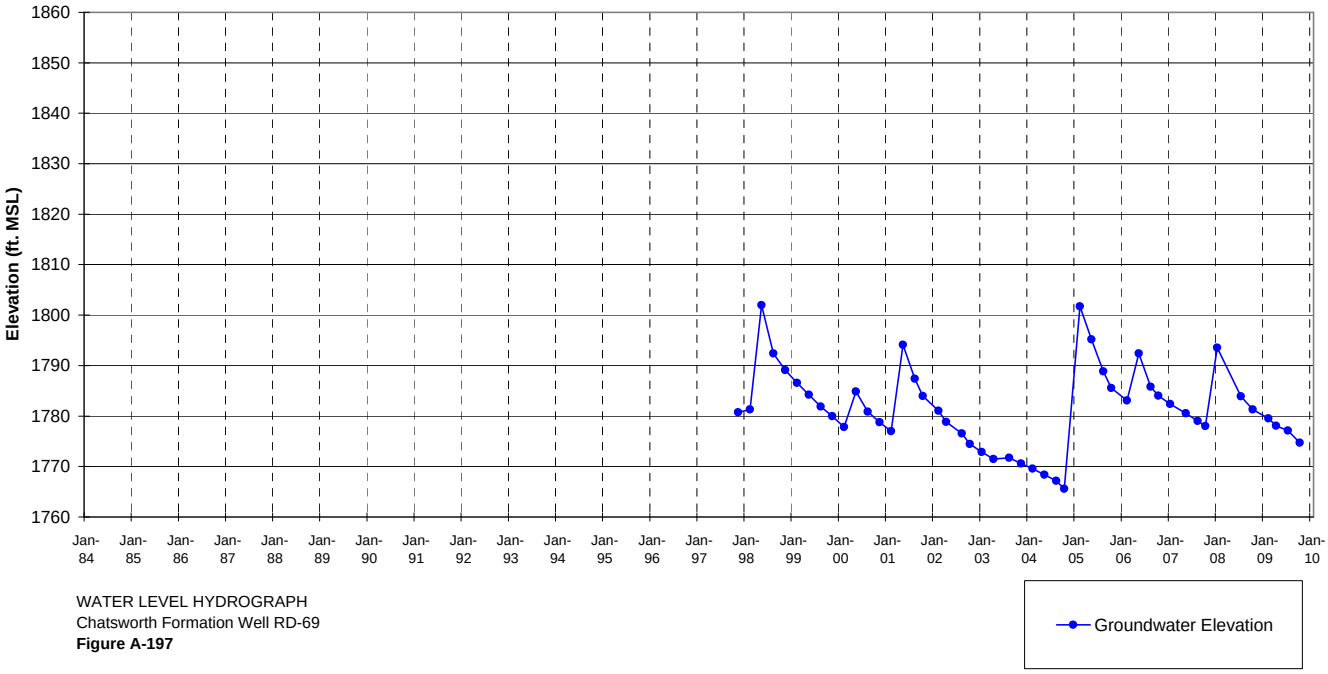
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-68A
Figure A-195

NOTE: MPE is provided when the hydrostatic water elevation is unavailable and flowing water is observed. MP Elevation = 1307.64 ft. msl

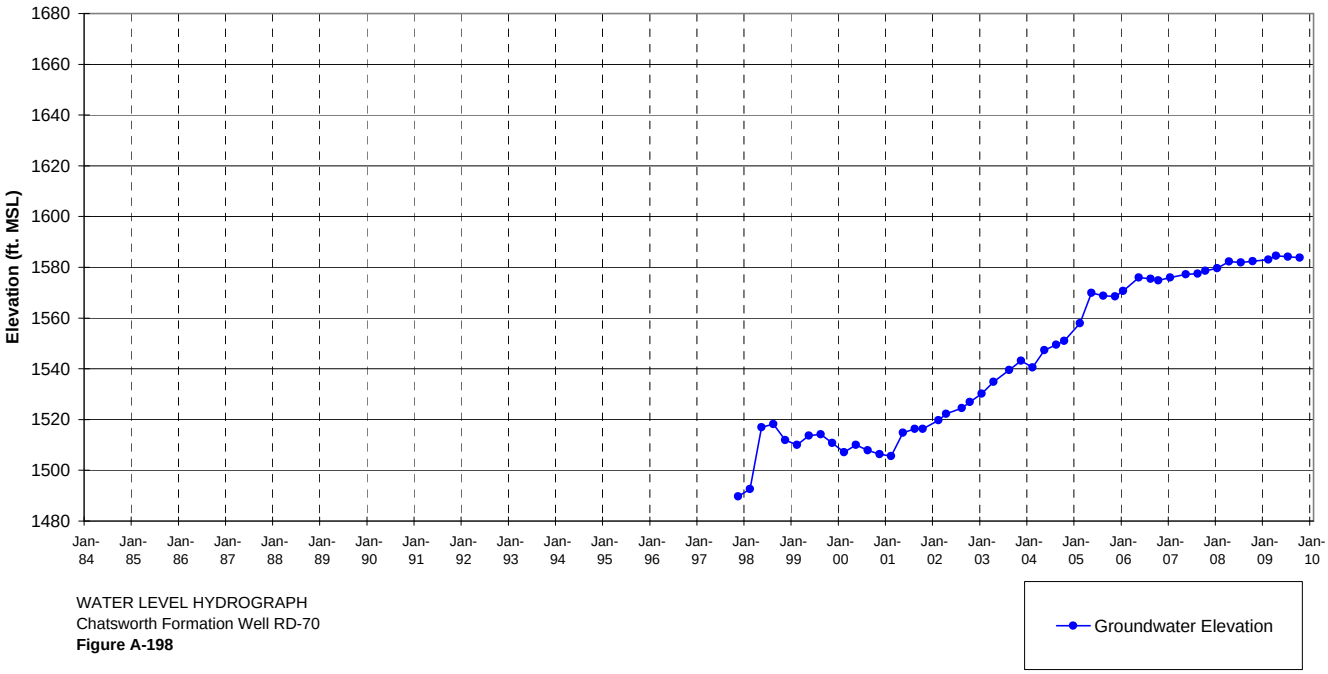


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-68B
Figure A-196

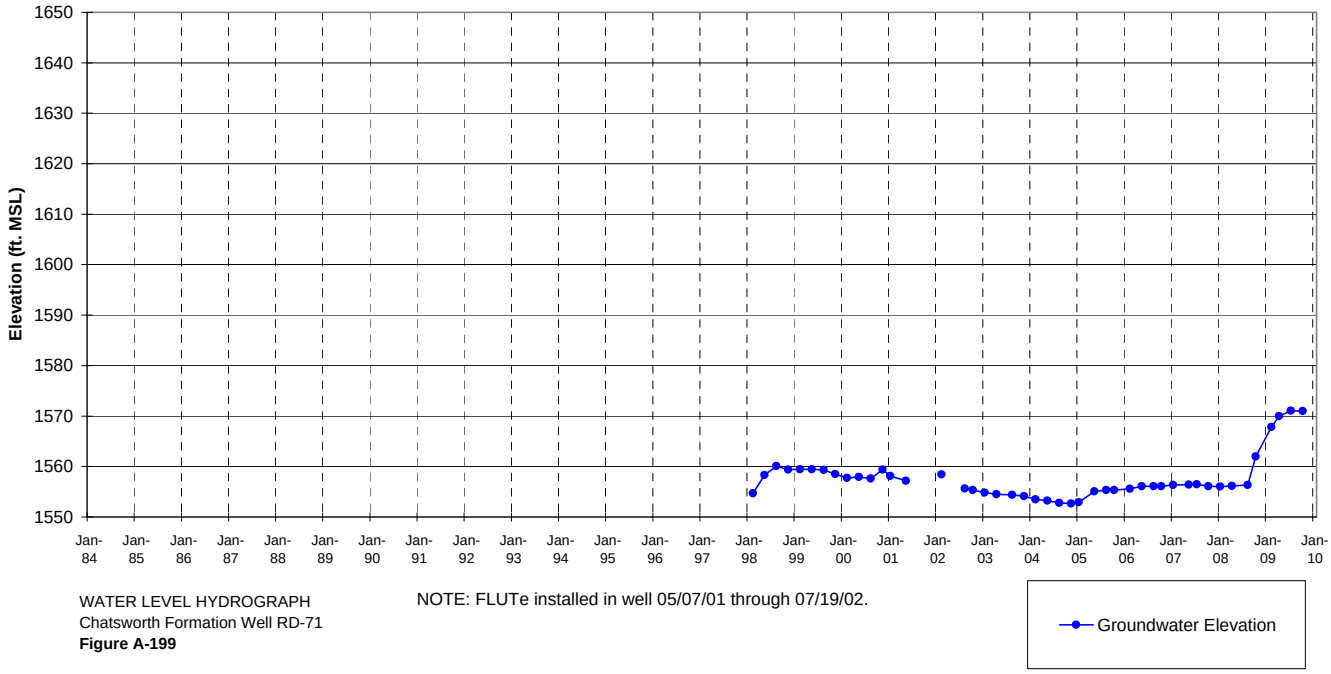
NOTE: MPE is provided when the hydrostatic water elevation is unavailable and flowing water is observed. MP Elevation = 1312.44 ft. msl



WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-69
Figure A-197

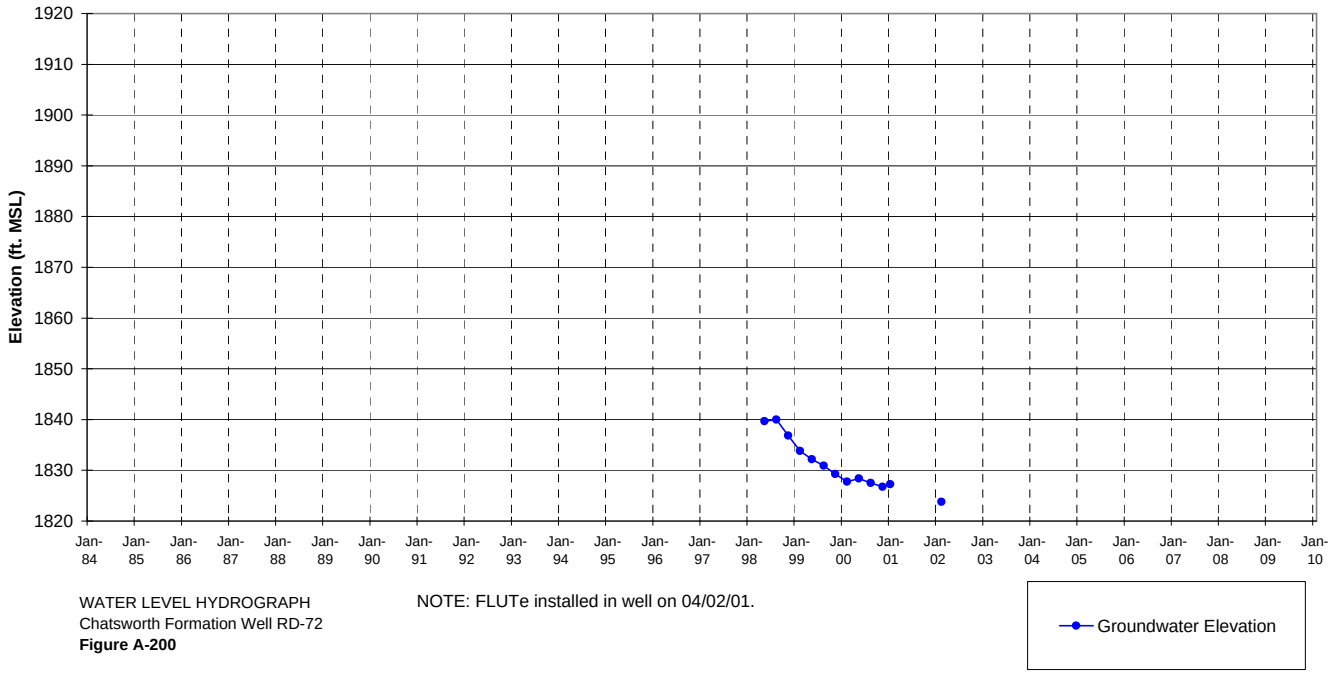


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-70
Figure A-198



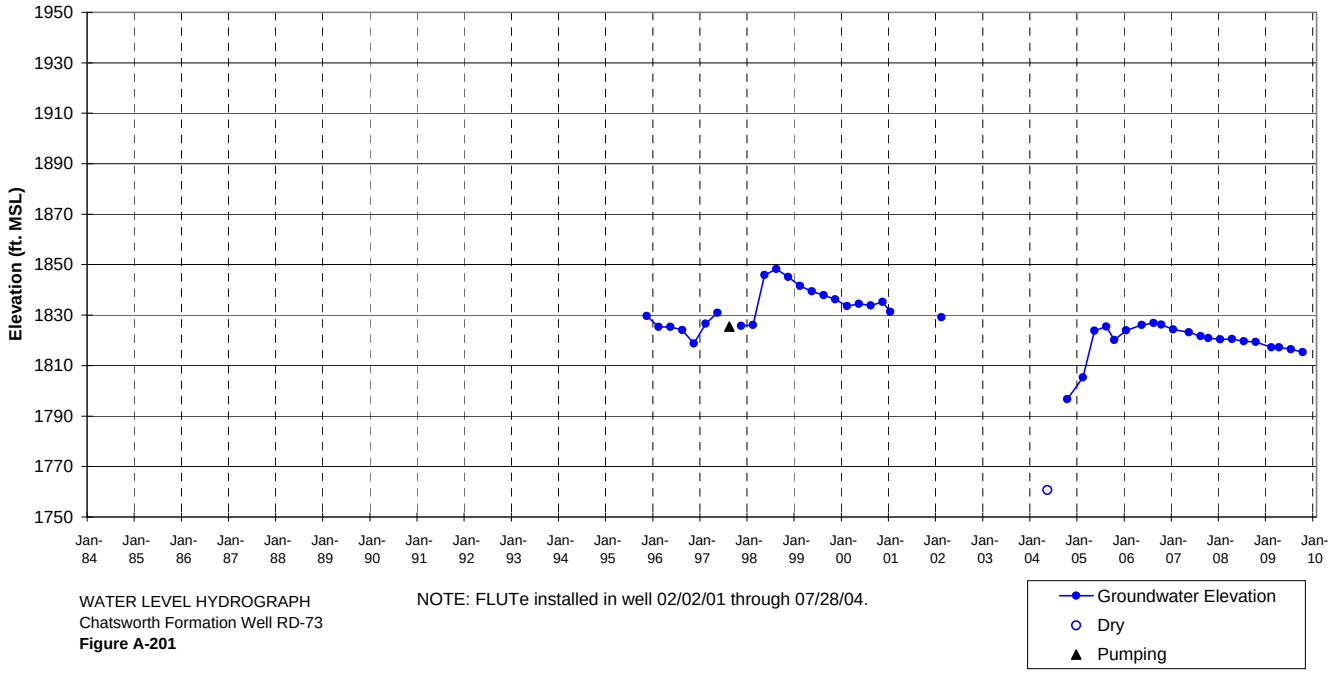
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-71
Figure A-199

NOTE: FLUTe installed in well 05/07/01 through 07/19/02.



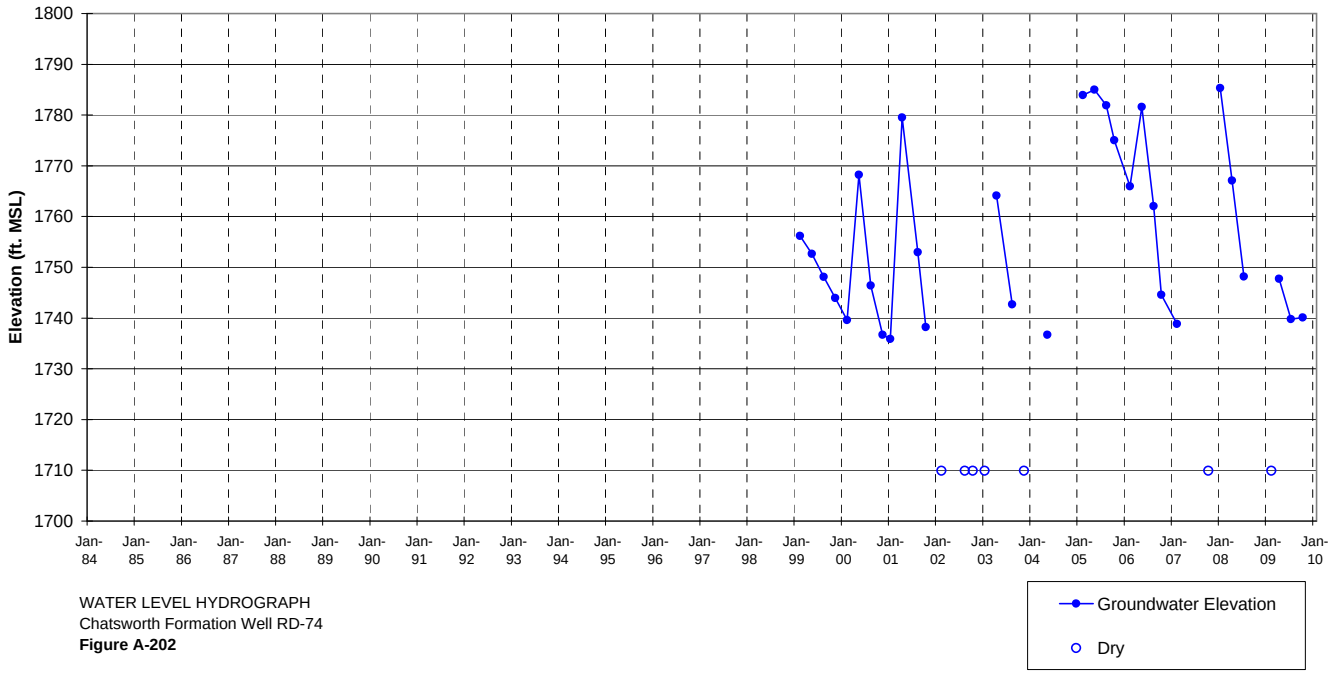
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-72
Figure A-200

NOTE: FLUTe installed in well on 04/02/01.

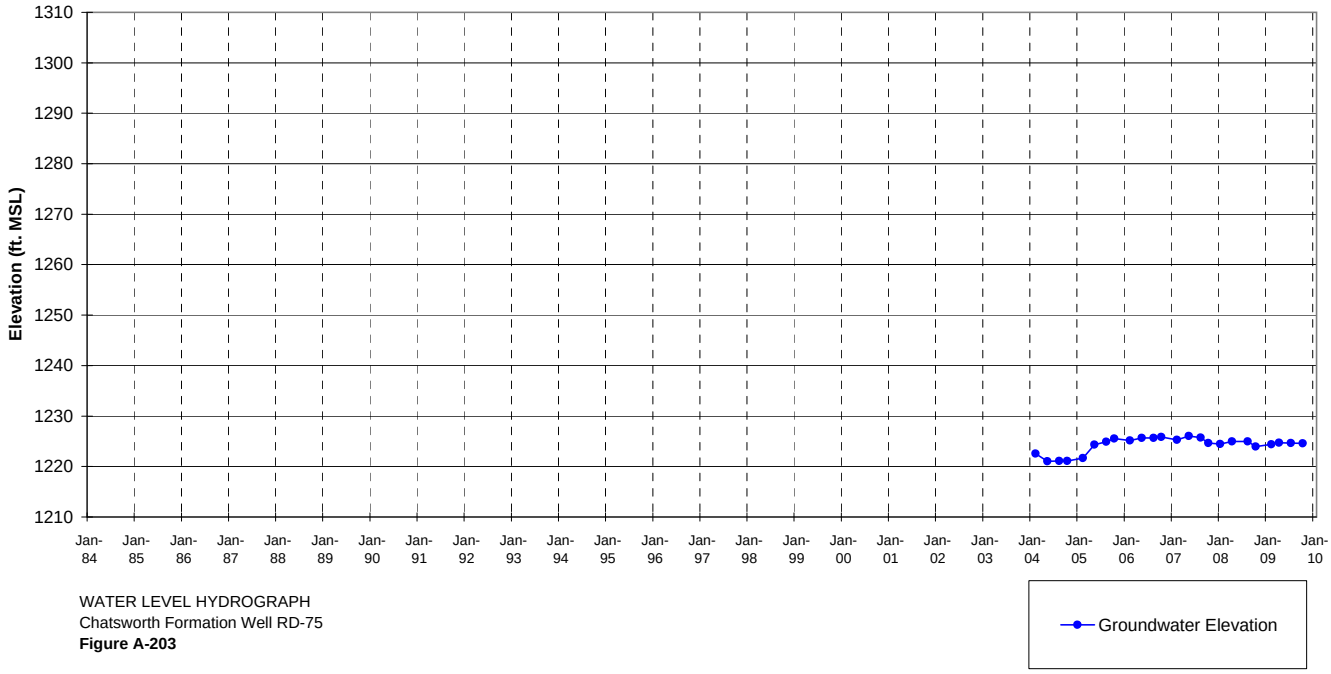


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-73
Figure A-201

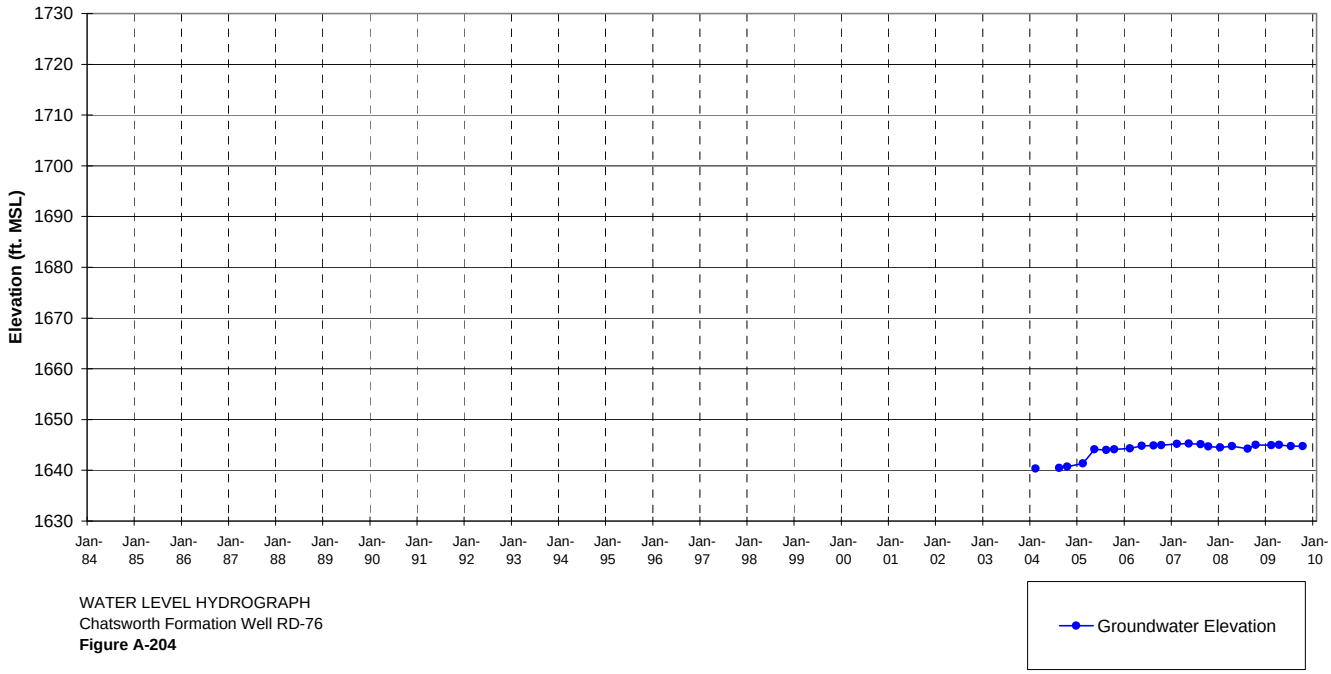
NOTE: FLUTe installed in well 02/02/01 through 07/28/04.



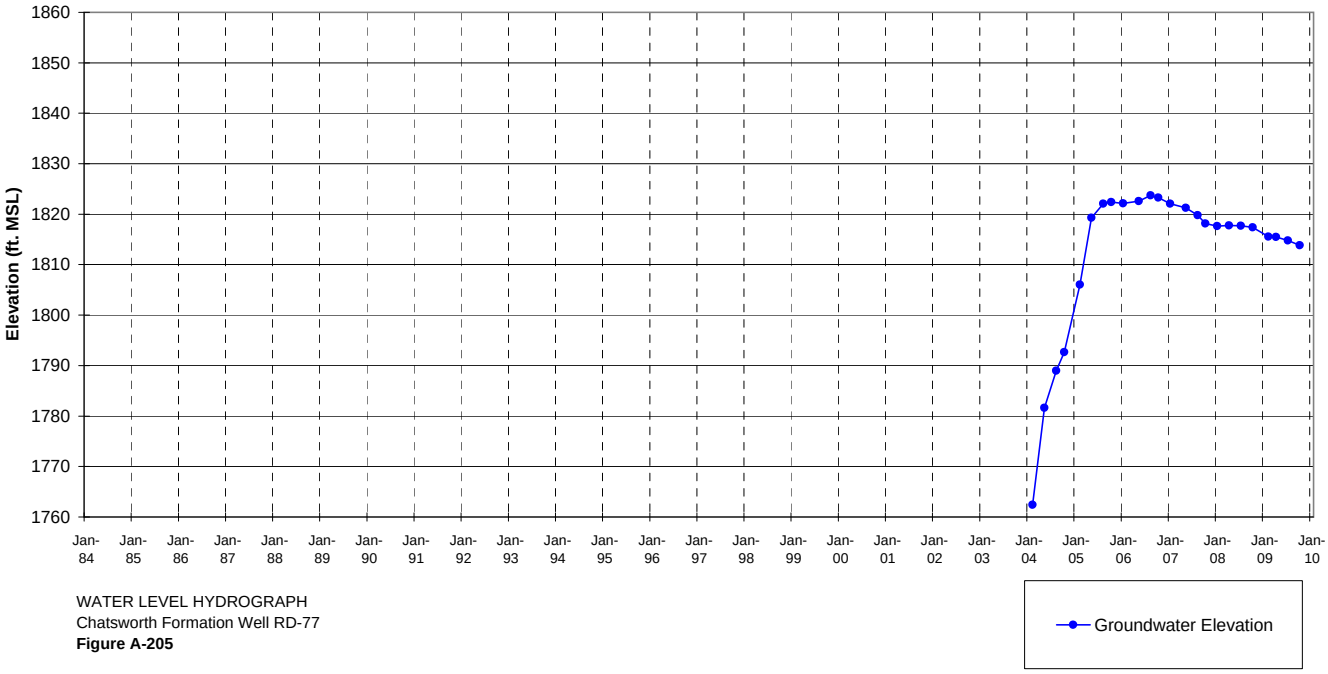
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-74
Figure A-202



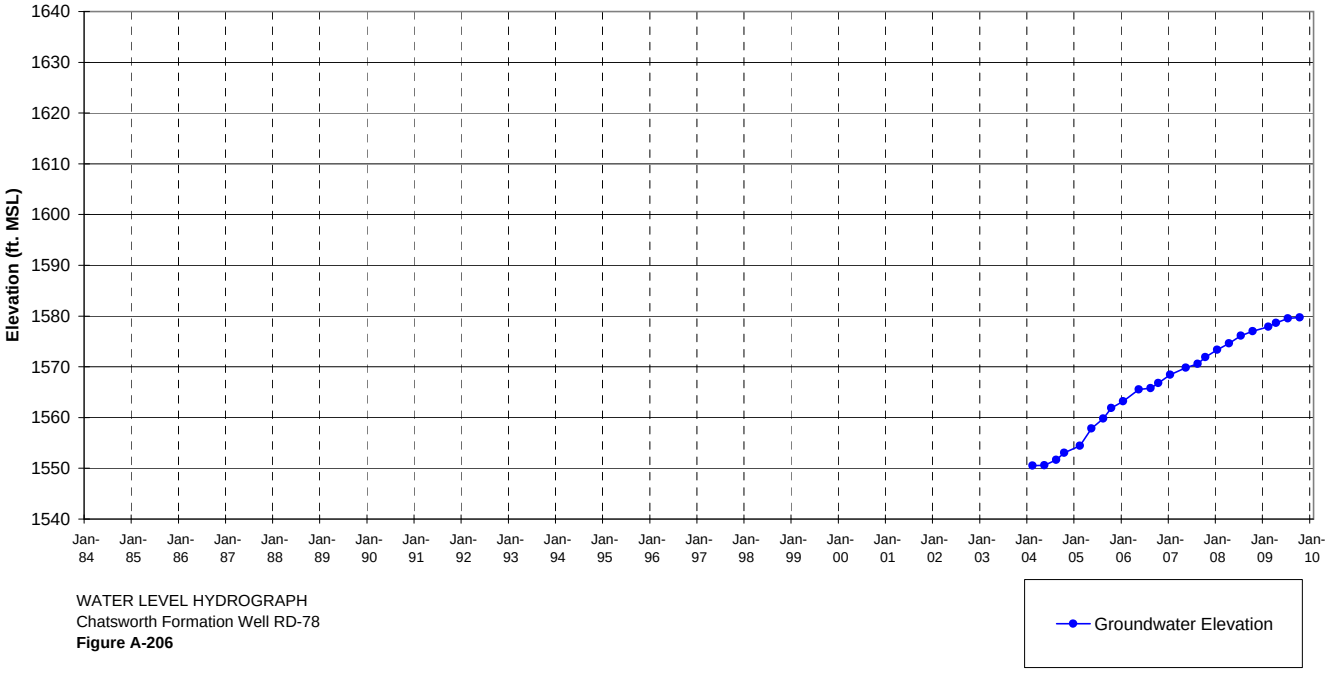
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-75
Figure A-203



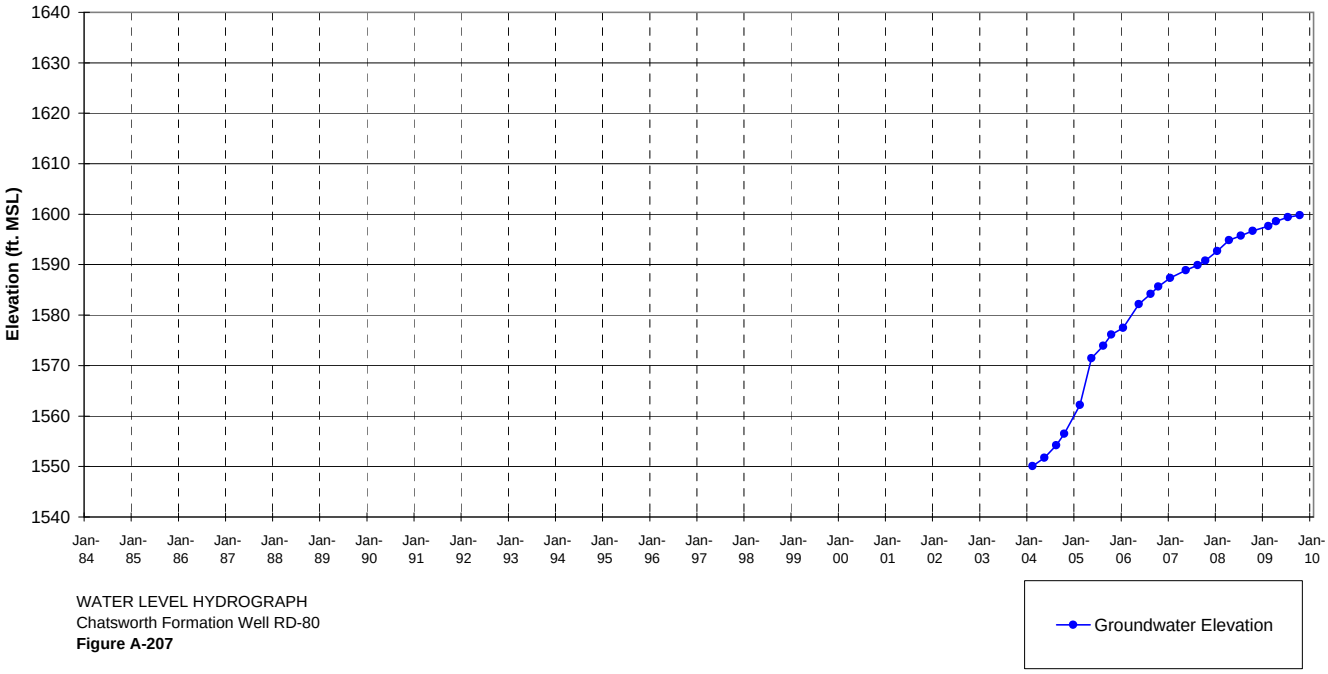
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-76
Figure A-204



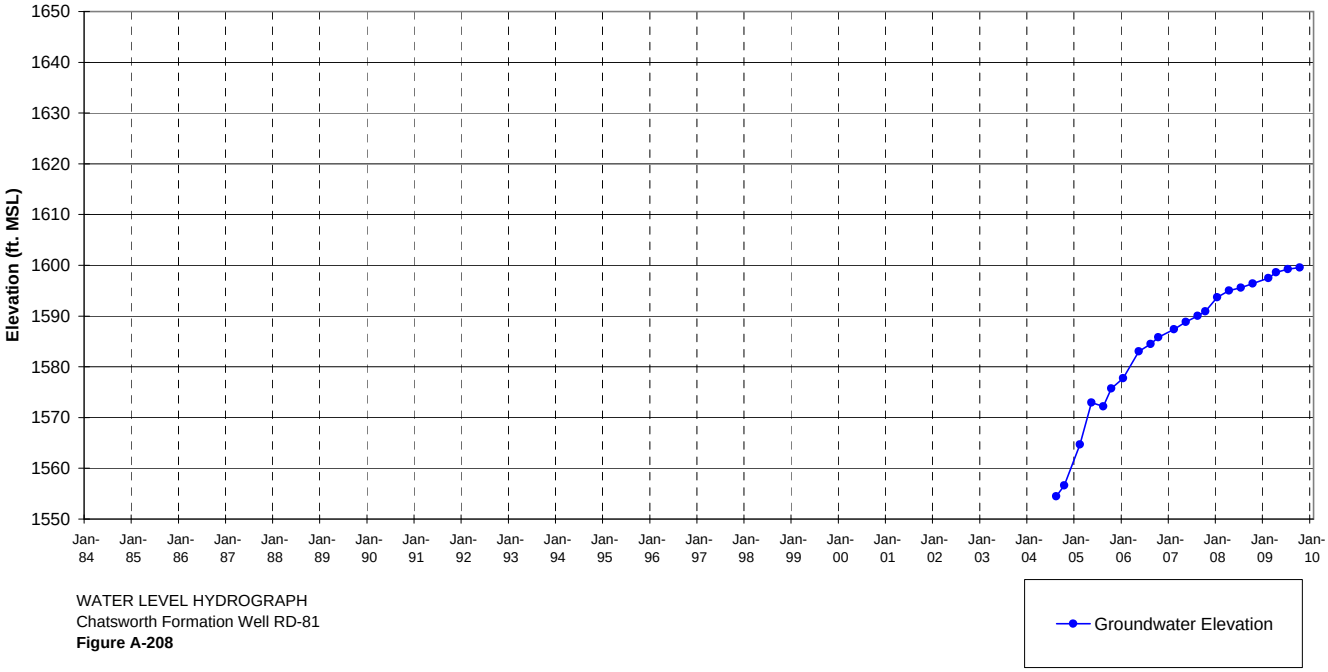
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-77
Figure A-205



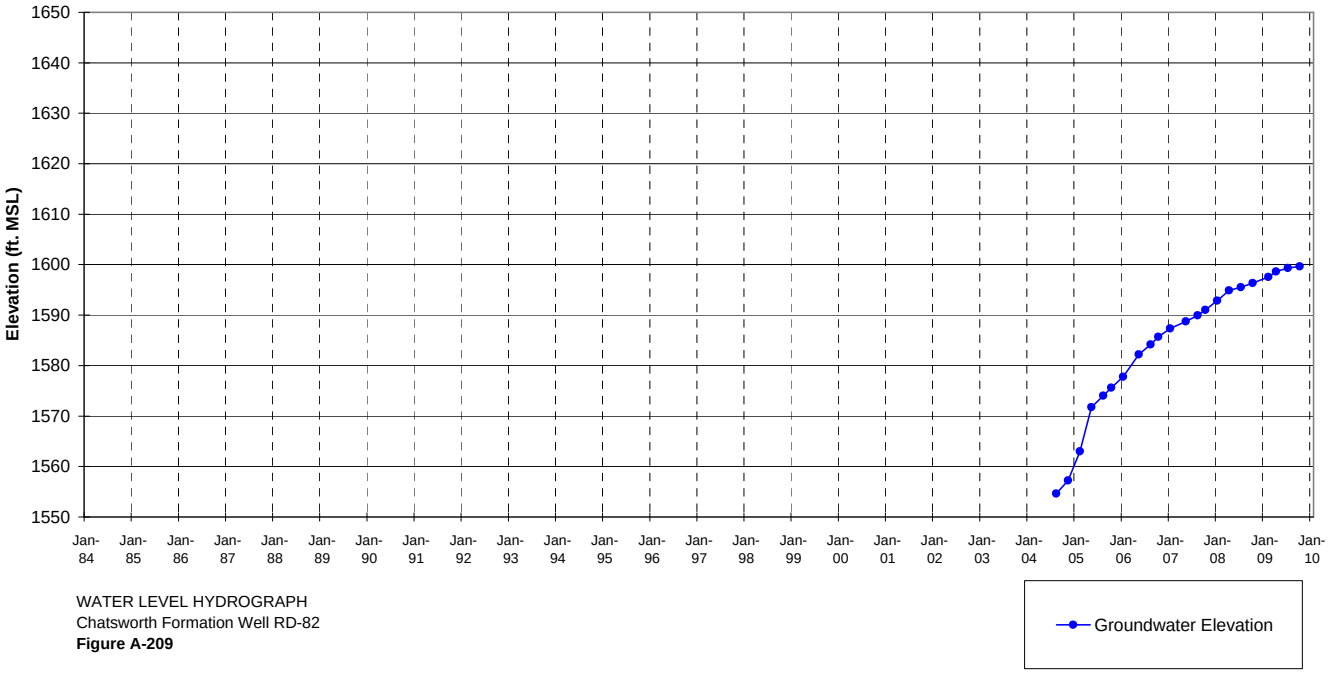
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-78
Figure A-206



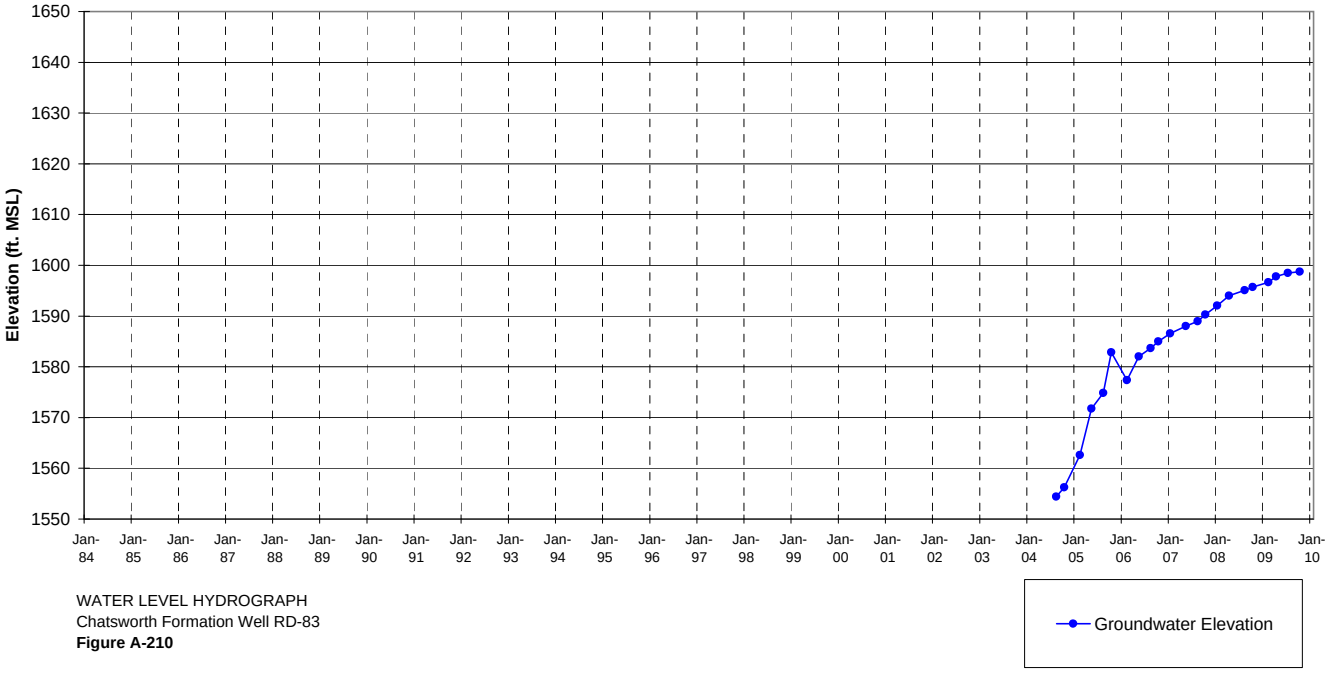
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-80
Figure A-207



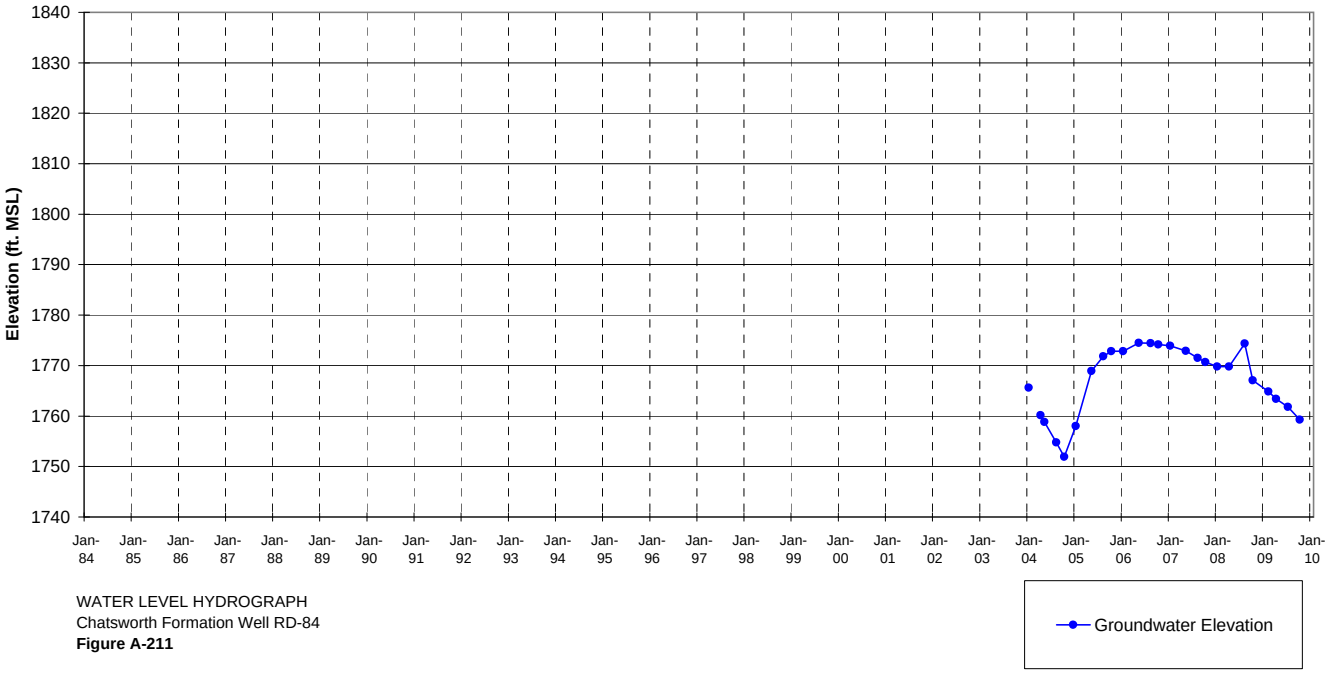
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-81
Figure A-208



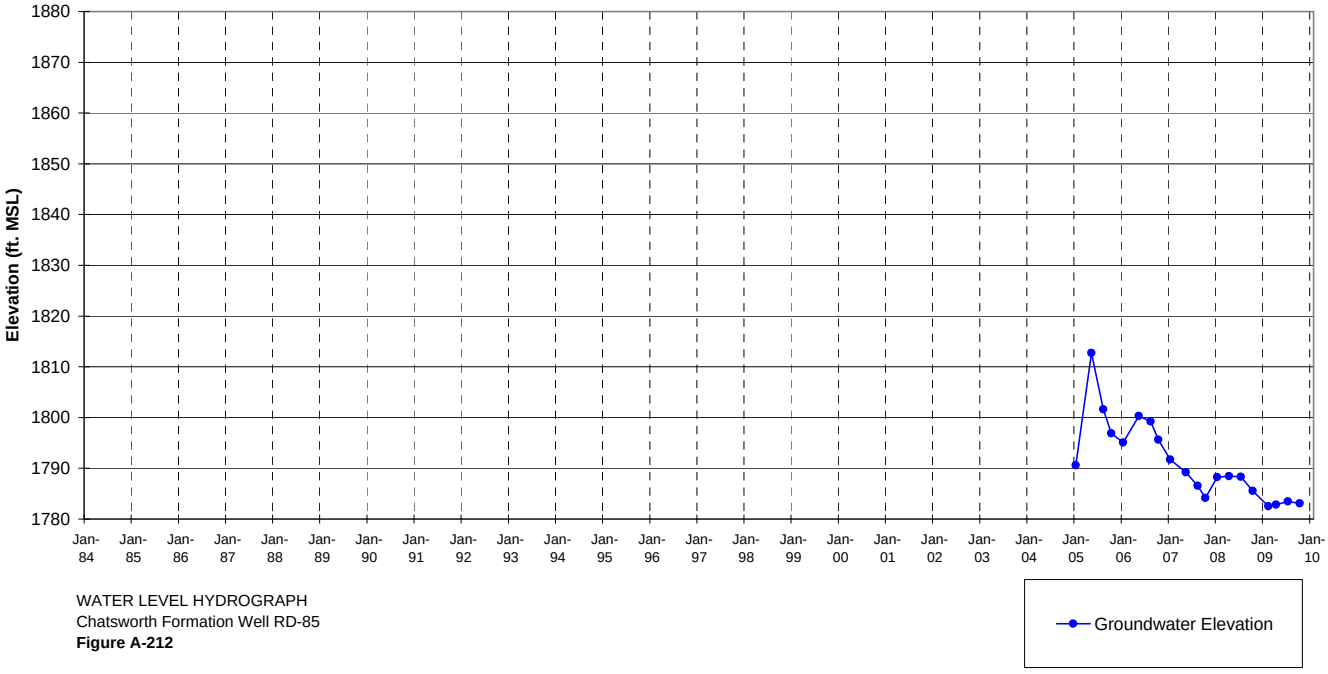
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-82
Figure A-209



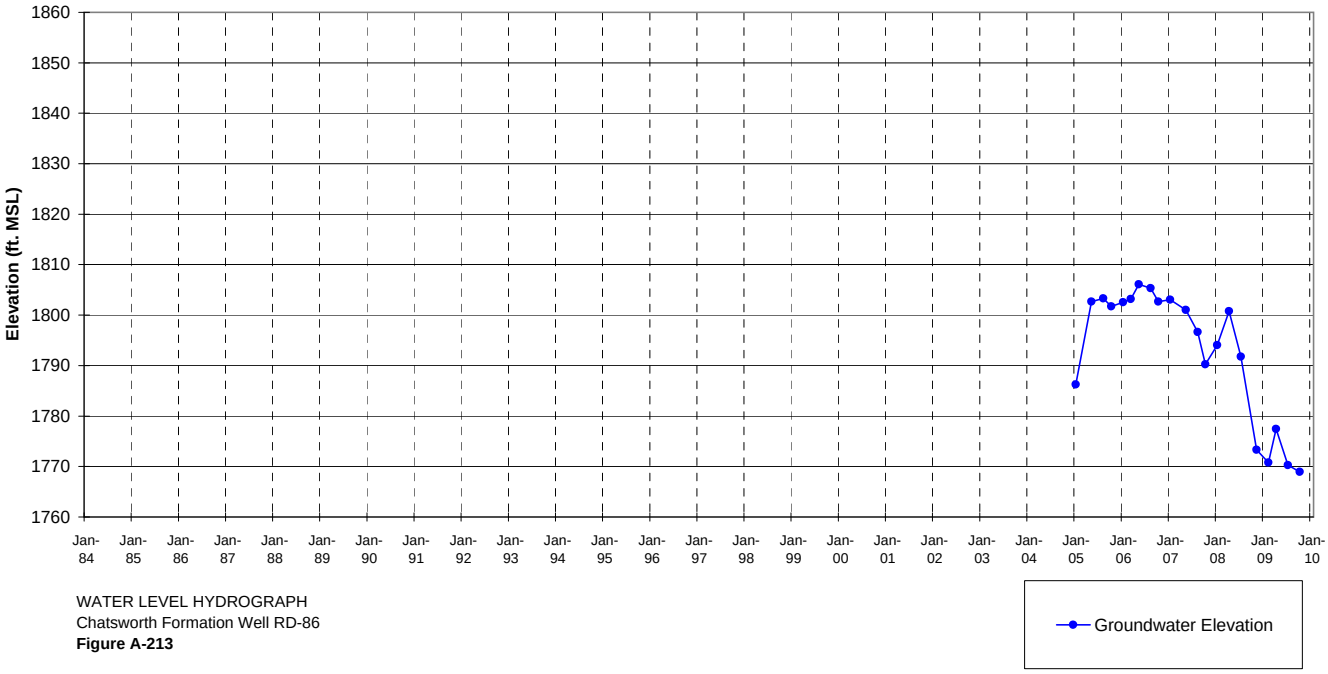
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-83
Figure A-210



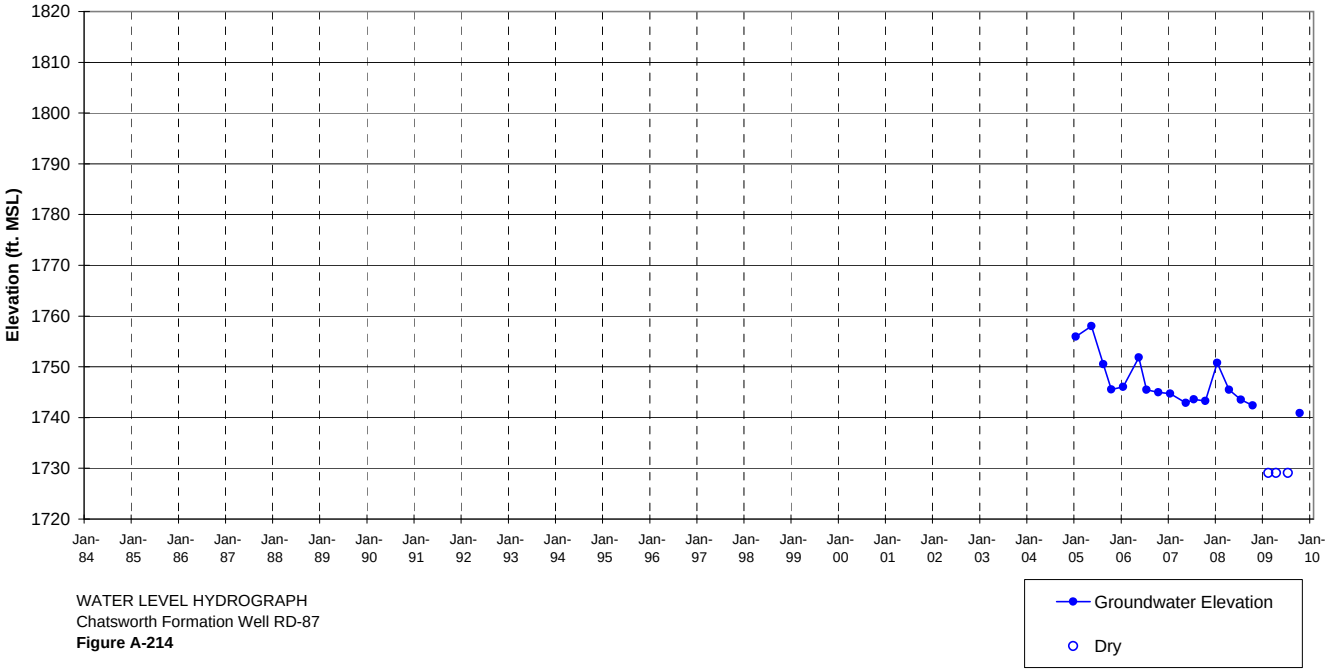
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-84
Figure A-211



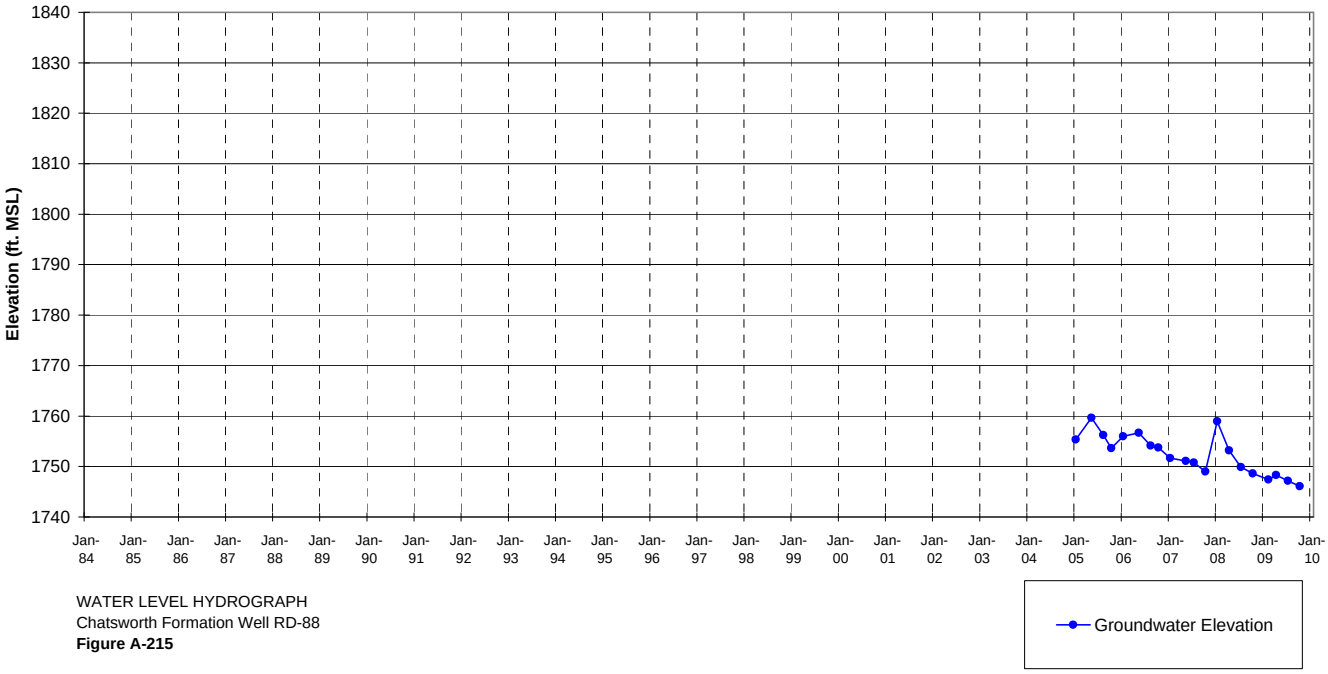
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-85
Figure A-212



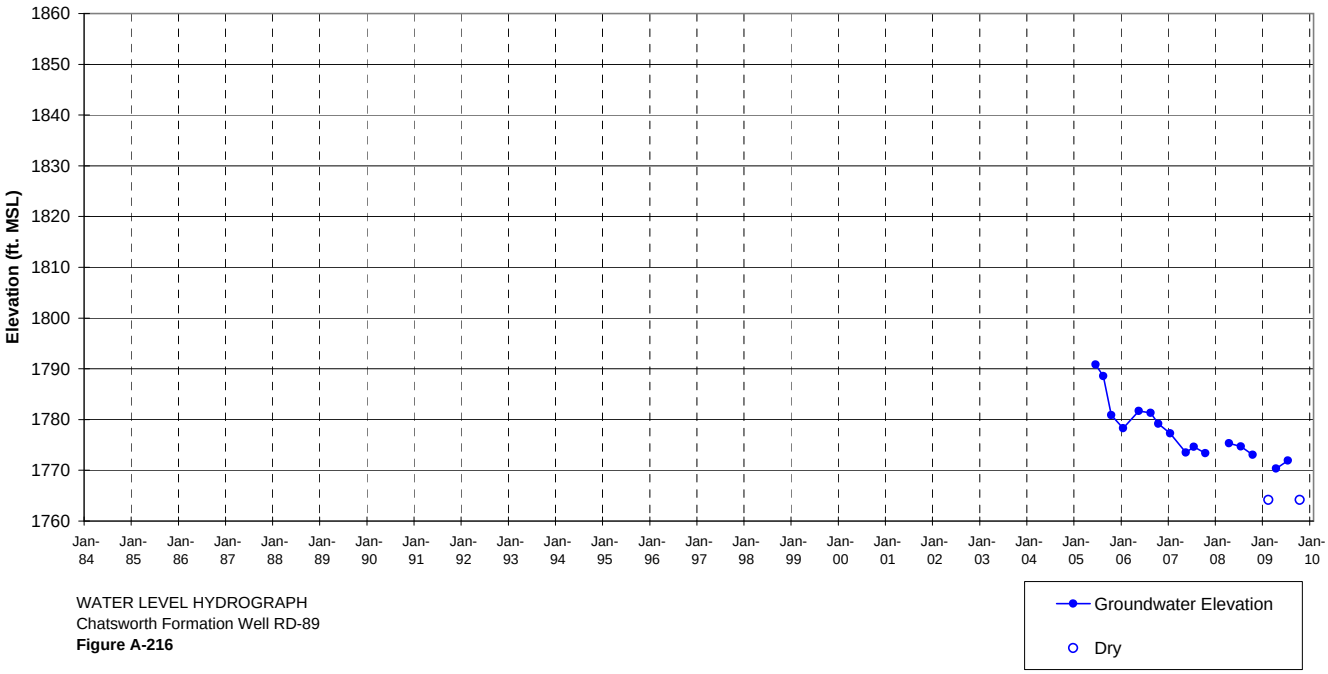
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-86
Figure A-213



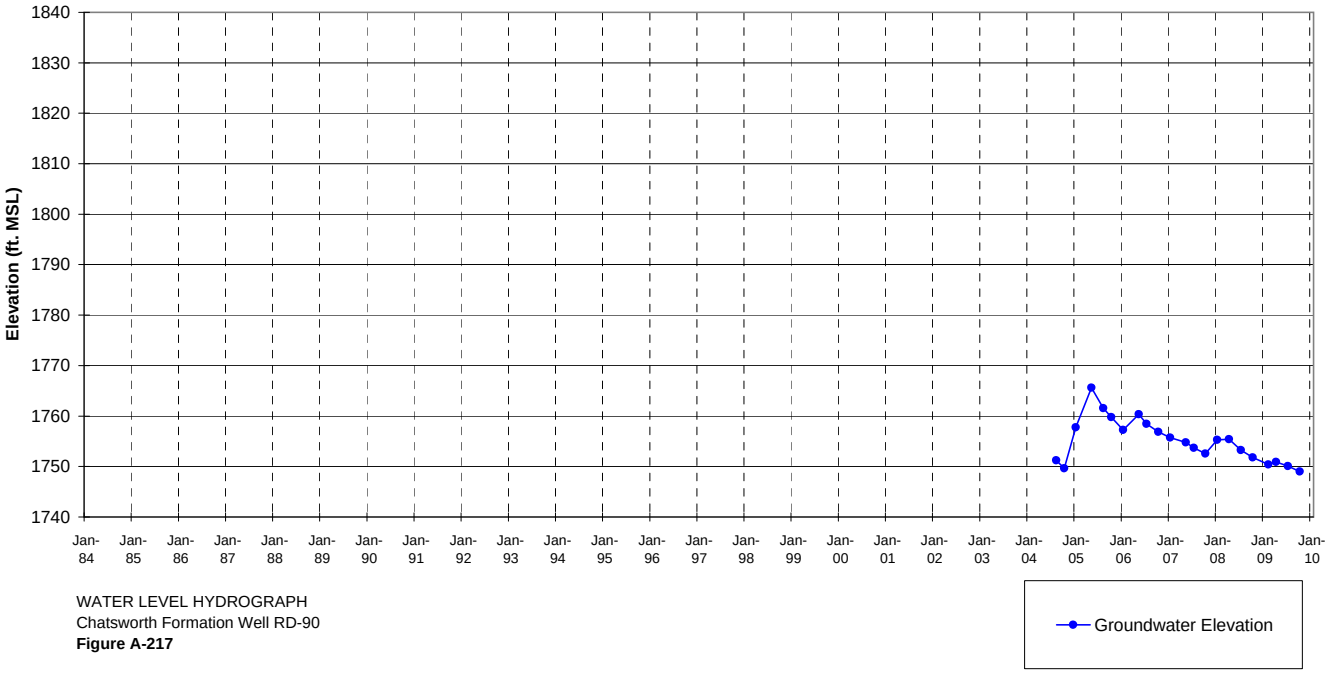
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-87
Figure A-214



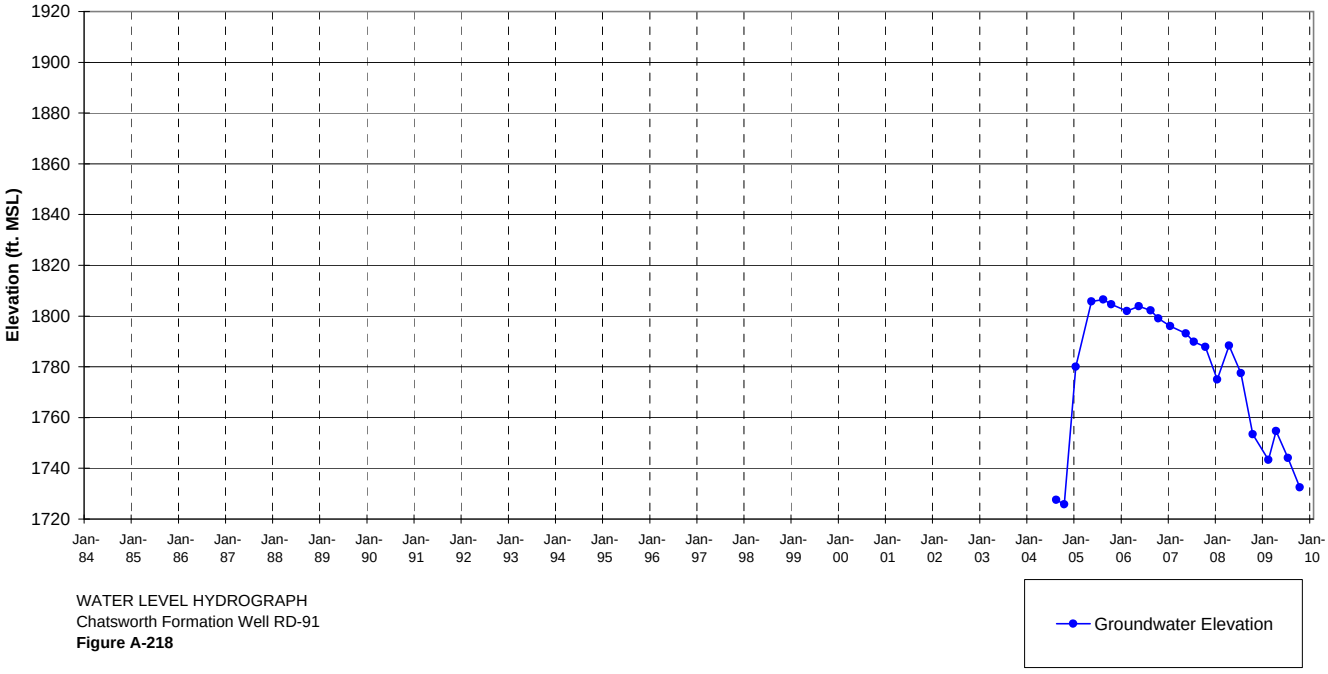
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-88
Figure A-215



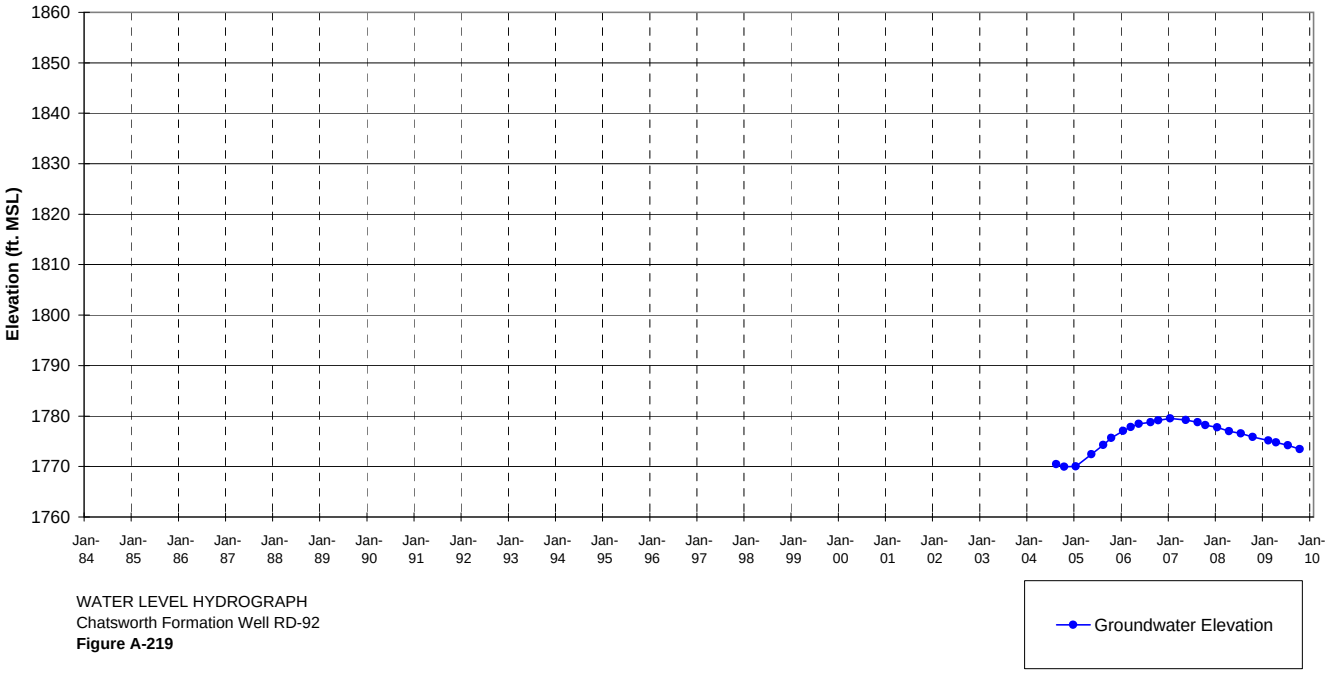
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-89
Figure A-216



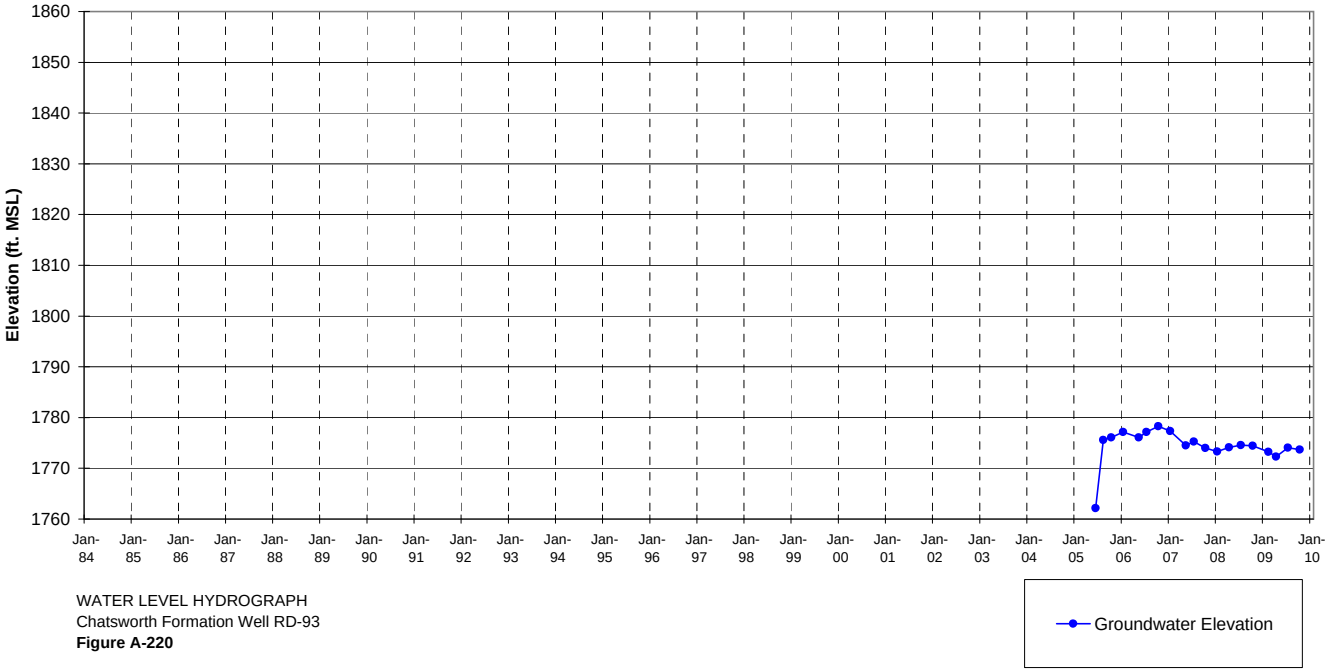
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-90
Figure A-217



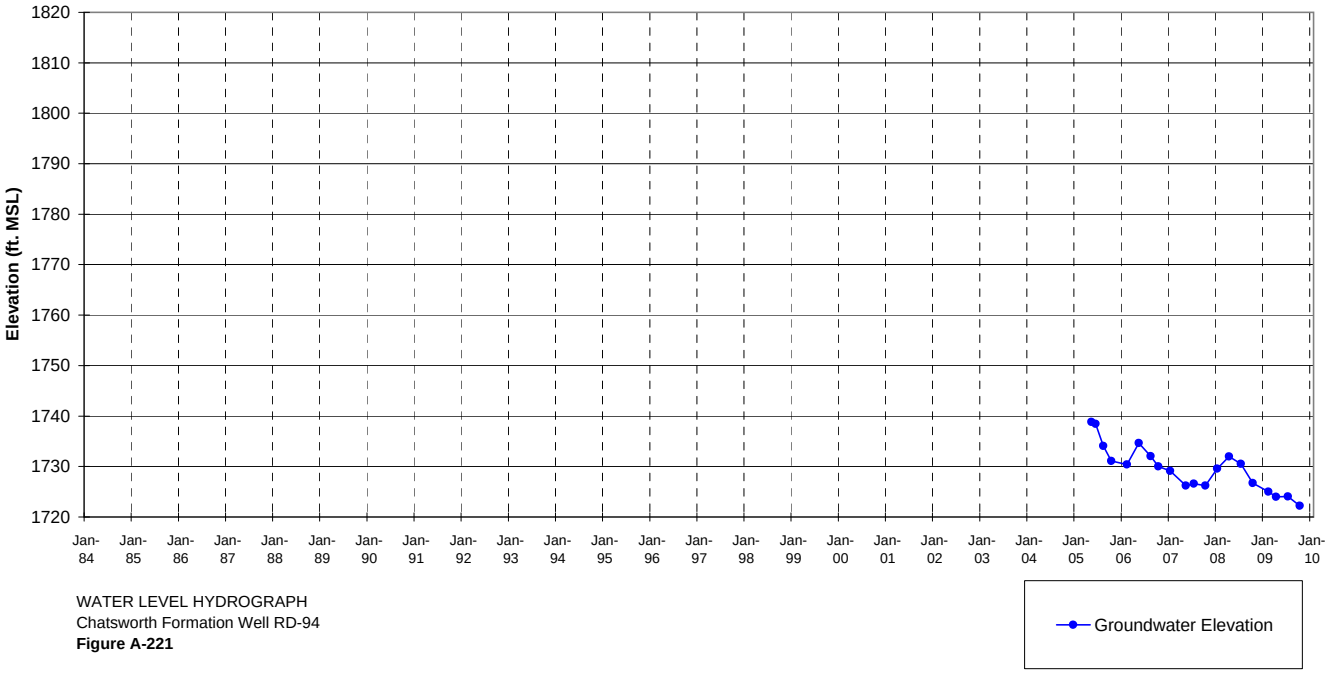
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-91
Figure A-218



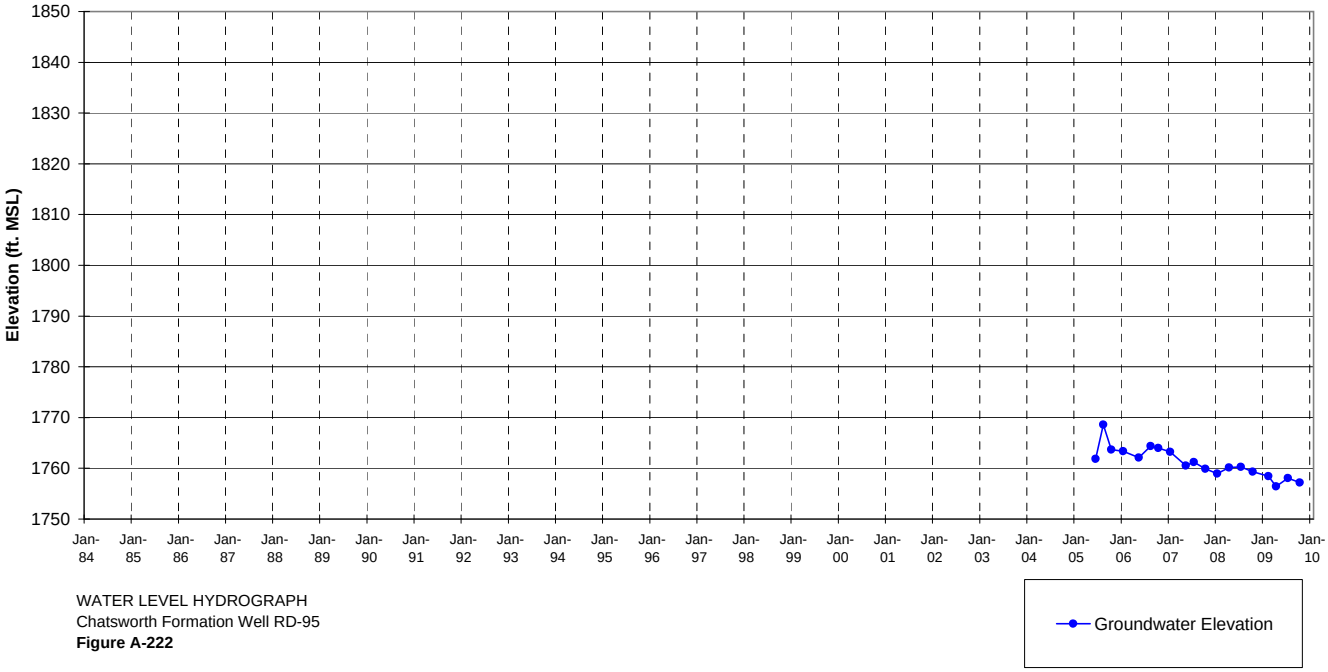
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-92
Figure A-219



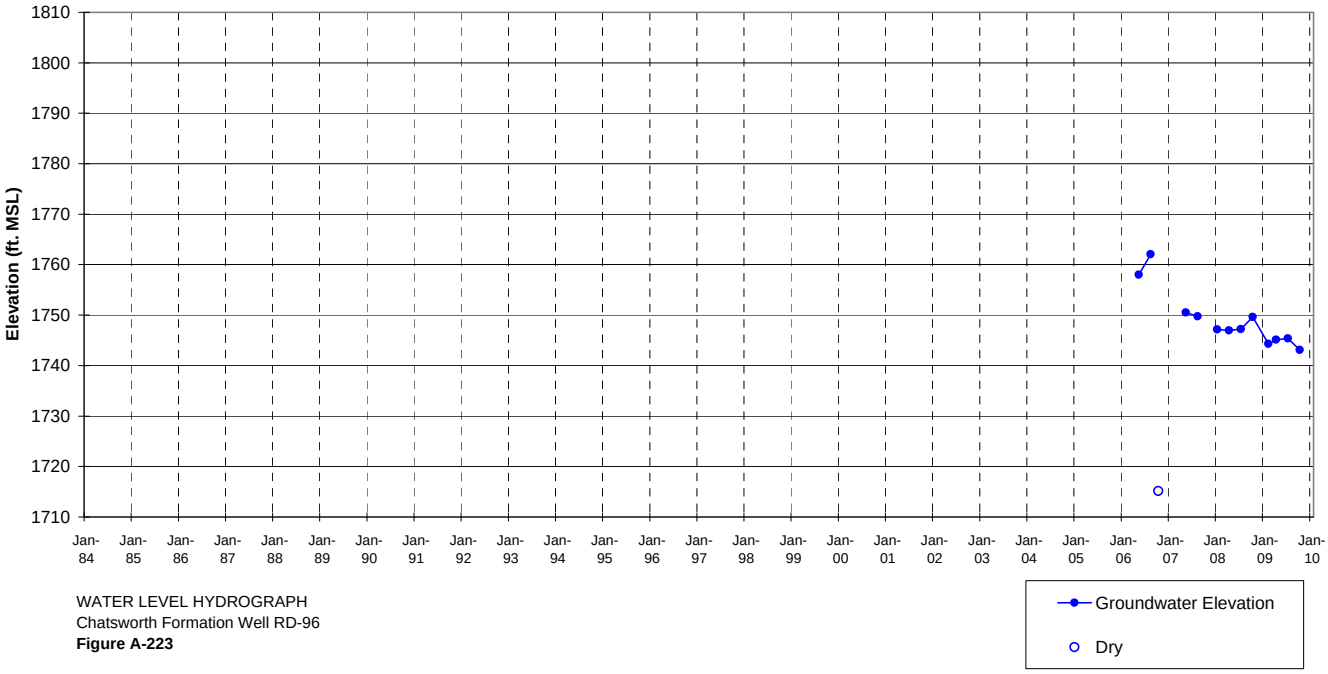
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-93
Figure A-220



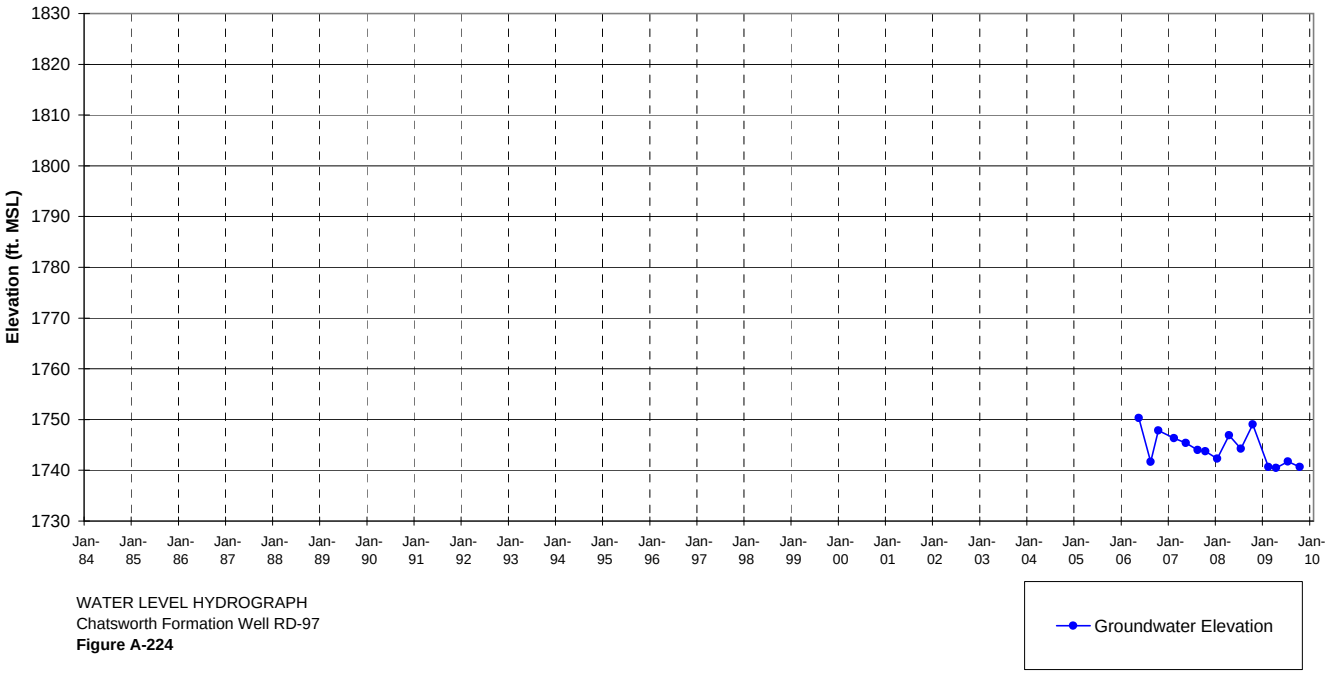
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-94
Figure A-221



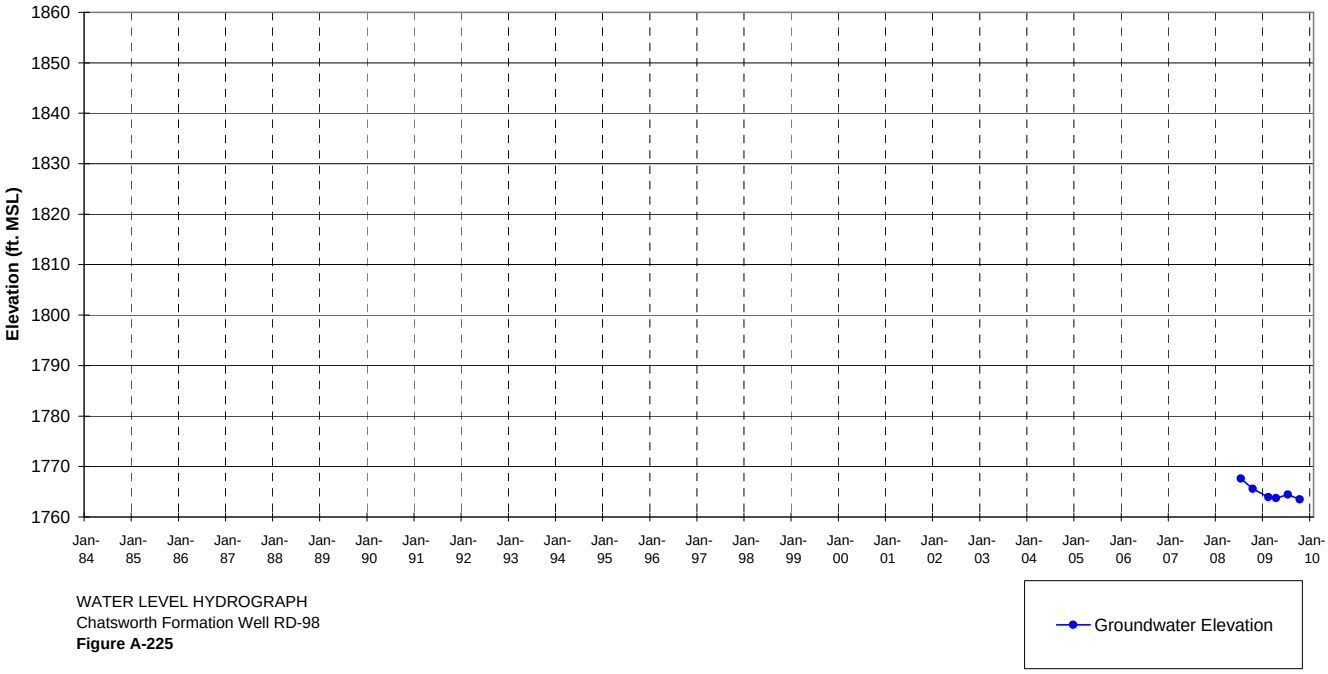
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-95
Figure A-222



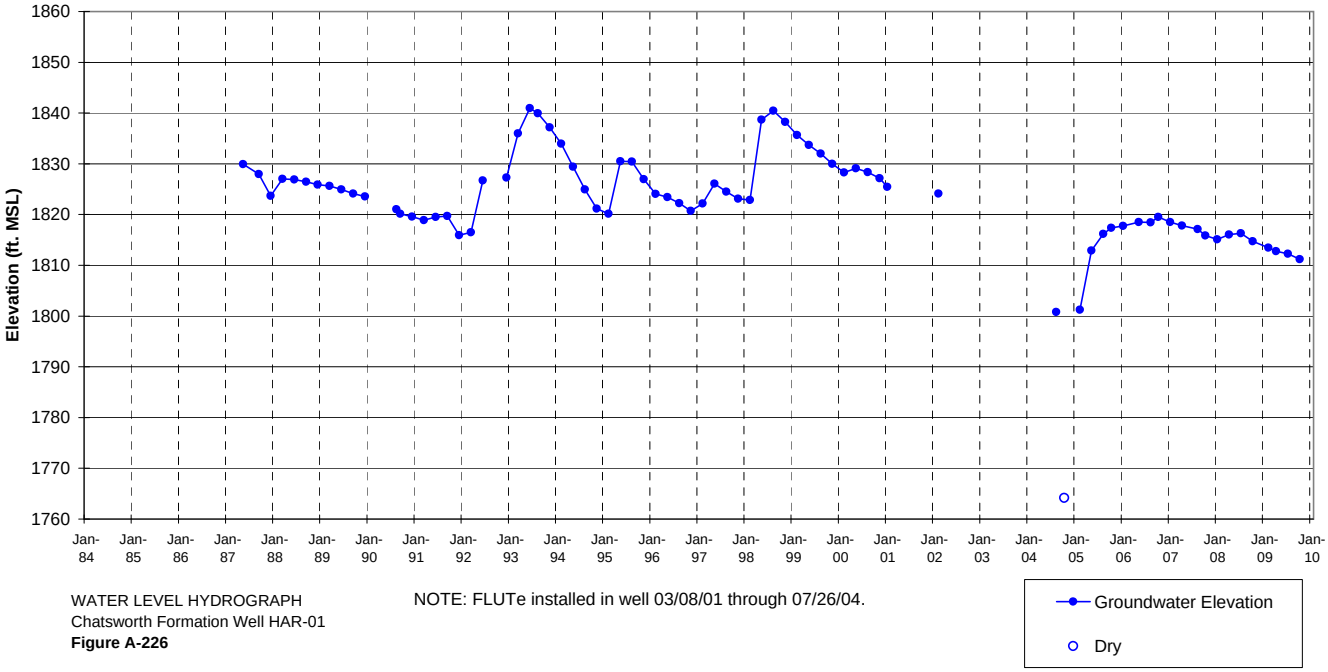
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-96
Figure A-223



WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-97
Figure A-224

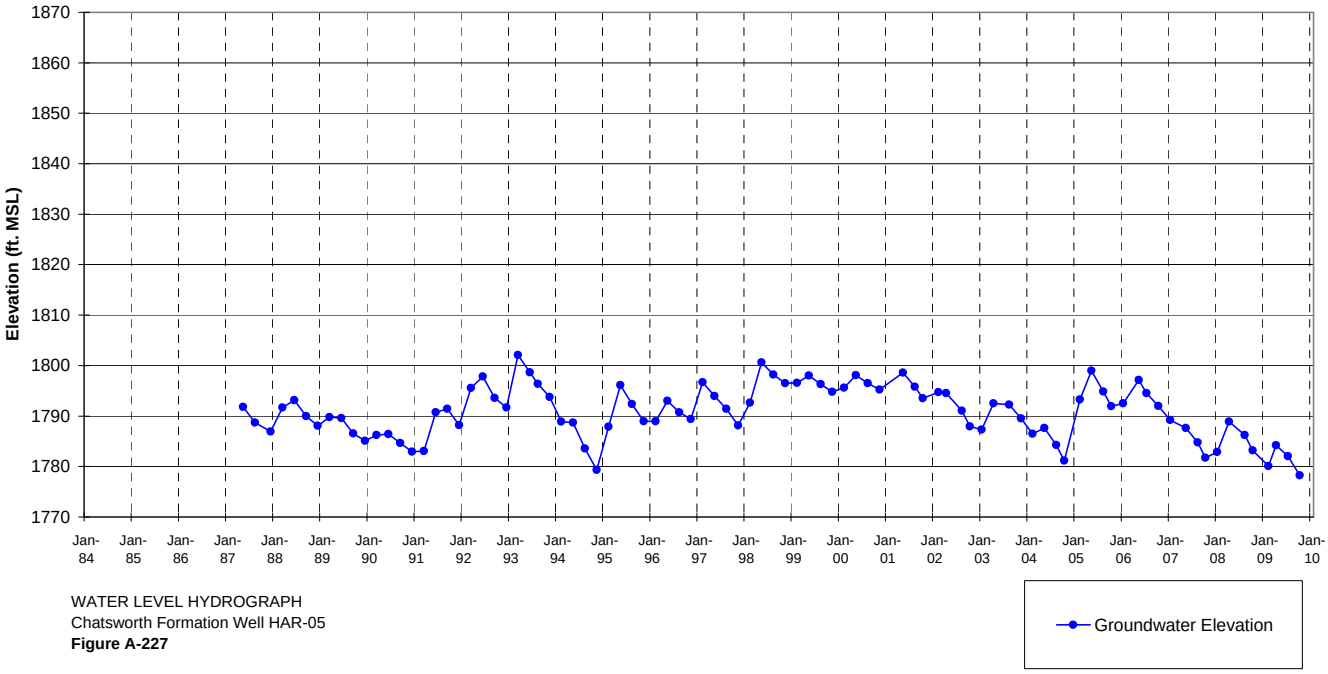


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-98
Figure A-225

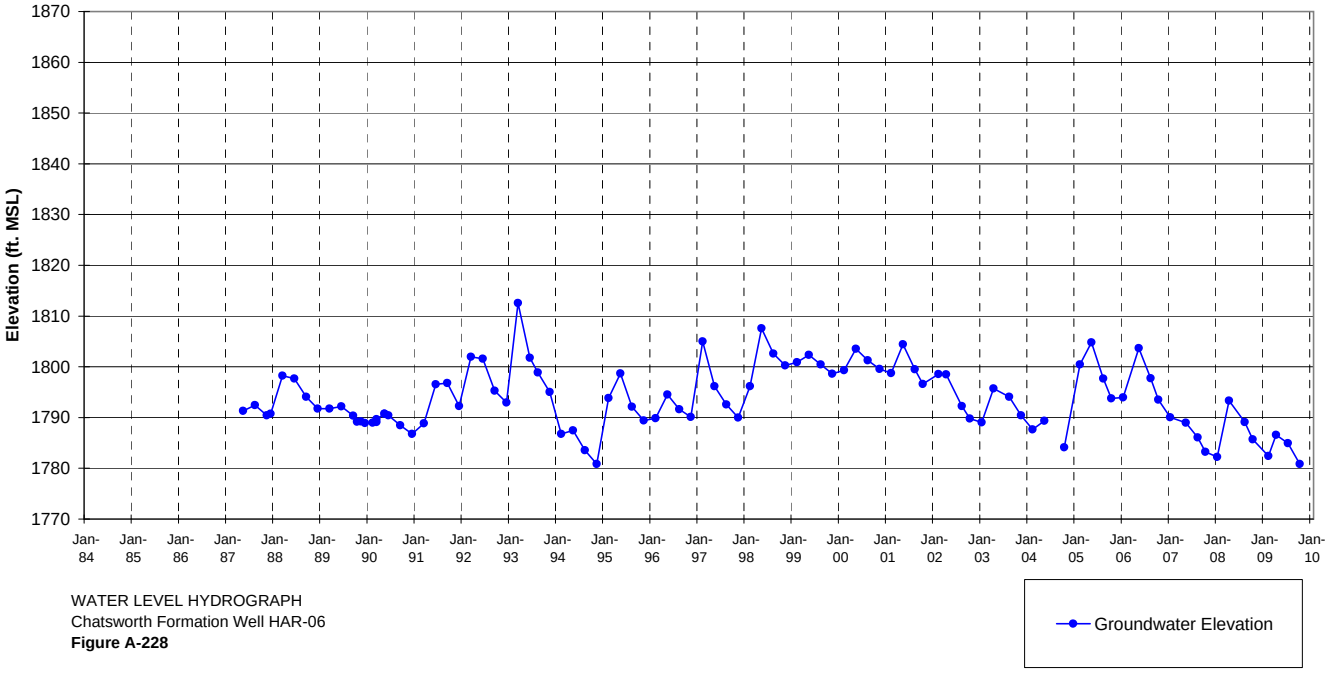


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-01
Figure A-226

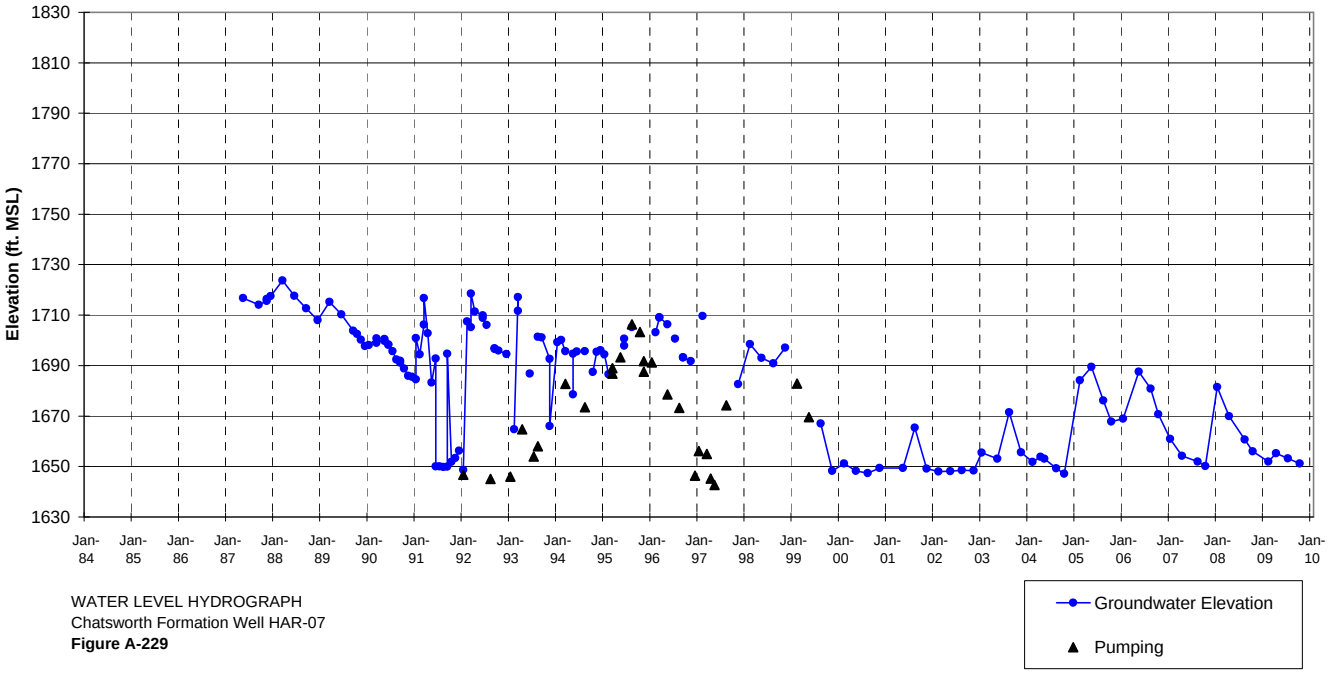
NOTE: FLUTe installed in well 03/08/01 through 07/26/04.



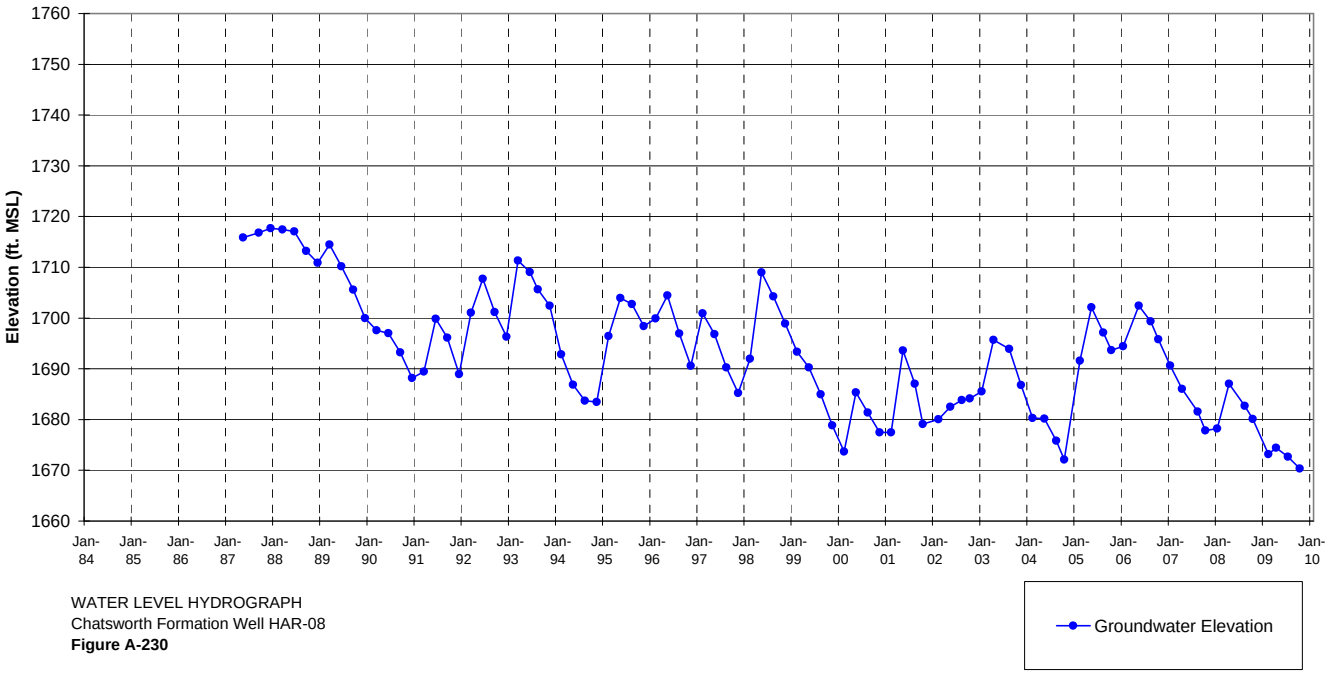
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-05
Figure A-227



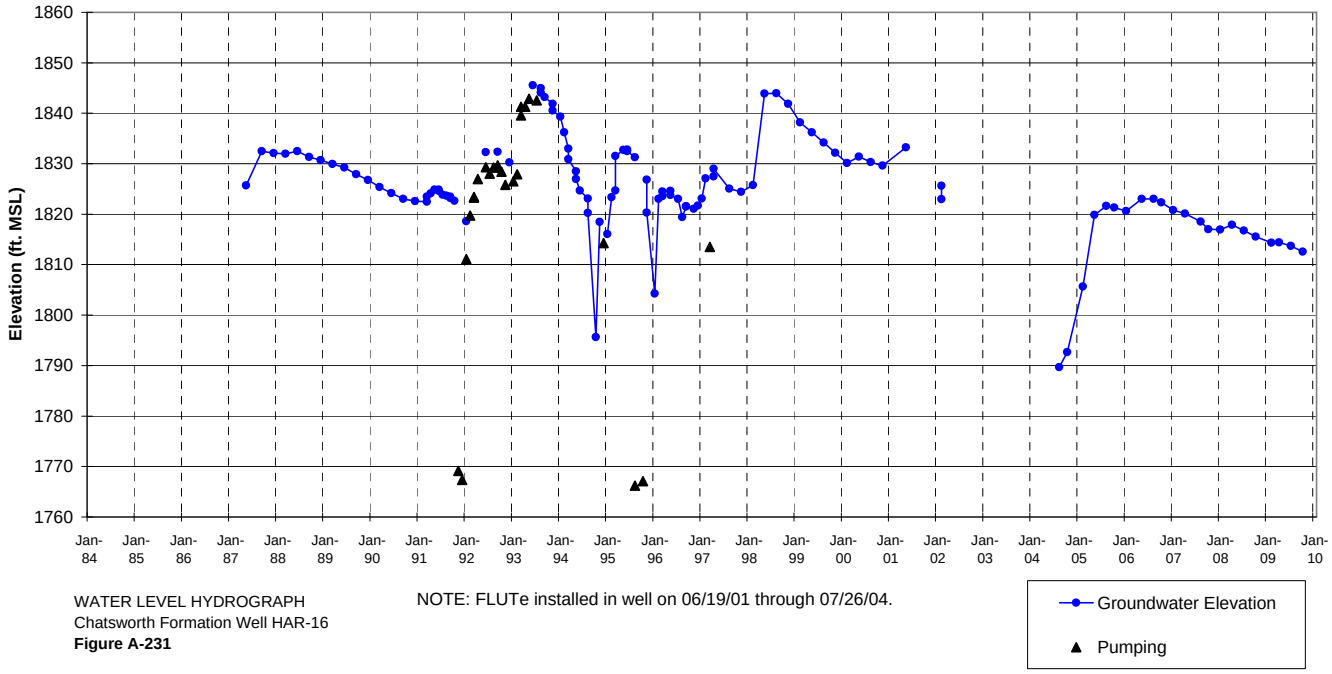
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-06
Figure A-228



WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-07
Figure A-229

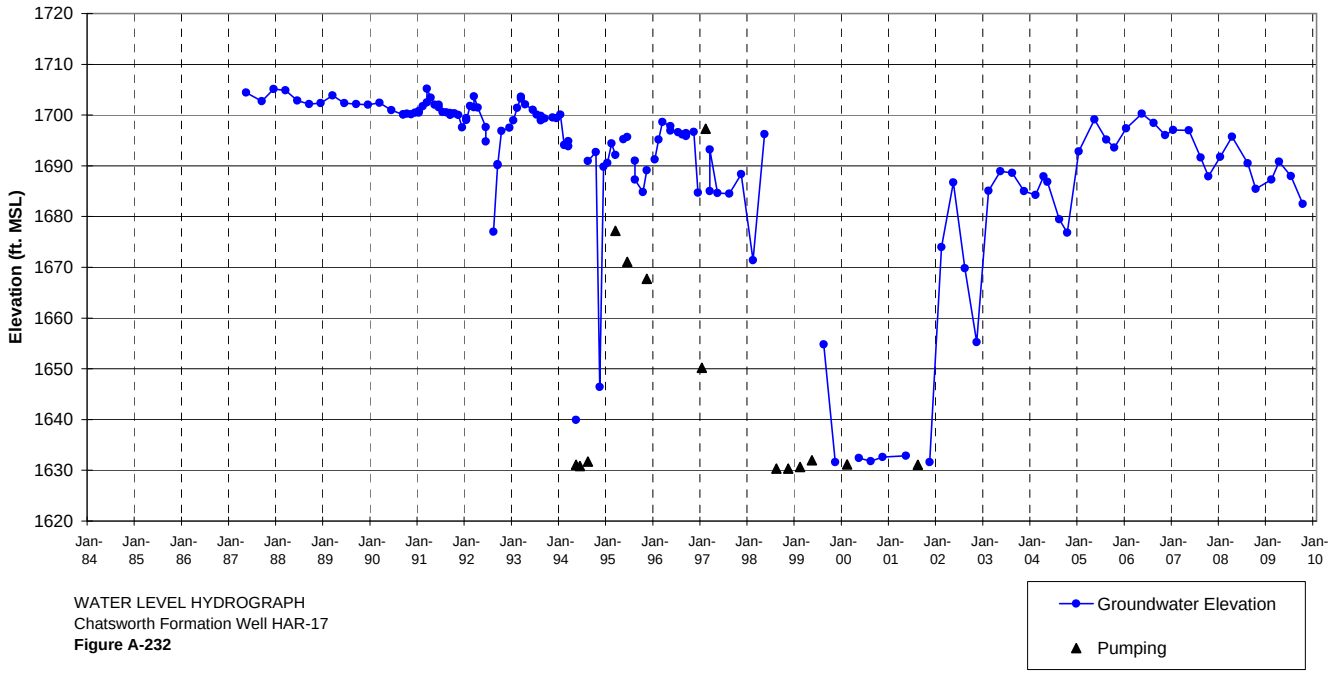


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-08
Figure A-230

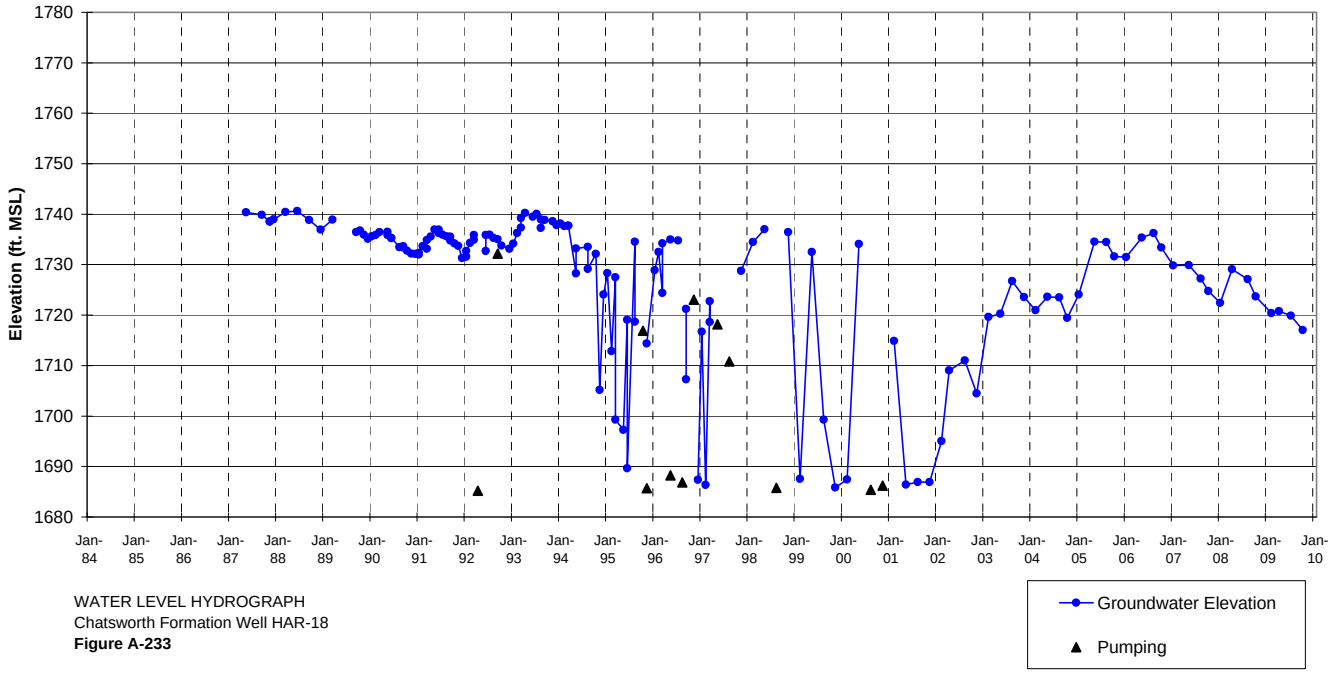


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-16
Figure A-231

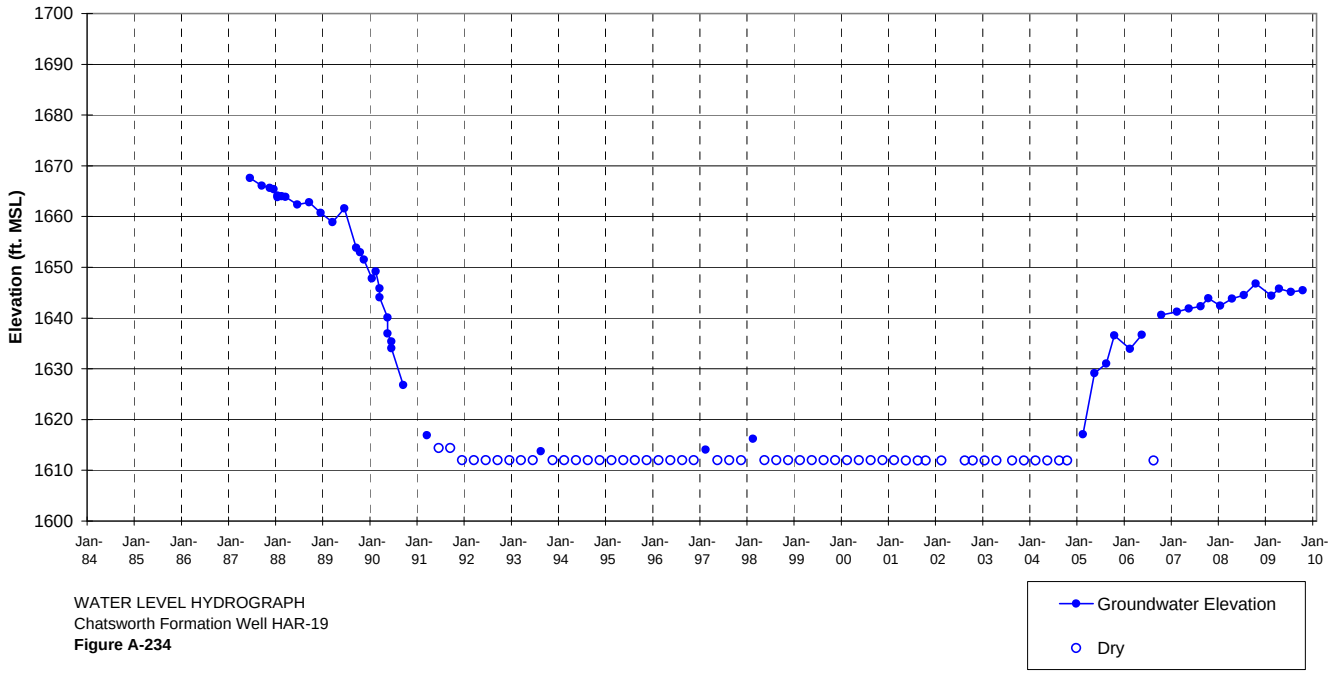
NOTE: FLUTe installed in well on 06/19/01 through 07/26/04.



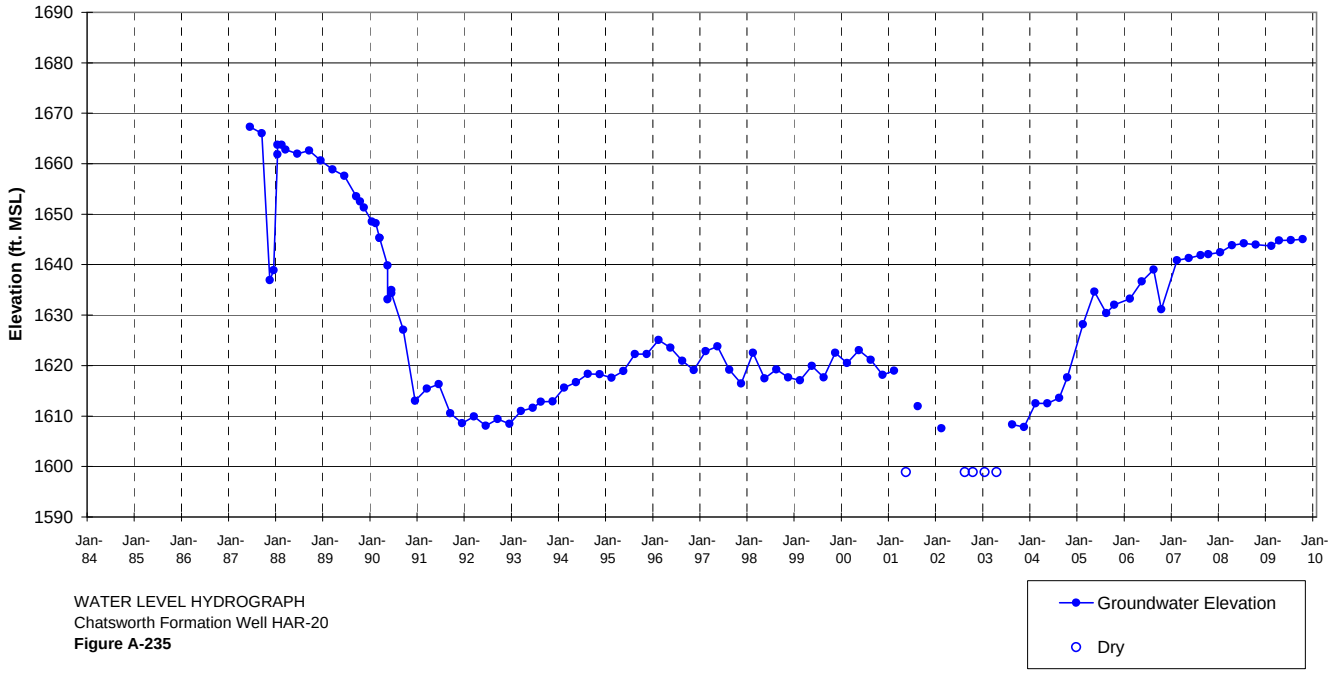
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-17
Figure A-232



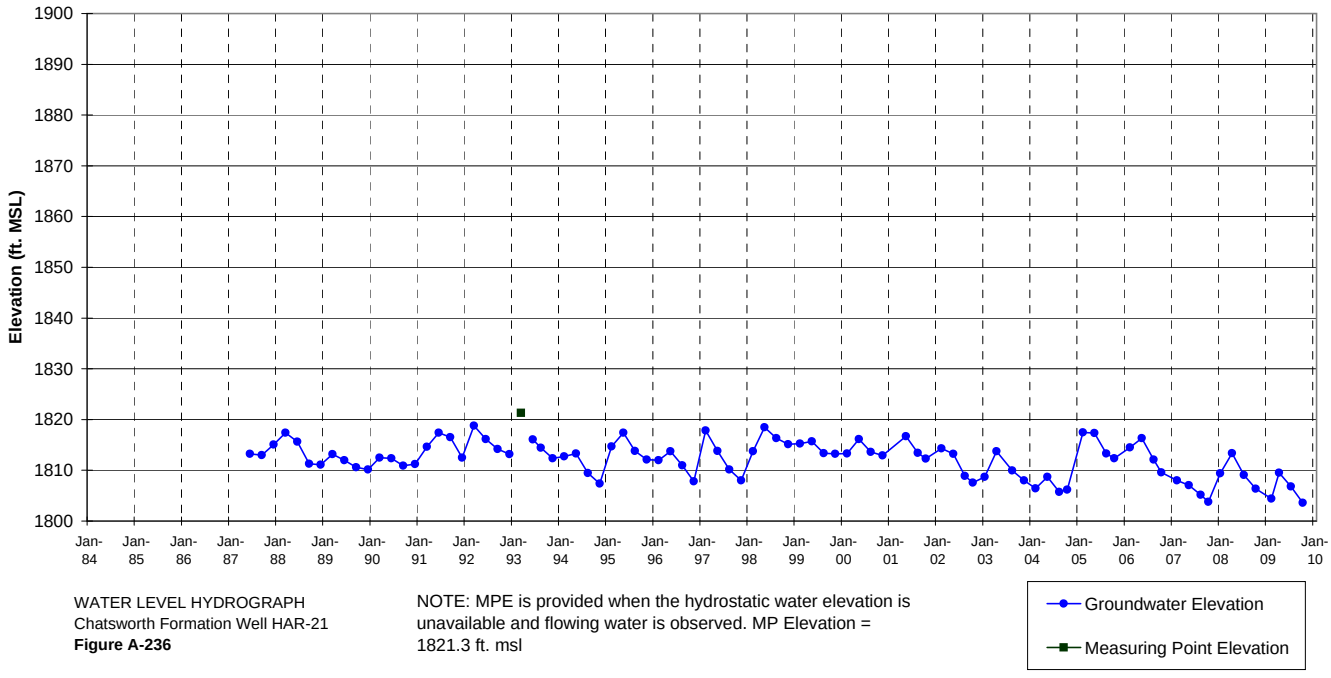
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-18
Figure A-233



WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-19
Figure A-234

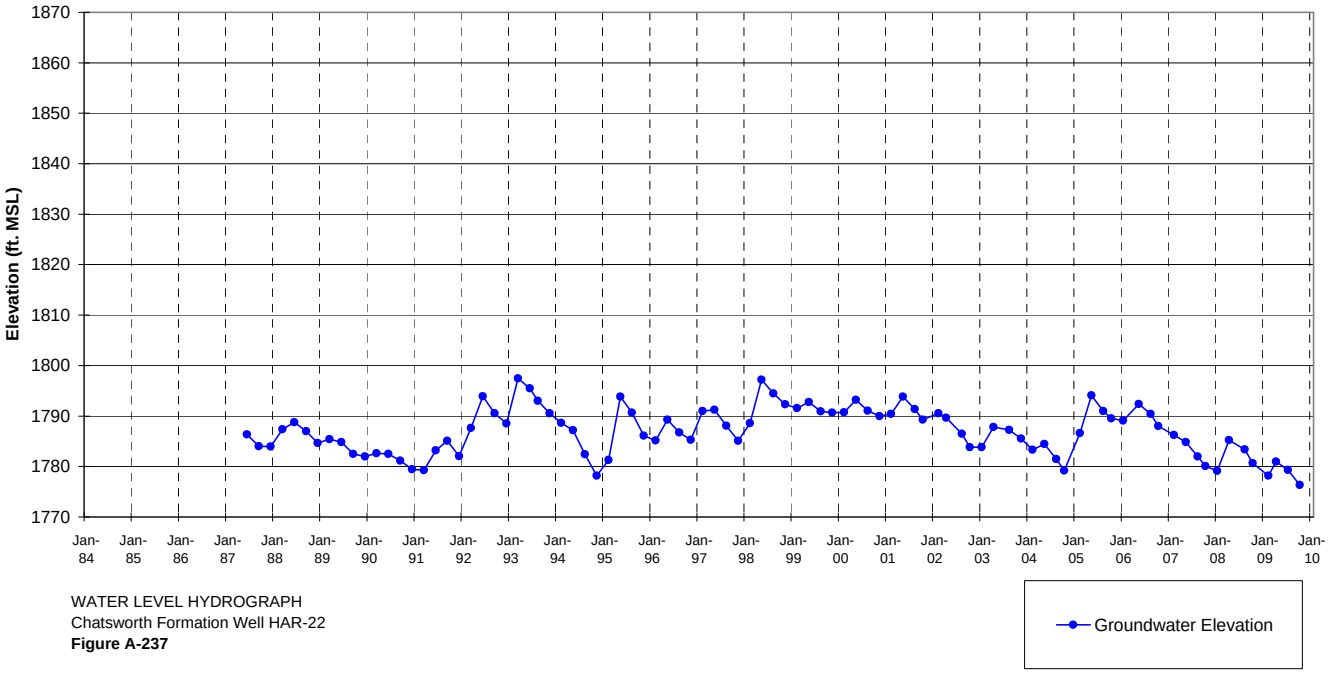


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-20
Figure A-235

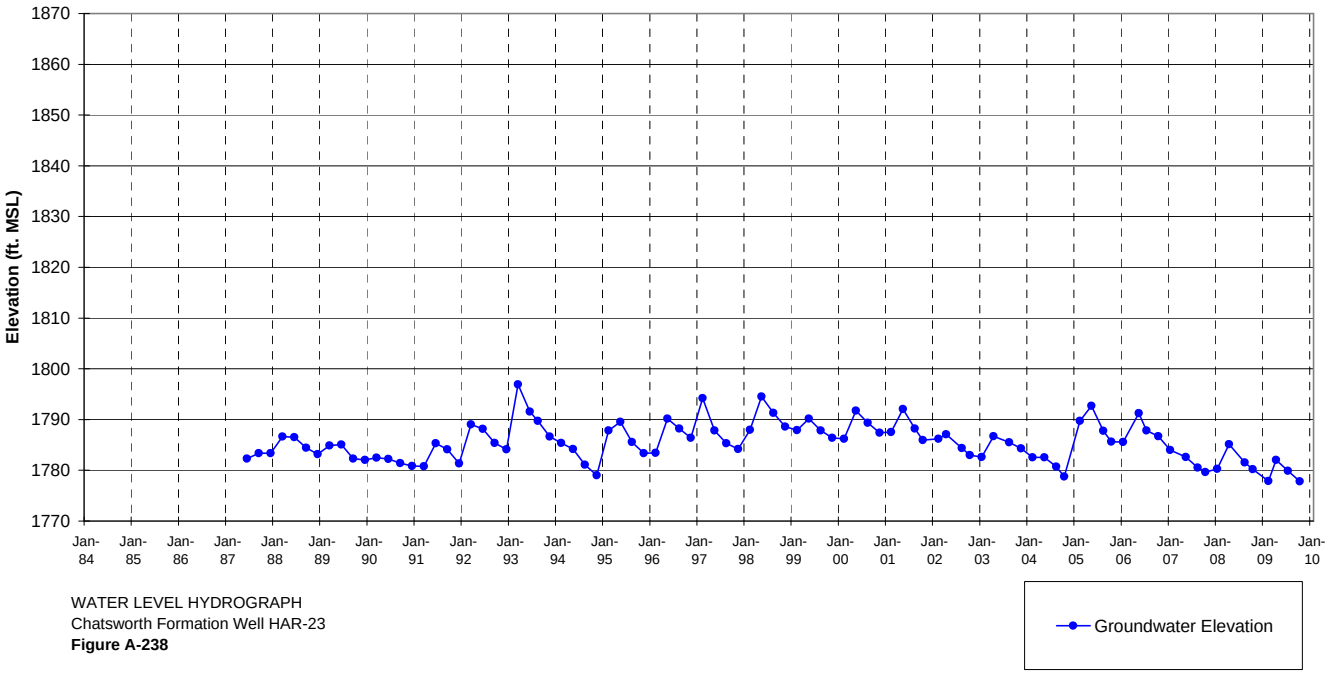


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-21
Figure A-236

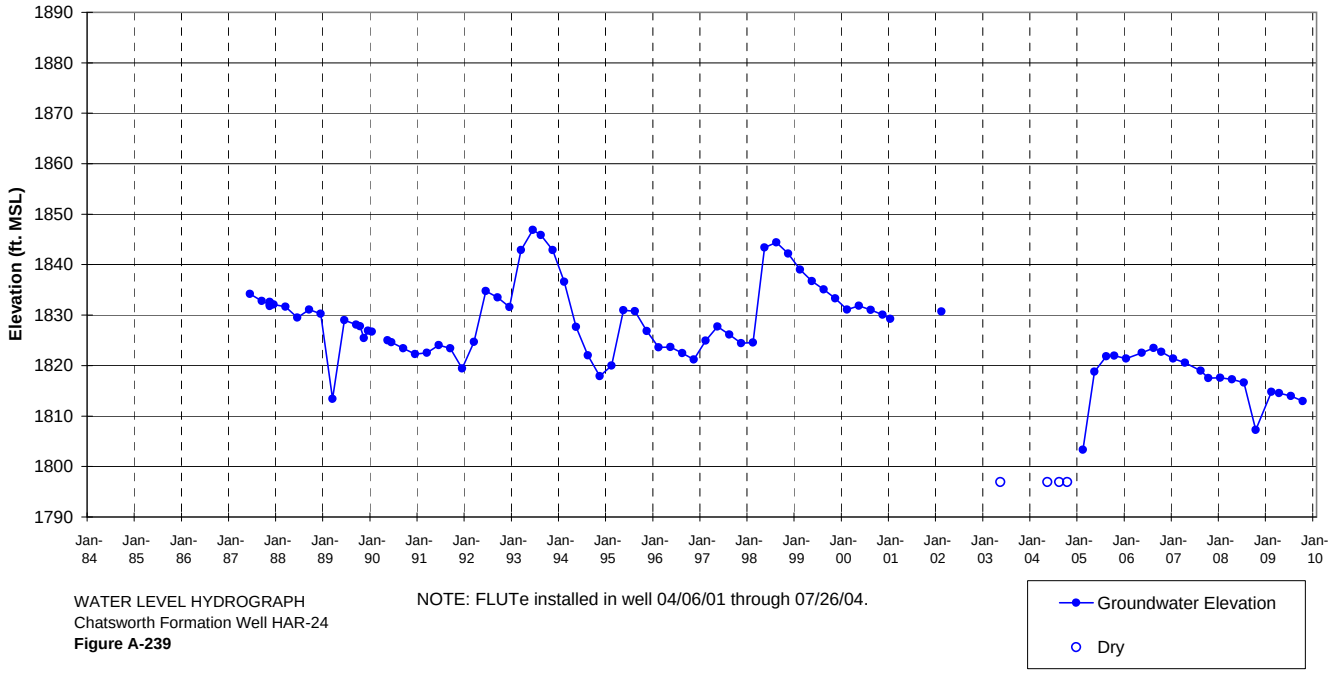
NOTE: MPE is provided when the hydrostatic water elevation is unavailable and flowing water is observed. MP Elevation = 1821.3 ft. msl



WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-22
Figure A-237

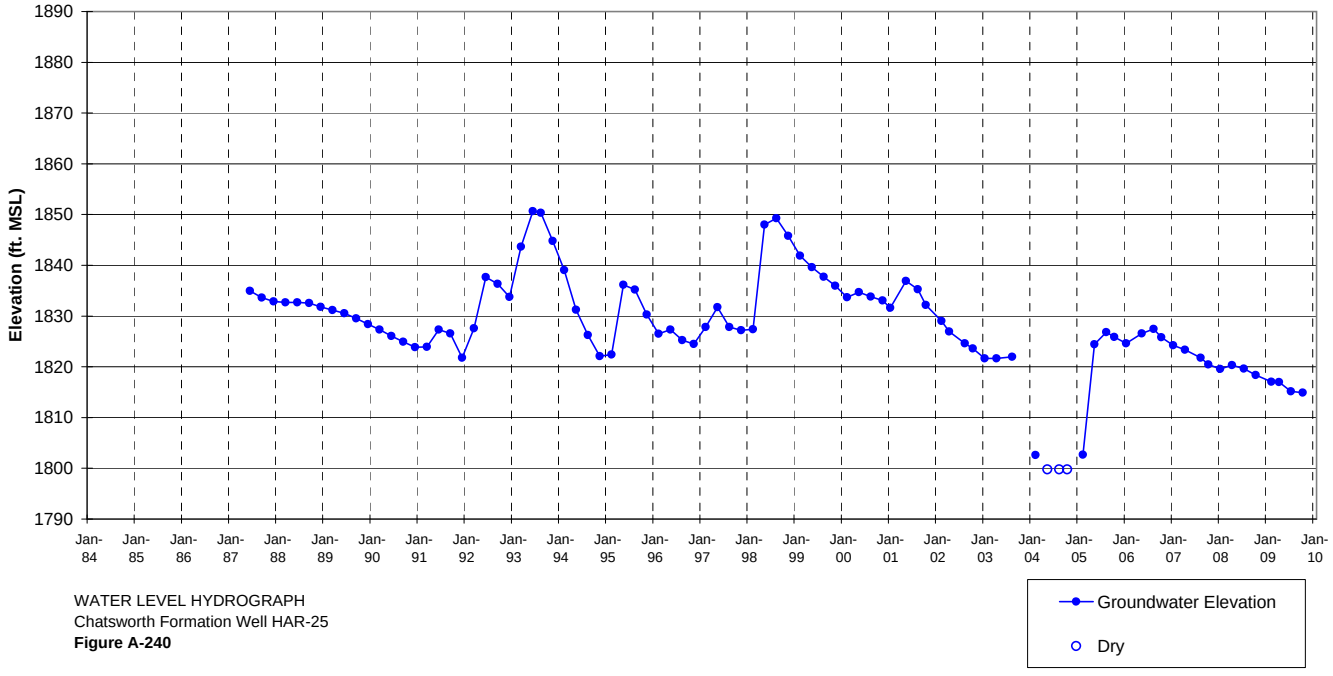


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-23
Figure A-238

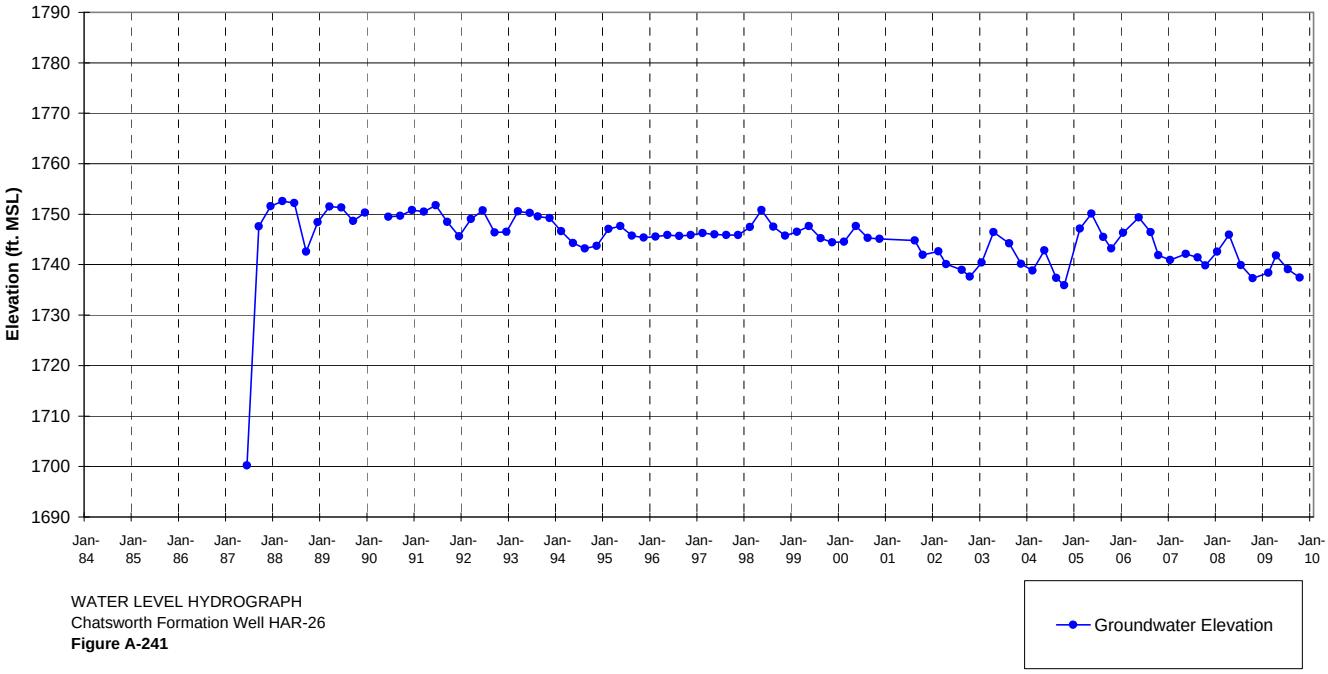


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-24
Figure A-239

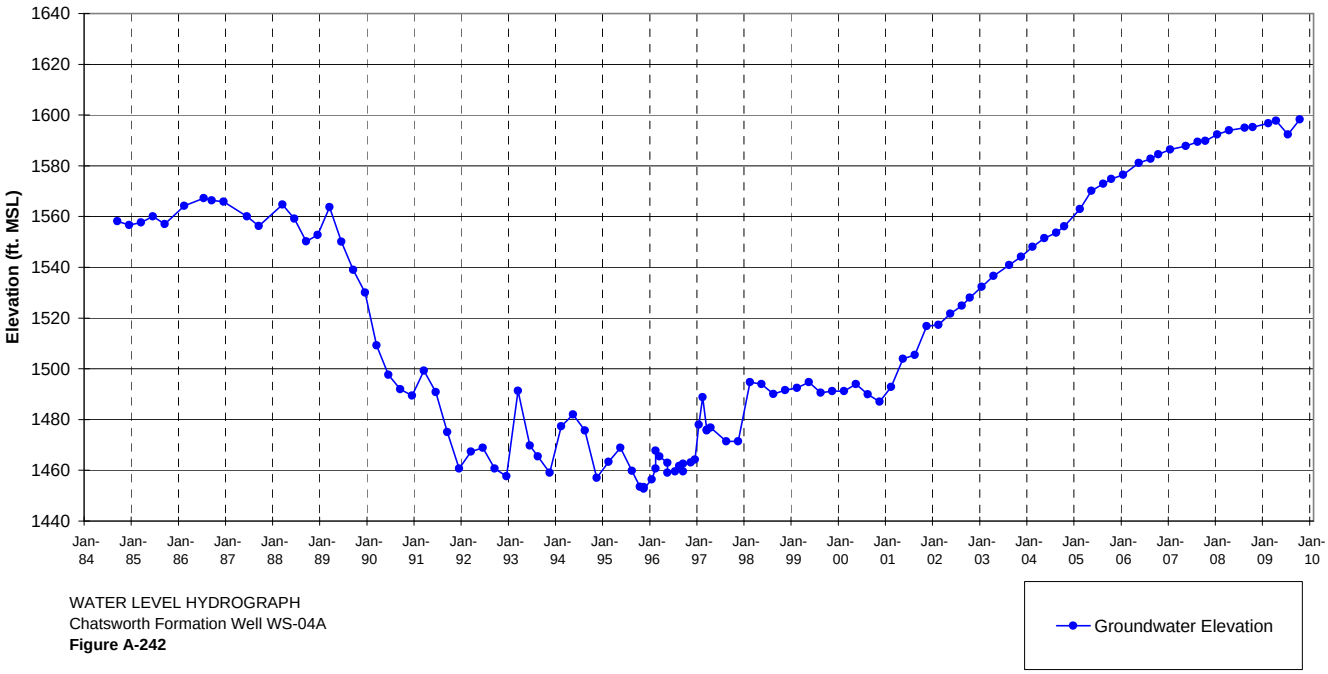
NOTE: FLUTe installed in well 04/06/01 through 07/26/04.



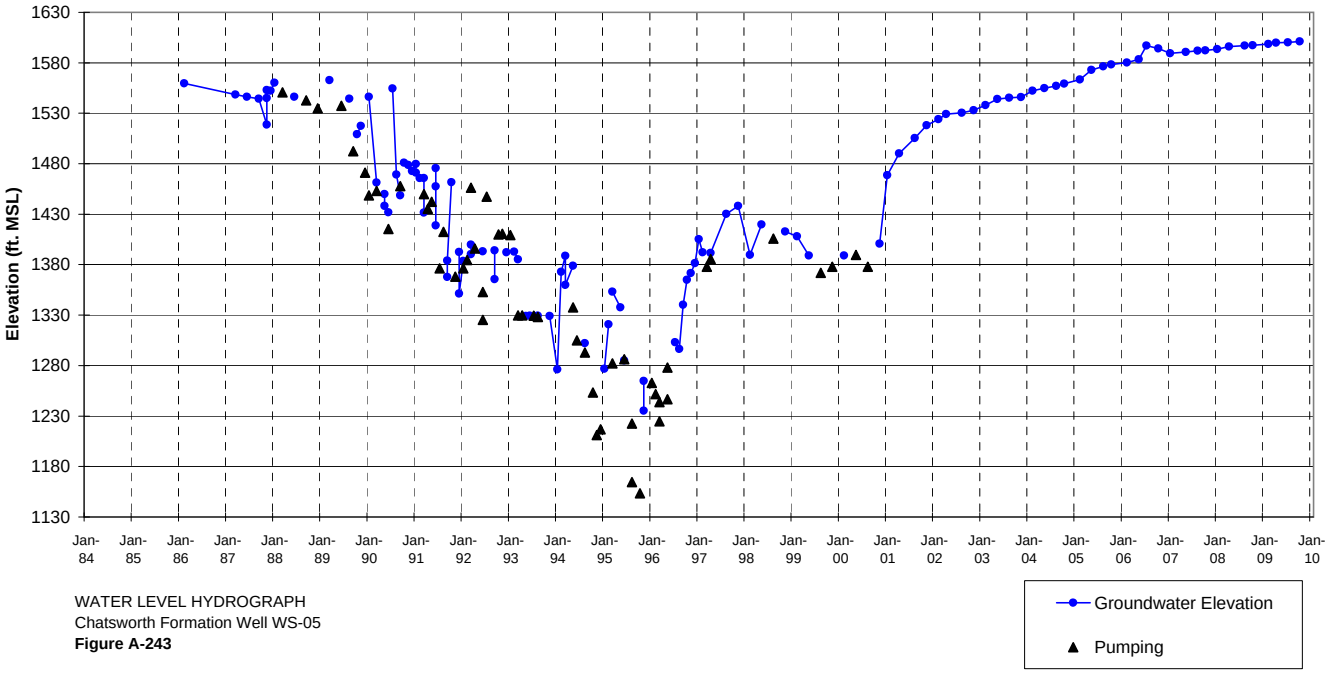
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-25
Figure A-240



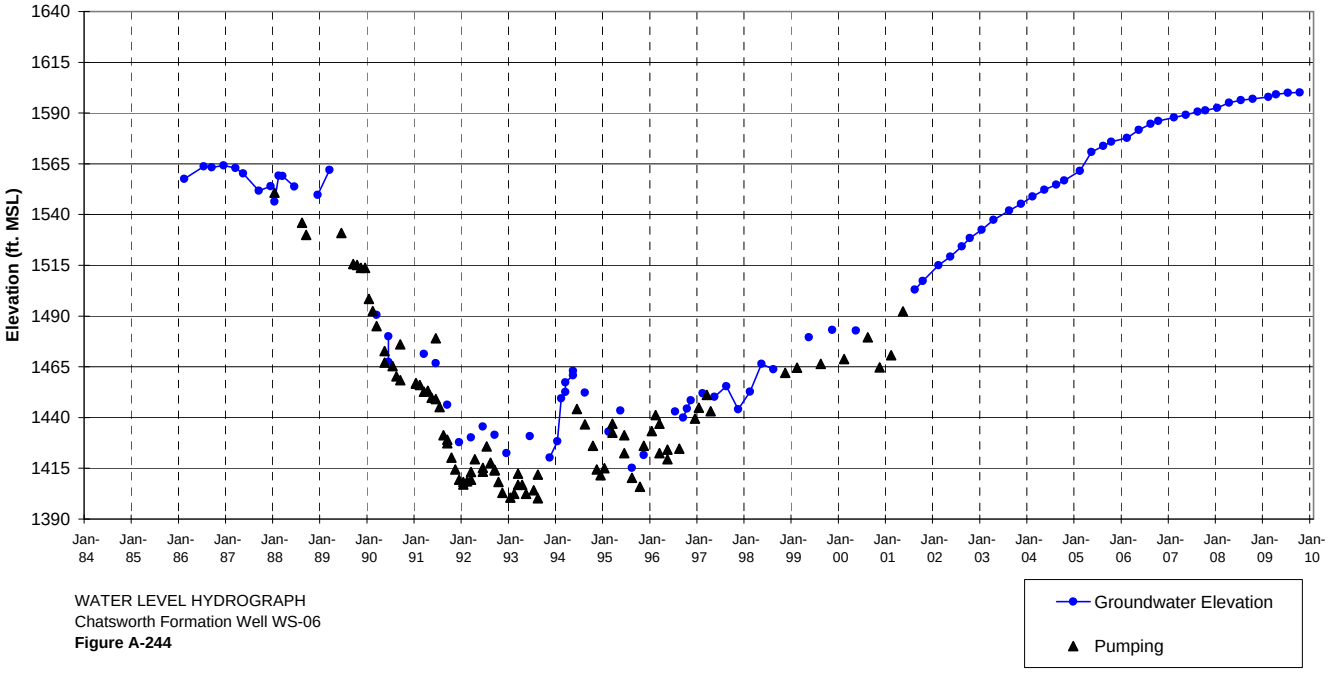
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-26
Figure A-241



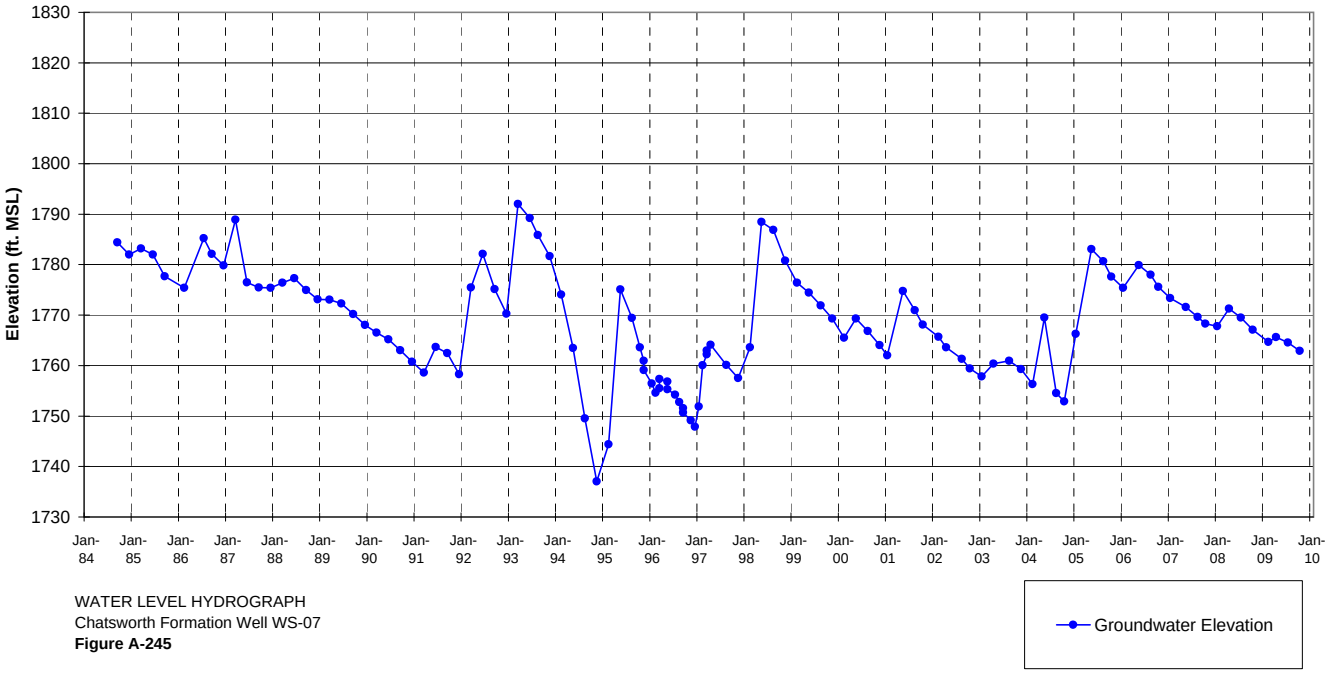
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well WS-04A
Figure A-242



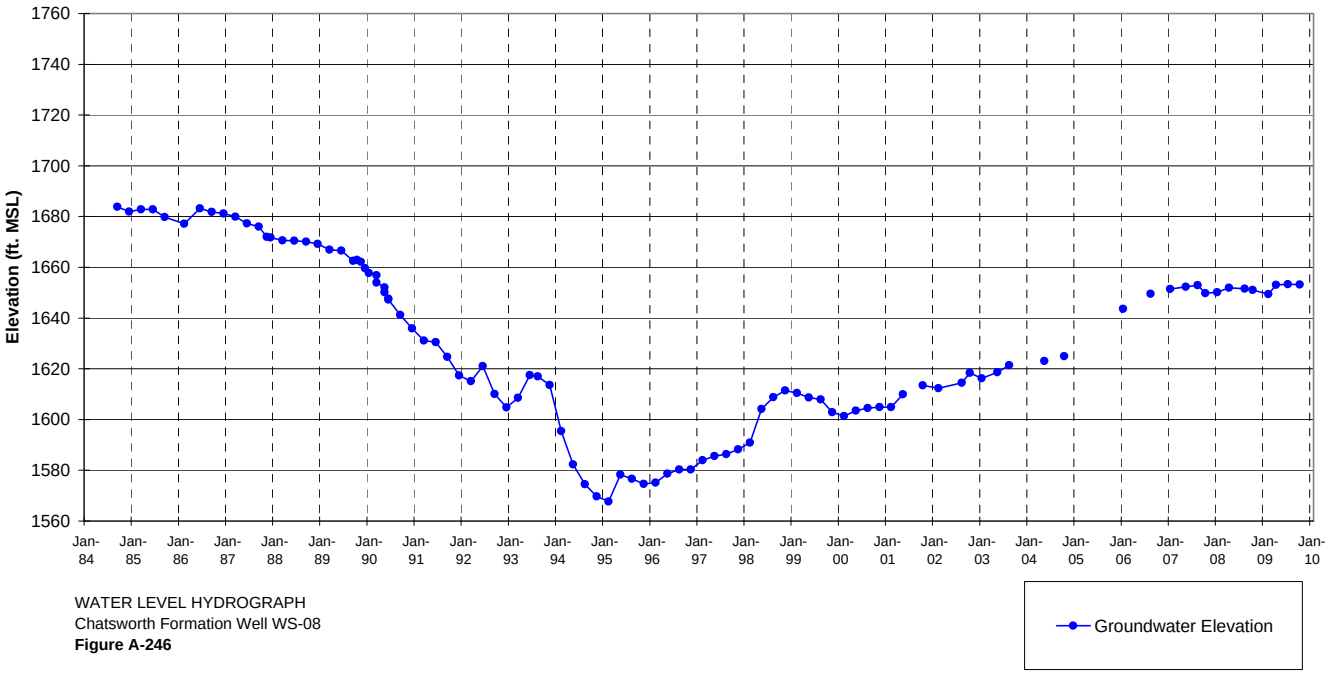
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well WS-05
Figure A-243



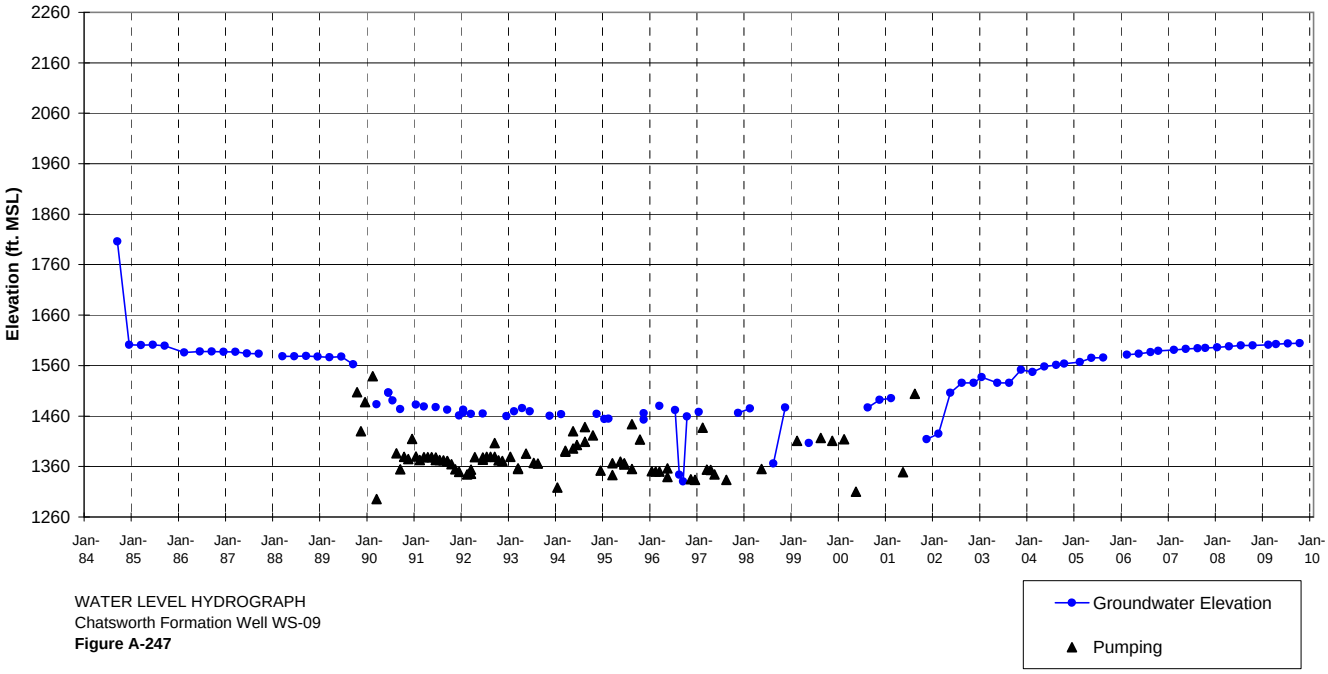
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well WS-06
Figure A-244



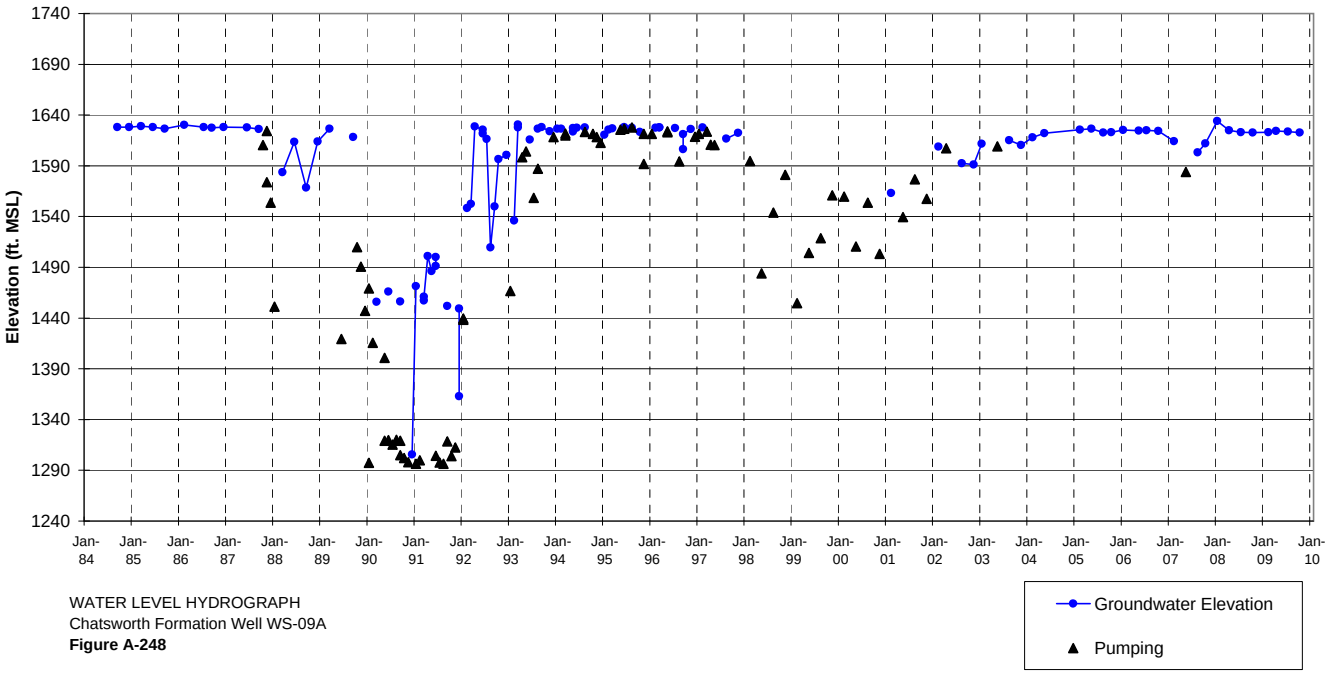
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well WS-07
Figure A-245



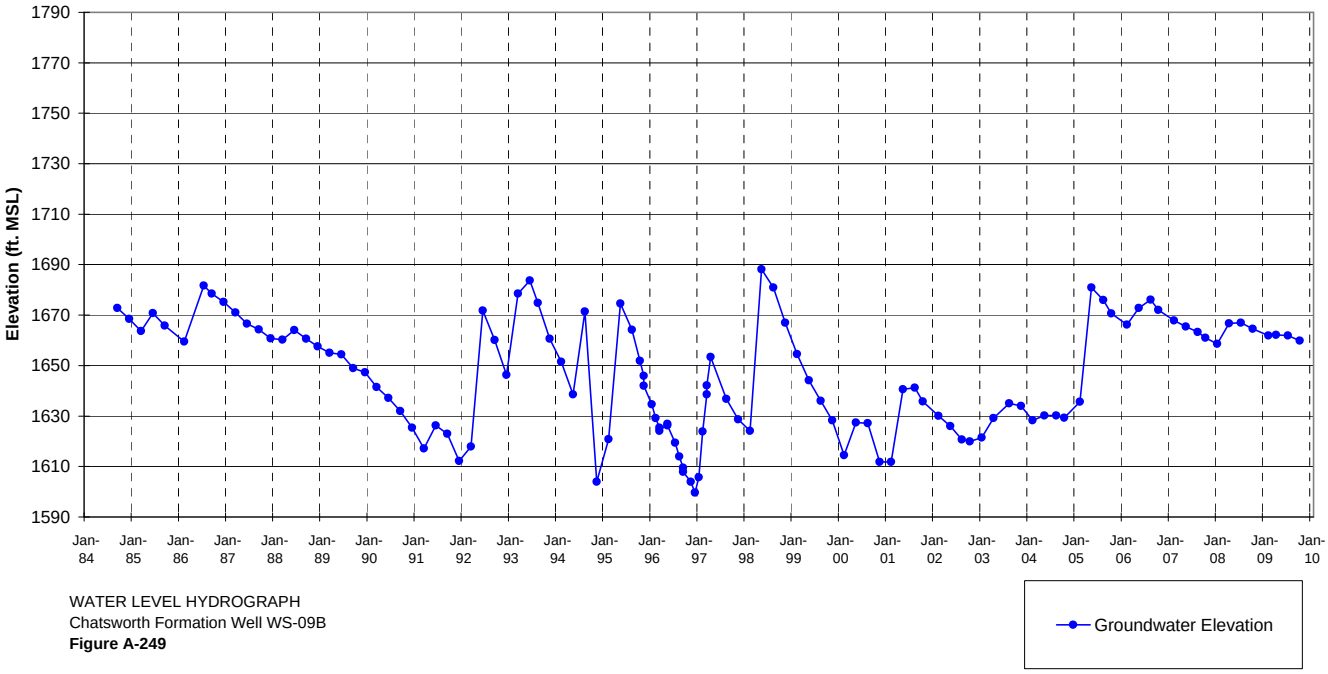
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well WS-08
Figure A-246



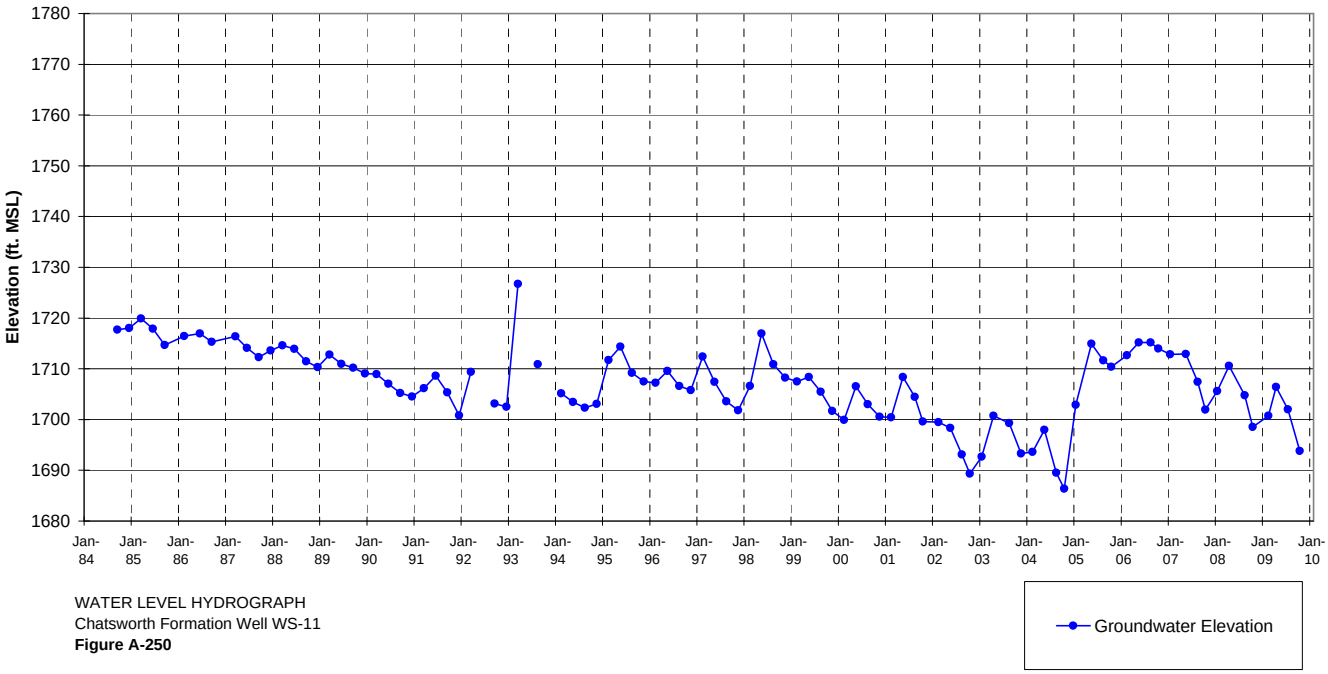
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well WS-09
Figure A-247



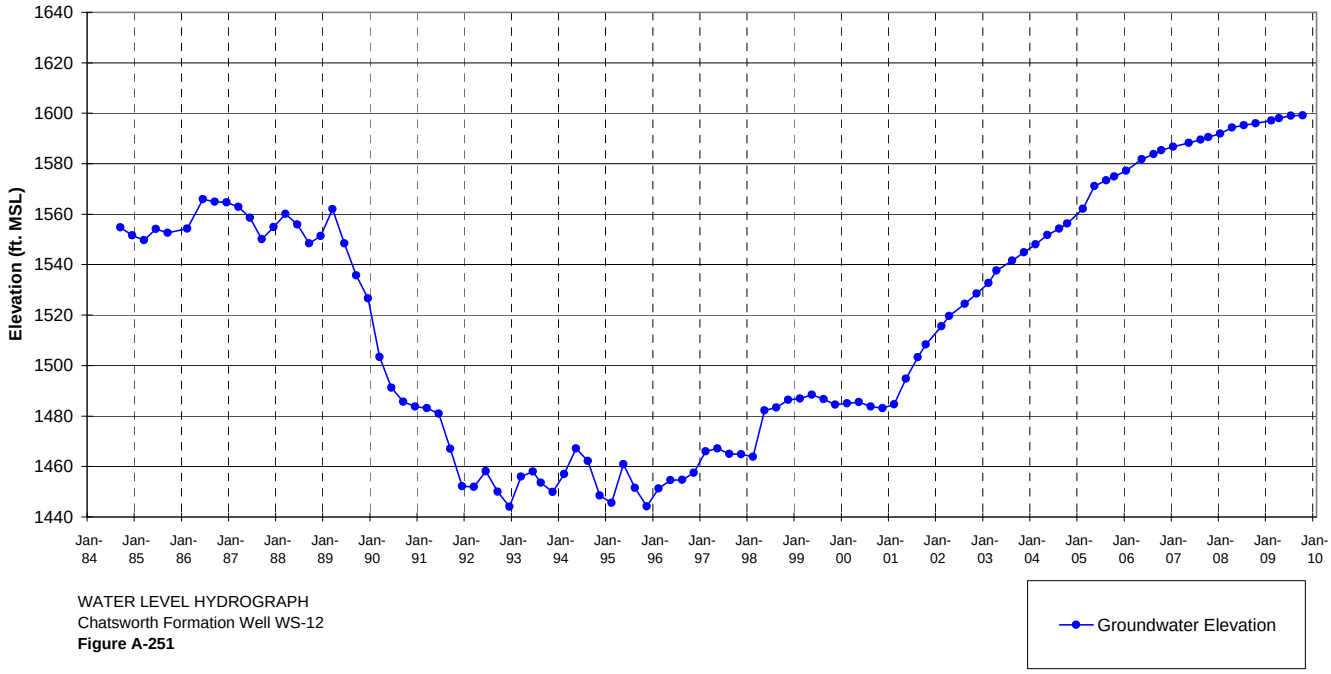
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well WS-09A
Figure A-248



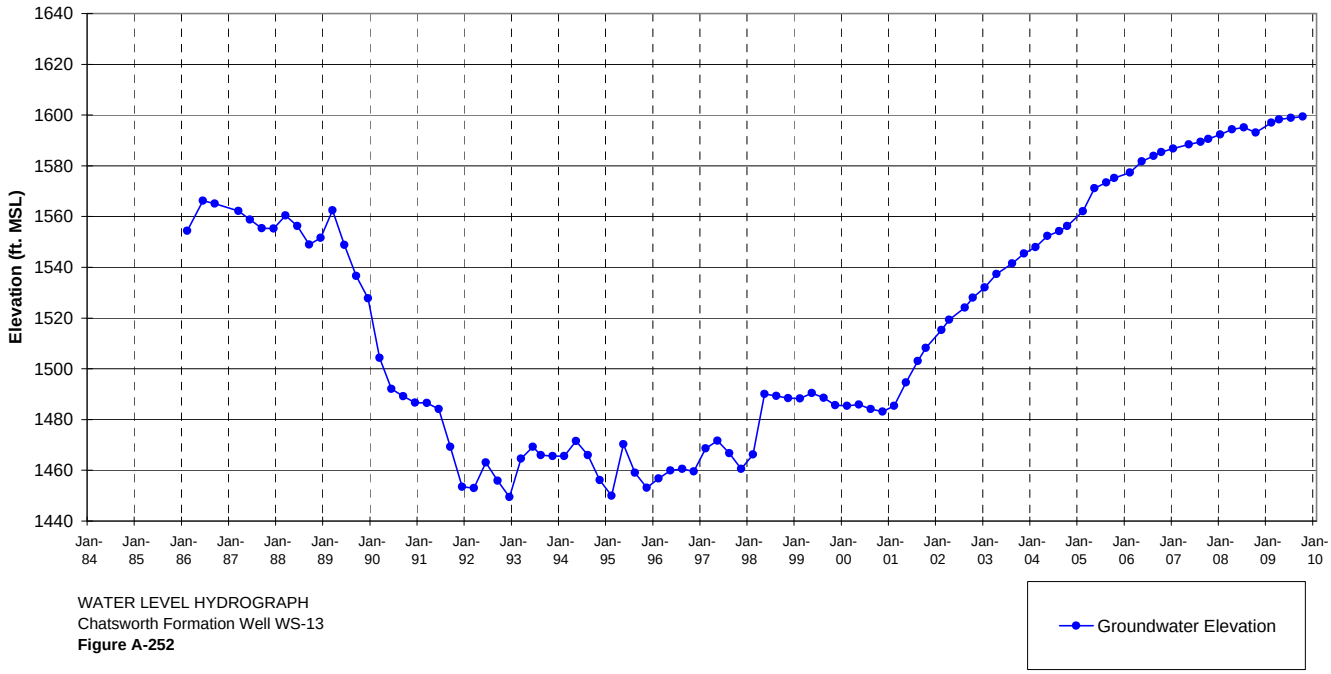
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well WS-09B
Figure A-249



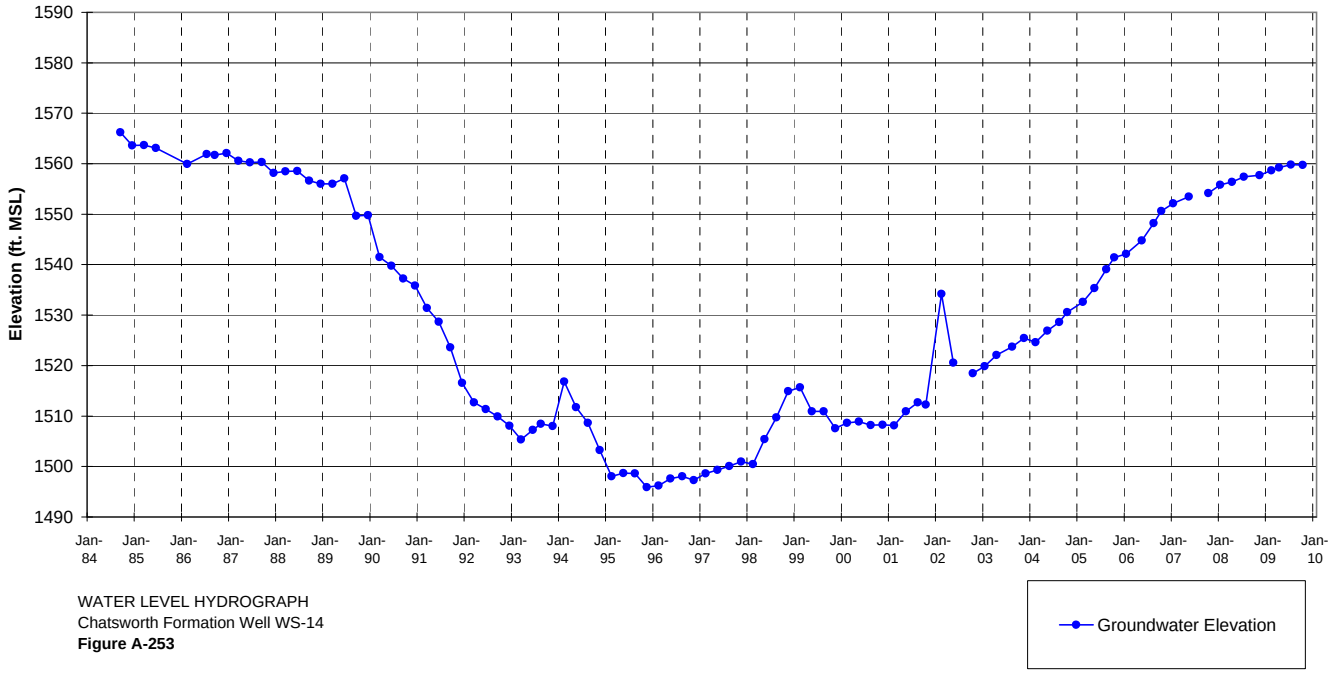
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well WS-11
Figure A-250



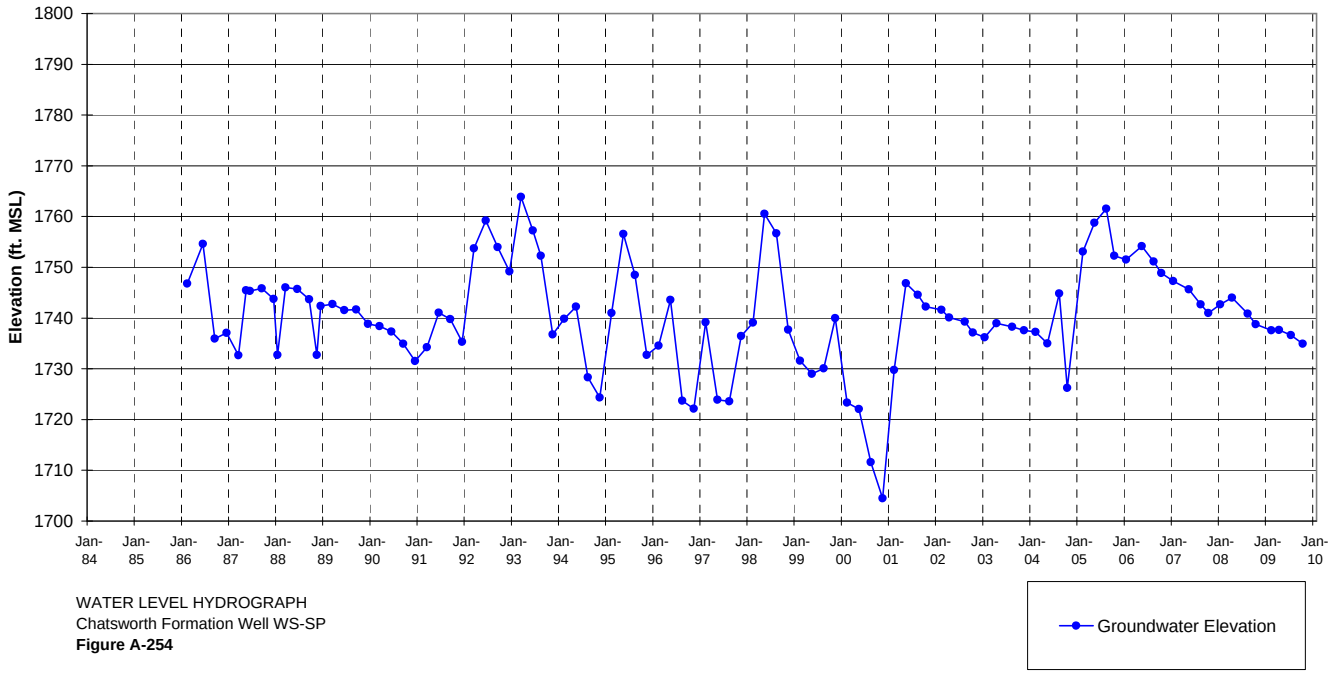
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well WS-12
Figure A-251



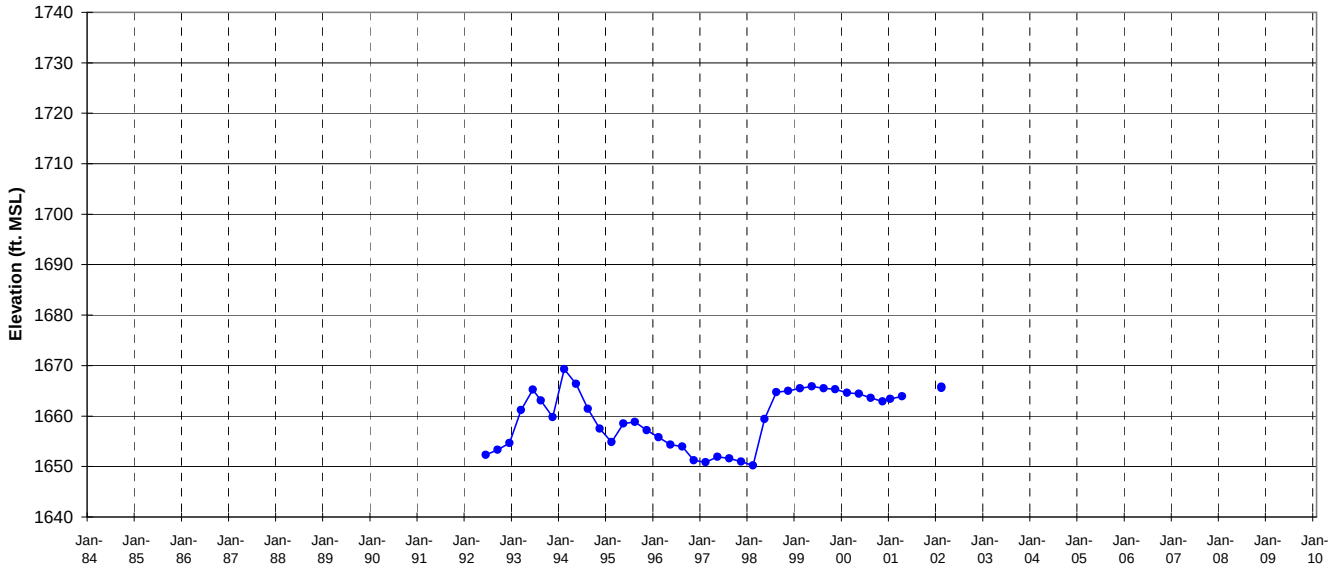
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well WS-13
Figure A-252



WATER LEVEL HYDROGRAPH
Chatsworth Formation Well WS-14
Figure A-253

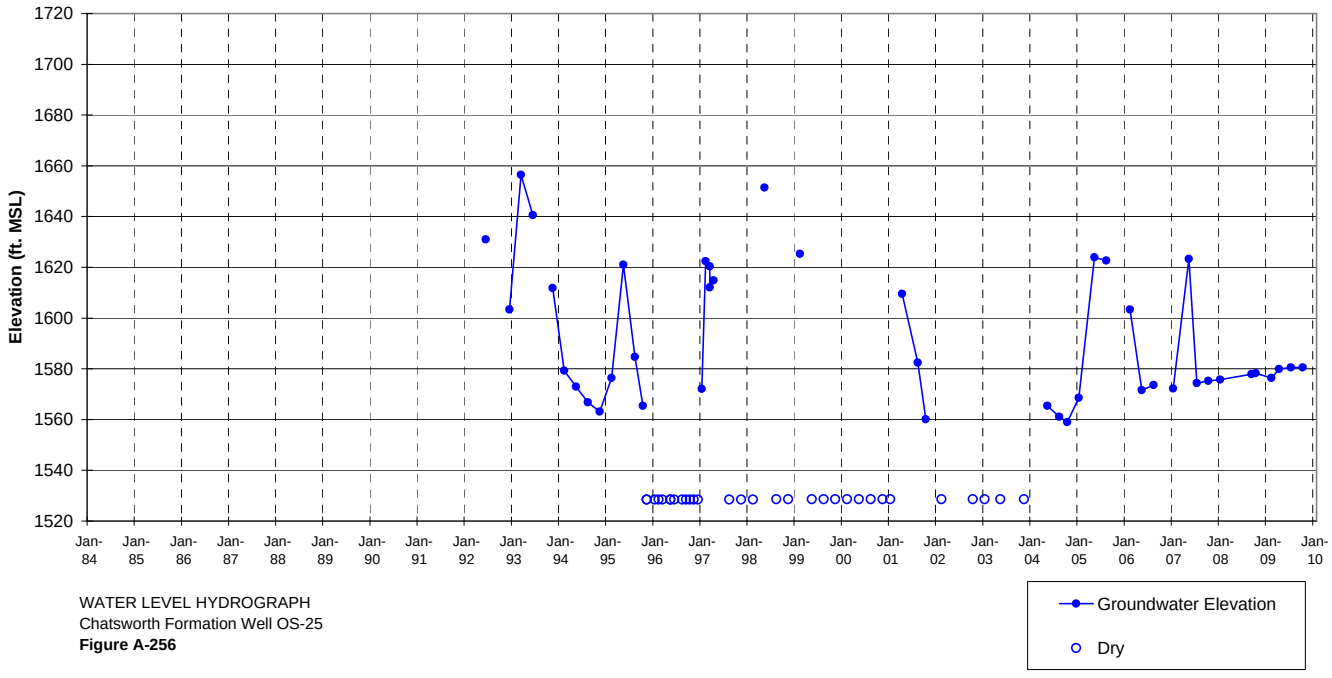


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well WS-SP
Figure A-254

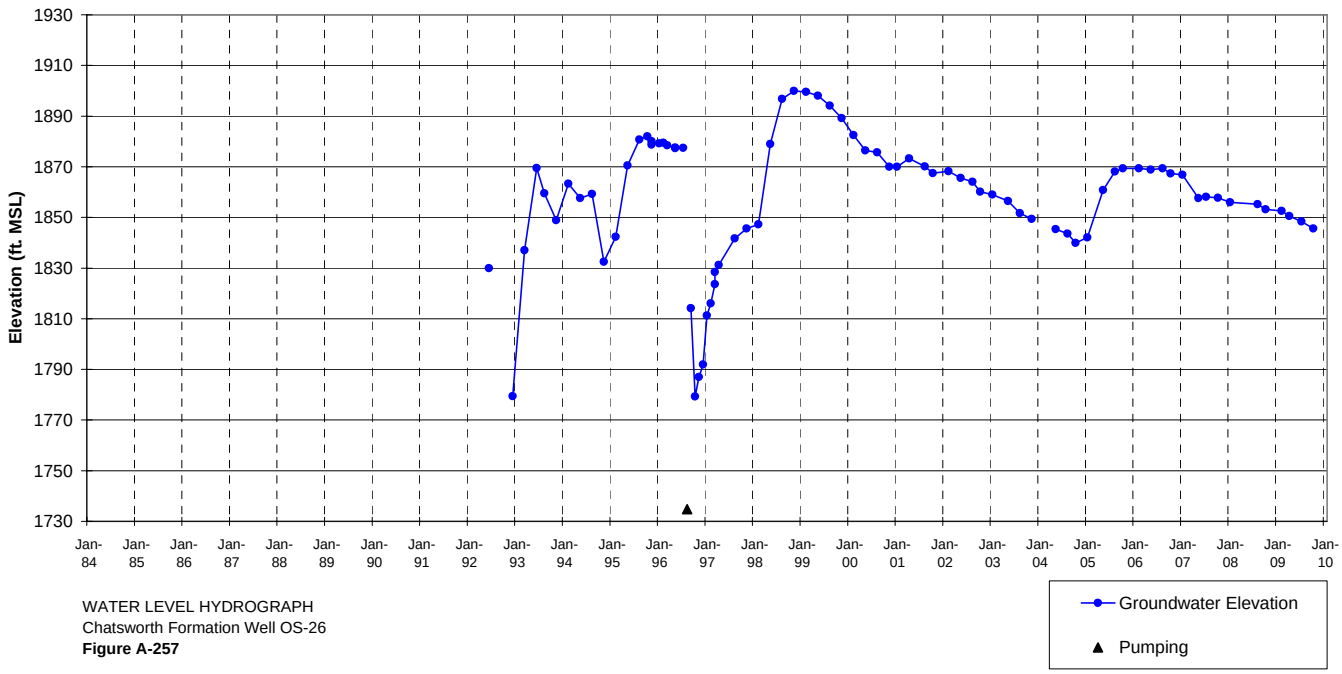


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well OS-24
Figure A-255

NOTE: FLUTe installed in well on 07/09/01. The FLUTe system has been partially removed.



WATER LEVEL HYDROGRAPH
Chatsworth Formation Well OS-25
Figure A-256



WATER LEVEL HYDROGRAPH
Chatsworth Formation Well OS-26
Figure A-257

Figure A-258
Chatsworth Formation Well RD-10 FLUTe Hydrograph

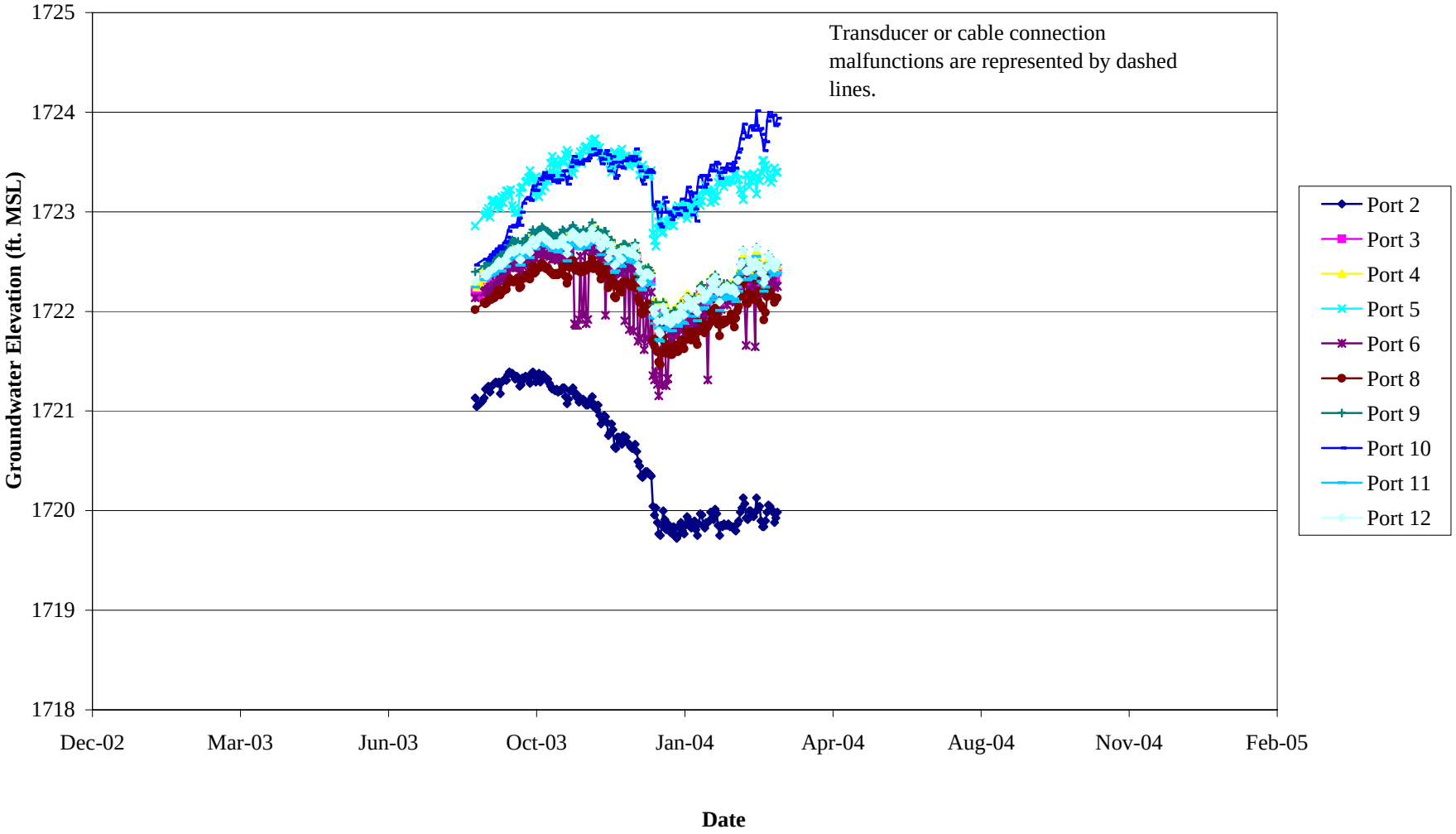


Figure A-259
Chatsworth Formation Well RD-21 FLUTe Hydrograph

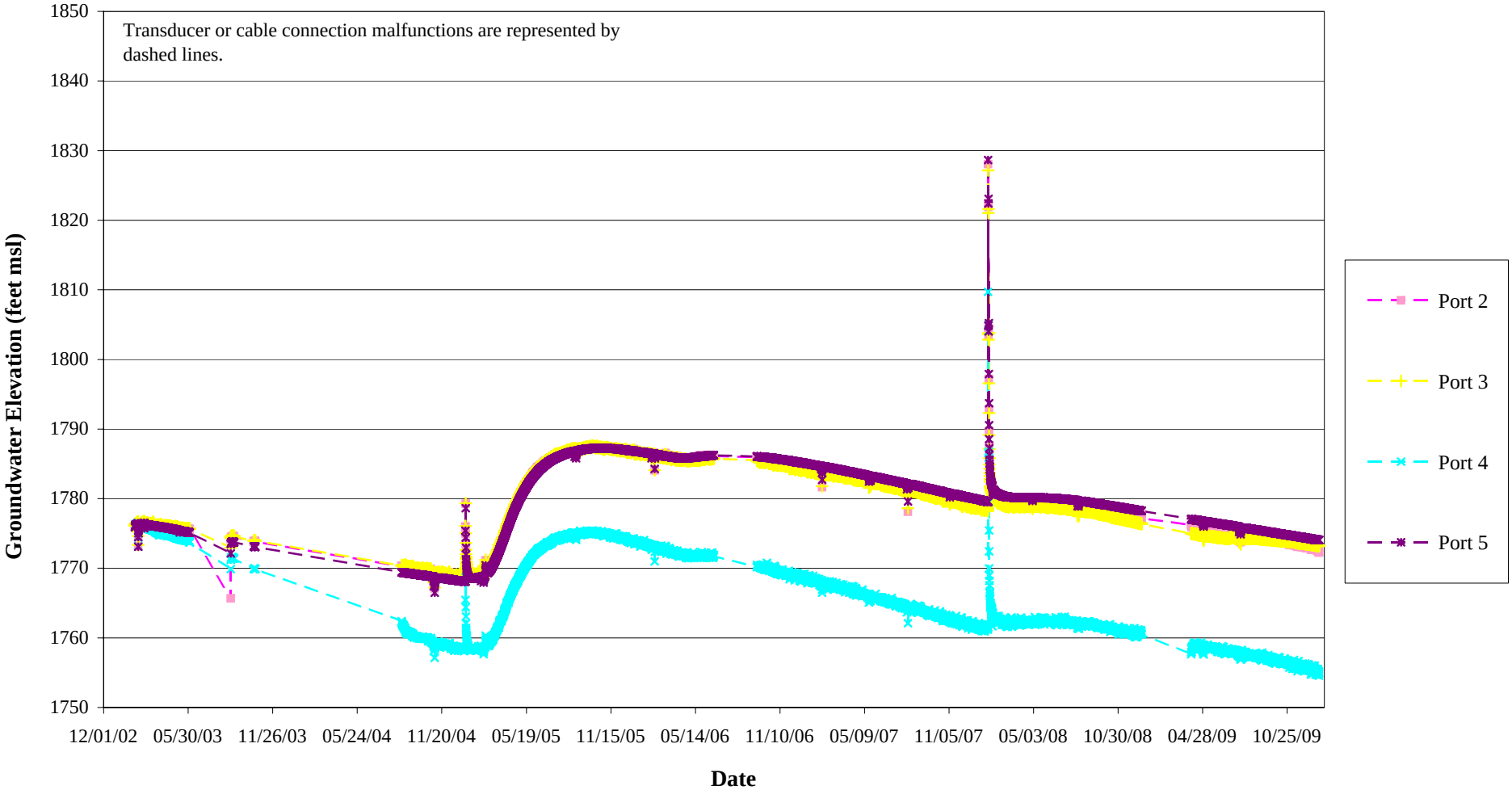


Figure A-260
Chatsworth Formation Well RD-22 FLUTe Hydrograph

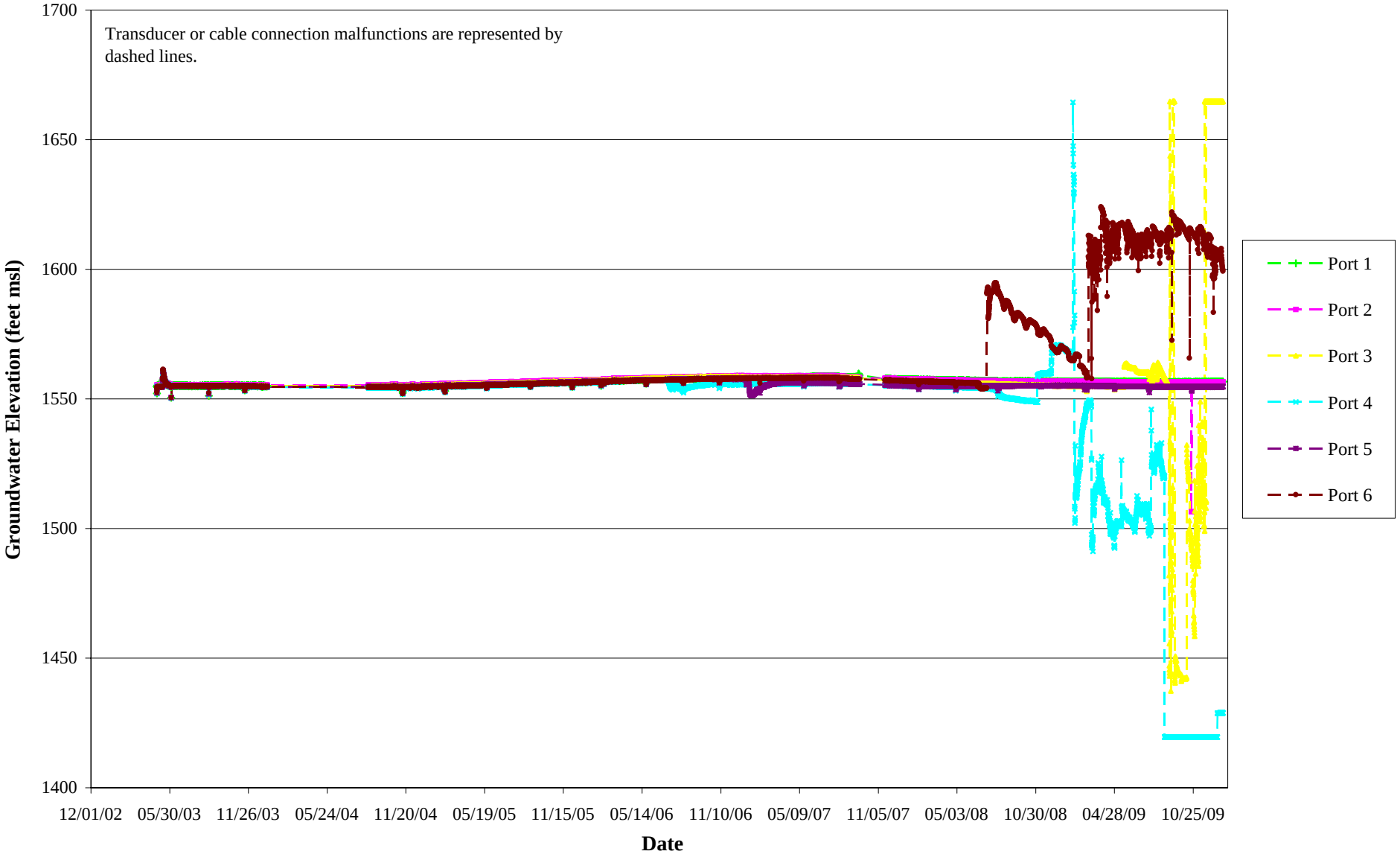


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Figure A-261
Chatsworth Formation Well RD-23 FLUTe Hydrograph

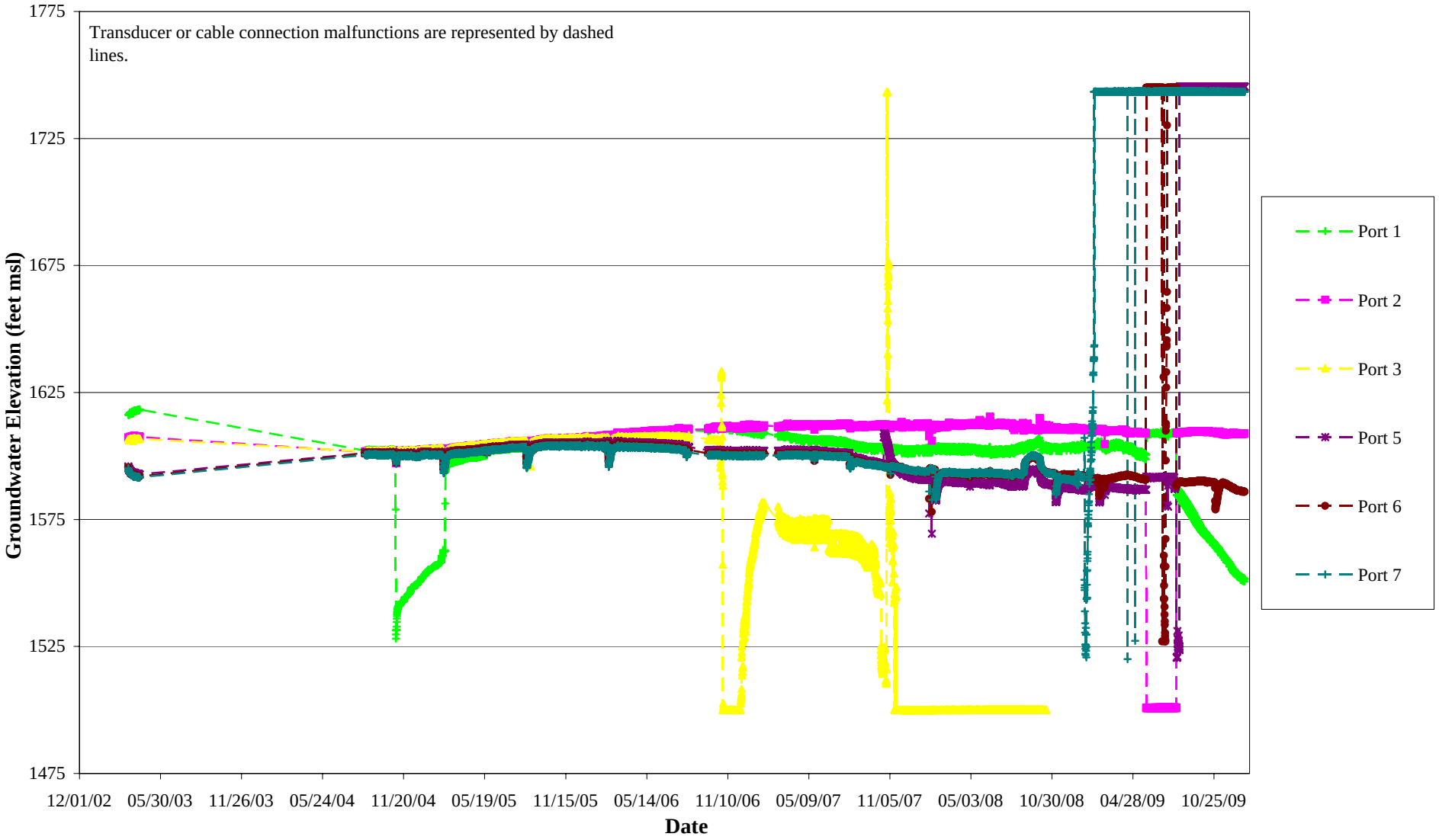

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Figure A-262
Chatsworth Formation Well RD-31 FLUTe Hydrograph

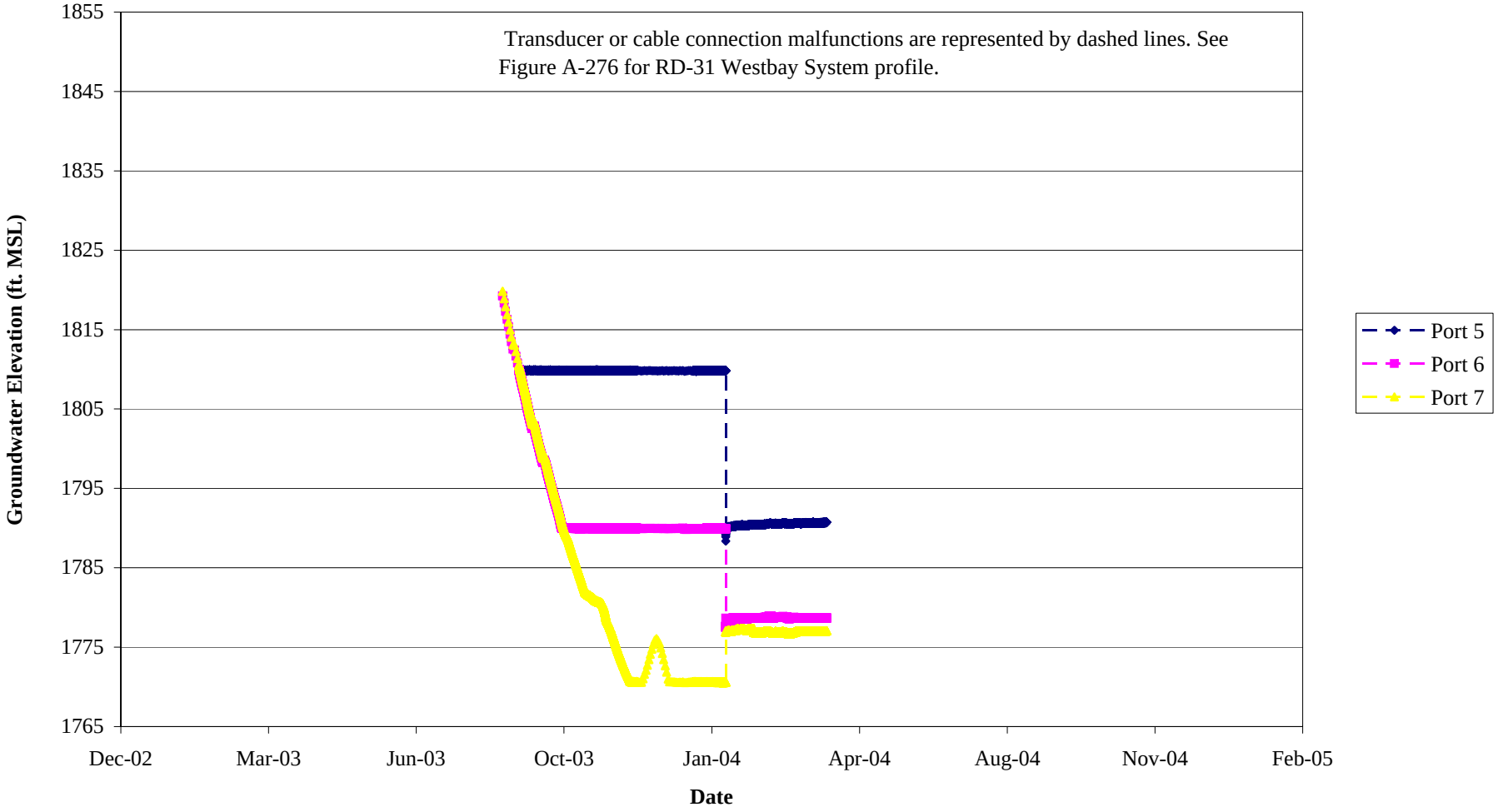

Figure A-263
Chatsworth Formation Well RD-33A FLUTe Hydrograph

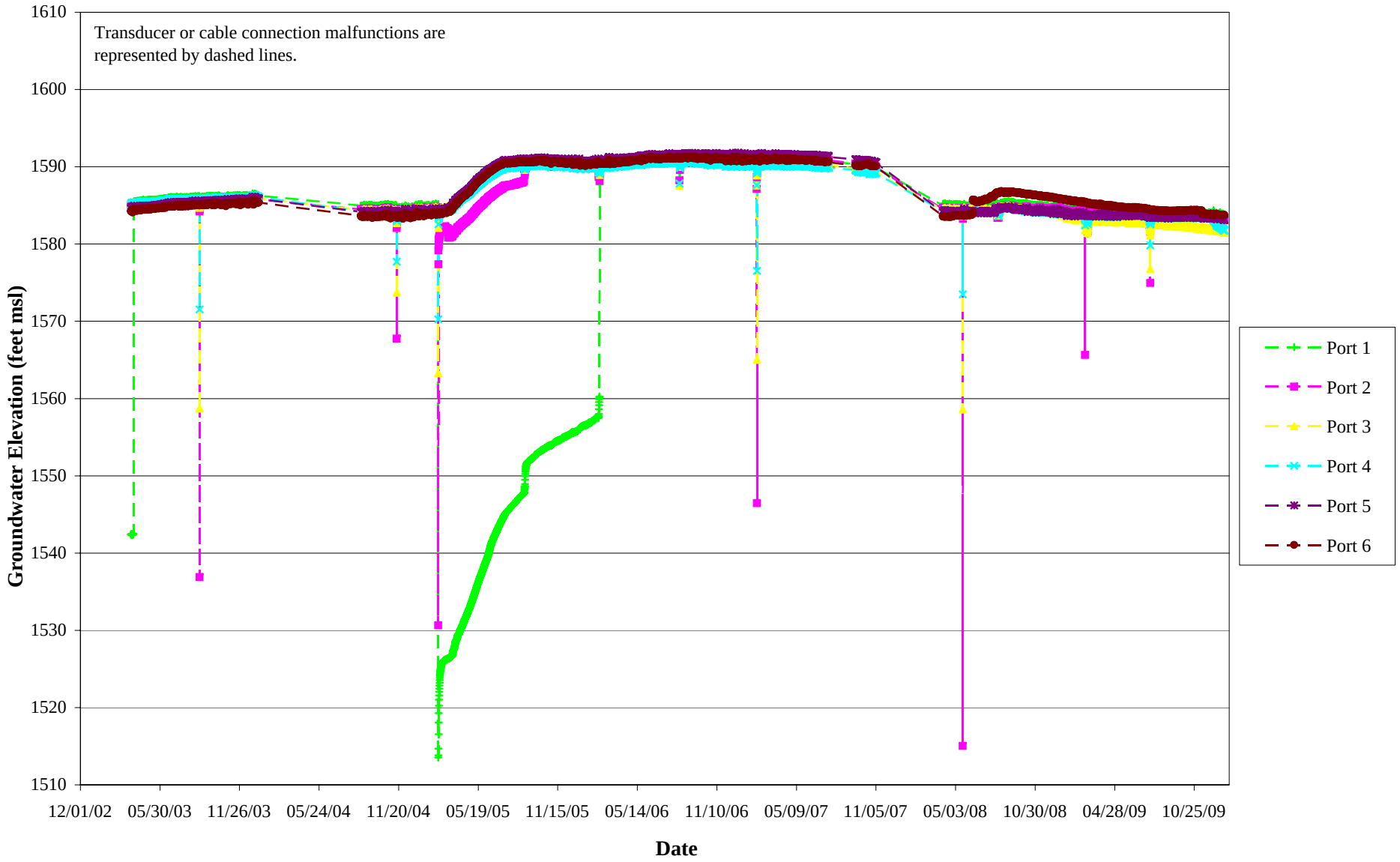

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Figure A-264
Chatsworth Formation Well RD-50 FLUTe Hydrograph

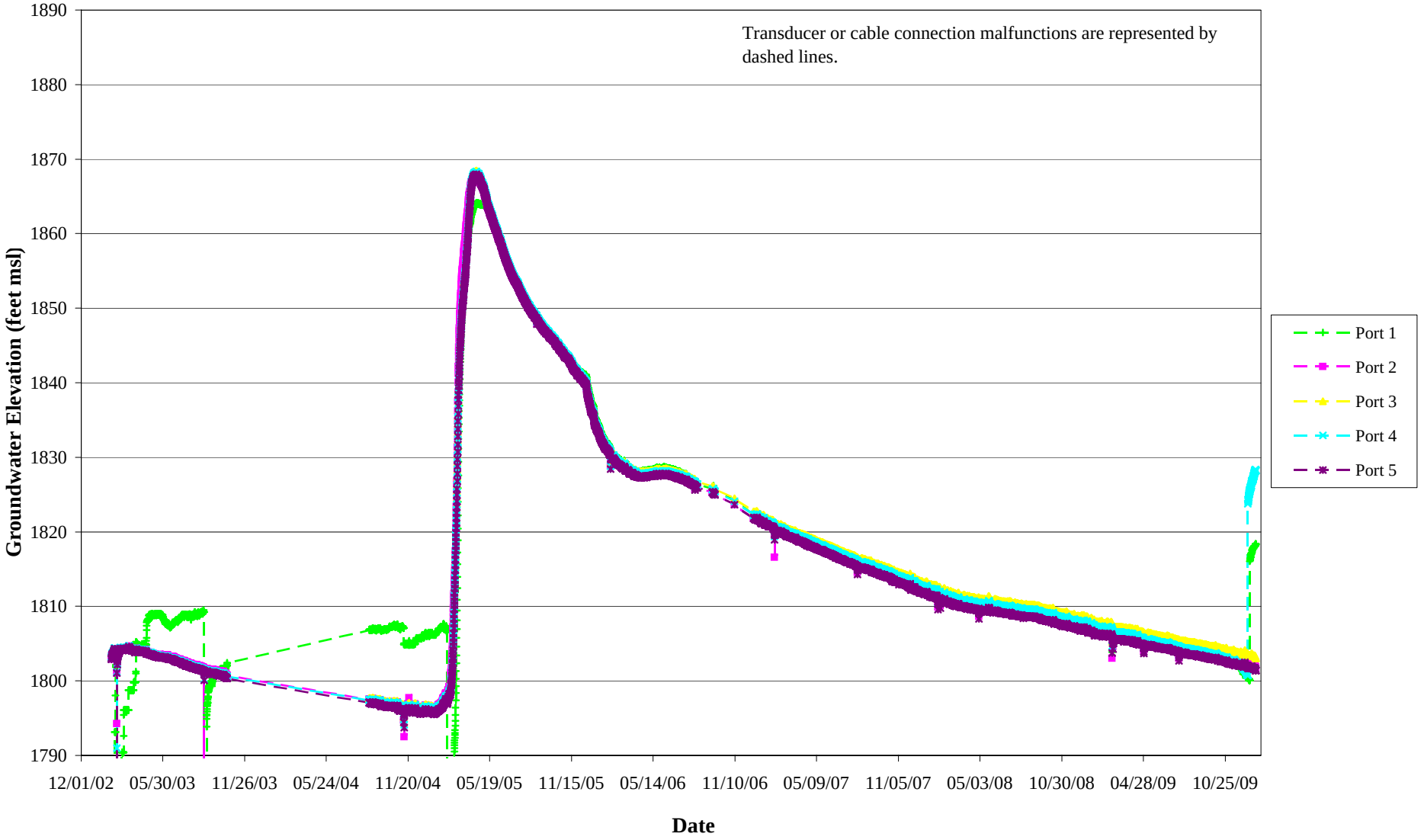

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Figure A-265
Chatsworth Formation Well RD-53 FLUTe Hydrograph

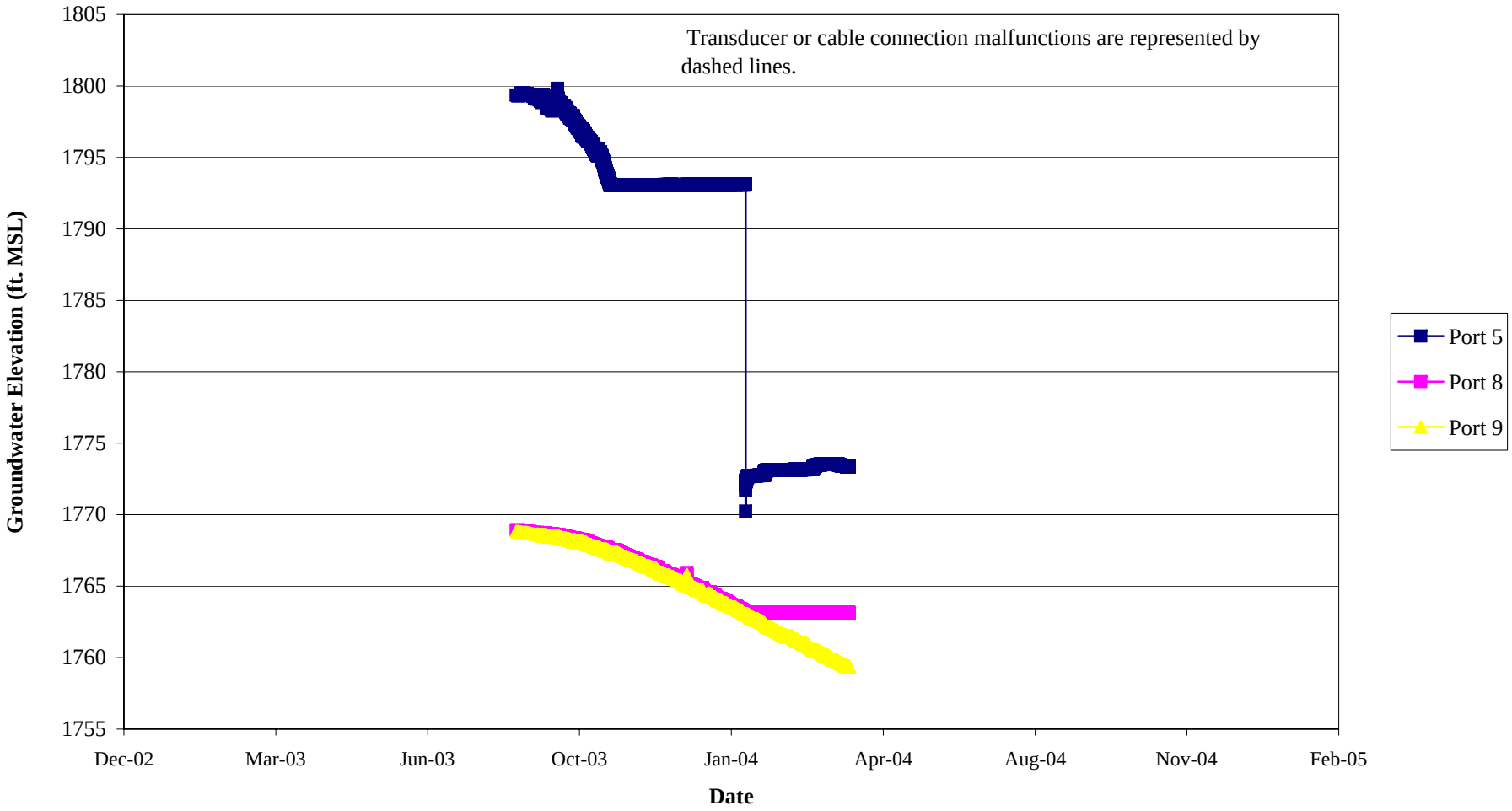

Figure A-266
Chatsworth Formation Well RD-54A FLUTe Hydrograph

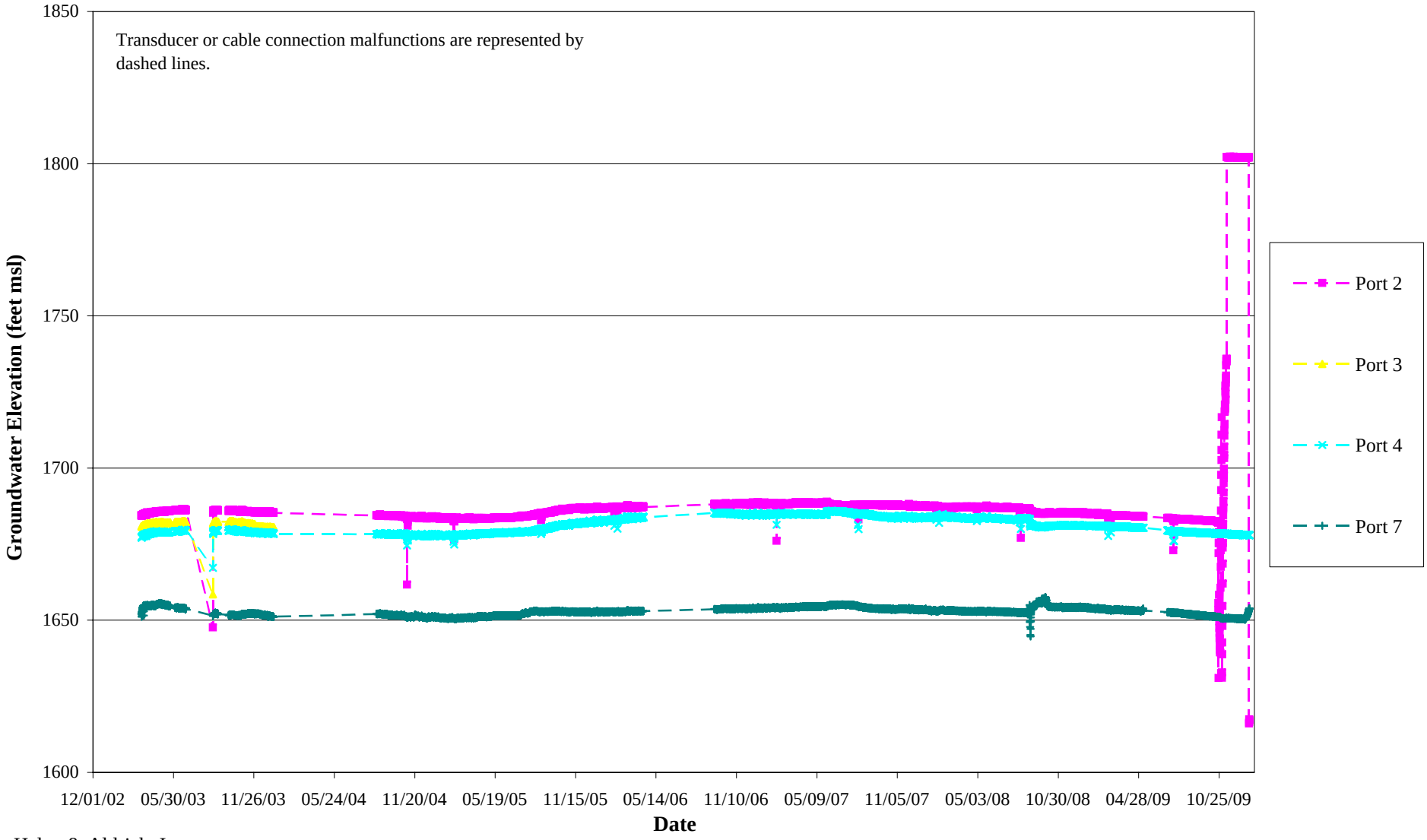

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Figure A-267
Chatsworth Formation Well RD-57 FLUTe Hydrograph

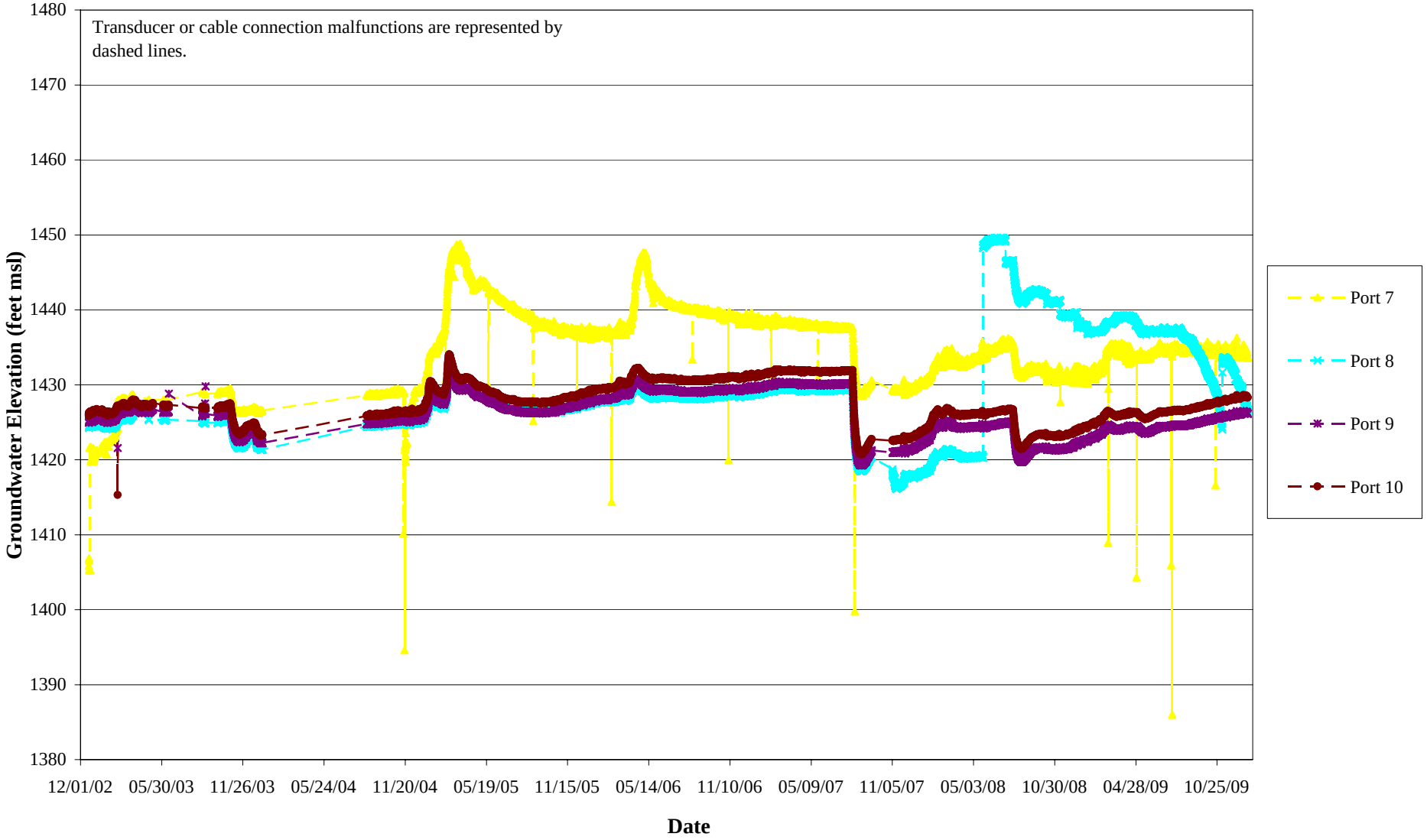

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Figure A-268
Chatsworth Formation Well RD-64 FLUTe Hydrograph

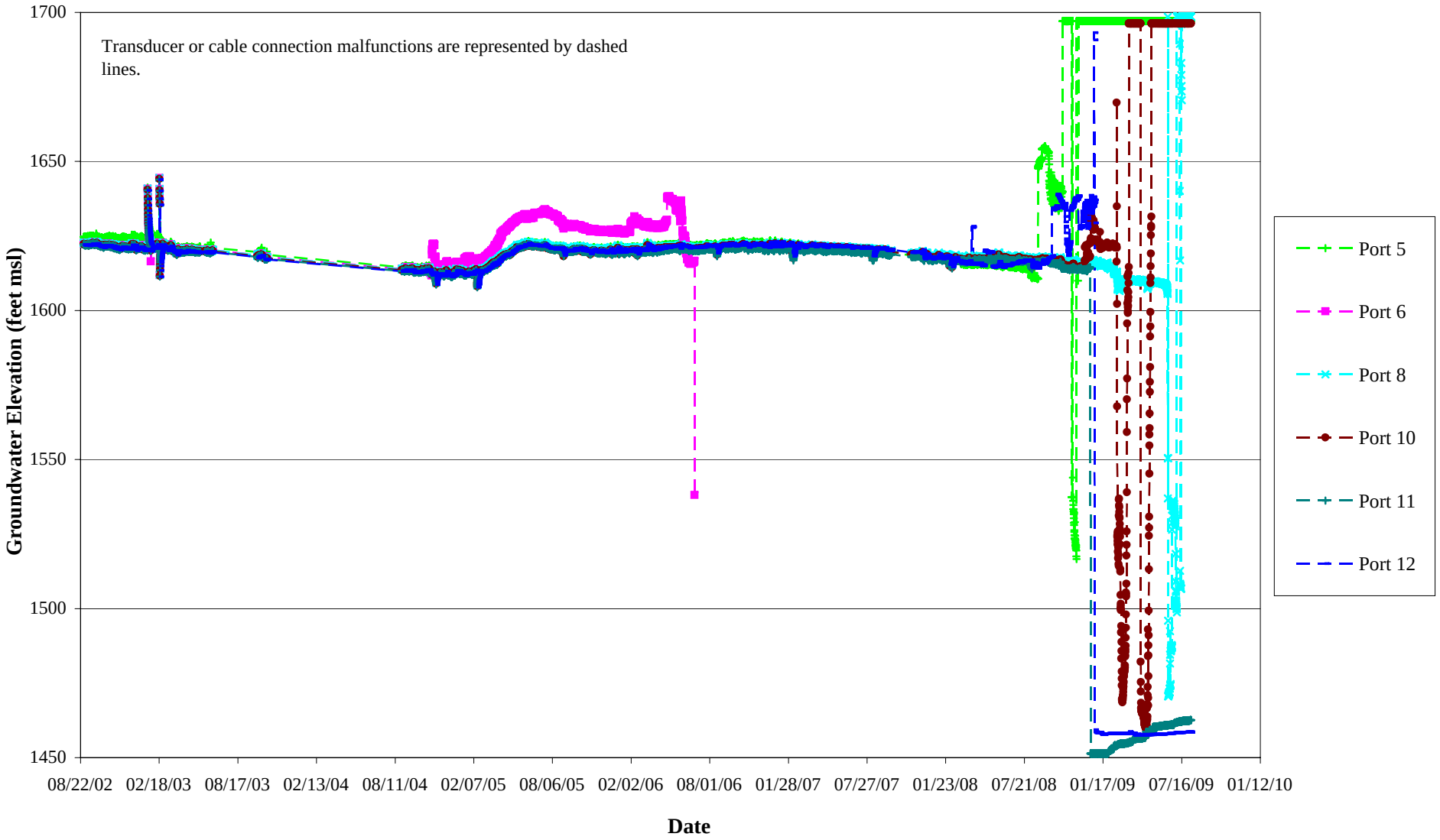

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Figure A-269
Chatsworth Formation Well RD-65 FLUTe Hydrograph

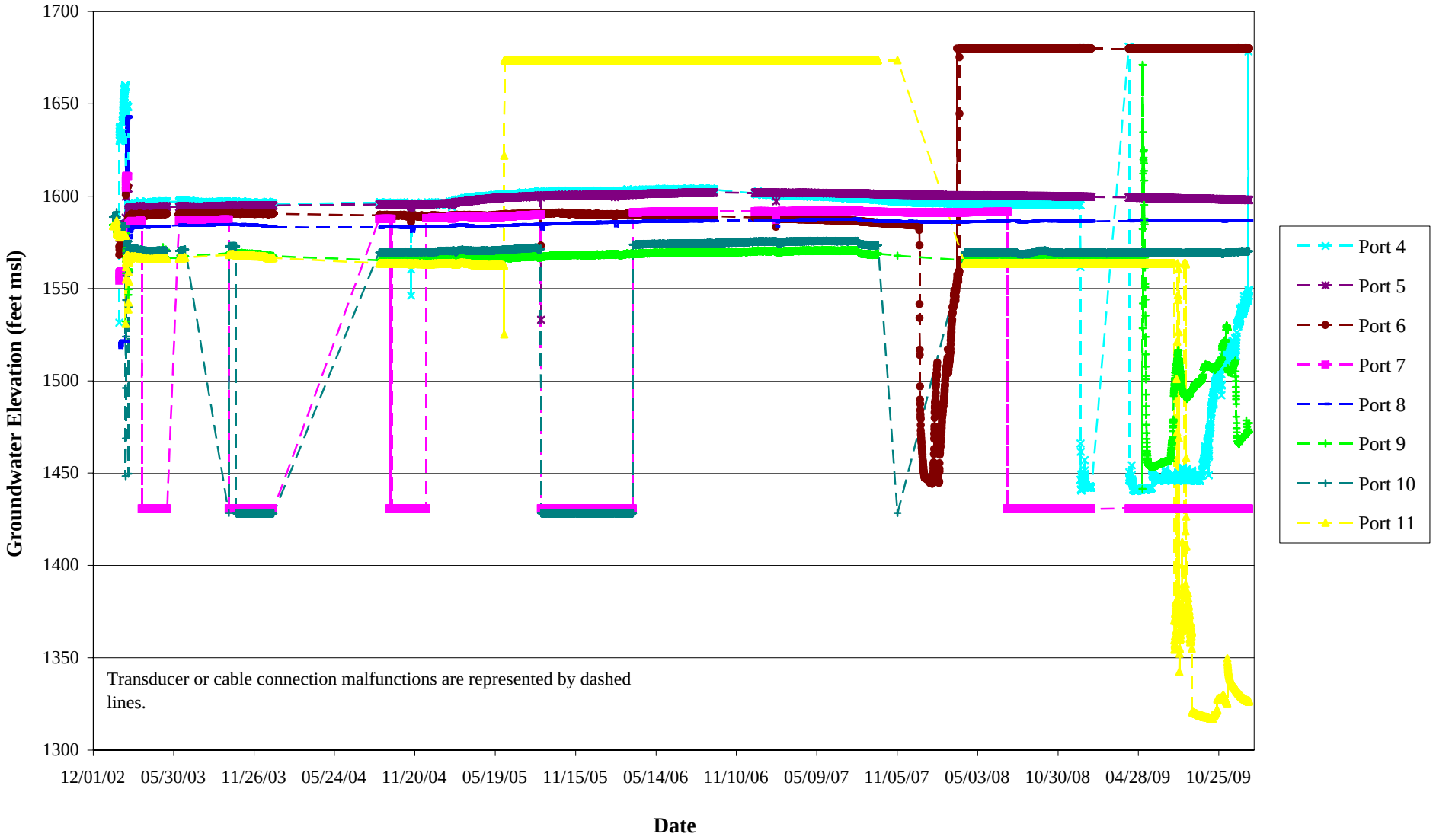

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Figure A-270
Chatsworth Formation Well RD-72 FLUTe Hydrograph

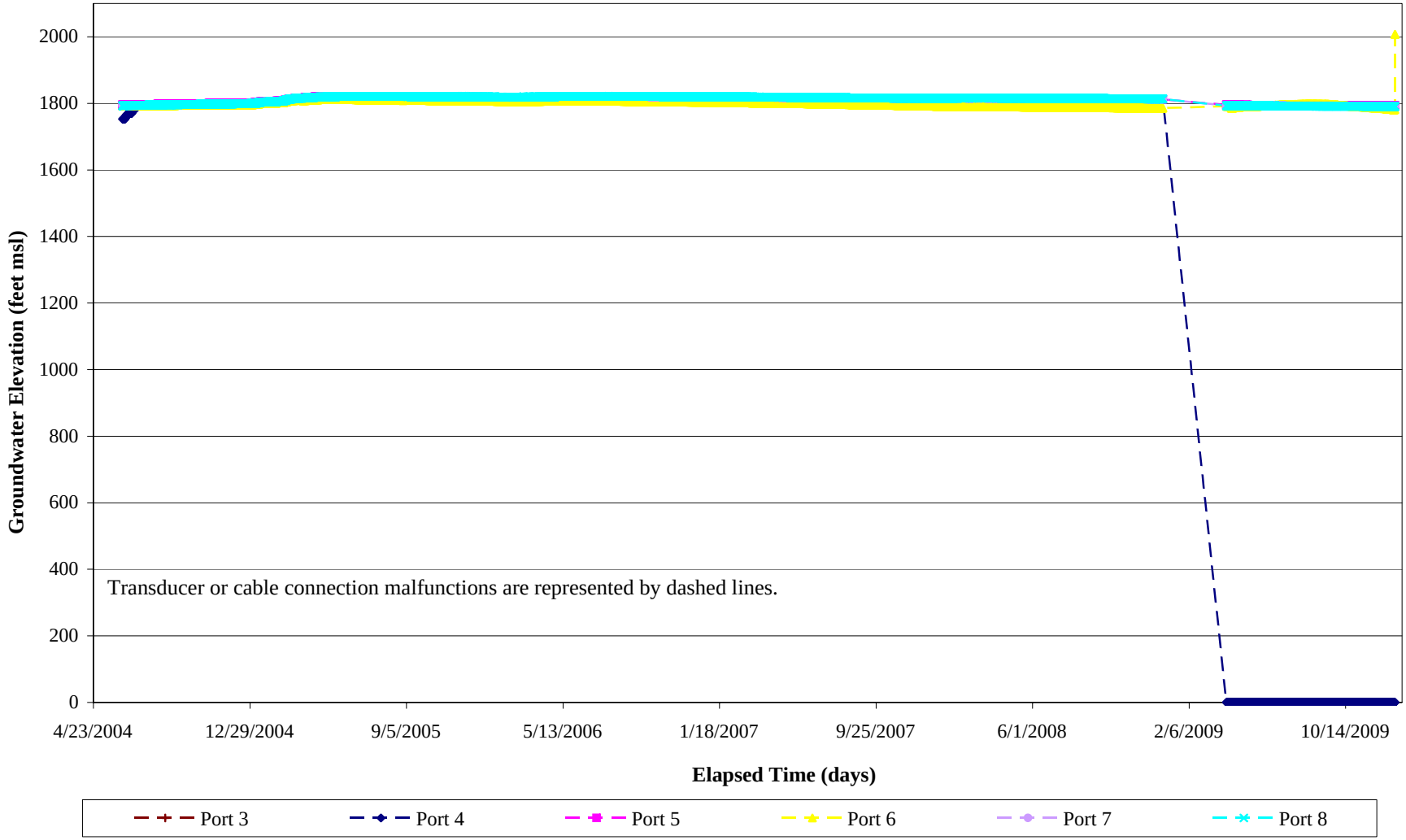

Figure A-271
Chatsworth Formation Well RD-73 FLUTe Hydrograph

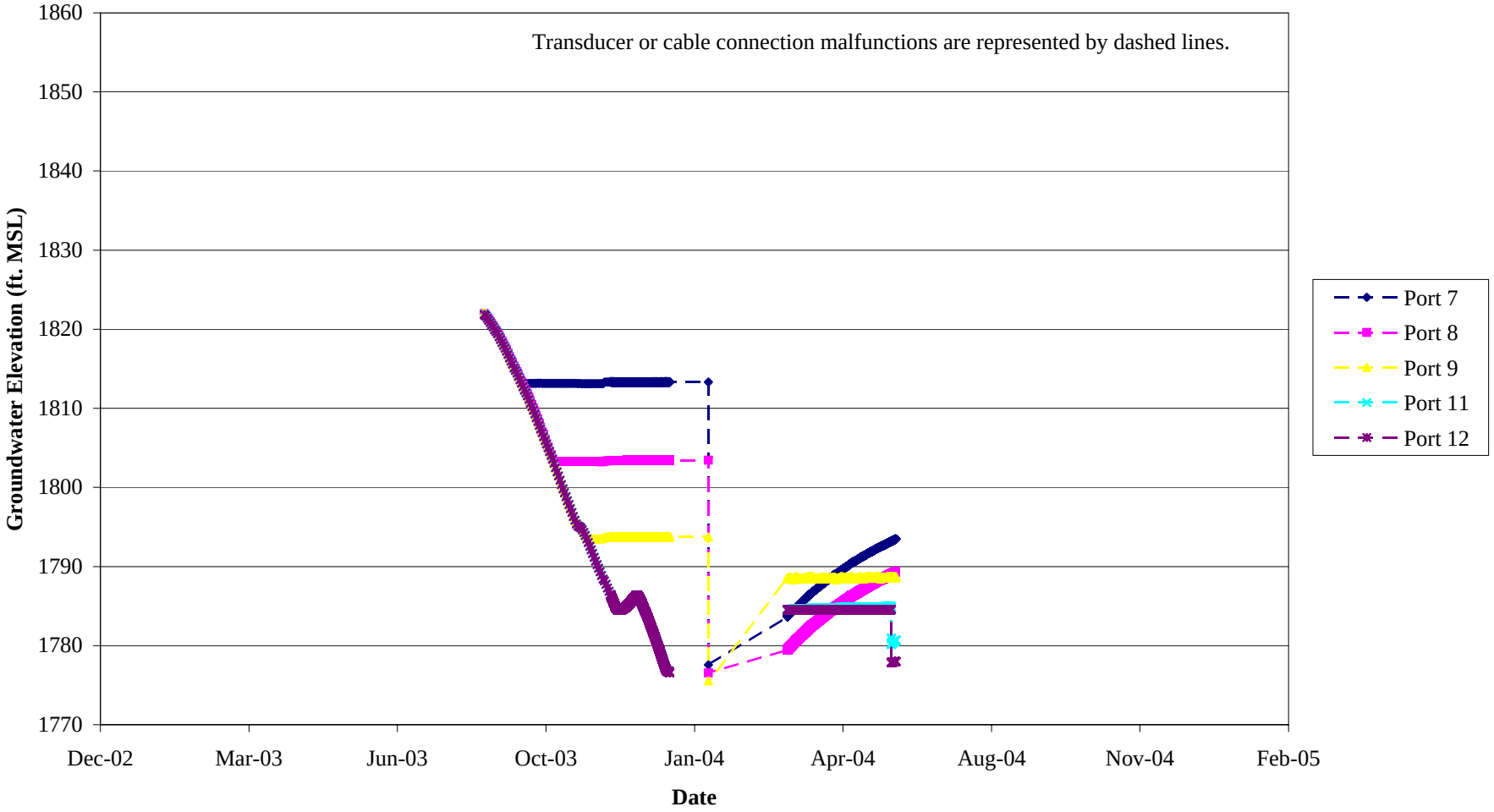

Figure A-272
Chatsworth Formation Well HAR-01 FLUTe Hydrograph

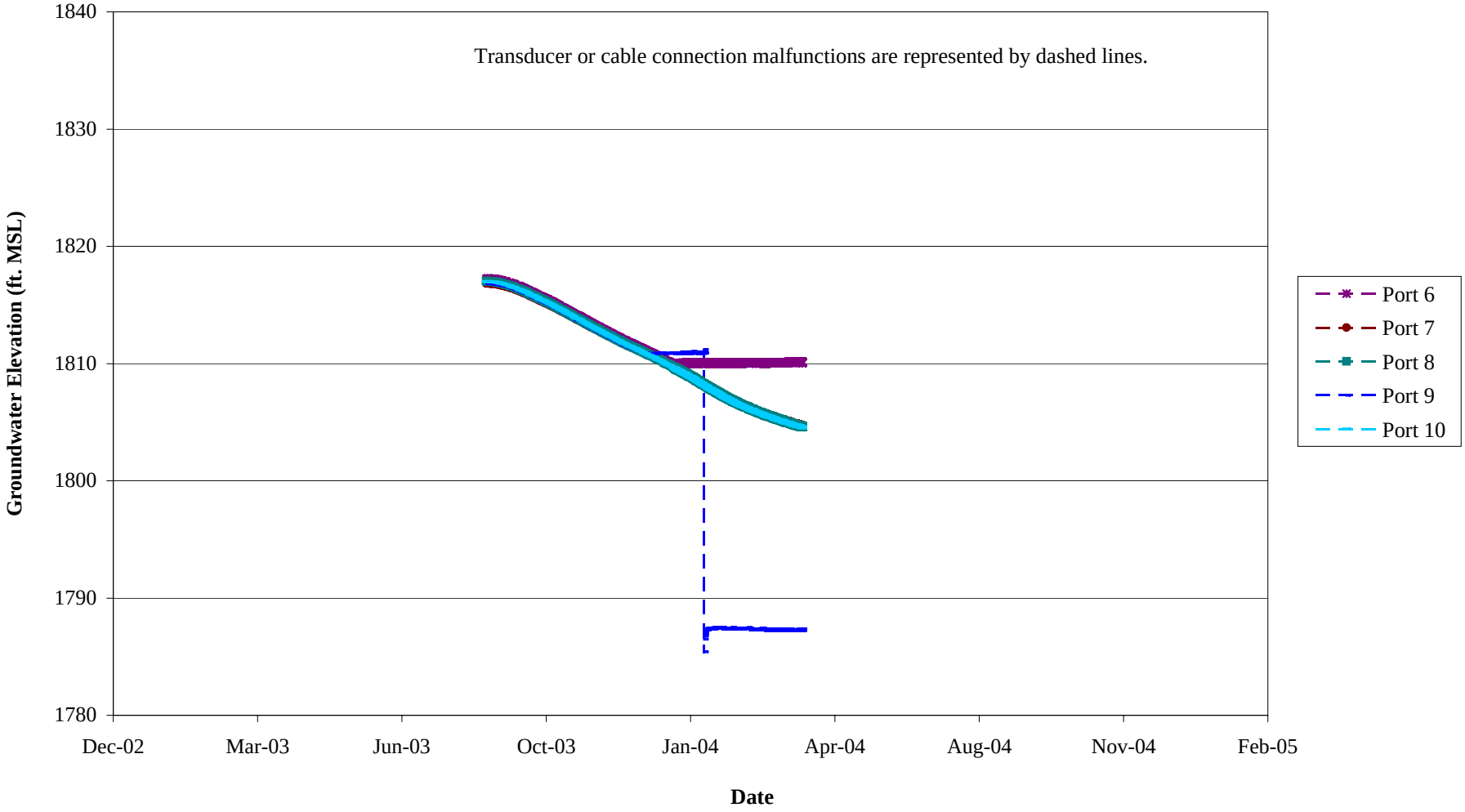

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Figure A-273
Chatsworth Formation Well HAR-16 FLUTe Hydrograph

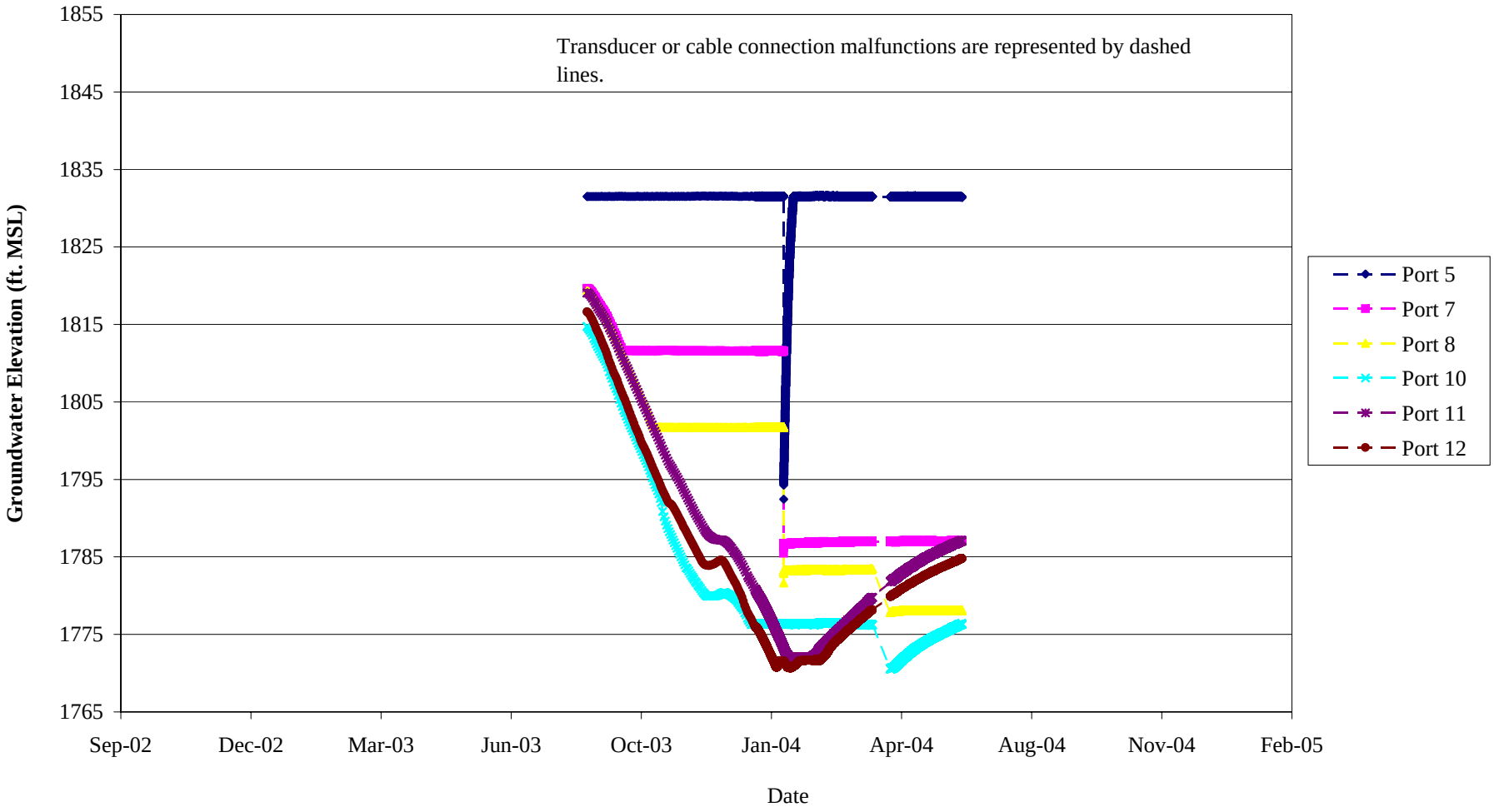


Figure A-274
Chatsworth Formation Well HAR-24 FLUTe Hydrograph

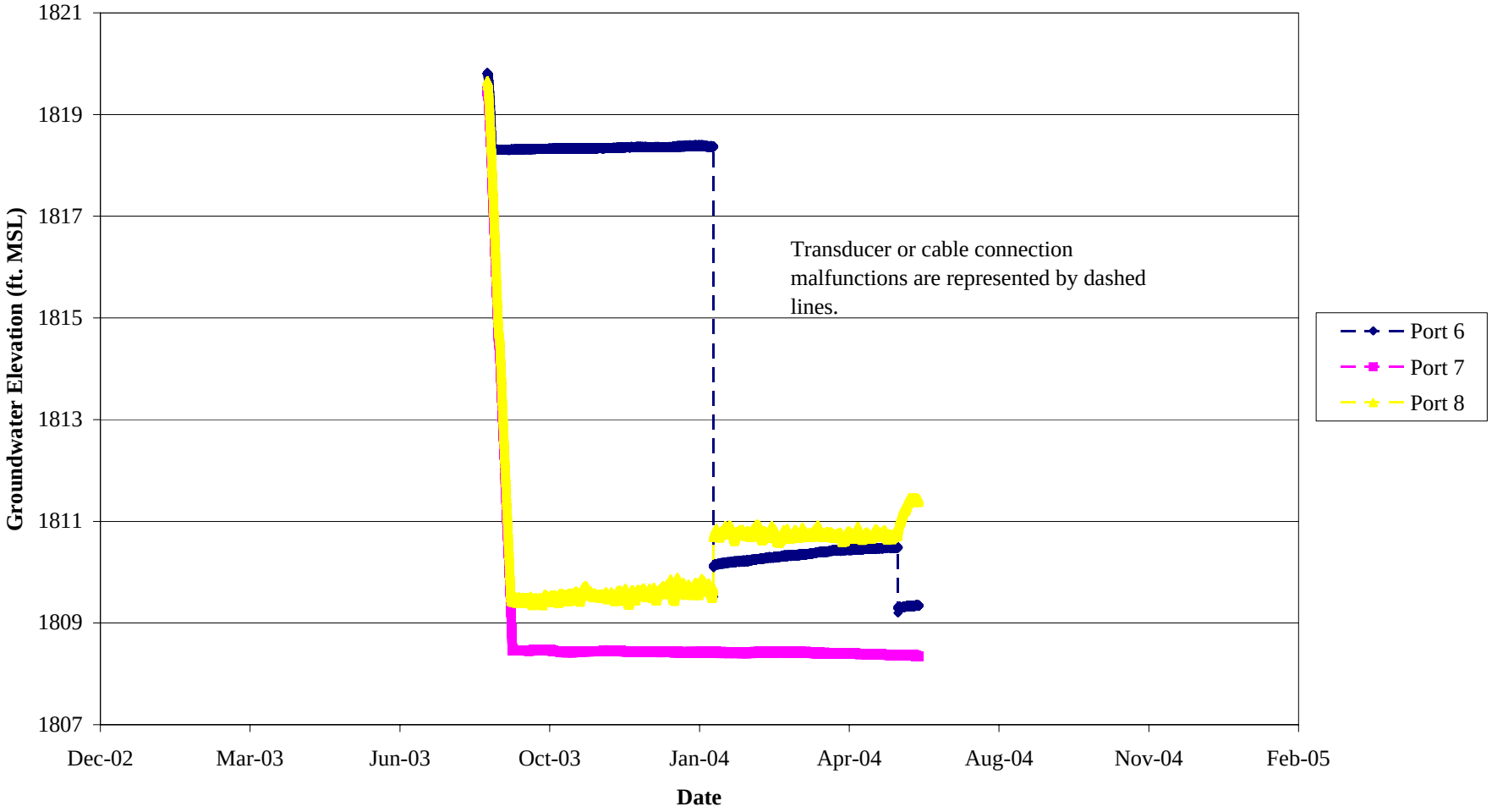


Figure A-275
Chatsworth Formation Well OS-24 FLUTe Transducer Measurements

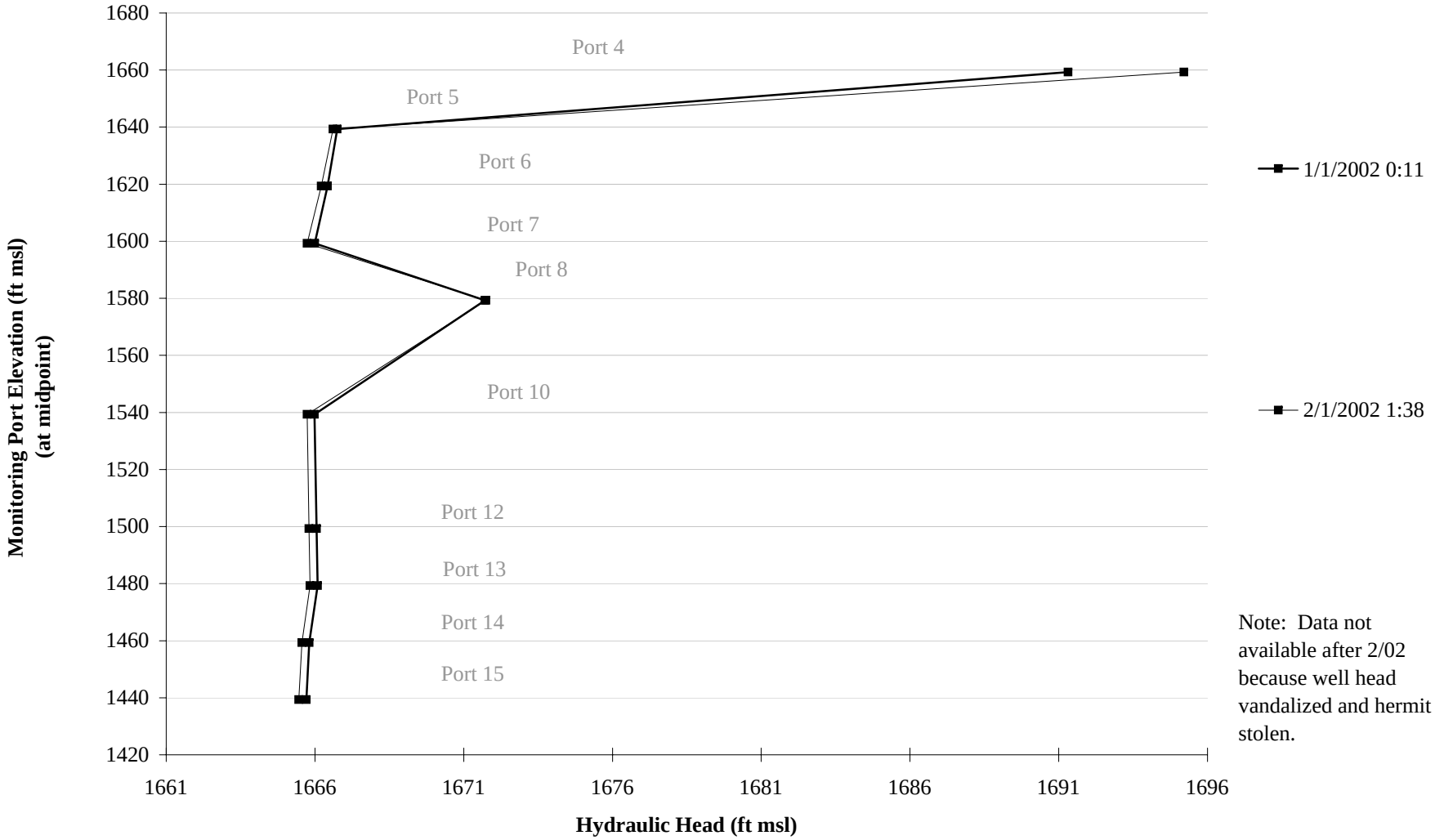
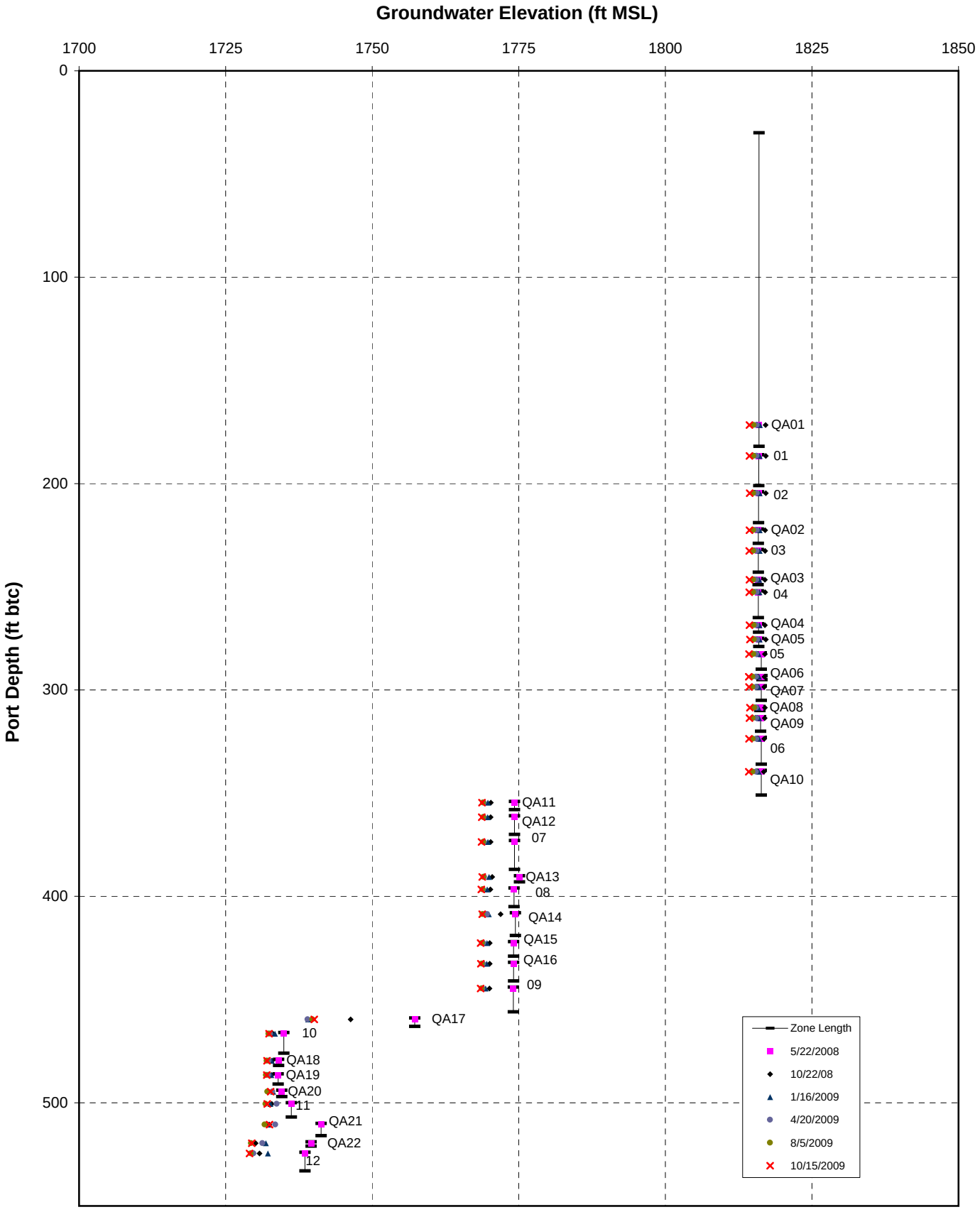


Figure A-276
Piezometric Profile
RD-31 Westbay System



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APPENDIX B

Groundwater Monitoring Schedule

APPENDIX B
GROUNDWATER MONITORING SCHEDULE

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Groundwater Monitoring Schedule 1

Tables

B-I Summary of Sampling and Analyses Quarterly Groundwater Monitoring Program, 2009

APPENDIX B

GROUNDWATER MONITORING SCHEDULE

The groundwater monitoring program for 2009 was conducted to fulfill the requirements of multiple regulatory programs prescribed by:

- the Post-Closure Permits (DTSC, 1995);
- Class 1 and Class 2 Permit Modifications of the Post-Closure Permits (DTSC, 2001);
- the LUFT program overseen by DTSC;
- various characterization efforts conducted at SSFL including the CFOU RFI groundwater investigation (Montgomery Watson, 2000b) and the SMOU RFI program (Ogden, 2000); and
- the Consent Order for Corrective Action issued on 16 August 2007 by DTSC (2007b).

Table B-I presents a summary of the actual analytical program conducted on the quarterly groundwater samples in 2009. The actual program varied from the required schedule due to groundwater level changes and requested additions to the monitoring schedule.

TABLE B-I
SUMMARY OF SAMPLING AND ANALYSES
QUARTERLY GROUNDWATER MONITORING PROGRAM, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
ES-17	Shallow		5/1/2009	8260B	Primary	PCP-ICA
ES-21	Shallow		3/4/2009	8260B	Primary	PCP-ICA
ES-21	Shallow		5/28/2009	8260B	Split	PCP-ICA
ES-21	Shallow		5/28/2009	8260B	Primary	PCP-ICA
ES-21	Shallow		5/28/2009	8260B	Duplicate	PCP-ICA
ES-23	Shallow		3/4/2009	8260B	Primary	PCP-ICA
ES-23	Shallow		7/17/2009	8260B	Primary	PCP-ICA
ES-24	Shallow		5/4/2009	8260B	Primary	PCP-ICA
ES-26	Shallow		5/1/2009	8260B	Primary	PCP-ICA
ES-26	Shallow		7/17/2009	8260B	Primary	PCP-ICA
ES-27	Shallow		3/4/2009	8260B	Primary	PCP-ICA
ES-27	Shallow		7/17/2009	8260B	Primary	PCP-ICA
ES-30	Shallow		4/27/2009	8260B	Primary	PCP-ICA
ES-30	Shallow		7/17/2009	8260B	Primary	PCP-ICA
ES-31	Shallow		3/4/2009	8260B	Primary	Area IV
ES-31	Shallow		3/4/2009	8260B	Duplicate	Area IV
ES-31	Shallow		3/4/2009	900.0-dissolved	Primary	Area IV
ES-31	Shallow		3/4/2009	900.0-total	Primary	Area IV
ES-31	Shallow		3/4/2009	901.1-dissolved	Primary	Area IV
ES-31	Shallow		3/4/2009	901.1-total	Primary	Area IV
ES-31	Shallow		3/4/2009	905.0-dissolved	Primary	Area IV
ES-31	Shallow		3/4/2009	905.0-total	Primary	Area IV
ES-31	Shallow		3/4/2009	906.0-total	Primary	Area IV
ES-31	Shallow		7/17/2009	900.0-dissolved	Primary	Area IV
ES-31	Shallow		7/17/2009	900.0-total	Primary	Area IV
ES-31	Shallow		7/17/2009	901.1-dissolved	Primary	Area IV
ES-31	Shallow		7/17/2009	901.1-total	Primary	Area IV
ES-31	Shallow		7/17/2009	905.0-dissolved	Primary	Area IV
ES-31	Shallow		7/17/2009	905.0-total	Primary	Area IV
ES-31	Shallow		7/17/2009	906.0-total	Primary	Area IV
HAR-03	Shallow		5/6/2009	8260B	Primary	PCP-Evaluation
HAR-04	Shallow		2/18/2009	8260B	Primary	PCP-ICA
HAR-04	Shallow		7/21/2009	8260B	Primary	PCP-ICA
HAR-07	Chatsworth		3/5/2009	300.0-Fluoride	Split	CFOU RFI
HAR-07	Chatsworth		3/5/2009	314.0	Primary	CFOU RFI
HAR-07	Chatsworth		3/5/2009	7196A, Dissolved	Primary	SMOU RFI
HAR-07	Chatsworth		3/5/2009	7196A, Dissolved	Duplicate	SMOU RFI
HAR-07	Chatsworth		3/5/2009	COCs	Primary	CFOU RFI
HAR-07	Chatsworth		3/5/2009	Metals, dissolved	Primary	SMOU RFI
HAR-07	Chatsworth		5/11/2009	1625M	Primary	CFOU RFI, PCP-POC
HAR-07	Chatsworth		5/11/2009	300.0-Fluoride	Primary	CFOU RFI
HAR-07	Chatsworth		5/11/2009	300.0-Nitrate-NO3	Primary	CFOU RFI
HAR-07	Chatsworth		5/11/2009	314.0	Primary	CFOU RFI
HAR-07	Chatsworth		5/11/2009	376.2-Sulfide	Primary	PCP-POC
HAR-07	Chatsworth		5/11/2009	504.1 (DBCP, EDB)	Primary	PCP-POC
HAR-07	Chatsworth		5/11/2009	7196A, Dissolved	Primary	SMOU RFI
HAR-07	Chatsworth		5/11/2009	8081A-AppIX	Primary	PCP-POC
HAR-07	Chatsworth		5/11/2009	8082	Primary	PCP-POC
HAR-07	Chatsworth		5/11/2009	8141A	Primary	PCP-POC
HAR-07	Chatsworth		5/11/2009	8260B-A+A	Primary	PCP-POC
HAR-07	Chatsworth		5/11/2009	8260B-AppIX	Primary	CFOU RFI
HAR-07	Chatsworth		5/11/2009	8260B-AppIX	Primary	PCP-POC
HAR-07	Chatsworth		5/11/2009	8260SIM	Primary	CFOU RFI
HAR-07	Chatsworth		5/11/2009	8260SIM	Primary	PCP-POC

See last three pages of Table B-I for notes and abbreviations.

TABLE B-I
SUMMARY OF SAMPLING AND ANALYSES
QUARTERLY GROUNDWATER MONITORING PROGRAM, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
HAR-07	Chatsworth		5/11/2009	8270C-App IX	Primary	CFOU RFI
HAR-07	Chatsworth		5/11/2009	8270C-App IX	Primary	PCP-POC
HAR-07	Chatsworth		5/11/2009	8315A-Formaldehyde	Primary	CFOU RFI
HAR-07	Chatsworth		5/11/2009	8321A-Hexachlorophene	Primary	PCP-POC
HAR-07	Chatsworth		5/11/2009	SRL 524M-TCP	Primary	PCP-POC
HAR-07	Chatsworth		5/11/2009	Metals, diss (App IX)	Primary	PCP-POC
HAR-07	Chatsworth		5/11/2009	Metals, dissolved	Primary	SMOU RFI
HAR-07	Chatsworth		7/21/2009	314.0	Primary	CFOU RFI
HAR-07	Chatsworth		7/21/2009	8151A	Primary	PCP-POC
HAR-07	Chatsworth		7/21/2009	8260B	Primary	PCP-ICA
HAR-07	Chatsworth		7/21/2009	8290	Primary	PCP-POC
HAR-07	Chatsworth		7/21/2009	9012-Cyanide, Total	Primary	PCP-POC
HAR-07	Chatsworth		7/21/2009	COCs	Primary	CFOU RFI
HAR-07	Chatsworth		7/21/2009	8270SIM-PCP	Primary	PCP-POC
HAR-07	Chatsworth		10/15/2009	314.0	Primary	CFOU RFI
HAR-07	Chatsworth		10/15/2009	COCs	Primary	CFOU RFI
HAR-08	Chatsworth		2/19/2009	300.0-Fluoride	Split	CFOU RFI
HAR-08	Chatsworth		2/19/2009	314.0	Primary	CFOU RFI
HAR-08	Chatsworth		2/19/2009	7196A, Dissolved	Primary	SMOU RFI
HAR-08	Chatsworth		2/19/2009	COCs	Primary	CFOU RFI
HAR-08	Chatsworth		2/19/2009	Metals, dissolved	Primary	SMOU RFI
HAR-08	Chatsworth		4/30/2009	314.0	Primary	CFOU RFI
HAR-08	Chatsworth		4/30/2009	7196A, Dissolved	Primary	SMOU RFI
HAR-08	Chatsworth		4/30/2009	COCs	Primary	CFOU RFI
HAR-08	Chatsworth		4/30/2009	Metals, dissolved	Primary	SMOU RFI
HAR-08	Chatsworth		7/21/2009	314.0	Primary	CFOU RFI
HAR-08	Chatsworth		7/21/2009	COCs	Primary	CFOU RFI
HAR-08	Chatsworth		10/22/2009	314.0	Primary	CFOU RFI
HAR-08	Chatsworth		10/22/2009	COCs	Primary	CFOU RFI
HAR-11	Shallow		2/26/2009	8260B	Primary	PCP-Evaluation
HAR-11	Shallow		2/26/2009	8260B	Duplicate	PCP-Evaluation
HAR-11	Shallow		2/26/2009	8260B	Split	PCP-Evaluation
HAR-11	Shallow		7/20/2009	8260B	Primary	PCP-Evaluation
HAR-14	Shallow		10/13/2009	8260B	Primary	PCP-POC
HAR-14	Shallow		4/23/2009	AppIX	Primary	PCP-POC
HAR-15	Shallow		10/13/2009	8260B	Primary	PCP-POC
HAR-15	Shallow		4/23/2009	AppIX	Primary	PCP-POC
HAR-16	Chatsworth		2/27/2009	8260B	Primary	PCP-POC
HAR-16	Chatsworth		4/23/2009	376.2-Sulfide	Split	PCP-POC
HAR-16	Chatsworth		4/23/2009	504.1 (DBCP, EDB)	Split	PCP-POC
HAR-16	Chatsworth		4/23/2009	8081A pesticides	Split	PCP-POC
HAR-16	Chatsworth		4/23/2009	8082	Split	PCP-POC
HAR-16	Chatsworth		4/23/2009	8141A	Split	PCP-POC
HAR-16	Chatsworth		4/23/2009	8151A	Split	PCP-POC
HAR-16	Chatsworth		4/23/2009	8260B-A+A	Split	PCP-POC
HAR-16	Chatsworth		4/23/2009	8260B-AppIX	Split	PCP-POC
HAR-16	Chatsworth		4/23/2009	8270C-App IX	Split	PCP-POC
HAR-16	Chatsworth		4/23/2009	8290	Split	PCP-POC
HAR-16	Chatsworth		4/23/2009	9012-Cyanide, Total	Split	PCP-POC
HAR-16	Chatsworth		4/23/2009	AppIX	Primary	PCP-POC
HAR-16	Chatsworth		4/23/2009	SRL 524M-TCP	Split	PCP-POC
HAR-16	Chatsworth		4/23/2009	Metals, diss (App IX)	Split	PCP-POC
HAR-16	Chatsworth		10/23/2009	8260B	Primary	PCP-POC

See last three pages of Table B-I for notes and abbreviations.

TABLE B-I
SUMMARY OF SAMPLING AND ANALYSES
QUARTERLY GROUNDWATER MONITORING PROGRAM, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
HAR-16	Chatsworth		10/23/2009	8260B	Duplicate	PCP-POC
HAR-16	Chatsworth		10/23/2009	8260B	Split	PCP-POC
HAR-17	Chatsworth		4/29/2009	376.2-Sulfide	Duplicate	PCP-POC
HAR-17	Chatsworth		4/29/2009	504.1 (DBCP, EDB)	Duplicate	PCP-POC
HAR-17	Chatsworth		4/29/2009	8081A-AppIX	Duplicate	PCP-POC
HAR-17	Chatsworth		4/29/2009	8082	Duplicate	PCP-POC
HAR-17	Chatsworth		4/29/2009	8141A	Duplicate	PCP-POC
HAR-17	Chatsworth		4/29/2009	8151A	Duplicate	PCP-POC
HAR-17	Chatsworth		4/29/2009	8260B-A+A	Duplicate	PCP-POC
HAR-17	Chatsworth		4/29/2009	8260B-AppIX	Duplicate	PCP-POC
HAR-17	Chatsworth		4/29/2009	8260SIM	Duplicate	PCP-POC
HAR-17	Chatsworth		4/29/2009	8270C-App IX	Duplicate	PCP-POC
HAR-17	Chatsworth		4/29/2009	8270SIM-PCP	Duplicate	PCP-POC
HAR-17	Chatsworth		4/29/2009	8290	Duplicate	PCP-POC
HAR-17	Chatsworth		4/29/2009	8321A-Hexachlorophene	Duplicate	PCP-POC
HAR-17	Chatsworth		4/29/2009	9012-Cyanide, Total	Duplicate	PCP-POC
HAR-17	Chatsworth		4/29/2009	AppIX	Primary	PCP-POC
HAR-17	Chatsworth		4/29/2009	SRL 524M-TCP	Duplicate	PCP-POC
HAR-17	Chatsworth		4/29/2009	Metals, diss (App IX)	Duplicate	PCP-POC
HAR-17	Chatsworth		7/16/2009	8290	Primary	PCP-POC
HAR-17	Chatsworth		7/16/2009	8290	Duplicate	PCP-POC
HAR-17	Chatsworth		7/16/2009	8290	Split	PCP-POC
HAR-17	Chatsworth		11/3/2009	8260B	Primary	PCP-POC
HAR-17	Chatsworth		11/3/2009	8260B	Duplicate	PCP-POC
HAR-17	Chatsworth		11/3/2009	8260B	Split	PCP-POC
HAR-18	Chatsworth		3/4/2009	300.0-Fluoride	Duplicate	CFOU RFI
HAR-18	Chatsworth		3/4/2009	314.0	Primary	CFOU RFI
HAR-18	Chatsworth		3/4/2009	COCs	Primary	CFOU RFI
HAR-18	Chatsworth		3/4/2009	8260B	Primary	PCP-ICA
HAR-18	Chatsworth		4/30/2009	300.0-Fluoride	Split	CFOU RFI
HAR-18	Chatsworth		4/30/2009	300.0-Nitrate-NO3	Split	CFOU RFI
HAR-18	Chatsworth		4/30/2009	314.0	Primary	CFOU RFI
HAR-18	Chatsworth		4/30/2009	8260B	Split	CFOU RFI
HAR-18	Chatsworth		4/30/2009	8260SIM	Split	CFOU RFI
HAR-18	Chatsworth		4/30/2009	8270C	Split	CFOU RFI
HAR-18	Chatsworth		4/30/2009	COCs	Primary	CFOU RFI
HAR-18	Chatsworth		7/16/2009	314.0	Primary	CFOU RFI
HAR-18	Chatsworth		7/16/2009	8260B	Primary	PCP-ICA
HAR-18	Chatsworth		7/16/2009	8260SIM	Duplicate	CFOU RFI
HAR-18	Chatsworth		7/16/2009	8270C	Duplicate	CFOU RFI
HAR-18	Chatsworth		7/16/2009	COCs	Primary	CFOU RFI
HAR-18	Chatsworth		10/29/2009	314.0	Primary	CFOU RFI
HAR-18	Chatsworth		10/29/2009	COCs	Primary	CFOU RFI
HAR-20	Chatsworth		2/17/2009	300.0-Fluoride	Duplicate	CFOU RFI
HAR-20	Chatsworth		2/17/2009	314.0	Primary	CFOU RFI
HAR-20	Chatsworth		2/17/2009	314.0	Split	CFOU RFI
HAR-20	Chatsworth		2/17/2009	COCs	Primary	CFOU RFI
HAR-20	Chatsworth		4/30/2009	314.0	Primary	CFOU RFI
HAR-20	Chatsworth		4/30/2009	314.0	Duplicate	CFOU RFI
HAR-20	Chatsworth		4/30/2009	314.0	Split	CFOU RFI
HAR-20	Chatsworth		4/30/2009	COCs	Primary	CFOU RFI
HAR-20	Chatsworth		7/15/2009	314.0	Primary	CFOU RFI
HAR-20	Chatsworth		7/15/2009	COCs	Primary	CFOU RFI

See last three pages of Table B-I for notes and abbreviations.

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BOEING SANTA SUSANA FIELD LABORATORY
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Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
HAR-20	Chatsworth		10/29/2009	314.0	Primary	CFOU RFI
HAR-20	Chatsworth		10/29/2009	COCs	Primary	CFOU RFI
HAR-22	Chatsworth		2/19/2009	8260B	Primary	PCP-Evaluation
HAR-22	Chatsworth		7/21/2009	8260B	Primary	PCP-Evaluation
HAR-22	Chatsworth		7/21/2009	8260B	Duplicate	PCP-Evaluation
HAR-22	Chatsworth		7/21/2009	8260B	Split	PCP-Evaluation
HAR-23	Chatsworth		3/9/2009	8260B	Primary	PCP-Evaluation
HAR-23	Chatsworth		7/20/2009	8260B	Primary	PCP-Evaluation
HAR-24	Chatsworth		3/9/2009	8260B	Primary	PCP-Evaluation
HAR-24	Chatsworth		3/9/2009	8260B	Duplicate	PCP-Evaluation
HAR-24	Chatsworth		7/21/2009	8260B	Primary	PCP-Evaluation
HAR-26	Chatsworth		3/2/2009	8260B	Primary	PCP-Evaluation
HAR-26	Chatsworth		3/2/2009	8270C-PAHs	Primary	SMOU RFI
HAR-26	Chatsworth		3/2/2009	8270C-PAHs	Duplicate	SMOU RFI
HAR-26	Chatsworth		3/2/2009	8270C-PAHs	Split	SMOU RFI
HAR-26	Chatsworth		3/2/2009	8315A-Formaldehyde	Primary	SMOU RFI
HAR-26	Chatsworth		5/1/2009	8270C-PAHs	Primary	SMOU RFI
HAR-26	Chatsworth		5/1/2009	8315A-Formaldehyde	Primary	SMOU RFI
HAR-26	Chatsworth		7/20/2009	8260B	Primary	PCP-Evaluation
HAR-26	Chatsworth		7/20/2009	8270C-PAHs	Primary	SMOU RFI
HAR-26	Chatsworth		7/20/2009	8270C-PAHs	Duplicate	SMOU RFI
HAR-26	Chatsworth		7/20/2009	8270C-PAHs	Split	SMOU RFI
HAR-26	Chatsworth		7/20/2009	8315A-Formaldehyde	Primary	SMOU RFI
HAR-26	Chatsworth		10/29/2009	8270C-PAHs	Primary	SMOU RFI
HAR-26	Chatsworth		10/29/2009	8315A-Formaldehyde	Primary	SMOU RFI
HAR-26	Chatsworth		10/29/2009	8315A-Formaldehyde	Duplicate	SMOU RFI
HAR-27	Shallow		2/18/2009	7196A, Dissolved	Primary	SMOU RFI
HAR-27	Shallow		2/18/2009	8260B	Primary	PCP-Evaluation
HAR-27	Shallow		2/18/2009	8260B	Duplicate	PCP-Evaluation
HAR-27	Shallow		2/18/2009	Metals, dissolved	Primary	SMOU RFI
HAR-27	Shallow		5/5/2009	7196A, Dissolved	Primary	SMOU RFI
HAR-27	Shallow		5/5/2009	7196A, Dissolved	Duplicate	SMOU RFI
HAR-27	Shallow		5/5/2009	Metals, dissolved	Primary	SMOU RFI
HAR-27	Shallow		7/21/2009	8260B	Primary	PCP-Evaluation
HAR-28	Shallow		3/4/2009	7196A, Dissolved	Primary	SMOU RFI
HAR-28	Shallow		3/4/2009	Metals, dissolved	Primary	SMOU RFI
HAR-28	Shallow		5/5/2009	7196A, Dissolved	Primary	SMOU RFI
HAR-28	Shallow		5/5/2009	7196A, Dissolved	Duplicate	SMOU RFI
HAR-28	Shallow		5/5/2009	Metals, dissolved	Primary	SMOU RFI
HAR-29	Shallow		3/4/2009	Metals, dissolved	Primary	SMOU RFI
HAR-29	Shallow		5/13/2009	Metals, dissolved	Primary	SMOU RFI
OS-02	Chatsworth		3/3/2009	8260B	Primary	Off-site
OS-04	Chatsworth		3/3/2009	8260B	Split	Off-site
OS-04	Chatsworth		3/3/2009	8260B	Primary	Off-site
OS-09	Chatsworth		3/3/2009	8260B	Primary	Off-site
OS-09	Chatsworth		8/4/2009	8260B	Primary	Off-site
OS-16	Chatsworth		2/17/2009	8260B	Primary	Off-site
OS-16	Chatsworth		2/17/2009	8260B	Duplicate	Off-site
OS-16	Chatsworth		7/29/2009	8260B	Primary	Off-site
OS-17	Chatsworth		7/30/2009	8260B	Primary	Off-site
OS-17	Chatsworth		3/10/2009	8260B	Primary	Off-site
OS-25	Chatsworth		3/6/2009	8260B	Primary	Off-site
OS-25	Chatsworth		8/5/2009	8260B	Primary	Off-site

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Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
OS-26	Chatsworth		2/11/2009	8260B	Primary	Off-site
OS-26	Chatsworth		8/3/2009	8260B	Primary	Off-site
OS-27	Chatsworth		3/9/2009	8260B	Primary	Off-site
OS-27	Chatsworth		3/9/2009	8260B	Duplicate	Off-site
OS-28	Chatsworth		3/10/2009	1625M	Primary	Off-site
OS-28	Chatsworth		3/10/2009	1625M	Duplicate	Off-site
OS-28	Chatsworth		3/10/2009	1625M	Split	Off-site
OS-28	Chatsworth		3/10/2009	8260B	Primary	Off-site
OS-28	Chatsworth		7/30/2009	1625M	Primary	Off-site
OS-28	Chatsworth		7/30/2009	1625M	Duplicate	Off-site
OS-28	Chatsworth		7/30/2009	1625M	Split	Off-site
OS-28	Chatsworth		7/30/2009	8260B	Primary	Off-site
PZ-004A	Shallow		2/26/2009	7196A, Dissolved	Primary	SMOU RFI
PZ-004A	Shallow		2/26/2009	Metals, dissolved	Primary	SMOU RFI
PZ-004A	Shallow		2/26/2009	Metals, total	Primary	SMOU RFI
PZ-004A	Shallow		2/26/2009	Metals, total	Duplicate	SMOU RFI
PZ-004A	Shallow		2/26/2009	Metals, total	Split	SMOU RFI
PZ-006C	Shallow		2/19/2009	8270C-PAHs	Primary	SMOU RFI
PZ-006C	Shallow		2/19/2009	8315A-Formaldehyde	Primary	SMOU RFI
PZ-006C	Shallow		5/6/2009	8270C-PAHs	Primary	SMOU RFI
PZ-006C	Shallow		5/6/2009	8315A-Formaldehyde	Primary	SMOU RFI
PZ-006C	Shallow		7/15/2009	8270C-PAHs	Primary	SMOU RFI
PZ-006C	Shallow		7/15/2009	8315A-Formaldehyde	Primary	SMOU RFI
PZ-006D	Shallow		2/23/2009	8270C-PAHs	Primary	SMOU RFI
PZ-006D	Shallow		2/23/2009	8315A-Formaldehyde	Primary	SMOU RFI
PZ-006D	Shallow		5/6/2009	8270C-PAHs	Primary	SMOU RFI
PZ-006D	Shallow		5/6/2009	8315A-Formaldehyde	Primary	SMOU RFI
PZ-006D	Shallow		7/15/2009	8270C-PAHs	Primary	SMOU RFI
PZ-006D	Shallow		7/15/2009	8315A-Formaldehyde	Primary	SMOU RFI
PZ-006D	Shallow		10/29/2009	8270C-PAHs	Primary	SMOU RFI
PZ-006D	Shallow		10/29/2009	8315A-Formaldehyde	Primary	SMOU RFI
PZ-006E	Shallow		2/23/2009	8270C-PAHs	Primary	SMOU RFI
PZ-006E	Shallow		2/23/2009	8315A-Formaldehyde	Primary	SMOU RFI
PZ-006E	Shallow		5/6/2009	8270C-PAHs	Primary	SMOU RFI
PZ-006E	Shallow		5/6/2009	8315A-Formaldehyde	Primary	SMOU RFI
PZ-006E	Shallow		7/15/2009	8270C-PAHs	Primary	SMOU RFI
PZ-006E	Shallow		7/15/2009	8315A-Formaldehyde	Primary	SMOU RFI
PZ-006E	Shallow		10/29/2009	8270C-PAHs	Primary	SMOU RFI
PZ-006E	Shallow		10/29/2009	8315A-Formaldehyde	Primary	SMOU RFI
PZ-025	Shallow		2/13/2009	8270C-PAHs	Primary	SMOU RFI
PZ-025	Shallow		2/13/2009	8315A-Formaldehyde	Primary	SMOU RFI
PZ-025	Shallow		4/29/2009	8270C-PAHs	Primary	SMOU RFI
PZ-025	Shallow		4/29/2009	8315A-Formaldehyde	Primary	SMOU RFI
PZ-025	Shallow		7/8/2009	8270C-PAHs	Primary	SMOU RFI
PZ-025	Shallow		7/8/2009	8315A-Formaldehyde	Primary	SMOU RFI
PZ-026	Shallow		2/12/2009	8270C-PAHs	Primary	SMOU RFI
PZ-026	Shallow		2/12/2009	8315A-Formaldehyde	Primary	SMOU RFI
PZ-026	Shallow		4/28/2009	8270C-PAHs	Primary	SMOU RFI
PZ-026	Shallow		4/28/2009	8315A-Formaldehyde	Primary	SMOU RFI
PZ-026	Shallow		7/9/2009	8270C-PAHs	Primary	SMOU RFI
PZ-026	Shallow		7/9/2009	8315A-Formaldehyde	Primary	SMOU RFI
PZ-026	Shallow		10/16/2009	8270C-PAHs	Primary	SMOU RFI
PZ-026	Shallow		10/16/2009	8315A-Formaldehyde	Primary	SMOU RFI

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Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
PZ-027	Shallow		2/12/2009	8270C-PAHs	Primary	SMOU RFI
PZ-027	Shallow		2/12/2009	8315A-Formaldehyde	Primary	SMOU RFI
PZ-027	Shallow		4/28/2009	8270C-PAHs	Primary	SMOU RFI
PZ-027	Shallow		4/28/2009	8315A-Formaldehyde	Primary	SMOU RFI
PZ-027	Shallow		7/8/2009	8270C-PAHs	Primary	SMOU RFI
PZ-027	Shallow		7/8/2009	8315A-Formaldehyde	Primary	SMOU RFI
PZ-048	Shallow		4/30/2009	Metals, dissolved	Primary	SMOU RFI
PZ-050	Shallow		2/10/2009	8015B (EFH)	Primary	SMOU RFI
PZ-050	Shallow		2/10/2009	8270C	Primary	SMOU RFI
PZ-050	Shallow		2/10/2009	Metals, diss (DTSC)	Primary	SMOU RFI
PZ-058	Shallow		5/4/2009	7196A, Dissolved	Primary	SMOU RFI
PZ-058	Shallow		5/4/2009	8015B (EFH)	Primary	SMOU RFI
PZ-058	Shallow		5/4/2009	8082	Primary	SMOU RFI
PZ-058	Shallow		5/4/2009	8260B	Primary	SMOU RFI
PZ-058	Shallow		5/4/2009	8260SIM	Primary	SMOU RFI
PZ-058	Shallow		5/4/2009	8270C	Primary	SMOU RFI
PZ-058	Shallow		5/4/2009	8290	Primary	SMOU RFI
PZ-058	Shallow		5/4/2009	TraceMetals-RFI G2, Diss	Primary	SMOU RFI
PZ-071	Shallow		5/7/2009	7196A, Dissolved	Primary	SMOU RFI
PZ-071	Shallow		5/7/2009	8015B (EFH)	Primary	SMOU RFI
PZ-071	Shallow		5/7/2009	8082	Primary	SMOU RFI
PZ-071	Shallow		5/7/2009	8082	Duplicate	SMOU RFI
PZ-071	Shallow		5/7/2009	8260B	Primary	SMOU RFI
PZ-071	Shallow		5/7/2009	8260SIM	Primary	SMOU RFI
PZ-071	Shallow		5/7/2009	8260SIM	Duplicate	SMOU RFI
PZ-071	Shallow		5/7/2009	8260SIM	Split	SMOU RFI
PZ-071	Shallow		5/7/2009	8270C	Primary	SMOU RFI
PZ-071	Shallow		5/7/2009	8290	Primary	SMOU RFI
PZ-071	Shallow		5/7/2009	8290	Duplicate	SMOU RFI
PZ-071	Shallow		5/7/2009	8290	Split	SMOU RFI
PZ-071	Shallow		5/7/2009	TraceMetals-RFI G2, Diss	Primary	SMOU RFI
PZ-071	Shallow		5/7/2009	TraceMetals-RFI G2, Diss	Duplicate	SMOU RFI
PZ-071	Shallow		5/7/2009	TraceMetals-RFI G2, Diss	Split	SMOU RFI
PZ-071	Shallow		7/16/2009	7196A, Dissolved	Primary	SMOU RFI
PZ-071	Shallow		7/16/2009	7196A, Dissolved	Duplicate	SMOU RFI
PZ-071	Shallow		7/16/2009	8015B (EFH)	Primary	SMOU RFI
PZ-071	Shallow		7/16/2009	8015B (EFH)	Duplicate	SMOU RFI
PZ-071	Shallow		7/16/2009	8015B (EFH)	Split	SMOU RFI
PZ-071	Shallow		7/16/2009	8082	Primary	SMOU RFI
PZ-071	Shallow		7/16/2009	8260B	Primary	SMOU RFI
PZ-071	Shallow		7/16/2009	8260B	Duplicate	SMOU RFI
PZ-071	Shallow		7/16/2009	8260SIM	Primary	SMOU RFI
PZ-071	Shallow		7/16/2009	8260SIM	Duplicate	SMOU RFI
PZ-071	Shallow		7/16/2009	8270C	Primary	SMOU RFI
PZ-071	Shallow		7/16/2009	8290	Primary	SMOU RFI
PZ-071	Shallow		7/16/2009	8290	Split	SMOU RFI
PZ-071	Shallow		7/16/2009	TraceMetals-RFI G2, Diss	Primary	SMOU RFI
PZ-076	Shallow		11/2/2009	8015B (EFH)	Primary	SMOU RFI
PZ-076	Shallow		11/2/2009	8260B	Primary	SMOU RFI
PZ-076	Shallow		11/2/2009	8270C	Primary	SMOU RFI
PZ-076	Shallow		11/2/2009	8290	Primary	SMOU RFI
PZ-076	Shallow		11/2/2009	Metals, diss (DTSC)	Primary	SMOU RFI

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Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
PZ-091	Shallow		10/9/2009	8015B (EFH)	Primary	SMOU RFI
PZ-091	Shallow		10/9/2009	8270C	Primary	SMOU RFI
PZ-091	Shallow		10/9/2009	Metals, diss (DTSC)	Primary	SMOU RFI
PZ-103	Shallow		2/26/2009	300.0-Full	Primary	SMOU RFI
PZ-103	Shallow		2/26/2009	300.0-Full	Duplicate	SMOU RFI
PZ-103	Shallow		2/26/2009	300.0-Full	Split	SMOU RFI
PZ-103	Shallow		4/27/2009	300.0-Full	Primary	SMOU RFI
PZ-103	Shallow		7/9/2009	300.0-Full	Primary	SMOU RFI
PZ-103	Shallow		10/7/2009	300.0-Full	Primary	SMOU RFI
PZ-105	Shallow		2/11/2009	8015B (EFH)	Primary	SMOU RFI
PZ-105	Shallow		2/11/2009	8260B	Primary	SMOU RFI
PZ-105	Shallow		2/11/2009	8260B	Duplicate	SMOU RFI
PZ-105	Shallow		2/11/2009	8260B	Split	SMOU RFI
PZ-105	Shallow		2/11/2009	Metals, diss (DTSC)	Primary	SMOU RFI
PZ-105	Shallow		4/29/2009	8015B (EFH)	Primary	SMOU RFI
PZ-105	Shallow		4/29/2009	8015B (EFH)	Duplicate	SMOU RFI
PZ-105	Shallow		4/29/2009	8260B	Primary	SMOU RFI
PZ-105	Shallow		4/29/2009	Metals, diss (DTSC)	Primary	SMOU RFI
PZ-105	Shallow		4/29/2009	Metals, diss (DTSC)	Duplicate	SMOU RFI
PZ-105	Shallow		4/29/2009	Metals, diss (DTSC)	Split	SMOU RFI
PZ-105	Shallow		7/10/2009	8015B (EFH)	Primary	SMOU RFI
PZ-105	Shallow		7/10/2009	8015B (EFH)	Split	SMOU RFI
PZ-105	Shallow		7/10/2009	8260B	Primary	SMOU RFI
PZ-105	Shallow		7/10/2009	8260B	Split	SMOU RFI
PZ-105	Shallow		7/10/2009	Metals, diss (DTSC)	Primary	SMOU RFI
PZ-105	Shallow		10/12/2009	8015B (EFH)	Primary	SMOU RFI
PZ-105	Shallow		10/12/2009	8260B	Primary	SMOU RFI
PZ-105	Shallow		10/12/2009	8260B	Duplicate	SMOU RFI
PZ-105	Shallow		10/12/2009	Metals, diss (DTSC)	Primary	SMOU RFI
PZ-108	Shallow		2/18/2009	300.0-Full	Primary	SMOU RFI
PZ-108	Shallow		2/18/2009	300.0-Full	Duplicate	SMOU RFI
PZ-108	Shallow		2/18/2009	300.0-Full	Split	SMOU RFI
PZ-108	Shallow		2/18/2009	314.0	Primary	SMOU RFI
PZ-108	Shallow		2/18/2009	314.0	Split	SMOU RFI
PZ-108	Shallow		2/18/2009	8315M-Hydrazines	Primary	SMOU RFI
PZ-108	Shallow		5/5/2009	300.0-Full	Primary	SMOU RFI
PZ-108	Shallow		5/5/2009	314.0	Primary	SMOU RFI
PZ-108	Shallow		5/5/2009	8315M-Hydrazines	Primary	SMOU RFI
PZ-108	Shallow		5/5/2009	8315M-Hydrazines	Duplicate	SMOU RFI
PZ-108	Shallow		7/14/2009	300.0-Full	Primary	SMOU RFI
PZ-108	Shallow		7/14/2009	300.0-Full (nitrate not schedule	Split	SMOU RFI
PZ-108	Shallow		7/14/2009	314.0	Primary	SMOU RFI
PZ-108	Shallow		7/14/2009	314.0	Split	SMOU RFI
PZ-108	Shallow		7/14/2009	8315M-Hydrazines	Primary	SMOU RFI
PZ-108	Shallow		10/14/2009	300.0-Full	Primary	SMOU RFI
PZ-108	Shallow		10/14/2009	300.0-Full	Duplicate	SMOU RFI
PZ-108	Shallow		10/14/2009	314.0	Primary	SMOU RFI
PZ-108	Shallow		10/14/2009	8315M-Hydrazines	Primary	SMOU RFI
PZ-109	Shallow		2/17/2009	300.0-Full	Primary	SMOU RFI
PZ-109	Shallow		2/17/2009	Metals, diss (DTSC)	Primary	SMOU RFI
PZ-109	Shallow		4/30/2009	300.0-Full	Primary	SMOU RFI
PZ-109	Shallow		4/30/2009	300.0-Full	Split	SMOU RFI
PZ-109	Shallow		4/30/2009	Metals, diss (DTSC)	Primary	SMOU RFI
PZ-109	Shallow		7/17/2009	300.0-Full	Primary	SMOU RFI

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Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
PZ-109	Shallow		7/17/2009	300.0-Full	Duplicate	SMOU RFI
PZ-109	Shallow		7/17/2009	Metals, diss (DTSC)	Primary	SMOU RFI
PZ-109	Shallow		7/17/2009	Metals, diss (DTSC)	Duplicate	SMOU RFI
PZ-109	Shallow		10/7/2009	300.0-Full	Primary	SMOU RFI
PZ-109	Shallow		10/7/2009	Metals, diss (DTSC)	Primary	SMOU RFI
PZ-120	Shallow		2/10/2009	8260B	Primary	SMOU RFI
PZ-120	Shallow		4/29/2009	8260B	Primary	SMOU RFI
PZ-120	Shallow		7/9/2009	8260B	Primary	SMOU RFI
PZ-120	Shallow		10/7/2009	8260B	Primary	SMOU RFI
PZ-122	Shallow		2/19/2009	300.0-Full	Primary	SMOU RFI
PZ-122	Shallow		2/19/2009	314.0	Primary	SMOU RFI
PZ-122	Shallow		2/19/2009	8015B (EFH)	Primary	SMOU RFI
PZ-122	Shallow		2/19/2009	8315M-Hydrazines	Primary	SMOU RFI
PZ-122	Shallow		2/19/2009	9040B	Primary	SMOU RFI
PZ-122	Shallow		2/19/2009	9040B	Duplicate	SMOU RFI
PZ-122	Shallow		2/19/2009	9040B	Split	SMOU RFI
PZ-122	Shallow		2/19/2009	Metals, diss (DTSC)	Primary	SMOU RFI
PZ-122	Shallow		2/19/2009	Metals, diss (DTSC)	Split	SMOU RFI
PZ-122	Shallow		5/5/2009	300.0-Full	Primary	SMOU RFI
PZ-122	Shallow		5/5/2009	300.0-Full	Duplicate	SMOU RFI
PZ-122	Shallow		5/5/2009	314.0	Primary	SMOU RFI
PZ-122	Shallow		5/5/2009	314.0	Duplicate	SMOU RFI
PZ-122	Shallow		5/5/2009	314.0	Split	SMOU RFI
PZ-122	Shallow		5/5/2009	8015B (EFH)	Primary	SMOU RFI
PZ-122	Shallow		5/5/2009	8315M-Hydrazines	Primary	SMOU RFI
PZ-122	Shallow		5/5/2009	9040B	Primary	SMOU RFI
PZ-122	Shallow		5/5/2009	9040B	Duplicate	SMOU RFI
PZ-122	Shallow		5/5/2009	9040B	Split	SMOU RFI
PZ-122	Shallow		5/5/2009	Metals, diss (DTSC)	Primary	SMOU RFI
PZ-122	Shallow		7/14/2009	300.0-Full	Primary	SMOU RFI
PZ-122	Shallow		7/14/2009	314.0	Primary	SMOU RFI
PZ-122	Shallow		7/14/2009	8015B (EFH)	Primary	SMOU RFI
PZ-122	Shallow		7/14/2009	8315M-Hydrazines	Primary	SMOU RFI
PZ-122	Shallow		7/14/2009	9040B	Primary	SMOU RFI
PZ-122	Shallow		7/14/2009	9040B	Duplicate	SMOU RFI
PZ-122	Shallow		7/14/2009	9040B	Split	SMOU RFI
PZ-122	Shallow		7/14/2009	Metals, diss (DTSC)	Primary	SMOU RFI
PZ-122	Shallow		7/14/2009	Metals, diss (DTSC)	Split	SMOU RFI
PZ-122	Shallow		10/13/2009	300.0-Full	Primary	SMOU RFI
PZ-122	Shallow		10/13/2009	300.0-Full	Split	SMOU RFI
PZ-122	Shallow		10/13/2009	314.0	Primary	SMOU RFI
PZ-122	Shallow		10/13/2009	8015B (EFH)	Primary	SMOU RFI
PZ-122	Shallow		10/13/2009	8315M-Hydrazines	Primary	SMOU RFI
PZ-122	Shallow		10/13/2009	8315M-Hydrazines	Duplicate	SMOU RFI
PZ-122	Shallow		10/13/2009	9040B	Primary	SMOU RFI
PZ-122	Shallow		10/13/2009	9040B	Duplicate	SMOU RFI
PZ-122	Shallow		10/13/2009	9040B	Split	SMOU RFI
PZ-122	Shallow		10/13/2009	Metals, diss (DTSC)	Primary	SMOU RFI
PZ-139	Shallow		10/15/2009	1625M	Primary	SMOU RFI
PZ-139	Shallow		10/15/2009	1625M	Duplicate	SMOU RFI
PZ-139	Shallow		10/15/2009	1625M	Split	SMOU RFI
PZ-139	Shallow		10/15/2009	7196A, Dissolved	Primary	SMOU RFI
PZ-139	Shallow		10/15/2009	7196A, Dissolved	Duplicate	SMOU RFI
PZ-139	Shallow		10/15/2009	7196A, Dissolved	Split	SMOU RFI

See last three pages of Table B-I for notes and abbreviations.

TABLE B-I
SUMMARY OF SAMPLING AND ANALYSES
QUARTERLY GROUNDWATER MONITORING PROGRAM, 2009
BOEING SANTA SUSANA FIELD LABORATORY
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Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
PZ-139	Shallow		10/15/2009	8015B (GRO)	Primary	SMOU RFI
PZ-139	Shallow		10/15/2009	8015B (EFH)	Primary	SMOU RFI
PZ-139	Shallow		10/15/2009	8082	Primary	SMOU RFI
PZ-139	Shallow		10/15/2009	8260B	Primary	SMOU RFI
PZ-139	Shallow		10/15/2009	8260SIM	Primary	SMOU RFI
PZ-139	Shallow		10/15/2009	8270C	Primary	SMOU RFI
PZ-139	Shallow		10/15/2009	8290	Primary	SMOU RFI
PZ-139	Shallow		10/15/2009	8315A-Formaldehyde	Primary	SMOU RFI
PZ-139	Shallow		10/15/2009	TraceMetals-RFI G2, Diss	Primary	SMOU RFI
PZ-140	Shallow		10/20/2009	1625M	Primary	SMOU RFI
PZ-140	Shallow		10/20/2009	1625M	Duplicate	SMOU RFI
PZ-140	Shallow		10/20/2009	7196A, Dissolved	Primary	SMOU RFI
PZ-140	Shallow		10/20/2009	8015B (GRO)	Primary	SMOU RFI
PZ-140	Shallow		10/20/2009	8015B (EFH)	Primary	SMOU RFI
PZ-140	Shallow		10/20/2009	8082	Primary	SMOU RFI
PZ-140	Shallow		10/20/2009	8260B	Primary	SMOU RFI
PZ-140	Shallow		10/20/2009	8260SIM	Primary	SMOU RFI
PZ-140	Shallow		10/20/2009	8270C	Primary	SMOU RFI
PZ-140	Shallow		10/20/2009	8290	Primary	SMOU RFI
PZ-140	Shallow		10/20/2009	8315A-Formaldehyde	Primary	SMOU RFI
PZ-140	Shallow		10/20/2009	TraceMetals-RFI G2, Diss	Primary	SMOU RFI
PZ-140	Shallow		10/20/2009	TraceMetals-RFI G2, Diss	Duplicate	SMOU RFI
PZ-140	Shallow		10/20/2009	TraceMetals-RFI G2, Diss	Split	SMOU RFI
PZ-141	Shallow		11/3/2009	1625M	Primary	SMOU RFI
PZ-141	Shallow		11/3/2009	1625M	Duplicate	SMOU RFI
PZ-141	Shallow		11/3/2009	7196A, Dissolved	Primary	SMOU RFI
PZ-141	Shallow		11/3/2009	8015B (GRO)	Primary	SMOU RFI
PZ-141	Shallow		11/3/2009	8015B (EFH)	Primary	SMOU RFI
PZ-141	Shallow		11/3/2009	8082	Primary	SMOU RFI
PZ-141	Shallow		11/3/2009	8260B	Primary	SMOU RFI
PZ-141	Shallow		11/3/2009	8260SIM	Primary	SMOU RFI
PZ-141	Shallow		11/3/2009	8260SIM	Split	SMOU RFI
PZ-141	Shallow		11/3/2009	8270C	Primary	SMOU RFI
PZ-141	Shallow		11/3/2009	8290	Primary	SMOU RFI
PZ-141	Shallow		11/3/2009	8315A-Formaldehyde	Primary	SMOU RFI
PZ-141	Shallow		11/3/2009	TraceMetals-RFI G2, Diss	Primary	SMOU RFI
RD-01	Chatsworth		2/25/2009	1625M	Split	CFOU RFI
RD-01	Chatsworth		2/25/2009	314.0	Primary	CFOU RFI
RD-01	Chatsworth		2/25/2009	314.0	Split	CFOU RFI
RD-01	Chatsworth		2/25/2009	8270C	Duplicate	CFOU RFI
RD-01	Chatsworth		2/25/2009	COCs	Primary	CFOU RFI
RD-01	Chatsworth		2/25/2009	8260B	Primary	PCP-ICA
RD-01	Chatsworth		5/12/2009	314.0	Primary	CFOU RFI
RD-01	Chatsworth		5/12/2009	COCs	Primary	CFOU RFI
RD-01	Chatsworth		7/14/2009	300.0-Nitrate-NO3	Duplicate	CFOU RFI
RD-01	Chatsworth		7/14/2009	314.0	Primary	CFOU RFI
RD-01	Chatsworth		7/14/2009	8260B	Primary	PCP-ICA
RD-01	Chatsworth		7/14/2009	COCs	Primary	CFOU RFI
RD-01	Chatsworth		10/27/2009	300.0-Fluoride	Split	CFOU RFI
RD-01	Chatsworth		10/27/2009	300.0-Nitrate-NO3	Split	CFOU RFI
RD-01	Chatsworth		10/27/2009	314.0	Primary	CFOU RFI
RD-01	Chatsworth		10/27/2009	350.3-Ammonia-N	Split	CFOU RFI
RD-01	Chatsworth		10/27/2009	8270C	Split	CFOU RFI
RD-01	Chatsworth		10/27/2009	COCs	Primary	CFOU RFI

See last three pages of Table B-I for notes and abbreviations.

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Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
RD-02	Chatsworth		2/26/2009	314.0	Primary	CFOU RFI
RD-02	Chatsworth		2/26/2009	8260B	Duplicate	CFOU RFI
RD-02	Chatsworth		2/26/2009	8260B	Duplicate	PCP-ICA
RD-02	Chatsworth		2/26/2009	8260B	Primary	PCP-ICA
RD-02	Chatsworth		2/26/2009	COCs	Primary	CFOU RFI
RD-02	Chatsworth		5/12/2009	314.0	Primary	CFOU RFI
RD-02	Chatsworth		5/12/2009	COCs	Primary	CFOU RFI
RD-03	Chatsworth		7/29/2009	8260B	Primary	PCP-Evaluation
RD-03	Chatsworth		10/27/2009	314.0	Primary	SMOU RFI
RD-03	Chatsworth		10/27/2009	314.0	Duplicate	SMOU RFI
RD-03	Chatsworth		10/27/2009	314.0	Split	SMOU RFI
RD-03	Chatsworth		10/27/2009	8015B (EFH)	Primary	SMOU RFI
RD-03	Chatsworth		10/27/2009	8015B (EFH)	Duplicate	SMOU RFI
RD-03	Chatsworth		10/27/2009	8015B (EFH)	Split	SMOU RFI
RD-03	Chatsworth		10/27/2009	8082	Primary	SMOU RFI
RD-03	Chatsworth		10/27/2009	8082	Duplicate	SMOU RFI
RD-03	Chatsworth		10/27/2009	8082	Split	SMOU RFI
RD-03	Chatsworth		10/27/2009	8270C	Primary	SMOU RFI
RD-03	Chatsworth		10/27/2009	8290	Primary	SMOU RFI
RD-03	Chatsworth		10/27/2009	8290	Split	SMOU RFI
RD-03	Chatsworth		10/27/2009	Metals, diss (DTSC)	Primary	SMOU RFI
RD-03	Chatsworth		10/27/2009	Metals, diss (DTSC)	Split	SMOU RFI
RD-04	Chatsworth		2/9/2009	314.0	Primary	CFOU RFI
RD-04	Chatsworth		2/9/2009	8260B	Duplicate	CFOU RFI
RD-04	Chatsworth		2/9/2009	8260B	Duplicate	PCP-ICA
RD-04	Chatsworth		2/9/2009	8260B	Primary	PCP-ICA
RD-04	Chatsworth		2/9/2009	COCs	Primary	CFOU RFI
RD-04	Chatsworth		5/5/2009	314.0	Primary	CFOU RFI
RD-04	Chatsworth		5/5/2009	COCs	Primary	CFOU RFI
RD-04	Chatsworth		7/28/2009	314.0	Primary	CFOU RFI
RD-04	Chatsworth		7/28/2009	8260B	Primary	PCP-ICA
RD-04	Chatsworth		7/28/2009	8260SIM	Duplicate	CFOU RFI
RD-04	Chatsworth		7/28/2009	COCs	Primary	CFOU RFI
RD-04	Chatsworth		10/28/2009	314.0	Primary	CFOU RFI
RD-04	Chatsworth		10/28/2009	350.3-Ammonia-N	Duplicate	CFOU RFI
RD-04	Chatsworth		10/28/2009	8315A-Formaldehyde	Duplicate	CFOU RFI
RD-04	Chatsworth		10/28/2009	COCs	Primary	CFOU RFI
RD-05A	Chatsworth		2/12/2009	8260B	Primary	PCP-Evaluation
RD-05A	Chatsworth		7/20/2009	8260B	Primary	PCP-Evaluation
RD-05B	Chatsworth		2/13/2009	8260B	Split	PCP-Detection
RD-05B	Chatsworth		2/13/2009	8260B	Primary	PCP-Detection
RD-05B	Chatsworth		2/13/2009	8260B	Duplicate	PCP-Detection
RD-05B	Chatsworth		5/12/2009	8260B	Primary	PCP-Detection
RD-05B	Chatsworth		5/12/2009	8260B	Duplicate	PCP-Detection
RD-05B	Chatsworth		7/22/2009	8260B	Primary	PCP-Detection
RD-05B	Chatsworth		10/22/2009	8260B	Primary	PCP-Detection
RD-05B	Chatsworth		10/22/2009	8260B	Duplicate	PCP-Detection
RD-05C	Chatsworth		2/13/2009	8260B	Primary	PCP-Detection
RD-05C	Chatsworth		5/8/2009	8260B	Primary	PCP-Detection
RD-05C	Chatsworth		7/20/2009	8260B	Primary	PCP-Detection
RD-05C	Chatsworth		10/22/2009	8260B	Primary	PCP-Detection
RD-05C	Chatsworth		10/22/2009	8260B	Duplicate	PCP-Detection
RD-06	Chatsworth		2/12/2009	8260B	Primary	PCP-Background
RD-06	Chatsworth		5/4/2009	8260B	Primary	PCP-Background

See last three pages of Table B-I for notes and abbreviations.

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Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
RD-06	Chatsworth		5/4/2009	8260B	Duplicate	PCP-Background
RD-06	Chatsworth		5/4/2009	8260B	Split	PCP-Background
RD-06	Chatsworth		7/13/2009	AppIX	Primary	PCP-Evaluation
RD-06	Chatsworth		7/13/2009	AppIX	Duplicate	PCP-Evaluation
RD-07	Chatsworth	Z3	2/20/2009	8260B	Primary	Area IV
RD-07	Chatsworth	Z3	2/20/2009	8290	Primary	SMOU RFI
RD-07	Chatsworth	Z3	2/20/2009	8290	Split	SMOU RFI
RD-07	Chatsworth	Z3	2/20/2009	900.0-dissolved	Primary	Area IV
RD-07	Chatsworth	Z3	2/20/2009	900.0-total	Primary	Area IV
RD-07	Chatsworth	Z3	2/20/2009	901.1-dissolved	Primary	Area IV
RD-07	Chatsworth	Z3	2/20/2009	901.1-total	Primary	Area IV
RD-07	Chatsworth	Z3	2/20/2009	905.0-dissolved	Primary	Area IV
RD-07	Chatsworth	Z3	2/20/2009	905.0-total	Primary	Area IV
RD-07	Chatsworth	Z3	2/20/2009	906.0-total	Primary	Area IV
RD-07	Chatsworth	Z3	2/20/2009	908.0-dissolved	Primary	Area IV
RD-07	Chatsworth	Z3	2/20/2009	908.0-total	Primary	Area IV
RD-07	Chatsworth	Z3	4/29/2009	8290	Primary	SMOU RFI
RD-07	Chatsworth	Z3	4/29/2009	8290	Duplicate	SMOU RFI
RD-07	Chatsworth	Z3	7/16/2009	8260B	Primary	Area IV
RD-07	Chatsworth	Z3	7/16/2009	900.0-dissolved	Primary	Area IV
RD-07	Chatsworth	Z3	7/16/2009	900.0-total	Primary	Area IV
RD-07	Chatsworth	Z3	7/16/2009	901.1-dissolved	Primary	Area IV
RD-07	Chatsworth	Z3	7/16/2009	901.1-total	Primary	Area IV
RD-07	Chatsworth	Z3	7/16/2009	905.0-dissolved	Primary	Area IV
RD-07	Chatsworth	Z3	7/16/2009	905.0-total	Primary	Area IV
RD-07	Chatsworth	Z3	7/16/2009	906.0-total	Primary	Area IV
RD-07	Chatsworth	Z3	7/16/2009	908.0-dissolved	Primary	Area IV
RD-08	Chatsworth		3/5/2009	8270C-PAHs	Primary	SMOU RFI
RD-08	Chatsworth		3/5/2009	8315A-Formaldehyde	Primary	SMOU RFI
RD-08	Chatsworth		5/13/2009	8270C-PAHs	Primary	SMOU RFI
RD-08	Chatsworth		5/13/2009	8270C-PAHs	Duplicate	SMOU RFI
RD-08	Chatsworth		5/13/2009	8315A-Formaldehyde	Primary	SMOU RFI
RD-08	Chatsworth		5/13/2009	8315A-Formaldehyde	Duplicate	SMOU RFI
RD-08	Chatsworth		8/5/2009	8270C-PAHs	Primary	SMOU RFI
RD-08	Chatsworth		8/5/2009	8315A-Formaldehyde	Primary	SMOU RFI
RD-08	Chatsworth		11/4/2009	8270C-PAHs	Primary	SMOU RFI
RD-08	Chatsworth		11/4/2009	8270C-PAHs	Duplicate	SMOU RFI
RD-08	Chatsworth		11/4/2009	8270C-PAHs	Split	SMOU RFI
RD-08	Chatsworth		11/4/2009	8315A-Formaldehyde	Primary	SMOU RFI
RD-08	Chatsworth		11/4/2009	8315A-Formaldehyde	Duplicate	SMOU RFI
RD-09	Chatsworth		2/19/2009	314.0	Primary	CFOU RFI
RD-09	Chatsworth		2/19/2009	314.0	Duplicate	CFOU RFI
RD-09	Chatsworth		2/19/2009	8315A-Formaldehyde	Split	CFOU RFI
RD-09	Chatsworth		2/19/2009	COCs	Primary	CFOU RFI
RD-09	Chatsworth		2/19/2009	8260B	Primary	PCP-ICA
RD-09	Chatsworth		5/7/2009	314.0	Primary	CFOU RFI
RD-09	Chatsworth		5/7/2009	314.0	Duplicate	CFOU RFI
RD-09	Chatsworth		5/7/2009	COCs	Primary	CFOU RFI
RD-09	Chatsworth		5/7/2009	COCs	Duplicate	CFOU RFI
RD-09	Chatsworth		7/28/2009	300.0-Fluoride	Split	CFOU RFI
RD-09	Chatsworth		7/28/2009	300.0-Nitrate-NO3	Split	CFOU RFI
RD-09	Chatsworth		7/28/2009	314.0	Primary	CFOU RFI
RD-09	Chatsworth		7/28/2009	8260B	Primary	PCP-ICA
RD-09	Chatsworth		7/28/2009	COCs	Primary	CFOU RFI

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Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
RD-09	Chatsworth		10/19/2009	300.0-Fluoride	Duplicate	CFOU RFI
RD-09	Chatsworth		10/19/2009	300.0-Nitrate-NO3	Duplicate	CFOU RFI
RD-09	Chatsworth		10/19/2009	314.0	Primary	CFOU RFI
RD-09	Chatsworth		10/19/2009	COCs	Primary	CFOU RFI
RD-10	Chatsworth		2/26/2009	314.0	Primary	CFOU RFI
RD-10	Chatsworth		2/26/2009	8315A-Formaldehyde	Split	CFOU RFI
RD-10	Chatsworth		2/26/2009	COCs	Primary	CFOU RFI
RD-10	Chatsworth		2/26/2009	8260B	Primary	PCP-Evaluation
RD-10	Chatsworth		5/11/2009	1625M	Duplicate	CFOU RFI
RD-10	Chatsworth		5/11/2009	314.0	Primary	CFOU RFI
RD-10	Chatsworth		5/11/2009	COCs	Primary	CFOU RFI
RD-10	Chatsworth		7/14/2009	300.0-Fluoride	Duplicate	CFOU RFI
RD-10	Chatsworth		7/14/2009	314.0	Primary	CFOU RFI
RD-10	Chatsworth		7/14/2009	350.3-Ammonia-N	Duplicate	CFOU RFI
RD-10	Chatsworth		7/14/2009	8260B	Primary	PCP-Evaluation
RD-10	Chatsworth		7/14/2009	COCs	Primary	CFOU RFI
RD-10	Chatsworth		10/27/2009	314.0	Primary	CFOU RFI
RD-10	Chatsworth		10/27/2009	314.0	Duplicate	CFOU RFI
RD-10	Chatsworth		10/27/2009	COCs	Primary	CFOU RFI
RD-11	Chatsworth		3/10/2009	8270C-PAHs	Primary	SMOU RFI
RD-11	Chatsworth		3/10/2009	8315A-Formaldehyde	Primary	SMOU RFI
RD-11	Chatsworth		5/14/2009	8270C-PAHs	Primary	SMOU RFI
RD-11	Chatsworth		5/14/2009	8270C-PAHs	Split	SMOU RFI
RD-11	Chatsworth		5/14/2009	8315A-Formaldehyde	Primary	SMOU RFI
RD-11	Chatsworth		5/14/2009	8315A-Formaldehyde	Duplicate	SMOU RFI
RD-11	Chatsworth		11/4/2009	8270C-PAHs	Primary	SMOU RFI
RD-11	Chatsworth		11/4/2009	8315A-Formaldehyde	Primary	SMOU RFI
RD-12	Chatsworth		3/5/2009	8270C-PAHs	Primary	SMOU RFI
RD-12	Chatsworth		3/5/2009	8315A-Formaldehyde	Primary	SMOU RFI
RD-12	Chatsworth		4/28/2009	8270C-PAHs	Primary	SMOU RFI
RD-12	Chatsworth		4/28/2009	8270C-PAHs	Duplicate	SMOU RFI
RD-12	Chatsworth		4/28/2009	8315A-Formaldehyde	Primary	SMOU RFI
RD-13	Chatsworth		3/9/2009	1625M	Primary	SMOU RFI
RD-13	Chatsworth		3/9/2009	1625M	Duplicate	SMOU RFI
RD-13	Chatsworth		3/9/2009	1625M	Split	SMOU RFI
RD-13	Chatsworth		3/9/2009	314.0	Primary	SMOU RFI
RD-13	Chatsworth		3/9/2009	314.0	Duplicate	SMOU RFI
RD-13	Chatsworth		3/9/2009	8260B	Primary	PCP-Background
RD-13	Chatsworth		3/9/2009	8260B	Duplicate	PCP-Background
RD-13	Chatsworth		3/9/2009	8315A-Formaldehyde	Primary	SMOU RFI
RD-13	Chatsworth		3/9/2009	8315A-Formaldehyde	Duplicate	SMOU RFI
RD-13	Chatsworth		3/9/2009	8315M-Hydrazines	Primary	SMOU RFI
RD-13	Chatsworth		3/9/2009	8315M-Hydrazines	Duplicate	SMOU RFI
RD-13	Chatsworth		3/9/2009	8330	Primary	SMOU RFI
RD-13	Chatsworth		3/9/2009	8330	Split	SMOU RFI
RD-13	Chatsworth		5/6/2009	1625M	Primary	SMOU RFI
RD-13	Chatsworth		5/6/2009	1625M	Duplicate	SMOU RFI
RD-13	Chatsworth		5/6/2009	1625M	Split	SMOU RFI
RD-13	Chatsworth		5/6/2009	314.0	Primary	SMOU RFI
RD-13	Chatsworth		5/6/2009	8260B	Primary	PCP-Background
RD-13	Chatsworth		5/6/2009	8260B	Duplicate	PCP-Background
RD-13	Chatsworth		5/6/2009	8315A-Formaldehyde	Primary	SMOU RFI
RD-13	Chatsworth		5/6/2009	8315M-Hydrazines	Primary	SMOU RFI
RD-13	Chatsworth		5/6/2009	8330	Primary	SMOU RFI

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BOEING SANTA SUSANA FIELD LABORATORY
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Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
RD-13	Chatsworth		5/6/2009	8330	Duplicate	SMOU RFI
RD-13	Chatsworth		5/6/2009	8330	Split	SMOU RFI
RD-13	Chatsworth		7/15/2009	1625M	Primary	SMOU RFI
RD-13	Chatsworth		7/15/2009	1625M	Duplicate	SMOU RFI
RD-13	Chatsworth		7/15/2009	1625M	Split	SMOU RFI
RD-13	Chatsworth		7/15/2009	314.0	Primary	SMOU RFI
RD-13	Chatsworth		7/15/2009	314.0	Duplicate	SMOU RFI
RD-13	Chatsworth		7/15/2009	8260B	Primary	PCP-Background
RD-13	Chatsworth		7/15/2009	8315A-Formaldehyde	Primary	SMOU RFI
RD-13	Chatsworth		7/15/2009	8315A-Formaldehyde	Duplicate	SMOU RFI
RD-13	Chatsworth		7/15/2009	8315M-Hydrazines	Primary	SMOU RFI
RD-13	Chatsworth		7/15/2009	8315M-Hydrazines	Duplicate	SMOU RFI
RD-13	Chatsworth		7/15/2009	8330	Primary	SMOU RFI
RD-13	Chatsworth		7/15/2009	8330	Duplicate	SMOU RFI
RD-13	Chatsworth		7/15/2009	8330	Split	SMOU RFI
RD-13	Chatsworth		10/21/2009	1625M	Primary	SMOU RFI
RD-13	Chatsworth		10/21/2009	1625M	Duplicate	SMOU RFI
RD-13	Chatsworth		10/21/2009	1625M	Split	SMOU RFI
RD-13	Chatsworth		10/21/2009	314.0	Primary	SMOU RFI
RD-13	Chatsworth		10/21/2009	8260B	Primary	PCP-Background
RD-13	Chatsworth		10/21/2009	8260B	Duplicate	PCP-Background
RD-13	Chatsworth		10/21/2009	8315A-Formaldehyde	Primary	SMOU RFI
RD-13	Chatsworth		10/21/2009	8315A-Formaldehyde	Split	SMOU RFI
RD-13	Chatsworth		10/21/2009	8315M-Hydrazines	Primary	SMOU RFI
RD-13	Chatsworth		10/21/2009	8330	Primary	SMOU RFI
RD-13	Chatsworth		10/21/2009	8330	Duplicate	SMOU RFI
RD-13	Chatsworth		10/21/2009	8330	Split	SMOU RFI
RD-13	Chatsworth		07/15/2009	8330	Primary	SMOU RFI
RD-15	Chatsworth		2/24/2009	8260B	Primary	Area IV
RD-15	Chatsworth		2/24/2009	900.0-dissolved	Primary	Area IV
RD-15	Chatsworth		2/24/2009	900.0-dissolved	Split	Area IV
RD-15	Chatsworth		2/24/2009	900.0-total	Primary	Area IV
RD-15	Chatsworth		2/24/2009	900.0-total	Split	Area IV
RD-15	Chatsworth		2/24/2009	901.1-dissolved	Primary	Area IV
RD-15	Chatsworth		2/24/2009	901.1-dissolved	Primary-Reanalysis 1	Area IV
RD-15	Chatsworth		2/24/2009	901.1-dissolved	Split	Area IV
RD-15	Chatsworth		2/24/2009	901.1-total	Primary	Area IV
RD-15	Chatsworth		2/24/2009	901.1-total	Split	Area IV
RD-15	Chatsworth		2/24/2009	905.0-dissolved	Primary	Area IV
RD-15	Chatsworth		2/24/2009	905.0-dissolved	Split	Area IV
RD-15	Chatsworth		2/24/2009	905.0-total	Primary	Area IV
RD-15	Chatsworth		2/24/2009	905.0-total	Split	Area IV
RD-15	Chatsworth		2/24/2009	906.0-total	Primary	Area IV
RD-15	Chatsworth		2/24/2009	906.0-total	Split	Area IV
RD-15	Chatsworth		2/24/2009	Metals, dissolved	Primary	Area IV, SMOU RFI
RD-15	Chatsworth		2/24/2009	Metals, dissolved	Split	Area IV, SMOU RFI
RD-15	Chatsworth		5/7/2009	Metals, dissolved	Primary	SMOU RFI
RD-15	Chatsworth		7/24/2009	900.0-dissolved	Primary	Area IV
RD-15	Chatsworth		7/24/2009	900.0-total	Primary	Area IV
RD-15	Chatsworth		7/24/2009	900.0-total	Duplicate	Area IV
RD-15	Chatsworth		7/24/2009	901.1-dissolved	Primary	Area IV
RD-15	Chatsworth		7/24/2009	901.1-total	Primary	Area IV
RD-15	Chatsworth		7/24/2009	901.1-total	Duplicate	Area IV
RD-15	Chatsworth		7/24/2009	905.0-dissolved	Primary	Area IV

See last three pages of Table B-I for notes and abbreviations.

TABLE B-I
SUMMARY OF SAMPLING AND ANALYSES
QUARTERLY GROUNDWATER MONITORING PROGRAM, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
RD-15	Chatsworth		7/24/2009	905.0-total	Primary	Area IV
RD-15	Chatsworth		7/24/2009	905.0-total	Duplicate	Area IV
RD-15	Chatsworth		7/24/2009	906.0-total	Primary	Area IV
RD-15	Chatsworth		7/24/2009	906.0-total	Duplicate	Area IV
RD-16	Chatsworth		2/24/2009	8260B	Primary	PCP-Detection
RD-16	Chatsworth		5/7/2009	8260B	Primary	PCP-Detection
RD-16	Chatsworth		7/21/2009	8260B	Primary	PCP-Detection
RD-16	Chatsworth		7/21/2009	8260B	Duplicate	PCP-Detection
RD-16	Chatsworth		10/20/2009	8260B	Primary	PCP-Detection
RD-16	Chatsworth		10/20/2009	8260B	Split	PCP-Detection
RD-17	Chatsworth		2/25/2009	8260B	Primary	Area IV
RD-17	Chatsworth		2/25/2009	900.0-dissolved	Primary	Area IV
RD-17	Chatsworth		2/25/2009	900.0-dissolved	Primary-Reanalysis 1	Area IV
RD-17	Chatsworth		2/25/2009	900.0-total	Primary	Area IV
RD-17	Chatsworth		2/25/2009	901.1-dissolved	Primary	Area IV
RD-17	Chatsworth		2/25/2009	901.1-total	Primary	Area IV
RD-17	Chatsworth		2/25/2009	905.0-dissolved	Primary	Area IV
RD-17	Chatsworth		2/25/2009	905.0-total	Primary	Area IV
RD-17	Chatsworth		2/25/2009	906.0-total	Primary	Area IV
RD-17	Chatsworth		7/27/2009	900.0-dissolved	Primary	Area IV
RD-17	Chatsworth		7/27/2009	900.0-total	Primary	Area IV
RD-17	Chatsworth		7/27/2009	901.1-dissolved	Primary	Area IV
RD-17	Chatsworth		7/27/2009	901.1-total	Primary	Area IV
RD-17	Chatsworth		7/27/2009	905.0-dissolved	Primary	Area IV
RD-17	Chatsworth		7/27/2009	905.0-total	Primary	Area IV
RD-17	Chatsworth		7/27/2009	906.0-total	Primary	Area IV
RD-18	Chatsworth		3/2/2009	8260B (IPA)	Primary	SMOU RFI
RD-18	Chatsworth		3/2/2009	8260B (IPA)	Split	SMOU RFI
RD-18	Chatsworth		3/2/2009	8260B	Primary	Perimeter
RD-18	Chatsworth		3/2/2009	8260B	Primary	SMOU RFI
RD-18	Chatsworth		5/5/2009	8260B	Primary	Perimeter
RD-18	Chatsworth		5/5/2009	8260B	Duplicate	Perimeter
RD-18	Chatsworth		5/5/2009	8260B	Split	Perimeter
RD-18	Chatsworth		7/24/2009	8260B	Primary	Perimeter
RD-18	Chatsworth		10/22/2009	8260B	Primary	Perimeter
RD-19	Chatsworth		2/24/2009	8260B	Primary	Perimeter
RD-19	Chatsworth		5/1/2009	8260B	Primary	Perimeter
RD-19	Chatsworth		7/14/2009	8260B	Primary	Perimeter
RD-19	Chatsworth		10/14/2009	8260B	Primary	Perimeter
RD-20	Chatsworth		2/18/2009	8290	Primary	SMOU RFI
RD-20	Chatsworth		2/18/2009	8290	Duplicate	SMOU RFI
RD-20	Chatsworth		5/6/2009	8290	Primary	SMOU RFI
RD-20	Chatsworth		5/6/2009	8290	Split	SMOU RFI
RD-20	Chatsworth		7/22/2009	8290	Primary	SMOU RFI
RD-20	Chatsworth		7/22/2009	8290	Duplicate	SMOU RFI
RD-20	Chatsworth		10/13/2009	8290	Primary	SMOU RFI
RD-21	Chatsworth	Z4	2/24/2009	8015B (EFH)	Primary	SMOU RFI
RD-21	Chatsworth	Z4	2/24/2009	8260B	Primary	Area IV
RD-21	Chatsworth	Z4	2/24/2009	900.0-dissolved	Primary	Area IV
RD-21	Chatsworth	Z4	2/24/2009	900.0-total	Primary	Area IV
RD-21	Chatsworth	Z4	2/24/2009	901.1-dissolved	Primary	Area IV
RD-21	Chatsworth	Z4	2/24/2009	901.1-total	Primary	Area IV
RD-21	Chatsworth	Z4	2/24/2009	905.0-dissolved	Primary	Area IV
RD-21	Chatsworth	Z4	2/24/2009	905.0-total	Primary	Area IV

See last three pages of Table B-I for notes and abbreviations.

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VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
RD-21	Chatsworth	Z4	2/24/2009	906.0-total	Primary	Area IV
RD-21	Chatsworth	Z4	2/24/2009	908.0-dissolved	Primary	Area IV
RD-21	Chatsworth	Z4	2/24/2009	908.0-total	Primary	Area IV
RD-21	Chatsworth	Z4	2/24/2009	Metals, dissolved	Primary	Area IV
RD-21	Chatsworth	Z2	4/29/2009	8015B (EFH)	Primary	SMOU RFI
RD-21	Chatsworth	Z2	4/29/2009	8015B (EFH)	Duplicate	SMOU RFI
RD-21	Chatsworth	Z2	4/29/2009	8015B (EFH)	Split	SMOU RFI
RD-21	Chatsworth	Z2	7/16/2009	8260B	Primary	Area IV
RD-21	Chatsworth	Z2	7/16/2009	900.0-dissolved	Primary	Area IV
RD-21	Chatsworth	Z2	7/16/2009	900.0-total	Primary	Area IV
RD-21	Chatsworth	Z2	7/16/2009	901.1-dissolved	Primary	Area IV
RD-21	Chatsworth	Z2	7/16/2009	901.1-total	Primary	Area IV
RD-21	Chatsworth	Z2	7/16/2009	905.0-dissolved	Primary	Area IV
RD-21	Chatsworth	Z2	7/16/2009	905.0-total	Primary	Area IV
RD-21	Chatsworth	Z2	7/16/2009	906.0-total	Primary	Area IV
RD-21	Chatsworth	Z2	7/16/2009	908.0-dissolved	Primary	Area IV
RD-21	Chatsworth	Z2	7/16/2009	908.0-total	Primary	Area IV
RD-21	Chatsworth	Z2	7/16/2009	Metals, dissolved	Primary	Area IV
RD-22	Chatsworth	Z2	2/23/2009	8260B	Primary	Area IV
RD-22	Chatsworth	Z2	2/23/2009	8260B	Primary	Perimeter
RD-22	Chatsworth	Z2	2/23/2009	900.0-dissolved	Primary	Area IV
RD-22	Chatsworth	Z2	2/23/2009	900.0-dissolved	Primary-Reanalysis 1	Area IV
RD-22	Chatsworth	Z2	2/23/2009	900.0-total	Primary	Area IV
RD-22	Chatsworth	Z2	2/23/2009	900.0-total	Primary-Reanalysis 1	Area IV
RD-22	Chatsworth	Z2	2/23/2009	901.1-dissolved	Primary	Area IV
RD-22	Chatsworth	Z2	2/23/2009	901.1-total	Primary	Area IV
RD-22	Chatsworth	Z2	2/23/2009	9012-Cyanide, Total	Primary	Area IV
RD-22	Chatsworth	Z2	2/23/2009	905.0-dissolved	Primary	Area IV
RD-22	Chatsworth	Z2	2/23/2009	905.0-total	Primary	Area IV
RD-22	Chatsworth	Z2	2/23/2009	906.0-total	Primary	Area IV
RD-22	Chatsworth	Z2	2/23/2009	Metals, dissolved	Primary	Area IV
RD-22	Chatsworth	Z2	4/29/2009	8260B	Primary	Perimeter
RD-22	Chatsworth	Z2	7/16/2009	8260B	Primary	Area IV
RD-22	Chatsworth	Z2	7/16/2009	8260B	Primary	Perimeter
RD-22	Chatsworth	Z2	7/16/2009	900.0-dissolved	Primary	Area IV
RD-22	Chatsworth	Z2	7/16/2009	900.0-total	Primary	Area IV
RD-22	Chatsworth	Z2	7/16/2009	901.1-dissolved	Primary	Area IV
RD-22	Chatsworth	Z2	7/16/2009	901.1-total	Primary	Area IV
RD-22	Chatsworth	Z2	7/16/2009	905.0-dissolved	Primary	Area IV
RD-22	Chatsworth	Z2	7/16/2009	905.0-total	Primary	Area IV
RD-22	Chatsworth	Z2	7/16/2009	906.0-total	Primary	Area IV
RD-22	Chatsworth	Z2	10/21/2009	8260B	Primary	Perimeter
RD-22	Chatsworth	Z2	10/21/2009	8260B	Duplicate	Perimeter
RD-23	Chatsworth	Z2	2/24/2009	8260B	Primary	Area IV
RD-23	Chatsworth	Z2	2/24/2009	900.0-dissolved	Primary	Area IV
RD-23	Chatsworth	Z2	2/24/2009	900.0-dissolved	Primary-Reanalysis 1	Area IV
RD-23	Chatsworth	Z2	2/24/2009	900.0-total	Primary	Area IV
RD-23	Chatsworth	Z2	2/24/2009	901.1-dissolved	Primary	Area IV
RD-23	Chatsworth	Z2	2/24/2009	901.1-total	Primary	Area IV
RD-23	Chatsworth	Z2	2/24/2009	905.0-dissolved	Primary	Area IV
RD-23	Chatsworth	Z2	2/24/2009	905.0-total	Primary	Area IV
RD-23	Chatsworth	Z2	2/24/2009	906.0-total	Primary	Area IV
RD-23	Chatsworth	Z2	2/24/2009	Metals, dissolved	Primary	Area IV
RD-23	Chatsworth	Z3	7/16/2009	8260B	Primary	Area IV

See last three pages of Table B-I for notes and abbreviations.

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QUARTERLY GROUNDWATER MONITORING PROGRAM, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
RD-23	Chatsworth	Z3	7/16/2009	900.0-dissolved	Primary	Area IV
RD-23	Chatsworth	Z3	7/16/2009	900.0-total	Primary	Area IV
RD-23	Chatsworth	Z3	7/16/2009	901.1-dissolved	Primary	Area IV
RD-23	Chatsworth	Z3	7/16/2009	901.1-total	Primary	Area IV
RD-23	Chatsworth	Z3	7/16/2009	905.0-dissolved	Primary	Area IV
RD-23	Chatsworth	Z3	7/16/2009	905.0-total	Primary	Area IV
RD-23	Chatsworth	Z3	7/16/2009	906.0-total	Primary	Area IV
RD-23	Chatsworth	Z3	7/16/2009	Metals, dissolved	Primary	Area IV
RD-24	Chatsworth		10/27/2009	8260B	Primary	Area IV
RD-24	Chatsworth		10/27/2009	900.0-dissolved	Primary	Area IV
RD-24	Chatsworth		10/27/2009	900.0-dissolved	Split	Area IV
RD-24	Chatsworth		10/27/2009	900.0-total	Primary	Area IV
RD-24	Chatsworth		10/27/2009	900.0-total	Split	Area IV
RD-24	Chatsworth		10/27/2009	901.1-dissolved	Primary	Area IV
RD-24	Chatsworth		10/27/2009	901.1-dissolved	Split	Area IV
RD-24	Chatsworth		10/27/2009	901.1-total	Primary	Area IV
RD-24	Chatsworth		10/27/2009	901.1-total	Split	Area IV
RD-24	Chatsworth		10/27/2009	905.0-dissolved	Primary	Area IV
RD-24	Chatsworth		10/27/2009	905.0-dissolved	Split	Area IV
RD-24	Chatsworth		10/27/2009	905.0-total	Primary	Area IV
RD-24	Chatsworth		10/27/2009	905.0-total	Split	Area IV
RD-24	Chatsworth		10/27/2009	906.0-total	Primary	Area IV
RD-24	Chatsworth		10/27/2009	906.0-total	Split	Area IV
RD-26	Chatsworth		2/17/2009	8260B	Primary	PCP-Evaluation
RD-26	Chatsworth		5/27/2009	8260B	Primary	PCP-Evaluation
RD-26	Chatsworth		5/27/2009	8260B	Duplicate	PCP-Evaluation
RD-26	Chatsworth		5/27/2009	8260B	Split	PCP-Evaluation
RD-26	Chatsworth		7/24/2009	8260B	Primary	PCP-Evaluation
RD-27	Chatsworth		3/6/2009	8260B	Primary	Area IV
RD-27	Chatsworth		3/6/2009	900.0-dissolved	Primary	Area IV
RD-27	Chatsworth		3/6/2009	900.0-total	Primary	Area IV
RD-27	Chatsworth		3/6/2009	901.1-dissolved	Primary	Area IV
RD-27	Chatsworth		3/6/2009	901.1-total	Primary	Area IV
RD-27	Chatsworth		3/6/2009	901.1-total	Primary-Reanalysis 1	Area IV
RD-27	Chatsworth		3/6/2009	901.1-total	Primary-Reanalysis 2	Area IV
RD-27	Chatsworth		3/6/2009	901.1-total	Primary-Reanalysis 3	Area IV
RD-27	Chatsworth		3/6/2009	905.0-dissolved	Primary	Area IV
RD-27	Chatsworth		3/6/2009	905.0-total	Primary	Area IV
RD-27	Chatsworth		3/6/2009	906.0-total	Primary	Area IV
RD-27	Chatsworth		3/6/2009	Metals, dissolved + Zr	Primary	SMOU RFI
RD-27	Chatsworth		7/30/2009	8260B	Primary	Area IV
RD-27	Chatsworth		7/30/2009	900.0-dissolved	Primary	Area IV
RD-27	Chatsworth		7/30/2009	900.0-total	Primary	Area IV
RD-27	Chatsworth		7/30/2009	900.0-total	Duplicate	Area IV
RD-27	Chatsworth		7/30/2009	901.1-dissolved	Primary	Area IV
RD-27	Chatsworth		7/30/2009	901.1-total	Primary	Area IV
RD-27	Chatsworth		7/30/2009	901.1-total	Duplicate	Area IV
RD-27	Chatsworth		7/30/2009	905.0-dissolved	Primary	Area IV
RD-27	Chatsworth		7/30/2009	905.0-total	Primary	Area IV
RD-27	Chatsworth		7/30/2009	905.0-total	Duplicate	Area IV
RD-27	Chatsworth		7/30/2009	906.0-total	Primary	Area IV
RD-27	Chatsworth		7/30/2009	906.0-total	Duplicate	Area IV
RD-29	Chatsworth		3/5/2009	8260B	Primary	Area IV
RD-29	Chatsworth		3/5/2009	900.0-dissolved	Primary	Area IV

See last three pages of Table B-I for notes and abbreviations.

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Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
RD-29	Chatsworth		3/5/2009	900.0-total	Primary	Area IV
RD-29	Chatsworth		3/5/2009	900.0-total	Duplicate	Area IV
RD-29	Chatsworth		3/5/2009	901.1-dissolved	Primary	Area IV
RD-29	Chatsworth		3/5/2009	901.1-total	Primary	Area IV
RD-29	Chatsworth		3/5/2009	901.1-total	Duplicate	Area IV
RD-29	Chatsworth		3/5/2009	905.0-dissolved	Primary	Area IV
RD-29	Chatsworth		3/5/2009	905.0-total	Primary	Area IV
RD-29	Chatsworth		3/5/2009	905.0-total	Duplicate	Area IV
RD-29	Chatsworth		3/5/2009	906.0-total	Primary	Area IV
RD-29	Chatsworth		3/5/2009	906.0-total	Duplicate	Area IV
RD-29	Chatsworth		3/5/2009	908.0-total	Primary	Area IV
RD-29	Chatsworth		3/5/2009	908.0-total	Duplicate	Area IV
RD-29	Chatsworth		7/24/2009	900.0-dissolved	Primary	Area IV
RD-29	Chatsworth		7/24/2009	900.0-total	Primary	Area IV
RD-29	Chatsworth		7/24/2009	901.1-dissolved	Primary	Area IV
RD-29	Chatsworth		7/24/2009	901.1-total	Primary	Area IV
RD-29	Chatsworth		7/24/2009	905.0-dissolved	Primary	Area IV
RD-29	Chatsworth		7/24/2009	905.0-total	Primary	Area IV
RD-29	Chatsworth		7/24/2009	906.0-total	Primary	Area IV
RD-32	Chatsworth		2/18/2009	8015B (GRO)	Primary	LUFT
RD-32	Chatsworth		2/18/2009	8260B	Primary	PCP-Detection
RD-32	Chatsworth		2/18/2009	8260B	Primary	LUFT
RD-32	Chatsworth		5/13/2009	8260B	Primary	PCP-Detection
RD-32	Chatsworth		7/29/2009	8015B (GRO)	Primary	LUFT
RD-32	Chatsworth		7/29/2009	8260B	Primary	PCP-Detection
RD-32	Chatsworth		7/29/2009	8260B	Primary	LUFT
RD-32	Chatsworth		7/29/2009	8260B	Duplicate	PCP-Detection
RD-32	Chatsworth		7/29/2009	8260B	Duplicate	LUFT
RD-32	Chatsworth		10/23/2009	8260B	Primary	PCP-Detection
RD-32	Chatsworth		10/23/2009	8260B	Split	PCP-Detection
RD-33A	Chatsworth	Z2	2/25/2009	8260B	Primary	Area IV
RD-33A	Chatsworth	Z2	2/25/2009	900.0-dissolved	Primary	Area IV
RD-33A	Chatsworth	Z2	2/25/2009	900.0-total	Primary	Area IV
RD-33A	Chatsworth	Z2	2/25/2009	901.1-dissolved	Primary	Area IV
RD-33A	Chatsworth	Z2	2/25/2009	901.1-total	Primary	Area IV
RD-33A	Chatsworth	Z2	2/25/2009	905.0-dissolved	Primary	Area IV
RD-33A	Chatsworth	Z2	2/25/2009	905.0-total	Primary	Area IV
RD-33A	Chatsworth	Z2	2/25/2009	906.0-total	Primary	Area IV
RD-33A	Chatsworth	Z2	2/25/2009	Metals, dissolved	Primary	Area IV
RD-33A	Chatsworth	Z2	7/17/2009	8260B	Primary	Area IV
RD-33A	Chatsworth	Z2	7/17/2009	900.0-dissolved	Primary	Area IV
RD-33A	Chatsworth	Z2	7/17/2009	900.0-total	Primary	Area IV
RD-33A	Chatsworth	Z2	7/17/2009	901.1-dissolved	Primary	Area IV
RD-33A	Chatsworth	Z2	7/17/2009	901.1-total	Primary	Area IV
RD-33A	Chatsworth	Z2	7/17/2009	9012-Cyanide, Total	Primary	Area IV
RD-33A	Chatsworth	Z2	7/17/2009	905.0-dissolved	Primary	Area IV
RD-33A	Chatsworth	Z2	7/17/2009	905.0-total	Primary	Area IV
RD-33A	Chatsworth	Z2	7/17/2009	906.0-total	Primary	Area IV
RD-33B	Chatsworth		3/5/2009	8260B	Primary	Area IV
RD-33B	Chatsworth		3/5/2009	8260B	Primary	Perimeter
RD-33B	Chatsworth		3/5/2009	900.0-dissolved	Primary	Area IV
RD-33B	Chatsworth		3/5/2009	900.0-total	Primary	Area IV
RD-33B	Chatsworth		3/5/2009	900.0-total	Duplicate	Area IV
RD-33B	Chatsworth		3/5/2009	901.1-dissolved	Primary	Area IV

See last three pages of Table B-I for notes and abbreviations.

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Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
RD-33B	Chatsworth		3/5/2009	901.1-dissolved	Primary-Reanalysis 1	Area IV
RD-33B	Chatsworth		3/5/2009	901.1-dissolved	Primary-Reanalysis 2	Area IV
RD-33B	Chatsworth		3/5/2009	901.1-total	Primary	Area IV
RD-33B	Chatsworth		3/5/2009	901.1-total	Duplicate	Area IV
RD-33B	Chatsworth		3/5/2009	9012-Cyanide, Total	Primary	Area IV
RD-33B	Chatsworth		3/5/2009	905.0-dissolved	Primary	Area IV
RD-33B	Chatsworth		3/5/2009	905.0-total	Primary	Area IV
RD-33B	Chatsworth		3/5/2009	905.0-total	Duplicate	Area IV
RD-33B	Chatsworth		3/5/2009	906.0-total	Primary	Area IV
RD-33B	Chatsworth		3/5/2009	906.0-total	Duplicate	Area IV
RD-33B	Chatsworth		3/5/2009	Metals, dissolved	Primary	Area IV
RD-33B	Chatsworth		5/14/2009	8260B	Primary	Perimeter
RD-33B	Chatsworth		8/4/2009	8260B	Primary	Area IV
RD-33B	Chatsworth		8/4/2009	8260B	Primary	Perimeter
RD-33B	Chatsworth		8/4/2009	900.0-dissolved	Primary	Area IV
RD-33B	Chatsworth		8/4/2009	900.0-total	Primary	Area IV
RD-33B	Chatsworth		8/4/2009	901.1-dissolved	Primary	Area IV
RD-33B	Chatsworth		8/4/2009	901.1-total	Primary	Area IV
RD-33B	Chatsworth		8/4/2009	905.0-dissolved	Primary	Area IV
RD-33B	Chatsworth		8/4/2009	905.0-total	Primary	Area IV
RD-33B	Chatsworth		8/4/2009	906.0-total	Primary	Area IV
RD-33B	Chatsworth		10/22/2009	8260B	Primary	Perimeter
RD-33C	Chatsworth		2/24/2009	8260B	Primary	Area IV
RD-33C	Chatsworth		2/24/2009	8260B	Primary	Perimeter
RD-33C	Chatsworth		2/24/2009	900.0-dissolved	Primary	Area IV
RD-33C	Chatsworth		2/24/2009	900.0-dissolved	Split	Area IV
RD-33C	Chatsworth		2/24/2009	900.0-total	Primary	Area IV
RD-33C	Chatsworth		2/24/2009	900.0-total	Split	Area IV
RD-33C	Chatsworth		2/24/2009	901.1-dissolved	Primary	Area IV
RD-33C	Chatsworth		2/24/2009	901.1-dissolved	Split	Area IV
RD-33C	Chatsworth		2/24/2009	901.1-total	Primary	Area IV
RD-33C	Chatsworth		2/24/2009	901.1-total	Split	Area IV
RD-33C	Chatsworth		2/24/2009	9012-Cyanide, Total	Primary	Area IV
RD-33C	Chatsworth		2/24/2009	9012-Cyanide, Total	Duplicate	Area IV
RD-33C	Chatsworth		2/24/2009	9012-Cyanide, Total	Split	Area IV
RD-33C	Chatsworth		2/24/2009	905.0-dissolved	Primary	Area IV
RD-33C	Chatsworth		2/24/2009	905.0-dissolved	Split	Area IV
RD-33C	Chatsworth		2/24/2009	905.0-total	Primary	Area IV
RD-33C	Chatsworth		2/24/2009	905.0-total	Split	Area IV
RD-33C	Chatsworth		2/24/2009	906.0-total	Primary	Area IV
RD-33C	Chatsworth		2/24/2009	906.0-total	Split	Area IV
RD-33C	Chatsworth		2/24/2009	Metals, dissolved	Primary	Area IV
RD-33C	Chatsworth		5/13/2009	8260B	Primary	Perimeter
RD-33C	Chatsworth		5/13/2009	8260B	Duplicate	Perimeter
RD-33C	Chatsworth		7/24/2009	8260B	Primary	Area IV
RD-33C	Chatsworth		7/24/2009	8260B	Primary	Perimeter
RD-33C	Chatsworth		7/24/2009	900.0-dissolved	Primary	Area IV
RD-33C	Chatsworth		7/24/2009	900.0-total	Primary	Area IV
RD-33C	Chatsworth		7/24/2009	900.0-total	Split	Area IV
RD-33C	Chatsworth		7/24/2009	901.1-dissolved	Primary	Area IV
RD-33C	Chatsworth		7/24/2009	901.1-total	Primary	Area IV
RD-33C	Chatsworth		7/24/2009	901.1-total	Split	Area IV
RD-33C	Chatsworth		7/24/2009	905.0-dissolved	Primary	Area IV
RD-33C	Chatsworth		7/24/2009	905.0-total	Primary	Area IV

See last three pages of Table B-I for notes and abbreviations.

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BOEING SANTA SUSANA FIELD LABORATORY
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Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
RD-33C	Chatsworth		7/24/2009	905.0-total	Split	Area IV
RD-33C	Chatsworth		7/24/2009	906.0-total	Primary	Area IV
RD-33C	Chatsworth		7/24/2009	906.0-total	Split	Area IV
RD-33C	Chatsworth		10/21/2009	8260B	Primary	Perimeter
RD-34A	Chatsworth		3/5/2009	8260B	Primary	Area IV
RD-34A	Chatsworth		3/5/2009	900.0-dissolved	Primary	Area IV
RD-34A	Chatsworth		3/5/2009	900.0-dissolved	Primary-Reanalysis 1	Area IV
RD-34A	Chatsworth		3/5/2009	900.0-total	Primary	Area IV
RD-34A	Chatsworth		3/5/2009	901.1-dissolved	Primary	Area IV
RD-34A	Chatsworth		3/5/2009	901.1-total	Primary	Area IV
RD-34A	Chatsworth		3/5/2009	9012-Cyanide, Total	Primary	Area IV
RD-34A	Chatsworth		3/5/2009	9012-Cyanide, Total	Split	Area IV
RD-34A	Chatsworth		3/5/2009	905.0-dissolved	Primary	Area IV
RD-34A	Chatsworth		3/5/2009	905.0-total	Primary	Area IV
RD-34A	Chatsworth		3/5/2009	906.0-total	Primary	Area IV
RD-34A	Chatsworth		3/5/2009	Metals, dissolved	Primary	Area IV
RD-34A	Chatsworth		7/28/2009	8260B	Primary	Area IV
RD-34A	Chatsworth		7/28/2009	900.0-dissolved	Primary	Area IV
RD-34A	Chatsworth		7/28/2009	900.0-total	Primary	Area IV
RD-34A	Chatsworth		7/28/2009	901.1-dissolved	Primary	Area IV
RD-34A	Chatsworth		7/28/2009	901.1-total	Primary	Area IV
RD-34A	Chatsworth		7/28/2009	905.0-dissolved	Primary	Area IV
RD-34A	Chatsworth		7/28/2009	905.0-total	Primary	Area IV
RD-34A	Chatsworth		7/28/2009	906.0-total	Primary	Area IV
RD-34B	Chatsworth		2/20/2009	8260B	Primary	Area IV
RD-34B	Chatsworth		2/20/2009	900.0-dissolved	Primary	Area IV
RD-34B	Chatsworth		2/20/2009	900.0-dissolved	Primary-Reanalysis 1	Area IV
RD-34B	Chatsworth		2/20/2009	900.0-total	Primary	Area IV
RD-34B	Chatsworth		2/20/2009	901.1-dissolved	Primary	Area IV
RD-34B	Chatsworth		2/20/2009	901.1-total	Primary	Area IV
RD-34B	Chatsworth		2/20/2009	9012-Cyanide, Total	Primary	Area IV
RD-34B	Chatsworth		2/20/2009	905.0-dissolved	Primary	Area IV
RD-34B	Chatsworth		2/20/2009	905.0-total	Primary	Area IV
RD-34B	Chatsworth		2/20/2009	906.0-total	Primary	Area IV
RD-34B	Chatsworth		2/20/2009	Metals, dissolved	Primary	Area IV
RD-34B	Chatsworth		2/20/2009	Metals, dissolved	Split	Area IV
RD-34B	Chatsworth		7/28/2009	8260B	Primary	Area IV
RD-34B	Chatsworth		7/28/2009	900.0-dissolved	Primary	Area IV
RD-34B	Chatsworth		7/28/2009	900.0-total	Primary	Area IV
RD-34B	Chatsworth		7/28/2009	901.1-dissolved	Primary	Area IV
RD-34B	Chatsworth		7/28/2009	901.1-total	Primary	Area IV
RD-34B	Chatsworth		7/28/2009	905.0-dissolved	Primary	Area IV
RD-34B	Chatsworth		7/28/2009	905.0-total	Primary	Area IV
RD-34B	Chatsworth		7/28/2009	906.0-total	Primary	Area IV
RD-34C	Chatsworth		2/19/2009	8260B	Primary	Area IV
RD-34C	Chatsworth		2/19/2009	900.0-dissolved	Primary	Area IV
RD-34C	Chatsworth		2/19/2009	900.0-total	Primary	Area IV
RD-34C	Chatsworth		2/19/2009	901.1-dissolved	Primary	Area IV
RD-34C	Chatsworth		2/19/2009	901.1-total	Primary	Area IV
RD-34C	Chatsworth		2/19/2009	9012-Cyanide, Total	Primary	Area IV
RD-34C	Chatsworth		2/19/2009	905.0-dissolved	Primary	Area IV
RD-34C	Chatsworth		2/19/2009	905.0-total	Primary	Area IV
RD-34C	Chatsworth		2/19/2009	906.0-total	Primary	Area IV
RD-34C	Chatsworth		2/19/2009	Metals, dissolved	Primary	Area IV

See last three pages of Table B-I for notes and abbreviations.

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Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
RD-34C	Chatsworth		2/19/2009	Metals, dissolved	Duplicate	Area IV
RD-34C	Chatsworth		7/23/2009	8260B	Primary	Area IV
RD-34C	Chatsworth		7/23/2009	900.0-dissolved	Primary	Area IV
RD-34C	Chatsworth		7/23/2009	900.0-dissolved	Duplicate	Area IV
RD-34C	Chatsworth		7/23/2009	900.0-dissolved	Split	Area IV
RD-34C	Chatsworth		7/23/2009	900.0-total	Primary	Area IV
RD-34C	Chatsworth		7/23/2009	900.0-total	Duplicate	Area IV
RD-34C	Chatsworth		7/23/2009	900.0-total	Split	Area IV
RD-34C	Chatsworth		7/23/2009	901.1-dissolved	Primary	Area IV
RD-34C	Chatsworth		7/23/2009	901.1-dissolved	Duplicate	Area IV
RD-34C	Chatsworth		7/23/2009	901.1-dissolved	Split	Area IV
RD-34C	Chatsworth		7/23/2009	901.1-total	Primary	Area IV
RD-34C	Chatsworth		7/23/2009	901.1-total	Duplicate	Area IV
RD-34C	Chatsworth		7/23/2009	901.1-total	Split	Area IV
RD-34C	Chatsworth		7/23/2009	905.0-dissolved	Primary	Area IV
RD-34C	Chatsworth		7/23/2009	905.0-dissolved	Duplicate	Area IV
RD-34C	Chatsworth		7/23/2009	905.0-dissolved	Split	Area IV
RD-34C	Chatsworth		7/23/2009	905.0-total	Primary	Area IV
RD-34C	Chatsworth		7/23/2009	905.0-total	Duplicate	Area IV
RD-34C	Chatsworth		7/23/2009	905.0-total	Split	Area IV
RD-34C	Chatsworth		7/23/2009	906.0-total	Primary	Area IV
RD-34C	Chatsworth		7/23/2009	906.0-total	Duplicate	Area IV
RD-34C	Chatsworth		7/23/2009	906.0-total	Split	Area IV
RD-36B	Chatsworth		2/18/2009	8015B (GRO)	Primary	LUFT
RD-36B	Chatsworth		2/18/2009	8015B (GRO)	Duplicate	LUFT
RD-36B	Chatsworth		2/18/2009	8260B	Split	PCP-Evaluation
RD-36B	Chatsworth		2/18/2009	8260B	Split	LUFT
RD-36B	Chatsworth		2/18/2009	8260B	Primary	PCP-Evaluation
RD-36B	Chatsworth		2/18/2009	8260B	Primary	LUFT
RD-36B	Chatsworth		7/30/2009	8015B (GRO)	Primary	LUFT
RD-36B	Chatsworth		7/30/2009	8260B	Primary	PCP-Evaluation
RD-36B	Chatsworth		7/30/2009	8260B	Primary	LUFT
RD-36B	Chatsworth		7/30/2009	8260B	Duplicate	PCP-Evaluation
RD-36B	Chatsworth		7/30/2009	8260B	Duplicate	LUFT
RD-36C	Chatsworth		2/23/2009	8015B (GRO)	Primary	LUFT
RD-36C	Chatsworth		2/23/2009	8015B (GRO)	Split	LUFT
RD-36C	Chatsworth		2/23/2009	8260B	Primary	PCP-Evaluation
RD-36C	Chatsworth		2/23/2009	8260B	Primary	LUFT
RD-36C	Chatsworth		8/3/2009	8015B (GRO)	Primary	LUFT
RD-36C	Chatsworth		8/3/2009	8015B (GRO)	Duplicate	LUFT
RD-36C	Chatsworth		8/3/2009	8260B	Primary	PCP-Evaluation
RD-36C	Chatsworth		8/3/2009	8260B	Primary	LUFT
RD-36C	Chatsworth		8/3/2009	8260B	Duplicate	PCP-Evaluation
RD-36C	Chatsworth		8/3/2009	8260B	Duplicate	LUFT
RD-36D	Chatsworth		2/18/2009	8015B (GRO)	Primary	LUFT
RD-36D	Chatsworth		2/18/2009	8260B	Primary	LUFT
RD-36D	Chatsworth		2/18/2009	8260B	Duplicate	LUFT
RD-36D	Chatsworth		7/30/2009	8015B (GRO)	Primary	LUFT
RD-36D	Chatsworth		7/30/2009	8260B	Primary	LUFT
RD-37	Chatsworth		2/19/2009	8015B (GRO)	Primary	LUFT
RD-37	Chatsworth		2/19/2009	8015B (GRO)	Duplicate	LUFT
RD-37	Chatsworth		2/19/2009	8260B	Primary	PCP-Detection
RD-37	Chatsworth		2/19/2009	8260B	Primary	LUFT
RD-37	Chatsworth		5/13/2009	8260B	Primary	PCP-Detection

See last three pages of Table B-I for notes and abbreviations.

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Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
RD-37	Chatsworth		5/13/2009	8260B	Duplicate	PCP-Detection
RD-37	Chatsworth		5/13/2009	8260B	Split	PCP-Detection
RD-37	Chatsworth		7/13/2009	1625M	Duplicate	PCP-Evaluation
RD-37	Chatsworth		7/13/2009	1625M	Split	PCP-Evaluation
RD-37	Chatsworth		7/13/2009	376.2-Sulfide	Split	PCP-Evaluation
RD-37	Chatsworth		7/13/2009	504.1 (DBCP, EDB)	Split	PCP-Evaluation
RD-37	Chatsworth		7/13/2009	8015B (GRO)	Primary	LUFT
RD-37	Chatsworth		7/13/2009	8081A-AppIX	Split	PCP-POC
RD-37	Chatsworth		7/13/2009	8082	Split	PCP-Evaluation
RD-37	Chatsworth		7/13/2009	8141A	Split	PCP-Evaluation
RD-37	Chatsworth		7/13/2009	8151A	Split	PCP-Evaluation
RD-37	Chatsworth		7/13/2009	8260B	Primary	LUFT
RD-37	Chatsworth		7/13/2009	8260B-AppIX	Split	PCP-Evaluation
RD-37	Chatsworth		7/13/2009	8260B	Split	LUFT
RD-37	Chatsworth		7/13/2009	8260B-A+A	Split	PCP-Evaluation
RD-37	Chatsworth		7/13/2009	8260SIM	Split	PCP-Evaluation
RD-37	Chatsworth		7/13/2009	8270C-App IX	Split	PCP-Evaluation
RD-37	Chatsworth		7/13/2009	8290	Split	PCP-Evaluation
RD-37	Chatsworth		7/13/2009	9012-Cyanide, Total	Split	PCP-Evaluation
RD-37	Chatsworth		7/13/2009	AppIX	Primary	PCP-Evaluation
RD-37	Chatsworth		7/13/2009	SRL 524M-TCP	Split	PCP-Evaluation
RD-37	Chatsworth		10/28/2009	8151A	Primary	PCP-Evaluation
RD-37	Chatsworth		10/28/2009	8151A	Duplicate	PCP-Evaluation
RD-37	Chatsworth		10/28/2009	8151A	Split	PCP-Evaluation
RD-37	Chatsworth		10/28/2009	8260B	Primary	PCP-Evaluation
RD-37	Chatsworth		10/28/2009	8290	Primary	PCP-Evaluation
RD-37	Chatsworth		10/28/2009	8290	Duplicate	PCP-Evaluation
RD-37	Chatsworth		10/28/2009	8290	Split	PCP-Evaluation
RD-38B	Chatsworth		2/27/2009	8015B (GRO)	Primary	LUFT
RD-38B	Chatsworth		2/27/2009	8260B	Primary	LUFT
RD-38B	Chatsworth		8/3/2009	8015B (GRO)	Primary	LUFT
RD-38B	Chatsworth		8/3/2009	8260B	Primary	LUFT
RD-39B	Chatsworth		3/10/2009	8260B	Primary	Perimeter
RD-39B	Chatsworth		5/13/2009	8260B	Primary	Perimeter
RD-39B	Chatsworth		8/3/2009	8260B	Primary	Perimeter
RD-39B	Chatsworth		11/3/2009	8260B	Primary	Perimeter
RD-41A	Chatsworth		2/18/2009	8260B	Primary	CFOU RFI
RD-41A	Chatsworth		2/18/2009	8260SIM	Primary	CFOU RFI
RD-41A	Chatsworth		7/28/2009	300.0-Fluoride	Primary	CFOU RFI
RD-41A	Chatsworth		7/28/2009	300.0-Nitrate-NO3	Primary	CFOU RFI
RD-41A	Chatsworth		7/28/2009	314.0	Primary	CFOU RFI
RD-41A	Chatsworth		7/28/2009	350.3-Ammonia-N	Primary	CFOU RFI
RD-41A	Chatsworth		7/28/2009	8260B	Primary	CFOU RFI
RD-41A	Chatsworth		7/28/2009	8260SIM	Primary	CFOU RFI
RD-41B	Chatsworth		2/12/2009	314.0	Primary	CFOU RFI
RD-41B	Chatsworth		2/12/2009	350.3-Ammonia-N	Duplicate	CFOU RFI
RD-41B	Chatsworth		2/12/2009	COCs	Primary	CFOU RFI
RD-41B	Chatsworth		2/12/2009	Metals, dissolved	Primary	SMOU RFI
RD-41B	Chatsworth		2/12/2009	Metals, dissolved	Split	SMOU RFI
RD-41B	Chatsworth		5/4/2009	1625M	Split	CFOU RFI
RD-41B	Chatsworth		5/4/2009	300.0-Fluoride	Split	CFOU RFI
RD-41B	Chatsworth		5/4/2009	300.0-Nitrate-NO3	Split	CFOU RFI
RD-41B	Chatsworth		5/4/2009	314.0	Primary	CFOU RFI
RD-41B	Chatsworth		5/4/2009	314.0	Duplicate	CFOU RFI

See last three pages of Table B-I for notes and abbreviations.

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Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
RD-41B	Chatsworth		5/4/2009	314.0	Split	CFOU RFI
RD-41B	Chatsworth		5/4/2009	8260SIM	Split	CFOU RFI
RD-41B	Chatsworth		5/4/2009	8270C	Split	CFOU RFI
RD-41B	Chatsworth		5/4/2009	COCs	Primary	CFOU RFI
RD-41B	Chatsworth		5/4/2009	Metals, dissolved	Primary	SMOU RFI
RD-41B	Chatsworth		8/4/2009	314.0	Primary	CFOU RFI
RD-41B	Chatsworth		8/4/2009	350.3-Ammonia-N	Duplicate	CFOU RFI
RD-41B	Chatsworth		8/4/2009	COCs	Primary	CFOU RFI
RD-41B	Chatsworth		11/2/2009	314.0	Primary	CFOU RFI
RD-41B	Chatsworth		11/2/2009	8260SIM	Duplicate	CFOU RFI
RD-41B	Chatsworth		11/2/2009	COCs	Primary	CFOU RFI
RD-41C	Chatsworth		3/2/2009	Metals, dissolved	Primary	SMOU RFI
RD-41C	Chatsworth		5/14/2009	Metals, dissolved	Primary	SMOU RFI
RD-41C	Chatsworth		5/14/2009	Metals, dissolved	Duplicate	SMOU RFI
RD-43A	Chatsworth		3/4/2009	8260B	Primary	PCP-Detection
RD-43A	Chatsworth		5/12/2009	8260B	Primary	PCP-Detection
RD-43A	Chatsworth		7/22/2009	8260B	Primary	PCP-Detection
RD-43A	Chatsworth		10/21/2009	8260B	Primary	PCP-Detection
RD-43A	Chatsworth		10/21/2009	8260B	Duplicate	PCP-Detection
RD-43A	Chatsworth		10/21/2009	8260B	Split	PCP-Detection
RD-43B	Chatsworth		2/18/2009	8260B	Primary	PCP-Detection
RD-43B	Chatsworth		5/12/2009	8260B	Primary	PCP-Detection
RD-43B	Chatsworth		5/12/2009	8260B	Duplicate	PCP-Detection
RD-43B	Chatsworth		7/22/2009	8260B	Primary	PCP-Detection
RD-43B	Chatsworth		10/21/2009	8260B	Primary	PCP-Detection
RD-43B	Chatsworth		10/21/2009	8260B	Duplicate	PCP-Detection
RD-43C	Chatsworth		2/18/2009	8260B	Primary	PCP-Detection
RD-43C	Chatsworth		5/12/2009	8260B	Primary	PCP-Detection
RD-43C	Chatsworth		7/22/2009	8260B	Primary	PCP-Detection
RD-43C	Chatsworth		7/22/2009	8260B	Duplicate	PCP-Detection
RD-43C	Chatsworth		10/21/2009	8260B	Primary	PCP-Detection
RD-43C	Chatsworth		10/21/2009	8260B	Split	PCP-Detection
RD-44	Chatsworth		3/2/2009	1625M	Duplicate	CFOU RFI
RD-44	Chatsworth		3/2/2009	314.0	Primary	CFOU RFI
RD-44	Chatsworth		3/2/2009	COCs	Primary	CFOU RFI
RD-44	Chatsworth		3/2/2009	8260B	Primary	PCP-Detection
RD-44	Chatsworth		4/30/2009	1625M	Duplicate	CFOU RFI
RD-44	Chatsworth		4/30/2009	300.0-Nitrate-NO3	Duplicate	CFOU RFI
RD-44	Chatsworth		4/30/2009	314.0	Primary	CFOU RFI
RD-44	Chatsworth		4/30/2009	8260B	Primary	PCP-Detection
RD-44	Chatsworth		4/30/2009	8260B	Duplicate	CFOU RFI
RD-44	Chatsworth		4/30/2009	8260SIM	Duplicate	CFOU RFI
RD-44	Chatsworth		4/30/2009	8270C	Duplicate	CFOU RFI
RD-44	Chatsworth		4/30/2009	COCs	Primary	CFOU RFI
RD-44	Chatsworth		7/27/2009	1625M	Duplicate	CFOU RFI
RD-44	Chatsworth		7/27/2009	314.0	Primary	CFOU RFI
RD-44	Chatsworth		7/27/2009	314.0	Duplicate	CFOU RFI
RD-44	Chatsworth		7/27/2009	8260B	Primary	PCP-Detection
RD-44	Chatsworth		7/27/2009	COCs	Primary	CFOU RFI
RD-44	Chatsworth		10/28/2009	1625M	Duplicate	CFOU RFI
RD-44	Chatsworth		10/28/2009	1625M	Split	CFOU RFI
RD-44	Chatsworth		10/28/2009	300.0-Fluoride	Duplicate	CFOU RFI
RD-44	Chatsworth		10/28/2009	300.0-Nitrate-NO3	Duplicate	CFOU RFI
RD-44	Chatsworth		10/28/2009	314.0	Primary	CFOU RFI

See last three pages of Table B-I for notes and abbreviations.

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Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
RD-44	Chatsworth		10/28/2009	314.0	Split	CFOU RFI
RD-44	Chatsworth		10/28/2009	8015B (EFH)	Primary	SMOU RFI
RD-44	Chatsworth		10/28/2009	8260B	Primary	PCP-Detection
RD-44	Chatsworth		10/28/2009	COCs	Primary	CFOU RFI
RD-44	Chatsworth		10/28/2009	Metals, diss (DTSC)	Primary	SMOU RFI
RD-45B	Chatsworth		2/20/2009	8260B	Primary	PCP-Evaluation
RD-45B	Chatsworth		7/29/2009	8260B	Primary	PCP-Evaluation
RD-45B	Chatsworth		7/29/2009	8260B	Duplicate	PCP-Evaluation
RD-45B	Chatsworth		7/29/2009	8260B	Split	PCP-Evaluation
RD-45C	Chatsworth		2/23/2009	8260B	Primary	PCP-Evaluation
RD-45C	Chatsworth		7/16/2009	8260B	Primary	PCP-Evaluation
RD-45C	Chatsworth		7/16/2009	8260B	Duplicate	PCP-Evaluation
RD-45C	Chatsworth		7/16/2009	8260B	Split	PCP-Evaluation
RD-46A	Chatsworth		3/4/2009	8260B	Primary	PCP-Evaluation
RD-46A	Chatsworth		8/5/2009	8260B	Primary	PCP-Evaluation
RD-46A	Chatsworth		8/5/2009	8260B	Duplicate	PCP-Evaluation
RD-46B	Chatsworth		10/22/2009	8015B (EFH)	Primary	SMOU RFI
RD-46B	Chatsworth		10/22/2009	8270C	Primary	SMOU RFI
RD-46B	Chatsworth		10/22/2009	8270C	Duplicate	SMOU RFI
RD-46B	Chatsworth		10/22/2009	8270C	Split	SMOU RFI
RD-47	Chatsworth		2/27/2009	8260B	Primary	PCP-Evaluation
RD-47	Chatsworth		7/30/2009	8260B	Primary	PCP-Evaluation
RD-47	Chatsworth		7/30/2009	8260B	Duplicate	PCP-Evaluation
RD-47	Chatsworth		7/30/2009	8260B	Split	PCP-Evaluation
RD-48B	Chatsworth		3/4/2009	8260B	Primary	PCP-Evaluation
RD-48B	Chatsworth		8/5/2009	8260B	Primary	PCP-Evaluation
RD-48B	Chatsworth		11/3/2009	314.0	Primary	SMOU RFI
RD-48B	Chatsworth		11/3/2009	8015B (EFH)	Primary	SMOU RFI
RD-48C	Chatsworth		2/26/2009	8260B	Primary	PCP-Background
RD-48C	Chatsworth		5/12/2009	8260B	Primary	PCP-Background
RD-48C	Chatsworth		5/12/2009	8260B	Duplicate	PCP-Background
RD-48C	Chatsworth		7/21/2009	8260B	Primary	PCP-Background
RD-48C	Chatsworth		10/28/2009	314.0	Primary	SMOU RFI
RD-48C	Chatsworth		10/28/2009	8015B (EFH)	Primary	SMOU RFI
RD-48C	Chatsworth		10/28/2009	8015B (EFH)	Duplicate	SMOU RFI
RD-48C	Chatsworth		10/28/2009	8015B (EFH)	Split	SMOU RFI
RD-48C	Chatsworth		10/28/2009	8260B	Primary	PCP-Background
RD-48C	Chatsworth		10/28/2009	8260B	Duplicate	PCP-Background
RD-49A	Chatsworth		3/5/2009	1625M	Split	CFOU RFI
RD-49A	Chatsworth		3/5/2009	300.0-Nitrate-NO3	Duplicate	CFOU RFI
RD-49A	Chatsworth		3/5/2009	314.0	Primary	CFOU RFI
RD-49A	Chatsworth		3/5/2009	COCs	Primary	CFOU RFI
RD-49A	Chatsworth		5/6/2009	314.0	Primary	CFOU RFI
RD-49A	Chatsworth		5/6/2009	COCs	Primary	CFOU RFI
RD-49A (LNAPL)	Chatsworth		8/5/2009	8015B (EFH)	Primary	CFOU RFI
RD-49B	Chatsworth		2/11/2009	314.0	Primary	CFOU RFI
RD-49B	Chatsworth		2/11/2009	COCs	Primary	CFOU RFI
RD-49B	Chatsworth		5/6/2009	314.0	Primary	CFOU RFI
RD-49B	Chatsworth		5/6/2009	COCs	Primary	CFOU RFI
RD-49B	Chatsworth		7/28/2009	300.0-Nitrate-NO3	Duplicate	CFOU RFI
RD-49B	Chatsworth		7/28/2009	314.0	Primary	CFOU RFI
RD-49B	Chatsworth		7/28/2009	8260SIM	Split	CFOU RFI
RD-49B	Chatsworth		7/28/2009	COCs	Primary	CFOU RFI
RD-49B	Chatsworth		10/30/2009	314.0	Primary	CFOU RFI

See last three pages of Table B-I for notes and abbreviations.

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BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
RD-49B	Chatsworth		10/30/2009	8015B (EFH)	Primary	Other
RD-49B	Chatsworth		10/30/2009	8015B (EFH)	Duplicate	Other
RD-49B	Chatsworth		10/30/2009	8015B (EFH)	Split	Other
RD-49B	Chatsworth		10/30/2009	8260SIM	Duplicate	CFOU RFI
RD-49B	Chatsworth		10/30/2009	8270C	Duplicate	CFOU RFI
RD-49B	Chatsworth		10/30/2009	COCs	Primary	CFOU RFI
RD-49C	Chatsworth		2/11/2009	314.0	Primary	CFOU RFI
RD-49C	Chatsworth		2/11/2009	COCs	Primary	CFOU RFI
RD-49C	Chatsworth		5/6/2009	314.0	Primary	CFOU RFI
RD-49C	Chatsworth		5/6/2009	8260B	Duplicate	CFOU RFI
RD-49C	Chatsworth		5/6/2009	COCs	Primary	CFOU RFI
RD-49C	Chatsworth		7/28/2009	314.0	Primary	CFOU RFI
RD-49C	Chatsworth		7/28/2009	8260B	Split	CFOU RFI
RD-49C	Chatsworth		7/28/2009	8270C	Split	CFOU RFI
RD-49C	Chatsworth		7/28/2009	COCs	Primary	CFOU RFI
RD-49C	Chatsworth		10/30/2009	314.0	Primary	CFOU RFI
RD-49C	Chatsworth		10/30/2009	8015B (EFH)	Primary	Other
RD-49C	Chatsworth		10/30/2009	8270C	Duplicate	CFOU RFI
RD-49C	Chatsworth		10/30/2009	8315A-Formaldehyde	Duplicate	CFOU RFI
RD-49C	Chatsworth		10/30/2009	COCs	Primary	CFOU RFI
RD-50	Chatsworth	Z2	2/20/2009	8015B (EFH)	Primary	SMOU RFI
RD-50	Chatsworth	Z2	2/20/2009	8015B (EFH)	Duplicate	SMOU RFI
RD-50	Chatsworth	Z2	2/20/2009	8015B (EFH)	Split	SMOU RFI
RD-50	Chatsworth	Z2	2/20/2009	8260B	Primary	Perimeter
RD-50	Chatsworth	Z2	4/29/2009	8015B (EFH)	Primary	SMOU RFI
RD-50	Chatsworth	Z2	7/16/2009	8260B	Primary	Perimeter
RD-51B	Chatsworth		2/9/2009	314.0	Primary	CFOU RFI
RD-51B	Chatsworth		2/9/2009	8260SIM	Split	CFOU RFI
RD-51B	Chatsworth		2/9/2009	COCs	Primary	CFOU RFI
RD-51B	Chatsworth		2/9/2009	8260B	Primary	PCP-Evaluation
RD-51B	Chatsworth		5/4/2009	314.0	Primary	CFOU RFI
RD-51B	Chatsworth		5/4/2009	COCs	Primary	CFOU RFI
RD-51B	Chatsworth		5/27/2009	8260B	Primary	CFOU RFI
RD-51B	Chatsworth		5/27/2009	8260B	Primary	PCP-Evaluation
RD-51B	Chatsworth		5/27/2009	8260B	Duplicate	PCP-Evaluation
RD-51B	Chatsworth		5/27/2009	8260B	Duplicate	CFOU RFI
RD-51B	Chatsworth		5/27/2009	8260B	Split	CFOU RFI
RD-51B	Chatsworth		5/27/2009	8260B	Split	PCP-Evaluation
RD-51B	Chatsworth		5/27/2009	8260B	Duplicate	PCP-Evaluation
RD-51B	Chatsworth		7/27/2009	1625M	Duplicate	CFOU RFI
RD-51B	Chatsworth		7/27/2009	314.0	Primary	CFOU RFI
RD-51B	Chatsworth		7/27/2009	8260B	Primary	PCP-Evaluation
RD-51B	Chatsworth		7/27/2009	8270C	Duplicate	CFOU RFI
RD-51B	Chatsworth		7/27/2009	8315A-Formaldehyde	Duplicate	CFOU RFI
RD-51B	Chatsworth		7/27/2009	COCs	Primary	CFOU RFI
RD-51B	Chatsworth		10/19/2009	314.0	Primary	CFOU RFI
RD-51B	Chatsworth		10/19/2009	350.3-Ammonia-N	Duplicate	CFOU RFI
RD-51B	Chatsworth		10/19/2009	COCs	Primary	CFOU RFI
RD-51C	Chatsworth		2/10/2009	1625M	Duplicate	CFOU RFI
RD-51C	Chatsworth		2/10/2009	314.0	Primary	CFOU RFI
RD-51C	Chatsworth		2/10/2009	314.0	Duplicate	CFOU RFI
RD-51C	Chatsworth		2/10/2009	COCs	Primary	CFOU RFI
RD-51C	Chatsworth		2/10/2009	8260B	Primary	PCP-Detection
RD-51C	Chatsworth		5/5/2009	1625M	Duplicate	CFOU RFI

See last three pages of Table B-I for notes and abbreviations.

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Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
RD-51C	Chatsworth		5/5/2009	1625M	Split	CFOU RFI
RD-51C	Chatsworth		5/5/2009	300.0-Fluoride	Split	CFOU RFI
RD-51C	Chatsworth		5/5/2009	300.0-Nitrate-NO3	Split	CFOU RFI
RD-51C	Chatsworth		5/5/2009	314.0	Primary	CFOU RFI
RD-51C	Chatsworth		5/5/2009	350.3-Ammonia-N	Split	CFOU RFI
RD-51C	Chatsworth		5/5/2009	8260B	Primary	PCP-Detection
RD-51C	Chatsworth		5/5/2009	8260B	Duplicate	CFOU RFI
RD-51C	Chatsworth		5/5/2009	8260B	Split	CFOU RFI
RD-51C	Chatsworth		5/5/2009	8260B	Duplicate	PCP-Detection
RD-51C	Chatsworth		5/5/2009	8260B	Split	PCP-Detection
RD-51C	Chatsworth		5/5/2009	8270C	Split	CFOU RFI
RD-51C	Chatsworth		5/5/2009	8315A-Formaldehyde	Split	CFOU RFI
RD-51C	Chatsworth		5/5/2009	COCs	Primary	CFOU RFI
RD-51C	Chatsworth		7/27/2009	1625M	Duplicate	CFOU RFI
RD-51C	Chatsworth		7/27/2009	314.0	Primary	CFOU RFI
RD-51C	Chatsworth		7/27/2009	8260B	Primary	PCP-Detection
RD-51C	Chatsworth		7/27/2009	COCs	Primary	CFOU RFI
RD-51C	Chatsworth		10/19/2009	1625M	Duplicate	CFOU RFI
RD-51C	Chatsworth		10/19/2009	1625M	Split	CFOU RFI
RD-51C	Chatsworth		10/19/2009	314.0	Primary	CFOU RFI
RD-51C	Chatsworth		10/19/2009	314.0	Duplicate	CFOU RFI
RD-51C	Chatsworth		10/19/2009	8260B	Primary	PCP-Detection
RD-51C	Chatsworth		10/19/2009	COCs	Primary	CFOU RFI
RD-52B	Chatsworth		2/12/2009	8260B	Primary	PCP-Evaluation
RD-52B	Chatsworth		7/17/2009	8260B	Primary	PCP-Evaluation
RD-52B	Chatsworth		7/17/2009	8260B	Duplicate	PCP-Evaluation
RD-52B	Chatsworth		7/17/2009	8260B	Split	PCP-Evaluation
RD-52C	Chatsworth		2/13/2009	8260B	Primary	PCP-Detection
RD-52C	Chatsworth		5/8/2009	8260B	Primary	PCP-Detection
RD-52C	Chatsworth		5/8/2009	8260B	Split	PCP-Detection
RD-52C	Chatsworth		7/20/2009	8260B	Primary	PCP-Detection
RD-52C	Chatsworth		7/20/2009	8260B	Duplicate	PCP-Detection
RD-52C	Chatsworth		10/22/2009	8260B	Primary	PCP-Detection
RD-53	Chatsworth		3/4/2009	8015B (GRO)	Primary	LUFT
RD-53	Chatsworth		3/4/2009	8015B (GRO)	Split	LUFT
RD-53	Chatsworth		3/4/2009	8260B	Primary	LUFT
RD-53	Chatsworth		7/21/2009	8015B (GRO)	Primary	LUFT
RD-53	Chatsworth		7/21/2009	8015B (GRO)	Split	LUFT
RD-53	Chatsworth		7/21/2009	8260B	Primary	LUFT
RD-54A	Chatsworth	Z2	2/24/2009	8260B	Primary	Area IV
RD-54A	Chatsworth	Z2	2/24/2009	8260B	Duplicate	Area IV
RD-54A	Chatsworth	Z2	2/24/2009	900.0-dissolved	Primary	Area IV
RD-54A	Chatsworth	Z2	2/24/2009	900.0-total	Primary	Area IV
RD-54A	Chatsworth	Z2	2/24/2009	901.1-dissolved	Primary	Area IV
RD-54A	Chatsworth	Z2	2/24/2009	901.1-total	Primary	Area IV
RD-54A	Chatsworth	Z2	2/24/2009	905.0-dissolved	Primary	Area IV
RD-54A	Chatsworth	Z2	2/24/2009	905.0-total	Primary	Area IV
RD-54A	Chatsworth	Z2	2/24/2009	906.0-total	Primary	Area IV
RD-54A	Chatsworth	Z2	2/24/2009	Metals, dissolved	Primary	Area IV
RD-54A	Chatsworth	Z2	7/16/2009	8260B	Primary	Area IV
RD-54A	Chatsworth	Z2	7/16/2009	900.0-dissolved	Primary	Area IV
RD-54A	Chatsworth	Z2	7/16/2009	900.0-total	Primary	Area IV
RD-54A	Chatsworth	Z2	7/16/2009	901.1-dissolved	Primary	Area IV
RD-54A	Chatsworth	Z2	7/16/2009	901.1-total	Primary	Area IV

See last three pages of Table B-I for notes and abbreviations.

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Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
RD-54A	Chatsworth	Z2	7/16/2009	905.0-dissolved	Primary	Area IV
RD-54A	Chatsworth	Z2	7/16/2009	905.0-total	Primary	Area IV
RD-54A	Chatsworth	Z2	7/16/2009	906.0-total	Primary	Area IV
RD-54A	Chatsworth	Z2	7/16/2009	Metals, dissolved	Primary	Area IV
RD-54B	Chatsworth		2/23/2009	8260B	Primary	Area IV
RD-54B	Chatsworth		2/23/2009	8260B	Duplicate	Area IV
RD-54B	Chatsworth		2/23/2009	900.0-dissolved	Primary	Area IV
RD-54B	Chatsworth		2/23/2009	900.0-total	Primary	Area IV
RD-54B	Chatsworth		2/23/2009	901.1-dissolved	Primary	Area IV
RD-54B	Chatsworth		2/23/2009	901.1-total	Primary	Area IV
RD-54B	Chatsworth		2/23/2009	905.0-dissolved	Primary	Area IV
RD-54B	Chatsworth		2/23/2009	905.0-total	Primary	Area IV
RD-54B	Chatsworth		2/23/2009	Metals, dissolved	Primary	Area IV
RD-54B	Chatsworth		2/23/2009	Metals, dissolved	Duplicate	Area IV
RD-54B	Chatsworth		10/30/2009	8260B	Primary	Area IV
RD-54B	Chatsworth		10/30/2009	900.0-dissolved	Primary	Area IV
RD-54B	Chatsworth		10/30/2009	900.0-dissolved	Duplicate	Area IV
RD-54B	Chatsworth		10/30/2009	900.0-total	Primary	Area IV
RD-54B	Chatsworth		10/30/2009	900.0-total	Duplicate	Area IV
RD-54B	Chatsworth		10/30/2009	901.1-dissolved	Primary	Area IV
RD-54B	Chatsworth		10/30/2009	901.1-dissolved	Duplicate	Area IV
RD-54B	Chatsworth		10/30/2009	901.1-total	Primary	Area IV
RD-54B	Chatsworth		10/30/2009	901.1-total	Duplicate	Area IV
RD-54B	Chatsworth		10/30/2009	905.0-dissolved	Primary	Area IV
RD-54B	Chatsworth		10/30/2009	905.0-dissolved	Duplicate	Area IV
RD-54B	Chatsworth		10/30/2009	905.0-total	Primary	Area IV
RD-54B	Chatsworth		10/30/2009	905.0-total	Duplicate	Area IV
RD-54B	Chatsworth		10/30/2009	906.0-total	Primary	Area IV
RD-54B	Chatsworth		10/30/2009	906.0-total	Duplicate	Area IV
RD-54B	Chatsworth		10/30/2009	Metals, dissolved	Primary	Area IV
RD-54B	Chatsworth		10/30/2009	Metals, dissolved	Duplicate	Area IV
RD-54B	Chatsworth		10/30/2009	Metals, dissolved	Split	Area IV
RD-54C	Chatsworth		2/24/2009	8260B	Primary	Area IV
RD-54C	Chatsworth		2/24/2009	900.0-dissolved	Primary	Area IV
RD-54C	Chatsworth		2/24/2009	900.0-total	Primary	Area IV
RD-54C	Chatsworth		2/24/2009	901.1-dissolved	Primary	Area IV
RD-54C	Chatsworth		2/24/2009	901.1-total	Primary	Area IV
RD-54C	Chatsworth		2/24/2009	905.0-dissolved	Primary	Area IV
RD-54C	Chatsworth		2/24/2009	905.0-total	Primary	Area IV
RD-54C	Chatsworth		2/24/2009	906.0-total	Primary	Area IV
RD-54C	Chatsworth		2/24/2009	Metals, dissolved	Primary	Area IV
RD-54C	Chatsworth		8/4/2009	8260B	Primary	Area IV
RD-54C	Chatsworth		8/4/2009	900.0-dissolved	Primary	Area IV
RD-54C	Chatsworth		8/4/2009	900.0-total	Primary	Area IV
RD-54C	Chatsworth		8/4/2009	901.1-dissolved	Primary	Area IV
RD-54C	Chatsworth		8/4/2009	901.1-total	Primary	Area IV
RD-54C	Chatsworth		8/4/2009	905.0-dissolved	Primary	Area IV
RD-54C	Chatsworth		8/4/2009	905.0-total	Primary	Area IV
RD-54C	Chatsworth		8/4/2009	906.0-total	Primary	Area IV
RD-54C	Chatsworth		8/4/2009	Metals, dissolved	Primary	Area IV
RD-54C	Chatsworth		8/4/2009	Metals, dissolved	Duplicate	Area IV
RD-54C	Chatsworth		8/4/2009	Metals, dissolved	Split	Area IV
RD-55A	Chatsworth		2/18/2009	314.0	Primary	CFOU RFI
RD-55A	Chatsworth		2/18/2009	COCs	Primary	CFOU RFI

See last three pages of Table B-I for notes and abbreviations.

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Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
RD-55A	Chatsworth		2/18/2009	8260B	Primary	PCP-Evaluation
RD-55A	Chatsworth		4/30/2009	314.0	Primary	CFOU RFI
RD-55A	Chatsworth		4/30/2009	8260B	Split	CFOU RFI
RD-55A	Chatsworth		4/30/2009	COCs	Primary	CFOU RFI
RD-55A	Chatsworth		7/21/2009	314.0	Primary	CFOU RFI
RD-55A	Chatsworth		7/21/2009	8260B	Primary	PCP-Evaluation
RD-55A	Chatsworth		7/21/2009	COCs	Primary	CFOU RFI
RD-55A	Chatsworth		11/3/2009	314.0	Primary	CFOU RFI
RD-55A	Chatsworth		11/3/2009	COCs	Primary	CFOU RFI
RD-55B	Chatsworth		2/12/2009	314.0	Primary	CFOU RFI
RD-55B	Chatsworth		2/12/2009	8260SIM	Duplicate	CFOU RFI
RD-55B	Chatsworth		2/12/2009	8315A-Formaldehyde	Duplicate	CFOU RFI
RD-55B	Chatsworth		2/12/2009	COCs	Primary	CFOU RFI
RD-55B	Chatsworth		2/12/2009	8260B	Primary	PCP-Evaluation
RD-55B	Chatsworth		4/30/2009	314.0	Primary	CFOU RFI
RD-55B	Chatsworth		4/30/2009	COCs	Primary	CFOU RFI
RD-55B	Chatsworth		7/21/2009	314.0	Primary	CFOU RFI
RD-55B	Chatsworth		7/21/2009	350.3-Ammonia-N	Duplicate	CFOU RFI
RD-55B	Chatsworth		7/21/2009	8260B	Primary	PCP-Evaluation
RD-55B	Chatsworth		7/21/2009	COCs	Primary	CFOU RFI
RD-55B	Chatsworth		11/2/2009	300.0-Fluoride	Duplicate	CFOU RFI
RD-55B	Chatsworth		11/2/2009	300.0-Nitrate-NO3	Duplicate	CFOU RFI
RD-55B	Chatsworth		11/2/2009	314.0	Primary	CFOU RFI
RD-55B	Chatsworth		11/2/2009	8260SIM	Split	CFOU RFI
RD-55B	Chatsworth		11/2/2009	8315A-Formaldehyde	Duplicate	CFOU RFI
RD-55B	Chatsworth		11/2/2009	COCs	Primary	CFOU RFI
RD-56B	Chatsworth		2/23/2009	8260B	Primary	Perimeter
RD-56B	Chatsworth		5/7/2009	8260B	Primary	Perimeter
RD-56B	Chatsworth		7/22/2009	8260B	Primary	Perimeter
RD-56B	Chatsworth		10/21/2009	8260B	Primary	Perimeter
RD-57	Chatsworth	Z7	2/25/2009	8260B	Primary	Area IV
RD-57	Chatsworth	Z7	2/25/2009	8260B	Primary	Perimeter
RD-57	Chatsworth	Z7	2/25/2009	900.0-dissolved	Primary	Area IV
RD-57	Chatsworth	Z7	2/25/2009	900.0-total	Primary	Area IV
RD-57	Chatsworth	Z7	2/25/2009	905.0-dissolved	Primary	Area IV
RD-57	Chatsworth	Z7	2/25/2009	905.0-total	Primary	Area IV
RD-57	Chatsworth	Z7	2/25/2009	906.0-total	Primary	Area IV
RD-57	Chatsworth	Z7	2/25/2009	Metals, dissolved	Primary	Area IV, SMOU RFI
RD-57	Chatsworth	Z7	4/29/2009	8260B	Primary	Perimeter
RD-57	Chatsworth	Z7	7/17/2009	8260B	Primary	Area IV
RD-57	Chatsworth	Z7	7/17/2009	900.0-total	Primary	Area IV
RD-57	Chatsworth	Z7	7/17/2009	901.1-total	Primary	Area IV
RD-57	Chatsworth	Z7	7/17/2009	905.0-total	Primary	Area IV
RD-57	Chatsworth	Z7	7/17/2009	906.0-total	Primary	Area IV
RD-57	Chatsworth	Z7	10/21/2009	8260B	Primary	Area IV
RD-58A	Chatsworth		3/5/2009	314.0	Primary	CFOU RFI
RD-58A	Chatsworth		3/5/2009	COCs	Primary	CFOU RFI
RD-58A	Chatsworth		3/5/2009	8260SIM	Duplicate	CFOU RFI
RD-58A	Chatsworth		3/5/2009	8260B	Primary	PCP-Evaluation
RD-58A	Chatsworth		5/11/2009	314.0	Primary	CFOU RFI
RD-58A	Chatsworth		5/11/2009	COCs	Primary	CFOU RFI
RD-58A	Chatsworth		8/4/2009	314.0	Primary	CFOU RFI
RD-58A	Chatsworth		8/4/2009	8260B	Primary	PCP-Evaluation
RD-58A	Chatsworth		8/4/2009	COCs	Primary	CFOU RFI

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Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
RD-58A	Chatsworth		10/22/2009	1625M	Primary	CFOU RFI
RD-58A	Chatsworth		10/22/2009	300.0-Fluoride	Primary	CFOU RFI
RD-58A	Chatsworth		10/22/2009	300.0-Nitrate-NO3	Primary	CFOU RFI
RD-58A	Chatsworth		10/22/2009	314.0	Primary	CFOU RFI
RD-58A	Chatsworth		10/22/2009	8260B	Primary	CFOU RFI
RD-58A	Chatsworth		10/22/2009	8260SIM	Primary	CFOU RFI
RD-58A	Chatsworth		10/22/2009	8270C	Primary	CFOU RFI
RD-58A	Chatsworth		10/22/2009	8315A-Formaldehyde	Primary	CFOU RFI
RD-58B	Chatsworth		2/11/2009	300.0-Nitrate-NO3	Split	CFOU RFI
RD-58B	Chatsworth		2/11/2009	314.0	Primary	CFOU RFI
RD-58B	Chatsworth		2/11/2009	8270C	Duplicate	CFOU RFI
RD-58B	Chatsworth		2/11/2009	8270C	Split	CFOU RFI
RD-58B	Chatsworth		2/11/2009	COCs	Primary	CFOU RFI
RD-58B	Chatsworth		2/11/2009	8260B	Primary	PCP-Evaluation
RD-58B	Chatsworth		5/11/2009	314.0	Primary	CFOU RFI
RD-58B	Chatsworth		5/11/2009	314.0	Split	CFOU RFI
RD-58B	Chatsworth		5/11/2009	COCs	Primary	CFOU RFI
RD-58B	Chatsworth		7/28/2009	300.0-Fluoride	Duplicate	CFOU RFI
RD-58B	Chatsworth		7/28/2009	314.0	Primary	CFOU RFI
RD-58B	Chatsworth		7/28/2009	8315A-Formaldehyde	Duplicate	CFOU RFI
RD-58B	Chatsworth		7/28/2009	COCs	Primary	CFOU RFI
RD-58B	Chatsworth		7/28/2009	8260B	Primary	PCP-Evaluation
RD-58B	Chatsworth		10/22/2009	314.0	Primary	CFOU RFI
RD-58B	Chatsworth		10/22/2009	COCs	Primary	CFOU RFI
RD-58C	Chatsworth		2/11/2009	8260B	Primary	PCP-Evaluation
RD-58C	Chatsworth		7/23/2009	8260B	Primary	PCP-Evaluation
RD-58C	Chatsworth		7/23/2009	8260B	Duplicate	PCP-Evaluation
RD-58C	Chatsworth		7/23/2009	8260B	Split	PCP-Evaluation
RD-59A	Chatsworth		3/3/2009	8260B	Primary	Area IV, Perimeter
RD-59A	Chatsworth		3/3/2009	900.0-dissolved	Primary	Area IV
RD-59A	Chatsworth		3/3/2009	900.0-total	Primary	Area IV
RD-59A	Chatsworth		3/3/2009	901.1-dissolved	Primary	Area IV
RD-59A	Chatsworth		3/3/2009	901.1-total	Primary	Area IV
RD-59A	Chatsworth		3/3/2009	905.0-dissolved	Primary	Area IV
RD-59A	Chatsworth		3/3/2009	905.0-total	Primary	Area IV
RD-59A	Chatsworth		3/3/2009	906.0-total	Primary	Area IV
RD-59A	Chatsworth		3/3/2009	Metals, dissolved	Primary	Area IV
RD-59A	Chatsworth		5/13/2009	8260B	Primary	Perimeter
RD-59A	Chatsworth		8/4/2009	8260B	Primary	Area IV, Perimeter
RD-59A	Chatsworth		8/4/2009	900.0-dissolved	Primary	Area IV
RD-59A	Chatsworth		8/4/2009	900.0-total	Primary	Area IV
RD-59A	Chatsworth		8/4/2009	901.1-dissolved	Primary	Area IV
RD-59A	Chatsworth		8/4/2009	901.1-total	Primary	Area IV
RD-59A	Chatsworth		8/4/2009	905.0-dissolved	Primary	Area IV
RD-59A	Chatsworth		8/4/2009	905.0-total	Primary	Area IV
RD-59A	Chatsworth		8/4/2009	906.0-total	Primary	Area IV
RD-59A	Chatsworth		8/4/2009	Metals, dissolved	Primary	Area IV
RD-59A	Chatsworth		11/4/2009	8260B	Primary	Perimeter
RD-59B	Chatsworth		3/3/2009	8260B	Primary	Area IV, Perimeter
RD-59B	Chatsworth		3/3/2009	900.0-dissolved	Primary	Area IV
RD-59B	Chatsworth		3/3/2009	900.0-total	Primary	Area IV
RD-59B	Chatsworth		3/3/2009	901.1-dissolved	Primary	Area IV
RD-59B	Chatsworth		3/3/2009	901.1-total	Primary	Area IV
RD-59B	Chatsworth		3/3/2009	905.0-dissolved	Primary	Area IV

See last three pages of Table B-I for notes and abbreviations.

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BOEING SANTA SUSANA FIELD LABORATORY
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Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
RD-59B	Chatsworth		3/3/2009	905.0-total	Primary	Area IV
RD-59B	Chatsworth		3/3/2009	906.0-total	Primary	Area IV
RD-59B	Chatsworth		3/3/2009	Metals, dissolved	Primary	Area IV
RD-59B	Chatsworth		5/13/2009	8260B	Primary	Perimeter
RD-59B	Chatsworth		8/4/2009	8260B	Primary	Area IV, Perimeter
RD-59B	Chatsworth		8/4/2009	900.0-dissolved	Primary	Area IV
RD-59B	Chatsworth		8/4/2009	900.0-total	Primary	Area IV
RD-59B	Chatsworth		8/4/2009	901.1-dissolved	Primary	Area IV
RD-59B	Chatsworth		8/4/2009	901.1-total	Primary	Area IV
RD-59B	Chatsworth		8/4/2009	905.0-dissolved	Primary	Area IV
RD-59B	Chatsworth		8/4/2009	905.0-total	Primary	Area IV
RD-59B	Chatsworth		8/4/2009	906.0-total	Primary	Area IV
RD-59B	Chatsworth		8/4/2009	Metals, dissolved	Primary	Area IV
RD-59B	Chatsworth		11/4/2009	8260B	Primary	Perimeter
RD-59C	Chatsworth		3/3/2009	8260B	Primary	Area IV, Perimeter
RD-59C	Chatsworth		3/3/2009	900.0-dissolved	Primary	Area IV
RD-59C	Chatsworth		3/3/2009	900.0-total	Primary	Area IV
RD-59C	Chatsworth		3/3/2009	901.1-dissolved	Primary	Area IV
RD-59C	Chatsworth		3/3/2009	901.1-total	Primary	Area IV
RD-59C	Chatsworth		3/3/2009	905.0-dissolved	Primary	Area IV
RD-59C	Chatsworth		3/3/2009	905.0-total	Primary	Area IV
RD-59C	Chatsworth		3/3/2009	906.0-total	Primary	Area IV
RD-59C	Chatsworth		3/3/2009	Metals, dissolved	Primary	Area IV
RD-59C	Chatsworth		5/13/2009	8260B	Primary	Perimeter
RD-59C	Chatsworth		8/4/2009	8260B	Primary	Area IV, Perimeter
RD-59C	Chatsworth		8/4/2009	900.0-dissolved	Primary	Area IV
RD-59C	Chatsworth		8/4/2009	900.0-total	Primary	Area IV
RD-59C	Chatsworth		8/4/2009	901.1-dissolved	Primary	Area IV
RD-59C	Chatsworth		8/4/2009	901.1-total	Primary	Area IV
RD-59C	Chatsworth		8/4/2009	905.0-dissolved	Primary	Area IV
RD-59C	Chatsworth		8/4/2009	905.0-total	Primary	Area IV
RD-59C	Chatsworth		8/4/2009	906.0-total	Primary	Area IV
RD-59C	Chatsworth		8/4/2009	Metals, dissolved	Primary	Area IV
RD-59C	Chatsworth		11/4/2009	8260B	Primary	Perimeter
RD-60	Chatsworth		3/4/2009	8015B (GRO)	Primary	Other
RD-60	Chatsworth		3/4/2009	8260B	Primary	PCP-Evaluation
RD-60	Chatsworth		8/3/2009	8260B	Primary	PCP-Evaluation
RD-61	Chatsworth		3/5/2009	8260B	Primary	PCP-Detection
RD-61	Chatsworth		5/5/2009	8260B	Primary	PCP-Detection
RD-61	Chatsworth		7/14/2009	8260B	Primary	PCP-Detection
RD-61	Chatsworth		10/22/2009	8015B (EFH)	Primary	SMOU RFI
RD-61	Chatsworth		10/22/2009	8260B	Primary	PCP-Detection
RD-61	Chatsworth		10/22/2009	8270C	Primary	SMOU RFI
RD-61	Chatsworth		10/22/2009	Metals, diss (DTSC)	Primary	SMOU RFI
RD-62	Chatsworth		2/26/2009	8260B	Primary	PCP-Detection
RD-62	Chatsworth		4/30/2009	8260B	Primary	PCP-Detection
RD-62	Chatsworth		7/22/2009	8260B	Primary	PCP-Detection
RD-62	Chatsworth		10/28/2009	8015B (EFH)	Primary	SMOU RFI
RD-62	Chatsworth		10/28/2009	8015B (EFH)	Duplicate	SMOU RFI
RD-62	Chatsworth		10/28/2009	8260B	Primary	PCP-Detection
RD-62	Chatsworth		10/28/2009	8260B	Duplicate	PCP-Detection
RD-62	Chatsworth		10/28/2009	8270C	Primary	SMOU RFI
RD-62	Chatsworth		10/28/2009	8270C	Split	SMOU RFI

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Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
RD-62	Chatsworth		10/28/2009	Metals, diss (DTSC)	Primary	SMOU RFI
RD-62	Chatsworth		10/28/2009	Metals, diss (DTSC)	Duplicate	SMOU RFI
RD-63	Chatsworth		2/20/2009	8260B	Primary	Area IV
RD-63	Chatsworth		2/20/2009	900.0-dissolved	Primary	Area IV
RD-63	Chatsworth		2/20/2009	900.0-dissolved	Split	Area IV
RD-63	Chatsworth		2/20/2009	900.0-total	Primary	Area IV
RD-63	Chatsworth		2/20/2009	900.0-total	Primary-Reanalysis 1	Area IV
RD-63	Chatsworth		2/20/2009	900.0-total	Split	Area IV
RD-63	Chatsworth		2/20/2009	901.1-dissolved	Primary	Area IV
RD-63	Chatsworth		2/20/2009	901.1-dissolved	Split	Area IV
RD-63	Chatsworth		2/20/2009	901.1-total	Primary	Area IV
RD-63	Chatsworth		2/20/2009	901.1-total	Split	Area IV
RD-63	Chatsworth		2/20/2009	905.0-dissolved	Primary	Area IV
RD-63	Chatsworth		2/20/2009	905.0-dissolved	Split	Area IV
RD-63	Chatsworth		2/20/2009	905.0-total	Primary	Area IV
RD-63	Chatsworth		2/20/2009	905.0-total	Split	Area IV
RD-63	Chatsworth		2/20/2009	906.0-total	Primary	Area IV
RD-63	Chatsworth		2/20/2009	906.0-total	Split	Area IV
RD-63	Chatsworth		7/31/2009	8260B	Primary	Area IV
RD-63	Chatsworth		7/31/2009	900.0-dissolved	Primary	Area IV
RD-63	Chatsworth		7/31/2009	900.0-total	Primary	Area IV
RD-63	Chatsworth		7/31/2009	901.1-dissolved	Primary	Area IV
RD-63	Chatsworth		7/31/2009	901.1-total	Primary	Area IV
RD-63	Chatsworth		7/31/2009	905.0-dissolved	Primary	Area IV
RD-63	Chatsworth		7/31/2009	905.0-total	Primary	Area IV
RD-63	Chatsworth		7/31/2009	906.0-total	Primary	Area IV
RD-64	Chatsworth	Z8	2/23/2009	8260B	Primary	Area IV
RD-64	Chatsworth	Z8	2/23/2009	900.0-dissolved	Primary	Area IV
RD-64	Chatsworth	Z8	2/23/2009	900.0-dissolved	Primary-Reanalysis 1	Area IV
RD-64	Chatsworth	Z8	2/23/2009	900.0-total	Primary	Area IV
RD-64	Chatsworth	Z8	2/23/2009	901.1-dissolved	Primary	Area IV
RD-64	Chatsworth	Z8	2/23/2009	901.1-total	Primary	Area IV
RD-64	Chatsworth	Z8	2/23/2009	905.0-dissolved	Primary	Area IV
RD-64	Chatsworth	Z8	2/23/2009	905.0-total	Primary	Area IV
RD-64	Chatsworth	Z8	2/23/2009	906.0-total	Primary	Area IV
RD-64	Chatsworth	Z8	2/23/2009	Metals, dissolved	Primary	SMOU RFI
RD-64	Chatsworth	Z4	4/29/2009	Metals, dissolved	Primary	SMOU RFI
RD-64	Chatsworth	Z4	4/29/2009	Metals, dissolved	Duplicate	SMOU RFI
RD-64	Chatsworth	Z4	7/16/2009	900.0-dissolved	Primary	Area IV
RD-64	Chatsworth	Z4	7/16/2009	900.0-total	Primary	Area IV
RD-64	Chatsworth	Z4	7/16/2009	901.1-dissolved	Primary	Area IV
RD-64	Chatsworth	Z4	7/16/2009	901.1-total	Primary	Area IV
RD-64	Chatsworth	Z4	7/16/2009	905.0-dissolved	Primary	Area IV
RD-64	Chatsworth	Z4	7/16/2009	905.0-total	Primary	Area IV
RD-64	Chatsworth	Z4	7/16/2009	906.0-total	Primary	Area IV
RD-65	Chatsworth	Z5	2/23/2009	8260B	Primary	Area IV
RD-66	Chatsworth		5/1/2009	8260B	Primary	Perimeter
RD-66	Chatsworth		5/1/2009	8260B	Split	Perimeter
RD-66	Chatsworth		7/30/2009	8260B	Primary	Perimeter
RD-66	Chatsworth		10/16/2009	8260B	Primary	Perimeter
RD-67	Chatsworth		2/19/2009	8260B	Primary	PCP-Background
RD-67	Chatsworth		5/1/2009	8260B	Primary	PCP-Background
RD-67	Chatsworth		5/1/2009	8260B	Duplicate	PCP-Background
RD-67	Chatsworth		7/27/2009	8260B	Primary	PCP-Background

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Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
RD-67	Chatsworth		7/27/2009	8260B	Duplicate	PCP-Background
RD-67	Chatsworth		7/27/2009	8260B	Split	PCP-Background
RD-67	Chatsworth		10/22/2009	8260B	Primary	PCP-Background
RD-68A	Chatsworth		3/3/2009	8260B	Split	Perimeter
RD-68A	Chatsworth		3/3/2009	8260B	Primary	Perimeter
RD-68A	Chatsworth		3/3/2009	8260B	Duplicate	Perimeter
RD-68A	Chatsworth		5/12/2009	8260B	Primary	Perimeter
RD-68A	Chatsworth		8/4/2009	8260B	Primary	Perimeter
RD-68A	Chatsworth		11/4/2009	8260B	Primary	Perimeter
RD-68B	Chatsworth		3/3/2009	8260B	Primary	Perimeter
RD-68B	Chatsworth		5/12/2009	8260B	Primary	Perimeter
RD-68B	Chatsworth		8/4/2009	8260B	Primary	Perimeter
RD-68B	Chatsworth		11/4/2009	8260B	Primary	Perimeter
RD-69	Chatsworth		3/5/2009	8260B	Primary	Perimeter
RD-69	Chatsworth		7/24/2009	8260B	Primary	Perimeter
RD-69	Chatsworth		11/4/2009	1625M	Duplicate	PCP-Background
RD-69	Chatsworth		11/4/2009	300.0-Fluoride	Duplicate	PCP-Background
RD-69	Chatsworth		11/4/2009	300.0-Fluoride	Split	PCP-Background
RD-69	Chatsworth		11/4/2009	COCs	Primary	PCP-Background
RD-69	Chatsworth		11/4/2009	General Minerals-Background	Primary	PCP-Background
RD-69	Chatsworth		11/4/2009	General Minerals-Background	Duplicate	PCP-Background
RD-69	Chatsworth		11/4/2009	General Minerals-Background	Split	PCP-Background
RD-70	Chatsworth		2/13/2009	8260B	Split	Perimeter
RD-70	Chatsworth		2/13/2009	8260B	Primary	Perimeter
RD-70	Chatsworth		2/13/2009	8260B	Duplicate	Perimeter
RD-70	Chatsworth		5/6/2009	8260B	Primary	Perimeter
RD-70	Chatsworth		7/29/2009	8260B	Primary	Perimeter
RD-70	Chatsworth		10/9/2009	8260B	Primary	PCP-Detection
RD-71	Chatsworth		2/26/2009	8260B	Primary	Perimeter
RD-71	Chatsworth		4/28/2009	8260B	Primary	Perimeter
RD-71	Chatsworth		4/28/2009	8260B	Duplicate	Perimeter
RD-71	Chatsworth		7/30/2009	8260B	Primary	Perimeter
RD-71	Chatsworth		10/16/2009	8260B	Primary	Perimeter
RD-73	Chatsworth		2/26/2009	8015B (GRO)	Primary	LUFT
RD-73	Chatsworth		2/26/2009	8260B	Primary	LUFT
RD-85	Chatsworth		3/10/2009	8260B (IPA)	Primary	SMOU RFI
RD-85	Chatsworth		3/10/2009	8260B	Primary	SMOU RFI
RD-86	Chatsworth		3/2/2009	8260B (IPA)	Primary	SMOU RFI
RD-86	Chatsworth		3/2/2009	8260B (IPA)	Split	SMOU RFI
RD-86	Chatsworth		3/2/2009	8260B	Primary	SMOU RFI
RD-91	Chatsworth		3/5/2009	8260B	Split	SMOU RFI
RD-91	Chatsworth		3/5/2009	8260B	Primary	SMOU RFI
RD-91	Chatsworth		3/5/2009	8270C	Primary	SMOU RFI
RD-91	Chatsworth		3/5/2009	8270C	Duplicate	SMOU RFI
RD-91	Chatsworth		3/5/2009	8270C	Split	SMOU RFI
RD-91	Chatsworth		3/5/2009	Metals, dissolved	Primary	SMOU RFI
RD-91	Chatsworth		5/5/2009	8260B	Primary	SMOU RFI
RD-91	Chatsworth		5/5/2009	8260B	Duplicate	SMOU RFI
RD-91	Chatsworth		5/5/2009	8260B	Split	SMOU RFI
RD-91	Chatsworth		5/5/2009	8270C	Primary	SMOU RFI
RD-91	Chatsworth		5/5/2009	8270C	Duplicate	SMOU RFI
RD-91	Chatsworth		5/5/2009	Metals, dissolved	Primary	SMOU RFI

See last three pages of Table B-I for notes and abbreviations.

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Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
RD-92	Chatsworth		3/4/2009	Metals, dissolved	Primary	SMOU RFI
RD-92	Chatsworth		5/1/2009	Metals, dissolved	Primary	SMOU RFI
RD-92	Chatsworth		5/1/2009	Metals, dissolved	Duplicate	SMOU RFI
RD-98	Chatsworth		2/20/2009	8260B	Primary	SMOU RFI
RD-98	Chatsworth		2/20/2009	8260B	Duplicate	SMOU RFI
RD-98	Chatsworth		2/20/2009	Metals, dissolved	Primary	SMOU RFI
RS-18	Shallow		3/4/2009	8260B	Primary	Area IV
RS-18	Shallow		3/4/2009	900.0-dissolved	Primary	Area IV
RS-18	Shallow		3/4/2009	900.0-total	Primary	Area IV
RS-18	Shallow		3/4/2009	901.1-dissolved	Primary	Area IV
RS-18	Shallow		3/4/2009	901.1-total	Primary	Area IV
RS-18	Shallow		3/4/2009	905.0-dissolved	Primary	Area IV
RS-18	Shallow		3/4/2009	905.0-total	Primary	Area IV
RS-18	Shallow		3/4/2009	906.0-total	Primary	Area IV
RS-18	Shallow		3/4/2009	908.0-dissolved	Primary	Area IV
RS-18	Shallow		3/4/2009	908.0-total	Primary	Area IV
RS-18	Shallow		3/4/2009	Metals, dissolved	Primary	Area IV, SMOU RFI
RS-18	Shallow		4/27/2009	900.0-dissolved	Primary	Area IV
RS-18	Shallow		4/27/2009	900.0-total	Primary	Area IV
RS-18	Shallow		4/27/2009	901.1-dissolved	Primary	Area IV
RS-18	Shallow		4/27/2009	901.1-total	Primary	Area IV
RS-18	Shallow		4/27/2009	905.0-dissolved	Primary	Area IV
RS-18	Shallow		4/27/2009	905.0-total	Primary	Area IV
RS-18	Shallow		4/27/2009	906.0-total	Primary	Area IV
RS-18	Shallow		4/27/2009	908.0-dissolved	Primary	Area IV
RS-18	Shallow		4/27/2009	908.0-total	Primary	Area IV
RS-18	Shallow		4/27/2009	Metals, dissolved	Primary	SMOU RFI
SH-08	Shallow		5/14/2009	8081A pesticides	Primary	SMOU RFI
SH-08	Shallow		5/14/2009	8081A pesticides	Duplicate	SMOU RFI
SH-08	Shallow		5/14/2009	8081A pesticides	Split	SMOU RFI
SH-08	Shallow		5/14/2009	8270C-PAHs	Primary	SMOU RFI
SH-08	Shallow		5/14/2009	8315A-Formaldehyde	Primary	SMOU RFI
WS-04A	Chatsworth		2/25/2009	8260B	Primary	PCP-Evaluation
WS-04A	Chatsworth		7/21/2009	8260B	Primary	PCP-Evaluation
WS-04A	Chatsworth		7/21/2009	8260B	Duplicate	PCP-Evaluation
WS-04A	Chatsworth		7/21/2009	8260B	Split	PCP-Evaluation
WS-05	Chatsworth		2/10/2009	300.0-Nitrate-NO3	Split	CFOU RFI
WS-05	Chatsworth		2/10/2009	314.0	Primary	CFOU RFI
WS-05	Chatsworth		2/10/2009	314.0	Duplicate	CFOU RFI
WS-05	Chatsworth		2/10/2009	8260SIM	Split	CFOU RFI
WS-05	Chatsworth		2/10/2009	8260B	Primary	PCP-ICA
WS-05	Chatsworth		2/10/2009	COCs	Primary	CFOU RFI
WS-05	Chatsworth		5/6/2009	314.0	Primary	CFOU RFI
WS-05	Chatsworth		5/6/2009	COCs	Primary	CFOU RFI
WS-05	Chatsworth		7/29/2009	300.0-Nitrate-NO3	Duplicate	CFOU RFI
WS-05	Chatsworth		7/29/2009	314.0	Primary	CFOU RFI
WS-05	Chatsworth		7/29/2009	314.0	Duplicate	CFOU RFI
WS-05	Chatsworth		7/29/2009	8260B	Primary	PCP-ICA
WS-05	Chatsworth		7/29/2009	8260SIM	Duplicate	CFOU RFI
WS-05	Chatsworth		7/29/2009	8270C	Duplicate	CFOU RFI
WS-05	Chatsworth		7/29/2009	COCs	Primary	CFOU RFI
WS-05	Chatsworth		10/15/2009	314.0	Primary	CFOU RFI
WS-05	Chatsworth		10/15/2009	314.0	Split	CFOU RFI

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Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
WS-05	Chatsworth		10/15/2009	8315A-Formaldehyde	Split	CFOU RFI
WS-05	Chatsworth		10/15/2009	COCs	Primary	CFOU RFI
WS-06	Chatsworth		2/26/2009	314.0	Primary	CFOU RFI
WS-06	Chatsworth		2/26/2009	314.0	Split	CFOU RFI
WS-06	Chatsworth		2/26/2009	8270C	Duplicate	CFOU RFI
WS-06	Chatsworth		2/26/2009	8270C	Split	CFOU RFI
WS-06	Chatsworth		2/26/2009	8260B	Primary	PCP-ICA
WS-06	Chatsworth		2/26/2009	COCs	Primary	CFOU RFI
WS-06	Chatsworth		5/6/2009	314.0	Primary	CFOU RFI
WS-06	Chatsworth		5/6/2009	COCs	Primary	CFOU RFI
WS-06	Chatsworth		7/29/2009	314.0	Primary	CFOU RFI
WS-06	Chatsworth		7/29/2009	8260B	Primary	PCP-ICA
WS-06	Chatsworth		7/29/2009	8315A-Formaldehyde	Duplicate	CFOU RFI
WS-06	Chatsworth		7/29/2009	COCs	Primary	CFOU RFI
WS-06	Chatsworth		10/29/2009	314.0	Primary	CFOU RFI
WS-06	Chatsworth		10/29/2009	314.0	Split	CFOU RFI
WS-06	Chatsworth		10/29/2009	COCs	Primary	CFOU RFI
WS-09	Chatsworth		2/10/2009	314.0	Primary	CFOU RFI
WS-09	Chatsworth		2/10/2009	COCs	Primary	CFOU RFI
WS-09	Chatsworth		2/10/2009	8260B	Primary	PCP-ICA
WS-09	Chatsworth		5/5/2009	314.0	Primary	CFOU RFI
WS-09	Chatsworth		5/5/2009	314.0	Duplicate	CFOU RFI
WS-09	Chatsworth		5/5/2009	COCs	Primary	CFOU RFI
WS-09	Chatsworth		5/5/2009	COCs	Duplicate	CFOU RFI
WS-09	Chatsworth		7/23/2009	314.0	Primary	CFOU RFI
WS-09	Chatsworth		7/23/2009	7196A, Dissolved	Primary	Other
WS-09	Chatsworth		7/23/2009	8260B	Primary	PCP-ICA
WS-09	Chatsworth		7/23/2009	8290	Primary	Other
WS-09	Chatsworth		7/23/2009	900.0-dissolved	Primary	Other
WS-09	Chatsworth		7/23/2009	900.0-total	Primary	Other
WS-09	Chatsworth		7/23/2009	906.0-total	Primary	Other
WS-09	Chatsworth		7/23/2009	COCs	Primary	CFOU RFI
WS-09	Chatsworth		7/23/2009	Metals, dissolved	Primary	Other
WS-09	Chatsworth		10/20/2009	314.0	Primary	CFOU RFI
WS-09	Chatsworth		10/20/2009	900.0-dissolved	Primary	Other
WS-09	Chatsworth		10/20/2009	900.0-total	Primary	Other
WS-09	Chatsworth		10/20/2009	905.0-dissolved	Primary	Other
WS-09	Chatsworth		10/20/2009	905.0-total	Primary	Other
WS-09	Chatsworth		10/20/2009	COCs	Primary	CFOU RFI
WS-09	Chatsworth		10/20/2009	Metals, dissolved + Sr	Primary	Other
WS-09A	Chatsworth		2/12/2009	314.0	Primary	CFOU RFI
WS-09A	Chatsworth		2/12/2009	350.3-Ammonia-N	Duplicate	CFOU RFI
WS-09A	Chatsworth		2/12/2009	8260SIM	Duplicate	CFOU RFI
WS-09A	Chatsworth		2/12/2009	8260B	Primary	PCP-ICA
WS-09A	Chatsworth		2/12/2009	COCs	Primary	CFOU RFI
WS-09A	Chatsworth		5/4/2009	314.0	Primary	CFOU RFI
WS-09A	Chatsworth		5/4/2009	COCs	Primary	CFOU RFI
WS-09A	Chatsworth		7/22/2009	300.0-Fluoride	Duplicate	CFOU RFI
WS-09A	Chatsworth		7/22/2009	314.0	Primary	CFOU RFI
WS-09A	Chatsworth		7/22/2009	6010B-Fe,Mn-Dissolved	Primary	Other
WS-09A	Chatsworth		7/22/2009	6010B-Fe,Mn-Total	Primary	Other
WS-09A	Chatsworth		7/22/2009	8260B	Primary	PCP-ICA
WS-09A	Chatsworth		7/22/2009	COCs	Primary	CFOU RFI
WS-09A	Chatsworth		10/14/2009	COCs	Primary	CFOU RFI

See last three pages of Table B-I for notes and abbreviations.

TABLE B-I
SUMMARY OF SAMPLING AND ANALYSES
QUARTERLY GROUNDWATER MONITORING PROGRAM, 2009
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Sample Port	Date Sampled	Analysis Method	Sample Type	Monitoring Program
WS-09A	Chatsworth		10/14/2009	314.0	Primary	CFOU RFI
WS-09A	Chatsworth		10/14/2009	314.0	Duplicate	CFOU RFI
WS-09A	Chatsworth		10/14/2009	8260SIM	Duplicate	CFOU RFI
WS-09A	Chatsworth		10/14/2009	8270C	Duplicate	CFOU RFI

See last three pages of Table B-I for notes and abbreviations.

ANALYTICAL METHODS

1625M	=	N-Nitrosodimethylamine, modified EPA method 1625.
300.0	=	EPA method 300.0 for inorganics. Table B-I includes: 300.0-Fluoride 300.0-Full 300.0-Nitrate-NO3
300.0-Full	=	EPA Method 300.0 for bromide, chloride, fluoride, nitrate-NO3, and sulfate.
314.0	=	Perchlorate, EPA method 314.0.
350.3-Ammonia-N	=	EPA method 350.3 for ammonia as nitrogen.
376.2-Sulfide	=	EPA method 376.2 for Sulfide
504.1 (DBCP, EDB)	=	EPA method 504.1 for 1,2-dibromo-3-chloropropane and 1,2-dibromoethane.
6010B-Fe,Mn-Dissolved	=	EPA method 6010B for dissolved iron and manganese. Dissolved metals were filtered and acidified in the field.
6010B-Fe,Mn-Total	=	EPA method 6010B for total iron and manganese. Total metals were acidified in the field.
7196A, Dissolved	=	EPA method 7196 for hexavalent chromium. Dissolved hexavalent chromium was filtered and acidified in the field.
8015B (EFH)	=	EPA method 8015 revised for diesal range organics.
8015B (GRO)	=	EPA method 8015 revised for gasoline range organics.
8081A pesticides	=	EPA method 8081A for pesticides.
8081A-AppIX	=	EPA method 8081A for Appendix IX organochlorine pesticides.
8082	=	EPA method 8082 for polychlorinated biphenyls (PCBs).
8141A	=	EPA method 8141A for organophosphorous pesticides.
8151A	=	EPA method 8151A for chlorinated herbicides.
8260B	=	EPA method 8260B for volatile organic compounds.
8260B-A+A	=	EPA method 8260B for volatile organic compounds for acrolein and acrylonitrile.
8260B-AppIX	=	EPA method 8260B for Appendix IX volatile organic compounds.
8260B (IPA)	=	EPA method 8260B for isopropanol.
8260SIM	=	EPA method 8260SIM for 1,4-dioxane.
8270C	=	EPA method 8270C for base/neutral and acid organic compounds.
8270C-AppIX	=	EPA method 8270C for Appendix IX base/neutral and acid organic compounds.
8270C-PAHs	=	EPA method 8270C for polynuclear aromatic hydrocarbons (PAHs).
8270SIM-PCP	=	EPA method 8270SIM for pentachlorophenol.
8290	=	EPA method 8290 for dioxins and furans.
8315A-Formaldehyde	=	EPA method 8315 for formaldehyde.
8315M-Hydrazines	=	EPA method 8315M for hydrazines.
8321A-Hexachlorophene	=	EPA method 8321A for hexachlorophene.
8330	=	EPA method 8330 for nitroaromatics and nitramines.
9012-Cyanide, Total	=	EPA method 9012 for total cyanide.
9040B	=	EPA method 9040B for pH.
AppIX	=	Appendix IX, see below.
COCs	=	Constituents of concern (table 3 of post-closure permits plus 1,3-dinitrobenzene). Includes EPA methods 8260B, 8260SIM, 8270C, 1625M, 8315A, 300.0, and 350.3.
General Minerals-Background	=	General minerals, including dissolved metals: calcium, iron, magnesium, manganese, potassium, sodium, strontium, and zinc; alkalinity as CaCO3, chloride, fluoride, nitrate, sulfate, total dissolved solids, pH, specific conductance, and turbidity. Includes EPA methods 6010B, 300.0, 160.1, 9040B, 120.1, 180.1, and method SM2320B. Dissolved metals were filtered and acidified in the field.
Metals, diss (App IX)	=	Metals including barium, cobalt, tin, vanadium, and zinc using EPA method 6010B; antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, and thallium using EPA method 6020; and mercury using EPA method 7470A. Dissolved metals ("diss") were filtered and acidified in the field.
Metals, dissolved and Metals, total	=	Metals including antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, and thallium, using EPA method 6020; barium, cobalt, iron, manganese, molybdenum, vanadium, and zinc using EPA method 6010B; and mercury using EPA method 7470A. Dissolved metals ("diss") were filtered and acidified in the field. Total metals were acidified in the field.
Metals, diss (DTSC)	=	Includes all metals listed above and additional metals including aluminum, boron, magnesium, strontium, and tin using EPA method 6010B. Dissolved metals ("diss") were filtered and acidified in the field.

Metals-RFI G2, diss	=	Metals including antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, and thallium using EPA method 6020; aluminum, barium, cobalt, iron, manganese, molybdenum, vanadium, and zinc using EPA method 6010B; and mercury using EPA method 7470A. Dissolved metals ("diss") were filtered and acidified in the field.
Zr	=	Zirconium was additionally analyzed at this well using EPA method 6010B.
Sr	=	Strontium was additionally analyzed at this well using EPA method 6010B.
SRL 524M-TCP	=	EPA Method for 1,2,3-Trichloropropane.

APPENDIX IX CONSTITUENTS

The laboratory uses the most current methods which may be updated from methods listed in Appendix IX (California Code of Regulations(22 CCR), Title 22, Sections 66264.800 through 66264.801, Appendix IX, Ground-water Monitoring List).

APPENDIX IX analyses include:
EPA method 8260B for volatile organic compounds
EPA method 8260SIM for 1,4-dioxane
EPA method 8270C for base/neutral and acid organic compounds
EPA method 8081A for organochlorine pesticides
EPA method 8082 for polychlorinated biphenyls (PCBs)
EPA method 8141A for organophosphorous pesticides
EPA method 8151A for chlorinated herbicides
EPA method 6010B/6020 for metals (Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, Sn, V, Zn)
EPA method 504.1 for 1,2-dibromoethane (EDB) and 1,2-dibromo-3-chloropropane (DBCP)
EPA method 7470A for mercury
EPA method 9012 for total cyanide
EPA method 376.2 for sulfide
EPA method 1625M for N-nitrosodimethylamine
EPA method 8290 for dioxins and furans
EPA method 8321A for hexachlorophene
SRL 524M-TCP for 1,2,3-trichloropropane

Radiochemical Parameters

900.0	=	EPA method 900.0 for gross alpha and beta radioactivity
901.1	=	EPA method 901.1 for gamma-emitting radionuclides: Sb-125, Ba-133, Cs-134, Cs-137, Co-60, Eu-152, Eu-154, Eu-155, Mn-54, K-40, and Na-22. The gamma-emitting radionuclides sampled during first quarter include those radionuclides listed above and additionally include Am-241 and Ra-228.
905.0	=	EPA method 905.0 for Sr-90
906.0	=	EPA method 906.0 for tritium
908.0	=	EPA method 908.0 for isotopic uranium

Note: An equivalent or superior in-house laboratory procedure is considered acceptable for EPA methodology. Lab used the most current promulgated version of each EPA method.

Dissolved radionuclide samples were filtered using a 0.45 micron filter and preserved in the field.
Total radionuclide samples were preserved in the field, but were not filtered.
Tritium samples were not filtered.

Select radiochemistry analyses were performed per EPA drinking water regulations:
1) if gross alpha activity exceeded 15 pCi/l, then isotopic uranium was analyzed by EPA method 908.0;
2) if gross beta activity exceeded 50 pCi/l, then K-40 and Sr-90 were analyzed by EPA methods 901.1 and 905.0, respectively.

APPENDIX C

Monitor Well and Piezometer Construction Data

APPENDIX C
MONITOR WELL AND PIEZOMETER CONSTRUCTION DATA

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TABLE C-I
WELL CONSTRUCTION DATA
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
Shallow Wells										
SH-01	III	10	16	0 - 10	4	0 - 10	0 - 5	5.5 - 10	1772.84	12/11/84
SH-02	III	10.6	16	0 - 10.6	4	0 - 10.6	0 - 5	6 - 10.6	1762.76	12/11/84
SH-03	III	9.5	16	0 - 9.5	4	0 - 9.5	0 - 4.6	5 - 9.5	1762.53	12/12/84
SH-04	III	17	16	0 - 17	4	0 - 13	0 - 8	9 - 13	1765.08	12/12/84
SH-05	III	10.5	16	0 - 10.5	4	0 - 10.5	0 - 5.6	6 - 10.5	1762.97	12/13/84
SH-06	III	11.5	16	0 - 11.5	4	0 - 11.5	0 - 6.2	7 - 11.5	1776.99	12/17/84
SH-07	III	13.5	16	0 - 13.5	4	0 - 13.5	0 - 8.5	9.5 - 13.5	1775.11	01/16/85
SH-08	III	12	16	0 - 12	4	0 - 11.4	0 - 5.2	5.9 - 11.4	1763.25	01/17/85
SH-09	III	9	16	0 - 9	4	0 - 9	0 - 3.5	4 - 9	1761.19	01/18/85
SH-10	III	8	16	0 - 8	4	0 - 7.5	0 - 2	3 - 7.5	1757.69	01/18/85
SH-11	III	17.5	16	0 - 17.5	4	0 - 17.5	0 - 11	13 - 17.5	1756.00	01/16/85
RS-01	I	24.5	16	0 - 24.5	4	0 - 24.5	0 - 12.5	14.5 - 24.5	1879.68	06/08/85
RS-02	I	26	16	0 - 26	4	0 - 26	0 - 15	16 - 26	1901.08	06/08/85
RS-03	I	21	16	0 - 21	4	0 - 21	0 - 10	11 - 21	1834.22	06/08/85
RS-04	I	30	16	0 - 30	4	0 - 30	0 - 18	20 - 30	1826.56	06/08/85
RS-05	I	20	16	0 - 20	4	0 - 20	0 - 7.5	10 - 20	1783.73	06/07/85
RS-06	I	18	16	0 - 18	4	0 - 18	0 - 7	8 - 18	1757.43	06/07/85
RS-07	I	7.5	16	0 - 7.5	4	0 - 7.5	0 - 1.6	2.5 - 7.5	1732.27	06/07/85
RS-08	II	12.5	16	0 - 12.5	4	0 - 12.5	0 - 5	7 - 12.5	1821.57	06/09/85
RS-09	III	26.2	16	0 - 26.2	4	0 - 26.2	0 - 14.2	16 - 26.2	1735.52	09/11/85
RS-10	II	17	16	0 - 17	4	0 - 17	0 - 6	7.3 - 17	1762.08	06/10/85
RS-11	IV	17.5	16	0 - 17.5	4	0 - 17.5	0 - 9	10 - 17.5	1790.39	06/10/85
RS-12	III	15.3	16	0 - 15.3	4	0 - 15.3	0 - 4	5 - 15.3	1727.48	06/09/85
RS-13	II	22.8	16	0 - 22.8	4	0 - 22.8	0 - 15	17 - 22.8	1645.13	06/11/85
RS-14	III	16	16	0 - 16	4	0 - 16	0 - 5	6 - 16	1734.78	06/09/85
RS-15	III	12	16	0 - 12	4	0 - 12	0 - 4.5	5 - 12	1764.86	06/10/85
RS-16	IV	20.5	16	0 - 20.5	4	0 - 20.5	0 - 14.5	16.5 - 20.5	1811.05	06/11/85
RS-17	III	16	16	0 - 16	4	0 - 16	0 - 4	6.4 - 16	1766.52	06/10/85
RS-18	IV	13	16	0 - 13	4	0 - 13	0 - 6	7.5 - 13	1802.86	06/12/85
RS-19	I	15	16	0 - 15	4	0 - 15	0 - 4.8	4.8 - 15	1812.42	09/12/85
RS-20	I	20.5	16	0 - 20.5	4	0 - 20.5	0 - 8.5	10.5 - 20.5	1823.77	09/12/85
RS-21	II	29	16	0 - 29	4	0 - 24.6	0 - 3.5	14.5 - 24.6	1767.36	10/23/85

See last page of table for notes and abbreviations.

TABLE C-I
WELL CONSTRUCTION DATA
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
RS-22	II	31	16	0 - 31	4	0 - 31	0 - 4	21 - 31	1771.23	10/23/85
RS-23	IV	13	12	0 - 13	4	0 - 13	0 - 6.8	8 - 13	1887.25	08/23/88
RS-24	IV	8.5	12	0 - 8.5	4	0 - 8.5	0 - 3	4 - 8.5	1809.24	08/25/88
RS-25	IV	13.5	Trenched	0 - 13.5	4	0 - 13.5	0 - 2	8.5 - 13.5	1862.71	08/25/88
RS-26	Destroyed July 1989 During Soils Removal									
RS-27	IV	9	8	0 - 9	4	0 - 9	0 - 3	5 - 9	1804.78	08/02/88
RS-28	IV	19	8	0 - 19	4	0 - 19	0 - 9	14 - 19	1768.59	08/17/89
RS-29	II	38	9-7/8	0 - 38	4	0 - 37.5	0 - 17	27 - 37.5	1833.09	02/20/93
RS-30	I	23	12	0 - 23	4	0 - 21	0 - 9	10.5 - 21	1909.01	03/20/91
RS-31	I	18	12	0 - 18	4	0 - 17.5	0 - 6	7 - 17.5	1909.03	03/19/91
RS-32	I	18	12	0 - 18	4	0 - 17	0 - 6	6.5 - 17	1908.99	03/19/91
RS-54	IV	38	11-1/4	0 - 7	6-1/4	0 – 7	0 - 7		1846.66	08/09/93
			5-7/8	7 - 38	---	---		Open Hole		
ES-01	I	26	15	0 - 26	6	(v)1.3 - 25.5	0 - 6	15.5 - 25.5	1782.20	10/20/86
ES-02	I	17.5	15	0 - 17.5	6	(v)1.5 - 16.7	0 - 4.8	6.7 - 16.7	1814.60	10/20/86
ES-03	I	27	15	0 - 27	6	(v)1.3 - 27	0 - 9.4	17 - 27	1783.39	10/21/86
ES-04	I	20	15	0 - 20	6	(v)1.4 - 20	0 - 4	5.8 - 20	1817.24	10/21/86
ES-05	I	19	15	0 - 19	6	(v)1.3 - 19	0 - 5.8	9 - 19	1818.13	10/21/86
ES-06	I	25	15	0 - 25	6	0 - 25	0 - 5.6	11.6 - 25	1825.41	11/04/86
ES-07	I	23.2	15	0 - 23.2	6	0 - 23.2	0 - 6.5	8.5 - 23.2	1826.53	11/05/86
ES-08	I	24.1	15	0 - 24.1	6	0.6 - 24.1	0 - 4.7	12.1 - 24.1	1826.60	11/05/86
ES-09	I	24.2	15	0 - 24.2	6	0 - 24.2	0 - 3.4	11.9 - 24.2	1827.80	11/05/86
ES-10	I	20	15	0 - 20	6	0 - 20	0 - 5	9.7 - 20	1829.46	11/05/86
ES-11	I	27	15	0 - 27	6	0 - 27	0 - 4.2	7.2 - 27	1835.07	11/06/86
ES-12	I	22.5	15	0 - 22.5	6	0 - 22.5	0 - 6.9	10.9 - 22.5	1838.19	11/06/86
ES-13	I	30	15	0 - 30	6	(v)1.2 - 23.6	0 - 3.1	6 - 23.6	1782.58	11/06/86
ES-14	III	24.6	15	0 - 24.6	6	0 - 23.5	0 - 9.4	12.9 - 23.5	1728.69	11/10/86
ES-15	III	24	15	0 - 24	6	0 - 24	0 -10.8	13.5 - 24	1730.21	11/10/86
ES-16	III	24.8	15	0 - 24.8	6	0 - 24.8	0 - 4.3	8.1 - 24.8	1737.90	11/10/86
ES-17	III	28	15	0 - 28	6	0 - 28	0 - 7.9	10.4 - 28	1739.31	11/11/86
ES-18	II	35	15	0 - 35	6	0 - 26.9	0 - 9.1	12.9 - 26.9	1770.25	11/11/86
ES-19	II	33	15	0 - 33	6	0 - 26.3	0 - 6.3	10.3 - 26.3	1769.44	11/11/86
ES-20	II	35	15	0 - 35	6	0 - 23	0 - 3.5	9.8 - 23	1770.58	11/13/86

See last page of table for notes and abbreviations.

TABLE C-I
WELL CONSTRUCTION DATA
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
ES-21	II	35	12	0 - 35	6	0 - 35	0 - 2.2	15.8 - 35	1769.62	01/26/87
ES-22	II	35.5	12	0 - 35.5	6	0 - 35.5	0 - 5.2	17.5 - 35.5	1770.93	01/27/87
ES-23	III	20	12	0 - 20	6	0 - 20	0 - 2.4	10.6 - 20	1760.73	01/27/87
ES-24	III	30	12	0 - 30	6	0 - 30	0 -11.7	18.3 - 30	1728.67	01/28/87
ES-25	III	35	12	0 - 35	6	0 - 35	0 - 9.2	19.5 - 35	1737.78	01/28/87
ES-26	III	35	12	0 - 35	6	0 - 34.5	0 - 8.7	17.5 - 34.5	1748.01	01/28/87
ES-27	III	35	12	0 - 35	6	0 - 35	0 - 9.5	15.3 - 35	1740.67	01/28/87
ES-28	III	21	12	0 - 21	6	0 - 21	0 - 1.7	8.9 - 21	1759.15	01/28/87
ES-29	III	28	12	0 - 28	6	0 - 28	0 - 8.4	11.6 - 28	1760.47	01/29/87
ES-30	III	25	12	0 - 25	6	0 - 25	0 - 5.5	10.1 - 25	1759.51	01/29/87
ES-31	IV	25	12	0 - 25	6	0 - 25	0 - 9.7	11.6 - 25	1787.01	01/29/87
ES-32	III	25	12	0 - 25	6	0 - 21.5	0 - 4.6	7.5 - 21.5	1740.65	01/29/87
HAR-02	I	30	8	0 - 30	4	(v)1.1 - 30	0 - 6.2	15.4 - 30	1886.38	05/12/87
HAR-03	I	30	8	0 - 30	4	0 - 30	0 - 6.2	14.7 - 30	1875.48	05/13/87
HAR-04	I	29	8	0 - 29	4	0 - 29	0 - 6.4	12.1 - 29	1873.40	05/13/87
HAR-09	II	30.5	8	0 - 30.5	4	0 - 30.5	0 - 5.9	16.1 - 30.5	1820.62	05/16/87
HAR-11	II	31	8	0 - 31	4	0 - 31	0 - 5	11.2 - 31	1827.90	05/16/87
HAR-12	III	30.5	8	0 - 30.5	4	0 - 30.5	0 - 3.5	15.5 - 30.5	1796.73	05/17/87
HAR-13	III	31.6	8	0 - 31.6	4	0 - 31.6	0 - 5.5	17.4 - 31.6	1801.18	05/17/87
HAR-14	III	40	8	0 - 40	4	0 - 40	0 - 5.5	11.8 - 40	1797.02	05/19/87
HAR-15	II	40	8	0 - 40	4	0 - 40	0 - 5	10.2 - 40	1809.69	05/19/87
HAR-27	II	40	8	0 - 40	4	0 - 40	0 - 3	21 - 40	1719.39	06/14/87
HAR-28	II	40	8	0 - 40	4	0 - 40	0 - 6	20 - 40	1720.17	06/14/87
HAR-29	II	40.2	8	0 - 40.2	4	0 - 40.2	0 - 7	20 - 40.2	1724.13	06/14/87
HAR-30	II	35	8	0 - 35	4	0 - 35	0 - 6.5	14 - 35	1806.47	06/15/87
HAR-31	II	40	8	0 - 40	4	0 - 40	0 - 6	22 - 40	1812.45	06/15/87
HAR-32	III	40	8	0 - 40	4	0 - 40	0 - 6	21 - 40	1736.58	06/17/87
HAR-33	III	35	8	0 - 35	4	0 - 35	0 - 6	18 - 35	1744.66	06/17/87
HAR-34	III	23	8	0 - 23	4	0 - 23	0 - 3	9 - 23	1751.17	06/17/87

See last page of table for notes and abbreviations.

TABLE C-I
WELL CONSTRUCTION DATA
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
CHATSWORTH FORMATION										
RD-01	I	506	15	0 - 26	10-1/8	0 - 26	0 - 26		1935.89	01/09/86
			8-5/8	26 - 506	---	---		Open Hole		
RD-02	I	400	15	0 - 26	10-1/8	0 - 26	0 - 26		1873.92	01/16/86
			8-5/8	26 - 400	---	---		Open Hole		
RD-03	I	300	15	0 - 27	10-1/8	0 - 27	0 - 27		1743.50	01/10/86
			8-5/8	27 - 300	---	---		Open Hole		
RD-04	II	496	15	0 - 27	10-1/8	0 - 27	0 - 27		1883.85	01/22/86
			8-5/8	27 - 496	---	---		Open Hole		
RD-05A	UL-S	158	12-1/4	0 - 29.5	8-1/4	0 - 29.5	0 - 29.5		1704.66	02/17/93
			6-1/4	29.5 - 158	---	---		Open Hole		
RD-05B	UL-S	310	15	0 - 27	10-1/8	0 - 27	0 - 27		1705.89	05/20/93
			9-7/8	27 - 310	5	0 - 310	0 - 248	257.6 - 310		
RD-05C	UL-S	480	17-1/2	0 - 29	12-1/8	0 - 28	0 - 29		1705.25	06/27/94
			11-7/8	29 - 421	6-1/4	0 - 418	0 - 421			
			6-1/4	421 - 480	---	---		Open Hole		
RD-06	UL-S	260	15	0 - 27	10-1/8	0 - 27	0 - 27		1617.21	01/31/86
			9-7/8	27 - 136	6-1/4	0 - 140		70 - 140		
			8-5/8	136 - 260	---	---		Open Hole		
RD-07	IV	300	15	0 - 25	10-1/8	0 - 25	0 - 25		1812.82	01/08/86
			8-5/8	25 - 300	---	---		Open Hole		
RD-08	III	50	15	0 - 27	10-1/8	0 - 27	0 - 27		1763.38	01/29/86
			8-5/8	27 - 50	---	---		Open Hole		
RD-09	II	200	15	0 - 37	10-1/8	0 - 37	0 - 37		1768.20	01/28/86
			8-5/8	37 - 200	---	---		Open Hole		
RD-10	I	400	15	0 - 30	10-1/8	0 - 30	0 - 30		1904.43	05/07/86
			8-3/8	30 - 400	---	---		Open Hole		
RD-11	III	71	15	0 - 30	10-1/8	0 - 30	0 - 30		1762.65	10/23/86
			8-3/8	30 - 71	---	---		Open Hole		
RD-12	III	72	15	0 - 30	10-1/8	0 - 30	0 - 30		1762.62	10/23/86
			8-3/8	30 - 72	---	---		Open Hole		
RD-13	IV	160	12	0 - 30	8-1/4	0 - 30	0 - 30		1840.27	07/25/89
			6-1/2	30 - 160	---	---		Open Hole		

See last page of table for notes and abbreviations.

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WELL CONSTRUCTION DATA
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Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
RD-14	IV	125	12	0 - 30	8-1/4	0 - 30	0 - 30		1824.29	07/27/89
			6-1/2	30 - 125	---	---		Open Hole		
RD-15	IV	152	12	0 - 30	8-1/4	0 - 30	0 - 30		1817.70	07/27/89
			6-1/2	30 - 152	---	---		Open Hole		
RD-16	IV	220	12	0 - 30	8-1/4	0 - 30	0 - 30		1808.99	08/15/89
			6-1/2	30 - 220	---	---		Open Hole		
RD-17	IV	125	12	0 - 30	8-1/4	0 - 30	0 - 30		1836.30	08/10/89
			6-1/2	30 - 125	---	---		Open Hole		
RD-18	IV	240	12	0 - 30	8-1/4	0 - 30	0 - 30		1839.49	07/28/89
			6-1/2	30 - 240	---	---		Open Hole		
RD-19	IV	135	12	0 - 30	8-1/4	0 - 30	0 - 30		1853.13	07/31/89
			6-1/2	30 - 135	---	---		Open Hole		
RD-20	IV	127	12	0 - 30	8-1/4	0 - 30	0 - 30		1819.72	07/27/89
			6-1/2	30 - 127	---	---		Open Hole		
RD-21	IV	175	12	0 - 30	8-1/4	0 - 30	0 - 30		1866.96	08/11/89
			6-1/2	30 - 175	---	---		Open Hole		
RD-22	IV	440	12	0 - 30	8-1/4	0 - 30	0 - 30		1853.41	08/15/89
			6-1/2	30 - 440	---	---		Open Hole		
RD-23	IV	440	12	0 - 30	8-1/4	0 - 30	0 - 30		1838.19	08/16/89
			6-1/2	30 - 440	---	---		Open Hole		
RD-24	IV	150	12	0 - 30	8-1/4	0 - 30	0 - 30		1809.93	08/09/89
			6-1/2	30 - 150	---	---		Open Hole		
RD-25	IV	Well abandoned April 2004 as part of Building 4059 demolition.								
RD-26	II	160	12	0 - 30	8-1/4	0 - 30	0 - 30		1880.39	08/03/89
			6-1/2	30 - 160	---	---		Open Hole		
RD-27	IV	150	12	0 - 30	8-1/4	0 - 30	0 - 30		1841.67	08/10/89
			6-1/2	30 - 150	---	---		Open Hole		
RD-28	IV	Well abandoned April 2004 as part of Building 4059 demolition.								
RD-29	IV	100	12	0 - 30	8-1/4	0 - 30	0 - 30		1806.29	08/10/89
			6-1/2	30 - 100	---	---		Open Hole		
RD-30	IV	75	12	0 - 30	8-1/4	0 - 30	0 - 30		1768.69	08/11/89
			6-1/2	30 - 75	---	---		Open Hole		

See last page of table for notes and abbreviations.

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Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
RD-31	I	542	12	0 - 30	8-1/4	0 - 30	0 - 30		1944.55	08/16/89
			6-1/2	30 - 178	---	---		Open Hole		
			3.8	178 - 542	---	---		Open Hole		11/14/05
RD-32	OS	150	17-1/2	0 - 19	12-1/8	0 - 19	0 - 19		1808.47	02/09/94
			11-7/8	19 - 99	6-1/4	0 - 99	0 - 99			
			5-7/8	99 - 150	---	---		Open Hole		
RD-33A	UL-N	320	17-1/2	0 - 11	12-1/8	0 - 11	0 - 11		1792.97	09/27/91
			11	11 - 100	6-1/4	0 - 100	0 - 100			
			5-1/2	100 - 320	---	---		Open Hole		
RD-33B	UL-N	415	17-1/2	0 - 20	12-1/8	0 - 20	0 - 20		1793.21	09/27/91
			11	20 - 360	6-1/4	0 - 360	20 - 360			
			6-1/4	360 - 415	---	---		Open Hole		
RD-33C	UL-N	520	17-1/2	0 - 10	12-1/8	0 - 10	0 - 10		1793.54	09/21/91
			11	10 - 480	6-1/4	0 - 480	0 - 480			
			6-1/4	480 - 520	---	---		Open Hole		
RD-34A	UL-N	60	12-1/4	0 - 16	8-1/4	0 - 16	0 - 16		1761.83	07/25/91
			6-1/2	16 - 60	---	---		Open Hole		
RD-34B	UL-N	240	17-1/2	0 - 30	12-1/8	0 - 30	0 - 30		1762.51	08/11/91
			11	30 - 180	6-1/4	0 - 180	0 - 180			
			6-1/4	180 - 240	---	---		Open Hole		
RD-34C	UL-N	450	17-1/2	0 - 30	12-1/8	0 - 30	0 - 30		1762.60	08/10/91
			11	30 - 380	6-1/4	0 - 380	0 - 380			
			6-1/4	380 - 450	---	---		Open Hole		
RD-35A	I	110	12-1/4	0 - 19.5	8-1/4	0 - 19.5	0 - 19.5		1908.62	01/24/93
			6-1/4	19.5 - 110	4	0 - 105.5	0 - 30	65 - 105.5		
RD-35B	I	328	24	0 – 10	18	0 - 10	0 - 10		1905.65	01/18/99
			17-1/2	10 – 162	12	0 - 158	0 - 162			
			9-7/8	162 – 328	4	0 - 324	0 - 292	303 - 324		
			3	328 – 359	---	---	328 - 359			
RD-36A	OS	95	17-1/2	0 – 20	12-1/8	0 - 20	0 - 20		1913.09	01/14/94
			6-1/4	20 – 95	---	---		Open Hole		

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Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
RD-36B	OS	170	17-1/2	0 – 20.5	12-1/8	0 - 20.5	0 - 20.5		1915.26	03/13/94
			11-7/8	20.5 – 120	6-1/4	0 - 120	0 - 120			
			5-7/8	120 – 170	---	---		Open Hole		
RD-36C	OS	466	26	0 – 20	20	0 - 20	0 - 20		1913.82	04/23/94
			15	20 – 198	10-1/8	0 - 197	0 - 198			
			5-7/8	198 – 466	4	0 - 455.5	0 - 381	405 - 455.5		
RD-36D	OS	605	24-1/2	0 – 10	18	0 - 10	0 - 10		1920.08	09/10/97
			15	10 – 554	10	0 - 550	0 - 550			
			9-7/8	554 – 608	4	0 - 605	0 - 560	575 - 605		
RD-37	OS	400	17-1/2	0 – 38	12-1/8	0 - 38	0 - 38		1870.01	01/28/94
			11-7/8	38 – 260	4	0 - 377				
			7-7/8	260 – 400				272 - 377		
RD-38A	OS	120	17-1/2	0 – 20	12-1/8	0 - 20	0 - 20		1879.47	02/12/94
			6-1/2	20 – 120	---	---		Open Hole		
RD-38B	OS	370	24	0 - 6	18	0 - 6	0 - 6		1881.45	12/15/98
			17-1/2	6 - 170	12	0 - 161	0 - 170			
			11-7/8	170 - 279	6	0 - 277	0 - 279			
			5-1/2	279 - 370	---	---		Open Hole		
RD-39A	OS	159	17-1/2	0 – 20	12-1/8	0 - 20	0 - 20		1960.23	02/02/94
			6-1/2	20 – 159	---	---		Open Hole		
RD-39B	OS	477	24	0 – 12	16	0 - 12	0 - 12		1959.48	11/11/97
			15	12 – 213	10	0 - 210	0 - 213			
			9-1/2	213 – 477	4	0 – 470	0 – 424	440 - 470		
			6-1/2	477 – 500	---	---	477 – 500			
RD-40	II	300	12-1/4	0 - 19.5	8-1/4	0 - 19.5	0 - 19.5		1972.02	01/08/93
			6-1/4	19.5 - 300	---	---		Open Hole		
RD-41A	II	120	12-1/4	0 - 19.5	8-1/4	0 - 19.5	0 - 19.5		1774.48	01/10/93
			6-1/4	19.5 - 120	---	---		Open Hole		
RD-41B	II	390	17-1/2	0 - 19.5	12-1/8	0 - 19.5	0 - 19.5		1774.71	10/19/93
			11-7/8	19.5 - 340	6-1/4	0 - 336	0 - 340			
			5-7/8	340 - 390	---	---		Open Hole		

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Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
RD-41C	II	558	17-1/2	0 - 19.5	12-1/8	0 - 19.5	0 - 19.5		1773.73	10/05/93
			11-1/4	19.5 - 492	6-1/4	0 - 491	0 - 492			
			6-1/4	492 - 558	---	---		Open Hole		
RD-42	II	120	12-1/4	0 - 19.5	8-1/4	0 - 19.5	0 - 19.5		1945.46	01/09/93
			6-1/4	19.5 - 120	---	---		Open Hole		
RD-43A	OS	98	17-1/2	0 - 19.5	12-1/8	0 - 19.5	0 - 19.5		1680.16	09/09/94
			6-1/2	19.5 - 98	---	---		Open Hole		
RD-43B	OS	295	17-1/2	0 - 20	12-1/8	0 - 20	0 - 20		1680.21	10/25/94
			11-7/8	20 - 240.5	6-1/4	0 – 240.5	0 – 30.5			
			6-1/2	240.5 – 295	---	---	115.5 – 240.5	Open Hole		
RD-43C	OS	439.5	17-1/2	0 - 20	12-1/8	0 - 20	0 - 20		1679.31	10/10/94
			11-7/8	20 - 370	6-1/4	0 - 370	5 - 140			
			6-1/2	370 - 439.5	---	---	183 - 219	Open Hole		
							318 - 368			
RD-44	I	485	17-1/2	0 - 20	12-1/8	0 - 20	0 - 20		2035.92	03/13/93
			6-1/4	20 - 485	---	---		Open Hole		
RD-45A	I	480	17-1/2	0 - 19.5	12-1/8	0 - 19.5	0 - 19.5		1841.59	02/06/93
			6-1/2	19.5 - 480	---	---		Open Hole		
RD-45B	I	590	17-1/2	0 - 20	12-1/8	0 - 20	0 - 20		1840.09	09/11/94
			11-7/8	20 - 538	6-1/4	0 - 538	0 - 127			
			6-1/2	538 - 590	---	---	471 - 538	Open Hole		
RD-45C	I	798	24	0 - 20	16	0 - 19	0 - 20		1835.74	08/26/94
			11-7/8	20 - 750	6-1/4	0 - 750	0 - 135			
			6-1/4	750 - 798	---	---	483 - 540	Open Hole		
							590 - 750			
RD-46A	I	140	12-1/4	0 - 29.5	8-1/4	0 - 29.5	0 - 29.5		1806.13	01/13/93
			6-1/4	29.5 - 140	---	---		Open Hole		
RD-46B	I	328	24	0 - 20	18	0 - 20	0 - 20		1807.19	12/19/98
			17-1/2	20 - 193	12	0 - 190	0 - 193			
			9-7/8	193 - 328	4	0 - 325	0 - 281	293 - 325		
			3	328 - 366	---	---	328 - 366			
RD-47	I	710	17-1/2	0 - 19	12-1/8	0 - 19	0 - 19		2045.72	04/01/93
			6-1/2	19.0 - 710	---	---		Open Hole		

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Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
RD-48A	UL-S	110	12-1/4	0 - 20	8-1/4	0 - 20	0 - 20		1736.54	03/15/93
			6-1/2	20 - 110	---	---		Open Hole		
RD-48B	UL-S	248	17-1/2	0 - 29.5	12-1/8	0 - 29.5	0 - 29.5		1735.40	05/26/93
			11-1/4	29.5 - 200	6-1/4	0 - 200	0 - 198.5			
			6-1/4	200 - 248	---	---		Open Hole		
RD-48C	UL-S	438	17-1/2	0 - 30	12-1/8	0 - 30	0 - 30		1734.95	05/16/93
			11-1/4	30 - 371	6-1/4	0 - 371	0 - 371			
			6-1/4	371 - 438	---	---		Open Hole		
RD-49A	II	50	12-3/4	0 - 18.5	8-1/4	0 - 18.5	0 - 18.5		1867.25	06/08/93
			6-1/4	18.5 - 50	---	---		Open Hole		
RD-49B	II	298	17-1/2	0 - 20	12-1/8	0 - 20	0 - 20		1867.95	06/14/93
			11-7/8	20 - 250	6-1/4	0 - 250	0 - 250			
			5-7/8	250 - 298	---	---		Open Hole		
RD-49C	II	558	17-1/2	0 - 19	12-1/8	0 - 19	0 - 19		1869.45	07/07/93
			11-7/8	19 - 500	6-1/4	0 - 491	0 - 491			
			6-1/4	500 - 558	---	---		Open Hole		
RD-50	IV	195	12-3/4	0 - 18.5	8-1/4	0 - 18.5	0 - 18.5		1914.88	05/28/93
			6-1/4	18.5 - 195	---	---		Open Hole		
RD-51A	II	250	24	0 - 50	12-1/8	0 - 50	0 - 50		1832.51	07/11/91
			11-3/4	50 - 160	6-1/4	0 - 160	0 - 160			
			5-1/2	160 - 250	---	---		Open Hole		
RD-51B	II	370	24	0 - 48	12-1/8	0 - 48	0 - 48		1832.68	07/11/91
			11-3/4	48 - 300	6-1/4	0 - 300	0 - 300			
			5-1/2	300 - 370	---	---		Open Hole		
RD-51C	II	602	14	0 - 13.5	12-1/8	0 - 13.5	0 - 13.5		1831.65	07/09/91
			11-3/4	13.5 - 510	6-1/4	0 - 510	0 - 510			
			5-1/2	510 - 602	---	---		Open Hole		
RD-52A	I	137	12-1/4	0 - 19.5	8-1/4	0 - 19.5	0 - 19.5		1755.09	01/25/93
			6-1/2	19.5 - 137	---	---		Open Hole		
RD-52B	I	318	17-1/2	0 - 24	12-1/8	0 - 24	0 - 24		1712.15	12/06/93
			11-1/4	24 - 200	6-1/4	0 - 200	0 - 199			
			5-7/8	200 - 318	---	---		Open Hole		

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Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
RD-52C	I	678	17-1/2	0 - 20	12-1/8	0 - 20	0 - 20		1712.83	11/29/93
			11-7/8	20 - 450			0 - 620			
			11-1/4	450 - 620	6-1/4	0 - 620				
			6-1/4	620 - 678	---	---		Open Hole		
RD-53	I	159	14	0 - 20	12-1/8	0 - 20	0 - 20		1909.19	05/15/91
			12	20 - 77	6-1/4	0 - 77	0 - 77			
			5-1/2	77 - 159	---	---		Open Hole		
RD-54A	IV	278	17-1/2	0 - 19	12-1/8	0 - 19	0 - 19		1841.72	08/07/93
			11-1/4	19 - 119	6-1/4	0 - 119	0 - 119			
			5-7/8	119 - 278	---	---		Open Hole		
RD-54B	IV	437	17-1/2	0 - 19	12-1/8	0 - 19	0 - 19		1842.54	08/31/93
			11-1/4	19 - 379	6-1/4	0 - 379	0 - 379			
			5-7/8	379 - 437	---	---		Open Hole		
RD-54C	IV	638	17-1/2	0 - 20	12-1/8	0 - 20	0 - 20		1843.77	07/27/93
			11-1/4	20 - 558	6-1/4	0 - 557	0 - 557			
			6-1/4	558 - 638	---	---		Open Hole		
RD-55A	III	106	17-1/2	0 - 28	12-1/8	0 - 28	0 - 28		1756.87	02/19/93
			6-1/4	28 - 106	---	---		Open Hole		
RD-55B	III	250	17-1/2	0 - 20	12-1/8	0 - 20	0 - 20		1757.19	04/19/93
			11	20 - 199.5	6-1/4	0 - 199.5	0 - 199.5			
			5-7/8	199.5 - 250	---	---		Open Hole		
RD-56A	UL-N	397.5	17-1/2	0 - 20.5	12-1/8	0 - 20.5	0 - 20.5		1758.62	03/08/94
			6-1/2	20.5 - 397.5	---	---		Open Hole		
RD-56B	UL-N	463	22	0 - 10	16	0 - 10	0 -10		1761.83	07/24/97
			15	10 - 453	10	0 - 443	0 - 443			
			6-1/2	453 - 463	---	---		Open Hole		
RD-57	UL-N	419	17-1/2	0 - 19.5	12-1/8	0 - 19.5	0 - 19.5		1774.15	02/23/94
			6-1/2	19.5 - 419	---	---		Open Hole		
RD-58A	III	126	12-1/4	0 - 19.5	8-1/4	0 - 19.5	0 - 19.5		1756.11	02/01/93
			6-1/4	19.5 - 126	---	---		Open Hole		
RD-58B	III	268	17-1/2	0 - 20	12-1/8	0 - 20	0 - 20		1761.34	08/28/94
			11-7/8	20 - 220	6-1/4	0 - 220	0 - 220			
			6-1/2	220 - 268	---	---		Open Hole		

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BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
RD-58C	III	498	17-1/2	0 - 19	12-1/8	0 - 19	0 - 19		1759.59	08/09/94
			11-7/8	19 - 450	6-1/4	0 - 450	0 - 450			
			6-1/2	450 - 498	---	---		Open Hole		
RD-59A	OS	58	17-1/2	0 - 21	12-1/8	0 - 21	0 - 21		1340.50	05/19/94
			6-1/2	21 - 58	---	---		Open Hole		
RD-59B	OS	214	17-1/2	0 - 19.5	12-1/8	0 - 19.5	0 - 19.5		1342.49	07/02/94
			6-1/2	19.5 - 214	2	0 - 209	0 - 161	178 - 209		
RD-59C	OS	398	17-1/2	0 - 19	12-1/8	0 - 19	0 - 19		1345.41	07/02/94
			6-1/2	19 - 398	2	0 - 397	0 - 186			
							250 - 328	345.5 - 397		
RD-60	III	126	12-1/4	0 - 19.5	8-1/4	0 - 19.5	0 - 19.5		1870.40	01/21/93
			6-1/4	19.5 - 126	---	---		Open Hole		
RD-61	I	129	17-1/2	0 - 19	12-1/8	0 - 19	0 - 19		1845.87	04/26/94
			6-1/4	19 - 129	---	---		Open Hole		
RD-62	UL-S	238	17-1/2	0 - 20.7	12-1/8	0 - 20.7	0 - 19.5		1837.20	05/06/94
			6-1/2	20.7 - 238	---	---		Open Hole		
RD-63	IV	230	12-3/4	0 - 20	8-1/4	0 - 20	0 - 20		1764.85	05/10/94
			6-1/2	20 - 230	---	---		Open Hole		
RD-64	IV	398	12-1/4	0 - 19	8-1/4	0 - 19	0 - 19		1857.04	05/19/94
			6-1/2	19 - 398	---	---		Open Hole		
RD-65	IV	397	12-3/4	0 - 19	8-1/4	0 - 19	0 - 19		1819.14	08/14/94
			6-1/2	19 - 397	---	---		Open Hole		
RD-66	OS	225	22	0 - 19	12	0 - 19	0 - 19		1730.79	07/28/97
			6-1/2	19 - 225	---	---		Open Hole		
RD-67	UL-S	102	17-1/2	0 - 20	12	0 - 20	0 - 20		1901.71	09/19/97
			6-1/2	20 - 102	---	---		Open Hole		
RD-68A	OS	90	17-1/2	0 - 19	12	0 - 19	0 - 19		1307.64	06/05/97
			6-1/4	19 - 90	---	---		Open Hole		
RD-68B	OS	272	---	0 - 52	12	0 - 52	0 - 224	240 - 270	1312.44	06/11/97
			11-7/8	52 - 272	4	0 - 270				
RD-69	I	103	17-1/2	0 - 19	12	0 - 19	0 - 19		1831.28	06/16/97
			6-1/4	19 - 103	---	---		Open Hole		

See last page of table for notes and abbreviations.

TABLE C-I
WELL CONSTRUCTION DATA
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
RD-70	UL-N	278	17-1/2	0 - 19	12	0 - 19	0 - 19		1732.26	06/14/97
			6-1/2	19 - 278	---	---		Open Hole		
RD-71	OS	281	17-1/2	0 - 20	12	0 - 20	0 - 20		1740.02	07/27/97
			6-1/2	20 - 281	---	---		Open Hole		
RD-72	I	182	24	0 - 27	12	0 - 27	0 - 27		1907.25	12/23/97
			6-1/2	27 - 182	---	---		Open Hole		
RD-73	I	141	12	0 - 20	10	0 - 20	0 - 20		1901.60	07/19/95
			6	20 - 141	---	---		Open Hole		
RD-74	IV	101	17-1/2	0 - 30	12	0 - 30	0 - 30		1810.90	01/21/99
			6-1/2	30 - 101	---	---		Open Hole		
RD-75	UL-S	425	12-3/4	0 - 30	8	0 - 30	0 - 30		1613.30	11/24/03
			4-4/5	30 - 425	---	---		Open Hole		
RD-76	I	153	12-3/4	0 - 30	8	0 - 30	0 - 30		1772.27	12/03/03
			6	30 - 153	4	0 - 153	---	133 - 153		
			5-1/2	153-185	---	---	Fill 153-185			
RD-77	I	170	12-3/4	0 - 46	8	0 - 46	0 - 46		1918.48	12/03/03
			4-4/5	46 - 170	---	---		Open Hole		
RD-78	I	333	12-3/4	0 - 40	8	0 - 40	0 - 40		1819.84	12/09/03
			5-1/2	40 - 333	---	---		Open Hole		
RD-80	I	224	12-3/4	0 - 19	8	0 - 19	0 - 19		1740.18	12/01/03
			4-4/5	19 - 224	---	---		Open Hole		
RD-81	I	205	12-3/4	0 - 20	8	0 - 20	0 - 20		1705.77	06/14/04
			6	20 - 205	---	---		Open Hole		
RD-82	II	197	12-3/4	0 - 20	8	0 - 20	0 - 20		1676.73	06/09/04
			6	20 - 197	---	---		Open Hole		
RD-83	II	143	12-3/4	0 - 20	8	0 - 20	0 - 20		1661.18	06/16/04
			6	20 - 143	---	---		Open Hole		
RD-84	I	171	10	0 - 40	5	0 - 40	0 - 40		1907.83	12/15/03
			4	40 - 171	---	---		Open Hole		
RD-85	IV	90	13-3/8	0 - 20	8	0 - 20	0 - 20		1849.09	08/04/04
			5	20 - 90	---	---		Open Hole		
RD-86	IV	80	13-3/8	0 - 20	8	0 - 20	0 - 20		1830.51	08/09/04
			5	20 - 80	---	---		Open Hole		

See last page of table for notes and abbreviations.

TABLE C-I
WELL CONSTRUCTION DATA
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
RD-87	IV	60	13-3/8	0 - 20	8	0 - 20	0 - 20		1789.09	08/11/04
			5	20 - 60	---	---		Open Hole		
RD-88	IV	30	13-3/8	0 - 20	8	0 - 20	0 - 20		1774.62	08/16/04
			5	20 - 30	---	---		Open Hole		
RD-89	IV	50	13	0 - 30	8	0 - 30	0 - 30		1814.18	05/18/05
			3.8	30 - 50	---	---		Open Hole		
RD-90	IV	125	12-3/4	0 - 20	8	0 - 20	0 - 20		1784.75	03/11/04
			6	20 - 125	---	---		Open Hole		
RD-91	IV	140	12-3/4	0 - 20	8	0 - 20	0 - 20		1818.04	03/12/04
			6	20 - 140	---	---		Open Hole		
RD-92	IV	105	12-3/4	0 - 20	8	0 - 20	0 - 20		1833.74	03/16/04
			6	20 - 105	---	---		Open Hole		
RD-93	IV	60	13	0 - 20	8	0 - 20	0 - 20		1810.48	05/19/05
			3.8	20 - 60	---	---		Open Hole		
RD-94	UL, NW	35	13	0 - 20.5	8	0 - 20.5	0 - 20.5		1744.38	05/15/05
	of IV		3.8	20.5 - 35	---	---		Open Hole		
RD-95	IV	80	13	0 - 50	8	0 - 50	0 - 50		1811.36	05/12/05
			3.8	50 - 80	---	---		Open Hole		
RD-96	IV	90	13	0 - 20	8	0 - 20	0 - 20		1805.14	05/03/06
			4	20 - 90	---	---		Open Hole		
RD-97	UL, NW	74.5	13	0 - 20	8	0 - 20	0 - 20		1792.22	04/28/06
	of IV		4	20 - 74.5	---	---		Open Hole		
RD-98	IV	65	13-3/8	0 - 20	8-1/8	0 - 20	0 - 20		1808.73	06/04/08
			5-1/2	20 - 65	---	---	---	Open hole		
WS-04A	I	502	13	0 - 300	10-1/4	0 - 288	Unknown	96 - 288	1749.77	1953
			10	300 - 502	---	---		Open Hole		
WS-05	I	2304	>12-1/4	0 - 40	12	0 - 40	0 - 55		1830.20	1951
			12-1/4	40 - 2304	---	---		Open Hole		
WS-06	I	1440	30	0 - 6	12-1/8	0 - 450	0 - 6	306 - 450	1932.72	1953
			13	6 - 450	---	---				
			8-1/4	450 - 1440				Open Hole		
WS-07	IV	700	15	0 - 400	12-1/8	0 - 400	Unknown	216 - 400	1826.19	1954
			10	400 - 700	---	---		Open Hole		

See last page of table for notes and abbreviations.

TABLE C-I
WELL CONSTRUCTION DATA
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
WS-08	III	700	15	0 - 400	12-1/8	0 - 400	Unknown	192 - 400	1794.39	1954
			10	400 - 700	---	---		Open Hole		
WS-09	II	1800	30	0 - 17	12-1/8	0 - 17	0 - 14		1883.99	1955
			15	17 - 690	---	---				
			10	690 - 1800				Open Hole		
WS-09A	II	541	30	0 - 34	14	0 - 34	0 - 20		1647.61	1956
			15	34 - 541	12-1/8	0 - 541				
					8-1/4	0 - 539		20 - 539		
WS-09B	II	220	16	0 - 220	---	---	Unknown	Open Hole	1796.89	1956
WS-11	III	677	13	0 - 400	12-1/8	0 - 400	Unknown	200 - 400	1748.70	1956
			9	400 - 677	8-1/4	365.5 - 615		365 - 615		
								Open Hole		
WS-12	I	1768	15	0 - 408	14	0 - 375	Unknown		1705.98	1956
			12	408 - 1768	---	---		Open Hole		
WS-13	II	940	>13	0 - 750	12-1/8	0 - 750	0 - 15	22 - 750	1658.62	1957
			11-1/2	750 - 940	---	---		Open Hole		
WS-14	I	1272	>16	0 - 40	16	0 - 40	Unknown		1878.23	1957
			12-3/4	40 - 1272	---	---		Open Hole		
WS-SP	II	203	Unknown	0 - 203	6	0 - 203	Unknown	Unknown	1766.76	Unknown
HAR-01	I	110	15	0 - 30	10-1/8	0 - 30	0 - 30		1874.13	05/16/87
			8	30 - 110	---	---		Open Hole		
HAR-05	II	180	15	0 - 30	10-1/8	0 - 30	0 - 30		1812.65	05/16/87
			8	30 - 180	---	---		Open Hole		
HAR-06	II	160	15	0 - 30	10-1/8	0 - 30	0 - 30		1815.03	05/16/87
			8	30 - 160	---	---		Open Hole		
HAR-07	II	100	15	0 - 30	10-1/8	0 - 30	0 - 30		1728.38	05/20/87
			8	30 - 100	---	---		Open Hole		
HAR-08	II	130	15	0 - 30	10-1/8	0 - 30	0 - 30		1730.75	05/20/87
			8	30 - 130	---	---		Open Hole		
HAR-16	I	120	15	0 - 30	10-1/8	0 - 30	0 - 30		1872.31	05/20/87
			8	30 - 120	---	---		Open Hole		
HAR-17	II	100	15	0 - 30	10-1/8	0 - 30	0 - 30		1711.59	05/20/87
			8	30 - 100	---	---		Open Hole		

See last page of table for notes and abbreviations.

TABLE C-I
WELL CONSTRUCTION DATA
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
HAR-18	III	80	15	0 - 30	10-1/8	0 - 30	0 - 30		1749.41	05/20/87
			8	30 - 80	---	---		Open Hole		
HAR-19	II	220	15	0 - 30	10-1/8	0 - 30	0 - 30		1833.42	06/17/87
			8	30 - 220	---	---		Open Hole		
HAR-20	II	230	15	0 - 30	10-1/8	0 - 30	0 - 30		1830.47	06/16/87
			8	30 - 230	---	---		Open Hole		
HAR-21	II	130	15	0 - 30	10-1/8	0 - 30	0 - 30		1821.30	06/18/87
			8	30 - 130	---	---		Open Hole		
HAR-22	II	90	15	0 - 30	10-1/8	0 - 30	0 - 30		1816.41	06/18/87
			8	30 - 90	---	---		Open Hole		
HAR-23	III	90	15	0 - 30	10-1/8	0 - 30	0 - 30		1805.87	06/18/87
			8	30 - 90	---	---		Open Hole		
HAR-24	I	110	15	0 - 30	10-1/8	0 - 30	0 - 30		1906.89	06/18/87
			8	30 - 110	---	---		Open Hole		
HAR-25	I	90	15	0 - 30	10-1/8	0 - 30	0 - 30		1889.75	06/18/87
			8	30 - 90	---	---		Open Hole		
HAR-26	III	90	15	0 - 30	10-1/8	0 - 30	0 - 30		1763.23	06/18/87
			8	30 - 90	---	---		Open Hole		
PRIVATE OFF-SITE WELLS AND SPRINGS										
OS-01 (converted to RD-68B)	OS	288	Unknown	Unknown	10	0 - 52	Unknown		1310.34	Unknown
					---	---		Open Hole		
OS-02	OS	700	Unknown	Unknown	10	0 - 17	0 - 17		1237.01	03/18/59
					---	---		Open Hole		
OS-03	OS	100	Drilled with		8-1/4	0 - 59	0 - 30	30 - 60	1298.15	06/12/50
			cable tools		---	---		Open Hole		
OS-04	OS	Well Construction Data Unresolved or Not Available							1334.00	
OS-05	OS	Well Construction Data Unresolved or Not Available								
OS-08(S)	OS									
OS-09	OS	Well Construction Data Unresolved or Not Available								
OS-10	OS	600	18	0 - 10	12-1/8	0 - 10	0 - 10		1016.97	12/54
			12	10 - 600	---	---		Open Hole		
OS-12(S)	OS									
OS-13(S)	OS									

See last page of table for notes and abbreviations.

TABLE C-I
WELL CONSTRUCTION DATA
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
OS-15	OS	218	Drilled with		8-1/4	0 - 40	0 - 40		1404.86	08/27/60
			cable tools		---	---		Open Hole		
OS-16	OS	Well Construction Data Unresolved or Not Available							1785.05	
OS-17	OS	475	Drilled with		---	0 - 25			1564.07	04/64
			cable tools		---	---		Open Hole		
OS-21	OS	Well Construction Data Unresolved or Not Available							1900.39	
OS-24	OS	515	10	0 - 40	6-1/4	0 - 40	0 - 40		1947.30	12/02/87
			6	40 - 515	---	---		Open Hole		
OS-25	OS	515	10	0 - 36	6-1/4	0 - 36	0 - 36		2043.58	12/10/87
			6	36 - 515	---	---		Open Hole		
OS-26	OS	515	10	0 - 40	6-1/4	0 - 40	0 - 40		2080.58	11/16/87
			6	40 - 515	---	---		Open Hole		
OS-27	OS	477	10-1/4	0 - 30	10	0 - 5.5	0 - 30		2043.90	05/16/95
			6-1/8	30 - 477	6	0 - 30		Open Hole		
OS-28	OS	245	10	0 - 245	6	0 - 242	0 - 182	182 - 242		04/25/95

See last page of table for notes and abbreviations.

TABLE I
NOTES AND ABBREVIATIONS

1. Depth/intervals are measured in feet below land surface.
2. Well OS-01 was converted to well RD-68B in 1997.
3. (---) = No casing installed over the borehole interval specified; open hole.
4. (v) = Top of well below land surface, installed inside zero-grade vault.
5. S = Spring; construction data not applicable.
6. UL-N = Undeveloped land in northern part of Facility.
7. UL-S = Undeveloped land in southern part of Facility.
8. OS = Off-site.

TABLE C-II

CONSTRUCTION DETAILS OF FLUTe DISCRETE-INTERVAL MONITORING SYSTEMS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well	RD-07		RD-10		RD-21		RD-22	
Date Liner Installed	04/29/02		03/18/02		01/14/03		02/18/03	
Date Liner Removed	NA		07/23/04		NA		NA	
Top of Casing Elevation (ft msl)	1812.82		1904.43		1866.96		1853.41	
Open-hole Depth to Water (ft btc)	87.03		195		90.3		305	
Hole Total Depth (ft btc)	299.55		401		175.3		440	
	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)
Port 1	50 - 60	1757.82	171 - 181	1728.43	85-95	1776.96	310-320	1538.41
Port 2	70 - 80	1737.82	191 - 201	1708.43	105-115	1756.96	330-340	1518.41
Port 3	90 - 100	1717.82	211 - 221	1688.43	125-135	1736.96	350-360	1498.41
Port 4	110 - 120	1697.82	231 - 241	1668.43	145-155	1716.96	370-380	1478.41
Port 5	130 - 140	1677.82	251 - 261	1648.43	165-175	1696.96	390-400	1458.41
Port 6	150 - 160	1657.82	271 - 281	1628.43	--	--	410-420	1438.41
Port 7	170 - 180	1637.82	291 - 301	1608.43	--	--	430-440	1418.41
Port 8	190 - 200	1617.82	311 - 321	1588.43	--	--	--	--
Port 9	210 - 220	1597.82	331 - 341	1568.43	--	--	--	--
Port 10	230 - 240	1577.82	351 - 361	1548.43	--	--	--	--
Port 11	250 - 260	1557.82	371 - 381	1528.43	--	--	--	--
Port 12	270 - 280	1537.82	391 - 401	1508.43	--	--	--	--
Port 13	290 - 299.55	1518.05	--	--	--	--	--	--
Port 14	--	--	--	--	--	--	--	--
Port 15	--	--	--	--	--	--	--	--

See last page of table for notes and abbreviations.

TABLE C-II

CONSTRUCTION DETAILS OF FLUTe DISCRETE-INTERVAL MONITORING SYSTEMS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well	RD-23		RD-31		RD-33A		RD-38A	
Date Liner Installed	01/20/03		01/25/01		01/09/03		06/06/01	
Date Liner Removed	NA		07/28/04		NA		12/09/02	
Top of Casing Elevation (ft msl)	1838.19		1945.02		1792.97		1878.92	
Open-hole Depth to Water (ft btc)	236.15		116.32		211.58		95.48	
Hole Total Depth (ft btc)	443.2		178.5		321.75		118.5	
	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)
Port 1	231-241	1602.19	48 - 58	1892.02	211 - 221	1576.97	13 - 18	1863.42
Port 2	251-261	1582.19	68 - 78	1872.02	231 - 241	1556.97	23 - 28	1853.42
Port 3	271-281	1562.19	88 - 98	1852.02	251 - 261	1536.97	33 - 38	1843.42
Port 4	291-301	1542.19	108 - 118	1832.02	271 - 281	1516.97	43 - 48	1833.42
Port 5	311-321	1522.19	128 - 138	1812.02	291 - 301	1496.97	53 - 58	1823.42
Port 6	331-341	1502.19	148 - 158	1792.02	311 - 321	1476.97	63 - 68	1813.42
Port 7	351-361	1482.19	168 - 178	1772.02	--	--	73 - 78	1803.42
Port 8	371-381	1462.19	--	--	--	--	83 - 88	1793.42
Port 9	391-396.5	1444.44	--	--	--	--	93 - 98	1783.42
Port 10	--	--	--	--	--	--	103 - 108	1773.42
Port 11	--	--	--	--	--	--	113 - 118	1763.42
Port 12	--	--	--	--	--	--	--	--
Port 13	--	--	--	--	--	--	--	--
Port 14	--	--	--	--	--	--	--	--
Port 15	--	--	--	--	--	--	--	--

See last page of table for notes and abbreviations.

TABLE C-II
CONSTRUCTION DETAILS OF FLUTe DISCRETE-INTERVAL MONITORING SYSTEMS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well	RD-39A		RD-45A		RD-50		RD-53	
Date Liner Installed	06/01/01		05/25/01		01/15/03		01/23/01	
Date Liner Removed	12/10/02		09/09/02		NA		07/30/04	
Top of Casing Elevation (ft msl)	1960.23		1841.59		1914.88		1909.19	
Open-hole Depth to Water (ft btc)	138.15		345.58		113.31		128.5	
Hole Total Depth (ft btc)	159		476.5		195.3		161	
	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)
Port 1	94 - 99	1863.73	186 - 196	1650.59	106-116	1803.88	74 - 79	1832.69
Port 2	104 - 109	1853.73	206 - 216	1630.59	126-136	1783.88	84 - 89	1822.69
Port 3	114 - 119	1843.73	226 - 236	1610.59	146-156	1763.88	94 - 99	1812.69
Port 4	124 - 129	1833.73	246 - 256	1590.59	166-176	1743.88	104 - 109	1802.69
Port 5	134 - 139	1823.73	266 - 276	1570.59	186-195.3	1724.23	114 - 119	1792.69
Port 6	144 - 149	1813.73	286 - 296	1550.59	--	--	124 - 129	1782.69
Port 7	154 - 159	1803.73	306 - 316	1530.59	--	--	134 - 139	1772.69
Port 8	--	--	326 - 336	1510.59	--	--	144 - 149	1762.69
Port 9	--	--	346 - 356	1490.59	--	--	154 - 159	1752.69
Port 10	--	--	366 - 376	1470.59	--	--	--	--
Port 11	--	--	386 - 396	1450.59	--	--	--	--
Port 12	--	--	406 - 416	1430.59	--	--	--	--
Port 13	--	--	426 - 436	1410.59	--	--	--	--
Port 14	--	--	446 - 456	1390.59	--	--	--	--
Port 15	--	--	466 - 476	1370.59	--	--	--	--

See last page of table for notes and abbreviations.

TABLE C-II

CONSTRUCTION DETAILS OF FLUTe DISCRETE-INTERVAL MONITORING SYSTEMS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well	RD-54A		RD-57		RD-64		RD-65	
Date Liner Installed	01/07/03		09/11/02		04/17/02		10/29/02	
Date Liner Removed	NA		NA		NA		NA	
Top of Casing Elevation (ft msl)	1841.72		1774.15		1857.04		1819.14	
Open-hole Depth to Water (ft btc)	160.2		352.5		231.82		227	
Hole Total Depth (ft btc)	283.8		418.3		403.0		397	
	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)
Port 1	150.5 - 160.5	1686.22	228 - 238	1541.15	170.5 - 180.5	1681.54	167 - 177	1647.14
Port 2	170.5 - 180.5	1666.22	248 - 258	1521.15	190.5 - 200.5	1661.54	187 - 197	1627.14
Port 3	190.5 - 200.5	1646.22	268 - 278	1501.15	210.5 - 220.5	1641.54	207 - 217	1607.14
Port 4	210.5 - 220.5	1626.22	288 - 298	1481.15	230.5 - 240.5	1621.54	227 - 237	1587.14
Port 5	230.5 - 240.5	1606.22	308 - 318	1461.15	250.5 - 260.5	1601.54	247 - 257	1567.14
Port 6	250.5 - 260.5	1586.22	328 - 338	1441.15	270.5 - 280.5	1581.54	267 - 277	1547.14
Port 7	270.5 - 280.5	1566.22	348 - 358	1421.15	290.5 - 300.5	1561.54	287 - 297	1527.14
Port 8	--	--	368 - 378	1401.15	310.5 - 320.5	1541.54	307 - 317	1507.14
Port 9	--	--	388 - 398	1381.15	330.5 - 340.5	1521.54	327 - 337	1487.14
Port 10	--	--	408 - 418	1361.15	350.5 - 360.5	1501.54	347 -357	1467.14
Port 11	--	--	--	--	370.5 - 380.5	1481.54	367 - 377	1447.14
Port 12	--	--	--	--	390.5 - 400.5	1461.54	387 - 397	1427.14
Port 13	--	--	--	--	--	--	--	--
Port 14	--	--	--	--	--	--	--	--
Port 15	--	--	--	--	--	--	--	--

See last page of table for notes and abbreviations.

TABLE C-II
CONSTRUCTION DETAILS OF FLUTe DISCRETE-INTERVAL MONITORING SYSTEMS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well	RD-66		RD-71		RD-72		RD-73	
Date Liner Installed	04/30/01		05/07/01		04/02/01		02/02/01	
Date Liner Removed	07/17/02		07/19/02		NA		07/28/04	
Top of Casing Elevation (ft msl)	1730.79		1740.02		1907.25		1901.60	
Open-hole Depth to Water (ft btc)	173.1		182.87		78.82		70.08	
Hole Total Depth (ft btc)	226		282		184		140	
	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)
Port 1	76 - 86	1649.79	52 - 62	1683.02	45 - 55	1857.25	27 - 32	1872.1
Port 2	96 - 106	1629.79	72 - 82	1663.02	65 - 75	1837.25	37 - 42	1862.1
Port 3	116 - 126	1609.79	92 - 102	1643.02	85 - 95	1817.25	47 - 52	1852.1
Port 4	136 - 146	1589.79	112 - 122	1623.02	105 - 115	1797.25	57 - 62	1842.1
Port 5	156 - 166	1569.79	132 - 142	1603.02	125 - 135	1777.25	67 - 72	1832.1
Port 6	176 - 186	1549.79	152 - 162	1583.02	145 - 155	1757.25	77 - 82	1822.1
Port 7	196 - 206	1529.79	172 - 182	1563.02	165 - 175	1737.25	87 - 92	1812.1
Port 8	216 - 226	1509.79	192 - 202	1543.02	185 - 195	1717.25	97 - 102	1802.1
Port 9	--	--	212 - 222	1523.02	--	--	107 - 112	1792.1
Port 10	--	--	232 - 242	1503.02	--	--	117 - 122	1782.1
Port 11	--	--	252 - 262	1483.02	--	--	127 - 132	1772.1
Port 12	--	--	272 - 282	1463.02	--	--	137 - 140	1762.1
Port 13	--	--	--	--	--	--	--	--
Port 14	--	--	--	--	--	--	--	--
Port 15	--	--	--	--	--	--	--	--

See last page of table for notes and abbreviations.

TABLE C-II
CONSTRUCTION DETAILS OF FLUTe DISCRETE-INTERVAL MONITORING SYSTEMS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well	HAR-01		HAR-16		HAR-24		OS-24	
Date Liner Installed	03/08/01		06/19/01		04/06/01		07/09/01	
Date Liner Removed	07/26/04		07/26/04		07/26/04		Partially Removed	
Top of Casing Elevation (ft msl)	1874.13		1872.31		1906.89		1947.30	
Open-hole Depth to Water (ft btc)	48.31		Unknown		75.3		285	
Hole Total Depth (ft btc)	108		114		112.5		513	
	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)
Port 1	13 - 18	1858.63	0 - 4	1870.31	37 - 42	1867.39	223 - 233	1719.3
Port 2	23 - 28	1848.63	9 - 14	1860.81	47 - 52	1857.39	243 - 253	1699.3
Port 3	33 - 38	1838.63	19 - 24	1850.81	57 - 62	1847.39	263 - 273	1679.3
Port 4	43 - 48	1828.63	29 - 34	1840.81	67 - 72	1837.39	283 - 293	1659.3
Port 5	53 - 58	1818.63	39 - 44	1830.81	77 - 82	1827.39	303 - 313	1639.3
Port 6	63 - 68	1808.63	49 - 54	1820.81	87 - 92	1817.39	323 - 333	1619.3
Port 7	73 - 78	1798.63	59 - 64	1810.81	97 - 102	1807.39	343 - 353	1599.3
Port 8	83 - 88	1788.63	69 - 74	1800.81	107 - 112	1797.39	363 - 373	1579.3
Port 9	93 - 98	1778.63	79 - 84	1790.81	--	--	383 - 393	1559.3
Port 10	103 - 108	1768.63	89 - 94	1780.81	--	--	403 - 413	1539.3
Port 11	--	--	99 - 104	1770.81	--	--	423 - 433	1519.3
Port 12	--	--	109 - 114	1760.81	--	--	443 - 453	1499.3
Port 13	--	--	--	--	--	--	463 - 473	1479.3
Port 14	--	--	--	--	--	--	483 - 493	1459.3
Port 15	--	--	--	--	--	--	503 - 513	1439.3

See last page of table for notes and abbreviations.

TABLE C-II
NOTES AND ABBREVIATIONS

1. ft btc = Feet below top of casing.
2. ft msl = Feet above mean sea level.
3. NA = Not applicable
4. -- = No FLUTe port installed.

5. HAR-01, HAR-16, HAR-24, RD-38A, RD-39A, RD-53, and RD-73 have/had alternating open and blank intervals at 5-foot frequencies (i.e., 5 feet open then 5 feet closed).

6. RD-07, RD-10, RD-21, RD-22, RD-23, RD-31, RD-33A, RD-45A, RD-50, RD-54A, RD-57, RD-64, RD-65, RD-66, RD-71, RD-72, and OS-24 have/had alternating open and blank intervals at 10-foot frequencies (i.e., 10 feet open then 10 feet closed).

TABLE C-III
CONSTRUCTION DETAILS OF PIEZOMETER MONITORING SYSTEMS
The Boeing Company
Santa Susana Field Laboratory
Ventura County, California

PIEZOMETER ID	LOCATION					PIEZOMETER DESIGN DETAILS						
	Area	SWMU	Northing	Easting	MP Elevation	Date Drilled	Total Depth	Screened Interval	Sand Interval	Bentonite Interval	Grout Interval	Concrete Interval
			[feet]	[feet]	[feet]	[m/d/y]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]
PZ-001A	II	RD-9 Area	268546.6	1789711.3	1768.50	10/31/2000	N/A	5.75-6.25	5-7	2-5	N/A	0-2
PZ-001B	II	RD-9 Area	268546.6	1789711.3	1768.50	10/31/2000	N/A	17.75-18.25	17-19	7-17	N/A	N/A
PZ-001C	II	RD-9 Area	268546.6	1789711.3	1768.50	10/31/2000	N/A	29.75-30.25	29-31	19-29	N/A	N/A
PZ-001D	II	RD-9 Area	268546.6	1789711.3	1768.50	10/31/2000	N/A	38.25-38.75	37.5-39.2	31-37.5	N/A	N/A
PZ-001E	II	RD-9 Area	268546.6	1789711.3	1768.50	10/31/2000	N/A	51.75-52.25	51-53	39.2-51	N/A	N/A
PZ-001F	II	RD-9 Area	268546.6	1789711.3	1768.50	10/31/2000	58.0	57.75-58.25	56.8-60	53-56.8	N/A	N/A
PZ-002A	I	CTL-III N	265543.1	1792828.1	1780.25	11/01/2000	N/A	5.75-6.25	5-7	2-5	N/A	0-2
PZ-002B	I	CTL-III N	265543.1	1792828.1	1780.25	11/01/2000	N/A	14.75-15.25	14-16	7-14	N/A	N/A
PZ-002C	I	CTL-III N	265543.1	1792828.1	1780.25	11/01/2000	N/A	26.75-27.25	26-28	16-26	N/A	N/A
PZ-002D	I	CTL-III N	265543.1	1792828.1	1780.25	11/01/2000	N/A	36.75-37.25	36-38	28-36	N/A	N/A
PZ-002E	I	CTL-III N	265543.1	1792828.1	1780.25	11/01/2000	N/A	51.75-52.25	51-53	38-51	N/A	N/A
PZ-002F	I	CTL-III N	265543.1	1792828.1	1780.25	11/01/2000	N/A	64.75-65.25	64-66	53-64	N/A	N/A
PZ-002G	I	CTL-III N	265543.1	1792828.1	1780.25	11/01/2000	82.0	79 [a]	78-81	66-78	N/A	N/A
PZ-003	I	APTF	267665.9	1795219.4	1897.85	11/02/2000	60.0	15-25	13-26	10-13	2-10	0-2
PZ-004A	II	Delta / PLF	264973.5	1787246.6	1716.00	12/13/2000	16.0	5-15	4-16	2-4	N/A	0-2
PZ-004B	II	Delta / PLF	264969.6	1787241.5	1715.89	12/13/2000	36.0	20-30	18-31.5	15-18	2-15	0-2
PZ-005	IV	Central Area IV	266634.9	1784877.3	1800.97	11/07/2000	45.0	15-25	11.5-26.5	8.5-11.5	2-8.5	0-2
PZ-006A	III	ECL	266669.3	1786868.4	1765.82	11/07/2000	N/A	5.75-6.25	5-7	2-5	N/A	0-2
PZ-006B	III	ECL	266669.3	1786868.4	1765.82	11/07/2000	N/A	13.75-14.25	13-15	7-13	N/A	N/A
PZ-006C	III	ECL	266669.3	1786868.4	1765.82	11/07/2000	N/A	17.75-18.25	17-19	15-17	N/A	N/A
PZ-006D	III	ECL	266669.3	1786868.4	1765.82	11/07/2000	N/A	23.75-24.25	23-25	19-23	N/A	N/A
PZ-006E	III	ECL	266669.3	1786868.4	1765.82	11/07/2000	36.5	34.75-35.25	34-36.5	25-34	N/A	N/A

Notes:

The difference between the total depth and the bottom of the sand interval was filled with sloughed native material and/or bentonite.

[a] The screen for this port is perpendicular to the well casing and covers the open bottom end; therefore, the screened section is a discrete depth.

bgs - Below ground surface
MP - Measuring point
UDL - undeveloped land

TABLE C-III
CONSTRUCTION DETAILS OF PIEZOMETER MONITORING SYSTEMS
The Boeing Company
Santa Susana Field Laboratory
Ventura County, California

PIEZOMETER ID	LOCATION					PIEZOMETER DESIGN DETAILS						
	Area	SWMU	Northing	Easting	MP Elevation	Date Drilled	Total Depth	Screened Interval	Sand Interval	Bentonite Interval	Grout Interval	Concrete Interval
			[feet]	[feet]	[feet]	[m/d/y]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]
PZ-007A	II	RD-9 Area	268474.7	1789593.8	1771.84	11/07/2000	N/A	5.75-6.25	5-7	2-5	N/A	0-2
PZ-007B	II	RD-9 Area	268474.7	1789593.8	1771.84	11/07/2000	N/A	10.75-11.25	10-12	7-10	N/A	N/A
PZ-007C	II	RD-9 Area	268474.7	1789593.8	1771.84	11/07/2000	N/A	15.75-16.25	15-17	12-15	N/A	N/A
PZ-007D	II	RD-9 Area	268474.7	1789593.8	1771.84	11/07/2000	N/A	24.75-25.25	24-26	17-24	N/A	N/A
PZ-007E	II	RD-9 Area	268474.7	1789593.8	1771.84	11/07/2000	N/A	30.75-31.25	30-32	26-30	N/A	N/A
PZ-007F	II	RD-9 Area	268474.7	1789593.8	1771.84	11/07/2000	N/A	35.75-36.25	35-37	32-35	N/A	N/A
PZ-007G	II	RD-9 Area	268474.7	1789593.8	1771.84	11/07/2000	46.0	45 [a]	42.6-46	37-42.6	N/A	N/A
PZ-008A	I	LETF / CTL-I	267305.5	1794332.0	1836.12	11/08/2000	N/A	8.75-9.25	8-10	5-8	2-5	0-2
PZ-008B	I	LETF / CTL-I	267305.5	1794332.0	1836.12	11/08/2000	N/A	19.75-20.25	19-21	10-19	N/A	N/A
PZ-008C	I	LETF / CTL-I	267305.5	1794332.0	1836.12	11/08/2000	N/A	31.75-32.25	31-33	21-31	N/A	N/A
PZ-008D	I	LETF / CTL-I	267305.5	1794332.0	1836.12	11/08/2000	N/A	39.75-40.25	39-41	33-39	N/A	N/A
PZ-008E	I	LETF / CTL-I	267305.5	1794332.0	1836.12	11/08/2000	N/A	46.75-47.25	46-48	41-46	N/A	N/A
PZ-008F	I	LETF / CTL-I	267305.5	1794332.0	1836.12	11/08/2000	N/A	62.75-63.25	61-64	48-61	N/A	N/A
PZ-008G	I	LETF / CTL-I	267305.5	1794332.0	1836.12	11/08/2000	72.0	70 [a]	69-71	64-69	N/A	N/A
PZ-009A	II	RD-9 Area	268649.2	1789768.5	1761.44	11/14/2000	N/A	5.75-6.25	5-7	2-5	N/A	0-2
PZ-009B	II	RD-9 Area	268649.2	1789768.5	1761.44	11/14/2000	N/A	10.75-11.25	10-12	7-10	N/A	N/A
PZ-009C	II	RD-9 Area	268649.2	1789768.5	1761.44	11/14/2000	N/A	18.25-18.75	17.5-19.5	12-17.5	N/A	N/A
PZ-009D	II	RD-9 Area	268649.2	1789768.5	1761.44	11/14/2000	N/A	22.75-23.25	22-24	19.5-22	N/A	N/A
PZ-009E	II	RD-9 Area	268649.2	1789768.5	1761.44	11/14/2000	N/A	30.25-30.75	29.5-31.5	24-29.5	N/A	N/A
PZ-009F	II	RD-9 Area	268649.2	1789768.5	1761.44	11/14/2000	36.0	34.75-35.25	34-36	31.5-34	N/A	N/A
PZ-010A	II	RD-9 Area	268595.8	1789646.3	1767.80	11/14/2000	N/A	7.75-8.25	7-9	5-7	2-5	0-2
PZ-010B	II	RD-9 Area	268595.8	1789646.3	1767.80	11/14/2000	N/A	13.75-14.25	13-15	9-13	N/A	N/A

Notes:

The difference between the total depth and the bottom of the sand interval was filled with sloughed native material and/or bentonite.

[a] The screen for this port is perpendicular to the well casing and covers the open bottom end; therefore, the screened section is a discrete depth.

bgs - Below ground surface
MP - Measuring point
UDL - undeveloped land

TABLE C-III
CONSTRUCTION DETAILS OF PIEZOMETER MONITORING SYSTEMS
The Boeing Company
Santa Susana Field Laboratory
Ventura County, California

PIEZOMETER ID	LOCATION					PIEZOMETER DESIGN DETAILS						
	Area	SWMU	Northing	Easting	MP Elevation	Date Drilled	Total Depth	Screened Interval	Sand Interval	Bentonite Interval	Grout Interval	Concrete Interval
			[feet]	[feet]	[feet]	[m/d/y]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]
PZ-010C	II	RD-9 Area	268595.8	1789646.3	1767.80	11/14/2000	N/A	19.75-20.25	19-21	15-19	N/A	N/A
PZ-010D	II	RD-9 Area	268595.8	1789646.3	1767.80	11/14/2000	N/A	25.75-26.25	22-27	21-25	N/A	N/A
PZ-010E	II	RD-9 Area	268595.8	1789646.3	1767.80	11/14/2000	N/A	29.75-30.25	29-31	27-29	N/A	N/A
PZ-010F	II	RD-9 Area	268595.8	1789646.3	1767.80	11/14/2000	N/A	38.25-38.75	36.5-39.5	31-36.5	N/A	N/A
PZ-010G	II	RD-9 Area	268595.8	1789646.3	1767.80	11/14/2000	45.0	43 [a]	42-44.5	39.5-42	N/A	N/A
PZ-011A	I	IEL	268086.1	1796133.0	1914.48	11/14/2000	N/A	15.75-16.25	15-17	12-15	2-12	0-2
PZ-011B	I	IEL	268086.1	1796133.0	1914.48	11/14/2000	N/A	24.75-25.25	24-26	17-24	N/A	N/A
PZ-011C	I	IEL	268086.1	1796133.0	1914.48	11/14/2000	N/A	30.75-31.25	30-32	26-30	N/A	N/A
PZ-011D	I	IEL	268086.1	1796133.0	1914.48	11/14/2000	N/A	40.75-41.25	39-42	32-39	N/A	N/A
PZ-011E	I	IEL	268086.1	1796133.0	1914.48	11/14/2000	N/A	46.25-46.75	44.5-47.5	42-44.5	N/A	N/A
PZ-011F	I	IEL	268086.1	1796133.0	1914.48	11/14/2000	N/A	51.25-51.75	50.5-52.5	47.5-50.5	N/A	N/A
PZ-011G	I	IEL	268086.1	1796133.0	1914.48	11/14/2000	58.0	56 [a]	55-58	52.5-55	N/A	N/A
PZ-012A	I	LETF S	266871.1	1794033.3	1827.69	11/16/2000	N/A	4.75-5.25	4-6	2-4	N/A	0-2
PZ-012B	I	LETF S	266871.1	1794033.3	1827.69	11/16/2000	N/A	10.75-11.25	10-12	6-10	N/A	N/A
PZ-012C	I	LETF S	266871.1	1794033.3	1827.69	11/16/2000	N/A	16.75-17.25	16-18	12-16	N/A	N/A
PZ-012D	I	LETF S	266871.1	1794033.3	1827.69	11/16/2000	N/A	21.25-21.75	20.5-22.5	18-20.5	N/A	N/A
PZ-012E	I	LETF S	266871.1	1794033.3	1827.69	11/16/2000	N/A	26.75-27.25	25-28	22.5-25	N/A	N/A
PZ-012F	I	LETF S	266871.1	1794033.3	1827.69	11/16/2000	37.0	34.75-35.25	34-37	28-34	N/A	N/A
PZ-013A	III	Comp A	266008.7	1786153.4	1739.89	11/17/2000	N/A	5.75-6.25	5-7	2-5	N/A	0-2
PZ-013B	III	Comp A	266008.7	1786153.4	1739.89	11/17/2000	N/A	14.75-15.25	13-16	7-13	N/A	N/A
PZ-013C	III	Comp A	266008.7	1786153.4	1739.89	11/17/2000	N/A	20.75-21.25	20-22	16-20	N/A	N/A
PZ-013D	III	Comp A	266008.7	1786153.4	1739.89	11/17/2000	N/A	28.75-29.25	27-30	22-27	N/A	N/A

Notes:

The difference between the total depth and the bottom of the sand interval was filled with sloughed native material and/or bentonite.

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TABLE C-III
CONSTRUCTION DETAILS OF PIEZOMETER MONITORING SYSTEMS
The Boeing Company
Santa Susana Field Laboratory
Ventura County, California

PIEZOMETER ID	LOCATION					PIEZOMETER DESIGN DETAILS						
	Area	SWMU	Northing	Easting	MP Elevation	Date Drilled	Total Depth	Screened Interval	Sand Interval	Bentonite Interval	Grout Interval	Concrete Interval
			[feet]	[feet]	[feet]	[m/d/y]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]
PZ-013E	III	Comp A	266008.7	1786153.4	1739.89	11/17/2000	N/A	39.75-40.25	39-41	30-39	N/A	N/A
PZ-013F	III	Comp A	266008.7	1786153.4	1739.89	11/17/2000	56.4	53.75-54.25	53-56.4	41-53	N/A	N/A
PZ-014A	III	Comp A	265865.4	1786275.4	1728.12	11/18/2000	N/A	5.75-6.25	5-7	2-5	N/A	0-2
PZ-014B	III	Comp A	265865.4	1786275.4	1728.12	11/18/2000	N/A	13.25-14.75	13.5-15.5	7-13.5	N/A	N/A
PZ-014C	III	Comp A	265865.4	1786275.4	1728.12	11/18/2000	N/A	19.75-20.25	19-21	15.5-19	N/A	N/A
PZ-014D	III	Comp A	265865.4	1786275.4	1728.12	11/18/2000	N/A	29.25-29.75	28.5-30.5	21-28.5	N/A	N/A
PZ-014E	III	Comp A	265865.4	1786275.4	1728.12	11/18/2000	42.0	38.75-39.25	37.8-41	30.5-37.8	N/A	N/A
PZ-015A	III	STL-IV	265687.4	1785844.7	1740.56	11/19/2000	N/A	5.75-6.25	5-7	2-5	N/A	0-2
PZ-015B	III	STL-IV	265687.4	1785844.7	1740.56	11/19/2000	N/A	13.75-14.25	13-15	7-13	N/A	N/A
PZ-015C	III	STL-IV	265687.4	1785844.7	1740.56	11/19/2000	N/A	24.25-24.75	23.5-25.5	15-23.5	N/A	N/A
PZ-015D	III	STL-IV	265687.4	1785844.7	1740.56	11/19/2000	N/A	32.75-33.25	31-34	25.5-31	N/A	N/A
PZ-015E	III	STL-IV	265687.4	1785844.7	1740.56	11/19/2000	N/A	37.75-38.25	37-39	34-37	N/A	N/A
PZ-015F	III	STL-IV	265687.4	1785844.7	1740.56	11/19/2000	N/A	43.25-43.75	42.5-44.5	39-42.5	N/A	N/A
PZ-015G	III	STL-IV	265687.4	1785844.7	1740.56	11/19/2000	49.5	48 [a]	47-49.5	44.5-47	N/A	N/A
PZ-016A	I	Canyon	266960.8	1794388.2	1854.34	11/20/2000	N/A	8.75-9.25	8-10	5-8	2-5	0-2
PZ-016B	I	Canyon	266960.8	1794388.2	1854.34	11/20/2000	N/A	18.25-18.75	17.5-19.5	10-17.5	N/A	N/A
PZ-016C	I	Canyon	266960.8	1794388.2	1854.34	11/20/2000	N/A	25.75-26.25	24-27	19.5-24	N/A	N/A
PZ-016D	I	Canyon	266960.8	1794388.2	1854.34	11/20/2000	N/A	33.75-34.25	33-35	27-33	N/A	N/A
PZ-016E	I	Canyon	266960.8	1794388.2	1854.34	11/20/2000	N/A	44.25-44.75	42.5-45.5	35-42.5	N/A	N/A
PZ-016F	I	Canyon	266960.8	1794388.2	1854.34	11/20/2000	N/A	56.75-57.25	56-58	45.5-56	N/A	N/A
PZ-016G	I	Canyon	266960.8	1794388.2	1854.34	11/20/2000	68.0	64.5 [a]	63.5-68	58-63.5	N/A	N/A
PZ-017A	II	Coca	265169.9	1788794.1	1837.83	11/21/2000	18.0	7-17	6-18	4-6	2-4	0-2

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The Boeing Company
Santa Susana Field Laboratory
Ventura County, California

PIEZOMETER ID	LOCATION					PIEZOMETER DESIGN DETAILS						
	Area	SWMU	Northing	Easting	MP Elevation	Date Drilled	Total Depth	Screened Interval	Sand Interval	Bentonite Interval	Grout Interval	Concrete Interval
			[feet]	[feet]	[feet]	[m/d/y]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]
PZ-017B	II	Coca	265168.4	1788789.1	1837.20	11/21/2000	31.0	20-30	18-31	15-18	2-15	0-2
PZ-018A	III	EEL	266278.3	1785963.5	1760.71	11/21/2000	N/A	5.75-6.25	5-7	2-5	N/A	0-2
PZ-018B	III	EEL	266278.3	1785963.5	1760.71	11/21/2000	N/A	11.25-11.75	10.5-12.5	7-10.5	N/A	N/A
PZ-018C	III	EEL	266278.3	1785963.5	1760.71	11/21/2000	N/A	15.75-16.25	15-17	12.5-15	N/A	N/A
PZ-018D	III	EEL	266278.3	1785963.5	1760.71	11/21/2000	N/A	19.75-20.25	19-20.8	17-19	N/A	N/A
PZ-018E	III	EEL	266278.3	1785963.5	1760.71	11/21/2000	26.0	24.75-25.25	22.5-25.5	20.8-22.5	N/A	N/A
PZ-019	II	RD-9 Area	268481.9	1789765.7	1776.77	11/29/2000	31.5	19-29	17-29.3	14-17	2-14	0-2
PZ-020	II	RD-9 Area	268428.3	1789492.8	1776.44	11/27/2000	31.5	19-29	17-29.5	14-17	2-14	0-2
PZ-021	II	RD-9 Area	268740.7	1789818.0	1759.26	11/27/2000	29.5	18-28	16-29.5	13-16	2-13	0-2
PZ-022	II	RD-9 Area	268636.1	1789594.0	1774.44	11/30/2000	29.5	19-29	17-29.5	14-17	2-14	0-2
PZ-023	III	ECL	266415.7	1786832.4	1758.96	11/30/2000	25.0	6-16	5-22	2-5	N/A	0-2
PZ-024	III	ECL	266485.1	1786749.6	1770.30	12/04/2000	25.0	14-24	12-24.5	9-12	2-9	0-2
PZ-025	III	ECL	266637.0	1786700.5	1780.27	12/04/2000	27.0	13-23	11-25.5	8-11	2-8	0-2
PZ-026	III	ECL	266453.2	1786996.3	1755.75	12/05/2000	24.2	14-24	12-24.2	9-12	2-9	0-2
PZ-027	III	ECL	266694.7	1786974.5	1773.06	12/05/2000	23.0	12-22	9.75-22.5	7-9.75	2-7	0-2
PZ-028	III	ECL	266445.3	1786539.9	1788.47	12/06/2000	44.0	25-35	20-35.5	17-20	2-17	0-2
PZ-029	III	EEL / Comp A	266350.5	1786105.8	1771.83	12/06/2000	31.0	19-29	17-31	14-17	2-14	0-2
PZ-030	III	EEL / Comp A	266264.1	1786177.7	1765.98	12/07/2000	32.5	17-27	12-32.5	9-12	2-9	0-2
PZ-031	III	EEL / Comp A	266198.9	1786234.0	1763.97	12/07/2000	30.0	13-23	9-24	6-9	2-6	0-2
PZ-032	III	Comp A	266044.9	1786345.0	1739.75	12/07/2000	22.0	10-20	5-22	2-5	N/A	0-2
PZ-033	III	Comp A	265757.3	1786439.6	1721.73	12/08/2000	29.0	11-21	9-22	6-9	2-6	0-2
PZ-034	III	Comp A	265907.5	1786529.6	1714.68	12/08/2000	12.0	5-12	4-12	2-4	N/A	0-2

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The Boeing Company
Santa Susana Field Laboratory
Ventura County, California

PIEZOMETER ID	LOCATION					PIEZOMETER DESIGN DETAILS						
	Area	SWMU	Northing	Easting	MP Elevation	Date Drilled	Total Depth	Screened Interval	Sand Interval	Bentonite Interval	Grout Interval	Concrete Interval
			[feet]	[feet]	[feet]	[m/d/y]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]
PZ-035	III	Comp A	265633.6	1786446.9	1712.96	12/11/2000	24.0	10-20	7-22.3	5-7	2-5	0-2
PZ-036	III	STL-IV	265656.6	1785404.9	1759.07	12/11/2000	28.9	15-25	10-28.9	7-10	2-7	0-2
PZ-037	III	STL-IV	265410.3	1785632.1	1749.29	12/12/2000	28.5	18-28	15-28.5	12-15	2-12	0-2
PZ-038	III	Comp A	265905.6	1785847.4	1752.31	12/12/2000	32.0	17-27	14-31.5	11-14	2-11	0-2
PZ-039	III	STL-IV	265797.1	1785695.9	1753.97	12/13/2000	29.0	18-28	14-29	11-14	2-11	0-2
PZ-040	III	STL-IV	264963.2	1785695.2	1704.54	12/13/2000	31.5	16.5-26.5	11-27	8-11	2-8	0-2
PZ-041	IV	PDU	267315.8	1785662.0	1809.10	01/16/2001	29.6	19-29	17-29.6	14-17	2-14	0-2
PZ-042	II	Delta / PLF	265103.3	1787397.2	1729.25	12/13/2000	40.5	19.5-29.5	17-31	14-17	2-14	0-2
PZ-043	II	Coca Rd W	265377.0	1787987.3	1776.63	12/13/2000	45.0	30-40	25-41	22-25	2-22	0-2
PZ-044	II	Coca Rd W	Abandoned 4/10/01									
PZ-045	II	Coca	265228.7	1788459.0	1828.55	12/15/2000	45.0	30-40	28-43.5	25-28	2-25	0-2
PZ-046	II	Coca	265321.9	1788500.8	1826.87	12/18/2000	35.0	24-34	22-34.5	19-22	2-19	0-2
PZ-047	II	Coca	265152.5	1788645.8	1835.51	12/18/2000	40.4	26-36	23-40.4	20-23	2-20	0-2
PZ-048	II	Coca	265150.4	1788984.1	1847.11	12/19/2000	49.0	9-19	7-20	4-7	2-4	0-2
PZ-049	II	Alfa	267506.9	1790363.0	1884.75	12/19/2000	34.0	6-16	4-17	2-4	N/A	0-2
PZ-050	III	EEL	266207.4	1785733.7	1765.50	12/14/2000	24.0	6-16	4-17	2-4	N/A	0-2
PZ-051	IV	EEL	266485.8	1785857.0	1770.87	12/14/2000	27.0	5-15	3-16	2-3	N/A	0-2
PZ-052	IV	Eastern Area IV	266742.1	1786103.7	1790.72	12/15/2000	30.0	18.9-28.9	17-30	14-17	2-14	0-2
PZ-053	II	R-2 Pond	265235.0	1786682.0	1701.72	12/15/2000	29.0	16-26	11-29	8-11	2-8	0-2
PZ-054	II	R-2 Pond North	265476.9	1786676.9	1702.11	12/18/2000	28.0	5-15	3.8-16	2-4	N/A	0-2
PZ-055	IV	Eastern Area IV	267253.6	1787421.3	1818.40	01/02/2001	29.5	19-29	17-29.5	14-17	2-14	0-2
PZ-056	IV	OCY S	268068.7	1788028.0	1805.86	12/19/2000	28.0	17-27	13-28	10-13	2-10	0-2

Notes:

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PIEZOMETER ID	LOCATION					PIEZOMETER DESIGN DETAILS						
	Area	SWMU	Northing	Easting	MP Elevation	Date Drilled	Total Depth	Screened Interval	Sand Interval	Bentonite Interval	Grout Interval	Concrete Interval
			[feet]	[feet]	[feet]	[m/d/y]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]
PZ-057	III	SPA	267455.0	1788156.6	1812.19	12/19/2000	32.5	12-22	8-24	5-8	2-5	0-2
PZ-058	III	SPA	267430.1	1787892.5	1784.63	12/20/2000	16.0	5-15	4-15.5	2-4	N/A	0-2
PZ-059	II	Bravo	266997.0	1789649.2	1836.67	12/20/2000	24.0	12-22	8-24	5-8	2-5	0-2
PZ-060	II	Alfa	267465.3	1790039.2	1868.90	12/20/2000	49.0	38-48	36-49	33-36	2-33	0-2
PZ-061	II	Alfa	267329.7	1789461.4	1832.05	01/16/2001	25.0	5-15	4-17	2-4	N/A	0-2
PZ-062	I	LOX	268955.3	1792144.7	1716.57	01/03/2001	27.3	14-24	12-27.3	9-12	2-9	0-2
PZ-063	I	IEL	268679.9	1796093.9	1882.86	01/03/2001	50.0	36-46	34-50	31-34	2-31	0-2
PZ-064	I	IEL	268571.9	1796392.5	1912.20	01/08/2001	60.0	46-56	44-60	41-44	2-41	0-2
PZ-065	I	IEL	268197.0	1795785.4	1904.93	01/09/2001	45.0	29-39	27-40	24-27	2-24	0-2
PZ-066	I	IEL	268141.4	1795531.1	1897.19	01/09/2001	55.0	44-54	42-55	39-42	2-39	0-2
PZ-067A	I	B359	267889.7	1795614.1	1909.66	01/12/2001	40.0	28-38	26-40	23-26	2-23	0-2
PZ-067B	I	B359	267892.5	1795607.5	1909.06	01/15/2001	65.0	48-58	46-59	43-46	2-43	0-2
PZ-068	I	Area I Landfill Upper	267959.1	1795304.9	1894.02	01/17/2001	55.0	44-54	42-54.8	39-42	2-39	0-2
PZ-069	I	APTF	267826.0	1795001.2	1885.33	01/18/2001	49.8	39-49	37-49.8	34-37	2-34	0-2
PZ-070	II	Bravo	267188.8	1789392.0	1834.61	12/20/2001	43.0	13-23	11-24	8-11	2-8	0-2
PZ-071	II	SPA	267577.3	1788785.5	1817.94	12/21/2000	31.5	18-28	15-31	11.9-15	2-11.9	0-2
PZ-072	III	Silvernale	266807.7	1787590.8	1768.19	01/02/2001	20.0	8.5-18.5	6.5-19	2-6.5	N/A	0-2
PZ-073	UDL	ELV Drainage	269435.8	1788107.5	1760.54	01/03/2001	55.0	41-51	35-55	30.5-35	2-30.5	0-2
PZ-074	I	Happy Valley	266110.3	1796300.5	1772.73	01/08/2001	25.0	10-20	8.5-24	5-8.5	2-5	0-2
PZ-075	I	IEL	268540.9	1795877.3	1893.10	01/08/2001	45.0	33-43	27-45	24.5-27	2-24.5	0-2
PZ-076	I	CTL-III	264309.1	1792921.1	1767.09	01/09/2001	60.0	36-46	32-47	28-32	2-28	0-2
PZ-077	I	Perimeter Pond	264396.8	1792351.4	1753.42	01/10/2001	37.0	15-25	12-26	9-12	2-9	0-2

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	Area	SWMU	Northing	Easting	MP Elevation	Date Drilled	Total Depth	Screened Interval	Sand Interval	Bentonite Interval	Grout Interval	Concrete Interval
			[feet]	[feet]	[feet]	[m/d/y]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]
PZ-078	I	Perimeter Pond / CTL-III	264578.0	1792341.9	1755.77	01/11/2001	48.0	15-25	12-26	9.5-12	2-9.5	0-2
PZ-079	I	CTL-III	265305.8	1792641.4	1776.66	01/11/2001	35.0	15-25	12-26	9.4-12	2-9.4	0-2
PZ-080	I	R-1 Pond	266375.7	1793364.4	1813.15	01/16/2001	50.0	19-29	5-31	2-5	N/A	0-2
PZ-081	I	LETF / CTL-I	267450.6	1794405.9	1841.67	01/19/2001	49.0	38.5-48.5	36.5-49	33.5-36.5	2-33.5	0-2
PZ-082	I	R-1 Pond	265999.5	1793220.6	1798.08	01/17/2001	45.0	10-20	8-21	5-8	2-5	0-2
PZ-083	I	LETF / CTL-I	267256.1	1794099.0	1833.45	01/22/2001	50.0	20-30	18-31	15-18	2-15	0-2
PZ-084	I	Bowl	265902.5	1793977.1	1836.00	01/18/2001	33.0	21-31	17-33	13.5-17	2-13.5	0-2
PZ-085A	I	Bowl	265753.4	1793796.9	1816.79	01/23/2001	31.0	20-30	17-31	14-17	2-14	0-2
PZ-085B	I	Bowl	265754.9	1793803.5	1816.81	01/22/2001	60.0	37-47	34-48	31-34	2-31	0-2
PZ-086	I	LETF / CTL-I	267235.1	1794239.4	1833.44	01/18/2001	35.0	16-26	14-27	11-14	2-11	0-2
PZ-087A	I	Bowl	265919.9	1793555.7	1817.15	01/24/2001	22.5	11-21	7-22.5	4.5-7	2-4.5	0-2
PZ-087B	I	Bowl	265915.2	1793549.9	1816.23	01/23/2001	55.0	41.5-51.5	36-55	34-36	2-34	0-2
PZ-088	I	LETF / CTL-I	267598.6	1794688.4	1859.54	01/19/2001	45.0	32-42	27-43	24-27	2-24	0-2
PZ-089	I	APTF	267716.1	1794950.5	1876.64	01/22/2001	20.0	6-16	4.5-18	2-4.5	N/A	0-2
PZ-090	I	CTL-III N	265525.4	1792702.2	1780.01	01/12/2001	45.0	16-26	13-28	10-13	2-10	0-2
PZ-091	I	CTL-III N	265700.0	1792877.1	1788.84	01/15/2001	55.0	26-36	23.5-40	20-23.5	2-20	0-2
PZ-092	I	B359	267813.6	1795369.1	1897.59	01/22/2001	34.5	19-29	17-31	14-17	2-14	0-2
PZ-093	I	LETF S	266764.7	1793696.6	1821.79	01/23/2001	40.0	24.5-34.5	22-35	19-22	2-19	0-2
PZ-094	Offsite	Sage Ranch	269025.4	1795857.2	1857.76	01/25/2001	34.0	13-23	10-24	8-10	2-8	0-2
PZ-095	I	LOX	269117.2	1792686.5	1760.02	02/14/2001	37.5	14-24	11-26	8-11	2-8	0-2
PZ-096	II	Coca Rd W	265475.3	1787620.7	1766.30	04/21/2001	45.0	33.5-43.5	31-45	28-31	2-28	0-2
PZ-097	UDL	FSDF	267048.9	1783400.3	1761.87	10/15/2001	44.5	33-43	31-44.5	11.5-28	2-11.5	0-2

Notes:

The difference between the total depth and the bottom of the sand interval was filled with sloughed native material and/or bentonite.

[a] The screen for this port is perpendicular to the well casing and covers the open bottom end; therefore, the screened section is a discrete depth.

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Table provided by MWH.
Haley & Aldrich, Inc.
G:\Projects\26472\Reports\M-513 2009 Annual\App C\2010-0228-HAI-SSFL_M513_C-III-F.xls

TABLE C-III
CONSTRUCTION DETAILS OF PIEZOMETER MONITORING SYSTEMS
The Boeing Company
Santa Susana Field Laboratory
Ventura County, California

PIEZOMETER ID	LOCATION					PIEZOMETER DESIGN DETAILS						
	Area	SWMU	Northing	Easting	MP Elevation	Date Drilled	Total Depth	Screened Interval	Sand Interval	Bentonite Interval	Grout Interval	Concrete Interval
			[feet]	[feet]	[feet]	[m/d/y]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]
PZ-098	IV	FSDF	266788.9	1783488.8	1797.78	10/16/2001	37.5	24-34	21.5-37.5	19-21.5	2-19	0-2
PZ-099	IV	FSDF	Abandoned in place in 2006									
PZ-100	IV	FSDF	266078.3	1782962.2	1870.11	10/17/2001	16.5	5.67-15.67	4.67-16.5	2-4.67	N/A	0-2
PZ-101	IV	FSDF	266057.5	1783090.6	1869.71	10/17/2001	27	10-20	7-27	5-7	1.75-5	0-1.75
PZ-102	IV	Central Area IV	267080.8	1784684.4	1827.78	10/18/2001	59.2	48.5-59.2	45-59.2	43-45	2-43	0-2
PZ-103	IV	Central Area IV	266281.2	1784400.9	1815.93	10/22/2001	39	28.5-38.5	26-39	23.5-26	2-23.5	0-2
PZ-104	IV	Central Area IV	266270.2	1784924.2	1797.47	10/22/2001	38.5	18-28	16-30	13-16	2-13	0-2
PZ-105	IV	Central Area IV	265935.5	1784787.9	1803.87	10/23/2001	28	17-27	15-28	12-15	2-12	0-2
PZ-106	IV	EEL	266411.9	1785469.6	1784.17	10/23/2001	35	18-28	16-30.5	12.75-16	2-12.75	0-2
PZ-107	IV	Eastern Area IV	266876.4	1785822.0	1793.62	10/24/2001	11	5-10	4-11	2-4	N/A	0-2
PZ-108	IV	HMSA	268032.6	1785076.3	1763.01	10/24/2001	30	16-26	13-28.5	10-13	2-10	0-2
PZ-109	IV	Central Area IV	267332.4	1785248.2	1809.36	10/25/2001	36.5	25-35	22-36.5	19-22	2-19	0-2
PZ-110	IV	Eastern Area IV	267204.0	1786209.6	1818.90	10/25/2001	17.5	7-17	5-17.5	2-5	N/A	0-2
PZ-111	IV	Eastern Area IV	266948.4	1786433.9	1794.90	10/26/2001	20.0	7.5-17.5	5-20	N/A	N/A	N/A
PZ-112	IV	Eastern Area IV	267435.9	1786720.8	1829.14	10/26/2001	35.0	24-34	22-35	19-22	2-19	0-2
PZ-113	IV	Eastern Area IV	267682.9	1787367.8	1823.68	10/29/2001	15.0	7-15	5-15	2-5	N/A	0-2
PZ-114	IV	Old Con Yard S	268304.0	1787913.1	1818.19	10/30/2001	48.2	37-47	35-48.2	32-35	2-32	0-2
PZ-115	IV	Eastern Area IV	268006.8	1787536.5	1817.81	10/30/2001	40	25.5-37.5	25-40	22-25	2-22	0-2
PZ-116	UDL	RMHF	266501.1	1783693.0	1827.78	10/31/2001	34	22-32	20-34	17-20	2-17	0-2
PZ-117	I	Happy Valley	266712.9	1796184.6	1763.01	11/01/2001	25.5	14.5-24.5	12.5-25.5	9.5-12.5	2-9.5	0-2
PZ-118	I	B-1 Area	269389.4	1796988.7	1907.84	11/02/2001	30.0	19.5-29.5	16.5-30	13.5-16.5	2-13.5	0-2
PZ-119	Offsite	Sage Ranch	269025.4	1795863.3	1857.64	11/02/2001	44	33-43	30-44	27-30	2-27	0-2

Notes:

The difference between the total depth and the bottom of the sand interval was filled with sloughed native material and/or bentonite.

[a] The screen for this port is perpendicular to the well casing and covers the open bottom end; therefore, the screened section is a discrete depth.

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TABLE C-III
CONSTRUCTION DETAILS OF PIEZOMETER MONITORING SYSTEMS
The Boeing Company
Santa Susana Field Laboratory
Ventura County, California

PIEZOMETER ID	LOCATION					PIEZOMETER DESIGN DETAILS						
	Area	SWMU	Northing	Easting	MP Elevation	Date Drilled	Total Depth	Screened Interval	Sand Interval	Bentonite Interval	Grout Interval	Concrete Interval
			[feet]	[feet]	[feet]	[m/d/y]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]	[feet bgs]
PZ-120	IV	HMSA / SCTI	267230.1	1785009.7	1810.96	03/18/2003	26	15-25	12-26	9-12	2-9	0-2
PZ-121	IV	HMSA / SCTI	267491.6	1785120.7	1808.98	03/19/2003	33	15-25	12-28	8.4-12; 28-33	1.5-8.4	0-1.5
PZ-122	IV	HMSA / SCTI	267091.9	1785176.5	1810.80	03/19/2003	27.5	15.5-25.5	12-27.5	9-12	2-9	0-2
PZ-123	UDL	Happy Valley	264643.9	1797304.3	1610.81	03/20/2003	23.5	11.5-21.5	8.7-23.5	5.7-8.7	1-5.7	0-1
PZ-124	IV	B056 Landfill	267166.7	1784015.9	1764.11	03/21/2003	31	14.7-24.7	11.3-31	8.3-11.3	1-8.3	0-1
PZ-125	II	RD-9 Area	268357.1	1789379.4	1783.91	03/24/2003	41	23.5-33.5	20-34	16.5-20; 34-38	1.5-16.5	0-1
PZ-126	II	Coca	265095.8	1789222.8	1853.62	04/30/2003	21	10.5-21	7-20.5	1.5-7; 21-50	N/A	1-1.5
PZ-127	I	Canyon	266957.1	1794827.5	1877.19	04/24/2003	66	55.25-62.25	49-65.5	43-49	1-43	0-1

Notes:

The difference between the total depth and the bottom of the sand interval was filled with sloughed native material and/or bentonite.
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TABLE C-III
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The Boeing Company
Santa Susana Field Laboratory
Ventura County, California

Well ID	Northing (feet)	Easting (feet)	Surface Elevation (feet amsl)	TOC Elevation (feet amsl)	Depth to Screen Top (feet bgs)	Depth to Screen Bottom (feet bgs)	Total Depth (feet bgs)	Total Depth Drilled (feet bgs)	Borehole Diameter (inches)	Casing Diameter (inches)	Screen Material	Screen Slot Size (inches)	Casing Material	Filter Pack Grade	Filter Pack Top (feet bgs)	Filter Pack Bottom (feet bgs)	Drilling Method	Drill Company	Annular Seal Material	Annular Seal Top (feet bgs)	Annular Seal Bottom (feet bgs)	Wellhead Completion
PZ-128 (AKA CB-1)	269120.834	1792525.660	1754.77	1757.26	23.5	33.5	35	48	6	2	SCH40 PVC	0.02	SCH40 PVC	3	21	35	Mud Rotary with HQ Diamond Core Bit	Layne Drilling	95/5 Slurry Bentonite chips Bentonite chips	0 14 35	14 21 48	Monument
CB-02	269100.7558	1793006.813	1763.45	NA	No well construc ted	NA	45	45	4	NA	NA	NA	NA	NA	NA	NA	Mud Rotary with HQ Diamond Core Bit	Layne Drilling	NA	NA	NA	NA
PZ-129 (AKA CB-3)	268893.232	1792607.916	1738.59	1741.94	16.5	26.5	30	30.0	6	2	SCH40 PVC	0.02	SCH40 PVC	3	14	28	Mud Rotary with HQ Diamond Core Bit	Layne Drilling	95/5 Slurry Bentonite chips Bentonite chips	0 9 28	9 14 30	Monument
PZ-130 (AKA CB-4)	268858.769	1793080.154	1743.50	1746.66	14.5	24.5	26	35.0	6	2	SCH40 PVC	0.02	SCH40 PVC	3	12	26	Mud Rotary with HQ Diamond Core Bit	Layne Drilling	95/5 Slurry Bentonite chips Bentonite chips	0 7 26	7 12 35	Monument
PZ-131 (AKA CB-5)	268963.222	1792792.983	1756.93	1759.95	16.0	26.0	29	53.0	6	2	SCH40 PVC	0.02	SCH40 PVC	3	14	29	Mud Rotary with HQ Diamond Core Bit	Layne Drilling	95/5 Slurry Bentonite chips Bentonite chips	0 9 29	9 14 53	Monument
PZ-132	269137.994	1792682.780	1756.82	1758.38	32.0	42.0	44	55.0	8	2	SCH40 PVC	0.02	SCH40 PVC	3	29	44	Hollow Stem Auger/Water and Mud Rotary with CME and HQ	WDC	95/5 Slurry Bentonite chips # 60 Sand Bentonite chips	0 22 27 44	22 27 29 55	Monument
PZ-133	269142.764	1790568.969	1796.61	1798.48	40.0	60.0	62	71.0	8	2	SCH40 PVC	0.02	SCH40 PVC	3	37	62	Hollow Stem Auger/Water and Mud Rotary with CME and HQ	WDC	95/5 Slurry Bentonite chips # 60 Sand Bentonite chips	0 25 35 62	25 35 37 71	Monument
PZ-134	268976.178	1790784.314	1819.88	1821.59	67.0	77.0	79	90.5	8	2	SCH40 PVC	0.02	SCH40 PVC	3	64	79	Hollow Stem Auger/Water and Mud Rotary with CME and HQ	WDC	95/5 Slurry Bentonite chips # 60 Sand Bentonite chips	0 52 62 79	52 62 64 90.5	Monument

Notes:
* Northing and Easting Coordinates are in State Plane NAD 27, Zone 5, US Feet. Surveyed using hand-held GPS system.

Abbreviations:
amsl - above mean sea level
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SCH - schedule
PVC - polyvinyl chloride
SST - stainless steel
TOC - top of casing

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The Boeing Company
Santa Susana Field Laboratory
Ventura County, California

Well ID	Northing (feet)	Easting (feet)	Surface Elevation (feet amsl)	TOC Elevation (feet amsl)	Depth to Screen Top (feet bgs)	Depth to Screen Bottom (feet bgs)	Total Depth (feet bgs)	Total Depth Drilled (feet bgs)	Borehole Diameter (inches)	Casing Diameter (inches)	Screen Material	Screen Slot Size (inches)	Casing Material	Filter Pack Grade	Filter Pack Top (feet bgs)	Filter Pack Bottom (feet bgs)	Drilling Method	Drill Company	Annular Seal Material	Annular Seal Top (feet bgs)	Annular Seal Bottom (feet bgs)	Wellhead Completion
PZ-135	268968.144	1790929.463	1822.22	1823.84	77.0	87.0	89	96.0	8	2	SCH40 PVC	0.02	SCH40 PVC	3	74	89	Hollow Stem Auger/Water and Mud Rotary with CME and HQ	WDC	95/5 Slurry Bentonite chips # 60 Sand Bentonite chips	0 62 72 89	62 72 74 96	Monument
PZ-136	268814.105	1791130.672	1811.18	1812.90	65.0	75.0	77	85.5	8	2	SCH40 PVC	0.02	SCH40 PVC	3	62	77	Hollow Stem Auger/Water and Mud Rotary with CME and HQ	WDC	95/5 Slurry Bentonite chips # 60 Sand Bentonite chips	0 53 60 77	53 60 62 85.5	Monument
PZ-137	268806.051	1791316.071	1808.33	1810.13	67.0	77.0	79	85.0	8	2	SCH40 PVC	0.02	SCH40 PVC	3	64	79	Hollow Stem Auger/Water and Mud Rotary with CME and HQ	WDC	95/5 Slurry Bentonite chips # 60 Sand Bentonite chips	0 55 62 79	55 62 64 85	Monument
PZ-138	269235.701	1789494.590	1830.37	1829.85	22.0	32.0	34	45.7	8	2	SCH40 PVC	0.02	SCH40 PVC	3	20	34	Hollow Stem Auger/Water and Mud Rotary with CME and HQ	WDC	95/5 Slurry Bentonite chips # 60 Sand Bentonite chips	0 13 18 34	13 18 20 45.7	Flush-mount
PZ-139	269286.834	1789390.976	1829.62	1831.91	52.0	62.0	65	74.0	8	2	SCH40 PVC	0.02	SCH40 PVC	3	52	65	Hollow Stem Auger/Water and Mud Rotary with CME and HQ	WDC	95/5 Slurry Bentonite chips # 60 Sand Bentonite chips	0 45 48 65	45 48 50 74	Monument
PZ-140	269204.918	1789288.167	1833.15	1832.82	52.0	62.0	65	73.0	8	2	SCH40 PVC	0.02	SCH40 PVC	3	52	65	Hollow Stem Auger/Water and Mud Rotary with CME and HQ	WDC	95/5 Slurry Bentonite chips # 60 Sand Bentonite chips	0 45 48 65	45 48 50 74	Monument

Notes:
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The Boeing Company
Santa Susana Field Laboratory
Ventura County, California

Well ID	Northing (feet)	Easting (feet)	Surface Elevation (feet amsl)	TOC Elevation (feet amsl)	Depth to Screen Top (feet bgs)	Depth to Screen Bottom (feet bgs)	Total Depth (feet bgs)	Total Depth Drilled (feet bgs)	Borehole Diameter (inches)	Casing Diameter (inches)	Screen Material	Screen Slot Size (inches)	Casing Material	Filter Pack Grade	Filter Pack Top (feet bgs)	Filter Pack Bottom (feet bgs)	Drilling Method	Drill Company	Annular Seal Material	Annular Seal Top (feet bgs)	Annular Seal Bottom (feet bgs)	Wellhead Completion
PZ-141	269206.908	1788741.765	1857.14	1856.58	21.0	31.0	33	40.5	8	2	SCH40 PVC	0.02	SCH40 PVC	3	18	33	Hollow Stem Auger/Water and Mud Rotary with CME and HQ	WDC	95/5 Slurry Bentonite chips # 60 Sand Bentonite chips	0 11 16 33	11 16 18 40.5	Flush-mount
PZ-142	268980.635	1790277.127	1745.52	1748.17	28.0	38.0	38.5	52.0	8	2	SCH40 PVC	0.02	SCH40 PVC	3	23	39	Hollow Stem	WDC	Bentonite chips	13	23	Monument
PZ-143	269399.543	1788800.747	1847.72	1849.84	55.0	65.0	67	75.0	8	2	SCH40 PVC	0.02	SCH40 PVC	3	52	67	Hollow Stem Auger/Water and Mud Rotary with CME and HQ	WDC	95/5 Slurry Bentonite chips # 60 Sand Bentonite chips	0 45 50 67	45 50 52 75	Monument
PZ-144	269095.231	1788634.167	1859.63	1859.13	13.0	23.0	25	40.0	8	2	SCH40 PVC	0.02	SCH40 PVC	3	11	25	Hollow Stem Auger/Water and Mud Rotary with CME and HQ	WDC	95/5 Slurry Bentonite chips # 60 Sand Bentonite chips	0 7 10 25	7 10 11 40	Flush-mount
PZ-145	268857.992	1789810.694	1764.80	1766.87	20.0	30.0	32	40.0	8	2	SCH40 PVC	0.02	SCH40 PVC	3	17	32	Hollow Stem Auger/Water and Mud Rotary with CME and HQ	WDC	95/5 Slurry Bentonite chips # 60 Sand Bentonite chips	0 10 15 32	10 15 17 40	Monument
PZ-146	268265.857	1789233.939	1787.87	1789.82	12.0	22.0	24	37.5	8	2	SCH40 PVC	0.02	SCH40 PVC	3	10	24	Hollow Stem Auger/Water and Mud Rotary with CME and HQ	WDC	95/5 Slurry Bentonite chips # 60 Sand Bentonite chips	0 6 9 24	6 9 10 37.5	Monument
PZ-147	268144.179	1789214.871	1791.44	1791.24	27.0	37.0	39	50.0	8	2	SCH40 PVC	0.02	SCH40 PVC	3	24	39	Hollow Stem Auger/Water and Mud Rotary with CME and HQ	WDC	95/5 Slurry Bentonite chips # 60 Sand Bentonite chips	0 17 22 39	17 22 24 50	Flush-mount
PZ-148	268103.787	1789185.773	1791.23	1794.71	19.0	29.0	31	39.7	8	2	SCH40 PVC	0.02	SCH40 PVC	3	17	31	Hollow Stem Auger/Water and Mud Rotary with CME and HQ	WDC	95/5 Slurry Bentonite chips # 60 Sand Bentonite chips	0 10 15 31	10 15 17 39.7	Monument

Notes:
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Well ID	Northing (feet)	Easting (feet)	Surface Elevation (feet amsl)	TOC Elevation (feet amsl)	Depth to Screen Top (feet bgs)	Depth to Screen Bottom (feet bgs)	Total Depth (feet bgs)	Total Depth Drilled (feet bgs)	Borehole Diameter (inches)	Casing Diameter (inches)	Screen Material	Screen Slot Size (inches)	Casing Material	Filter Pack Grade	Filter Pack Top (feet bgs)	Filter Pack Bottom (feet bgs)	Drilling Method	Driller	Annular Seal Material	Annular Seal Top (feet bgs)	Annular Seal Bottom (feet bgs)	Wellhead Completion
PZ-149	265317.333	1786822.562	1712.32	1715.19	26	36	36.5	47	8	2	SCH40 PVC	0.02	SCH40 PVC	#3	20	36.5	Hollow Stem Auger	WDC	Bentonite Chips	10	20	Monument
PZ-150	268281.654	1786086.776	1849.92	1852.23	17.5	27.5	27.5	27.5	10 5/8	4	SCH40 PVC	0.020	SCH40 PVC	#3	14.5	27.5	Air Rotary	WDC	Cement-Bentonite Grout	11	14.5	Monument
PZ-151	268743.1285	1787988.758	1860.4	1862.60	69.5	79.5	80	82	8	2	SCH40 PVC	0.02	SCH40 PVC	#3	64	80	CME-85 HAS/HQ w/carbide bit	WDC	Cement-Bentonite Grout Bentonite chips # 60 Sand Bentonite chips	2 52 62 80	52 62 64 82	Monument
PZ-152	268541.5223	1788231.608	1881.1	1880.80	26.1	36.1	36.6	47	8	2	SCH40 PVC	0.02	SCH40 PVC	#3	23	36.6	CME-85 HAS/HQ w/carbide bit	WDC	Cement-Bentonite Grout Bentonite chips # 60 Sand Bentonite chips	2 11 21 36.6	11 21 23 47	Flush-mount
PZ-153	267496.9893	1790701.028	1908.5	1908.10	55.0	64.9	65.4	70	8	2	SCH40 PVC	0.02	SCH40 PVC	#3	51	65.45	CME-85 HAS/HQ w/carbide bit	WDC	Cement-Bentonite Grout Bentonite chips # 60 Sand Bentonite chips	2 38 48 65.45	38 48 51 70	Flush-mount
PZ-154	267589.45	1790451.038	1899.9	1902.30	50.0	60.0	60.5	61	8	2	SCH40 PVC	0.02	SCH40 PVC	#3	46	61	CME-85 HAS/HQ w/carbide bit	WDC	Cement-Bentonite Grout Bentonite chips # 60 Sand	2 34 44	34 44 46	Monument
PZ-155	267068.2506	1789414.183	1829.7	1831.90	51.5	61.5	62.0	62	8	2	SCH40 PVC	0.02	SCH40 PVC	#3	46	62	CME-85 HAS/HQ w/carbide bit	WDC	Cement-Bentonite Grout Bentonite chips # 60 Sand	2 34 44	34 44 46	Monument
PZ-156	267141.728	1788999.05	1849.8	1849.40	104	114	116	140	8	2	SCH40 PVC	0.02	SCH40 PVC	#3	101	116	CME-85 HAS/HQ w/carbide bit	WDC	Cement-Bentonite Grout Bentonite chips # 60 Sand Bentonite chips	2 89 99 116	89 99 101 140	Flush-mount

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Well ID	Northing (feet)	Easting (feet)	Surface Elevation (feet amsl)	TOC Elevation (feet amsl)	Depth to Screen Top (feet bgs)	Depth to Screen Bottom (feet bgs)	Total Depth (feet bgs)	Total Depth Drilled (feet bgs)	Borehole Diameter (inches)	Casing Diameter (inches)	Screen Material	Screen Slot Size (inches)	Casing Material	Filter Pack Grade	Filter Pack Top (feet bgs)	Filter Pack Bottom (feet bgs)	Drilling Method	Driller	Annular Seal Material	Annular Seal Top (feet bgs)	Annular Seal Bottom (feet bgs)	Wellhead Completion
PZ-157	267917.6295	1788242.536	1807.4	1809.80	22.3	32.3	32.8	45	8	2	SCH40 PVC	0.02	SCH40 PVC	#3	17	32.78	CME-85 HAS/HQ w/carbide bit	WDC	Cement-Bentonite Grout Bentonite chips # 60 Sand Bentonite chips	2 5 15 32.78	5 15 17 45	Monument
PZ-158	267307.2187	1788012.877	1795.4	1797.40	12.2	22.2	22.7	32	8	2	SCH40 PVC	0.02	SCH40 PVC	#3	7	22.74	CME-85 HAS/HQ w/carbide bit	WDC	Cement-Bentonite Grout Bentonite chips # 60 Sand Bentonite chips	2 3 6 22.74	3 6 7 32	Monument
PZ-159	267632.0562	1788806.35	1814.7	1814.20	8.8	18.8	23	41	8	2	SCH40 PVC	0.02	SCH40 PVC	#3	7	23	CME-85 HAS/HQ w/carbide bit	WDC	Cement-Bentonite Grout Bentonite chips # 60 Sand Bentonite chips	2 3 6 23	3 6 7 41	Flush-mount
PZ-160	268345.039	1786286.124	1849.14	1851.41	17.0	27.0	27	27	10 5/8	4	SCH40 PVC	0.020	SCH40 PVC	#3	14	27	Air Rotary	WDC	Cement-Bentonite Grout	1	14	Monument
PZ-161	268418.806	1786132.353	1850.00	1852.23	18	28	28	28	10 5/8	4	SCH40 PVC	0.020	SCH40 PVC	#3	15	28	Air Rotary	WDC	Cement-Bentonite Grout	1	15	Monument

Notes:
Northing and Easting Coordinates are in State Plane NAD 27, US Feet.
Abbreviations:
amsl - above mean sea level
bgs - below ground surface
SCH - schedule
PVC - polyvinyl chloride
TOC - top of casing
NM -not measured

APPENDIX D

QUALITY ASSURANCE ASSESSMENT

APPENDIX D
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1	Data Usability Summary Reports (on CD)

1. OVERVIEW

Field and laboratory data were reviewed for consistency with the procedures outlined in the *Groundwater Monitoring, Quality Assurance Project Plan, Santa Susana Field Laboratory* (GWRC, 1995c) following each 2009 quarterly groundwater sampling event. Results of the review are discussed in the following sections. The analytical data were validated pursuant to the process summarized in Section 3.2 of this Appendix.

2. INTRODUCTION

2.1 Quality Assurance/Quality Control (QA/QC) Procedures

Following each quarterly groundwater sampling event, field and laboratory data are reviewed for consistency with procedures outlined in the *Groundwater Monitoring, Quality Assurance Project Plan, Santa Susana Field Laboratory* (GWRC, 1995c). As the project develops, it is anticipated that the quality assurance assessment conducted following each quarterly event may be modified. The current procedures include reviewing field forms and documentation and evaluating whether field data were complete. Analytical data were reviewed by the laboratory for precision, accuracy, representativeness, and comparability as part of its standard Quality Assurance/Quality Control (QA/QC) program. QA/QC data were reported as part of the laboratory data package. Analytical data also were reviewed by Haley & Aldrich for data representativeness, reproducibility, completeness, erroneous data, and discrepancies.

Laboratories used during the year included

Laboratory	Abbreviation	Location
Eberline Services	Eberline	Richmond, California
General Engineering Laboratories	GEL	Charleston, South Carolina
Lancaster Laboratories	Lancaster	Lancaster, Pennsylvania
TestAmerica-Denver	TA-Denver	Arvada, Colorado
TestAmerica-Irvine	TA-Irvine	Irvine, California
TestAmerica-Knoxville	TA-Knoxville	Knoxville, Tennessee
Truesdail Laboratories, Inc.	Truesdail	Tustin, California
Weck Laboratories	Weck	City of Industry, California

Laboratories serving as primary versus split laboratories are identified in Table III.

Haley & Aldrich field and analytical data reviews are summarized in the following section.

Percent completeness (% C) values presented in this summary were calculated using the following equation:

$$\% \, C = \frac{\text{Number of Valid (Usable) Measurements}}{\text{Number of Measurements Planned}} \times 100$$

3. QA/QC EVALUATION

3.1 Field Data

3.1.1 Pre-Sampling Water Levels

During each quarterly sampling event, facility wells, three private off-site wells, and a number of piezometers were scheduled for water level monitoring prior to sampling. Monitoring attempts are summarized below. During the first quarter, nine wells were not monitored because the vault was welded shut to prevent surface water from infiltrating the well (2 wells), FLUTe systems prevented access (2 wells), dataloggers were inoperable (2 wells), open valve prevented pressure reading of artesian water level (1 well), partial collapse prevented water level measurement (1 well), and monitoring was not attempted (1 well). During the second quarter, five wells were not monitored because the vault was welded shut to prevent surface water from infiltrating the well (2 wells), FLUTe systems prevented access (1 well), datalogger was not installed (1 well), and an obstruction in the casing prevented water level measurement (1 well). During the third quarter, four wells were not monitored because the vault was welded shut to prevent surface water from infiltrating the well (2 wells), the FLUTe systems prevented access (1 well), and the datalogger was not installed (1 well). During the fourth quarter, ten wells were not monitored because the vault was welded shut to prevent surface water from infiltrating the well (2 wells), the FLUTe systems prevented access (1 well), site activities restricted access (6 wells), and the datalogger was not installed (1 well).

Water Level Monitoring	First Quarter 2009	Second Quarter 2009	Third Quarter 2009	Fourth Quarter 2009
Number of locations scheduled	320	306	288	328
Number of locations monitored	311	301	284	318
Completeness value	97%	98%	99%	97%

3.1.2 Groundwater Sample Collection

During each quarterly sampling event, the number of wells and piezometers scheduled for sampling ranged from 190 to 234. Of the locations scheduled for sampling, the percentage sampled each quarter ranged from 42% to 61%. Samples were not collected at a number of locations because the wells or piezometers were dry, contained inadequate water for sampling purposes, were inaccessible, or the well equipment malfunctioned.

Comparing the number of wells that could be sampled versus the schedule, the field completeness value for water sample collection during 2009 was 100%.

3.1.3 QA/QC Sample Collection

The QA/QC sample collection targets are listed in the Quality Assurance Project Plan (QAPP) (GWRC, 1995c) and the SMOU RFI QAPP (MECx, 2009). During 2009, the QA/QC targets were met except where wells contained inadequate water for QA/QC sampling purposes; for some analytical methods (350.3, 7196A, 8270SIM-pentachlorophenol, 8315-formaldehyde, 8315-hydrazines, and 8321A-hexachlorophene) which were not available at the pre-qualified split laboratories; or where monitoring was not attempted.

Percent Completeness for QA/QC Sample Collection								
QA/QC Samples	QAPP (GWRC, 1995c)				SMOU RFI QAPP (MECx, 2009)			
	1st	2nd	3rd	4th	1st	2nd	3rd	4th
Duplicate samples	90%	82%	100%	100%	83%	100%	83%	84%
Split samples	96%	69%	94%	100%	88%	82%	67%	100%
matrix spike and matrix spike duplicate (MS/MSD) samples	100%	72%	94%	86%	84%	95%	88%	78%
Trip blanks	100%	91%	100%	100%	100%	91%	100%	100%
VOC field blanks	95%	76%	90%	95%	95%	76%	90%	95%
Field blanks (other than VOCs)	60%	69%	97%	100%	94%	100%	88%	94%
Field blank-rinsate	NA	NA	NA	NA	75%	82%	94%	82%

NA = Not applicable. QC samples were collected using dedicated equipment.

3.1.4 Water Quality Parameter Measurements

Each water quality parameter (pH, temperature, electrical conductivity, and turbidity) is scheduled to be measured at least three times before sample collection. At 3 wells, one or more field parameters were not measured three times prior to sampling during the year. The quarterly completeness value for field parameters measured at least three times prior to sample collection ranged from 99% to 100%.

3.2 Analytical Data

All laboratories were certified by the California Department of Public Health Environmental Laboratory Accreditation Program.

3.2.1 Comparison with Historical Water Quality Data

Some analyte concentrations increased or decreased in groundwater samples collected during the year with respect to prior results, but most values were within the range of historical data. A summary of results is included in Section 2.2 of this report.

During the year, the laboratories were requested to confirm suspect results.

Results of verification sampling results are summarized in Section 2.2.4 of this report.

3.2.2 Lab Performance Comparison

Results of the split sample analyses are presented in Table D-I. Replicate percent differences (RPDs) were calculated for each analyte detected by both the primary and split laboratories if the analyte concentration exceeded the product of five times the reporting limit (RL) times the dilution factor. The RPD value calculated for 2009 split sample analyses ranged from 0% to 27%.

$$RPD = \left|((X_1 - X_2)/X_{ave})\right| \times 100$$

X_1 = value of first result;
X_2 = value of second result; and
X_{ave} = average concentration = $((X_1 + X_2) / 2)$

3.2.3 Field Duplicate Sample Precision

Results of analyses were precise as indicated by the RPDs of field duplicate samples (Table D-II). RPD values calculated for 2009 duplicate samples ranged from 0% to 46%.

3.2.4 Data Representativeness, Reproducibility, and Completeness

Data representativeness, reproducibility, and completeness of results were evaluated by verifying the following:

- all locations were sampled as scheduled,
- samples were properly collected and preserved (if required),
- procedures to maintain the integrity of samples during shipment were followed,
- sample dilutions were properly conducted,
- chain-of-custody records were complete when submitted or changed appropriately, and
- laboratory QA/QC data were obtained for each sample submitted.

All locations were sampled as scheduled except at locations where wells contained insufficient water volume, where equipment problems were encountered, or where wells were inaccessible. All samples were preserved (where necessary) and shipped following acceptable procedures. Samples from wells with previous TCE concentrations exceeding 3,000 μg/L were segregated during storage and shipment.

A few chain-of-custody forms were not completed satisfactorily. Because the laboratories were notified of the deficiencies immediately following sample submission, all samples submitted were identified correctly and analyzed according to the monitoring schedule. Field personnel were informed of the custody form deficiencies and provided a copy of the corrected custody form.

All samples were received appropriately, identified correctly, and analyzed according to the monitoring requirements.

3.2.5 Contract-Required Minimum Detectable Activity

Project laboratory analysis technical specifications, including Minimum Detectable Activities (MDAs), have been developed to aid in the collection of high quality data and to be consistent with EPA Drinking Water regulations (Federal Register, 2000). Non-attainment of the MDA technical specifications is due in part to matrix conditions and in part to limitations in the prescribed analytical methods. Matrix conditions, including concentrations of dissolved and suspended solids, impact the homogeneity of the samples and limit method counting efficiency. Additionally, prescribed analytical methods call for specified sample volumes and counting times that further limit the ability to attain the project MDAs.

During the year, the radiochemistry laboratories were able to meet the contract-required MDAs.

3.2.6 Data Usability Summary

Analytical results for groundwater samples, trip blank samples, field blank samples, and site specific matrix spike and matrix spike duplicate samples (MS/MSD) were reviewed to evaluate

the data usability. These data were assessed in accordance with guidance from the EPA "USEPA Contract Laboratory Program National Functional Guidelines for Low Concentration Organic Data Review" (OSWER 9240.1-34, USEPA-540-R-00-006, June 2001), "USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review" (OSWER 9240.1-46, USEPA-540-R-08-01, June 2008)", "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review" (EPA 540-R-01-008, July 2002), and the EPA Method specific protocol criteria, where applicable. Radiochemical data were assessed in accordance with protocols established for the U.S. Department of Energy, "Evaluation of Radiochemical Data Usability" (Paar & Porterfield, 1997).

Chain of custody documentation was completed by Haley & Aldrich personnel during the performance of sampling activities conducted at SSFL. The external chain of custody documents were completed appropriately upon sample transfer to analytical laboratory personnel.

A review of the chain of custody documents indicated that the sample custody remained intact through the analytical process and the reported results are representative of the samples collected at SSFL. The chain of custody documents are provided with each laboratory report.

The following items and criteria applicable to the QA/QC data and sample analysis data listed above were reviewed. Data Usability Summary Reports (DUSRs) are provided in Attachment 1 on the enclosed CD. Results requiring a change in the data qualifier are summarized in Table D-III.

- Preservation and Analytical Holding Time Compliance
- Method Blank, Trip Blank, and Field Blank Sample Analyses
- Surrogate Compound Recoveries
- Laboratory Control Sample Analyses
- Matrix Spike Sample Analyses
- Sample Data Reporting Procedures
- Laboratory Data Qualification Procedures

3.2.6.1 Sample Data Reporting

Laboratory analytical reports contain laboratory specific data qualifiers. When an analysis was performed without dilution, the reporting limit was based on the most recent MDL study conducted by the contract laboratory. The reporting limit values for the dilution analyses were adjusted for the level of dilution performed. Values presented for target analytes detected at concentrations below the reporting limit but above the MDL were flagged with a "J" as estimated values. No corrective action is recommended.

3.2.6.2 Data Qualifiers

The use of the data qualifiers is intended to aid users in their interpretation of the sample results. Laboratory specific data qualifiers were assigned by the laboratories to the reported results in accordance with each laboratory's standard operating procedures. However, some data qualifiers used by the laboratories do not correspond with standard EPA guidance as referenced in this document. The recommended EPA data qualifiers should preclude the use of the laboratory specific qualifiers so that comparability of the

reported results can be achieved if future analyses are performed at other laboratory facilities.

3.2.6.3 Summary

The results presented in each laboratory report were found to be compliant with the data quality objectives (DQOs) for the project and usable, with the exceptions noted in Table D-III. Based on this review, the data usability is 100%, with the exceptions noted in Table D-III.

TABLE D-I
SUMMARY OF 2009 SPLIT SAMPLE RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Geological Unit	Date	Method (units)	Constituent	Sample Result		RPD
					Primary	Split	
ES-21	Shallow	05/28/09	8260B (ug/L)	1,1-Dichloroethene	0.8 U	0.32 J	NV
				cis-1,2-Dichloroethene	190	130	NV
				trans-1,2-Dichloroethene	23	15	NV
				Trichloroethene	340	230	NV
				Vinyl chloride	5	4.2	NV
HAR-07	Chatsworth	03/05/09	300.0 (mg/L)	Fluoride	0.27	0.27	NV
HAR-08	Chatsworth	02/19/09	300.0 (mg/L)	Fluoride	0.27	0.22	NV
HAR-11	Shallow	02/26/09	8260B (ug/L)	cis-1,2-Dichloroethene	1.9	1.5	NV
HAR-16	Chatsworth	04/23/09	376.2 (mg/L)	Sulfide	0.0071 U	0.054 U	ND
			504.1 (ug/L)	1,2-Dibromo-3-chloropropane	0.0065 U	0.0098 U	ND
				1,2-Dibromoethane	0.0035 U	0.0098 U	ND
			524M (ug/L)	1,2,3-Trichloropropane	0.012	0.005	NV
			6010B (mg/L)	Barium, Dissolved	---	0.023	NV
				Zinc, Dissolved	---	0.719	NV
			6020 (mg/L)	Arsenic, Dissolved	0.00047 J	0.00095 U	NV
				Barium, Dissolved	0.025	---	NV
				Cobalt, Dissolved	0.000054 J	---	NV
				Copper, Dissolved	0.0056	0.0042	NV
				Lead, Dissolved	0.0014	0.0011	NV
				Nickel, Dissolved	0.0018 J	0.0015 J	NV
				Selenium, Dissolved	0.0029 J	0.0025	NV
				Vanadium, Dissolved	0.00096 J	---	NV
				Zinc, Dissolved	0.85	---	NV
			7470A (mg/L)	Mercury, Dissolved	0.000027 U	0.000056 U	ND
			8081A (ug/L)	Organochlorine pesticides	None detected	None detected	ND
			8082 (ug/L)	PCBs	None detected	None detected	ND
			8141A (ug/L)	Organophosphorous compounds	None detected	None detected	ND
			8151A (ug/L)	Chlorinated herbicides	None detected	None detected	ND
			8260B (ug/L)	1,1-Dichloroethene	28 J	27 J	NV
				cis-1,2-Dichloroethene	160	150	NV
				Tetrachloroethene	16 J	16 J	NV
				Trichloroethene	15000	12000	NV
				Trichlorofluoromethane	30 J	21	NV
			8270C (ug/L)	n-Nitrosodimethylamine	21	18	NV
			8290 (pg/L)	Dioxins and Furans	None detected	None detected	ND
			9012A (mg/L)	Cyanides	0.0024 U	0.005 U	ND
		10/23/09	8260B (ug/L)	1,1,2-Trichloro-1,2,2-trifluoroethane	32 U	1.6 J	NV
				1,1,2-Trichloroethane	13 U	1.5	NV
				1,1-Dichloroethane	6.4 U	2.5	NV
				1,1-Dichloroethene	24 J	22	NV
				Benzene	6.4 U	0.36 J	NV
				Bromodichloromethane	6.8 U	47	NV
				Carbon Tetrachloride	7.6 U	0.67	NV
				Chloroform	7.2 U	6.9	NV
				cis-1,2-Dichloroethene	170	200	NV
				Tetrachloroethene	14 J	14	NV
				trans-1,2-Dichloroethene	6 U	2	NV
				Trichloroethene	14000	12000	NV
				Trichlorofluoromethane	19 J	15	NV
HAR-17	Chatsworth	07/16/09	8290 (pg/L)	Dioxins and Furans	None detected	None detected	ND
		11/3/2009	8260B (ug/L)	1,1,2-Trichloro-1,2,2-trifluoroethane	42	47	11
				1,1-Dichloroethane	0.67 J	0.57 J	NV
				1,1-Dichloroethene	0.7 J	0.42 U	NV
				Acetone	1.9 R	4.5 U	NV
				cis-1,2-Dichloroethene	19 J	17	11
				trans-1,2-Dichloroethene	0.37 J	0.3 U	NV
				trans-1,3-Dichloropropene	0.25 R	0.32 U	NV
				Trichloroethene	110	84	NV
HAR-18	Chatsworth	04/30/09	300.0 (mg/L)	Fluoride	0.27	0.25	NV
				Nitrate-NO3	22	5	NV
			8260B (ug/L)	1,1,2-Trichloro-1,2,2-trifluoroethane	400	710	NV
				1,1-Dichloroethane	3 J	2.7 J	NV
				1,1-Dichloroethene	42	43	NV
				Chloroform	2 U	0.98 J	NV
				cis-1,2-Dichloroethene	1200	1000	NV
				Tetrachloroethene	2.4 J	2.5 J	NV
				trans-1,2-Dichloroethene	23	19	NV
				Trichloroethene	1200	1400	NV
HAR-18	Chatsworth	04/30/09	8260B (ug/L)	Vinyl chloride	130	120	NV
			8260B SIM (ug/L)	1,4-Dioxane	6.1	7.3	NV
			8270C (ug/L)	n-Nitrosodimethylamine	2 U	1.6 J	NV

See Table III for notes and abbreviations.

TABLE D-I
SUMMARY OF 2009 SPLIT SAMPLE RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Geological Unit	Date	Method (units)	Constituent	Sample Result		RPD
					Primary	Split	
HAR-20	Chatsworth	02/17/09	314.0 (ug/L)	Perchlorate	0.7 U	0.33 J	ND
		04/30/09	314.0 (ug/L)	Perchlorate	0.7 U	0.28 U	ND
HAR-22	Chatsworth	07/21/09	8260B (ug/L)	cis-1,2-Dichloroethene	4.8	5.2	4
				trans-1,2-Dichloroethene	0.2 J	0.22 J	NV
				Trichloroethene	1.1	1.2	NV
				Vinyl chloride	0.1 J	0.4 U	ND
HAR-26	Chatsworth	03/02/09	8270C (ug/L)	SVOCs	None detected	None detected	ND
		07/20/09	8270C (ug/L)	SVOCs	None detected	None detected	ND
OS-04	Chatsworth	03/03/09	8260B (ug/L)	VOCs	None detected	None detected	ND
OS-28	Chatsworth	03/10/09	1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
		07/30/09	1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
PZ-004A	Shallow	02/26/09	6010B (mg/L)	Barium, Dissolved	0.043	0.043	NV
				Cobal, Dissolved	0.0069	0.0066 J	NV
				Iron, Dissolved	2.35	2.4	2
				Manganese, Dissolved	0.213	0.21	1
				Vanadium, Dissolved	0.0025 U	0.002 J	ND
				Zinc, Dissolved	0.0107 J	0.011 J	NV
			6020 (mg/L)	Antimony, Dissolved	0.0003 U	0.00023 J	ND
				Arsenic, Dissolved	0.0051	0.0052	NV
				Beryllium, Dissolved	0.00017 J	0.00018 J	NV
				Cadmium, Dissolved	0.00021 U	0.000063 J	ND
				Chromium, Dissolved	0.000074 J	0.0012 J	NV
				Copper, Dissolved	0.0017 J	0.0016 J	NV
				Lead, Dissolved	0.00014 J	0.00026 J	NV
				Nickel, Dissolved	0.0098	0.01	NV
				Selenium, Dissolved	0.00099 U	0.001 J	ND
				Thallium, Dissolved	0.00015 U	0.000038 J	ND
			7470A (mg/L)	Mercury, Dissolved	0.000056 U	0.000027 U	ND
PZ-071	Shallow	05/07/09	6010B (mg/L)	Aluminum, Dissolved	0.145 J	0.15	NV
				Barium, Dissolved	0.067	0.073	9
				Cobalt, Dissolved	0.0021 U	0.0015 J	NV
				Iron, Dissolved	0.345	0.28	NV
				Manganese, Dissolved	0.44	0.52	17
				Molybdenum, Dissolved	0.0255	0.016 J	NV
				Vanadium, Dissolved	0.0025 U	0.0023 J	NV
			6020 (mg/L)	Antimony, Dissolved	0.0003 U	0.00016 J	NV
				Arsenic, Dissolved	0.00095 U	0.00092 J	NV
				Cadmium, Dissolved	0.00021 U	0.0002 J	NV
				Copper, Dissolved	0.00081 J	0.00069 J	NV
				Lead, Dissolved	0.00013 J	0.00018 U	NV
				Nickel, Dissolved	0.0048	0.0049	NV
				Selenium, Dissolved	0.00099 U	0.00072 J	NV
			7470A (mg/L)	Mercury, Dissolved	0.000056 U	0.000027 U	ND
			8260B SIM (ug/L)	1,4-Dioxane	0.5 U	1 U	ND
			8290 (pg/L)	Dioxins and Furans	None detected	None detected	ND
		07/16/09	8015B (mg/L)	Diesel Range Organics (C15-C20)	0.12 J	0.03 U	ND
			8290 (pg/L)	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	280	4.76 U	ND
				1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	2.7 J	4.76 U	ND
				2,3,7,8-Tetrachlorodibenzofuran	3.6 J	2.56 U	ND
				Octachlorodibenzo-p-dioxin	4100 J	9.51 U	ND
PZ-103	Shallow	02/26/09	300.0 (mg/L)	Bromide	0.068	0.39	NV
				Chloride	188	160	NV
				Fluoride	0.79	0.52	NV
				Nitrate-NO3	40	43	NV
				Sulfate	92.8	94	NV
PZ-105	Shallow	02/11/09	8260B (ug/L)	Trichloroethene	10	11	10
		04/29/09	6010B (mg/L)	Barium, Dissolved	0.015	0.015	NV
				Boron, Dissolved	0.158	0.15	NV
				Iron, Dissolved	0.0522 U	0.027 J	NV
				Magnesium, Dissolved	17.3	17	NV
				Manganese, Dissolved	0.0031 J	0.0036 J	NV
				Molybdenum, Dissolved	0.0331 U	0.022	NV
				Strontium, Dissolved	0.397	0.4	1
				Vanadium, Dissolved	0.0029	0.0029 J	NV
				Zinc, Dissolved	0.0081	0.0061 J	NV
			6020 (mg/L)	Antimony, Dissolved	0.00032 J	0.00032 J	NV
				Arsenic, Dissolved	0.0017 J	0.0018 J	NV
				Cadmium, Dissolved	0.00021 U	0.00018 J	NV
				Chromium, Dissolved	0.00068 U	0.00066 J	NV
				Copper, Dissolved	0.00042 J	0.00056 U	NV
				Nickel, Dissolved	0.0005 U	0.0006 J	NV

See Table III for notes and abbreviations.

TABLE D-I
SUMMARY OF 2009 SPLIT SAMPLE RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Geological Unit	Date	Method (units)	Constituent	Sample Result		RPD
					Primary	Split	
PZ-105	Shallow	04/29/09	7470A (mg/L)	Mercury, Dissolved	0.000056 U	0.000027 U	ND
		07/10/09	8015B (mg/L)	DRO	None detected	None detected	ND
			8260B (ug/L)	Trichloroethene	5.8	4.5	NV
PZ-108	Shallow	02/18/09	314.0 (ug/L)	Perchlorate	0.7 U	0.28 U	ND
			300.0 (mg/L)	Bromide	0.49 J	0.21	NV
				Chloride	42.8	49	NV
				Fluoride	0.59	0.6	NV
				Nitrate-NO3	12	12	0
				Sulfate	128	130	NV
		07/14/09	300.0 (mg/L)	Bromide	0.46 J	0.19 J	NV
				Chloride	43.5	49	NV
				Fluoride	0.49	0.53	NV
				Sulfate	118	120	NV
			314.0 (ug/L)	Perchlorate	0.7 U	0.28 U	ND
PZ-109	Shallow	04/30/09	300.0 (mg/L)	Bromide	0.91	0.69	NV
				Chloride	56.3	59	NV
				Fluoride	1	1	NV
				Nitrate-NO3	7	1.6 J	NV
				Sulfate	129	130	NV
PZ-122	Shallow	02/19/09	6010B (mg/L)	Aluminum, Dissolved	0.0802 U	0.024 J	ND
				Barium, Dissolved	0.046	0.055	18
				Boron, Dissolved	0.192	0.21	NV
				Iron, Dissolved	0.0522 U	0.034 J	ND
				Magnesium, Dissolved	17.5	20	NV
				Manganese, Dissolved	0.0074	0.0094 J	NV
				Strontium, Dissolved	0.279	0.34	20
				Vanadium, Dissolved	0.0025 U	0.0017 J	ND
			6020 (mg/L)	Antimony, Dissolved	0.0003 U	0.000093 J	ND
				Arsenic, Dissolved	0.00095 U	0.001 J	ND
				Nickel, Dissolved	0.0019 J	0.0025	NV
				Thallium, Dissolved	0.00015 U	0.000029 J	ND
			7470A (mg/L)	Mercury, Dissolved	0.000056 U	0.000027 U	ND
			9040B (pH units)	pH	7	7.1	1
		05/05/09	314.0 (ug/L)	Perchlorate	0.7 U	0.28 U	ND
			9040B (pH units)	pH	7.1	7.1	0
		07/14/09	6010B (mg/L)	Aluminum, Dissolved	0.0802 U	0.049 J	ND
				Barium, Dissolved	0.0523	0.053	1
				Boron, Dissolved	0.22	0.23	NV
				Iron, Dissolved	0.0522 U	0.069 J	ND
				Magnesium, Dissolved	19.9	20	NV
				Manganese, Dissolved	0.0139	0.015	NV
				Strontium, Dissolved	0.33	0.34	1
				Vanadium, Dissolved	0.0025 U	0.0013 J	ND
				Zinc, Dissolved	0.037	0.0052 J	NV
			6020 (mg/L)	Antimony, Dissolved	0.0003 U	0.000077 J	ND
				Arsenic, Dissolved	0.00095 U	0.00051 J	ND
				Cadmium, Dissolved	0.0002 U	0.000064 J	ND
				Nickel, Dissolved	0.0018 U	0.0031	ND
			7470A (mg/L)	Mercury, Dissolved	0.000056 U	0.000027 U	ND
			9040B (pH units)	pH	7	7.2	1
		10/13/200	300.0 (mg/L)	Bromide	0.33 J	0.45 J	NV
				Chloride	33	37	11
				Fluoride	0.34 U	0.36 J	NV
				Nitrate-NO3	13	14	7
				Sulfate	100	100	NV
			9040B (pH units)	pH	7.2	7.05 J	2
PZ-139	Shallow	10/15/200	7196A (mg/L)	Hexavalent Chromium, Dissolved	0.0044 U	0.005 U	ND
			1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
PZ-140	Shallow	10/20/200	6010B (mg/L)	Manganese, Dissolved	0.087	0.088	NV
				Molybdenum, Dissolved	0.0044 J	0.0057 J	NV
				Vanadium, Dissolved	0.0014 J	0.003 U	NV
			6020 (mg/L)	Antimony, Dissolved	0.00017 U	0.00032 J	NV
				Arsenic, Dissolved	0.00076 J	0.0011	NV
				Barium, Dissolved	0.055	0.056	2
				Cadmium, Dissolved	0.00013 U	0.00011 J	NV
				Copper, Dissolved	0.00062 J	0.0012 J	NV
				Nickel, Dissolved	0.0047	0.0029	NV
				Selenium, Dissolved	0.0011 J	0.0012 J	NV
				Thallium, Dissolved	0.000049 U	0.00032 J	NV

See Table III for notes and abbreviations.

TABLE D-I
SUMMARY OF 2009 SPLIT SAMPLE RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Geological Unit	Date	Method (units)	Constituent	Sample Result		RPD
					Primary	Split	
PZ-140	Shallow	10/20/200	7470A (mg/L)	Mercury, Dissolved	0.000027 U	0.000073 U	ND
PZ-141	Shallow	11/3/2009	8260B SIM (ug/L)	1,4-Dioxane	0.19 U	1 U	ND
RD-01	Chatsworth	02/25/09	314.0 (ug/L)	Perchlorate	0.7 U	1.4 U	ND
			1625M (ug/L)	n-Nitrosodimethylamine	0.015	0.017	NV
		10/27/09	300.0 (mg/L)	Fluoride	0.33 U	0.5	NV
				Nitrate-NO3	0.19 U	0.25 U	ND
			350.1 (mg/L)	Ammonia-N	0.47 U	0.22 U	ND
			8270C (ug/L)	Benzidine	48 U	9.8 R	NV
RD-03	Chatsworth	10/27/09	314.0 (ug/L)	Perchlorate	0.28 U	0.9 U	ND
			6010B (mg/L)	Boron, Dissolved	0.054	0.044 J	NV
				Iron, Dissolved	0.31	0.31	NV
				Magnesium, Dissolved	28	27	4
				Manganese, Dissolved	0.28	0.28	0
				Molybdenum, Dissolved	0.0031 U	0.0053 J	NV
				Strontium, Dissolved	0.32	0.31	3
			6020 (mg/L)	Arsenic, Dissolved	0.00021 U	0.00095 J	NV
				Barium, Dissolved	0.057	0.053	7
				Copper, Dissolved	0.00056 U	0.0008 J	NV
				Lead, Dissolved	0.00018 J	0.00024 J	NV
				Nickel, Dissolved	0.0018 J	0.0012 J	NV
				Selenium, Dissolved	0.0007 U	0.0014 J	NV
				Zinc, Dissolved	0.047	0.041	NV
			7470A (mg/L)	Mercury, Dissolved	0.000027 U	0.000073 U	ND
			8015B (mg/L)	DRO	None detected	None detected	ND
			8082 (ug/L)	PCBs	None detected	None detected	ND
			8290 (pg/L)	1,2,3,4,6,7,8-Heptachlorodibenzofuran	2.3 U	0.85 J	NV
				1,2,3,4,7,8,9-Heptachlorodibenzofuran	4.7 U	1 J	NV
				1,2,3,4,7,8-Hexachlorodibenzofuran	1.3 U	0.75 J	NV
				1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	2.1 U	1.1 J	NV
				1,2,3,6,7,8-Hexachlorodibenzofuran	1.2 U	0.86 J	NV
				1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	2.1 U	0.38 J	NV
				1,2,3,7,8,9-Hexachlorodibenzofuran	1.7 U	0.8 J	NV
				1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	2 U	1 J	NV
				1,2,3,7,8-Pentachlorodibenzofuran	1.9 U	0.57 J	NV
				2,3,4,6,7,8-Hexachlorodibenzofuran	1.3 U	0.73 J	NV
				2,3,4,7,8-Pentachlorodibenzofuran	1.6 U	0.53 J	NV
				2,3,7,8-TCDD TEQ	8.92 U	0.76 J	NV
RD-05B	Chatsworth	02/13/09	8260B (ug/L)	Carbon Disulfide	0.5	0.45 U	ND
RD-06	Chatsworth	05/04/09	8260B (ug/L)	Carbon Disulfide	0.4 J	0.63 J	NV
RD-07	Chatsworth	02/20/09	8290 (pg/L)	Octachlorodibenzo-p-dioxin	2.1 J	17.2 U	ND
RD-08	Chatsworth	11/4/2009	8270C (ug/L)	PAHs	None detected	None detected	ND
RD-09	Chatsworth	02/19/09	8315A (ug/L)	Formaldehyde	10 J	33 U	ND
		07/28/09	300.0 (mg/L)	Fluoride	0.2	0.17 J	NV
				Nitrate-NO3	0.22 U	0.19 U	ND
RD-10	Chatsworth	02/26/09	8315A (ug/L)	Formaldehyde	10 U	30 U	ND
RD-11	Chatsworth	05/14/09	8270C (ug/L)	PAHs	None detected	None detected	ND
RD-13	Chatsworth	03/09/09	1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
			8330 (ug/L)	Nitroaromatics and nitramines	None detected	None detected	ND
		05/06/09	1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
			8330 (ug/L)	Nitroaromatics and nitramines	None detected	None detected	ND
		07/15/09	1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
			8330 (ug/L)	Nitroaromatics and nitramines	none detected	none detected	ND
RD-13	Chatsworth	10/21/09	1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
			8330 (ug/L)	Nitroaromatics and nitramines	None detected	None detected	ND
			8315A (ug/L)	Formaldehyde	8.4 U	0.564 U	ND
RD-15	Chatsworth	02/24/09	6010B (mg/L)	Barium, Dissolved	0.0498	0.052	4
				Iron, Dissolved	0.219	0.27	NV
				Manganese, Dissolved	0.0696	0.071	2
				Zinc, Dissolved	0.599	0.64	7
			6020 (mg/L)	Antimony, Dissolved	0.0003 U	0.00016 J	ND
				Arsenic, Dissolved	0.00095 U	0.00043 J	ND
				Copper, Dissolved	0.0024	0.0028	NV
				Lead, Dissolved	0.0017	0.0018	NV
				Nickel, Dissolved	0.0016 J	0.0021	NV
				Thallium, Dissolved	0.00015 U	0.000045 J	ND
			7470A (mg/L)	Mercury, Dissolved	0.000056 U	0.000027 U	ND

TABLE D-I
SUMMARY OF 2009 SPLIT SAMPLE RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Geological Unit	Date	Method (units)	Constituent	Sample Result		RPD
					Primary	Split	
RD-15	Chatsworth	02/24/09	900.0 (pCi/L)	Gross Alpha, Dissolved	6.78 ± 2.4	9.05 ± 1.84	NV
				Gross Beta, Dissolved	6.68 ±1.6	6.8 ± 1.39	NV
				Gross Alpha	9.9 ± 3	10.2 ± 2.57	NV
				Gross Beta	7.43 ± 2.1	7.13 ± 1.72	NV
			901.1 (pCi/L)	Potassium-40, Dissolved	95.1 ± 24	-18.1 U ± -20.6	ND
				Gamma-emitting radionuclides	None detected	None detected	ND
			905.0 (pCi/L)	Strontium-90, Dissolved	0.065 U ± 0.32	-0.52 U ± 0.512	ND
				Strontium-90	0.099 U ± 0.3	-0.167 U ± 0.529	ND
			906.0 (pCi/L)	Tritium	61.2 U ± 91	47.6 U ± 87.7	ND
RD-16	Chatsworth	10/20/09	8260B (ug/L)	VOCs	None detected	None detected	ND
RD-18	Chatsworth	03/02/09	8260B (ug/L)	Isopropanol	50 U	13 U	ND
		05/05/09	8260B (ug/L)	VOCs	None detected	None detected	ND
RD-20	Chatsworth	05/06/09	8290 (pg/L)	1,2,3,4,6,7,8-HpCDF	2 J	4.77 U	NV
RD-21(Z2)	Chatsworth	04/29/09	8015B (mg/L)	Diesel Range Organics (C15 - C20)	13 J	3.4	NV
				Diesel Range Organics (C8 - C30)	13 J	0.031 U	NV
RD-24	Chatsworth	10/27/09	900.0	Gross Alpha	4.87 ± 2.9	7.6 ± 2.8	NV
			900.0	Gross Alpha, Dissolved	4.57 ± 1.9	12.5 ± 3.8	NV
			900.0	Gross Beta	7.31 ± 2.2	7 ± 1.7	NV
			900.0	Gross Beta, Dissolved	6.77 ± 1.8	9.8 ± 2.3	NV
			901.1	Gamma-emitting radionuclides	None detected	None detected	NV
			901.1	Gamma-emitting radionuclides, Dissolved	None detected	None detected	NV
			905.0	Strontium-90	None detected	None detected	NV
			905.0	Strontium-90, Dissolved	None detected	None detected	NV
			906.0	Tritium	None detected	None detected	NV
RD-26	Chatsworth	05/27/09	8260B (ug/L)	Carbon Tetrachloride	0.2 J	0.24 J	NV
				Chloroform	0.2 J	0.27 J	NV
				Trichloroethene	4.9	5	NV
RD-33C	Chatsworth	02/24/09	900.0 (pCi/L)	Gross Alpha, Dissolved	1.53 J ± 1	6.12 ± 1.53	NV
				Gross Beta, Dissolved	4.93 ± 1.1	6.54 ± 1.31	NV
				Gross Alpha	0.345 U ± 1.3	8.05 ± 1.73	ND
				Gross Beta	3.96 J ± 1.3	6.15 ± 1.3	NV
			901.1 (pCi/L)	Gamma-emitting radionuclides-Dissolved	None detected	None detected	ND
				Gamma-emitting radionuclides	None detected	None detected	ND
			9012A (mg/L)	Cyanides	0.005 U	0.0053 J	ND
			905.0 (pCi/L)	Strontium-90, Dissolved	0.092 U ± 0.29	0.102 U ± 0.732	ND
				Strontium-90	0.178 U ± 0.28	-0.944 U ± 0.653	ND
			906.0 (pCi/L)	Tritium	25.8 U ± 90	-40.2 U ± 88.4	ND
		07/24/09	900.0 (pCi/L)	Gross Alpha	1.72 J ± 1.2	4.99 ± 2.98	NV
				Gross Beta	4.94 ± 2	6.42 ± 2.48	NV
			901.1 (pCi/L)	Gamma-emitting radionuclides	None detected	None detected	ND
			905.0 (pCi/L)	Strontium-90	0.027 U ± 0.22	0.617 U ± 0.685	ND
			906.0 (pCi/L)	Tritium	72.1 U ± 85	29.2 U ± 84.8	ND
RD-34A	Chatsworth	03/05/09	9012A (mg/L)	Cyanides	0.005 U	0.0024 U	ND
RD-34B	Chatsworth	02/20/09	6010B (mg/L)	Barium, Dissolved	0.0906	0.092	2
				Iron, Dissolved	1.02	1.1	8
				Manganese, Dissolved	0.102	0.1	2
				Zinc, Dissolved	0.373	0.37	1
			6020 (mg/L)	Antimony, Dissolved	0.0003 U	0.00015 J	ND
				Arsenic, Dissolved	0.00095 U	0.00023 J	ND
				Nickel, Dissolved	0.00057 J	0.0009 J	NV
				Silver, Dissolved	0.00008 U	0.00017 J	ND
				Thallium, Dissolved	0.00015 U	0.000023 J	ND
			7470A (mg/L)	Mercury, Dissolved	0.000056 U	0.000027 U	ND
RD-34C	Chatsworth	07/23/09	900.0 (pCi/L)	Gross Alpha, Dissolved	1.63 J ± 0.9	2.84 U ± 2.24	ND
				Gross Beta, Dissolved	5.1 ± 1.1	5.16 ± 2.47	NV
				Gross Alpha	1.14 J ± 0.82	4.29 ± 2.53	NV
				Gross Beta	4.33 ± 1.1	4.5 ± 2.72	NV
			901.1 (pCi/L)	Gamma-emitting radionuclides-Dissolved	None detected	None detected	ND
				Gamma-emitting radionuclides	None detected	None detected	ND
			905.0 (pCi/L)	Strontium-90, Dissolved	-0.227 U ± 0.18	0.335 U ± 0.619	ND
				Strontium-90	0.088 U ± 0.26	2.13 ± 0.634	ND
			906.0 (pCi/L)	Tritium	76.1 U ± 85	-3.89 U ± 83.6	ND
RD-36B	Chatsworth	02/18/09	8260B (ug/L)	Chloroform	0.8 U	0.22 J	ND
				cis-1,2-Dichloroethene	0.8 U	0.37 J	ND
				Tetrachloroethene	10	9.6	NV
				Trichloroethene	130	120	8
RD-36C	Chatsworth	02/23/09	8015B (ug/L)	Gasoline Range Organics (C6-C12)	50 U	75	ND

TABLE D-I
SUMMARY OF 2009 SPLIT SAMPLE RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Geological Unit	Date	Method (units)	Constituent	Sample Result		RPD
					Primary	Split	
RD-37	Chatsworth	05/13/09	8260B (ug/L)	cis-1,2-Dichloroethene	0.1 J	0.15 U	NV
		07/13/09	1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
			376.2 (mg/L)	Sulfide	0.21	0.23	NV
			504.1 (ug/L)	1,2-Dibromo-3-chloropropane	0.0064 U	0.0097 U	ND
				1,2-Dibromoethane	0.0035 U	0.0097 U	ND
			524M (ug/L)	1,2,3-Trichloropropane	0.0017 U	0.0012 U	ND
			8081A (ug/L)	Organochlorine pesticides	None detected	None detected	ND
			8082 (ug/L)	Polychlorinated biphenyl (PCBs)	None detected	None detected	ND
			8141A (ug/L)	Organophosphorous compounds	None detected	None detected	ND
			8151A (ug/L)	2,4,5-TP (Silvex)	0.24 U	0.01 J	ND
			8260B (ug/L)	VOCs	None detected	None detected	ND
			8260B SIM (ug/L)	1,4-Dioxane	1.5 J	0.9 J	NV
			8270C (ug/L)	bis(2-Ethylhexyl) phthalate	1.4 J,L	8 U	ND
			8290 (pg/L)	Octachlorodibenzo-p-dioxin	130 U	13.2 J	ND
			9012A (mg/L)	Cyanides	0.0024 U	0.005 U	ND
RD-37	Chatsworth	10/28/09	8151A (ug/L)	Chlorinated herbicides	None detected	None detected	ND
			8290 (pg/L)	Octachlorodibenzo-p-dioxin	31 J,L	3.3 U	NV
RD-41B	Chatsworth	02/12/09	6010B (mg/L)	Barium, Dissolved	0.0484	0.048	NV
				Iron, Dissolved	5.88	5.5	7
				Manganese, Dissolved	0.223	0.21	6
				Vanadium, Dissolved	0.0025 U	0.0011 J	ND
				Zinc, Dissolved	0.661	0.68	3
		02/12/09	6020 (mg/L)	Antimony, Dissolved	0.0003 U	0.0001 J	ND
				Arsenic, Dissolved	0.00095 U	0.00062 J	ND
				Lead, Dissolved	0.00039 J	0.00037 J	NV
				Nickel, Dissolved	0.0005 U	0.00087 J	ND
				Selenium, Dissolved	0.00099 U	0.00096 J	ND
				Thallium, Dissolved	0.00015 U	0.000025 J	ND
			7470A (mg/L)	Mercury, Dissolved	0.000056 U	0.000027 U	ND
		05/04/09	1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
			300.0 (mg/L)	Fluoride	0.24	0.12 J	NV
				Nitrate-NO3	0.22 U	0.19 UJ	ND
			314.0 (ug/L)	Perchlorate	0.7 U	0.28 U	ND
			8260B SIM (ug/L)	1,4-Dioxane	1.1 J	1.2 J	NV
			8270C (ug/L)	SVOCs	None detected	None detected	ND
RD-43A	Chatsworth	10/21/09	8260B (ug/L)	VOCs	None detected	None detected	ND
RD-43C	Chatsworth	10/21/09	8260B (ug/L)	Tetrachloroethene	0.23 J	0.32 U	NV
RD-44	Chatsworth	10/28/09	1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
			314.0 (ug/L)	Perchlorate	0.28 U	0.9 U	ND
RD-45B	Chatsworth	07/29/09	8260B (ug/L)	cis-1,2-Dichloroethene	36	28	13
				trans-1,2-Dichloroethene	2 J	1.7	NV
				Trichloroethene	2	1.3	NV
RD-45C	Chatsworth	07/16/09	8260B (ug/L)	VOCs	None detected	None detected	ND
RD-46B	Chatsworth	10/22/09	8270C (ug/L)	SVOCs	None detected	None detected	ND
RD-47	Chatsworth	07/30/09	8260B (ug/L)	cis-1,2-Dichloroethene	0.6	0.54 J	NV
				Trichloroethene	0.1 J	0.16 U	ND
RD-48C	Chatsworth	10/28/09	8015B (mg/L)	DRO	None detected	None detected	ND
RD-49A	Chatsworth	03/05/09	1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
RD-49B	Chatsworth	07/28/09	8260B SIM (ug/L)	1,4-Dioxane	1.9 J	2.4	NV
		10/30/09	8015B (mg/L)	DRO	None detected	None detected	ND
RD-49C	Chatsworth	07/28/09	8260B (ug/L)	cis-1,2-Dichloroethene	100	78	12
				trans-1,2-Dichloroethene	3 J	2.4	NV
				Trichloroethene	13	11	8
				Vinyl chloride	1	1.4	NV
			8270C (ug/L)	bis(2-Ethylhexyl) phthalate	25 L	0.53 U	ND
RD-50	Chatsworth	02/20/09	8015B (ug/L)	Diesel Range Organics (C15-C20)	19,000 J	6400	NV
RD-51B	Chatsworth	02/09/09	8260B SIM (ug/L)	1,4-Dioxane	0.5 U	1 U	ND
		05/27/09	8260B (ug/L)	cis-1,2-Dichloroethene	9.6	9.2	4
				trans-1,2-Dichloroethene	0.8	0.81 J	NV
				Trichloroethene	4.3	4	NV
				Vinyl chloride	5.7	7.5	27
RD-51C	Chatsworth	05/05/09	8260B (ug/L)	VOCs	None detected	None detected	ND
		10/19/09	1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
RD-52B	Chatsworth	07/17/09	8260B (ug/L)	cis-1,2-Dichloroethene	3.3	3.6	NV
				trans-1,2-Dichloroethene	0.9	0.86 J	NV
				Trichloroethene	1	0.94 J	NV
RD-52C	Chatsworth	05/08/09	8260B (ug/L)	Carbon Disulfide	0.7	4.5 U	NV
RD-53	Chatsworth	03/04/09	8015B (ug/L)	Gasoline Range Organics (C6-C12)	92 J	130	NV
		07/21/09	8015B (ug/L)	Gasoline Range Organics (C6-C12)	88 J	46 J	NV

TABLE D-I
SUMMARY OF 2009 SPLIT SAMPLE RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Geological Unit	Date	Method (units)	Constituent	Sample Result		RPD
					Primary	Split	
RD-54B	Chatsworth	10/30/09	6010B (mg/L)	Aluminum, Dissolved	---	0.04 U	NV
				Iron, Dissolved	1.9	1.8	5
				Manganese, Dissolved	0.1	0.096	NV
				Molybdenum, Dissolved	0.0038 J	0.0035 J	NV
			6020 (mg/L)	Barium, Dissolved	0.051	0.054	6
				Copper, Dissolved	0.00099 J	0.002 U	NV
				Lead, Dissolved	0.00073 J	0.00074 J	NV
				Nickel, Dissolved	0.0027	0.0045	NV
				Selenium, Dissolved	0.0007 U	0.0015 J	NV
				Zinc, Dissolved	0.92 J	0.83	10
			7470A (mg/L)	Mercury, Dissolved	0.000027 U	0.000073 U	ND
RD-54C	Chatsworth	08/04/09	6010B (mg/L)	Barium, Dissolved	0.076	0.074	1
				Iron, Dissolved	1.33	1.4	3
				Manganese, Dissolved	0.224	0.21	3
				Molybdenum, Dissolved	0.0049 U	0.0064 J	ND
				Zinc, Dissolved	1.64	1.6	1
			6020 (mg/L)	Arsenic, Dissolved	0.00095 U	0.00079 J	ND
				Lead, Dissolved	0.00026 U	0.00019 J	ND
			7470A (mg/L)	Mercury, Dissolved	0.000056 U	0.000028 U	ND
RD-55A	Chatsworth	04/30/09	8260B (ug/L)	cis-1,2-Dichloroethene	2.9	2	NV
				trans-1,2-Dichloroethene	0.2 J	0.16 J	NV
				Trichloroethene	5.1	4.7	NV
				Vinyl chloride	0.4 J	0.4 U	NV
RD-55B	Chatsworth	11/2/2009	8260B SIM (ug/L)	1,4-Dioxane	0.65 U	1 U	ND
RD-58B	Chatsworth	02/11/09	300.0 (mg/L)	Nitrate-NO3	0.22 U	0.19 U	ND
			8270C (ug/L)	bis(2-Ethylhexyl) phthalate	2 U	0.69 J,L	ND
		05/11/09	314.0 (ug/L)	Perchlorate	0.7 U	0.28 U	ND
RD-58C	Chatsworth	07/23/09	8260B (ug/L)	cis-1,2-Dichloroethene	0.8	0.75 J	NV
				Vinyl chloride	1.3	1	NV
RD-62	Chatsworth	10/28/09	8270C (ug/L)	SVOCs	None detected	None detected	ND
RD-63	Chatsworth	02/20/09	900.0 (pCi/L)	Gross Alpha, dissolved	10.6 ± 3.68	8.72 ± 2.12	NV
				Gross Beta, dissolved	11.9 ± 2.8	8.58 ± 1.61	NV
				Gross Alpha	11.2 ± 3.8	10.8 ± 2.48	NV
				Gross Beta	10.5 ± 3.7	10.9 ± 1.74	NV
			901.1 (pCi/L)	Gamma-emitting radionuclides-Dissolved	None detected	None detected	ND
				Potassium-40	16.2 J ± 9.9	-16.7 U ± 21.3	ND
			905.0 (pCi/L)	Strontium-90, Dissolved	-0.029 U ± 0.31	0.19 U ± 0.875	ND
				Strontium-90	-0.037 U ± 0.26	-0.791 U ± 0.898	ND
			906.0 (pCi/L)	Tritium	-52 U ± 100	-61 U ± 87.4	ND
RD-66	Chatsworth	05/01/09	8260B (ug/L)	VOCs	None detected	None detected	ND
RD-67	Chatsworth	07/27/09	8260B (ug/L)	VOCs	None detected	None detected	ND
RD-68A	Chatsworth	03/03/09	8260B (ug/L)	VOCs	None detected	None detected	ND
RD-69	Chatsworth	11/4/2009	120.1	Specific conductivity	1000	930	7
			160.1	Total Dissolved Solids	610	630	3
			180.1	Turbidity	100	77	NV
			300.0 (mg/L)	Chloride	43	47	9
				Fluoride	0.19 U	0.39 J	NV
				Sulfate	160	170	NV
			2320B	Alkalinity as CaCO3	360	320	12
			6010B (mg/L)	Calcium, Dissolved	89	92 J	3
				Iron, Dissolved	8.5	8.8	3
				Magnesium, Dissolved	50	51	2
				Manganese, Dissolved	0.12	0.12	0
				Potassium, Dissolved	3.6 J	3.3	NV
				Sodium, Dissolved	55	51	8
				Strontium, Dissolved	0.85	0.81	5
				Zinc, Dissolved	0.43	0.43	0
			9040B (pH units)	pH	7.4	7.15	3
RD-70	Chatsworth	02/13/09	8260B (ug/L)	Vinyl chloride	0.2 J	0.4 U	ND
RD-86	Chatsworth	03/02/09	8260B (ug/L)	Isopropanol	50 U	13 U	ND
RD-91	Chatsworth	03/05/09	8260B (ug/L)	Chloroform	0.8 U	0.26 J	ND
				cis-1,2-Dichloroethene	32	28	13
				trans-1,2-Dichloroethene	0.8 U	0.33 J	ND
				Trichloroethene	260	260	NV
			8270C (ug/L)	SVOCs	None detected	None detected	ND

See Table III for notes and abbreviations.

TABLE D-I
SUMMARY OF 2009 SPLIT SAMPLE RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Geological Unit	Date	Method (units)	Constituent	Sample Result		RPD
					Primary	Split	
RD-91	Chatsworth	05/05/09	8260B (ug/L)	Chloroform	0.8 U	0.35 J	NV
				cis-1,2-Dichloroethene	34	36	6
				trans-1,2-Dichloroethene	0.8 U	0.96 J	NV
				Trichloroethene	270	280	NV
SH-08	Shallow	05/14/09	8081A (ug/L)	Aldrin	0.0079 J	0.0056 U	NV
				alpha-BHC	0.0033 J	0.005 U	NV
				beta-BHC	0.0036 U	0.022 J	NV
				Dieldrin	0.005 J	0.006 J	NV
WS-04A	Chatsworth	07/21/09	8260B (ug/L)	VOCs	None detected	None detected	ND
WS-05	Chatsworth	02/10/09	300.0 (ug/L)	Nitrate-NO3	0.22 U	0.19 U	ND
			8260B SIM (ug/L)	1,4-Dioxane	1.9 J	2.7	NV
		10/15/09	8315A (ug/L)	Formaldehyde	11 U	5.57 U	ND
			314.0 (ug/L)	Perchlorate	0.28 U	0.9 U	ND
WS-06	Chatsworth	02/26/09	314.0 (ug/L)	Perchlorate	0.7 U	0.28 U	ND
			8270C (ug/L)	bis(2-Ethylhexyl) phthalate	2 U	0.56 J,L	ND
		10/29/09	314.0 (ug/L)	Perchlorate	0.28 U	0.9 U	ND

See Table III for notes and abbreviations.

TABLE D-II

SUMMARY OF 2009 DUPLICATE SAMPLE RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Geological Unit	Date	Method (units)	Constituent	Sample Result		RPD
					Primary	Duplicate	
ES-21	Shallow	05/28/09	8260B (ug/L)	cis-1,2-Dichloroethene	190	190	0
				trans-1,2-Dichloroethene	23	22	NV
				Trichloroethene	340	350	NV
				Vinyl chloride	5	5	NV
ES-31	Shallow	03/04/09	8260B (ug/L)	Trichloroethene	0.3 J	0.3 J	NV
HAR-07	Chatsworth	03/08/09	7196A (mg/L)	Hexavalent Chromium, Dissolved	0.005 U	0.005 U	ND
HAR-11	Shallow	02/26/09	8260B (ug/L)	cis-1,2-Dichloroethene	1.9	1.9	NV
HAR-16	Chatsworth	10/23/09	8260B (ug/L)	1,1-Dichloroethene	24 J	22 J	NV
				cis-1,2-Dichloroethene	170	170	NV
				Tetrachloroethene	14 J	15 J	NV
				Trichloroethene	14000	13000	NV
				Trichlorofluoromethane	19 J	18 J	NV
HAR-17	Chatsworth	04/29/09	376.2 (mg/L)	Sulfide	0.0071 U	0.0071 U	ND
			504.1 (ug/L)	1,2-Dibromo-3-chloropropane	0.0065 U	0.0064 U	ND
				1,2-Dibromoethane	0.0035 U	0.0035 U	ND
			524M (ug/L)	1,2,3-Trichloropropane	0.0017 U	0.0017 U	ND
			6010B (mg/L)	Tin, Dissolved	0.0058 U	0.0058 U	ND
			6020 (mg/L)	Arsenic, Dissolved	0.00028 J	0.00024	NV
				Barium, Dissolved	0.074	0.071	4
				Cobalt, Dissolved	0.00046 J	0.00045 J	NV
				Copper, Dissolved	0.0087	0.0083	NV
				Lead, Dissolved	0.00044 J	0.00096 J	NV
				Nickel, Dissolved	0.0047	0.0046	NV
				Thallium, Dissolved	0.000024 J	0.00002 J	NV
				Vanadium, Dissolved	0.00032 J	0.0003 J	NV
				Zinc, Dissolved	0.15	0.12	22
			7470A (mg/L)	Mercury, Dissolved	0.000027 U	0.000027 U	ND
			8081A (ug/L)	Organochlorine pesticides	None detected	None detected	ND
			8082 (ug/L)	PCBs	None detected	None detected	ND
			8141A (ug/L)	Organophosphorous compounds	None detected	None detected	ND
			8151A (ug/L)	Chlorinated herbicides	None detected	None detected	ND
			8260B (ug/L)	1,1-Dichloroethane	0.55 J	0.6 J	NV
				1,1-Dichloroethene	0.44 J	0.51 J	NV
				cis-1,2-Dichloroethene	16	18	12
				trans-1,2-Dichloroethene	0.34 J	0.35 J	NV
				Trichloroethene	83	95	13
			8260B SIM (ug/L)	1,4-Dioxane	3	3.1	NV
			8270C (ug/L)	SVOCs	None detected	None detected	ND
			8270C (ug/L)	Pentachlorophenol	0.76 U	0.77 U	ND
			8290 (pg/L)	1,2,3,4,6,7,8-HpCDF	1.2 U	2.9 J	NV
			8321A (ug/L)	Hexachlorophene	2.7 U	2.7 U	ND
			9012A (mg/L)	Cyanides	0.0024 U	0.0024 U	ND
		07/16/09	8290 (pg/L)	Dioxins and Furans	None detected	None detected	ND
		11/03/09	8260B (ug/L)	1,1,2-Trichloro-1,2,2-trifluoroethane	42	41	2
				1,1-Dichloroethane	0.67 J	0.63 J	NV
				1,1-Dichloroethene	0.7 J	0.67 J	NV
				cis-1,2-Dichloroethene	19 J	19 J	0
				trans-1,2-Dichloroethene	0.37 J	0.34 J	NV
				Trichloroethene	110	87	23
HAR-18	Chatsworth	03/04/09	300.0 (mg/L)	Fluoride	0.27	0.39	NV
		07/16/09	8260B SIM (ug/L)	1,4-Dioxane	4.8	6.9	NV
			8270C (ug/L)	SVOCs	None detected	None detected	ND
HAR-20	Chatsworth	02/17/09	300.0 (mg/L)	Fluoride	0.23 J	0.23 J	NV
		04/30/09	314.0 (ug/L)	Perchlorate	0.7 U	0.7 U	ND
HAR-22	Chatsworth	07/21/09	8260B (ug/L)	cis-1,2-Dichloroethene	4.8	5.2	4
				trans-1,2-Dichloroethene	0.2 J	0.2 J	NV
				Trichloroethene	1.1	1.2	NV
				Vinyl chloride	0.1 J	0.1 J	NV
HAR-24	Chatsworth	03/09/09	8260B (ug/L)	1,1,2-Trichloro-1,2,2-trifluoroethane	9 J	9 J	NV
				Chloroform	2 J	2 J	NV
				cis-1,2-Dichloroethene	5 J	5	NV
				Trichloroethene	130	130	0

See Table III for notes and abbreviations.

TABLE D-II

SUMMARY OF 2009 DUPLICATE SAMPLE RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Geological Unit	Date	Method (units)	Constituent	Sample Result		RPD
					Primary	Duplicate	
HAR-26	Chatsworth	03/02/09	8270C (ug/L)	PAHs	None detected	None detected	ND
		07/20/09	8270C (ug/L)	SVOCs	None detected	None detected	ND
		10/29/09	8315A (ug/L)	Formaldehyde	8.4 U	8.4 U	ND
HAR-27	Shallow	02/18/09	8260B (ug/L)	cis-1,2-Dichloroethene	4.8	3	46
				trans-1,2-Dichloroethene	3.2	2	NV
				Vinyl Chloride	2	1.4	NV
		05/05/09	7196A (mg/L)	Hexavalent Chromium, Dissolved	0.005 U	0.005 U	ND
HAR-28	Shallow	05/05/09	7196A (mg/L)	Hexavalent Chromium, Dissolved	0.005 U	0.005 U	ND
OS-16	Chatsworth	02/17/09	8260B (ug/L)	VOCs	None detected	None detected	ND
OS-27	Chatsworth	03/09/09	8260B (ug/L)	VOCs	None detected	None detected	ND
OS-28	Chatsworth	03/10/09	1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
		07/30/09	1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
PZ-004A	Shallow	02/26/09	6010B (mg/L)	Barium	0.043	0.0448	4
				Cobalt	0.0069	0.0074	NV
				Iron	2.35	2.47	5
				Manganese	0.213	0.223	5
				Zinc	0.0107 J	0.0096 J	NV
				Arsenic	0.0051	0.0057	NV
			6020 (mg/L)	Beryllium	0.00017 J	0.0002 J	NV
				Chromium	0.00074 J	0.00073 J	NV
				Copper	0.0017 J	0.00016 J	NV
				Lead	0.00014 J	0.00016 J	NV
				Nickel	0.0098	0.0096	NV
			7470A (mg/L)	Mercury	0.000056 U	0.000056 U	ND
PZ-071	Shallow	05/07/09	6010B (mg/L)	Aluminum, Dissolved	0.145 J	0.155 J	NV
				Barium, Dissolved	0.067	0.0704	5
				Iron, Dissolved	0.345	0.367	NV
				Manganese, Dissolved	0.44	0.483	9
				Molybdenum, Dissolved	0.0255	0.0171	NV
			6020 (mg/L)	Arsenic, Dissolved	0.00095 U	0.00096 J	NV
				Copper, Dissolved	0.00081 J	0.00069 J	NV
				Lead, Dissolved	0.00013 J	0.00011 J	NV
				Nickel, Dissolved	0.0048	0.0048	NV
			7470A (mg/L)	Mercury, Dissolved	0.000056 U	0.000056 U	ND
			8082 (ug/L)	PCBs	None detected	None detected	ND
			8260B SIM (ug/L)	1,4-Dioxane	0.5 U	0.5 U	ND
			8290 (pg/L)	Dioxins and Furans	None detected	None detected	ND
		7/16/2009	7196A (mg/L)	Hexavalent Chromium, Dissolved	0.005 U	0.005 U	ND
			8015B	Diesel Range Organics (C15-C20)	0.12 J	0.096 U	ND
				Diesel Range Organics (C8-C30)	0.2 J	0.15 J	NV
			8260B (ug/L)	cis-1,2-Dichloroethene	0.6	0.4 J	NV
				Trichloroethene	0.4 J	0.2 J	NV
			8260B SIM (ug/L)	1,4-Dioxane	0.5 U	0.5 U	ND
PZ-103	Shallow	02/26/09	300.0 (mg/L)	Bromide	0.68	0.59	NV
				Chloride	188	171	NV
				Fluoride	0.79	0.82	NV
				Nitrate-NO3	40	40	NV
				Sulfate	92.8	93.6	NV
PZ-105	Shallow	02/11/09	8260B (ug/L)	1,1-Dichloroethene	0.1 J	0.1 J	NV
				Toluene	0.1 U	0.1 J	ND
				Trichloroethene	10	9.8	2
		04/29/09	6010B (mg/L)	Barium, Dissolved	0.015	0.015	NV
				Boron, Dissolved	0.158	0.158	NV
				Magnesium, Dissolved	17.3	17.7	2
				Manganese, Dissolved	0.0031 J	0.0034 J	NV
				Strontium, Dissolved	0.397	0.403	2
				Vanadium, Dissolved	0.0029 J	0.0029 J	NV
			6020 (mg/L)	Antimony, Dissolved	0.00032 J	0.00031 J	NV
				Arsenic, Dissolved	0.0017 J	0.0018 J	NV
				Copper, Dissolved	0.00042 J	0.0005 J	NV
				Nickel, Dissolved	0.0005 U	0.004	NV

TABLE D-II

SUMMARY OF 2009 DUPLICATE SAMPLE RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Geological Unit	Date	Method (units)	Constituent	Sample Result		RPD
					Primary	Duplicate	
PZ-105	Shallow	04/29/09	7470A (mg/L)	Mercury, Dissolved	0.000056 U	0.000056 U	ND
			8015B (mg/L)	Diesel Range Organics	None detected	None detected	ND
		10/12/09	8260B (ug/L)	Trichloroethene	10	9.3	7
PZ-108	Shallow	02/18/09	300.0 (mg/L)	Bromide	0.49 J	0.43 J	NV
				Chloride	42.8	46.4	NV
				Fluoride	0.59	0.59	0
				Nitrate (as NO3)	12	11	9
				Sulfate	128	131	NV
		05/05/09	8315M (ug/L)	Hydrazines	None detected	None detected	ND
		10/14/09	300.0 (mg/L)	Bromide	0.41 J	0.42 J	NV
				Chloride	48	48	0
				Fluoride	0.58 U	0.58 U	ND
				Nitrate-NO3	7.5	7.6	NV
				Sulfate	140	140	NV
PZ-109	Shallow	07/17/09	300.0 (mg/L)	Bromide	0.8	0.81	NV
				Chloride	54.4	52.9	NV
				Fluoride	0.82	0.87	3
				Nitrate-NO3	7.5	6.1	10
				Sulfate	108	115	NV
			6010B (mg/L)	Aluminum, Dissolved	0.084 J	0.116 J	NV
				Barium, Dissolved	0.0196	0.0189	NV
				Boron, Dissolved	0.131	0.129	NV
				Iron, Dissolved	0.104 J	0.145 J	NV
				Magnesium, Dissolved	25.8	25.6	0.4
				Manganese, Dissolved	0.0957	0.0951	0.3
				Molybdenum, Dissolved	0.0875	0.0872	0.2
				Strontium, Dissolved	0.249	0.244	1
			6020 (mg/L)	Antimony, Dissolved	0.00061 J	0.00045 J	NV
				Arsenic, Dissolved	0.0015 J	0.0013 J	NV
			7470A (mg/L)	Mercury, Dissolved	0.000056 U	0.000056 U	ND
PZ-122	Shallow	02/19/09	9040B (pH units)	pH	7	7.4	6
		05/05/09	300.0 (mg/L)	Bromide	0.46 J	0.42 J	NV
				Chloride	33.2	36.1	NV
				Fluoride	0.47	0.45	NV
				Nitrate-NO3	13	13	0
				Sulfate	102	105	NV
			314.0 (ug/L)	Perchlorate	0.7 U	0.7 U	ND
			9040B (pH units)	pH	7.1	7.2	1
		07/14/09	9040B (pH units)	pH	7	7	0
		10/13/09	8315M (ug/L)	Hydrazines	None detected	None detected	ND
			9040B	pH	7.2	7.2	0
PZ-139	Shallow	10/15/09	1625M	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
			7196A	Hexavalent Chromium, Dissolved	0.0044 U	0.0044 U	ND
PZ-140	Shallow	10/20/09	1625M	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
			6020 (mg/L)	Arsenic, Dissolved	0.00076 J	0.00072 J	NV
				Barium, Dissolved	0.055	0.053	NV
				Copper, Dissolved	0.00062 J	0.00059 J	NV
				Nickel, Dissolved	0.0047	0.0043	NV
				Selenium, Dissolved	0.0011 J	0.00084 J	NV
			6010B (mg/L)	Manganese, Dissolved	0.087	0.086	NV
				Molybdenum, Dissolved	0.0044 J	0.0031 U	ND
				Vanadium, Dissolved	0.0014 J	0.0017 J	NV
			7470A (mg/L)	Mercury, Dissolved	0.000027 U	0.000027 U	ND
PZ-141	Shallow	11/03/09	1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.0051	ND
RD-01	Chatsworth	02/25/09	8270C (ug/L)	bis(2-Ethylhexyl) phthalate	4 J,L	2 U	ND
		07/14/09	300.0 (mg/L)	Nitrate-NO3	0.4 J	0.41 J	NV
RD-02	Chatsworth	02/26/09	8260B (ug/L)	1,1-Dichloroethene	2 J	1 J	NV
				cis-1,2-Dichloroethene	320	320	NV
				trans-1,2-Dichloroethene	25	24	NV
				Trichloroethene	260	250	4
				Vinyl Chloride	1	1	NV

See Table III for notes and abbreviations.

TABLE D-II
SUMMARY OF 2009 DUPLICATE SAMPLE RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Geological Unit	Date	Method (units)	Constituent	Sample Result		RPD
					Primary	Duplicate	
RD-03	Chatsworth	10/27/09	314.0 (ug/L)	Perchlorate	0.28 U	0.28 U	ND
			8015B (mg/L)	DRO	None detected	None detected	ND
			8082 (ug/L)	PCBs	None detected	None detected	ND
RD-04	Chatsworth	02/09/09	8260B (ug/L)	1,1-Dichloroethene	1 J	2 J	NV
				trans-1,2-Dichloroethene	4 J	4 J	NV
				cis-1,2-Dichloroethene	180	180	0
				Trichloroethene	1,100	1,100	0
		07/28/09	8260B SIM (ug/L)	1,4-Dioxane	0.5 U	0.5 J	ND
		10/28/09	350.1 (mg/L)	Ammonia-N	0.47 U	0.47 U	ND
			8315A (ug/L)	Formaldehyde	8.4 U	8.4 U	ND
RD-05B	Chatsworth	02/13/09	8260B (ug/L)	Carbon Disulfide	0.5	0.5 J	NV
				Chloromethane	0.2 U	0.3 J	ND
		05/12/09	8260B (ug/L)	Carbon Disulfide	0.8	0.4 U	ND
RD-05B	Chatsworth	10/22/09	8260B (ug/L)	VOCs	None detected	None detected	ND
RD-05C	Chatsworth	10/22/09	8260B (ug/L)	VOCs	None detected	None detected	ND
RD-06	Chatsworth	05/04/09	8260B (ug/L)	Carbon Disulfide	0.4 J	0.5 J	NV
				Chloromethane	0.2 U	0.3 J	ND
		07/13/09	1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
			376.2 (mg/L)	Sulfide	0.0071 U	0.0071 U	ND
			504.1 (ug/L)	1,2-Dibromo-3-chloropropane	0.0065 U	0.0064 U	ND
				1,2-Dibromoethane	0.0035 U	0.0035 U	ND
			524M (ug/L)	1,2,3-Trichloropropane	0.0017 U	0.0017 U	ND
			6020 (mg/L)	Barium, Dissolved	0.039	0.04	1
				Cobalt, Dissolved	0.00014 J	0.00016 J	NV
				Nickel, Dissolved	0.0012 J	0.0013 J	NV
				Zinc, Dissolved	0.057	0.058	1
			7470A (mg/L)	Mercury, Dissolved	0.000027 U	0.000027 U	ND
			8081A (ug/L)	gamma-BHC (Lindane)	0.0066 U	0.021 J	ND
			8082 (ug/L)	Polychlorinated biphenyl (PCBs)	None detected	None detected	ND
			8141A (ug/L)	Organophosphorous compounds	None detected	None detected	ND
			8151A (ug/L)	Chlorinated herbicides	None detected	None detected	ND
			8260B (ug/L)	VOCs	None detected	None detected	ND
			8260B SIM (ug/L)	1,4-Dioxane	1 U	1 U	ND
			8270C (ug/L)	SVOCs	None detected	None detected	ND
			8270SIM-PCP (ug/L)	Pentachlorophenol	0.77 U	0.78 U	ND
			8290 (pg/L)	Dioxins and Furans	None detected	None detected	ND
			8321A (ug/L)	Hexachlorophene	2.7 U	2.7 U	ND
			9012A (mg/L)	Cyanides	0.0024 U	0.0031 J	ND
RD-07(Z3)	Chatsworth	04/29/09	8290 (pg/L)	Dioxins and Furans	None detected	None detected	ND
RD-08	Chatsworth	05/13/09	8270C (ug/L)	PAHs	None detected	None detected	ND
			8315A (ug/L)	Formaldehyde	10 U	11 U	ND
		11/04/09	8270C (ug/L)	PAHs	None detected	None detected	NV
			8315A (ug/L)	Formaldehyde	8.4 U	8.4 U	ND
RD-09	Chatsworth	02/19/09	314.0 (ug/L)	Perchlorate	0.7 U	0.7 U	ND
		05/07/09	1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
			300.0 (mg/L)	Fluoride	0.19	0.21	NV
				Nitrate-NO3	0.22 U	0.22 U	ND
			314.0 (ug/L)	Perchlorate	0.7 U	0.7 U	ND
			350.3 (mg/L)	Ammonia-N	0.03 U	0.03 U	ND
			8260B (ug/L)	cis-1,2-Dichloroethene	66	68	NV
				trans-1,2-Dichloroethene	13	13	NV
				Trichloroethene	320	320	NV
			8260B SIM (ug/L)	1,4-Dioxane	1.4 J	1.1 J	NV
			8270C (ug/L)	SVOCs	None detected	None detected	ND
			8315A (ug/L)	Formaldehyde	33 J	33 J	NV
			300.0 (mg/L)	Fluoride	0.17 U	0.18 U	ND
				Nitrate-NO3	0.19 U	0.19 U	ND
RD-10	Chatsworth	05/11/09	1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
		07/14/09	300.0 (mg/L)	Fluoride	0.34	0.37	NV
			350.3 (mg/L)	Ammonia-N	0.03 U	0.03 U	ND
		10/27/09	314.0 (ug/L)	Perchlorate	49	51	NV
RD-11	Chatsworth	05/14/09	8315A (ug/L)	Formaldehyde	15 J	10 J	NV

See Table III for notes and abbreviations.

TABLE D-II
SUMMARY OF 2009 DUPLICATE SAMPLE RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Geological Unit	Date	Method (units)	Constituent	Sample Result		RPD
					Primary	Duplicate	
RD-12	Chatsworth	04/28/09	8270C (ug/L)	PAHs	None detected	None detected	ND
RD-13	Chatsworth	03/09/09	314.0 (ug/L)	Perchlorate	0.7 U	0.7 U	ND
			1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
			8260B (ug/L)	Trichloroethene	0.2 J	0.2 J	NV
			8315A (ug/L)	Formaldehyde	None detected	None detected	ND
			8315M (ug/L)	Propellants	None detected	None detected	ND
		05/06/09	1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
			8260B (ug/L)	Trichloroethene	0.3 J	0.3 J	NV
			8330 (ug/L)	Nitroaromatics and nitramines	None detected	None detected	ND
		07/15/09	1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
			314.0 (ug/L)	Perchlorate	0.7 U	0.7 U	ND
			8315A (ug/L)	Formaldehyde	10 U	10 U	ND
			8315M (ug/L)	Hydrazines	None detected	None detected	ND
			8330 (ug/L)	Nitroaromatics and nitramines	None detected	None detected	ND
		10/21/09	1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
			8260B (ug/L)	VOCs	None detected	None detected	ND
			8330 (ug/L)	nitroaromatics nitrobenzene	None detected	None detected	ND
RD-15	Chatsworth	07/24/09	900.0 (pCi/L)	Gross Alpha	6 ± 2.1	10.6 ± 3.6	NV
				Gross Beta	9.85 ± 1.4	10.1 ± 2	NV
			901.1 (pCi/L)	Gamma-emitting radionuclides	None detected	None detected	ND
			905.0 (pCi/L)	Strontium-90	-0.063 U ± 0.18	-0.073 U ± 0.22	ND
			906.0 (pCi/L)	Tritium	81.5 U ± 85	102 U ± 88	ND
RD-16	Chatsworth	07/21/09	8260B (ug/L)	VOCs	None detected	None detected	ND
RD-18	Chatsworth	05/05/09	8260B (ug/L)	VOCs	None detected	None detected	ND
RD-20	Chatsworth	02/18/09	8290 (pg/L)	OCDD	4.9 J	3.2 J	NV
				OCDF	1.8 U	5.7 J	ND
		07/22/09	8290 (pg/L)	Dioxins and Furans	None detected	None detected	ND
RD-21(Z2)	Chatsworth	04/29/09	8015B (mg/L)	Diesel Range Organics (C15 - C20)	13 J	4.9 J	NV
				Diesel Range Organics (C8 - C30)	13 J	4.9 J	NV
RD-22(Z2)	Chatsworth	10/21/09	8260B (ug/L)	VOCs	None detected	None detected	ND
RD-26	Chatsworth	05/27/09	8260B (ug/L)	Carbon Tetrachloride	0.2 J	0.2 J	NV
				Chloroform	0.2 J	0.2 J	NV
				Trichloroethene	4.9	4.9	0
RD-27	Chatsworth	07/30/09	900.0 (pCi/L)	Gross Alpha	4.31 ± 1.6	4.97 ± 1.7	NV
				Gross Beta	7.74 ± 1.6	7.26 ± 1.8	NV
			901.1 (pCi/L)	Gamma-emitting radionuclides	None detected	None detected	ND
			905.0 (pCi/L)	Strontium-90	0.265 U ± 0.35	0.026 U ± 0.24	ND
			906.0 (pCi/L)	Tritium	64.9 U ± 84	81.2 U ± 84	ND
RD-29	Chatsworth	03/05/09	900.0 (pCi/L)	Gross Alpha	16.8 ± 4.4	18.1 ± 4.8	NV
				Gross Beta	11.7 ± 2.3	12 ± 2.6	NV
			901.1 (pCi/L)	Gamma-emitting radionuclides	None detected	None detected	ND
			905.0 (pCi/L)	Strontium-90	-0.075 U ± 0.26	0.062 U ± 0.27	ND
			906.0 (pCi/L)	Tritium	99.2 J ± 55	126 J ± 72	NV
			908.0 (pCi/L)	Uranium-233/234	9.98 ± 1.1	9.71 ± 1.1	3
				Uranium-235	0.518 J ± 0.17	0.530 J ± 0.16	NV
				Uranium-238	9.27 ± 1	9.56 ± 1.1	3
RD-32	Chatsworth	07/29/09	8260B (ug/L)	VOCs	None detected	None detected	ND
RD-33B	Chatsworth	03/05/09	900.0 (pCi/L)	Gross Alpha	-0.081 U ± 1	1.03 U ± 2.1	ND
				Gross Beta	4.09 ± 1.4	4.52 ± 1.6	NV
			901.1 (pCi/L)	Gamma-emitting radionuclides	None detected	None detected	ND
			905.0 (pCi/L)	Strontium-90	0.051 U ± 0.29	0.062 U ± 0.27	ND
			906.0 (pCi/L)	Tritium	71.6 U ± 54	126 J ± 72	ND
RD-33C	Chatsworth	02/24/09	9012A (mg/L)	Cyanide, Total	0.005 U	0.005 U	ND
		05/13/09	8260B (ug/L)	VOCs	None detected	None detected	ND
RD-34C	Chatsworth	02/19/09	6010B (mg/L)	Barium, Dissolved	0.0676	0.0692	2
				Iron, Dissolved	0.197 J	0.216	NV
				Manganese, Dissolved	0.0126	0.0127	NV
				Zinc, Dissolved	0.0597	0.0687	NV
			6020 (mg/L)	Copper, Dissolved	0.00088 J	0.00038 J	NV
				Lead, Dissolved	0.00015 J	0.00017 J	NV
			7470A (mg/L)	Mercury, Dissolved	0.000056 U	0.000056 U	ND

See Table III for notes and abbreviations.

TABLE D-II
SUMMARY OF 2009 DUPLICATE SAMPLE RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Geological Unit	Date	Method (units)	Constituent	Sample Result		RPD
					Primary	Duplicate	
RD-34C	Chatsworth	07/23/09	900.0 (pCi/L)	Gross Alpha, Dissolved	1.63 J ± 0.9	0.897 U ± 0.83	ND
				Gross Beta, Dissolved	5.1 ± 1.1	4.5 ± 1.4	NV
				Gross Alpha	1.14 J ± 0.82	2.11 J ± 1	NV
				Gross Beta	4.33 ± 1.1	4.33 ± 1.2	NV
			901.1 (pCi/L)	Gamma-emitting radionuclides-Dissolved	None detected	None detected	ND
				Gamma-emitting radionuclides	None detected	None detected	ND
			905.0 (pCi/L)	Strontium-90, Dissolved	-0.227 U ± 0.18	0.051 U ± 0.22	ND
				Strontium-90	0.088 U ± 0.26	-0.018 U ± 0.21	ND
			906.0 (pCi/L)	Tritium	76.1 U ± 85	79.9 U ± 85	ND
RD-36B	Chatsworth	02/18/09	8015B (mg/L)	Gasoline Range Organics (C6-C12)	50 J	50 U	ND
		07/30/09	8260B (ug/L)	Tetrachloroethene	10	10	NV
				Trichloroethene	130	130	0
RD-36C	Chatsworth	08/03/09	8015B (ug/L)	Gasoline Range Organics (C6-C12)	50 J	50 U	ND
			8260B (ug/L)	1,1-Dichloroethene	3 J	3 J	NV
				cis-1,2-Dichloroethene	64	61	2
				Tetrachloroethene	2 J	1 J	NV
				trans-1,2-Dichloroethene	13	13	NV
				Trichloroethene	49	45	4
RD-36D	Chatsworth	02/18/09	8260B (ug/L)	cis-1,2-Dichloroethene	0.1 J	0.1 J	NV
				Trichloroethene	0.4 J	0.4 J	NV
RD-37	Chatsworth	02/19/09	8015B (mg/L)	Gasoline Range Organics (C6-C12)	50 U	50 U	ND
		05/13/09	8260B (ug/L)	Carbon Disulfide	0.4 U	0.4 J	ND
				cis-1,2-Dichloroethene	0.1 J	0.1 J	NV
		07/13/09	1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
		10/28/09	8151A (ug/L)	Chlorinated herbicides	None detected	None detected	ND
			8290 (pg/L)	Octachlorodibenzo-p-dioxin	31 J,L	3.5 J,L	NV
RD-41B	Chatsworth	02/12/09	350.3 (mg/L)	Ammonia-N	0.03 U	0.03 U	ND
		05/04/09	314.0 (ug/L)	Perchlorate	0.7 U	0.7 U	ND
		08/04/09	350.3 (mg/L)	Ammonia-N	0.11 U	0.097 U	ND
		11/02/09	8260B SIM (ug/L)	1,4-Dioxane	19 UJ	65 UJ	ND
RD-41C	Chatsworth	05/14/09	6010B (mg/L)	Barium, Dissolved	0.0185	0.0182	NV
				Iron, Dissolved	2.27	2.25	1
				Manganese, Dissolved	0.337	0.337	0
				Zinc, Dissolved	0.615	0.606	1
			6020 (mg/L)	Copper, Dissolved	0.00058 J	0.00038 U	ND
				Lead, Dissolved	0.0002 J	0.00014 J	NV
			7470A (mg/L)	Mercury, Dissolved	0.000056 U	0.000056 U	ND
RD-43A	Chatsworth	10/21/09	8260B (ug/L)	VOCs	None detected	None detected	ND
RD-43B	Chatsworth	05/12/09	8260B (ug/L)	VOCs	None detected	None detected	ND
RD-43B	Chatsworth	10/21/09	8260B (ug/L)	VOCs	None detected	None detected	ND
RD-43C	Chatsworth	07/22/09	8260B (ug/L)	VOCs	None detected	None detected	ND
RD-44	Chatsworth	03/02/09	1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
		04/30/09	1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
			300.0 (mg/L)	Nitrate-NO3	0.22 U	0.22 U	ND
			8260B (ug/L)	VOCs	None detected	None detected	ND
			8260B SIM (ug/L)	1,4-Dioxane	0.5 U	0.5 U	ND
			8270C (ug/L)	SVOCs	None detected	None detected	ND
		07/27/09	1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
			314.0 (ug/L)	Perchlorate	0.7 U	0.7 U	ND
		10/28/09	1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
			300.0 (mg/L)	Fluoride	0.38 U	0.36 U	ND
				Nitrate-NO3	0.19 U	0.19 U	ND
RD-45B	Chatsworth	07/29/09	8260B (ug/L)	cis-1,2-Dichloroethene	36	36	0
				trans-1,2-Dichloroethene	2 J	2 J	NV
				Trichloroethene	2	2	NV
RD-45C	Chatsworth	07/16/09	8260B (ug/L)	VOCs	None detected	None detected	ND
RD-46A	Chatsworth	08/05/09	8260B (ug/L)	cis-1,2-Dichloroethene	630	620	NV
				Trichloroethene	6800	6600	NV
RD-46B	Chatsworth	10/22/09	8270C (ug/L)	SVOCs	None detected	None detected	NV
RD-47	Chatsworth	07/30/09	8260B (ug/L)	cis-1,2-Dichloroethene	0.6	0.5	NV
				Trichloroethene	0.1 J	0.1 J	NV
		05/12/09	8260B (ug/L)	VOCs	None detected	None detected	ND

See Table III for notes and abbreviations.

TABLE D-II
SUMMARY OF 2009 DUPLICATE SAMPLE RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Geological Unit	Date	Method (units)	Constituent	Sample Result		RPD
					Primary	Duplicate	
RD-48C	Chatsworth	10/28/09	8015B (mg/L)	DRO	None detected	None detected	ND
			8260B (ug/L)	VOCs	None detected	None detected	ND
RD-49A	Chatsworth	03/05/09	300.0 (mg/L)	Nitrate-NO3	0.22 U	0.22 U	ND
RD-49B	Chatsworth	07/28/09	300.0 (mg/L)	Nitrate-NO3	0.22 U	0.22 U	ND
		10/30/09	8015B (mg/L)	DRO	None detected	None detected	ND
			8260B SIM (ug/L)	1,4-Dioxane	2.2 J	2.3 J	NV
			8270C (ug/L)	SVOCs	None detected	None detected	ND
RD-49C	Chatsworth	05/06/09	8260B (ug/L)	1,1-Dichloroethene	0.2 J	0.2 J	NV
				Chloromethane	0.2 U	0.3 J	NV
				cis-1,2-Dichloroethene	78	73	NV
				trans-1,2-Dichloroethene	2.5	2.5	NV
				Trichloroethene	13	13	0
				Vinyl chloride	1.7	1.7	NV
		10/30/09	8270C (ug/L)	SVOCs	None detected	None detected	ND
			8315A (ug/L)	Formaldehyde	8.4 U	8.4 U	ND
RD-50(Z2)	Chatsworth	02/20/09	8015B (mg/L)	Extractable Fuel Hydrocarbons (C15 - C20)	19 J	16 J	NV
				Extractable Fuel Hydrocarbons (C8 - C30)	19 J	16 J	NV
RD-51B	Chatsworth	05/27/09	8260B (ug/L)	cis-1,2-Dichloroethene	9.6	9.8	2
				trans-1,2-Dichloroethene	0.8	0.8	NV
				Trichloroethene	4.3	4.4	2
				Vinyl chloride	5.7	5.7	0
		07/27/09	8270C (ug/L)	SVOCs	None detected	None detected	ND
			8315A (ug/L)	Formaldehyde	20 U	18 U	ND
		10/19/09	350.1 (mg/L)	Ammonia-N	0.47 U	0.47 U	ND
RD-51C	Chatsworth	02/10/09	1625M (ug/L)	n-Nitrosodimethylamine	None detected	None detected	ND
			314.0 (ug/L)	Perchlorate	0.7 U	0.7 U	ND
		05/05/09	1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
			8260B (ug/L)	VOCs	None detected	None detected	ND
		07/27/09	1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
		10/19/09	314.0 (ug/L)	Perchlorate	0.28 U	0.28 U	ND
			1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
RD-52B	Chatsworth	07/17/09	8260B (ug/L)	cis-1,2-Dichloroethene	3.3	3.2	2
				trans-1,2-Dichloroethene	0.9	0.9	NV
				Trichloroethene	1	1	NV
		07/20/09	8260B (ug/L)	VOCs	None detected	None detected	ND
RD-54A	Chatsworth	02/24/09	8260B (ug/L)	1,1-Dichloroethene	2 J	2 J	NV
				cis-1,2-Dichloroethene	45	44	2
				Trichloroethene	7	6	15
RD-54B	Chatsworth	02/23/09	8260B (ug/L)	VOCs	None detected	None detected	ND
			6010B (mg/L)	Barium, Dissolved	0.059	0.061	4
				Iron, Dissolved	2.94	3.06	4
				Manganese, Dissolved	0.0938	0.0946	1
				Zinc, Dissolved	1.35	1.29	5
			6020 (mg/L)	Lead, Dissolved	0.00075 J	0.00066 J	NV
			7470A (mg/L)	Mercury, Dissolved	0.000056 U	0.000056 U	ND
		10/30/09	6010B (mg/L)	Iron, Dissolved	1.9	1.8	NV
				Manganese, Dissolved	0.1	0.095	NV
				Molybdenum, Dissolved	0.0038 J	0.0031 U	ND
			6020 (mg/L)	Barium, Dissolved	0.051	0.051	NV
				Copper, Dissolved	0.00099 J	0.0013 J	NV
				Lead, Dissolved	0.00073 J	0.00069 J	NV
				Nickel, Dissolved	0.0027	0.0024	NV
				Zinc, Dissolved	0.92 J	0.93 J	NV
			7470A (mg/L)	Mercury, Dissolved	0.000027 U	0.000027 U	ND
			900.0 (pCi/L)	Gross alpha	2.22 U ± 2	5.01 ± 2.4	ND
				Gross Alpha, Dissolved	1.94 U ± 1.7	3.62 ± 1.9	ND
				Gross beta	7.06 ± 2.3	6.47 ± 2.2	NV
				Gross Beta, Dissolved	5.17 ± 2.1	5.48 ± 2	NV
			901.1 (pCi/L)	Gamma-emitting radionuclides	None detected	None detected	ND
				Gamma-emitting radionuclides-Dissolved	None detected	None detected	ND

TABLE D-II

SUMMARY OF 2009 DUPLICATE SAMPLE RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Geological Unit	Date	Method (units)	Constituent	Sample Result		RPD
					Primary	Duplicate	
RD-54B	Chatsworth	10/30/09	905.0 (pCi/L)	Strontium-90	-0.108 U ± 0.23	-0.105 U ± 0.26	ND
				Strontium-90, Dissolved	0.036 U ± 0.29	-0.009 U ± 0.31	ND
			906.0 (pCi/L)	Tritium	-133 U ± 91	-156 U ± 90	ND
RD-54C	Chatsworth	08/04/09	6010B (mg/L)	Barium, Dissolved	0.076	0.0734	2
				Iron, Dissolved	1.33	1.47	5
				Manganese, Dissolved	0.224	0.215	2
				Zinc, Dissolved	1.64	1.62	1
			6020 (mg/L)	Metals, Dissolved	None detected	None detected	ND
			7470A (mg/L)	Mercury, Dissolved	0.000056 U	0.000056 U	ND
RD-55B	Chatsworth	02/12/09	8260B SIM (ug/L)	1,4-Dioxane	0.5 U	0.5 U	ND
			8315A (ug/L)	Formaldehyde	10 U	10 U	ND
		07/21/09	350.3 (mg/L)	Ammonia-N	0.03 U	0.03 U	ND
		11/02/09	300.0 (mg/L)	Fluoride	0.56 U	0.52 U	ND
				Nitrate-NO3	0.19 U	0.19 U	ND
			8315A (ug/L)	Formaldehyde	8.4 U	8.4 U	ND
RD-58A	Chatsworth	03/05/09	8260B SIM (ug/L)	1,4-Dioxane	0.5 U	0.5 U	ND
RD-58B	Chatsworth	02/11/09	8270C (ug/L)	SVOCs	None detected	None detected	ND
		07/28/09	300.0 (mg/L)	Fluoride	0.47	0.39	NV
			8315A (ug/L)	Formaldehyde	27 U	26 U	ND
RD-58C	Chatsworth	07/23/09	8260B (ug/L)	cis-1,2-Dichloroethene	0.8	0.8	NV
				Vinyl chloride	1.3	1.3	NV
RD-62	Chatsworth	10/28/09	6010B (mg/L)	Aluminum, Dissolved	0.16	0.018 U	ND
				Boron, Dissolved	0.072	0.072	0
				Iron, Dissolved	0.36	0.22	24
				Magnesium, Dissolved	50	50	NV
				Manganese, Dissolved	0.084	0.084	NV
				Strontium, Dissolved	0.31	0.32	2
			6020 (mg/L)	Barium, Dissolved	0.04	0.04	NV
				Lead, Dissolved	0.00031 J	0.00028 J	NV
				Nickel, Dissolved	0.0013 J	0.0013 J	NV
				Zinc, Dissolved	0.42	0.42	0
			7470A (mg/L)	Mercury, Dissolved	0.000027 U	0.000027 U	ND
			8015B (mg/L)	DRO	None detected	None detected	ND
			8260B (ug/L)	VOCs	None detected	None detected	ND
RD-64(Z4)	Chatsworth	04/29/09	6010B (mg/L)	Barium, Dissolved	0.0069	0.0078	NV
				Iron, Dissolved	0.355	0.372	NV
				Manganese, Dissolved	0.155	0.159	3
				Zinc, Dissolved	0.0138 J	0.0112 J	NV
			6020 (mg/L)	Antimony, Dissolved	0.00063 J	0.00068 J	NV
				Arsenic, Dissolved	0.0024	0.0028	NV
				Copper, Dissolved	0.0078	0.0081	NV
				Lead, Dissolved	0.00024 J	0.00019 J	NV
				Nickel, Dissolved	0.0066	0.0086	NV
			7470A (mg/L)	Mercury, Dissolved	0.000059 J	0.000071 J	NV
RD-67	Chatsworth	05/01/09	8260B (ug/L)	Chloromethane	0.2 J	0.2 U	ND
		07/27/09	8260B (ug/L)	VOCs	None detected	None detected	ND
RD-68A	Chatsworth	03/03/09	8260B (ug/L)	VOCs	None detected	None detected	ND
RD-69	Chatsworth	11/04/09	120.1	Specific conductivity	1000	1000	0
			160.1	Total Dissolved Solids	610	600	1
			180.1	Turbidity	100	81	NV
			300.0 (mg/L)	Chloride	43	43	0
				Fluoride	0.19 U	0.2 U	ND
				Sulfate	160	160	0
			1625M (ug/L)	n-Nitrosodimethylamine	0.005 U	0.005 U	ND
			2320B	Alkalinity as CaCO3	360	330	NV
			6010B (mg/L)	Calcium, Dissolved	89	87	1
				Iron, Dissolved	8.5	8.3	1
				Magnesium, Dissolved	50	50	0
				Manganese, Dissolved	0.12	0.12	0
				Potassium, Dissolved	3.6 J	3.5 J	NV
				Sodium, Dissolved	55	53	2

TABLE D-II

SUMMARY OF 2009 DUPLICATE SAMPLE RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Geological Unit	Date	Method (units)	Constituent	Sample Result		RPD
					Primary	Duplicate	
RD-69	Chatsworth	11/04/09	6010B	Strontium, Dissolved	0.85	0.83	1
				Zinc, Dissolved	0.43	0.42	1
			9040B	pH	7.4	7.4	0
RD-70	Chatsworth	02/13/09	8260B (ug/L)	Vinyl chloride	0.2 J	0.1 J	NV
RD-71	Chatsworth	04/28/09	8260B (ug/L)	VOCs	None detected	None detected	ND
RD-91	Chatsworth	03/05/09	8270C (ug/L)	SVOCs	None detected	None detected	ND
		05/05/09	8260B (ug/L)	cis-1,2-Dichloroethene	34	34	0
				Trichloroethene	270	270	0
			8270C (ug/L)	SVOCs	None detected	None detected	ND
RD-92	Chatsworth	05/01/09	6010B (mg/L)	Barium, Dissolved	0.0414	0.0393	5
				Manganese, Dissolved	0.002 J	0.0018 J	NV
				Zinc, Dissolved	0.0821	0.0698	NV
			6020 (mg/L)	Copper, Dissolved	0.0029	0.0017 J	NV
				Lead, Dissolved	0.00058 J	0.00042 J	NV
			7470A (mg/L)	Mercury, Dissolved	0.000056 U	0.000056 U	ND
RD-98	Chatsworth	02/20/09	8260B (ug/L)	1,1,2-Trichloro-1,2,2-trifluoroethane	1.7	1.7	NV
				Chloroform	0.1 J	0.1 J	NV
				Tetrachloroethene	0.5	0.5	NV
				Trichloroethene	10	10	0
SH-08	Shallow	05/14/09	8081A (ug/L)	Aldrin	0.0079 J	0.0068 J	NV
				alpha-BHC	0.0033 J	0.0026 U	ND
				Dieldrin	0.005 J	0.0068 J	NV
WS-04A	Chatsworth	07/21/09	8260B (ug/L)	VOCs	None detected	None detected	ND
WS-05	Chatsworth	02/10/09	314.0 (ug/L)	Perchlorate	0.7 U	0.7 U	ND
		07/29/09	300.0 (mg/L)	Nitrate-NO3	0.22 U	0.22 U	ND
			314.0 (ug/L)	Perchlorate	0.7 U	0.7 U	ND
			8260B SIM (ug/L)	1,4-Dioxane	2.2	2.5	NV
			8270C (ug/L)	SVOCs	None detected	None detected	ND
WS-06	Chatsworth	02/26/09	8270C (ug/L)	SVOCs	None detected	None detected	ND
		07/29/09	8315A (ug/L)	Formaldehyde	34 U	37 U	ND
WS-09	Chatsworth	05/05/09	1625M (ug/L)	n-Nitrosodimethylamine	0.0063	0.005 U	ND
			300.0 (mg/L)	Fluoride	0.28	0.27	NV
				Nitrate-NO3	0.22 U	0.22 U	ND
			314.0 (ug/L)	Perchlorate	0.7 U	0.7 U	ND
			350.3 (mg/L)	Ammonia-N	0.03 U	0.03 U	ND
			8260B (ug/L)	1,1-Dichloroethene	11 J	10 J	NV
				cis-1,2-Dichloroethene	850	830	NV
				trans-1,2-Dichloroethene	21 J	20 J	NV
				Trichloroethene	12000	16000	NV
			8260B SIM (ug/L)	1,4-Dioxane	3.6	4.1	NV
			8270C (ug/L)	SVOCs	None detected	None detected	ND
			8315A (ug/L)	Formaldehyde	11 J	16 J	NV
WS-09A	Chatsworth	02/12/09	350.3 (mg/L)	Ammonia-N	0.13	0.17	NV
			8260B SIM (ug/L)	1,4-Dioxane	0.5 U	0.5 U	ND
		07/22/09	300.0 (mg/L)	Fluoride	0.24	0.08 U	ND
		10/14/09	314.0 (ug/L)	Perchlorate	0.28 U	0.28 U	ND
			8260B SIM (ug/L)	1,4-Dioxane	0.65 U	0.65 U	ND
			8270C (ug/L)	SVOCs	None detected	None detected	ND

TABLE D-III
SUMMARY OF 2009 DATA QUALIFICATION
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Date	Sample Type	Constituent	Sample Result	Units	Original Lab Qualifier	Validation Qualifier	Validation Level	Validation Comments	Data Usability Summary Report Name
ES-21	05/28/09	Split	Methylene chloride	1.4	ug/L	J	U	V	Reported result is less than 5X or 10X the associated trip blank.	D9E290342_DJC_DUSR Report.pdf
HAR-07	05/11/09	Primary	Antimony, Dissolved	0.00028	mg/L	JB	U	V	Reported result is less than 5X or 10X the associated method blank.	D9E120226_DJC_DUSR Report.pdf
HAR-07	05/11/09	Primary	Cobalt, Dissolved	0.000078	mg/L	JB	U	V	Reported result is less than 5X or 10X the associated method blank.	D9E120226_DJC_DUSR Report.pdf
HAR-07	05/11/09	Primary	Mercury, Dissolved	0.000072	mg/L	JB	U	V	Reported result is less than 5X or 10X the associated method blank.	D9E120226_DJC_DUSR Report.pdf
HAR-07	05/11/09	Primary	Methylene chloride	8	ug/L	JB	U	V	Reported result is less than 5X or 10X the associated method blank.	D9E120226_DJC_DUSR Report.pdf
HAR-07	05/11/09	Primary	bis(2-Ethylhexyl) phthalate	3	ug/L	JB	U	V	Reported result is less than 5X or 10X the associated method blank.	D9E140311_DJC_DUSR Report.pdf
HAR-07	05/11/09	Primary	Chrysene	0.56	ug/L	JB	U	V	Reported result is less than 5X or 10X the associated trip blank.	D9E140311_DJC_DUSR Report.pdf
HAR-07	07/21/09	Primary	bis(2-Ethylhexyl) phthalate	6	ug/L		U	V	Reported result is less than 5X or 10X the associated field blank.	1154451_DJC_DUSR Report.pdf
HAR-07	07/21/09	Primary	Formaldehyde	22	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1154451_DJC_DUSR Report.pdf
HAR-07	07/21/09	Primary	Octachlorodibenzo-p-dioxin	4.2	pg/L	Q B J	U	V	Reported result is less than 5X or 10X the associated method blank.	H9G220134_DJC_DUSR Report.pdf
HAR-07	10/15/09	Primary	Fluoride	0.27	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J160173_V_DUSR Report.pdf
HAR-07	10/15/09	Primary	bis(2-Ethylhexyl) phthalate	2.7	ug/L	J B	U	IV	Reported result is less than 5X or 10X the associated method blank times the dilution factor	D9J160173_IV_DUSR Report.pdf
HAR-07	10/15/09	Primary	Chrysene	0.56	ug/L	J	U	IV	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J160173_V_DUSR Report.pdf; see IV for Lvl IV
HAR-08	07/21/09	Primary	bis(2-Ethylhexyl) phthalate	2	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1154451_DJC_DUSR Report.pdf
HAR-08	07/21/09	Primary	Formaldehyde	12	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1154451_DJC_DUSR Report.pdf
HAR-08	10/22/09	Primary	Methylene chloride	1.6	ug/L	J	U	V	Reported result is less than 5X or 10X the associated trip blank times the dilution factor	D9J230301_V_DUSR Report.pdf
HAR-08	10/22/09	Primary	Fluoride	0.22	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J230301_V_DUSR Report.pdf
HAR-08	10/22/09	Primary	Trichloroethene	1.3	ug/L		U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J230301_V_DUSR Report.pdf
HAR-08	10/22/09	Primary	bis(2-Ethylhexyl) phthalate	2	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor	D9J230301_V_DUSR Report.pdf
HAR-08	10/22/09	Primary	Chrysene	0.64	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor	D9J230301_V_DUSR Report.pdf
HAR-11	02/26/09	Split	Methylene chloride	0.35	ug/L	J,B	U	V	Reported result is less than 5X or 10X the associated method blank.	D9B270193_DV_DJC_DUSR Report.pdf

TABLE D-III
SUMMARY OF 2009 DATA QUALIFICATION
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Date	Sample Type	Constituent	Sample Result	Units	Original Lab Qualifier	Validation Qualifier	Validation Level	Validation Comments	Data Usability Summary Report Name
HAR-14	04/23/09	Primary	Methylene chloride	0.47	ug/L	J	U	V	Reported result is less than 5X or 10X the associated method blank.	D9D240334_DJC_DUSR Report.pdf
HAR-14	04/23/09	Primary	Chrysene	0.59	ug/L	J	U	V	Reported result is less than 5X or 10X the associated method blank.	D9D240334_DJC_DUSR Report.pdf
HAR-14	04/23/09	Primary	Octachlorodibenzo-p-dioxin	4.4	pg/L	BJ	U	V	Reported result is less than 5X or 10X the associated method blank.	H9D280118_DJC_DUSR Report.pdf
HAR-14	10/13/09	Primary	Chloroform	1.9	ug/L		U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J140296_V_DUSR Report.pdf
HAR-15	04/23/09	Primary	bis(2-Ethylhexyl) phthalate	1.8	ug/L	J	U	V	Reported result is less than 5X or 10X the associated method blank.	D9D240334_DJC_DUSR Report.pdf
HAR-15	04/23/09	Primary	Methylene chloride	0.47	ug/L	J	U	V	Reported result is less than 5X or 10X the associated method blank.	D9D240334_DJC_DUSR Report.pdf
HAR-15	04/23/09	Primary	Octachlorodibenzo-p-dioxin	2	pg/L	QBJ	U	V	Reported result is less than 5X or 10X the associated method blank.	H9D280118_DJC_DUSR Report.pdf
HAR-15	10/13/09	Primary	cis-1,2-Dichloroethene	0.88	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J140296_V_DUSR Report.pdf
HAR-15	10/13/09	Primary	Acetone	2.7	ug/L	J	U	V	Reported result is less than 5X or 10X the associated trip blank times the dilution factor	D9J140296_V_DUSR Report.pdf
HAR-16	04/23/09	Primary	bis(2-Ethylhexyl) phthalate	1.8	ug/L	J	U	V	Reported result is less than 5X or 10X the associated method blank.	D9D240334_DJC_DUSR Report.pdf
HAR-16	04/23/09	Primary	Methylene chloride	29	ug/L	J	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor	D9D240334_DJC_DUSR Report.pdf
HAR-16	04/23/09	Primary	Chrysene	0.6	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	D9D240334_DJC_DUSR Report.pdf
HAR-16	10/23/09	Primary	Chloroform	7.2	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J240196_V_DUSR Report.pdf
HAR-16	10/23/09	Primary	Methylene chloride	36	ug/L	J	U	V	Reported result is less than 5X or 10X the associated trip blank times the dilution factor	D9J240196_V_DUSR Report.pdf
HAR-16	10/23/09	Primary	Carbon Disulfide	29	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor	D9J240196_V_DUSR Report.pdf
HAR-16	10/23/09	Duplicate	Carbon Disulfide	23	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor	D9J240196_V_DUSR Report.pdf
HAR-16	10/23/09	Duplicate	Chloroform	7	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J240196_V_DUSR Report.pdf
HAR-16	10/23/09	Duplicate	Methylene chloride	34	ug/L	J	U	V	Reported result is less than 5X or 10X the associated trip blank times the dilution factor	D9J240196_V_DUSR Report.pdf
HAR-17	04/29/09	Duplicate	Octachlorodibenzo-p-dioxin	8.3	pg/L	B,J	U	IV	Reported result is less than 5X or 10X the associated method blank.	H9D300186_DMC_DUSR Report.pdf
HAR-17	04/29/09	Duplicate	1,2,3,4,6,7,8-Heptachlorodibenzofuran	2.9	pg/L	J	J	IV	Compound detected at a concentration below the QL but above the EDL.	H9D300186_DMC_DUSR Report.pdf

TABLE D-III
SUMMARY OF 2009 DATA QUALIFICATION
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Date	Sample Type	Constituent	Sample Result	Units	Original Lab Qualifier	Validation Qualifier	Validation Level	Validation Comments	Data Usability Summary Report Name
HAR-17	07/16/09	Primary	1,2,3,4,6,7,8-Heptachlorodibenzofuran	14	pg/L	J	U	IV	Reported result is less than 5X or 10X the associated field blank.	H9G170196_MGN_DUSR Report.pdf
HAR-17	07/16/09	Primary	1,2,3,4,7,8-Hexachlorodibenzofuran	1.6	pg/L	Q J	U	IV	Reported result is less than 5X or 10X the associated field blank.	H9G170196_MGN_DUSR Report.pdf
HAR-17	07/16/09	Primary	Octachlorodibenzofuran	21	pg/L	J	U	IV	Reported result is less than 5X or 10X the associated field blank.	H9G170196_MGN_DUSR Report.pdf
HAR-17	07/16/09	Primary	Octachlorodibenzo-p-dioxin	28	pg/L	Q B J	U	IV	Reported result is less than 5X or 10X the associated method blank.	H9G170196_MGN_DUSR Report.pdf
HAR-17	07/16/09	Duplicate	1,2,3,4,6,7,8-Heptachlorodibenzofuran	67	pg/L		U	IV	Reported result is less than 5X or 10X the associated field blank.	H9G170196_MGN_DUSR Report.pdf
HAR-17	07/16/09	Duplicate	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	56	pg/L		U	IV	Reported result is less than 5X or 10X the associated field blank.	H9G170196_MGN_DUSR Report.pdf
HAR-17	07/16/09	Duplicate	1,2,3,4,7,8,9-Heptachlorodibenzofuran	3.8	pg/L	J	U	IV	Reported result is less than 5X or 10X the associated field blank.	H9G170196_MGN_DUSR Report.pdf
HAR-17	07/16/09	Duplicate	1,2,3,4,7,8-Hexachlorodibenzofuran	16	pg/L	J	U	IV	Reported result is less than 5X or 10X the associated field blank.	H9G170196_MGN_DUSR Report.pdf
HAR-17	07/16/09	Duplicate	1,2,3,6,7,8-Hexachlorodibenzofuran	17	pg/L	Q J	U	IV	Reported result is less than 5X or 10X the associated field blank.	H9G170196_MGN_DUSR Report.pdf
HAR-17	07/16/09	Duplicate	Octachlorodibenzofuran	170	pg/L		U	IV	Reported result is less than 5X or 10X the associated field blank.	H9G170196_MGN_DUSR Report.pdf
HAR-17	07/16/09	Duplicate	Octachlorodibenzo-p-dioxin	1100	pg/L	B	U	IV	Reported result is less than 5X or 10X the associated field blank.	H9G170196_MGN_DUSR Report.pdf
HAR-17	11/03/09	Primary	trans-1,3-Dichloropropene	0.25	ug/L	J	R	IV	Compound was misidentified, this compound is rejected.	D9K040450_IV_DUSR Report.pdf
HAR-17	11/03/09	Primary	Acetone	1.9	ug/L	U	R	IV	Rejected. Exceeds calibration range.	D9K040450_IV_DUSR Report.pdf
HAR-17	11/03/09	Primary	cis-1,2-Dichloroethene	19	ug/L		J	IV	Matrix Spike/Matrix Spike Duplicate recovery outside acceptance criteria.	D9K040450_IV_DUSR Report.pdf
HAR-17	11/03/09	Duplicate	cis-1,2-Dichloroethene	19	ug/L		J	IV	Matrix Spike/Matrix Spike Duplicate recovery outside acceptance criteria.	D9K040450_IV_DUSR Report.pdf
HAR-17	11/03/09	Duplicate	Acetone	8.8	ug/L	J	R	IV	Rejected. Exceeds calibration range.	D9K040450_IV_DUSR Report.pdf
HAR-18	03/04/09	Primary	n-Nitrosodimethylamine	0.51	ug/L	E-01	J	IV	Concentration exceeds the calibration range of the instrument; estimated value.	9C06049_04-22-09_MGN_DUSR Report.pdf
HAR-18	04/30/09	Primary	Methylene chloride	4.4	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1142900_DJC_DUSR Report.pdf
HAR-18	04/30/09	Split	bis(2-Ethylhexyl) phthalate	2.3	ug/L	J	U	V	Reported result is less than 5X or 10X the associated method blank.	D9E010171_DJC_DUSR Report.pdf
HAR-18	07/16/09	Primary	Ammonia-N	0.063	mg/L	J	U	V	Reported result is less than 5X or 10X the associated method blank.	1153920_DJC_DUSR Report.pdf
HAR-18	07/16/09	Primary	bis(2-Ethylhexyl) phthalate	4	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1153920_DJC_DUSR Report.pdf
HAR-18	10/29/09	Primary	Acetone	66	ug/L		U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J300214_V_DUSR Report.pdf
HAR-18	10/29/09	Primary	Chloroform	1.4	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J300214_V_DUSR Report.pdf
HAR-18	10/29/09	Primary	Fluoride	0.3	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J300214_V_DUSR Report.pdf
HAR-20	02/17/09	Duplicate	Fluoride	0.23	mg/L		J	V	Matrix Spike/Matrix Spike Duplicate recovery outside acceptance criteria.	1132638_DV_DJC_DUSR Report.pdf

See Table III for notes and abbreviations.

TABLE D-III
SUMMARY OF 2009 DATA QUALIFICATION
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Date	Sample Type	Constituent	Sample Result	Units	Original Lab Qualifier	Validation Qualifier	Validation Level	Validation Comments	Data Usability Summary Report Name
HAR-20	02/17/09	Primary	Fluoride	0.23	mg/L		J	V	Matrix Spike/Matrix Spike Duplicate recovery outside acceptance criteria.	1132638_DV_DJC_DUSR Report.pdf
HAR-20	07/15/09	Primary	bis(2-Ethylhexyl) phthalate	6	ug/L		U	V	Reported result is less than 5X or 10X the associated field blank.	1153741_DJC_DUSR Report.pdf
HAR-20	10/29/09	Primary	bis(2-Ethylhexyl) phthalate	0.95	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J300214_V_DUSR Report.pdf
HAR-20	10/29/09	Primary	Fluoride	0.21	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J300214_V_DUSR Report.pdf
HAR-26	07/20/09	Primary	Chloromethane	0.2	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1154292_DJC_DUSR Report.pdf
HAR-26	07/20/09	Primary	Formaldehyde	11	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1154292_DJC_DUSR Report.pdf
HAR-26	10/29/09	Primary	Chrysene	0.55	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J300214_V_DUSR Report.pdf
HAR-27	02/18/09	Duplicate	Acetone	30	ug/L		U	V	Reported result is less than 5X or 10X than the associated trip blank.	1132816_DV_DJC_DUSR Report.pdf
HAR-27	02/18/09	Primary	Acetone	8.4	ug/L		U	V	Reported result is less than 5X or 10X than the associated trip blank.	1132816_DV_DJC_DUSR Report.pdf
OS-25	08/05/09	Primary	Carbon Disulfide	0.9	ug/L		U	V	Reported result is less than 5X or 10X the associated field blank.	1156563_DJC_DUSR Report.pdf
PZ-006D	07/15/09	Primary	Formaldehyde	42	ug/L	J	U	V	Reported result is less than 5X or 10X the associated method blank.	1153741_DJC_DUSR Report.pdf
PZ-006E	07/15/09	Primary	Formaldehyde	35	ug/L	J	U	V	Reported result is less than 5X or 10X the associated method blank.	1153741_DJC_DUSR Report.pdf
PZ-050	02/10/09	Primary	Copper, Dissolved	0.00076	mg/L	J	U	V	Reported result is less than 5X or 10X than the associated field blank.	1131770_DV_DJC_DUSR Report.pdf
PZ-071	05/07/09	Split	Thallium, Dissolved	0.000036	mg/L	JB	U	V	Reported result is less than 5X or 10X the associated method blank.	D9E080302_DJC_DUSR Report.pdf
PZ-071	07/16/09	Primary	1,2,3,4,6,7,8-Heptachlorodibenzofuran	72	pg/L		U	IV	Reported result is less than 5X or 10X the associated field blank.	H9G170196_MGN_DUSR Report.pdf
PZ-071	07/16/09	Primary	1,2,3,4,7,8,9-Heptachlorodibenzofuran	7.2	pg/L	J	U	IV	Reported result is less than 5X or 10X the associated field blank.	H9G170196_MGN_DUSR Report.pdf
PZ-071	07/16/09	Primary	1,2,3,4,7,8-Hexachlorodibenzofuran	11	pg/L	J	U	IV	Reported result is less than 5X or 10X the associated field blank.	H9G170196_MGN_DUSR Report.pdf
PZ-071	07/16/09	Primary	1,2,3,6,7,8-Hexachlorodibenzofuran	45	pg/L	Q J	U	IV	Reported result is less than 5X or 10X the associated field blank.	H9G170196_MGN_DUSR Report.pdf
PZ-071	07/16/09	Primary	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	4.6	pg/L	Q J	U	IV	Reported result is less than 5X or 10X the associated field blank.	H9G170196_MGN_DUSR Report.pdf
PZ-071	07/16/09	Primary	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	4.6	pg/L	Q J	U	IV	Reported result is less than 5X or 10X the associated field blank.	H9G170196_MGN_DUSR Report.pdf
PZ-071	07/16/09	Primary	2,3,4,6,7,8-Hexachlorodibenzofuran	3.7	pg/L	J	U	IV	Reported result is less than 5X or 10X the associated field blank.	H9G170196_MGN_DUSR Report.pdf
PZ-071	07/16/09	Primary	Aroclor 1016	0.12	ug/L	U	UJ	V	Surrogate recovery outside acceptance criteria.	D9G170303_DJC_DUSR Report.pdf
PZ-071	07/16/09	Primary	Aroclor 1221	0.21	ug/L	U	UJ	V	Surrogate recovery outside acceptance criteria.	D9G170303_DJC_DUSR Report.pdf
PZ-071	07/16/09	Primary	Aroclor 1232	0.16	ug/L	U	UJ	V	Surrogate recovery outside acceptance criteria.	D9G170303_DJC_DUSR Report.pdf

See Table III for notes and abbreviations.

TABLE D-III
SUMMARY OF 2009 DATA QUALIFICATION
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Date	Sample Type	Constituent	Sample Result	Units	Original Lab Qualifier	Validation Qualifier	Validation Level	Validation Comments	Data Usability Summary Report Name
PZ-071	07/16/09	Primary	Aroclor 1242	0.1	ug/L	U	UJ	V	Surrogate recovery outside acceptance criteria.	D9G170303_DJC_DUSR Report.pdf
PZ-071	07/16/09	Primary	Aroclor 1248	0.089	ug/L	U	UJ	V	Surrogate recovery outside acceptance criteria.	D9G170303_DJC_DUSR Report.pdf
PZ-071	07/16/09	Primary	Aroclor 1254	0.11	ug/L	U	UJ	V	Surrogate recovery outside acceptance criteria.	D9G170303_DJC_DUSR Report.pdf
PZ-071	07/16/09	Primary	Aroclor 1260	0.16	ug/L	U	UJ	V	Surrogate recovery outside acceptance criteria.	D9G170303_DJC_DUSR Report.pdf
PZ-071	07/16/09	Primary	Copper, Dissolved	0.0018	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1153920_DJC_DUSR Report.pdf
PZ-071	07/16/09	Primary	Lead, Dissolved	0.00007	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1153920_DJC_DUSR Report.pdf
PZ-071	07/16/09	Primary	Molybdenum, Dissolved	0.0263	mg/L		U	V	Reported result is less than 5X or 10X the associated field blank.	1153920_DJC_DUSR Report.pdf
PZ-071	07/16/09	Primary	Nickel, Dissolved	0.0063	mg/L		U	V	Reported result is less than 5X or 10X the associated field blank.	1153920_DJC_DUSR Report.pdf
PZ-071	07/16/09	Primary	Octachlorodibenzofuran	320	pg/L		U	IV	Reported result is less than 5X or 10X the associated field blank.	H9G170196_MGN_DUSR Report.pdf
PZ-071	07/16/09	Primary	Octachlorodibenzo-p-dioxin	4100	pg/L	B	J	IV	Matrix Spike/Matrix Spike Duplicate recovery outside acceptance criteria.	H9G170196_MGN_DUSR Report.pdf
PZ-076	11/02/09	Primary	Silver, Dissolved	0.000016	mg/L	J	U	IV	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9K030529_V_DUSR Report.pdf; see IV for Lvl IV
PZ-076	11/02/09	Primary	bis(2-Ethylhexyl) phthalate	3.1	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor.	D9K030529_V_DUSR Report.pdf
PZ-076	11/02/09	Primary	Cadmium, Dissolved	0.00011	mg/L	J	U	IV	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9K030529_V_DUSR Report.pdf; see IV for Lvl IV
PZ-076	11/02/09	Primary	Zinc, Dissolved	0.0028	mg/L	J	U	IV	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9K030529_V_DUSR Report.pdf; see IV for Lvl IV
PZ-076	11/02/09	Primary	Thallium, Dissolved	0.000057	mg/L	J	U	IV	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9K030529_V_DUSR Report.pdf; see IV for Lvl IV
PZ-076	11/02/09	Primary	Trichloroethene	2.3	ug/L		U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9K030529_V_DUSR Report.pdf
PZ-076	11/02/09	Primary	Chrysene	0.55	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9K030529_V_DUSR Report.pdf
PZ-091	10/09/09	Primary	bis(2-Ethylhexyl) phthalate	3.4	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor.	D9J120130_V_DUSR Report.pdf
PZ-091	10/09/09	Primary	Chrysene	0.65	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor.	D9J120130_V_DUSR Report.pdf
PZ-091	10/09/09	Primary	Zinc, Dissolved	0.0038	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J120130_V_DUSR Report.pdf

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Well ID	Date	Sample Type	Constituent	Sample Result	Units	Original Lab Qualifier	Validation Qualifier	Validation Level	Validation Comments	Data Usability Summary Report Name
PZ-103	07/09/09	Primary	Nitrate-NO3	55	mg/L		J	V	Prepared or analyzed outside of holding time.	1152949_DJC_DUSR Report.pdf
PZ-103	10/07/09	Primary	Fluoride	0.57	mg/L		U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J080182_V_DUSR Report.pdf
PZ-105	04/29/09	Duplicate	Molybdenum, Dissolved	0.0233	mg/L		U	V	Reported result is less than 5X or 10X the associated field blank.	1142742_DJC_DUSR Report.pdf
PZ-105	04/29/09	Duplicate	Lead, Dissolved	0.000053	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1142742_DJC_DUSR Report.pdf
PZ-105	04/29/09	Primary	Molybdenum, Dissolved	0.0331	mg/L		U	V	Reported result is less than 5X or 10X the associated field blank.	1142742_DJC_DUSR Report.pdf
PZ-105	07/10/09	Primary	Copper, Dissolved	0.00062	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1153067_DJC_DUSR Report.pdf
PZ-105	07/10/09	Primary	Lead, Dissolved	0.00008	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1153067_DJC_DUSR Report.pdf
PZ-105	07/10/09	Primary	Molybdenum, Dissolved	0.0233	mg/L		U	V	Reported result is less than 5X or 10X the associated field blank.	1153067_DJC_DUSR Report.pdf
PZ-105	07/10/09	Primary	Nickel, Dissolved	0.00066	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1153067_DJC_DUSR Report.pdf
PZ-105	07/10/09	Split	Diesel Range Organics (C8-C11)	0.041	mg/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank.	D9G140177_DJC_DUSR Report.pdf
PZ-105	10/12/09	Primary	Thallium, Dissolved	0.000034	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J130287_V_DUSR Report.pdf
PZ-105	10/12/09	Primary	Zinc, Dissolved	0.0025	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J130287_V_DUSR Report.pdf
PZ-105	10/12/09	Primary	Acetone	4.9	ug/L	J	U	V	Reported result is less than 5X or 10X the associated trip blank times the dilution factor	D9J130287_V_DUSR Report.pdf
PZ-105	10/12/09	Primary	Cadmium, Dissolved	0.00021	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J130287_V_DUSR Report.pdf
PZ-108	07/14/09	Primary	Hydrazine	0.648	ug/L	J	J	IV	Prepared or analyzed outside of holding time.	984327_MGN_DUSR Report.pdf
PZ-108	07/14/09	Primary	Monomethylhydrazine	0.857	ug/L	U	UJ	IV	Prepared or analyzed outside of holding time.	984327_MGN_DUSR Report.pdf
PZ-108	10/14/09	Primary	Fluoride	0.58	mg/L		U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J150201_V_DUSR Report.pdf
PZ-108	10/14/09	Duplicate	Fluoride	0.58	mg/L		U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J150201_V_DUSR Report.pdf
PZ-109	02/17/09	Primary	Fluoride	0.99	mg/L		J	V	Matrix Spike/Matrix Spike Duplicate recovery outside acceptance criteria.	1132638_DV_DJC_DUSR Report.pdf
PZ-109	07/17/09	Primary	Copper, Dissolved	0.00047	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1154030_DJC_DUSR Report.pdf
PZ-109	07/17/09	Primary	Lead, Dissolved	0.000083	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1154030_DJC_DUSR Report.pdf
PZ-109	07/17/09	Primary	Nickel, Dissolved	0.001	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1154030_DJC_DUSR Report.pdf

See Table III for notes and abbreviations.

TABLE D-III
SUMMARY OF 2009 DATA QUALIFICATION
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Date	Sample Type	Constituent	Sample Result	Units	Original Lab Qualifier	Validation Qualifier	Validation Level	Validation Comments	Data Usability Summary Report Name
PZ-109	07/17/09	Duplicate	Copper, Dissolved	0.00063	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1154030_DJC_DUSR Report.pdf
PZ-109	07/17/09	Duplicate	Lead, Dissolved	0.00012	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1154030_DJC_DUSR Report.pdf
PZ-109	07/17/09	Duplicate	Nickel, Dissolved	0.0011	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1154030_DJC_DUSR Report.pdf
PZ-109	10/07/09	Primary	Fluoride	1.1	mg/L		U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J080182_V_DUSR Report.pdf
PZ-120	07/09/09	Primary	1,1-Dichloroethene	0.4	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1152949_DJC_DUSR Report.pdf
PZ-120	07/09/09	Primary	Benzene	0.1	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1152949_DJC_DUSR Report.pdf
PZ-120	10/07/09	Primary	Acetone	3.4	ug/L	J	U	V	Reported result is less than 5X or 10X the associated trip blank times the dilution factor.	D9J080182_V_DUSR Report.pdf
PZ-120	10/07/09	Primary	Methylene chloride	0.55	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor.	D9J080182_V_DUSR Report.pdf
PZ-122	07/14/09	Primary	Hydrazine	0.452	ug/L	U	UJ	V	Prepared or analyzed outside of holding time.	984327_DJC_DUSR Report.pdf
PZ-122	07/14/09	Primary	Molybdenum, Dissolved	0.0072	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1153524_DJC_DUSR Report.pdf
PZ-122	07/14/09	Primary	Monomethylhydrazine	0.857	ug/L	U	UJ	V	Prepared or analyzed outside of holding time.	984327_DJC_DUSR Report.pdf
PZ-122	07/14/09	Primary	Nickel, Dissolved	0.0018	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1153524_DJC_DUSR Report.pdf
PZ-122	07/14/09	Split	Thallium, Dissolved	0.000046	mg/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank.	D9G150243_DJC_DUSR Report.pdf
PZ-122	10/13/09	Primary	Silver, Dissolved	0.000018	mg/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor.	D9J140296_V_DUSR Report.pdf
PZ-122	10/13/09	Primary	Thallium, Dissolved	0.000034	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J140296_V_DUSR Report.pdf
PZ-122	10/13/09	Primary	Fluoride	0.34	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J140296_V_DUSR Report.pdf
PZ-122	10/13/09	Primary	Cadmium, Dissolved	0.000065	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J140296_V_DUSR Report.pdf
PZ-122	10/13/09	Split	pH	7.05	pH Units	HFT	J	IV	Prepared or analyzed outside of holding time.	ISJ1208_IV_DUSR Report.pdf
PZ-139	10/15/09	Primary	bis(2-Ethylhexyl) phthalate	2.7	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor.	D9J160173_V_DUSR Report.pdf
PZ-139	10/15/09	Primary	Cadmium, Dissolved	0.00015	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J160173_V_DUSR Report.pdf

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Well ID	Date	Sample Type	Constituent	Sample Result	Units	Original Lab Qualifier	Validation Qualifier	Validation Level	Validation Comments	Data Usability Summary Report Name
PZ-139	10/15/09	Primary	Zinc, Dissolved	0.0033	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J160173_V_DUSR Report.pdf
PZ-139	10/15/09	Split	n-Nitrosodimethylamine	0.005	ug/L	U,L	U	IV	LCS/LCSD recovery outside acceptance criteria.	ISJ1609_IV_DUSR Report.pdf
PZ-140	10/20/09	Primary	bis(2-Ethylhexyl) phthalate	2.3	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor.	D9J210197_V_DUSR Report.pdf
PZ-140	10/20/09	Primary	Cadmium, Dissolved	0.00013	mg/L	J	U	IV	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J210197_V_DUSR Report.pdf; see IV for Lvl IV
PZ-140	10/20/09	Primary	Zinc, Dissolved	0.0036	mg/L	J	U	IV	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J210197_V_DUSR Report.pdf; see IV for Lvl IV
PZ-140	10/20/09	Primary	Thallium, Dissolved	0.000049	mg/L	J	U	IV	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J210197_V_DUSR Report.pdf; see IV for Lvl IV
PZ-140	10/20/09	Duplicate	Cadmium, Dissolved	0.00012	mg/L	J	U	IV	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J210197_V_DUSR Report.pdf; see IV for Lvl IV
PZ-140	10/20/09	Duplicate	Thallium, Dissolved	0.000045	mg/L	J	U	IV	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J210197_V_DUSR Report.pdf; see IV for Lvl IV
PZ-141	11/03/09	Primary	Cadmium, Dissolved	0.0002	mg/L	J	U	IV	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9K040450_V_DUSR Report.pdf; see IV for Lvl IV
PZ-141	11/03/09	Primary	Zinc, Dissolved	0.007	mg/L	J	U	IV	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9K040450_V_DUSR Report.pdf; see IV for Lvl IV
PZ-141	11/03/09	Primary	Antimony, Dissolved	0.00036	mg/L	J	U	IV	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9K040450_V_DUSR Report.pdf; see IV for Lvl IV
PZ-141	11/03/09	Primary	cis-1,2-Dichloroethene	2.1	ug/L		J	IV	Matrix Spike/Matrix Spike Duplicate recovery outside acceptance criteria.	D9K040450_IV_DUSR Report.pdf
PZ-141	11/03/09	Primary	Acetone	1.9	ug/L	U	R	IV	Rejected. Exceeds calibration range.	D9K040450_IV_DUSR Report.pdf
PZ-141	11/03/09	Primary	Thallium, Dissolved	0.000037	mg/L	J	U	IV	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9K040450_V_DUSR Report.pdf; see IV for Lvl IV
RD-01	07/14/09	Primary	Formaldehyde	13	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1153524_DJC_DUSR Report.pdf
RD-01	10/27/09	Primary	Fluoride	0.33	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J280189_V_DUSR Report.pdf
RD-01	10/27/09	Split	Benzidine	9.8	ug/L	U,L6	R	IV	LCS/LCSD recovery outside acceptance criteria.	ISJ2937_IV_DUSR Report.pdf
RD-01	10/27/09	Split	2,4-Dimethylphenol	3.4	ug/L	U	UJ	IV	Calibration verification was out of control limits.	ISJ2937_IV_DUSR Report.pdf
RD-03	07/29/09	Primary	Carbon Disulfide	0.6	ug/L		U	V	Reported result is less than 5X or 10X the associated trip blank.	1155614_DJC_DUSR Report.pdf
RD-03	10/27/09	Primary	Octachlorodibenzofuran	4.4	pg/L	U	UJ	V	Matrix Spike/Matrix Spike Duplicate recovery outside acceptance criteria.	D9J280190_V_DUSR Report.pdf

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Well ID	Date	Sample Type	Constituent	Sample Result	Units	Original Lab Qualifier	Validation Qualifier	Validation Level	Validation Comments	Data Usability Summary Report Name
RD-03	10/27/09	Split	Octachlorodibenzo-p-dioxin	2.5	pg/L	J,Q,B	U		Reported result is less than 5X or 10X than the associated method blank.	
RD-03	10/27/09	Split	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	1	pg/L	J,Q	J		LCS/LCSD recovery outside acceptance criteria.	
RD-03	10/27/09	Split	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	1.4	pg/L	J,B	U		Reported result is less than 5X or 10X than the associated method blank.	
RD-04	05/05/09	Primary	Ammonia-N	0.17	mg/L		J	V	Matrix Spike/Matrix Spike Duplicate recovery outside acceptance criteria.	1143500_DJC_DUSR Report.pdf
RD-04	07/28/09	Primary	1,1-Dichloroethene	2	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1155424_DJC_DUSR Report.pdf
RD-04	07/28/09	Primary	Formaldehyde	55	ug/L		U	V	Reported result is less than 5X or 10X the associated field blank.	1155424_DJC_DUSR Report.pdf
RD-04	10/28/09	Primary	Fluoride	0.24	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J290208_V_DUSR Report.pdf
RD-05B	02/13/09	Duplicate	Chloromethane	0.3	ug/L	J	U	V	Reported result is less than 5X or 10X than the associated field blank.	1132333_DV_DJC_DUSR Report.pdf
RD-05B	07/22/09	Primary	Chloromethane	0.3	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1154682_DJC_DUSR Report.pdf
RD-05B	10/22/09	Duplicate	Methylene chloride	1.7	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor.	D9J230301_V_DUSR Report.pdf
RD-05C	02/13/09	Primary	Chloromethane	0.4	ug/L	J	U	IV	Reported result is less than 5X or 10X than the associated field blank.	1132333_DV_DJC_DUSR Report.pdf
RD-05C	07/20/09	Primary	Chloromethane	0.2	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1154292_DJC_DUSR Report.pdf
RD-06	05/04/09	Split	Methyl ethyl ketone	1.8	ug/L	U	UJ	IV	Continuing calibration verification outside acceptance criteria.	D9E060235_MGN_DUSR Report.pdf
RD-06	05/04/09	Split	2-Hexanone	1.4	ug/L	U	UJ	IV	Continuing calibration verification outside acceptance criteria.	D9E060235_MGN_DUSR Report.pdf
RD-06	07/13/09	Primary	Octachlorodibenzofuran	3.7	pg/L	J	U	IV	Reported result is less than 5X or 10X the associated field blank.	H9G160213_MGN_DUSR Report.pdf
RD-06	07/13/09	Primary	Octachlorodibenzo-p-dioxin	13	pg/L	Q B J	U	IV	Reported result is less than 5X or 10X the associated method blank.	H9G160213_MGN_DUSR Report.pdf
RD-06	07/13/09	Duplicate	1,2,3,4,6,7,8-Heptachlorodibenzofuran	1.9	pg/L	Q J	U	IV	Reported result is less than 5X or 10X the associated field blank.	H9G160213_MGN_DUSR Report.pdf
RD-06	07/13/09	Duplicate	Cyanides	0.0031	mg/L	J	J	IV	Matrix Spike/Matrix Spike Duplicate recovery outside acceptance criteria.	D9G150243_MGN_DUSR Report.pdf
RD-06	07/13/09	Duplicate	gamma-BHC	0.021	ug/L	J COL	J	IV	RPD between primary and secondary column outside acceptance criteria.	D9G150243_MGN_DUSR Report.pdf
RD-06	07/13/09	Duplicate	Octachlorodibenzofuran	6.1	pg/L	J	U	IV	Reported result is less than 5X or 10X the associated field blank.	H9G160213_MGN_DUSR Report.pdf
RD-06	07/13/09	Duplicate	Octachlorodibenzo-p-dioxin	64	pg/L	B J	U	IV	Reported result is less than 5X or 10X the associated method blank.	H9G160213_MGN_DUSR Report.pdf
RD-06	07/13/09	Duplicate	Thallium, Dissolved	0.000046	mg/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank.	D9G150243_DJC_DUSR Report.pdf
RD-08	08/05/09	Primary	Formaldehyde	12	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1156563_DJC_DUSR Report.pdf
RD-09	02/19/09	Split	Formaldehyde	33	ug/L	J,B	U	V	Reported result is less than 5X or 10X the associated method blank.	D9B200114_DV_DJC_DUSR Report.pdf

See Table III for notes and abbreviations.

TABLE D-III
SUMMARY OF 2009 DATA QUALIFICATION
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Date	Sample Type	Constituent	Sample Result	Units	Original Lab Qualifier	Validation Qualifier	Validation Level	Validation Comments	Data Usability Summary Report Name
RD-09	07/28/09	Primary	Ammonia-N	0.06	mg/L	J	U	V	Reported result is less than 5X or 10X the associated method blank.	1155424_DJC_DUSR Report.pdf
RD-09	07/28/09	Primary	Formaldehyde	32	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1155424_DJC_DUSR Report.pdf
RD-09	10/19/09	Primary	Fluoride	0.17	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J200192_V_DUSR Report.pdf
RD-09	10/19/09	Primary	bis(2-Ethylhexyl) phthalate	2.1	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor.	D9J200192_V_DUSR Report.pdf
RD-09	10/19/09	Duplicate	Fluoride	0.18	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J200192_V_DUSR Report.pdf
RD-10	02/26/09	Split	Formaldehyde	30	ug/L	J,B	U	V	Reported result is less than 5X or 10X the associated method blank.	D9B270112_DV_DJC_DUSR Report.pdf
RD-10	07/14/09	Primary	bis(2-Ethylhexyl) phthalate	3	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1153524_DJC_DUSR Report.pdf
RD-10	07/14/09	Primary	Formaldehyde	16	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1153524_DJC_DUSR Report.pdf
RD-10	10/27/09	Primary	Chrysene	0.54	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J280189_V_DUSR Report.pdf
RD-10	10/27/09	Primary	Fluoride	0.34	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J280189_V_DUSR Report.pdf
RD-11	05/14/09	Split	Chrysene	0.6	ug/L	JB	U	V	Reported result is less than 5X or 10X the associated method blank.	D9E150325_DJC_DUSR Report.pdf
RD-13	10/21/09	Primary	Methylene chloride	1.9	ug/L	J	U	V	Reported result is less than 5X or 10X the associated trip blank times the dilution factor.	D9J220340_V_DUSR Report.pdf
RD-13	10/21/09	Primary	Trichloroethene	0.27	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J220340_V_DUSR Report.pdf
RD-13	10/21/09	Split	Formaldehyde	0.564	ug/L	J	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor.	ISJ2383_V_DUSR Report.pdf
RD-13	10/21/09	Split	sym-Trinitrobenzene	0.03	ug/L	J,B	U	IV	Reported result is less than 5X or 10X the associated method blank times the dilution factor.	ISJ2383_IV_DUSR Report.pdf
RD-13	10/21/09	Duplicate	Methylene chloride	1.7	ug/L	J	U	V	Reported result is less than 5X or 10X the associated trip blank times the dilution factor.	D9J220340_V_DUSR Report.pdf
RD-13	10/21/09	Duplicate	Trichloroethene	0.25	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J220340_V_DUSR Report.pdf
RD-16	07/21/09	Duplicate	Chloromethane	0.2	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1154451_DJC_DUSR Report.pdf
RD-18	05/05/09	Split	Methylene chloride	0.86	ug/L	JB	U	V	Reported result is less than 5X or 10X the associated method blank.	D9E070287_DJC_DUSR Report.pdf

See Table III for notes and abbreviations.

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BOEING SANTA SUSANA FIELD LABORATORY
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Well ID	Date	Sample Type	Constituent	Sample Result	Units	Original Lab Qualifier	Validation Qualifier	Validation Level	Validation Comments	Data Usability Summary Report Name
RD-18	10/22/09	Primary	Methylene chloride	0.34	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor	D9J230301_V_DUSR Report.pdf
RD-19	10/14/09	Primary	Acetone	5.8	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J150201_V_DUSR Report.pdf
RD-20	05/06/09	Primary	1,2,3,4,6,7,8-Heptachlorodibenzofuran	2	pg/L	J	J	IV	Compound detected below EDL but above the QL	H9E070185_DMC_DUSR Report.pdf
RD-20	05/06/09	Primary	Octachlorodibenzo-p-dioxin	3.5	pg/L	QJ	UJ	IV	Result qualified as estimated non-detect because EMPC was reported by Lab.	H9E070185_DMC_DUSR Report.pdf
RD-20	07/22/09	Primary	Octachlorodibenzo-p-dioxin	2.9	pg/L	Q B J	U	V	Reported result is less than 5X or 10X the associated method blank.	H9G230131_DJC_DUSR Report.pdf
RD-20	07/22/09	Duplicate	Octachlorodibenzo-p-dioxin	4.1	pg/L	Q B J	U	V	Reported result is less than 5X or 10X the associated method blank.	H9G230131_DJC_DUSR Report.pdf
RD-21	07/16/09	Primary	Copper, Dissolved	0.0014	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1153920_DJC_DUSR Report.pdf
RD-21	07/16/09	Primary	Molybdenum, Dissolved	0.005	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1153920_DJC_DUSR Report.pdf
RD-22	10/21/09	Primary	Methylene chloride	1.6	ug/L	J	U	V	Reported result is less than 5X or 10X the associated trip blank times the dilution factor	D9J220340_V_DUSR Report.pdf
RD-22	10/21/09	Duplicate	Methylene chloride	2	ug/L	J	U	V	Reported result is less than 5X or 10X the associated trip blank times the dilution factor	D9J220340_V_DUSR Report.pdf
RD-22(Z2)	02/23/09	Primary	Lead, Dissolved	0.00011	mg/L	J	U	V	Reported result is less than 5X or 10X the associated method blank.	1133423_DV_DJC_DUSR Report.pdf
RD-23	07/16/09	Primary	Molybdenum, Dissolved	0.005	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1153920_DJC_DUSR Report.pdf
RD-23	07/16/09	Primary	Nickel, Dissolved	0.00077	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1153920_DJC_DUSR Report.pdf
RD-24	10/27/09	Primary	cis-1,2-Dichloroethene	0.33	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J280189_V_DUSR Report.pdf
RD-26	05/27/09	Split	Methylene chloride	0.38	ug/L	J	U	V	Reported result is less than 5X or 10X the associated trip blank.	D9E280208_DJC_DUSR Report.pdf
RD-27	03/06/09	Primary	Copper, Dissolved	0.0009	mg/L	J	U	V	Reported result is less than 5X or 10X the associated method blank.	1135099_DV_DJC_DUSR Report.pdf
RD-32	10/23/09	Primary	Trichloroethene	0.41	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J240196_V_DUSR Report.pdf
RD-32	10/23/09	Primary	Carbon Disulfide	0.65	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor	D9J240196_V_DUSR Report.pdf
RD-32	10/23/09	Primary	Methylene chloride	0.53	ug/L	J	U	V	Reported result is less than 5X or 10X the associated trip blank times the dilution factor	D9J240196_V_DUSR Report.pdf
RD-33A	07/17/09	Primary	1,1-Dichloroethene	0.9	ug/L		U	V	Reported result is less than 5X or 10X the associated field blank.	1154030_DJC_DUSR Report.pdf
RD-33A	07/17/09	Primary	Benzene	0.3	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1154030_DJC_DUSR Report.pdf

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Well ID	Date	Sample Type	Constituent	Sample Result	Units	Original Lab Qualifier	Validation Qualifier	Validation Level	Validation Comments	Data Usability Summary Report Name
RD-33A(Z2)	02/25/09	Primary	Lead	0.000069	mg/L	J	U	V	Reported result is less than 5X or 10X the associated method blank.	1133802_DV_DJC_DUSR Report.pdf
RD-33B	10/22/09	Primary	Methylene chloride	0.35	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor.	D9J230301_V_DUSR Report.pdf
RD-33B	10/22/09	Primary	Acetone	2.9	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J230301_V_DUSR Report.pdf
RD-33C	10/21/09	Primary	Methylene chloride	1.6	ug/L	J	U	V	Reported result is less than 5X or 10X the associated trip blank times the dilution factor.	D9J220340_V_DUSR Report.pdf
RD-34A	03/05/09	Primary	Copper, Dissolved	0.00062	mg/L	J	U	V	Reported result is less than 5X or 10X the associated method blank.	1134984_DV_DJC_DUSR Report.pdf
RD-34A	07/28/09	Primary	1,1-Dichloroethene	0.5	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1155424_DJC_DUSR Report.pdf
RD-34B	02/20/09	Primary	Lead, Dissolved	0.00019	mg/L	J	U	V	Reported result is less than 5X or 10X the associated method blank.	1133157_DV_DJC_DUSR Report.pdf
RD-34B	07/28/09	Primary	1,1-Dichloroethene	0.1	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1155424_DJC_DUSR Report.pdf
RD-37	05/13/09	Split	Acetone	2.7	ug/L	J	U	IV	Reported result is less than 5X or 10X the associated trip blank.	D9E140311_MGN_DUSR Report.pdf
RD-37	07/13/09	Primary	1,2,3,4,6,7,8-Heptachlorodibenzofuran	34	pg/L	J	U	IV	Reported result is less than 5X or 10X the associated field blank.	H9G160213_MGN_DUSR Report.pdf
RD-37	07/13/09	Primary	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	6.8	pg/L	Q J	U	IV	Reported result is less than 5X or 10X the associated field blank.	H9G160213_MGN_DUSR Report.pdf
RD-37	07/13/09	Primary	1,2,3,4,7,8-Hexachlorodibenzofuran	7.1	pg/L	J	U	IV	Reported result is less than 5X or 10X the associated field blank.	H9G160213_MGN_DUSR Report.pdf
RD-37	07/13/09	Primary	1,2,3,6,7,8-Hexachlorodibenzofuran	4.5	pg/L	Q J	U	IV	Reported result is less than 5X or 10X the associated field blank.	H9G160213_MGN_DUSR Report.pdf
RD-37	07/13/09	Primary	Octachlorodibenzofuran	38	pg/L	J	U	IV	Reported result is less than 5X or 10X the associated field blank.	H9G160213_MGN_DUSR Report.pdf
RD-37	07/13/09	Primary	Octachlorodibenzo-p-dioxin	130	pg/L	B	U	IV	Reported result is less than 5X or 10X the associated field blank.	H9G160213_MGN_DUSR Report.pdf
RD-37	07/13/09	Split	1,4-Dioxane	0.9	ug/L	J	J	IV	Sample preservation violation due to pH.	1153317_MGN_DUSR Report.pdf
RD-37	07/13/09	Split	bis(2-Ethylhexyl) phthalate	8	ug/L		U	V	Reported result is less than 5X or 10X the associated field blank.	1153317_DJC_DUSR Report.pdf
RD-37	10/28/09	Split	Octachlorodibenzo-p-dioxin	3.3	pg/L	J,Q,B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor.	ISJ3113_V_DUSR Report.pdf
RD-37	10/28/09	Split	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	1.1	pg/L	J,Q,B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor.	ISJ3113_V_DUSR Report.pdf
RD-39B	11/03/09	Primary	Acetone	1.9	ug/L	U	R	IV	Rejected. Exceeds calibration range.	D9K040450_IV_DUSR Report.pdf
RD-41A	07/28/09	Primary	Ammonia-N	0.035	mg/L	J	U	V	Reported result is less than 5X or 10X the associated method blank.	1155424_DJC_DUSR Report.pdf
RD-41A	07/28/09	Primary	Chloromethane	0.2	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1155424_DJC_DUSR Report.pdf
RD-41B	02/12/09	Primary	1,1,1-Trichloroethane	2	ug/L	U	R	V	LCS/LCSD recovery outside acceptance criteria.	1132242_DV_DJC_DUSR Report.pdf
RD-41B	05/04/09	Split	Nitrate-N	0.19	mg/L	U	UJ	V	Prepared or analyzed outside of holding time.	D9E060235_DJC_DUSR Report.pdf

See Table III for notes and abbreviations.

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Well ID	Date	Sample Type	Constituent	Sample Result	Units	Original Lab Qualifier	Validation Qualifier	Validation Level	Validation Comments	Data Usability Summary Report Name
RD-41B	05/04/09	Split	Acenaphthene	0.27	ug/L	U	UJ	V	Prepared or analyzed outside of holding time.	D9E060235_DJC_DUSR Report.pdf
RD-41B	05/04/09	Split	Chrysene	0.64	ug/L	J,B	U	V	Reported result is less than 5X or 10X the associated method blank.	D9E060235_DJC_DUSR Report.pdf
RD-41B	08/04/09	Primary	Ammonia-N	0.11	mg/L		U	V	Reported result is less than 5X or 10X the associated method blank.	1156342_DJC_DUSR Report.pdf
RD-41B	08/04/09	Duplicate	Ammonia-N	0.097	mg/L	J	U	V	Reported result is less than 5X or 10X the associated method blank.	1156342_DJC_DUSR Report.pdf
RD-41B	11/02/09	Primary	1,4-Dioxane	19	ug/L	U,RL1	UJ	V	Prepared or analyzed outside of holding time.	D9K030529_V_DUSR Report.pdf
RD-41B	11/02/09	Primary	Fluoride	0.2	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9K030529_V_DUSR Report.pdf
RD-41B	11/02/09	Primary	bis(2-Ethylhexyl) phthalate	2.8	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor	D9K030529_V_DUSR Report.pdf
RD-41B	11/02/09	Primary	Methylene chloride	2.5	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9K030529_V_DUSR Report.pdf
RD-41B	11/02/09	Duplicate	1,4-Dioxane	65	ug/L	U,RL1	UJ	V	Prepared or analyzed outside of holding time.	D9K030529_V_DUSR Report.pdf
RD-43A	07/22/09	Primary	Chloromethane	0.2	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1154682_MGN_DUSR Report.pdf
RD-43A	10/21/09	Primary	Methylene chloride	2.1	ug/L	J	U	V	Reported result is less than 5X or 10X the associated trip blank times the dilution factor	D9J220340_V_DUSR Report.pdf
RD-43A	10/21/09	Duplicate	Methylene chloride	2	ug/L	J	U	V	Reported result is less than 5X or 10X the associated trip blank times the dilution factor	D9J220340_V_DUSR Report.pdf
RD-43A	10/21/09	Duplicate	Trichloroethene	0.18	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J220340_V_DUSR Report.pdf
RD-43B	10/21/09	Primary	Methylene chloride	1.9	ug/L	J	U	V	Reported result is less than 5X or 10X the associated trip blank times the dilution factor	D9J220340_V_DUSR Report.pdf
RD-43B	10/21/09	Duplicate	Methylene chloride	1.8	ug/L	J	U	V	Reported result is less than 5X or 10X the associated trip blank times the dilution factor	D9J220340_V_DUSR Report.pdf
RD-43C	10/21/09	Primary	Bromoform	0.19	ug/L	U	UJ	IV	Continuing calibration verification outside acceptance criteria.	D9J220340_IV_DUSR Report.pdf
RD-44	07/27/09	Primary	Ammonia-N	0.032	mg/L	J	U	V	Reported result is less than 5X or 10X the associated method blank.	1155244_DJC_DUSR Report.pdf
RD-44	10/28/09	Primary	Fluoride	0.38	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J290208_V_DUSR Report.pdf
RD-44	10/28/09	Duplicate	Fluoride	0.36	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J290208_V_DUSR Report.pdf
RD-45C	07/16/09	Duplicate	Chloromethane	0.2	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1153920_DJC_DUSR Report.pdf

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RD-46B	10/22/09	Primary	bis(2-Ethylhexyl) phthalate	1.9	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor.	D9J230301_V_DUSR Report.pdf
RD-46B	10/22/09	Duplicate	Chrysene	0.56	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor.	D9J230301_V_DUSR Report.pdf
RD-46B	10/22/09	Duplicate	bis(2-Ethylhexyl) phthalate	1.8	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor.	D9J230301_V_DUSR Report.pdf
RD-47	07/30/09	Duplicate	Chloromethane	0.3	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1155806_DJC_DUSR Report.pdf
RD-48B	08/05/09	Primary	Chloromethane	0.2	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1156563_DJC_DUSR Report.pdf
RD-48C	07/21/09	Primary	Carbon Disulfide	0.8	ug/L		U	V	Reported result is less than 5X or 10X the associated field blank.	1154451_DJC_DUSR Report.pdf
RD-49A	05/06/09	Primary	bis(2-Ethylhexyl) phthalate	6	ug/L		U	V	Reported result is less than 5X or 10X the associated method blank.	1143735_DJC_DUSR Report.pdf
RD-49B	02/11/09	Primary	1,1,1-Trichloroethane	0.8	ug/L	U	R	V	LCS/LCSD recovery outside acceptance criteria.	1132036_DV_DJC_DUSR Report.pdf
RD-49B	10/30/09	Primary	Fluoride	0.23	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J310155_V_DUSR Report.pdf
RD-49C	02/11/09	Primary	bis(2-Ethylhexyl) phthalate	27	ug/L		U	V	Reported result is less than 5X or 10X the associated method blank.	1132036_DV_DJC_DUSR Report.pdf
RD-49C	02/11/09	Primary	1,1,1-Trichloroethane	0.8	ug/L	U	R	V	LCS/LCSD recovery outside acceptance criteria.	1132036_DV_DJC_DUSR Report.pdf
RD-49C	05/06/09	Primary	bis(2-Ethylhexyl) phthalate	3	ug/L	J	U	V	Reported result is less than 5X or 10X the associated method blank.	1143735_DJC_DUSR Report.pdf
RD-49C	07/28/09	Primary	Formaldehyde	28	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1155424_DJC_DUSR Report.pdf
RD-49C	10/30/09	Primary	Fluoride	0.25	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J310155_V_DUSR Report.pdf
RD-50	07/16/09	Primary	Benzene	0.1	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1153920_DJC_DUSR Report.pdf
RD-51B	07/27/09	Primary	Ammonia-N	0.051	mg/L	J	U	V	Reported result is less than 5X or 10X the associated method blank.	1155244_DJC_DUSR Report.pdf
RD-51B	07/27/09	Primary	Formaldehyde	20	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1155244_DJC_DUSR Report.pdf
RD-51B	07/27/09	Duplicate	Formaldehyde	18	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1155244_DJC_DUSR Report.pdf
RD-51B	10/19/09	Primary	bis(2-Ethylhexyl) phthalate	2.1	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor.	D9J200192_V_DUSR Report.pdf
RD-51B	10/19/09	Primary	Fluoride	0.29	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J200192_V_DUSR Report.pdf
RD-51C	05/05/09	Split	Methylene chloride	1.1	ug/L	JB	U	V	Reported result is less than 5X or 10X the associated method blank.	D9E070287_DJC_DUSR Report.pdf
RD-51C	07/27/09	Primary	Ammonia-N	0.084	mg/L	J	U	V	Reported result is less than 5X or 10X the associated method blank.	1155244_DJC_DUSR Report.pdf

See Table III for notes and abbreviations.

TABLE D-III
SUMMARY OF 2009 DATA QUALIFICATION
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Date	Sample Type	Constituent	Sample Result	Units	Original Lab Qualifier	Validation Qualifier	Validation Level	Validation Comments	Data Usability Summary Report Name
RD-51C	10/19/09	Primary	Fluoride	0.19	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J200192_V_DUSR Report.pdf
RD-51C	10/19/09	Primary	bis(2-Ethylhexyl) phthalate	2	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor	D9J200192_V_DUSR Report.pdf
RD-52C	07/20/09	Primary	Chloromethane	0.5	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1154292_DJC_DUSR Report.pdf
RD-52C	07/20/09	Duplicate	Chloromethane	0.3	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1154292_DJC_DUSR Report.pdf
RD-52C	10/22/09	Primary	Methylene chloride	0.33	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor	D9J230301_V_DUSR Report.pdf
RD-54A	07/16/09	Primary	Copper, Dissolved	0.00061	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1153920_DJC_DUSR Report.pdf
RD-54A	07/16/09	Primary	Lead, Dissolved	0.00016	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1153920_DJC_DUSR Report.pdf
RD-54A	07/16/09	Primary	Nickel, Dissolved	0.0011	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1153920_DJC_DUSR Report.pdf
RD-54B	10/30/09	Primary	Zinc, Dissolved	0.92	mg/L		J	V	Matrix Spike/Matrix Spike Duplicate recovery outside acceptance criteria.	D9J310155_V_DUSR Report.pdf
RD-54B	10/30/09	Primary	Thallium, Dissolved	0.000049	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J310155_V_DUSR Report.pdf
RD-54B	10/30/09	Primary	Silver, Dissolved	0.000028	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J310155_V_DUSR Report.pdf
RD-54B	10/30/09	Primary	Antimony, Dissolved	0.000097	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J310155_V_DUSR Report.pdf
RD-54B	10/30/09	Primary	Acetone	7	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor	D9J310155_V_DUSR Report.pdf
RD-54B	10/30/09	Split	Antimony, Dissolved	0.0003	mg/L	U,C	UJ	IV	Calibration verification was out of control limits.	ISJ3338_IV_DUSR Report.pdf
RD-54B	10/30/09	Split	Copper, Dissolved	0.002	mg/L	B	U	IV	Reported result is less than 5X or 10X the associated method blank times the dilution factor	ISJ3338_IV_DUSR Report.pdf
RD-54B	10/30/09	Duplicate	Silver, Dissolved	0.000016	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J310155_V_DUSR Report.pdf
RD-54B	10/30/09	Duplicate	Zinc, Dissolved	0.93	mg/L		J	V	Matrix Spike/Matrix Spike Duplicate recovery outside acceptance criteria.	D9J310155_V_DUSR Report.pdf
RD-54C	08/04/09	Primary	Copper, Dissolved	0.00062	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1156342_DJC_DUSR Report.pdf
RD-54C	08/04/09	Primary	Lead, Dissolved	0.00026	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1156342_DJC_DUSR Report.pdf
RD-54C	08/04/09	Primary	Molybdenum, Dissolved	0.0049	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1156342_DJC_DUSR Report.pdf
RD-54C	08/04/09	Primary	Nickel, Dissolved	0.00063	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1156342_DJC_DUSR Report.pdf

See Table III for notes and abbreviations.

TABLE D-III
SUMMARY OF 2009 DATA QUALIFICATION
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Date	Sample Type	Constituent	Sample Result	Units	Original Lab Qualifier	Validation Qualifier	Validation Level	Validation Comments	Data Usability Summary Report Name
RD-54C	08/04/09	Split	Mercury, Dissolved	0.000028	mg/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank.	D9H060361_DJC_DUSR Report.pdf
RD-54C	08/04/09	Split	Nickel, Dissolved	0.0019	mg/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank.	D9H060361_DJC_DUSR Report.pdf
RD-54C	08/04/09	Split	Thallium, Dissolved	0.000053	mg/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank.	D9H060361_DJC_DUSR Report.pdf
RD-54C	08/04/09	Duplicate	Copper, Dissolved	0.00051	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1156342_DJC_DUSR Report.pdf
RD-54C	08/04/09	Duplicate	Lead, Dissolved	0.00024	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1156342_DJC_DUSR Report.pdf
RD-54C	08/04/09	Duplicate	Molybdenum, Dissolved	0.0049	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1156342_DJC_DUSR Report.pdf
RD-54C	08/04/09	Duplicate	Nickel, Dissolved	0.0006	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1156342_DJC_DUSR Report.pdf
RD-55A	11/03/09	Primary	Fluoride	0.38	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9K040450_V_DUSR Report.pdf
RD-55B	02/12/09	Primary	1,1,1-Trichloroethane	0.8	ug/L	U	R	V	LCS/LCSD recovery outside acceptance criteria.	1132242_DV_DJC_DUSR Report.pdf
RD-55B	07/21/09	Primary	Formaldehyde	15	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1154451_DJC_DUSR Report.pdf
RD-55B	11/02/09	Primary	bis(2-Ethylhexyl) phthalate	2.8	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor	D9K030529_V_DUSR Report.pdf
RD-55B	11/02/09	Primary	Fluoride	0.56	mg/L		U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9K030529_V_DUSR Report.pdf
RD-55B	11/02/09	Duplicate	Fluoride	0.52	mg/L		U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9K030529_V_DUSR Report.pdf
RD-56B	07/22/09	Primary	Chloromethane	0.5	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1154682_DJC_DUSR Report.pdf
RD-56B	10/21/09	Primary	Trichloroethene	0.43	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J220340_V_DUSR Report.pdf
RD-56B	10/21/09	Primary	Methylene chloride	2	ug/L	J	U	V	Reported result is less than 5X or 10X the associated trip blank times the dilution factor	D9J220340_V_DUSR Report.pdf
RD-57	10/21/09	Primary	Methylene chloride	1.9	ug/L	J	U	V	Reported result is less than 5X or 10X the associated trip blank times the dilution factor	D9J220340_V_DUSR Report.pdf
RD-58A	05/11/09	Primary	Chloromethane	0.3	ug/L	J	U	V	Reported result is less than 5X or 10X the associated trip blank.	1144359_DJC_DUSR Report.pdf
RD-58A	08/04/09	Primary	Formaldehyde	11	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1156342_DJC_DUSR Report.pdf
RD-58A	10/22/09	Primary	Acetone	2.8	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J230301_V_DUSR Report.pdf
RD-58A	10/22/09	Primary	Fluoride	0.42	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J230301_V_DUSR Report.pdf

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BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Date	Sample Type	Constituent	Sample Result	Units	Original Lab Qualifier	Validation Qualifier	Validation Level	Validation Comments	Data Usability Summary Report Name
RD-58A	10/22/09	Primary	1,4-Dioxane	0.65	ug/L	U	UJ	V	Prepared or analyzed outside of holding time.	D9J230301_V_DUSR Report.pdf
RD-58A	10/22/09	Primary	bis(2-Ethylhexyl) phthalate	2.1	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor.	D9J230301_V_DUSR Report.pdf
RD-58A	10/22/09	Primary	Methylene chloride	0.34	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor.	D9J230301_V_DUSR Report.pdf
RD-58B	02/11/09	Duplicate	bis(2-Ethylhexyl) phthalate	18	ug/L		U	V	Reported result is less than 5X or 10X the associated method blank.	1132036_DV_DJC_DUSR Report.pdf
RD-58B	07/28/09	Primary	Ammonia-N	0.039	mg/L	J	U	V	Reported result is less than 5X or 10X the associated method blank.	1155424_DJC_DUSR Report.pdf
RD-58B	07/28/09	Primary	Formaldehyde	27	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1155424_DJC_DUSR Report.pdf
RD-58B	07/28/09	Duplicate	Formaldehyde	26	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1155424_DJC_DUSR Report.pdf
RD-58B	10/22/09	Primary	bis(2-Ethylhexyl) phthalate	1.8	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor.	D9J230301_V_DUSR Report.pdf
RD-58B	10/22/09	Primary	Trichloroethene	0.27	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J230301_V_DUSR Report.pdf
RD-58B	10/22/09	Primary	Fluoride	0.43	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J230301_V_DUSR Report.pdf
RD-58B	10/22/09	Primary	Chrysene	0.56	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor.	D9J230301_V_DUSR Report.pdf
RD-58C	07/23/09	Duplicate	Chloromethane	0.3	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1154816_DJC_DUSR Report.pdf
RD-59A	08/04/09	Primary	Chloromethane	0.2	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1156342_DJC_DUSR Report.pdf
RD-59A	08/04/09	Primary	Copper, Dissolved	0.0019	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1156342_DJC_DUSR Report.pdf
RD-59A	08/04/09	Primary	Nickel, Dissolved	0.0014	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1156342_DJC_DUSR Report.pdf
RD-59B	08/04/09	Primary	Chloromethane	0.2	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1156342_DJC_DUSR Report.pdf
RD-59B	08/04/09	Primary	Lead, Dissolved	0.00031	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1156342_DJC_DUSR Report.pdf
RD-59B	11/04/09	Primary	Carbon Disulfide	0.98	ug/L	J	U	V	Reported result is less than 5X or 10X the associated trip blank times the dilution factor.	D9K050472_V_DUSR Report.pdf
RD-59C	08/04/09	Primary	Copper, Dissolved	0.00073	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1156342_DJC_DUSR Report.pdf
RD-59C	08/04/09	Primary	Lead, Dissolved	0.00052	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1156342_DJC_DUSR Report.pdf
RD-59C	11/04/09	Primary	Carbon Disulfide	0.89	ug/L	J	U	V	Reported result is less than 5X or 10X the associated trip blank times the dilution factor.	D9K050472_V_DUSR Report.pdf

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SUMMARY OF 2009 DATA QUALIFICATION
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Date	Sample Type	Constituent	Sample Result	Units	Original Lab Qualifier	Validation Qualifier	Validation Level	Validation Comments	Data Usability Summary Report Name
RD-60	08/03/09	Primary	1,1-Dichloroethene	2	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1156160_DJC_DUSR Report.pdf
RD-61	10/22/09	Primary	Acetone	5.5	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J230301_V_DUSR Report.pdf
RD-61	10/22/09	Primary	Zinc, Dissolved	1	mg/L		U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J230301_V_DUSR Report.pdf
RD-61	10/22/09	Primary	Silver, Dissolved	0.000016	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J230301_V_DUSR Report.pdf
RD-61	10/22/09	Primary	bis(2-Ethylhexyl) phthalate	2.5	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor.	D9J230301_V_DUSR Report.pdf
RD-63	07/31/09	Primary	1,1-Dichloroethene	1	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1155881_DJC_DUSR Report.pdf
RD-64(Z8)	02/23/09	Primary	Lead, Dissolved	0.00029	mg/L	J	U	V	Reported result is less than 5X or 10X the associated method blank.	1133423_DV_DJC_DUSR Report.pdf
RD-64(Z8)	02/23/09	Primary	Arsenic, Dissolved	0.0039	mg/L		J	IV	Serial dilution outside acceptance criteria	1133423_MGN_DUSR Report.pdf
RD-66	05/01/09	Split	Methylene chloride	0.95	ug/L	J,B	U	V	Reported result is less than 5X or 10X the associated method blank.	D9E060235_DJC_DUSR Report.pdf
RD-67	07/27/09	Primary	Chloromethane	0.2	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1155244_DJC_DUSR Report.pdf
RD-68B	11/04/09	Primary	Methylene chloride	0.73	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor.	D9K050472_V_DUSR Report.pdf
RD-69	07/24/09	Primary	Chloromethane	0.2	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1154951_DJC_DUSR Report.pdf
RD-69	11/04/09	Primary	Fluoride	0.19	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9K050472_V_DUSR Report.pdf
RD-69	11/04/09	Primary	Acetone	1.9	ug/L	U	R	IV	Calibration verification was out of control limits.	D9K050472_IV_DUSR Report.pdf
RD-69	11/04/09	Primary	trans-1,3-Dichloropropene	0.24	ug/L	J	R	IV	Compound was misidentified, this compound is rejected.	D9K050472_IV_DUSR Report.pdf
RD-69	11/04/09	Split	Calcium, Dissolved	92	mg/L	MHA	J		Matrix Spike/Matrix Spike Duplicate recovery outside acceptance criteria.	
RD-69	11/04/09	Duplicate	Fluoride	0.2	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9K050472_V_DUSR Report.pdf
RD-70	10/09/09	Primary	Acetone	6	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J120130_V_DUSR Report.pdf
RD-71	07/30/09	Primary	Chloromethane	0.2	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1155806_DJC_DUSR Report.pdf
RD-73	02/26/09	Primary	Gasoline Range Organics (C8-C11)	4500	ug/L		J	V	Surrogate recovery outside acceptance criteria.	1134032_DV_DJC_DUSR Report.pdf
RD-91	03/05/09	Primary	Copper, Dissolved	0.0068	mg/L		U	V	Reported result is less than 5X or 10X the associated method blank.	1134984_DV_DJC_DUSR Report.pdf
RD-91	03/05/09	Split	bis(2-Ethylhexyl) phthalate	2.3	ug/L	J,B	U	V	Reported result is less than 5X or 10X the associated method blank.	D9C060330_DV_DJC_DUSR Report.pdf

See Table III for notes and abbreviations.
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TABLE D-III
SUMMARY OF 2009 DATA QUALIFICATION
BOEING SANTA SUSANA FIELD LABORATORY
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Well ID	Date	Sample Type	Constituent	Sample Result	Units	Original Lab Qualifier	Validation Qualifier	Validation Level	Validation Comments	Data Usability Summary Report Name
RD-91	05/05/09	Split	Methylene chloride	0.94	ug/L	JB	U	V	Reported result is less than 5X or 10X the associated method blank.	D9E070287_DJC_DUSR Report.pdf
RD-98	02/20/09	Primary	Lead, Dissolved	0.000074	mg/L	J	U	V	Reported result is less than 5X or 10X the associated method blank.	1133157_DV_DJC_DUSR Report.pdf
WS-04A	07/21/09	Duplicate	Chloromethane	0.2	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1154451_DJC_DUSR Report.pdf
WS-05	02/10/09	Primary	bis(2-Ethylhexyl) phthalate	16	ug/L		U	V	Reported result is less than 5X or 10X the associated method blank.	1131770_DV_DJC_DUSR Report.pdf
WS-05	05/06/09	Primary	bis(2-Ethylhexyl) phthalate	11	ug/L		U	V	Reported result is less than 5X or 10X the associated method blank.	1143735_DJC_DUSR Report.pdf
WS-05	07/29/09	Primary	Ammonia-N	0.11	mg/L		U	V	Reported result is less than 5X or 10X the associated method blank.	1155614_DJC_DUSR Report.pdf
WS-05	07/29/09	Primary	Chloromethane	0.2	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1155614_DJC_DUSR Report.pdf
WS-05	07/29/09	Primary	Formaldehyde	10	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1155614_DJC_DUSR Report.pdf
WS-05	10/15/09	Primary	bis(2-Ethylhexyl) phthalate	2.6	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor	D9J160173_V_DUSR Report.pdf
WS-05	10/15/09	Primary	cis-1,2-Dichloroethene	1.9	ug/L		U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J160173_V_DUSR Report.pdf
WS-05	10/15/09	Primary	Formaldehyde	11	ug/L	J	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor	D9J160173_V_DUSR Report.pdf
WS-05	10/15/09	Primary	Trichloroethene	1.1	ug/L		U	V	Reported result is less than 5X or 10X the associated trip blank times the dilution factor	D9J160173_V_DUSR Report.pdf
WS-05	10/15/09	Primary	Chrysene	0.59	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J160173_V_DUSR Report.pdf
WS-05	10/15/09	Primary	Fluoride	0.25	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J160173_V_DUSR Report.pdf
WS-05	10/15/09	Split	Formaldehyde	5.57	ug/L	J	U	IV	Reported result is less than 5X or 10X the associated method blank times the dilution factor	ISJ1609_IV_DUSR Report.pdf
WS-06	07/29/09	Primary	Ammonia-N	0.07	mg/L	J	U	V	Reported result is less than 5X or 10X the associated method blank.	1155614_DJC_DUSR Report.pdf
WS-06	07/29/09	Primary	Formaldehyde	34	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1155614_DJC_DUSR Report.pdf
WS-06	07/29/09	Duplicate	Formaldehyde	37	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1155614_DJC_DUSR Report.pdf
WS-06	10/29/09	Primary	Fluoride	0.21	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor	D9J300214_V_DUSR Report.pdf
WS-09	02/10/09	Primary	1,1,1-Trichloroethane	0.8	ug/L	U	R	V	LCS/LCSD recovery outside acceptance criteria.	1131770_DV_DJC_DUSR Report.pdf
WS-09	02/10/09	Primary	bis(2-Ethylhexyl) phthalate	7	ug/L		U	V	Reported result is less than 5X or 10X the associated method blank.	1131770_DV_DJC_DUSR Report.pdf

See Table III for notes and abbreviations.

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Well ID	Date	Sample Type	Constituent	Sample Result	Units	Original Lab Qualifier	Validation Qualifier	Validation Level	Validation Comments	Data Usability Summary Report Name
WS-09	07/23/09	Primary	1,2,3,4,6,7,8-Heptachlorodibenzofuran	4.8	pg/L	Q J	U	V	Reported result is less than 5X or 10X the associated field blank.	H9G240111_DJC_DUSR Report.pdf
WS-09	07/23/09	Primary	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	23	pg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	H9G240111_DJC_DUSR Report.pdf
WS-09	07/23/09	Primary	1,2,3,6,7,8-Hexachlorodibenzofuran	3.4	pg/L	Q J	U	V	Reported result is less than 5X or 10X the associated field blank.	H9G240111_DJC_DUSR Report.pdf
WS-09	07/23/09	Primary	Ammonia-N	0.042	mg/L	J	U	V	Reported result is less than 5X or 10X the associated method blank.	1154816_DJC_DUSR Report.pdf
WS-09	07/23/09	Primary	Nickel, Dissolved	0.00094	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1154816_DJC_DUSR Report.pdf
WS-09	07/23/09	Primary	Octachlorodibenzofuran	29	pg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	H9G240111_DJC_DUSR Report.pdf
WS-09	07/23/09	Primary	Octachlorodibenzo-p-dioxin	390	pg/L	B	U	V	Reported result is less than 5X or 10X the associated field blank.	H9G240111_DJC_DUSR Report.pdf
WS-09	10/20/09	Primary	Thallium, Dissolved	0.000051	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J210197_V_DUSR Report.pdf
WS-09	10/20/09	Primary	Fluoride	0.25	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J210197_V_DUSR Report.pdf
WS-09	10/20/09	Primary	bis(2-Ethylhexyl) phthalate	2.1	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor.	D9J210197_V_DUSR Report.pdf
WS-09	10/20/09	Primary	1,4-Dioxane	65	ug/L	U	UJ	V	Prepared or analyzed outside of holding time.	D9J210197_V_DUSR Report.pdf
WS-09A	02/12/09	Primary	1,1,1-Trichloroethane	0.8	ug/L	U	R	V	LCS/LCSD recovery outside acceptance criteria.	1132242_DV_DJC_DUSR Report.pdf
WS-09A	07/22/09	Primary	bis(2-Ethylhexyl) phthalate	3	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank.	1154682_DJC_DUSR Report.pdf
WS-09A	10/14/09	Primary	bis(2-Ethylhexyl) phthalate	2.6	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor.	D9J150201_V_DUSR Report.pdf
WS-09A	10/14/09	Primary	Fluoride	0.24	mg/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J150201_V_DUSR Report.pdf
WS-09A	10/14/09	Primary	Formaldehyde	36	ug/L	J	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor.	D9J150201_V_DUSR Report.pdf
WS-09A	10/14/09	Primary	Chrysene	0.64	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J150201_V_DUSR Report.pdf
WS-09A	10/14/09	Duplicate	Chrysene	0.55	ug/L	J	U	V	Reported result is less than 5X or 10X the associated field blank times the dilution factor.	D9J150201_V_DUSR Report.pdf
WS-09A	10/14/09	Duplicate	bis(2-Ethylhexyl) phthalate	2.6	ug/L	J B	U	V	Reported result is less than 5X or 10X the associated method blank times the dilution factor.	D9J150201_V_DUSR Report.pdf

ATTACHMENT 1

DATA USABILITY SUMMARY REPORTS (ON CD)

Data Usability Summary Report (DUSR)
BOEING SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1131576

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-51B_020909_01_L
RD-04_020909_78_L
RD-51B_020909_19_L
RD-51B_020909_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-04_020909_78_L	Acetone	3.3 ug/L	RD-51B_020909_01_L	33.0 ug/L
RD-51B_020909_19_L	Methylene chloride	0.4 ug/L	RD-51B_020909_01_L	4.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
BOEING SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1131770

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
WS-05_021009_01_L
RD-51C_021009_01_L
WS-05_021009_78_L
RD-51C_021009_19_L
RD-51C_021009_78_L
WS-09_021009_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-51C_021009_19_L	Methylene Chloride	0.3 ug/L	RD-51C_021009_01_L	3.0 ug/L
RD-51C_021009_78_L	Acetone	3.3 ug/L	WS-05_021009_01_L RD-51C_021009_01_L	33.0 ug/L
WS-05_021009_78_L	Methylene Chloride Toluene	0.4 ug/L 0.1 ug/L	WS-05_021009_01_L RD-51C_021009_01_L	4.0 ug/L 0.5 ug/L
RD-51C_021009_78_L	Acetone	3.2 ug/L	WS-05_021009_01_L RD-51C_021009_01_L	32.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
LCS (C090482AA)	Chloromethane Chloroethane	64 - 136 71 - 125	144 127	WS-05_021009_78_L RD-51C_021009_19_L WS-09_021009_78_L

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
BOEING SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1132242

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-06_021209_01_L
RD-52B_021209_78_L
WS-09A_021209_78_L
RD-41B_021209_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
WS-09A_021209_78_L	Acetone	3.5 ug/L	RD-06_021209_01_L	35.0 ug/L
RD-41B_021209_78_L	Acetone	3.2 ug/L	RD-06_021209_01_L	32.0 ug/L
RD-52B_021209_78_L	Acetone	3.1 ug/L	RD-06_021209_01_L	31.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
LCS (Y090492AA)	1,1,1-Trichloroethane	83 - 127	78	WS-09A_021209_78_L

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
BOEING SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1132333

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-05C_021309_01_L
RD-05B_021309_19_L
RD-05B_021309_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-05B_021309_19_L	Chloromethane	0.2 ug/L	RD-05C_021309_01_L	1.0 ug/L
(Equipment Blank)	Methylene chloride	0.4 ug/L		4.0 ug/L
RD-05B_021309_78_L	Acetone	3.5 ug/L	RD-05C_021309_01_L	35.0 ug/L
	Methylene chloride	0.3 ug/L	RD-05B_021309_19_L	3.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
BOEING SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1132638

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-26_021709_01_L
OS-16_021709_78_L
RD-26_021709_78_L
HAR-20_021709_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
OS-16_021709_78_L	Acetone	3.5 ug/L	RD-26_021709_01_L	35.0 ug/L
	Methylene chloride	0.3 ug/L		3.0 ug/L
RD-26_021709_78_L	Acetone	3.1 ug/L	RD-26_021709_01_L	31.0 ug/L
RD-26_021709_78_L	Methylene chloride	0.5 ug/L	RD-26_021709_01_L	5.0 ug/L
	Toluene	0.1 ug/L		0.5 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed

for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
BOEING SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1133047

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-37_021909_01_L
RD-37_021909_78_L
HAR-22_021909_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
HAR-22_021909_78_L	Methylene chloride	0.5 ug/L	RD-37_021909_01_L	5.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
BOEING SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1133423

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-64(Z8)_022309_01_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	ICP/MS Metals	EPA 6020/200.8	180 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Duplicate Sample Analysis
- ICP Interference Check Sample Performance
- ICP Serial Dilution Replicate Percent Difference
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No

qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Duplicate Sample Analysis

The replicate percent difference (RPD) was evaluated for each duplicate sample pair to monitor the reproducibility of the data. The RPD for each sample pair was within the QA/QC limit of 30% for aqueous samples and 50% for solid matrices, for those target analytes with sample concentrations >5X the MDL. No qualification of the data is recommended.

ICP Interference Check Sample Performance

The results of the ICP Interference Check Samples analyzed concurrently with the project samples were all within the acceptance criteria +/- 20% of true value as prescribed by USEPA guidance. No qualification of the data is recommended.

ICP Serial Dilution Replicate Percent Difference

The results of the ICP Serial Dilution samples analyzed concurrently with the project samples were in accordance with the EPA QA acceptance criteria of less than 10% RPD for those target analytes with sample concentrations >50X the MDL, with the following exception(s):

Serial Dilution ID	Target Analyte(s)	%D	Affected Sample(s)
*03963L	Arsenic	16	RD-64(Z8)_022309_01_L

Action:
For serial dilution %D results >10%, qualify results > the MDL as "J" and non-detects as "UJ".

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
BOEING SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1134723

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
ES-21_030409_01_L
HAR-18_030409_78_L
RD-43A_030409_78_L
RS-18_030409_19_L
RS-18_030409_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
HAR-18_030409_78_L	Methylene chloride	0.5 ug/L	ES-21_030409_01_L	5.0 ug/L
RD-43A_030409_78_L	Methylene chloride	0.3 ug/L	ES-21_030409_01_L	3.0 ug/L
RS-18_030409_19_L	Acetone	9.0 ug/L	ES-21_030409_01_L	90.0 ug/L
	2-Butanone	3.0 ug/L		30.0 ug/L
RS-18_030409_78_L	Methylene chloride	0.4 ug/L	ES-21_030409_01_L	4.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1134984

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-33B_030509_01_L
RD-33B_030509_78_L
RD-69_030509_78_L
RD-91_030509_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-69_030509_78_L	Methylene chloride	0.3 ug/L	RD-33B_030509_01_L	3.0 ug/L
RD-91_030509_78_L	Methylene chloride	0.3 ug/L	RD-33B_030509_01_L	3.0 ug/L
RD-33B_030509_78_L	Methylene chloride	0.2 ug/L	RD-33B_030509_01_L	2.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: Eberline Analytical Corporation - Richmond, CA
Sample Delivery Group # R903002-8951

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-17_022509_01_DISS_E
RD-23(Z2)_022409_01_DISS_E

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Gamma Spectroscopy	EPA 901.1	N/A

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Duplicate Sample Analysis
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No

qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Duplicate Sample Analysis

The replicate percent difference (RPD) was evaluated for each duplicate sample pair to monitor the reproducibility of the data. The RPD for each sample pair was within the QA/QC limit of 30% for aqueous samples and 50% for solid matrices, for those target analytes with sample concentrations >5X the MDL. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: Weck Laboratories – Industry, CA
Sample Delivery Group # SDG Number

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
HAR-18_030409_01_W

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	NDMA	EPA 1625C(M)	7 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were

not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: Weck Laboratories – Industry, CA
Sample Delivery Group # SDG Number

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
HAR-18_030409_01_W

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	NDMA	EPA 1625C(M)	7 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were

not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
BOEING SSFL
Analytical Laboratory: TestAmerica, Inc. – Denver, CO
Sample Delivery Group # D9B190248

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
HAR-20_021709_03_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Perchlorate	EPA 314.0	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
BOEING SSFL
Analytical Laboratory: TestAmerica, Inc. – Denver, CO
Sample Delivery Group # D9B200225

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
PZ-122_021909_03_DISS_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	ICP/MS Metals	EPA 6020/200.8	180 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Duplicate Sample Analysis
- ICP Interference Check Sample Performance
- ICP Serial Dilution Replicate Percent Difference
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No

qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Duplicate Sample Analysis

The replicate percent difference (RPD) was evaluated for each duplicate sample pair to monitor the reproducibility of the data. The RPD for each sample pair was within the QA/QC limit of 30% for aqueous samples and 50% for solid matrices, for those target analytes with sample concentrations >5X the MDL. No qualification of the data is recommended.

ICP Interference Check Sample Performance

The results of the ICP Interference Check Samples analyzed concurrently with the project samples were all within the acceptance criteria +/- 20% of true value as prescribed by USEPA guidance. No qualification of the data is recommended.

ICP Serial Dilution Replicate Percent Difference

The results of the ICP Serial Dilution samples analyzed concurrently with the project samples were in accordance with the EPA QA acceptance criteria of less than 10% RPD for those target analytes with sample concentrations >50X the MDL. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
BOEING SSFL
Analytical Laboratory: TestAmerica, Inc. – Denver, CO
Sample Delivery Group # D9B250254

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-33C_022409_03_TOT_TAD
RD-36C_022309_03_TAD
RD-50(Z2)_022009_03_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Volatile Fuels, GRO	EPA 8015	14 days
2.	Volatile Fuels, TPH	EPA 8015	14 days
3.	Cyanide, Total	EPA 9012A	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
Method Blank	C6-C12	6.2 ug/L	RD-36C_022309_03_TAD	31.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
BOEING SSFL
Analytical Laboratory: TestAmerica, Inc. – Denver, CO
Sample Delivery Group # D9C030155

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-18_030209_03_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Internal Standard Recoveries
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
BOEING SSFL
Analytical Laboratory: TestAmerica, Inc. – Denver, CO
Sample Delivery Group # D9C060330

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-91_030509_03_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
BOEING SSFL
Analytical Laboratory: TestAmerica, Inc. – Knoxville, TN
Sample Delivery Group # H9B200111

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-20_021809_36_TK

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dibenzodioxins and Dibenzofurans, HRGC/HRMS	EPA 8290	30 / 45 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: TestAmerica, Inc. – Knoxville, TN
Sample Delivery Group # H9B250120

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-07(Z3)_022009_01_TK

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dibenzodioxins and Dibenzofurans, HRGC/HRMS	EPA 8290	30 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and –50% of the corresponding CCV standard. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: TestAmerica, Inc. – Knoxville, TN
Sample Delivery Group # H9B250120

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-07(Z3)_022009_01_TK

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dibenzodioxins and Dibenzofurans, HRGC/HRMS	EPA 8290	30 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and –50% of the corresponding CCV standard. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: Eberline Analytical Corporation - Richmond, CA
Sample Delivery Group # R903002-8951

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-17_022509_01_DISS_E
RD-23(Z2)_022409_01_DISS_E

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Gamma Spectroscopy	EPA 901.1	N/A

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Duplicate Sample Analysis
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No

qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Duplicate Sample Analysis

The replicate percent difference (RPD) was evaluated for each duplicate sample pair to monitor the reproducibility of the data. The RPD for each sample pair was within the QA/QC limit of 30% for aqueous samples and 50% for solid matrices, for those target analytes with sample concentrations >5X the MDL. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1131576

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-04_020909_01_L
RD-04_020909_36_L
RD-04_020909_78_L
RD-51B_020909_01_L
RD-51B_020909_19_L
RD-51B_020909_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
3.	Fluoride	EPA 300.0	28 days
4.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
5.	NDMA	EPA 1625C(M)	7 days
6.	Perchlorate	EPA 314.0	28 days
7.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
8.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-04_020909_78_L	Acetone	3.3 J ug/L	All Project Samples	33.0 ug/L
RD-51B_020909_19_L	Methylene chloride	0.4 J ug/L	RD-51B_020909_01_L	4.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
Y090492AA-MS	Trichloroethene	83 - 136	74	RD-04_020909_01_L RD-04_020909_36_L

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1131770

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-050_021009_01_DISS_L
PZ-050_021009_01_L
PZ-050_021009_19_DISS_L
PZ-050_021009_19_L
PZ-050_021009_19R_DISS_L
PZ-050_021009_19R_L
PZ-120_021009_01_L
PZ-120_021009_19_L
PZ-120_021009_19R_L
RD-51C_021009_01_L
RD-51C_021009_19_L
RD-51C_021009_36_L
RD-51C_021009_78_L

Sample ID
WS-05_021009_01_L
WS-05_021009_36_L
WS-05_021009_78_L
WS-09_021009_01_L
WS-09_021009_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	ICP Metals	EPA 6010B/200.7	180 days
3.	ICP/MS Metals	EPA 6020/200.8	180 days
4.	Mercury	EPA 7470A	28 days
5.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
6.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
7.	Perchlorate	EPA 314.0	28 days
8.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
9.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
10.	TPH(d)	EPA 8015M	14 days
11.	Fluoride	EPA 300.0	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for

each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
PZ-120_021009_19_L	Methylene chloride	0.3 J ug/L	All Project Samples	3.0 ug/L
PZ-120_021009_19R_L	Methylene chloride	0.3 J ug/L	All Project Samples	3.0 ug/L
RD-51C_021009_19_L	Methylene chloride	0.3 J ug/L	All Project Samples	3.0 ug/L
RD-51C_021009_78_L	Acetone	3.3 J ug/L	All Project Samples	33.0 ug/L
WS-05_021009_78_L	Methylene chloride	0.4 J ug/L	All Project Samples	4.0 ug/L
	Toluene	0.1 J ug/L		1.0 ug/L
WS-09_021009_78_L	Acetone	3.2 J ug/L		32.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
09045WAB026-BLK	bis(2-Ethylhexyl)phthalate	9.0 ug/L	WS-05_021009_01_L	90.0 ug/L
			WS-09_021009_01_L	

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
PZ-050_021009_19_DISS_L	Copper	0.00046 J mg/L	PZ-050_021009_01_DISS_L	0.0046 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
090430008A-MS	Extractable Fuel Hydrocarbons (C8 - C30)	26 - 138	182	PZ-050_021009_01_L
				PZ-050_021009_19_L

				PZ-050_021009_19R_L
C090482AA-LCS	Chloromethane Chloroethane	64 - 136 71 - 125	144 127	PZ-120_021009_01_L PZ-120_021009_19_L PZ-120_021009_19R_L RD-51C_021009_78_L WS-05_021009_78_L WS-09_021009_78_L
Y090492AA-LCS	1,1,1-Trichloroethane	83 - 127	78	WS-09_021009_01_L
C090482AA-MSD	Chloromethane Trichloroethene	66 - 158 80 - 139	160 -63	PZ-120_021009_01_L PZ-120_021009_19_L PZ-120_021009_19R_L RD-51C_021009_78_L WS-05_021009_78_L WS-09_021009_78_L
C090491AA-MS	1,3-Dichlorobenzene	89 - 123	88	RD-51C_021009_01_L RD-51C_021009_19_L WS-05_021009_01_L

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09045WAB026- LCS	N-Nitrosodimethylamine	47 - 80	94	WS-05_021009_01_L WS-09_021009_01_L
09043WAB026-MS	N-Nitrosodiphenylamine	72 - 124	126	PZ-050_021009_01_L PZ-050_021009_19_L PZ-050_021009_19R_L RD-51C_021009_01_L RD-51C_021009_19_L
09043WAB026-MSD	N-Nitrosodiphenylamine	72 - 124	132	PZ-050_021009_01_L PZ-050_021009_19_L PZ-050_021009_19R_L RD-51C_021009_01_L RD-51C_021009_19_L
09045WAB026-MS	Phenol N-Nitrosodimethylamine bis(2-Ethylhexyl)phthalate	10 - 83 45 - 81 72 - 122	96 90 68	WS-05_021009_01_L WS-09_021009_01_L
09045WAB026-MSD	Phenol 4-Nitrophenol N-Nitrosodimethylamine N-Nitrosodiphenylamine bis(2-Ethylhexyl)phthalate	10 - 83 10 - 109 45 - 81 72 - 124 72 - 122	94 114 90 127 274	WS-05_021009_01_L WS-09_021009_01_L

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to

affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Type	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)
09042196601B-MS	MS	Nitrate ion	144	All Project Samples	J	

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1132036

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID	Sample ID
OS-26_021109_01_L	RD-58C_021109_78_L
OS-26_021109_78_L	
PZ-105_021109_01_DISS_L	
PZ-105_021109_01_L	
PZ-105_021109_19_L	
PZ-105_021109_78_L	
PZ-105_021109_36_L	
RD-49B_021109_01_L	
RD-49B_021109_78_L	
RD-49C_021109_01_L	
RD-58B_021109_01_L	
RD-58B_021109_36_L	
RD-58C_021109_01_L	

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	ICP Metals	EPA 6010B/200.7	180 days
3.	ICP/MS Metals	EPA 6020/200.8	180 days
4.	Mercury	EPA 7470A	28 days
5.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
6.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
7.	Perchlorate	EPA 314.0	28 days
8.	Fluoride	EPA 300.0	28 days
9.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
10.	TPH(d)	EPA 8015M	14 days
11.	1,4-Dioxane	GC/MS Isotope Dilution	7 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for

each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
PZ-105_021109_19_L	Methylene chloride	0.2 J ug/L	PZ-105_021109_01_L	2.0 ug/L
PZ-105_021109_78_L	Methylene chloride	0.2 J ug/L	All Project Samples	2.0 ug/L
RD-49B_021109_78_L	Acetone	3.0 J ug/L	All Project Samples	3.0 ug/L
OS-26_021109_78_L	Acetone	3.5 J ug/L	All Project Samples	35.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
09045WAB026-BLK	bis(2-Ethylhexyl)phthalate	9.0 ug/L	All Project Samples	90.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
Y090492AA-LCS/MS	1,1,1-Trichloroethane	83 - 127	78	RD-49B_021109_01_L
				RD-49C_021109_01_L
	Trichloroethene	83 - 136	74	
C090482AA-LCS	Chloromethane	64 - 136	144	RD-58B_021109_01_L
	Chloroethane	71 - 125	127	OS-26_021109_01_L
				OS-26_021109_78_L
C090482AA-MSD	Chloromethane	66 - 158	160	OS-26_021109_01_L
	Trichloroethene	80 - 139	-63	OS-26_021109_78_L
				RD-58B_021109_01_L
G090491AA-MSD	1,1-Dichloroethene	90 - 114	72	PZ-105_021109_01_L
	Methylene chloride	87 - 118	86	PZ-105_021109_19_L
	1,1-Dichloroethane	92 - 130	90	PZ-105_021109_78_L

	1,1,1-Trichloroethane	81 - 155	79	PZ-105_021109_36_L
	Bromodichloromethane	86 - 139	84	RD-49B_021109_78_L
	Dibromochloromethane	80 - 146	78	RD-58C_021109_01_L
				RD-58C_021109_78_L
G090491AA-MS	1,1-Dichloroethene	90 - 144	269	PZ-105_021109_01_L
				PZ-105_021109_19_L
				PZ-105_021109_78_L
				PZ-105_021109_36_L
				RD-49B_021109_78_L
				RD-58C_021109_01_L
				RD-58C_021109_78_L

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09045WAB026- LCS	N-Nitrosodimethylamine	47 - 80	94	RD-49B_021109_01_L
				RD-49C_021109_01_L
				RD-58B_021109_01_L
				RD-58B_021109_36_L
09045WAB026-MS	Phenol	10 - 83	96	RD-49B_021109_01_L
	N-Nitrosodimethylamine	45 - 81	90	RD-49C_021109_01_L
	bis(2-Ethylhexyl)phthalate	72 - 122	68	RD-49C_021109_01_L
				RD-58B_021109_36_L
09045WAB026-MSD	Phenol	10 - 83	94	RD-49B_021109_01_L
	4-Nitrophenol	10 - 109	114	RD-49C_021109_01_L
	N-Nitrosodimethylamine	45 - 81	90	RD-58B_021109_01_L
	N-Nitrosodiphenylamine	72 - 124	127	RD-58B_021109_36_L
	bis(2-Ethylhexyl)phthalate	72 - 122	274	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Type	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)
09043196601B-MS	MS	Fluoride ion	116	All Project Samples		

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1132242

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID	Sample ID
PZ-026_021209_01_L	WS-09A_021209_36_L
PZ-027_021209_01_L	WS-09A_021209_78_L
RD-05A_021209_01_L	RD-41B_021209_78_L
RD-06_021209_01_L	
RD-41B_021209_01_L	
RD-41B_021209_01_L	
RD-41B_021209_36_L	
RD-52B_021209_01_L	
RD-52B_021209_19_L	
RD-52B_021209_78_L	
RD-55B_021209_01_L	
RD-55B_021209_36_L	
WS-09A_021209_01_L	

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	ICP Metals	EPA 6010B/200.7	180 days
3.	ICP/MS Metals	EPA 6020/200.8	180 days
4.	Mercury	EPA 7470A	28 days
5.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
6.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
7.	Fluoride	EPA 300.0	28 days
8.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
9.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
10.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
11.	Perchlorate	EPA 314.0	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for

each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-52B_021209_19_L	Methylene chloride	0.3 J ug/L	RD-52B_021209_01_L	3.0 ug/L
RD-52B_021209_78_L	Acetone	3.1 J ug/L	All Project Samples	31.0 ug/L
WS-09A_021209_78_L	Acetone	3.5 J ug/L	All Project Samples	35.0 ug/L
RD-41B_021209_78_L	Acetone	3.2 J ug/L	All Project Samples	32.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
09045WAB026-BLK	bis(2-Ethylhexyl)phthalate	9.0 ug/L	RD-41B_021209_01_L RD-55B_021209_01_L WS-09A_021209_01_L	90.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
Y090492AA-LCS	1,1,1-Trichloroethane	83 - 127	78	RD-41B_021209_01_L RD-55B_021209_01_L WS-09A_021209_01_L
G090491AA-MSD	1,1-Dichloroethene	90 - 114	72	RD-05A_021209_01_L
	Methylene chloride	87 - 118	86	RD-06_021209_01_L
	1,1-Dichloroethane	92 - 130	90	RD-52B_021209_01_L
	1,1,1-Trichloroethane	81 - 155	79	
	Bromodichloromethane	86 - 139	84	
	Dibromochloromethane	80 - 146	78	
G090491AA-MS	1,1-Dichloroethene	90 - 144	269	RD-05A_021209_01_L

				RD-06_021209_01_L RD-52B_021209_01_L
y090492AA-MS	Trichloroethene	83 - 136	74	RD-41B_021209_01_L RD-55B_021209_01_L WS-09A_021209_01_L
YOYOYIOY	Trichloroethene	low high		

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09045WAB026- LCS	N-Nitrosodimethylamine	47 - 80	94	RD-41B_021209_01_L RD-55B_021209_01_L WS-09A_021209_01_L
09045WAB026-MS	Phenol	10 - 83	96	RD-41B_021209_01_L
	N-Nitrosodimethylamine	45 - 81	90	RD-55B_021209_01_L
	bis(2-Ethylhexyl)phthalate	72 - 122	68	WS-09A_021209_01_L
09045WAB026-MSD	Phenol	10 - 83	94	RD-41B_021209_01_L
	4-Nitrophenol	10 - 109	114	RD-55B_021209_01_L
	N-Nitrosodimethylamine	45 - 81	90	WS-09A_021209_01_L
	N-Nitrosodiphenylamine	72 - 124	127	
	bis(2-Ethylhexyl)phthalate	72 - 122	274	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Type	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)
09044196603A-MS	MS	Nitrate ion	121	All Project Samples		

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by

the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1132333

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-025_021309_01_L
RD-05B_021309_01_L
RD-05B_021309_19_L
RD-05B_021309_36_L
RD-05B_021309_78_L
RD-05C_021309_01_L
RD-52C_021309_01_L
RD-52C_021309_78_L
RD-70_021309_01_L
RD-70_021309_36_L
RD-70_021309_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
3.	PAHs	EPA 8310	7 days ext/40 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-05B_021309_19_L	Chloromethane	0.2 J ug/L	RD-05B_021309_01_L	1.0 ug/L
	Methylene chloride	0.4 J ug/L	RD-05B_021309_36_L	4.0 ug/L
RD-05B_021309_78_L	Acetone	3.5 J ug/L	All Project Samples	35.0 ug/L
	Methylene chloride	0.3 J ug/L		3.0 ug/L
RD-52C_021309_78_L	Acetone	3.9 J ug/L	All Project Samples	39.0 ug/L
	Methylene chloride	0.2 J ug/L		2.0 ug/L
RD-70_021309_78_L	Acetone	3.4 J ug/L	All Project Samples	34.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
C090492AA	Chloromethane	64 - 136	142	RD-70_021309_36_L
	1,1,2-Trichloroethane	87 - 115	117	RD-70_021309_78_L
		low high		

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1132638

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-20_021709_01_L
HAR-20_021709_36_L
OS-16_021709_01_L
OS-16_021709_36_L
OS-16_021709_78_L
PZ-109_021709_01_DISS_L
PZ-109_021709_01_L
RD-26_021709_01_L
RD-26_021709_19_L
RD-26_021709_78_L
PZ-109_021709_19R_L
PZ-109_021709_19_L
HAR-20_021709_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	ICP Metals	EPA 6010B/200.7	180 days
3.	ICP/MS Metals	EPA 6020/200.8	180 days
4.	Mercury	EPA 7470A	28 days
5.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
6.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
7.	Perchlorate	EPA 314.0	28 days
8.	Fluoride	EPA 300.0	28 days
9.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
10.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
11.	1,4-Dioxane	GC/MS Isotope Dilution	7 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for

each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
OS-16_021709_78_L	Acetone	3.5 J ug/L	All Project Samples	35.0 ug/L
	Methylene chloride	0.3 J ug/L		3.0 ug/L
RD-26_021709_19_L	Methylene chloride	0.4 J ug/L	RD-26_021709_01_L	4.0 ug/L
RD-26_021709_78_L	Acetone	3.1 J ug/L	All Project Samples	31.0 ug/L
HAR-20_021709_78_L	Methylene chloride	0.5 J ug/L	All Project Samples	5.0 ug/L
	Toluene	0.1 J ug/L		0.5 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
090501848002-BLK	Barium	0.00064 J mg/L	All Project Samples	0.0064 mg/L
	Cobalt	0.0027 J mg/L		0.027 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09052WAA026-LCS	N-Nitrosodimethylamine	47 - 80	101	HAR-20_021709_01_L
	Butylbenzylphthalate	71 - 100	102	
	Benzo(a)anthracene	82 - 96	98	
09052WAA026-MS	Phenol	10 - 83	109	HAR-20_021709_01_L
	4-Nitrophenol	10 - 109	118	
	N-Nitrosodimethylamine	45 - 81	100	
09052WAA026-MSD	Phenol	10 - 83	109	HAR-20_021709_01_L
	4-Nitrophenol	10 - 109	119	
	N-Nitrosodimethylamine	45 - 81	102	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Type	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)
09049196602B-MS	MS	Chloride ion	116	HAR-20_021709_01_L		
	MS	Sulfate ion	116	PZ-109_021709_01_L		
	MS	Fluoride ion	153		J	
	MS	Nitrate ion	111			

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1132816

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID	Sample ID
HAR-04_021809_01_L	RD-36D_021809_36_L
HAR-04_021809_78_L	RD-41A_021809_01_L
HAR-27_021809_01_L	RD-43B_021809_01_L
HAR-27_021809_01_L	RD-43B_021809_19_L
HAR-27_021809_36_L	RD-43B_021809_78_L
PZ-108_021809_01_L	RD-43C_021809_01_L
PZ-108_021809_36_L	RD-55A_021809_01_L
RD-32_021809_01_L	
RD-32_021809_19_L	
RD-36B_021809_01_L	
RD-36B_021809_36_L	
RD-36B_021809_78_L	
RD-36D_021809_01_L	

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	ICP Metals	EPA 6010B/200.7	180 days
3.	ICP/MS Metals	EPA 6020/200.8	180 days
4.	Mercury	EPA 7470A	28 days
5.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
6.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
7.	Perchlorate	EPA 314.0	28 days
8.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
9.	Chromium VI	EPA 218.6	24 hours
10.	Bromide	EPA 300.0/320.1	28 days
11.	Chloride	EPA 300.0/SM 4500-Cl	28 days
12.	Fluoride	EPA 300.0	28 days
13.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
14.	Sulfate	EPA 300.0/375.4	28 days
15.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-36B_021809_78_L	Acetone	3.3 J ug/L	All Project Samples	33.0 ug/L
	Methylene chloride	0.3 J ug/L		3.0 ug/L
RD-43B_021809_19_L	Methylene chloride	0.4 J ug/L	RD-43B_021809_19_L	4.0 ug/L
RD-43B_021809_78_L	Acetone	3.6 J ug/L	All Project Samples	36.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
G090511AA-MS	Dibromochloromethane	80 - 146	79	RD-43C_021809_01_L

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)

09052WAA026-LCS	N-Nitosodimethylamine	47 - 80	101	All Project Samples
	Butylbenzylphthalate	71 - 100	102	
	Benzo(a)anthracene	82 - 96	98	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1133047

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-08_021909_01_L
HAR-08_021909_01_L
HAR-22_021909_01_L
HAR-22_021909_19_L
HAR-22_021909_78_L
PZ-122_021909_01_DISS_L
PZ-122_021909_01_L
PZ-122_021909_19_L
PZ-122_021909_19R_L
PZ-122_021909_36_L
RD-09_021909_01_L
RD-09_021909_36_L
RD-34C_021909_01_L

Sample ID
RD-34C_021909_01_L
RD-34C_021909_01_TOT_L
RD-34C_021909_36_L
RD-37_021909_01_L
RD-37_021909_36_L
RD-37_021909_78_L
RD-67_021909_01_L
HAR-08_021909_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	ICP Metals	EPA 6010B/200.7	180 days
3.	ICP/MS Metals	EPA 6020/200.8	180 days
4.	Mercury	EPA 7470A	28 days
5.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
6.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
7.	Perchlorate	EPA 314.0	28 days
8.	Chromium VI	EPA 218.6	24 hours
9.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
10.	TPH(d)	EPA 8015M	14 days
11.	Bromide	EPA 300.0/320.1	28 days
12.	Chloride	EPA 300.0/SM 4500-Cl	28 days
13.	Fluoride	EPA 300.0	28 days
14.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
15.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
16.	pH	EPA 150.1	ASAP (24 hours)
17.	Sulfate	EPA 300.0/375.4	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format

- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
HAR-22_021909_19_L	Methylene chloride	0.3 J ug/L	HAR-22_021909_01_L	3.0 ug/L
HAR-08_021909_78_L	Methylene chloride	0.4 J ug/L	All Project Samples	4.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
090541848001-BLK	Magnesium	0.0217 J mg/L	All Project Samples	0.217 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
Y090563AA-MSD	Trichloroethene	88 - 125	153	RD-09_021909_01_L
Y090563AA-MS	1,4-Dichlorobenzene	83 - 113	114	RD-09_021909_01_L

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target

analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09052WAC026-LCS	N-Nitrosodimethylamine	42 - 50	85	All Project Samples
09052WAC026-MS	Phenol	10 - 83	101	All Project Samples
	N-Nitrosodimethylamine	45 - 81	87	
09052WAC026-MSD	Phenol	10 - 83	99	All Project Samples
	N-Nitrosodimethylamine	45 - 81	92	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1133157

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-07(Z3)_022009_01_L
RD-07(Z3)_022009_78_L
RD-34B_022009_01_L
RD-34B_022009_01_L
RD-34B_022009_01_TOT_L
RD-45B_022009_01_L
RD-45B_022009_78_L
RD-50(Z2)_022009_01_L
RD-50(Z2)_022009_36_L
RD-63_022009_01_L
RD-63_022009_78_L
RD-98_022009_01_L
RD-98_022009_01_L

Sample ID
RD-98_022009_19_L
RD-98_022009_36_L
RD-98_022009_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	ICP Metals	EPA 6010B/200.7	180 days
3.	ICP/MS Metals	EPA 6020/200.8	180 days
4.	Mercury	EPA 7470A	28 days
5.	Volatile Fuels, GRO	EPA 8015	14 days
6.	Cyanide, Total	EPA 335.2	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project

sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-07(Z3)_022009_78_L	Methylene chloride	0.6 ug/L	All Project Samples	6.0 ug/L
RD-63_022009_78_L	Methylene chloride	0.6 ug/L	All Project Samples	6.0 ug/L
RD-98_022009_19_L	Methylene chloride	0.5 J ug/L	RD-98_022009_01_L	5.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
090566050004A-BLK	Lead	0.000054 J mg/L	All Project Samples	0.00054 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
Y090563AA-MSD	Trichloroethene	88 - 125	153	RD-63_022009_01_L
Y090563AA-MS	1,4-Dichlorobenzene	83 - 113	114	RD-63_022009_01_L

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and

compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1133423

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-006C_021909_01_L
PZ-006D_022309_01_L
PZ-006E_022309_01_L
RD-22(Z2)_022309_01_L
RD-22(Z2)_022309_01_L
RD-22(Z2)_022309_01_TOT_L
RD-22(Z2)_022309_78_L
RD-36C_022309_01_L
RD-36C_022309_78_L
RD-45C_022309_01_L
RD-54B_022309_01_L
RD-54B_022309_01_L
RD-54B_022309_36_L

Sample ID
RD-54B_022309_36_L
RD-56B_022309_01_L
RD-64(Z8)_022309_01_L
RD-64(Z8)_022309_01_L
RD-64(Z8)_022309_19_L
RD-65(Z5)_022309_01_L
RD-56B_022309_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	ICP Metals	EPA 6010B/200.7	180 days
3.	ICP/MS Metals	EPA 6020/200.8	180 days
4.	Mercury	EPA 7470A	28 days
5.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
6.	PAHs	EPA 8310	7 days ext/40 days analysis
7.	Cyanide, Total	EPA 335.2	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-22(Z2)_022309_78_L	Methylene chloride	0.5 ug/L	All Project Samples	5.0 ug/L
RD-36C_022309_78_L	Methylene chloride	0.4 J ug/L	All Project Samples	4.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
090566050004A-BLK	Lead	0.000054 J mg/L	All Project Samples	0.00054 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
C090561AA-MS	trans-1,2-Dichloroethene	88 - 127	128	RD-22(Z2)_022309_01_L
	1,3-Dichlorobenzene	83 - 117	119	RD-22(Z2)_022309_78_L
				RD-56B_022309_01_L
				RD-45C_022309_01_L
				RD-56B_022309_78_L
				RD-54B_022309_01_L
				RD-54B_022309_36_L
				RD-36C_022309_78_L
Y090563AA-MSD	Trichloroethene	88 - 125	153	RD-36C_022309_01_L
				RD-64(Z8)_022309_01_L
				RD-64(Z8)_022309_19_L
				RD-65(Z5)_022309_01_L
Y090563AA-MS	1,4-Dichlorobenzene	83 - 113	114	RD-36C_022309_01_L
				RD-64(Z8)_022309_01_L
				RD-64(Z8)_022309_19_L
				RD-65(Z5)_022309_01_L

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09052WAC026-LCS	N-Nitrosodimethylamine	42 - 50	85	All Project Samples
09052WAC026-MS	Phenol	10 - 83	101	All Project Samples
	N-Nitrosodimethylamine	45 - 81	87	
09052WAC026-MSD	Phenol	10 - 83	99	All Project Samples
	N-Nitrosodimethylamine	45 - 81	92	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1133620

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-15_022409_01_L
RD-15_022409_01_L
RD-16_022409_01_L
RD-19_022409_01_L
RD-19_022409_19_L
RD-19_022409_78_L
RD-21(Z4)_022409_01_L
RD-21(Z4)_022409_01_L
RD-23(Z2)_022409_78_L
RD-23(Z2)_022409_01_L
RD-23(Z2)_022409_01_L
RD-33C_022409_01_L
RD-33C_022409_01_L

Sample ID
RD-33C_022409_01_TOT_L
RD-33C_022409_36_TOT_L
RD-33C_022409_78_L
RD-54A(Z2)_022409_01_L
RD-54A(Z2)_022409_01_L
RD-54A(Z2)_022409_36_L
RD-54C_022409_01_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	ICP Metals	EPA 6010B/200.7	180 days
3.	ICP/MS Metals	EPA 6020/200.8	180 days
4.	Mercury	EPA 7470A	28 days
5.	TPH(d)	EPA 8015M	14 days
6.	Cyanide, Total	EPA 335.2	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project

sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-19_022409_19_L	Methylene chloride	0.4 J ug/L	All Project Samples	4.0 ug/L
RD-19_022409_78_L	Methylene chloride	0.3 J ug/L	All Project Samples	3.0 ug/L
RD-23(Z2)_022409_78_L	Methylene chloride	0.5 ug/L	All Project Samples	5.0 ug/L
RD-33C_022409_78_L	Methylene chloride	0.4 J ug/L	All Project Samples	4.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
Y090563AA-MSD	Trichloroethene	88 - 125	153	RD-21(Z4)_022409_01_L RD-23(Z2)_022409_01_L RD-54A(Z2)_022409_01_L
Y090563AA-MS	1,4-Dichlorobenzene	83 - 113	114	RD-21(Z4)_022409_01_L RD-23(Z2)_022409_01_L RD-54A(Z2)_022409_01_L

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1133802

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-01_022509_01_L
RD-01_022509_36_L
RD-01_022509_78_L
RD-17_022509_01_L
RD-33A(Z2)_022509_78_L
RD-33A(Z2)_022509_01_L
RD-33A(Z2)_022509_01_L
RD-57(Z7)_022509_01_L
RD-57(Z7)_022509_01_L
WS-04A_022509_01_L
RD-17_022509_78_L
WS-04A_022509_19_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	ICP Metals	EPA 6010B/200.7	180 days
3.	ICP/MS Metals	EPA 6020/200.8	180 days
4.	Mercury	EPA 7470A	28 days
5.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
6.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
7.	Perchlorate	EPA 314.0	28 days
8.	Fluoride	EPA 300.0	28 days
9.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
10.	Cyanide, Total	EPA 335.2	14 days
11.	1,4-Dioxane	GC/MS Isotope Dilution	7 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-01_022509_78_L	Methylene chloride	0.3 J ug/L	All Project Samples	3.0 ug/L
RD-33A(Z2)_022509_78_L	Methylene chloride	0.4 J ug/L	All Project Samples	4.0 ug/L
RD-17_022509_78_L	Methylene chloride	0.4 J ug/L	All Project Samples	4.0 ug/L
WS-04A_022509_19_L	Methylene chloride	0.4 J ug/L	WS-04A_022509_01_L	4.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
090586050005A-BLK	Lead	0.000096 J mg/L	All Project Samples	0.00096 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09061WAG026- LCS	N-Nitrosodimethylamine	47 - 80	87	All Project Samples
	Benzo(a)anthracene	82 - 96	97	
09061WAG026- LCSD	2,4-Dimethylphenol	80 - 107	108	All Project Samples
	N-Nitrosodimethylamine	47 - 80	87	
	Butylbenzylphthalate	71 - 100	101	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than

10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1134032

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-004A_022609_01_TOT_L
PZ-004A_022609_01_L
PZ-004A_022609_19R_L
PZ-004A_022609_36_TOT_L
PZ-103_022609_01_L
PZ-103_022609_36_L
RD-02_022609_01_L
RD-02_022609_36_L
RD-02_022609_78_L
RD-10_022609_01_L
RD-10_022609_78_L
RD-48C_022609_01_L
RD-62_022609_01_L

Sample ID
RD-71_022609_01_L
RD-71_022609_78_L
RD-73_022609_01_L
WS-06_022609_01_L
WS-06_022609_36_L
HAR-11_022609_01_L
HAR-11_022609_36_L
HAR-11_022609_19_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	ICP Metals	EPA 6010B/200.7	180 days
3.	ICP/MS Metals	EPA 6020/200.8	180 days
4.	Mercury	EPA 7470A	28 days
5.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
6.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
7.	Perchlorate	EPA 314.0	28 days
8.	Fluoride	EPA 300.0	28 days
9.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
10.	Volatile Fuels, GRO	EPA 8015	14 days
11.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
12.	Chromium VI (Hexavalent Chromium)	EPA 7196A/7199	24 hours
13.	Bromide	EPA 300.0/320.1	28 days
14.	Chloride	EPA 300.0/SM 4500-Cl	28 days
15.	Sulfate	EPA 300.0/375.4	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-02_022609_78_L	Methylene chloride	0.3 J ug/L	All Project Samples	3.0 ug/L
RD-10_022609_78_L	Methylene chloride	0.5 J ug/L	All Project Samples	5.0 ug/L
RD-71_022609_78_L	Methylene chloride	0.3 J ug/L	All Project Samples	3.0 ug/L
HAR-11_022609_19_L	Methylene chloride	0.5 J ug/L	All Project Samples	5.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
C090621AA-LCS	Bromoform	71 - 121	122	All Project Samples HAR-11_022609_01_L HAR-11_022609_19_L RD-02_022609_78_L RD-10_022609_78_L RD-48C_022609_01_L RD-62_022609_01_L RD-71_022609_01_L RD-71_022609_78_L
C090621AB-LCS	Bromoform	71 - 121	122	HAR-11_022609_36_L
Y090631AA-MS	cis-1,2-Dichloroethene	85 - 125	62	RD-02_022609_01_L RD-02_022609_36_L RD-10_022609_01_L
Y090631AA-MSD	cis-1,2-Dichloroethene	85 - 125	82	RD-02_022609_01_L

				RD-02_022609_36_L RD-10_022609_01_L

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09061WAG026- LCS	N-Nitrosodimethylamine	47 - 80	87	All Project Samples
	Benzo(a)anthracene	82 - 96	97	
09061wAG026- LCSD	2,4-Dimethylphenol	80 - 107	108	RD-49B_021109_01_L
	N-Nitrosodimethylamine	47 - 80	87	RD-49C_021109_01_L
	Butylbenzylphthalate	71 - 100	101	RD-49C_021109_01_L
				RD-58B_021109_36_L
09045WAB026-MSD	Phenol	10 - 83	94	RD-49B_021109_01_L
	4-Nitrophenol	10 - 109	114	RD-49C_021109_01_L
	N-Nitrosodimethylamine	45 - 81	90	RD-58B_021109_01_L
	N-Nitrosodiphenylamine	72 - 124	127	RD-58B_021109_36_L
	bis(2-Ethylhexyl)phthalate	72 - 122	274	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

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Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1134134

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-16_022409_01_L
HAR-16_022409_78_L
RD-38B_022409_01_L
RD-47_022409_01_L
RD-47_022409_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	Volatile Fuels, GRO	EPA 8015	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
HAR-16_022409_78_L	Methylene chloride	0.5 J ug/L	All Project Samples	5.0 ug/L
RD-47_022409_78_L	Methylene chloride	0.4 J ug/L	All Project Samples	4.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
C090621AA-LCS	Trichloroethene	71 - 121	122	HAR-16_022409_78_L RD-47_022409_01_L RD-47_022409_78_L RD-38B_022409_01_L

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

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Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1134341

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-26_030209_01_L
HAR-26_030209_36_L
HAR-26_030209_78_L
RD-18_030209_01_L
RD-18_030209_78_L
RD-41C_030209_01_L
RD-44_030209_01_L
RD-44_030209_19_L
RD-44_030209_78_L
RD-86_030209_01_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	ICP Metals	EPA 6010B/200.7	180 days
3.	ICP/MS Metals	EPA 6020/200.8	180 days
4.	Mercury	EPA 7470A	28 days
5.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
6.	PAHs	EPA 8310	7 days ext/40 days analysis
7.	Perchlorate	EPA 314.0	28 days
8.	Fluoride	EPA 300.0	28 days
9.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
10.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
11.	Purgeable Halocarbons/Aromatics	EPA 8260(8021B list)	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
HAR-26_030209_78_L	Methylene chloride	0.4 J ug/L	All Project Samples	4.0 ug/L
RD-44_030209_19_L	Methylene chloride	0.3 J ug/L	RD-44_030209_01_L	3.0 ug/L
RD-44_030209_78_L	Methylene chloride	0.3 J ug/L	All Project Samples	3.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09066WAB026- LCS	2,4-Dimethylphenol	80 - 107	110	RD-44_030209_01_L
	N-Nitrosodimethylamine	47 - 80	88	
	Bezidine	20 - 109	111	
09066wAB026- LCSD	N-Nitrosodimethylamine	47 - 80	88	RD-44_030209_01_L

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Type	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)
090636050001A-LCS	LCS	Antimony	111	RD-41C_030209_01_L		

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1134513

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
OS-02_030309_01_L
OS-02_030309_78_L
OS-04_030309_01_L
OS-09_030309_01_L
RD-59A_030309_01_L
RD-59A_030309_01_L
RD-59B_030309_01_L
RD-59B_030309_01_L
RD-59C_030309_01_L
RD-59C_030309_01_L
RD-68A_030309_01_L
RD-68A_030309_36_L
RD-68B_030309_01_L

Sample ID
OS-09_030309_78_L
RD-68A_030309_19_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	ICP Metals	EPA 6010B/200.7	180 days
3.	ICP/MS Metals	EPA 6020/200.8	180 days
4.	Mercury	EPA 7470A	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds

were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
OS-02_030309_78_L	Methylene chloride	0.4 J ug/L	All Project Samples	4.0 ug/L
OS-09_030309_78_L	Methylene chloride	0.4 J ug/L	All Project Samples	4.0 ug/L
RD-68A_030309_19_L	Methylene chloride	0.5 J ug/L	RD-68A_030309_01_L	5.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1134723

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID	Sample ID
ES-21_030409_01_L	RD-48B_030409_01_L
ES-23_030409_01_L	RD-53_030409_01_L
ES-27_030409_01_L	RS-18_030409_01_L
ES-31_030409_01_L	RS-18_030409_01_L
ES-31_030409_36_L	RS-18_030409_19_L
HAR-18_030409_01_L	RS-18_030409_78_L
HAR-18_030409_36_L	RD-60_030409_01_L
HAR-18_030409_78_L	RD-92_030409_01_L
HAR-28_030409_01_L	
HAR-29_030409_01_L	
RD-43A_030409_01_L	
RD-43A_030409_78_L	
RD-46A_030409_01_L	

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	ICP Metals	EPA 6010B/200.7	180 days
3.	ICP/MS Metals	EPA 6020/200.8	180 days
4.	Mercury	EPA 7470A	28 days
5.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
6.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
7.	Perchlorate	EPA 314.0	28 days
8.	Fluoride	EPA 300.0	28 days
9.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
10.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
11.	Volatile Fuels, GRO	EPA 8015	14 days
12.	Chromium VI (Hexavalent Chromium)	EPA 7196A/7199	24 hours

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
HAR-18_030409_78_L	Methylene chloride	0.5 J ug/L	All Project Samples	5.0 ug/L
RD-43A_030409_78_L	Methylene chloride	0.3 J ug/L	All Project Samples	3.0 ug/L
RS-18_030409_19_L	Acetone	9 J ug/L	RS-18_030409_01_L	90.0 ug/L
	2-Butanone	3.0		30.0
RS-18_030409_78_L	Methylene chloride	0.4 J ug/L	All Project Samples	4.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09066WAB026- LCS	2,4-Dimethylphenol	80 - 107	110	All Project Samples
	N-Nitrosodimethylamine	47 - 80	88	
	Bezidine	20 - 109	111	
09066WAB026- LCSD	N-Nitrosodimethylamine	47 - 80	88	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1134984

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-07_030509_01_DISS_L
HAR-07_030509_01_L
HAR-07_030509_36_DISS_L
RD-08_030509_01_L
RD-12_030509_01_L
RD-29_030509_01_L
RD-29_030509_19_L
RD-33B_030509_01_DISS_L
RD-33B_030509_01_L
RD-33B_030509_01_TOT_L
RD-34A_030509_01_DISS_L
RD-34A_030509_01_L
RD-34A_030509_01_TOT_L

Sample ID
RD-49A_030509_01_L
RD-49A_030509_36_L
RD-58A_030509_01_L
RD-58A_030509_36_L
RD-61_030509_01_L
RD-69_030509_01_L
RD-69_030509_78_L
RD-91_030509_01_DISS_L
RD-91_030509_01_L
RD-91_030509_36_L
RD-91_030509_78_L
HAR-07_030509_19_DISS_L
RD-33B_030509_78_L

Sample ID
HAR-07_030509_19_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	ICP Metals	EPA 6010B/200.7	180 days
3.	ICP/MS Metals	EPA 6020/200.8	180 days
4.	Mercury	EPA 7470A	28 days
5.	NDMA	EPA 1625C(M)	7 days
6.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
7.	Perchlorate	EPA 314.0	28 days
8.	Fluoride	EPA 300.0	28 days
9.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
10.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
11.	Cyanide, Total	EPA 335.2	14 days
12.	Chromium VI (Hexavalent Chromium)	EPA 7196A/7199	24 hours
13.	PAHs	EPA 8310	7 days ext/40 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-29_030509_19_L	Methylene chloride	0.5 J ug/L	RD-29_030509_01_L	5.0 ug/L
RD-69_030509_78_L	Methylene chloride	0.3 J ug/L	All Project Samples	3.0 ug/L
RD-91_030509_78_L	Methylene chloride	0.3 J ug/L	All Project Samples	3.0 ug/L
RD-33B_030509_78_L	Methylene chloride	0.2 J ug/L	All Project Samples	2.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
090686050001A-BLK	Copper	0.00093 J mg/L	All Project Samples	0.0093 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
Y090711AA-MS	cis-1,2-Dichloroethene	85 - 125	77	HAR-07_030509_01_L
	Trichloroethene	88 - 125	63	RD-49A_030509_01_L
				RD-58A_030509_01_L
				RD-91_030509_01_L
Y090711AA-MSD	cis-1,2-Dichloroethene	85 - 125	177	HAR-07_030509_01_L
	trans-1,2-Dichloroethene	87 - 125	130	RD-49A_030509_01_L
	Trichloroethene	88 - 125	265	RD-58A_030509_01_L
				RD-91_030509_01_L

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09066WAB026- LCS	2,4-Dimethylphenol	80 - 107	110	HAR-07_030509_01_L
	N-Nitrosodimethylamine	47 - 80	88	RD-49A_030509_01_L
	Bezidine	20 - 109	111	RD-58A_030509_01_L
				RD-91_030509_01_L
				RD-91_030509_36_L
09066WAB026- LCSD	N-Nitrosodimethylamine	47 - 80	88	HAR-07_030509_01_L
				RD-49A_030509_01_L
				RD-58A_030509_01_L
				RD-91_030509_01_L
				RD-91_030509_36_L
09066WAF026-LCS	Chrysene	82 - 112	79	RD-08_030509_01_L
				RD-12_030509_01_L

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Type	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)
090686050001A-LCS	LCS	Antimony	111	All Project Samples	#N/A	#N/A
90681848001-MSD	MSD	Manganese	71	All Project Samples	J	UJ

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1135099

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
OS-25_030609_01_L
OS-25_030609_78_L
RD-27_030609_01_DISS_L
RD-27_030609_01_L
RD-27_030609_19_L
RD-27_030609_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	ICP Metals	EPA 6010B/200.7	180 days
3.	ICP/MS Metals	EPA 6020/200.8	180 days
4.	Mercury	EPA 7470A	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
OS-25_030609_78_L	Methylene chloride	0.3 J ug/L	All Project Samples	3.0 ug/L

RD-27_030609_19_L	Methylene chloride	0.4 J ug/L	RD-27_030609_01_L	4.0 ug/L
RD-27_030609_78_L	Methylene chloride	0.3 J ug/L	All Project Samples	3.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
090686050001A-BLK	Copper	0.00093 J mg/L	All Project Samples	0.0093 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Type	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)
090686050001A-LCS	LCS	Antimony	111	All Project Samples		

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

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Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1135345

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
OS-27_030909_01_L
OS-27_030909_36_L
RD-13_030909_01_L
RD-13_030909_19_L
RD-13_030909_36_L
OS-27_030909_19_L
OS-27_030909_78_L
HAR-23_030909_01_L
HAR-23_030909_78_L
HAR-24_030909_01_L
HAR-24_030909_36_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
3.	Perchlorate	EPA 314.0	28 days
4.	Nitroaromatics / Amines	EPA 8330	7 days ext/40 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-13_030909_36_L	Methylene chloride	0.4 J ug/L	OS-27_030909_01_L OS-27_030909_36_L	4.0 ug/L
OS-27_030909_78_L	Methylene chloride	0.3 J ug/L	All Project Samples	4.0 ug/L
HAR-23_030909_78_L	Methylene chloride	0.3 J ug/L	All Project Samples	3.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
Y090711AA-MSD	trans-1,2-Dichloroethene	87 - 126	130	HAR-23_030909_01_L HAR-24_030909_36_L

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09070WAB026- LCS	1-Methylnaphthalene	78 - 105	108	All Project Samples
09070WAB026- LCSD	1-Methylnaphthalene	78 - 105	110	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should

not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1135533

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
OS-27_030909_01_L
OS-27_030909_36_L
RD-13_030909_01_L
RD-13_030909_19_L
RD-13_030909_36_L
OS-27_030909_19_L
OS-27_030909_78_L
HAR-23_030909_01_L
HAR-23_030909_78_L
HAR-24_030909_01_L
HAR-24_030909_36_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
3.	Perchlorate	EPA 314.0	28 days
4.	PAHs		

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
OS-27_030909_19_L	Methylene chloride	0.4 J ug/L	OS-27_030909_01_L OS-27_030909_36_L	4.0 ug/L
OS-27_030909_78_L	Methylene chloride	0.3 J ug/L	All Project Samples	3.0 ug/L
HAR-23_030909_78_L	Methylene chloride	0.3 J ug/L	All Project Samples	3.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09066WAB026- LCS	2,4-Dimethylphenol	80 - 107	110	All Project Samples
	N-Nitrosodimethylamine	47 - 80	88	
	Bezidine	20 - 109	111	
09066WAB026- LCSD	N-Nitrosodimethylamine	47 - 80	88	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: General Engineering Laboratories - Charleston, SC
Sample Delivery Group # 225241

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-07(Z3)_022009_03_GEL

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins	EPA 8290	1 year

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: GEL Laboratories LLC. - Charleston SC 29407
Sample Delivery Group # 225246

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-15_022409_03_DISS_GEL
RD-15_022409_03_TOT_GEL
RD-33C_022409_03_DISS_GEL
RD-33C_022409_03_TOT_GEL
RD-63_022009_03_DISS_GEL
RD-63_022009_03_TOT_GEL

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Gross Alpha, Beta in water	900.0	6 months
2.	Gamma Emitters in water	901.1	6 months
3.	Strontium-90	905.0	6 months
4.	Tritium	906.0	6 months
5.	Uranium, Isotopic	908.0	6 months

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was

analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Eberline Services - Richmond, CA
Sample Delivery Group # 8951

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID	Sample ID
RD-07(Z3)_022009_01_DISS_E	RD-33C_022409_01_TOT_E
RD-07(Z3)_022009_01_TOT_E	
RD-15_022409_01_DISS_E	
RD-15_022409_01_TOT_E	
RD-17_022509_01_DISS_E	
RD-17_022509_01_TOT_E	
RD-21(Z4)_022409_01_DISS_E	
RD-21(Z4)_022409_01_TOT_E	
RD-22(Z2)_022309_01_DISS_E	
RD-22(Z2)_022309_01_TOT_E	
RD-23(Z2)_022409_01_DISS_E	
RD-23(Z2)_022409_01_TOT_E	
RD-33C_022409_01_DISS_E	

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Gross Alpha, Beta in water	900.0	6 months
2.	Gamma Emitters in water	901.1	6 months
3.	Strontium-90	905.0	6 months
4.	Tritium	906.0	6 months
5.	Uranium, Isotopic	908.0	6 months

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No

qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Eberline Services - Richmond, CA
Sample Delivery Group # 8952

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID	Sample ID
RD-34B_022009_01_DISS_E	RD-64(Z8)_022309_01_TOT_E
RD-34B_022009_01_TOT_E	
RD-34C_021909_01_DISS_E	
RD-34C_021909_01_TOT_E	
RD-54A(Z2)_022009_01_DISS_E	
RD-54A(Z2)_022009_01_TOT_E	
RD-54B_022309_01_DISS_E	
RD-54B_022309_01_TOT_E	
RD-54C_022409_01_DISS_E	
RD-54C_022409_01_TOT_E	
RD-63_022009_01_DISS_E	
RD-63_022009_01_TOT_E	
RD-64(Z8)_022309_01_DISS_E	

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Gross Alpha, Beta in water	900.0	6 months
2.	Gamma Emitters in water	901.1	6 months
3.	Strontium-90	905.0	6 months
4.	Tritium	906.0	6 months
5.	Uranium, Isotopic	908.0	6 months

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No

qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Eberline Services - Richmond, CA
Sample Delivery Group # 8953

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID	Sample ID
RD-34B_022009_01_DISS_E	RD-64(Z8)_022309_01_TOT_E
RD-34B_022009_01_TOT_E	
RD-34C_021909_01_DISS_E	
RD-34C_021909_01_TOT_E	
RD-54A(Z2)_022009_01_DISS_E	
RD-54A(Z2)_022009_01_TOT_E	
RD-54B_022309_01_DISS_E	
RD-54B_022309_01_TOT_E	
RD-54C_022409_01_DISS_E	
RD-54C_022409_01_TOT_E	
RD-63_022009_01_DISS_E	
RD-63_022009_01_TOT_E	
RD-64(Z8)_022309_01_DISS_E	

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Gross Alpha, Beta in water	900.0	6 months
2.	Gamma Emitters in water	901.1	6 months
3.	Strontium-90	905.0	6 months
4.	Tritium	906.0	6 months
5.	Uranium, Isotopic	908.0	6 months

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No

qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Eberline Services - Richmond, CA
Sample Delivery Group # 8951-Recount

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-15_022409_01_DISS_E
RD-15_022409_01_TOT_E
RD-17_022509_01_DISS_E
RD-17_022509_01_TOT_E
RD-22(Z2)_022309_01_DISS_E
RD-22(Z2)_022309_01_TOT_E
RD-23(Z2)_022409_01_DISS_E
RD-23(Z2)_022409_01_TOT_E

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Gamma Emitters in water	901.1	6 months

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No

qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Eberline Services - Richmond, CA
Sample Delivery Group # 8954

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
ES-31_030409_01_DISS_E
ES-31_030409_01_TOT_E
RD-29_030509_01_DISS_E
RD-29_030509_01_TOT_E
RD-29_030509_36_TOT_E
RD-33B_030509_01_DISS_E
RD-33B_030509_01_TOT_E
RD-33B_030509_36_TOT_E
RD-34A_030509_01_DISS_E
RD-34A_030509_01_TOT_E
RS-18_030409_01_DISS_E
RS-18_030409_01_TOT_E

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Gross Alpha, Beta in water	900.0	6 months
2.	Gamma Emitters in water	901.1	6 months
3.	Strontium-90	905.0	6 months
4.	Tritium	906.0	6 months
5.	Uranium, Isotopic	908.0	6 months

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Eberline Services - Richmond, CA
Sample Delivery Group # 8955

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-27_030609_01_DISS_E
RD-27_030609_01_TOT_E

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Gross Alpha, Beta in water	900.0	6 months
2.	Gamma Emitters in water	901.1	6 months
3.	Strontium-90	905.0	6 months
4.	Tritium	906.0	6 months

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Truesdail Laboratories, Inc. – Tustin, CA
Sample Delivery Group # 981858

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-108_021809_01_TU

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Hydrazines	EPA 8315M	3 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Truesdail Laboratories, Inc. – Tustin, CA
Sample Delivery Group # 981896

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-122_021909_01_TU
PZ-122_021909_19R_TU

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Hydrazines	EPA 8315M	3 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and

compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Truesdail Laboratories, Inc. – Tustin, CA
Sample Delivery Group # 982147

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-13_030909_01_TU
RD-13_030909_19_TU
RD-13_030909_36_TU

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Hydrazines	EPA 8315M	3 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for

completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Weck Laboratories – Industry, CA
Sample Delivery Group # 9B10025

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-44_050708_01_W
RD-44_050708_19_W
RD-44_050708_36_W
RD-49B_050708_01_W
RD-51C_050708_01_W

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	NDMA	EPA 521	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
W8E0671-BLK1	N-Nitrosodimethylamine	0.000986 J ug/L	All Project Samples	0.00493 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C

and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluatec to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Weck Laboratories – Industry, CA
Sample Delivery Group # 9B11090

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-51C_021009_01_W
RD-51C_021009_19_W
RD-51C_021009_36_W
WS-05_021009_01_W
WS-09_021009_01_W

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	NDMA	EPA 1625	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without

qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Weck Laboratories – Industry, CA
Sample Delivery Group # 9B12041

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-49B_021109_01_W
RD-49C_021109_01_W
RD-58B_021109_01_W

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	NDMA	EPA 1625	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Weck Laboratories – Industry, CA
Sample Delivery Group # 9B13060

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-41B_021209_01_W
RD-55B_021209_01_W
WS-09A_021209_01_W

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	NDMA	EPA 1625	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Weck Laboratories – Industry, CA
Sample Delivery Group # 9B19067

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-20_021709_01_W
RD-55A_021809_01_W

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	NDMA	EPA 1625	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Weck Laboratories – Industry, CA
Sample Delivery Group # 9B20074

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-08_021909_01_W
RD-09_021909_01_W

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	NDMA	EPA 1625	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Weck Laboratories – Industry, CA
Sample Delivery Group # 9B27070

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-01_022509_01_W
RD-02_022609_01_W
RD-10_022609_01_W
WS-06_022609_01_W

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	NDMA	EPA 1625	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Weck Laboratories – Industry, CA
Sample Delivery Group # 9C04034

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-44_030209_01_W
RD-44_030209_36_W

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	NDMA	EPA 1625	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Weck Laboratories – Industry, CA
Sample Delivery Group # 9C06049

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
OS-28_031009_01_W
OS-28_031009_36_W
OS-28_031009_78_W
RD-13_030909_01_W
RD-13_030909_19_W
RD-13_030909_36_W
RD-13_030909_78_W

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	NDMA	EPA 1625	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory

qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Weck Laboratories – Industry, CA
Sample Delivery Group # 9C10056

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
OS-28_031009_01_W
OS-28_031009_36_W
OS-28_031009_78_W
RD-13_030909_01_W
RD-13_030909_19_W
RD-13_030909_36_W
RD-13_030909_78_W

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	NDMA	EPA 1625	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory

qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9B110281

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-51B_020909_03_TAD
WS-05_021009_03_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
2.	1,4-Dioxane	GC/MS Isotope Dilution	7 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without

qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9B120148

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-105_021109_03_TAD
PZ-105_021109_78_TAD
RD-58B_021109_03_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
3.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
PZ-105_021109_78_TAD	Acetone	2.2 J ug/L	All Project Samples	22.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9B170176

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-05B_021309_03_TAD
RD-05B_021309_78_TAD
RD-41B_021209_03_TAD
RD-70_021309_03_TAD
RD-70_021309_78_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	ICP Metals	EPA 6010B/200.7	180 days
3.	ICP/MS Metals	EPA 6020/200.8	180 days
4.	Mercury	EPA 7470A	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control

criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9B190248

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-20_021709_03_TAD
PZ-108_021809_03_TAD
RD-36B_021809_03_TAD
RD-36B_021809_78_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	Perchlorate	EPA 314.0	28 days
3.	Chloride	EPA 300.0/SM 4500-Cl	28 days
4.	Fluoride	EPA 300.0	28 days
5.	Bromide	EPA 300.0/320.1	28 days
6.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
7.	Sulfate	EPA 300.0/375.4	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value

RD-36B_021809_78_TAD	Methylene chloride	1.2 J B ug/L	All Project Samples	12.0 ug/L
9063072-BLK	Methylene chloride	0.98 J ug/L	All Project Samples	9.8 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – N. Canton, OH
Sample Delivery Group # D9B200114

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-09_021909_03_TC

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9052010-BLK	Formaldehyde	27 J ug/L	All Project Samples	135 ug/L

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9B200225

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-08_021909_03_TAD
PZ-122_021909_03_DISS_TAD
PZ-122_021909_03_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Fluoride	EPA 300.0	28 days
2.	pH	EPA 9040B	ASAP (24 hours)
3.	ICP Metals	EPA 6010B/200.7	180 days
4.	ICP/MS Metals	EPA 6020/200.8	180 days
5.	Mercury	EPA 7470A	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9055076-BLK	Barium	0.0006 J mg/L	All Project Samples	0.006 mg/L

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9B250254

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-08_021909_03_TAD
PZ-122_021909_03_DISS_TAD
PZ-122_021909_03_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Fluoride	EPA 300.0	28 days
2.	pH	EPA 9040B	ASAP (24 hours)
3.	ICP Metals	EPA 6010B/200.7	180 days
4.	ICP/MS Metals	EPA 6020/200.8	180 days
5.	Mercury	EPA 7470A	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9055076-BLK	Barium	0.0006 J mg/L	All Project Samples	0.006 mg/L

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – N. Canton, OH
Sample Delivery Group # D9B270112

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-10_022609_03_TC

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9059010-BLK	Formaldehyde	34 J ug/L	All Project Samples	170 ug/L

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Irvine, CA
Sample Delivery Group # D9B270193

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-004A_022609_03_TOT_TAD
PZ-103_022609_03_TAD
RD-01_022509_03_TAD
WS-06_022609_03_TAD
HAR-11_022609_03_TAD
HAR-11_022609_78_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	NDMA	EPA 1625C(M)	7 days
3.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
4.	ICP Metals	EPA 6010B/200.7	180 days
5.	ICP/MS Metals	EPA 6020/200.8	180 days
6.	Mercury	EPA 7470A	28 days
7.	Perchlorate	EPA 314.0	28 days
8.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
9.	Bromide	EPA 300.0/320.1	28 days
10.	Chloride	EPA 300.0/SM 4500-Cl	28 days
11.	Fluoride	EPA 300.0	28 days
12.	Sulfate	EPA 300.0/375.4	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9059032-BLK	Chrysene	0.6 ug/L	All Project Samples	2.8 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
9068240-LCS	Benzidine	10 - 120	0	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than

10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9C030155

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-105_021109_03_TAD
PZ-105_021109_78_TAD
RD-58B_021109_03_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
3.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
PZ-105_021109_78_TAD	Acetone	2.2 J ug/L	All Project Samples	22.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9C040292

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
OS-04_030309_03_TAD
OS-04_030309_78_TAD
RD-68A_030309_03_TAD
RD-68A_030309_78_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
OS-04_030309_78_TAD	Acetone	4.7 J ug/L	All Project Samples	47.0 ug/L
	Methylene chloride	0.86 J ug/L		8.6 ug/L
RD-68A_030309_78_TAD	Methylene chloride	1.2 J ug/L	All Project Samples	12.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Irvine, CA
Sample Delivery Group # D9C060330

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-07_030509_03_TAD
RD-34A_030509_03_TOT_TAD
RD-53_030409_03_TAD
RD-91_030509_03_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	Volatile Fuels, GRO	EPA 8015	14 days
4.	Cyanide, Total	EPA 9012	14 days
5.	Fluoride	EPA 300.0	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9068240-BLK	bis(2-Ethylhexyl)phthalate	2.2 J ug/L	All Project Samples	22.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
9068240-LCS	Benzidine	10 - 120	0	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

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Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Irvine, CA
Sample Delivery Group # D9C110117

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
OS-28_031009_03_TAD
RD-13_030909_03_TAD
RD-49A_030909_03_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	NDMA	EPA 1625C(M)	7 days
2.	Nitroaromatics amines	EPA 8330	8 days ext/40 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9068240-BLK	bis(2-Ethylhexyl)phthalate	2.2 J ug/L	All Project Samples	22.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated

to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
9068240-LCS	Benzidine	10 - 120	0	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica. - Knoxville, TN
Sample Delivery Group # H9B200111

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-20_021809_01_TK
RD-20_021809_36_TK

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins	EPA 8290	1 year

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and

compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica. - Knoxville, TN
Sample Delivery Group # H9B250120

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-20_111108_01_T

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins	EPA 8290	1 year

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
H8K170000-485B	OCDD	1.2 J pg/L	All Project Samples	6 pg/L

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Eberline Services - Richmond, CA
Sample Delivery Group # 8955-Recount

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-27_030609_01_DISS_E
RD-27_030609_01_TOT_E

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Gamma Emitters in water	901.1	6 months

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and

compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Eberline Services - Richmond, CA
Sample Delivery Group # 8954-Recount

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-33B_030509_01_DISS_E
RD-33B_030509_01_TOT_E
RD-33B_030509_36_TOT_E
RD-34A_030509_01_DISS_E
RD-34A_030509_01_TOT_E

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Gamma Emitters in water	901.1	6 months

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Eberline Services - Richmond, CA
Sample Delivery Group # 8952-Recount

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-34B_022009_01_DISS_E
RD-34B_022009_01_TOT_E
RD-63_022009_01_DISS_E
RD-63_022009_01_TOT_E
RD-64(Z8)_022309_01_DISS_E
RD-64(Z8)_022309_01_TOT_E

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Gamma Emitters in water	901.1	6 months

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # SDG Number

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
PZ-048_043009_01_D_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	ICP Metals	EPA 6010B/200.7	180 days
2.	ICP/MS Metals	EPA 6020/200.8	180 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Duplicate Sample Analysis
- ICP Interference Check Sample Performance
- ICP Serial Dilution Replicate Percent Difference
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene

chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Duplicate Sample Analysis

The replicate percent difference (RPD) was evaluated for each duplicate sample pair to monitor the reproducibility of the data. The RPD for each sample pair was within the QA/QC limit of 30% for aqueous samples and 50% for solid matrices, for those target analytes with sample concentrations >5X the MDL. No qualification of the data is recommended.

ICP Interference Check Sample Performance

The results of the ICP Interference Check Samples analyzed concurrently with the project samples were all within the acceptance criteria +/- 20% of true value as prescribed by USEPA guidance. No qualification of the data is recommended.

ICP Serial Dilution Replicate Percent Difference

The results of the ICP Serial Dilution samples analyzed concurrently with the project samples were in accordance with the EPA QA acceptance criteria of less than 10% RPD for those target analytes with sample concentrations >50X the MDL. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1143030

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-67_050109_01_L
RD-67_050109_36_L
RD-66_050109_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Project-specific Reporting Limits
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Field Duplicate Sample Analysis
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Project-specific Reporting Limits

The reporting limits for the samples within this Sample Delivery Group (SDG) met or exceeded the minimum reporting limit requirements specified by the Project-specific Quality Assurance Project Plan (QAPP). No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Field Duplicate Sample Analysis

The overall variability attributable to the sampling procedure, sample matrix, and laboratory procedures, was evaluated by assessing the relative percent difference (RPD) data from field duplicate samples. All calculated RPD values were within matrix specific data quality objectives, with the exception of results qualified “J” as shown in the table(s) below:

	Original Sample ID.	**FD Sample ID.**		**Flag original sample**
Target Analyte(s)	RD-67_050109_01_L	RD-67_050109_36_L	**%RPD**	**results with:**
Chloromethane	0.2 J	0.2 U	0%	

Action:
If the sample matrix is solid and the %RPD is greater than 50%, the original sample results are qualified "J". If the sample matrix is water or air and the %RPD is greater than 35%, the original sample results are qualified "J".

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1143263

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-06_050409_01_L
RD-06_050409_19_L
RD-06_050409_36_L
WS-09A_050409_78_L

Project Samples were analyzed according to the following analytical methods

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Field Duplicate Sample Analysis
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-06_050409_19_L	Methylene chloride	0.4 ug/L	RD-06_050409_01_L RD-06_050409_36_L	4.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Field Duplicate Sample Analysis

The overall variability attributable to the sampling procedure, sample matrix, and laboratory procedures, was evaluated by assessing the relative percent difference (RPD) data from field duplicate samples. All calculated RPD values were within matrix specific data quality objectives, with the exception of results qualified "J" as shown in the table(s) below:

Target Analyte(s)	Original Sample ID. RD-06_050409_01_L	FD Sample ID. RD-06_050409_36_L	%RPD	Flag original sample results with:
Carbon disulfide	0.4 J	0.5 J	22%	
Chloromethane	0.5 U	0.3 J	50%	J

Action:
If the sample matrix is solid and the %RPD is greater than 50%, the original sample results are qualified "J". If the sample matrix is water or air and the %RPD is greater than 35%, the original sample results are qualified "J".

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1143735

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-49C_050609_01_L
RD-49C_050609_36_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Field Duplicate Sample Analysis
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Field Duplicate Sample Analysis

The overall variability attributable to the sampling procedure, sample matrix, and laboratory procedures, was evaluated by assessing the relative percent difference (RPD) data from field duplicate samples. All calculated RPD values were within matrix specific data quality objectives, with the exception of results qualified "J" as shown in the table(s) below:

Target Analyte(s)	Original Sample ID. RD-49C_050609_01_L	FD Sample ID. RD-49C_050609_36_L	%RPD	Flag original sample results with:
1,1-Dichloroethene	0.2 J	0.2 J	0%	
cis-1,2-Dichloroethene	78	73	7%	
trans-1,2-Dichloroethene	2.5	2.5	0%	
Trichloroethene	13	13	0%	
Vinyl chloride	1.7	1.7	0%	
Chloromethane	0.2 U	0.3 J	40%	J

Action:
If the sample matrix is solid and the %RPD is greater than 50%, the original sample results are qualified "J". If the sample matrix is water or air and the %RPD is greater than 35%, the original sample results are qualified "J".

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1143965

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
PZ-071_050709_01_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	GC Extractable TPH	EPA 8015B	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No

qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1144841

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-32_051309_78_L-TB
RD-37_051309_01_L
RD-37_051309_19_L-FB
RD-37_051309_36_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Field Duplicate Sample Analysis
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Field Duplicate Sample Analysis

The overall variability attributable to the sampling procedure, sample matrix, and laboratory procedures, was evaluated by assessing the relative percent difference (RPD) data from field duplicate samples. All calculated RPD values were within matrix specific data quality objectives, with the exception of results qualified “J” as shown in the table(s) below:

Target Analyte(s)	Original Sample ID. RD-37_051309_01_L	FD Sample ID. RD-37_051309_36_L	%RPD	Flag original sample results with:
cis-1,2-Dichloroethene	0.1 J	0.1 J	0%	
Carbon disulfide	0.4 U	0.4 J	0%	

Action:
If the sample matrix is solid and the %RPD is greater than 50%, the original sample results are qualified "J". If the sample matrix is water or air and the %RPD is greater than 35%, the original sample results are qualified "J".

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1145031

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
SH-08_051409_01_L
SH-08_051409_36_L
SH-08_051409_19_L
SH-08_051409_19R_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Pesticides, Organochlorine	EPA 8081A/608	7 days ext/40 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Field Duplicate Sample Analysis
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Field Duplicate Sample Analysis

The overall variability attributable to the sampling procedure, sample matrix, and laboratory procedures, was evaluated by assessing the relative percent difference (RPD) data from field duplicate samples. All calculated RPD values were within matrix specific data quality objectives, with the exception of results qualified “J” as shown in the table(s) below:

Target Analyte(s)	Original Sample ID. SH-08_051409_01_L	FD Sample ID. SH-08_051409_36_L	%RPD	Flag original sample results with:
Aldrin	0.0079 J	0.0068 J	15%	
alpha_BHC	0.0033 J	0.0026 J	24%	
Dieldrin	0.0050 J	0.0068 J	31%	

Action:
If the sample matrix is solid and the %RPD is greater than 50%, the original sample results are qualified "J". If the sample matrix is water or air and the %RPD is greater than 35%, the original sample results are qualified "J".

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: TestAmerica, Inc. – Denver, CO
Sample Delivery Group # D9E060235

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-06_050409_03_TAD
RD-06_050409_78_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols, with the following exception(s):

During the analysis of VOCs (SW846 8260B), the continuing calibration verification (CCV) standards for the following target compound(s) exhibited a percent drift (%D) greater than the acceptance criteria of 25% and/or a RRF less than 0.05:

Inst.	Date / Time	Target Analyte(s)	%D	RRF	Affected Sample(s)	Corrective Action
R1	05/09/09	2-Butanone	31.20		RD-06_050409_03_TAD	See Action #1 Below
	1132	2-Hexanone	27.00		RD-06_050409_78_TAD	See Action #1 Below
		1,2-Dibromo-3-chloropropane	39.30			See Action #1 Below

Action #1
Positive results are qualified "J", estimated and non-detected analytes as "UJ", estimated detection limit.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-06_050409_78_TAD	Methylene chloride	1.3 ug/L	RD-06_050409_03_TAD	13.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: TestAmerica, Inc. – Denver, CO
Sample Delivery Group # D9E140311

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-37_051309_03_TAD
RD-37_051309_78_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-37_051309_78_TAD (Trip Blank)	Acetone	6.4 ug/L	RD-37_051309_03_TAD	64.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: TestAmerica, Inc. – Denver, CO
Sample Delivery Group # D9E150325

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
SH-08_051409_03_TAD
SH-08_051409_19R_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Pesticides, Organochlorine	EPA 8081A/608	7 days ext/40 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were

not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: General Engineering Laboratories - Charleston, SC
Sample Delivery Group # 229204

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Chlorinated Dibenzo-p-dioxins (CDD) and CDF Data Review (EPA 540/R-05/001) USEPA Analytical Services Branch (ASB), September, 2005.

and method protocol criteria where applicable as prescribed by “Test Methods for Evaluating Solid Waste”, SW846, Update III, 1996, USEPA Method 8290A.

This DUSR pertains to the following samples:

Sample ID
RD_20_050609_03

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins/Furans	EPA 8290A	30 days ext/45 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Project-specific Reporting Limits
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Project-specific Reporting Limits

The reporting limits for the samples within this Sample Delivery Group (SDG) met or exceeded the minimum reporting limit requirements specified by the Project-specific Quality Assurance Project Plan (QAPP). No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, results should be reported unless the concentration of the compound in the project sample is less than or equal to the amount in any blank for the target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of the corresponding CCV standard. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the EDL and QL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: TestAmerica, Inc. – Knoxville, TN
Sample Delivery Group # H9D300185/186

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Chlorinated Dibenzo-p-dioxins/furans Data Review (EPA 540/R-05/001)
  USEPA Analytical Services Branch (ASB) OSWER Directive 9240-1-51, 2005

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, EPA Method 8290A.

This DUSR pertains to the following samples:

Sample ID
RD-20_050609_01
RD-20_050609_19
HAR-17_042909_01
HAR-17_042909_36

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins / Furans	EPA 8290	30 days ext/45 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Field Duplicate Sample Analysis
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, results should be reported unless the concentration of the target compound detected in the project sample is less than the amount in any blank and above the Contract Required Quantitation Limit (CRQL). Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-20_050609_19	OCDD	3.7 ppt	RD-20_050609_01	18.5 ppt

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

C^{13} Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of the corresponding CCV standard. No qualification of the data is recommended.

Field Duplicate Sample Analysis

The overall variability attributable to the sampling procedure, sample matrix, and laboratory procedures, was evaluated by assessing the relative percent difference (RPD) data from field duplicate samples. All calculated RPD values were within matrix specific data quality objectives, with the exception of results qualified "J" as shown in the table(s) below:

Target Analyte(s)	Original Sample ID.	FD Sample ID.	%RPD	Flag original sample results with:
1,2,3,4,6,7,8-HpCDF	HAR-17_042909_01	HAR-17_042909_36	83%	J

Action:
If the sample matrix is solid and the %RPD is greater than 50%, the original sample results are qualified "J". If the sample matrix is water or air and the %RPD is greater than 35%, the original sample results are qualified "J".

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within the applicable RRT window of the associated calibration standard, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the EDL and QL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at these quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with the cited EPA methodology.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1142095

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-16_042309_03_D_L
HAR-16_042309_03_L
HAR-16_042309_03_T_L
HAR-16_042309_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	ICP Metals	EPA 6010B/200.7	180 days
4.	ICP/MS Metals	EPA 6020/200.8	180 days
5.	Mercury	EPA 7470A	28 days
6.	Sulfide, Total	EPA 376.2	7 days
7.	Cyanide, Total	EPA 9012	14 days
8.	EDB/DBCP	EPA 504.1	14 days
9.	Pesticides, Organochlorine	EPA 8081A/608	7 days ext/40 days analysis
10.	PCBs	EPA 8082/608	7 days ext/40 days analysis
11.	Pesticides, Organophosphorus	EPA 8141A	7 days ext/40 days analysis
12.	Herbicides, Chlorinated	EPA 8151A	7 days ext/40 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Duplicate Sample Analysis
- ICP Serial Dilution Replicate Percent Difference
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene

chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
HAR-16_042309_78_L	Methylene chloride	0.4 J ug/L	All Project Samples	4.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
0911WAB026-LCS	2-Methylnaphthalene	86 - 102	85	All Project Samples
	Fluorene	84 - 100	82	
	Hexachlorobutadiene	66 - 111	65	
	2-Methylnaphthalene	86 - 102	85	
0911WAB026-LCSD	Benzo(a)anthracene	82 - 96	81	All Project Samples
	Fluorene	84 - 100	82	
	2-Methylnaphthalene	86 - 102	85	
	Pyridine	27 - 79	80	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Duplicate Sample Analysis

The replicate percent difference (RPD) was evaluated for each duplicate sample pair to monitor the reproducibility of the data. The RPD for each sample pair was within the QA/QC limit of 30% for aqueous samples and 50% for solid matrices, for those target analytes with sample concentrations >5X the MDL. No qualification of the data is recommended.

ICP Serial Dilution Replicate Percent Difference

The results of the ICP Serial Dilution samples analyzed concurrently with the project samples were in accordance with the EPA QA acceptance criteria of less than 10% RPD for those target analytes with sample concentrations >50X the MDL. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1142522

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
ES-30_042709_01_L
ES-30_042709_78_L
PZ-026_042809_01_L
PZ-027_042809_01_L
PZ-103_042709_01_L
PZ-103_042709_19_L
PZ-103_042709_19R_L
RD-12_042809_01_L
RD-12_042809_36_L
RD-71_042809_01_L
RD-71_042809_36_L
RD-71_042809_78_L
RS-18_042709_01_D_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	ICP Metals	EPA 6010B/200.7	180 days
4.	ICP/MS Metals	EPA 6020/200.8	180 days
5.	Mercury	EPA 7470A	28 days
6.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
7.	Bromide	EPA 300.0/320.1	28 days
8.	Chloride	EPA 300.0/SM 4500-Cl	28 days
9.	Fluoride	EPA 300.0	28 days
10.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
ES-30_042709_78_L	Methylene chloride	0.4 J ug/L	All Project Samples	4.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
PZ-103_042709_19_L	Fluoride ion	0.11 mg/L	PZ-103_042709_01_L	0.55 mg/L
PZ-103_042709_19R_L	Fluoride ion	0.11 mg/L	PZ-103_042709_01_L	0.55 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Type	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)
09119621101B-MS	MS	Nitrate ion	111	All Project Samples		

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1142742

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-025_042909_01_L
PZ-025_042909_19R_L
PZ-105_042909_01_D_L
PZ-105_042909_01_L
PZ-105_042909_19_D_L
PZ-105_042909_19_L
PZ-105_042909_19R_D_L
PZ-105_042909_19R_L
PZ-105_042909_36_D_L
PZ-105_042909_36_L
PZ-120_042909_01_L
RD-21(Z2)_042909_01_L
RD-21(Z2)_042909_36_L

Sample ID
RD-22(Z2)_042909_01_L
RD-22(Z2)_042909_19_L
RD-22(Z2)_042909_78_L
RD-50(Z2)_042909_01_L
RD-57(Z7)_042909_01_L
RD-64(Z4)_042909_01_D_L
RD-64(Z4)_042909_36_D_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	ICP Metals	EPA 6010B/200.7	180 days
4.	ICP/MS Metals	EPA 6020/200.8	180 days
5.	Mercury	EPA 7470A	28 days
6.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
7.	TPH(d)	EPA 8015B	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
PZ-105_042909_19R_L	Methylene chloride	0.4 J ug/L	PZ-105_042909_01_L	4.0 ug/L
RD-22(Z2)_042909_19_L	Methylene chloride	0.4 J ug/L	RD-22(Z2)_042909_01_L	4.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
091211848006-BLK	Boron	0.0121 J mg/L	All Project Samples	0.121 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1142900

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-08_043009_01_L
HAR-08_043009_01_L
HAR-18_043009_01_L
HAR-20_043009_01_L
HAR-20_043009_36_L
PZ-048_043009_01_D_L
PZ-109_043009_01_D_L
PZ-109_043009_01_L
RD-44_043009_01_L
RD-44_043009_36_L
RD-55A_043009_01_L
RD-55B_043009_01_L
RD-62_043009_01_L

Sample ID
RD-62_043009_19_L
RD-62_043009_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	ICP Metals	EPA 6010B/200.7	180 days
4.	ICP/MS Metals	EPA 6020/200.8	180 days
5.	Mercury	EPA 7470A	28 days
6.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
7.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
8.	Perchlorate	EPA 314.0	28 days
9.	Chromium VI (Hexavalent Chromium)	EPA 7196A/7199	24 hours
10.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-62_043009_19_L	Methylene chloride	0.5 J ug/L	RD-62_043009_01_L	5.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
091241848003-BLK	Zinc	0.0092 J mg/L	All Project Samples	0.092 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09125WAJ026-LCS	Benzidine	82 - 96	73	All Project Samples
	4-Chlorophenyl phenyl ether	76 - 102	73	
	2,4-Dichlorophenol	86 - 108	80	
	2,4-Dimethylphenol	80 - 107	77	
	Fluorene	84 - 100	75	
	Phenanthrene	85 - 103	84	
09125WAJ026-MS	4-Chloronaphthalene	49 - 111	119	All Project Samples
09125WAJ026-MSD	4-Chloronaphthalene	49 - 111	122	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than

10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Type	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)
09127691401A-MS	MS	Ammonia	0	All Project Samples	J	R
09127691401A-MSD	MSD	Ammonia	0	All Project Samples	J	R

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1143030

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
ES-17_050109_01_L
ES-26_050109_01_L
HAR-26_050109_01_L
RD-19_050109_01_L
RD-66_050109_01_L
RD-66_050109_19_L
RD-66_050109_78_L
RD-67_050109_01_L
RD-67_050109_36_L
RD-92_050109_01_L
RD-92_050109_19_D_L
RD-92_050109_36_D_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	ICP Metals	EPA 6010B/200.7	180 days
4.	ICP/MS Metals	EPA 6020/200.8	180 days
5.	Mercury	EPA 7470A	28 days
6.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
7.	1,4-Dioxane	GC/MS Isotope Dilution	7 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project

sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-66_050109_19_L	Methylene chloride	0.4 J ug/L	RD-66_050109_01_L	4.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
091240002A-BLK	Formaldehyde	13 J ug/L	All Project Samples	65 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
Y091301AB-MS	Trichloroethene	88 - 125	137	ES-17_050109_01_L ES-26_050109_01_L
Y091301AB-MSD	Trichloroethene	88 - 125	84	ES-17_050109_01_L ES-26_050109_01_L
Y091301AA-MS	Trichloroethene	88 - 125	137	ES-17_050109_01_L ES-26_050109_01_L
Y091301AA-MSD	Trichloroethene	88 - 125	84	ES-17_050109_01_L ES-26_050109_01_L

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID /				

Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09125WAJ026-LCS	Benzo(a)anthracene	82 - 96	73	All Project Samples
	Indeno(1,2,3-cd)pyrene	84 - 100	75	
	2-Methylnaphthalene	86 - 102	81	
	Phenanthrene	85 - 103	84	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1143263

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
ES-24_050409_01_L
PZ-058_050409_01_D_L
PZ-058_050409_01_L
RD-06_050409_01_L
RD-06_050409_19_L
RD-06_050409_36_L
RD-41B_050409_01_L
RD-41B_050409_01_L
RD-41B_050409_36_L
RD-51B_050409_01_L
WS-09A_050409_01_L
WS-09A_050409_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	ICP Metals	EPA 6010B/200.7	180 days
4.	ICP/MS Metals	EPA 6020/200.8	180 days
5.	Mercury	EPA 7470A	28 days
6.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
7.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
8.	Perchlorate	EPA 314.0	28 days
9.	Chromium VI (Hexavalent Chromium)	EPA 7196A/7199	24 hours
10.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
11.	TPH(d)	EPA 8015B	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-06_050409_19_L	Methylene chloride	0.4 J ug/L	RD-06_050409_01_L	4.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
Y091301AA-MS	Trichloroethene	88 - 125	137	ES-24_050409_01_L RD-51B_050409_01_L
Y091301AA-MSD	Trichloroethene	88 - 125	84	ES-24_050409_01_L RD-51B_050409_01_L

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09126WAC026-LCS	N-Nitrosodimethylamine	47 - 80	83	All Project Samples
09126WAC026-LCSD	N-Nitrosodimethylamine	47 - 80	85	All Project Samples
	Fluorene	84 - 100	82	
	Benzo(a)anthracene	82 - 96	80	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Type	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)
09127691401A-MS	MS	Ammonia	0	All Project Samples	J	R
09127691401A-MSD	MSD	Ammonia	0	All Project Samples	J	R
091270016A-LCS	LCS	Extractable Fuel	59	All Project Samples	J	UJ
091270016A-LCSD	LCSD	Extractable Fuel	59	All Project Samples	J	UJ

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1143500

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID	Sample ID
HAR-27_050509_01_D_L	RD-18_050509_36_L
HAR-27_050509_19_D_L	RD-51C_050509_01_L
HAR-27_050509_36_D_L	RD-51C_050509_19_L
HAR-28_050509_01_D_L	RD-51C_050509_36_L
HAR-28_050509_36_D_L	RD-61_050509_01_L
PZ-108_050509_01_L	RD-91_050509_01_D_L
PZ-122_050509_01_D_L	RD-91_050509_01_L
PZ-122_050509_01_L	RD-91_050509_19_L
PZ-122_050509_19_L	RD-91_050509_36_L
PZ-122_050509_19R_L	RD-91_050509_78_L
PZ-122_050509_36_L	WS-09_050509_01_L
RD-04_050509_01_L	WS-09_050509_36_L
RD-18_050509_01_L	

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	ICP Metals	EPA 6010B/200.7	180 days
4.	ICP/MS Metals	EPA 6020/200.8	180 days
5.	Mercury	EPA 7470A	28 days
6.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
7.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
8.	Perchlorate	EPA 314.0	28 days
9.	Chromium VI (Hexavalent Chromium)	EPA 7196A/7199	24 hours
10.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
11.	TPH(d)	EPA 8015B	14 days
12.	Bromide	EPA 300.0/320.1	28 days
13.	Chloride	EPA 300.0/SM 4500-Cl	28 days
14.	Sulfate	EPA 300.0/375.4	28 days
15.	pH	EPA 150.1	ASAP (24 hours)

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-51C_050509_19_L	Methylene chloride	0.4 J ug/L	RD-51C_050509_01_L RD-51C_050509_36_L	4.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
Y091301AA-MS	Trichloroethene	88 - 125	137	ES-24_050409_01_L RD-51B_050409_01_L
Y091301AA-MSD	Trichloroethene	88 - 125	84	ES-24_050409_01_L RD-51B_050409_01_L
G091271AA-MS	Trichloroethene	85 - 131	-6	All Project Samples
G091271AA-MSD	Trichloroethene	85 - 131	49	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09129WAA-LCS	bis(2-Ethylhexyl)phthalate	65 - 126	144	All Project Samples
	N-Nitrosodimethylamine	47 - 80	89	
09129WAA-MS	N-Nitrosodimethylamine	45 - 81	90	All Project Samples
	Pentachlorophenol	71 - 104	106	
	Phenol	10 - 83	103	
09129WAA-MSD	N-Nitrosodimethylamine	45 - 81	88	All Project Samples
	Phenol	10 - 83	102	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Type	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)	
091326050005A-MSD	MSD	Lead	65	All Project Samples	J	UJ	#N/A

LCS ID / Project Sample MS	Type	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)
09127691401A-MS	MS	Ammonia	0	All Project Samples	J	R
09127691401A-MSD	MSD	Ammonia	0	All Project Samples	J	R
091270016A-LCS	LCS	Extractable Fuel	59	All Project Samples	J	UJ
091270016A-LCSD	LCSD	Extractable Fuel	59	All Project Samples	J	UJ
09127196601A-MS	MS	Bromide	89	All Project Samples		

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

G:\Projects\26472 - ROC\database\LAB\2009\2nd Qtr 09\Data Validation\Individual Reports\[1143500_DV.xls]Final Report

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1143735

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID	Sample ID
HAR-03_050609_01_L	WS-05_050609_01_L
PZ-006C_050609_01_L	WS-06_050609_01_L
PZ-006D_050609_01_L	
PZ-006D_050609_19_L	
PZ-006E_050609_01_L	
RD-13_050609_01_L	
RD-13_050609_19_L	
RD-13_050609_36_L	
RD-49A_050609_01_L	
RD-49B_050609_01_L	
RD-49C_050609_01_L	
RD-49C_050609_36_L	
RD-70_050609_01_L	

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	Nitroaromatics/ Nitroamines	8330	7 days ext/40 days analysis
3.	Perchlorate	EPA 314.0	28 days
4.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
5.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
6.	1,4-Dioxane	8260 SIM	7 days
7.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-	28 days
8.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-	48 hours
9.	Fluoride	EPA 300.0	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
09132WAA026-BLK	bis(2-Ethylhexyl)phthalate	13.0 ug/L	All Project Samples	130.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
9135215-LCS	Methylene chloride	71 - 120	122	All Project Samples
9135215-LCSD	Methylene chloride	71 - 120	159	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Type	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)
09127196602A-MS	MS	Fluoride ion	87	RD-49A_050609_01_L RD-49C_050609_01_L		

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and

compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1143965

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-071_050709_01_D_L
PZ-071_050709_01_L
PZ-071_050709_19_L
PZ-071_050709_19R_D_L
PZ-071_050709_36_L
RD-09_050709_01_L
RD-09_050709_36_L
RD-15_050709_01_D_L
RD-16_050709_01_L
RD-56B_050709_01_L
RD-09_050709_78_L
RD-09_050709_19_L
PZ-071_050709_36_D_L

Sample ID
PZ-071_050709_19R_L
PZ-071_050709_19_D_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	ICP Metals	EPA 6010B/200.7	180 days
4.	ICP/MS Metals	EPA 6020/200.8	180 days
5.	Mercury	EPA 7470A	28 days
6.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
7.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
8.	Perchlorate	EPA 314.0	28 days
9.	Chromium VI (Hexavalent Chromium)	EPA 7196A/7199	24 hours
10.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
11.	TPH(d)	EPA 8015B	14 days
12.	Bromide	EPA 300.0/320.1	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-09_050709_19_L	Methylene chloride	0.4 J ug/L	All Project Samples	4.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
C091371AA-MS	Acetone	57 - 163	166	PZ-071_050709_01_L RD-09_050709_01_L RD-09_050709_36_L RD-16_050709_01_L
C091371AA-MSD	Acetone 2-Butanone	57 - 163 58 - 168	173 174	PZ-071_050709_01_L RD-09_050709_01_L RD-09_050709_36_L RD-16_050709_01_L
		85 - 131	-6	All Project Samples
		85 - 131	49	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to

affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09132WAA-LCS	bis(2-Ethylhexyl)phthalate	47 - 80	83	All Project Samples
09132WAA-LCSD	N-Nitrosodimethylamine	47 - 80	83	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1144144

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-05C_050809_01_L
RD-52C_050809_01_L
RD-52C_050809_19_L
RD-52C_050809_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-52C_050809_19_L	Methylene chloride	0.4 J ug/L	RD-52C_050809_01_L	4.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated

to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1144359

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-07_051109_01_D_L
HAR-07_051109_01_L
RD-10_051109_01_L
RD-58A_051109_01_L
RD-58A_051109_19_L
RD-58A_051109_78_L
RD-58B_051109_01_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	ICP Metals	EPA 6010B/200.7	180 days
4.	ICP/MS Metals	EPA 6020/200.8	180 days
5.	Mercury	EPA 7470A	28 days
6.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
7.	Fluoride	EPA 300.0	28 days
8.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
9.	Perchlorate	EPA 314.0	28 days
10.	Chromium VI (Hexavalent Chromium)	EPA 7196A/7199	24 hours
11.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
12.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project

sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09134WAB-LCS	N-Nitrosodimethylamine	47 - 80	84	All Project Samples
09134WAB-LCSD	N-Nitrosodimethylamine	47 - 80	86	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1144533

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-01_051209_01_L
RD-02_051209_01_L
RD-02_051209_19_L
RD-05B_051209_01_L
RD-05B_051209_36_L
RD-43A_051209_01_L
RD-43A_051209_78_L
RD-43B_051209_01_L
RD-43B_051209_36_L
RD-43C_051209_01_L
RD-48C_051209_01_L
RD-48C_051209_36_L
RD-68A_051209_01_L

Sample ID
RD-68B_051209_01_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	Perchlorate	EPA 314.0	28 days
4.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
5.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
6.	Fluoride	EPA 300.0	28 days
7.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
8.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09134WAB026-LCS	N-Nitrosodimethylamine	47 - 80	84	All Project Samples
09134WAB026-LCSD	N-Nitrosodimethylamine	47 - 80	86	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1144841

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-29_051309_01_D_L
RD-08_051309_01_L
RD-08_051309_19_L
RD-08_051309_36_L
RD-32_051309_01_L
RD-32_051309_19_L
RD-32_051309_78_L
RD-33C_051309_01_L
RD-33C_051309_36_L
RD-37_051309_01_L
RD-37_051309_19_L
RD-37_051309_36_L
RD-39B_051309_01_L

Sample ID
RD-59A_051309_01_L
RD-59B_051309_01_L
RD-59C_051309_01_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	ICP Metals	EPA 6010B/200.7	180 days
4.	ICP/MS Metals	EPA 6020/200.8	180 days
5.	Mercury	EPA 7470A	28 days
6.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project

sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09138WAD-LCSD	1-Methylnaphthalene	78 - 105	109	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1145031

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-11_051409_01_L
RD-11_051409_36_L
RD-33B_051409_01_L
RD-41C_051409_01_D_L
RD-41C_051409_36_D_L
SH-08_051409_01_L
SH-08_051409_19_L
SH-08_051409_19R_L
SH-08_051409_36_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	ICP Metals	EPA 6010B/200.7	180 days
4.	ICP/MS Metals	EPA 6020/200.8	180 days
5.	Mercury	EPA 7470A	28 days
6.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
7.	Pesticides, Organochlorine	EPA 8081A/608	7 days ext/40 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Duplicate Sample Analysis
- ICP Serial Dilution Replicate Percent Difference
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene

chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09140WAC026-LCS	1-Methylnaphthalene	78 - 105	107	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Duplicate Sample Analysis

The replicate percent difference (RPD) was evaluated for each duplicate sample pair to monitor the reproducibility of the data. The RPD for each sample pair was within the QA/QC limit of 30% for aqueous samples and 50% for solid matrices, for those target analytes with sample concentrations >5X the MDL. No qualification of the data is recommended.

ICP Serial Dilution Replicate Percent Difference

The results of the ICP Serial Dilution samples analyzed concurrently with the project samples were in accordance with the EPA QA acceptance criteria of less than 10% RPD for those target analytes with sample concentrations >50X the MDL. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the

method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1146637

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-26_052709_01_L
RD-26_052709_19_L
RD-26_052709_36_L
RD-51B_052709_01_L
RD-51B_052709_19_L
RD-51B_052709_36_L
RD-51B_052709_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory

qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1146869

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
ES-21_052809_01_L
ES-21_052809_19_L
ES-21_052809_36_L
ES-21_052809_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
Y091553AA-LCS	Bromomethane	45 - 126	128	All Project Samples
	Chloroethane	55 - 119	122	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: General Engineering Laboratories - Charleston, SC
Sample Delivery Group # 228632

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-16_042309_03_GEL

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins	EPA 8290	1 year

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: General Engineering Laboratories - Charleston, SC
Sample Delivery Group # 229204

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-20_050509_03_GEL

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins	EPA 8290	1 year

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: General Engineering Laboratories - Charleston, SC
Sample Delivery Group # 229355

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-071_050709_03_GEL

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins	EPA 8290	1 year

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Eberline Services - Richmond, CA
Sample Delivery Group # 8956

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RS-18_042709_01_D_E
RS-18_042709_01_T_E

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Gross Alpha, Beta in water	900.0	6 months
2.	Gamma Emitters in water	901.1	6 months
3.	Tritium	906.0	6 months
4.	Uranium, Isotopic	908.0	6 months

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Truesdail Laboratories, Inc. – Tustin, CA
Sample Delivery Group # 983149

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-108_050509_01_TU
PZ-108_050509_19_TU
PZ-108_050509_19R_TU
PZ-108_050509_36_TU
PZ-122_050509_01_TU

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Hydrazines	EPA 8315M	3 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Truesdail Laboratories, Inc. – Tustin, CA
Sample Delivery Group # 983178

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-13_050609_01_TU

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Hydrazines	EPA 8315M	3 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Weck Laboratories – Industry, CA
Sample Delivery Group # 9D28008

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HSR-16_042309_03_W

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	1,2,3-TCP	EPA 8260B	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Weck Laboratories – Industry, CA
Sample Delivery Group # 9E07024

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-13_050609_03_W
RD-41B_050409_03_W

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	NDMA	EPA 1625	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica Laboratories – Denver, CO
Sample Delivery Group # D9D240334

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-14_042309_01_D_TAD
HAR-14_042309_01_T_TAD
HAR-14_042309_01_TAD
HAR-15_042309_01_D_TAD
HAR-15_042309_01_T_TAD
HAR-15_042309_01_TAD
HAR-16_042309_01_D_TAD
HAR-16_042309_01_T_TAD
HAR-16_042309_01_TAD
HAR-16_042309_19_D_TAD
HAR-16_042309_19_T_TAD
HAR-16_042309_19_TAD
HAR-16_042309_78_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	1,2,3-TCP	EPA 8260B	14 days
2.	EDB/DBCP	EPA 504.1	14 days
3.	Pesticides, Organochlorine	EPA 8081A/608	7 days ext/40 days analysis
4.	PCBs	EPA 8082/608	7 days ext/40 days analysis
5.	Pesticides, Organophosphorus	EPA 8141A	7 days ext/40 days analysis
6.	Herbicides, Chlorinated	EPA 8151A	7 days ext/40 days analysis
7.	1,4-Dioxane	8260 SIM	7 days
8.	VOCs	EPA 8260B/624	14 days
9.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
10.	Hexachlorophene	8321A	7 days
11.	Cyanide, Total	EPA 9012	14 days
12.	Mercury	EPA 7470A	28 days
13.	ICP Metals	EPA 6010B/200.7	180 days
14.	ICP/MS Metals	EPA 6020/200.8	180 days
15.	Fluoride	EPA 300.0	28 days
16.	Perchlorate	EPA 314.0	28 days
17.	NDMA	EPA 1625C(M)	7 days
18.	Sulfide, Total	EPA 376.2	7 days
19.	Hexachlorophene	8321A	7 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries

- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
HAR-16_042309_19_TAD	Acetone	9.2 J ug/L	HAR-16_042309_01_TAD	92 ug/L
	Methylene chloride	0.41 J ug/L		4.1 ug/L
HAR-16_042309_78_TAD	Acetone	14 ug/L	All Project Samples	140 ug/L
	Methylene chloride	1.3 J		13
9126086-BLK	Methylene chloride	0.52 J ug/L	All Project Samples	5.2 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9115043-BLK	Chrysene	0.64 ug/L	HAR-14_042309_01_TAD HAR-16_042309_19_TAD	3.2 ug/L
9119264-BLK	bis(2-Ethylhexyl)phthalate	1.8 J ug/L	HAR-15_042309_01_TAD HAR-16_042309_01_TAD	18 ug/L
HAR-16_042309_19_TAD	Chrysene	0.61 J ug/L	All Project Samples	3.05 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID /				

Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
9D29034-MS1	1,4-Dioxane	70 - 130	178	All Project Samples
9D29034-MSD1	1,4-Dioxane	70 - 730	176	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica Laboratories – Denver, CO
Sample Delivery Group # D9D300169

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-17_042909_01_D_TAD
HAR-17_042909_01_T_TAD
HAR-17_042909_01_TAD
HAR-17_042909_19_TAD
HAR-17_042909_36_D_TAD
HAR-17_042909_36_T_TAD
HAR-17_042909_36_TAD
PZ-105_042909_03_D_TAD
RD-21(Z2)_042909_03_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	1,2,3-TCP	EPA 8260B	14 days
2.	EDB/DBCP	EPA 504.1	14 days
3.	Pesticides, Organochlorine	EPA 8081A/608	7 days ext/40 days analysis
4.	PCBs	EPA 8082/608	7 days ext/40 days analysis
5.	Pesticides, Organophosphorus	EPA 8141A	7 days ext/40 days analysis
6.	Herbicides, Chlorinated	EPA 8151A	7 days ext/40 days analysis
7.	1,4-Dioxane	8260 SIM	7 days
8.	VOCs	EPA 8260B/624	14 days
9.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
10.	Hexachlorophene	8321A	7 days
11.	Cyanide, Total	EPA 9012	14 days
12.	Mercury	EPA 7470A	28 days
13.	ICP Metals	EPA 6010B/200.7	180 days
14.	ICP/MS Metals	EPA 6020/200.8	180 days
15.	Fluoride	EPA 300.0	28 days
16.	Perchlorate	EPA 314.0	28 days
17.	NDMA	EPA 1625C(M)	7 days
18.	Sulfide, Total	EPA 376.2	7 days
19.	TPH(d)	EPA 8015M	14 days
20.	Hexachlorophene	8321A	7 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers

- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
HAR-17_042909_19_TAD	Chloroform	17 ug/L	HAR-17_042909_01_TAD	85 ug/L
	Methylene chloride	1.2 J ug/L		12 ug/L
	Styrene	0.22 J ug/L		1.1 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9144137-BL:K	Zinc	0.0021 J mg/L	All Project Samples	0.021 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of

the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9E010171

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-08_043009_01_TAD
HAR-18_043009_01_TAD
HAR-18_043009_03_TAD
HAR-20_043009_01_TAD
HAR-20_043009_03_TAD
PZ-109_043009_03_TAD
RD-44_043009_01_TAD
RD-44_043009_36_TAD
RD-55A_043009_01_TAD
RD-55A_043009_03_TAD
RD-55B_043009_01_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
4.	Perchlorate	EPA 314.0	28 days
5.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
6.	Fluoride	EPA 300.0	28 days
7.	Bromide	EPA 300.0/320.1	28 days
8.	Chloride	EPA 300.0/SM 4500-Cl	28 days
9.	Sulfate	EPA 300.0/375.4	28 days
10.	NDMA	EPA 1625C(M)	7 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9122034-BLK	bis(2-Ethylhexyl)phthalate	1.8 J ug/L	All Project Samples	18.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica Laboratories – Denver, CO
Sample Delivery Group # D9E060235

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-058_050409_01_TAD
RD-06_050409_03_TAD
RD-06_050409_78_TAD
RD-41B_050409_01_TAD
RD-41B_050409_03_TAD
RD-51B_050409_01_TAD
RD-66_050109_03_TAD
WS-09A_050409_01_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	NDMA	EPA 1625C(M)	7 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	Perchlorate	EPA 314.0	28 days
4.	PCBs	EPA 8082/608	7 days ext/40 days analysis
5.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
6.	VOCs	EPA 8260B/624	14 days
7.	Fluoride	EPA 300.0	28 days
8.	1,4-Dioxane	8260 SIM	7 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group, with the following exception(s):

During the analysis of SVOCs (EPA Method 8270C) preservation and/or technical holding times were exceeded for project samples shown below. Sample results should be qualified according to the actions specified in the following table:

Lab ID	Sample ID	Matrix	Action
D9E060235-005	RD-41B_050409_03_TAD	GW	See Action #1 Below

Action #1

Positive results are qualified "J", estimated and non-detected analytes as "UJ", estimated detection limit.

During the analysis of general parameters preservation and/or technical holding times were exceeded for project samples shown below. Sample results should be qualified according to the actions specified in the following table:

Lab ID	Sample ID	Matrix	Action
D9E060235-005	RD-41B_050409_03_TAD	GW	See Action #1 Below

Action #1

Positive results are qualified "J", estimated and non-detected analytes as "UJ", estimated reporting limit.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-06_050409_78_TAD	Methylene chloride	1.3 J ug/L	All Project Samples	13 ug/L
9135215-BLK	Methylene chloride	2 J ug/L	RD-	20 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9134153-BLK	Chrysene	0.59 J ug/L	RD-41B_050409_03_TAD	2.95 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C, and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria, with the following exception(s):

Surrogate Percent Recovery Criteria			
Surrogate		Aqueous Matrix (%)	Solid Matrix (%)
Dibromofluoromethane	S01	low high	low high
1,2-Dichloroethane-d4	S02	low high	low high
Toluene-d8	S03	80 - 125	low high
4-Bromofluorobenzene	S04	low high	low high

Project Sample ID	Matrix	S01 %R	S02 %R	S03 %R	S04 %R	Positive Results	Non Detect (ND)
RD-66_050109_03_TAD	GW			127		J	

Affected Analytes

All VOC target analytes in identified project sample(s).

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount

of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
9135215-LCS	Methylene chloride	71 - 120	122	All Project Samples
9135215-LCSD	Methylene chloride	71 - 120	159	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9E070287

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID	Sample ID
PZ-122_050509_03_TAD	RD-51C_050509_78_TAD
RD-04_050509_01_TAD	RD-91_050509_03_TAD
RD-13_050609_01_TAD	WS-05_050609_01_TAD
RD-13_050609_03_TAD	WS-06_050609_01_TAD
RD-13_050609_19_TAD	WS-09_050509_01_TAD
RD-13_050609_36_TAD	WS-09_050509_19H_TAD
RD-18_050509_03_TAD	WS-09_050509_36H_TAD
RD-49A_050609_01_TAD	
RD-49B_050609_01_TAD	
RD-49C_050609_01_TAD	
RD-51C_050509_01_TAD	
RD-51C_050509_03_TAD	
RD-51C_050509_36_TAD	

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	NDMA	EPA 1625C(M)	7 days
3.	Perchlorate	EPA 314.0	28 days
4.	pH	EPA 9040B	ASAP (24 hours)
5.	Nitroaromatics/ Nitroamines	8330	7 days ext/40 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene

chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-51C_050509_78_TAD	Methylene chloride	2 J ug/L	All Project Samples	20.0 ug/L
9135215-BLK	Methylene chloride	2 J ug/L	All Project Samples	20.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9122034-BLK	bis(2-Ethylhexyl)phthalate	1.8 J ug/L	All Project Samples	18.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
9135215-LCS	Methylene chloride	71 - 120	122	All Project Samples
9135215-LCSD	Methylene chloride	71 - 120	159	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Irvine, CA
Sample Delivery Group # D9E080302

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-071_050709_01_TAD
RD-09_050709_01_TAD
RD-09_050709_36_TAD
PZ-071_050709_36_TAD
PZ-071_050709_19_TAD
PZ-071_050709_19R_TAD
PZ-071_050709_03_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	NDMA	EPA 1625C(M)	7 days
2.	PCBs	EPA 8082/608	7 days ext/40 days analysis
3.	ICP Metals	EPA 6010B/200.7	180 days
4.	ICP/MS Metals	EPA 6020/200.8	180 days
5.	Mercury	EPA 7470A	28 days
6.	1,4-Dioxane	GC/MS Isotope Dilution	7 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

				Flag sample results

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	with a "U" if < to this value
9131453-BLK	Thallium	0.000021 J mg/L	All Project Samples	0.00021 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
9132575-MS	Aroclor 1260	58 - 150	54	

Action:
If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample use the same rules as the LCS/LCSD and apply the qualifiers to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

G:\Projects\26472\database\LAB\2009\2nd Qtr 09\Data Validation\Individual Reports\[D9E020302_DV.xls]Final Report

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica Laboratories – Denver, CO
Sample Delivery Group # D9E120226

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-07_051109_01_D_TAD
HAR-07_051109_01_TAD
RD-52C_050809_03_TAD
RD-52C_050809_78_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	1,2,3-TCP	EPA 8260B	14 days
2.	EDB/DBCP	EPA 504.1	14 days
3.	Hexachlorophene	8321A	7 days
4.	Sulfide, Total	EPA 376.2	7 days
5.	Perchlorate	EPA 314.0	28 days
6.	Fluoride	EPA 300.0	28 days
7.	1,4-Dioxane	8260 SIM	7 days
8.	VOCs	EPA 8260B/624	14 days
9.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-	48 hours
10.	Mercury	EPA 7470A	28 days
11.	Cyanide, Total	EPA 9012	14 days
12.	ICP/MS Metals	EPA 6020/200.8	180 days
13.	ICP Metals	EPA 6010B/200.7	180 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds

were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-52C_050809_78_TAD	Methylene chloride	2 JB ug/L	All Project Samples	20 ug/L
9135215-BLK	Methylene chloride	2 J ug/L	All Project Samples	ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9115043-BLK	Chrysene	0.64 ug/L	HAR-14_042309_01_TAD HAR-16_042309_19_TAD	3.2 ug/L
9119264-BLK	bis(2-Ethylhexyl)phthalate	1.8 J ug/L	HAR-15_042309_01_TAD HAR-16_042309_01_TAD	18 ug/L
HAR-16_042309_19_TAD	Chrysene	0.61 J ug/L	All Project Samples	3.05 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9133079-BLK	Antimony	0.00011 J mg/L	All Project Samples	0.0011 mg/L
	Barium	0.00052 J mg/L		0.0052 mg/L
	Zinc	0.0022 J mg/L		0.022 mg/L
	Cobalt	0.000023 J mg/L		0.00023 mg/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9133133-BLK	Mercury	0.00008 J mg/L	All Project Samples	0.0008 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C, and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria, with the following exception(s):

Surrogate Percent Recovery Criteria			
Surrogate		Aqueous Matrix (%)	Solid Matrix (%)
Dibromofluoromethane	S01	low high	low high
1,2-Dichloroethane-d4	S02	low high	low high
Toluene-d8	S03	low high	low high
4-Bromofluorobenzene	S04	78 - 118	low high

Project Sample ID	Matrix	S01 %R	S02 %R	S03 %R	S04 %R	Positive Results	Non Detect (ND)
RD-52C_050809_03_TAD	WQ				120	J	

Affected Analytes

All VOC target analytes in identified project sample(s).

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
9135215-LCS	Methylene chloride	71 - 120	122	All Project Samples
9135215-LCSD	Methylene chloride	71 - 120	159	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica Laboratories – Denver, CO
Sample Delivery Group # D9E140311

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-07_051109_01_TAD
RD-01_051209_01_TAD
RD-02_051209_01_TAD
RD-10_051109_01_TAD
RD-10_051109_36_TAD
RD-37_051309_03_TAD
RD-37_051309_78_TAD
RD-58A_051109_01_TAD
RD-58B_051109_01_TAD
RD-58B_051109_03_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	NDMA	EPA 1625C(M)	7 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	Pesticides, Organochlorine	EPA 8081A/608	7 days ext/40 days analysis
4.	PCBs	EPA 8082/608	7 days ext/40 days analysis
5.	Pesticides, Organophosphorus	EPA 8141A	7 days ext/40 days analysis
6.	VOCs	EPA 8260B/624	14 days
7.	NDMA	EPA 1625C(M)	7 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds

were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-37_051309_78_TAD	Acetone	6.4 ug/L	All Project Samples	64 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9136041-BLK	Chrysene	0.57 J ug/L	All Project Samples	2.85 ug/L
	bis(2-Ethylhexyl)phthalate	2.4 J ug/L		24 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

G:\Projects\26472\database\LAB\2009\2nd Qtr 09\Data Validation\Individual Reports\[D9E140311_DV.xls]Final Report

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9E150325

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-11_051409_03_TAD
SH-08_051409_03_TAD
SH-08_051409_19R_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
2.	Pesticides, Organochlorine	EPA 8081A/608	7 days ext/40 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9140184-BLK	Chrysene	0.75 ug/L	All Project Samples	3.8 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated

to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9E280208

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
ES-21_052809_03_TAD
ES-21_052809_78_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
ES-21_052809_78_TAD	Methylene chloride	1.6 J ug/L	All Project Samples	16.0 ug/L
	Toluene	0.18 J ug/L		0.90 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control

criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
9160164-LCSD	1,1,2,2-Tetrachloroethane	73 - 120	122	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9E290342

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
ES-21_052809_03_TAD
ES-21_052809_78_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
ES-21_052809_78_TAD	Methylene chloride	1.6 J ug/L	All Project Samples	16.0 ug/L
	Toluene	0.18 J ug/L		0.90 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control

criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
9160164-LCSD	1,1,2,2-Tetrachloroethane	73 - 120	122	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica. - Knoxville, TN
Sample Delivery Group # H9D280118

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-20_111108_01_T

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins	EPA 8290	1 year

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
H8K170000-485B	OCDD	1.2 J pg/L	All Project Samples	6 pg/L

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica. - Knoxville, TN
Sample Delivery Group # H9D300186

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-20_111108_01_T

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins	EPA 8290	1 year

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
H8K170000-485B	OCDD	1.2 J pg/L	All Project Samples	6 pg/L

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica. - Knoxville, TN
Sample Delivery Group # H9E060209

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-058_050409_01_TK

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins	EPA 8290	1 year

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica. - Knoxville, TN
Sample Delivery Group # H9E07185

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-20_050609_01_TK
RD-20_050609_19_TK

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins	EPA 8290	1 year

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-20_050609_19_TK	OCDD	3.7 QJ pg/L	All Project Samples	18.5 pg/L

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No

qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica. - Knoxville, TN
Sample Delivery Group # H9E080196

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-071_050709_01_TK
PZ-071_050709_19_TK
PZ-071_050709_19R_TK
PZ-071_050709_36_TK

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins	EPA 8290	1 year

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1153317

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD37-071309_03_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	1,4-Dioxane -W	8260 SIM	7 days
2.	Herbicides, Chlorinated -W	EPA 8151A	7 days ext/40 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group, with the following exception(s):

During the analysis of VOCs (EPA Method 8260B) preservation and/or technical holding times were exceeded for project samples shown below. Sample results should be qualified according to the actions specified in the following table:

Lab ID	Sample ID	Matrix	Action
5722473	RD37-071309_01_L	#N/A	See Action #1 Below

Action #1
Positive results are qualified "J", estimated and non-detected analytes as "UJ", estimated reporting limit.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that

there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1154682

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-43A_072209_01_L
RD-62_072209_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols, with the following exception(s):

During the analysis of VOCs (SW846 8260B), the continuing calibration verification (CCV) standards for the following target compound(s) exhibited a percent drift (%D) greater than the acceptance criteria of 25% and/or a RRF less than 0.05:

Inst.	Date / Time	Target Analyte(s)	%D	RRF	Affected Sample(s)	Corrective Action
HP16334.i	07/27/09 11:34	Dichlorodifluoromethane	-33.00	0.26	RD-43A_072209_01_L RD-62_072209_78_L	See Action #1 Below

Action #1
Positive results are qualified "J", estimated and non-detected analytes as "UJ", estimated detection limit.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: GEL Laboratories LLC - Charleston, SC
Sample Delivery Group # 233547

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-06_071309_03_GEL

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dibenzodioxins and Dibenzofurans, HRGC/HRMS	EPA 8290	30/45 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Project-specific Reporting Limits
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Field Duplicate Sample Analysis
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Project-specific Reporting Limits

The reporting limits for the samples within this Sample Delivery Group (SDG) met or exceeded the minimum reporting limit requirements specified by the Project-specific Quality Assurance Project Plan (QAPP). No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 5 times (5X) the amount for target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of the corresponding CCV standard. No qualification of the data is recommended.

Field Duplicate Sample Analysis

The overall variability attributable to the sampling procedure, sample matrix, and laboratory procedures, was evaluated by assessing the relative percent difference (RPD) data from field duplicate samples. All calculated RPD values, for sample results greater than 5X the reporting limit, were within matrix specific data quality objectives. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the EDL and QL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: GEL Laboratories LLC - Charleston, SC
Sample Delivery Group # 233747

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Chlorinated Dibenzo-p-dioxins (CDD) and CDF Data Review (EPA 540/R-05/001) USEPA Analytical Services Branch (ASB), September, 2005.

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or USEPA Method 8290.

This DUSR pertains to the following samples:

Sample ID
HAR-17_071609_03_TK
HAR-17_071609_19_TK
PZ-071_071609_03_TK
PZ-071_071609_19R_TK

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dibenzodioxins/Dibenzofurans, HRGC/HRMS	EPA 8290	10 / 30 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
HAR-17_071609_19_TK	1,2,3,4,6,7,8-HpCDD	30 pg/L	HAR-17_071609_03_TK	150 pg/L
	OCDD	570 pg/L		2850 pg/L
	1,2,3,4,7,8-HxCDF	17.0 pg/L		85 pg/L
	1,2,3,6,7,8-HxCDF	12.0 pg/L		60 pg/L
	2,3,4,6,7,8-HxCDF	2.9 pg/L		15 pg/L
	1,2,3,4,6,7,8-HpCDF	79 pg/L		395 pg/L
	1,2,3,4,7,8,9-HpCDF	4.9 pg/L		25 pg/L
	OCDF	150 pg/L		750 pg/L
PZ-071_071609_19R_TK	1,2,3,6,7,8-HxCDD	1.8 pg/L	PZ-071_071609_03_TK	9.0 pg/L
	1,2,3,7,8,9-HxCDD	2.7 pg/L		13.5 pg/L
	1,2,3,4,6,7,8-HpCDD	23 pg/L		115 pg/L
	OCDD	610 pg/L		3050 pg/L
	1,2,3,4,7,8-HxCDF	2.2 pg/L		11.0 pg/L
	1,2,3,6,7,8-HxCDF	2.3 pg/L		11.5 pg/L
	2,3,4,6,7,8-HxCDF	2.0 pg/L		10.0 pg/L
	1,2,3,7,8,9-HxCDF	2.1 pg/L		10.5 pg/L
	1,2,3,4,6,7,8-HpCDF	9.1 pg/L		45.5 pg/L
	1,2,3,4,7,8,9-HpCDF	3.3 pg/L		16.5 pg/L
	OCDF	52 pg/L		260 pg/L

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of the corresponding CCV standard. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the EDL and QL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: Truesdail Laboratories, Inc. - Tustin, CA
Sample Delivery Group # 984327

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
PZ-108_071409_01_TU
PZ-108_071409_19_TU

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Hydrazines	EPA 8315M	3 / 28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group, with the following exception(s):

During the analysis of VOCs (EPA Method 8260B) preservation and/or technical holding times were exceeded for project samples shown below. Sample results should be qualified according to the actions specified in the following table:

Lab ID	Sample ID	Matrix	Action
984327-1	PZ-108_071409_01_TU	AQ	See Action #1 Below
984327-2	PZ-108_071409_19_TU	AQ	See Action #1 Below

Action #1
Positive results are qualified "J", estimated and non-detected analytes as "UJ", estimated reporting limit.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: TestAmerica, Inc. – Denver, CO
Sample Delivery Group # D9G140177

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-37_071309_01_TAD
RD-37_071309_36_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	1,4-Dioxane -W	8260 SIM	7 days
2.	Herbicides, Chlorinated -W	EPA 8151A	7 days ext/40 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: TestAmerica, Inc. – Denver, CO
Sample Delivery Group # D9G150243

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-06_071309_01_T_TAD
RD-06_071309_01_TAD
RD-06_071309_36_T_TAD
RD-06_071309_36_TAD
RD-06_071309_19_T_TAD
RD-06_071309_19_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Pesticides, Organochlorine -W	EPA 8081A/608	7 days ext/40 days analysis
2.	Cyanide, Total -W	EPA 9012A	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Duplicate Sample Analysis
- Field Duplicate Sample Analysis
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Type	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)
RD-06_071309_01_T_TAD	MSD	Cyanide, Total	88	RD-06_071309_01_T_TAD RD-06_071309_36_T_TAD	J	

Duplicate Sample Analysis

The replicate percent difference (RPD) was evaluated for each duplicate sample pair to monitor the reproducibility of the data. The RPD for each sample pair was within the QA/QC limit of 30% for aqueous samples and 50% for solid matrices, for those target analytes with sample concentrations >5X the MDL. No qualification of the data is recommended.

Field Duplicate Sample Analysis

The overall variability attributable to the sampling procedure, sample matrix, and laboratory procedures, was evaluated by assessing the relative percent difference (RPD) data from field duplicate samples. All calculated RPD values for results greater than 5X the reporting limits were within matrix specific data quality objectives. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: TestAmerica, Inc. – Knoxville, TN
Sample Delivery Group # H9G160213

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-06_071309_01_TK
RD-06_071309_19_TK
RD-06_071309_36_TK
RD-37_071309_01_TK

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dibenzodioxins and Dibenzofurans, HRGC/HRMS	EPA 8290	30/45 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Project-specific Reporting Limits
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Field Duplicate Sample Analysis
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Project-specific Reporting Limits

The reporting limits for the samples within this Sample Delivery Group (SDG) met or exceeded the minimum reporting limit requirements specified by the Project-specific Quality Assurance Project Plan (QAPP). No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc

Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 5 times (5X) the amount for target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
Method Blank	OCDD	13.0 pg/L	RD-06_071309_01_TK RD-06_071309_19_TK RD-06_071309_36_TK RD-37_071309_01_TK	65.0 pg/L

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of the corresponding CCV standard. No qualification of the data is recommended.

Field Duplicate Sample Analysis

The overall variability attributable to the sampling procedure, sample matrix, and laboratory procedures, was evaluated by assessing the relative percent difference (RPD) data from field duplicate samples. All calculated RPD values, for sample results greater than 5X the reporting limit, were within matrix specific data quality objectives. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the EDL and QL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: TestAmerica, Inc. – Knoxville, TN
Sample Delivery Group # H9G170196

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Chlorinated Dibenzo-p-dioxins (CDD) and CDF Data Review (EPA 540/R-05/001) USEPA Analytical Services Branch (ASB), September, 2005.

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or USEPA Method 8290.

This DUSR pertains to the following samples:

Sample ID
HAR-17_071609_01_TK
HAR-17_071609_19_TK
HAR-17_071609_36_TK
PZ-071_071609_01_TK
PZ-071_071609_19R_TK

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dibenzodioxins/Dibenzofurans, HRGC/HRMS	EPA 8290	10 / 30 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Field Duplicate Sample Analysis
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the projec sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
HAR-17_071609_19_TK	1,2,3,4,6,7,8-HpCDD	30 pg/L	HAR-17_071609_01_TK	150 pg/L
	OCDD	570 pg/L	HAR-17_071609_36_TK	2850 pg/L
	1,2,3,4,7,8-HxCDF	17.0 pg/L		85 pg/L
	1,2,3,6,7,8-HxCDF	12.0 pg/L		60 pg/L
	2,3,4,6,7,8-HxCDF	2.9 pg/L		15 pg/L
	1,2,3,4,6,7,8-HpCDF	79 pg/L		395 pg/L
	1,2,3,4,7,8,9-HpCDF	4.9 pg/L		25 pg/L
	OCDF	150 pg/L		750 pg/L
PZ-071_071609_19R_TK	1,2,3,6,7,8-HxCDD	1.8 pg/L	PZ-071_071609_01_TK	9.0 pg/L
	1,2,3,7,8,9-HxCDD	2.7 pg/L		13.5 pg/L
	1,2,3,4,6,7,8-HpCDD	23 pg/L		115 pg/L
	OCDD	610 pg/L		3050 pg/L
	1,2,3,4,7,8-HxCDF	2.2 pg/L		11.0 pg/L
	1,2,3,6,7,8-HxCDF	2.3 pg/L		11.5 pg/L
	2,3,4,6,7,8-HxCDF	2.0 pg/L		10.0 pg/L
	1,2,3,7,8,9-HxCDF	2.1 pg/L		10.5 pg/L
	1,2,3,4,6,7,8-HpCDF	9.1 pg/L		45.5 pg/L
	1,2,3,4,7,8,9-HpCDF	3.3 pg/L		16.5 pg/L
	OCDF	52 pg/L		260 pg/L
Method Blank	OCDD	13 pg/L	HAR-17_071609_01_TK HAR-17_071609_19_TK HAR-17_071609_36_TK PZ-071_071609_01_TK PZ-071_071609_19R_TK	65 pg/L

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently witl the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
PZ-071_071609_01_TK	OCDD	78 - 137	0	PZ-071_071609_01_TK

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of the corresponding CCV standard. No qualification of the data is recommended.

Field Duplicate Sample Analysis

The overall variability attributable to the sampling procedure, sample matrix, and laboratory procedures, was evaluated by assessing the relative percent difference (RPD) data from field duplicate samples. All calculated RPD values were within matrix specific data quality objectives, with the exception of results qualified "J" as shown in the table(s) below:

	Original Sample ID.	**FD Sample ID.**		**Flag original sample**
Target Analyte(s)	HAR-17_071609_01_TK	HAR-17_071609_36_TK	**%RPD**	**results with:**
2,3,7,8-TCDD	3.6 U	2.8 U	25%	
1,2,3,7,8-PeCDD	2.3 U	2.0 U	14%	
1,2,3,4,7,8-HxCDD	1.6 U	1.2 U	29%	
1,2,3,6,7,8-HxCDD	1.9 U	1.4 U	30%	
1,2,3,7,8,9-HxCDD	1.6 U	1.2 U	29%	
1,2,3,4,6,7,8-HpCDD	2.6 U	**56**	182%	J
OCDD	**28**	**1100**	190%	J
2,3,7,8-TCDF	2.1 U	1.9 U	10%	
1,2,3,7,8-PeCDF	2.4 U	2.3 U	4%	
2,3,4,7,8-PeCDF	2.1 U	1.9 U	10%	
1,2,3,4,7,8-HxCDF	**1.6**	**16**	164%	J
1,2,3,6,7,8-HxCDF	1.1 U	**17**	176%	J
2,3,4,6,7,8-HxCDF	1.0 U	1.0 U	0%	
1,2,3,7,8,9-HxCDF	1.3 U	1.2 U	8%	
1,2,3,4,6,7,8-HpCDF	**14**	**67**	131%	J
1,2,3,4,7,8,9-HpCDF	2.1 U	**3.8**	58%	J
OCDF	**21**	**170**	156%	J

Action:
If the sample matrix is solid and the %RPD is greater than 50%, the original sample results are qualified "J". If the sample matrix is water or air and the %RPD is greater than 35%, the original sample results are qualified "J".

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the EDL and QL were flagged as estimated, "J", by the laboratory. The data user should be aware tha there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1152949

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-025_070809_01_L
PZ-026_070909_01_L
PZ-026_070909_19R_L
PZ-027_070809_01_L
PZ-027_070809_19R_L
PZ-103_070909_01_L
PZ-120_070909_01_L
RD-49A_070909_01_LNAPL_L
PZ-120_070909_19_L
PZ-120_070909_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	Bromide	EPA 300.0/320.1	28 days
4.	Chloride	EPA 300.0/SM 4500-Cl	28 days
5.	Fluoride	EPA 300.0	28 days
6.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
7.	Sulfate	EPA 300.0/375.4	28 days
8.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group, with the following exception(s):

During the analysis of general parameters preservation and/or technical holding times were exceeded for project samples shown below. Sample results should be qualified according to the actions specified in the following table:

Lab ID	Sample ID	Matrix	Action

5720504	PZ-103_070909_01_L	GW	See Action #1 Below

Action #1

Positive results are qualified "J", estimated and non-detected analytes as "UJ".

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
PZ-120_070909_78_L	Toluene	0.1 J ug/L	All Project Samples	0.5 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
091910012A-BLK	Formaldehyde	20 J ug/L	All Project Samples	100 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09192WAB026-LCS	Benzo(a)anthracene	82 - 96	99	All Project Samples
	Fluorene	84 - 100	102	
	Phenanthrene	85 - 103	105	
	Pyrene	75 - 107	111	
				All Project Samples
				All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower

acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1153067

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-105_071009_01_D_L
PZ-105_071009_01_L
PZ-105_071009_19_L
PZ-105_071009_19R__D_L
PZ-105_071009_19R_L
PZ-105_071009_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	TPH(d)	EPA 8015B	14 days
3.	ICP Metals	EPA 6010B/200.7	180 days
4.	ICP/MS Metals	EPA 6020/200.8	180 days
5.	Mercury	EPA 7470A	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value

PZ-105_071009_19_L	Benzene	0.1 J ug/L	All Project Samples	0.5 ug/L
PZ-105_071009_78_L	Benzene	0.1 J ug/L	All Project Samples	0.5 ug/L
	Toluene	0.1 J ug/L		0.5 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
PZ-105_071009_19R__D_L	Strontium	0.00091 J mg/L	All Project Samples	0.0091 mg/L
	Lead	0.00006 J mg/L		0.0006 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories. - Lancaster, PA
Sample Delivery Group # 1153317

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-37_071309_01_L
RD-37_071309_03_L
RD-37_071309_03_T_L
RD-37_071309_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
4.	Cyanide, Total	EPA 9012	14 days
5.	PCBs	EPA 8082/608	7 days ext/40 days analysis
6.	EDB/DBCP	EPA 504.1	14 days
7.	Pesticides, Organochlorine	EPA 8081A/608	7 days ext/40 days analysis
8.	Herbicides, Chlorinated	EPA 8151A	7 days ext/40 days analysis
9.	Pesticides, Organophosphorus	EPA 8141A	7 days ext/40 days analysis
10.	TPH(g)/BTEX/MTBE	EPA 8015M/8021B	14 days
11.	Sulfide, Total	EPA 376.2	7 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09196WAD026-LCS	Acenaphthylene	72 - 108	109	All Project Samples
	Benzo(a)anthracene	82 - 96	100	
	Butylbenzylphthalate	71 - 100	113	
	Chrysene	79 - 104	107	
	Di-n-butylphthalate	71 - 103	105	
	Di-n-octylphthalate	60 - 112	117	
	Fluorene	84 - 100	102	
	Nitrobenzene	74 - 100	102	
	N-Nitrosodimethylamine	47 - 80	89	
	Phenanthrene	85 - 103	104	
09196WAD026-LCSD	Acenaphthylene	72 - 108	110	All Project Samples
	Anthracene	80 - 102	103	
	bis(2-Ethylhexyl)phthalate	71 - 100	159	
	Butylbenzylphthalate	71 - 100	119	
	Chrysene	79 - 104	110	
	Di-n-butylphthalate	71 - 103	108	
	Di-n-octylphthalate	60 - 112	116	
	Fluorene	84 - 100	105	
	Nitrobenzene	74 - 100	103	
	N-Nitrosodimethylamine	47 - 80	93	
	Phenanthrene	85 - 103	107	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and

compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1153524

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-108_071409_01_L
PZ-108_071409_19_L
PZ-122_071409_01_D_L
PZ-122_071409_01_L
PZ-122_071409_19_L
PZ-122_071409_19R_L
PZ-122_071409_36_L
RD-01_071409_01_L
RD-01_071409_19_L
RD-01_071409_36_L
RD-10_071409_01_L
RD-10-071409_36_L
RD-19_071409_01_L

Sample ID
RD-61_071409_01_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	ICP Metals	EPA 6010B/200.7	180 days
4.	ICP/MS Metals	EPA 6020/200.8	180 days
5.	Mercury	EPA 7470A	28 days
6.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
7.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
8.	Perchlorate	EPA 314.0	28 days
9.	Bromide	EPA 300.0/320.1	28 days
10.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
11.	Chloride	EPA 300.0/SM 4500-Cl	28 days
12.	Fluoride	EPA 300.0	28 days
13.	Sulfate	EPA 300.0/375.4	28 days
14.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
15.	TPH(d)	EPA 8015B	14 days
16.	pH	EPA 9040B	ASAP (24 hours)

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers

- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
09201691401A-BLK	Ammonia	0.039 J ug/L	All Project Samples	0.195 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09196WAD026-LCS	Acenaphthylene	72 - 108	109	All Project Samples
	Benzo(a)anthracene	82 - 96	100	
	Butylbenzylphthalate	71 - 100	113	
	Chrysene	79 - 104	107	
	Di-n-butylphthalate	71 - 103	105	
	Di-n-octylphthalate	60 - 112	117	
	Fluorene	84 - 100	102	
	Nitrobenzene	74 - 100	102	
	N-Nitrosodimethylamine	47 - 80	89	
	Phenanthrene	85 - 103	104	
09125WAJ026-MS	Acenaphthylene	72 - 108	110	All Project Samples
	Anthracene	80 - 102	103	
	bis(2-Ethylhexyl)phthalate	71 - 100	159	
	Butylbenzylphthalate	71 - 100	119	
	Chrysene	79 - 104	110	
	Di-n-butylphthalate	71 - 103	108	

	Di-n-octylphthalate	60 - 112	116	
	Fluorene	84 - 100	105	
	Nitrobenzene	74 - 100	103	
	N-Nitrosodimethylamine	47 - 80	93	
	Phenanthrene	85 - 103	107	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1153741

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-20_071509_01_L
HAR-20_071509_19_L
HAR-20_071509_78_L
PZ-006C_071509_01_L
PZ-006D_071509_01_L
PZ-006E_071509_01_L
RD-13_071509_01_L
RD-13_071509_19_L
RD-13_071509_36_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	Perchlorate	EPA 314.0	28 days
4.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
5.	Fluoride	EPA 300.0	28 days
6.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
7.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
8.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
9.	Explosives-Energetics	8330	7 days ext/40 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene

chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-13_071509_19_L	Formaldehyde	16 J ug/L	All Project Samples	80 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
C092021AA-MS	1,1,2-Trichloro-1,2,2-trifluoroethane	87 - 158	86	RD-13_071509_01_L HAR-20_071509_19_L HAR-20_071509_78_L

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09201WAB026-LCS	2-Methylnaphthalene	26 - 102	104	All Project Samples
	4-Chlorophenyl phenyl ether	76 - 102	107	
	Benzo(a)anthracene	82 - 96	102	
	Butylbenzylphthalate	71 - 100	105	
	Fluorene	84 - 100	106	
	N-Nitrosodimethylamine	47 - 80	100	
	Pentachlorophenol	51 - 109	111	
09201WAB026-MS	2,4-Dinitrotoluene	71 - 110	116	All Project Samples
	4-Nitrophenol	10 - 109	130	
	N-Nitrosodimethylamine	45 - 81	105	
	Pentachlorophenol	71 - 104	129	

	Phenol	10 - 83	109	
09201WAB026-MSD	2,4-Dinitrotoluene	71 - 110	118	All Project Samples
	4-Nitrophenol	10 - 109	131	
	Benzidine	20 - 122	18	
	N-Nitrosodimethylamine	45 - 81	103	
	Pentachlorophenol	71 - 104	127	
	Phenol	10 - 83	109	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1153920

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-18_071609_01_L
HAR-18_071609_19_L
HAR-18_071609_36_L
PZ-071_071609_01_D_L
PZ-071_071609_01_L
PZ-071_071609_19_D_L
PZ-071_071609_19_L
PZ-071_071609_19R_D_L
PZ-071_071609_19R_L
PZ-071_071609_36_D_L
PZ-071_071609_36_L
RD-07(Z3)_071609_01_L
RD-21(Z2)_071609_01_D_L

Sample ID
RD-21(Z2)_071609_01_L
RD-22(Z2)_071609_01_L
RD-23(Z3)_071609_01_D_L
RD-23(Z3)_071609_01_L
RD-45C_071609_01_L
RD-45C_071609_19_L
RD-45C_071609_36_L
RD-45C_071609_78_L
RD-50(Z2)_071609_01_L
RD-54A(Z2)_071609_01_D_L
RD-54A(Z2)_071609_01_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	ICP Metals	EPA 6010B/200.7	180 days
4.	ICP/MS Metals	EPA 6020/200.8	180 days
5.	Mercury	EPA 7470A	28 days
6.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
7.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
8.	Perchlorate	EPA 314.0	28 days
9.	Chromium VI (Hexavalent Chromium)	EPA 7196A/7199	24 hours
10.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
11.	TPH(d)	EPA 8015B	14 days
12.	Fluoride	EPA 300.0	28 days
13.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
PZ-071_071609_19R_L	Methylene chloride	0.7 ug/L	All Project Samples	7.0 ug/L
RD-45C_071609_19_L	Methylene chloride	0.2 J ug/L	All Project Samples	2.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
PZ-071_071609_19_L	bis(2-Ethylhexyl)phthalate	2 J ug/L	All Project Samples	20.0 ug/L
PZ-071_071609_19R_L	bis(2-Ethylhexyl)phthalate	2 J ug/L	All Project Samples	20.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
PZ-071_071609_19_D_L	Molybdenum	0.0072 J mg/L	All Project Samples	0.072 mg/L
PZ-071_071609_19R_D_L	Barium	0.00093 J mg/L	All Project Samples	0.0093 mg/L
	Lead	0.000065 J mg/L		0.00065 mg/L
	Nickel	0.00084 J mg/L		0.0084 mg/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
09201691401A-BLK	Ammonia	0.039 J ug/L	All Project Samples	0.195 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the

following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09201WAB026-LCS	4-Chlorophenyl phenyl ether	76 - 102	107	All Project Samples
	Benzo(a)anthracene	82 - 96	102	
	Butylbenzylphthalate	71 - 100	105	
	Fluorene	84 - 100	106	
	N-Nitrosodimethylamine	47 - 80	100	
	Pentachlorophenol	51 - 109	111	
				All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1154030

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
ES-23_071709_01_L
ES-26_071709_01_L
ES-26_071709_78_L
ES-27_071709_01_L
ES-30_071709_01_L
PZ-109_071709_01_D_L
PZ-109_071709_01_L
PZ-109_071709_19_D_L
PZ-109_071709_36_D_L
RD-33A(Z2)_071709_01_L
RD-33A(Z2)_071709_01_T_L
RD-52B_071709_01_L
RD-52B_071709_19_L

Sample ID
RD-52B_071709_36_L
RD-57(Z7)_071709_01_L
PZ-109_071709_36_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	Cyanide, Total	EPA 9012	14 days
3.	ICP Metals	EPA 6010B/200.7	180 days
4.	ICP/MS Metals	EPA 6020/200.8	180 days
5.	Mercury	EPA 7470A	28 days
6.	Bromide	EPA 300.0/320.1	28 days
7.	Chloride	EPA 300.0/SM 4500-Cl	28 days
8.	Fluoride	EPA 300.0	28 days
9.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
10.	Sulfate	EPA 300.0/375.4	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-52B_071709_19_L	Methylene chloride	0.2 J ug/L	All Project Samples	2.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
PZ-109_071709_19_D_L	Copper	0.0006 J mg/L	All Project Samples	0.006 mg/L
	Lead	0.000061 J mg/L		0.00061 mg/L
	Strontium	0.00094 J mg/L		0.0094 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result

was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1154292

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-11_072009_01_L
HAR-11_072009_78_L
HAR-23_072009_01_L
HAR-26_072009_01_L
HAR-26_072009_19_L
HAR-26_072009_36_L
RD-05A_072009_01_L
RD-05C_072009_01_L
RD-52C_072009_01_L
RD-52C_072009_36_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

				Flag sample results

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	with a "U" if < to this value
HAR-26_072009_19_L	1,1-Dichloroethene	0.3 J ug/L	HAR-26_072009_01_L	1.5 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09203WAA026-LCS	2-Methylnaphthalene	86 - 102	110	All Project Samples
	Acenaphthene	77 - 105	106	
	Benzo(a)anthracene	82 - 96	107	
	Chrysene	79 - 104	109	
	Fluoranthene	74 - 101	102	
	Fluorene	84 - 100	112	
	Phenanthrene	85 - 103	108	
	Pyrene	75 - 107	116	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by

the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1154451

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID	Sample ID
HAR-04_072109_01_L	RD-55A_072109_01_L
HAR-07_072109_01_L	RD-55B_072109_01_L
HAR-08_072109_01_L	RD-55B_072109_19_L
HAR-22_072109_01_L	RD-55B_072109_36_L
HAR-22_072109_36_L	WS-04A_072109_01_L
HAR-24_072109_01_L	WS-04A_072109_36_L
HAR-27_072109_01_L	
RD-16_072109_01_L	
RD-16_072109_19_L	
RD-16_072109_36_L	
RD-48C_072109_01_L	
RD-53_072109_01_L	
RD-53_072109_78_L	

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	TPH(g)/BTEX/MTBE	EPA 8015M/8021B	14 days
4.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
5.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
6.	Fluoride	EPA 300.0	28 days
7.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
8.	Perchlorate	EPA 314.0	28 days
9.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-16_072109_19_L	Methylene chloride	0.2 J ug/L	RD-16_072109_01_L RD-16_072109_36_L	2.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09206WAB026-LCS	2,4,6-Trichlorophenol	83 - 113	117	All Project Samples
	2,4-Dichlorophenol	86 - 108	111	
	4-Bromophenyl phenyl ether	75 - 101	115	
	4-Chlorophenyl phenyl ether	76 - 102	112	
	Di-n-butylphthalate	71 - 103	105	
	Di-n-octylphthalate	60 - 112	117	
	Acenaphthene	77 - 105	108	
	Anthracene	80 - 102	106	
	Benzo(a)anthracene	82 - 96	114	
	Benzo(a)pyrene	69 - 111	116	
	Benzo(g,h,i)perylene	68 - 117	126	
	Benzo(k)fluoranthene	70 - 111	125	
	bis(2-Chloroethoxy)methane	73 - 105	105	
	bis(2-Ethylhexyl)phthalate	65 - 126	136	
	Butylbenzylphthalate	71 - 100	116	
	Chrysene	79 - 104	118	
	Dibenz(a,h)anthracene	67 - 117	123	
	Dimethylphthalate	73 - 104	106	
	Di-n-butylphthalate	71 - 103	106	
	Fluoranthene	74 - 101	104	
	Fluorene	84 - 100	110	
	Di-n-butylphthalate	71 - 103	105	

	Di-n-octylphthalate	60 - 112	117	
	Fluorene	84 - 100	102	
	Hexachlorobenzene	73 - 100	113	
	Hexachlorobutadiene	66 - 111	112	
	Indeno(1,2,3-cd)pyrene	64 - 115	121	
	Naphthalene	72 - 105	107	
	Nitrobenzene	74 - 100	105	
	N-Nitrosodimethylamine	47 - 80	107	
	Pentachlorophenol	51 - 109	128	
	Phenanthrene	85 - 103	110	
09206WAB026-LCSD	4-Bromophenyl phenyl ether	75 - 101	111	All Project Samples
	4-Chlorophenyl phenyl ether	76 - 102	106	
	Anthracene	80 - 102	104	
	Benzo(a)anthracene	82 - 96	110	
	Benzo(a)pyrene	69 - 111	115	
	Benzo(g,h,i)perylene	68 - 117	125	
	Benzo(k)fluoranthene	70 - 111	121	
	Butylbenzylphthalate	71 - 100	114	
	Chrysene	79 - 104	115	
	Dibenz(a,h)anthracene	67 - 117	119	
	Dimethylphthalate	73 - 104	105	
	Di-n-octylphthalate	60 - 112	114	
	Fluorene	84 - 100	106	
	Hexachlorobenzene	73 - 100	107	
	Indeno(1,2,3-cd)pyrene	64 - 115	120	
	Nitrobenzene	74 - 100	101	
	N-Nitrosodimethylamine	47 - 80	102	
	Pentachlorophenol	51 - 109	119	
	Phenanthrene	85 - 103	105	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Type	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)
09203196602A-MS	MS	Fluoride ion	112	All Project Samples		

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common

laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories. - Lancaster, PA
Sample Delivery Group # 1154682

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-05B_072209_01_L
RD-43A_072209_01_L
RD-43B_072209_01_L
RD-43C_072209_01_L
RD-43C_072209_36_L
RD-56B_072209_01_L
RD-62_072209_01_L
RD-62_072209_19_L
RD-62_072209_78_L
WS-09A_072209_01_D_L
WS-09A_072209_01_L
WS-09A_072209_01_T_L
WS-09A_072209_36_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	Perchlorate	EPA 314.0	28 days
4.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
5.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
6.	Fluoride	EPA 300.0	28 days
7.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
8.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
9.	Perchlorate	EPA 314.0	28 days
10.	ICP Metals	EPA 6010B/200.7	180 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-62_072209_19_L	1,1-Dichloroethene	0.5 J ug/L	All Project Samples	2.5 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
09210691401A-BLK	Ammonia	0.033 J mg/L	All Project Samples	0.165 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
Y092081AA-MS	1,1,2,2-Tetrachloroethane	73 - 119	62	All Project Samples
	2-Hexanone	55 - 127	39	
	4-Methyl-2-pentanone	63 - 123	46	
	Acetone	52 - 139	44	
	2-Butanone	57 - 127	45	
Y092081AA-MSD	1,1,2,2-Tetrachloroethane	73 - 119	62	All Project Samples
	2-Hexanone	55 - 127	38	
	4-Methyl-2-pentanone	63 - 123	46	
	Acetone	52 - 139	42	
	2-Butanone	57 - 127	45	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target

analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
	2,4,6-Trichlorophenol	83 - 113	117	All Project Samples
	2,4-Dichlorophenol	86 - 108	111	
	4-Bromophenyl phenyl ether	75 - 101	115	
	4-Chlorophenyl phenyl ether	76 - 102	112	
	Acenaphthene	77 - 105	108	
	Anthracene	80 - 102	106	
	Benzo(a)anthracene	82 - 96	114	
	Benzo(a)pyrene	69 - 111	116	
	Benzo(g,h,i)perylene	68 - 117	126	
	Benzo(k)fluoranthene	70 - 111	125	
	bis(2-Chloroethoxy)methane	73 - 105	108	
	bis(2-Ethylhexyl)phthalate	65 - 126	136	
	Butylbenzylphthalate	71 - 100	116	
	Chrysene	79 - 104	118	
	Dibenz(a,h)anthracene	67 - 117	123	
	Dimethylphthalate	73 - 104	106	
	Di-n-butylphthalate	71 - 101	104	
	Fluoranthene	74 - 101	104	
	Fluorene	84 - 100	110	
	Hexachlorobenzene	73 - 100	113	
	Hexachlorobutadiene	66 - 111	112	
	Indeno(1,2,3-cd)pyrene	64 - 115	121	
	Naphthalene	72 - 105	107	
	Nitrobenzene	74 - 100	105	
	N-Nitrosodimethylamine	47 - 80	107	
	Pentachlorophenol	51 - 109	128	
	Phenanthrene	85 - 103	110	
	4-Bromophenyl phenyl ether	75 - 101	111	All Project Samples
	4-Chlorophenyl phenyl ether	76 - 102	106	
	Anthracene	80 - 102	104	
	Benzo(a)anthracene	82 - 96	110	
	Benzo(a)pyrene	69 - 111	115	
	Benzo(g,h,i)perylene	68 - 117	125	
	Benzo(k)fluoranthene	70 - 111	121	
	Butylbenzylphthalate	71 - 100	114	
	Chrysene	79 - 104	105	
	Dibenz(a,h)anthracene	67 - 117	119	
	Dimethylphthalate	73 - 104	105	
	Di-n-octylphthalate	60 - 112	114	
	Fluorene	84 - 100	106	
	Hexachlorobenzene	73 - 100	107	
	Indeno(1,2,3-cd)pyrene	64 - 115	120	
	Nitrobenzene	74 - 100	101	
	N-Nitrosodimethylamine	47 - 80	102	
	Pentachlorophenol	51 - 109	119	
	Phenanthrene	85 - 103	105	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target

analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Type	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)
09205196602A-MS	MS	Fluoride ion	86	WS-09A_072209_01_L		
09205196602C-MS	MS	Fluoride ion	73	WS-09A_072209_36_L	J	UJ

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories. - Lancaster, PA
Sample Delivery Group # 1154816

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-34C_072309_01_L
RD-58C_072309_01_L
RD-58C_072309_19_L
RD-58C_072309_36_L
RD-58C_072309_78_L
WS-09_072309_01_D_L
WS-09_072309_01_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	Chemical Oxygen Demand (COD)	EPA 410.4/SM 5220D	28 days
4.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
5.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
6.	Fluoride	EPA 300.0	28 days
7.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
8.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
9.	Perchlorate	EPA 314.0	28 days
10.	ICP Metals	EPA 6010B/200.7	180 days
11.	ICP/MS Metals	EPA 6020/200.8	180 days
12.	Mercury	EPA 7470A	28 days
13.	Chromium VI (Hexavalent Chromium)	EPA 7196A/7199	24 hours

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-58C_072309_19_L	Methylene chloride	0.6 ug/L	All Project Samples	6.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
092050006A-BLK	Formaldehyde	11 J ug/L	All Project Samples	55 ug/L
09210691401A-BLK	Ammonia	0.033 J mg/L	All Project Samples	0.165 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
C092091AA-MS	1,1,2,2-Tetrachloroethane	73 - 119	62	All Project Samples
	2-Hexanone	55 - 127	39	
	4-Methyl-2-pentanone	63 - 123	46	
	Acetone	52 - 139	44	
	2-Butanone	57 - 127	45	
C092091AA-MSD	1,1,2,2-Tetrachloroethane	73 - 119	62	All Project Samples
	2-Hexanone	55 - 127	38	
	4-Methyl-2-pentanone	63 - 123	46	
	Acetone	52 - 139	42	
	2-Butanone	57 - 127	45	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than

10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
	2,4,6-Trichlorophenol	83 - 113	117	All Project Samples
	2,4-Dichlorophenol	86 - 108	111	
	4-Bromophenyl phenyl ether	75 - 101	115	
	4-Chlorophenyl phenyl ether	76 - 102	112	
	Acenaphthene	77 - 105	108	
	Anthracene	80 - 102	106	
	Benzo(a)anthracene	82 - 96	114	
	Benzo(a)pyrene	69 - 111	116	
	Benzo(g,h,i)perylene	68 - 117	126	
	Benzo(k)fluoranthene	70 - 111	125	
	bis(2-Chloroethoxy)methane	73 - 105	108	
	bis(2-Ethylhexyl)phthalate	65 - 126	136	
	Butylbenzylphthalate	71 - 100	116	
	Chrysene	79 - 104	118	
	Dibenz(a,h)anthracene	67 - 117	123	
	Dimethylphthalate	73 - 104	106	
	Di-n-butylphthalate	71 - 101	104	
	Fluoranthene	74 - 101	104	
	Fluorene	84 - 100	110	
	Hexachlorobenzene	73 - 100	113	
	Hexachlorobutadiene	66 - 111	112	
	Indeno(1,2,3-cd)pyrene	64 - 115	121	
	Naphthalene	72 - 105	107	
	Nitrobenzene	74 - 100	105	
	N-Nitrosodimethylamine	47 - 80	107	
	Pentachlorophenol	51 - 109	128	
	Phenanthrene	85 - 103	110	
	4-Bromophenyl phenyl ether	75 - 101	111	All Project Samples
	4-Chlorophenyl phenyl ether	76 - 102	106	
	Anthracene	80 - 102	104	
	Benzo(a)anthracene	82 - 96	110	
	Benzo(a)pyrene	69 - 111	115	
	Benzo(g,h,i)perylene	68 - 117	125	
	Benzo(k)fluoranthene	70 - 111	121	
	Butylbenzylphthalate	71 - 100	114	
	Chrysene	79 - 104	105	
	Dibenz(a,h)anthracene	67 - 117	119	
	Dimethylphthalate	73 - 104	105	
	Di-n-octylphthalate	60 - 112	114	
	Fluorene	84 - 100	106	
	Hexachlorobenzene	73 - 100	107	
	Indeno(1,2,3-cd)pyrene	64 - 115	120	
	Nitrobenzene	74 - 100	101	
	N-Nitrosodimethylamine	47 - 80	102	
	Pentachlorophenol	51 - 109	119	
	Phenanthrene	85 - 103	105	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than

10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories - Lancaster, PA
Sample Delivery Group # 1154951

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-18_072409_01_L
RD-26_072409_01_L
RD-26_072409_19_L
RD-33C_072409_01_L
RD-69_072409_01_L
RD-69_072409_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-26_072409_19_L	1,1-Dichloroethene	0.3 J ug/L	RD-26_072409_01_L	1.5 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
G092111AA-LCS	1,4-Dichlorobenzene	86 - 107	108	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories. - Lancaster, PA
Sample Delivery Group # 1155244

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-44_072709_01_L
RD-44_072709_36_L
RD-51B_072709_01_L
RD-51B_072709_36_L
RD-51C_072709_01_L
RD-67_072709_01_L
RD-67_072709_19_L
RD-67_072709_36_L
RD-67_072709_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	Perchlorate	EPA 314.0	28 days
4.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
5.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
6.	Fluoride	EPA 300.0	28 days
7.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
8.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds

were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-67_072709_19_L	Chloromethane	0.3 J ug/L	All Project Samples	1.5 ug/L
	Methylene chloride	0.5		5.0

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
09210691401A-BLK	Ammonia	0.033 J mg/L	All Project Samples	0.165 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09210WAC026-LCS	4-Bromophenyl phenyl ether	75 - 101	107	All Project Samples
	Anthracene	80 - 102	104	
	Benzo(a)anthracene	82 - 96	100	
	bis(2-Chloroethyl)ether	69 - 103	104	
	Butylbenzylphthalate	71 - 100	107	
	Di-n-butylphthalate	71 - 103	112	
	Fluoranthene	74 - 101	104	
	Fluorene	84 - 100	107	
	Hexachlorobenzene	73 - 100	106	
	Nitrobenzene	74 - 100	102	
	N-Nitrosodimethylamine	47 - 80	102	
	Phenanthrene	85 - 103	104	
09210WAC026-MS	4-Nitrophenol	10 - 109	113	All Project Samples
	Acenaphthene	81 - 103	104	
	Benzidine	20 - 122	15	
	N-Nitrosodimethylamine	45 - 81	109	
	Phenol	10 - 83	104	
09210WAC026-MSD	4-Nitrophenol	10 - 109	114	All Project Samples
	Acenaphthene	81 - 103	106	
	Benzidine	20 - 122	17	
	N-Nitrosodimethylamine	45 - 81	108	

	Phenol	10 - 83	106	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Type	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)
09209196604A-MS	MS	Fluoride ion	86	All Project Samples		

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories. - Lancaster, PA
Sample Delivery Group # 1155424

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-04_072809_01_L
RD-04_072809_36_L
RD-09_072809_01_L
RD-34A_072809_01_L
RD-34B_072809_01_L
RD-41A_072809_01_L
RD-49B_072809_01_L
RD-49B_072809_19_L
RD-49B_072809_36_L
RD-49B_072809_78_L
RD-49C_072809_01_L
RD-49C_072809_19_L
RD-58B_072809_01_L

Sample ID
RD-58B_072809_19_L
RD-58B_072809_36_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	Perchlorate	EPA 314.0	28 days
4.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
5.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
6.	Fluoride	EPA 300.0	28 days
7.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
8.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
09215691401A-BLK	Ammonia	0.03 J mg/L	All Project Samples	0.15 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09213WAC026-LCS	4-Bromophenyl phenyl ether	75 - 101	104	All Project Samples
	Butylbenzylphthalate	71 - 100	105	
	Di-n-butylphthalate	71 - 103	109	
	Di-n-octylphthalate	60 - 112	113	
	Fluorene	84 - 100	104	
	Nitrobenzene	74 - 100	102	
	N-Nitrosodimethylamine	47 - 80	106	
09213WAC026-LCSD	4-Bromophenyl phenyl ether	75 - 101	108	All Project Samples
	Anthracene	80 - 102	106	
	Benzo(a)anthracene	82 - 96	101	
	bis(2-Chloroethyl)ether	69 - 103	106	
	Butylbenzylphthalate	71 - 100	111	
	Diethylphthalate	69 - 105	108	
	Di-n-butylphthalate	71 - 103	114	
	Di-n-octylphthalate	60 - 112	119	
	Fluoranthene	74 - 101	105	
	Fluorene	84 - 100	106	
	Hexachlorobenzene	73 - 100	105	
	Nitrobenzene	74 - 100	104	
	N-Nitrosodimethylamine	47 - 80	119	
	Phenanthrene	85 - 103	104	
				All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories. - Lancaster, PA
Sample Delivery Group # 1155614

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-04_072809_01_L
RD-04_072809_36_L
RD-09_072809_01_L
RD-34A_072809_01_L
RD-34B_072809_01_L
RD-41A_072809_01_L
RD-49B_072809_01_L
RD-49B_072809_19_L
RD-49B_072809_36_L
RD-49B_072809_78_L
RD-49C_072809_01_L
RD-49C_072809_19_L
RD-58B_072809_01_L

Sample ID
RD-58B_072809_19_L
RD-58B_072809_36_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	Perchlorate	EPA 314.0	28 days
4.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
5.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
6.	Fluoride	EPA 300.0	28 days
7.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
8.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
09215691401A-BLK	Ammonia	0.03 J mg/L	All Project Samples	0.15 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09213WAC026-LCS	4-Bromophenyl phenyl ether	75 - 101	104	All Project Samples
	Butylbenzylphthalate	71 - 100	105	
	Di-n-butylphthalate	71 - 103	109	
	Di-n-octylphthalate	60 - 112	113	
	Fluorene	84 - 100	104	
	Nitrobenzene	74 - 100	102	
	N-Nitrosodimethylamine	47 - 80	106	
09213WAC026-LCSD	4-Bromophenyl phenyl ether	75 - 101	108	All Project Samples
	Anthracene	80 - 102	106	
	Benzo(a)anthracene	82 - 96	101	
	bis(2-Chloroethyl)ether	69 - 103	106	
	Butylbenzylphthalate	71 - 100	111	
	Diethylphthalate	69 - 105	108	
	Di-n-butylphthalate	71 - 103	114	
	Di-n-octylphthalate	60 - 112	119	
	Fluoranthene	74 - 101	105	
	Fluorene	84 - 100	106	
	Hexachlorobenzene	73 - 100	105	
	Nitrobenzene	74 - 100	104	
	N-Nitrosodimethylamine	47 - 80	119	
	Phenanthrene	85 - 103	104	
				All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories. - Lancaster, PA
Sample Delivery Group # 1155806

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
OS-16_072909_01_L
OS-16_072909_78_L
RD-03_072909_01_L
RD-32_072909_01_L
RD-32_072909_36_L
RD-32_072909_78_L
RD-45B_072909_01_L
RD-45B_072909_19_L
RD-45B_072909_36_L
RD-70_072909_01_L
WS-05_072909_01_L
WS-05_072909_36_L
WS-06_072909_01_L
WS-06_072909_36_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	Perchlorate	EPA 314.0	28 days
4.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
5.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
6.	Fluoride	EPA 300.0	28 days
7.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
8.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
9.	Volatile Fuels, GRO	EPA 8015	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
OS-16_072909_78_L	Carbon disulfide	0.4 J ug/L	All Project Samples	2.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
09215691401A-BLK	Ammonia	0.03 J mg/L	All Project Samples	0.15 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09213WAC026-LCS	4-Bromophenyl phenyl ether	75 - 101	104	All Project Samples
	Butylbenzylphthalate	71 - 100	105	
	Di-n-butylphthalate	71 - 103	109	
	Di-n-octylphthalate	60 - 112	113	
	Fluorene	84 - 100	104	
	Nitrobenzene	74 - 100	102	
	N-Nitrosodimethylamine	47 - 80	106	
09213WAC026-LCSD	4-Bromophenyl phenyl ether	75 - 101	108	All Project Samples
	Anthracene	80 - 102	106	
	Benzo(a)anthracene	82 - 96	101	
	bis(2-Chloroethyl)ether	69 - 103	106	
	Butylbenzylphthalate	71 - 100	111	
	Diethylphthalate	69 - 105	108	
	Di-n-butylphthalate	71 - 103	114	
	Di-n-octylphthalate	60 - 112	119	
	Fluoranthene	74 - 101	105	
	Fluorene	84 - 100	106	

	Hexachlorobenzene	73 - 100	105	
	Nitrobenzene	74 - 100	104	
	N-Nitrosodimethylamine	47 - 80	119	
	Phenanthrene	85 - 103	104	
				All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories. - Lancaster, PA
Sample Delivery Group # 1155881

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-63_073109_01_L
RD-63_073109_19_L
RD-63_073109_78_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories. - Lancaster, PA
Sample Delivery Group # 1156160

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
OS-26_080309_01_L
RD-36C_080309_01_L
RD-36C_080309_36_L
RD-38B_080309_01_L
RD-38B_080309_19_L
RD-38B_080309_78_L
RD-39B_080309_01_L
RD-60_080309_01_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	Volatile Fuels, GRO	EPA 8015	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control

criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories. - Lancaster, PA
Sample Delivery Group # 1156342

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
OS-09_080409_01_L
OS-09_080409_19_L
OS-09_080409_78_L
RD-33B_080409_01_L
RD-41B_080409_01_L
RD-41B_080409_19_L
RD-41B_080409_36_L
RD-54C_080409_01_D_L
RD-54C_080409_01_L
RD-54C_080409_36_D_L
RD-58A_080409_01_L
RD-59A_080409_01_D_L
RD-59A_080409_01_L

Sample ID
RD-59B_080409_01_D_L
RD-59B_080409_01_L
RD-59C_080409_01_D_L
RD-59C_080409_01_L
RD-68A_080409_01_L
RD-68B_080409_01_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	Mercury	EPA 7470A	28 days
4.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
5.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
6.	Fluoride	EPA 300.0	28 days
7.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
8.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
9.	Perchlorate	EPA 314.0	28 days
10.	ICP Metals	EPA 6010B/200.7	180 days
11.	ICP/MS Metals	EPA 6020/200.8	180 days
12.	Mercury	EPA 7470A	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
OS-09_080409_19_L	Methylene chloride	0.6 ug/L	All Project Samples	6.0 ug/L
	Carbon disulfide	0.5 J ug/L		2.5 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
09218691401A-BLK	Ammonia	0.031 J mg/L	All Project Samples	0.155 mg/L
RD-41B_080409_19_L	Ammonia	0.03 J mg/L	All Project Samples	0.15 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09220WAA026-LCS	4-Bromophenyl phenyl ether	75 - 101	110	All Project Samples
	4-Chlorophenyl phenyl ether	76 - 102	105	
	Anthracene	80 - 102	103	
	Benzo(a)anthracene	82 - 96	98	
	Butylbenzylphthalate	71 - 100	105	
	Di-n-butylphthalate	71 - 103	108	
	Fluoranthene	74 - 101	103	
	Fluorene	84 - 100	102	
	Hexachlorobenzene	73 - 100	108	
	Nitrobenzene	74 - 100	102	
	N-Nitrosodimethylamine	47 - 80	118	
09220WAA026-LCSD	4-Bromophenyl phenyl ether	75 - 101	109	All Project Samples

	Anthracene	80 - 102	103	
	Butylbenzylphthalate	71 - 100	102	
	Di-n-butylphthalate	71 - 103	106	
	Fluorene	84 - 100	103	
	Hexachlorobenzene	73 - 100	109	
	N-Nitrosodimethylamine	47 - 80	111	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Lancaster Laboratories. - Lancaster, PA
Sample Delivery Group # 1156563

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
OS-25_080509_01_L
RD-08_080509_01_L
RD-08_080509_19_L
RD-46A_080509_01_L
RD-46A_080509_36_L
RD-48B_080509_01_L
RD-48B_080509_19_L
RD-48B_080509_78_L
RD-49A_080509_01_LNAPL_L

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	TPH(d)	EPA 8015B	14 days
4.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

				Flag sample results

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	with a "U" if < to this value
RD-48B_080509_19_L	Methylene chloride	0.7 ug/L	All Project Samples	7.0 ug/L
RD-48B_080509_78_L	Dibromochloromethane	0.2 J ug/L	All Project Samples	1.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
09220WAA026-LCS	2-Methylnaphthalene	86 - 102	106	All Project Samples
	Anthracene	80 - 102	103	
	Benzo(a)anthracene	82 - 85	98	
	Fluoranthene	71 - 100	103	
	Fluorene	84 - 100	102	
09220WAA026-LCSD	2-Methylnaphthalene	86 - 102	107	All Project Samples
	Anthracene	80 - 102	103	
	Fluorene	84 - 100	103	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory:General Engineering Laboratories, LLC, Charleston, SC
Sample Delivery Group # 233547

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-37_071309_03_GEL

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins	EPA 8290	1 year

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory:General Engineering Laboratories, LLC, Charleston, SC
Sample Delivery Group # 233747

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-17_071609_03_GEL
PZ-071_071609_03_GEL

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins	EPA 8290	1 year

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and

compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: GEL Laboratories LLC. - Charleston SC 29407
Sample Delivery Group # 234321

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-33C_072409_03_T_GEL
RD-34C_072409_03_D_GEL
RD-34C_072409_03_T_GEL

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Gross Alpha, Beta in water	900.0	6 months
2.	Gamma Emitters in water	901.1	6 months
3.	Tritium	906.0	6 months
4.	Uranium, Isotopic	908.0	6 months

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Eberline Services - Richmond, CA
Sample Delivery Group # 8957

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-07(Z3)_071609_01_D_E
RD-07(Z3)_071609_01_T_E
RD-22(Z2)_071609_01_D_E
RD-22(Z2)_071609_01_T_E
RD-23(Z3)_071609_01_D_E
RD-23(Z3)_071609_01_T_E
RD-54A(Z2)_071609_01_D_E
RD-54A(Z2)_071609_01_T_E
RD-64(Z4)_071609_01_D_E
RD-64(Z4)_071609_01_T_E

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Gross Alpha, Beta in water	900.0	6 months
2.	Gamma Emitters in water	901.1	6 months
3.	Tritium	906.0	6 months
4.	Uranium, Isotopic	908.0	6 months
5.	Strontium-90	905.0	6 months

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Eberline Services - Richmond, CA
Sample Delivery Group # 8958

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
ES-31_071709_01_D_E
ES-31_071709_01_T_E
ES-21(Z2)_071609_01_D_E
ES-21(Z2)_071609_01_T_E
RD-33A(Z2)_071709_01_D_E
RD-33A(Z2)_071709_01_T_E
RD-57(Z7)_071709_01_T_E

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Gross Alpha, Beta in water	900.0	6 months
2.	Gamma Emitters in water	901.1	6 months
3.	Tritium	906.0	6 months
4.	Uranium, Isotopic	908.0	6 months
5.	Strontium-90	905.0	6 months

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was

analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Eberline Services - Richmond, CA
Sample Delivery Group # 8959

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-15_072409_01_D_E
RD-15_072409_01_T_E
RD-15_072409_36_T_E
RD-29_072409_01_D_E
RD-29_072409_01_T_E
RD-33C_072409_01_D_E
RD-33C_072409_01_T_E
RD-34C_072309_01_D_E
RD-34C_072309_01_T_E
RD-34C_072309_19_D_E
RD-34C_072309_19_T_E
RD-34C_072309_36_D_E
RD-34C_072309_36_T_E

Sample ID
WS-09_072309_01_D_E
WS-09_072309_01_T_E

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Gross Alpha, Beta in water	900.0	6 months
2.	Gamma Emitters in water	901.1	6 months
3.	Tritium	906.0	6 months
4.	Uranium, Isotopic	908.0	6 months
5.	Strontium-90	905.0	6 months

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No

qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Eberline Services - Richmond, CA
Sample Delivery Group # 8960

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-17_072709_01_D_E
RD-17_072709_01_T_E
RD-27_073009_01_D_E
RD-27_073009_01_T_E
RD-27_073009_36_T_E
RD-34A_072809_01_D_E
RD-34A_072809_01_T_E
RD-34B_072809_01_D_E
RD-34B_072809_01_T_E
RD-63_073109_01_D_E
RD-63_073109_01_T_E

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Gross Alpha, Beta in water	900.0	6 months
2.	Gamma Emitters in water	901.1	6 months
3.	Tritium	906.0	6 months
4.	Uranium, Isotopic	908.0	6 months
5.	Strontium-90	905.0	6 months

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Eberline Services - Richmond, CA
Sample Delivery Group # 8961

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-33B_080409_01_D_E
RD-33B_080409_01_T_E
RD-54C_080409_01_D_E
RD-54C_080409_01_T_E
RD-59A_080409_01_D_E
RD-59A_080409_01_T_E
RD-59B_080409_01_D_E
RD-59B_080409_01_T_E
RD-59C_080409_01_D_E
RD-59C_080409_01_T_E

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Gross Alpha, Beta in water	900.0	6 months
2.	Gamma Emitters in water	901.1	6 months
3.	Tritium	906.0	6 months
4.	Uranium, Isotopic	908.0	6 months
5.	Strontium-90	905.0	6 months

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

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Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Truesdail Laboratories, Inc. – Tustin, CA
Sample Delivery Group # 984327

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-108_071409_01_TU
PZ-108_071409_19R_TU
PZ-122_071409_01_TU

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Hydrazines	EPA 8315M	3 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group, with the following exception(s):

During the analysis of general parameters preservation and/or technical holding times were exceeded for project samples shown below. Sample results should be qualified according to the actions specified in the following table:

Lab ID	Sample ID	Matrix	Action
984327-1	PZ-108_071409_01_TU	GW	See Action #1 Below
984327-2	PZ-108_071409_19R_TU	GW	See Action #1 Below
984327-3	PZ-122_071409_01_TU	GW	See Action #1 Below

Action #1
Positive results are qualified "J", estimated and non-detected analytes as "UJ"

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

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Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Truesdail Laboratories, Inc. – Tustin, CA
Sample Delivery Group # 984357

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-13_071509_01_TU
RD-13_071509_19_TU
RD-13_071509_78_TU

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Hydrazines	EPA 8315M	3 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for

completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Weck Laboratories – Industry, CA
Sample Delivery Group # 9G16026

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-13_071509_03_W
RD-37_071509_03_W

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	NDMA	EPA 1625C(M)	7 days
2.	1,2,3-TCP	524M	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: Weck Laboratories – Industry, CA
Sample Delivery Group # 9G31043

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
OS-28_073009_03_W

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	NDMA	EPA 1625C(M)	7 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9G140177

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-105_071009_03_TAD
RD-37_071309_01_D_TAD
RD-37_071309_01_T_TAD
RD-37_071309_01_TAD
RD-37_071309_36_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	ICP Metals	EPA 6010B/200.7	180 days
4.	ICP/MS Metals	EPA 6020/200.8	180 days
5.	Mercury	EPA 7470A	28 days
6.	Cyanide, Total	EPA 9012	14 days
7.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
8.	NDMA	EPA 1625C(M)	7 days
9.	PCBs	EPA 8082/608	7 days ext/40 days analysis
10.	EDB/DBCP	EPA 504.1	14 days
11.	Herbicides, Chlorinated	EPA 8151A	7 days ext/40 days analysis
12.	Pesticides, Organophosphorus	EPA 8141A	7 days ext/40 days analysis
13.	Pesticides, Organochlorine	EPA 8081A/608	7 days ext/40 days analysis
14.	1,2,3-TCP	EPA 8260B	14 days
15.	Sulfide, Total	EPA 376.2	7 days
16.	Hexachlorophene	8321A	14 days
17.	TPH(d)	EPA 8015B	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9197529-BLK	EFH(C8-C11)	0.044 J mg/L	All Project Samples	0.22 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C, and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria, with the following exception(s):

Surrogate Percent Recovery Criteria				
Surrogate		Aqueous Matrix (%)	Solid Matrix (%)	Vapor Matrix (%)
Dibromofluoromethane	S01	77 - 119	high	low high
1,2-Dichloroethane-d4	S02	low high	low high	low high
Toluene-d8	S03	low high	low high	low high
4-Bromofluorobenzene	S04	low high	low high	low high

Project Sample ID	Matrix	S01 %R	S02 %R	S03 %R	S04 %R	Positive Results	Non Detect (ND)
RD-37_071309_01_TAD	GW	120				J	

Affected Analytes

All VOC target analytes in identified project sample(s).

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9G150243

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-108_071409_03_TAD
PZ-122_071409_03_D_TAD
PZ-122_071409_03_TAD
RD-01_071409_01_TAD
RD-06_071309_01_D_TAD
RD-06_071309_01_T_TAD
RD-06_071309_01_TAD
RD-06_071309_19_D_TAD
RD-06_071309_19_T_TAD
RD-06_071309_19_TAD
RD-06_071309_36_D_TAD
RD-06_071309_36_T_TAD
RD-06_071309_36_TAD

Sample ID
RD-06_071309_78_TAD
RD-10_071409_01_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	ICP Metals	EPA 6010B/200.7	180 days
4.	ICP/MS Metals	EPA 6020/200.8	180 days
5.	Mercury	EPA 7470A	28 days
6.	Cyanide, Total	EPA 9012	14 days
7.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
8.	NDMA	EPA 1625C(M)	7 days
9.	PCBs	EPA 8082/608	7 days ext/40 days analysis
10.	EDB/DBCP	EPA 504.1	14 days
11.	Herbicides, Chlorinated	EPA 8151A	7 days ext/40 days analysis
12.	Pesticides, Organophosphorus	EPA 8141A	7 days ext/40 days analysis
13.	Pesticides, Organochlorine	EPA 8081A/608	7 days ext/40 days analysis
14.	1,2,3-TCP	EPA 8260B	14 days
15.	Sulfide, Total	EPA 376.2	7 days
16.	Hexachlorophene	8321A	14 days
17.	TPH(d)	EPA 8015B	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format

- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-06_071309_19_TAD	Acetone	1.9 J ug/L	All Project Samples	19.0 ug/L
RD-06_071309_78_TAD	Acetone	5.4 J ug/L	All Project Samples	54.0 ug/L
	Methylene chloride	0.63 J ug/L		6.3 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9197118-BLK	Thallium	0.000022 J mg/L	All Project Samples	0.00022 mg/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-06_071309_19_D_TAD	Mercury	0.000033 J mg/L	All Project Samples	0.00033 mg/L
9197216-BLK	Mercury	0.000031 J	All Project Samples	0.00031

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9197529-BLK	EFH(C8-C11)	0.044 J mg/L	All Project Samples	0.22 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C, and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria, with the following exception(s):

Surrogate Percent Recovery Criteria				
Surrogate		Aqueous Matrix (%)	Solid Matrix (%)	Vapor Matrix (%)
Dibromofluoromethane	S01	77 - 119	high	low high
1,2-Dichloroethane-d4	S02	low high	low high	low high
Toluene-d8	S03	low high	low high	low high
4-Bromofluorobenzene	S04	low high	low high	low high

		S01	S02	S03	S04	Positive	Non Detect

Project Sample ID	Matrix	%R	%R	%R	%R	Results	(ND)
RD-37_071309_01_TAD	#N/A	120				#N/A	#N/A

Affected Analytes

All VOC target analytes in identified project sample(s).

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9G160309

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-20_071509_01_TAD
RD-13_071509_01_TAD
RD-13_071509_03_TAD
RD-13_071509_19_TAD
RD-13_071509_36_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	NDMA	EPA 1625C(M)	7 days
2.	Explosives-Energetics	8330	7 days ext/40 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In

cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9G170303

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-18_071609_01_TAD
PZ-071_071609_01_TAD
PZ-071_071609_03_TAD
RD-45C_071609_03_TAD
RD-45C_071609_78_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	NDMA	EPA 1625C(M)	7 days
3.	TPH(d)	EPA 8015B	14 days
4.	PCBs	EPA 8082/608	7 days ext/40 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-45C_071609_78_TAD	Acetone	2.6 J ug/L	All Project Samples	26.0 ug/L
	Methylene chloride	1 J ug/L		10.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9201485-BLK	EFH(C8-C11)	0.065 J mg/L	All Project Samples	0.325 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C, and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria, with the following exception(s):

Surrogate Percent Recovery Criteria			
Surrogate		**Aqueous Matrix (%)**	**Solid Matrix (%)**
Tetrachloro-m-xylene	S01	low - high	low - high
Decachlorobiphenyl	S02	50 - 138	low - high

				Applies to List S01		Applies to List S02	
Project Sample ID	**Matrix**	**S01 %R**	**S02 %R**	**Positive Results**	**Non Detect (ND)**	**Positive Results**	**Non Detect (ND)**
PZ-071_071609_01_TAD	GW		47			J	UJ

List S02 Compounds

Aroclor 1242, Aroclor 1248, Aroclor 1254, Aroclor 1260

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Type	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)
9201485-LCS	LCS	EFH(C8-C11)	130	All Project Samples	J	
9201485-LCSD	LCSD	EFH(C8-C11)	130	All Project Samples	J	

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if

less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9G210291

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-26_072009_03_TAD
RD-52B_071709_03_TAD
RD-52B_071709_78_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-52B_071709_78_TAD	Acetone	3.1 J ug/L	All Project Samples	31.0 ug/L
	Methylene chloride	1.1 J ug/L		11.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C

and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9G220284

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-105_071009_03_TAD
RD-37_071309_01_D_TAD
RD-37_071309_01_T_TAD
RD-37_071309_01_TAD
RD-37_071309_36_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	ICP Metals	EPA 6010B/200.7	180 days
4.	ICP/MS Metals	EPA 6020/200.8	180 days
5.	Mercury	EPA 7470A	28 days
6.	Cyanide, Total	EPA 9012	14 days
7.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
8.	NDMA	EPA 1625C(M)	7 days
9.	PCBs	EPA 8082/608	7 days ext/40 days analysis
10.	EDB/DBCP	EPA 504.1	14 days
11.	Herbicides, Chlorinated	EPA 8151A	7 days ext/40 days analysis
12.	Pesticides, Organophosphorus	EPA 8141A	7 days ext/40 days analysis
13.	Pesticides, Organochlorine	EPA 8081A/608	7 days ext/40 days analysis
14.	1,2,3-TCP	EPA 8260B	14 days
15.	Sulfide, Total	EPA 376.2	7 days
16.	Hexachlorophene	8321A	14 days
17.	TPH(d)	EPA 8015B	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9197529-BLK	EFH(C8-C11)	0.044 J mg/L	All Project Samples	0.22 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C, and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria, with the following exception(s):

Surrogate Percent Recovery Criteria				
Surrogate		Aqueous Matrix (%)	Solid Matrix (%)	Vapor Matrix (%)
Dibromofluoromethane	S01	77 - 119	high	low high
1,2-Dichloroethane-d4	S02	low high	low high	low high
Toluene-d8	S03	low high	low high	low high
4-Bromofluorobenzene	S04	low high	low high	low high

Project Sample ID	Matrix	S01 %R	S02 %R	S03 %R	S04 %R	Positive Results	Non Detect (ND)
RD-37_071309_01_TAD	GW	120				J	

Affected Analytes

All VOC target analytes in identified project sample(s).

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9G230312

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
WS-09A_072209_01_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	NDMA	EPA 1625C(M)	7 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9G240305

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-58C_072309_03_TAD
RD-58C_072309_78_TAD
WS-09_072309_01_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	NDMA	EPA 1625C(M)	7 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9G300214

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID	Sample ID
RD-04_072809_01_TAD	RD-51C_072709_36_TAD
RD-09_072809_01_TAD	RD-58B_072809_01_TAD
RD-09_072809_03_TAD	RD-67_072709_03_TAD
RD-44_072709_01_TAD	RD-67_072709_78_TAD
RD-44_072709_36_TAD	WS-05_072909_01_TAD
RD-45B_072909_03_TAD	WS-06_072909_01_TAD
RD-45B_072909_78_TAD	RD-49B_072809_03_TAD
RD-49B_072809_01_TAD	
RD-49C_072809_01_TAD	
RD-49C_072809_03_TAD	
RD-49C_072809_78_TAD	
RD-51B_072709_01_TAD	
RD-51C_072709_01_TAD	

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	NDMA	EPA 1625C(M)	7 days
4.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
5.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
6.	Fluoride	EPA 300.0	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project

sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-49C_072809_78_TAD	Methylene chloride	0.56 J ug/L	All Project Samples	5.6 ug/L
RD-67_072709_78_TAD	Methylene chloride	0.5 J ug/L	All Project Samples	5.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
9216092-LCSD	4-Methyl-2-pentanone	65 - 120	124	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
9214011-LCSD	Hexachlorobutadiene	40 - 120	38	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9G310268

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
OS-28_073009_01_TAD
OS-28_073009_36_TAD
RD-47_073009_03_TAD
RD-47_073009_78_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	NDMA	EPA 1625C(M)	7 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-47_073009_78_TAD	Methylene chloride	0.8 J ug/L	All Project Samples	8.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C

and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluatec to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
9216092-LCSD	4-Methyl-2-pentanone	65 - 120	124	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9H060361

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-41B_080409_01_TAD
RD-54C_080409_03_D_TAD
RD-58A_080409_01_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	NDMA	EPA 1625C(M)	7 days
2.	ICP Metals	EPA 6010B/200.7	180 days
3.	ICP/MS Metals	EPA 6020/200.8	180 days
4.	Mercury	EPA 7470A	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9220058-BLK	Nickel	0.00038 J mg/L	All Project Samples	0.0038 mg/L
	Thallium	0.000048 J mg/L		0.00048 mg/L
9220059-BLK	Manganese	0.00029 J mg/L	All Project Samples	0.0029 mg/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9222173-BLK	Mercury	0.00003 J mg/L	All Project Samples	0.0003 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica. - Knoxville, TN
Sample Delivery Group # H9G160213

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-17_071609_01_TK
HAR-17_071609_19_TK
HAR-17_071609_36_TK
PZ-071_071609_01_TK
PZ-071_071609_19R_TK

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins	EPA 8290	1 year

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
HAR-17_071609_19_TK	1,2,3,4,6,7,8-HpCDD	30 J pg/L	All Project Samples	150 pg/L
	OCDD	570 B pg/L		2850 pg/L
	1,2,3,4,7,8-HxCDF	17 J pg/L		85 pg/L
	1,2,3,6,7,8-HxCDF	12 QJ pg/L		60 pg/L
	2,3,4,6,7,8-HxCDF	2.9 J pg/L		14.5 pg/L
	1,2,3,4,6,7,8-HpCDF	79 pg/L		395 pg/L
	1,2,3,4,7,8,9-HpCDF	4.9 J pg/L		24.5 pg/L

	OCDF	150 pg/L		750 pg/L
PZ-071_071609_19R_TK	1,2,3,6,7,8-HxCDD	1.8 QJ pg/L	All Project Samples	9 pg/L
	1,2,3,7,8,9-HxCDD	2.7 J pg/L		13.5 pg/L
	1,2,3,4,6,7,8-HpCDD	23 J pg/L		115 pg/L
	OCDD	610 B pg/L		3050 pg/L
	1,2,3,4,7,8-HxCDF	2.2 QJ pg/L		11 pg/L
	1,2,3,6,7,8-HxCDF	2.3 QJ pg/L		11.5 pg/L
	2,3,4,6,7,8-HxCDF	2.0 QJ pg/L		10 pg/L
	1,2,3,7,8,9-HxCDF	2.1 QJ pg/L		10.5 pg/L
	1,2,3,4,6,7,8-HpCDF	9.1 J pg/L		45.5 pg/L
	1,2,3,4,7,8,9-HpCDF	3.3 QJ pg/L		16.5 pg/L
	OCDF	52 J pg/L		260 pg/L
9201154-BLK	OCDD	13 QJ pg/L	All Project Samples	65 pg/L

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica. - Knoxville, TN
Sample Delivery Group # H9G170196

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-17_071609_01_TK
HAR-17_071609_19_TK
HAR-17_071609_36_TK
PZ-071_071609_01_TK
PZ-071_071609_19R_TK

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins	EPA 8290	1 year

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
HAR-17_071609_19_TK	1,2,3,4,6,7,8-HpCDD	30 J pg/L	All Project Samples	150 pg/L
	OCDD	570 B pg/L		2850 pg/L
	1,2,3,4,7,8-HxCDF	17 J pg/L		85 pg/L
	1,2,3,6,7,8-HxCDF	12 QJ pg/L		60 pg/L
	2,3,4,6,7,8-HxCDF	2.9 J pg/L		14.5 pg/L
	1,2,3,4,6,7,8-HpCDF	79 pg/L		395 pg/L
	1,2,3,4,7,8,9-HpCDF	4.9 J pg/L		24.5 pg/L

	OCDF	150 pg/L		750 pg/L
PZ-071_071609_19R_TK	1,2,3,6,7,8-HxCDD	1.8 QJ pg/L	All Project Samples	9 pg/L
	1,2,3,7,8,9-HxCDD	2.7 J pg/L		13.5 pg/L
	1,2,3,4,6,7,8-HpCDD	23 J pg/L		115 pg/L
	OCDD	610 B pg/L		3050 pg/L
	1,2,3,4,7,8-HxCDF	2.2 QJ pg/L		11 pg/L
	1,2,3,6,7,8-HxCDF	2.3 QJ pg/L		11.5 pg/L
	2,3,4,6,7,8-HxCDF	2.0 QJ pg/L		10 pg/L
	1,2,3,7,8,9-HxCDF	2.1 QJ pg/L		10.5 pg/L
	1,2,3,4,6,7,8-HpCDF	9.1 J pg/L		45.5 pg/L
	1,2,3,4,7,8,9-HpCDF	3.3 QJ pg/L		16.5 pg/L
	OCDF	52 J pg/L		260 pg/L
9201154-BLK	OCDD	13 QJ pg/L	All Project Samples	65 pg/L

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica. - Knoxville, TN
Sample Delivery Group # H9G220134

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-07_072109_01_TK

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins	EPA 8290	1 year

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9204150-BLK	OCDD	4.2 J pg/L	All Project Samples	21 pg/L

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica. - Knoxville, TN
Sample Delivery Group # H9G230131

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
WS-09_072309_01_TK

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins	EPA 8290	1 year

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9208167-BLK	OCDD	2.8 J pg/L	All Project Samples	14 pg/L

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica. - Knoxville, TN
Sample Delivery Group # H9G240111

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-17_071609_01_TK
HAR-17_071609_19_TK
HAR-17_071609_36_TK
PZ-071_071609_01_TK
PZ-071_071609_19R_TK

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins	EPA 8290	1 year

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
HAR-17_071609_19_TK	1,2,3,4,6,7,8-HpCDD	30 J pg/L	All Project Samples	150 pg/L
	OCDD	570 B pg/L		2850 pg/L
	1,2,3,4,7,8-HxCDF	17 J pg/L		85 pg/L
	1,2,3,6,7,8-HxCDF	12 QJ pg/L		60 pg/L
	2,3,4,6,7,8-HxCDF	2.9 J pg/L		14.5 pg/L
	1,2,3,4,6,7,8-HpCDF	79 pg/L		395 pg/L
	1,2,3,4,7,8,9-HpCDF	4.9 J pg/L		24.5 pg/L

	OCDF	150 pg/L		750 pg/L
PZ-071_071609_19R_TK	1,2,3,6,7,8-HxCDD	1.8 QJ pg/L	All Project Samples	9 pg/L
	1,2,3,7,8,9-HxCDD	2.7 J pg/L		13.5 pg/L
	1,2,3,4,6,7,8-HpCDD	23 J pg/L		115 pg/L
	OCDD	610 B pg/L		3050 pg/L
	1,2,3,4,7,8-HxCDF	2.2 QJ pg/L		11 pg/L
	1,2,3,6,7,8-HxCDF	2.3 QJ pg/L		11.5 pg/L
	2,3,4,6,7,8-HxCDF	2.0 QJ pg/L		10 pg/L
	1,2,3,7,8,9-HxCDF	2.1 QJ pg/L		10.5 pg/L
	1,2,3,4,6,7,8-HpCDF	9.1 J pg/L		45.5 pg/L
	1,2,3,4,7,8,9-HpCDF	3.3 QJ pg/L		16.5 pg/L
	OCDF	52 J pg/L		260 pg/L
9201154-BLK	OCDD	13 QJ pg/L	All Project Samples	65 pg/L

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL 4Q2009
Analytical Laboratory: TestAmerica, Inc. – Denver, CO
Sample Delivery Group # D9J160173

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
HAR-07_101509_01_TAD
HAR-07_101509_19_TAD
HAR-07_101509_78_TAD
PZ-139_101509_01_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
2.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
HAR-07_101509_78_TAD	Acetone	4.0 ug/L	PZ-139_101509_01_TAD	40.0 ug/L
(Trip Blank)	cis-1,2-Dichloroethene	0.35 ug/L		1.8 ug/L
	Trichloroethene	0.47 ug/L		2.4 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
Method Blank	bis(2-Ethylhexyl)phthalate	2.6 ug/L	HAR-07_101509_01_TAD	26.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL 4Q2009
Analytical Laboratory: TestAmerica, Inc. – Denver, CO
Sample Delivery Group # D9J160192

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Chlorinated Dibenzo-p-dioxins/furans Data Review (EPA 540/R-05/001)
  USEPA Analytical Services Branch (ASB) OSWER Directive 9240-1-51, 2005

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or or EPA Mathod 8290.

This DUSR pertains to the following samples:

Sample ID
PZ-139_101509_01_TAD3

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins / Furans	EPA 8290	30 days ext/45 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, results should be reported unless the concentration of the target compound detected in the project sample is less than the amount in any blank and above the Contract Required Quantitation Limit (CRQL). Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

^{13}C Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of the corresponding CCV standard. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the EDL and QL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at these quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with the cited EPA methodology.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL 4Q2009
Analytical Laboratory: Test America Denver, CO
Sample Delivery Group # D9J170175

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-66_101609_01_TAD
RD-71_101609_01_TAD
RD-66_101609_19_TAD
RD-66_101609_78_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-66_101609_78_TAD	Methylene chloride	0.73 ug/L	RD-66_101609_01_TAD RD-71_101609_01_TAD RD-66_101609_19_TAD	7.3 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

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Data Usability Summary Report (DUSR)
Boeing SSFL 4Q2009
Analytical Laboratory: TestAmerica, Inc. – Denver, CO
Sample Delivery Group # D9J210197

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
PZ-140_102009_01_D_TAD
PZ-140_102009_01_TAD
PZ-140_102009_19_D_TAD
PZ-140_102009_19R_D_TAD
PZ-140_102009_36_D_TAD
PZ-140_102009_78_TAD
RD-16_102009_19_TAD
RD-16_102009_78_TAD
WS-09_102009_19_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	ICP/MS Metals	EPA 6020/200.8	180 days
2.	Volatile Fuels, GRO	EPA 8015	14 days
3.	TPH(d)	EPA 8015M	14 days
4.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Duplicate Sample Analysis
- Field Duplicate Sample Analysis
- ICP Interference Check Sample Performance
- ICP Serial Dilution Replicate Percent Difference
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-16_102009_19_TAD (Equipment Blank)	Chloroform	0.92 ug/L	PZ-140_102009_01_D_TAD	4.6 ug/L
RD-16_102009_78_TAD	Methylene chloride	0.77 ug/L	PZ-140_102009_01_D_TAD	7.7 ug/L
	Trichloroethene	0.31 ug/L	RD-16_102009_19_TAD	1.6 ug/L
PZ-140_102009_78_TAD	C6-C12	11.0 ug/L	PZ-140_102009_01_TAD	55.0 ug/L
Prep Blank	C6-C12	8.6 ug/L	PZ-140_102009_01_TAD	43.0 ug/L
			PZ-140_102009_78_TAD	

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
Prep Blank	Nickel, Total	0.00032 mg/L	PZ-140_102009_01_D_TAD	0.0032 mg/L
			PZ-140_102009_19_D_TAD	
			PZ-140_102009_19R_D_TAD	
			PZ-140_102009_36_D_TAD	

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Duplicate Sample Analysis

The replicate percent difference (RPD) was evaluated for each duplicate sample pair to monitor the reproducibility of the data. The RPD for each sample pair was within the QA/QC limit of 30% for aqueous samples and 50% for solid matrices, for those target analytes with sample concentrations >5X the MDL. No qualification of the data is recommended.

Field Duplicate Sample Analysis

The overall variability attributable to the sampling procedure, sample matrix, and laboratory procedures, was evaluated by assessing the relative percent difference (RPD) data from field duplicate samples. All calculated RPD values were within matrix specific data quality objectives. No qualification of the data is recommended.

ICP Interference Check Sample Performance

The results of the ICP Interference Check Samples analyzed concurrently with the project samples were all within the acceptance criteria +/- 20% of true value as prescribed by USEPA guidance. No qualification of the data is recommended.

ICP Serial Dilution Replicate Percent Difference

The results of the ICP Serial Dilution samples analyzed concurrently with the project samples were in accordance with the EPA QA acceptance criteria of less than 10% RPD for those target analytes with sample concentrations >50X the MDL. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: TestAmerica, Inc. – Denver, CO
Sample Delivery Group # D9J210285

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
WS-09_102009_01_D_TAD3
WS-09_102009_01_T_TAD3

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Total Sr-90	EPA 905	6 months

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Duplicate Sample Analysis
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Duplicate Sample Analysis

The replicate percent difference (RPD) was evaluated for each duplicate sample pair to monitor the reproducibility of the data. The RPD for each sample pair was within the QA/QC limit of 30% for aqueous samples and 50% for solid matrices, for those target analytes with sample concentrations >5X the MDL. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
BOEING SSFL 4TH QUARTER 2009
Analytical Laboratory: TestAmerica, Inc. – Denver, CO
Sample Delivery Group # D9J220340

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD43C_102109_01_TAD
RD13_102109_19_TAD
RD13_102109_78_TAD
RD43A_102109_19_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols, with the following exception(s):

During the analysis of VOCs (SW846 8260B), the continuing calibration verification (CCV) standards for the following target compound(s) exhibited a percent drift (%D) greater than the acceptance criteria of 25% and/or a RRF less than 0.05:

Inst.	Date / Time	Target Analyte(s)	%D	RRF	Affected Sample(s)	Corrective Action
C	10/29/09 06:30	Bromoform	25.30	0.21	RD43C_102109_01_TAD RD13_102109_19_TAD RD13_102109_78_TAD RD43A_102109_19_TAD	See Action #1 Below

Action #1
Positive results are qualified "J", estimated and non-detected analytes as "UJ", estimated detection limit.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD13_102109_19_TAD	Chloroform	0.94 ug/L	RD43C_102109_01_TAD	4.7 ug/L
	Methylene chloride	2.0 ug/L		20.0 ug/L
RD13_102109_78_TAD	Methylene chloride	2.4 ug/L	RD43C_102109_01_TAD RD13_102109_19_TAD RD13_102109_78_TAD RD43A_102109_19_TAD	24.0 ug/L
RD43A_102109_19_TA	Chloroform	0.87 ug/L	RD43C_102109_01_TAD	4.4 ug/L
	Methylene chloride	1.9 ug/L		19.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
RD43C_102109_01_TAD	Bromoform	74 - 121	71	RD43C_102109_01_TAD

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: TestAmerica, Inc. – Denver, CO
Sample Delivery Group # D9J290208

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-44_102809_01_D_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	ICP/MS Metals	EPA 6020/200.8	180 days
2.	ICP Metals	EPA 6010B/200.7	180 days
3.	Mercury	EPA 7470A	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Duplicate Sample Analysis
- ICP Interference Check Sample Performance
- ICP Serial Dilution Replicate Percent Difference
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds

were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-44_102809_19_D_TAD	Boron, Dissolved	0.0042 mg/L	RD-44_102809_01_D_TAD	0.042 mg/L
Field Blank	Magnesium, Dissolved	0.019 mg/L		0.19 mg/L

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Duplicate Sample Analysis

The replicate percent difference (RPD) was evaluated for each duplicate sample pair to monitor the reproducibility of the data. The RPD for each sample pair was within the QA/QC limit of 30% for aqueous samples and 50% for solid matrices, for those target analytes with sample concentrations >5X the MDL. No qualification of the data is recommended.

ICP Interference Check Sample Performance

The results of the ICP Interference Check Samples analyzed concurrently with the project samples were all within the acceptance criteria +/- 20% of true value as prescribed by USEPA guidance. No qualification of the data is recommended.

ICP Serial Dilution Replicate Percent Difference

The results of the ICP Serial Dilution samples analyzed concurrently with the project samples were in accordance with the EPA QA acceptance criteria of less than 10% RPD for those target analytes with sample concentrations >50X the MDL. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: TestAmerica, Inc. – Denver, CO
Sample Delivery Group # D9K030529

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
PZ-076_110209_01_D_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	ICP/MS Metals	EPA 6020/200.8	180 days
2.	ICP Metals	EPA 6010B/200.7	180 days
3.	Mercury	EPA 7470A	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Duplicate Sample Analysis
- ICP Interference Check Sample Performance
- ICP Serial Dilution Replicate Percent Difference
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were

not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Duplicate Sample Analysis

The replicate percent difference (RPD) was evaluated for each duplicate sample pair to monitor the reproducibility of the data. The RPD for each sample pair was within the QA/QC limit of 30% for aqueous samples and 50% for solid matrices, for those target analytes with sample concentrations >5X the MDL. No qualification of the data is recommended.

ICP Interference Check Sample Performance

The results of the ICP Interference Check Samples analyzed concurrently with the project samples were all within the acceptance criteria +/- 20% of true value as prescribed by USEPA guidance. No qualification of the data is recommended.

ICP Serial Dilution Replicate Percent Difference

The results of the ICP Serial Dilution samples analyzed concurrently with the project samples were in accordance with the EPA QA acceptance criteria of less than 10% RPD for those target analytes with sample concentrations >50X the MDL. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL 4Q2009
Analytical Laboratory: TestAmerica, Inc. – Denver, CO
Sample Delivery Group # D9K040450

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
HAR-17_110309_01_TAD
HAR-17_110309_36_TAD
PZ-141_110309_01_D_TAD
PZ-141_110309_01_TAD
PZ-141_110309_36_TAD
RD-39B_110309_01_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	ICP/MS Metals	EPA 6020/200.8	180 days
2.	NDMA	EPA 1625C(M)	7 days
3.	ICP Metals	EPA 6010B/200.7	180 days
4.	Mercury	EPA 7470A	28 days
5.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Duplicate Sample Analysis
- ICP Interference Check Sample Performance
- ICP Serial Dilution Replicate Percent Difference
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without

exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols, with the following exception(s):

During the analysis of VOCs (SW846 8260B), the initial calibration standards for the following target compound(s) exhibited a percent relative standard deviation (%RSD) greater than the acceptance criteria of 30% and/or a RRF less than 0.05:

Inst.	Date / Time	Target Analyte(s)	%RSD	RRF	Affected Sample(s)	Corrective Action
R2	10/30/09 16:30	Acetone 2-Butanone (MEK)	17.69 19.01	0.02 0.04	HAR-17_110309_01_TAD HAR-17_110309_36_TAD PZ-141_110309_01_TAD RD-39B_110309_01_TAD	See Action #2 Below See Action #2 Below

Action #2
Positive results are qualified "J", estimated and non-detected analytes as "R", rejected.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
PZ-141_110309_19_TAD Field Blank	Chloroform	0.418 ug/L	PZ-141_110309_01_TAD	2.1 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the

following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
HAR-17_110309_01_TAD MSD	cis-1,2-Dichloroethene	75 - 120	121	HAR-17_110309_01_TAD HAR-17_110309_36_TAD PZ-141_110309_01_TAD RD-39B_110309_01_TAD

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Duplicate Sample Analysis

The replicate percent difference (RPD) was evaluated for each duplicate sample pair to monitor the reproducibility of the data. The RPD for each sample pair was within the QA/QC limit of 30% for aqueous samples and 50% for solid matrices, for those target analytes with sample concentrations >5X the MDL. No qualification of the data is recommended.

ICP Interference Check Sample Performance

The results of the ICP Interference Check Samples analyzed concurrently with the project samples were all within the acceptance criteria +/- 20% of true value as prescribed by USEPA guidance. No qualification of the data is recommended.

ICP Serial Dilution Replicate Percent Difference

The results of the ICP Serial Dilution samples analyzed concurrently with the project samples were in accordance with the EPA QA acceptance criteria of less than 10% RPD for those target analytes with sample concentrations >50X the MDL. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum, with the following exception(s):

Project Sample	Target Analyte(s)	RT	EXP RT	All ions present?	Result Flag
HAR-17_110309_01_TAD	trans-1,3-Dichloropropene	8.13	8.12	NO	R

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

G:\Projects\20080_SSFL\Data Validation\4th Qtr 2009\Completed EDDs, DUSRs\[D9K040450_LMT.xls]Final Report

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: TestAmerica, Inc. – Denver, CO
Sample Delivery Group # D9K050472-Formaldehyde

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-69_110409_01_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 5 times (5X) the amount in any blank for formaldehyde. Formaldehyde was not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Target Compound Identification

HPLC qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention time (RRT) of all reported formaldehyde detections were within +/- 0.06 RRT units of the associated calibration standard RRT. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
BOEING SSFL 4TH QUARTER 2009
Analytical Laboratory: DelMar Analytical – Irvine, CA
Sample Delivery Group # ISJ1208

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
PZ-122_101309_03_TAI

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	pH	EPA 9040B	ASAP (24 hours)
2.	Inorganic Ions by Ion Chromatography	EPA 300.0	48 hours

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Duplicate Sample Analysis
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group, with the following exception(s):

During the analysis of general parameters preservation and/or technical holding times were exceeded for project samples shown below. Sample results should be qualified according to the actions specified in the following table:

Lab ID	Sample ID	Matrix	Action
ISJ1208-01	PZ-122_101309_03_TAI	AQ	See Action #1 Below

Action #1
pH: If not analyzed in the field, results are qualified "J", estimated.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Duplicate Sample Analysis

The replicate percent difference (RPD) was evaluated for each duplicate sample pair to monitor the reproducibility of the data. The RPD for each sample pair was within the QA/QC limit of 30% for aqueous samples and 50% for solid matrices, for those target analytes with sample concentrations >5X the MDL. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL 4Q2009
Analytical Laboratory: TestAmerica, Inc. – Irvine, CA
Sample Delivery Group # ISJ1609

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
PZ-139_101509_03_D_TAI
WS-05_101509_03_TAI
PZ-139_101509_03_TAI

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Chromium VI (Hexavalent Chromium)	EPA 7196A/7199	24 hours
2.	Perchlorate	EPA 314.0	28 days
3.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
4.	NDMA	EPA 1625C(M)	7 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Duplicate Sample Analysis
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
LCSD	NDMA	60 - 140	200	PZ-139_101509_03_TAI

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Duplicate Sample Analysis

The replicate percent difference (RPD) was evaluated for each duplicate sample pair to monitor the reproducibility of the data. The RPD for each sample pair was within the QA/QC limit of 30% for aqueous samples and 50% for solid matrices, for those target analytes with sample concentrations >5X the MDL. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: TestAmerica, Inc. – Irvine, CA
Sample Delivery Group # ISJ2269

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
PZ-140_102009_03_D_TAI
RD-16_102009_03_TAI
RD-16_102009_78_TAI

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	ICP Metals	EPA 6010B/200.7	180 days
3.	ICP/MS Metals	EPA 6020/200.8	180 days
4.	Mercury	EPA 7470A	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Duplicate Sample Analysis
- ICP Interference Check Sample Performance
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols, with the following exception(s):

During the analysis of VOCs (SW846 8260B), the initial calibration standards for the following target compound(s) exhibited a percent relative standard deviation (%RSD) greater than the acceptance criteria of 30% and/or a RRF less than 0.05:

Inst.	Date / Time	Target Analyte(s)	%RSD	RRF	Affected Sample(s)	Corrective Action
	10/23/09 08:31	2-Butanone (MEK)	17.68	0.04	RD-16_102009_03_TAI RD-16_102009_78_TAI	See Action #2 Below

Action #2
Positive results are qualified "J", estimated and non-detected analytes as "R", rejected.

During the analysis of Metals (EPA Methods 6010B/6020/7470A/7471A), the initial calibration standards for the following target compound(s) exhibited a percent recovery (%R) outside the acceptance criteria of 75-125%:

Inst.	Date / Time	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)
	10/28/09 15:00	Silver, Dissolved	120.09	PZ-140_102009_03_D_TAI	J	

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols, with the following exception(s):

During the analysis of Metals (EPA Methods 6010B/6020/7470A/7471A), the continuing calibration standards for the following target compound(s) exhibited a percent recovery (%R) outside the acceptance criteria of 75-125%:

Inst.	Date / Time	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)
	10/24/09 00:28	Chromium, Dissolved	115.39	PZ-140_102009_03_D_TAI	J	

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9J23108-BLK1 MB	Lead, Dissolved	0.000257 mg/L	PZ-140_102009_03_D_TAI	0.00257 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating

the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
9J30019-BS1 LCS	cis-1,3-Dichloropropene	75 - 125	126	RD-16_102009_03_TAI RD-16_102009_78_TAI

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Duplicate Sample Analysis

The replicate percent difference (RPD) was evaluated for each duplicate sample pair to monitor the reproducibility of the data. The RPD for each sample pair was within the QA/QC limit of 30% for aqueous samples and 50% for solid matrices, for those target analytes with sample concentrations >5X the MDL. No qualification of the data is recommended.

ICP Interference Check Sample Performance

The results of the ICP Interference Check Samples analyzed concurrently with the project samples were all within the acceptance criteria +/- 20% of true value as prescribed by USEPA guidance. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

G:\Projects\20080_SSFL\Data Validation\4th Qtr 2009\Completed EDDs, DUSRs\[ISJ2269_IV.xls]Final Report

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: TestAmerica, Inc. – Irvine, CA
Sample Delivery Group # ISJ2383

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-13_102109_03_TAI

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Nitroaromatics & Nitramines	SW-846 8330	7 days ext/40 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Initial Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
G9J270000-236 MB	1,3,5-Trinitrobenzene	0.031 J ug/L	RD-13_102109_03_TAI	0.2 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
G9J270000-236	Nitrobenzene	69 - 119	121	RD-13_102109_03_TAI

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: TestAmerica, Inc. – Irvine, CA
Sample Delivery Group # ISJ2937

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-01_102709_03_TAI
RD-03_102709_03_D_TAI
RD-03_102709_03_TAI

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Volatile Fuels, GRO	EPA 8015	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	PCBs	EPA 8082/608	7 days ext/40 days analysis
4.	ICP Metals	EPA 6010B/200.7	180 days
5.	ICP/MS Metals	EPA 6020/200.8	180 days
6.	Fluoride	EPA 300.0	48 hours
7.	Nitrogen, Nitrate (NO3)	EPA 300.0	48 hours
8.	Perchlorate	EPA 314.0	28 days
9.	Mercury	EPA 7470A	28 days
10.	Nitrogen, Ammonia (NH3)	EPA 350.1-9310503	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Duplicate Sample Analysis
- ICP Interference Check Sample Performance
- ICP Serial Dilution Replicate Percent Difference
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols, with the following exception(s):

During the analysis of SVOCs (SW846 8270C), the initial calibration standards for the following target compound(s) exhibited a percent relative standard deviation (%RSD) greater than the acceptance criteria of 30% and/or a RRF less than 0.05:

Inst.	Date / Time	Target Analyte(s)	%RSD	RRF	Affected Sample(s)	Corrective Action
	10/24/09 12:57	2,4-Dimethylphenol	36.09	0.21	RD-01_102709_03_TAI	See Action #1 Below

Action #1
Positive results are qualified "J", estimated and non-detected analytes as "UJ", estimated detection limit.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
9J28068-BS1	Benzidine	30 - 160	10	RD-01_102709_03_TAI

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Duplicate Sample Analysis

The replicate percent difference (RPD) was evaluated for each duplicate sample pair to monitor the reproducibility of the data. The RPD for each sample pair was within the QA/QC limit of 30% for aqueous samples and 50% for solid matrices, for those target analytes with sample concentrations >5X the MDL. No qualification of the data is recommended.

ICP Interference Check Sample Performance

The results of the ICP Interference Check Samples analyzed concurrently with the project samples were all within the acceptance criteria +/- 20% of true value as prescribed by USEPA guidance. No qualification of the data is recommended.

ICP Serial Dilution Replicate Percent Difference

The results of the ICP Serial Dilution samples analyzed concurrently with the project samples were in accordance with the EPA QA acceptance criteria of less than 10% RPD for those target analytes with sample concentrations >50X the MDL. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL 4Q2009
Analytical Laboratory: DelMar Analytical – Irvine, CA
Sample Delivery Group # ISJ3073

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-03_102709-_03_TAI4
RD-24_102709-_03_D_TAI4
RD-24_102709-_03_T_TAI4

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins / Furans	EPA 8290	30 days ext/45 days analysis
2.	Gamm Spectroscopy - Cesium 137 and Hits	EPA 901.1 MOD	180 days
3.	Gross Alpha/Beta	EPA 900.0 MOD	180 days
4.	Tritium by Distillation & LSC	EPA 9006.0 MOD	180 days
5.	Strontium 90 by GFPC	EPA 905 MOD	180 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
Method Blank	1,2,3,4,6,7,8-HpCDD	0.42 pg/L	RD-03_102709-	2.1 pg/L
	OCDD	1.2 pg/L		6.0 pg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
LCS	1,2,3,7,8,9-HxCDD	80 - 120	134	RD-03_102709-

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of

the corresponding CCV standard. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: TestAmerica, Inc. – Irvine, CA
Sample Delivery Group # ISJ3110

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-37_102809_03_TAI

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Herbicides, Chlorinated	EPA 8151A	7 days ext/40 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Analytical Laboratory: TestAmerica, Inc. – Irvine, CA
Sample Delivery Group # ISJ3338

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-49B_103009_03_TAI
RD-54B_103009_03_D_TAI

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Volatile Fuels, GRO	EPA 8015	14 days
2.	ICP Metals	EPA 6010B	180 days
3.	ICP/MS Metals	EPA 6020	180 days
4.	Mercury	EPA 1311/1312/7470A	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Duplicate Sample Analysis
- ICP Interference Check Sample Performance
- ICP Serial Dilution Replicate Percent Difference
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols, with the following exception(s):

During the analysis of Metals (EPA Methods 6010B/6020/7470A/7471A), the initial calibration standards for the following target compound(s) exhibited a percent recovery (%R) outside the acceptance criteria of 75-125%:

Inst.	Date / Time	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)

	11/05/09 16:41	Antimony, Dissolved	89.00	RD-54B_103009_03_D_TAI	J	UJ

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols, with the following exception(s):

During the analysis of Metals (EPA Methods 6010B/6020/7470A/7471A), the continuing calibration standards for the following target compound(s) exhibited a percent recovery (%R) outside the acceptance criteria of 75-125%:

Inst.	Date / Time	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)
	11/06/09 01:23	Beryllium, Dissolved	125.00	RD-54B_103009_03_D_TAI	J	
	11/06/09 02:13	Cadmium, Dissolved	117.00	RD-54B_103009_03_D_TAI	J	

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9K02123 MB	Copper, Dissolved	0.00144 mg/L	RD-54B_103009_03_D_TAI	0.0144 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Duplicate Sample Analysis

The replicate percent difference (RPD) was evaluated for each duplicate sample pair to monitor the reproducibility of the data. The RPD for each sample pair was within the QA/QC limit of 30% for aqueous samples and 50% for solid matrices, for those target analytes with sample

concentrations >5X the MDL. No qualification of the data is recommended.

ICP Interference Check Sample Performance

The results of the ICP Interference Check Samples analyzed concurrently with the project samples were all within the acceptance criteria +/- 20% of true value as prescribed by USEPA guidance. No qualification of the data is recommended.

ICP Serial Dilution Replicate Percent Difference

The results of the ICP Serial Dilution samples analyzed concurrently with the project samples were in accordance with the EPA QA acceptance criteria of less than 10% RPD for those target analytes with sample concentrations >50X the MDL. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL 4Q2009
Analytical Laboratory: TestAmerica, Inc. –Irvine, CA
Sample Delivery Group # ISK0150

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-55B_110209_03_TAI

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	1,4-Dioxane	GC/MS Isotope Dilution	7 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. Nc Qualification of the data is recommended.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing SSFL
Please Select a Lab from the Dropdown list or add Reference in Table at end of sheet…
Sample Delivery Group # ISK0468

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008) and/or
  USEPA National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996, or Standard Methods for the Examination of Water and Wastewater, Eds 18-20.

This DUSR pertains to the following samples:

Sample ID
RD-08_110409_03_TAI
RD-69_110409_03_D_TAI
RD-69_110409_03_TAI

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	ICP Metals	EPA 6010B/200.7	180 days
2.	Alkalinity	SM 2320B	14 days
3.	Chloride	EPA 300.0/SM 4500-Cl	28 days
4.	Fluoride	EPA 300.0	28 days
5.	Sulfate	EPA 300.0/375.4	28 days
6.	Solids, Total Dissolved (TDS)	EPA 160.1	7 days
7.	Turbidity	EPA 180.1	48 hours
8.	pH	EPA 9040B	ASAP (24 hours)
9.	Specific Conductance	EPA 120.1/SM 2510B	28 days
10.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- GC/MS Instrument Performance Check
- Initial Calibration Procedures
- Continuing Calibration Procedures
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Internal Standard Recoveries
- Duplicate Sample Analysis
- ICP Interference Check Sample Performance
- ICP Serial Dilution Replicate Percent Difference
- Target Compound Identification
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

GC/MS Instrument Performance Check

GC/MS instrument performance checks for the instruments used in the analysis of project samples fell within method specific criteria without exception. No qualification of the data is recommended.

Initial Calibration Procedures

Initial instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols, with the following exception(s):

During the analysis of SVOCs (SW846 8270C), the initial calibration standards for the following target compound(s) exhibited a percent relative standard deviation (%RSD) greater than the acceptance criteria of 30% and/or a RRF less than 0.05:

Inst.	Date / Time	Target Analyte(s)	%RSD	RRF	Affected Sample(s)	Corrective Action
	10/19/09	Hexachlorocyclopentadiene	42.08	0.14	RD-08_110409_03_TAI	See Action #1 Below
	16:54	2,4-Dinitrophenol	48.34	0.18		See Action #1 Below
		4-Nitrophenol	31.67	0.17		See Action #1 Below

Action #1
Positive results are qualified "J", estimated and non-detected analytes as "UJ", estimated detection limit.

Continuing Calibration Procedures

Continuing calibration verification (CCV) procedures for the analysis of project samples were consistent with the guidelines prescribed by EPA protocols. No Qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9K05123 MB	Sodium, Dissolved	0.778 mg/L	RD-69_110409_03_D_TAI	7.78 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately

quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Type	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)	
9K05123-MS1	MS	Calcium, Dissolved	156	RD-69_110409_03_D_TAI	J		#N/A
9K05123-MSD1	MSD	Calcium, Dissolved	139	RD-69_110409_03_D_TAI	J		#N/A

Internal Standard Recoveries

Internal Standard compounds were added to each sample matrix prior to the analysis of organic parameters to quantify the amount of the target compounds detected within each sample. The calculated response of each IS compound fell within the QA/QC criteria of +100% and – 50% of the corresponding CCV standard. No qualification of the data is recommended.

Duplicate Sample Analysis

The replicate percent difference (RPD) was evaluated for each duplicate sample pair to monitor the reproducibility of the data. The RPD for each sample pair was within the QA/QC limit of 30% for aqueous samples and 50% for solid matrices, for those target analytes with sample concentrations >5X the MDL. No qualification of the data is recommended.

ICP Interference Check Sample Performance

The results of the ICP Interference Check Samples analyzed concurrently with the project samples were all within the acceptance criteria +/- 20% of true value as prescribed by USEPA guidance. No qualification of the data is recommended.

ICP Serial Dilution Replicate Percent Difference

The results of the ICP Serial Dilution samples analyzed concurrently with the project samples were in accordance with the EPA QA acceptance criteria of less than 10% RPD for those target analytes with sample concentrations >50X the MDL. No qualification of the data is recommended.

Target Compound Identification

GC/MS qualitative analysis for organic parameters was performed to remove mis-identifications of the target compounds. The relative retention times (RRT) of all reported target compounds were within +/- 0.06 RRT units of the associated calibration standard RRT, and all ions present in the reference standard spectrum at a relative intensity greater than 10 percent were also present in the sample spectrum. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format or equivalent. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Samples that contain results between the MDL and RL were flagged as estimated, "J", by the laboratory. The data user should be aware that there is a possibility of false positive or mis-identification at the quantitation levels. The laboratory also qualified results when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9J310155

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-49B_103009_01_TAD
RD-49B_103009_19_TAD
RD-49B_103009_36_TAD
RD-49B_103009_78_TAD
RD-49C_103009_01_TAD
RD-49C_103009_36_TAD
RD-54B_103009_01_D_TAD
RD-54B_103009_01_TAD
54B_103009_19_D_TAD
54B_103009_36_D_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
4.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
5.	ICP Metals	EPA 6010B/200.7	180 days
6.	ICP/MS Metals	EPA 6020/200.8	180 days
7.	Mercury	EPA 7470A	28 days
8.	NDMA	EPA 1625C(M)	7 days
9.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
10.	Perchlorate	EPA 314.0	28 days
11.	Fluoride	EPA 300.0	28 days
12.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
13.	TPH(d)	EPA 8015B	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group, with the following exception(s):

During the analysis of VOCs (EPA Method 8260B) preservation and/or technical holding times were exceeded for project samples shown below. Sample results should be qualified according to the actions specified in the following table:

Lab ID	Sample ID	Matrix	Action
D9J310155-001	RD-49B_103009_01_TAD	GW	See Action #1 Below
D9J310155-005	RD-49B_103009_36_TAD	GW	See Action #1 Below
D9J310155-006	RD-49C_103009_01_TAD	GW	See Action #1 Below

Action #1

PLEASE SELECT ACTION FROM LIST…

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-49B_103009_19_TAD	Chloroform	0.88 J ug/L	All Project Samples	4.4 ug/L
RD-49B_103009_78_TAD	Acetone	12.0 ug/L	All Project Samples	120.0 ug/L
	Methylene chloride	1 J ug/L		10.0 ug/L
9314057-BLK	Acetone	1.9 J ug/L	All Project Samples	19.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9306265-BLK	Manganese	0.00036 J mg/L	All Project Samples	0.0036 mg/L
RD-54B_103009_19_D_TAD	Antimony	0.000077 J mg/L	All Project Samples	0.00077 mg/L
	Cobalt	0.0014 J mg/L		0.014 mg/L
	Manganese	0.00027 J mg/L		0.0027 mg/L
	Silver	0.000022 J mg/L		0.00022 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID /				

Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
9314057-LCSD	Bromoform	74 - 121	72	All Project Samples
	Carbon disulfide	56 - 120	55	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Type	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)
9306265-MSD	MSD	Zinc	161	All Project Samples	J	

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9J080182

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-103_100709_01_TAD
PZ-109_100709_01_D_TAD
PZ-109_100709_01_TAD
PZ-120_100709_01_TAD
PZ-120_100709_19_TAD
PZ-120_100709_78_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	ICP Metals	EPA 6010B/200.7	180 days
3.	ICP/MS Metals	EPA 6020/200.8	180 days
4.	Mercury	EPA 7470A	28 days
5.	Bromide	EPA 300.0/320.1	28 days
6.	Chloride	EPA 300.0/SM 4500-Cl	28 days
7.	Fluoride	EPA 300.0	28 days
8.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
9.	Sulfate	EPA 300.0/375.4	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
PZ-120_100709_19_TAD	Acetone	2.5 J ug/L	All Project Samples	25.0 ug/L
	Methylene chloride	0.89 JB ug/L		8.9 ug/L
PZ-120_100709_78_TAD	Acetone	3.8 J ug/L	All Project Samples	38.0 ug/L
	Methylene chloride	1.4 JB ug/L		14.0 ug/L
9288616-BLK	Methylene chloride	1.5 J ug/L	All Project Samples	15.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Type	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)
9285307-MS	MS	Mercury	77			
9285307-MSD	MSD	Mercury	78			

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

G:\Projects\26472\database\LAB\2009\4th Qtr 09\Data Validation\Individual Reports\[D9J080182_DV_DJC_vocs-metals-gen.xls]Final Report

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9J120130

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-091_100909_01_D_TAD
PZ-091_100909_01_TAD
RD-70_100909_01_TAD
RD-70_100909_19_TAD
RD-70_100909_78_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	ICP Metals	EPA 6010B/200.7	180 days
4.	ICP/MS Metals	EPA 6020/200.8	180 days
5.	Mercury	EPA 7470A	28 days
6.	TPH(d)	EPA 8015B	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value

RD-70_100909_19_TAD	Acetone	2 J ug/L	All Project Samples	20.0 ug/L
	Chloroform	0.89 J ug/L		4.5 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9286178-BLK	bis(2-Ethylhexyl)phthalate	2.8 J ug/L	All Project Samples	28.0 ug/L
	Chrysene	0.76 J ug/L		3.8 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9J130287

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-105_101209_01_D_TAD
PZ-105_101209_01_TAD
PZ-105_101209_19_TAD
PZ-105_101209_19R_D_TAD
PZ-105_101209_19R_TAD
PZ-105_101209_36_TAD
PZ-105_101209_78_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	TPH(d)	EPA 8015B	14 days
3.	ICP Metals	EPA 6010B/200.7	180 days
4.	ICP/MS Metals	EPA 6020/200.8	180 days
5.	Mercury	EPA 7470A	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

				Flag sample results with a "U"

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	if < to this value
PZ-105_101209_19_TAD	Chloroform	0.92 J ug/L	All Project Samples	4.6 ug/L
PZ-105_101209_19R_TAD	Chloroform	0.71 J ug/L	All Project Samples	3.6 ug/L
PZ-105_101209_78_TAD	Acetone	7.1 J ug/L	All Project Samples	71.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
PZ-105_101209_19R_D_TAD	Boron	0.0018 J mg/L	All Project Samples	0.018 mg/L
	Cadmium	0.000064 J mg/L		0.00064 mg/L
	Silver	0.000036 J mg/L		0.00036 mg/L
	Thallium	0.000056 J mg/L		0.00056 mg/L
	Zinc	0.0024 J mg/L		0.024 mg/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
PZ-105_101209_19R_TAD	EFH(C12-C14)	0.034 J mg/L	All Project Samples	0.17 mg/L
	EFH(C21-C30)	0.39 J mg/L		1.95 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result

was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9J140296

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-14_101309_01_TAD
HAR-14_101309_78_TAD
HAR-15_101309_01_TAD
PZ-122_101309_01_D_TAD
PZ-122_101309_01_TAD
Z-122_101309_19R_TAD
PZ-122_101309_36_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	Explosives-Energetics	8330	7 days ext/40 days analysis
3.	ICP Metals	EPA 6010B/200.7	180 days
4.	ICP/MS Metals	EPA 6020/200.8	180 days
5.	Mercury	EPA 7470A	28 days
6.	TPH(d)	EPA 8015B	14 days
7.	Bromide	EPA 300.0/320.1	28 days
8.	Chloride	EPA 300.0/SM 4500-Cl	28 days
9.	Fluoride	EPA 300.0	28 days
10.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
11.	Sulfate	EPA 300.0/375.4	28 days
12.	Perchlorate	EPA 314.0	28 days
13.	pH	EPA 150.1	ASAP (24 hours)

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
HAR-14_101309_78_TAD	Acetone	5.7 J ug/L	All Project Samples	57.0 ug/L
	Methylene chloride	0.49 J ug/L		4.9 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9290158-BLK	Silver	0.000016 J mg/L	All Project Samples	0.00016 mg/L
9290159-BLK	Iron	0.041 J mg/L	All Project Samples	0.41 mg/L
	Manganese	0.00031 J mg/L		0.0031 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica. - Knoxville, TN
Sample Delivery Group # D9J140396

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-20_101309_01_TAD3
RD-20_101309_19_TAD3

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins	EPA 8290	1 year

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9288329-BLK	OCDD	4.3 QJ pg/L	All Project Samples	21.5 pg/L

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No

qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9J150201

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-108_101409_01_TAD
PZ-108_101409_19_TAD
PZ-108_101409_19R_TAD
PZ-108_101409_36_TAD
RD-19_101409_01_TAD
WS-09A_101409_01_TAD
WS-09A_101409_19_TAD
WS-09A_101409_36_TAD
WS-09A_101409_78_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
4.	NDMA	EPA 1625C(M)	7 days
5.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
6.	Perchlorate	EPA 314.0	28 days
7.	Bromide	EPA 300.0/320.1	28 days
8.	Chloride	EPA 300.0/SM 4500-Cl	28 days
9.	Cyanide, Total	EPA 9012	14 days
10.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
11.	Sulfate	EPA 300.0/375.4	28 days
12.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
13.	Explosives-Energetics	8330	7 days ext/40 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
WS-09A_101409_19_TAD	cis-1,2-Dichloroethene	0.39 J ug/L	All Project Samples	2.0 ug/L
	Trichloroethene	0.49 J ug/L		2.5 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9294375-BLK	bis(2-Ethylhexyl)phthalate	2.6 J ug/L	All Project Samples	26.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
PZ-108_101409_19_TAD	Fluoride ion	0.25 J mg/L	All Project Samples	1.25 mg/L
	Sulfate ion	0.24 J mg/L		1.2 mg/L
PZ-108_101409_19R_TAD	Fluoride ion	0.26 J mg/L	All Project Samples	1.3 mg/L
092890008A-BLK	Formaldehyde	15 J ug/L	All Project Samples	75 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the

method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9J160173

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-07_101509_01_TAD
HAR-07_101509_19_TAD
HAR-07_101509_78_TAD
PZ-139_101509_01_D_TAD
PZ-139_101509_01_TAD
PZ-139_101509_19_D_TAD
PZ-139_101509_19R_D_TAD
PZ-139_101509_19R_TAD
PZ-139_101509_36_D_TAD
PZ-139_101509_36_TAD
PZ-139_101509_78_TAD
WS-05_101509_01_TAD
WS-05_101509_19_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
4.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
5.	ICP Metals	EPA 6010B/200.7	180 days
6.	ICP/MS Metals	EPA 6020/200.8	180 days
7.	Mercury	EPA 7470A	28 days
8.	NDMA	EPA 1625C(M)	7 days
9.	Chromium VI (Hexavalent Chromium)	EPA 7196A/7199	24 hours
10.	PCBs	EPA 8082/608	7 days ext/40 days analysis
11.	Fluoride	EPA 300.0	28 days
12.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
13.	Perchlorate	EPA 314.0	28 days
14.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
15.	Volatile Fuels, GRO	EPA 8015	14 days
16.	TPH(d)	EPA 8015B	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers

- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
HAR-07_101509_78_TAD	Acetone	4 J ug/L	All Project Samples	40.0 ug/L
	Trichloroethene	0.47 J ug/L		2.4 ug/L
	cis-1,2-Dichloroethene	0.35 J ug/L		1.8 ug/L
HAR-07_101509_19_TAD	Chloroform	0.84 J ug/L	All Project Samples	4.2 ug/L
PZ-139_101509_78_TAD	Gasoline Range Organics (C6-C12)	11 JB ug/L	All Project Samples	55.0 ug/L
9295212-BLK	Gasoline Range Organics (C6-C12)	8.6 J ug/L	All Project Samples	43.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
PZ-139_101509_19R_TAD	bis(2-Ethylhexyl)phthalate	2.4 JB ug/L	All Project Samples	24.0 ug/L
	Chrysene	0.55 J ug/L		2.8 ug/L
9291035-BLK	bis(2-Ethylhexyl)phthalate	2.6 J ug/L	All Project Samples	26.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9290159-BLK	Iron	0.041 J mg/L	All Project Samples	0.41 mg/L
	Manganese	0.00031 J mg/L		0.0031 mg/L
9290158-BLK	Silver	0.000016 J mg/L	All Project Samples	0.00016 mg/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
092890008A-BLK	Formaldehyde	15 J ug/L	All Project Samples	75 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Type	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)

LCS ID / Project Sample MS	Type	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)
92930527-MS	MS	Mercury	84	All Project Samples		
92930527-MSD	MSD	Mercury	82	All Project Samples		

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica. - Knoxville, TN
Sample Delivery Group # D9J160192

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-139_101509_01_TAD3

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins	EPA 8290	1 year

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9J170175

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-026_101609_01_TAD
RD-66_101609_01_TAD
RD-66_101609_19_TAD
RD-66_101609_78_TAD
RD-71_101609_01_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	PAHs	EPA 8310	7 days ext/40 days analysis
3.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-66_101609_78_TAD	Methylene chloride	0.73 J ug/L	All Project Samples	7.3 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9286178-BLK	bis(2-Ethylhexyl)phthalate	2.8 J ug/L	All Project Samples	28.0 ug/L
	Chrysene	0.76 J ug/L		3.8 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
092890008A-BLK	Formaldehyde	15 J mg/L	All Project Samples	75 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9J200192

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-09_101909_01_TAD
RD-09_101909_19_TAD
RD-09_101909_36_TAD
RD-09_101909_78_TAD
RD-51B_101909_01_TAD
RD-51B_101909_36_TAD
RD-51C_101909_01_TAD
RD-51C_101909_36_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
4.	NDMA	EPA 1625C(M)	7 days
5.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
6.	Perchlorate	EPA 314.0	28 days
7.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-	48 hours
8.	Sulfate	EPA 300.0/375.4	28 days
9.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-	28 days
10.	Fluoride	EPA 300.0	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene

chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
WS-09A_101409_19_TAD	cis-1,2-Dichloroethene	0.39 J ug/L	All Project Samples	2.0 ug/L
	Trichloroethene	0.49 J ug/L		2.5 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9294193-BLK	bis(2-Ethylhexyl)phthalate	2.1 J ug/L	All Project Samples	21.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

G:\Projects\26472\database\LAB\2009\4th Qtr 09\Data Validation\Individual Reports\[D9J200192_DV_KRM.xls]Final Report

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9J210197

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-140_102009_01_D_TAD
PZ-140_102009_01_TAD
PZ-140_102009_19_D_TAD
PZ-140_102009_19R_D_TAD
PZ-140_102009_36_D_TAD
PZ-140_102009_36_TAD
PZ-140_102009_78_TAD
RD-16_102009_01_TAD
RD-16_102009_19_TAD
RD-16_102009_78_TAD
WS-09_102009_01_D_TAD
WS-09_102009_01_TAD
WS-09_102009_19_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
4.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
5.	ICP Metals	EPA 6010B/200.7	180 days
6.	ICP/MS Metals	EPA 6020/200.8	180 days
7.	Mercury	EPA 7470A	28 days
8.	NDMA	EPA 1625C(M)	7 days
9.	Chromium VI (Hexavalent Chromium)	EPA 7196A/7199	24 hours
10.	PCBs	EPA 8082/608	7 days ext/40 days analysis
11.	Fluoride	EPA 300.0	28 days
12.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
13.	Perchlorate	EPA 314.0	28 days
14.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
15.	Volatile Fuels, GRO	EPA 8015	14 days
16.	TPH(d)	EPA 8015B	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers

- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group, with the following exception(s):

During the analysis of VOCs (EPA Method 8260B) preservation and/or technical holding times were exceeded for project samples shown below. Sample results should be qualified according to the actions specified in the following table:

Lab ID	Sample ID	Matrix	Action
D9J210197-014	WS-09_102009_01_TAD	GW	See Action #1 Below

Action #1

Positive results are qualified "J", estimated and non-detected analytes as "UJ", estimated reporting limit.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-16_102009_19_TAD	Chloroform	0.92 J ug/L	All Project Samples	4.6 ug/L
RD-16_102009_78_TAD	Methylene chloride	0.77 J ug/L	All Project Samples	7.7 ug/L
	Trichloroethene	0.31 J ug/L		1.6 ug/L
PZ-140_102009_78_TAD	Gasoline Range Organics (C6-C12)	11 JB ug/L	All Project Samples	55.0 ug/L
9295212-BLK	Gasoline Range Organics (C6-C12)	8.6 J ug/L	All Project Samples	43.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
WS-09_102009_01_TAD	bis(2-Ethylhexyl)phthalate	2.2 JB ug/L	All Project Samples	22.0 ug/L
9295172-BLK	bis(2-Ethylhexyl)phthalate	2.1 J ug/L	All Project Samples	21.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9295313-BLK	Nickel	0.00032 J mg/L	All Project Samples	0.0032 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9J210285

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-140_102009_01_TAD3
WS-09_102009_01_D_TAD
WS-09_102009_01_T_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Gross Alpha, Beta in water	900	6 months
2.	Strontium-90	905	6 months
3.	Dioxins	EPA 8290	1 YEAR

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9302431-BLK	OCDD	11 J pg/L	All Project Samples	55 pg/L

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was

analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9J220340

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID	Sample ID
RD-13_102109_01_TAD	RD-56B_102109_01_TAD
RD-13_102109_19_TAD	RD-57(Z7)_102109_01_TAD
RD-13_102109_36_TAD	
RD-13_102109_78_TAD	
RD-22(Z2)_102109_01_TAD	
RD-22(Z2)_102109_36_TAD	
RD-33C_102109_01_TAD	
RD-43A_102109_01_TAD	
RD-43A_102109_19_TAD	
RD-43A_102109_36_TAD	
RD-43B_102109_01_TAD	
RD-43B_102109_36_TAD	
RD-43C_102109_01_TAD	

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	Explosives-Energetics	8330	7 days ext/40 days analysis
3.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
4.	Perchlorate	EPA 314.0	28 days
5.	NDMA	EPA 1625C(M)	7 days
6.	Hydrazines	EPA 8315	3 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project

sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-13_102109_19_TAD	Methylene chloride	0.94 J ug/L	All Project Samples	4.7 ug/L
	Chloroform	2 J ug/L		20.0 ug/L
RD-13_102109_78_TAD	Methylene chloride	2.4 J ug/L	All Project Samples	24.0 ug/L
RD-43A_102109_19_TAD	Methylene chloride	1.9 J ug/L	All Project Samples	19.0 ug/L
	Chloroform	0.87 J		4.4

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
D9J220340014S	Bromoform	74 - 121	71	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of

the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Irvine, CA
Sample Delivery Group # D9J230301

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID	Sample ID
HAR-08_102209_01_TAD	RD-58A_102209_01_TAD
RD-05B_102209_01_TAD	RD-58B_102209_01_TAD
RD-05B_102209_19_TAD	RD-61_102209_01_D_TAD
RD-05B_102209_36_TAD	RD-61_102209_01_TAD
RD-05B_102209_78_TAD	RD-67_102209_01_TAD
RD-05C_102209_01_TAD	RD-58B_102209_19_TAD
RD-05C_102209_36_TAD	
RD-18_102209_01_TAD	
RD-33B_102209_01_TAD	
RD-46B_102209_01_TAD	
RD-46B_102209_19_TAD	
RD-46B_102209_36_TAD	
RD-52C_102209_01_TAD	

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
4.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
5.	ICP Metals	EPA 6010B/200.7	180 days
6.	ICP/MS Metals	EPA 6020/200.8	180 days
7.	Mercury	EPA 7470A	28 days
8.	NDMA	EPA 1625C(M)	7 days
9.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
10.	TPH(d)	EPA 8015B	14 days
11.	Fluoride	EPA 300.0	28 days
12.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
13.	Perchlorate	EPA 314.0	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group, with the following exception(s):

During the analysis of VOCs (EPA Method 8260B) preservation and/or technical holding times were exceeded for project samples shown below. Sample results should be qualified according to the actions specified in the following table:

Lab ID	Sample ID	Matrix	Action
D9J230301-014	RD-58A_102209_01_TAD	GW	See Action #1 Below

Action #1

Positive results are qualified "J", estimated and non-detected analytes as "UJ", estimated reporting limit.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-05B_102209_19_TAD	Chloroform	0.59 J ug/L	All Project Samples	3.0 ug/L
	Methylene chloride	1.4 ug/L		14.0 ug/L
RD-05B_102209_78_TAD	Methylene chloride	1.7 JB ug/L	All Project Samples	17.0 ug/L
9304048-BLK	Methylene chloride	0.34 J ug/L	All Project Samples	3.4 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-46B_102209_19_TAD	bis(2-Ethylhexyl)phthalate	1.8 JB ug/L	All Project Samples	18.0 ug/L
92988013-BLK	bis(2-Ethylhexyl)phthalate	1.9 J ug/L	RD-46B_102209_01_TAD	19.0 ug/L
	Chrysene	0.59 J	RD-46B_102209_19_TAD	3.0
			RD-58A_102209_01_TAD	
			RD-58B_102209_01_TAD	
93001110-BLK	bis(2-Ethylhexyl)phthalate	1.9 J ug/L	HAR-08_102209_01_TAD	19.0 ug/L
	Chrysene	0.56 J ug/L		2.8 ug/L
9301160-BLK	bis(2-Ethylhexyl)phthalate	2.5 J ug/L	RD-61_102209_01_TAD	25.0 ug/L
RD-46B_102209_19_TAD	EFH(C15-C20)	0.056 J mg/L	RD-46B_102209_01_TAD	0.3 mg/L
	EFH(C21-C30)	0.18 J mg/L	RD-46B_102209_19_TAD	0.9 mg/L
			RD-61_102209_01_TAD	

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with

the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
9304048-MS	1,2-Dichloroethane	74 - 120	121	RD-05B_102209_36_TAD RD-05B_102209_78_TAD RD-05C_102209_01_TAD RD-05C_102209_36_TAD RD-18_102209_01_TAD RD-33B_102209_01_TAD RD-52C_102209_01_TAD RD-58A_102209_01_TAD RD-58B_102209_01_TAD RD-61_102209_01_TAD RD-67_102209_01_TAD

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Type	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)
9301075-MS	MS	Zinc	180	RD-61_102209_01_D_TAD	J	
9301075-MSD	MSD	Zinc	165	RD-61_102209_01_D_TAD	J	

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9J240196

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-16_102309_01_TAD
HAR-16_102309_36_TAD
RD-32_102309_01_TAD
RD-32_102309_19_TAD
RD-32_102309_78_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9307153-BLK	Carbon disulfide	0.73 J ug/L	HAR-16_102309_01_TAD HAR-16_102309_36_TAD RD-32_102309_01_TAD	3.7 ug/L
RD-32_102309_19_TAD	Chloroform	0.88 J ug/L	All Project Samples	4.4 ug/L
RD-32_102309_78_TAD	Methylene chloride	0.61 JB ug/L	All Project Samples	6.1 ug/L
9308537-BLK	Methylene chloride	0.47 J ug/L	RD-32_102309_19_TAD	4.7 ug/L

			RD-32_102309_78_TAD	

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9J280189

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-01_102709_01_TAD
RD-01_102709_19_TAD
RD-03_102709_01_D_TAD
RD-03_102709_01_TAD
RD-03_102709_19_TAD
RD-03_102709_36_TAD
RD-10_102709_01_TAD
RD-10_102709_36_TAD
RD-24_102709_01_TAD
RD-24_102709_78_TAD
RD-24_102709_19_TAD
RD-01_102709_78_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
4.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
5.	ICP Metals	EPA 6010B/200.7	180 days
6.	ICP/MS Metals	EPA 6020/200.8	180 days
7.	Mercury	EPA 7470A	28 days
8.	NDMA	EPA 1625C(M)	7 days
9.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
10.	PCBs	EPA 8082/608	7 days ext/40 days analysis
11.	Fluoride	EPA 300.0	28 days
12.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
13.	Perchlorate	EPA 314.0	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-01_102709_19_TAD	Chloroform	0.82 J ug/L	All Project Samples	4.1 ug/L
9308537-BLK	Methylene chloride	0.47 J ug/L	All Project Samples	4.7 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review,

the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica Laboratories – Denver, CO
Sample Delivery Group # D9J280190

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-03_102709_01_TAD3

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins	EPA 8290	1 year

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9302431-BLK	OCDD	11 J pg/L	All Project Samples	55 pg/L

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Type	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)
D9J280190001S	MS	OCDF	52	RD-03_102709_01_TAD3	J	UJ
D9J280190001D	MSD	OCDF	49	RD-03_102709_01_TAD3	J	UJ

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9J290208

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-04_102809_01_TAD
RD-04_102809_36_TAD
RD-37_102809_01_TAD
RD-37_102809_19_TAD
RD-37_102809_36_TAD
RD-44_102809_01_D_TAD
RD-44_102809_01_TAD
RD-44_102809_19_D_TAD
RD-44_102809_19_TAD
RD-44_102809_36_TAD
RD-44_102809_78_TAD
RD-48C_102809_01_TAD
RD-48C_102809_19_TAD

Sample ID
RD-48C_102809_36_TAD
RD-62_102809_01_D_TAD
RD-62_102809_01_TAD
RD-62_102809_36_D_TAD
RD-62_102809_36_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
4.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
5.	ICP Metals	EPA 6010B/200.7	180 days
6.	ICP/MS Metals	EPA 6020/200.8	180 days
7.	Mercury	EPA 7470A	28 days
8.	NDMA	EPA 1625C(M)	7 days
9.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
10.	Herbicides, Chlorinated	EPA 8151A	7 days ext/40 days analysis
11.	Fluoride	EPA 300.0	28 days
12.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
13.	Perchlorate	EPA 314.0	28 days
14.	TPH(d)	EPA 8015B	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-37_102809_19_TAD	Chloroform	0.51 J ug/L	All Project Samples	2.6 ug/L
9308537-BLK	Methylene chloride	0.47 J ug/L	All Project Samples	4.7 ug/L
RD-44_102809_19_TAD	Chloroform	0.83 J ug/L	All Project Samples	4.2

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-44_102809_19_D_TAD	Boron	0.0042 J mg/L	All Project Samples	0.042 mg/L
	Magnesium	0.019 J mg/L		0.19 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
9304071-MS	Benzidine	10 - 120	0	All Project Samples
	N-Nitrosodiphenylamine	58 - 120	53	
9304071-MSD	N-Nitrosodiphenylamine	58 - 120	50	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target

analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica. - Knoxville, TN
Sample Delivery Group # D9J290291

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-37_102809_19_TAD3
RD-37_102809_01_TAD3
RD-37_102809_36_TAD3

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins	EPA 8290	1 year

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for

completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9J300214

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-18_102909_01_TAD
HAR-18_102909_19_TAD
HAR-20_102909_01_TAD
HAR-26_102909_01_TAD
HAR-26_102909_36_TAD
PZ-006D_102909_01_TAD
PZ-006E_102909_01_TAD
WS-06_102909_01_TAD
WS-06_102909_19_TAD
WS-06_102909_78_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
4.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
5.	Perchlorate	EPA 314.0	28 days
6.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-	48 hours
7.	Fluoride	EPA 300.0	28 days
8.	NDMA	EPA 1625C(M)	7 days
9.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project

sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
WS-06_102909_19_TAD	Chloroform	0.62 J ug/L	All Project Samples	3.1 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
9304071-MS	Benzidine	10 - 120	0	All Project Samples
	N-Nitrosodiphenylamine	58 - 120	53	
9304071-MSD	N-Nitrosodiphenylamine	58 - 120	50	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9K020444

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-24_102709_01_D_TAD3
RD-24_102709_01_T_TAD3
RD-54B_102709_01_D_TAD3
RD-54B_102709_01_T_TAD3
RD-54B_102709_19_D_TAD3
RD-54B_102709_19_T_TAD3
RD-54B_102709_36_D_TAD3
RD-54B_102709_36_T_TAD3

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Gross Alpha, Beta in water	900	6 months
2.	Strontium-90	905	6 months
3.	Tritium	906	6 months
4.	Uranium, Isotopic	908	6 months

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was

analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica. - Knoxville, TN
Sample Delivery Group # D9K030514

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-076_110209_01_TAD3
PZ-076_110209_19R_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins	EPA 8290	1 year

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and

compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9K030529

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-076_110209_01_D_TAD
PZ-076_110209_01_TAD
PZ-076_110209_19_TAD
PZ-076_110209_78_TAD
RD-41B_110209_01_TAD
RD-55B_110209_01_TAD
RD-55B_110209_36_TAD
RD-41B_110209_36_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
4.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
5.	ICP Metals	EPA 6010B/200.7	180 days
6.	ICP/MS Metals	EPA 6020/200.8	180 days
7.	Mercury	EPA 7470A	28 days
8.	NDMA	EPA 1625C(M)	7 days
9.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
10.	Perchlorate	EPA 314.0	28 days
11.	Fluoride	EPA 300.0	28 days
12.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
13.	TPH(d)	EPA 8015B	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group, with the following exception(s):

During the analysis of VOCs (EPA Method 8260B) preservation and/or technical holding times were exceeded for project samples shown

below. Sample results should be qualified according to the actions specified in the following table:

Lab ID	Sample ID	Matrix	Action
D9K030529-005	RD-41B_110209_01_TAD	GW	See Action #1 Below
D9K030529-007	RD-41B_110209_36_TAD	GW	See Action #1 Below

Action #1
PLEASE SELECT ACTION FROM LIST…

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
PZ-076_110209_19_TAD	Chloroform	0.61 J ug/L	All Project Samples	32.3 ug/L
PZ-076_110209_78_TAD	Acetone	12.0 ug/L	All Project Samples	120.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9308237-BLK	bis(2-Ethylhexyl)phthalate	3 J ug/L	All Project Samples	30.0 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of

the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9K040450

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-17_110309_01_TAD
HAR-17_110309_36_TAD
PZ-141_110309_01_D_TAD
PZ-141_110309_01_TAD
PZ-141_110309_19_TAD
PZ-141_110309_36_TAD
PZ-141_110309_78_TAD
RD-39B_110309_01_TAD
RD-48B_110309_01_TAD
RD-55A_110309_01_TAD
PZ-141_110309_19R_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
4.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
5.	ICP Metals	EPA 6010B/200.7	180 days
6.	ICP/MS Metals	EPA 6020/200.8	180 days
7.	Mercury	EPA 7470A	28 days
8.	NDMA	EPA 1625C(M)	7 days
9.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
10.	PCBs	EPA 8082/608	7 days ext/40 days analysis
11.	Fluoride	EPA 300.0	28 days
12.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
13.	Perchlorate	EPA 314.0	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for

each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
PZ-141_110309_19_TAD	Chloroform	0.42 J ug/L	All Project Samples	2.1 ug/L
PZ-141_110309_78_TAD	Gasoline Range Organics (C6-C12)	9.2 J ug/L	All Project Samples	46.0 ug/L
9316328-BLK	Gasoline Range Organics (C6-C12)	9 J ug/L	All Project Samples	45.0 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9310095-BLK	Silver	0.000015 J mg/L	All Project Samples	0.00015 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
9316147-MSD	cis-1,2-Dichloroethene	75 - 120	121	All Project Samples
	Trichloroethene	78 - 122	417	
9316147-MS	Trichloroethene	78 - 122	408	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
9309265-LCS	N-Nitrosodimethylamine	44 - 120	131	All Project Samples
9309265-LCSD	N-Nitrosodimethylamine	44 - 120	142	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica. - Knoxville, TN
Sample Delivery Group # D9K040486

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-141_110309_01_TAD3

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins	EPA 8290	1 year

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Denver, Co
Sample Delivery Group # D9K050472

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-08_110409_01_TAD
RD-08_110409_19_TAD
RD-08_110409_36_TAD
RD-11_110409_01_TAD
RD-59A_110409_01_TAD
RD-59B_110409_01_TAD
RD-59C_110409_01_TAD
RD-68A_110409_01_TAD
RD-68A_110409_19_TAD
RD-68A_110409_78_TAD
RD-68B_110409_01_TAD
RD-69_110409_01_D_TAD
RD-69_110409_01_TAD

Sample ID
RD-69_110409_19_D_TAD
RD-69_110409_19_TAD
RD-69_110409_36_D_TAD
RD-69_110409_36_TAD

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	1,4-Dioxane	GC/MS Isotope Dilution	7 days
4.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
5.	ICP Metals	EPA 6010B/200.7	180 days
6.	pH	EPA 150.1	ASAP (24 hours)
7.	Specific Conductance	EPA 120.1/SM 2510B	28 days
8.	NDMA	EPA 1625C(M)	7 days
9.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-NH3 B/E	28 days
10.	Sulfate	EPA 300.0/375.4	28 days
11.	Fluoride	EPA 300.0	28 days
12.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-NO3	48 hours
13.	Chloride	EPA 300.0/SM 4500-Cl	28 days
14.	Alkalinity	SM 2320B	14 days
15.	Solids, Total Dissolved (TDS)	EPA 160.1	7 days
16.	Turbidity	EPA 180.1	48 hours

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers

- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-68A_110409_19_TAD	Chloroform	0.65 J ug/L	All Project Samples	3.3 ug/L
	Methylene chloride	0.58 J ug/L		5.8 ug/L
RD-68A_110409_78_TAD	Acetone	3.2 J ug/L	All Project Samples	32.0 ug/L
	Carbon disulfide	0.55 J ug/L		2.8 ug/L
	Methylene chloride	1.4 J ug/L		14.0 ug/L
9318034-BLK	Methylene chloride	0.53 J ug/L	RD-68A_110409_19_TAD RD-68A_110409_78_TAD RD-68B_110409_01_TAD	5.3

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
RD-69_110409_19_D_TAD	Calcium	0.10 J mg/L	All Project Samples	1 mg/L
	Magnesium	0.027 mg/L		0.27 mg/L
	Sodium	0.16 J mg/L		1.6 mg/L
	Strontium	0.0012 mg/L		0.012 mg/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9310106-BLK	Fluoride ion	0.061 J mg/L	All Project Samples	3.233 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount

of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Irvine, CA
Sample Delivery Group # ISJ2055

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-51C_101909_03H_TAI

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	NDMA	EPA 1625C(M)	7 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9286178-BLK	bis(2-Ethylhexyl)phthalate	2.8 J ug/L	All Project Samples	28.0 ug/L
	Chrysene	0.76 J ug/L		3.8 ug/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix

interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Irvine, CA
Sample Delivery Group # ISJ2269

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
PZ-140_102009_03_D_TAI
RD-16_102009_03_TAI
RD-16_102009_78_TAI

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	ICP Metals	EPA 6010B/200.7	180 days
3.	ICP/MS Metals	EPA 6020/200.8	180 days
4.	Mercury	EPA 7470A	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9J23108-BLK1	Lead	0.000257 mg/L		0.00257 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
9J30019-BS1_ISJ2269	cis-1,3-Dichloropropene	75 - 125	126	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Irvine, CA
Sample Delivery Group # ISJ2383

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-13_102109_03_TAI
RD-43A_102109_03_TAI
RD-43A_102109_78_TAI
RD-43C_102109_03_TAI

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days
2.	Explosives-Energetics	8330	7 days ext/40 days analysis
3.	Formaldehyde	EPA 8315	3 days ext/ 3 days analysis
4.	NDMA	EPA 1625C(M)	7 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group, with the following exception(s):

During the analysis of SVOCs (EPA Method 8270C) preservation and/or technical holding times were exceeded for project samples shown below. Sample results should be qualified according to the actions specified in the following table:

Lab ID	Sample ID	Matrix	Action
ISJ2383-01	RD-13_102109_03_TAI	GW	See Action #1 Below

Action #1
Positive results are qualified "J", estimated and non-detected analytes as "UJ", estimated detection limit.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the

following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9286178-BLK	1,3,5-Trinitrobenzene	0.031 ug/L	RD-13_102109_03_TAI	0.155 ug/L

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
708491-MB	Formaldehyde	1.21 J mg/L	RD-13_102109_03_TAI	6.05 mg/L

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
9J30019-BS1	cis-1,3-Dichloropropene	75 - 125	126	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
G9J270000236C	Nitrobenzene	69 - 119	121	

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than

10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Irvine, CA
Sample Delivery Group # ISJ2613

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-46B_102209_03_TAI

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Irvine, CA
Sample Delivery Group # ISJ2693

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-16_102309_03_TAI
RD-32_102309_03_TAI
RD-32_102309_78_TAI

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
9K02014-BS1	cis-1,3-Dichloropropene	75 - 125	130	RD-32_102309_78_TAI
9K02014-MSD1	cis-1,3-Dichloropropene	70 - 130	132	RD-32_102309_78_TAI

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Irvine, CA
Sample Delivery Group # ISJ2937

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-01_102709_03_TAI
RD-03_102709_03_D_TAI
RD-03_102709_03_TAI

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	TPH(d)	EPA 8015B	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	PCBs	EPA 8082/608	7 days ext/40 days analysis
4.	ICP Metals	EPA 6010B/200.7	180 days
5.	ICP/MS Metals	EPA 6020/200.8	180 days
6.	Mercury	EPA 7470A	28 days
7.	Fluoride	EPA 300.0	28 days
8.	Nitrogen, Nitrate (NO3)	EPA 300.0/SM 4500-	48 hours
9.	Nitrogen, Ammonia (NH3)	EPA 350.2/SM 4500-	28 days
10.	Perchlorate	EPA 314.0	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
9J28068-BS1	Benzidine	30 - 160	0	RD-01_102709_03_TAI

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Irvine, CA
Sample Delivery Group # ISJ3110

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-37_102809_03_TAI
RD-44_102809_03_TAI
RD-48C_102809_03_TAI
RD-62_102809_03_TAI

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	TPH(d)	EPA 8015B	14 days
2.	SVOCs (BNAs)	EPA 8270C/625	7 days ext/40 days analysis
3.	NDMA	EPA 1625C(M)	7 days
4.	Perchlorate	EPA 314.0	28 days
5.	Herbicides, Chlorinated	EPA 8151A	7 days ext/40 days analysis

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control

criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
9J30107-BS2	N-Nitrosodimethylamine	60 - 140	182	RD-44_102809_03_TAI

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Irvine, CA
Sample Delivery Group # ISJ3113

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-37_102809_03_TAI4

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Dioxins	EPA 8290	1 year

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target compounds were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples, with the following exception(s):

Blank	Target Analyte(s)	Concn.	Affected Sample(s)	Flag sample results with a "U" if < to this value
9307293-BLK	OCDD	1.2 J,Q pg/L	All Project Samples	6 pg/L
	1,2,3,4,6,7,8-HpCDD	0.42 J,Q pg/L		2.1

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the

following exception(s):

LCS ID / Project Sample MS	Type	Target Analyte(s)	%R	Affected Sample(s)	Positive Results	Non Detect (ND)
9307293-LCS	LCS	1,2,3,7,8,9-HxCDD	134	All Project Samples	J	

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Irvine, CA
Sample Delivery Group # ISJ3225

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
WS-06_102909_03_TAI

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	Perchlorate	EPA 314.0	28 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Irvine, CA
Sample Delivery Group # ISJ3338

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004)
- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Sample Data Reporting Format
- Data Qualifiers
- Summary

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Irvine, CA
Sample Delivery Group # ISK0150

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
RD-55B_110209_03_TAI

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria. No qualification of the data is recommended.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a “B”. If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the “B” qualifier was not carried forward for database input; if less than the 10X or 5X rule the “B” qualifier was replaced with a “U”. The “J” qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

Data Usability Summary Report (DUSR)
Boeing-SSFL
Analytical Laboratory: TestAmerica – Irvine, CA
Sample Delivery Group # ISK0527

Analytical results for the project samples were reviewed to evaluate the data usability. Data was assessed in accordance with guidance from the following Federal and/or State guidance documents:

- USEPA National Functional Guidelines for Organic Data Review (EPA 540/R-99/008)

and method protocol criteria where applicable as prescribed by "Test Methods for Evaluating Solid Waste", SW846, Update III, 1996.

This DUSR pertains to the following samples:

Sample ID
HAR-17_110309_03_TAI
HAR-17_110309_78_TAI
PZ-141_110309_03_TAI

Project Samples were analyzed according to the following analytical methods:

	Parameter	Analytical Method	Holding Time Criteria
1.	VOCs	EPA 8260B/624	14 days

The following items/criteria applicable to the analysis of project samples and associated QA/QC procedures were reviewed.

- Holding Times
- Blank Sample Analysis
- System Monitoring Compound Recoveries
- Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries
- Sample Data Reporting Format
- Data Qualifiers
- Summary

Preservation and Holding Times

Maximum allowable holding times, measured from the time of sample collection to the time of sample preparation or analysis, were met for each project sample analyzed as part of this sample delivery group. No qualification of the data is recommended.

Blank Sample Analysis

In accordance with cited USEPA guidelines, positive sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for metals and the common organic laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane, and phthalate esters), or 5 times (5X) the amount for other target compounds. Target analytes were not detected in associated blank samples (trip, equipment, method) prepared and analyzed concurrently with the project samples. No qualification of the data is recommended.

System Monitoring Compound Recoveries

System monitoring/surrogate compounds are added to each sample prior to analysis of organic parameters by EPA Methods 8260B, 8270C and/or 8082 to confirm the efficiency of the sample preparation procedure. The calculated recovery for each surrogate compound was evaluated to confirm the accuracy of the reported results. The calculated recovery of these compounds fell within the laboratory specific quality control criteria. In a few instances, sample extracts required dilution prior to analysis to either improve instrument performance by minimizing matrix interference or enable quantification of the detected target analytes within the instrument calibration range. Where applicable, the laboratory qualified the reported results indicating the system monitoring compound recovery could not be calculated due to a sample extract dilution. In cases where the instrument resolution appeared to be unaffected by the diluted sample matrix, the sample results were accepted without qualification. No qualification of the data is recommended.

Laboratory Control Samples, Matrix Spike/Matrix Spike Duplicate Recoveries

Analytical precision and accuracy was evaluated based on the laboratory control and matrix spike sample analyses performed concurrently with the project samples. For matrix spike samples, after the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability to identify these compounds within the sample matrix. For LCS analyses, after the addition of a known amount of each target analyte into laboratory reagent water, the sample was analyzed to confirm the ability of the analytical system to accurately quantify the compounds. The reported recovery of MS/MSD and LCS analyses fell within the laboratory QA acceptance criteria, with the following exception(s):

LCS ID / Project Sample MS	Target Analyte(s)	%R Criteria	%R	Affected Sample(s)
9K11033-BS1	cis-1,3-Dichloropropene	75 - 125	127	All Project Samples
9K11033-MS1	Acetone	20 - 150	161	All Project Samples
9K11033-MSD1	Acetone	20 - 150	171	All Project Samples

Action:

If the LCS %R is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the LCS %R is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "R". If the MS/MSD is from a project sample and the %R greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the MS/MSD %R is >10%, but less than the lower acceptance limit, associated analyte positive results are qualified "J" and non-detects are qualified "UJ". If the MS/MSD %R is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R". MS/MSD qualifiers are only applied to affected samples of the same matrix. If the MS/MSD is a LAB sample do not qualify project samples.

Sample Data Reporting Format

The sample data are presented using USEPA Contract Laboratory Protocol (CLP) format. The data package has been reviewed for completeness and found to contain each required sample result and associated QA/QC report form. The reporting format is complete and compliant with the objectives of the project. No qualification of the data is recommended.

Data Qualifiers

Data qualifiers were assigned by the laboratory to the reported results to identify target analytes detected below the reporting limit but above the method detection limit, and/or when target analytes were detected in the associated method/preparation blank sample. Based on a spot check of the data qualifiers used, these flags appeared to be applied to the reported results in accordance with EPA guidance.

Organic analyses samples that contained concentrations of target analytes at a reportable level in the associated method blanks were flagged by the laboratory with a "B". If the target analyte concentration was greater than 10 times (10X) the amount in any blank for the common laboratory contaminants or 5 times (5X) the amount for other target compounds, the "B" qualifier was not carried forward for database input; if less than the 10X or 5X rule the "B" qualifier was replaced with a "U". The "J" qualifier, which indicates an estimated value because the result was between the MDL and RL was carried through to the database.

Summary

The results presented in each report were found to be compliant with the data quality objectives for the project and usable. Based on our review, the usability of the data is 100%, with the few exceptions noted above.

APPENDIX E

Results of Radiological Analyses

APPENDIX E
RESULTS OF RADIOLOGICAL ANALYSES

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RESULTS OF RADIOLOGICAL ANALYSES……1

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APPENDIX E

RESULTS OF RADIOLOGICAL ANALYSES

This appendix contains a compilation of radiochemistry data obtained during the quarterly groundwater monitoring program and new well construction activities. Table E-I presents the results for gross alpha and gross beta analyses. Table E-II presents the results for tritium and Table E-III presents the results for man-made beta- and gamma-emitting radionuclides. Table E-IV presents the results for naturally occurring gamma-emitting radionuclides. Table E-V presents the results for all other specific isotopes, including isotopic uranium, isotopic thorium, and other isotopes.

Any radionuclide activity detected is reported by the laboratory, though the reported activity may be less than the overall laboratory error. Analytical results that are less than the instrument background count are shown as negative values.

A result is considered non-detectable when it is less than the minimum detectable activity (MDA), when it is less than the overall laboratory error, or when the sample count is less than the instrument background count. In these cases, radioactivity is not considered to be present at detectable concentrations.

As discussed in Appendix D, project specific MDAs were not always attained due in part to matrix conditions (e.g., dissolved and suspended solids) and limitations in the prescribed analytical methods (e.g., sample volumes, counting times).

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Piezometers										
PZ-101		Primary	06/02/05	Gross alpha	5.06	3.3	3.16	Filtered		ES
PZ-101		Primary	06/02/05	Gross beta	3.53 U	3.7	5.82	Filtered		ES
PZ-107		Primary	06/02/05	Gross alpha	6.33	4	3.37	Filtered		ES
PZ-107		Primary	06/02/05	Gross beta	9.07	6	8.82	Filtered		ES
PZ-111		Primary	06/02/05	Gross alpha	3.84	3.1	3.6	Filtered		ES
PZ-111		Primary	06/02/05	Gross beta	5.53 U	4.7	7.38	Filtered		ES
PZ-116		Primary	06/02/05	Gross alpha	12.5	6.3	5.2	Filtered		ES
PZ-116		Primary	06/02/05	Gross beta	28.5	8.6	8.16	Filtered		ES
Shallow Wells										
ECL-FD		Primary	06/03/91	Gross alpha	9.43	7.35	4	Filtered		IT
ECL-FD		Primary	06/03/91	Gross beta	1.21 U	2.96	4	Filtered		IT
ECL-FD		Primary	12/12/91	Gross alpha	5.73	4.46	4	Filtered		IT
ECL-FD		Primary	12/12/91	Gross beta	8.37	3.08	4	Filtered		IT
ES-06		Primary	12/08/89	Gross alpha	0.404 U	0.502	---	Filtered		UST
ES-06		Primary	12/08/89	Gross beta	0.84 U	2.1	---	Filtered		UST
ES-12		Primary	03/03/89	Gross alpha	12	5	---	Unfiltered		FGL
ES-12		Primary	03/03/89	Gross beta	24	6	---	Unfiltered		FGL
ES-24		Primary	03/03/89	Gross alpha	7	4	---	Unfiltered		FGL
ES-24		Primary	03/03/89	Gross beta	7	5	---	Unfiltered		FGL
ES-24		Primary	06/03/89	Gross alpha	10.7	3.8	---	Unfiltered		BC
ES-24		Primary	06/03/89	Gross beta	2.1	0.7	---	Unfiltered		BC
ES-24		Primary	09/10/89	Gross alpha	1 U	2.4	---	Filtered		BC
ES-24		Primary	09/10/89	Gross alpha	3.7	2.5	---	Unfiltered		UST
ES-24		Duplicate	09/10/89	Gross alpha	5.9	1.5	---	Filtered		BC
ES-24		Duplicate	09/10/89	Gross alpha	10.5	1.9	---	Unfiltered		UST
ES-24		Primary	09/10/89	Gross beta	6	0.6	---	Filtered		BC
ES-24		Primary	09/10/89	Gross beta	9.2	0.6	---	Unfiltered		UST
ES-24		Duplicate	09/10/89	Gross beta	6.8	0.3	---	Filtered		BC
ES-24		Duplicate	09/10/89	Gross beta	7.1	0.3	---	Unfiltered		UST
ES-31		Primary	07/23/89	Gross alpha	6.9	2.2	---	Unfiltered, Decanted		BC
ES-31		Primary	07/23/89	Gross beta	6.7	0.5	---	Unfiltered, Decanted		BC
ES-31		Primary	12/10/90	Gross alpha	2.79 U	2.1	4	Filtered		IT
ES-31		Primary	12/10/90	Gross beta	2.09 U	2.35	4	Filtered		IT
ES-31		Primary	03/04/91	Gross alpha	0.899 U	1.32	4	Filtered		IT
ES-31		Duplicate	03/04/91	Gross alpha	2.37 U	1.73	4	Filtered		IT
ES-31		Primary	03/04/91	Gross beta	4.79	2.55	4	Filtered		IT
ES-31		Duplicate	03/04/91	Gross beta	2.98 U	2.29	4	Filtered		IT
ES-31		Primary	06/06/91	Gross alpha	9.12	4.51	4	Filtered		IT
ES-31		Duplicate	06/06/91	Gross alpha	8.09	4.9	4	Filtered		IT
ES-31		Primary	06/06/91	Gross beta	4.94	2.59	4	Filtered		IT
ES-31		Duplicate	06/06/91	Gross beta	4.99	2.63	4	Filtered		IT
ES-31		Primary	09/07/91	Gross alpha	6.61	3.65	4	Filtered		IT

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
ES-31		Primary	09/07/91	Gross beta	7.63	2.32	4	Filtered		IT
ES-31		Primary	12/07/91	Gross alpha	7.57	4.02	4	Filtered		IT
ES-31		Primary	12/07/91	Gross beta	22.8	3.64	4	Filtered		IT
ES-31		Primary	03/05/92	Gross alpha	4	2	2	Filtered		CEP
ES-31		Primary	03/05/92	Gross beta	3 U	---	3	Filtered		CEP
ES-31		Primary	03/03/93	Gross alpha	4	3	2	Filtered	High statistics due to large amount of solids.	CEP
ES-31		Primary	03/03/93	Gross beta	6	4	3	Filtered		CEP
ES-31		Primary	02/22/94	Gross alpha	2 U	3.1	5.5	Filtered		LAS
ES-31		Primary	02/22/94	Gross beta	4.3 U	2.9	4.6	Filtered		LAS
ES-31		Primary	02/15/95	Gross alpha	23.5	6.5	4.2	Filtered		LAS
ES-31		Reanalysis of Primary	02/15/95	Gross alpha	22.5	6.2	4.7	Filtered		LAS
ES-31		Primary	02/15/95	Gross beta	20.9	3.7	4.1	Filtered		LAS
ES-31		Reanalysis of Primary	02/15/95	Gross beta	28	3.8	3.6	Filtered		LAS
ES-31		Primary	02/06/96	Gross alpha	2.4 U	3.6	6.1	Filtered		LAS
ES-31		Primary	02/06/96	Gross beta	2.3 U	2.8	4.7	Filtered		LAS
ES-31		Primary	02/04/97	Gross alpha	9.9	5.1	5.8	Filtered		LAS
ES-31		Primary	02/04/97	Gross beta	3.5 U	3.1	5.1	Filtered		LAS
ES-31		Primary	02/04/98	Gross alpha	11.5	3.7	2.6	Filtered		TN
ES-31		Primary	02/04/98	Gross beta	5.09	2	2.92	Filtered		TN
ES-31		Primary	02/06/99	Gross alpha	6.85	3.3	3.52	Filtered		TN
ES-31		Primary	02/06/99	Gross beta	4.33	2.7	4.18	Filtered		TN
ES-31		Primary	02/06/00	Gross alpha	4.36	2.6	3.09	Filtered		TR
ES-31		Primary	02/06/00	Gross beta	4.79 U	3.2	5.06	Filtered		TR
ES-31		Primary	02/15/01	Gross alpha	3.16	2.3	2.68	Filtered		ES
ES-31		Primary	02/15/01	Gross beta	4.41	1.8	2.59	Filtered		ES
ES-31		Primary	02/18/02	Gross alpha	10.49	3.59	2.08	Filtered		DL
ES-31		Primary	02/18/02	Gross beta	2.79	1.76	2.55	Filtered		DL
ES-31		Primary	02/19/03	Gross alpha	2.33 U	2.2	2.73	Filtered		ES
ES-31		Primary	02/19/03	Gross beta	3.64 J	1.9	2.8	Filtered		ES
ES-31		Primary	03/10/05	Gross alpha	-0.145 U	1.5	3.07	Filtered		ES
ES-31		Primary	03/10/05	Gross beta	2.29 U	2.4	3.91	Filtered		ES
ES-31		Primary	12/07/05	Gross alpha	2.41 U	2.3	2.72	Filtered		ES
ES-31		Split	12/07/05	Gross alpha	5.75	3.62	4.4	Filtered		STL
ES-31		Primary	12/07/05	Gross beta	4.18	2.5	3.71	Filtered		ES
ES-31		Split	12/07/05	Gross beta	3.15 U	3.13	6.37	Filtered		STL
ES-31		Primary	02/21/06	Gross alpha	3.68 U	3	4.05	Filtered		ES
ES-31		Primary	02/21/06	Gross beta	3.38 J	2.3	3.34	Filtered		ES
ES-31		Primary	08/15/06	Gross alpha	0.343 U	2.2	3.8	Filtered		ES
ES-31		Primary	08/15/06	Gross beta	4.38	1.7	2.3	Filtered		ES
ES-31		Primary	02/28/07	Gross alpha	2.59 U	2	2.72	Filtered		ES
ES-31		Primary	02/28/07	Gross beta	3.71 U	3.9	6.05	Filtered		ES
ES-31		Primary	08/16/07	Gross alpha	-2.14 U	3.4	6.06	Filtered		ES
ES-31		Primary	08/16/07	Gross beta	14.1	3.5	2.85	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
ES-31		Primary	02/01/08	Gross alpha	8.75	2.9	1.94	Filtered		ES
ES-31		Primary	02/01/08	Gross beta	4.32	1.5	1.85	Filtered		ES
ES-31		Primary	08/19/08	Gross alpha	5.53	2.2	1.69	Filtered		ES
ES-31		Primary	08/19/08	Gross beta	5.19	1.3	1.76	Filtered		ES
ES-31		Primary	03/04/09	Gross alpha	4.63	1.9	2.12	Filtered		ES
ES-31		Primary	03/04/09	Gross alpha	7.53	2.4	1.95	Unfiltered		ES
ES-31		Primary	03/04/09	Gross beta	2.9 U	2	3.38	Filtered		ES
ES-31		Primary	03/04/09	Gross beta	5.45	1.6	2.22	Unfiltered		ES
ES-31		Primary	07/17/09	Gross alpha	5.48	1.9	1.59	Filtered		ES
ES-31		Primary	07/17/09	Gross alpha	6.62	2.1	1.52	Unfiltered		ES
ES-31		Primary	07/17/09	Gross beta	4.36	1.5	2.17	Filtered		ES
ES-31		Primary	07/17/09	Gross beta	3.89 J	1.3	1.87	Unfiltered		ES
HAR-03		Primary	09/11/89	Gross alpha	5	1.7	---	Filtered		BC
HAR-03		Primary	09/11/89	Gross alpha	19	2.5	---	Unfiltered		UST
HAR-03		Primary	09/11/89	Gross beta	2	0.5	---	Filtered		BC
HAR-03		Primary	09/11/89	Gross beta	13	0.6	---	Unfiltered		UST
HAR-04		Primary	06/02/89	Gross alpha	20.7	3.4	---	Unfiltered		BC
HAR-04		Primary	06/02/89	Gross beta	19.7	0.9	---	Unfiltered		BC
HAR-04		Primary	07/23/89	Gross alpha	1.7	1.3	---	Unfiltered, Decanted		BC
HAR-04		Primary	07/23/89	Gross beta	1.1	0.3	---	Unfiltered, Decanted		BC
HAR-04		Primary	09/11/89	Gross alpha	1.6	0.8	---	Filtered		BC
HAR-04		Primary	09/11/89	Gross alpha	8.9	1.6	---	Unfiltered		UST
HAR-04		Primary	09/11/89	Gross beta	3.1	0.2	---	Filtered		BC
HAR-04		Primary	09/11/89	Gross beta	8.9	0.5	---	Unfiltered		UST
HAR-11		Primary	06/02/89	Gross alpha	92.5	14.7	---	Unfiltered		BC
HAR-11		Primary	06/02/89	Gross beta	80.6	3.1	---	Unfiltered		BC
HAR-11		Primary	07/22/89	Gross alpha	4.9	1.1	---	Unfiltered, Decanted		BC
HAR-11		Primary	07/22/89	Gross beta	12.8	0.9	---	Unfiltered, Decanted		BC
HAR-14		Primary	06/02/89	Gross alpha	34	5.7	---	Unfiltered		BC
HAR-14		Primary	06/02/89	Gross beta	47.4	1.4	---	Unfiltered		BC
HAR-14		Primary	07/22/89	Gross alpha	11.9	2.3	---	Unfiltered, Decanted		BC
HAR-14		Primary	07/22/89	Gross beta	8.2	0.5	---	Unfiltered, Decanted		BC
HAR-14		Primary	09/12/89	Gross alpha	-1 U	2	---	Filtered		UST
HAR-14		Primary	09/12/89	Gross alpha	9.2	1	---	Unfiltered		UST
HAR-14		Split	09/12/89	Gross alpha	1 U	5	---	Filtered		TMA
HAR-14		Split	09/12/89	Gross alpha	0 U	3	---	Unfiltered		TMA
HAR-14		Primary	09/12/89	Gross beta	9.7	0.8	---	Filtered		UST
HAR-14		Primary	09/12/89	Gross beta	9	0.2	---	Unfiltered		UST
HAR-14		Split	09/12/89	Gross beta	3 U	5	---	Filtered		TMA
HAR-14		Split	09/12/89	Gross beta	14	6	---	Unfiltered		TMA

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
HAR-14		Primary	03/16/93	Gross alpha	5	3	2	Filtered		CEP
HAR-14		Primary	03/16/93	Gross beta	5	4	3	Filtered		CEP
HAR-14		Primary	06/08/93	Gross alpha	6	3	2	Filtered		CEP
HAR-14		Primary	06/08/93	Gross beta	11	4	3	Filtered		CEP
HAR-14		Primary	08/09/93	Gross alpha	2	1	2	Filtered		CEP
HAR-14		Primary	08/09/93	Gross beta	9	3	3	Filtered		CEP
HAR-14		Primary	11/04/93	Gross alpha	4.4	2.7	3.4	Filtered		CEP
HAR-14		Primary	11/04/93	Gross beta	5.4	2.8	4.2	Filtered		CEP
HAR-15		Primary	03/16/93	Gross alpha	8	5	2	Filtered		CEP
HAR-15		Primary	03/16/93	Gross alpha	70	14	2	Filtered		CEP
HAR-15		Primary	03/16/93	Gross beta	38	8	3	Filtered	Correspondence suggests that sample may be unfiltered.	CEP
HAR-15		Reanalysis of Primary	03/16/93	Gross beta	45	9	3	Filtered		CEP
HAR-15		Primary	06/08/93	Gross alpha	54	11	2	Filtered		CEP
HAR-15		Reanalysis of Primary	06/08/93	Gross alpha	4	3	2	Filtered		CEP
HAR-15		Primary	06/08/93	Gross beta	66	10	3	Filtered		CEP
HAR-15		Reanalysis of Primary	06/08/93	Gross beta	7	5	3	Filtered		CEP
HAR-15		Primary	08/09/93	Gross alpha	4	3	2	Filtered	High statistics due to large amount of solids.	CEP
HAR-15		Primary	08/09/93	Gross beta	3 U	---	3	Filtered		CEP
HAR-15		Primary	11/04/93	Gross alpha	14.8	6.4	6.7	Filtered		LAS
HAR-15		Reanalysis of Primary	11/04/93	Gross beta	9	3.7	5.4	Filtered		CEP
HAR-27		Primary	12/08/89	Gross alpha	2.69 U	2.73	---	Filtered		UST
HAR-27		Primary	12/08/89	Gross beta	5.65	2.73	---	Filtered		UST
HAR-30		Primary	06/02/89	Gross alpha	6.1	2.8	---	Unfiltered		BC
HAR-30		Primary	06/02/89	Gross beta	10.2	0.9	---	Unfiltered		BC
HAR-30		Primary	07/22/89	Gross alpha	5.6	2.2	---	Filtered		BC
HAR-30		Primary	07/22/89	Gross alpha	5	2	---	Unfiltered		FGL
HAR-30		Primary	07/22/89	Gross alpha	11.8	2.3	---	Unfiltered, Decanted		BC
HAR-30		Primary	07/22/89	Gross beta	8.4	0.7	---	Filtered		BC
HAR-30		Primary	07/22/89	Gross beta	3 U	4	---	Unfiltered		FGL
HAR-30		Primary	07/22/89	Gross beta	7.4	0.6	---	Unfiltered, Decanted		BC
HAR-30		Primary	09/11/89	Gross alpha	14.2	4.3	---	Unfiltered		BC
HAR-30		Primary	09/11/89	Gross beta	11.3	1.6	---	Unfiltered		BC
HAR-30		Primary	06/29/90	Gross alpha	10.7	4	---	Filtered		BC
HAR-30		Primary	06/29/90	Gross alpha	6.2	3.64	---	Filtered		UST
HAR-30		Primary	06/29/90	Gross beta	6.17	2.92	---	Filtered		UST
HAR-30		Primary	06/29/90	Gross beta	10.5	1.4	---	Filtered		BC
RS-05		Primary	10/19/89	Gross alpha	7.79	3.55	---	Filtered		UST
RS-05		Primary	10/19/89	Gross beta	3.17	1.85	---	Filtered		UST

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-05		Primary	10/31/89	Gross alpha	6.15	4.71	---	Filtered		UST
RS-05		Primary	10/31/89	Gross alpha	37.2	11.1	---	Unfiltered		UST
RS-05		Primary	10/31/89	Gross beta	5.3	2.8	---	Filtered		UST
RS-05		Primary	10/31/89	Gross beta	8.32	3.01	---	Unfiltered		UST
RS-06		Primary	06/03/89	Gross alpha	16.3	4.3	---	Unfiltered		BC
RS-06		Primary	06/03/89	Gross beta	12.6	0.8	---	Unfiltered		BC
RS-06		Primary	07/23/89	Gross alpha	5.1	2.1	---	Unfiltered, Decanted		BC
RS-06		Primary	07/23/89	Gross beta	14.7	0.3	---	Unfiltered, Decanted		BC
RS-07		Primary	06/04/89	Gross alpha	5.1 U	7.6	---	Unfiltered		BC
RS-07		Primary	06/04/89	Gross beta	4.3	1.4	---	Unfiltered		BC
RS-07		Primary	07/22/89	Gross alpha	2.1	0.9	---	Unfiltered		BC
RS-07		Primary	07/22/89	Gross beta	7.7	1.1	---	Unfiltered		BC
RS-07		Primary	09/11/89	Gross alpha	1.2 U	2.1	---	Filtered		BC
RS-07		Primary	09/11/89	Gross alpha	2 U	3.4	---	Unfiltered		UST
RS-07		Primary	09/11/89	Gross beta	5.5	0.8	---	Filtered		BC
RS-07		Primary	09/11/89	Gross beta	8.5	1.2	---	Unfiltered		UST
RS-08		Primary	06/04/89	Gross alpha	12.4	6.1	---	Unfiltered		BC
RS-08		Primary	06/04/89	Gross beta	14.5	1.1	---	Unfiltered		BC
RS-08		Primary	07/22/89	Gross alpha	15.5	1.5	---	Unfiltered, Decanted		BC
RS-08		Primary	07/22/89	Gross beta	17.1	1	---	Unfiltered, Decanted		BC
RS-08		Primary	03/18/93	Gross alpha	14	9	2	Filtered		CEP
RS-08		Primary	03/18/93	Gross beta	5	4	3	Filtered		CEP
RS-08		Primary	06/08/93	Gross alpha	16	7	2	Filtered		CEP
RS-08		Primary	06/08/93	Gross beta	13	4	3	Filtered		CEP
RS-08		Primary	08/09/93	Gross alpha	14	5	2	Filtered		CEP
RS-08		Primary	08/09/93	Gross beta	7	3	3	Filtered		CEP
RS-08		Primary	11/08/93	Gross alpha	19	10	11	Filtered		LAS
RS-08		Reanalysis of Primary	11/08/93	Gross beta	15.1 U	9.9	16	Filtered		LAS
RS-11		Primary	12/08/89	Gross alpha	1.38 U	1.63	---	Filtered		UST
RS-11		Primary	12/08/89	Gross beta	0.962 U	2.22	---	Filtered		UST
RS-11		Primary	12/06/90	Gross alpha	1.93 U	2.19	4	Filtered		IT
RS-11		Primary	12/06/90	Gross beta	-1.05 U	1.96	4	Filtered		IT
RS-11		Primary	03/04/91	Gross alpha	2.54 U	1.84	4	Filtered		IT
RS-11		Primary	03/04/91	Gross beta	0.981 U	2.19	4	Filtered		IT
RS-11		Primary	12/07/91	Gross alpha	3.77 U	2.63	4	Filtered		IT
RS-11		Primary	12/07/91	Gross beta	1.44 U	1.29	4	Filtered		IT
RS-11		Primary	03/05/92	Gross alpha	2 U	---	2	Filtered		CEP
RS-11		Primary	03/05/92	Gross beta	3 U	---	3	Filtered		CEP
RS-11		Primary	03/07/93	Gross alpha	2 U	---	2	Filtered		CEP
RS-11		Primary	03/07/93	Gross beta	6	4	3	Filtered		CEP
RS-11		Primary	02/22/94	Gross alpha	0 U	2.2	4.9	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-11		Primary	02/22/94	Gross beta	2.3 U	2.4	4	Filtered		LAS
RS-11		Primary	02/15/95	Gross alpha	19.4	5.6	4	Filtered		LAS
RS-11		Reanalysis of Primary	02/15/95	Gross alpha	0.4 U	2	4	Filtered		LAS
RS-11		Primary	02/15/95	Gross beta	16.6	3	3.3	Filtered		LAS
RS-11		Reanalysis of Primary	02/15/95	Gross beta	3.1	1.7	2.6	Filtered		LAS
RS-11		Primary	02/07/96	Gross alpha	9.4	4.4	5.5	Filtered		LAS
RS-11		Primary	02/07/96	Gross beta	5.4	2.4	3.6	Filtered		LAS
RS-11		Primary	02/04/97	Gross alpha	6.1	3.9	5.2	Filtered		LAS
RS-11		Primary	02/04/97	Gross beta	3.1 U	2.5	4	Filtered		LAS
RS-11		Primary	02/04/98	Gross alpha	2.6 U	2.4	3.46	Filtered		TN
RS-11		Primary	02/04/98	Gross beta	3.44	1.4	2.1	Filtered		TN
RS-11		Primary	02/06/99	Gross alpha	1.58 U	1.3	1.84	Filtered		TN
RS-11		Primary	02/06/99	Gross beta	2.36	1.5	2.31	Filtered		TN
RS-11		Primary	02/15/00	Gross alpha	0.381 U	1.6	3.24	Filtered		TR
RS-11		Primary	02/15/00	Gross beta	0.572 U	4.4	7.48	Filtered		TR
RS-11		Primary	02/06/01	Gross alpha	0.782 U	1.6	2.24	Filtered		ES
RS-11		Primary	02/06/01	Gross beta	5.1	1.7	2.46	Filtered		ES
RS-11		Primary	05/01/03	Gross alpha	1.65 U	1.8	2.83	Filtered		ES
RS-11		Primary	05/01/03	Gross beta	0.692 U	2.3	3.89	Filtered		ES
RS-11		Primary	02/17/05	Gross alpha	27.9	11	8.44	Filtered		ES
RS-11		Primary	02/17/05	Gross beta	12.2	7.5	11	Filtered		ES
RS-11		Primary	08/29/05	Gross alpha	10.9	4.3	4.24	Filtered		ES
RS-11		Primary	08/29/05	Gross beta	11.2	4.2	5.48	Filtered		ES
RS-11		Primary	02/21/06	Gross alpha	8.6 U	7.2	9.72	Filtered		ES
RS-11		Primary	02/21/06	Gross beta	-8.84 U	13	23.1	Filtered		ES
RS-11		Primary	08/10/06	Gross alpha	2.19 U	1.9	2.66	Filtered		ES
RS-11		Primary	08/10/06	Gross beta	0.122 U	2.4	3.86	Filtered		ES
RS-11		Primary	02/28/07	Gross alpha	16.7	5.6	4.58	Filtered		ES
RS-11		Primary	02/28/07	Gross beta	14.1	4.4	4.91	Filtered		ES
RS-11		Primary	05/02/08	Gross alpha	38.8	11	5.49	Filtered		ES
RS-11		Primary	05/02/08	Gross beta	21.1	4	4.15	Filtered		ES
RS-14		Primary	06/04/89	Gross alpha	-1 U	2.7	---	Unfiltered		BC
RS-14		Primary	06/04/89	Gross beta	7.6	0.5	---	Unfiltered		BC
RS-14		Primary	07/22/89	Gross alpha	5.2	2.2	---	Unfiltered, Decanted		BC
RS-14		Primary	07/22/89	Gross beta	5.8	0.7	---	Unfiltered, Decanted		BC
RS-14		Primary	09/10/89	Gross alpha	4.5	1.6	---	Filtered		BC
RS-14		Primary	09/10/89	Gross alpha	9	1.7	---	Unfiltered		UST
RS-14		Duplicate	09/10/89	Gross alpha	5.2	1.6	---	Filtered		BC
RS-14		Duplicate	09/10/89	Gross alpha	7.7	1.8	---	Unfiltered		UST
RS-14		Primary	09/10/89	Gross beta	4.4	0.4	---	Filtered		BC
RS-14		Primary	09/10/89	Gross beta	8.1	0.5	---	Unfiltered		UST
RS-14		Duplicate	09/10/89	Gross beta	5.3	0.4	---	Filtered		BC

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-14		Duplicate	09/10/89	Gross beta	6.9	0.4	---	Unfiltered		UST
RS-15		Primary	12/08/89	Gross alpha	4.12	2.33	---	Filtered		UST
RS-15		Primary	12/08/89	Gross beta	3.33	2.51	---	Filtered		UST
RS-15		Primary	12/07/91	Gross alpha	8.02	4	4	Filtered		IT
RS-15		Primary	12/07/91	Gross beta	4.55	2.12	4	Filtered		IT
RS-15		Primary	12/06/92	Gross alpha	4	3	2	Filtered		CEP
RS-15		Primary	12/06/92	Gross beta	8	3	3	Filtered		CEP
RS-16		Primary	03/09/92	Gross alpha	3	2	2	Filtered		CEP
RS-16		Primary	03/09/92	Gross beta	3 U	---	3	Filtered		CEP
RS-16		Primary	02/09/95	Gross alpha	3.1 U	4.4	7.5	Filtered		LAS
RS-16		Primary	02/09/95	Gross beta	1.4 U	4	7	Filtered		LAS
RS-16		Primary	02/04/97	Gross alpha	10.3	6.3	8.4	Filtered		LAS
RS-16		Primary	02/04/97	Gross beta	2.9 U	4.1	6.9	Filtered		LAS
RS-16		Primary	05/27/98	Gross alpha	5.34	2.7	2.96	Filtered		TN
RS-16		Primary	05/27/98	Gross beta	3	1.8	2.81	Filtered		TN
RS-16		Primary	02/23/05	Gross alpha	11.6	5.2	4.17	Filtered		ES
RS-16		Primary	02/23/05	Gross beta	8.93	4.4	5.91	Filtered		ES
RS-16		Primary	02/01/08	Gross alpha	8.38	2.8	2.26	Filtered		ES
RS-16		Primary	02/01/08	Gross beta	4.71	1.9	2.79	Filtered		ES
RS-17		Primary	12/08/89	Gross alpha	3.56	2.61	---	Filtered		UST
RS-17		Primary	12/08/89	Gross beta	1.1 U	2.18	---	Filtered		UST
RS-17		Primary	12/10/90	Gross alpha	8.36	4.63	4	Filtered		IT
RS-17		Primary	12/10/90	Gross beta	2.35 U	2.47	4	Filtered		IT
RS-17		Primary	12/07/91	Gross alpha	9.58	5.41	4	Filtered		IT
RS-17		Primary	12/07/91	Gross beta	1.54 U	2.36	4	Filtered		IT
RS-17		Primary	12/05/92	Gross alpha	3	2	2	Filtered		CEP
RS-17		Primary	12/05/92	Gross beta	4	3	3	Filtered		CEP
RS-18		Primary	03/03/89	Gross alpha	20	5	---	Unfiltered		FGL
RS-18		Primary	03/03/89	Gross beta	11	3	---	Unfiltered		FGL
RS-18		Primary	06/04/89	Gross alpha	27.6	8.4	---	Unfiltered		BC
RS-18		Primary	06/04/89	Gross beta	33	1.5	---	Unfiltered		BC
RS-18		Primary	03/27/90	Gross alpha	9.92	4.84	---	Filtered		UST
RS-18		Primary	03/27/90	Gross beta	8.48	2.98	---	Filtered		UST
RS-18		Primary	03/10/91	Gross alpha	16.4	5.86	4	Filtered		IT
RS-18		Duplicate	03/10/91	Gross alpha	11	5.73	4	Filtered		IT
RS-18		Primary	03/10/91	Gross beta	7.84	2.81	4	Filtered		IT
RS-18		Duplicate	03/10/91	Gross beta	6.06	2.97	4	Filtered		IT
RS-18		Primary	06/04/91	Gross alpha	22	7.92	4	Filtered		IT
RS-18		Duplicate	06/04/91	Gross alpha	18.4	7.5	4	Filtered		IT
RS-18		Primary	06/04/91	Gross beta	9.36	5.13	4	Filtered		IT
RS-18		Duplicate	06/04/91	Gross beta	13.1	5.61	4	Filtered		IT
RS-18		Primary	03/04/92	Gross alpha	3	2	2	Filtered		CEP
RS-18		Primary	03/04/92	Gross beta	3 U	---	3	Filtered		CEP
RS-18		Primary	06/04/92	Gross alpha	14	6	2	Filtered		CEP

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-18		Primary	06/04/92	Gross beta	11	3	3	Filtered		CEP
RS-18		Primary	09/10/92	Gross alpha	21	5	2	Filtered		CEP
RS-18		Reanalysis of Primary	09/10/92	Gross alpha	21	6	2	Filtered		CEP
RS-18		Split	09/10/92	Gross alpha	55	20	---	Filtered		BL
RS-18		Reanalysis of Split	09/10/92	Gross alpha	78	24	---	Filtered		BL
RS-18		Primary	09/10/92	Gross beta	32	5	3	Filtered		CEP
RS-18		Split	09/10/92	Gross beta	40	12	---	Filtered		BL
RS-18		Reanalysis of Split	09/10/92	Gross beta	50	10	---	Filtered		BL
RS-18		Primary	12/15/92	Gross alpha	13	6	2	Filtered		CEP
RS-18		Split	12/15/92	Gross alpha	24	14	2	Filtered		BL
RS-18		Primary	12/15/92	Gross beta	8	4	3	Filtered		CEP
RS-18		Split	12/15/92	Gross beta	19	9	4	Filtered		BL
RS-18		Primary	06/23/93	Gross alpha	6	5	2	Filtered	High statistics due to large amount of solids.	CEP
RS-18		Primary	06/23/93	Gross beta	14	8	3	Filtered		CEP
RS-18		Primary	11/06/93	Gross alpha	23.1	9.3	9	Filtered		LAS
RS-18		Primary	11/06/93	Gross beta	14.1	6.1	9.1	Filtered		LAS
RS-18		Primary	05/04/94	Gross alpha	34	12	8.7	Filtered		LAS
RS-18		Primary	05/04/94	Gross beta	5.1 U	6.7	11	Filtered		LAS
RS-18		Primary	02/17/95	Gross alpha	39	10	5.8	Filtered		LAS
RS-18		Reanalysis of Primary	02/17/95	Gross alpha	14.2	5.8	5.4	Filtered		LAS
RS-18		Primary	02/17/95	Gross beta	31.4	5.8	6.5	Filtered		LAS
RS-18		Reanalysis of Primary	02/17/95	Gross beta	9.1	3.4	4.9	Filtered		LAS
RS-18		Primary	08/10/95	Gross alpha	13.3	6.9	7.4	Filtered		LAS
RS-18		Primary	08/10/95	Gross beta	9.1	5.5	8.5	Filtered		LAS
RS-18		Primary	05/16/96	Gross alpha	26	11	13	Filtered		LAS
RS-18		Primary	05/16/96	Gross beta	11.1 U	7.4	12	Filtered		LAS
RS-18		Primary	02/03/97	Gross alpha	20.6	9.8	11	Filtered		LAS
RS-18		Primary	02/03/97	Gross beta	6.8 U	6.2	10	Filtered		LAS
RS-18		Primary	02/05/98	Gross alpha	15.2	4.8	3.64	Filtered		TN
RS-18		Primary	02/05/98	Gross beta	5.86	1.8	2.45	Filtered		TN
RS-18		Primary	08/05/98	Gross alpha	45.8	8.1	5.82	Filtered		TN
RS-18		Primary	08/05/98	Gross beta	13.7 U	10	16.1	Filtered		TN
RS-18		Primary	05/12/99	Gross alpha	26.9	6.2	3.65	Filtered		TN
RS-18		Primary	05/12/99	Gross beta	13.6	2.1	2.24	Filtered		TN
RS-18		Primary	05/09/00	Gross alpha	21	6.3	5.21	Filtered		TR
RS-18		Primary	05/09/00	Gross beta	11.6	3.1	4.08	Filtered		TR
RS-18		Primary	02/19/01	Gross alpha	4.38	3.5	4.25	Filtered		ES
RS-18		Primary	02/19/01	Gross beta	7.08	1.7	2.12	Filtered		ES
RS-18		Primary	05/02/03	Gross alpha	29.1	9.1	4.92	Filtered		ES
RS-18		Primary	05/02/03	Gross beta	17.8	6	6.32	Filtered		ES
RS-18		Primary	02/23/05	Gross alpha	11.5	4.4	2.78	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-18		Primary	02/23/05	Gross beta	6.68	2.8	3.65	Filtered		ES
RS-18		Primary	08/26/05	Gross alpha	5.65	2.1	1.79	Filtered		ES
RS-18		Primary	08/26/05	Gross beta	5.19	1.7	2	Filtered		ES
RS-18		Primary	02/20/06	Gross alpha	-0.194 U	3.6	6.8	Filtered		ES
RS-18		Primary	02/20/06	Gross beta	8.71	4.1	5.92	Filtered		ES
RS-18		Primary	02/04/08	Gross alpha	6.67	2.6	2.36	Filtered		ES
RS-18		Primary	02/04/08	Gross beta	3.81 J	1.9	2.78	Filtered		ES
RS-18		Primary	03/04/09	Gross alpha	3.66	1.7	2.03	Filtered		ES
RS-18		Primary	03/04/09	Gross alpha	7.53	2.5	2.08	Unfiltered		ES
RS-18		Primary	03/04/09	Gross beta	2.86 U	2	3.15	Filtered		ES
RS-18		Primary	03/04/09	Gross beta	5.55	1.8	2.44	Unfiltered		ES
RS-18		Primary	04/27/09	Gross alpha	0.622 U	1.4	2.28	Filtered		ES
RS-18		Primary	04/27/09	Gross alpha	4.8	2.3	2.64	Unfiltered		ES
RS-18		Primary	04/27/09	Gross beta	3.76 J	1.2	1.57	Filtered		ES
RS-18		Primary	04/27/09	Gross beta	5.78	1.4	1.71	Unfiltered		ES
RS-22		Primary	06/07/89	Gross alpha	245	29.4	---	Unfiltered		BC
RS-22		Primary	06/07/89	Gross beta	227	12.4	---	Unfiltered		BC
RS-22		Primary	07/22/89	Gross alpha	1.9	1.5	---	Unfiltered, Decanted		BC
RS-22		Primary	07/22/89	Gross beta	2.2	0.3	---	Unfiltered, Decanted		BC
RS-25		Primary	02/25/03	Gross alpha	2.18 J	1.3	1.62	Filtered		ES
RS-25		Primary	02/25/03	Gross beta	8.98	2.2	3.19	Filtered		ES
RS-25		Primary	02/13/08	Gross alpha	5	2.5	2.8	Filtered		ES
RS-25		Primary	02/13/08	Gross beta	5.43	2.5	3.78	Filtered		ES
RS-27		Primary	03/04/92	Gross alpha	2 U	---	2	Filtered		CEP
RS-27		Primary	03/04/92	Gross beta	4	3	3	Filtered		CEP
RS-27		Primary	06/04/92	Gross alpha	-0.3 U	1.5	2	Filtered		CEP
RS-27		Primary	06/04/92	Gross beta	2 U	3	3	Filtered		CEP
RS-27		Primary	05/17/95	Gross alpha	1.1 U	1.2	1.9	Filtered		LAS
RS-27		Primary	05/17/95	Gross beta	3.7	1.4	2.1	Filtered		LAS
RS-27		Primary	05/07/98	Gross alpha	-0.216 U	0.8	1.79	Filtered		TN
RS-27		Primary	05/07/98	Gross beta	1.03 U	1.2	2.01	Filtered		TN
RS-28		Primary	09/27/89	Gross alpha	7.5	2.3	---	Filtered		BC
RS-28		Primary	09/27/89	Gross alpha	42.3	7.5	---	Unfiltered		BC
RS-28		Primary	09/27/89	Gross beta	10	0.8	---	Filtered		BC
RS-28		Primary	09/27/89	Gross beta	49.5	1.3	---	Unfiltered		BC
RS-28		Primary	10/19/89	Gross alpha	7.4	3.2	---	Filtered		UST
RS-28		Split	10/19/89	Gross alpha	7.07	3.03	---	Filtered		UST
RS-28		Primary	10/19/89	Gross beta	11.7	0.9	---	Filtered		UST
RS-28		Split	10/19/89	Gross beta	3.53	1.79	---	Filtered		UST
RS-28		Primary	11/01/89	Gross alpha	4.62	2.59	---	Filtered		UST
RS-28		Primary	11/01/89	Gross alpha	7.38	3.45	---	Unfiltered		UST
RS-28		Primary	11/01/89	Gross beta	4.76	2.59	---	Filtered		UST
RS-28		Primary	11/01/89	Gross beta	7.03	2.94	---	Unfiltered		UST

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-28		Primary	03/27/90	Gross alpha	5.68	3.5	---	Filtered		UST
RS-28		Primary	03/27/90	Gross beta	5.39	2.6	---	Filtered		UST
RS-28		Primary	06/29/90	Gross alpha	9.39	4.83	---	Filtered		UST
RS-28		Primary	06/29/90	Gross beta	5.24	2.8	---	Filtered		UST
RS-28		Primary	09/15/90	Gross alpha	9.85	3.9	---	Filtered		UST
RS-28		Duplicate	09/15/90	Gross alpha	7.9	4	---	Filtered		UST
RS-28		Primary	09/15/90	Gross beta	5.77	2.72	---	Filtered		UST
RS-28		Duplicate	09/15/90	Gross beta	6.97	2.8	---	Filtered		UST
RS-28		Primary	12/06/90	Gross alpha	8.72	4.75	4	Filtered		IT
RS-28		Primary	12/06/90	Gross beta	4.93	2.55	4	Filtered		IT
RS-28		Primary	03/09/91	Gross alpha	6.44	3.16	4	Filtered		IT
RS-28		Primary	03/09/91	Gross beta	3.32 U	2.29	4	Filtered		IT
RS-28		Primary	06/07/91	Gross alpha	7.18	3.38	4	Filtered		IT
RS-28		Primary	06/07/91	Gross beta	12.7	3.45	4	Filtered		IT
RS-28		Primary	09/09/91	Gross alpha	0.957 U	0.7	4	Filtered		IT
RS-28		Primary	09/09/91	Gross beta	5.3	1.4	4	Filtered		IT
RS-28		Primary	12/06/91	Gross alpha	6.42	3.4	4	Filtered		IT
RS-28		Primary	12/06/91	Gross beta	5.13	2.14	4	Filtered		IT
RS-28		Primary	03/09/92	Gross alpha	3	2	2	Filtered		CEP
RS-28		Primary	03/09/92	Gross beta	3 U	---	3	Filtered		CEP
RS-28		Primary	06/03/92	Gross alpha	3	2	2	Filtered		CEP
RS-28		Primary	06/03/92	Gross beta	-5 U	3	3	Filtered		CEP
RS-28		Primary	09/13/92	Gross alpha	0.3 U	2.2	2	Filtered		CEP
RS-28		Split	09/13/92	Gross alpha	8.4	7.1	---	Filtered		BL
RS-28		Primary	09/13/92	Gross beta	5	4	3	Filtered		CEP
RS-28		Split	09/13/92	Gross beta	9.7	6.8	---	Filtered		BL
RS-28		Primary	12/05/92	Gross alpha	4	2	2	Filtered		CEP
RS-28		Primary	12/05/92	Gross beta	7	3	3	Filtered		CEP
RS-28		Primary	06/22/93	Gross alpha	3	2	2	Filtered	High statistics due to large amount of solids.	CEP
RS-28		Primary	06/22/93	Gross beta	8	3	3	Filtered		CEP
RS-28		Primary	11/06/93	Gross alpha	6	3.8	4.9	Filtered		LAS
RS-28		Primary	11/06/93	Gross beta	3.7 U	3.6	5.8	Filtered		LAS
RS-28		Primary	05/07/94	Gross alpha	10.9	5.4	5.8	Filtered		LAS
RS-28		Primary	05/07/94	Gross beta	8.1	4.1	6.3	Filtered		LAS
RS-28		Primary	05/17/95	Gross alpha	7.6	4.4	5.3	Filtered		LAS
RS-28		Primary	05/17/95	Gross beta	10.5	3.8	5.4	Filtered		LAS
RS-28		Primary	11/08/95	Gross alpha	3.8	3.1	---	Filtered		LAS
RS-28		Primary	11/08/95	Gross beta	5.2	2.4	---	Filtered		LAS
RS-28		Primary	05/16/96	Gross alpha	25.7	7.9	6.6	Filtered		LAS
RS-28		Primary	05/16/96	Gross beta	33.7	6	6.8	Filtered		LAS
RS-28		Primary	05/08/98	Gross alpha	4.41	2.5	2.95	Filtered		TN
RS-28		Primary	05/08/98	Gross beta	4.61	1.6	2.32	Filtered		TN
RS-28		Primary	11/16/98	Gross alpha	5.46	2.3	2.18	Filtered		TN
RS-28		Primary	11/16/98	Gross beta	6.55	1.9	2.8	Filtered		TN
RS-28		Primary	05/05/00	Gross alpha	3.42	2.3	2.92	Filtered		TR

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-28		Primary	05/05/00	Gross beta	5.44	2.7	3.96	Filtered		TR
RS-28		Primary	05/10/01	Gross alpha	0.802 U	2.2	3.58	Filtered		ES
RS-28		Primary	05/10/01	Gross beta	6.44	1.9	2.49	Filtered		ES
RS-28		Primary	05/20/05	Gross alpha	7.44	4.4	3.82	Filtered		ES
RS-28		Primary	05/20/05	Gross beta	5.14	3.2	4.75	Filtered		ES
RS-28		Primary	08/30/05	Gross alpha	4.58	1.8	1.45	Filtered		ES
RS-28		Primary	08/30/05	Gross beta	5.27	1.9	2.47	Filtered		ES
RS-28		Primary	02/17/06	Gross alpha	4.15 U	3.6	5.12	Filtered		ES
RS-28		Primary	02/17/06	Gross beta	-0.452 U	2	3.68	Filtered		ES
RS-28		Primary	08/11/06	Gross alpha	3.68	1.9	2.27	Filtered		ES
RS-28		Primary	08/11/06	Gross beta	9.32	2.7	2.8	Filtered		ES
RS-28		Primary	02/13/07	Gross alpha	2.72 J	1.9	2.5	Filtered		ES
RS-28		Primary	02/13/07	Gross beta	7.06	2.2	2.42	Filtered		ES
RS-28		Primary	11/05/07	Gross alpha	4.77 U	6.4	9.87	Filtered		ES
RS-28		Primary	11/05/07	Gross beta	9.05	4.3	5.7	Filtered		ES
RS-28		Primary	02/06/08	Gross alpha	7.26	3.2	3.57	Filtered		ES
RS-28		Primary	02/06/08	Gross beta	6.85	2.4	3.09	Filtered		ES
RS-28		Primary	08/19/08	Gross alpha	4.02	2.7	3.63	Filtered		ES
RS-28		Primary	08/19/08	Gross beta	8.1	2.4	3.33	Filtered		ES
RS-54		Primary	09/11/93	Gross alpha	3	2	2	Filtered	High statistics due to large amount of solids.	CEP
RS-54		Primary	09/11/93	Gross beta	3 U	---	3	Filtered		CEP
RS-54		Primary	09/29/93	Gross alpha	11	7	2	Filtered		CEP
RS-54		Primary	09/29/93	Gross beta	9	3	3	Filtered		CEP
RS-54		Primary	05/07/94	Gross alpha	35	12	9.8	Filtered		LAS
RS-54		Reanalysis of Primary	05/07/94	Gross alpha	42	14	11	Filtered		LAS
RS-54		Primary	05/07/94	Gross beta	15.1	7.3	11	Filtered		LAS
RS-54		Reanalysis of Primary	05/07/94	Gross beta	24.1	8.1	11	Filtered		LAS
RS-54		Primary	08/07/94	Gross alpha	27	11	8.9	Filtered		LAS
RS-54		Primary	08/07/94	Gross beta	30.3	8.1	11	Filtered		LAS
RS-54		Primary	08/03/95	Gross alpha	25.1	9.5	8.3	Filtered		LAS
RS-54		Primary	08/03/95	Gross beta	7.2 U	6.3	10	Filtered		LAS
RS-54		Primary	05/16/96	Gross alpha	31	10	8.6	Filtered		LAS
RS-54		Primary	05/16/96	Gross beta	12.8	5.3	7.7	Filtered		LAS
RS-54		Primary	08/23/96	Gross alpha	50	14	11	Filtered		LAS
RS-54		Reanalysis of Primary	08/23/96	Gross alpha	53	15	12	Filtered		LAS
RS-54		Primary	08/23/96	Gross beta	9.7 U	6.5	10	Filtered		LAS
RS-54		Reanalysis of Primary	08/23/96	Gross beta	21.7	8	11	Filtered		LAS
RS-54		Primary	05/03/97	Gross alpha	28	9.9	8.7	Filtered		LAS
RS-54		Primary	05/03/97	Gross beta	6.7 U	5.4	8.5	Filtered		LAS
RS-54		Primary	08/02/97	Gross alpha	24.8	9.9	9	Filtered		LAS
RS-54		Primary	08/02/97	Gross beta	13.5	6.2	9.3	Filtered		LAS
RS-54		Primary	08/27/97	Gross alpha	24.8	9.9	10	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-54		Primary	08/27/97	Gross beta	13.2	6.4	9.6	Filtered		LAS
RS-54		Primary	02/08/98	Gross alpha	8.86	3	2.62	Filtered		TN
RS-54		Primary	02/08/98	Gross beta	5.92	1.7	2.26	Filtered		TN
RS-54		Primary	08/04/98	Gross alpha	31.5	14	13	Filtered		TN
RS-54		Primary	08/04/98	Gross beta	4.93 U	18	30.5	Filtered		TN
RS-54		Primary	02/02/99	Gross alpha	10.2	3.9	3.34	Filtered		TN
RS-54		Primary	02/02/99	Gross beta	10	1.9	2.25	Filtered		TN
RS-54		Primary	08/18/99	Gross alpha	16.1	4.7	3.45	Filtered		TN
RS-54		Primary	08/18/99	Gross beta	11.4	3.2	4.34	Filtered		TN
RS-54		Primary	03/15/00	Gross alpha	16.5	4.7	3.08	Filtered		TR
RS-54		Primary	03/15/00	Gross beta	11.6	2.8	3.83	Filtered		TR
RS-54		Primary	11/01/01	Gross alpha	59.44	2.3	2.56	Filtered		DL
RS-54		Primary	11/01/01	Gross beta	7.59	1.8	2.9	Filtered		DL
RS-54		Primary	03/01/02	Gross alpha	24.29	6.92	0.85	Filtered		DL
RS-54		Primary	03/01/02	Gross beta	5.52	1.17	3.4	Filtered		DL
RS-54		Primary	11/07/02	Gross alpha	16.9	6.4	6.52	Filtered		ES
RS-54		Primary	11/07/02	Gross beta	11.7	3.5	4.79	Filtered		ES
RS-54		Primary	02/16/05	Gross alpha	13.7	5.8	4.39	Filtered		ES
RS-54		Primary	02/16/05	Gross beta	-6.78 U	5.4	9.28	Filtered		ES
RS-54		Primary	09/06/05	Gross alpha	12	3.9	2.98	Filtered		ES
RS-54		Primary	09/06/05	Gross beta	10.4	3.7	4.54	Filtered		ES
RS-54		Primary	02/23/06	Gross alpha	6.94 U	5.5	7.57	Filtered		ES
RS-54		Split	02/23/06	Gross alpha	21	5.89	3.36	Filtered		STL
RS-54		Primary	02/23/06	Gross beta	9.35	4.1	5.16	Filtered		ES
RS-54		Split	02/23/06	Gross beta	11.4	3.82	5.18	Filtered		STL
RS-54		Primary	02/15/07	Gross alpha	20	6.4	4.95	Filtered		ES
RS-54		Primary	02/15/07	Gross beta	13.2	3.7	3.68	Filtered		ES
RS-54		Primary	02/22/08	Gross alpha	23	6.6	3.82	Filtered		ES
RS-54		Primary	02/22/08	Gross beta	11.8	2.6	3.28	Filtered		ES
RS-54		Primary	09/04/08	Gross alpha	18	5.8	3.51	Filtered		ES
RS-54		Primary	09/04/08	Gross beta	9.93	2.6	3.47	Filtered		ES
SH-04		Primary	06/03/89	Gross alpha	4.8 U	6.9	---	Unfiltered		BC
SH-04		Primary	06/03/89	Gross beta	6.8	3.2	---	Unfiltered		BC
SH-04		Primary	07/22/89	Gross alpha	4	1	---	Unfiltered, Decanted		BC
SH-04		Primary	07/22/89	Gross beta	19.2	2.4	---	Unfiltered, Decanted		BC
SH-04		Primary	09/09/89	Gross alpha	22	5.4	---	Filtered		BC
SH-04		Primary	09/09/89	Gross alpha	8	4.4	---	Unfiltered		UST
SH-04		Primary	09/09/89	Gross beta	13	1.3	---	Filtered		BC
SH-04		Primary	09/09/89	Gross beta	10	1.3	---	Unfiltered		UST
SH-04		Primary	03/18/93	Gross alpha	7	6	2	Filtered	High statistics due to large amount of solids.	CEP
SH-04		Primary	03/18/93	Gross beta	3 U	---	3	Filtered		CEP
SH-04		Primary	06/09/93	Gross alpha	5	4	2	Filtered	High statistics due to large amount of solids.	CEP

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
SH-04		Primary	06/09/93	Gross beta	8	4	3	Filtered		CEP
SH-04		Primary	08/09/93	Gross alpha	5	4	2	Filtered	High statistics due to large amount of solids.	CEP
SH-04		Primary	08/09/93	Gross beta	3 U	---	3	Filtered		CEP
SH-04		Primary	11/04/93	Gross alpha	1.1 U	5.2	11	Filtered		LAS
SH-04		Primary	11/04/93	Gross beta	2.9 U	6.5	11	Filtered		LAS
SH-04		Primary	05/06/94	Gross alpha	3.5 U	5.7	10	Filtered		LAS
SH-04		Primary	05/06/94	Gross beta	4.5 U	6.7	11	Filtered		LAS
SH-07		Primary	06/03/89	Gross alpha	185	18.3	---	Unfiltered		BC
SH-07		Primary	06/03/89	Gross beta	21.2	3.1	---	Unfiltered		BC
SH-07		Primary	07/19/89	Gross alpha	8.4	2	---	Filtered		BC
SH-07		Primary	07/19/89	Gross alpha	30.5	3.3	---	Unfiltered, Decanted		BC
SH-07		Primary	07/19/89	Gross beta	3.8	0.6	---	Filtered		BC
SH-07		Primary	07/19/89	Gross beta	21.2	0.9	---	Unfiltered, Decanted		BC
SH-07		Primary	09/09/89	Gross alpha	5.4	1.4	---	Filtered		BC
SH-07		Primary	09/09/89	Gross alpha	5.9	2.1	---	Unfiltered		UST
SH-07		Primary	09/09/89	Gross beta	3.2	0.4	---	Filtered		BC
SH-07		Primary	09/09/89	Gross beta	11	0.5	---	Unfiltered		UST
SH-11		Primary	06/03/89	Gross alpha	281	20.9	---	Unfiltered		BC
SH-11		Primary	06/03/89	Gross beta	11.8	3.6	---	Unfiltered		BC
SH-11		Primary	07/19/89	Gross alpha	4.7	1.8	---	Filtered		BC
SH-11		Primary	07/19/89	Gross alpha	8.9	2.5	---	Unfiltered, Decanted		BC
SH-11		Primary	07/19/89	Gross beta	5.6	0.6	---	Filtered		BC
SH-11		Primary	07/19/89	Gross beta	8.1	0.6	---	Unfiltered, Decanted		BC
SH-11		Primary	09/09/89	Gross alpha	1.2 U	1.7	---	Filtered		BC
SH-11		Primary	09/09/89	Gross alpha	5.9	2.1	---	Unfiltered		UST
SH-11		Primary	09/09/89	Gross beta	5.6	0.6	---	Filtered		BC
SH-11		Primary	09/09/89	Gross beta	11	0.5	---	Unfiltered		UST
SH-11		Primary	10/17/89	Gross alpha	5.23	2.97	---	Filtered		UST
SH-11		Primary	10/17/89	Gross beta	2.43	1.68	---	Filtered		UST
SH-11		Primary	10/31/89	Gross alpha	9.57	5.05	---	Filtered		UST
SH-11		Primary	10/31/89	Gross alpha	10.4	6.06	---	Unfiltered		UST
SH-11		Primary	10/31/89	Gross beta	2.95	2.45	---	Filtered		UST
SH-11		Primary	10/31/89	Gross beta	6.96	2.82	---	Unfiltered		UST
Chatsworth Formation Wells										
HAR-06		Primary	06/02/89	Gross alpha	15.5	3.7	---	Unfiltered		BC
HAR-06		Primary	06/02/89	Gross beta	12.1	0.8	---	Unfiltered		BC
HAR-06		Primary	07/22/89	Gross alpha	9.2	2	---	Unfiltered, Decanted		BC
HAR-06		Primary	07/22/89	Gross beta	11.9	0.6	---	Unfiltered, Decanted		BC
HAR-06		Primary	09/14/89	Gross alpha	4.6	3.8	---	Filtered		BC
HAR-06		Primary	09/14/89	Gross alpha	9.4	4.2	---	Unfiltered		UST

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
HAR-06		Primary	09/14/89	Gross beta	18.7	1.4	---	Filtered		BC
HAR-06		Primary	09/14/89	Gross beta	20	1.6	---	Unfiltered		UST
HAR-07		Primary	06/05/89	Gross alpha	9.2	4.3	---	Unfiltered		BC
HAR-07		Primary	06/05/89	Gross beta	4.2	0.9	---	Unfiltered		BC
HAR-07		Primary	07/25/89	Gross alpha	1.6	1.5	---	Unfiltered, Decanted		BC
HAR-07		Primary	07/25/89	Gross beta	13.1	0.6	---	Unfiltered, Decanted		BC
HAR-07		Primary	09/09/89	Gross alpha	4	1.5	---	Filtered		BC
HAR-07		Primary	09/09/89	Gross alpha	6	1.8	---	Unfiltered		UST
HAR-07		Primary	09/09/89	Gross beta	6	0.3	---	Filtered		BC
HAR-07		Primary	09/09/89	Gross beta	10	0.3	---	Unfiltered		UST
HAR-07		Primary	03/15/93	Gross alpha	2 U	---	2	Filtered		CEP
HAR-07		Primary	03/15/93	Gross beta	3 U	---	3	Filtered		CEP
HAR-07		Primary	06/09/93	Gross alpha	4	3	2	Filtered	High statistics due to large amount of solids.	CEP
HAR-07		Primary	06/09/93	Gross beta	5	4	2	Filtered		CEP
HAR-07		Primary	08/09/93	Gross alpha	5	2	2	Filtered		CEP
HAR-07		Primary	08/09/93	Gross beta	18	4	3	Filtered		CEP
HAR-07		Primary	11/04/93	Gross alpha	4.1 U	3.2	4.4	Filtered		CEP
HAR-07		Primary	11/04/93	Gross beta	4.5 U	3.2	5	Filtered		CEP
HAR-08		Primary	06/07/89	Gross alpha	-1 U	1.5	---	Unfiltered		BC
HAR-08		Primary	06/07/89	Gross beta	1.9	0.5	---	Unfiltered		BC
HAR-08		Primary	07/23/89	Gross alpha	-1 U	1.2	---	Unfiltered, Decanted		BC
HAR-08		Primary	07/23/89	Gross beta	-1 U	0.3	---	Unfiltered, Decanted		BC
HAR-16		Primary	06/05/89	Gross alpha	4.2	1.9	---	Unfiltered		BC
HAR-16		Primary	06/05/89	Gross beta	1.7	0.8	---	Unfiltered		BC
HAR-16		Primary	07/25/89	Gross alpha	4.6	1.9	---	Unfiltered, Decanted		BC
HAR-16		Primary	07/25/89	Gross beta	5.4	0.8	---	Unfiltered, Decanted		BC
HAR-16		Primary	09/09/89	Gross alpha	1 U	1.1	---	Filtered		BC
HAR-16		Primary	09/09/89	Gross alpha	2.1	1.3	---	Unfiltered		UST
HAR-16		Primary	09/09/89	Gross beta	3.6	0.3	---	Filtered		BC
HAR-16		Primary	09/09/89	Gross beta	4.5	0.4	---	Unfiltered		UST
HAR-16		Primary	03/15/93	Gross alpha	2 U	---	2	Filtered		CEP
HAR-16		Primary	03/15/93	Gross beta	3 U	---	3	Filtered		CEP
HAR-16		Primary	06/09/93	Gross alpha	3	2	2	Filtered	High statistics due to large amount of solids.	CEP
HAR-16		Primary	06/09/93	Gross beta	7	4	3	Filtered		CEP
HAR-16		Primary	08/09/93	Gross alpha	2 U	---	2	Filtered		CEP
HAR-16		Primary	08/09/93	Gross beta	3 U	---	3	Filtered		CEP
HAR-16		Primary	11/22/93	Gross alpha	-0.5 U	2	4.7	Filtered		CEP
HAR-16		Primary	11/22/93	Gross beta	3 U	2.5	4.2	Filtered		CEP
HAR-17		Primary	06/04/89	Gross alpha	7.3	2.5	---	Unfiltered		BC

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
HAR-17		Primary	06/04/89	Gross beta	2.3	0.6	---	Unfiltered		BC
HAR-17		Primary	07/23/89	Gross alpha	4.7	1.7	---	Unfiltered, Decanted		BC
HAR-17		Primary	07/23/89	Gross beta	4.6	0.5	---	Unfiltered, Decanted		BC
HAR-17		Primary	06/28/90	Gross alpha	7.88	5.95	---	Filtered		UST
HAR-17		Primary	06/28/90	Gross beta	5.39	2.8	---	Filtered		UST
HAR-17		Primary	03/17/93	Gross alpha	7	5	2	Filtered		CEP
HAR-17		Primary	03/17/93	Gross beta	4	3	3	Filtered		CEP
HAR-17		Primary	06/09/93	Gross alpha	3	2	2	Filtered	High statistics due to large amount of solids.	CEP
HAR-17		Primary	06/09/93	Gross beta	12	4	3	Filtered		CEP
HAR-17		Primary	08/09/93	Gross alpha	2 U	---	2	Filtered		CEP
HAR-17		Primary	08/09/93	Gross beta	3 U	---	3	Filtered		CEP
HAR-17		Primary	11/08/93	Gross alpha	2.9 U	3.4	5.5	Filtered		CEP
HAR-17		Primary	11/08/93	Gross beta	4.1 U	4.2	7	Filtered		CEP
HAR-18		Primary	06/05/89	Gross alpha	11.8	4.4	---	Unfiltered		BC
HAR-18		Primary	06/05/89	Gross beta	9.5	1.1	---	Unfiltered		BC
HAR-18		Primary	07/25/89	Gross alpha	8.6	2.6	---	Unfiltered, Decanted		BC
HAR-18		Primary	07/25/89	Gross beta	16.7	1	---	Unfiltered, Decanted		BC
HAR-18		Primary	09/11/89	Gross alpha	16.5	4.5	---	Filtered		BC
HAR-18		Primary	09/11/89	Gross alpha	21.6	4.7	---	Unfiltered		UST
HAR-18		Primary	09/11/89	Gross beta	20.1	1.7	---	Filtered		BC
HAR-18		Primary	09/11/89	Gross beta	14	1.9	---	Unfiltered		UST
HAR-18		Primary	05/08/94	Gross alpha	19.1	7.2	6.7	Filtered		LAS
HAR-18		Primary	05/08/94	Gross beta	9.7	4.5	6.7	Filtered		LAS
HAR-19		Primary	09/09/89	Gross alpha	6	1.9	---	Filtered		BC
HAR-19		Primary	09/09/89	Gross alpha	10	2.1	---	Unfiltered		UST
HAR-19		Primary	09/09/89	Gross beta	12	0.4	---	Filtered		BC
HAR-19		Primary	09/09/89	Gross beta	11	0.5	---	Unfiltered		UST
HAR-20		Primary	09/09/89	Gross alpha	12	2.6	---	Filtered		BC
HAR-20		Primary	09/09/89	Gross alpha	20	2.9	---	Unfiltered		UST
HAR-20		Primary	09/09/89	Gross beta	9	0.6	---	Filtered		BC
HAR-20		Primary	09/09/89	Gross beta	13	0.72	---	Unfiltered		UST
HAR-21		Primary	09/09/89	Gross alpha	11	2.1	---	Filtered		BC
HAR-21		Primary	09/09/89	Gross alpha	15	2.5	---	Unfiltered		UST
HAR-21		Primary	09/09/89	Gross beta	11	0.7	---	Filtered		BC
HAR-21		Primary	09/09/89	Gross beta	19	0.9	---	Unfiltered		UST
HAR-23		Primary	06/02/89	Gross alpha	-1 U	3.8	---	Unfiltered		BC
HAR-23		Primary	06/02/89	Gross beta	7.7	0.8	---	Unfiltered		BC
HAR-23		Primary	07/22/89	Gross alpha	4.2	1.6	---	Unfiltered, Decanted		BC
HAR-23		Primary	07/22/89	Gross beta	8	0.3	---	Unfiltered, Decanted		BC

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
HAR-26		Primary	07/22/89	Gross alpha	2.6	1.4	---	Unfiltered, Decanted		BC
HAR-26		Primary	07/22/89	Gross beta	3.3	0.5	---	Unfiltered, Decanted		BC
HAR-26		Primary	02/23/94	Gross alpha	0.8 U	2.4	---	Filtered		LAS
HAR-26		Primary	02/23/94	Gross beta	3.9	2.7	---	Filtered		LAS
HAR-26		Primary	08/15/94	Gross alpha	0.2 U	2.5	---	Filtered		LAS
HAR-26		Primary	08/15/94	Gross beta	3.8	3.2	---	Filtered		LAS
RD-01		Primary	06/01/89	Gross alpha	6.2	4.8	---	Unfiltered		BC
RD-01		Primary	06/01/89	Gross beta	6.8	0.7	---	Unfiltered		BC
RD-01		Primary	07/22/89	Gross alpha	4.2	1.5	---	Unfiltered, Decanted		BC
RD-01		Primary	07/22/89	Gross beta	8.5	0.5	---	Unfiltered, Decanted		BC
RD-01		Primary	09/11/89	Gross alpha	8.7	2.8	---	Filtered		BC
RD-01		Primary	09/11/89	Gross alpha	11.5	3.1	---	Unfiltered		UST
RD-01		Primary	09/11/89	Gross beta	14.7	1	---	Filtered		BC
RD-01		Primary	09/11/89	Gross beta	12.5	1.1	---	Unfiltered		UST
RD-02		Primary	06/03/89	Gross alpha	6.9	3.2	---	Unfiltered		BC
RD-02		Primary	06/03/89	Gross beta	2.3	0.6	---	Unfiltered		BC
RD-02		Primary	07/23/89	Gross alpha	3.9	1.6	---	Unfiltered, Decanted		BC
RD-02		Primary	07/23/89	Gross beta	7.1	0.5	---	Unfiltered, Decanted		BC
RD-03		Primary	06/07/89	Gross alpha	1.9 U	3.1	---	Unfiltered		BC
RD-03		Primary	06/07/89	Gross beta	6.6	0.7	---	Unfiltered		BC
RD-03		Primary	07/22/89	Gross alpha	3.5	1.6	---	Unfiltered, Decanted		BC
RD-03		Primary	07/22/89	Gross beta	7.7	0.5	---	Unfiltered, Decanted		BC
RD-03		Primary	09/10/89	Gross alpha	5.9	1.5	---	Filtered		BC
RD-03		Primary	09/10/89	Gross alpha	10.5	1.9	---	Unfiltered		UST
RD-03		Primary	09/10/89	Gross beta	6.8	0.3	---	Filtered		BC
RD-03		Primary	09/10/89	Gross beta	7.1	0.3	---	Unfiltered		UST
RD-03		Primary	09/12/89	Gross alpha	10	2.2	---	Filtered		BC
RD-03		Primary	09/12/89	Gross alpha	11	2.2	---	Unfiltered		UST
RD-03		Split	09/12/89	Gross alpha	0 U	2	---	Filtered		TMA
RD-03		Split	09/12/89	Gross alpha	0 U	2	---	Unfiltered		TMA
RD-03		Primary	09/12/89	Gross beta	4	0.7	---	Filtered		BC
RD-03		Primary	09/12/89	Gross beta	4	0.7	---	Unfiltered		UST
RD-03		Split	09/12/89	Gross beta	19	3	---	Filtered		TMA
RD-03		Split	09/12/89	Gross beta	0 U	2	---	Unfiltered		TMA
RD-04		Primary	06/04/89	Gross alpha	2 U	3.5	---	Unfiltered		BC
RD-04		Primary	06/04/89	Gross beta	8.4	0.6	---	Unfiltered		BC
RD-04		Primary	07/22/89	Gross alpha	4.6	1.6	---	Unfiltered, Decanted		BC
RD-04		Primary	07/22/89	Gross beta	9.2	0.4	---	Unfiltered, Decanted		BC

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-05B		Primary	06/07/89	Gross alpha	9.8	2.5	---	Unfiltered		BC
RD-05B		Primary	06/07/89	Gross beta	-1 U	0.6	---	Unfiltered		BC
RD-05B		Primary	07/22/89	Gross alpha	5.1	1.7	---	Unfiltered, Decanted		BC
RD-05B		Primary	07/22/89	Gross beta	7.9	0.5	---	Unfiltered, Decanted		BC
RD-05B		Primary	09/10/89	Gross alpha	3.5	1.5	---	Filtered		BC
RD-05B		Primary	09/10/89	Gross alpha	2	1.5	---	Unfiltered		UST
RD-05B		Primary	09/10/89	Gross beta	7.3	0.3	---	Filtered		BC
RD-05B		Primary	09/10/89	Gross beta	10	0.3	---	Unfiltered		UST
RD-05B		Primary	09/10/91	Gross alpha	2.74 U	2.93	4	Filtered		IT
RD-05B		Primary	09/10/91	Gross beta	7.16	2.82	4	Filtered		IT
RD-05B		Primary	03/16/93	Gross alpha	2 U	---	2	Filtered		CEP
RD-05B		Primary	03/16/93	Gross beta	3 U	---	3	Filtered		CEP
RD-05B		Primary	06/07/93	Gross alpha	10	4	2	Filtered		CEP
RD-05B		Primary	06/07/93	Gross beta	21	4	3	Filtered		CEP
RD-05B		Primary	08/09/93	Gross alpha	8	3	2	Filtered		CEP
RD-05B		Primary	08/09/93	Gross beta	13	3	3	Filtered		CEP
RD-05B		Primary	11/22/93	Gross alpha	3 U	4.7	8.2	Filtered		CEP
RD-05B		Primary	11/22/93	Gross beta	5.4 U	4.3	7.1	Filtered		CEP
RD-06		Primary	06/07/89	Gross alpha	7.3	2.2	---	Unfiltered		BC
RD-06		Primary	06/07/89	Gross beta	7.5	0.6	---	Unfiltered		BC
RD-06		Primary	07/22/89	Gross alpha	18.1	2.9	---	Unfiltered, Decanted		BC
RD-06		Primary	07/22/89	Gross beta	11.3	0.8	---	Unfiltered, Decanted		BC
RD-06		Primary	09/10/89	Gross alpha	3.2	1.3	---	Filtered		BC
RD-06		Primary	09/10/89	Gross alpha	4	1.6	---	Unfiltered		UST
RD-06		Primary	09/10/89	Gross beta	7.5	0.4	---	Filtered		BC
RD-06		Primary	09/10/89	Gross beta	5.7	0.3	---	Unfiltered		UST
RD-06		Primary	10/18/89	Gross alpha	2.1	1.98	---	Filtered		UST
RD-06		Primary	10/18/89	Gross beta	5.16	1.99	---	Filtered		UST
RD-06		Primary	10/31/89	Gross alpha	3.11	2.42	---	Filtered		UST
RD-06		Primary	10/31/89	Gross alpha	4.9	3.98	---	Unfiltered		UST
RD-06		Primary	10/31/89	Gross beta	6.22	2.79	---	Filtered		UST
RD-06		Primary	10/31/89	Gross beta	6.03	2.77	---	Unfiltered		UST
RD-06		Primary	03/06/91	Gross alpha	9.99	5.83	4	Filtered		IT
RD-06		Primary	03/06/91	Gross beta	3.58 U	2.32	4	Filtered		IT
RD-06		Primary	09/10/91	Gross alpha	0.285 U	1.87	4	Filtered		IT
RD-06		Primary	09/10/91	Gross beta	5.57	2.58	4	Filtered		IT
RD-06		Primary	03/10/92	Gross alpha	2 U	---	2	Filtered		CEP
RD-06		Primary	03/10/92	Gross beta	3 U	---	3	Filtered		CEP
RD-06		Primary	03/16/93	Gross alpha	4	3	2	Filtered	High statistics due to large amount of solids.	CEP
RD-06		Primary	03/16/93	Gross beta	7	4	3	Filtered		CEP
RD-06		Primary	06/07/93	Gross alpha	3	2	2	Filtered	High statistics due to large amount of solids.	CEP

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-06		Primary	06/07/93	Gross beta	8	7	3	Filtered		CEP
RD-06		Primary	08/09/93	Gross alpha	5	3	2	Filtered		CEP
RD-06		Primary	08/09/93	Gross beta	4	3	3	Filtered		CEP
RD-06		Primary	11/22/93	Gross alpha	1.5 U	4.1	7.9	Filtered		CEP
RD-06		Primary	11/22/93	Gross beta	5.5 U	4.6	7.4	Filtered		CEP
RD-07		Primary	06/04/89	Gross alpha	11.5	5	---	Unfiltered		BC
RD-07		Primary	06/04/89	Gross beta	8.1	1	---	Unfiltered		BC
RD-07		Primary	07/22/89	Gross alpha	6.6	1.5	---	Unfiltered, Decanted		BC
RD-07		Primary	07/22/89	Gross beta	5.3	0.5	---	Unfiltered, Decanted		BC
RD-07		Primary	09/13/89	Gross alpha	2.6	1.8	---	Filtered		BC
RD-07		Primary	09/13/89	Gross alpha	8	2.6	---	Unfiltered		BC
RD-07		Primary	09/13/89	Gross beta	9.9	0.7	---	Filtered		BC
RD-07		Primary	09/13/89	Gross beta	13.6	0.9	---	Unfiltered		BC
RD-07		Primary	12/05/90	Gross alpha	7.19	3.19	4	Filtered		IT
RD-07		Primary	12/05/90	Gross beta	6.66	2.72	4	Filtered		IT
RD-07		Primary	03/09/91	Gross alpha	5.7	2.67	4	Filtered		IT
RD-07		Primary	03/09/91	Gross beta	3.63 U	2.42	4	Filtered		IT
RD-07		Primary	12/07/91	Gross alpha	7.42	3.19	4	Filtered		IT
RD-07		Primary	12/07/91	Gross beta	5.06	1.61	4	Filtered		IT
RD-07		Primary	03/06/92	Gross alpha	2 U	---	2	Filtered		CEP
RD-07		Primary	03/06/92	Gross beta	6	4	3	Filtered		CEP
RD-07		Primary	03/07/93	Gross alpha	3	2	2	Filtered	High statistics due to large amount of solids.	CEP
RD-07		Primary	03/07/93	Gross beta	5	4	3	Filtered		CEP
RD-07		Primary	02/27/94	Gross alpha	6.4	3.7	4.3	Filtered		LAS
RD-07		Primary	02/27/94	Gross beta	4.7	2.7	4.2	Filtered		LAS
RD-07		Primary	08/09/94	Gross alpha	6.1	3.5	4	Filtered		LAS
RD-07		Primary	08/09/94	Gross beta	5.4	2.8	4.3	Filtered		LAS
RD-07		Primary	02/09/95	Gross alpha	3.4 U	3.3	5.1	Filtered		LAS
RD-07		Duplicate	02/09/95	Gross alpha	10.8	5.1	5.6	Filtered		LAS
RD-07		Primary	02/09/95	Gross beta	5.9	3.2	4.9	Filtered		LAS
RD-07		Duplicate	02/09/95	Gross beta	6.6	3.5	5.3	Filtered		LAS
RD-07		Primary	08/04/95	Gross alpha	6.6	3.6	4.4	Filtered		LAS
RD-07		Primary	08/04/95	Gross beta	7.5	2.8	4	Filtered		LAS
RD-07		Primary	02/07/96	Gross alpha	12.2	4.5	4.7	Filtered		LAS
RD-07		Primary	02/07/96	Gross beta	3.1	1.9	3	Filtered		LAS
RD-07		Primary	08/18/96	Gross alpha	8.7	4.5	5.3	Filtered		LAS
RD-07		Primary	08/18/96	Gross beta	6.5	3.2	4.8	Filtered		LAS
RD-07		Primary	02/25/97	Gross alpha	9.5	3.9	4	Filtered		LAS
RD-07		Primary	02/25/97	Gross beta	5.9	2.4	3.6	Filtered		LAS
RD-07		Primary	08/25/97	Gross alpha	12.5	5.6	6.1	Filtered		LAS
RD-07		Primary	08/25/97	Gross beta	8.1	4.3	6.6	Filtered		LAS
RD-07		Primary	02/05/98	Gross alpha	10.3	2.8	1.77	Filtered		TN
RD-07		Primary	02/05/98	Gross beta	8.27	1.7	2.12	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-07		Primary	08/05/98	Gross alpha	9.43 U	8.9	13.3	Filtered		TN
RD-07		Primary	08/05/98	Gross beta	-7.81 U	18	32.4	Filtered		TN
RD-07		Primary	02/06/99	Gross alpha	5.53	2.3	2.01	Filtered		TN
RD-07		Primary	02/06/99	Gross beta	11.9	1.9	2.33	Filtered		TN
RD-07		Primary	08/19/99	Gross alpha	6.94	2.3	1.71	Filtered		TN
RD-07		Primary	08/19/99	Gross beta	8.51	1.7	1.98	Filtered		TN
RD-07		Primary	03/16/00	Gross alpha	9.92	3.2	2.61	Filtered		TR
RD-07		Primary	03/16/00	Gross beta	9.58	2.3	2.96	Filtered		TR
RD-07		Primary	08/10/00	Gross alpha	8.94	2.9	2.65	Filtered		TR
RD-07		Primary	08/10/00	Gross beta	7.04	2.6	3.78	Filtered		TR
RD-07		Primary	02/23/01	Gross alpha	12.4	3.7	3.68	Filtered		ES
RD-07		Primary	02/23/01	Gross beta	8.74	2.1	2.92	Filtered		ES
RD-07		Primary	11/07/01	Gross alpha	6.18	3.28	1.8	Filtered		DL
RD-07		Primary	11/07/01	Gross beta	5.9	1.5	2.9	Filtered		DL
RD-07		Primary	02/22/02	Gross alpha	18.36	5.66	1.94	Filtered		DL
RD-07		Primary	02/22/02	Gross beta	4.37	1.15	2.93	Filtered		DL
RD-07		Primary	08/20/02	Gross alpha	4.94	3.5	3.94	Filtered		ES
RD-07		Primary	08/20/02	Gross beta	5.9	1.6	2.16	Filtered		ES
RD-07	Z03	Primary	01/29/03	Gross alpha	14.4	3.5	2.34	Filtered		ES
RD-07	Z03	Primary	01/29/03	Gross beta	15.5	3.1	4.07	Filtered		ES
RD-07	Z03	Primary	02/10/03	Gross alpha	14.4	3.5	2.34	Filtered		ES
RD-07	Z03	Primary	02/10/03	Gross beta	15.5	3.1	4.07	Filtered		ES
RD-07	Z13	Primary	08/28/03	Gross alpha	6.82	2.9	2.19	Filtered		ES
RD-07	Z13	Primary	08/28/03	Gross beta	9.29	3.2	3.72	Filtered		ES
RD-07	Z04	Primary	08/25/04	Gross alpha	3.04	2	1.8	Filtered		ES
RD-07	Z04	Primary	08/25/04	Gross beta	8.63	3	3.34	Filtered		ES
RD-07	Z05	Primary	08/25/04	Gross alpha	3.03	2.1	2.22	Filtered		ES
RD-07	Z05	Primary	08/25/04	Gross beta	8.02	2.6	2.62	Filtered		ES
RD-07	Z06	Primary	08/25/04	Gross alpha	4.22	2.5	2.04	Filtered		ES
RD-07	Z06	Primary	08/25/04	Gross beta	7.83	2.8	2.6	Filtered		ES
RD-07	Z07	Primary	08/25/04	Gross alpha	3.36	2	1.91	Filtered		ES
RD-07	Z07	Primary	08/25/04	Gross beta	7.9	2.5	2.41	Filtered		ES
RD-07	Z08	Primary	08/25/04	Gross alpha	4.96	2.5	2.52	Filtered		ES
RD-07	Z08	Primary	08/25/04	Gross beta	7.99	2.3	2.1	Filtered		ES
RD-07	Z09	Primary	08/25/04	Gross alpha	6.61	2.7	1.65	Filtered		ES
RD-07	Z09	Primary	08/25/04	Gross beta	8.8	2.6	2.5	Filtered		ES
RD-07	Z10	Primary	08/25/04	Gross alpha	2.8 J	1.8	1.64	Filtered		ES
RD-07	Z10	Primary	08/25/04	Gross beta	6.13	2.1	2.34	Filtered		ES
RD-07	Z11	Primary	08/25/04	Gross alpha	3.14	1.8	1.6	Filtered		ES
RD-07	Z11	Primary	08/25/04	Gross beta	5.91	2.1	2.22	Filtered		ES
RD-07	Z12	Primary	08/25/04	Gross alpha	3.01	1.8	1.5	Filtered		ES
RD-07	Z12	Primary	08/25/04	Gross beta	10.9	3	2.51	Filtered		ES
RD-07	Z13	Primary	08/25/04	Gross alpha	3.11	1.9	1.77	Filtered		ES
RD-07	Z13	Primary	08/25/04	Gross beta	7.64	2.4	2.37	Filtered		ES
RD-07	Z03	Primary	02/17/05	Gross alpha	4.7	2.4	2.26	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-07	Z03	Primary	02/17/05	Gross beta	-3.15 U	2.8	4.88	Filtered		ES
RD-07	Z03	Primary	08/31/05	Gross alpha	9.55	2.8	1.51	Filtered		ES
RD-07	Z03	Primary	08/31/05	Gross beta	5.92	1.8	1.74	Filtered		ES
RD-07	Z03	Primary	02/16/06	Gross alpha	22.8	6.5	2.79	Filtered		ES
RD-07	Z03	Primary	02/16/06	Gross beta	15.6	4	2.9	Filtered		ES
RD-07	Z03	Primary	08/16/06	Gross alpha	36.3	8.4	2.91	Filtered		ES
RD-07	Z03	Primary	08/16/06	Gross beta	19.8	4.5	2.63	Filtered		ES
RD-07	Z03	Primary	02/08/07	Gross alpha	39.4	13	7.24	Filtered		ES
RD-07	Z03	Primary	02/08/07	Gross beta	22	7.2	7.49	Filtered		ES
RD-07	Z03	Primary	08/09/07	Gross alpha	40	14	7.81	Filtered		ES
RD-07	Z03	Primary	08/09/07	Gross beta	17.2	7.5	9.92	Filtered		ES
RD-07	Z03	Primary	02/05/08	Gross alpha	43.1	10	2.78	Filtered		ES
RD-07	Z03	Primary	02/05/08	Gross beta	20.2	4.8	3.48	Filtered		ES
RD-07	Z03	Primary	08/06/08	Gross alpha	26.4	6.9	2.43	Filtered		ES
RD-07	Z03	Primary	08/06/08	Gross beta	18.4	3.5	4.15	Filtered		ES
RD-07	Z03	Primary	02/20/09	Gross alpha	24.5	5.8	2.12	Filtered		ES
RD-07	Z03	Primary	02/20/09	Gross alpha	23	5.6	2.13	Unfiltered		ES
RD-07	Z03	Primary	02/20/09	Gross beta	12.2	2.4	2.94	Filtered		ES
RD-07	Z03	Primary	02/20/09	Gross beta	10.4	2.3	3.01	Unfiltered		ES
RD-07	Z03	Primary	07/16/09	Gross alpha	18	5	3.7	Filtered		ES
RD-07	Z03	Primary	07/16/09	Gross alpha	14.9	4	1.94	Unfiltered		ES
RD-07	Z03	Primary	07/16/09	Gross beta	9.95	1.9	1.88	Filtered		ES
RD-07	Z03	Primary	07/16/09	Gross beta	8.83	1.7	1.82	Unfiltered		ES
RD-08		Primary	06/07/89	Gross alpha	-1 U	2.9	---	Unfiltered		BC
RD-08		Primary	06/07/89	Gross beta	4.1	0.7	---	Unfiltered		BC
RD-08		Primary	07/24/89	Gross alpha	-1 U	1	---	Unfiltered, Decanted		BC
RD-08		Primary	07/24/89	Gross beta	4.5	0.3	---	Unfiltered, Decanted		BC
RD-08		Primary	09/13/89	Gross alpha	-1 U	2	---	Filtered		BC
RD-08		Primary	09/13/89	Gross alpha	-1 U	1.4	---	Unfiltered		BC
RD-08		Primary	09/13/89	Gross beta	1.9	0.8	---	Filtered		BC
RD-08		Primary	09/13/89	Gross beta	6.9	0.5	---	Unfiltered		BC
RD-09		Primary	03/03/89	Gross alpha	4	2	---	Unfiltered		FGL
RD-09		Primary	03/03/89	Gross beta	7	4	---	Unfiltered		FGL
RD-09		Primary	06/03/89	Gross alpha	-1 U	3	---	Unfiltered		BC
RD-09		Primary	06/03/89	Gross beta	6.8	0.7	---	Unfiltered		BC
RD-10		Primary	06/07/89	Gross alpha	2.3 U	2.5	---	Unfiltered		BC
RD-10		Primary	06/07/89	Gross beta	2.6	0.5	---	Unfiltered		BC
RD-10		Primary	07/22/89	Gross alpha	6.9	1.8	---	Unfiltered, Decanted		BC
RD-10		Primary	07/22/89	Gross beta	5.9	0.4	---	Unfiltered, Decanted		BC
RD-10		Primary	09/10/89	Gross alpha	4	1.5	---	Filtered		BC
RD-10		Primary	09/10/89	Gross alpha	5	1.6	---	Unfiltered		UST
RD-10		Primary	09/10/89	Gross beta	10	0.3	---	Filtered		BC

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-10		Primary	09/10/89	Gross beta	14	0.4	---	Unfiltered		UST
RD-10		Primary	03/06/91	Gross alpha	1.85 U	2.44	4	Filtered		IT
RD-10		Primary	03/06/91	Gross beta	2.56 U	2.02	4	Filtered		IT
RD-10		Primary	03/07/92	Gross alpha	2 U	---	2	Filtered		CEP
RD-10		Primary	03/07/92	Gross beta	3 U	---	3	Filtered		CEP
RD-12		Primary	06/03/89	Gross alpha	-1 U	3.9	---	Unfiltered		BC
RD-12		Primary	06/03/89	Gross beta	3.3	0.9	---	Unfiltered		BC
RD-12		Primary	07/22/89	Gross alpha	-1 U	1.5	---	Unfiltered, Decanted		BC
RD-12		Primary	07/22/89	Gross beta	12.4	1.3	---	Unfiltered, Decanted		BC
RD-13		Primary	09/05/89	Gross alpha	5.9	1.3	---	Filtered		BC
RD-13		Primary	09/05/89	Gross alpha	7.6	1.6	---	Unfiltered		BC
RD-13		Primary	09/05/89	Gross beta	10.1	0.3	---	Filtered		BC
RD-13		Primary	09/05/89	Gross beta	10.6	0.3	---	Unfiltered		BC
RD-13		Primary	09/12/89	Gross alpha	7	2.4	---	Filtered		UST
RD-13		Primary	09/12/89	Gross alpha	7	1.9	---	Unfiltered		UST
RD-13		Split	09/12/89	Gross alpha	4	3	---	Filtered		TMA
RD-13		Split	09/12/89	Gross alpha	0 U	2	---	Unfiltered		TMA
RD-13		Primary	09/12/89	Gross beta	5.6	0.7	---	Filtered		UST
RD-13		Primary	09/12/89	Gross beta	46	0.5	---	Unfiltered		UST
RD-13		Split	09/12/89	Gross beta	2	2	---	Filtered		TMA
RD-13		Split	09/12/89	Gross beta	7	2	---	Unfiltered		TMA
RD-13		Primary	10/17/89	Gross alpha	5.9	2.4	---	Filtered		UST
RD-13		Primary	10/17/89	Gross beta	10.3	0.6	---	Filtered		UST
RD-13		Primary	12/06/90	Gross alpha	1.69 U	2.16	4	Filtered		IT
RD-13		Primary	12/06/90	Gross beta	5.03	2.65	4	Filtered		IT
RD-13		Primary	03/08/91	Gross alpha	2.15 U	2.02	4	Filtered		IT
RD-13		Primary	03/08/91	Gross beta	6.02	2.72	4	Filtered		IT
RD-13		Primary	12/10/91	Gross alpha	4.02	2.51	4	Filtered		IT
RD-13		Primary	12/10/91	Gross beta	5.68	1.77	4	Filtered		IT
RD-13		Primary	03/12/92	Gross alpha	2 U	---	2	Filtered		CEP
RD-13		Primary	03/12/92	Gross beta	3 U	---	3	Filtered		CEP
RD-13		Primary	03/08/93	Gross alpha	7	3	2	Filtered		CEP
RD-13		Primary	03/08/93	Gross beta	7	4	3	Filtered		CEP
RD-13		Primary	08/26/97	Gross alpha	7.5	4.6	5.7	Filtered		LAS
RD-13		Primary	08/26/97	Gross beta	6.4	3.8	6	Filtered		LAS
RD-14		Primary	08/29/89	Gross alpha	4	2.07	---	Filtered		BC
RD-14		Primary	08/29/89	Gross alpha	5	2.19	---	Unfiltered		BC
RD-14		Primary	08/29/89	Gross beta	4	0.77	---	Filtered		BC
RD-14		Primary	08/29/89	Gross beta	3	0.8	---	Unfiltered		BC
RD-14		Primary	10/18/89	Gross alpha	5.8	2.3	---	Filtered		UST
RD-14		Duplicate	10/18/89	Gross alpha	4.83	2.48	---	Filtered		UST
RD-14		Primary	10/18/89	Gross beta	8.6	0.7	---	Filtered		UST
RD-14		Duplicate	10/18/89	Gross beta	1.97	1.65	---	Filtered		UST

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-14		Primary	10/31/89	Gross alpha	5.27	2.62	---	Filtered		UST
RD-14		Primary	10/31/89	Gross alpha	6.33	3.05	---	Unfiltered		UST
RD-14		Primary	10/31/89	Gross beta	5.01	2.62	---	Filtered		UST
RD-14		Primary	10/31/89	Gross beta	5.15	2.63	---	Unfiltered		UST
RD-14		Primary	12/07/90	Gross alpha	6.29	3.02	4	Filtered		IT
RD-14		Primary	12/07/90	Gross beta	6.69	2.8	4	Filtered		IT
RD-14		Primary	03/09/91	Gross alpha	9.44	4.63	4	Filtered		IT
RD-14		Primary	03/09/91	Gross beta	5.36	2.53	4	Filtered		IT
RD-14		Primary	12/06/91	Gross alpha	5.92	3.4	4	Filtered		IT
RD-14		Primary	12/06/91	Gross beta	7.66	2.22	4	Filtered		IT
RD-14		Primary	03/05/92	Gross alpha	3	2	2	Filtered		CEP
RD-14		Primary	03/05/92	Gross beta	3 U	---	3	Filtered		CEP
RD-14		Primary	03/07/93	Gross alpha	4	3	2	Filtered	High statistics due to large amount of solids.	CEP
RD-14		Primary	03/07/93	Gross beta	3 U	---	3	Filtered		CEP
RD-14		Primary	02/24/94	Gross alpha	1.8 U	3	5.3	Filtered		LAS
RD-14		Primary	02/24/94	Gross beta	0.8 U	3.2	5.6	Filtered		LAS
RD-14		Primary	02/08/95	Gross alpha	5.4 U	4.4	6.4	Filtered		LAS
RD-14		Primary	02/08/95	Gross beta	5.7	3.5	5.4	Filtered		LAS
RD-14		Primary	02/16/96	Gross alpha	4.4 U	3.4	4.8	Filtered		LAS
RD-14		Primary	02/16/96	Gross beta	5.4	2.2	3.3	Filtered		LAS
RD-14		Primary	02/07/97	Gross alpha	3.7 U	3.6	5.6	Filtered		LAS
RD-14		Primary	02/07/97	Gross beta	7.7	3.3	5	Filtered		LAS
RD-15		Primary	08/30/89	Gross alpha	6	2.62	---	Filtered		BC
RD-15		Primary	08/30/89	Gross alpha	8	2.5	---	Unfiltered		BC
RD-15		Primary	08/30/89	Gross beta	12	0.89	---	Filtered		BC
RD-15		Primary	08/30/89	Gross beta	5	0.89	---	Unfiltered		BC
RD-15		Primary	10/19/89	Gross alpha	12.5	2.7	---	Filtered		UST
RD-15		Primary	10/19/89	Gross beta	10.7	1	---	Filtered		UST
RD-15		Primary	12/07/90	Gross alpha	5.82	2.76	4	Filtered		IT
RD-15		Primary	12/07/90	Gross beta	6.45	2.77	4	Filtered		IT
RD-15		Primary	03/10/91	Gross alpha	9.29	3.41	4	Filtered		IT
RD-15		Primary	03/10/91	Gross beta	8.99	3.05	4	Filtered		IT
RD-15		Primary	12/06/91	Gross alpha	12.3	5.11	4	Filtered		IT
RD-15		Primary	12/06/91	Gross beta	9.19	2.48	4	Filtered		IT
RD-15		Primary	03/11/92	Gross alpha	3	2	2	Filtered		CEP
RD-15		Split	03/11/92	Gross alpha	7.7	5.7	2	Filtered		TEL
RD-15		Primary	03/11/92	Gross beta	7	3	3	Filtered		CEP
RD-15		Split	03/11/92	Gross beta	14	3	3	Filtered		TEL
RD-15		Primary	05/10/01	Gross alpha	2.02 U	2.4	3.45	Filtered		ES
RD-15		Primary	05/10/01	Gross beta	3.68 U	3	4.76	Filtered		ES
RD-15		Primary	03/06/02	Gross alpha	7.84	3.91	3.01	Filtered		DL
RD-15		Primary	03/06/02	Gross beta	4.77	1.32	2.75	Filtered		DL
RD-15		Primary	02/26/03	Gross alpha	5.24	3.1	3.69	Filtered		ES
RD-15		Primary	02/26/03	Gross beta	14.4	4.6	6.44	Filtered		ES
RD-15		Primary	02/24/04	Gross alpha	3.63 U	3.3	3.86	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-15		Primary	02/24/04	Gross beta	7.91	3.6	4.63	Filtered		ES
RD-15		Primary	08/09/04	Gross alpha	4.1	3	3.09	Filtered		ES
RD-15		Primary	08/09/04	Gross beta	10.4	3.5	3.52	Filtered		ES
RD-15		Primary	02/14/05	Gross alpha	8	3.6	2.98	Filtered		ES
RD-15		Primary	02/14/05	Gross beta	8.34	3.1	3.71	Filtered		ES
RD-15		Primary	08/24/05	Gross alpha	5.23	1.8	1.24	Filtered		ES
RD-15		Primary	08/24/05	Gross beta	7.22	2.2	2.48	Filtered		ES
RD-15		Primary	02/16/06	Gross alpha	5.52	1.98	1.69	Filtered		STL
RD-15		Primary	02/16/06	Gross alpha	4.68	3.2	4.13	Filtered		ES
RD-15		Split	02/16/06	Gross alpha	5.52	2	1.69	Filtered		STL
RD-15		Primary	02/16/06	Gross beta	8.84	2.9	3.06	Filtered		ES
RD-15		Primary	02/16/06	Gross beta	10.9	2.52	3.19	Filtered		STL
RD-15		Split	02/16/06	Gross beta	10.9	2	3.19	Filtered		STL
RD-15		Primary	08/08/06	Gross alpha	6.83	2.3	1.91	Filtered		ES
RD-15		Split	08/08/06	Gross alpha	4.16	2.9	3.22	Filtered		STL
RD-15		Primary	08/08/06	Gross beta	7.49	2.6	3.2	Filtered		ES
RD-15		Split	08/08/06	Gross beta	11.1	3.2	4.72	Filtered		STL
RD-15		Primary	02/06/07	Gross alpha	5.02	2.1	2.11	Filtered		ES
RD-15		Primary	02/06/07	Gross beta	7.42	2.3	2.52	Filtered		ES
RD-15		Primary	08/07/07	Gross alpha	3.54 U	3.2	4.44	Filtered		ES
RD-15		Primary	08/07/07	Gross beta	8.24	2.4	2.58	Filtered		ES
RD-15		Primary	02/20/08	Gross alpha	10.8	3.6	2.64	Filtered		ES
RD-15		Primary	02/20/08	Gross beta	6.9	2	2.99	Filtered		ES
RD-15		Primary	08/06/08	Gross alpha	6.28	2.7	2.61	Filtered		ES
RD-15		Primary	08/06/08	Gross beta	5.74	2	2.82	Filtered		ES
RD-15		Primary	02/24/09	Gross alpha	6.78	2.4	2.33	Filtered		ES
RD-15		Primary	02/24/09	Gross alpha	9.9	3	2.39	Unfiltered		ES
RD-15		Split	02/24/09	Gross alpha	9.05	1.84	1.27	Filtered		GEL
RD-15		Split	02/24/09	Gross alpha	10.2	2.57	1.93	Unfiltered		GEL
RD-15		Primary	02/24/09	Gross beta	6.68	1.6	1.95	Filtered		ES
RD-15		Primary	02/24/09	Gross beta	7.43	2.1	3.06	Unfiltered		ES
RD-15		Split	02/24/09	Gross beta	6.8	1.39	1.91	Filtered		GEL
RD-15		Split	02/24/09	Gross beta	7.13	1.72	2.28	Unfiltered		GEL
RD-15		Primary	07/24/09	Gross alpha	6.04	2.1	1.74	Filtered		ES
RD-15		Primary	07/24/09	Gross alpha	6	2.1	1.43	Unfiltered		ES
RD-15		Duplicate	07/24/09	Gross alpha	10.6	3.6	3.68	Unfiltered		ES
RD-15		Primary	07/24/09	Gross beta	8.03	1.7	2.19	Filtered		ES
RD-15		Primary	07/24/09	Gross beta	9.85	1.4	0.901	Unfiltered		ES
RD-15		Duplicate	07/24/09	Gross beta	10.1	2	2.24	Unfiltered		ES
RD-16		Primary	09/14/89	Gross alpha	4.1	2	---	Filtered		BC
RD-16		Primary	09/14/89	Gross alpha	15.3	3.7	---	Unfiltered		BC
RD-16		Primary	09/14/89	Gross beta	6.6	1	---	Filtered		BC
RD-16		Primary	09/14/89	Gross beta	5.9	1.8	---	Unfiltered		BC
RD-16		Primary	10/25/89	Gross alpha	6.4	2.3	---	Filtered		UST
RD-16		Primary	10/25/89	Gross beta	9.2	0.6	---	Filtered		UST

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-16		Primary	07/01/90	Gross alpha	1.92 U	2.37	---	Filtered		UST
RD-16		Primary	07/01/90	Gross beta	6.35	2.87	---	Filtered		UST
RD-16		Primary	12/07/90	Gross alpha	4.88	2.54	4	Filtered		IT
RD-16		Primary	12/07/90	Gross beta	6.39	2.72	4	Filtered		IT
RD-16		Primary	03/09/91	Gross alpha	6.12	2.82	4	Filtered		IT
RD-16		Primary	03/09/91	Gross beta	4.2	2.51	4	Filtered		IT
RD-16		Primary	12/05/91	Gross alpha	3 U	2.27	4	Filtered		IT
RD-16		Primary	12/05/91	Gross beta	6.38	1.93	4	Filtered		IT
RD-16		Primary	06/06/92	Gross alpha	2	2	2	Filtered		CEP
RD-16		Primary	06/06/92	Gross beta	-2 U	3	3	Filtered		CEP
RD-16		Primary	05/27/98	Gross alpha	4.72	2.4	2.75	Filtered		TN
RD-16		Primary	05/27/98	Gross beta	7.56	1.7	2.12	Filtered		TN
RD-17		Primary	09/21/89	Gross alpha	1.7	1.6	---	Filtered		BC
RD-17		Primary	09/21/89	Gross alpha	9.4	2.1	---	Unfiltered		BC
RD-17		Primary	09/21/89	Gross beta	8.5	0.8	---	Filtered		BC
RD-17		Primary	09/21/89	Gross beta	8.3	1.1	---	Unfiltered		BC
RD-17		Primary	10/18/89	Gross alpha	-1 U	1.5	---	Filtered		UST
RD-17		Duplicate	10/18/89	Gross alpha	2.8	2	---	Filtered		UST
RD-17		Primary	10/18/89	Gross beta	5.6	0.5	---	Filtered		UST
RD-17		Duplicate	10/18/89	Gross beta	5.7	0.5	---	Filtered		UST
RD-17		Primary	12/04/90	Gross alpha	4.5	2.87	4	Filtered		IT
RD-17		Primary	12/04/90	Gross beta	1.63 U	2.22	4	Filtered		IT
RD-17		Primary	03/05/91	Gross alpha	4.22	2.27	4	Filtered		IT
RD-17		Primary	03/05/91	Gross beta	1.69 U	0.994	4	Filtered		IT
RD-17		Primary	12/07/91	Gross alpha	2.42	1.81	1	Filtered		IT
RD-17		Split	12/07/91	Gross alpha	2 U	---	2	Filtered		CEP
RD-17		Primary	12/07/91	Gross beta	4.94	1.63	1	Filtered		IT
RD-17		Split	12/07/91	Gross beta	3 U	---	3	Filtered		CEP
RD-17		Primary	03/04/92	Gross alpha	2 U	---	2	Filtered		CEP
RD-17		Primary	03/04/92	Gross beta	3 U	---	3	Filtered		CEP
RD-17		Primary	03/05/93	Gross alpha	3	2	2	Filtered	High statistics due to large amount of solids.	CEP
RD-17		Primary	03/05/93	Gross beta	4	3	3	Filtered		CEP
RD-17		Primary	02/26/94	Gross alpha	3.8 U	3.5	5.3	Filtered		LAS
RD-17		Primary	02/26/94	Gross beta	7.4	2.9	4.2	Filtered		LAS
RD-17		Primary	02/08/95	Gross alpha	4.7 U	3.6	4.9	Filtered		LAS
RD-17		Primary	02/08/95	Gross beta	3.1 U	3	5	Filtered		LAS
RD-17		Primary	02/04/96	Gross alpha	8.8	3.3	3.5	Filtered		LAS
RD-17		Primary	02/04/96	Gross beta	2 U	1.5	2.4	Filtered		LAS
RD-17		Primary	02/08/97	Gross alpha	4.5	3.2	4.5	Filtered		LAS
RD-17		Primary	02/08/97	Gross beta	7.3	2.6	3.7	Filtered		LAS
RD-17		Primary	02/04/98	Gross alpha	4.18	2	2.06	Filtered		TN
RD-17		Primary	02/04/98	Gross beta	6.25	1.6	2.11	Filtered		TN
RD-17		Primary	02/08/99	Gross alpha	4.31	2	1.96	Filtered		TN
RD-17		Primary	02/08/99	Gross beta	5.94	1.7	2.33	Filtered		TN
RD-17		Primary	02/21/00	Gross alpha	3.57	2.6	3.43	Filtered		TR

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-17		Primary	02/21/00	Gross beta	6.66	3.7	5.66	Filtered		TR
RD-17		Primary	02/14/01	Gross alpha	4.46	2.6	2.79	Filtered		ES
RD-17		Primary	02/14/01	Gross beta	7.87	1.6	1.98	Filtered		ES
RD-17		Primary	03/01/02	Gross alpha	4.7	1.96	1.2	Filtered		DL
RD-17		Primary	03/01/02	Gross beta	4.59	1.3	2.57	Filtered		DL
RD-17		Primary	02/24/03	Gross alpha	2.73 J	2.3	2.62	Filtered		ES
RD-17		Primary	02/24/03	Gross beta	7.25	3.6	5.2	Filtered		ES
RD-17		Primary	02/23/04	Gross alpha	5.68	3.4	3.06	Filtered		ES
RD-17		Primary	02/23/04	Gross beta	9.16	3.8	4.52	Filtered		ES
RD-17		Primary	08/09/04	Gross alpha	3.07	2.7	2.75	Filtered		ES
RD-17		Primary	08/09/04	Gross beta	8.44	3.7	4.73	Filtered		ES
RD-17		Primary	02/15/05	Gross alpha	2.93 U	2.6	3.52	Filtered		ES
RD-17		Primary	02/15/05	Gross beta	7.32	2.9	3.68	Filtered		ES
RD-17		Primary	08/23/05	Gross alpha	2.61 J	1.3	1.33	Filtered		ES
RD-17		Primary	08/23/05	Gross beta	7.49	2	1.94	Filtered		ES
RD-17		Primary	02/16/06	Gross alpha	0.699 U	2.7	4.81	Filtered		ES
RD-17		Primary	02/16/06	Gross beta	7.98	3.2	3.95	Filtered		ES
RD-17		Primary	08/10/06	Gross alpha	3.32	1.6	1.71	Filtered		ES
RD-17		Primary	08/10/06	Gross beta	5.63	2.1	2.65	Filtered		ES
RD-17		Primary	02/06/07	Gross alpha	2.72 J	1.5	1.81	Filtered		ES
RD-17		Split	02/06/07	Gross alpha	6.95	2.9	1.81	Filtered		STL
RD-17		Primary	02/06/07	Gross beta	6.32	1.7	1.68	Filtered		ES
RD-17		Split	02/06/07	Gross beta	7.82	2.9	4.77	Filtered		STL
RD-17		Primary	08/06/07	Gross alpha	5.49	2.5	2.87	Filtered		ES
RD-17		Primary	08/06/07	Gross beta	6.82	2.2	2.46	Filtered		ES
RD-17		Primary	02/22/08	Gross alpha	5.71	2.5	2.29	Filtered		ES
RD-17		Primary	02/22/08	Gross beta	8.42	1.8	2.26	Filtered		ES
RD-17		Primary	08/06/08	Gross alpha	5.66	2.9	3.6	Filtered		ES
RD-17		Primary	08/06/08	Gross beta	7.02	1.9	2.52	Filtered		ES
RD-17		Primary	02/25/09	Gross alpha	4.6	1.9	2.17	Filtered		ES
RD-17		Primary	02/25/09	Gross alpha	5.14	2.1	2.24	Unfiltered		ES
RD-17		Primary	02/25/09	Gross beta	5.14	1.9	2.92	Filtered		ES
RD-17		Primary	02/25/09	Gross beta	4.99	1.4	2.01	Unfiltered		ES
RD-17		Primary	07/27/09	Gross alpha	2.64 J	1.9	2.45	Filtered		ES
RD-17		Primary	07/27/09	Gross alpha	5.15	2.3	2.39	Unfiltered		ES
RD-17		Primary	07/27/09	Gross beta	6.43	2.3	3.3	Filtered		ES
RD-17		Primary	07/27/09	Gross beta	8.17	2.3	3.04	Unfiltered		ES
RD-18		Primary	09/15/89	Gross alpha	12.7	2.3	---	Filtered		BC
RD-18		Primary	09/15/89	Gross alpha	16	2.5	---	Unfiltered		BC
RD-18		Primary	09/15/89	Gross beta	6.7	1.2	---	Filtered		BC
RD-18		Primary	09/15/89	Gross beta	14.4	1.2	---	Unfiltered		BC
RD-18		Primary	10/26/89	Gross alpha	6	2	---	Filtered		UST
RD-18		Primary	10/26/89	Gross beta	9.6	0.7	---	Filtered		UST
RD-18		Primary	07/01/90	Gross alpha	3.85	2.23	---	Filtered		UST
RD-18		Primary	07/01/90	Gross beta	6.95	2.79	---	Filtered		UST

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-18		Primary	12/08/90	Gross alpha	8.2	3.26	4	Filtered		IT
RD-18		Primary	12/08/90	Gross beta	6.62	2.9	4	Filtered		IT
RD-18		Primary	03/09/91	Gross alpha	3.31 U	1.87	4	Filtered		IT
RD-18		Primary	03/09/91	Gross beta	4.05	2.42	4	Filtered		IT
RD-18		Primary	12/11/91	Gross alpha	2.51 U	1.91	4	Filtered		IT
RD-18		Primary	12/11/91	Gross beta	3.45 U	1.27	4	Filtered		IT
RD-18		Primary	03/12/92	Gross alpha	7	2	2	Filtered		CEP
RD-18		Primary	03/12/92	Gross beta	11	3	3	Filtered		CEP
RD-18		Primary	03/17/93	Gross alpha	4	2	2	Filtered		TN
RD-18		Primary	03/17/93	Gross beta	12	4	3	Filtered		TN
RD-18		Primary	06/08/93	Gross alpha	8	3	2	Filtered		CEP
RD-18		Primary	06/08/93	Gross beta	22	4	3	Filtered		CEP
RD-18		Primary	08/09/93	Gross alpha	7	2	2	Filtered		CEP
RD-18		Primary	08/09/93	Gross beta	16	3	3	Filtered		CEP
RD-18		Primary	11/04/93	Gross alpha	1.5 U	1.9	3.1	Filtered		CEP
RD-18		Primary	11/04/93	Gross beta	7.2	2.5	3.5	Filtered		CEP
RD-18		Primary	02/22/94	Gross alpha	13.6	4.4	3.6	Filtered		LAS
RD-18		Primary	02/22/94	Gross beta	8.7	2.6	3.5	Filtered		LAS
RD-18		Primary	02/17/95	Gross alpha	22.1	5.3	3.3	Filtered		LAS
RD-18		Reanalysis of Primary	02/17/95	Gross alpha	8.5	3.4	3.4	Filtered		LAS
RD-18		Primary	02/17/95	Gross beta	20.4	3	3	Filtered		LAS
RD-18		Reanalysis of Primary	02/17/95	Gross beta	12.2	2.2	2.5	Filtered		LAS
RD-18		Primary	02/05/96	Gross alpha	1.9 U	2.3	3.9	Filtered		LAS
RD-18		Primary	02/05/96	Gross beta	2.4 U	1.6	2.6	Filtered		LAS
RD-18		Primary	02/06/97	Gross alpha	11.2	3.8	3.5	Filtered		LAS
RD-18		Primary	02/06/97	Gross beta	7.3	2.3	3.2	Filtered		LAS
RD-18		Primary	02/06/98	Gross alpha	3.42	1.5	1.5	Filtered		TN
RD-18		Primary	02/06/98	Gross beta	4.95	1.5	2.03	Filtered		TN
RD-19		Primary	08/31/89	Gross alpha	13	2.41	---	Filtered		BC
RD-19		Primary	08/31/89	Gross alpha	10	2.35	---	Unfiltered		BC
RD-19		Primary	08/31/89	Gross beta	1.3	0.88	---	Filtered		BC
RD-19		Primary	08/31/89	Gross beta	18	0.77	---	Unfiltered		BC
RD-19		Primary	10/26/89	Gross alpha	11	2.1	---	Filtered		UST
RD-19		Primary	10/26/89	Gross beta	13.4	0.7	---	Filtered		UST
RD-19		Primary	12/08/90	Gross alpha	6.66	3.17	4	Filtered		IT
RD-19		Duplicate	12/08/90	Gross alpha	11.9	5.63	4	Filtered		IT
RD-19		Primary	12/08/90	Gross beta	9.06	3.2	4	Filtered		IT
RD-19		Duplicate	12/08/90	Gross beta	11.6	3.38	4	Filtered		IT
RD-19		Primary	03/08/91	Gross alpha	11.7	5.8	4	Filtered		IT
RD-19		Duplicate	03/08/91	Gross alpha	8.8	4.49	4	Filtered		IT
RD-19		Primary	03/08/91	Gross beta	7.74	2.89	4	Filtered		IT
RD-19		Duplicate	03/08/91	Gross beta	7.96	2.93	4	Filtered		IT
RD-19		Primary	12/11/91	Gross alpha	9.2	5.31	4	Filtered		IT
RD-19		Primary	12/11/91	Gross beta	11.2	3.47	4	Filtered		IT

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-19		Primary	03/12/92	Gross alpha	17	4	2	Filtered		CEP
RD-19		Primary	03/12/92	Gross beta	15	4	3	Filtered		CEP
RD-19		Primary	03/08/93	Gross alpha	6	4	2	Filtered	High statistics due to large amount of solids.	CEP
RD-19		Duplicate	03/08/93	Gross alpha	5	4	2	Filtered	High statistics due to large amount of solids.	CEP
RD-19		Primary	03/08/93	Gross beta	12	4	3	Filtered	High statistics due to large amount of solids.	CEP
RD-19		Duplicate	03/08/93	Gross beta	13	4	3	Filtered	High statistics due to large amount of solids.	CEP
RD-19		Primary	02/26/94	Gross alpha	18	9.2	11	Filtered		LAS
RD-19		Reanalysis of Primary	02/26/94	Gross alpha	21	10	11	Filtered		LAS
RD-19		Primary	02/26/94	Gross beta	17.5	5.4	7.6	Filtered		LAS
RD-19		Reanalysis of Primary	02/26/94	Gross beta	32.1	8.9	12	Filtered		LAS
RD-19		Primary	02/15/95	Gross alpha	100	22	13	Filtered		LAS
RD-19		Reanalysis of Primary	02/15/95	Gross alpha	13.3	8.7	11	Filtered		LAS
RD-19		Primary	02/15/95	Gross beta	50.2	9.8	11	Filtered		LAS
RD-19		Reanalysis of Primary	02/15/95	Gross beta	34.6	7	8.5	Filtered		LAS
RD-19		Primary	02/06/96	Gross alpha	36	12	12	Filtered		CEP
RD-19		Reanalysis of Primary	02/06/96	Gross alpha	6.9	5	7.3	Filtered		CEP
RD-19		Primary	02/06/96	Gross beta	29.8	7.1	9	Filtered		CEP
RD-19		Reanalysis of Primary	02/06/96	Gross beta	3.6 U	2.8	4.6	Filtered		CEP
RD-19		Primary	02/07/97	Gross alpha	27	10	10	Filtered		LAS
RD-19		Primary	02/07/97	Gross beta	17.3	5.7	8	Filtered		LAS
RD-19		Primary	02/06/98	Gross alpha	25.6	5.7	3.37	Filtered		TN
RD-19		Primary	02/06/98	Gross beta	18.6	2.5	2.95	Filtered		TN
RD-20		Primary	09/05/89	Gross alpha	10	2.3	---	Filtered		BC
RD-20		Primary	09/05/89	Gross alpha	14.4	2.4	---	Unfiltered		BC
RD-20		Primary	09/05/89	Gross beta	16.7	0.7	---	Filtered		BC
RD-20		Primary	09/05/89	Gross beta	34.1	0.8	---	Unfiltered		BC
RD-20		Primary	10/17/89	Gross alpha	13.1	3.3	---	Filtered		UST
RD-20		Primary	10/17/89	Gross beta	17.06	1	---	Filtered		UST
RD-20		Primary	12/07/90	Gross alpha	4.74	2.36	4	Filtered		IT
RD-20		Primary	12/07/90	Gross beta	2.49 U	2.3	4	Filtered		IT
RD-20		Primary	03/05/91	Gross alpha	4.07	2.23	4	Filtered		IT
RD-20		Primary	03/05/91	Gross beta	5.29	1.39	4	Filtered		IT
RD-20		Primary	12/10/91	Gross alpha	4.43	3.96	4	Filtered		IT
RD-20		Primary	12/10/91	Gross beta	9.08	3.07	4	Filtered		IT
RD-20		Primary	03/04/92	Gross alpha	4	3	2	Filtered		CEP
RD-20		Primary	03/04/92	Gross beta	5	3	3	Filtered		CEP
RD-20		Primary	03/03/93	Gross alpha	6	5	2	Filtered	High statistics due to large amount of solids.	CEP
RD-20		Primary	03/03/93	Gross beta	10	4	3	Filtered		CEP

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-20		Primary	02/22/94	Gross alpha	5 U	6.4	11	Filtered		LAS
RD-20		Primary	02/22/94	Gross beta	8.3 U	6.9	11	Filtered		LAS
RD-20		Primary	02/16/95	Gross alpha	35	11	8.6	Filtered		LAS
RD-20		Reanalysis of Primary	02/16/95	Gross alpha	10.1	6	7.1	Filtered		LAS
RD-20		Reanalysis of Primary	02/16/95	Gross alpha	6.5 U	5.5	7.5	Filtered		LAS
RD-20		Duplicate	02/16/95	Gross alpha	46	12	8.8	Filtered		LAS
RD-20		Primary	02/16/95	Gross beta	36.3	6.9	8	Filtered		LAS
RD-20		Reanalysis of Primary	02/16/95	Gross beta	9.6	4.1	6	Filtered		LAS
RD-20		Duplicate	02/16/95	Gross beta	35.4	6.7	7.6	Filtered		LAS
RD-20		Reanalysis of Duplicate	02/16/95	Gross beta	10.3 U	6.9	11	Filtered		LAS
RD-20		Primary	02/04/96	Gross alpha	6.5 U	6.9	11	Filtered		LAS
RD-20		Primary	02/04/96	Gross beta	4.7 U	4.2	6.9	Filtered		LAS
RD-20		Primary	02/08/97	Gross alpha	14.4	6.9	7.9	Filtered		LAS
RD-20		Primary	02/08/97	Gross beta	5.8 U	3.9	6.1	Filtered		LAS
RD-20		Primary	02/04/98	Gross alpha	8.04	3.6	3.42	Filtered		TN
RD-20		Primary	02/04/98	Gross beta	8.24	2	2.68	Filtered		TN
RD-21		Primary	09/12/89	Gross alpha	6	2	---	Filtered		BC
RD-21		Primary	09/12/89	Gross alpha	6.5	2.2	---	Unfiltered		BC
RD-21		Primary	09/12/89	Gross beta	-0.5 U	1	---	Filtered		BC
RD-21		Primary	09/12/89	Gross beta	5.5	1.1	---	Unfiltered		BC
RD-21		Primary	10/20/89	Gross alpha	7.7	2.6	---	Filtered		BC
RD-21		Duplicate	10/20/89	Gross alpha	12.3	3	---	Filtered		BC
RD-21		Primary	10/20/89	Gross beta	10.8	0.9	---	Filtered		BC
RD-21		Duplicate	10/20/89	Gross beta	3.1	1	---	Filtered		BC
RD-21		Primary	12/03/90	Gross alpha	2.91 U	2.53	4	Filtered		IT
RD-21		Primary	12/03/90	Gross beta	1.85 U	2.34	4	Filtered		IT
RD-21		Primary	03/08/91	Gross alpha	7.8	4.84	4	Filtered		IT
RD-21		Primary	03/08/91	Gross beta	5.85	2.62	4	Filtered		IT
RD-21		Primary	12/05/91	Gross alpha	7.59	3.74	4	Filtered		IT
RD-21		Primary	12/05/91	Gross beta	6.37	2.11	4	Filtered		IT
RD-21		Primary	03/04/92	Gross alpha	5	2	2	Filtered		CEP
RD-21		Primary	03/04/92	Gross beta	5	4	3	Filtered		CEP
RD-21		Primary	03/06/93	Gross alpha	3	2	2	Filtered		CEP
RD-21		Primary	03/06/93	Gross beta	3 U	---	3	Filtered		CEP
RD-21		Primary	06/22/93	Gross alpha	13	4	2	Filtered		CEP
RD-21		Primary	06/22/93	Gross beta	37	5	3	Filtered		CEP
RD-21		Primary	08/06/93	Gross alpha	3	2	2	Filtered	High statistics due to large amount of solids.	CEP
RD-21		Primary	08/06/93	Gross beta	3 U	---	3	Filtered		CEP
RD-21		Primary	11/06/93	Gross alpha	4.1	3	3.9	Filtered		LAS
RD-21		Primary	11/06/93	Gross beta	6.5	3.5	5.4	Filtered		LAS
RD-21		Primary	02/25/94	Gross alpha	7.2	4.5	5.7	Filtered		LAS
RD-21		Primary	02/25/94	Gross beta	6.1	3.5	5.4	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-21		Primary	08/08/94	Gross alpha	6.8	3.9	4.3	Filtered		LAS
RD-21		Primary	08/08/94	Gross beta	6.6	3.3	5	Filtered		LAS
RD-21		Primary	02/08/95	Gross alpha	8.2	4.8	5.9	Filtered		LAS
RD-21		Primary	02/08/95	Gross beta	9.2	3.7	5.3	Filtered		LAS
RD-21		Primary	08/31/95	Gross alpha	13.7	6.3	6.8	Filtered		LAS
RD-21		Primary	08/31/95	Gross beta	5.5 U	3.9	6.1	Filtered		LAS
RD-21		Primary	02/16/96	Gross alpha	6.8	4.1	5.4	Filtered		LAS
RD-21		Primary	02/16/96	Gross beta	5.1	2.8	4.4	Filtered		LAS
RD-21		Primary	08/18/96	Gross alpha	10.3	5.6	7.1	Filtered		LAS
RD-21		Primary	08/18/96	Gross beta	3.5 U	3.5	5.8	Filtered		LAS
RD-21		Primary	02/06/97	Gross alpha	4.6 U	3.8	5.5	Filtered		LAS
RD-21		Primary	02/06/97	Gross beta	4.5 U	3.1	5	Filtered		LAS
RD-21		Primary	02/09/98	Gross alpha	11.8	3.3	2.49	Filtered		TN
RD-21		Primary	02/09/98	Gross beta	6.79	1.7	2.25	Filtered		TN
RD-21		Primary	02/16/99	Gross alpha	13	4.5	3.73	Filtered		TN
RD-21		Primary	02/16/99	Gross beta	6.58	1.7	2.24	Filtered		TN
RD-21		Primary	03/15/00	Gross alpha	17.2	4.5	3.31	Filtered		TR
RD-21		Primary	03/15/00	Gross beta	6.85	2.2	3	Filtered		TR
RD-21		Primary	10/24/01	Gross alpha	21.45	5.64	2.56	Filtered		DL
RD-21		Primary	10/24/01	Gross beta	3.85	0.96	2.9	Filtered		DL
RD-21		Primary	03/06/02	Gross alpha	5.04	2.93	3.64	Filtered		DL
RD-21		Primary	03/06/02	Gross beta	3.07	1.2	2.3	Filtered		DL
RD-21	Z02	Primary	02/25/03	Gross alpha	2.78 U	2.5	3.04	Filtered		ES
RD-21	Z02	Primary	02/25/03	Gross beta	7.72	3.6	5.25	Filtered		ES
RD-21	Z02	Primary	11/04/04	Gross alpha	0.726 U	1.7	2.8	Filtered		ES
RD-21	Z02	Primary	11/04/04	Gross beta	5.09	2.8	3.87	Filtered		ES
RD-21	Z02	Primary	02/16/05	Gross alpha	4.89	3.3	3.83	Filtered		ES
RD-21	Z02	Primary	02/16/05	Gross beta	4.19 U	3.2	4.86	Filtered		ES
RD-21	Z02	Primary	09/01/05	Gross alpha	4.37	1.7	1.5	Filtered		ES
RD-21	Z02	Primary	09/01/05	Gross beta	6.7	2.2	2.45	Filtered		ES
RD-21	Z02	Primary	02/16/06	Gross alpha	-0.928 U	4.1	7.56	Filtered		ES
RD-21	Z02	Primary	02/16/06	Gross beta	6.03	3.9	5.73	Filtered		ES
RD-21	Z02	Primary	08/16/06	Gross alpha	5.86	2.3	2.18	Filtered		ES
RD-21	Z02	Primary	08/16/06	Gross beta	6.86	2.2	2.41	Filtered		ES
RD-21	Z02	Primary	05/21/07	Gross alpha	13.2	7.8	9.72	Filtered		ES
RD-21	Z02	Primary	05/21/07	Gross beta	5.84	3.2	4.69	Filtered		ES
RD-21	Z02	Primary	08/09/07	Gross alpha	13.5	4.7	4.52	Filtered		ES
RD-21	Z02	Primary	08/09/07	Gross beta	6.41	3.2	4.76	Filtered		ES
RD-21	Z02	Primary	02/05/08	Gross alpha	6.45	2.1	1.61	Filtered		ES
RD-21	Z02	Primary	02/05/08	Gross beta	4.99	1.6	1.95	Filtered		ES
RD-21	Z03	Primary	08/06/08	Gross alpha	1.82 U	1.6	2.21	Filtered		ES
RD-21	Z03	Primary	08/06/08	Gross beta	10.3	1.9	1.93	Filtered		ES
RD-21	Z04	Primary	02/24/09	Gross alpha	4.18	2.1	2.44	Filtered		ES
RD-21	Z04	Primary	02/24/09	Gross alpha	10.1	2.8	1.28	Unfiltered		ES
RD-21	Z04	Primary	02/24/09	Gross beta	4.43	1.5	2.13	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-21	Z04	Primary	02/24/09	Gross beta	5.54	1.7	2.31	Unfiltered		ES
RD-21	Z02	Primary	07/16/09	Gross alpha	6.69	3.4	4.42	Filtered		ES
RD-21	Z02	Primary	07/16/09	Gross alpha	5.8	2.3	2.29	Unfiltered		ES
RD-21	Z02	Primary	07/16/09	Gross beta	7.23	2.1	2.82	Filtered		ES
RD-21	Z02	Primary	07/16/09	Gross beta	4.64	2	2.84	Unfiltered		ES
RD-22		Primary	09/13/89	Gross alpha	7.8	1.7	---	Filtered		BC
RD-22		Primary	09/13/89	Gross alpha	7.8	2.8	---	Unfiltered		BC
RD-22		Primary	09/13/89	Gross beta	35	0.8	---	Filtered		BC
RD-22		Primary	09/13/89	Gross beta	5.5	1.3	---	Unfiltered		BC
RD-22		Primary	10/19/89	Gross alpha	-1 U	2.1	---	Filtered		UST
RD-22		Primary	10/19/89	Gross beta	9	0.8	---	Filtered		UST
RD-22		Primary	03/27/90	Gross alpha	2.92	2.85	---	Filtered		UST
RD-22		Primary	03/27/90	Gross beta	6.02	2.75	---	Filtered		UST
RD-22		Primary	07/01/90	Gross alpha	3.27	3.12	---	Filtered		UST
RD-22		Primary	07/01/90	Gross beta	5.01	2.63	---	Filtered		UST
RD-22		Primary	09/15/90	Gross alpha	0.539 U	1.87	---	Filtered		UST
RD-22		Primary	09/15/90	Gross beta	7.38	2.88	---	Filtered		UST
RD-22		Primary	12/04/90	Gross alpha	5.87	4.09	4	Filtered		IT
RD-22		Duplicate	12/04/90	Gross alpha	3.57 U	3.91	4	Filtered		IT
RD-22		Primary	12/04/90	Gross beta	6.14	2.78	4	Filtered		IT
RD-22		Duplicate	12/04/90	Gross beta	3.71 U	2.57	4	Filtered		IT
RD-22		Primary	03/11/91	Gross alpha	11.4	7.46	4	Filtered		IT
RD-22		Primary	03/11/91	Gross beta	3.64 U	2.39	4	Filtered		IT
RD-22		Primary	06/05/91	Gross alpha	2.71 U	2.6	4	Filtered		IT
RD-22		Primary	06/05/91	Gross beta	7.64	2.85	4	Filtered		IT
RD-22		Primary	09/07/91	Gross alpha	1.48 U	0.898	4	Filtered		IT
RD-22		Primary	09/07/91	Gross beta	4.71	1.34	4	Filtered		IT
RD-22		Primary	12/06/91	Gross alpha	3.59	3.06	1	Filtered		IT
RD-22		Primary	12/06/91	Gross beta	5.17	2.36	1	Filtered		IT
RD-22		Primary	06/05/92	Gross alpha	3	2	2	Filtered		CEP
RD-22		Primary	06/05/92	Gross beta	-3 U	3	3	Filtered		CEP
RD-22		Primary	09/10/92	Gross alpha	3	2	2	Filtered		CEP
RD-22		Primary	09/10/92	Gross beta	15	4	3	Filtered		CEP
RD-22		Primary	12/04/92	Gross alpha	3	2	2	Filtered		CEP
RD-22		Primary	12/04/92	Gross beta	14	3	3	Filtered		CEP
RD-22		Primary	03/20/93	Gross alpha	2 U	---	2	Filtered		CEP
RD-22		Primary	03/20/93	Gross beta	10	3	3	Filtered		CEP
RD-22		Primary	06/22/93	Gross alpha	10	4	2	Filtered		CEP
RD-22		Primary	06/22/93	Gross beta	36	5	3	Filtered		CEP
RD-22		Primary	08/05/93	Gross alpha	2 U	---	2	Filtered		CEP
RD-22		Primary	08/05/93	Gross beta	3 U	---	3	Filtered		CEP
RD-22		Primary	11/21/93	Gross alpha	3.5 U	3.8	5.9	Filtered		LAS
RD-22		Primary	11/21/93	Gross beta	8.9	4.2	6.5	Filtered		LAS
RD-22		Primary	02/24/94	Gross alpha	4.6 U	5.1	8.1	Filtered		LAS
RD-22		Primary	02/24/94	Gross beta	8.6	5.4	8.5	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-22		Primary	08/09/94	Gross alpha	2.3 U	3.3	5.5	Filtered		LAS
RD-22		Primary	08/09/94	Gross beta	7.7	3.6	5.6	Filtered		LAS
RD-22		Primary	02/17/95	Gross alpha	29.6	8.4	6.3	Filtered		LAS
RD-22		Reanalysis of Primary	02/17/95	Gross alpha	0.2 U	2.6	5.8	Filtered		LAS
RD-22		Primary	02/17/95	Gross beta	26.6	4.8	5.4	Filtered		LAS
RD-22		Reanalysis of Primary	02/17/95	Gross beta	4.5 U	3.4	5.4	Filtered		LAS
RD-22		Primary	08/29/95	Gross alpha	3.1 U	4.2	7.1	Filtered		LAS
RD-22		Primary	08/29/95	Gross beta	8.1	4.5	7	Filtered		LAS
RD-22		Primary	02/16/96	Gross alpha	2.2 U	3	5.1	Filtered		LAS
RD-22		Primary	02/16/96	Gross beta	2.6 U	2.1	3.3	Filtered		LAS
RD-22		Primary	08/18/96	Gross alpha	-0.3 U	4.3	9	Filtered		LAS
RD-22		Primary	08/18/96	Gross beta	8.9	4.9	7.7	Filtered		LAS
RD-22		Primary	02/26/97	Gross alpha	3.9 U	4.2	6.6	Filtered		LAS
RD-22		Primary	02/26/97	Gross beta	7.5	3.8	5.8	Filtered		LAS
RD-22		Primary	05/28/98	Gross alpha	4.18	2.8	3.6	Filtered		TN
RD-22		Primary	05/28/98	Gross beta	7.19	1.7	2.28	Filtered		TN
RD-22		Primary	02/17/99	Gross alpha	0.868 U	2	3.5	Filtered		TN
RD-22		Primary	02/17/99	Gross beta	4.48	1.7	2.56	Filtered		TN
RD-22		Primary	02/06/00	Gross alpha	5.12	3.3	4.43	Filtered		TR
RD-22		Primary	02/06/00	Gross beta	8.1	2.8	3.93	Filtered		TR
RD-22		Primary	02/16/01	Gross alpha	3.64	3.3	2.9	Filtered		ES
RD-22		Primary	02/16/01	Gross beta	8.59	1.7	2.06	Filtered		ES
RD-22		Primary	02/20/02	Gross alpha	9.21	3.56	2.16	Filtered		DL
RD-22		Primary	02/20/02	Gross beta	4.79	9.21	1.32	Filtered		DL
RD-22	Z02	Primary	02/24/03	Gross alpha	2.97 J	1.4	1.55	Filtered		ES
RD-22	Z02	Primary	02/24/03	Gross beta	9.22	1.9	2.55	Filtered		ES
RD-22	Z02	Primary	11/12/04	Gross alpha	3.41	2.4	2.95	Filtered		ES
RD-22	Z02	Primary	11/12/04	Gross beta	6.82	3.1	4.22	Filtered		ES
RD-22	Z02	Primary	02/17/05	Gross alpha	3.55 U	2.9	3.76	Filtered		ES
RD-22	Z02	Primary	02/17/05	Gross beta	-2.82 U	4.6	8.01	Filtered		ES
RD-22	Z02	Primary	08/31/05	Gross alpha	5.18	2.1	2.09	Filtered		ES
RD-22	Z02	Primary	08/31/05	Gross beta	7.87	2.5	2.83	Filtered		ES
RD-22	Z02	Primary	02/15/06	Gross alpha	-2.11 U	4	7.01	Filtered		ES
RD-22	Z02	Primary	02/15/06	Gross beta	8.51	3.6	4.7	Filtered		ES
RD-22	Z02	Primary	08/16/06	Gross alpha	3.28	1.8	2.09	Filtered		ES
RD-22	Z02	Primary	08/16/06	Gross beta	6.19	2.4	3.26	Filtered		ES
RD-22	Z02	Primary	02/07/07	Gross alpha	1.58 U	2	3.13	Filtered		ES
RD-22	Z02	Primary	02/07/07	Gross beta	7.04	2.5	3.12	Filtered		ES
RD-22	Z02	Primary	08/09/07	Gross alpha	5 U	3.8	5.34	Filtered		ES
RD-22	Z02	Primary	08/09/07	Gross beta	5.99 U	5.8	9.11	Filtered		ES
RD-22	Z02	Primary	02/05/08	Gross alpha	4.22	2.6	3.55	Filtered		ES
RD-22	Z02	Primary	02/05/08	Gross beta	5.97	2.2	2.82	Filtered		ES
RD-22	Z02	Primary	08/06/08	Gross alpha	3.76	2.5	3.1	Filtered		ES
RD-22	Z02	Primary	08/06/08	Gross beta	5.54	3.4	5.15	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-22	Z02	Primary	02/23/09	Gross alpha	3.05	1.9	2.82	Filtered		ES
RD-22	Z02	Primary	02/23/09	Gross alpha	2.18 U	2	2.89	Unfiltered		ES
RD-22	Z02	Primary	02/23/09	Gross beta	7.17	1.8	2.34	Filtered		ES
RD-22	Z02	Primary	02/23/09	Gross beta	7.08	3.1	4.7	Unfiltered		ES
RD-22	Z02	Primary	07/16/09	Gross alpha	2.7 J	1.9	2.3	Filtered		ES
RD-22	Z02	Primary	07/16/09	Gross alpha	3.32	1.9	2.36	Unfiltered		ES
RD-22	Z02	Primary	07/16/09	Gross beta	5.88	2.4	3.56	Filtered		ES
RD-22	Z02	Primary	07/16/09	Gross beta	5.96	2.6	3.87	Unfiltered		ES
RD-23		Primary	09/13/89	Gross alpha	8.2	2.3	---	Filtered		BC
RD-23		Primary	09/13/89	Gross alpha	8.6	2.4	---	Unfiltered		BC
RD-23		Primary	09/13/89	Gross beta	-0.5 U	1.2	---	Filtered		BC
RD-23		Primary	09/13/89	Gross beta	7.4	1.2	---	Unfiltered		BC
RD-23		Primary	10/20/89	Gross alpha	9.4	3	---	Filtered		BC
RD-23		Primary	10/20/89	Gross beta	6.5	0.9	---	Filtered		BC
RD-23		Primary	06/29/90	Gross alpha	0.58 U	2.12	---	Filtered		UST
RD-23		Primary	06/29/90	Gross beta	1.73 U	2.18	---	Filtered		UST
RD-23		Primary	12/05/90	Gross alpha	1.28 U	1.52	4	Filtered		IT
RD-23		Primary	12/05/90	Gross beta	2.27 U	2.26	4	Filtered		IT
RD-23		Primary	03/11/91	Gross alpha	3.3 U	1.94	4	Filtered		IT
RD-23		Duplicate	03/11/91	Gross alpha	1.61 U	1.34	4	Filtered		IT
RD-23		Primary	03/11/91	Gross beta	0.626 U	1.89	4	Filtered		IT
RD-23		Duplicate	03/11/91	Gross beta	3.98 U	2.41	4	Filtered		IT
RD-23		Primary	12/05/91	Gross alpha	3.8 U	2.08	4	Filtered		IT
RD-23		Primary	12/05/91	Gross beta	5.5	1.5	4	Filtered		IT
RD-23		Primary	03/04/92	Gross alpha	2 U	---	2	Filtered		CEP
RD-23		Primary	03/04/92	Gross beta	3 U	---	3	Filtered		CEP
RD-23		Primary	03/21/93	Gross alpha	2 U	---	2	Filtered		CEP
RD-23		Primary	03/21/93	Gross beta	9	2	3	Filtered		CEP
RD-23		Primary	06/23/93	Gross alpha	2 U	---	2	Filtered		CEP
RD-23		Primary	06/23/93	Gross beta	6	4	3	Filtered		CEP
RD-23		Primary	08/06/93	Gross alpha	2 U	---	2	Filtered		CEP
RD-23		Primary	08/06/93	Gross beta	3 U	---	3	Filtered		CEP
RD-23		Primary	11/06/93	Gross alpha	2.9 U	2.5	3.8	Filtered		LAS
RD-23		Primary	11/06/93	Gross beta	3.3 U	2.4	3.9	Filtered		LAS
RD-23		Primary	02/25/94	Gross alpha	3.1 U	2.8	4	Filtered		LAS
RD-23		Primary	02/25/94	Gross beta	3.9 U	2.8	4.6	Filtered		LAS
RD-23		Primary	08/08/94	Gross alpha	2.5 U	2.7	4.3	Filtered		LAS
RD-23		Primary	08/08/94	Gross beta	5.7	2.7	4	Filtered		LAS
RD-23		Primary	11/22/94	Gross alpha	4.4	2.8	---	Filtered		LAS
RD-23		Primary	11/22/94	Gross beta	4.5	2	---	Filtered		LAS
RD-23		Primary	02/05/95	Gross alpha	3.1 U	3.1	4.7	Filtered		LAS
RD-23		Primary	02/05/95	Gross beta	8.4	3.3	4.8	Filtered		LAS
RD-23		Primary	08/03/95	Gross alpha	4.1 U	3.2	4.4	Filtered		LAS
RD-23		Primary	08/03/95	Gross beta	7.2	3.1	4.7	Filtered		LAS
RD-23		Primary	02/16/96	Gross alpha	3.6 U	2.7	3.8	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-23		Primary	02/16/96	Gross beta	4	1.8	2.6	Filtered		LAS
RD-23		Primary	08/18/96	Gross alpha	2.9 U	2.8	4.4	Filtered		LAS
RD-23		Primary	08/18/96	Gross beta	3.9 U	2.5	4	Filtered		LAS
RD-23		Primary	02/27/97	Gross alpha	6.4	3.1	3.4	Filtered		LAS
RD-23		Primary	02/27/97	Gross beta	3.8	1.9	2.9	Filtered		LAS
RD-23		Primary	02/07/98	Gross alpha	4.11	1.7	1.75	Filtered		TN
RD-23		Primary	02/07/98	Gross beta	4.93	1.4	1.92	Filtered		TN
RD-23		Primary	02/08/99	Gross alpha	4.69	2.1	2.24	Filtered		TN
RD-23		Primary	02/08/99	Gross beta	4.64	1.5	2.02	Filtered		TN
RD-23		Primary	02/05/00	Gross alpha	4.69	2.3	2.26	Filtered		TR
RD-23		Primary	02/05/00	Gross beta	5.26	2.6	3.85	Filtered		TR
RD-23		Primary	10/25/01	Gross alpha	4.89	2.43	2.09	Filtered		DL
RD-23		Primary	10/25/01	Gross beta	2.42	1.12	1.86	Filtered		DL
RD-23		Primary	03/01/02	Gross alpha	3.05	1.94	2.08	Filtered		DL
RD-23		Primary	03/01/02	Gross beta	3.66	1.29	2.38	Filtered		DL
RD-23	Z01	Primary	02/26/03	Gross alpha	4.42	1.3	0.96	Filtered		ES
RD-23	Z01	Primary	02/26/03	Gross beta	6.18	1.8	2.61	Filtered		ES
RD-23	Z02	Primary	11/03/04	Gross alpha	1.47 U	1.6	1.98	Filtered		ES
RD-23	Z02	Primary	11/03/04	Gross beta	5.19	2.3	2.85	Filtered		ES
RD-23	Z02	Primary	02/14/05	Gross alpha	2.82 J	1.8	2.1	Filtered		ES
RD-23	Z02	Primary	02/14/05	Gross beta	4.2	2	2.76	Filtered		ES
RD-23	Z03	Primary	09/12/05	Gross alpha	3.61	1.2	0.583	Filtered		ES
RD-23	Z03	Primary	09/12/05	Gross beta	2.05 J	1.2	1.72	Filtered		ES
RD-23	Z03	Primary	02/17/06	Gross alpha	1.8 U	2.1	3.37	Filtered		ES
RD-23	Z03	Primary	02/17/06	Gross beta	4.91	1.7	1.92	Filtered		ES
RD-23	Z03	Primary	08/17/06	Gross alpha	0.793 U	1.5	2.12	Filtered		ES
RD-23	Z03	Primary	08/17/06	Gross beta	3.2 J	1.4	2	Filtered		ES
RD-23	Z03	Primary	02/07/07	Gross alpha	1.7 U	1.9	2.76	Filtered		ES
RD-23	Z03	Primary	02/07/07	Gross beta	3.17 U	2.3	3.43	Filtered		ES
RD-23	Z03	Primary	08/09/07	Gross alpha	2.97 U	2.4	3.41	Filtered		ES
RD-23	Z03	Primary	08/09/07	Gross beta	4.21	1.9	2.77	Filtered		ES
RD-23	Z03	Primary	02/06/08	Gross alpha	2.44 J	1.5	1.81	Filtered		ES
RD-23	Z03	Primary	02/06/08	Gross beta	2.58 J	1.3	1.84	Filtered		ES
RD-23	Z02	Primary	08/07/08	Gross alpha	3.5	1.7	1.61	Filtered		ES
RD-23	Z02	Primary	08/07/08	Gross beta	17.1	2.3	1.72	Filtered		ES
RD-23	Z02	Primary	02/24/09	Gross alpha	1.38 U	1.4	2.06	Filtered		ES
RD-23	Z02	Primary	02/24/09	Gross alpha	5.69	2.1	2.15	Unfiltered		ES
RD-23	Z02	Primary	02/24/09	Gross beta	3.63 J	1	1.4	Filtered		ES
RD-23	Z02	Primary	02/24/09	Gross beta	3.85 J	1.1	1.47	Unfiltered		ES
RD-23	Z03	Primary	07/16/09	Gross alpha	2.66 J	1.6	2.23	Filtered		ES
RD-23	Z03	Primary	07/16/09	Gross alpha	3.3	1.2	0.73	Unfiltered		ES
RD-23	Z03	Primary	07/16/09	Gross beta	2.93 J	0.9	1.24	Filtered		ES
RD-23	Z03	Primary	07/16/09	Gross beta	3.34 J	1.2	1.59	Unfiltered		ES
RD-24		Primary	09/12/89	Gross alpha	4.3	1	---	Filtered		UST
RD-24		Primary	09/12/89	Gross alpha	8.6	1.6	---	Unfiltered		UST

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-24		Split	09/12/89	Gross alpha	2 U	3	---	Filtered		TMA
RD-24		Split	09/12/89	Gross alpha	3	2	---	Unfiltered		TMA
RD-24		Primary	09/12/89	Gross beta	7.4	0.2	---	Filtered		UST
RD-24		Primary	09/12/89	Gross beta	14	0.6	---	Unfiltered		UST
RD-24		Split	09/12/89	Gross beta	7	2	---	Filtered		TMA
RD-24		Split	09/12/89	Gross beta	6	2	---	Unfiltered		TMA
RD-24		Primary	10/17/89	Gross alpha	2.4	2.3	---	Filtered		UST
RD-24		Primary	10/17/89	Gross beta	7.3	0.5	---	Filtered		UST
RD-24		Primary	12/05/90	Gross alpha	6.15	3.65	4	Filtered		IT
RD-24		Primary	12/05/90	Gross beta	6.12	2.81	4	Filtered		IT
RD-24		Primary	03/06/91	Gross alpha	5.46	2.99	4	Filtered		IT
RD-24		Primary	03/06/91	Gross beta	3.68 U	1.86	4	Filtered		IT
RD-24		Primary	12/11/91	Gross alpha	6.33	3.5	4	Filtered		IT
RD-24		Primary	12/11/91	Gross beta	5.21	1.84	4	Filtered		IT
RD-24		Primary	03/06/92	Gross alpha	3	2	2	Filtered		CEP
RD-24		Primary	03/06/92	Gross beta	3 U	---	3	Filtered		CEP
RD-24		Primary	03/07/93	Gross alpha	3	2	2	Filtered	High statistics due to large amount of solids.	CEP
RD-24		Primary	03/07/93	Gross beta	7	4	3	Filtered		CEP
RD-24		Primary	02/23/94	Gross alpha	7.6	4.4	5.2	Filtered		LAS
RD-24		Primary	02/23/94	Gross beta	7	3.3	5	Filtered		LAS
RD-24		Primary	08/08/94	Gross alpha	3 U	2.7	3.9	Filtered		LAS
RD-24		Primary	08/08/94	Gross beta	6.9	2.7	4	Filtered		LAS
RD-24		Primary	02/16/95	Gross alpha	16.5	5.9	5.1	Filtered		LAS
RD-24		Reanalysis of Primary	02/16/95	Gross alpha	10	4.4	4.4	Filtered		LAS
RD-24		Primary	02/16/95	Gross beta	25.2	4.4	4.9	Filtered		LAS
RD-24		Reanalysis of Primary	02/16/95	Gross beta	13	2.8	3.5	Filtered		LAS
RD-24		Primary	08/10/95	Gross alpha	3.4 U	2.8	3.9	Filtered		LAS
RD-24		Primary	08/10/95	Gross beta	5.9	2.5	3.7	Filtered		LAS
RD-24		Primary	02/07/96	Gross alpha	9	5.6	8	Filtered		LAS
RD-24		Primary	02/07/96	Gross beta	2.9 U	3.5	5.7	Filtered		LAS
RD-24		Primary	08/07/96	Gross alpha	3.5 U	5	8.5	Filtered		LAS
RD-24		Primary	08/07/96	Gross beta	6.8	3.9	6	Filtered		LAS
RD-24		Primary	02/07/97	Gross alpha	4.7 U	3.5	4.9	Filtered		LAS
RD-24		Primary	02/07/97	Gross beta	6.4	2.9	4.3	Filtered		LAS
RD-24		Primary	08/04/97	Gross alpha	3.7 U	3.2	4.4	Filtered		LAS
RD-24		Primary	08/04/97	Gross beta	5.9	3	4.7	Filtered		LAS
RD-24		Primary	02/18/98	Gross alpha	4.42	2	1.9	Filtered		TN
RD-24		Primary	02/18/98	Gross beta	8.05	1.7	2.12	Filtered		TN
RD-24		Primary	05/05/98	Gross alpha	3.63 U	2.8	3.73	Filtered		TN
RD-24		Primary	05/05/98	Gross beta	7.06	2.1	2.94	Filtered		TN
RD-24		Primary	08/04/98	Gross alpha	12.2 U	9.5	12.4	Filtered		TN
RD-24		Primary	08/04/98	Gross beta	11 U	18	28.7	Filtered		TN
RD-24		Primary	02/02/99	Gross alpha	4.53	2.3	2.28	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-24		Primary	02/02/99	Gross beta	7.1	2.6	3.77	Filtered		TN
RD-24		Primary	08/11/99	Gross alpha	3.18	2	2.44	Filtered		TN
RD-24		Primary	08/11/99	Gross beta	7.07	1.8	7.07	Filtered		TN
RD-24		Primary	02/03/00	Gross alpha	4.87	1.7	1.71	Filtered		TR
RD-24		Primary	02/03/00	Gross beta	13.3	2	2.65	Filtered		TR
RD-24		Primary	08/04/00	Gross alpha	4.16	2	1.78	Filtered		TR
RD-24		Primary	08/04/00	Gross beta	6.26	1.9	2.63	Filtered		TR
RD-24		Primary	02/06/01	Gross alpha	4.84	3	3.87	Filtered		ES
RD-24		Primary	02/06/01	Gross beta	7.86	2.1	2.92	Filtered		ES
RD-24		Primary	10/25/01	Gross alpha	14.45	4.88	2.74	Filtered		DL
RD-24		Primary	10/25/01	Gross beta	5.14	1.28	2.95	Filtered		DL
RD-24		Primary	02/25/02	Gross alpha	5.44	12.7	3.22	Filtered		DL
RD-24		Primary	02/25/02	Gross beta	3.9	11.26	2.6	Filtered		DL
RD-24		Primary	11/06/02	Gross alpha	8.93	3.3	3.1	Filtered		ES
RD-24		Primary	11/06/02	Gross beta	8.16	2.1	2.91	Filtered		ES
RD-24		Primary	02/12/03	Gross alpha	2.83 J	1.4	1.51	Filtered		ES
RD-24		Primary	02/12/03	Gross beta	6.67	1.3	1.8	Filtered		ES
RD-24		Primary	11/14/03	Gross alpha	5.06	3.4	2.92	Filtered		ES
RD-24		Split	11/14/03	Gross alpha	11.6	4.56	3.11	Filtered		STL
RD-24		Primary	11/14/03	Gross beta	9.29	3.4	3.66	Filtered		ES
RD-24		Split	11/14/03	Gross beta	13.3	4.16	5.91	Filtered		STL
RD-24		Primary	02/23/04	Gross alpha	3.25	1.9	1.94	Filtered		ES
RD-24		Primary	02/23/04	Gross beta	4.86	2.6	3.6	Filtered		ES
RD-24		Primary	08/26/04	Gross alpha	1.7 U	1.9	2.41	Filtered		ES
RD-24		Primary	08/26/04	Gross beta	8.17	2.8	3.09	Filtered		ES
RD-24		Primary	02/24/05	Gross alpha	2.52 J	1.9	2.13	Filtered		ES
RD-24		Primary	02/24/05	Gross beta	7.06	2.4	2.7	Filtered		ES
RD-24		Primary	09/06/05	Gross alpha	4.06	1.6	1.36	Filtered		ES
RD-24		Primary	09/06/05	Gross beta	7.28	2.3	2.7	Filtered		ES
RD-24		Primary	02/15/06	Gross alpha	0.624 U	4.3	7.52	Filtered		ES
RD-24		Primary	02/15/06	Gross beta	5.03 U	3.7	5.73	Filtered		ES
RD-24		Primary	08/10/06	Gross alpha	2.71 U	2.1	3.02	Filtered		ES
RD-24		Primary	08/10/06	Gross beta	7.67	2.8	3.93	Filtered		ES
RD-24		Primary	05/24/07	Gross alpha	5.21	2.6	3.01	Filtered		ES
RD-24		Primary	05/24/07	Gross beta	8.68	2.8	3.36	Filtered		ES
RD-24		Primary	08/08/07	Gross alpha	8.54	3.7	4.03	Filtered		ES
RD-24		Primary	08/08/07	Gross beta	6.2	2.3	2.83	Filtered		ES
RD-24		Primary	02/13/08	Gross alpha	2.52 J	1.2	1.2	Filtered		ES
RD-24		Primary	02/13/08	Gross beta	4.85	0.97	1.11	Filtered		ES
RD-24		Primary	10/27/09	Gross alpha	4.57	1.9	1.88	Filtered		TAD
RD-24		Primary	10/27/09	Gross alpha	4.87	2.9	4.07	Unfiltered		TAD
RD-24		Split	10/27/09	Gross alpha	12.5	3.8	3.2	Filtered		TAI
RD-24		Split	10/27/09	Gross alpha	7.6	2.8	2.6	Unfiltered		TAI
RD-24		Primary	10/27/09	Gross beta	6.77	1.8	2.3	Filtered		TAD
RD-24		Primary	10/27/09	Gross beta	7.31	2.2	2.96	Unfiltered		TAD

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-24		Split	10/27/09	Gross beta	9.8	2.3	2.7	Filtered		TAI
RD-24		Split	10/27/09	Gross beta	7	1.7	2.2	Unfiltered		TAI
RD-25		Primary	09/12/89	Gross alpha	8.9	1.7	---	Filtered		UST
RD-25		Primary	09/12/89	Gross alpha	4.2	1.4	---	Unfiltered		UST
RD-25		Split	09/12/89	Gross alpha	2 U	3	---	Filtered		TMA
RD-25		Split	09/12/89	Gross alpha	0 U	3	---	Filtered		TMA
RD-25		Split	09/12/89	Gross alpha	0 U	4	---	Unfiltered		TMA
RD-25		Split	09/12/89	Gross alpha	0 U	3	---	Unfiltered		TMA
RD-25		Primary	09/12/89	Gross beta	56.1	0.5	---	Filtered		UST
RD-25		Primary	09/12/89	Gross beta	11.4	0.4	---	Unfiltered		UST
RD-25		Split	09/12/89	Gross beta	3	2	---	Filtered		TMA
RD-25		Split	09/12/89	Gross beta	3	4	---	Filtered		TMA
RD-25		Split	09/12/89	Gross beta	5	5	---	Unfiltered		TMA
RD-25		Split	09/12/89	Gross beta	6	2	---	Unfiltered		TMA
RD-25		Primary	09/19/89	Gross alpha	10.4	2.4	---	Filtered		BC
RD-25		Primary	09/19/89	Gross alpha	3.4	2.3	---	Unfiltered		BC
RD-25		Primary	09/19/89	Gross beta	3.7	1.2	---	Filtered		BC
RD-25		Primary	09/19/89	Gross beta	1.6	1.1	---	Unfiltered		BC
RD-25		Primary	10/20/89	Gross alpha	6	2.3	---	Filtered		BC
RD-25		Primary	10/20/89	Gross beta	9.2	0.7	---	Filtered		BC
RD-25		Primary	12/05/90	Gross alpha	3.84 U	3.17	4	Filtered		IT
RD-25		Primary	12/05/90	Gross beta	6.77	2.84	4	Filtered		IT
RD-25		Primary	03/06/91	Gross alpha	2.16 U	10.3	4	Filtered		IT
RD-25		Primary	03/06/91	Gross beta	3.28 U	1.17	4	Filtered		IT
RD-25		Primary	12/10/91	Gross alpha	8.29	4.23	4	Filtered		IT
RD-25		Primary	12/10/91	Gross beta	5.87	2.18	4	Filtered		IT
RD-25		Primary	03/06/92	Gross alpha	3	2	2	Filtered		CEP
RD-25		Primary	03/06/92	Gross beta	3 U	---	3	Filtered		CEP
RD-25		Primary	03/17/93	Gross alpha	7	3	2	Filtered		CEP
RD-25		Primary	03/17/93	Gross beta	4	3	3	Filtered		CEP
RD-25		Primary	02/28/94	Gross alpha	9.8	5.7	6.7	Filtered		LAS
RD-25		Primary	02/28/94	Gross beta	5.6 U	3.8	6	Filtered		LAS
RD-25		Primary	08/17/94	Gross alpha	10.1	5.2	5.7	Filtered		LAS
RD-25		Primary	08/17/94	Gross beta	7.3	4.4	6.8	Filtered		LAS
RD-25		Primary	02/09/95	Gross alpha	46	11	6.4	Filtered		LAS
RD-25		Reanalysis of Primary	02/09/95	Gross alpha	9.7	5.3	6.4	Filtered		LAS
RD-25		Primary	02/09/95	Gross beta	41.7	6.4	6.5	Filtered		LAS
RD-25		Reanalysis of Primary	02/09/95	Gross beta	13	4.4	6.3	Filtered		LAS
RD-25		Primary	08/18/95	Gross alpha	9	5.1	6.3	Filtered		LAS
RD-25		Primary	08/18/95	Gross beta	8.5	3.6	5.4	Filtered		LAS
RD-25		Primary	02/06/96	Gross alpha	5.7	3.4	4.5	Filtered		LAS
RD-25		Primary	02/06/96	Gross beta	3.8	2	3.1	Filtered		LAS
RD-25		Primary	08/20/96	Gross alpha	11.3	5.6	6.5	Filtered		LAS
RD-25		Primary	08/20/96	Gross beta	9.6	3.9	5.8	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-25		Primary	02/07/97	Gross alpha	4.9 U	3.7	5.1	Filtered		LAS
RD-25		Primary	02/07/97	Gross beta	6	3	4.5	Filtered		LAS
RD-25		Primary	08/21/97	Gross alpha	12.1	5.9	6.8	Filtered		LAS
RD-25		Primary	08/21/97	Gross beta	7.6	4.1	6.3	Filtered		LAS
RD-25		Primary	02/05/98	Gross alpha	12.2	3.8	2.7	Filtered		TN
RD-25		Primary	02/05/98	Gross beta	7.55	2.1	2.9	Filtered		TN
RD-25		Primary	08/18/98	Gross alpha	3.13	1.2	1.21	Filtered		TN
RD-25		Primary	08/18/98	Gross beta	6.01	1.5	1.93	Filtered		TN
RD-25		Primary	02/16/99	Gross alpha	18.3	5.2	3.55	Filtered		TN
RD-25		Primary	02/16/99	Gross beta	9.37	2.1	2.81	Filtered		TN
RD-25		Primary	08/19/99	Gross alpha	2.96	1.7	1.89	Filtered		TN
RD-25		Primary	08/19/99	Gross beta	5.74	1.7	2.33	Filtered		TN
RD-25		Primary	02/16/00	Gross alpha	5.66	3.1	3.51	Filtered		TR
RD-25		Primary	02/16/00	Gross beta	3.64 U	4.3	7.04	Filtered		TR
RD-25		Primary	08/09/00	Gross alpha	0.815 U	1.5	2.3	Filtered		TR
RD-25		Primary	08/09/00	Gross beta	5.33	1.7	2.24	Filtered		TR
RD-25		Primary	02/07/01	Gross alpha	4.6	2.6	2.83	Filtered		ES
RD-25		Primary	02/07/01	Gross beta	12.5	2.2	2.78	Filtered		ES
RD-25		Primary	10/25/01	Gross alpha	12.22	4.97	3.14	Filtered		DL
RD-25		Primary	10/25/01	Gross beta	6.17	1.49	3.14	Filtered		DL
RD-25		Primary	03/07/02	Gross alpha	6	3.25	4.4	Filtered		DL
RD-25		Primary	03/07/02	Gross beta	4.53	1.37	2.74	Filtered		DL
RD-25		Primary	11/06/02	Gross alpha	9.9	3.6	3.65	Filtered		ES
RD-25		Primary	11/06/02	Gross beta	7.83	1.8	2.43	Filtered		ES
RD-25		Primary	02/24/03	Gross alpha	3.92	1.4	1.39	Filtered		ES
RD-25		Primary	02/24/03	Gross beta	9.12	1.9	2.69	Filtered		ES
RD-25		Primary	11/13/03	Gross alpha	7.21	4.2	3.51	Filtered		ES
RD-25		Primary	11/13/03	Gross beta	7.19	2.6	2.92	Filtered		ES
RD-25		Primary	02/23/04	Gross alpha	4.78	3.3	4.21	Filtered		ES
RD-25		Split	02/23/04	Gross alpha	5.81	2.88	2.11	Filtered		STL
RD-25		Primary	02/23/04	Gross beta	9.34	4.1	5.32	Filtered		ES
RD-25		Split	02/23/04	Gross beta	8.24	2.53	3.75	Filtered		STL
RD-26		Primary	09/26/89	Gross alpha	7.1	1.5	---	Filtered		BC
RD-26		Primary	09/26/89	Gross alpha	11.8	1.9	---	Unfiltered		BC
RD-26		Primary	09/26/89	Gross beta	9.2	0.6	---	Filtered		BC
RD-26		Primary	09/26/89	Gross beta	10.8	0.7	---	Unfiltered		BC
RD-26		Primary	10/20/89	Gross alpha	8.9	2.9	---	Filtered		BC
RD-26		Primary	10/20/89	Gross beta	11.9	0.8	---	Filtered		BC
RD-26		Primary	12/04/90	Gross alpha	7.2	4.33	4	Filtered		IT
RD-26		Primary	12/04/90	Gross beta	2.9 U	2.39	4	Filtered		IT
RD-26		Primary	03/07/91	Gross alpha	12.9	4.75	4	Filtered		IT
RD-26		Primary	03/07/91	Gross beta	4.63	2.54	4	Filtered		IT
RD-26		Primary	03/11/92	Gross alpha	2 U	---	2	Filtered		CEP
RD-26		Primary	03/11/92	Gross beta	3 U	---	3	Filtered		CEP
RD-27		Primary	09/21/89	Gross alpha	13.7	2.4	---	Filtered		BC

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-27		Primary	09/21/89	Gross alpha	21	2.8	---	Unfiltered		BC
RD-27		Primary	09/21/89	Gross beta	5.7	1.3	---	Filtered		BC
RD-27		Primary	09/21/89	Gross beta	13.1	1.4	---	Unfiltered		BC
RD-27		Primary	10/19/89	Gross alpha	10.3	2.8	---	Filtered		BC
RD-27		Primary	10/19/89	Gross beta	9.6	0.7	---	Filtered		BC
RD-27		Primary	12/04/90	Gross alpha	6.79	3.45	4	Filtered		IT
RD-27		Primary	12/04/90	Gross beta	3.39 U	2.43	4	Filtered		IT
RD-27		Primary	03/07/91	Gross alpha	15.2	10.3	4	Filtered		IT
RD-27		Primary	03/07/91	Gross beta	7.91	2.82	4	Filtered		IT
RD-27		Primary	06/08/91	Gross alpha	5.75	2.66	4	Filtered		IT
RD-27		Duplicate	06/08/91	Gross alpha	4.87	2.24	4	Filtered		IT
RD-27		Primary	06/08/91	Gross beta	2.53 U	1.18	4	Filtered		IT
RD-27		Duplicate	06/08/91	Gross beta	3.41 U	2.34	4	Filtered		IT
RD-27		Primary	12/06/91	Gross alpha	5.65	2.67	1	Filtered		IT
RD-27		Primary	12/06/91	Gross beta	9.7	1.94	1	Filtered		IT
RD-27		Primary	03/09/92	Gross alpha	2 U	---	2	Filtered		CEP
RD-27		Primary	03/09/92	Gross beta	3 U	---	3	Filtered		CEP
RD-27		Primary	03/08/93	Gross alpha	5	3	2	Filtered		CEP
RD-27		Primary	03/08/93	Gross beta	11	4	3	Filtered		CEP
RD-27		Primary	02/28/94	Gross alpha	5.8	3	3.5	Filtered		LAS
RD-27		Primary	02/28/94	Gross beta	8.2	2.6	3.7	Filtered		LAS
RD-27		Primary	08/18/94	Gross alpha	3.6 U	3	4.4	Filtered		LAS
RD-27		Primary	08/18/94	Gross beta	9	2.9	4	Filtered		LAS
RD-27		Primary	02/17/95	Gross alpha	23.7	5.7	4	Filtered		LAS
RD-27		Reanalysis of Primary	02/17/95	Gross alpha	3.8	2.6	3.3	Filtered		LAS
RD-27		Primary	02/17/95	Gross beta	21.2	3	2.9	Filtered		LAS
RD-27		Reanalysis of Primary	02/17/95	Gross beta	9.5	2.5	3.3	Filtered		LAS
RD-27		Primary	08/18/95	Gross alpha	5.2	2.9	3.7	Filtered		LAS
RD-27		Primary	08/18/95	Gross beta	6.4	2.2	3.1	Filtered		LAS
RD-27		Primary	02/05/96	Gross alpha	4.7	3.1	4.1	Filtered		LAS
RD-27		Primary	02/05/96	Gross beta	8.4	2.3	3.1	Filtered		LAS
RD-27		Primary	08/19/96	Gross alpha	2.3 U	2.7	4.4	Filtered		LAS
RD-27		Primary	08/19/96	Gross beta	6.7	2.7	4	Filtered		LAS
RD-27		Primary	02/05/97	Gross alpha	5.8	3.1	3.8	Filtered		LAS
RD-27		Primary	02/05/97	Gross beta	8.4	2.3	3.1	Filtered		LAS
RD-27		Primary	08/27/97	Gross alpha	4.2 U	3.5	5.1	Filtered		LAS
RD-27		Primary	08/27/97	Gross beta	5.2	3.1	4.9	Filtered		LAS
RD-27		Primary	02/04/98	Gross alpha	6.68	2.2	1.59	Filtered		TN
RD-27		Primary	02/04/98	Gross beta	8.62	1.7	2.09	Filtered		TN
RD-27		Primary	08/07/98	Gross alpha	8.47 U	8.3	12.2	Filtered		TN
RD-27		Primary	08/07/98	Gross beta	-19 U	20	36.2	Filtered		TN
RD-27		Primary	02/16/99	Gross alpha	4.86	2.2	2.21	Filtered		TN
RD-27		Primary	02/16/99	Gross beta	6.31	1.9	2.64	Filtered		TN
RD-27		Primary	08/17/99	Gross alpha	5.3	1.9	1.45	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-27		Primary	08/17/99	Gross beta	6.66	1.8	2.62	Filtered		TN
RD-27		Primary	02/21/00	Gross alpha	4.92	2.8	3.22	Filtered		TR
RD-27		Primary	02/21/00	Gross beta	6.16 U	4.1	6.39	Filtered		TR
RD-27		Primary	08/04/00	Gross alpha	3.15	2	2.58	Filtered		TR
RD-27		Primary	08/04/00	Gross beta	4.88	2.1	3.09	Filtered		TR
RD-27		Primary	02/14/01	Gross alpha	4.27	1.9	1.63	Filtered		ES
RD-27		Primary	02/14/01	Gross beta	8.48	4.1	1.92	Filtered		ES
RD-27		Primary	10/26/01	Gross alpha	10.14	3.64	1.43	Filtered		DL
RD-27		Primary	10/26/01	Gross beta	7.46	1.49	3.26	Filtered		DL
RD-27		Primary	03/06/02	Gross alpha	5.25	2.56	3.05	Filtered		DL
RD-27		Primary	03/06/02	Gross beta	5.28	1.38	2.78	Filtered		DL
RD-27		Primary	08/22/02	Gross alpha	2.42 U	3	4.22	Filtered		ES
RD-27		Primary	08/22/02	Gross beta	4.47 U	3.1	4.9	Filtered		ES
RD-27		Primary	05/14/03	Gross alpha	4.43	2.5	2.45	Filtered		ES
RD-27		Primary	05/14/03	Gross beta	7.41	3	3.88	Filtered		ES
RD-27		Primary	11/14/03	Gross alpha	1.68 U	1.7	2.12	Filtered		ES
RD-27		Split	11/14/03	Gross alpha	4.91	2.29	1.95	Filtered		STL
RD-27		Primary	11/14/03	Gross beta	6.79	2.3	2.56	Filtered		ES
RD-27		Split	11/14/03	Gross beta	7.05	2.35	3.7	Filtered		STL
RD-27		Primary	02/23/04	Gross alpha	9.34	4	2.6	Filtered		ES
RD-27		Primary	02/23/04	Gross beta	10.1	3.7	4.14	Filtered		ES
RD-27		Primary	08/10/04	Gross alpha	2.87 J	2	1.82	Filtered		ES
RD-27		Primary	08/10/04	Gross beta	5.78	2.3	2.74	Filtered		ES
RD-27		Primary	02/17/05	Gross alpha	4.55	2.1	1.54	Filtered		ES
RD-27		Primary	02/17/05	Gross beta	5.68	2	2.23	Filtered		ES
RD-27		Primary	08/24/05	Gross alpha	2.44 J	1.9	2.12	Filtered		ES
RD-27		Primary	08/24/05	Gross beta	7.97	2.7	2.89	Filtered		ES
RD-27		Primary	02/20/06	Gross alpha	6.14	2.9	2.93	Filtered		ES
RD-27		Primary	02/20/06	Gross beta	9.06	2.4	1.93	Filtered		ES
RD-27		Primary	08/25/06	Gross alpha	1.57 U	1.5	2.37	Filtered		ES
RD-27		Primary	08/25/06	Gross beta	6.89	1.8	1.55	Filtered		ES
RD-27		Primary	02/14/07	Gross alpha	2.33 J	1.3	1.54	Filtered		ES
RD-27		Split	02/14/07	Gross alpha	5.69	2.3	1.15	Filtered		STL
RD-27		Primary	02/14/07	Gross beta	6.81	1.8	1.46	Filtered		ES
RD-27		Split	02/14/07	Gross beta	7.95	2.4	3.57	Filtered		STL
RD-27		Primary	08/09/07	Gross alpha	5.69	2.5	2.63	Filtered		ES
RD-27		Primary	08/09/07	Gross beta	7.02	2	2.04	Filtered		ES
RD-27		Primary	03/05/08	Gross alpha	7.26	2.7	2.5	Filtered		ES
RD-27		Primary	03/05/08	Gross beta	7.17	1.7	2.13	Filtered		ES
RD-27		Primary	09/04/08	Gross alpha	4.12	1.8	1.76	Filtered		ES
RD-27		Primary	09/04/08	Gross beta	10.3	1.7	1.63	Filtered		ES
RD-27		Primary	03/06/09	Gross alpha	2.63 J	1.4	1.68	Filtered		ES
RD-27		Primary	03/06/09	Gross alpha	3.52	1.4	1.66	Unfiltered		ES
RD-27		Primary	03/06/09	Gross beta	6.56	1.5	1.85	Filtered		ES
RD-27		Primary	03/06/09	Gross beta	5.08	1.3	1.7	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-27		Primary	07/30/09	Gross alpha	2.59 J	1.3	1.53	Filtered		ES
RD-27		Primary	07/30/09	Gross alpha	4.31	1.6	1.44	Unfiltered		ES
RD-27		Duplicate	07/30/09	Gross alpha	4.97	1.7	1.18	Unfiltered		ES
RD-27		Primary	07/30/09	Gross beta	8.05	2	2.64	Filtered		ES
RD-27		Primary	07/30/09	Gross beta	7.74	1.6	1.97	Unfiltered		ES
RD-27		Duplicate	07/30/09	Gross beta	7.26	1.8	2.28	Unfiltered		ES
RD-28		Primary	09/13/89	Gross alpha	7.1	1.3	---	Filtered		UST
RD-28		Primary	09/13/89	Gross alpha	9.5	1.3	---	Unfiltered		UST
RD-28		Split	09/13/89	Gross alpha	7	4	---	Filtered		TMA
RD-28		Split	09/13/89	Gross alpha	4	3	---	Unfiltered		TMA
RD-28		Primary	09/13/89	Gross beta	16.1	0.4	---	Filtered		UST
RD-28		Primary	09/13/89	Gross beta	18.3	0.4	---	Unfiltered		UST
RD-28		Split	09/13/89	Gross beta	14	5	---	Filtered		TMA
RD-28		Split	09/13/89	Gross beta	7	6	---	Unfiltered		TMA
RD-28		Primary	09/26/89	Gross alpha	10.4	2.3	---	Filtered		BC
RD-28		Primary	09/26/89	Gross alpha	14.9	2.6	---	Unfiltered		BC
RD-28		Primary	09/26/89	Gross beta	12.3	0.7	---	Filtered		BC
RD-28		Primary	09/26/89	Gross beta	9.4	0.8	---	Unfiltered		BC
RD-28		Primary	10/19/89	Gross alpha	10.4	3.4	---	Filtered		UST
RD-28		Primary	10/19/89	Gross beta	8.5	0.8	---	Filtered		UST
RD-28		Primary	03/27/90	Gross alpha	9.6	5.36	---	Filtered		UST
RD-28		Primary	03/27/90	Gross beta	6.09	2.73	---	Filtered		UST
RD-28		Primary	07/01/90	Gross alpha	3.34 U	3.9	---	Filtered		UST
RD-28		Primary	07/01/90	Gross beta	8.19	3.12	---	Filtered		UST
RD-28		Primary	09/16/90	Gross alpha	4.94	3.51	---	Filtered		UST
RD-28		Primary	09/16/90	Gross beta	4.66	2.52	---	Filtered		UST
RD-28		Primary	12/05/90	Gross alpha	1.47 U	6.11	4	Filtered		IT
RD-28		Primary	12/05/90	Gross beta	5.38	2.72	4	Filtered		IT
RD-28		Primary	03/06/91	Gross alpha	9.62	4.86	4	Filtered		IT
RD-28		Primary	03/06/91	Gross beta	2.91 U	1.14	4	Filtered		IT
RD-28		Primary	09/11/91	Gross alpha	6.05	3.1	4	Filtered		IT
RD-28		Primary	09/11/91	Gross beta	6.64	1.51	4	Filtered		IT
RD-28		Primary	12/10/91	Gross alpha	10.5	5.73	4	Filtered		IT
RD-28		Split	12/10/91	Gross alpha	2 U	---	2	Filtered		CEP
RD-28		Primary	12/10/91	Gross beta	10.1	2.87	4	Filtered		IT
RD-28		Split	12/10/91	Gross beta	3 U	---	3	Filtered		CEP
RD-28		Primary	03/06/92	Gross alpha	2 U	---	2	Filtered		CEP
RD-28		Split	03/06/92	Gross alpha	17	8	6	Filtered		TEL
RD-28		Primary	03/06/92	Gross beta	3 U	---	3	Filtered		CEP
RD-28		Split	03/06/92	Gross beta	16	4	3	Filtered		TEL
RD-28		Primary	03/17/93	Gross alpha	9	4	2	Filtered		CEP
RD-28		Primary	03/17/93	Gross beta	6	4	3	Filtered		CEP
RD-28		Primary	08/05/93	Gross alpha	6	3	2	Filtered		CEP
RD-28		Primary	08/05/93	Gross beta	5	3	3	Filtered		CEP
RD-28		Primary	02/24/94	Gross alpha	24.7	9.7	9.5	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-28		Reanalysis of Primary	02/24/94	Gross alpha	15.4	7.3	8.1	Filtered		LAS
RD-28		Primary	02/24/94	Gross beta	12.3	7.2	11	Filtered		LAS
RD-28		Reanalysis of Primary	02/24/94	Gross beta	16.7	4.9	6.8	Filtered		LAS
RD-28		Primary	08/17/94	Gross alpha	7.3	4.6	5.4	Filtered		LAS
RD-28		Primary	08/17/94	Gross beta	6.8	4.3	6.8	Filtered		LAS
RD-28		Primary	02/09/95	Gross alpha	19.2	7.1	6.5	Filtered		LAS
RD-28		Reanalysis of Primary	02/09/95	Gross alpha	15.2	6.2	6	Filtered		LAS
RD-28		Primary	02/09/95	Gross beta	10.2	4.3	6.2	Filtered		LAS
RD-28		Reanalysis of Primary	02/09/95	Gross beta	8.8	4.4	6.6	Filtered		LAS
RD-28		Primary	08/18/95	Gross alpha	17.1	7	6.8	Filtered		LAS
RD-28		Primary	08/18/95	Gross beta	7.1	4.1	6.3	Filtered		LAS
RD-28		Primary	02/06/96	Gross alpha	17.2	7.8	9.1	Filtered		LAS
RD-28		Primary	02/06/96	Gross beta	15.3	4.6	6.3	Filtered		LAS
RD-28		Primary	08/20/96	Gross alpha	23.9	9.6	11	Filtered		LAS
RD-28		Primary	08/20/96	Gross beta	13.2	5.3	7.7	Filtered		LAS
RD-28		Primary	02/06/97	Gross alpha	12.2	6.9	9.1	Filtered		LAS
RD-28		Primary	02/06/97	Gross beta	8.6	4.4	6.8	Filtered		LAS
RD-28		Primary	08/28/97	Gross alpha	28	10	9.1	Filtered		LAS
RD-28		Primary	08/28/97	Gross beta	13	6.6	9.9	Filtered		LAS
RD-28		Primary	02/05/98	Gross alpha	24.7	5.7	2.87	Filtered		TN
RD-28		Primary	02/05/98	Gross beta	11.2	2	2.44	Filtered		TN
RD-28		Primary	08/18/98	Gross alpha	1.73	0.98	1.15	Filtered		TN
RD-28		Primary	08/18/98	Gross beta	8.56	1.8	2.38	Filtered		TN
RD-28		Primary	02/16/99	Gross alpha	14	4.3	3.59	Filtered		TN
RD-28		Primary	02/16/99	Gross beta	12.2	1.9	2.16	Filtered		TN
RD-28		Primary	08/19/99	Gross alpha	21.4	5.5	4.48	Filtered		TN
RD-28		Primary	08/19/99	Gross beta	14.4	3.2	3.96	Filtered		TN
RD-28		Primary	02/16/00	Gross alpha	15	5	3.67	Filtered		TR
RD-28		Primary	02/16/00	Gross beta	13.4	4.3	5.87	Filtered		TR
RD-28		Primary	08/09/00	Gross alpha	3.54 U	4.1	5.74	Filtered		TR
RD-28		Primary	08/09/00	Gross beta	28.7	3.8	4.55	Filtered		TR
RD-28		Primary	02/07/01	Gross alpha	5.82	2.9	2.51	Filtered		ES
RD-28		Primary	02/07/01	Gross beta	15.9	2	2.05	Filtered		ES
RD-28		Primary	10/25/01	Gross alpha	24.51	7	3.19	Filtered		DL
RD-28		Primary	10/25/01	Gross beta	8.26	1.49	3.86	Filtered		DL
RD-28		Primary	02/25/02	Gross alpha	29.36	5.9	4.84	Filtered		DL
RD-28		Primary	02/25/02	Gross beta	1.74 U	0.42	3.26	Filtered		DL
RD-28		Primary	11/06/02	Gross alpha	18.7	5.7	4.84	Filtered		ES
RD-28		Primary	11/06/02	Gross beta	10.3	3.1	3.26	Filtered		ES
RD-28		Primary	02/24/03	Gross alpha	11.9	4.7	4.57	Filtered		ES
RD-28		Primary	02/24/03	Gross beta	12	3.9	5.33	Filtered		ES
RD-28		Primary	11/14/03	Gross alpha	11.1	6.5	5.96	Filtered		ES
RD-28		Primary	11/14/03	Gross beta	15.4	6.7	8.98	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-28		Primary	02/23/04	Gross alpha	14.4	7	5.58	Filtered		ES
RD-28		Split	02/23/04	Gross alpha	21.3	7.8	3.33	Filtered		STL
RD-28		Primary	02/23/04	Gross beta	11.3	5.7	7.48	Filtered		ES
RD-28		Split	02/23/04	Gross beta	16.6	4.57	6.46	Filtered		STL
RD-29		Primary	09/20/89	Gross alpha	29.9	3	---	Filtered		BC
RD-29		Primary	09/20/89	Gross alpha	-1 U	0.9	---	Unfiltered		BC
RD-29		Duplicate	09/20/89	Gross alpha	30	3	---	Filtered		BC
RD-29		Duplicate	09/20/89	Gross alpha	36.5	3	---	Unfiltered		BC
RD-29		Primary	09/20/89	Gross beta	37.3	1.5	---	Filtered		BC
RD-29		Primary	09/20/89	Gross beta	22.3	0.4	---	Unfiltered		BC
RD-29		Duplicate	09/20/89	Gross beta	35	1.5	---	Filtered		BC
RD-29		Duplicate	09/20/89	Gross beta	35.2	1.6	---	Unfiltered		BC
RD-29		Primary	10/18/89	Gross alpha	20.9	3.3	---	Filtered		UST
RD-29		Primary	10/18/89	Gross beta	8.7	1.1	---	Filtered		UST
RD-29		Primary	12/08/89	Gross alpha	18.6	5.36	---	Filtered		UST
RD-29		Primary	12/08/89	Gross alpha	22.6	6.21	---	Unfiltered		UST
RD-29		Primary	12/08/89	Gross beta	7.12	2.86	---	Filtered		UST
RD-29		Primary	12/08/89	Gross beta	6.55	2.8	---	Unfiltered		UST
RD-29		Primary	03/27/90	Gross alpha	20.1	7.35	---	Filtered		UST
RD-29		Primary	03/27/90	Gross beta	9.85	3.17	---	Filtered		UST
RD-29		Primary	06/30/90	Gross alpha	15.3	6.63	---	Filtered		UST
RD-29		Primary	06/30/90	Gross beta	11.7	3.28	---	Filtered		UST
RD-29		Primary	09/15/90	Gross alpha	28.7	8.06	---	Filtered		UST
RD-29		Primary	09/15/90	Gross beta	5.1	2.59	---	Filtered		UST
RD-29		Primary	12/06/90	Gross alpha	11.9	4.93	4	Filtered		IT
RD-29		Duplicate	12/06/90	Gross alpha	13.3	4.83	4	Filtered		IT
RD-29		Primary	12/06/90	Gross beta	5.61	2.69	4	Filtered		IT
RD-29		Duplicate	12/06/90	Gross beta	7.19	2.84	4	Filtered		IT
RD-29		Primary	03/05/91	Gross alpha	29.1	8.42	4	Filtered		IT
RD-29		Primary	03/05/91	Gross beta	3.98 U	1.24	4	Filtered		IT
RD-29		Primary	06/05/91	Gross alpha	7.06	2.99	4	Filtered		IT
RD-29		Duplicate	06/05/91	Gross alpha	7	4.46	4	Filtered		IT
RD-29		Primary	06/05/91	Gross beta	4.51	2.55	4	Filtered		IT
RD-29		Duplicate	06/05/91	Gross beta	12.9	3.47	4	Filtered		IT
RD-29		Primary	09/07/91	Gross alpha	5.01	1.6	4	Filtered		IT
RD-29		Primary	09/07/91	Gross beta	6.95	1.54	4	Filtered		IT
RD-29		Primary	12/10/91	Gross alpha	17.9	6.42	4	Filtered		IT
RD-29		Split	12/10/91	Gross alpha	2 U	---	2	Filtered		CEP
RD-29		Primary	12/10/91	Gross beta	12.5	2.82	4	Filtered		IT
RD-29		Split	12/10/91	Gross beta	3 U	---	3	Filtered		CEP
RD-29		Primary	03/03/92	Gross alpha	3	2	2	Filtered		CEP
RD-29		Primary	03/03/92	Gross beta	5	3	3	Filtered		CEP
RD-29		Primary	06/03/92	Gross alpha	4	2	2	Filtered		CEP
RD-29		Primary	06/03/92	Gross beta	1 U	3	3	Filtered		CEP
RD-29		Primary	09/10/92	Gross alpha	10	3	2	Filtered		CEP

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-29		Primary	09/10/92	Gross beta	21	5	3	Filtered		CEP
RD-29		Primary	12/05/92	Gross alpha	9	3	2	Filtered		CEP
RD-29		Primary	12/05/92	Gross beta	12	3	3	Filtered		CEP
RD-29		Primary	03/05/93	Gross alpha	4	3	2	Filtered	High statistics due to large amount of solids.	CEP
RD-29		Primary	03/05/93	Gross beta	7	4	3	Filtered		CEP
RD-29		Primary	08/08/93	Gross alpha	3	2	2	Filtered	High statistics due to large amount of solids.	CEP
RD-29		Primary	08/08/93	Gross beta	4	3	3	Filtered		CEP
RD-29		Primary	02/26/94	Gross alpha	7.8	4.8	6.2	Filtered		LAS
RD-29		Primary	02/26/94	Gross beta	8.1	3.6	5.3	Filtered		LAS
RD-29		Primary	08/17/94	Gross alpha	17.1	6.5	5.7	Filtered		LAS
RD-29		Primary	08/17/94	Gross beta	8.3	4.5	6.8	Filtered		LAS
RD-29		Primary	05/09/01	Gross alpha	2.15 U	2.8	4.01	Filtered		CEP
RD-29		Primary	05/09/01	Gross beta	3.99 U	3.2	5.16	Filtered		CEP
RD-29		Primary	05/03/02	Gross alpha	22.79	6.44	2.04	Filtered		DL
RD-29		Primary	05/03/02	Gross beta	5.31	1.15	3.32	Filtered		DL
RD-29		Primary	05/13/03	Gross alpha	16.1	5.5	3.04	Filtered		ES
RD-29		Primary	05/13/03	Gross beta	9.76	4.1	5.16	Filtered		ES
RD-29		Primary	02/24/04	Gross alpha	12.1	5.3	3.85	Filtered		ES
RD-29		Primary	02/24/04	Gross beta	9.97	4.6	5.99	Filtered		ES
RD-29		Primary	08/09/04	Gross alpha	10.9	4.8	3.76	Filtered		ES
RD-29		Primary	08/09/04	Gross beta	9.62	4.4	6.04	Filtered		ES
RD-29		Primary	02/24/05	Gross alpha	3.1	1.7	1.7	Filtered		ES
RD-29		Primary	02/24/05	Gross beta	11	3	2.52	Filtered		ES
RD-29		Primary	08/25/05	Gross alpha	4.13	1.6	1.47	Filtered		ES
RD-29		Primary	08/25/05	Gross beta	6.06	1.8	1.78	Filtered		ES
RD-29		Primary	02/16/06	Gross alpha	9.83	3.9	3.02	Filtered		ES
RD-29		Primary	02/16/06	Gross beta	9.28	2.5	1.92	Filtered		ES
RD-29		Primary	08/11/06	Gross alpha	7.12	2.5	1.8	Filtered		ES
RD-29		Primary	08/11/06	Gross beta	6.24	3.3	4.85	Filtered		ES
RD-29		Primary	02/07/07	Gross alpha	10	5.3	5.62	Filtered		ES
RD-29		Primary	02/07/07	Gross beta	10.7	6	8.59	Filtered		ES
RD-29		Primary	08/08/07	Gross alpha	18.8	8.9	7.99	Filtered		ES
RD-29		Reanalysis of Primary	08/08/07	Gross alpha	16.1	8.6	8.67	Filtered		ES
RD-29		Primary	08/08/07	Gross beta	15.5	5.7	6.57	Filtered		ES
RD-29		Reanalysis of Primary	08/08/07	Gross beta	9.31	4.9	6.8	Filtered		ES
RD-29		Primary	02/05/08	Gross alpha	16.8	4.7	2.67	Filtered		ES
RD-29		Primary	02/05/08	Gross beta	12	2.9	2.23	Filtered		ES
RD-29		Primary	08/11/08	Gross alpha	10.8	3.7	3.21	Filtered		ES
RD-29		Primary	08/11/08	Gross beta	7.95	2.3	3.4	Filtered		ES
RD-29		Primary	03/05/09	Gross alpha	9.03	3	2.56	Filtered		ES
RD-29		Primary	03/05/09	Gross alpha	16.8	4.4	2.38	Unfiltered		ES
RD-29		Duplicate	03/05/09	Gross alpha	18.1	4.8	2.18	Unfiltered		ES
RD-29		Primary	03/05/09	Gross beta	10.4	2.3	2.72	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-29		Primary	03/05/09	Gross beta	11.7	2.3	2.5	Unfiltered		ES
RD-29		Duplicate	03/05/09	Gross beta	12	2.6	2.95	Unfiltered		ES
RD-29		Primary	07/24/09	Gross alpha	8.66	2.7	1.49	Filtered		ES
RD-29		Primary	07/24/09	Gross alpha	8.98	2.9	1.81	Unfiltered		ES
RD-29		Primary	07/24/09	Gross beta	11.8	2.1	2.14	Filtered		ES
RD-29		Primary	07/24/09	Gross beta	10.2	2.1	2.44	Unfiltered		ES
RD-30		Primary	09/22/89	Gross alpha	17.4	2.4	---	Filtered		BC
RD-30		Primary	09/22/89	Gross alpha	22.8	2.7	---	Unfiltered		BC
RD-30		Primary	09/22/89	Gross beta	33.2	1.2	---	Filtered		BC
RD-30		Primary	09/22/89	Gross beta	38.4	1.3	---	Unfiltered		BC
RD-30		Primary	10/19/89	Gross alpha	8.5	2.8	---	Filtered		UST
RD-30		Primary	10/19/89	Gross beta	8.1	0.8	---	Filtered		UST
RD-30		Primary	03/27/90	Gross alpha	3.19	2.74	---	Filtered		UST
RD-30		Primary	03/27/90	Gross beta	5.19	2.66	---	Filtered		UST
RD-30		Primary	06/29/90	Gross alpha	5.24	4.33	---	Filtered		UST
RD-30		Primary	06/29/90	Gross beta	3.18	2.42	---	Filtered		UST
RD-30		Primary	09/15/90	Gross alpha	2.63	2.15	---	Filtered		UST
RD-30		Primary	09/15/90	Gross beta	4.88	2.61	---	Filtered		UST
RD-30		Primary	12/06/90	Gross alpha	4.71	2.42	4	Filtered		IT
RD-30		Primary	12/06/90	Gross beta	3.18 U	2.46	4	Filtered		IT
RD-30		Primary	03/09/91	Gross alpha	8.58	4.74	4	Filtered		IT
RD-30		Primary	03/09/91	Gross beta	6.12	2.68	4	Filtered		IT
RD-30		Primary	09/09/91	Gross alpha	1.16 U	0.756	4	Filtered		IT
RD-30		Primary	09/09/91	Gross beta	4.65	1.33	4	Filtered		IT
RD-30		Primary	12/06/91	Gross alpha	11.9	4.99	4	Filtered		IT
RD-30		Primary	12/06/91	Gross beta	7.03	2.24	4	Filtered		IT
RD-30		Primary	06/03/92	Gross alpha	4	2	2	Filtered		CEP
RD-30		Split	06/03/92	Gross alpha	10	5	6	Filtered		TEL
RD-30		Primary	06/03/92	Gross beta	1 U	3	3	Filtered		CEP
RD-30		Split	06/03/92	Gross beta	9.9	2.7	3	Filtered		TEL
RD-30		Primary	03/21/93	Gross alpha	2 U	---	2	Filtered		CEP
RD-30		Primary	03/21/93	Gross beta	14	3	3	Filtered		CEP
RD-30		Primary	02/26/94	Gross alpha	4.8 U	4.7	7.2	Filtered		LAS
RD-30		Primary	02/26/94	Gross beta	7.9	3.9	6	Filtered		LAS
RD-30		Primary	08/09/94	Gross alpha	4.6 U	4	5.8	Filtered		LAS
RD-30		Primary	08/09/94	Gross beta	7.5	3.5	5.3	Filtered		LAS
RD-30		Primary	02/08/95	Gross alpha	10.2	6.2	8	Filtered		LAS
RD-30		Primary	02/08/95	Gross beta	7.6	4.5	7	Filtered		LAS
RD-30		Primary	08/19/95	Gross alpha	5.5 U	4.1	5.8	Filtered		LAS
RD-30		Primary	08/19/95	Gross beta	4.7 U	3.2	5.2	Filtered		LAS
RD-30		Primary	02/28/96	Gross alpha	5.6 U	4.5	6.6	Filtered		LAS
RD-30		Primary	02/28/96	Gross beta	3.1 U	3.3	5.5	Filtered		LAS
RD-30		Primary	08/20/96	Gross alpha	7 U	5.7	8.6	Filtered		ES
RD-30		Primary	08/20/96	Gross beta	5.6 U	3.8	6	Filtered		ES
RD-30		Primary	02/25/97	Gross alpha	12.1	5.2	5.1	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-30		Primary	02/25/97	Gross beta	7.5	3.1	4.6	Filtered		LAS
RD-30		Primary	08/27/97	Gross alpha	13.6	7	8.2	Filtered		LAS
RD-30		Primary	08/27/97	Gross beta	9	5.2	8.1	Filtered		LAS
RD-30		Primary	05/28/98	Gross alpha	10.7	3.6	3.18	Filtered		TN
RD-30		Primary	05/28/98	Gross beta	8.29	1.7	2.02	Filtered		TN
RD-30		Primary	08/05/98	Gross alpha	9.2 U	9	13.2	Filtered		TN
RD-30		Primary	08/05/98	Gross beta	-2.84 U	20	35	Filtered		TN
RD-30		Primary	02/05/99	Gross alpha	6.46	2.9	2.83	Filtered		TN
RD-30		Primary	02/05/99	Gross beta	8.21	2.7	3.87	Filtered		TN
RD-30		Primary	05/05/00	Gross alpha	10.5	3.6	2.89	Filtered		TR
RD-30		Primary	05/05/00	Gross beta	7.54	3.1	4.48	Filtered		TR
RD-30		Primary	08/08/00	Gross alpha	7.63	3	2.64	Filtered		TR
RD-30		Primary	08/08/00	Gross beta	10.4	2.8	3.79	Filtered		TR
RD-30		Primary	05/09/01	Gross alpha	6.43	3	2.91	Filtered		ES
RD-30		Primary	05/09/01	Gross beta	9.48	1.8	2.12	Filtered		ES
RD-30		Primary	11/09/01	Gross alpha	14.72	6.4	2.98	Filtered		DL
RD-30		Primary	11/09/01	Gross beta	8.3	1.97	4.22	Filtered		DL
RD-30		Primary	03/11/02	Gross alpha	14.94	4.1	4.24	Filtered		DL
RD-30		Primary	03/11/02	Gross beta	5.03	1.16	3.26	Filtered		DL
RD-30		Primary	08/30/02	Gross alpha	10.8	3.3	2.4	Filtered		ES
RD-30		Primary	08/30/02	Gross beta	10.1	2.2	2.91	Filtered		ES
RD-30		Primary	02/07/03	Gross alpha	3.27	1.6	1.72	Filtered		ES
RD-30		Primary	02/07/03	Gross beta	7	1.9	2.74	Filtered		ES
RD-30		Primary	11/14/03	Gross alpha	8.3	4.4	3.19	Filtered		ES
RD-30		Primary	11/14/03	Gross beta	13.9	4.2	3.81	Filtered		ES
RD-30		Primary	02/24/04	Gross alpha	10.6	5.2	4.09	Filtered		ES
RD-30		Primary	02/24/04	Gross beta	-9.66 U	7.3	12.3	Filtered		ES
RD-30		Primary	08/10/04	Gross alpha	2.25 U	3.1	4.42	Filtered		ES
RD-30		Primary	08/10/04	Gross beta	10.7	4	4.74	Filtered		ES
RD-30		Primary	08/29/05	Gross alpha	8.72	2.7	1.78	Filtered		ES
RD-30		Split	08/29/05	Gross alpha	13	3.7	1.48	Filtered		STL
RD-30		Primary	08/29/05	Gross beta	7.88	2.3	2.45	Filtered		ES
RD-30		Split	08/29/05	Gross beta	7.9	2.6	4.08	Filtered		STL
RD-30		Primary	02/17/06	Gross alpha	5.51	3.6	4.27	Filtered		ES
RD-30		Primary	02/17/06	Gross beta	9.28	2.9	2.84	Filtered		ES
RD-30		Primary	08/09/06	Gross alpha	10.3	3.6	3.33	Filtered		ES
RD-30		Split	08/09/06	Gross alpha	9.63	3.9	2.68	Filtered		STL
RD-30		Primary	08/09/06	Gross beta	8.45	2.9	3.39	Filtered		ES
RD-30		Split	08/09/06	Gross beta	11.4	3.8	5.92	Filtered		STL
RD-30		Primary	05/24/07	Gross alpha	6.86	3	3.31	Filtered		ES
RD-30		Primary	05/24/07	Gross beta	6.17	2.7	3.75	Filtered		ES
RD-30		Primary	08/21/07	Gross alpha	5.67	3.5	4.52	Filtered		ES
RD-30		Primary	08/21/07	Gross beta	7.66	2.9	3.81	Filtered		ES
RD-30		Primary	02/06/08	Gross alpha	11.8	4.5	3.8	Filtered		ES
RD-30		Primary	02/06/08	Gross beta	10.6	3.5	4.1	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-30		Primary	08/13/08	Gross alpha	7.56	3.6	4.06	Filtered		ES
RD-30		Primary	08/13/08	Gross beta	8.74	2.8	3.87	Filtered		ES
RD-31		Primary	09/26/89	Gross alpha	3.6	1	---	Filtered		BC
RD-31		Primary	09/26/89	Gross alpha	3.7	0.8	---	Unfiltered		BC
RD-31		Primary	09/26/89	Gross beta	4.8	0.3	---	Filtered		BC
RD-31		Primary	09/26/89	Gross beta	7.4	0.3	---	Unfiltered		BC
RD-31		Primary	10/24/89	Gross alpha	4.2	2.1	---	Filtered		BC
RD-31		Primary	10/24/89	Gross beta	1.4	0.6	---	Filtered		BC
RD-31		Primary	12/05/90	Gross alpha	2.07 U	1.8	4	Filtered		IT
RD-31		Primary	12/05/90	Gross beta	4.18	2.56	4	Filtered		IT
RD-31		Primary	03/10/91	Gross alpha	2.26 U	1.66	4	Filtered		IT
RD-31		Primary	03/10/91	Gross beta	1.02 U	2.1	4	Filtered	High statistics due to large amount of solids.	IT
RD-31		Primary	03/05/92	Gross alpha	2 U	---	2	Filtered		CEP
RD-31		Primary	03/05/92	Gross beta	3 U	---	3	Filtered		CEP
RD-33A		Primary	12/05/91	Gross alpha	7.99	3.19	4	Filtered		IT
RD-33A		Primary	12/05/91	Gross beta	8.1	1.9	4	Filtered		IT
RD-33A		Primary	12/12/91	Gross alpha	12.9	4.01	4	Filtered		IT
RD-33A		Split	12/12/91	Gross alpha	2 U	---	2	Filtered		CEP
RD-33A		Primary	12/12/91	Gross beta	7.13	1.72	4	Filtered		IT
RD-33A		Split	12/12/91	Gross beta	3 U	---	3	Filtered		CEP
RD-33A		Primary	06/08/92	Gross alpha	3	2	2	Filtered		CEP
RD-33A		Primary	06/08/92	Gross beta	-2 U	3	3	Filtered	High statistics due to large amount of solids.	CEP
RD-33A		Primary	09/15/92	Gross alpha	5	2	2	Filtered		CEP
RD-33A		Primary	09/15/92	Gross beta	7	4	3	Filtered		CEP
RD-33A		Primary	12/05/92	Gross alpha	2 U	---	2	Filtered		CEP
RD-33A		Primary	12/05/92	Gross beta	4	3	3	Filtered		CEP
RD-33A		Primary	06/24/93	Gross alpha	2 U	---	2	Filtered		CEP
RD-33A		Primary	06/24/93	Gross beta	3 U	---	3	Filtered		CEP
RD-33A		Primary	08/24/93	Gross alpha	2 U	---	2	Filtered		CEP
RD-33A		Primary	08/24/93	Gross beta	7	3	3	Filtered		CEP
RD-33A		Primary	11/17/93	Gross alpha	3.9	2.8	3.7	Filtered		LAS
RD-33A		Primary	11/17/93	Gross beta	7.2	2.5	3.6	Filtered		LAS
RD-33A		Primary	02/27/94	Gross alpha	4.9	3.1	4.1	Filtered		LAS
RD-33A		Primary	02/27/94	Gross beta	4.6	2.1	3.2	Filtered		LAS
RD-33A		Primary	08/18/94	Gross alpha	3.9 U	2.8	4	Filtered		LAS
RD-33A		Primary	08/18/94	Gross beta	5.7	2.5	3.7	Filtered		LAS
RD-33A		Primary	02/07/95	Gross alpha	1.8 U	2.3	3.7	Filtered		LAS
RD-33A		Primary	02/07/95	Gross beta	7.7	2.4	3.3	Filtered		LAS
RD-33A		Primary	08/09/95	Gross alpha	1.6 U	1.9	3	Filtered		LAS
RD-33A		Primary	08/09/95	Gross beta	5.8	2.1	3.1	Filtered		LAS
RD-33A		Primary	02/19/96	Gross alpha	6.7	3.5	4.6	Filtered		LAS
RD-33A		Primary	02/19/96	Gross beta	4	2.2	3.4	Filtered		LAS
RD-33A		Primary	08/23/96	Gross alpha	1.6 U	2.4	4.2	Filtered		LAS
RD-33A		Primary	08/23/96	Gross beta	4.2	2.3	3.6	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33A		Primary	02/25/97	Gross alpha	7.6	3.2	3.5	Filtered		LAS
RD-33A		Primary	02/25/97	Gross beta	4.2	1.8	2.7	Filtered		LAS
RD-33A		Primary	08/27/97	Gross alpha	1.2 U	2.2	4	Filtered		LAS
RD-33A		Primary	08/27/97	Gross beta	8.6	3.4	5.1	Filtered		LAS
RD-33A		Primary	05/27/98	Gross alpha	7.38	2.3	1.66	Filtered		TN
RD-33A		Primary	05/27/98	Gross beta	5.67	1.8	2.46	Filtered		TN
RD-33A		Primary	08/17/98	Gross alpha	1.5	0.76	0.786	Filtered		TN
RD-33A		Primary	08/17/98	Gross beta	4.71	1.4	2.02	Filtered		TN
RD-33A		Primary	02/03/99	Gross alpha	3.16	1.4	1.26	Filtered		TN
RD-33A		Primary	02/03/99	Gross beta	4.87	1.7	2.46	Filtered		TN
RD-33A		Primary	02/09/00	Gross alpha	5.26	2.2	2.24	Filtered		TR
RD-33A		Primary	02/09/00	Gross beta	5.35	2.2	3.27	Filtered		TR
RD-33A		Primary	05/14/01	Gross alpha	1.7 U	1.5	2	Filtered		ES
RD-33A		Primary	05/14/01	Gross beta	6.32	1.5	1.98	Filtered		ES
RD-33A		Primary	02/15/02	Gross alpha	3.13	1.79	2.33	Filtered		DL
RD-33A		Primary	02/15/02	Gross beta	6.36	1.55	2.87	Filtered		DL
RD-33A	Z04	Primary	01/30/03	Gross alpha	3.42	2.1	2.24	Filtered		ES
RD-33A	Z04	Primary	01/30/03	Gross beta	5.38	2.3	3.32	Filtered		ES
RD-33A	Z02	Primary	11/15/04	Gross alpha	1.75 J	1.2	1.46	Filtered		ES
RD-33A	Z02	Primary	11/15/04	Gross beta	5.52	1.8	1.82	Filtered		ES
RD-33A	Z03	Primary	02/17/05	Gross alpha	4.16	2.2	2.28	Filtered		ES
RD-33A	Z03	Primary	02/17/05	Gross beta	6.98	2.3	2.4	Filtered		ES
RD-33A	Z03	Primary	09/01/05	Gross alpha	4.31	1.9	1.36	Filtered		ES
RD-33A	Z03	Primary	09/01/05	Gross beta	4.76	1.7	1.94	Filtered		ES
RD-33A	Z02	Primary	02/17/06	Gross alpha	2.53 J	1.3	1.33	Filtered		ES
RD-33A	Z02	Primary	02/17/06	Gross beta	2.7 J	1.3	1.84	Filtered		ES
RD-33A	Z03	Primary	08/18/06	Gross alpha	4.54	1.7	1.47	Filtered		ES
RD-33A	Z03	Primary	08/18/06	Gross beta	5.58	1.5	1.4	Filtered		ES
RD-33A	Z02	Primary	02/08/07	Gross alpha	5.35	2.7	2.64	Filtered		ES
RD-33A	Z02	Primary	02/08/07	Gross beta	7.39	2.6	2.72	Filtered		ES
RD-33A	Z02	Primary	08/13/07	Gross alpha	6.2	3.2	2.99	Filtered		ES
RD-33A	Z02	Primary	08/13/07	Gross beta	4.05	2.2	2.91	Filtered		ES
RD-33A	Z02	Primary	02/07/08	Gross alpha	1.48 U	1.3	1.94	Filtered		ES
RD-33A	Z02	Primary	02/07/08	Gross beta	5.8	1.4	0.987	Filtered		ES
RD-33A	Z02	Primary	08/08/08	Gross alpha	8.77	2.6	1.64	Filtered		ES
RD-33A	Z02	Primary	08/08/08	Gross beta	6.98	1.5	2.02	Filtered		ES
RD-33A	Z02	Primary	02/25/09	Gross alpha	3.53	1.3	1.18	Filtered		ES
RD-33A	Z02	Primary	02/25/09	Gross alpha	4.76	1.4	0.953	Unfiltered		ES
RD-33A	Z02	Primary	02/25/09	Gross beta	7.2	1.4	1.54	Filtered		ES
RD-33A	Z02	Primary	02/25/09	Gross beta	6.16	1	0.971	Unfiltered		ES
RD-33A	Z02	Primary	07/17/09	Gross alpha	3.34	1.3	1.16	Filtered		ES
RD-33A	Z02	Primary	07/17/09	Gross alpha	4.45	1.3	0.885	Unfiltered		ES
RD-33A	Z02	Primary	07/17/09	Gross beta	5.57	1.1	1.3	Filtered		ES
RD-33A	Z02	Primary	07/17/09	Gross beta	6.6	1.3	1.58	Unfiltered		ES
RD-33B		Primary	12/12/91	Gross alpha	2.87 U	2.16	4	Filtered		IT

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33B		Split	12/12/91	Gross alpha	2 U	---	2	Filtered		CEP
RD-33B		Primary	12/12/91	Gross beta	7.53	1.92	4	Filtered		IT
RD-33B		Split	12/12/91	Gross beta	3 U	---	3	Filtered		CEP
RD-33B		Primary	06/24/92	Gross alpha	1 U	2	2	Filtered		CEP
RD-33B		Primary	06/24/92	Gross beta	3	3	3	Filtered		CEP
RD-33B		Primary	09/15/92	Gross alpha	0.1 U	1.3	2	Filtered	High statistics due to large amount of solids.	CEP
RD-33B		Primary	09/15/92	Gross beta	0.3 U	3	3	Filtered		CEP
RD-33B		Primary	12/05/92	Gross alpha	2 U	---	2	Filtered		CEP
RD-33B		Primary	12/05/92	Gross beta	9	3	3	Filtered		CEP
RD-33B		Primary	06/24/93	Gross alpha	2 U	---	2	Filtered		CEP
RD-33B		Primary	06/24/93	Gross beta	3 U	---	3	Filtered		CEP
RD-33B		Primary	08/24/93	Gross alpha	2	1	2	Filtered		CEP
RD-33B		Primary	08/24/93	Gross beta	4	3	3	Filtered		CEP
RD-33B		Primary	11/17/93	Gross alpha	1.1 U	1.3	2.2	Filtered		LAS
RD-33B		Primary	11/17/93	Gross beta	5.3	1.6	2.3	Filtered		LAS
RD-33B		Primary	02/27/94	Gross alpha	0.8 U	1.8	3.3	Filtered		LAS
RD-33B		Primary	02/27/94	Gross beta	4.9	2	2.9	Filtered		LAS
RD-33B		Primary	08/18/94	Gross alpha	0.7 U	2	3.9	Filtered		LAS
RD-33B		Primary	08/18/94	Gross beta	5.4	3	4.7	Filtered		LAS
RD-33B		Primary	02/07/95	Gross alpha	0 U	1.8	3.9	Filtered		LAS
RD-33B		Primary	02/07/95	Gross beta	5.7	2.4	3.5	Filtered		LAS
RD-33B		Primary	08/09/95	Gross alpha	1.5 U	1.8	3	Filtered		LAS
RD-33B		Primary	08/09/95	Gross beta	4.9	1.9	2.8	Filtered		LAS
RD-33B		Primary	02/19/96	Gross alpha	2.6 U	2.4	3.7	Filtered		LAS
RD-33B		Primary	02/19/96	Gross beta	4.5	2.3	3.6	Filtered		LAS
RD-33B		Primary	08/23/96	Gross alpha	-0.5 U	1.5	3.6	Filtered		LAS
RD-33B		Primary	08/23/96	Gross beta	6.8	2.5	3.7	Filtered		LAS
RD-33B		Primary	02/25/97	Gross alpha	1.2 U	2	3.5	Filtered		LAS
RD-33B		Primary	02/25/97	Gross beta	4.4	1.7	2.4	Filtered		LAS
RD-33B		Primary	08/22/97	Gross alpha	2.5 U	2.2	3.2	Filtered		LAS
RD-33B		Primary	08/22/97	Gross beta	5.8	2.4	3.6	Filtered		LAS
RD-33B		Primary	05/27/98	Gross alpha	1.44 U	1.5	2.27	Filtered		TN
RD-33B		Primary	05/27/98	Gross beta	6.5	1.5	1.91	Filtered		TN
RD-33B		Primary	08/17/98	Gross alpha	0.004 U	0.34	0.724	Filtered		TN
RD-33B		Primary	08/17/98	Gross beta	4.31	1.5	2.13	Filtered		TN
RD-33B		Primary	02/03/99	Gross alpha	1.86	1.4	1.75	Filtered		TN
RD-33B		Primary	02/03/99	Gross beta	3.8	1.4	2.05	Filtered		TN
RD-33B		Primary	02/09/00	Gross alpha	2.31 U	1.8	2.43	Filtered		TR
RD-33B		Primary	02/09/00	Gross beta	5.24	3.2	4.94	Filtered		TR
RD-33B		Primary	02/17/01	Gross alpha	1.73 U	1.6	1.99	Filtered		ES
RD-33B		Primary	02/17/01	Gross beta	4.68	1.7	2.49	Filtered		ES
RD-33B		Primary	02/15/02	Gross alpha	3.19	2.09	1.35	Filtered		DL
RD-33B		Primary	02/15/02	Gross beta	2.78	1.31	1.89	Filtered		DL
RD-33B		Primary	02/11/03	Gross alpha	0.527 U	0.75	1.07	Filtered		ES
RD-33B		Primary	02/11/03	Gross beta	4.94	1.1	1.66	Filtered		ES

See last page of table for notes and abbreviations.

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RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33B		Primary	11/04/04	Gross alpha	1.02 U	1.5	2.07	Filtered		ES
RD-33B		Primary	11/04/04	Gross beta	5.46	2.4	2.95	Filtered		ES
RD-33B		Primary	02/17/05	Gross alpha	1.99 U	1.6	2.15	Filtered		ES
RD-33B		Split	02/17/05	Gross alpha	1.21 U	1.5	2.84	Filtered		STL
RD-33B		Primary	02/17/05	Gross beta	5.98	1.9	2.02	Filtered		ES
RD-33B		Split	02/17/05	Gross beta	4.92	2.2	3.77	Filtered		STL
RD-33B		Primary	08/22/05	Gross alpha	1.47 J	0.92	1.09	Filtered		ES
RD-33B		Split	08/22/05	Gross alpha	2.48 J	1.4	1.73	Filtered		STL
RD-33B		Primary	08/22/05	Gross beta	5.04	1.5	1.63	Filtered		ES
RD-33B		Split	08/22/05	Gross beta	7.76	2.3	3.32	Filtered		STL
RD-33B		Primary	02/16/06	Gross alpha	1.22 U	2.6	4.4	Filtered		ES
RD-33B		Primary	02/16/06	Gross beta	5.82	2.8	4.18	Filtered		ES
RD-33B		Primary	08/09/06	Gross alpha	-0.647 U	0.99	1.9	Filtered		ES
RD-33B		Split	08/09/06	Gross alpha	2.24 U	2	2.88	Filtered		STL
RD-33B		Primary	08/09/06	Gross beta	4.99	1.8	2.35	Filtered		ES
RD-33B		Split	08/09/06	Gross beta	9.68	2.9	4.28	Filtered		STL
RD-33B		Primary	02/07/07	Gross alpha	0.218 U	1.3	2.19	Filtered		ES
RD-33B		Primary	02/07/07	Gross beta	5.06	2.6	3.71	Filtered		ES
RD-33B		Primary	08/14/07	Gross alpha	-1.51 U	2	3.6	Filtered		ES
RD-33B		Reanalysis of Primary	08/14/07	Gross alpha	-3.56 U	2.4	4.33	Filtered		ES
RD-33B		Primary	08/14/07	Gross beta	3.22 J	1.8	2.87	Filtered		ES
RD-33B		Reanalysis of Primary	08/14/07	Gross beta	5.05	1.7	2.04	Filtered		ES
RD-33B		Primary	02/13/08	Gross alpha	0.997 U	1.3	2.02	Filtered		ES
RD-33B		Primary	02/13/08	Gross beta	5.14	2	2.99	Filtered		ES
RD-33B		Primary	08/07/08	Gross alpha	1.35 U	1.6	2.62	Filtered		ES
RD-33B		Primary	08/07/08	Gross beta	4.86	1.3	1.85	Filtered		ES
RD-33B		Primary	03/05/09	Gross alpha	0.558 U	1.4	2.27	Filtered		ES
RD-33B		Primary	03/05/09	Gross alpha	-0.081 U	1	1.81	Unfiltered		ES
RD-33B		Duplicate	03/05/09	Gross alpha	1.03 U	2.1	3.52	Unfiltered		ES
RD-33B		Primary	03/05/09	Gross beta	6.09	2.5	3.65	Filtered		ES
RD-33B		Primary	03/05/09	Gross beta	4.09	1.4	2	Unfiltered		ES
RD-33B		Duplicate	03/05/09	Gross beta	4.52	1.6	2.35	Unfiltered		ES
RD-33B		Primary	08/04/09	Gross alpha	1.24 U	1.1	1.7	Filtered		ES
RD-33B		Primary	08/04/09	Gross alpha	0.562 U	1.1	1.73	Unfiltered		ES
RD-33B		Primary	08/04/09	Gross beta	4.49	1.9	2.88	Filtered		ES
RD-33B		Primary	08/04/09	Gross beta	4.32	2.3	3.39	Unfiltered		ES
RD-33C		Primary	12/05/91	Gross alpha	4.19	2.34	4	Filtered		IT
RD-33C		Primary	12/05/91	Gross beta	7.42	1.79	4	Filtered		IT
RD-33C		Primary	12/12/91	Gross alpha	1.91 U	1.82	4	Filtered		IT
RD-33C		Split	12/12/91	Gross alpha	-6 U	---	2	Filtered		CEP
RD-33C		Primary	12/12/91	Gross beta	6.15	1.75	4	Filtered		IT
RD-33C		Split	12/12/91	Gross beta	2 U	4	3	Filtered		CEP
RD-33C		Primary	06/08/92	Gross alpha	1 U	1	2	Filtered		CEP
RD-33C		Primary	06/08/92	Gross beta	-3 U	3	3	Filtered		CEP

See last page of table for notes and abbreviations.

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RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
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Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33C		Primary	09/15/92	Gross alpha	2	2	2	Filtered		CEP
RD-33C		Primary	09/15/92	Gross beta	2 U	3	3	Filtered		CEP
RD-33C		Primary	12/05/92	Gross alpha	2 U	---	2	Filtered		CEP
RD-33C		Primary	12/05/92	Gross beta	4	3	3	Filtered		CEP
RD-33C		Primary	06/24/93	Gross alpha	2	1	2	Filtered		CEP
RD-33C		Primary	06/24/93	Gross beta	7	3	3	Filtered		CEP
RD-33C		Primary	08/24/93	Gross alpha	2	1	2	Filtered		CEP
RD-33C		Primary	08/24/93	Gross beta	8	3	3	Filtered		CEP
RD-33C		Primary	11/17/93	Gross alpha	2.3 U	2.6	4.1	Filtered		LAS
RD-33C		Primary	11/17/93	Gross beta	5.8	2.5	3.8	Filtered		LAS
RD-33C		Primary	02/27/94	Gross alpha	0.3 U	2.2	4.5	Filtered		LAS
RD-33C		Primary	02/27/94	Gross beta	6.4	2.3	3.4	Filtered		LAS
RD-33C		Primary	08/17/94	Gross alpha	2.1 U	2.8	4.6	Filtered		LAS
RD-33C		Primary	08/17/94	Gross beta	4.4 U	3.4	5.5	Filtered		LAS
RD-33C		Primary	02/07/95	Gross alpha	4.4 U	3.2	4.5	Filtered		LAS
RD-33C		Primary	02/07/95	Gross beta	4.2	2.6	4.1	Filtered		LAS
RD-33C		Primary	08/09/95	Gross alpha	2.6 U	2.4	3.6	Filtered		LAS
RD-33C		Primary	08/09/95	Gross beta	6.1	2.3	3.3	Filtered		LAS
RD-33C		Primary	02/19/96	Gross alpha	6.5	3.4	4.3	Filtered		LAS
RD-33C		Primary	02/19/96	Gross beta	4	2.2	3.4	Filtered		LAS
RD-33C		Primary	08/22/96	Gross alpha	-0.7 U	1.8	4.6	Filtered		LAS
RD-33C		Primary	08/22/96	Gross beta	4.9	2.8	4.3	Filtered		LAS
RD-33C		Primary	02/25/97	Gross alpha	3.1 U	2.5	3.5	Filtered		LAS
RD-33C		Primary	02/25/97	Gross beta	6.9	2.1	2.8	Filtered		LAS
RD-33C		Primary	08/21/97	Gross alpha	4.3	2.9	3.8	Filtered		LAS
RD-33C		Primary	08/21/97	Gross beta	5	2.7	4.1	Filtered		LAS
RD-33C		Primary	05/27/98	Gross alpha	5.82	2.2	2.01	Filtered		TN
RD-33C		Primary	05/27/98	Gross beta	5.99	1.6	2.13	Filtered		TN
RD-33C		Primary	08/17/98	Gross alpha	1.57	0.86	1	Filtered		TN
RD-33C		Primary	08/17/98	Gross beta	3.72	1.6	2.35	Filtered		TN
RD-33C		Primary	02/03/99	Gross alpha	3.4	1.7	1.81	Filtered		TN
RD-33C		Primary	02/03/99	Gross beta	5.55	1.6	2.24	Filtered		TN
RD-33C		Primary	02/09/00	Gross alpha	3.5	2.4	3.21	Filtered		TR
RD-33C		Primary	02/09/00	Gross beta	6.98	2.6	3.8	Filtered		TR
RD-33C		Primary	02/17/01	Gross alpha	4.71	2.2	1.99	Filtered		ES
RD-33C		Primary	02/17/01	Gross beta	6.91	1.6	2.02	Filtered		ES
RD-33C		Primary	02/15/02	Gross alpha	4.29	2.45	1.43	Filtered		DL
RD-33C		Primary	02/15/02	Gross beta	3.45	1.34	2.14	Filtered		DL
RD-33C		Primary	02/10/03	Gross alpha	0.201 U	1.5	2.63	Filtered		ES
RD-33C		Primary	02/10/03	Gross beta	5.34	2	2.78	Filtered		ES
RD-33C		Primary	11/04/04	Gross alpha	3.61	2.1	2.24	Filtered		ES
RD-33C		Split	11/04/04	Gross alpha	5.57	2.3	2.29	Filtered		STL
RD-33C		Primary	11/04/04	Gross beta	7.83	2.8	3.06	Filtered		ES
RD-33C		Split	11/04/04	Gross beta	6.85	2.5	4.13	Filtered		STL
RD-33C		Primary	02/16/05	Gross alpha	4.65	2.3	2.09	Filtered		ES

See last page of table for notes and abbreviations.

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RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33C		Primary	02/16/05	Gross beta	1.05 U	2.3	3.89	Filtered		ES
RD-33C		Primary	08/22/05	Gross alpha	2.82 J	1.4	1.22	Filtered		ES
RD-33C		Primary	08/22/05	Gross beta	4.43	1.7	2.32	Filtered		ES
RD-33C		Primary	02/16/06	Gross alpha	3.77	2.6	3.55	Filtered		ES
RD-33C		Primary	02/16/06	Gross beta	6.68	2.4	2.83	Filtered		ES
RD-33C		Primary	08/08/06	Gross alpha	1.65 U	1.3	1.84	Filtered		ES
RD-33C		Primary	08/08/06	Gross beta	4.75	1.7	2.12	Filtered		ES
RD-33C		Primary	02/06/07	Gross alpha	-0.318 U	1.8	3.86	Filtered		ES
RD-33C		Primary	02/06/07	Gross beta	-2.85 U	1.9	3.46	Filtered		ES
RD-33C		Primary	08/07/07	Gross alpha	3.01	2	2.56	Filtered		ES
RD-33C		Primary	08/07/07	Gross beta	4.97	1.8	2.25	Filtered		ES
RD-33C		Primary	02/12/08	Gross alpha	2.4 J	1.5	1.71	Filtered		ES
RD-33C		Primary	02/12/08	Gross beta	4.9	1.2	1.58	Filtered		ES
RD-33C		Primary	08/07/08	Gross alpha	2.94 J	1.8	2.11	Filtered		ES
RD-33C		Primary	08/07/08	Gross beta	5.77	2.3	3.36	Filtered		ES
RD-33C		Primary	02/24/09	Gross alpha	1.53 J	1	1.48	Filtered		ES
RD-33C		Primary	02/24/09	Gross alpha	0.345 U	1.3	2.2	Unfiltered		ES
RD-33C		Split	02/24/09	Gross alpha	6.12	1.53	1.32	Filtered		GEL
RD-33C		Split	02/24/09	Gross alpha	8.05	1.73	1.3	Unfiltered		GEL
RD-33C		Primary	02/24/09	Gross beta	4.93	1.1	1.43	Filtered		ES
RD-33C		Primary	02/24/09	Gross beta	3.96 J	1.3	1.87	Unfiltered		ES
RD-33C		Split	02/24/09	Gross beta	6.54	1.31	1.77	Filtered		GEL
RD-33C		Split	02/24/09	Gross beta	6.15	1.3	1.79	Unfiltered		GEL
RD-33C		Primary	07/24/09	Gross alpha	2.86 J	1.3	1.47	Filtered		ES
RD-33C		Primary	07/24/09	Gross alpha	1.72 J	1.2	1.45	Unfiltered		ES
RD-33C		Split	07/24/09	Gross alpha	4.99	2.98	3.46	Unfiltered		GEL
RD-33C		Primary	07/24/09	Gross beta	5.03	1.2	1.56	Filtered		ES
RD-33C		Primary	07/24/09	Gross beta	4.94	2	2.92	Unfiltered		ES
RD-33C		Split	07/24/09	Gross beta	6.42	2.48	3.41	Unfiltered		GEL
RD-34A		Primary	12/05/91	Gross alpha	22.1	7.98	4	Filtered		IT
RD-34A		Split	12/05/91	Gross alpha	2 U	---	2	Filtered		CEP
RD-34A		Primary	12/05/91	Gross beta	15.9	3.56	4	Filtered		IT
RD-34A		Split	12/05/91	Gross beta	3 U	---	3	Filtered		CEP
RD-34A		Primary	03/10/92	Gross alpha	6	3	2	Filtered		CEP
RD-34A		Split	03/10/92	Gross alpha	28	11	6	Filtered		TEL
RD-34A		Primary	03/10/92	Gross beta	5	3	3	Filtered		CEP
RD-34A		Split	03/10/92	Gross beta	22	4	3	Filtered		TEL
RD-34A		Primary	06/08/92	Gross alpha	6	2	2	Filtered		CEP
RD-34A		Primary	06/08/92	Gross beta	-2 U	3	3	Filtered		CEP
RD-34A		Primary	09/13/92	Gross alpha	6	3	2	Filtered		CEP
RD-34A		Reanalysis of Primary	09/13/92	Gross alpha	6	3	2	Filtered		CEP
RD-34A		Split	09/13/92	Gross alpha	21	14	---	Filtered		BL
RD-34A		Reanalysis of Split	09/13/92	Gross alpha	33	12	---	Filtered		BL
RD-34A		Primary	09/13/92	Gross beta	8	4	3	Filtered		CEP

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34A		Reanalysis of Primary	09/13/92	Gross beta	19	3	3	Filtered		CEP
RD-34A		Split	09/13/92	Gross beta	28	8	---	Filtered		BL
RD-34A		Reanalysis of Split	09/13/92	Gross beta	14	8	---	Filtered		BL
RD-34A		Primary	12/05/92	Gross alpha	7	3	2	Filtered		CEP
RD-34A		Split	12/05/92	Gross alpha	31	11	---	Filtered		BL
RD-34A		Reanalysis of Split	12/05/92	Gross alpha	16	11	---	Filtered		BL
RD-34A		Primary	12/05/92	Gross beta	6	3	3	Filtered		CEP
RD-34A		Split	12/05/92	Gross beta	18	6	---	Filtered		BL
RD-34A		Reanalysis of Split	12/05/92	Gross beta	21	7	---	Filtered		BL
RD-34A		Primary	03/09/93	Gross alpha	11	5	2	Filtered		CEP
RD-34A		Primary	03/09/93	Gross beta	11	4	3	Filtered		CEP
RD-34A		Primary	06/22/93	Gross alpha	7	4	2	Filtered		CEP
RD-34A		Primary	06/22/93	Gross beta	20	4	3	Filtered		CEP
RD-34A		Primary	08/24/93	Gross alpha	7	3	2	Filtered		CEP
RD-34A		Primary	08/24/93	Gross beta	11	3	3	Filtered		CEP
RD-34A		Primary	11/18/93	Gross alpha	12.5	7	7.9	Filtered		CEP
RD-34A		Primary	11/18/93	Gross beta	8.1 U	5.5	8.7	Filtered		CEP
RD-34A		Primary	02/26/94	Gross alpha	18.8	8.2	8.6	Filtered		LAS
RD-34A		Reanalysis of Primary	02/26/94	Gross alpha	10.4	6.3	7.8	Filtered		LAS
RD-34A		Primary	02/26/94	Gross beta	8.7	5.3	8.3	Filtered		LAS
RD-34A		Reanalysis of Primary	02/26/94	Gross beta	21.5	6.6	9.2	Filtered		LAS
RD-34A		Primary	08/09/94	Gross alpha	14.6	7	7.7	Filtered		LAS
RD-34A		Primary	08/09/94	Gross beta	9.2	4.3	6.4	Filtered		LAS
RD-34A		Primary	02/07/95	Gross alpha	10.8	7.3	8.8	Filtered		LAS
RD-34A		Primary	02/07/95	Gross beta	13.5	7.1	11	Filtered		LAS
RD-34A		Primary	08/09/95	Gross alpha	15.5	7	7.2	Filtered		LAS
RD-34A		Primary	08/09/95	Gross beta	12.8	5.1	7.5	Filtered		LAS
RD-34A		Primary	02/19/96	Gross alpha	13.4	6.2	7.2	Filtered		LAS
RD-34A		Primary	02/19/96	Gross beta	9.9	3.6	5.2	Filtered		LAS
RD-34A		Primary	08/18/96	Gross alpha	4.5 U	5.9	9.9	Filtered		LAS
RD-34A		Primary	08/18/96	Gross beta	15.5	5.7	8.3	Filtered		LAS
RD-34A		Primary	02/07/97	Gross alpha	17	7.9	9.6	Filtered		LAS
RD-34A		Primary	02/07/97	Gross beta	9.7	4.8	7.2	Filtered		LAS
RD-34A		Primary	05/27/98	Gross alpha	21.5	5.2	3.49	Filtered		TN
RD-34A		Primary	05/27/98	Gross beta	10.5	2	2.38	Filtered		TN
RD-34A		Primary	08/18/98	Gross alpha	5.97	1.5	1.2	Filtered		TN
RD-34A		Primary	08/18/98	Gross beta	10.3	1.7	1.93	Filtered		TN
RD-34A		Primary	05/09/01	Gross alpha	7.97	3.2	2.87	Filtered		ES
RD-34A		Primary	05/09/01	Gross beta	14.8	2	2.15	Filtered		ES
RD-34A		Primary	05/16/03	Gross alpha	18.5	7	5.31	Filtered		ES
RD-34A		Primary	05/16/03	Gross beta	12.1	5.1	6.32	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34A		Primary	05/17/04	Gross alpha	11	7.1	8.68	Filtered		ES
RD-34A		Primary	05/17/04	Gross beta	12.2	7.2	10.2	Filtered		ES
RD-34A		Primary	08/09/04	Gross alpha	0.831 U	3.2	5.56	Filtered		ES
RD-34A		Primary	08/09/04	Gross beta	7.6	4.7	6.71	Filtered		ES
RD-34A		Primary	02/17/05	Gross alpha	9.61	4.9	4.59	Filtered		ES
RD-34A		Primary	02/17/05	Gross beta	11.6	4.6	5.84	Filtered		ES
RD-34A		Primary	08/25/05	Gross alpha	7.81	2.7	2.2	Filtered		ES
RD-34A		Primary	08/25/05	Gross beta	11.3	3	2.54	Filtered		ES
RD-34A		Primary	02/21/06	Gross alpha	8.73	4.7	5.62	Filtered		ES
RD-34A		Primary	02/21/06	Gross beta	5.94	2.8	3.84	Filtered		ES
RD-34A		Primary	11/16/06	Gross alpha	13.1	4	2.71	Filtered		ES
RD-34A		Primary	11/16/06	Gross beta	11	4.3	5.85	Filtered		ES
RD-34A		Primary	02/15/07	Gross alpha	20.1	6.3	4.71	Filtered		ES
RD-34A		Primary	02/15/07	Gross beta	14.7	4.8	5.8	Filtered		ES
RD-34A		Primary	08/15/07	Gross alpha	23.2	7.1	5.27	Filtered		ES
RD-34A		Primary	08/15/07	Gross beta	13.2	4	4.5	Filtered		ES
RD-34A		Primary	02/06/08	Gross alpha	23.5	6.9	3.98	Filtered		ES
RD-34A		Primary	02/06/08	Gross beta	11.4	4.3	5.39	Filtered		ES
RD-34A		Primary	08/07/08	Gross alpha	16.4	5.5	3.43	Filtered		ES
RD-34A		Primary	08/07/08	Gross beta	19	3.8	4.54	Filtered		ES
RD-34A		Primary	03/05/09	Gross alpha	7.65	3.2	3.35	Filtered		ES
RD-34A		Primary	03/05/09	Gross alpha	13.4	4.6	4.11	Unfiltered		ES
RD-34A		Primary	03/05/09	Gross beta	10.8	2.9	3.71	Filtered		ES
RD-34A		Primary	03/05/09	Gross beta	15.4	3.4	4	Unfiltered		ES
RD-34A		Primary	07/28/09	Gross alpha	10.6	3.8	3.09	Filtered		ES
RD-34A		Primary	07/28/09	Gross alpha	11.6	4.1	3.42	Unfiltered		ES
RD-34A		Primary	07/28/09	Gross beta	9.61	4.4	6.72	Filtered		ES
RD-34A		Primary	07/28/09	Gross beta	13.2	3.6	4.82	Unfiltered		ES
RD-34B		Primary	12/05/91	Gross alpha	3.76 U	2.43	4	Filtered		IT
RD-34B		Primary	12/05/91	Gross beta	5.52	1.86	4	Filtered		IT
RD-34B		Primary	03/10/92	Gross alpha	2 U	---	2	Filtered		CEP
RD-34B		Split	03/10/92	Gross alpha	6 U	---	6	Filtered		TEL
RD-34B		Primary	03/10/92	Gross beta	4	3	3	Filtered		CEP
RD-34B		Split	03/10/92	Gross beta	9.5	3.1	3	Filtered		TEL
RD-34B		Primary	06/08/92	Gross alpha	1 U	2	2	Filtered		CEP
RD-34B		Primary	06/08/92	Gross beta	-2 U	3	3	Filtered		CEP
RD-34B		Primary	09/13/92	Gross alpha	3	2	2	Filtered		CEP
RD-34B		Split	09/13/92	Gross alpha	9.7	6.8	---	Filtered		BL
RD-34B		Primary	09/13/92	Gross beta	8	4	3	Filtered		CEP
RD-34B		Split	09/13/92	Gross beta	17	7	---	Filtered		BL
RD-34B		Primary	12/05/92	Gross alpha	2 U	---	2	Filtered		CEP
RD-34B		Primary	12/05/92	Gross beta	4	3	3	Filtered		CEP
RD-34B		Primary	03/09/93	Gross alpha	9	4	2	Filtered		CEP
RD-34B		Primary	03/09/93	Gross beta	13	4	3	Filtered		CEP
RD-34B		Primary	06/23/93	Gross alpha	3	2	2	Filtered	High statistics due to large amount of solids.	CEP

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34B		Primary	06/23/93	Gross beta	13	4	3	Filtered		CEP
RD-34B		Primary	08/24/93	Gross alpha	2 U	---	2	Filtered		CEP
RD-34B		Primary	08/24/93	Gross beta	6	3	3	Filtered		CEP
RD-34B		Primary	11/18/93	Gross alpha	0.2 U	2.3	5.1	Filtered		LAS
RD-34B		Primary	11/18/93	Gross beta	8.5	3.8	5.7	Filtered		LAS
RD-34B		Primary	02/26/94	Gross alpha	1 U	2.5	4.7	Filtered		LAS
RD-34B		Primary	02/26/94	Gross beta	5.8	2.6	3.9	Filtered		LAS
RD-34B		Primary	08/09/94	Gross alpha	4.9 U	3.7	5.1	Filtered		LAS
RD-34B		Primary	08/09/94	Gross beta	7	3.4	5.2	Filtered		LAS
RD-34B		Primary	02/07/95	Gross alpha	0.5 U	2.3	4.6	Filtered		LAS
RD-34B		Primary	02/07/95	Gross beta	5.4	2.8	4.3	Filtered		LAS
RD-34B		Primary	08/09/95	Gross alpha	2.7 U	3.1	5.1	Filtered		LAS
RD-34B		Primary	08/09/95	Gross beta	11.2	3.7	5.3	Filtered		LAS
RD-34B		Primary	02/19/96	Gross alpha	5.2	3.5	4.8	Filtered		LAS
RD-34B		Primary	02/19/96	Gross beta	6.6	2.4	3.5	Filtered		LAS
RD-34B		Primary	08/18/96	Gross alpha	2.3 U	3.3	5.5	Filtered		LAS
RD-34B		Primary	08/18/96	Gross beta	6	3.3	5.1	Filtered		LAS
RD-34B		Primary	02/07/97	Gross alpha	5.4	3.5	4.6	Filtered		LAS
RD-34B		Primary	02/07/97	Gross beta	6.3	2.7	4	Filtered		LAS
RD-34B		Primary	08/21/97	Gross alpha	9.3	4.6	5.3	Filtered		LAS
RD-34B		Primary	08/21/97	Gross beta	6.4	3.3	4.9	Filtered		LAS
RD-34B		Primary	05/27/98	Gross alpha	12.8	4.1	3.78	Filtered		TN
RD-34B		Primary	05/27/98	Gross beta	13.2	2	2.11	Filtered		TN
RD-34B		Primary	08/18/98	Gross alpha	1.26	0.76	0.87	Filtered		TN
RD-34B		Primary	08/18/98	Gross beta	5.29	1.7	2.5	Filtered		TN
RD-34B		Primary	02/04/99	Gross alpha	7.65	3.2	3.25	Filtered		TN
RD-34B		Primary	02/04/99	Gross beta	8.57	2.3	3.08	Filtered		TN
RD-34B		Primary	02/05/00	Gross alpha	5.25	1.6	1.56	Filtered		TR
RD-34B		Primary	02/05/00	Gross beta	7.99	2	3.01	Filtered		TR
RD-34B		Primary	02/16/01	Gross alpha	3.85	2.3	2.91	Filtered		ES
RD-34B		Primary	02/16/01	Gross beta	5.59	1.9	2.81	Filtered		ES
RD-34B		Primary	02/15/02	Gross alpha	3.8	2.64	2.82	Filtered		DL
RD-34B		Primary	02/15/02	Gross beta	7.89	1.79	3.36	Filtered		DL
RD-34B		Primary	02/06/03	Gross alpha	2.37 U	2	2.75	Filtered		ES
RD-34B		Primary	02/06/03	Gross beta	6.78	2.3	3.32	Filtered		ES
RD-34B		Primary	02/24/04	Gross alpha	2.31 U	2.2	3.05	Filtered		ES
RD-34B		Primary	02/24/04	Gross beta	3.65 U	3.8	5.96	Filtered		ES
RD-34B		Primary	08/09/04	Gross alpha	-0.066 U	1.5	2.83	Filtered		ES
RD-34B		Primary	08/09/04	Gross beta	5.23	2.8	3.89	Filtered		ES
RD-34B		Primary	02/15/05	Gross alpha	5.47	2.9	3.13	Filtered		ES
RD-34B		Primary	02/15/05	Gross beta	8.57	2.7	2.81	Filtered		ES
RD-34B		Primary	08/23/05	Gross alpha	2.98 J	1.2	0.889	Filtered		ES
RD-34B		Primary	08/23/05	Gross beta	6.84	1.8	1.59	Filtered		ES
RD-34B		Primary	02/17/06	Gross alpha	3.86	2.6	3.2	Filtered		ES
RD-34B		Primary	02/17/06	Gross beta	8.57	2.5	2.18	Filtered		ES

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34B		Primary	08/09/06	Gross alpha	-0.562 U	2.4	4.39	Filtered		ES
RD-34B		Primary	08/09/06	Gross beta	7.86	2.5	3.04	Filtered		ES
RD-34B		Primary	08/14/07	Gross alpha	2.05 U	2.7	4.26	Filtered		ES
RD-34B		Primary	08/14/07	Gross beta	3.79 J	2.4	3.64	Filtered		ES
RD-34B		Primary	02/06/08	Gross alpha	6.8	2.8	2.29	Filtered		ES
RD-34B		Primary	02/06/08	Gross beta	6.9	2.4	3.03	Filtered		ES
RD-34B		Primary	08/07/08	Gross alpha	5.12	2.5	2.34	Filtered		ES
RD-34B		Primary	08/07/08	Gross beta	8.01	2.2	2.92	Filtered		ES
RD-34B		Primary	02/20/09	Gross alpha	1.26 U	2.1	3.38	Filtered		ES
RD-34B		Primary	02/20/09	Gross alpha	3.07	1.9	2.69	Unfiltered		ES
RD-34B		Primary	02/20/09	Gross beta	5.58	1.9	2.63	Filtered		ES
RD-34B		Primary	02/20/09	Gross beta	6.84	1.8	2.44	Unfiltered		ES
RD-34B		Primary	07/28/09	Gross alpha	2.99 J	1.5	1.73	Filtered		ES
RD-34B		Primary	07/28/09	Gross alpha	2.58 J	1.5	1.65	Unfiltered		ES
RD-34B		Primary	07/28/09	Gross beta	5.65	2	2.86	Filtered		ES
RD-34B		Primary	07/28/09	Gross beta	6.11	2	2.76	Unfiltered		ES
RD-34C		Primary	12/06/91	Gross alpha	1.01 U	1.18	4	Filtered		IT
RD-34C		Primary	12/06/91	Gross beta	3.76 U	1.34	4	Filtered		IT
RD-34C		Primary	03/10/92	Gross alpha	2 U	---	2	Filtered		CEP
RD-34C		Split	03/10/92	Gross alpha	4 U	---	4	Filtered		TEL
RD-34C		Primary	03/10/92	Gross beta	6	3	3	Filtered		CEP
RD-34C		Split	03/10/92	Gross beta	6.7	2.6	3	Filtered		TEL
RD-34C		Primary	06/08/92	Gross alpha	1 U	1	2	Filtered		CEP
RD-34C		Primary	06/08/92	Gross beta	-4 U	3	3	Filtered		CEP
RD-34C		Primary	09/13/92	Gross alpha	0.9 U	1.9	2	Filtered		CEP
RD-34C		Split	09/13/92	Gross alpha	2.9 U	5.2	---	Filtered		BL
RD-34C		Primary	09/13/92	Gross beta	6	4	3	Filtered		CEP
RD-34C		Split	09/13/92	Gross beta	15	5	---	Filtered		BL
RD-34C		Primary	12/05/92	Gross alpha	2 U	---	2	Filtered		CEP
RD-34C		Primary	12/05/92	Gross beta	3 U	---	3	Filtered		CEP
RD-34C		Primary	03/09/93	Gross alpha	5	3	2	Filtered		CEP
RD-34C		Primary	03/09/93	Gross beta	7	4	3	Filtered		CEP
RD-34C		Primary	06/24/93	Gross alpha	2 U	---	2	Filtered		CEP
RD-34C		Primary	06/24/93	Gross beta	3 U	---	3	Filtered		CEP
RD-34C		Primary	08/24/93	Gross alpha	2 U	---	2	Filtered		CEP
RD-34C		Primary	08/24/93	Gross beta	3 U	---	3	Filtered		CEP
RD-34C		Primary	11/06/93	Gross alpha	1.6 U	1.9	3.2	Filtered		LAS
RD-34C		Primary	11/06/93	Gross beta	3.7	2.1	3.3	Filtered		LAS
RD-34C		Primary	02/26/94	Gross alpha	1.6 U	2.1	3.6	Filtered		LAS
RD-34C		Primary	02/26/94	Gross beta	5.2	2.2	3.4	Filtered		LAS
RD-34C		Primary	08/09/94	Gross alpha	2.8 U	2.3	3.4	Filtered		LAS
RD-34C		Primary	08/09/94	Gross beta	5.3	2	3	Filtered		LAS
RD-34C		Primary	02/07/95	Gross alpha	2.7 U	2.4	3.5	Filtered		LAS
RD-34C		Primary	02/07/95	Gross beta	4.2	2.4	3.8	Filtered		LAS
RD-34C		Primary	08/10/95	Gross alpha	2.3 U	2.1	3.2	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34C		Primary	08/10/95	Gross beta	3.7	2	3	Filtered		LAS
RD-34C		Primary	02/19/96	Gross alpha	2.3 U	2.2	3.3	Filtered		LAS
RD-34C		Primary	02/19/96	Gross beta	4	1.5	2.2	Filtered		LAS
RD-34C		Primary	08/19/96	Gross alpha	0.5 U	1.9	3.8	Filtered		LAS
RD-34C		Primary	08/19/96	Gross beta	4.9	2.2	3.3	Filtered		LAS
RD-34C		Primary	02/07/97	Gross alpha	3.4	2.2	2.8	Filtered		LAS
RD-34C		Primary	02/07/97	Gross beta	5	1.7	2.4	Filtered		LAS
RD-34C		Primary	08/21/97	Gross alpha	4.2	2.7	3.6	Filtered		LAS
RD-34C		Primary	08/21/97	Gross beta	7.3	2.6	3.7	Filtered		LAS
RD-34C		Primary	05/27/98	Gross alpha	2.4	1.6	2.16	Filtered		TN
RD-34C		Primary	05/27/98	Gross beta	4.67	1.4	1.9	Filtered		TN
RD-34C		Primary	08/17/98	Gross alpha	1.08	0.68	0.791	Filtered		TN
RD-34C		Primary	08/17/98	Gross beta	3.73	1.4	2.02	Filtered		TN
RD-34C		Primary	02/04/99	Gross alpha	1.59 U	1.6	2.48	Filtered		TN
RD-34C		Primary	02/04/99	Gross beta	2.72 U	2.5	4	Filtered		TN
RD-34C		Primary	02/05/00	Gross alpha	0.866 U	1.5	2.54	Filtered		TR
RD-34C		Primary	02/05/00	Gross beta	4.64	2.8	4.29	Filtered		TR
RD-34C		Primary	02/16/01	Gross alpha	2.21	1.6	1.92	Filtered		ES
RD-34C		Primary	02/16/01	Gross beta	9.8	1.9	2.48	Filtered		ES
RD-34C		Primary	02/14/02	Gross alpha	2.17 U	1.86	3.3	Filtered		DL
RD-34C		Primary	02/14/02	Gross beta	4.4	1.53	2.3	Filtered		DL
RD-34C		Primary	02/06/03	Gross alpha	1.84 J	1.2	1.48	Filtered		ES
RD-34C		Primary	02/06/03	Gross beta	3.28 J	1.7	2.7	Filtered		ES
RD-34C		Primary	02/24/04	Gross alpha	0.582 U	1.7	3.06	Filtered		ES
RD-34C		Primary	02/24/04	Gross beta	5.18	3	4.22	Filtered		ES
RD-34C		Primary	08/09/04	Gross alpha	2.02 U	1.9	2.81	Filtered		ES
RD-34C		Split	08/09/04	Gross alpha	0.257 U	1.15	3.09	Filtered		STL
RD-34C		Primary	08/09/04	Gross beta	4.66	2.7	3.87	Filtered		ES
RD-34C		Split	08/09/04	Gross beta	6.19	2.11	3.16	Filtered		STL
RD-34C		Primary	02/15/05	Gross alpha	2.07 J	1.4	1.46	Filtered		ES
RD-34C		Primary	02/15/05	Gross beta	4.42	1.7	2.22	Filtered		ES
RD-34C		Primary	08/23/05	Gross alpha	0.573 U	1.4	2.5	Filtered		ES
RD-34C		Primary	08/23/05	Gross beta	3.79 J	1.8	2.28	Filtered		ES
RD-34C		Primary	02/21/06	Gross alpha	0.228 U	1.9	3.45	Filtered		ES
RD-34C		Split	02/21/06	Gross alpha	0.605 U	0.667	1.18	Filtered		STL
RD-34C		Primary	02/21/06	Gross beta	5.86	2.5	3.37	Filtered		ES
RD-34C		Split	02/21/06	Gross beta	5.3	1.44	2.05	Filtered		STL
RD-34C		Primary	08/09/06	Gross alpha	0.38 U	0.77	1.27	Filtered		ES
RD-34C		Primary	08/09/06	Gross beta	3.35 J	1.6	2.31	Filtered		ES
RD-34C		Primary	02/07/07	Gross alpha	1.36 U	1.9	2.98	Filtered		ES
RD-34C		Primary	02/07/07	Gross beta	4.17	2.2	2.99	Filtered		ES
RD-34C		Primary	08/08/07	Gross alpha	-0.962 U	1.5	2.82	Filtered		ES
RD-34C		Primary	08/08/07	Gross beta	4.98	1.5	1.66	Filtered		ES
RD-34C		Primary	02/12/08	Gross alpha	1.04 U	1	1.52	Filtered		ES
RD-34C		Primary	02/12/08	Gross beta	4.06	1.1	1.56	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34C		Primary	08/07/08	Gross alpha	4.23	2.9	4.17	Filtered		ES
RD-34C		Primary	08/07/08	Gross beta	4.45	1.2	1.65	Filtered		ES
RD-34C		Primary	02/19/09	Gross alpha	1.04 U	0.94	1.64	Filtered		ES
RD-34C		Primary	02/19/09	Gross alpha	2.26 J	1.3	1.63	Unfiltered		ES
RD-34C		Primary	02/19/09	Gross beta	4.74	1.1	1.36	Filtered		ES
RD-34C		Primary	02/19/09	Gross beta	4.86	1.4	1.88	Unfiltered		ES
RD-34C		Primary	07/23/09	Gross alpha	1.63 J	0.9	1.14	Filtered		ES
RD-34C		Primary	07/23/09	Gross alpha	1.14 J	0.82	1.09	Unfiltered		ES
RD-34C		Duplicate	07/23/09	Gross alpha	0.897 U	0.83	1.27	Filtered		ES
RD-34C		Duplicate	07/23/09	Gross alpha	2.11 J	1	1.01	Unfiltered		ES
RD-34C		Split	07/23/09	Gross alpha	2.84 U	2.24	3.06	Filtered		GEL
RD-34C		Split	07/23/09	Gross alpha	4.29	2.53	2.96	Unfiltered		GEL
RD-34C		Primary	07/23/09	Gross beta	5.1	1.1	1.46	Filtered		ES
RD-34C		Primary	07/23/09	Gross beta	4.33	1.1	1.36	Unfiltered		ES
RD-34C		Duplicate	07/23/09	Gross beta	4.5	1.4	2.04	Filtered		ES
RD-34C		Duplicate	07/23/09	Gross beta	4.33	1.2	1.56	Unfiltered		ES
RD-34C		Split	07/23/09	Gross beta	5.16	2.47	3.65	Filtered		GEL
RD-34C		Split	07/23/09	Gross beta	4.5	2.72	4.25	Unfiltered		GEL
RD-35B		Primary	05/07/99	Gross alpha	22.8	4.4	2.29	Filtered		TN
RD-35B		Primary	05/07/99	Gross beta	12.6	2	2.27	Filtered		TN
RD-35B		Primary	08/18/99	Gross alpha	1.56	1.2	1.46	Filtered		TN
RD-35B		Primary	08/18/99	Gross beta	4.05	1.6	2.45	Filtered		TN
RD-36D		Primary	11/13/97	Gross alpha	-1.6 U	2.2	5.9	Filtered		LAS
RD-36D		Primary	11/13/97	Gross beta	5.3 U	3.4	5.5	Filtered		LAS
RD-38B		Primary	02/17/99	Gross alpha	1.52 U	2	3.09	Filtered		TN
RD-38B		Primary	02/17/99	Gross beta	4.98	1.6	2.17	Filtered		TN
RD-45C		Primary	10/06/94	Gross alpha	2.6	1.9	---	Filtered		LAS
RD-45C		Primary	10/06/94	Gross beta	4.4	2	---	Filtered		LAS
RD-46B		Primary	02/15/99	Gross alpha	3.26	2	2.36	Filtered		TN
RD-46B		Primary	02/15/99	Gross beta	3.74	1.6	2.39	Filtered		TN
RD-50		Primary	05/05/94	Gross alpha	24.9	6.9	4.6	Filtered		LAS
RD-50		Reanalysis of Primary	05/05/94	Gross alpha	9.6	4.7	4.5	Filtered		LAS
RD-50		Primary	05/05/94	Gross beta	10.2	3.9	5.6	Filtered		LAS
RD-50		Reanalysis of Primary	05/05/94	Gross beta	6	3.6	5.5	Filtered		LAS
RD-50		Primary	05/19/95	Gross alpha	11.8	5.5	5.7	Filtered		LAS
RD-50		Primary	05/19/95	Gross beta	5.4 U	3.9	6.2	Filtered		LAS
RD-50		Primary	05/14/96	Gross alpha	31.9	6.6	4.2	Filtered		LAS
RD-50		Primary	05/14/96	Gross beta	10.7	2.6	3.2	Filtered		LAS
RD-50		Primary	05/05/97	Gross alpha	7	3.6	3.9	Filtered		LAS
RD-50		Primary	05/05/97	Gross beta	7.5	2.7	3.9	Filtered		LAS
RD-50		Primary	05/28/98	Gross alpha	8.45	4.1	4.57	Filtered		TN
RD-50		Primary	05/28/98	Gross beta	5.92	1.7	2.39	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-51C		Primary	12/14/91	Gross alpha	1.18 U	2.3	4	Filtered		IT
RD-51C		Primary	12/14/91	Gross beta	2.93 U	1.91	4	Filtered		IT
RD-51C		Primary	03/06/92	Gross alpha	2 U	---	2	Filtered		CEP
RD-51C		Primary	03/06/92	Gross beta	3 U	---	3	Filtered		CEP
RD-54A		Primary	09/12/93	Gross alpha	2 U	---	2	Filtered		CEP
RD-54A		Primary	09/12/93	Gross beta	3 U	---	3	Filtered		CEP
RD-54A		Primary	09/29/93	Gross alpha	2 U	---	2	Filtered		CEP
RD-54A		Primary	09/29/93	Gross beta	3 U	---	3	Filtered		CEP
RD-54A		Primary	05/08/94	Gross alpha	5	3.6	4.5	Filtered		LAS
RD-54A		Primary	05/08/94	Gross beta	7.1	3.9	6	Filtered		LAS
RD-54A		Primary	08/09/94	Gross alpha	1.4 U	2.6	4.6	Filtered		LAS
RD-54A		Primary	08/09/94	Gross beta	6.2	2.8	4.3	Filtered		LAS
RD-54A		Primary	08/03/95	Gross alpha	4.9	2.5	2.8	Filtered		LAS
RD-54A		Primary	08/03/95	Gross beta	6.6	2	2.7	Filtered		LAS
RD-54A		Primary	05/16/96	Gross alpha	11	5.3	5.5	Filtered		LAS
RD-54A		Primary	05/16/96	Gross beta	7.4	3.8	5.8	Filtered		LAS
RD-54A		Primary	08/23/96	Gross alpha	2.5 U	3.7	6.3	Filtered		LAS
RD-54A		Primary	08/23/96	Gross beta	1.5 U	3.3	5.6	Filtered		LAS
RD-54A		Primary	05/05/97	Gross alpha	0.5 U	1.9	3.6	Filtered		LAS
RD-54A		Primary	05/05/97	Gross beta	1.4 U	2	3.4	Filtered		LAS
RD-54A		Primary	08/22/97	Gross alpha	16.9	5.3	4.5	Filtered		LAS
RD-54A		Primary	08/22/97	Gross beta	4.7	2.7	4.2	Filtered		LAS
RD-54A		Primary	02/08/98	Gross alpha	1.56 U	1.3	1.8	Filtered		TN
RD-54A		Primary	02/08/98	Gross beta	4.49	1.5	2.07	Filtered		TN
RD-54A		Primary	08/07/98	Gross alpha	0.051 U	7.9	16.1	Filtered		TN
RD-54A		Primary	08/07/98	Gross beta	4.83 U	17	28.6	Filtered		TN
RD-54A		Primary	02/08/99	Gross alpha	22.2	12	9.94	Filtered		TN
RD-54A		Primary	02/08/99	Gross beta	58	7.4	5.62	Filtered		TN
RD-54A		Primary	03/15/00	Gross alpha	7.08	2.9	2.89	Filtered		TR
RD-54A		Primary	03/15/00	Gross beta	6.84	2.3	3.25	Filtered		TR
RD-54A		Primary	10/26/01	Gross alpha	20.14	4.71	2.56	Filtered		DL
RD-54A		Primary	10/26/01	Gross beta	6.03	1.17	2.9	Filtered		DL
RD-54A		Primary	02/27/02	Gross alpha	7.8	2.71	3.2	Filtered		DL
RD-54A		Primary	02/27/02	Gross beta	1.82 U	0.7	2.14	Filtered		DL
RD-54A	Z02	Primary	02/18/03	Gross alpha	5.39	1.8	2.06	Filtered		ES
RD-54A	Z02	Primary	02/18/03	Gross beta	9.08	2.6	4.04	Filtered		ES
RD-54A	Z02	Primary	11/03/04	Gross alpha	2.34 U	2.1	2.35	Filtered		ES
RD-54A	Z02	Primary	11/03/04	Gross beta	9.87	3	2.85	Filtered		ES
RD-54A	Z02	Primary	02/16/05	Gross alpha	9.98	3.6	1.88	Filtered		ES
RD-54A	Z02	Primary	02/16/05	Gross beta	6.14	2.5	3.06	Filtered		ES
RD-54A	Z02	Primary	08/31/05	Gross alpha	16.3	4.9	1.87	Filtered		ES
RD-54A	Z02	Primary	08/31/05	Gross beta	8.33	2.8	2.88	Filtered		ES
RD-54A	Z02	Primary	02/16/06	Gross alpha	7.44	3.4	3.68	Filtered		ES
RD-54A	Z02	Primary	02/16/06	Gross beta	3.75 U	2.8	4.08	Filtered		ES
RD-54A	Z02	Primary	08/17/06	Gross alpha	12.1	4.2	4.08	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54A	Z02	Primary	08/17/06	Gross beta	10.8	3.1	3.1	Filtered		ES
RD-54A	Z02	Primary	02/07/07	Gross alpha	9.54	5.4	5.79	Filtered		ES
RD-54A	Z02	Primary	02/07/07	Gross beta	7.14	4	5.5	Filtered		ES
RD-54A	Z02	Primary	08/10/07	Gross alpha	20	8.8	8.03	Filtered		ES
RD-54A	Z02	Primary	08/10/07	Gross beta	12.9	4.4	4.79	Filtered		ES
RD-54A	Z02	Primary	02/06/08	Gross alpha	11.2	3.5	2.34	Filtered		ES
RD-54A	Z02	Primary	02/06/08	Gross beta	9.02	2.8	3.15	Filtered		ES
RD-54A	Z02	Primary	08/07/08	Gross alpha	9.3	3.2	2.41	Filtered		ES
RD-54A	Z02	Primary	08/07/08	Gross beta	7.06	2	2.59	Filtered		ES
RD-54A	Z02	Primary	02/24/09	Gross alpha	5.79	2.3	2.24	Filtered		ES
RD-54A	Z02	Primary	02/24/09	Gross alpha	5.78	2	1.66	Unfiltered		ES
RD-54A	Z02	Primary	02/24/09	Gross beta	6.33	2.4	3.53	Filtered		ES
RD-54A	Z02	Primary	02/24/09	Gross beta	5.76	1.3	1.47	Unfiltered		ES
RD-54A	Z02	Primary	07/16/09	Gross alpha	4.64	1.7	1.13	Filtered		ES
RD-54A	Z02	Primary	07/16/09	Gross alpha	4.8	1.8	1.58	Unfiltered		ES
RD-54A	Z02	Primary	07/16/09	Gross beta	5.7	1.4	1.93	Filtered		ES
RD-54A	Z02	Primary	07/16/09	Gross beta	5.23	2.1	3.1	Unfiltered		ES
RD-54B		Primary	09/12/93	Gross alpha	5	2	2	Filtered		CEP
RD-54B		Primary	09/12/93	Gross beta	13	4	3	Filtered		CEP
RD-54B		Primary	09/29/93	Gross alpha	2 U	---	2	Filtered		CEP
RD-54B		Primary	09/29/93	Gross beta	4	3	3	Filtered		CEP
RD-54B		Primary	05/08/94	Gross alpha	4.7 U	5.2	8.3	Filtered		LAS
RD-54B		Primary	05/08/94	Gross beta	9.5	5.1	8	Filtered		LAS
RD-54B		Primary	08/08/94	Gross alpha	2.5 U	4.2	7.3	Filtered		LAS
RD-54B		Primary	08/08/94	Gross beta	5.9 U	4.1	6.6	Filtered		LAS
RD-54B		Primary	08/30/95	Gross alpha	4.6 U	5	7.9	Filtered		LAS
RD-54B		Primary	08/30/95	Gross beta	4.6 U	4.3	7.1	Filtered		LAS
RD-54B		Primary	05/16/96	Gross alpha	5.8 U	5.6	8.6	Filtered		LAS
RD-54B		Primary	05/16/96	Gross beta	10.9	5.6	8.6	Filtered		LAS
RD-54B		Primary	08/23/96	Gross alpha	0.8 U	3.4	6.6	Filtered		LAS
RD-54B		Primary	08/23/96	Gross beta	7.5	3.7	5.6	Filtered		LAS
RD-54B		Primary	08/22/97	Gross alpha	5.9	4	5.6	Filtered		LAS
RD-54B		Primary	08/22/97	Gross beta	5.7	3	4.5	Filtered		LAS
RD-54B		Primary	02/08/98	Gross alpha	1.42 U	1.2	1.54	Filtered		TN
RD-54B		Primary	02/08/98	Gross beta	7	1.7	2.21	Filtered		TN
RD-54B		Primary	08/07/98	Gross alpha	-1.66 U	4.2	11.4	Filtered		TN
RD-54B		Primary	08/07/98	Gross beta	-14 U	22	37.7	Filtered		TN
RD-54B		Primary	02/08/99	Gross alpha	1.44 U	3.7	6.84	Filtered		TN
RD-54B		Primary	02/08/99	Gross beta	17.2	4.4	4.7	Filtered		TN
RD-54B		Primary	03/15/00	Gross alpha	1.05 U	1.2	1.79	Filtered		TR
RD-54B		Primary	03/15/00	Gross beta	0.622 U	2.2	3.75	Filtered		TR
RD-54B		Primary	10/25/01	Gross alpha	7.4	3.3	2.45	Filtered		DL
RD-54B		Primary	10/25/01	Gross beta	2.88	1.14	2.13	Filtered		DL
RD-54B		Primary	02/27/02	Gross alpha	2.59	1.9	1.87	Filtered		DL
RD-54B		Primary	02/27/02	Gross beta	4.4	1.5	2.52	Filtered		DL

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54B		Primary	02/26/03	Gross alpha	5.38	1.8	1.8	Filtered		ES
RD-54B		Primary	02/26/03	Gross beta	7.36	2.2	3.34	Filtered		ES
RD-54B		Primary	02/16/05	Gross alpha	6.58	4.1	4.67	Filtered		ES
RD-54B		Primary	02/16/05	Gross beta	9.24	4.1	5.36	Filtered		ES
RD-54B		Primary	08/22/05	Gross alpha	0.719 U	2.2	3.05	Filtered		ES
RD-54B		Primary	08/22/05	Gross beta	4.86	2.2	3.22	Filtered		ES
RD-54B		Primary	02/20/06	Gross alpha	3.94 U	3.5	4.64	Filtered		ES
RD-54B		Primary	02/20/06	Gross beta	8.64	3.2	3.67	Filtered		ES
RD-54B		Primary	08/23/06	Gross alpha	0.082 U	1.9	3.38	Filtered		ES
RD-54B		Primary	08/23/06	Gross beta	5.48 U	3.5	5.49	Filtered		ES
RD-54B		Primary	02/12/07	Gross alpha	1.93 U	2	3.06	Filtered		ES
RD-54B		Primary	02/12/07	Gross beta	6.13	2.4	3.26	Filtered		ES
RD-54B		Primary	08/14/07	Gross alpha	3.48 U	3.7	5.55	Filtered		ES
RD-54B		Primary	08/14/07	Gross beta	5.67	2.8	4.09	Filtered		ES
RD-54B		Primary	02/14/08	Gross alpha	5.64	2.8	2.71	Filtered		ES
RD-54B		Primary	02/14/08	Gross beta	5.93	2.2	3.24	Filtered		ES
RD-54B		Primary	11/07/08	Gross alpha	1.54 U	2.7	4.34	Filtered		ES
RD-54B		Primary	11/07/08	Gross alpha	6.34 U	5	7.27	Unfiltered		ES
RD-54B		Primary	11/07/08	Gross beta	6.44	1.9	2.58	Filtered		ES
RD-54B		Primary	11/07/08	Gross beta	6.61	1.9	2.65	Unfiltered		ES
RD-54B		Primary	02/23/09	Gross alpha	6.21	3.8	5.36	Filtered		ES
RD-54B		Primary	02/23/09	Gross alpha	2.89 U	2.3	3.26	Unfiltered		ES
RD-54B		Primary	02/23/09	Gross beta	8	2.4	3.23	Filtered		ES
RD-54B		Primary	02/23/09	Gross beta	5.04	2.2	3.29	Unfiltered		ES
RD-54B		Primary	10/30/09	Gross alpha	1.94 U	1.7	2.53	Filtered		TAD
RD-54B		Primary	10/30/09	Gross alpha	2.22 U	2	2.82	Unfiltered		TAD
RD-54B		Duplicate	10/30/09	Gross alpha	3.62	1.9	2.67	Filtered		TAD
RD-54B		Duplicate	10/30/09	Gross alpha	5.01	2.4	2.56	Unfiltered		TAD
RD-54B		Primary	10/30/09	Gross beta	5.17	2.1	3.02	Filtered		TAD
RD-54B		Primary	10/30/09	Gross beta	7.06	2.3	3.31	Unfiltered		TAD
RD-54B		Duplicate	10/30/09	Gross beta	5.48	2	2.85	Filtered		TAD
RD-54B		Duplicate	10/30/09	Gross beta	6.47	2.2	3.08	Unfiltered		TAD
RD-54C		Primary	09/11/93	Gross alpha	6	3	2	Filtered		CEP
RD-54C		Primary	09/11/93	Gross beta	10	3	3	Filtered		CEP
RD-54C		Primary	09/29/93	Gross alpha	2 U	---	2	Filtered		CEP
RD-54C		Primary	09/29/93	Gross beta	3 U	---	3	Filtered		CEP
RD-54C		Primary	05/08/94	Gross alpha	1.9 U	1.8	2.7	Filtered		LAS
RD-54C		Primary	05/08/94	Gross beta	2.9	1.7	2.6	Filtered		LAS
RD-54C		Primary	08/08/94	Gross alpha	0.8 U	1.5	2.6	Filtered		LAS
RD-54C		Primary	08/08/94	Gross beta	2.7	1.4	2.2	Filtered		LAS
RD-54C		Primary	08/30/95	Gross alpha	1.3 U	1.7	2.8	Filtered		LAS
RD-54C		Primary	08/30/95	Gross beta	4.3	1.6	2.4	Filtered		LAS
RD-54C		Primary	05/16/96	Gross alpha	3.4	1.4	1.3	Filtered		LAS
RD-54C		Primary	05/16/96	Gross beta	4	1.5	2.1	Filtered		LAS
RD-54C		Primary	08/23/96	Gross alpha	0.7 U	1.4	2.6	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54C		Primary	08/23/96	Gross beta	3.2	1.5	2.3	Filtered		LAS
RD-54C		Primary	05/05/97	Gross alpha	1.4 U	1.4	2.1	Filtered		LAS
RD-54C		Primary	05/05/97	Gross beta	2 U	1.4	2.2	Filtered		LAS
RD-54C		Primary	08/24/97	Gross alpha	-0.18 U	0.74	1.7	Filtered		LAS
RD-54C		Primary	08/24/97	Gross beta	1.4 U	1.3	2.1	Filtered		LAS
RD-54C		Primary	02/08/98	Gross alpha	0.349 U	0.63	1.1	Filtered		TN
RD-54C		Primary	02/08/98	Gross beta	2.36	1.3	2	Filtered		TN
RD-54C		Primary	08/07/98	Gross alpha	-1.41 U	6.2	14.2	Filtered		TN
RD-54C		Primary	08/07/98	Gross beta	-6.31 U	16	28.1	Filtered		TN
RD-54C		Primary	02/09/99	Gross alpha	-0.998 U	1.4	4.91	Filtered		TN
RD-54C		Primary	02/09/99	Gross beta	7.69	3.3	4.41	Filtered		TN
RD-54C		Primary	03/15/00	Gross alpha	0.652 U	1.3	2.35	Filtered		TR
RD-54C		Primary	03/15/00	Gross beta	4.04	2.5	3.84	Filtered		TR
RD-54C		Primary	11/02/01	Gross alpha	2.23	1.54	1.04	Filtered		DL
RD-54C		Primary	11/02/01	Gross beta	2.07	1.1	1.64	Filtered		DL
RD-54C		Primary	02/27/02	Gross alpha	1.77	1.38	1.62	Filtered		DL
RD-54C		Primary	02/27/02	Gross beta	1.27 U	1.01	1.4	Filtered		DL
RD-54C		Primary	02/26/03	Gross alpha	1.9 J	1.1	1.3	Filtered		ES
RD-54C		Primary	02/26/03	Gross beta	5.32	1.8	2.82	Filtered		ES
RD-54C		Primary	11/05/04	Gross alpha	0.771 U	2.5	3.7	Filtered		ES
RD-54C		Primary	11/05/04	Gross beta	9.57	3.6	4.26	Filtered		ES
RD-54C		Primary	02/17/05	Gross alpha	1.18 U	1.2	1.8	Filtered		ES
RD-54C		Split	02/17/05	Gross alpha	0.516 U	1.3	2.95	Filtered		STL
RD-54C		Primary	02/17/05	Gross beta	-0.849 U	1.7	3.02	Filtered		ES
RD-54C		Split	02/17/05	Gross beta	6.72	2.5	3.82	Filtered		STL
RD-54C		Primary	08/22/05	Gross alpha	0.733 U	1.2	2.08	Filtered		ES
RD-54C		Primary	08/22/05	Gross beta	4.69	1.7	2.19	Filtered		ES
RD-54C		Primary	02/23/06	Gross alpha	-2.58 U	3.6	7.1	Filtered		ES
RD-54C		Primary	02/23/06	Gross beta	4.22 U	2.9	4.33	Filtered		ES
RD-54C		Primary	08/10/06	Gross alpha	0.419 U	1.6	2.64	Filtered		ES
RD-54C		Primary	08/10/06	Gross beta	8.17	2.5	2.62	Filtered		ES
RD-54C		Primary	02/12/07	Gross alpha	0.241 U	1.3	2.25	Filtered		ES
RD-54C		Primary	02/12/07	Gross beta	4.37	2.2	3.14	Filtered		ES
RD-54C		Primary	08/07/07	Gross alpha	1.32 U	1.4	2.11	Filtered		ES
RD-54C		Primary	08/07/07	Gross beta	5.14	1.6	1.67	Filtered		ES
RD-54C		Primary	02/14/08	Gross alpha	1.32 J	1	1.29	Filtered		ES
RD-54C		Primary	02/14/08	Gross beta	5.11	1.2	1.5	Filtered		ES
RD-54C		Primary	08/07/08	Gross alpha	1.71 U	1.3	1.88	Filtered		ES
RD-54C		Primary	08/07/08	Gross beta	3.04 J	1.3	1.98	Filtered		ES
RD-54C		Primary	02/24/09	Gross alpha	-1.44 U	1.9	3.53	Filtered		ES
RD-54C		Primary	02/24/09	Gross alpha	1.25 U	1.7	2.83	Unfiltered		ES
RD-54C		Primary	02/24/09	Gross beta	5.5	2.1	3.1	Filtered		ES
RD-54C		Primary	02/24/09	Gross beta	6.58	2.6	3.88	Unfiltered		ES
RD-54C		Primary	08/04/09	Gross alpha	0.382 U	1.5	2.46	Filtered		ES
RD-54C		Primary	08/04/09	Gross alpha	2.5 J	1.7	2.24	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54C		Primary	08/04/09	Gross beta	3.71 J	2	3.24	Filtered		ES
RD-54C		Primary	08/04/09	Gross beta	4.96	2.8	4.27	Unfiltered		ES
RD-56A		Primary	05/10/94	Gross alpha	3.9 U	4.5	7.2	Filtered		LAS
RD-56A		Primary	05/10/94	Gross beta	9.3	5.2	8	Filtered		LAS
RD-56A		Primary	02/20/96	Gross alpha	4.1 U	3.4	5.1	Filtered		LAS
RD-56A		Primary	02/20/96	Gross beta	3.7	2.2	3.4	Filtered		LAS
RD-56A		Primary	02/06/97	Gross alpha	5.5 U	4.4	6.4	Filtered		LAS
RD-56A		Primary	02/06/97	Gross beta	6.2	3.6	5.6	Filtered		LAS
RD-56A		Primary	05/28/98	Gross alpha	3.82	2.3	2.72	Filtered		TN
RD-56A		Primary	05/28/98	Gross beta	5.45	1.5	2.02	Filtered		TN
RD-56B		Primary	05/28/98	Gross alpha	3.53	2	2.46	Filtered		TN
RD-56B		Primary	05/28/98	Gross beta	6.17	1.5	1.96	Filtered		TN
RD-57		Primary	03/16/94	Gross alpha	5.2	3.1	---	Filtered		LAS
RD-57		Primary	03/16/94	Gross beta	4.1	2.3	---	Filtered		LAS
RD-57		Primary	05/10/94	Gross alpha	2.3 U	2.2	3.2	Filtered		LAS
RD-57		Primary	05/10/94	Gross beta	5.4	2.5	3.8	Filtered		LAS
RD-57		Primary	08/18/94	Gross alpha	2.8 U	2.7	4.2	Filtered		LAS
RD-57		Primary	08/18/94	Gross beta	8.6	3.2	4.7	Filtered		LAS
RD-57		Primary	02/07/95	Gross alpha	1.3 U	2.1	3.8	Filtered		LAS
RD-57		Primary	02/07/95	Gross beta	4.8	2.4	3.7	Filtered		LAS
RD-57		Primary	08/09/95	Gross alpha	4.2	2.7	3.4	Filtered		LAS
RD-57		Primary	08/09/95	Gross beta	6.1	2.5	3.7	Filtered		LAS
RD-57		Primary	02/19/96	Gross alpha	3.8 U	3	4.6	Filtered		LAS
RD-57		Primary	02/19/96	Gross beta	5.4	1.7	2.4	Filtered		LAS
RD-57		Primary	08/22/96	Gross alpha	2.4 U	4.5	7.9	Filtered		LAS
RD-57		Primary	08/22/96	Gross beta	5.3 U	4.1	6.6	Filtered		LAS
RD-57		Primary	02/25/97	Gross alpha	6.5	3.1	3.5	Filtered		LAS
RD-57		Primary	02/25/97	Gross beta	6.2	2.1	2.9	Filtered		LAS
RD-57		Primary	08/27/97	Gross alpha	6.2	3.5	4.1	Filtered		LAS
RD-57		Primary	08/27/97	Gross beta	5.6	2.9	4.4	Filtered		LAS
RD-57		Primary	05/26/98	Gross alpha	4.96	2	1.73	Filtered		TN
RD-57		Primary	05/26/98	Gross beta	5.43	1.7	2.47	Filtered		TN
RD-57		Primary	08/17/98	Gross alpha	0.975	0.64	0.734	Filtered		TN
RD-57		Primary	08/17/98	Gross beta	4.4	1.5	2.13	Filtered		TN
RD-57		Primary	05/13/99	Gross alpha	2.84	1.6	1.92	Filtered		TN
RD-57		Primary	05/13/99	Gross beta	3.9	1.8	2.69	Filtered		TN
RD-57		Primary	02/09/00	Gross alpha	1.92	1.1	1.15	Filtered		TR
RD-57		Primary	02/09/00	Gross beta	5.16	2	2.8	Filtered		TR
RD-57		Primary	05/11/01	Gross alpha	1.46 U	1.5	2.06	Filtered		ES
RD-57		Primary	05/11/01	Gross beta	4.4	1.4	2	Filtered		ES
RD-57		Primary	02/14/02	Gross alpha	2.54	1.46	1.36	Filtered		DL
RD-57		Primary	02/14/02	Gross beta	3.15	1.23	2.04	Filtered		DL
RD-57	Z08	Primary	01/29/03	Gross alpha	2.68 J	1.7	2.02	Filtered		ES
RD-57	Z08	Primary	01/29/03	Gross beta	4.31	2.6	4.01	Filtered		ES
RD-57	Z08	Primary	04/30/03	Gross alpha	3.06	1.9	2.18	Filtered		ES

See last page of table for notes and abbreviations.

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RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-57	Z08	Primary	04/30/03	Gross beta	6.07	2.2	2.63	Filtered		ES
RD-57	Z07	Primary	03/08/05	Gross alpha	2.66 J	1.6	1.52	Filtered		ES
RD-57	Z07	Primary	03/08/05	Gross beta	4.01	1.8	2.32	Filtered		ES
RD-57	Z07	Primary	09/01/05	Gross alpha	6.54	2	1.02	Filtered		ES
RD-57	Z07	Primary	09/01/05	Gross beta	6	1.9	2.18	Filtered		ES
RD-57	Z07	Primary	02/20/06	Gross alpha	3.21	2	2.65	Filtered		ES
RD-57	Z07	Primary	02/20/06	Gross beta	3.17 J	1.5	2.13	Filtered		ES
RD-57	Z07	Primary	08/18/06	Gross alpha	3.57	2.3	3.36	Filtered		ES
RD-57	Z07	Primary	08/18/06	Gross beta	8.34	2.3	2.27	Filtered		ES
RD-57	Z07	Primary	02/08/07	Gross alpha	5.1	1.7	1.19	Filtered		ES
RD-57	Z07	Primary	02/08/07	Gross beta	5.7	1.7	1.62	Filtered		ES
RD-57	Z05	Primary	08/08/08	Gross alpha	0.086 U	0.73	1.29	Filtered		ES
RD-57	Z05	Primary	08/08/08	Gross beta	3.33 J	0.88	1.16	Filtered		ES
RD-57	Z07	Primary	02/25/09	Gross alpha	4.89	1.6	1.25	Filtered		ES
RD-57	Z07	Primary	02/25/09	Gross alpha	1.89 J	1.4	1.89	Unfiltered		ES
RD-57	Z07	Primary	02/25/09	Gross beta	7.44	1.6	1.98	Filtered		ES
RD-57	Z07	Primary	02/25/09	Gross beta	4.63	2.2	3.33	Unfiltered		ES
RD-57	Z07	Primary	07/17/09	Gross alpha	4.76	1.7	1.56	Unfiltered		ES
RD-57	Z07	Primary	07/17/09	Gross beta	4.9	1.5	2.08	Unfiltered		ES
RD-59A		Primary	08/16/94	Gross alpha	3.6 U	3.7	5.7	Filtered		LAS
RD-59A		Primary	08/16/94	Gross beta	6.2 U	4.1	6.5	Filtered		LAS
RD-59A		Primary	02/06/95	Gross alpha	0.8 U	2.9	5.7	Filtered		LAS
RD-59A		Duplicate	02/06/95	Gross alpha	-5.5 U	7.3	20	Filtered		LAS
RD-59A		Primary	02/06/95	Gross beta	2.9 U	3.3	5.6	Filtered		LAS
RD-59A		Duplicate	02/06/95	Gross beta	2 U	20	35	Filtered		LAS
RD-59A		Primary	08/08/95	Gross alpha	4.8 U	4.3	6.4	Filtered		LAS
RD-59A		Primary	08/08/95	Gross beta	7.4	3.6	5.5	Filtered		LAS
RD-59A		Primary	03/12/96	Gross alpha	3.3 U	4.1	6.7	Filtered		LAS
RD-59A		Primary	03/12/96	Gross beta	4.7 U	3.3	5.2	Filtered		LAS
RD-59A		Primary	08/21/96	Gross alpha	0.3 U	3.3	6.8	Filtered		LAS
RD-59A		Primary	08/21/96	Gross beta	5.5 U	3.8	6	Filtered		LAS
RD-59A		Primary	02/16/97	Gross alpha	2 U	3.4	6.1	Filtered		LAS
RD-59A		Primary	02/16/97	Gross beta	7.4	3.6	5.6	Filtered		LAS
RD-59A		Primary	08/22/97	Gross alpha	0.9 U	3.8	7.5	Filtered		LAS
RD-59A		Primary	08/22/97	Gross beta	3.2 U	4	6.7	Filtered		LAS
RD-59A		Primary	08/19/98	Gross alpha	1.02	0.73	0.921	Filtered		TN
RD-59A		Primary	08/19/98	Gross beta	4.35	1.7	2.52	Filtered		TN
RD-59A		Primary	02/16/99	Gross alpha	3.17 U	2.4	3.2	Filtered		TN
RD-59A		Primary	02/16/99	Gross beta	4.96	1.9	2.89	Filtered		TN
RD-59A		Primary	03/14/00	Gross alpha	2.84	2.1	2.52	Filtered		TR
RD-59A		Primary	03/14/00	Gross beta	3.83 U	2.5	3.87	Filtered		TR
RD-59A		Primary	05/16/01	Gross alpha	0.724 U	2.2	3.56	Filtered		ES
RD-59A		Primary	05/16/01	Gross beta	6	1.6	2.21	Filtered		ES
RD-59A		Primary	02/28/02	Gross alpha	2.03	1.75	1.69	Filtered		DL
RD-59A		Primary	02/28/02	Gross beta	3.06	1.36	2.09	Filtered		DL

See last page of table for notes and abbreviations.

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RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-59A		Primary	01/31/03	Gross alpha	1.81 U	1.8	2.12	Filtered		ES
RD-59A		Primary	01/31/03	Gross beta	4.95	2.4	3.56	Filtered		ES
RD-59A		Primary	05/15/03	Gross alpha	3.55	2	2.54	Filtered		ES
RD-59A		Split	05/15/03	Gross alpha	3.53	1.94	2.54	Filtered		STL
RD-59A		Primary	05/15/03	Gross beta	7.58	2.8	3.36	Filtered		ES
RD-59A		Split	05/15/03	Gross beta	14	3.88	5.48	Filtered		STL
RD-59A		Primary	11/16/04	Gross alpha	2.54 U	2.4	3.18	Filtered		ES
RD-59A		Primary	11/16/04	Gross beta	5.45	2.9	4.3	Filtered		ES
RD-59A		Primary	09/07/05	Gross alpha	3.39	2	2.1	Filtered		ES
RD-59A		Primary	09/07/05	Gross beta	5.35	2.1	2.86	Filtered		ES
RD-59A		Primary	08/23/06	Gross alpha	2.13 U	1.9	2.81	Filtered		ES
RD-59A		Primary	08/23/06	Gross beta	6.86	2.3	2.67	Filtered		ES
RD-59A		Primary	02/28/07	Gross alpha	0.439 U	1.6	2.72	Filtered		ES
RD-59A		Primary	02/28/07	Gross beta	5.39	2.2	2.88	Filtered		ES
RD-59A		Primary	08/16/07	Gross alpha	-0.848 U	3.1	5.52	Filtered		ES
RD-59A		Primary	08/16/07	Gross beta	5.29	2.4	3.38	Filtered		ES
RD-59A		Primary	05/20/08	Gross alpha	3.09	1.9	2.25	Filtered		ES
RD-59A		Primary	05/20/08	Gross beta	3.63 J	2.3	3.61	Filtered		ES
RD-59A		Primary	08/14/08	Gross alpha	3.53	2.3	3.1	Filtered		ES
RD-59A		Primary	08/14/08	Gross beta	5.36	1.8	2.49	Filtered		ES
RD-59A		Primary	03/03/09	Gross alpha	1.26 U	1.7	2.63	Filtered		ES
RD-59A		Primary	03/03/09	Gross alpha	0.064 U	2.8	4.89	Unfiltered		ES
RD-59A		Primary	03/03/09	Gross beta	5.83	2.1	3.04	Filtered		ES
RD-59A		Primary	03/03/09	Gross beta	6.53	2.3	3.37	Unfiltered		ES
RD-59A		Primary	08/04/09	Gross alpha	2.52 J	1.4	1.79	Filtered		ES
RD-59A		Primary	08/04/09	Gross alpha	2.53 J	1.5	1.76	Unfiltered		ES
RD-59A		Primary	08/04/09	Gross beta	4.38	1.9	2.87	Filtered		ES
RD-59A		Primary	08/04/09	Gross beta	5.61	2	2.77	Unfiltered		ES
RD-59B		Primary	08/16/94	Gross alpha	0.5 U	2.2	4.6	Filtered		LAS
RD-59B		Primary	08/16/94	Gross beta	4.8 U	3.4	5.5	Filtered		LAS
RD-59B		Primary	02/06/95	Gross alpha	1.1 U	2.7	5	Filtered		LAS
RD-59B		Primary	02/06/95	Gross beta	6	2.8	4.3	Filtered		LAS
RD-59B		Primary	08/08/95	Gross alpha	3.3 U	2.9	4.2	Filtered		LAS
RD-59B		Primary	08/08/95	Gross beta	4.9	2.5	3.7	Filtered		LAS
RD-59B		Primary	03/12/96	Gross alpha	0.6 U	2.5	4.9	Filtered		LAS
RD-59B		Primary	03/12/96	Gross beta	4.7	2.4	3.8	Filtered		LAS
RD-59B		Primary	08/21/96	Gross alpha	-0.2 U	2.7	5.7	Filtered		LAS
RD-59B		Primary	08/21/96	Gross beta	4.7	2.8	4.3	Filtered		LAS
RD-59B		Primary	02/16/97	Gross alpha	4.5 U	3.5	5	Filtered		LAS
RD-59B		Primary	02/16/97	Gross beta	6.7	2.9	4.3	Filtered		LAS
RD-59B		Primary	08/22/97	Gross alpha	3.5 U	3.2	4.8	Filtered		LAS
RD-59B		Primary	08/22/97	Gross beta	5.3	3	4.7	Filtered		LAS
RD-59B		Primary	08/19/98	Gross alpha	0.127 U	0.44	0.839	Filtered		TN
RD-59B		Primary	08/19/98	Gross beta	3.41	1.4	2.03	Filtered		TN
RD-59B		Primary	02/16/99	Gross alpha	4.38	2.3	2.58	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-59B		Primary	02/16/99	Gross beta	5.32	1.6	2.32	Filtered		TN
RD-59B		Primary	03/14/00	Gross alpha	3.27	2.2	2.82	Filtered		TR
RD-59B		Primary	03/14/00	Gross beta	3.46	2	2.99	Filtered		TR
RD-59B		Primary	02/17/01	Gross alpha	2.27	2.2	2.2	Filtered		ES
RD-59B		Primary	02/17/01	Gross beta	4.17	1.5	2.08	Filtered		ES
RD-59B		Primary	02/28/02	Gross alpha	1.58	1.38	1.46	Filtered		DL
RD-59B		Primary	02/28/02	Gross beta	1.58 U	1.28	1.91	Filtered		DL
RD-59B		Primary	01/31/03	Gross alpha	1.52 U	1.8	2.45	Filtered		ES
RD-59B		Primary	01/31/03	Gross beta	3.58 J	2.2	3.41	Filtered		ES
RD-59B		Primary	11/05/04	Gross alpha	0.518 U	1.8	3.55	Filtered		ES
RD-59B		Primary	11/05/04	Gross beta	6.22	2.7	3.52	Filtered		ES
RD-59B		Primary	09/07/05	Gross alpha	2.08 J	1.4	1.67	Filtered		ES
RD-59B		Primary	09/07/05	Gross beta	3.72 J	1.9	2.87	Filtered		ES
RD-59B		Primary	02/22/06	Gross alpha	0.042 U	2.6	4.98	Filtered		ES
RD-59B		Primary	02/22/06	Gross beta	4.45	1.7	2.01	Filtered		ES
RD-59B		Primary	08/23/06	Gross alpha	-0.607 U	1.4	2.5	Filtered		ES
RD-59B		Primary	08/23/06	Gross beta	4.44	1.4	1.6	Filtered		ES
RD-59B		Primary	02/28/07	Gross alpha	-0.443 U	1.2	2.21	Filtered		ES
RD-59B		Split	02/28/07	Gross alpha	2.77 J	1.7	1.93	Filtered		STL
RD-59B		Primary	02/28/07	Gross beta	3.77 J	1.5	1.91	Filtered		ES
RD-59B		Split	02/28/07	Gross beta	4.65	2.1	3.6	Filtered		STL
RD-59B		Primary	08/16/07	Gross alpha	1.65 U	2	3.1	Filtered		ES
RD-59B		Primary	08/16/07	Gross beta	2.95 J	1.9	2.79	Filtered		ES
RD-59B		Primary	05/20/08	Gross alpha	1.19 U	1.2	1.78	Filtered		ES
RD-59B		Primary	05/20/08	Gross beta	3.65 J	1.1	1.46	Filtered		ES
RD-59B		Primary	08/14/08	Gross alpha	2.57 J	1.8	2.22	Filtered		ES
RD-59B		Primary	08/14/08	Gross beta	3.26 J	1.7	2.72	Filtered		ES
RD-59B		Primary	03/03/09	Gross alpha	0.66 U	1.2	2.06	Filtered		ES
RD-59B		Primary	03/03/09	Gross alpha	-1.56 U	1.3	2.51	Unfiltered		ES
RD-59B		Primary	03/03/09	Gross beta	4.16	1.6	2.26	Filtered		ES
RD-59B		Primary	03/03/09	Gross beta	2.75 J	1.5	2.44	Unfiltered		ES
RD-59B		Primary	08/04/09	Gross alpha	3.98	2.3	3.15	Filtered		ES
RD-59B		Primary	08/04/09	Gross alpha	1.49 J	1	1.31	Unfiltered		ES
RD-59B		Primary	08/04/09	Gross beta	3.55 J	1.4	2.06	Filtered		ES
RD-59B		Primary	08/04/09	Gross beta	2.94 J	1.3	1.98	Unfiltered		ES
RD-59C		Primary	08/16/94	Gross alpha	1.9 U	2.4	3.8	Filtered		LAS
RD-59C		Primary	08/16/94	Gross beta	4.1 U	2.9	4.6	Filtered		LAS
RD-59C		Primary	02/06/95	Gross alpha	2.2 U	2.9	4.9	Filtered		LAS
RD-59C		Primary	02/06/95	Gross beta	3.7 U	2.8	4.4	Filtered		LAS
RD-59C		Primary	08/08/95	Gross alpha	0.9 U	2.2	4.2	Filtered		LAS
RD-59C		Primary	08/08/95	Gross beta	3.2 U	2.5	4.1	Filtered		LAS
RD-59C		Primary	03/12/96	Gross alpha	0.2 U	3.5	6.9	Filtered		LAS
RD-59C		Primary	03/12/96	Gross beta	4.6	2.5	3.9	Filtered		LAS
RD-59C		Primary	08/21/96	Gross alpha	1.3 U	2.7	4.9	Filtered		LAS
RD-59C		Primary	08/21/96	Gross beta	3.1 U	2.7	4.3	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-59C		Primary	02/16/97	Gross alpha	4 U	3.6	5.6	Filtered		LAS
RD-59C		Primary	02/16/97	Gross beta	3.1 U	2.6	4.2	Filtered		LAS
RD-59C		Primary	08/22/97	Gross alpha	1.6 U	2.6	4.5	Filtered		LAS
RD-59C		Primary	08/22/97	Gross beta	2.8 U	3.2	5.3	Filtered		LAS
RD-59C		Primary	08/19/98	Gross alpha	0.193 U	0.43	0.782	Filtered		TN
RD-59C		Primary	08/19/98	Gross beta	2.2	1.4	2.14	Filtered		TN
RD-59C		Primary	02/16/99	Gross alpha	0.66 U	1.5	2.61	Filtered		TN
RD-59C		Primary	02/16/99	Gross beta	5.17	1.8	2.66	Filtered		TN
RD-59C		Primary	03/14/00	Gross alpha	0.518 U	1.5	2.85	Filtered		TR
RD-59C		Primary	03/14/00	Gross beta	4.63	2.2	3.4	Filtered		TR
RD-59C		Primary	02/17/01	Gross alpha	1.11 U	1.7	2.42	Filtered		ES
RD-59C		Primary	02/17/01	Gross beta	4.17	1.5	2.04	Filtered		ES
RD-59C		Primary	02/28/02	Gross alpha	0.23 U	1.68	2.92	Filtered		DL
RD-59C		Primary	02/28/02	Gross beta	1.84 U	0.94	1.92	Filtered		DL
RD-59C		Primary	01/31/03	Gross alpha	2.04 J	1.8	2	Filtered		ES
RD-59C		Primary	01/31/03	Gross beta	3.54 J	1.9	2.8	Filtered		ES
RD-59C		Primary	11/05/04	Gross alpha	0.419 U	1.8	3.59	Filtered		ES
RD-59C		Primary	11/05/04	Gross beta	3.82 U	2.6	4.07	Filtered		ES
RD-59C		Primary	09/07/05	Gross alpha	2.2 J	1.3	1.4	Filtered		ES
RD-59C		Primary	09/07/05	Gross beta	3.92 J	1.7	2.26	Filtered		ES
RD-59C		Primary	02/22/06	Gross alpha	-1.41 U	2.7	4.86	Filtered		ES
RD-59C		Split	02/22/06	Gross alpha	1.34 U	1.21	2	Filtered		STL
RD-59C		Primary	02/22/06	Gross beta	3.26 J	1.7	2.44	Filtered		ES
RD-59C		Split	02/22/06	Gross beta	3.96 J	1.6	2.68	Filtered		STL
RD-59C		Primary	08/23/06	Gross alpha	-1.26 U	1.4	2.77	Filtered		ES
RD-59C		Primary	08/23/06	Gross beta	2.32 U	2.3	3.9	Filtered		ES
RD-59C		Primary	02/28/07	Gross alpha	1.4 U	1.3	1.94	Filtered		ES
RD-59C		Primary	02/28/07	Gross beta	3.82 J	1.6	2.09	Filtered		ES
RD-59C		Primary	08/16/07	Gross alpha	1.27 U	1.8	2.9	Filtered		ES
RD-59C		Primary	08/16/07	Gross beta	2.64 J	1.6	2.33	Filtered		ES
RD-59C		Primary	05/20/08	Gross alpha	1.52 U	1.4	1.95	Filtered		ES
RD-59C		Primary	05/20/08	Gross beta	2.89 J	1.3	1.97	Filtered		ES
RD-59C		Primary	08/14/08	Gross alpha	0.596 U	2	3.36	Filtered		ES
RD-59C		Primary	08/14/08	Gross beta	5.47	2.6	3.8	Filtered		ES
RD-59C		Primary	03/03/09	Gross alpha	-0.292 U	1	2	Filtered		ES
RD-59C		Primary	03/03/09	Gross alpha	0.808 U	1.1	2.12	Unfiltered		ES
RD-59C		Primary	03/03/09	Gross beta	3.94 J	1.9	2.8	Filtered		ES
RD-59C		Primary	03/03/09	Gross beta	2.17 U	2	3.38	Unfiltered		ES
RD-59C		Primary	08/04/09	Gross alpha	0.487 U	1.1	1.84	Filtered		ES
RD-59C		Primary	08/04/09	Gross alpha	1.71 J	1.2	1.63	Unfiltered		ES
RD-59C		Primary	08/04/09	Gross beta	2.87 J	1.3	2.06	Filtered		ES
RD-59C		Primary	08/04/09	Gross beta	3.14 J	1.6	2.46	Unfiltered		ES
RD-61		Primary	05/28/98	Gross alpha	2.72	1.8	2.08	Filtered		TN
RD-61		Primary	05/28/98	Gross beta	3.58	1.7	2.56	Filtered		TN
RD-63		Primary	09/22/94	Gross alpha	12.9	5.6	---	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-63		Primary	09/22/94	Gross beta	10.3	4.6	---	Filtered		LAS
RD-63		Primary	11/09/94	Gross alpha	14.4	5.7	5.5	Filtered		LAS
RD-63		Primary	11/09/94	Gross beta	10.9	3.8	5.3	Filtered		LAS
RD-63		Primary	01/04/95	Gross alpha	8.7	5.2	---	Filtered		LAS
RD-63		Primary	01/04/95	Gross beta	7.7	4.1	---	Filtered		LAS
RD-63		Primary	02/02/99	Gross alpha	17.6	5.3	3.78	Filtered		TN
RD-63		Primary	02/02/99	Gross beta	19.1	3	3.51	Filtered		TN
RD-63		Primary	02/16/00	Gross alpha	9.95	4.1	3.9	Filtered		TR
RD-63		Primary	02/16/00	Gross beta	9.7	4.2	6.3	Filtered		TR
RD-63		Primary	02/23/01	Gross alpha	13.7	3.7	3.39	Filtered		ES
RD-63		Primary	02/23/01	Gross beta	7.73	1.9	2.59	Filtered		ES
RD-63		Primary	02/14/02	Gross alpha	9.48	3.51	2.56	Filtered		DL
RD-63		Primary	02/14/02	Gross beta	8.14	1.64	3.63	Filtered		DL
RD-63		Primary	02/05/03	Gross alpha	6.08	1.7	1.94	Filtered		ES
RD-63		Primary	02/05/03	Gross beta	9.06	1.3	1.72	Filtered		ES
RD-63		Primary	02/24/04	Gross alpha	4.35	3.6	4.22	Filtered		ES
RD-63		Primary	02/24/04	Gross beta	8.01	4	5.28	Filtered		ES
RD-63		Primary	08/25/05	Gross alpha	9.38	3	1.54	Filtered		ES
RD-63		Primary	08/25/05	Gross beta	10.6	2.8	2.51	Filtered		ES
RD-63		Primary	02/16/06	Gross alpha	8.81	4.8	5.12	Filtered		ES
RD-63		Primary	02/16/06	Gross beta	11.2	4.2	4.97	Filtered		ES
RD-63		Primary	08/09/06	Gross alpha	3.75 U	3	4.45	Filtered		ES
RD-63		Split	08/09/06	Gross alpha	8.44	4.5	4.25	Filtered		STL
RD-63		Primary	08/09/06	Gross beta	8.13	2.7	3.14	Filtered		ES
RD-63		Split	08/09/06	Gross beta	11.1	3.5	5.33	Filtered		STL
RD-63		Primary	05/24/07	Gross alpha	10.4	3.8	3.3	Filtered		ES
RD-63		Split	05/24/07	Gross alpha	10.7	3.6	2.25	Filtered		STL
RD-63		Primary	05/24/07	Gross beta	11.7	3	2.57	Filtered		ES
RD-63		Split	05/24/07	Gross beta	11.5	3.4	5.03	Filtered		STL
RD-63		Primary	08/21/07	Gross alpha	8.45	4.3	4.98	Filtered		ES
RD-63		Primary	08/21/07	Gross beta	8.41	4.9	7.12	Filtered		ES
RD-63		Primary	02/06/08	Gross alpha	6.84	4.7	6.57	Filtered		ES
RD-63		Primary	02/06/08	Gross beta	9.4	3.3	3.84	Filtered		ES
RD-63		Primary	08/12/08	Gross alpha	7.42	3.2	2.93	Filtered		ES
RD-63		Primary	08/12/08	Gross beta	11	3	4.21	Filtered		ES
RD-63		Primary	02/20/09	Gross alpha	10.6	3.9	3.68	Filtered		ES
RD-63		Primary	02/20/09	Gross alpha	11.2	3.8	3.64	Unfiltered		ES
RD-63		Split	02/20/09	Gross alpha	8.72	2.12	1.57	Filtered		GEL
RD-63		Split	02/20/09	Gross alpha	10.8	2.48	1.96	Unfiltered		GEL
RD-63		Primary	02/20/09	Gross beta	11.9	2.8	3.18	Filtered		ES
RD-63		Primary	02/20/09	Gross beta	10.5	3.7	5.65	Unfiltered		ES
RD-63		Split	02/20/09	Gross beta	8.58	1.61	2.04	Filtered		GEL
RD-63		Split	02/20/09	Gross beta	10.9	1.74	2.17	Unfiltered		GEL
RD-63		Primary	07/31/09	Gross alpha	7.64	4.3	5.81	Filtered		ES
RD-63		Primary	07/31/09	Gross alpha	9.62	3.3	2.4	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-63		Primary	07/31/09	Gross beta	9.97	3	4.09	Filtered		ES
RD-63		Primary	07/31/09	Gross beta	11.1	3	3.92	Unfiltered		ES
RD-64		Primary	05/10/01	Gross alpha	3.98	2.6	2.93	Filtered		ES
RD-64		Primary	05/10/01	Gross beta	8.63	2	2.38	Filtered		ES
RD-64		Primary	02/28/02	Gross alpha	5.1	2.67	2.83	Filtered		DL
RD-64		Primary	02/28/02	Gross beta	5.93	1.1	2.28	Filtered		DL
RD-64	Z06	Primary	01/29/03	Gross alpha	3.9	2.2	2.28	Filtered		ES
RD-64	Z06	Primary	01/29/03	Gross beta	6.68	2.1	2.81	Filtered		ES
RD-64	Z06	Primary	11/12/04	Gross alpha	3.25	2.2	1.93	Filtered		ES
RD-64	Z06	Primary	11/12/04	Gross beta	6.85	2.3	2.56	Filtered		ES
RD-64	Z06	Primary	02/14/05	Gross alpha	5.62	3	3.15	Filtered		ES
RD-64	Z06	Primary	02/14/05	Gross beta	7.75	3	3.68	Filtered		ES
RD-64	Z06	Primary	08/31/05	Gross alpha	6.16	2.2	1.55	Filtered		ES
RD-64	Z06	Primary	08/31/05	Gross beta	6.57	1.9	1.9	Filtered		ES
RD-64	Z06	Primary	02/16/06	Gross alpha	-0.557 U	1.5	2.55	Filtered		ES
RD-64	Z06	Primary	02/16/06	Gross beta	1.36 U	1.5	2.56	Filtered		ES
RD-64	Z06	Primary	08/17/06	Gross alpha	7.25	2.4	2.15	Filtered		ES
RD-64	Z06	Primary	08/17/06	Gross beta	7.93	2.6	3.15	Filtered		ES
RD-64	Z06	Primary	02/08/07	Gross alpha	5.13	2.2	2.36	Filtered		ES
RD-64	Z06	Primary	02/08/07	Gross beta	5.44	1.9	2.45	Filtered		ES
RD-64	Z02	Primary	08/10/07	Gross alpha	14.6	4.4	3.11	Filtered		ES
RD-64	Z02	Primary	08/10/07	Gross beta	6.91	2.2	2.53	Filtered		ES
RD-64	Z07	Primary	02/06/08	Gross alpha	7.02	2.8	2.67	Filtered		ES
RD-64	Z07	Primary	02/06/08	Gross beta	7.09	2.1	2.4	Filtered		ES
RD-64	Z07	Primary	08/07/08	Gross alpha	4.41	2.6	2.96	Filtered		ES
RD-64	Z07	Primary	08/07/08	Gross beta	8.49	3	4.2	Filtered		ES
RD-64	Z08	Primary	02/23/09	Gross alpha	4.44	2	2.48	Filtered		ES
RD-64	Z08	Primary	02/23/09	Gross alpha	6.76	2.1	1.7	Unfiltered		ES
RD-64	Z08	Primary	02/23/09	Gross beta	3.6 U	2.3	3.82	Filtered		ES
RD-64	Z08	Primary	02/23/09	Gross beta	6.15	1.6	1.97	Unfiltered		ES
RD-64	Z04	Primary	07/16/09	Gross alpha	0.296 U	0.67	1.1	Filtered		ES
RD-64	Z04	Primary	07/16/09	Gross alpha	1.52 U	1.5	2.3	Unfiltered		ES
RD-64	Z04	Primary	07/16/09	Gross beta	4.3	1.1	1.41	Filtered		ES
RD-64	Z04	Primary	07/16/09	Gross beta	4.38	1.2	1.66	Unfiltered		ES
RD-65		Primary	02/27/97	Gross alpha	0.3 U	1.7	3.5	Filtered		LAS
RD-65		Primary	02/27/97	Gross beta	0.5 U	1.8	3.1	Filtered		LAS
RD-65		Primary	02/07/98	Gross alpha	2.24	1.3	1.47	Filtered		TN
RD-65		Primary	02/07/98	Gross beta	4.39	1.6	2.38	Filtered		TN
RD-66		Primary	09/30/97	Gross alpha	7.5	5.6	7.3	Filtered		LAS
RD-66		Primary	09/30/97	Gross beta	3.7 U	4.7	7.9	Filtered		LAS
RD-68A		Primary	07/09/97	Gross alpha	5.6 U	5.3	8	Filtered		LAS
RD-68A		Primary	07/09/97	Gross beta	3.8 U	4.3	7.1	Filtered		LAS
RD-68B		Primary	07/10/97	Gross alpha	-0.7 U	2.8	6.3	Filtered		LAS
RD-68B		Primary	07/10/97	Gross beta	3.4 U	3	4.9	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-69		Primary	05/28/98	Gross alpha	2.33 U	1.8	2.45	Filtered		TN
RD-69		Primary	05/28/98	Gross beta	3.8	1.4	1.96	Filtered		TN
RD-71		Primary	09/30/97	Gross alpha	4.9 U	3.7	5	Filtered		LAS
RD-71		Primary	09/30/97	Gross beta	4.1 U	3.2	5.1	Filtered		LAS
RD-74		Primary	05/13/99	Gross alpha	8.82	3.4	2.74	Filtered		TN
RD-74		Primary	05/13/99	Gross beta	5.29	1.9	2.72	Filtered		TN
RD-75		Primary	08/30/05	Gross alpha	4.05	2.1	2.64	Filtered		ES
RD-75		Primary	08/30/05	Gross beta	8.15	2.6	3.05	Filtered		ES
RD-85		Primary	08/13/04	Gross alpha	8.99	4.3	3.42	Filtered		ES
RD-85		Primary	08/13/04	Gross beta	16.6	4.3	3.27	Filtered		ES
RD-85		Primary	02/23/05	Gross alpha	1.67 U	2.5	4.03	Filtered		ES
RD-85		Primary	02/23/05	Gross beta	5.98	3.4	4.77	Filtered		ES
RD-86		Primary	08/13/04	Gross alpha	3.79	2.1	1.82	Filtered		ES
RD-86		Primary	08/13/04	Gross beta	9.51	2.7	2.26	Filtered		ES
RD-86		Primary	08/26/04	Gross alpha	3.55	2	2.07	Filtered		ES
RD-86		Primary	08/26/04	Gross beta	6.79	2.6	3.23	Filtered		ES
RD-86		Primary	02/23/05	Gross alpha	6.42	3.4	3.4	Filtered		ES
RD-86		Primary	02/23/05	Gross beta	2.75 U	2.6	3.96	Filtered		ES
RD-87		Primary	08/18/04	Gross alpha	1.51 U	3.7	5.89	Filtered		ES
RD-87		Primary	08/18/04	Gross beta	10.2	5.2	7.05	Filtered		ES
RD-87		Primary	08/26/04	Gross alpha	7.76	4	4.14	Filtered		ES
RD-87		Primary	08/26/04	Gross beta	11.8	4.1	4.52	Filtered		ES
RD-87		Primary	08/24/05	Gross alpha	12	3.3	2	Filtered		ES
RD-87		Primary	08/24/05	Gross beta	6.64	2.3	2.98	Filtered		ES
RD-88		Primary	08/20/04	Gross alpha	6.19	5.6	5.81	Filtered		ES
RD-88		Primary	08/20/04	Gross beta	8.43 U	6.8	8.53	Filtered		ES
RD-88		Primary	08/26/04	Gross alpha	6.67	4.1	3.55	Filtered		ES
RD-88		Primary	08/26/04	Gross beta	14.8	5.1	5.56	Filtered		ES
RD-88		Primary	08/25/05	Gross alpha	5.12	1.9	1.29	Filtered		ES
RD-88		Primary	08/25/05	Gross beta	9.68	2.4	1.99	Filtered		ES
RD-89		Primary	05/24/05	Gross alpha	11.2	5.6	5.08	Filtered		ES
RD-89		Duplicate	05/24/05	Gross alpha	11.7	5.6	4.75	Filtered		ES
RD-89		Primary	05/24/05	Gross beta	4.24 U	4.3	6.92	Filtered		ES
RD-89		Duplicate	05/24/05	Gross beta	8.35	4.8	6.94	Filtered		ES
RD-89		Primary	06/01/05	Gross alpha	11.4	5.4	5.32	Filtered		ES
RD-89		Primary	06/01/05	Gross beta	3.26 U	4.4	7.35	Filtered		ES
RD-90		Primary	03/25/04	Gross alpha	9.02	4.8	3.85	Filtered		ES
RD-90		Primary	03/25/04	Gross beta	14	5	5.63	Filtered		ES
RD-90		Primary	04/15/04	Gross alpha	11.3	4.3	2.55	Filtered		ES
RD-90		Primary	04/15/04	Gross beta	13.4	3.7	3.13	Filtered		ES
RD-90		Primary	08/25/05	Gross alpha	14.5	4	2.04	Filtered		ES
RD-90		Primary	08/25/05	Gross beta	15.9	3.9	3	Filtered		ES
RD-91		Primary	03/25/04	Gross alpha	1.49 U	2.3	3.26	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-91		Primary	03/25/04	Gross beta	7.33	3.4	4.44	Filtered		ES
RD-91		Primary	04/15/04	Gross alpha	6.93	3.2	2.45	Filtered		ES
RD-91		Primary	04/15/04	Gross beta	5.36	3.3	4.81	Filtered		ES
RD-92		Primary	03/25/04	Gross alpha	0.401 U	1.6	2.74	Filtered		ES
RD-92		Primary	03/25/04	Gross beta	1.51 U	2.4	3.95	Filtered		ES
RD-92		Primary	04/15/04	Gross alpha	0.79 U	0.97	1.28	Filtered		ES
RD-92		Primary	04/15/04	Gross beta	2.78 J	1.3	1.77	Filtered		ES
RD-93		Primary	05/23/05	Gross alpha	7.04	4.8	5.94	Filtered		ES
RD-93		Duplicate	05/23/05	Gross alpha	11.1	6.3	7.32	Filtered		ES
RD-93		Primary	05/23/05	Gross beta	3.4 U	4.7	8.02	Filtered		ES
RD-93		Duplicate	05/23/05	Gross beta	4.35 U	5.2	8.64	Filtered		ES
RD-93		Primary	06/01/05	Gross alpha	6.29 U	5.7	8.39	Filtered		ES
RD-93		Primary	06/01/05	Gross beta	4.06 U	8	13.8	Filtered		ES
RD-93		Primary	08/24/05	Gross alpha	5.15	2.4	2.51	Filtered		ES
RD-93		Primary	08/24/05	Gross beta	3.48 U	2.9	4.42	Filtered		ES
RD-94		Primary	05/23/05	Gross alpha	11	5.1	4.53	Filtered		ES
RD-94		Primary	05/23/05	Gross beta	10.1	4.3	5.63	Filtered		ES
RD-94		Primary	06/01/05	Gross alpha	18.8	7.3	5.34	Filtered		ES
RD-94		Primary	06/01/05	Gross beta	8.82	5.3	7.85	Filtered		ES
RD-94		Primary	08/25/05	Gross alpha	7.09	2.5	2.02	Filtered		ES
RD-94		Primary	08/25/05	Gross beta	11.5	3.1	2.87	Filtered		ES
RD-95		Primary	05/23/05	Gross alpha	4.61	3.4	4.13	Filtered		ES
RD-95		Primary	05/23/05	Gross beta	4.89 U	3.6	5.65	Filtered		ES
RD-95		Primary	06/01/05	Gross alpha	4.1 U	4	5.56	Filtered		ES
RD-95		Primary	06/01/05	Gross beta	4.13 U	5.1	8.44	Filtered		ES
RD-95		Primary	08/24/05	Gross alpha	3.66	2.1	2.64	Filtered		ES
RD-95		Primary	08/24/05	Gross beta	3.11 U	2.8	4.45	Filtered		ES
RD-96		Primary	05/09/06	Gross alpha	2.97 U	4.2	6.91	Filtered		ES
RD-96		Primary	05/09/06	Gross alpha	16.2	6.2	3.77	Unfiltered		ES
RD-96		Primary	05/09/06	Gross beta	8.16	5.2	7.95	Filtered		ES
RD-96		Primary	05/09/06	Gross beta	16.2	5.1	5.39	Unfiltered		ES
RD-97		Primary	05/09/06	Gross alpha	5.43 U	4.7	6.45	Filtered		ES
RD-97		Primary	05/09/06	Gross alpha	35.8	13	7.05	Unfiltered		ES
RD-97		Primary	05/09/06	Gross beta	7.04	4	5.6	Filtered		ES
RD-97		Primary	05/09/06	Gross beta	40.5	11	8.9	Unfiltered		ES
RD-98		Primary	06/26/08	Gross alpha	5.39 J	2.7	3	Filtered		ES
RD-98		Primary	06/26/08	Gross beta	10.9	2.9	4	Filtered		ES
RD-98		Primary	09/11/08	Gross alpha	4.16	2.2	2.24	Filtered		ES
RD-98		Primary	09/11/08	Gross beta	9.65	2	2.3	Filtered		ES
RD-98		Primary	11/14/08	Gross alpha	-3.01 U	2.8	5.08	Filtered		ES
RD-98		Primary	11/14/08	Gross alpha	2.55 U	2.5	3.53	Unfiltered		ES
RD-98		Primary	11/14/08	Gross beta	9.67	2.2	2.69	Filtered		ES
RD-98		Primary	11/14/08	Gross beta	8.72	3	4.2	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
WS-04A		Primary	06/03/89	Gross alpha	9.9	2.5	---	Unfiltered		BC
WS-04A		Primary	06/03/89	Gross beta	5.8	0.7	---	Unfiltered		BC
WS-04A		Primary	07/23/89	Gross alpha	-1 U	1.5	---	Unfiltered, Decanted		BC
WS-04A		Primary	07/23/89	Gross beta	7.1	0.4	---	Unfiltered, Decanted		BC
WS-04A		Primary	09/09/89	Gross alpha	2.1	1.5	---	Filtered		BC
WS-04A		Primary	09/09/89	Gross alpha	5.6	1.9	---	Unfiltered		UST
WS-04A		Primary	09/09/89	Gross beta	7.8	0.5	---	Filtered		BC
WS-04A		Primary	09/09/89	Gross beta	12.4	0.6	---	Unfiltered		UST
WS-04A		Primary	12/06/90	Gross alpha	2.18 U	2.79	4	Filtered		IT
WS-04A		Primary	12/06/90	Gross beta	5.9	2.66	4	Filtered		IT
WS-04A		Primary	03/18/93	Gross alpha	2 U	---	2	Filtered		CEP
WS-04A		Primary	03/18/93	Gross beta	5	2	3	Filtered		CEP
WS-04A		Primary	06/10/93	Gross alpha	4	3	2	Filtered	High statistics due to large amount of solids.	CEP
WS-04A		Primary	06/10/93	Gross beta	9	4	3	Filtered		CEP
WS-04A		Primary	08/23/93	Gross alpha	2 U	---	2	Filtered		CEP
WS-04A		Primary	08/23/93	Gross beta	8	3	3	Filtered		CEP
WS-04A		Primary	11/04/93	Gross alpha	1.3 U	2.3	4.2	Filtered		CEP
WS-04A		Primary	11/04/93	Gross beta	4.3 U	3.2	5.1	Filtered		CEP
WS-05		Primary	06/01/89	Gross alpha	-1 U	2.7	---	Unfiltered		BC
WS-05		Primary	06/01/89	Gross beta	6.2	0.5	---	Unfiltered		BC
WS-05		Primary	07/22/89	Gross alpha	3.5	1.5	---	Unfiltered, Decanted		BC
WS-05		Primary	07/22/89	Gross beta	7.5	0.4	---	Unfiltered, Decanted		BC
WS-05		Primary	09/09/89	Gross alpha	1.5	1.4	---	Filtered		BC
WS-05		Primary	09/09/89	Gross alpha	4	1.6	---	Unfiltered		UST
WS-05		Primary	09/09/89	Gross beta	9.3	0.3	---	Filtered		BC
WS-05		Primary	09/09/89	Gross beta	10.2	0.4	---	Unfiltered		UST
WS-06		Primary	06/01/89	Gross alpha	7.4	4.3	---	Unfiltered		BC
WS-06		Primary	06/01/89	Gross beta	5.2	0.8	---	Unfiltered		BC
WS-06		Primary	07/23/89	Gross alpha	5.8	1.7	---	Unfiltered, Decanted		BC
WS-06		Primary	07/23/89	Gross beta	7.6	0.4	---	Unfiltered, Decanted		BC
WS-06		Primary	09/11/89	Gross alpha	2.9	2.3	---	Filtered		BC
WS-06		Primary	09/11/89	Gross alpha	2.4	2.4	---	Unfiltered		UST
WS-06		Primary	09/11/89	Gross beta	12.9	0.8	---	Filtered		BC
WS-06		Primary	09/11/89	Gross beta	12.3	0.8	---	Unfiltered		UST
WS-07		Primary	06/04/89	Gross alpha	3.4 U	4	---	Unfiltered		BC
WS-07		Primary	06/04/89	Gross beta	7.3	0.8	---	Unfiltered		BC
WS-07		Primary	07/23/89	Gross alpha	8.3	1.9	---	Unfiltered, Decanted		BC
WS-07		Primary	07/23/89	Gross beta	4.7	0.5	---	Unfiltered, Decanted		BC

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
WS-07		Primary	12/06/90	Gross alpha	3.8 U	2.03	4	Filtered		IT
WS-07		Duplicate	12/06/90	Gross alpha	2.1 U	1.69	4	Filtered		IT
WS-07		Primary	12/06/90	Gross beta	5.07	2.59	4	Filtered		IT
WS-07		Duplicate	12/06/90	Gross beta	5.23	2.68	4	Filtered		IT
WS-07		Primary	03/08/91	Gross alpha	5.76	2.68	4	Filtered		IT
WS-07		Primary	03/08/91	Gross beta	4.82	2.55	4	Filtered		IT
WS-07		Primary	12/07/91	Gross alpha	5.18	2.97	4	Filtered		IT
WS-07		Split	12/07/91	Gross alpha	2 U	---	2	Filtered		CEP
WS-07		Primary	12/07/91	Gross beta	5.78	1.87	4	Filtered		IT
WS-07		Split	12/07/91	Gross beta	3 U	---	3	Filtered		CEP
WS-08		Primary	06/04/89	Gross alpha	157	22.6	---	Unfiltered		BC
WS-08		Primary	06/04/89	Gross beta	239	8.7	---	Unfiltered		BC
WS-08		Primary	07/22/89	Gross alpha	2.1	1.8	---	Filtered		BC
WS-08		Primary	07/22/89	Gross alpha	3.9	1.6	---	Unfiltered, Decanted		BC
WS-08		Primary	07/22/89	Gross beta	1.8	0.6	---	Filtered		BC
WS-08		Primary	07/22/89	Gross beta	5.7	0.4	---	Unfiltered, Decanted		BC
WS-08		Primary	09/09/89	Gross alpha	2.6	1.2	---	Filtered		BC
WS-08		Primary	09/09/89	Gross alpha	9.7	1.9	---	Unfiltered		UST
WS-08		Primary	09/09/89	Gross beta	9.5	0.3	---	Filtered		BC
WS-08		Primary	09/09/89	Gross beta	10.7	0.4	---	Unfiltered		UST
WS-09		Primary	06/04/89	Gross alpha	21.2	3.7	---	Unfiltered		BC
WS-09		Primary	06/04/89	Gross beta	11.5	0.9	---	Unfiltered		BC
WS-09		Primary	07/19/89	Gross alpha	5.4	2.6	---	Filtered		BC
WS-09		Primary	07/19/89	Gross alpha	10	3	---	Unfiltered		FGL
WS-09		Primary	07/19/89	Gross alpha	8.8	1.8	---	Unfiltered, Decanted		BC
WS-09		Primary	07/19/89	Gross beta	10	1	---	Filtered		BC
WS-09		Primary	07/19/89	Gross beta	7	5	---	Unfiltered		FGL
WS-09		Primary	07/19/89	Gross beta	12	0.5	---	Unfiltered, Decanted		BC
WS-09		Primary	07/23/09	Gross alpha	9.86	3.8	4.29	Filtered		ES
WS-09		Primary	07/23/09	Gross alpha	11.8	3.5	1.7	Unfiltered		ES
WS-09		Primary	07/23/09	Gross beta	9.91	2.5	3.11	Filtered		ES
WS-09		Primary	07/23/09	Gross beta	9.05	2.4	3.14	Unfiltered		ES
WS-09		Primary	10/20/09	Gross alpha	11	4.9	4.2	Filtered		TAD
WS-09		Primary	10/20/09	Gross alpha	19.5	7.3	4.86	Unfiltered		TAD
WS-09		Primary	10/20/09	Gross beta	6.4	1.7	1.97	Filtered		TAD
WS-09		Primary	10/20/09	Gross beta	8.17	2.1	2.39	Unfiltered		TAD
WS-09A		Primary	06/01/89	Gross alpha	-1 U	3.4	---	Unfiltered		BC
WS-09A		Primary	06/01/89	Gross beta	4.3	0.6	---	Unfiltered		BC
WS-09A		Primary	07/23/89	Gross alpha	1.8	1.2	---	Unfiltered, Decanted		BC
WS-09A		Primary	07/23/89	Gross beta	3.9	0.3	---	Unfiltered, Decanted		BC
WS-09A		Primary	09/12/89	Gross alpha	-1 U	2.3	---	Filtered		BC

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
WS-09A		Primary	09/12/89	Gross alpha	3.9	3.1	---	Unfiltered		UST
WS-09A		Primary	09/12/89	Gross beta	7.9	0.8	---	Filtered		BC
WS-09A		Primary	09/12/89	Gross beta	10.6	1	---	Unfiltered		UST
WS-09B		Primary	06/06/89	Gross alpha	-1 U	3.1	---	Unfiltered		BC
WS-09B		Primary	06/06/89	Gross beta	11.1	0.7	---	Unfiltered		BC
WS-09B		Primary	07/24/89	Gross alpha	5.8	2	---	Unfiltered, Decanted		BC
WS-09B		Primary	07/24/89	Gross beta	9	0.4	---	Unfiltered, Decanted		BC
WS-12		Primary	06/04/89	Gross alpha	11.2	3	---	Unfiltered		BC
WS-12		Primary	06/04/89	Gross beta	9.4	0.6	---	Unfiltered		BC
WS-12		Primary	07/24/89	Gross alpha	3.8	1.5	---	Unfiltered, Decanted		BC
WS-12		Primary	07/24/89	Gross beta	6.8	0.4	---	Unfiltered, Decanted		BC
WS-13		Primary	06/03/89	Gross alpha	10.5	3	---	Unfiltered		BC
WS-13		Primary	06/03/89	Gross beta	4.5	0.7	---	Unfiltered		BC
WS-13		Primary	07/22/89	Gross alpha	6.6	1.8	---	Unfiltered, Decanted		BC
WS-13		Primary	07/22/89	Gross beta	6.1	0.4	---	Unfiltered, Decanted		BC
WS-13		Primary	10/17/89	Gross alpha	4.01	2.45	---	Filtered		UST
WS-13		Duplicate	10/17/89	Gross alpha	2.98	2.24	---	Filtered		UST
WS-13		Primary	10/17/89	Gross beta	3.82	1.86	---	Filtered		UST
WS-13		Duplicate	10/17/89	Gross beta	3.9	1.9	---	Filtered		UST
WS-13		Primary	11/01/89	Gross alpha	1.69 U	1.73	---	Filtered		UST
WS-13		Primary	11/01/89	Gross alpha	1.68 U	1.92	---	Unfiltered		UST
WS-13		Primary	11/01/89	Gross beta	5.82	2.75	---	Filtered		UST
WS-13		Primary	11/01/89	Gross beta	5.77	2.76	---	Unfiltered		UST
WS-14		Primary	06/03/89	Gross alpha	7.9	4	---	Unfiltered		BC
WS-14		Primary	06/03/89	Gross beta	2.3	1	---	Unfiltered		BC
WS-14		Primary	07/22/89	Gross alpha	3.3	1.4	---	Unfiltered, Decanted		BC
WS-14		Primary	07/22/89	Gross beta	5.3	0.3	---	Unfiltered, Decanted		BC
Private Off-site Wells										
OS-01		Primary	01/01/86	Gross alpha	4.05 U	3.66	6.64	Unfiltered		R
OS-01		Primary	01/01/86	Gross beta	3.2 U	0.58	3.78	Unfiltered		R
OS-01		Primary	01/01/87	Gross alpha	5.49 U	3.2	9.46	Unfiltered		R
OS-01		Primary	01/01/87	Gross beta	4.23 U	0.57	4.88	Unfiltered		R
OS-01		Primary	01/01/88	Gross alpha	5.5 U	3.23	7.77	Unfiltered		R
OS-01		Primary	01/01/88	Gross beta	4.2 U	0.95	5.19	Unfiltered		R
OS-01		Primary	06/05/89	Gross alpha	-1 U	3	---	Unfiltered		BC
OS-01		Primary	06/05/89	Gross beta	5.6	0.7	---	Unfiltered		BC
OS-01		Primary	07/24/89	Gross alpha	5.1	3.7	---	Unfiltered, Decanted		BC

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Private Off-site Wells										
OS-01		Primary	07/24/89	Gross beta	6.5	1.2	---	Unfiltered, Decanted		BC
OS-01		Primary	09/13/89	Gross alpha	2.3	2.3	---	Filtered		BC
OS-01		Primary	09/13/89	Gross alpha	3.6	2.5	---	Unfiltered		UST
OS-01		Primary	09/13/89	Gross beta	5.5	0.8	---	Filtered		BC
OS-01		Primary	09/13/89	Gross beta	9	0.9	---	Unfiltered		UST
OS-01		Primary	06/28/90	Gross alpha	2.28 U	2.57	---	Filtered		UST
OS-01		Primary	06/28/90	Gross beta	4.21	2.51	---	Filtered		UST
OS-01		Primary	12/11/90	Gross alpha	2.62 U	1.83	4	Filtered		IT
OS-01		Primary	12/11/90	Gross beta	5.31	2.64	4	Filtered		IT
OS-01		Primary	03/09/91	Gross alpha	3.19 U	2.18	4	Filtered		IT
OS-01		Primary	03/09/91	Gross beta	5.91	2.6	4	Filtered		IT
OS-01		Primary	09/09/91	Gross alpha	1.37 U	1.83	4	Filtered		IT
OS-01		Primary	09/09/91	Gross beta	5.06	1.79	4	Filtered		IT
OS-01		Primary	12/09/91	Gross alpha	4.63	3.03	4	Filtered		IT
OS-01		Primary	12/09/91	Gross beta	5.79	2.01	4	Filtered		IT
OS-01		Primary	06/09/92	Gross alpha	-0.2 U	1.8	2	Filtered		CEP
OS-01		Primary	06/09/92	Gross beta	2 U	3	3	Filtered		CEP
OS-01		Primary	09/15/92	Gross alpha	0.3 U	2	2	Filtered		CEP
OS-01		Primary	09/15/92	Gross beta	3	3	3	Filtered		CEP
OS-01		Primary	12/17/92	Gross alpha	3	2	2	Filtered		CEP
OS-01		Primary	12/17/92	Gross beta	4	3	3	Filtered		CEP
OS-01		Primary	06/22/93	Gross alpha	3	2	2	Filtered	High statistics due to large amount of solids.	CEP
OS-01		Primary	06/22/93	Gross beta	17	4	3	Filtered		CEP
OS-01		Primary	08/23/93	Gross alpha	4	2	2	Filtered		CEP
OS-01		Primary	08/23/93	Gross beta	9	3	3	Filtered		CEP
OS-01		Primary	11/08/93	Gross alpha	3 U	3.1	4.6	Filtered		LAS
OS-01		Primary	11/08/93	Gross beta	21.2	4.3	5.4	Filtered		LAS
OS-01		Primary	02/23/94	Gross alpha	2 U	3.4	6.1	Filtered		LAS
OS-01		Primary	02/23/94	Gross beta	4.6	2.7	4.2	Filtered		LAS
OS-01		Primary	08/15/94	Gross alpha	-1.1 U	2.4	6	Filtered		LAS
OS-01		Primary	08/15/94	Gross beta	3.6 U	3.4	5.5	Filtered		LAS
OS-02		Primary	01/01/86	Gross alpha	5.17 U	5.38	11.3	Unfiltered		R
OS-02		Primary	01/01/86	Gross beta	1.75 U	0.22	1.96	Unfiltered		R
OS-02		Primary	01/01/87	Gross alpha	7.5 U	4.87	14.24	Unfiltered		R
OS-02		Primary	01/01/87	Gross beta	2.88 U	0.78	3.37	Unfiltered		R
OS-02		Primary	01/01/88	Gross alpha	6.4 U	2.29	9.01	Unfiltered		R
OS-02		Primary	01/01/88	Gross beta	2.96 U	1.23	4.23	Unfiltered		R
OS-02		Primary	06/05/89	Gross alpha	1.3 U	2.6	---	Unfiltered		BC
OS-02		Primary	06/05/89	Gross beta	-1 U	0.7	---	Unfiltered		BC
OS-02		Primary	07/24/89	Gross alpha	-1 U	4.1	---	Unfiltered, Decanted		BC
OS-02		Primary	07/24/89	Gross beta	4.2	1.4	---	Unfiltered, Decanted		BC
OS-02		Primary	09/13/89	Gross alpha	-1 U	1.7	---	Filtered		BC

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Private Off-site Wells										
OS-02		Primary	09/13/89	Gross alpha	2.9	2.9	---	Unfiltered		UST
OS-02		Primary	09/13/89	Gross beta	2.2	0.5	---	Filtered		BC
OS-02		Primary	09/13/89	Gross beta	8.5	0.8	---	Unfiltered		UST
OS-02		Primary	06/28/90	Gross alpha	2.28 U	2.85	---	Filtered		UST
OS-02		Primary	06/28/90	Gross beta	1.4 U	2.15	---	Filtered		UST
OS-02		Primary	12/11/90	Gross alpha	0.188 U	0.827	4	Filtered		IT
OS-02		Primary	12/11/90	Gross beta	2.1 U	2.26	4	Filtered		IT
OS-02		Primary	03/08/91	Gross alpha	4.73	3.42	4	Filtered		IT
OS-02		Duplicate	03/08/91	Gross alpha	2.83 U	3.11	4	Filtered		IT
OS-02		Primary	03/08/91	Gross beta	4.05	2.53	4	Filtered		IT
OS-02		Duplicate	03/08/91	Gross beta	1.46 U	2.53	4	Filtered		IT
OS-02		Primary	09/09/91	Gross alpha	0.825 U	1.66	4	Filtered		IT
OS-02		Primary	09/09/91	Gross beta	2.01 U	1.4	4	Filtered		IT
OS-02		Primary	12/09/91	Gross alpha	2.08 U	2.22	4	Filtered		IT
OS-02		Primary	12/09/91	Gross beta	1.88 U	1.45	4	Filtered		IT
OS-02		Primary	06/09/92	Gross alpha	-1 U	2	2	Filtered		CEP
OS-02		Primary	06/09/92	Gross beta	2 U	3	3	Filtered		CEP
OS-02		Primary	09/15/92	Gross alpha	1.5 U	2	2	Filtered		CEP
OS-02		Primary	09/15/92	Gross beta	1.8 U	3	3	Filtered		CEP
OS-02		Primary	12/17/92	Gross alpha	2 U	---	2	Filtered		CEP
OS-02		Primary	12/17/92	Gross beta	3 U	---	3	Filtered		CEP
OS-02		Primary	06/22/93	Gross alpha	2 U	---	2	Filtered		CEP
OS-02		Primary	06/22/93	Gross beta	7	3	3	Filtered		CEP
OS-02		Primary	08/23/93	Gross alpha	4	2	2	Filtered		CEP
OS-02		Primary	08/23/93	Gross beta	4	3	3	Filtered		CEP
OS-02		Primary	11/08/93	Gross alpha	1.1 U	2.2	4.1	Filtered		LAS
OS-02		Primary	11/08/93	Gross beta	1.5 U	2.7	4.6	Filtered		LAS
OS-02		Primary	02/23/94	Gross alpha	2.3 U	2.4	3.6	Filtered		LAS
OS-02		Primary	02/23/94	Gross beta	1.3 U	2.6	4.4	Filtered		LAS
OS-02		Primary	08/15/94	Gross alpha	0.6 U	2.4	4.8	Filtered		LAS
OS-02		Primary	08/15/94	Gross beta	1.3 U	3.2	5.5	Filtered		LAS
OS-03		Primary	01/01/86	Gross alpha	6.66 U	2.97	10.79	Unfiltered		R
OS-03		Primary	01/01/86	Gross beta	3.47 U	0.25	3.69	Unfiltered		R
OS-03		Primary	01/01/87	Gross alpha	8.89 U	1.75	10.13	Unfiltered		R
OS-03		Primary	01/01/87	Gross beta	3.9 U	0.12	3.99	Unfiltered		R
OS-03		Primary	06/05/89	Gross alpha	-1 U	3.1	---	Unfiltered		BC
OS-03		Primary	06/05/89	Gross beta	5.6	0.7	---	Unfiltered		BC
OS-03		Primary	07/24/89	Gross alpha	4.2	3.7	---	Unfiltered, Decanted		BC
OS-03		Primary	07/24/89	Gross beta	7.5	1.1	---	Unfiltered, Decanted		BC
OS-03		Primary	09/13/89	Gross alpha	-1 U	1.9	---	Filtered		BC
OS-03		Primary	09/13/89	Gross alpha	10.2	3.4	---	Unfiltered		UST
OS-03		Primary	09/13/89	Gross beta	5.6	0.7	---	Filtered		BC
OS-03		Primary	09/13/89	Gross beta	17.1	1	---	Unfiltered		UST
OS-03		Primary	12/11/90	Gross alpha	0.283 U	0.909	4	Filtered		IT

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Private Off-site Wells										
OS-03		Primary	12/11/90	Gross beta	3.76 U	2.53	4	Filtered		IT
OS-03		Primary	03/08/91	Gross alpha	1.79 U	1.61	4	Filtered		IT
OS-03		Primary	03/08/91	Gross beta	2.99 U	2.34	4	Filtered		IT
OS-03		Primary	12/09/91	Gross alpha	1.91 U	1.9	4	Filtered		IT
OS-03		Primary	12/09/91	Gross beta	3.04 U	1.61	4	Filtered		IT
OS-03		Primary	06/09/92	Gross alpha	-0.2 U	1.8	2	Filtered		CEP
OS-03		Primary	06/09/92	Gross beta	3	3	3	Filtered		CEP
OS-03		Primary	06/22/93	Gross alpha	4	3	2	Filtered	High statistics due to large amount of solids.	CEP
OS-03		Primary	06/22/93	Gross beta	13	7	3	Filtered		CEP
OS-03		Primary	08/23/93	Gross alpha	2 U	---	2	Filtered		CEP
OS-03		Primary	08/23/93	Gross beta	7	3	3	Filtered		CEP
OS-03		Primary	11/08/93	Gross alpha	-0.5 U	1.4	3.9	Filtered		LAS
OS-03		Primary	11/08/93	Gross beta	2.6 U	3.2	5.4	Filtered		LAS
OS-03		Primary	02/23/94	Gross alpha	0.8 U	2.4	4.7	Filtered		LAS
OS-03		Primary	02/23/94	Gross beta	3.9 U	2.7	4.4	Filtered		LAS
OS-03		Primary	08/15/94	Gross alpha	0.2 U	2.5	5.3	Filtered		LAS
OS-03		Primary	08/15/94	Gross beta	3.8 U	3.2	5.2	Filtered		LAS
OS-04		Primary	01/01/86	Gross alpha	4.16 U	1.39	6.09	Unfiltered		R
OS-04		Primary	01/01/86	Gross beta	3.64 U	0.07	3.72	Unfiltered		R
OS-04		Primary	01/01/87	Gross alpha	4.5 U	5.7	8.54	Unfiltered		R
OS-04		Primary	01/01/87	Gross beta	4.5 U	1.1	5.28	Unfiltered		R
OS-04		Primary	06/05/89	Gross alpha	-1 U	3	---	Unfiltered		BC
OS-04		Primary	06/05/89	Gross beta	3	0.7	---	Unfiltered		BC
OS-04		Primary	07/24/89	Gross alpha	5.1	2	---	Unfiltered, Decanted		BC
OS-04		Primary	07/24/89	Gross beta	12	0.8	---	Unfiltered, Decanted		BC
OS-04		Primary	09/13/89	Gross alpha	-1 U	2.3	---	Filtered		BC
OS-04		Primary	09/13/89	Gross alpha	5.2	3.3	---	Unfiltered		UST
OS-04		Primary	09/13/89	Gross beta	8.8	0.8	---	Filtered		BC
OS-04		Primary	09/13/89	Gross beta	14.1	1.1	---	Unfiltered		UST
OS-04		Primary	12/11/90	Gross alpha	0.731 U	1.39	4	Filtered		IT
OS-04		Primary	12/11/90	Gross beta	4.08	2.42	4	Filtered		IT
OS-04		Primary	06/09/92	Gross alpha	1 U	2	2	Filtered		CEP
OS-04		Primary	06/09/92	Gross beta	6	3	3	Filtered		CEP
OS-04		Primary	06/22/93	Gross alpha	3	2	2	Filtered	High statistics due to large amount of solids.	CEP
OS-04		Primary	06/22/93	Gross beta	10	3	3	Filtered		CEP
OS-04		Primary	08/23/93	Gross alpha	2 U	---	2	Filtered		CEP
OS-04		Primary	08/23/93	Gross beta	3 U	---	3	Filtered		CEP
OS-04		Primary	02/23/94	Gross alpha	1.3 U	3.4	6.4	Filtered		LAS
OS-04		Primary	02/23/94	Gross beta	6.1	3.2	4.9	Filtered		LAS
OS-04		Primary	08/15/94	Gross alpha	1.5 U	2.9	5.3	Filtered		LAS
OS-04		Primary	08/15/94	Gross beta	3.9 U	3.6	5.9	Filtered		LAS
OS-05		Primary	01/01/86	Gross alpha	6.76 U	2.72	10.48	Unfiltered		R

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Private Off-site Wells										
OS-05		Primary	01/01/86	Gross beta	3.69 U	0.52	4.23	Unfiltered		R
OS-05		Primary	01/01/87	Gross alpha	2.44 U	1.97	3.76	Unfiltered		R
OS-05		Primary	01/01/87	Gross beta	4.44 U	0.27	4.85	Unfiltered		R
OS-05		Primary	01/01/88	Gross alpha	7.53 U	7.39	15.11	Unfiltered		R
OS-05		Primary	01/01/88	Gross beta	4.2 U	0.41	4.46	Unfiltered		R
OS-05		Primary	06/05/89	Gross alpha	7.4	2.3	---	Unfiltered		BC
OS-05		Primary	06/05/89	Gross beta	7.3	0.6	---	Unfiltered		BC
OS-05		Primary	07/24/89	Gross alpha	6.4	2.1	---	Unfiltered, Decanted		BC
OS-05		Primary	07/24/89	Gross beta	9.2	0.9	---	Unfiltered, Decanted		BC
OS-05		Primary	09/13/89	Gross alpha	-1 U	2.7	---	Filtered		BC
OS-05		Primary	09/13/89	Gross alpha	-1 U	2.7	---	Unfiltered		UST
OS-05		Primary	09/13/89	Gross beta	11.7	1	---	Filtered		BC
OS-05		Primary	09/13/89	Gross beta	9.9	1	---	Unfiltered		UST
OS-05		Primary	03/27/90	Gross alpha	2.6 U	3.33	---	Filtered		UST
OS-05		Primary	03/27/90	Gross beta	4.3	2.57	---	Filtered		UST
OS-05		Primary	06/28/90	Gross alpha	2.8 U	3.67	---	Filtered		UST
OS-05		Primary	06/28/90	Gross beta	7.27	2.84	---	Filtered		UST
OS-05		Primary	09/14/90	Gross alpha	5.86	4.59	---	Filtered		UST
OS-05		Primary	09/14/90	Gross beta	9.76	5.05	---	Filtered		UST
OS-05		Primary	12/11/90	Gross alpha	0.515 U	1.12	4	Filtered		IT
OS-05		Primary	12/11/90	Gross beta	3.43 U	2.45	4	Filtered		IT
OS-05		Primary	03/08/91	Gross alpha	3.14 U	2.75	4	Filtered		IT
OS-05		Primary	03/08/91	Gross beta	4.17	2.42	4	Filtered		IT
OS-05		Primary	09/09/91	Gross alpha	5.58	5.7	4	Filtered		IT
OS-05		Primary	09/09/91	Gross beta	9.91	5.07	4	Filtered		IT
OS-05		Primary	12/09/91	Gross alpha	2.39 U	2.65	4	Filtered		IT
OS-05		Primary	12/09/91	Gross beta	6.23	2.31	4	Filtered		IT
OS-05		Primary	06/09/92	Gross alpha	-0.2 U	2	2	Filtered		CEP
OS-05		Primary	06/09/92	Gross beta	5	3	3	Filtered		CEP
OS-05		Primary	09/15/92	Gross alpha	1.9 U	2	2	Filtered		CEP
OS-05		Split	09/15/92	Gross alpha	1.2 U	6.3	---	Filtered		BL
OS-05		Primary	09/15/92	Gross beta	6	4	3	Filtered		CEP
OS-05		Split	09/15/92	Gross beta	12	8	---	Filtered		BL
OS-05		Primary	12/17/92	Gross alpha	3	2	2	Filtered		CEP
OS-05		Primary	12/17/92	Gross beta	7	4	3	Filtered		CEP
OS-05		Primary	06/22/93	Gross alpha	4	3	2	Filtered	High statistics due to large amount of solids.	CEP
OS-05		Primary	06/22/93	Gross beta	16	7	3	Filtered		CEP
OS-05		Primary	08/23/93	Gross alpha	2 U	---	2	Filtered		CEP
OS-05		Primary	08/23/93	Gross beta	3 U	---	3	Filtered		CEP
OS-05		Primary	11/08/93	Gross alpha	1.3 U	3.3	6.3	Filtered		LAS
OS-05		Primary	11/08/93	Gross beta	4.9 U	3.8	6.2	Filtered		LAS
OS-05		Primary	02/23/94	Gross alpha	5.2 U	4.7	7	Filtered		LAS
OS-05		Primary	02/23/94	Gross beta	7.4	3.6	5.5	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Private Off-site Wells										
OS-08		Primary	01/01/86	Gross alpha	2.04 U	3.91	6.05	Unfiltered		R
OS-08		Primary	01/01/86	Gross beta	2.77 U	0.46	3.26	Unfiltered		R
OS-08		Primary	01/01/87	Gross alpha	3.88 U	2.38	6.44	Unfiltered		R
OS-08		Primary	01/01/87	Gross beta	3.18 U	1.04	4.73	Unfiltered		R
OS-08		Primary	01/01/88	Gross alpha	3.52 U	3.31	5.86	Unfiltered		R
OS-08		Primary	01/01/88	Gross beta	3.6 U	1.39	4.59	Unfiltered		R
OS-08		Primary	06/05/89	Gross alpha	-1 U	3	---	Unfiltered		BC
OS-08		Primary	06/05/89	Gross beta	3.8	0.5	---	Unfiltered		BC
OS-08		Primary	07/24/89	Gross alpha	1.2	1.2	---	Unfiltered, Decanted		BC
OS-08		Primary	07/24/89	Gross beta	4.5	0.5	---	Unfiltered, Decanted		BC
OS-08		Primary	09/13/89	Gross alpha	-1 U	2.2	---	Filtered		BC
OS-08		Primary	09/13/89	Gross alpha	1.5 U	2.6	---	Unfiltered		UST
OS-08		Primary	09/13/89	Gross beta	-1 U	0.7	---	Filtered		BC
OS-08		Primary	09/13/89	Gross beta	1.6	0.8	---	Unfiltered		UST
OS-08		Primary	06/09/92	Gross alpha	0 U	2	2	Filtered		CEP
OS-08		Primary	06/09/92	Gross beta	1 U	3	3	Filtered		CEP
OS-08		Primary	06/22/93	Gross alpha	2 U	---	2	Filtered		CEP
OS-08		Primary	06/22/93	Gross beta	10	3	3	Filtered		CEP
OS-08		Primary	08/15/94	Gross alpha	0.2 U	3.3	6.9	Filtered		LAS
OS-08		Primary	08/15/94	Gross beta	2.1 U	4.4	7.6	Filtered		LAS
OS-09R		Primary	01/26/04	Gross alpha	1.29 U	1.6	2.52	Filtered		ES
OS-09R		Primary	01/26/04	Gross beta	0.54 U	1.6	2.64	Filtered		ES
OS-10		Primary	01/01/86	Gross alpha	1.89 U	0.94	2.8	Unfiltered		R
OS-10		Primary	01/01/86	Gross beta	0.71 U	0.46	1.09	Unfiltered		R
OS-10		Primary	01/01/87	Gross alpha	1.84 U	1.65	3.78	Unfiltered		R
OS-10		Primary	01/01/87	Gross beta	1.32 U	0.1	1.48	Unfiltered		R
OS-10		Primary	01/01/88	Gross alpha	4.87	---	4.87	Unfiltered		R
OS-10		Primary	01/01/88	Gross beta	1.55	---	1.55	Unfiltered		R
OS-10		Primary	06/05/89	Gross alpha	-1 U	1.9	---	Unfiltered		BC
OS-10		Primary	06/05/89	Gross beta	4.7	0.5	---	Unfiltered		BC
OS-10		Primary	07/24/89	Gross alpha	2.2	1.4	---	Unfiltered, Decanted		BC
OS-10		Primary	07/24/89	Gross beta	4.2	0.6	---	Unfiltered, Decanted		BC
OS-10		Primary	09/13/89	Gross alpha	-1 U	1.6	---	Filtered		BC
OS-10		Primary	09/13/89	Gross alpha	-1 U	1.8	---	Unfiltered		UST
OS-10		Primary	09/13/89	Gross beta	-1 U	0.6	---	Filtered		BC
OS-10		Primary	09/13/89	Gross beta	-1 U	0.6	---	Unfiltered		UST
OS-10		Primary	12/09/91	Gross alpha	0.749 U	1.57	4	Filtered		IT
OS-10		Primary	12/09/91	Gross beta	0.444 U	1.09	4	Filtered		IT
OS-12		Primary	06/04/89	Gross alpha	74.9	35.6	---	Unfiltered		BC
OS-12		Primary	06/04/89	Gross beta	129.5	8.1	---	Unfiltered		BC
OS-12		Primary	07/23/89	Gross alpha	48	27	---	Unfiltered		FGL

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Private Off-site Wells										
OS-12		Primary	07/23/89	Gross alpha	2.6	0.9	---	Unfiltered, Decanted		BC
OS-12		Primary	07/23/89	Gross beta	67	31	---	Unfiltered		FGL
OS-12		Primary	07/23/89	Gross beta	12.4	3.2	---	Unfiltered, Decanted		BC
OS-13		Primary	01/01/86	Gross alpha	2.06 U	2.56	4.68	Unfiltered		R
OS-13		Primary	01/01/86	Gross beta	3.38 U	0.49	3.77	Unfiltered		R
OS-13		Primary	01/01/87	Gross alpha	3.32 U	3.86	7.24	Unfiltered		R
OS-13		Primary	01/01/87	Gross beta	3.18 U	0.45	3.64	Unfiltered		R
OS-15		Primary	01/01/86	Gross alpha	19.68 U	10.31	35.11	Unfiltered		R
OS-15		Primary	01/01/86	Gross beta	6.54 U	3.3	12.08	Unfiltered		R
OS-15		Primary	01/01/87	Gross alpha	14.32 U	2.89	16.12	Unfiltered		R
OS-15		Primary	01/01/87	Gross beta	5.49 U	1.13	6.64	Unfiltered		R
OS-15		Primary	01/01/88	Gross alpha	11.87	---	11.87	Unfiltered		R
OS-15		Primary	01/01/88	Gross beta	6.63	---	6.63	Unfiltered		R
OS-15		Primary	06/07/89	Gross alpha	18.5	4.7	---	Unfiltered		BC
OS-15		Primary	06/07/89	Gross beta	4.7	1.6	---	Unfiltered		BC
OS-15		Primary	07/23/89	Gross alpha	11.6	1.1	---	Unfiltered, Decanted		BC
OS-15		Primary	07/23/89	Gross beta	40.1	1.1	---	Unfiltered, Decanted		BC
OS-15		Primary	12/10/91	Gross alpha	3.39 U	4.83	4	Filtered		IT
OS-15		Primary	12/10/91	Gross beta	10.9	4.69	4	Filtered		IT
OS-16		Primary	01/01/86	Gross alpha	19.19 U	5.46	25.98	Unfiltered		R
OS-16		Primary	01/01/86	Gross beta	5.21 U	0.67	6.16	Unfiltered		R
OS-16		Primary	01/01/87	Gross alpha	10.32 U	7.65	15.74	Unfiltered		R
OS-16		Primary	01/01/87	Gross beta	4.71 U	0.63	5.09	Unfiltered		R
OS-16		Primary	01/01/88	Gross alpha	11.06 U	7.18	16.13	Unfiltered		R
OS-16		Primary	01/01/88	Gross beta	4.9 U	0.88	5.52	Unfiltered		R
OS-16		Primary	06/05/89	Gross alpha	4.8	2.3	---	Unfiltered		BC
OS-16		Primary	06/05/89	Gross beta	4.7	0.5	---	Unfiltered		BC
OS-16		Primary	07/22/89	Gross alpha	10.8	2.1	---	Unfiltered, Decanted		BC
OS-16		Primary	07/22/89	Gross beta	8.6	0.5	---	Unfiltered, Decanted		BC
OS-16		Primary	09/14/89	Gross alpha	3.2	2.5	---	Filtered		BC
OS-16		Primary	09/14/89	Gross alpha	5.3	2.6	---	Unfiltered		UST
OS-16		Primary	09/14/89	Gross beta	5.2	0.9	---	Filtered		BC
OS-16		Primary	09/14/89	Gross beta	5.8	1.1	---	Unfiltered		UST
OS-16		Primary	10/19/89	Gross alpha	5.54	2.72	---	Filtered		UST
OS-16		Duplicate	10/19/89	Gross alpha	5.11	2.59	---	Filtered		UST
OS-16		Primary	10/19/89	Gross beta	5.04	1.99	---	Filtered		UST
OS-16		Duplicate	10/19/89	Gross beta	4.27	1.82	---	Filtered		UST
OS-16		Primary	11/01/89	Gross alpha	4.39	2.73	---	Filtered		UST
OS-16		Primary	11/01/89	Gross alpha	2.57	2.2	---	Unfiltered		UST
OS-16		Duplicate	11/01/89	Gross alpha	5.06	2.95	---	Filtered		UST
OS-16		Duplicate	11/01/89	Gross alpha	4.05	2.65	---	Unfiltered		UST

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Private Off-site Wells										
OS-16		Primary	11/01/89	Gross beta	6.73	2.59	---	Filtered		UST
OS-16		Primary	11/01/89	Gross beta	6.75	2.92	---	Unfiltered		UST
OS-16		Duplicate	11/01/89	Gross beta	6.99	2.72	---	Filtered		UST
OS-16		Duplicate	11/01/89	Gross beta	4.29	2.59	---	Unfiltered		UST
OS-16		Primary	09/09/91	Gross alpha	15	6.32	4	Filtered		IT
OS-16		Primary	09/09/91	Gross beta	8.23	3.82	4	Filtered		IT
OS-16		Primary	12/10/91	Gross alpha	1.65 U	2.07	4	Filtered		IT
OS-16		Primary	12/10/91	Gross beta	1.59 U	1.75	4	Filtered		IT
OS-16		Primary	03/12/92	Gross alpha	5	3	2	Filtered		CEP
OS-16		Primary	03/12/92	Gross beta	5	3	3	Filtered		CEP
OS-17		Primary	06/04/89	Gross alpha	8.4	2.8	---	Unfiltered		BC
OS-17		Primary	06/04/89	Gross beta	13.9	0.7	---	Unfiltered		BC
OS-17		Primary	07/22/89	Gross alpha	4.5	1.7	---	Unfiltered, Decanted		BC
OS-17		Primary	07/22/89	Gross beta	10.7	0.5	---	Unfiltered, Decanted		BC
OS-17		Primary	09/13/89	Gross alpha	1.4 U	3.5	---	Filtered		BC
OS-17		Primary	09/13/89	Gross alpha	2.5 U	3.4	---	Unfiltered		UST
OS-17		Primary	09/13/89	Gross beta	7.6	1.4	---	Filtered		BC
OS-17		Primary	09/13/89	Gross beta	12.8	1.4	---	Unfiltered		UST
OS-17		Primary	09/12/91	Gross alpha	3.07 U	3.35	4	Filtered		IT
OS-17		Primary	09/12/91	Gross beta	4.21	2.66	4	Filtered		IT
OS-17		Primary	12/10/91	Gross alpha	1.64 U	2.49	4	Filtered		IT
OS-17		Primary	12/10/91	Gross beta	3.37 U	2.26	4	Filtered		IT
OS-17		Primary	03/12/92	Gross alpha	2 U	---	2	Filtered		CEP
OS-17		Primary	03/12/92	Gross beta	6	3	3	Filtered		CEP
OS-21		Primary	06/06/89	Gross alpha	-1 U	3	---	Unfiltered		BC
OS-21		Primary	06/06/89	Gross beta	7.1	0.7	---	Unfiltered		BC
OS-21		Primary	07/23/89	Gross alpha	1.6	1.5	---	Unfiltered, Decanted		BC
OS-21		Primary	07/23/89	Gross beta	5.5	0.4	---	Unfiltered, Decanted		BC
OS-21		Primary	09/09/89	Gross alpha	3	1.5	---	Filtered		BC
OS-21		Primary	09/09/89	Gross alpha	-1 U	1.2	---	Unfiltered		UST
OS-21		Primary	09/09/89	Gross beta	10	0.4	---	Filtered		BC
OS-21		Primary	09/09/89	Gross beta	10	0.4	---	Unfiltered		UST
OS-21		Primary	10/19/89	Gross alpha	1.08 U	1.56	---	Filtered		UST
OS-21		Primary	10/19/89	Gross beta	2.91	1.78	---	Filtered		UST
OS-21		Primary	11/01/89	Gross alpha	1.42 U	1.9	---	Filtered		UST
OS-21		Primary	11/01/89	Gross alpha	2.82	2.18	---	Unfiltered		UST
OS-21		Primary	11/01/89	Gross beta	3.56	2.52	---	Filtered		UST
OS-21		Primary	11/01/89	Gross beta	6.83	2.83	---	Unfiltered		UST
OS-21		Primary	03/09/91	Gross alpha	0.804 U	1.7	4	Filtered		IT
OS-21		Primary	03/09/91	Gross beta	4.13	2.44	4	Filtered		IT
OS-21		Primary	12/10/91	Gross alpha	1.55 U	2.31	4	Filtered		IT
OS-21		Primary	12/10/91	Gross beta	2.59 U	1.92	4	Filtered		IT

See last page of table for notes and abbreviations.

TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Private Off-site Wells										
OS-21		Primary	03/12/92	Gross alpha	2 U	---	2	Filtered		CEP
OS-21		Primary	03/12/92	Gross beta	3 U	---	3	Filtered		CEP
OS-21		Primary	03/19/93	Gross alpha	2 U	---	2	Filtered		CEP
OS-21		Primary	03/19/93	Gross beta	3 U	---	3	Filtered		CEP
OS-22		Primary	06/27/89	Gross alpha	8.5	3.4	---	Unfiltered		BC
OS-22		Primary	06/27/89	Gross beta	11	1	---	Unfiltered		BC
OS-23		Primary	06/28/89	Gross alpha	14.6	4	---	Unfiltered		BC
OS-23		Primary	06/28/89	Gross beta	16.6	1.1	---	Unfiltered		BC
OS-27		Primary	05/15/97	Gross alpha	5.2 U	4.2	5.9	Filtered		LAS
OS-27		Primary	05/15/97	Gross beta	4.3 U	3.5	5.6	Filtered		LAS
Municipal Water Supply										
Calleguas		Primary	12/14/90	Gross alpha	-0.00286 U	0.418	4	Filtered		IT
Calleguas		Primary	12/14/90	Gross beta	5.5	2.42	4	Filtered		IT
Calleguas		Primary	03/10/91	Gross alpha	0.82 U	1.07	4	Filtered		IT
Calleguas		Primary	03/10/91	Gross beta	3.05 U	2.28	4	Filtered		IT
Calleguas		Primary	03/12/92	Gross alpha	2 U	---	2	Filtered		CEP
Calleguas		Primary	03/12/92	Gross beta	5	3	3	Filtered		CEP
Calleguas		Primary	09/22/92	Gross alpha	0.7 U	2	2	Filtered		CEP
Calleguas		Primary	09/22/92	Gross beta	1.8 U	2.3	3	Filtered		CEP
Seeps/Springs										
FDP-881		Primary	07/09/09	Gross alpha	46 J	12	9	Unfiltered		TAI
FDP-881		Primary	07/09/09	Gross beta	37.8 J	6.2	5.2	Unfiltered		TAI
FDP-882		Primary	07/09/09	Gross alpha	4.95 J	2.31	3.55	Unfiltered		GEL
FDP-882		Primary	07/09/09	Gross beta	8.64	2.07	3.23	Unfiltered		GEL

See last page of table for notes and abbreviations.

TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY
IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

NOTES AND ABBREVIATIONS

BC = BC Laboratories, Bakersfield, California
BL = Barringer Laboratories, Inc., Golden, Colorado
CEP = Controls for Environmental Pollution, Santa Fe, New Mexico
DL = Davi Laboratories, Pinole, California
ES = Eberline Services, (formerly Thermo Retec), Richmond, California
FGL = FGL Environmental, Santa Paula, California
GEL = General Engineering Laboratories, LLC, Charleston, South Carolina
IT = International Technologies, Inc., (formerly United States Testing), Richland, Washington
LAS = LAS Laboratories, (formerly Lockheed Martin), Las Vegas, Nevada
R = Rocketdyne, SSFL, California
STL = Severn Trent Laboratories, (formerly International Technologies, Inc.), Richland, Washington
TAD = TestAmerica, Denver, Colorado
TAI = TestAmerica, Irvine, California
TEL = Teledyne Isotopes, Westwood, New Jersey
TMA = Thermoanalytical Inc. (TMA/NORCAL), Richmond, California
TN = Thermo NUtech, (formerly Thermoanalytical Inc. (TMA/NORCAL)), Richmond, California
TR = Thermo Retec, (formerly Thermo NUtech), Richmond, California
UST = United States Testing, Richland, Washington

MDA	=	Minimum detectable activity.
Z	=	FLUTe sample port number.
---	=	Analysis not performed.
J	=	Result is less than contract-required MDA and greater than or equal to the MDA.
U	=	Not detected above the MDA; numerical value is the activity for the radionuclide.
pCi/L	=	PicoCuries per liter.

NOTES:
All samples analyzed according to EPA method 900.0, Gross Alpha and Gross Beta Radioactivity.

Any activity detected is reported by the laboratory, though the reported activity may be less than the overall laboratory error. Analytical results that are less than the instrument background count are shown as negative values.

Filtered samples were collected using a 0.45 micron filter in the field.

As discussed in Appendix D, project specific MDAs were not always attained due in part to matrix conditions (e.g., dissolved and suspended solids) and limitations in the prescribed analytical methods (e.g., sample volumes, counting times).

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
ES-06		Primary	05/04/94	Tritium	-70 U	110	240	Unfiltered		LAS
ES-08		Primary	05/26/94	Tritium	-100 U	100	230	Unfiltered		LAS
ES-24		Primary	09/10/89	Tritium	-62.7 U	124	---	Unfiltered		UST
ES-24		Duplicate	09/10/89	Tritium	-58 U	126	---	Unfiltered		UST
ES-24		Split	09/10/89	Tritium	1000 U	---	1000	Unfiltered		TMA
ES-31		Primary	12/10/90	Tritium	49.9 U	196	500	Unfiltered		IT
ES-31		Primary	03/04/91	Tritium	590	221	500	Unfiltered		IT
ES-31		Duplicate	03/04/91	Tritium	159 U	197	500	Unfiltered		IT
ES-31		Primary	06/03/91	Tritium	7.7 U	194	500	Unfiltered		IT
ES-31		Primary	09/07/91	Tritium	-48.1 U	196	500	Unfiltered		IT
ES-31		Primary	12/07/91	Tritium	-89.6 U	206	500	Unfiltered		IT
ES-31		Primary	03/05/92	Tritium	500 U	---	500	Unfiltered		CEP
ES-31		Primary	03/03/93	Tritium	300 U	326	500	Unfiltered		CEP
ES-31		Primary	02/22/94	Tritium	0 U	150	280	Unfiltered		LAS
ES-31		Primary	02/15/95	Tritium	-40 U	180	260	Unfiltered		LAS
ES-31		Primary	02/06/96	Tritium	-120 U	140	220	Unfiltered		LAS
ES-31		Primary	02/04/97	Tritium	155	64	96	Unfiltered		LAS
ES-31		Primary	02/04/98	Tritium	38.4 U	120	198	Unfiltered		TN
ES-31		Primary	02/06/99	Tritium	62.7 U	100	172	Unfiltered		TN
ES-31		Primary	02/06/00	Tritium	0 U	120	207	Unfiltered		TN
ES-31		Primary	02/15/01	Tritium	24.8 U	120	201	Unfiltered		ES
ES-31		Primary	02/18/02	Tritium	65 U	121	384	Unfiltered		DL
ES-31		Primary	02/19/03	Tritium	21.1 U	110	191	Unfiltered		ES
ES-31		Primary	02/01/08	Tritium	36.8 U	83	138	Unfiltered		ES
ES-31		Primary	03/04/09	Tritium	126 J	59	87.8	Unfiltered		ES
ES-31		Primary	07/17/09	Tritium	47.4 U	88	147	Unfiltered		ES
HAR-03		Primary	09/11/89	Tritium	-4.78 U	121	---	Unfiltered		UST
HAR-03		Split	09/11/89	Tritium	1000 U	---	1000	Unfiltered		TMA
HAR-04		Primary	09/11/89	Tritium	-185 U	115	---	Unfiltered		UST
HAR-04		Split	09/11/89	Tritium	1000 U	---	1000	Unfiltered		TMA
HAR-14		Primary	09/12/89	Tritium	-22.9 U	124	---	Unfiltered		UST
HAR-14		Split	09/12/89	Tritium	1000 U	---	1000	Unfiltered		TMA
HAR-30		Primary	09/12/89	Tritium	-45 U	129	---	Unfiltered		UST
HAR-30		Split	09/12/89	Tritium	1000 U	---	1000	Unfiltered		TMA
RS-07		Primary	09/11/89	Tritium	-74.6 U	120	---	Unfiltered		UST
RS-07		Split	09/11/89	Tritium	100 U	---	100	Unfiltered		TMA
RS-11		Primary	12/06/90	Tritium	43.2 U	200	500	Unfiltered		IT
RS-11		Primary	03/04/91	Tritium	58.2 U	192	500	Unfiltered		IT
RS-11		Primary	12/07/91	Tritium	12 U	212	500	Unfiltered		IT
RS-11		Primary	03/05/92	Tritium	500 U	---	500	Unfiltered		CEP
RS-11		Primary	03/07/93	Tritium	378 U	437	500	Unfiltered		CEP
RS-11		Primary	02/22/94	Tritium	-80 U	130	280	Unfiltered		LAS
RS-11		Primary	02/15/95	Tritium	30 U	190	260	Unfiltered		LAS
RS-11		Primary	02/07/96	Tritium	-20 U	160	220	Unfiltered		LAS

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-11		Primary	02/04/97	Tritium	117	59	90	Unfiltered		LAS
RS-11		Primary	02/04/98	Tritium	-50.7 U	120	202	Unfiltered		TN
RS-11		Primary	02/06/99	Tritium	80.1 U	110	174	Unfiltered		TN
RS-11		Primary	02/15/00	Tritium	45.4 U	110	191	Unfiltered		TN
RS-11		Primary	02/06/01	Tritium	-11.1 U	98	168	Unfiltered		ES
RS-11		Primary	05/01/03	Tritium	17.6 U	100	172	Unfiltered		ES
RS-11		Primary	05/02/08	Tritium	-53.2 U	92	159	Unfiltered		ES
RS-13		Primary	09/09/89	Tritium	-148 U	121	---	Unfiltered		UST
RS-13		Split	09/09/89	Tritium	1000 U	---	1000	Unfiltered		TMA
RS-14		Primary	09/10/89	Tritium	-116 U	122	---	Unfiltered		UST
RS-14		Duplicate	09/10/89	Tritium	-39.3 U	129	---	Unfiltered		UST
RS-14		Split	09/10/89	Tritium	1000 U	---	1000	Unfiltered		TMA
RS-16		Primary	03/09/92	Tritium	500 U	---	500	Unfiltered		CEP
RS-16		Primary	06/23/93	Tritium	25 U	442	500	Unfiltered		CEP
RS-16		Primary	02/09/95	Tritium	-60 U	190	270	Unfiltered		LAS
RS-16		Primary	02/04/97	Tritium	353	75	92	Unfiltered		LAS
RS-16		Primary	05/27/98	Tritium	-41.3 U	120	205	Unfiltered		TN
RS-16		Primary	02/01/08	Tritium	24.3 U	81	136	Unfiltered		ES
RS-17		Primary	12/10/90	Tritium	61 U	197	500	Unfiltered		IT
RS-17		Primary	12/07/91	Tritium	-5.54 U	211	500	Unfiltered		IT
RS-17		Primary	12/05/92	Tritium	-297 U	499	500	Unfiltered		CEP
RS-18		Primary	03/10/91	Tritium	102	195	10	Unfiltered		IT
RS-18		Duplicate	03/10/91	Tritium	75.8	194	10	Unfiltered		IT
RS-18		Primary	03/04/92	Tritium	-200 U	496	500	Unfiltered		CEP
RS-18		Primary	12/15/92	Tritium	434 U	495	500	Unfiltered		CEP
RS-18		Primary	06/23/93	Tritium	-133 U	500	500	Unfiltered		CEP
RS-18		Primary	11/06/93	Tritium	230	140	220	Unfiltered		LAS
RS-18		Primary	05/04/94	Tritium	230	160	230	Unfiltered		LAS
RS-18		Primary	02/17/95	Tritium	40 U	190	260	Unfiltered		LAS
RS-18		Primary	08/10/95	Tritium	30 U	210	290	Unfiltered		LAS
RS-18		Primary	05/16/96	Tritium	140 U	190	220	Unfiltered		LAS
RS-18		Primary	02/03/97	Tritium	255	69	93	Unfiltered		LAS
RS-18		Primary	02/05/98	Tritium	25.9 U	120	206	Unfiltered		TN
RS-18		Primary	08/05/98	Tritium	138 U	130	212	Unfiltered		TN
RS-18		Primary	05/12/99	Tritium	135 U	110	178	Unfiltered		TN
RS-18		Primary	05/09/00	Tritium	-1.1 U	12	20.6	Unfiltered		TR
RS-18		Primary	02/19/01	Tritium	124 U	120	201	Unfiltered		ES
RS-18		Primary	05/02/03	Tritium	68.7 U	110	177	Unfiltered		ES
RS-18		Primary	02/04/08	Tritium	26.8 U	82	137	Unfiltered		ES
RS-18		Primary	03/04/09	Tritium	107 J	56	88	Unfiltered		ES
RS-18		Primary	04/27/09	Tritium	31.1 U	88	147	Unfiltered		ES
RS-25		Primary	02/25/03	Tritium	45.9 U	110	186	Unfiltered		ES
RS-25		Primary	02/13/08	Tritium	-71.1 U	88	154	Unfiltered		ES
RS-27		Primary	03/04/92	Tritium	-472 U	498	500	Unfiltered		CEP
RS-27		Primary	05/17/95	Tritium	60 U	190	230	Unfiltered		LAS

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-27		Primary	05/07/98	Tritium	-182 U	120	220	Unfiltered		TN
RS-28		Primary	10/19/89	Tritium	47 U	195	---	Unfiltered		UST
RS-28		Primary	12/06/90	Tritium	-25 U	197	500	Unfiltered		IT
RS-28		Primary	03/09/91	Tritium	198 U	192	500	Unfiltered		IT
RS-28		Primary	12/06/91	Tritium	86.9 U	216	500	Unfiltered		IT
RS-28		Primary	03/06/92	Tritium	500 U	---	500	Unfiltered		IT
RS-28		Primary	03/09/92	Tritium	500 U	---	500	Unfiltered		CEP
RS-28		Primary	06/22/93	Tritium	-393 U	500	500	Unfiltered		CEP
RS-28		Primary	11/06/93	Tritium	70 U	120	210	Unfiltered		LAS
RS-28		Primary	05/07/94	Tritium	30 U	130	230	Unfiltered		LAS
RS-28		Primary	05/17/95	Tritium	20 U	180	230	Unfiltered		LAS
RS-28		Primary	11/08/95	Tritium	120 U	210	---	Unfiltered		LAS
RS-28		Primary	05/16/96	Tritium	100 U	180	220	Unfiltered		LAS
RS-28		Primary	05/08/98	Tritium	-168 U	120	209	Unfiltered		TN
RS-28		Primary	11/16/98	Tritium	60.9 U	130	209	Unfiltered		TN
RS-28		Primary	05/05/00	Tritium	-12.3 U	12	20.6	Unfiltered		TR
RS-28		Primary	05/10/01	Tritium	6.37 U	120	202	Unfiltered		ES
RS-28		Primary	02/06/08	Tritium	-91.9 U	86	150	Unfiltered		ES
RS-54		Primary	09/11/93	Tritium	1099	707	500	Unfiltered		CEP
RS-54		Primary	09/29/93	Tritium	-98 U	500	500	Unfiltered		CEP
RS-54		Primary	05/07/94	Tritium	80 U	140	240	Unfiltered		LAS
RS-54		Primary	08/07/94	Tritium	200 U	170	270	Unfiltered		LAS
RS-54		Primary	08/03/95	Tritium	50 U	220	280	Unfiltered		LAS
RS-54		Primary	05/16/96	Tritium	80 U	180	230	Unfiltered		LAS
RS-54		Primary	08/23/96	Tritium	160 U	140	220	Unfiltered		LAS
RS-54		Primary	05/03/97	Tritium	120 U	120	200	Unfiltered		LAS
RS-54		Primary	08/02/97	Tritium	40 U	120	210	Unfiltered		LAS
RS-54		Primary	08/27/97	Tritium	50 U	110	190	Unfiltered		LAS
RS-54		Primary	02/08/98	Tritium	134 U	120	196	Unfiltered		TN
RS-54		Primary	05/28/98	Tritium	69.4 U	120	192	Unfiltered		TN
RS-54		Primary	08/04/98	Tritium	36.8 U	120	210	Unfiltered		TN
RS-54		Primary	02/02/99	Tritium	85.4 U	100	166	Unfiltered		TN
RS-54		Primary	08/18/99	Tritium	66.4 U	96	159	Unfiltered		TN
RS-54		Primary	03/15/00	Tritium	144 U	110	181	Unfiltered		TN
RS-54		Primary	11/01/01	Tritium	64 U	108	249	Unfiltered		DL
RS-54		Primary	03/01/02	Tritium	332 U	58	350	Unfiltered		DL
RS-54		Primary	11/07/02	Tritium	1.83 U	110	186	Unfiltered		ES
RS-54		Primary	02/22/08	Tritium	76.9 U	93	153	Unfiltered		ES
RS-54		Primary	09/04/08	Tritium	-63.5 U	92	158	Unfiltered		ES
SH-04		Primary	09/09/89	Tritium	-75.8 U	124	---	Unfiltered		UST
SH-04		Split	09/09/89	Tritium	1000 U	---	1000	Unfiltered		TMA
SH-05		Primary	11/29/89	Tritium	-202 U	239	---	Unfiltered		UST
SH-06		Primary	11/29/89	Tritium	-12.2 U	249	---	Unfiltered		UST
SH-07		Primary	09/09/89	Tritium	-80.5 U	124	---	Unfiltered		UST
SH-07		Split	09/09/89	Tritium	1000 U	---	1000	Unfiltered		TMA

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
SH-07		Primary	11/29/89	Tritium	-258 U	235	---	Unfiltered		UST
SH-11		Primary	09/09/89	Tritium	-43.1 U	126	---	Unfiltered		UST
SH-11		Split	09/09/89	Tritium	1000 U	---	1000	Unfiltered		TMA
Chatsworth Formation Wells										
HAR-06		Primary	09/14/89	Tritium	45.9 U	133	---	Unfiltered		UST
HAR-06		Split	09/14/89	Tritium	1000 U	---	1000	Unfiltered		TMA
HAR-07		Primary	09/09/89	Tritium	-88.9 U	128	---	Unfiltered		UST
HAR-07		Split	09/09/89	Tritium	1000 U	---	1000	Unfiltered		TMA
HAR-16		Primary	09/09/89	Tritium	-57.4 U	126	---	Unfiltered		UST
HAR-16		Split	09/09/89	Tritium	1000 U	---	1000	Unfiltered		TMA
HAR-18		Primary	09/11/89	Tritium	-68.4 U	133	---	Unfiltered		UST
HAR-18		Split	09/11/89	Tritium	1000 U	---	1000	Unfiltered		TMA
HAR-19		Primary	09/09/89	Tritium	329	137	---	Unfiltered		UST
HAR-19		Split	09/09/89	Tritium	1000 U	---	1000	Unfiltered		TMA
HAR-19		Primary	06/28/90	Tritium	12.9 U	212	---	Unfiltered		UST
HAR-20		Primary	09/09/89	Tritium	-65 U	125	---	Unfiltered		UST
HAR-20		Split	09/09/89	Tritium	1000 U	---	1000	Unfiltered		TMA
HAR-21		Primary	09/09/89	Tritium	-39.2 U	121	---	Unfiltered		UST
HAR-21		Split	09/09/89	Tritium	1000 U	---	1000	Unfiltered		TMA
RD-01		Primary	09/11/89	Tritium	123 U	137	---	Unfiltered		UST
RD-01		Split	09/11/89	Tritium	1000 U	---	1000	Unfiltered		TMA
RD-03		Primary	09/10/89	Tritium	-155 U	122	---	Unfiltered		UST
RD-03		Split	09/10/89	Tritium	1000 U	---	1000	Unfiltered		TMA
RD-03		Primary	09/11/89	Tritium	1000 U	---	1000	Unfiltered		TMA
RD-03		Primary	09/12/89	Tritium	-129 U	117	---	Unfiltered		UST
RD-05B		Primary	09/10/89	Tritium	-10.3 U	128	---	Unfiltered		UST
RD-05B		Split	09/10/89	Tritium	1000 U	---	1000	Unfiltered		TMA
RD-05B		Primary	09/10/91	Tritium	144 U	202	500	Unfiltered		IT
RD-06		Primary	09/10/89	Tritium	-44 U	126	---	Unfiltered		UST
RD-06		Split	09/10/89	Tritium	1000 U	---	1000	Unfiltered		TMA
RD-06		Primary	03/06/91	Tritium	83.1 U	193	500	Unfiltered		IT
RD-06		Primary	09/10/91	Tritium	58.6 U	197	500	Unfiltered		IT
RD-06		Primary	03/10/92	Tritium	500 U	---	500	Unfiltered		CEP
RD-06		Primary	08/06/95	Tritium	23.5	5.9	5.8	Unfiltered		LAS
RD-07		Primary	09/11/89	Tritium	-101 U	128	---	Unfiltered		UST
RD-07		Split	09/11/89	Tritium	1000 U	---	1000	Unfiltered		TMA
RD-07		Primary	12/05/90	Tritium	-8.63 U	201	500	Unfiltered		IT
RD-07		Primary	03/09/91	Tritium	32.3 U	192	500	Unfiltered		IT
RD-07		Primary	12/07/91	Tritium	68.4 U	215	500	Unfiltered		IT
RD-07		Primary	03/06/92	Tritium	500 U	---	500	Unfiltered		CEP
RD-07		Primary	03/07/93	Tritium	342 U	429	500	Unfiltered		CEP
RD-07		Primary	02/27/94	Tritium	100 U	160	280	Unfiltered		LAS
RD-07		Primary	08/09/94	Tritium	-10 U	140	270	Unfiltered		LAS

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-07		Primary	02/09/95	Tritium	90 U	200	260	Unfiltered		LAS
RD-07		Duplicate	02/09/95	Tritium	-30 U	190	260	Unfiltered		LAS
RD-07		Primary	08/04/95	Tritium	-10 U	210	280	Unfiltered		LAS
RD-07		Primary	02/07/96	Tritium	30 U	160	220	Unfiltered		LAS
RD-07		Primary	08/18/96	Tritium	-40 U	110	220	Unfiltered		LAS
RD-07		Primary	02/25/97	Tritium	60 U	120	210	Unfiltered		LAS
RD-07		Primary	08/25/97	Tritium	-9 U	99	190	Unfiltered		LAS
RD-07		Primary	02/05/98	Tritium	16.4 U	120	205	Unfiltered		TN
RD-07		Primary	08/05/98	Tritium	-48.2 U	130	219	Unfiltered		TN
RD-07		Primary	02/06/99	Tritium	59.3 U	100	168	Unfiltered		TN
RD-07		Primary	08/19/99	Tritium	-18.1 U	96	165	Unfiltered		TN
RD-07		Primary	03/16/00	Tritium	-21.1 U	110	181	Unfiltered		TN
RD-07		Primary	08/10/00	Tritium	-33 U	130	225	Unfiltered		TR
RD-07		Primary	02/23/01	Tritium	51.2 U	130	214	Unfiltered		ES
RD-07		Primary	11/07/01	Tritium	0 U	77	264	Unfiltered		DL
RD-07		Primary	02/22/02	Tritium	0 U	200	252	Unfiltered		DL
RD-07		Primary	08/20/02	Tritium	-10.6 U	120	203	Unfiltered		ES
RD-07	Z03	Primary	01/29/03	Tritium	0 U	110	182	Unfiltered		ES
RD-07	Z03	Primary	02/10/03	Tritium	0 U	110	182	Unfiltered		ES
RD-07	Z13	Primary	08/28/03	Tritium	-37.4 U	110	188	Unfiltered		ES
RD-07	Z04	Primary	08/25/04	Tritium	-65.3 U	100	173	Unfiltered		ES
RD-07	Z05	Primary	08/25/04	Tritium	-82 U	97	169	Unfiltered		ES
RD-07	Z06	Primary	08/25/04	Tritium	-44.7 U	99	171	Unfiltered		ES
RD-07	Z07	Primary	08/25/04	Tritium	22 U	100	174	Unfiltered		ES
RD-07	Z08	Primary	08/25/04	Tritium	-88 U	98	171	Unfiltered		ES
RD-07	Z09	Primary	08/25/04	Tritium	-14.8 U	100	170	Unfiltered		ES
RD-07	Z10	Primary	08/25/04	Tritium	-86 U	100	174	Unfiltered		ES
RD-07	Z11	Primary	08/25/04	Tritium	-79.4 U	98	170	Unfiltered		ES
RD-07	Z12	Primary	08/25/04	Tritium	-41.8 U	100	172	Unfiltered		ES
RD-07	Z13	Primary	08/25/04	Tritium	-35.4 U	100	174	Unfiltered		ES
RD-07	Z03	Primary	02/17/05	Tritium	41.8 U	150	255	Unfiltered		ES
RD-07	Z03	Primary	08/31/05	Tritium	23.6 U	160	271	Unfiltered		ES
RD-07	Z03	Primary	02/16/06	Tritium	59 U	90	162	Unfiltered		ES
RD-07	Z03	Primary	08/16/06	Tritium	-24.7 U	95	160	Unfiltered		ES
RD-07	Z03	Primary	02/08/07	Tritium	22.8 U	52	85.7	Unfiltered		ES
RD-07	Z03	Primary	08/09/07	Tritium	-56.7 U	58	98.6	Unfiltered		ES
RD-07	Z03	Primary	02/05/08	Tritium	78.6 U	84	138	Unfiltered		ES
RD-07	Z03	Primary	08/06/08	Tritium	-39.7 U	100	176	Unfiltered		ES
RD-07	Z03	Primary	02/20/09	Tritium	62.5 U	91	151	Unfiltered		ES
RD-07	Z03	Primary	07/16/09	Tritium	-55 U	89	154	Unfiltered		ES
RD-08		Primary	09/11/89	Tritium	-136 U	126	---	Unfiltered		UST
RD-08		Split	09/11/89	Tritium	1000 U	---	1000	Unfiltered		TMA
RD-10		Primary	09/10/89	Tritium	-72.1 U	125	---	Unfiltered		UST
RD-10		Split	09/10/89	Tritium	1000 U	---	1000	Unfiltered		TMA
RD-10		Primary	03/06/91	Tritium	21.2 U	190	500	Unfiltered		IT
RD-10		Primary	03/07/92	Tritium	500 U	---	500	Unfiltered		CEP

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-13		Primary	09/10/89	Tritium	1000 U	---	1000	Unfiltered		TMA
RD-13		Primary	09/12/89	Tritium	-167 U	115	---	Unfiltered		UST
RD-13		Primary	10/17/89	Tritium	-88.1 U	229	---	Unfiltered		UST
RD-13		Primary	12/06/90	Tritium	-28.8 U	197	500	Unfiltered		IT
RD-13		Primary	03/08/91	Tritium	-33.32 U	189	500	Unfiltered		IT
RD-13		Primary	12/10/91	Tritium	-65.4 U	214	500	Unfiltered		IT
RD-13		Primary	03/12/92	Tritium	500 U	---	500	Unfiltered		CEP
RD-13		Primary	03/08/93	Tritium	63 U	327	500	Unfiltered		CEP
RD-13		Primary	08/08/95	Tritium	7.1 U	6.6	8.4	Unfiltered		LAS
RD-13		Primary	08/26/97	Tritium	-60 U	92	190	Unfiltered		LAS
RD-14		Primary	10/18/89	Tritium	-157 U	226	---	Unfiltered		UST
RD-14		Duplicate	10/18/89	Tritium	161 U	202	---	Unfiltered		UST
RD-14		Primary	12/07/90	Tritium	2.77 U	195	500	Unfiltered		IT
RD-14		Primary	03/09/91	Tritium	26.8 U	191	500	Unfiltered		IT
RD-14		Primary	12/06/91	Tritium	-90.6 U	206	500	Unfiltered		IT
RD-14		Primary	03/05/92	Tritium	500 U	---	500	Unfiltered		CEP
RD-14		Primary	03/07/93	Tritium	475 U	499	500	Unfiltered		CEP
RD-14		Primary	02/24/94	Tritium	50 U	150	270	Unfiltered		LAS
RD-14		Primary	02/08/95	Tritium	-50 U	190	190	Unfiltered		LAS
RD-14		Primary	02/16/96	Tritium	-130 U	170	220	Unfiltered		LAS
RD-14		Primary	02/07/97	Tritium	40 U	120	220	Unfiltered		LAS
RD-15		Primary	10/19/89	Tritium	-12.2 U	192	---	Unfiltered		UST
RD-15		Primary	12/07/90	Tritium	49.9 U	198	500	Unfiltered		IT
RD-15		Primary	03/10/91	Tritium	85.5 U	186	500	Unfiltered		IT
RD-15		Primary	12/06/91	Tritium	-26.8 U	210	500	Unfiltered		IT
RD-15		Primary	03/11/92	Tritium	500 U	---	500	Unfiltered		CEP
RD-15		Split	03/11/92	Tritium	100 U	---	100	Unfiltered		TEL
RD-15		Primary	05/10/01	Tritium	75.2 U	120	199	Unfiltered		ES
RD-15		Primary	03/06/02	Tritium	0 U	78	259	Unfiltered		DL
RD-15		Primary	02/26/03	Tritium	68.7 U	120	194	Unfiltered		ES
RD-15		Primary	02/24/04	Tritium	-52.6 U	110	185	Unfiltered		ES
RD-15		Primary	08/09/04	Tritium	0.984 J	0.21	---	Unfiltered		ES
RD-15		Primary	02/14/05	Tritium	-15 U	120	200	Unfiltered		ES
RD-15		Primary	02/16/06	Tritium	81.2 U	100	164	Unfiltered		ES
RD-15		Split	02/16/06	Tritium	29.5 U	154	330	Unfiltered		STL
RD-15		Primary	02/06/07	Tritium	26.4 U	54	89	Unfiltered		ES
RD-15		Primary	02/20/08	Tritium	-52.2 U	87	152	Unfiltered		ES
RD-15		Primary	02/24/09	Tritium	61.2 U	91	151	Unfiltered		ES
RD-15		Split	02/24/09	Tritium	-47.6 U	87.7	155	Unfiltered		GEL
RD-15		Primary	07/24/09	Tritium	81.5 U	85	140	Unfiltered		ES
RD-15		Duplicate	07/24/09	Tritium	102 U	87	140	Unfiltered		ES
RD-16		Primary	10/25/89	Tritium	176 U	222	---	Unfiltered		UST
RD-16		Primary	12/07/90	Tritium	56.3 U	198	500	Unfiltered		IT
RD-16		Primary	03/09/91	Tritium	98.1 U	187	500	Unfiltered		IT
RD-16		Primary	12/05/91	Tritium	67.4 U	219	500	Unfiltered		IT
RD-16		Primary	06/06/92	Tritium	564	529	500	Unfiltered		CEP

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-16		Primary	05/27/98	Tritium	-160 U	120	211	Unfiltered		TN
RD-17		Primary	10/18/89	Tritium	77.8 U	243	---	Unfiltered		UST
RD-17		Duplicate	10/18/89	Tritium	14.1 U	194	---	Unfiltered		UST
RD-17		Primary	12/04/90	Tritium	108 U	199	500	Unfiltered		IT
RD-17		Primary	03/05/91	Tritium	1.85 U	189	500	Unfiltered		IT
RD-17		Primary	12/07/91	Tritium	-44.4 U	209	500	Unfiltered		IT
RD-17		Split	12/07/91	Tritium	500 U	---	500	Unfiltered		CEP
RD-17		Primary	03/04/92	Tritium	-98 U	498	500	Unfiltered		CEP
RD-17		Primary	03/05/93	Tritium	160 U	300	500	Unfiltered		CEP
RD-17		Primary	02/26/94	Tritium	-70 U	130	280	Unfiltered		LAS
RD-17		Primary	02/08/95	Tritium	-10 U	200	260	Unfiltered		LAS
RD-17		Primary	02/04/96	Tritium	-30 U	150	220	Unfiltered		LAS
RD-17		Primary	02/08/97	Tritium	10 U	120	220	Unfiltered		LAS
RD-17		Primary	02/04/98	Tritium	-80.3 U	110	201	Unfiltered		TN
RD-17		Primary	02/08/99	Tritium	-13.1 U	120	206	Unfiltered		TN
RD-17		Primary	02/21/00	Tritium	62.8 U	120	193	Unfiltered		TN
RD-17		Primary	02/14/01	Tritium	71.9 U	120	206	Unfiltered		ES
RD-17		Primary	03/01/02	Tritium	264 U	58	350	Unfiltered		DL
RD-17		Primary	02/24/03	Tritium	-52.5 U	110	188	Unfiltered		ES
RD-17		Primary	02/23/04	Tritium	-21.8 U	110	185	Unfiltered		ES
RD-17		Primary	02/15/05	Tritium	-1.87 U	120	198	Unfiltered		ES
RD-17		Primary	02/16/06	Tritium	87.6 U	100	164	Unfiltered		ES
RD-17		Primary	02/06/07	Tritium	-8.88 U	50	83.6	Unfiltered		ES
RD-17		Split	02/06/07	Tritium	24.5 U	81	108	Unfiltered		STL
RD-17		Primary	02/22/08	Tritium	-23.8 U	89	152	Unfiltered		ES
RD-17		Primary	02/25/09	Tritium	106 U	93	151	Unfiltered		ES
RD-17		Primary	07/27/09	Tritium	96.4 U	86	139	Unfiltered		ES
RD-18		Primary	10/26/89	Tritium	53.6 U	215	---	Unfiltered		UST
RD-18		Primary	12/08/90	Tritium	26.8 U	195	500	Unfiltered		IT
RD-18		Primary	03/09/91	Tritium	201 U	192	500	Unfiltered		IT
RD-18		Primary	12/11/91	Tritium	-18.3 U	217	500	Unfiltered		IT
RD-18		Primary	03/12/92	Tritium	500 U	---	500	Unfiltered		CEP
RD-18		Primary	02/22/94	Tritium	40 U	150	270	Unfiltered		LAS
RD-18		Primary	02/17/95	Tritium	-90 U	170	260	Unfiltered		LAS
RD-18		Primary	02/05/96	Tritium	20 U	160	220	Unfiltered		LAS
RD-18		Primary	02/06/97	Tritium	100	60	95	Unfiltered		LAS
RD-18		Primary	02/06/98	Tritium	13.7 U	110	194	Unfiltered		TN
RD-19		Primary	10/26/89	Tritium	27.3 U	214	---	Unfiltered		UST
RD-19		Primary	12/08/90	Tritium	-20.3 U	193	500	Unfiltered		IT
RD-19		Primary	03/08/91	Tritium	11.5 U	182	500	Unfiltered		IT
RD-19		Duplicate	03/08/91	Tritium	225 U	193	500	Unfiltered		IT
RD-19		Primary	12/11/91	Tritium	-22.1 U	217	500	Unfiltered		IT
RD-19		Primary	03/12/92	Tritium	500 U	---	500	Unfiltered		CEP
RD-19		Primary	03/08/93	Tritium	262 U	499	500	Unfiltered		CEP
RD-19		Primary	02/26/94	Tritium	-80 U	130	280	Unfiltered		LAS
RD-19		Primary	02/15/95	Tritium	-40 U	180	260	Unfiltered		LAS

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-19		Primary	02/06/96	Tritium	-40 U	150	220	Unfiltered		LAS
RD-19		Primary	02/07/97	Tritium	-60 U	100	210	Unfiltered		LAS
RD-19		Primary	02/06/98	Tritium	49.9 U	120	193	Unfiltered		TN
RD-20		Primary	10/17/89	Tritium	-72.1 U	230	---	Unfiltered		UST
RD-20		Primary	12/07/90	Tritium	49.9 U	197	500	Unfiltered		IT
RD-20		Primary	12/10/90	Tritium	-26.8 U	192	500	Unfiltered		IT
RD-20		Primary	03/05/91	Tritium	132 U	196	500	Unfiltered		IT
RD-20		Primary	12/10/91	Tritium	20.2 U	219	500	Unfiltered		IT
RD-20		Primary	03/04/92	Tritium	-274 U	486	500	Unfiltered		CEP
RD-20		Primary	02/22/94	Tritium	-120 U	120	280	Unfiltered		LAS
RD-20		Primary	02/16/95	Tritium	-40 U	180	260	Unfiltered		LAS
RD-20		Duplicate	02/16/95	Tritium	-50 U	180	260	Unfiltered		LAS
RD-20		Primary	02/04/96	Tritium	-110 U	150	220	Unfiltered		LAS
RD-20		Primary	02/08/97	Tritium	30 U	120	220	Unfiltered		LAS
RD-20		Primary	02/04/98	Tritium	-16.4 U	120	205	Unfiltered		TN
RD-21		Primary	10/20/89	Tritium	-100 U	229	---	Unfiltered		UST
RD-21		Duplicate	10/20/89	Tritium	35.7 U	194	---	Unfiltered		UST
RD-21		Primary	12/03/90	Tritium	182 U	202	500	Unfiltered		IT
RD-21		Primary	03/08/91	Tritium	119 U	188	500	Unfiltered		IT
RD-21		Primary	12/05/91	Tritium	184 U	225	500	Unfiltered		IT
RD-21		Primary	03/04/92	Tritium	-256 U	497	500	Unfiltered		CEP
RD-21		Primary	03/06/93	Tritium	314 U	335	500	Unfiltered		CEP
RD-21		Primary	06/22/93	Tritium	-570 U	500	500	Unfiltered		CEP
RD-21		Primary	08/06/93	Tritium	560	510	500	Unfiltered		CEP
RD-21		Primary	11/06/93	Tritium	0 U	120	220	Unfiltered		LAS
RD-21		Primary	02/25/94	Tritium	50 U	150	270	Unfiltered		LAS
RD-21		Primary	08/08/94	Tritium	-150 U	110	260	Unfiltered		LAS
RD-21		Primary	02/08/95	Tritium	40 U	210	260	Unfiltered		LAS
RD-21		Primary	08/31/95	Tritium	-60 U	220	300	Unfiltered		LAS
RD-21		Primary	02/16/96	Tritium	-110 U	170	220	Unfiltered		LAS
RD-21		Primary	08/18/96	Tritium	-40 U	110	220	Unfiltered		LAS
RD-21		Primary	02/06/97	Tritium	117	61	94	Unfiltered		LAS
RD-21		Primary	02/09/98	Tritium	13.7 U	110	194	Unfiltered		TN
RD-21		Primary	02/16/99	Tritium	0 U	120	207	Unfiltered		TN
RD-21		Primary	03/15/00	Tritium	25 U	110	181	Unfiltered		TN
RD-21		Primary	10/24/01	Tritium	0 U	106	249	Unfiltered		DL
RD-21		Primary	03/06/02	Tritium	0 U	77	259	Unfiltered		DL
RD-21	Z02	Primary	02/25/03	Tritium	86.9 U	120	192	Unfiltered		ES
RD-21	Z02	Primary	11/04/04	Tritium	51.1 U	96	159	Unfiltered		ES
RD-21	Z02	Primary	02/16/05	Tritium	-3.49 U	150	256	Unfiltered		ES
RD-21	Z02	Primary	02/16/06	Tritium	85.1 U	110	164	Unfiltered		ES
RD-21	Z02	Primary	02/08/07	Tritium	24.8 U	51	85	Unfiltered		ES
RD-21	Z02	Primary	05/21/07	Tritium	-13.6 U	49	82.2	Unfiltered		ES
RD-21	Z02	Primary	02/05/08	Tritium	-30 U	82	140	Unfiltered		ES
RD-21	Z04	Primary	02/24/09	Tritium	93.7 U	92	151	Unfiltered		ES
RD-21	Z02	Primary	07/16/09	Tritium	32.5 U	88	147	Unfiltered		ES

See last page of table for notes and abbreviations.

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RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-22		Primary	10/19/89	Tritium	-47.9 U	189	---	Unfiltered		UST
RD-22		Primary	12/04/90	Tritium	41.3 U	195	500	Unfiltered		IT
RD-22		Duplicate	12/04/90	Tritium	116 U	198	500	Unfiltered		IT
RD-22		Primary	03/11/91	Tritium	-90.5 U	186	500	Unfiltered		IT
RD-22		Primary	12/06/91	Tritium	-26.8 U	210	500	Unfiltered		IT
RD-22		Primary	06/05/92	Tritium	75 U	517	500	Unfiltered		CEP
RD-22		Primary	03/20/93	Tritium	-627 U	490	500	Unfiltered		CEP
RD-22		Primary	06/22/93	Tritium	118 U	500	500	Unfiltered		CEP
RD-22		Primary	08/05/93	Tritium	440 U	500	500	Unfiltered		CEP
RD-22		Primary	11/21/93	Tritium	-100 U	110	240	Unfiltered		LAS
RD-22		Primary	02/24/94	Tritium	70 U	150	270	Unfiltered		LAS
RD-22		Primary	08/09/94	Tritium	20 U	140	260	Unfiltered		LAS
RD-22		Primary	02/17/95	Tritium	-20 U	180	260	Unfiltered		LAS
RD-22		Primary	08/29/95	Tritium	100 U	240	300	Unfiltered		LAS
RD-22		Primary	02/16/96	Tritium	20 U	190	230	Unfiltered		LAS
RD-22		Primary	08/18/96	Tritium	-20 U	110	220	Unfiltered		LAS
RD-22		Primary	02/26/97	Tritium	140 U	130	210	Unfiltered		LAS
RD-22		Primary	05/28/98	Tritium	43.7 U	110	184	Unfiltered		TN
RD-22		Primary	02/17/99	Tritium	41.5 U	120	207	Unfiltered		TN
RD-22		Primary	02/06/00	Tritium	-139 U	120	211	Unfiltered		TN
RD-22		Primary	02/16/01	Tritium	-6.18 U	120	200	Unfiltered		ES
RD-22		Primary	02/20/02	Tritium	228 U	80	252	Unfiltered		DL
RD-22	Z02	Primary	02/24/03	Tritium	16.5 U	110	192	Unfiltered		ES
RD-22	Z02	Primary	11/12/04	Tritium	-24.9 U	130	231	Unfiltered		ES
RD-22	Z02	Primary	02/17/05	Tritium	-24.2 U	150	253	Unfiltered		ES
RD-22	Z02	Primary	08/31/05	Tritium	50.9 U	160	266	Unfiltered		ES
RD-22	Z02	Primary	02/15/06	Tritium	40.4 U	99	165	Unfiltered		ES
RD-22	Z02	Primary	02/07/07	Tritium	36.1 U	51	85	Unfiltered		ES
RD-22	Z02	Primary	02/05/08	Tritium	-19.6 U	81	138	Unfiltered		ES
RD-22	Z02	Primary	02/23/09	Tritium	4.08 U	90	151	Unfiltered		ES
RD-22	Z02	Primary	07/16/09	Tritium	-126 U	87	153	Unfiltered		ES
RD-23		Primary	10/20/89	Tritium	589	267	---	Unfiltered		UST
RD-23		Primary	06/29/90	Tritium	129 U	218	---	Unfiltered		UST
RD-23		Primary	12/05/90	Tritium	88.3 U	206	---	Unfiltered		IT
RD-23		Primary	03/11/91	Tritium	106 U	195	500	Unfiltered		IT
RD-23		Duplicate	03/11/91	Tritium	64.7 U	193	500	Unfiltered		IT
RD-23		Primary	12/05/91	Tritium	256 U	229	500	Unfiltered		IT
RD-23		Primary	03/04/92	Tritium	-66 U	517	---	Unfiltered		CEP
RD-23		Primary	03/21/93	Tritium	455 U	499	500	Unfiltered		CEP
RD-23		Primary	06/23/93	Tritium	1574	702	500	Unfiltered		CEP
RD-23		Reanalysis of Primary	06/23/93	Tritium	672 U	735	---	Unfiltered		CEP
RD-23		Primary	08/06/93	Tritium	1108	514	500	Unfiltered		CEP
RD-23		Reanalysis of Primary	08/06/93	Tritium	406 U	500	500	Unfiltered		CEP
RD-23		Primary	02/25/94	Tritium	850	250	270	Unfiltered		CEP
RD-23		Primary	08/08/94	Tritium	500	210	270	Unfiltered		LAS

See last page of table for notes and abbreviations.

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RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-23		Primary	11/22/94	Tritium	630	250	---	Unfiltered		LAS
RD-23		Primary	02/05/95	Tritium	340	230	260	Unfiltered		LAS
RD-23		Primary	08/03/95	Tritium	400	250	280	Unfiltered		LAS
RD-23		Primary	02/16/96	Tritium	430	210	220	Unfiltered		LAS
RD-23		Primary	08/18/96	Tritium	450	180	220	Unfiltered		LAS
RD-23		Primary	02/27/97	Tritium	350	150	210	Unfiltered		LAS
RD-23		Primary	02/07/98	Tritium	234	120	195	Unfiltered		TN
RD-23		Primary	02/08/99	Tritium	294	130	205	Unfiltered		TN
RD-23		Primary	02/05/00	Tritium	64.4 U	120	204	Unfiltered		TN
RD-23		Primary	10/25/01	Tritium	46 U	108	249	Unfiltered		DL
RD-23		Primary	03/01/02	Tritium	304 U	59	350	Unfiltered		DL
RD-23	Z01	Primary	02/26/03	Tritium	116 U	120	188	Unfiltered		ES
RD-23	Z02	Primary	11/03/04	Tritium	-29.3 U	93	159	Unfiltered		ES
RD-23	Z02	Primary	02/14/05	Tritium	0 U	150	258	Unfiltered		ES
RD-23	Z03	Primary	02/17/06	Tritium	148 U	94	163	Unfiltered		ES
RD-23	Z03	Primary	02/07/07	Tritium	13.4 U	50	84	Unfiltered		ES
RD-23	Z03	Primary	02/06/08	Tritium	-50.8 U	85	146	Unfiltered		ES
RD-23	Z02	Primary	02/24/09	Tritium	54.4 U	91	151	Unfiltered		ES
RD-23	Z03	Primary	07/16/09	Tritium	-135 U	87	154	Unfiltered		ES
RD-24		Primary	09/12/89	Tritium	-22 U	122	---	Unfiltered		UST
RD-24		Split	09/12/89	Tritium	1000 U	---	1000	Unfiltered		TMA
RD-24		Primary	10/17/89	Tritium	-89 U	229	---	Unfiltered		UST
RD-24		Primary	12/05/90	Tritium	37.4 U	204	500	Unfiltered		IT
RD-24		Primary	03/06/91	Tritium	158 U	197	500	Unfiltered		IT
RD-24		Primary	12/11/91	Tritium	-33.7 U	216	500	Unfiltered		IT
RD-24		Primary	03/06/92	Tritium	500 U	---	500	Unfiltered		CEP
RD-24		Primary	02/23/94	Tritium	230 U	180	280	Unfiltered		LAS
RD-24		Primary	08/08/94	Tritium	80 U	150	260	Unfiltered		LAS
RD-24		Primary	02/16/95	Tritium	320	220	250	Unfiltered		LAS
RD-24		Primary	08/10/95	Tritium	170 U	230	270	Unfiltered		LAS
RD-24		Primary	02/07/96	Tritium	400	190	220	Unfiltered		LAS
RD-24		Primary	08/07/96	Tritium	320	160	220	Unfiltered		LAS
RD-24		Primary	02/07/97	Tritium	500	180	220	Unfiltered		LAS
RD-24		Primary	08/04/97	Tritium	390	160	210	Unfiltered		LAS
RD-24		Primary	02/18/98	Tritium	358	130	193	Unfiltered		TN
RD-24		Primary	05/05/98	Tritium	161 U	130	206	Unfiltered		TN
RD-24		Primary	08/04/98	Tritium	299	140	220	Unfiltered		TN
RD-24		Primary	02/02/99	Tritium	220	120	182	Unfiltered		TN
RD-24		Primary	08/11/99	Tritium	401	110	157	Unfiltered		TN
RD-24		Primary	02/03/00	Tritium	317	130	208	Unfiltered		TN
RD-24		Primary	08/04/00	Tritium	267	140	218	Unfiltered		TR
RD-24		Primary	02/06/01	Tritium	245	110	168	Unfiltered		ES
RD-24		Primary	10/25/01	Tritium	493	113	249	Unfiltered		DL
RD-24		Primary	02/25/02	Tritium	285 U	58	350	Unfiltered		DL
RD-24		Primary	11/06/02	Tritium	162 U	110	182	Unfiltered		ES
RD-24		Primary	02/12/03	Tritium	257	120	193	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-24		Primary	11/14/03	Tritium	185 U	120	194	Unfiltered		ES
RD-24		Split	11/14/03	Tritium	237	65	82.4	Unfiltered		STL
RD-24		Primary	02/23/04	Tritium	65 U	110	179	Unfiltered		ES
RD-24		Primary	08/26/04	Tritium	140 U	110	174	Unfiltered		ES
RD-24		Primary	02/24/05	Tritium	260	120	191	Unfiltered		ES
RD-24		Primary	09/06/05	Tritium	140 U	110	178	Unfiltered		ES
RD-24		Primary	02/15/06	Tritium	187 J	100	162	Unfiltered		ES
RD-24		Primary	08/10/06	Tritium	47.4 U	97	162	Unfiltered		ES
RD-24		Primary	05/24/07	Tritium	69.2 U	50	81.2	Unfiltered		ES
RD-24		Primary	08/08/07	Tritium	25.5 U	59	97.7	Unfiltered		ES
RD-24		Primary	02/13/08	Tritium	-26.4 U	90	154	Unfiltered		ES
RD-24		Primary	10/27/09	Tritium	-59 U	65	112	Unfiltered		TAD
RD-24		Split	10/27/09	Tritium	110 U	110	170	Unfiltered		TAI
RD-25		Primary	09/12/89	Tritium	-162 U	116	---	Unfiltered		UST
RD-25		Split	09/12/89	Tritium	1000 U	---	1000	Unfiltered		TMA
RD-25		Primary	10/20/89	Tritium	-99.3 U	229	---	Unfiltered		UST
RD-25		Primary	12/05/90	Tritium	17.3 U	202	500	Unfiltered		IT
RD-25		Primary	03/06/91	Tritium	-45.3 U	187	500	Unfiltered		IT
RD-25		Primary	12/10/91	Tritium	93.3 U	222	500	Unfiltered		IT
RD-25		Primary	03/06/92	Tritium	500 U	---	500	Unfiltered		CEP
RD-25		Primary	03/17/93	Tritium	257 U	427	500	Unfiltered		CEP
RD-25		Primary	02/28/94	Tritium	-40 U	130	270	Unfiltered		LAS
RD-25		Primary	08/17/94	Tritium	-30 U	130	260	Unfiltered		LAS
RD-25		Primary	02/09/95	Tritium	-40 U	190	270	Unfiltered		LAS
RD-25		Primary	08/18/95	Tritium	-100 U	200	300	Unfiltered		LAS
RD-25		Primary	02/06/96	Tritium	-20 U	150	210	Unfiltered		LAS
RD-25		Primary	08/20/96	Tritium	50 U	120	220	Unfiltered		LAS
RD-25		Primary	02/07/97	Tritium	240	150	220	Unfiltered		LAS
RD-25		Primary	08/21/97	Tritium	-30 U	110	210	Unfiltered		LAS
RD-25		Primary	02/05/98	Tritium	-59 U	110	198	Unfiltered		TN
RD-25		Primary	08/18/98	Tritium	-66.5 U	120	216	Unfiltered		TN
RD-25		Primary	02/16/99	Tritium	81 U	120	202	Unfiltered		TN
RD-25		Primary	08/19/99	Tritium	-20.3 U	98	168	Unfiltered		TN
RD-25		Primary	02/16/00	Tritium	23.4 U	110	187	Unfiltered		TN
RD-25		Primary	08/09/00	Tritium	3.69 U	130	226	Unfiltered		TR
RD-25		Primary	02/07/01	Tritium	-48.4 U	98	170	Unfiltered		ES
RD-25		Primary	10/25/01	Tritium	0 U	78	264	Unfiltered		DL
RD-25		Primary	03/07/02	Tritium	0 U	78	259	Unfiltered		DL
RD-25		Primary	11/06/02	Tritium	-95.2 U	100	182	Unfiltered		ES
RD-25		Primary	02/24/03	Tritium	-31.8 U	110	197	Unfiltered		ES
RD-25		Primary	11/13/03	Tritium	9.52 U	120	197	Unfiltered		ES
RD-25		Primary	02/23/04	Tritium	259	120	183	Unfiltered		ES
RD-25		Split	02/23/04	Tritium	244	72.2	84.7	Unfiltered		STL
RD-26		Primary	10/20/89	Tritium	45.9 U	237	---	Unfiltered		UST
RD-26		Primary	12/04/90	Tritium	209 U	204	500	Unfiltered		IT
RD-26		Primary	03/07/91	Tritium	110 U	187	500	Unfiltered		IT

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-26		Primary	03/11/92	Tritium	500 U	---	500	Unfiltered		CEP
RD-27		Primary	10/19/89	Tritium	2.82 U	193	---	Unfiltered		UST
RD-27		Primary	12/04/90	Tritium	90.2 U	197	500	Unfiltered		IT
RD-27		Primary	03/07/91	Tritium	27.9 U	183	500	Unfiltered		IT
RD-27		Primary	12/06/91	Tritium	-48.1 U	209	500	Unfiltered		IT
RD-27		Primary	03/09/92	Tritium	500 U	---	500	Unfiltered		CEP
RD-27		Primary	03/08/93	Tritium	293 U	322	500	Unfiltered		CEP
RD-27		Primary	08/09/93	Tritium	324 U	500	500	Unfiltered		CEP
RD-27		Primary	02/28/94	Tritium	0 U	140	280	Unfiltered		LAS
RD-27		Primary	08/18/94	Tritium	-110 U	120	260	Unfiltered		LAS
RD-27		Primary	02/17/95	Tritium	-60 U	180	260	Unfiltered		LAS
RD-27		Primary	08/18/95	Tritium	80 U	220	300	Unfiltered		LAS
RD-27		Primary	02/05/96	Tritium	-30 U	150	210	Unfiltered		LAS
RD-27		Primary	08/19/96	Tritium	240	150	210	Unfiltered		LAS
RD-27		Primary	02/05/97	Tritium	87 U	58	93	Unfiltered		LAS
RD-27		Primary	08/27/97	Tritium	-16 U	98	190	Unfiltered		LAS
RD-27		Primary	02/04/98	Tritium	11.4 U	120	198	Unfiltered		TN
RD-27		Primary	08/07/98	Tritium	-83.9 U	130	218	Unfiltered		TN
RD-27		Primary	02/16/99	Tritium	3.33 U	120	199	Unfiltered		TN
RD-27		Primary	08/17/99	Tritium	-48 U	94	162	Unfiltered		TN
RD-27		Primary	02/21/00	Tritium	31.2 U	110	192	Unfiltered		TN
RD-27		Primary	08/04/00	Tritium	73.6 U	130	220	Unfiltered		TR
RD-27		Primary	02/14/01	Tritium	8.32 U	120	202	Unfiltered		ES
RD-27		Primary	10/26/01	Tritium	30 U	107	202	Unfiltered		DL
RD-27		Primary	03/06/02	Tritium	0 U	77	259	Unfiltered		DL
RD-27		Primary	08/22/02	Tritium	-24.9 U	120	199	Unfiltered		ES
RD-27		Primary	02/21/03	Tritium	29.8 U	110	193	Unfiltered		ES
RD-27		Primary	11/14/03	Tritium	-11.2 U	110	194	Unfiltered		ES
RD-27		Split	11/14/03	Tritium	9.54 U	48.9	85	Unfiltered		STL
RD-27		Primary	02/23/04	Tritium	43.1 U	110	183	Unfiltered		ES
RD-27		Primary	08/10/04	Tritium	-27.9 U	94	162	Unfiltered		ES
RD-27		Primary	02/17/05	Tritium	-56.1 U	120	199	Unfiltered		ES
RD-27		Primary	08/24/05	Tritium	3.69 U	150	261	Unfiltered		ES
RD-27		Primary	02/20/06	Tritium	-6.14 U	99	167	Unfiltered		ES
RD-27		Primary	08/25/06	Tritium	-14.2 U	100	177	Unfiltered		ES
RD-27		Primary	02/14/07	Tritium	-38.6 U	57	95.8	Unfiltered		ES
RD-27		Split	02/14/07	Tritium	-11 U	74	106	Unfiltered		STL
RD-27		Primary	08/09/07	Tritium	-46.4 U	58	98.6	Unfiltered		ES
RD-27		Reanalysis of Primary	08/09/07	Tritium	-52.4 U	59	100	Unfiltered		ES
RD-27		Primary	03/05/08	Tritium	82.4 U	94	155	Unfiltered		ES
RD-27		Primary	09/04/08	Tritium	-88.1 U	90	156	Unfiltered		ES
RD-27		Primary	03/06/09	Tritium	121 U	100	170	Unfiltered		ES
RD-27		Primary	07/30/09	Tritium	64.9 U	84	138	Unfiltered		ES
RD-27		Duplicate	07/30/09	Tritium	81.2 U	84	138	Unfiltered		ES
RD-28		Primary	09/13/89	Tritium	665	149	---	Unfiltered		UST

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-28		Split	09/13/89	Tritium	1000 U	---	1000	Unfiltered		TMA
RD-28		Primary	10/19/89	Tritium	699	234	---	Unfiltered		UST
RD-28		Primary	03/27/90	Tritium	819	236	---	Unfiltered		UST
RD-28		Primary	07/01/90	Tritium	612	244	---	Unfiltered		UST
RD-28		Primary	09/16/90	Tritium	814	242	---	Unfiltered		UST
RD-28		Duplicate	09/16/90	Tritium	839	242	---	Unfiltered		UST
RD-28		Primary	12/05/90	Tritium	567	232	500	Unfiltered		IT
RD-28		Primary	03/06/91	Tritium	638	223	500	Unfiltered		IT
RD-28		Primary	06/10/91	Tritium	431 U	227	500	Unfiltered		IT
RD-28		Primary	09/11/91	Tritium	620	247	500	Unfiltered		IT
RD-28		Primary	12/10/91	Tritium	575	250	500	Unfiltered		IT
RD-28		Split	12/10/91	Tritium	500 U	---	500	Unfiltered		CEP
RD-28		Primary	03/06/92	Tritium	420 U	110	500	Unfiltered		TEL
RD-28		Split	03/06/92	Tritium	500 U	---	500	Unfiltered		CEP
RD-28		Primary	06/10/92	Tritium	1025	505	500	Unfiltered		CEP
RD-28		Split	06/10/92	Tritium	540	120	500	Unfiltered		TEL
RD-28		Primary	09/16/92	Tritium	300 U	500	500	Unfiltered		CEP
RD-28		Split	09/16/92	Tritium	450 U	290	500	Unfiltered		BL
RD-28		Primary	12/07/92	Tritium	465 U	500	500	Unfiltered		CEP
RD-28		Primary	03/17/93	Tritium	0 U	490	500	Unfiltered		CEP
RD-28		Primary	08/05/93	Tritium	1684	522	500	Unfiltered		CEP
RD-28		Reanalysis of Primary	08/05/93	Tritium	369 U	500	500	Unfiltered		CEP
RD-28		Primary	02/24/94	Tritium	490	210	270	Unfiltered		LAS
RD-28		Primary	08/17/94	Tritium	870	240	260	Unfiltered		LAS
RD-28		Primary	02/09/95	Tritium	380	230	260	Unfiltered		LAS
RD-28		Primary	08/18/95	Tritium	680	280	300	Unfiltered		LAS
RD-28		Primary	02/06/96	Tritium	430	190	210	Unfiltered		LAS
RD-28		Primary	08/20/96	Tritium	450	170	220	Unfiltered		LAS
RD-28		Primary	02/06/97	Tritium	496	83	92	Unfiltered		LAS
RD-28		Primary	08/28/97	Tritium	320	140	180	Unfiltered		LAS
RD-28		Primary	02/05/98	Tritium	267	130	199	Unfiltered		TN
RD-28		Primary	08/18/98	Tritium	50.6 U	130	210	Unfiltered		TN
RD-28		Primary	02/16/99	Tritium	55.3 U	120	194	Unfiltered		TN
RD-28		Primary	11/03/99	Tritium	-50 U	98	169	Unfiltered		TN
RD-28		Primary	02/16/00	Tritium	744	140	188	Unfiltered		TN
RD-28		Primary	08/09/00	Tritium	916	150	188	Unfiltered		TR
RD-28		Primary	02/07/01	Tritium	1100	130	168	Unfiltered		ES
RD-28		Primary	10/25/01	Tritium	0 U	100	236	Unfiltered		DL
RD-28		Primary	02/25/02	Tritium	324 U	63	350	Unfiltered		DL
RD-28		Primary	11/06/02	Tritium	1280	140	181	Unfiltered		ES
RD-28		Primary	02/24/03	Tritium	756	130	184	Unfiltered		ES
RD-28		Primary	11/14/03	Tritium	1430	210	197	Unfiltered		ES
RD-28		Primary	02/23/04	Tritium	1120	180	189	Unfiltered		ES
RD-28		Split	02/23/04	Tritium	1120	131	84.1	Unfiltered		STL
RD-28		Primary	08/13/04	Tritium	102 U	100	170	Unfiltered		ES
RD-28		Primary	08/18/04	Tritium	15400	1600	173	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-29		Primary	10/18/89	Tritium	-101 U	230	---	Unfiltered		UST
RD-29		Primary	12/06/90	Tritium	55.7 U	201	500	Unfiltered		IT
RD-29		Primary	03/05/91	Tritium	105 U	194	500	Unfiltered		IT
RD-29		Primary	12/10/91	Tritium	89.5 U	222	500	Unfiltered		IT
RD-29		Split	12/10/91	Tritium	500 U	---	500	Unfiltered		CEP
RD-29		Primary	03/03/92	Tritium	-447 U	520	500	Unfiltered		CEP
RD-29		Primary	03/05/93	Tritium	366 U	499	500	Unfiltered		CEP
RD-29		Primary	08/08/93	Tritium	345 U	500	500	Unfiltered		CEP
RD-29		Primary	02/26/94	Tritium	70 U	150	270	Unfiltered		LAS
RD-29		Primary	08/17/94	Tritium	10 U	260	260	Unfiltered		LAS
RD-29		Primary	05/09/01	Tritium	19 U	120	201	Unfiltered		ES
RD-29		Primary	05/03/02	Tritium	56 U	118	366	Unfiltered		DL
RD-29		Primary	05/13/03	Tritium	-12.4 U	100	174	Unfiltered		ES
RD-29		Primary	02/24/04	Tritium	-120 U	110	187	Unfiltered		ES
RD-29		Primary	02/24/05	Tritium	57.1 U	110	188	Unfiltered		ES
RD-29		Primary	08/25/05	Tritium	-475 U	850	1500	Unfiltered		ES
RD-29		Primary	02/16/06	Tritium	58.6 U	100	168	Unfiltered		ES
RD-29		Primary	02/07/07	Tritium	27.4 U	52	86	Unfiltered		ES
RD-29		Primary	02/05/08	Tritium	91.7 U	85	139	Unfiltered		ES
RD-29		Primary	03/05/09	Tritium	99.2 J	55	87.6	Unfiltered		ES
RD-29		Duplicate	03/05/09	Tritium	126 J	72	87.8	Unfiltered		ES
RD-29		Primary	07/24/09	Tritium	55.6 U	84	140	Unfiltered		ES
RD-30		Primary	10/19/89	Tritium	108 U	199	---	Unfiltered		UST
RD-30		Primary	12/06/90	Tritium	34.6 U	200	500	Unfiltered		IT
RD-30		Primary	03/09/91	Tritium	89.6 U	195	500	Unfiltered		IT
RD-30		Primary	09/09/91	Tritium	20.3 U	199	500	Unfiltered		IT
RD-30		Primary	12/06/91	Tritium	28.7 U	213	500	Unfiltered		IT
RD-30		Primary	06/03/92	Tritium	-76 U	518	500	Unfiltered		CEP
RD-30		Split	06/03/92	Tritium	200 U	---	200	Unfiltered		TEL
RD-30		Primary	03/21/93	Tritium	-686 U	499	500	Unfiltered		CEP
RD-30		Primary	02/26/94	Tritium	70 U	150	270	Unfiltered		LAS
RD-30		Primary	08/09/94	Tritium	-30 U	130	260	Unfiltered		LAS
RD-30		Primary	02/08/95	Tritium	10 U	200	270	Unfiltered		LAS
RD-30		Primary	08/19/95	Tritium	30 U	220	300	Unfiltered		LAS
RD-30		Primary	02/28/96	Tritium	-40 U	180	220	Unfiltered		LAS
RD-30		Primary	08/20/96	Tritium	40 U	120	220	Unfiltered		LAS
RD-30		Primary	02/25/97	Tritium	40 U	110	200	Unfiltered		LAS
RD-30		Primary	08/27/97	Tritium	50 U	110	190	Unfiltered		LAS
RD-30		Primary	05/28/98	Tritium	78.6 U	110	186	Unfiltered		TN
RD-30		Primary	08/05/98	Tritium	-85 U	130	221	Unfiltered		TN
RD-30		Primary	02/05/99	Tritium	38.5 U	99	167	Unfiltered		TN
RD-30		Primary	05/05/00	Tritium	-0.88 U	12	20.6	Unfiltered		TR
RD-30		Primary	08/08/00	Tritium	19.7 U	130	220	Unfiltered		TR
RD-30		Primary	05/09/01	Tritium	72.5 U	120	203	Unfiltered		ES
RD-30		Primary	11/09/01	Tritium	136 U	104	238	Unfiltered		DL
RD-30		Primary	03/11/02	Tritium	264 U	82	264	Unfiltered		DL

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-30		Primary	08/30/02	Tritium	52.6 U	120	201	Unfiltered		ES
RD-30		Primary	02/07/03	Tritium	83.8 U	110	190	Unfiltered		ES
RD-30		Primary	11/14/03	Tritium	-76.9 U	110	194	Unfiltered		ES
RD-30		Primary	02/24/04	Tritium	-93.7 U	110	184	Unfiltered		ES
RD-30		Primary	08/10/04	Tritium	-56.8 U	92	160	Unfiltered		ES
RD-30		Primary	08/29/05	Tritium	-27.6 U	150	264	Unfiltered		ES
RD-30		Split	08/29/05	Tritium	-13.3 U	72.6	117	Unfiltered		STL
RD-30		Primary	02/17/06	Tritium	90 U	89	160	Unfiltered		ES
RD-30		Primary	08/09/06	Tritium	0 U	97	163	Unfiltered		ES
RD-30		Split	08/09/06	Tritium	172 J	90	115	Unfiltered		STL
RD-30		Primary	05/24/07	Tritium	36.8 U	45	62	Unfiltered		ES
RD-30		Primary	08/21/07	Tritium	-29.8 U	52	87.9	Unfiltered		ES
RD-30		Primary	02/06/08	Tritium	-17 U	87	147	Unfiltered		ES
RD-30		Primary	08/13/08	Tritium	12.5 U	94	158	Unfiltered		ES
RD-31		Primary	10/24/89	Tritium	188 U	227	---	Unfiltered		UST
RD-31		Primary	12/05/90	Tritium	-56.6 U	198	500	Unfiltered		IT
RD-31		Primary	03/10/91	Tritium	182 U	191	500	Unfiltered		IT
RD-31		Primary	03/05/92	Tritium	500 U	---	500	Unfiltered		CEP
RD-33A		Primary	12/05/91	Tritium	97.2 U	221	500	Unfiltered		IT
RD-33A		Primary	12/12/91	Tritium	-14.4 U	214	500	Unfiltered		IT
RD-33A		Split	12/12/91	Tritium	500 U	---	500	Unfiltered		CEP
RD-33A		Primary	06/08/92	Tritium	335 U	515	500	Unfiltered		CEP
RD-33A		Primary	09/15/92	Tritium	299 U	500	500	Unfiltered		CEP
RD-33A		Primary	12/05/92	Tritium	-43 U	500	500	Unfiltered		CEP
RD-33A		Primary	06/24/93	Tritium	-468 U	437	500	Unfiltered		CEP
RD-33A		Primary	08/24/93	Tritium	436 U	500	500	Unfiltered		CEP
RD-33A		Primary	11/17/93	Tritium	-70 U	120	230	Unfiltered		LAS
RD-33A		Primary	02/27/94	Tritium	-120 U	120	270	Unfiltered		LAS
RD-33A		Primary	05/10/94	Tritium	60 U	130	230	Unfiltered		LAS
RD-33A		Primary	08/18/94	Tritium	-20 U	130	260	Unfiltered		LAS
RD-33A		Primary	02/07/95	Tritium	4.6 U	5.5	6.9	Unfiltered	Analysis conducted using electrolytic enrichment	LAS
RD-33A		Primary	02/07/95	Tritium	-50 U	200	260	Unfiltered		LAS
RD-33A		Primary	08/09/95	Tritium	90 U	220	280	Unfiltered		LAS
RD-33A		Primary	02/19/96	Tritium	10 U	180	230	Unfiltered		LAS
RD-33A		Primary	08/23/96	Tritium	120 U	140	230	Unfiltered		LAS
RD-33A		Primary	02/25/97	Tritium	120 U	130	220	Unfiltered		LAS
RD-33A		Primary	08/27/97	Tritium	-78 U	86	180	Unfiltered		LAS
RD-33A		Primary	05/27/98	Tritium	-125 U	120	207	Unfiltered		TN
RD-33A		Primary	08/17/98	Tritium	0 U	130	223	Unfiltered		TN
RD-33A		Primary	02/03/99	Tritium	-2.34 U	100	173	Unfiltered		TN
RD-33A		Primary	02/09/00	Tritium	-59.1 U	120	202	Unfiltered		TN
RD-33A		Primary	05/14/01	Tritium	-57.4 U	120	202	Unfiltered		ES
RD-33A		Primary	02/15/02	Tritium	257 U	122	384	Unfiltered		DL
RD-33A	Z04	Primary	01/30/03	Tritium	8.31 U	120	196	Unfiltered		ES
RD-33A	Z02	Primary	11/15/04	Tritium	-56.6 U	130	230	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33A	Z03	Primary	02/17/05	Tritium	-31.7 U	150	258	Unfiltered		ES
RD-33A	Z02	Primary	02/17/06	Tritium	13.1 U	110	165	Unfiltered		ES
RD-33A	Z02	Primary	02/08/07	Tritium	-43.2 U	53	89	Unfiltered		ES
RD-33A	Z02	Primary	02/07/08	Tritium	12.3 U	82	138	Unfiltered		ES
RD-33A	Z02	Primary	02/25/09	Tritium	20.8 U	110	189	Unfiltered		ES
RD-33A	Z02	Primary	07/17/09	Tritium	14.9 U	88	147	Unfiltered		ES
RD-33B		Primary	12/12/91	Tritium	51.9 U	218	500	Unfiltered		IT
RD-33B		Split	12/12/91	Tritium	500 U	---	500	Unfiltered		CEP
RD-33B		Primary	06/24/92	Tritium	-219 U	492	500	Unfiltered		CEP
RD-33B		Primary	09/15/92	Tritium	500	500	500	Unfiltered		CEP
RD-33B		Primary	12/05/92	Tritium	4 U	500	500	Unfiltered		CEP
RD-33B		Primary	06/24/93	Tritium	-346 U	500	500	Unfiltered		CEP
RD-33B		Primary	08/24/93	Tritium	0 U	500	500	Unfiltered		CEP
RD-33B		Primary	11/17/93	Tritium	-60 U	120	250	Unfiltered		LAS
RD-33B		Primary	02/27/94	Tritium	60 U	150	280	Unfiltered		LAS
RD-33B		Primary	05/10/94	Tritium	-20 U	120	230	Unfiltered		LAS
RD-33B		Primary	08/18/94	Tritium	-130 U	120	260	Unfiltered		LAS
RD-33B		Primary	02/07/95	Tritium	20 U	200	260	Unfiltered		LAS
RD-33B		Primary	08/09/95	Tritium	-80 U	200	280	Unfiltered		LAS
RD-33B		Primary	02/19/96	Tritium	-40 U	180	230	Unfiltered		LAS
RD-33B		Primary	08/23/96	Tritium	-20 U	110	220	Unfiltered		LAS
RD-33B		Primary	02/25/97	Tritium	30 U	110	200	Unfiltered		LAS
RD-33B		Primary	08/22/97	Tritium	-60 U	110	220	Unfiltered		LAS
RD-33B		Primary	05/27/98	Tritium	-173 U	120	205	Unfiltered		TN
RD-33B		Primary	08/17/98	Tritium	-22.9 U	120	208	Unfiltered		TN
RD-33B		Primary	02/03/99	Tritium	-6.96 U	100	171	Unfiltered		TMA
RD-33B		Primary	08/11/99	Tritium	-1.67 U	88	150	Unfiltered		TN
RD-33B		Primary	05/17/00	Tritium	-38.6 U	100	180	Unfiltered		TR
RD-33B		Primary	08/09/00	Tritium	64.1 U	130	219	Unfiltered		TR
RD-33B		Primary	02/17/01	Tritium	-67.1 U	120	204	Unfiltered		ES
RD-33B		Primary	10/30/01	Tritium	0 U	80	264	Unfiltered		DL
RD-33B		Primary	02/15/02	Tritium	0 U	118	384	Unfiltered		DL
RD-33B		Primary	08/21/02	Tritium	-56.4 U	120	208	Unfiltered		ES
RD-33B		Primary	02/11/03	Tritium	87.7 U	120	194	Unfiltered		ES
RD-33B		Primary	11/13/03	Tritium	52 U	120	199	Unfiltered		ES
RD-33B		Primary	11/04/04	Tritium	26.5 U	95	160	Unfiltered		ES
RD-33B		Primary	02/17/05	Tritium	193 U	120	201	Unfiltered		ES
RD-33B		Split	02/17/05	Tritium	-10.7 U	85.4	130	Unfiltered		STL
RD-33B		Primary	08/22/05	Tritium	85.4 U	160	263	Unfiltered		ES
RD-33B		Split	08/22/05	Tritium	51.1 U	68.5	103	Unfiltered		STL
RD-33B		Primary	02/16/06	Tritium	14.4 U	95	160	Unfiltered		ES
RD-33B		Primary	08/09/06	Tritium	-97.3 U	93	160	Unfiltered		ES
RD-33B		Split	08/09/06	Tritium	-96.9 U	78	126	Unfiltered		STL
RD-33B		Primary	02/07/07	Tritium	4.49 U	51	84.6	Unfiltered		ES
RD-33B		Primary	08/14/07	Tritium	14.8 U	50	83.8	Unfiltered		ES
RD-33B		Reanalysis of Primary	08/14/07	Tritium	0 U	50	83.2	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33B		Primary	02/13/08	Tritium	-38.4 U	89	153	Unfiltered		ES
RD-33B		Primary	08/07/08	Tritium	-10.5 U	100	177	Unfiltered		ES
RD-33B		Primary	03/05/09	Tritium	125 J	68	87.6	Unfiltered		ES
RD-33B		Duplicate	03/05/09	Tritium	71.6 U	54	87.7	Unfiltered		ES
RD-33B		Primary	08/04/09	Tritium	37.4 U	110	178	Unfiltered		ES
RD-33C		Primary	12/05/91	Tritium	68.3 U	219	500	Unfiltered		IT
RD-33C		Primary	12/12/91	Tritium	-21.1 U	214	500	Unfiltered		IT
RD-33C		Split	12/12/91	Tritium	500 U	---	500	Unfiltered		CEP
RD-33C		Primary	06/08/92	Tritium	368 U	518	500	Unfiltered		CEP
RD-33C		Primary	09/15/92	Tritium	241 U	500	500	Unfiltered		CEP
RD-33C		Primary	12/05/92	Tritium	-215 U	500	500	Unfiltered		CEP
RD-33C		Primary	06/24/93	Tritium	-280 U	500	500	Unfiltered		CEP
RD-33C		Primary	08/24/93	Tritium	159 U	500	500	Unfiltered		CEP
RD-33C		Primary	11/17/93	Tritium	30 U	130	240	Unfiltered		LAS
RD-33C		Primary	02/27/94	Tritium	0 U	140	270	Unfiltered		LAS
RD-33C		Primary	05/09/94	Tritium	-20 U	120	240	Unfiltered		LAS
RD-33C		Primary	08/17/94	Tritium	-40 U	130	260	Unfiltered		LAS
RD-33C		Primary	02/07/95	Tritium	-10 U	200	260	Unfiltered		LAS
RD-33C		Primary	08/09/95	Tritium	0 U	210	280	Unfiltered		LAS
RD-33C		Primary	02/19/96	Tritium	40 U	190	230	Unfiltered		LAS
RD-33C		Primary	08/22/96	Tritium	30 U	120	220	Unfiltered		LAS
RD-33C		Primary	02/25/97	Tritium	40 U	120	210	Unfiltered		LAS
RD-33C		Primary	08/21/97	Tritium	-20 U	120	220	Unfiltered		LAS
RD-33C		Primary	05/27/98	Tritium	-149 U	120	210	Unfiltered		TN
RD-33C		Primary	08/17/98	Tritium	37.4 U	130	213	Unfiltered		TN
RD-33C		Primary	02/03/99	Tritium	-2.3 U	99	169	Unfiltered		TN
RD-33C		Primary	08/11/99	Tritium	1.7 U	90	153	Unfiltered		TN
RD-33C		Primary	02/09/00	Tritium	-90.6 U	110	193	Unfiltered		TN
RD-33C		Primary	08/09/00	Tritium	77.5 U	130	221	Unfiltered		TR
RD-33C		Primary	02/17/01	Tritium	-50 U	120	203	Unfiltered		ES
RD-33C		Primary	10/30/01	Tritium	0 U	78	264	Unfiltered		DL
RD-33C		Primary	02/15/02	Tritium	175 U	121	384	Unfiltered		DL
RD-33C		Primary	08/20/02	Tritium	55.8 U	120	205	Unfiltered		ES
RD-33C		Primary	02/10/03	Tritium	73.1 U	120	201	Unfiltered		ES
RD-33C		Primary	11/13/03	Tritium	107 U	110	188	Unfiltered		ES
RD-33C		Split	11/13/03	Tritium	-23.3 U	46.7	82.2	Unfiltered		STL
RD-33C		Primary	11/04/04	Tritium	-30.7 U	93	159	Unfiltered		ES
RD-33C		Split	11/04/04	Tritium	23.1 U	46	89.2	Unfiltered		STL
RD-33C		Primary	02/16/05	Tritium	-79.4 U	120	201	Unfiltered		ES
RD-33C		Primary	08/22/05	Tritium	22.2 U	150	262	Unfiltered		ES
RD-33C		Primary	02/16/06	Tritium	55 U	98	163	Unfiltered		ES
RD-33C		Primary	08/08/06	Tritium	-87.5 U	92	158	Unfiltered		ES
RD-33C		Primary	02/06/07	Tritium	-52.9 U	53	89.2	Unfiltered		ES
RD-33C		Primary	08/07/07	Tritium	10.2 U	59	98	Unfiltered		ES
RD-33C		Primary	02/12/08	Tritium	-80.5 U	86	151	Unfiltered		ES
RD-33C		Primary	08/07/08	Tritium	-18.8 U	100	176	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33C		Primary	02/24/09	Tritium	25.8 U	90	151	Unfiltered		ES
RD-33C		Split	02/24/09	Tritium	-40.2 U	88.4	155	Unfiltered		GEL
RD-33C		Primary	07/24/09	Tritium	72.1 U	85	140	Unfiltered		ES
RD-33C		Split	07/24/09	Tritium	29.2 U	84.8	145	Unfiltered		GEL
RD-34A		Primary	12/05/91	Tritium	7040	685	500	Unfiltered		IT
RD-34A		Split	12/05/91	Tritium	7155	632	500	Unfiltered		CEP
RD-34A		Primary	03/10/92	Tritium	7069	598	500	Unfiltered		CEP
RD-34A		Split	03/10/92	Tritium	6700	200	500	Unfiltered		TEL
RD-34A		Primary	06/08/92	Tritium	2529	548	500	Unfiltered		CEP
RD-34A		Primary	09/13/92	Tritium	1841	527	500	Unfiltered		CEP
RD-34A		Split	09/13/92	Tritium	1800	300	500	Unfiltered		BL
RD-34A		Primary	12/05/92	Tritium	3006	545	500	Unfiltered		CEP
RD-34A		Reanalysis of Primary	12/05/92	Tritium	4180	768	500	Unfiltered		CEP
RD-34A		Split	12/05/92	Tritium	3500	400	500	Unfiltered		BL
RD-34A		Primary	03/09/93	Tritium	1119	743	500	Unfiltered		CEP
RD-34A		Primary	06/22/93	Tritium	657	500	500	Unfiltered		CEP
RD-34A		Primary	08/24/93	Tritium	812	639	500	Unfiltered		CEP
RD-34A		Primary	11/18/93	Tritium	990	230	240	Unfiltered		LAS
RD-34A		Primary	02/26/94	Tritium	3550	440	280	Unfiltered		LAS
RD-34A		Primary	05/09/94	Tritium	3430	390	230	Unfiltered		LAS
RD-34A		Primary	08/09/94	Tritium	2710	380	270	Unfiltered		LAS
RD-34A		Primary	11/09/94	Tritium	1860	340	240	Unfiltered		LAS
RD-34A		Primary	02/07/95	Tritium	3200	440	260	Unfiltered		LAS
RD-34A		Primary	08/09/95	Tritium	2080	380	280	Unfiltered		LAS
RD-34A		Primary	02/19/96	Tritium	4020	420	220	Unfiltered		LAS
RD-34A		Primary	08/18/96	Tritium	4250	470	220	Unfiltered		LAS
RD-34A		Primary	02/07/97	Tritium	4870	500	220	Unfiltered		LAS
RD-34A		Primary	05/27/98	Tritium	2210	180	213	Unfiltered		TN
RD-34A		Primary	08/18/98	Tritium	2060	180	200	Unfiltered		TN
RD-34A		Primary	08/29/00	Tritium	2440	150	146	Unfiltered		TR
RD-34A		Primary	05/09/01	Tritium	3120	200	196	Unfiltered		ES
RD-34A		Primary	05/16/03	Tritium	2420	300	175	Unfiltered		ES
RD-34A		Primary	05/17/04	Tritium	2190	260	145	Unfiltered		ES
RD-34A		Primary	08/09/04	Tritium	2440	290	160	Unfiltered		ES
RD-34A		Primary	02/17/05	Tritium	1050	180	204	Unfiltered		ES
RD-34A		Primary	08/25/05	Tritium	1010	240	300	Unfiltered		ES
RD-34A		Primary	02/21/06	Tritium	1710	210	162	Unfiltered		ES
RD-34A		Primary	11/16/06	Tritium	1100	220	189	Unfiltered		ES
RD-34A		Primary	02/15/07	Tritium	1160	140	92.6	Unfiltered		ES
RD-34A		Primary	08/15/07	Tritium	1230	140	83.3	Unfiltered		ES
RD-34A		Primary	02/06/08	Tritium	1110	160	147	Unfiltered		ES
RD-34A		Primary	08/07/08	Tritium	876	160	177	Unfiltered		ES
RD-34A		Primary	03/05/09	Tritium	990	130	87.8	Unfiltered		ES
RD-34A		Primary	07/28/09	Tritium	859	140	139	Unfiltered		ES
RD-34B		Primary	12/05/91	Tritium	336 U	234	500	Unfiltered		IT

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34B		Primary	12/11/91	Tritium	820	538	500	Unfiltered		CEP
RD-34B		Split	12/11/91	Tritium	236 U	230	500	Unfiltered		IT
RD-34B		Primary	03/10/92	Tritium	500 U	---	500	Unfiltered		CEP
RD-34B		Split	03/10/92	Tritium	390 U	100	500	Unfiltered		TEL
RD-34B		Primary	06/08/92	Tritium	534	520	500	Unfiltered		CEP
RD-34B		Primary	09/13/92	Tritium	400 U	500	500	Unfiltered		CEP
RD-34B		Split	09/13/92	Tritium	420 U	290	500	Unfiltered		BL
RD-34B		Primary	12/05/92	Tritium	121 U	500	500	Unfiltered		CEP
RD-34B		Primary	03/21/93	Tritium	125 U	490	500	Unfiltered		CEP
RD-34B		Primary	06/23/93	Tritium	-387 U	500	500	Unfiltered		CEP
RD-34B		Primary	08/24/93	Tritium	286 U	500	500	Unfiltered		CEP
RD-34B		Primary	11/18/93	Tritium	210 U	150	240	Unfiltered		LAS
RD-34B		Primary	02/26/94	Tritium	60 U	150	280	Unfiltered		LAS
RD-34B		Primary	05/10/94	Tritium	220 U	150	230	Unfiltered		LAS
RD-34B		Primary	08/09/94	Tritium	0 U	140	270	Unfiltered		LAS
RD-34B		Primary	11/09/94	Tritium	170 U	190	240	Unfiltered		LAS
RD-34B		Primary	02/07/95	Tritium	220 U	220	260	Unfiltered	Analysis conducted using electrolytic enrichment	LAS
RD-34B		Primary	02/07/95	Tritium	205	12	6.6	Unfiltered	Analysis conducted using electrolytic enrichment	LAS
RD-34B		Primary	08/09/95	Tritium	90 U	220	280	Unfiltered		LAS
RD-34B		Primary	02/19/96	Tritium	448	21	6.4	Unfiltered	Analysis conducted using electrolytic enrichment	LAS
RD-34B		Primary	02/19/96	Tritium	440	55	53	Unfiltered	Analysis conducted using electrolytic enrichment	LAS
RD-34B		Primary	08/18/96	Tritium	330	160	220	Unfiltered		LAS
RD-34B		Primary	02/07/97	Tritium	150 U	130	210	Unfiltered		LAS
RD-34B		Primary	08/21/97	Tritium	200 U	140	220	Unfiltered		LAS
RD-34B		Primary	05/27/98	Tritium	372	130	208	Unfiltered		TN
RD-34B		Primary	08/18/98	Tritium	376	140	208	Unfiltered		TN
RD-34B		Primary	02/04/99	Tritium	650	120	162	Unfiltered		TN
RD-34B		Primary	08/11/99	Tritium	176	100	164	Unfiltered		TN
RD-34B		Primary	02/05/00	Tritium	200	120	196	Unfiltered		TN
RD-34B		Primary	02/16/01	Tritium	180 U	130	208	Unfiltered		ES
RD-34B		Primary	11/02/01	Tritium	89 U	103	238	Unfiltered		DL
RD-34B		Primary	02/15/02	Tritium	151 U	121	384	Unfiltered		DL
RD-34B		Primary	08/23/02	Tritium	-40.8 U	120	206	Unfiltered		ES
RD-34B		Primary	02/06/03	Tritium	171 U	110	182	Unfiltered		ES
RD-34B		Primary	11/13/03	Tritium	254	120	196	Unfiltered		ES
RD-34B		Primary	02/24/04	Tritium	105 U	110	188	Unfiltered		ES
RD-34B		Primary	08/09/04	Tritium	60.5 U	99	165	Unfiltered		ES
RD-34B		Primary	02/15/05	Tritium	180 U	120	196	Unfiltered		ES
RD-34B		Primary	08/23/05	Tritium	145 U	180	296	Unfiltered		ES
RD-34B		Primary	02/17/06	Tritium	154 U	100	169	Unfiltered		ES
RD-34B		Primary	08/09/06	Tritium	340	110	159	Unfiltered		ES
RD-34B		Primary	08/14/07	Tritium	188 J	56	82.2	Unfiltered		ES
RD-34B		Primary	02/06/08	Tritium	89.4 U	89	146	Unfiltered		ES
RD-34B		Primary	08/07/08	Tritium	263	110	176	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34B		Primary	02/20/09	Tritium	100 U	110	112	Unfiltered		ES
RD-34B		Primary	07/28/09	Tritium	231	92	139	Unfiltered		ES
RD-34C		Primary	12/06/91	Tritium	71.2 U	215	500	Unfiltered		IT
RD-34C		Primary	12/12/91	Tritium	30.8 U	217	500	Unfiltered		IT
RD-34C		Split	12/12/91	Tritium	500 U	---	500	Unfiltered		CEP
RD-34C		Primary	03/10/92	Tritium	500 U	---	500	Unfiltered		CEP
RD-34C		Split	03/10/92	Tritium	100 U	---	100	Unfiltered		TEL
RD-34C		Primary	06/08/92	Tritium	455 U	519	500	Unfiltered		CEP
RD-34C		Primary	09/13/92	Tritium	357 U	500	500	Unfiltered		CEP
RD-34C		Split	09/13/92	Tritium	-140 U	270	500	Unfiltered		BL
RD-34C		Primary	12/05/92	Tritium	-373 U	494	500	Unfiltered		CEP
RD-34C		Primary	03/09/93	Tritium	300 U	499	500	Unfiltered		CEP
RD-34C		Primary	06/24/93	Tritium	158 U	500	500	Unfiltered		CEP
RD-34C		Primary	08/24/93	Tritium	101 U	500	500	Unfiltered		CEP
RD-34C		Primary	11/06/93	Tritium	140 U	140	230	Unfiltered		LAS
RD-34C		Primary	02/26/94	Tritium	-30 U	140	270	Unfiltered		LAS
RD-34C		Primary	05/09/94	Tritium	-20 U	120	230	Unfiltered		LAS
RD-34C		Primary	08/09/94	Tritium	-80 U	130	270	Unfiltered		LAS
RD-34C		Primary	11/09/94	Tritium	40 U	170	240	Unfiltered		LAS
RD-34C		Primary	02/07/95	Tritium	-10 U	200	260	Unfiltered		LAS
RD-34C		Primary	08/10/95	Tritium	-240 U	180	300	Unfiltered		LAS
RD-34C		Primary	02/19/96	Tritium	-290 U	160	230	Unfiltered		LAS
RD-34C		Primary	08/19/96	Tritium	30 U	110	200	Unfiltered		LAS
RD-34C		Primary	02/07/97	Tritium	40 U	120	220	Unfiltered		LAS
RD-34C		Primary	08/21/97	Tritium	-30 U	110	210	Unfiltered		LAS
RD-34C		Primary	05/27/98	Tritium	-184 U	120	210	Unfiltered		TN
RD-34C		Primary	08/17/98	Tritium	127 U	120	203	Unfiltered		TN
RD-34C		Primary	02/04/99	Tritium	11.4 U	99	169	Unfiltered		TN
RD-34C		Primary	08/12/99	Tritium	45 U	93	156	Unfiltered		TN
RD-34C		Primary	02/05/00	Tritium	-75.5 U	120	208	Unfiltered		TN
RD-34C		Primary	08/08/00	Tritium	16 U	130	218	Unfiltered		TR
RD-34C		Primary	02/16/01	Tritium	-111 U	120	207	Unfiltered		ES
RD-34C		Primary	11/02/01	Tritium	20 U	102	238	Unfiltered		DL
RD-34C		Primary	02/14/02	Tritium	0 U	115	384	Unfiltered		DL
RD-34C		Primary	08/28/02	Tritium	-74.5 U	120	210	Unfiltered		ES
RD-34C		Primary	02/06/03	Tritium	-78.4 U	110	184	Unfiltered		ES
RD-34C		Primary	11/13/03	Tritium	-33.1 U	110	190	Unfiltered		ES
RD-34C		Primary	02/24/04	Tritium	-59.8 U	110	185	Unfiltered		ES
RD-34C		Primary	08/09/04	Tritium	-28 U	95	163	Unfiltered		ES
RD-34C		Split	08/09/04	Tritium	43.3 U	58.4	101	Unfiltered		STL
RD-34C		Primary	02/15/05	Tritium	-7.5 U	120	199	Unfiltered		ES
RD-34C		Primary	08/23/05	Tritium	-100 U	170	301	Unfiltered		ES
RD-34C		Primary	02/21/06	Tritium	108 U	92	162	Unfiltered		ES
RD-34C		Split	02/21/06	Tritium	-40.2 U	150	328	Unfiltered		STL
RD-34C		Primary	08/09/06	Tritium	-69 U	100	174	Unfiltered		ES
RD-34C		Primary	02/07/07	Tritium	31.4 U	51	84.4	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34C		Primary	08/08/07	Tritium	-70.2 U	58	99.5	Unfiltered		ES
RD-34C		Primary	02/12/08	Tritium	-7.73 U	90	154	Unfiltered		ES
RD-34C		Primary	08/07/08	Tritium	31.3 U	100	176	Unfiltered		ES
RD-34C		Primary	02/19/09	Tritium	-1.76 U	100	111	Unfiltered		ES
RD-34C		Primary	07/23/09	Tritium	76.1 U	85	140	Unfiltered		ES
RD-34C		Duplicate	07/23/09	Tritium	79.9 U	85	139	Unfiltered		ES
RD-34C		Split	07/23/09	Tritium	-3.89 U	83.6	145	Unfiltered		GEL
RD-35B		Primary	05/07/99	Tritium	17.4 U	100	176	Unfiltered		TN
RD-36D		Primary	11/13/97	Tritium	30 U	110	190	Unfiltered		LAS
RD-38B		Primary	02/17/99	Tritium	20.1 U	120	200	Unfiltered		TN
RD-45A		Primary	05/05/94	Tritium	30 U	130	230	Unfiltered		LAS
RD-45C		Primary	10/06/94	Tritium	-70 U	120	---	Unfiltered		LAS
RD-46B		Primary	02/15/99	Tritium	125 U	120	197	Unfiltered		TN
RD-47		Primary	08/07/95	Tritium	1.4 U	5.2	5.9	Unfiltered		LAS
RD-48A		Primary	08/06/95	Tritium	11.6	6.6	7.7	Unfiltered		LAS
RD-48B		Primary	08/07/95	Tritium	3 U	5.6	7	Unfiltered		LAS
RD-48C		Primary	08/06/95	Tritium	14.9	6.4	7.2	Unfiltered		LAS
RD-50		Primary	05/05/94	Tritium	60 U	130	---	Unfiltered		LAS
RD-50		Primary	05/19/95	Tritium	-30 U	180	230	Unfiltered		LAS
RD-50		Primary	05/14/96	Tritium	-30 U	170	220	Unfiltered		LAS
RD-50		Primary	05/05/97	Tritium	550	170	200	Unfiltered		LAS
RD-50		Primary	05/28/98	Tritium	-18.6 U	110	186	Unfiltered		TN
RD-51C		Primary	12/14/91	Tritium	32.7 U	219	500	Unfiltered		IT
RD-51C		Primary	03/06/92	Tritium	500 U	---	500	Unfiltered		CEP
RD-54A		Primary	09/12/93	Tritium	-52 U	500	500	Unfiltered		CEP
RD-54A		Primary	09/29/93	Tritium	169 U	500	500	Unfiltered		CEP
RD-54A		Primary	05/26/94	Tritium	270	160	230	Unfiltered		LAS
RD-54A		Primary	08/09/94	Tritium	130 U	160	260	Unfiltered		LAS
RD-54A		Primary	08/03/95	Tritium	60 U	220	280	Unfiltered		LAS
RD-54A		Primary	05/16/96	Tritium	270	200	220	Unfiltered		LAS
RD-54A		Primary	08/23/96	Tritium	440	150	180	Unfiltered		LAS
RD-54A		Primary	05/05/97	Tritium	430	150	190	Unfiltered		LAS
RD-54A		Primary	08/22/97	Tritium	370	160	220	Unfiltered		LAS
RD-54A		Primary	02/08/98	Tritium	354	130	192	Unfiltered		TN
RD-54A		Primary	08/07/98	Tritium	497	140	216	Unfiltered		TN
RD-54A		Primary	02/08/99	Tritium	697	160	212	Unfiltered		TN
RD-54A		Primary	08/18/99	Tritium	491	110	157	Unfiltered		TN
RD-54A		Primary	03/15/00	Tritium	332	120	181	Unfiltered		TN
RD-54A		Primary	10/26/01	Tritium	139 U	109	249	Unfiltered		DL
RD-54A		Primary	02/27/02	Tritium	67 U	56	350	Unfiltered		DL
RD-54A		Primary	08/14/02	Tritium	105 U	120	200	Unfiltered		ES
RD-54A	Z02	Primary	02/18/03	Tritium	10.7 U	110	194	Unfiltered		ES
RD-54A	Z02	Primary	08/26/03	Tritium	25.3 U	110	190	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54A	Z02	Primary	11/03/04	Tritium	64.5 U	96	160	Unfiltered		ES
RD-54A	Z02	Primary	02/16/05	Tritium	14 U	150	256	Unfiltered		ES
RD-54A	Z02	Primary	08/31/05	Tritium	205 U	170	268	Unfiltered		ES
RD-54A	Z02	Primary	02/16/06	Tritium	270	100	165	Unfiltered		ES
RD-54A	Z02	Primary	08/17/06	Tritium	161 J	100	161	Unfiltered		ES
RD-54A	Z02	Primary	02/07/07	Tritium	244	61	85.2	Unfiltered		ES
RD-54A	Z02	Primary	08/10/07	Tritium	47.8 U	58	96.3	Unfiltered		ES
RD-54A	Z02	Primary	02/06/08	Tritium	-17.2 U	87	148	Unfiltered		ES
RD-54A	Z02	Primary	08/07/08	Tritium	99.9 U	110	176	Unfiltered		ES
RD-54A	Z02	Primary	02/24/09	Tritium	-30.2 U	100	111	Unfiltered		ES
RD-54A	Z02	Primary	07/16/09	Tritium	-89.4 U	88	154	Unfiltered		ES
RD-54B		Primary	09/12/93	Tritium	77 U	500	500	Unfiltered		CEP
RD-54B		Primary	09/29/93	Tritium	378 U	500	500	Unfiltered		CEP
RD-54B		Primary	05/08/94	Tritium	-20 U	120	230	Unfiltered		LAS
RD-54B		Primary	08/08/94	Tritium	-110 U	120	270	Unfiltered		LAS
RD-54B		Primary	08/30/95	Tritium	100 U	240	310	Unfiltered		LAS
RD-54B		Primary	05/16/96	Tritium	40 U	180	220	Unfiltered		LAS
RD-54B		Primary	08/21/96	Tritium	-27 U	91	180	Unfiltered		LAS
RD-54B		Primary	08/22/97	Tritium	-80 U	100	210	Unfiltered		LAS
RD-54B		Primary	02/08/98	Tritium	40.8 U	110	193	Unfiltered		TN
RD-54B		Primary	08/07/98	Tritium	26.4 U	130	218	Unfiltered		TN
RD-54B		Primary	02/08/99	Tritium	-59.8 U	120	209	Unfiltered		TN
RD-54B		Primary	08/18/99	Tritium	-6.88 U	92	157	Unfiltered		TN
RD-54B		Primary	03/15/00	Tritium	0 U	0	181	Unfiltered		TN
RD-54B		Primary	10/25/01	Tritium	0 U	79	264	Unfiltered		DL
RD-54B		Primary	02/27/02	Tritium	191 U	59	350	Unfiltered		DL
RD-54B		Primary	08/21/02	Tritium	-21.9 U	120	210	Unfiltered		ES
RD-54B		Primary	02/26/03	Tritium	24.2 U	110	187	Unfiltered		ES
RD-54B		Primary	08/07/03	Tritium	-31.7 U	110	190	Unfiltered		ES
RD-54B		Primary	02/16/05	Tritium	136 U	120	200	Unfiltered		ES
RD-54B		Primary	08/22/05	Tritium	3.69 U	150	261	Unfiltered		ES
RD-54B		Primary	02/20/06	Tritium	101 U	100	170	Unfiltered		ES
RD-54B		Primary	08/23/06	Tritium	-77.8 U	100	175	Unfiltered		ES
RD-54B		Primary	02/12/07	Tritium	0 U	58	96.2	Unfiltered		ES
RD-54B		Primary	08/14/07	Tritium	-12.7 U	52	86.7	Unfiltered		ES
RD-54B		Primary	02/14/08	Tritium	-25 U	91	156	Unfiltered		ES
RD-54B		Primary	11/07/08	Tritium	-66.9 U	100	178	Unfiltered		ES
RD-54B		Primary	10/30/09	Tritium	-133 U	91	160	Unfiltered		TAD
RD-54B		Duplicate	10/30/09	Tritium	-156 U	90	160	Unfiltered		TAD
RD-54C		Primary	09/11/93	Tritium	58 U	500	500	Unfiltered		CEP
RD-54C		Primary	09/29/93	Tritium	236 U	500	500	Unfiltered		CEP
RD-54C		Primary	05/08/94	Tritium	0 U	120	230	Unfiltered		LAS
RD-54C		Primary	08/08/94	Tritium	-30 U	140	270	Unfiltered		LAS
RD-54C		Primary	08/30/95	Tritium	-10 U	230	310	Unfiltered		LAS
RD-54C		Primary	05/16/96	Tritium	-40 U	170	220	Unfiltered		LAS
RD-54C		Primary	08/23/96	Tritium	50 U	100	180	Unfiltered		LAS

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54C		Primary	05/05/97	Tritium	20 U	110	200	Unfiltered		LAS
RD-54C		Primary	08/24/97	Tritium	10 U	110	210	Unfiltered		LAS
RD-54C		Primary	02/08/98	Tritium	38.3 U	110	192	Unfiltered		TN
RD-54C		Primary	08/07/98	Tritium	35.4 U	130	215	Unfiltered		TN
RD-54C		Primary	02/09/99	Tritium	81 U	120	204	Unfiltered		TN
RD-54C		Primary	08/18/99	Tritium	28.2 U	96	161	Unfiltered		TN
RD-54C		Primary	03/15/00	Tritium	28.8 U	110	181	Unfiltered		TN
RD-54C		Primary	11/02/01	Tritium	36 U	81	264	Unfiltered		DL
RD-54C		Primary	02/27/02	Tritium	221 U	57	350	Unfiltered		DL
RD-54C		Primary	08/22/02	Tritium	67.4 U	130	208	Unfiltered		ES
RD-54C		Primary	02/26/03	Tritium	-79.1 U	110	188	Unfiltered		ES
RD-54C		Primary	08/26/03	Tritium	-12.4 U	110	186	Unfiltered		ES
RD-54C		Primary	11/05/04	Tritium	25.9 U	93	156	Unfiltered		ES
RD-54C		Primary	02/17/05	Tritium	-34 U	120	201	Unfiltered		ES
RD-54C		Split	02/17/05	Tritium	-2.69 U	8.51	128	Unfiltered		STL
RD-54C		Primary	08/22/05	Tritium	36.6 U	150	260	Unfiltered		ES
RD-54C		Primary	02/23/06	Tritium	-45.9 U	97	167	Unfiltered		ES
RD-54C		Primary	08/10/06	Tritium	-36 U	95	161	Unfiltered		ES
RD-54C		Primary	02/12/07	Tritium	-14.3 U	57	94.7	Unfiltered		ES
RD-54C		Primary	08/07/07	Tritium	-2.55 U	58	97.6	Unfiltered		ES
RD-54C		Primary	02/14/08	Tritium	-58 U	90	156	Unfiltered		ES
RD-54C		Primary	08/07/08	Tritium	12.5 U	100	176	Unfiltered		ES
RD-54C		Primary	02/24/09	Tritium	-84.5 U	100	111	Unfiltered		ES
RD-54C		Primary	08/04/09	Tritium	-27.1 U	100	178	Unfiltered		ES
RD-56A		Primary	05/10/94	Tritium	-40 U	110	230	Unfiltered		LAS
RD-56A		Primary	02/20/96	Tritium	-10 U	180	230	Unfiltered		LAS
RD-56A		Primary	02/06/97	Tritium	96	59	93	Unfiltered		LAS
RD-56A		Primary	05/28/98	Tritium	16.2 U	110	185	Unfiltered		TN
RD-56B		Primary	05/28/98	Tritium	-35.2 U	110	188	Unfiltered		TN
RD-57		Primary	03/16/94	Tritium	-50 U	100	230	Unfiltered		LAS
RD-57		Primary	05/10/94	Tritium	-60 U	110	---	Unfiltered		LAS
RD-57		Primary	08/18/94	Tritium	60 U	150	260	Unfiltered		LAS
RD-57		Primary	02/07/95	Tritium	-100 U	190	260	Unfiltered		LAS
RD-57		Primary	08/09/95	Tritium	-110 U	200	270	Unfiltered		LAS
RD-57		Primary	02/19/96	Tritium	-150 U	170	230	Unfiltered		LAS
RD-57		Primary	08/22/96	Tritium	-19 U	92	180	Unfiltered		LAS
RD-57		Primary	02/25/97	Tritium	150 U	130	210	Unfiltered		LAS
RD-57		Primary	08/27/97	Tritium	0 U	100	190	Unfiltered		LAS
RD-57		Primary	05/26/98	Tritium	-144 U	120	207	Unfiltered		TN
RD-57		Primary	08/17/98	Tritium	-7.03 U	130	214	Unfiltered		TN
RD-57		Primary	05/13/99	Tritium	17.4 U	100	176	Unfiltered		TN
RD-57		Primary	08/11/99	Tritium	48.8 U	94	156	Unfiltered		TN
RD-57		Primary	02/09/00	Tritium	-84.4 U	110	200	Unfiltered		TN
RD-57		Primary	08/08/00	Tritium	-14.7 U	130	226	Unfiltered		TR
RD-57		Primary	05/11/01	Tritium	-35.8 U	120	200	Unfiltered		ES
RD-57		Primary	10/31/01	Tritium	0 U	80	264	Unfiltered		DL

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-57		Primary	02/14/02	Tritium	10 U	120	384	Unfiltered		DL
RD-57		Primary	08/14/02	Tritium	0 U	0	201	Unfiltered		ES
RD-57	Z08	Primary	01/29/03	Tritium	-57.7 U	110	187	Unfiltered		ES
RD-57	Z08	Primary	04/30/03	Tritium	18.8 U	99	167	Unfiltered		ES
RD-57	Z08	Primary	08/27/03	Tritium	-24.8 U	110	186	Unfiltered		ES
RD-57	Z07	Primary	11/18/04	Tritium	-35.6 U	130	231	Unfiltered		ES
RD-57	Z07	Primary	03/08/05	Tritium	-43.5 U	100	170	Unfiltered		ES
RD-57	Z07	Primary	09/01/05	Tritium	-68.6 U	100	174	Unfiltered		ES
RD-57	Z07	Primary	02/20/06	Tritium	120 U	100	164	Unfiltered		ES
RD-57	Z07	Primary	08/18/06	Tritium	-43.1 U	100	175	Unfiltered		ES
RD-57	Z07	Primary	02/08/07	Tritium	-30.2 U	56	93.8	Unfiltered		ES
RD-57	Z08	Primary	08/14/07	Tritium	17.3 U	51	84.3	Unfiltered		ES
RD-57	Z08	Primary	02/07/08	Tritium	-12.4 U	82	140	Unfiltered		ES
RD-57	Z05	Primary	08/08/08	Tritium	-12.6 U	100	177	Unfiltered		ES
RD-57	Z07	Primary	02/25/09	Tritium	10.4 U	110	188	Unfiltered		ES
RD-57	Z07	Primary	07/17/09	Tritium	-12.2 U	87	147	Unfiltered		ES
RD-59A		Primary	08/16/94	Tritium	-70 U	120	260	Unfiltered		LAS
RD-59A		Primary	02/06/95	Tritium	160 U	220	260	Unfiltered	Analysis conducted using electrolytic enrichment	LAS
RD-59A		Primary	02/06/95	Tritium	69.5	7.2	6	Unfiltered	Analysis conducted using electrolytic enrichment	LAS
RD-59A		Duplicate	02/06/95	Tritium	-140 U	190	270	Unfiltered		LAS
RD-59A		Primary	08/08/95	Tritium	-100 U	200	290	Unfiltered		LAS
RD-59A		Primary	03/12/96	Tritium	29.4	6.6	7	Unfiltered		LAS
RD-59A		Primary	08/21/96	Tritium	-28 U	91	180	Unfiltered		LAS
RD-59A		Primary	02/16/97	Tritium	200 U	150	220	Unfiltered		LAS
RD-59A		Primary	08/22/97	Tritium	-30 U	110	210	Unfiltered		LAS
RD-59A		Primary	08/19/98	Tritium	-2.44 U	130	222	Unfiltered		TN
RD-59A		Primary	02/16/99	Tritium	107 U	120	194	Unfiltered		TN
RD-59A		Primary	08/06/99	Tritium	52.9 U	95	158	Unfiltered		TN
RD-59A		Primary	03/14/00	Tritium	19.2 U	110	181	Unfiltered		TN
RD-59A		Primary	08/10/00	Tritium	13 U	140	229	Unfiltered		TR
RD-59A		Primary	05/16/01	Tritium	-23.2 U	120	200	Unfiltered		ES
RD-59A		Primary	11/12/01	Tritium	968 QC	115	238	Unfiltered	QC = Suspect	DL
RD-59A		Primary	02/28/02	Tritium	536 QC	115	350	Unfiltered	QC = Suspect	DL
RD-59A		Primary	08/08/02	Tritium	74.2 U	120	201	Unfiltered		ES
RD-59A		Primary	01/31/03	Tritium	23.9 U	110	187	Unfiltered		ES
RD-59A		Primary	05/15/03	Tritium	29.7 U	100	171	Unfiltered		ES
RD-59A		Split	05/15/03	Tritium	-12.3 U	51.5	110	Unfiltered		STL
RD-59A		Primary	08/08/03	Tritium	-33.7 U	110	190	Unfiltered		ES
RD-59A		Split	08/08/03	Tritium	17.1 U	49	86.9	Unfiltered		STL
RD-59A		Primary	11/14/03	Tritium	-82.5 U	110	199	Unfiltered		ES
RD-59A		Split	11/14/03	Tritium	-8.74 U	46.3	83.2	Unfiltered		STL
RD-59A		Primary	11/16/04	Tritium	-94.7 U	130	228	Unfiltered		ES
RD-59A		Primary	09/07/05	Tritium	-86.5 U	100	176	Unfiltered		ES
RD-59A		Primary	08/23/06	Tritium	4.28 U	110	175	Unfiltered		ES
RD-59A		Primary	11/14/06	Tritium	-100 U	180	190	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-59A		Primary	02/28/07	Tritium	58.5 U	55	90.6	Unfiltered		ES
RD-59A		Primary	08/16/07	Tritium	23.9 U	49	81.4	Unfiltered		ES
RD-59A		Primary	05/20/08	Tritium	-44.1 U	93	160	Unfiltered		ES
RD-59A		Primary	08/14/08	Tritium	-57.5 U	92	158	Unfiltered		ES
RD-59A		Primary	03/03/09	Tritium	-104 U	110	188	Unfiltered		ES
RD-59A		Primary	08/04/09	Tritium	-77 U	100	178	Unfiltered		ES
RD-59B		Primary	08/29/94	Tritium	40 U	150	---	Unfiltered		LAS
RD-59B		Primary	02/06/95	Tritium	-150 U	180	260	Unfiltered		LAS
RD-59B		Primary	08/08/95	Tritium	-90 U	200	280	Unfiltered		LAS
RD-59B		Primary	03/12/96	Tritium	-80 U	100	180	Unfiltered		LAS
RD-59B		Primary	08/21/96	Tritium	38 U	98	180	Unfiltered		LAS
RD-59B		Primary	02/16/97	Tritium	20 U	120	230	Unfiltered		LAS
RD-59B		Primary	08/22/97	Tritium	-30 U	110	210	Unfiltered		LAS
RD-59B		Primary	08/19/98	Tritium	68.8 U	130	209	Unfiltered		TN
RD-59B		Primary	02/16/99	Tritium	26.3 U	110	196	Unfiltered		TN
RD-59B		Primary	08/06/99	Tritium	24.3 U	93	156	Unfiltered		TN
RD-59B		Primary	03/14/00	Tritium	-67.2 U	100	181	Unfiltered		TN
RD-59B		Primary	08/10/00	Tritium	-23.7 U	130	224	Unfiltered		TR
RD-59B		Primary	02/17/01	Tritium	-68.1 U	120	200	Unfiltered		ES
RD-59B		Primary	11/12/01	Tritium	101 U	104	238	Unfiltered		DL
RD-59B		Primary	02/28/02	Tritium	222 U	58	350	Unfiltered		DL
RD-59B		Primary	08/08/02	Tritium	55.1 U	120	202	Unfiltered		ES
RD-59B		Primary	01/31/03	Tritium	-31.1 U	110	183	Unfiltered		ES
RD-59B		Primary	08/08/03	Tritium	-21.2 U	110	192	Unfiltered		ES
RD-59B		Primary	11/05/04	Tritium	-32.1 U	93	159	Unfiltered		ES
RD-59B		Primary	09/07/05	Tritium	-61.2 U	99	171	Unfiltered		ES
RD-59B		Primary	02/22/06	Tritium	41.9 U	100	169	Unfiltered		ES
RD-59B		Primary	08/23/06	Tritium	-42.8 U	100	171	Unfiltered		ES
RD-59B		Primary	11/14/06	Tritium	-144 U	170	187	Unfiltered		ES
RD-59B		Primary	02/28/07	Tritium	9.38 U	55	90.8	Unfiltered		ES
RD-59B		Split	02/28/07	Tritium	-28 U	73	118	Unfiltered		STL
RD-59B		Primary	08/16/07	Tritium	38.8 U	50	82.5	Unfiltered		ES
RD-59B		Primary	05/20/08	Tritium	-57.5 U	91	158	Unfiltered		ES
RD-59B		Primary	08/14/08	Tritium	-70.3 U	92	158	Unfiltered		ES
RD-59B		Primary	03/03/09	Tritium	-81.3 U	110	189	Unfiltered		ES
RD-59B		Primary	08/04/09	Tritium	-60.4 U	100	178	Unfiltered		ES
RD-59C		Primary	06/20/94	Tritium	20 U	140	---	Unfiltered		LAS
RD-59C		Primary	08/16/94	Tritium	-30 U	130	260	Unfiltered		LAS
RD-59C		Primary	02/06/95	Tritium	-50 U	190	250	Unfiltered		LAS
RD-59C		Primary	08/08/95	Tritium	-200 U	190	280	Unfiltered		LAS
RD-59C		Primary	03/12/96	Tritium	-60 U	100	170	Unfiltered		LAS
RD-59C		Primary	08/21/96	Tritium	50 U	100	180	Unfiltered		LAS
RD-59C		Primary	02/16/97	Tritium	40 U	130	230	Unfiltered		LAS
RD-59C		Primary	08/22/97	Tritium	-70 U	110	210	Unfiltered		LAS
RD-59C		Primary	08/19/98	Tritium	43.3 U	120	207	Unfiltered		TN
RD-59C		Primary	02/16/99	Tritium	30.6 U	120	203	Unfiltered		TN

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-59C		Primary	08/06/99	Tritium	-30.5 U	94	161	Unfiltered		TN
RD-59C		Primary	03/14/00	Tritium	7.68 U	110	181	Unfiltered		TN
RD-59C		Primary	08/10/00	Tritium	54.4 U	130	223	Unfiltered		TR
RD-59C		Primary	02/17/01	Tritium	30.6 U	130	212	Unfiltered		ES
RD-59C		Primary	11/12/01	Tritium	132 U	104	238	Unfiltered		DL
RD-59C		Primary	02/28/02	Tritium	0 U	59	350	Unfiltered		DL
RD-59C		Primary	08/08/02	Tritium	-43.8 U	120	204	Unfiltered		ES
RD-59C		Primary	01/31/03	Tritium	1.97 U	110	185	Unfiltered		ES
RD-59C		Primary	08/08/03	Tritium	50.7 U	110	190	Unfiltered		ES
RD-59C		Primary	11/05/04	Tritium	-14.9 U	95	162	Unfiltered		ES
RD-59C		Primary	09/07/05	Tritium	-15.4 U	100	172	Unfiltered		ES
RD-59C		Primary	02/22/06	Tritium	-34.2 U	99	169	Unfiltered		ES
RD-59C		Split	02/22/06	Tritium	40.4 U	150	329	Unfiltered		STL
RD-59C		Primary	08/23/06	Tritium	5.93 U	100	175	Unfiltered		ES
RD-59C		Primary	11/14/06	Tritium	-81.7 U	170	190	Unfiltered		ES
RD-59C		Primary	02/28/07	Tritium	-9.57 U	55	92.7	Unfiltered		ES
RD-59C		Primary	08/16/07	Tritium	45.7 U	50	81.9	Unfiltered		ES
RD-59C		Primary	05/20/08	Tritium	-34.6 U	93	160	Unfiltered		ES
RD-59C		Primary	08/14/08	Tritium	-32.8 U	93	159	Unfiltered		ES
RD-59C		Primary	03/03/09	Tritium	-66.6 U	110	188	Unfiltered		ES
RD-59C		Primary	08/04/09	Tritium	-93.7 U	100	178	Unfiltered		ES
RD-61		Primary	05/28/98	Tritium	-50.5 U	110	184	Unfiltered		TN
RD-63		Primary	05/19/94	Tritium	40 U	130	230	Unfiltered		LAS
RD-63		Primary	09/22/94	Tritium	80 U	150	---	Unfiltered		LAS
RD-63		Primary	11/09/94	Tritium	90 U	180	230	Unfiltered		LAS
RD-63		Primary	01/04/95	Tritium	350	210	---	Unfiltered		LAS
RD-63		Primary	02/02/99	Tritium	362	110	170	Unfiltered		TN
RD-63		Primary	02/16/00	Tritium	266	120	190	Unfiltered		TN
RD-63		Primary	02/23/01	Tritium	-26.9 U	130	216	Unfiltered		ES
RD-63		Primary	02/14/02	Tritium	41 U	120	384	Unfiltered		DL
RD-63		Primary	02/05/03	Tritium	152 U	120	194	Unfiltered		ES
RD-63		Primary	02/24/04	Tritium	344	120	181	Unfiltered		ES
RD-63		Primary	08/25/05	Tritium	69.5 U	180	301	Unfiltered		ES
RD-63		Primary	02/16/06	Tritium	350	110	165	Unfiltered		ES
RD-63		Primary	05/24/07	Tritium	51.4 U	49	81	Unfiltered		ES
RD-63		Split	05/24/07	Tritium	-9.7 U	69	112	Unfiltered		STL
RD-63		Primary	08/21/07	Tritium	-29.2 U	51	86.2	Unfiltered		ES
RD-63		Primary	02/06/08	Tritium	-31.7 U	86	147	Unfiltered		ES
RD-63		Primary	02/20/09	Tritium	-52 U	100	112	Unfiltered		ES
RD-63		Split	02/20/09	Tritium	-61 U	87.4	155	Unfiltered		GEL
RD-63		Primary	07/31/09	Tritium	100 U	86	138	Unfiltered		ES
RD-64		Primary	05/10/01	Tritium	181 U	130	203	Unfiltered		ES
RD-64		Primary	02/28/02	Tritium	204 U	58	350	Unfiltered		DL
RD-64	Z06	Primary	01/29/03	Tritium	21.3 U	110	182	Unfiltered		ES
RD-64	Z06	Primary	11/12/04	Tritium	17.7 U	130	230	Unfiltered		ES
RD-64	Z06	Primary	02/14/05	Tritium	24.5 U	150	256	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-64	Z06	Primary	02/16/06	Tritium	161 U	95	165	Unfiltered		ES
RD-64	Z06	Primary	02/08/07	Tritium	118 J	53	83.6	Unfiltered		ES
RD-64	Z07	Primary	02/06/08	Tritium	111 U	92	149	Unfiltered		ES
RD-64	Z08	Primary	02/23/09	Tritium	77.8 U	100	111	Unfiltered		ES
RD-64	Z04	Primary	07/16/09	Tritium	62.9 U	93	154	Unfiltered		ES
RD-65		Primary	02/27/97	Tritium	380	160	210	Unfiltered		LAS
RD-65		Primary	02/07/98	Tritium	322	130	194	Unfiltered		TN
RD-66		Primary	09/30/97	Tritium	30 U	100	180	Unfiltered		LAS
RD-68A		Primary	07/09/97	Tritium	20 U	110	210	Unfiltered		LAS
RD-68A		Primary	02/28/07	Tritium	-8.88 U	55	92.4	Unfiltered		ES
RD-68B		Primary	07/10/97	Tritium	-50 U	100	210	Unfiltered		LAS
RD-68B		Primary	02/28/07	Tritium	-31.5 U	56	93.7	Unfiltered		ES
RD-69		Primary	05/28/98	Tritium	68.6 U	110	183	Unfiltered		TN
RD-71		Primary	09/30/97	Tritium	110 U	110	180	Unfiltered		LAS
RD-74		Primary	05/13/99	Tritium	30.2 U	110	184	Unfiltered		TN
RD-75		Primary	08/30/05	Tritium	-23.3 U	150	268	Unfiltered		ES
RD-85		Primary	08/13/04	Tritium	-32 U	99	170	Unfiltered		ES
RD-85		Duplicate	08/13/04	Tritium	102 U	100	170	Unfiltered		ES
RD-85		Split	08/13/04	Tritium	80 U	220	370	Unfiltered		PA
RD-85		Primary	08/26/04	Tritium	83.9 U	110	188	Unfiltered		ES
RD-85		Primary	02/23/05	Tritium	-11.2 U	110	191	Unfiltered		ES
RD-86		Primary	08/13/04	Tritium	62.8 U	100	172	Unfiltered		ES
RD-86		Primary	08/26/04	Tritium	3.91 U	110	189	Unfiltered		ES
RD-86		Primary	02/23/05	Tritium	-93.8 U	110	192	Unfiltered		ES
RD-87		Primary	08/18/04	Tritium	14900	1500	167	Unfiltered		ES
RD-87		Duplicate	08/18/04	Tritium	15400	1600	173	Unfiltered		ES
RD-87		Primary	08/26/04	Tritium	14800	1500	182	Unfiltered		ES
RD-87		Primary	08/24/05	Tritium	10200	1100	263	Unfiltered		ES
RD-87		Primary	02/22/07	Tritium	12800	1300	90	Unfiltered		ES
RD-88		Primary	08/20/04	Tritium	82000	8200	178	Unfiltered		ES
RD-88		Primary	08/26/04	Tritium	86600	8700	198	Unfiltered		ES
RD-88		Primary	08/25/05	Tritium	57600	6000	562	Unfiltered		ES
RD-88		Primary	02/22/07	Tritium	57200	5700	144	Unfiltered		ES
RD-89		Primary	05/24/05	Tritium	75.8 U	96	158	Unfiltered		ES
RD-89		Duplicate	05/24/05	Tritium	95.9 U	97	159	Unfiltered		ES
RD-89		Primary	06/01/05	Tritium	55.2 U	100	166	Unfiltered		ES
RD-90		Primary	03/25/04	Tritium	75500	7700	917	Unfiltered		ES
RD-90		Primary	04/15/04	Tritium	83300	8400	233	Unfiltered		ES
RD-90		Primary	08/12/04	Tritium	90900	9100	187	Unfiltered		ES
RD-90		Primary	08/12/04	Tritium	89600	9000	188	Unfiltered		ES
RD-90		Primary	08/13/04	Tritium	83000	8300	182	Unfiltered		ES
RD-90		Primary	08/25/05	Tritium	71800	7500	631	Unfiltered		ES
RD-90		Primary	02/23/07	Tritium	63500	6400	154	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-91		Primary	03/25/04	Tritium	52.8 U	110	184	Unfiltered		ES
RD-91		Primary	04/15/04	Tritium	-62.8 U	130	216	Unfiltered		ES
RD-91		Primary	02/22/07	Tritium	-71 U	53	90.6	Unfiltered		ES
RD-92		Primary	03/25/04	Tritium	-10.5 U	110	182	Unfiltered		ES
RD-92		Primary	04/15/04	Tritium	-62.1 U	120	213	Unfiltered		ES
RD-93		Primary	05/23/05	Tritium	27800	3000	478	Unfiltered		ES
RD-93		Duplicate	05/23/05	Tritium	26000	2800	459	Unfiltered		ES
RD-93		Primary	06/01/05	Tritium	34900	3600	270	Unfiltered		ES
RD-93		Primary	08/24/05	Tritium	17300	1800	264	Unfiltered		ES
RD-93		Primary	02/22/07	Tritium	13700	1400	89.7	Unfiltered		ES
RD-94		Primary	05/23/05	Tritium	12200	1300	318	Unfiltered		ES
RD-94		Primary	06/01/05	Tritium	12400	1300	167	Unfiltered		ES
RD-94		Primary	08/25/05	Tritium	11900	1300	299	Unfiltered		ES
RD-94		Primary	02/22/07	Tritium	13400	1400	90.2	Unfiltered		ES
RD-95		Primary	05/23/05	Tritium	117000	13000	1040	Unfiltered		ES
RD-95		Primary	06/01/05	Tritium	112000	11000	489	Unfiltered		ES
RD-95		Primary	08/24/05	Tritium	103000	11000	465	Unfiltered		ES
RD-95		Primary	02/22/07	Tritium	91500	9200	185	Unfiltered		ES
RD-96		Primary	05/09/06	Tritium	76.2 U	140	228	Unfiltered		ES
RD-96		Primary	02/22/07	Tritium	-53.8 U	52	88.6	Unfiltered		ES
RD-97		Primary	05/09/06	Tritium	-33.6 U	130	228	Unfiltered		ES
RD-97		Primary	02/22/07	Tritium	-55 U	53	90.6	Unfiltered		ES
RD-98		Primary	06/26/08	Tritium	2.71 U	92	154	Unfiltered		ES
RD-98		Primary	09/11/08	Tritium	-145 U	97	171	Unfiltered		ES
RD-98		Primary	11/14/08	Tritium	-10.5 U	110	186	Unfiltered		ES
WS-04A		Primary	09/09/89	Tritium	-155 U	125	---	Unfiltered		UST
WS-04A		Split	09/09/89	Tritium	1000 U	---	1000	Unfiltered		TMA
WS-04A		Primary	12/06/90	Tritium	-67.2 U	195	500	Unfiltered		IT
WS-05		Primary	09/09/89	Tritium	-216 U	119	---	Unfiltered		UST
WS-05		Split	09/09/89	Tritium	1000 U	---	1000	Unfiltered		TMA
WS-05		Primary	05/06/94	Tritium	-40 U	110	230	Unfiltered		LAS
WS-06		Primary	09/11/89	Tritium	-128 U	125	---	Unfiltered		UST
WS-06		Split	09/11/89	Tritium	1000 U	---	1000	Unfiltered		TMA
WS-07		Primary	12/06/90	Tritium	187 U	235	500	Unfiltered		IT
WS-07		Duplicate	12/06/90	Tritium	78 U	229	500	Unfiltered		IT
WS-07		Primary	03/08/91	Tritium	-70.2 U	178	500	Unfiltered		IT
WS-07		Primary	12/07/91	Tritium	-48.1 U	209	500	Unfiltered		IT
WS-07		Split	12/07/91	Tritium	500 U	---	500	Unfiltered		CEP
WS-07		Primary	03/25/92	Tritium	500 U	---	500	Unfiltered		CEP
WS-08		Primary	09/09/89	Tritium	-258 U	138	---	Unfiltered		UST
WS-08		Split	09/09/89	Tritium	1000 U	---	1000	Unfiltered		TMA
WS-09		Primary	07/23/09	Tritium	67.8 U	85	140	Unfiltered		ES
WS-09A		Primary	09/12/89	Tritium	-53.4 U	127	---	Unfiltered		UST

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
WS-09A		Split	09/12/89	Tritium	1000 U	---	1000	Unfiltered		TMA
Private Off-site Wells										
OS-01		Primary	09/13/89	Tritium	-227 U	121	---	Unfiltered		UST
OS-01		Split	09/13/89	Tritium	1000 U	---	1000	Unfiltered		TMA
OS-01		Primary	12/11/90	Tritium	-17.5 U	207	500	Unfiltered		IT
OS-01		Primary	03/09/91	Tritium	-109 U	185	500	Unfiltered		IT
OS-01		Primary	09/09/91	Tritium	63.8 U	201	500	Unfiltered		IT
OS-01		Primary	12/09/91	Tritium	-49 U	209	500	Unfiltered		IT
OS-01		Primary	06/09/92	Tritium	-129 U	489	500	Unfiltered		CEP
OS-01		Primary	09/15/92	Tritium	411 U	500	500	Unfiltered		CEP
OS-01		Primary	12/17/92	Tritium	187 U	498	500	Unfiltered		CEP
OS-01		Primary	06/22/93	Tritium	-17 U	446	500	Unfiltered		CEP
OS-01		Primary	08/23/93	Tritium	-436 U	500	500	Unfiltered		CEP
OS-01		Primary	11/08/93	Tritium	60 U	120	210	Unfiltered		LAS
OS-01		Primary	02/23/94	Tritium	-70 U	130	270	Unfiltered		LAS
OS-01		Primary	08/15/94	Tritium	-70 U	120	250	Unfiltered		LAS
OS-01		Primary	02/06/95	Tritium	10 U	200	260	Unfiltered		LAS
OS-01		Primary	08/08/95	Tritium	-110 U	200	280	Unfiltered		LAS
OS-01		Primary	08/21/96	Tritium	-20 U	110	220	Unfiltered		LAS
OS-02		Primary	09/13/89	Tritium	-90.8 U	128	---	Unfiltered		UST
OS-02		Split	09/13/89	Tritium	1000 U	---	1000	Unfiltered		TMA
OS-02		Primary	12/11/90	Tritium	-39.7 U	206	500	Unfiltered		IT
OS-02		Primary	03/08/91	Tritium	86.5 U	186	500	Unfiltered		IT
OS-02		Duplicate	03/08/91	Tritium	-80.4 U	186	500	Unfiltered		IT
OS-02		Primary	09/09/91	Tritium	0 U	198	500	Unfiltered		IT
OS-02		Primary	12/09/91	Tritium	-61 U	208	500	Unfiltered		IT
OS-02		Primary	06/09/92	Tritium	348 U	493	500	Unfiltered		CEP
OS-02		Primary	09/15/92	Tritium	299 U	500	500	Unfiltered		CEP
OS-02		Primary	12/17/92	Tritium	-607 U	520	500	Unfiltered		CEP
OS-02		Primary	06/22/93	Tritium	74 U	500	500	Unfiltered		CEP
OS-02		Primary	08/23/93	Tritium	51 U	426	500	Unfiltered		CEP
OS-02		Primary	11/08/93	Tritium	20 U	120	210	Unfiltered		LAS
OS-02		Primary	02/23/94	Tritium	-20 U	140	270	Unfiltered		LAS
OS-02		Primary	08/15/94	Tritium	10 U	140	260	Unfiltered		LAS
OS-02		Primary	02/06/95	Tritium	-20 U	200	250	Unfiltered		LAS
OS-02		Primary	08/08/95	Tritium	-50 U	200	270	Unfiltered		LAS
OS-02		Primary	08/21/96	Tritium	70 U	120	210	Unfiltered		LAS
OS-02		Primary	08/22/97	Tritium	-40 U	110	210	Unfiltered		LAS
OS-02		Primary	08/19/98	Tritium	-83.2 U	120	216	Unfiltered		TN
OS-02		Primary	02/28/07	Tritium	-6.69 U	56	92.8	Unfiltered		ES
OS-03		Primary	09/13/89	Tritium	7.49 U	132	---	Unfiltered		UST
OS-03		Split	09/13/89	Tritium	1000 U	---	1000	Unfiltered		TMA
OS-03		Primary	12/11/90	Tritium	-35.1 U	207	500	Unfiltered		IT
OS-03		Primary	03/08/91	Tritium	44.4 U	192	500	Unfiltered		IT
OS-03		Primary	12/09/91	Tritium	-9.24 U	211	500	Unfiltered		IT
OS-03		Primary	06/09/92	Tritium	-223 U	485	500	Unfiltered		CEP

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Private Off-site Wells										
OS-03		Primary	06/22/93	Tritium	104 U	500	500	Unfiltered		CEP
OS-03		Primary	08/23/93	Tritium	-120 U	421	500	Unfiltered		CEP
OS-03		Primary	11/08/93	Tritium	80 U	140	240	Unfiltered		LAS
OS-03		Primary	02/23/94	Tritium	0 U	140	270	Unfiltered		LAS
OS-03		Primary	08/15/94	Tritium	-60 U	130	260	Unfiltered		LAS
OS-03		Primary	02/06/95	Tritium	-140 U	190	260	Unfiltered		LAS
OS-03		Primary	08/08/95	Tritium	150 U	230	280	Unfiltered		LAS
OS-03		Primary	08/21/96	Tritium	60 U	130	220	Unfiltered		LAS
OS-03		Primary	08/22/97	Tritium	-73 U	99	200	Unfiltered		LAS
OS-03		Primary	08/19/98	Tritium	63.1 U	130	213	Unfiltered		TN
OS-04		Primary	09/13/89	Tritium	71.2 U	135	---	Unfiltered		UST
OS-04		Split	09/13/89	Tritium	1000 U	---	1000	Unfiltered		TMA
OS-04		Primary	12/11/90	Tritium	-26.8 U	208	500	Unfiltered		IT
OS-04		Primary	06/09/92	Tritium	169 U	488	500	Unfiltered		CEP
OS-04		Primary	06/22/93	Tritium	-385 U	500	500	Unfiltered		CEP
OS-04		Primary	08/23/93	Tritium	-477 U	500	500	Unfiltered		CEP
OS-04		Primary	02/23/94	Tritium	-70 U	130	270	Unfiltered		LAS
OS-04		Primary	08/15/94	Tritium	-80 U	120	260	Unfiltered		LAS
OS-04		Primary	02/06/95	Tritium	-20 U	200	250	Unfiltered		LAS
OS-04		Primary	08/08/95	Tritium	-90 U	210	290	Unfiltered		LAS
OS-04		Primary	08/21/96	Tritium	110 U	130	220	Unfiltered		LAS
OS-04		Primary	08/22/97	Tritium	0 U	120	220	Unfiltered		LAS
OS-04		Primary	08/19/98	Tritium	-2.28 U	120	208	Unfiltered		TN
OS-04		Primary	02/28/07	Tritium	0 U	55	92.2	Unfiltered		ES
OS-05		Primary	09/13/89	Tritium	-52.4 U	129	---	Unfiltered		UST
OS-05		Split	09/13/89	Tritium	1000 U	---	1000	Unfiltered		TMA
OS-05		Primary	12/11/90	Tritium	-80.3 U	205	500	Unfiltered		IT
OS-05		Primary	03/08/91	Tritium	-162 U	182	500	Unfiltered		IT
OS-05		Primary	09/09/91	Tritium	129 U	204	500	Unfiltered		IT
OS-05		Primary	12/09/91	Tritium	61.9 U	214	500	Unfiltered		IT
OS-05		Primary	06/09/92	Tritium	91 U	492	500	Unfiltered		CEP
OS-05		Primary	09/15/92	Tritium	620	509	500	Unfiltered		CEP
OS-05		Split	09/15/92	Tritium	-220 U	270	500	Unfiltered		BL
OS-05		Primary	12/17/92	Tritium	20 U	498	500	Unfiltered		CEP
OS-05		Primary	06/22/93	Tritium	-628 U	500	500	Unfiltered		CEP
OS-05		Primary	08/23/93	Tritium	-89 U	434	500	Unfiltered		CEP
OS-05		Primary	11/08/93	Tritium	20 U	120	220	Unfiltered		LAS
OS-05		Primary	02/23/94	Tritium	50 U	150	270	Unfiltered		LAS
OS-05		Primary	08/08/95	Tritium	60 U	210	270	Unfiltered		LAS
OS-05		Primary	08/21/96	Tritium	-20 U	110	220	Unfiltered		LAS
OS-05		Primary	08/22/97	Tritium	-40 U	110	210	Unfiltered		LAS
OS-05		Primary	08/19/98	Tritium	-39.4 U	120	211	Unfiltered		TN
OS-05A		Primary	02/06/95	Tritium	-60 U	190	260	Unfiltered		LAS
OS-05A		Primary	08/08/95	Tritium	330	250	290	Unfiltered		LAS
OS-08		Primary	09/13/89	Tritium	101 U	140	---	Unfiltered		UST
OS-08		Split	09/13/89	Tritium	1000 U	---	1000	Unfiltered		TMA

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Private Off-site Wells										
OS-08		Primary	06/09/92	Tritium	-172 U	490	500	Unfiltered		CEP
OS-08		Primary	06/22/93	Tritium	-332 U	500	500	Unfiltered		CEP
OS-08		Primary	08/15/94	Tritium	-10 U	140	260	Unfiltered		LAS
OS-09		Primary	02/28/07	Tritium	-65.1 U	55	93.4	Unfiltered		ES
OS-09R		Primary	01/26/04	Tritium	-32.5 U	120	204	Unfiltered		ES
OS-10		Primary	09/13/89	Tritium	-121 U	126	---	Unfiltered		UST
OS-10		Split	09/13/89	Tritium	1000 U	---	1000	Unfiltered		TMA
OS-10		Primary	12/09/91	Tritium	-120 U	205	500	Unfiltered		IT
OS-10		Primary	08/15/94	Tritium	10 U	140	260	Unfiltered		LAS
OS-15		Primary	12/10/91	Tritium	127 U	224	500	Unfiltered		IT
OS-16		Primary	09/14/89	Tritium	-100 U	127	---	Unfiltered		UST
OS-16		Split	09/14/89	Tritium	1000 U	---	1000	Unfiltered		TMA
OS-16		Primary	09/09/91	Tritium	-93.3 U	193	500	Unfiltered		IT
OS-16		Primary	12/10/91	Tritium	148 U	226	500	Unfiltered		IT
OS-16		Primary	03/12/92	Tritium	500 U	---	500	Unfiltered		CEP
OS-17		Primary	09/13/89	Tritium	37.5 U	132	---	Unfiltered		UST
OS-17		Split	09/13/89	Tritium	1000 U	---	1000	Unfiltered		TMA
OS-17		Primary	09/12/91	Tritium	306 U	230	500	Unfiltered		IT
OS-17		Primary	12/10/91	Tritium	31.7 U	219	500	Unfiltered		IT
OS-17		Primary	03/12/92	Tritium	500 U	---	500	Unfiltered		CEP
OS-21		Primary	09/09/89	Tritium	-160 U	121	---	Unfiltered		UST
OS-21		Split	09/09/89	Tritium	1000 U	---	1000	Unfiltered		TMA
OS-21		Primary	03/09/91	Tritium	-38.8 U	188	500	Unfiltered		IT
OS-21		Primary	12/10/91	Tritium	-165 U	209	500	Unfiltered		IT
OS-21		Primary	03/12/92	Tritium	500 U	---	500	Unfiltered		CEP
OS-21		Primary	03/19/93	Tritium	119 U	490	500	Unfiltered		CEP
OS-27		Primary	05/15/97	Tritium	30 U	100	190	Unfiltered		LAS
Municipal Water Supply										
Calleguas		Primary	12/14/90	Tritium	117 U	230	500	Unfiltered		IT
Calleguas		Primary	03/12/92	Tritium	500 U	---	500	Unfiltered		CEP
Seeps/Springs										
FDP-881		Primary	07/09/09	Tritium	116 U	108	180	Unfiltered		GEL
FDP-882		Primary	07/09/09	Tritium	81.2 U	106	179	Unfiltered		GEL

See last page of table for notes and abbreviations.

TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

NOTES AND ABBREVIATIONS

BL = Barringer Laboratories, Inc., Golden, Colorado
CEP = Controls for Environmental Pollution, Santa Fe, New Mexico
DL = Davi Laboratories, Pinole, California
ES = Eberline Services, (formerly Thermo Retec), Richmond, California
GEL = General Engineering Laboratories, LLC, Charleston, South Carolina
IT = International Technologies, Inc., (formerly United States Testing), Richland, Washington
LAS = LAS Laboratories, (formerly Lockheed Martin), Las Vegas, Nevada
PA = Paragon Analytics, Fort Collins, Colorado
STL = Severn Trent Laboratories, (formerly International Technologies, Inc.), Richland, Washington
TAD = TestAmerica, Denver, Colorado
TAI = TestAmerica, Irvine, California
TEL = Teledyne Isotopes, Westwood, New Jersey
TMA = Thermoanalytical Inc. (TMA/NORCAL), Richmond, California
TN = Thermo NUtech, (formerly Thermoanalytical Inc. (TMA/NORCAL)), Richmond, California
TR = Thermo Retec, (formerly Thermo NUtech), Richmond, California
UST = United States Testing, Richland, Washington

MDA	=	Minimum detectable activity.
Z	=	FLUTe sample port number.
---	=	Analysis not performed.
J	=	Result is less than contract-required MDA and greater than or equal to the MDA.
S	=	Suspect result.
U	=	The result is less than the MDA reported by the laboratory.
pCi/L	=	picoCuries per liter.

NOTES:
Samples analyzed for tritium by EPA Method 906.0.

Any activity detected is reported by the laboratory, though the reported activity may be less than the overall laboratory error. Analytical results that are less than the instrument background count are shown as negative values.

As discussed in Appendix D, project specific MDAs were not always attained due in part to matrix conditions (e.g., dissolved and suspended solids) and limitations in the prescribed analytical methods (e.g., sample volumes, counting times).

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Piezometers										
PZ-101		Primary	06/02/05	Cesium-134	1.56 U	---	1.56	Filtered		ES
PZ-101		Primary	06/02/05	Cesium-137	1.25 U	---	1.25	Filtered		ES
PZ-101		Primary	06/02/05	Cobalt-57	0.546 U	---	0.546	Filtered		ES
PZ-101		Primary	06/02/05	Cobalt-60	1.36 U	---	1.36	Filtered		ES
PZ-101		Primary	06/02/05	Europium-152	3.1 U	---	3.1	Filtered		ES
PZ-101		Primary	06/02/05	Europium-154	4.09 U	---	4.09	Filtered		ES
PZ-101		Primary	06/02/05	Manganese-54	1.28 U	---	1.28	Filtered		ES
PZ-101		Primary	06/02/05	Sodium-22	1.39 U	---	1.39	Filtered		ES
PZ-107		Primary	06/02/05	Cesium-134	1.64 U	---	1.64	Filtered		ES
PZ-107		Primary	06/02/05	Cesium-137	1.54 U	---	1.54	Filtered		ES
PZ-107		Primary	06/02/05	Cobalt-57	0.988 U	---	0.988	Filtered		ES
PZ-107		Primary	06/02/05	Cobalt-60	1.64 U	---	1.64	Filtered		ES
PZ-107		Primary	06/02/05	Europium-152	4.05 U	---	4.05	Filtered		ES
PZ-107		Primary	06/02/05	Europium-154	4.81 U	---	4.81	Filtered		ES
PZ-107		Primary	06/02/05	Manganese-54	1.48 U	---	1.48	Filtered		ES
PZ-107		Primary	06/02/05	Sodium-22	1.64 U	---	1.64	Filtered		ES
PZ-111		Primary	06/02/05	Cesium-134	1.56 U	---	1.56	Filtered		ES
PZ-111		Primary	06/02/05	Cesium-137	1.25 U	---	1.25	Filtered		ES
PZ-111		Primary	06/02/05	Cobalt-57	0.528 U	---	0.528	Filtered		ES
PZ-111		Primary	06/02/05	Cobalt-60	1.42 U	---	1.42	Filtered		ES
PZ-111		Primary	06/02/05	Europium-152	3.21 U	---	3.21	Filtered		ES
PZ-111		Primary	06/02/05	Europium-154	4.12 U	---	4.12	Filtered		ES
PZ-111		Primary	06/02/05	Manganese-54	1.23 U	---	1.23	Filtered		ES
PZ-111		Primary	06/02/05	Sodium-22	1.4 U	---	1.4	Filtered		ES
PZ-116		Primary	06/02/05	Cesium-134	1.65 U	---	1.65	Filtered		ES
PZ-116		Primary	06/02/05	Cesium-137	1.28 U	---	1.28	Filtered		ES
PZ-116		Primary	06/02/05	Cobalt-57	0.569 U	---	0.569	Filtered		ES
PZ-116		Primary	06/02/05	Cobalt-60	1.47 U	---	1.47	Filtered		ES
PZ-116		Primary	06/02/05	Europium-152	3.34 U	---	3.34	Filtered		ES
PZ-116		Primary	06/02/05	Europium-154	4.11 U	---	4.11	Filtered		ES
PZ-116		Primary	06/02/05	Manganese-54	1.26 U	---	1.26	Filtered		ES
PZ-116		Primary	06/02/05	Sodium-22	1.4 U	---	1.4	Filtered		ES
Shallow Wells										
ES-31		Primary	12/10/90	Cesium-137	-5.61 U	5.7	10	Filtered		IT
ES-31		Primary	03/04/91	Cesium-137	-1.01 U	4.78	10	Filtered		IT
ES-31		Duplicate	03/04/91	Cesium-137	-1.69 U	5.35	10	Filtered		IT
ES-31		Primary	06/03/91	Cesium-137	2.08 U	---	10	Filtered		IT
ES-31		Primary	06/06/91	Cesium-137	2.08 U	4.3	10	Filtered		IT
ES-31		Primary	12/07/91	Cesium-137	2.84 U	4.49	10	Filtered		IT
ES-31		Primary	03/05/92	Cesium-137	0 U	---	---	Filtered		CEP
ES-31		Primary	02/06/99	Cesium-134	16.6 U	---	16.6	Filtered		TN
ES-31		Primary	02/06/99	Cesium-137	13.2 U	---	13.2	Filtered		TN
ES-31		Primary	02/06/99	Cobalt-57	9.08 U	---	9.08	Filtered		TN
ES-31		Primary	02/06/99	Cobalt-60	14.6 U	---	14.6	Filtered		TN
ES-31		Primary	02/06/00	Cesium-134	15.1 U	---	15.1	Filtered		TR

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
ES-31		Primary	02/06/00	Cesium-137	13.9 U	---	13.9	Filtered		TR
ES-31		Primary	02/06/00	Cobalt-57	8.52 U	---	8.52	Filtered		TR
ES-31		Primary	02/06/00	Cobalt-60	16.7 U	---	16.7	Filtered		TR
ES-31		Primary	02/15/01	Cesium-134	14.2 U	---	14.2	Filtered		ES
ES-31		Primary	02/15/01	Cesium-137	11.7 U	---	11.7	Filtered		ES
ES-31		Primary	02/15/01	Cobalt-57	7.93 U	---	7.93	Filtered		ES
ES-31		Primary	02/15/01	Cobalt-60	11.1 U	---	11.1	Filtered		ES
ES-31		Primary	02/18/02	Cesium-134	3 U	3	3	Filtered		DL
ES-31		Primary	02/18/02	Cesium-137	3 U	3	3	Filtered		DL
ES-31		Primary	02/18/02	Cobalt-57	3 U	3	3	Filtered		DL
ES-31		Primary	02/18/02	Cobalt-60	3 U	3	3	Filtered		DL
ES-31		Primary	02/19/03	Cesium-134	2.16 U	---	2.16	Filtered		ES
ES-31		Primary	02/19/03	Cesium-137	1.94 U	---	1.94	Filtered		ES
ES-31		Primary	02/19/03	Cobalt-57	1.35 U	---	1.35	Filtered		ES
ES-31		Primary	02/19/03	Cobalt-60	1.96 U	---	1.96	Filtered		ES
ES-31		Primary	03/10/05	Cesium-134	1.66 U	---	1.66	Filtered		ES
ES-31		Primary	03/10/05	Cesium-137	1.29 U	---	1.29	Filtered		ES
ES-31		Primary	03/10/05	Cobalt-57	0.552 U	---	0.552	Filtered		ES
ES-31		Primary	03/10/05	Cobalt-60	1.51 U	---	1.51	Filtered		ES
ES-31		Primary	03/10/05	Europium-152	3.13 U	---	3.13	Filtered		ES
ES-31		Primary	03/10/05	Europium-154	4.39 U	---	4.39	Filtered		ES
ES-31		Primary	03/10/05	Manganese-54	1.39 U	---	1.39	Filtered		ES
ES-31		Primary	03/10/05	Sodium-22	1.46 U	---	1.46	Filtered		ES
ES-31		Primary	02/21/06	Cesium-134	1.19 U	---	1.19	Filtered		ES
ES-31		Primary	02/21/06	Cesium-137	1.15 U	---	1.15	Filtered		ES
ES-31		Primary	02/21/06	Cobalt-57	0.743 U	---	0.743	Filtered		ES
ES-31		Primary	02/21/06	Cobalt-60	1.15 U	---	1.15	Filtered		ES
ES-31		Primary	02/21/06	Europium-152	2.75 U	---	2.75	Filtered		ES
ES-31		Primary	02/21/06	Europium-154	3 U	---	3	Filtered		ES
ES-31		Primary	02/21/06	Manganese-54	1.14 U	---	1.14	Filtered		ES
ES-31		Primary	02/21/06	Sodium-22	1.04 U	---	1.04	Filtered		ES
ES-31		Primary	02/28/07	Cesium-134	1.6 U	---	1.6	Filtered		ES
ES-31		Primary	02/28/07	Cesium-137	1 U	---	1	Filtered		ES
ES-31		Primary	02/28/07	Cobalt-57	0.605 U	---	0.605	Filtered		ES
ES-31		Primary	02/28/07	Cobalt-60	1.04 U	---	1.04	Filtered		ES
ES-31		Primary	02/28/07	Europium-152	2.89 U	---	2.89	Filtered		ES
ES-31		Primary	02/28/07	Europium-154	3.37 U	---	3.37	Filtered		ES
ES-31		Primary	02/28/07	Manganese-54	0.939 U	---	0.939	Filtered		ES
ES-31		Primary	02/28/07	Sodium-22	1.15 U	---	1.15	Filtered		ES
ES-31		Primary	02/01/08	Cesium-134	1.58 U	---	1.58	Filtered		ES
ES-31		Primary	02/01/08	Cesium-137	1.23 U	---	1.23	Filtered		ES
ES-31		Primary	02/01/08	Cobalt-57	0.793 U	---	0.793	Filtered		ES
ES-31		Primary	02/01/08	Cobalt-60	1.26 U	---	1.26	Filtered		ES
ES-31		Primary	02/01/08	Europium-152	3.19 U	---	3.19	Filtered		ES
ES-31		Primary	02/01/08	Europium-154	3.77 U	---	3.77	Filtered		ES
ES-31		Primary	02/01/08	Manganese-54	1.16 U	---	1.16	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
ES-31		Primary	02/01/08	Sodium-22	1.36 U	---	1.36	Filtered		ES
ES-31		Primary	03/04/09	Antimony-125	0.069 U	1.9	3.22	Filtered		ES
ES-31		Primary	03/04/09	Antimony-125	-0.012 U	3.2	5.38	Unfiltered		ES
ES-31		Primary	03/04/09	Barium-133	0.048 U	1.3	2.22	Filtered		ES
ES-31		Primary	03/04/09	Barium-133	-3.36 U	2.9	4.89	Unfiltered		ES
ES-31		Primary	03/04/09	Cesium-134	0.184 U	0.98	1.69	Filtered		ES
ES-31		Primary	03/04/09	Cesium-134	-1.38 U	1.5	2.54	Unfiltered		ES
ES-31		Primary	03/04/09	Cesium-137	-0.589 U	0.99	1.74	Filtered		ES
ES-31		Primary	03/04/09	Cesium-137	0.07 U	1.8	3.04	Unfiltered		ES
ES-31		Primary	03/04/09	Cobalt-60	0.002 U	0.58	1.05	Filtered		ES
ES-31		Primary	03/04/09	Cobalt-60	-0.86 U	1.6	2.68	Unfiltered		ES
ES-31		Primary	03/04/09	Europium-152	-0.56 U	2.6	4.47	Filtered		ES
ES-31		Primary	03/04/09	Europium-152	-1.71 U	3.1	5.35	Unfiltered		ES
ES-31		Primary	03/04/09	Europium-154	0.747 U	2.4	4.14	Filtered		ES
ES-31		Primary	03/04/09	Europium-154	-0.124 U	3.9	6.72	Unfiltered		ES
ES-31		Primary	03/04/09	Europium-155	1.02 U	4	6.81	Filtered		ES
ES-31		Primary	03/04/09	Europium-155	0.167 U	3.4	5.8	Unfiltered		ES
ES-31		Primary	03/04/09	Manganese-54	0.29 U	0.98	1.69	Filtered		ES
ES-31		Primary	03/04/09	Manganese-54	-0.083 U	1.3	2.23	Unfiltered		ES
ES-31		Primary	03/04/09	Sodium-22	0.255 U	0.81	1.41	Filtered		ES
ES-31		Primary	03/04/09	Sodium-22	-0.042 U	1.3	2.29	Unfiltered		ES
ES-31		Primary	07/17/09	Antimony-125	-3.21 U	7.1	12.5	Filtered		ES
ES-31		Primary	07/17/09	Antimony-125	3.07 U	7.7	13	Unfiltered		ES
ES-31		Primary	07/17/09	Barium-133	0.756 U	1.4	4.76	Filtered		ES
ES-31		Primary	07/17/09	Barium-133	-1.99 U	4.5	7.68	Unfiltered		ES
ES-31		Primary	07/17/09	Cesium-134	-1.67 U	4.2	7.36	Filtered		ES
ES-31		Primary	07/17/09	Cesium-134	-0.571 U	0.99	5.4	Unfiltered		ES
ES-31		Primary	07/17/09	Cesium-137	2.08 U	4.6	7.87	Filtered		ES
ES-31		Primary	07/17/09	Cesium-137	1.36 U	4.4	7.51	Unfiltered		ES
ES-31		Primary	07/17/09	Cobalt-60	-1 U	4.6	8.09	Filtered		ES
ES-31		Primary	07/17/09	Cobalt-60	-0.928 U	3.8	6.71	Unfiltered		ES
ES-31		Primary	07/17/09	Europium-152	-5.87 U	12	20	Filtered		ES
ES-31		Primary	07/17/09	Europium-152	1.96 U	1.9	11.9	Unfiltered		ES
ES-31		Primary	07/17/09	Europium-154	-1.49 U	7.7	13.9	Filtered		ES
ES-31		Primary	07/17/09	Europium-154	2.78 U	7.3	12.6	Unfiltered		ES
ES-31		Primary	07/17/09	Europium-155	-1.27 U	7.7	13.2	Filtered		ES
ES-31		Primary	07/17/09	Europium-155	-4.47 U	7.7	13.3	Unfiltered		ES
ES-31		Primary	07/17/09	Manganese-54	0.893 U	3.7	6.35	Filtered		ES
ES-31		Primary	07/17/09	Manganese-54	0.946 U	3.5	5.96	Unfiltered		ES
ES-31		Primary	07/17/09	Sodium-22	-0.505 U	2.6	4.71	Filtered		ES
ES-31		Primary	07/17/09	Sodium-22	0.941 U	2.5	4.28	Unfiltered		ES
HAR-14		Primary	09/12/89	Cesium-137	1.95 U	4.39	---	Filtered		UST
HAR-14		Primary	09/12/89	Cesium-137	1.12 U	5.04	---	Unfiltered		UST
HAR-14		Split	09/12/89	Cesium-137	-19 U	---	---	Filtered		TMA
HAR-14		Split	09/12/89	Cesium-137	-6 U	---	---	Unfiltered		TMA
HAR-14		Primary	09/12/89	Cobalt-60	1.99 U	4.62	---	Filtered		UST

See last page of table for notes and abbreviations.

TABLE E-III
RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
HAR-14		Primary	09/12/89	Cobalt-60	0.85 U	4.32	---	Unfiltered		UST
RS-05		Primary	10/31/89	Cesium-137	-2.54 U	5.37	---	Filtered		UST
RS-05		Primary	10/31/89	Cesium-137	-2.73 U	4.72	---	Unfiltered		UST
RS-11		Primary	12/06/90	Cesium-137	-1.14 U	5.41	10	Filtered		IT
RS-11		Primary	03/04/91	Cesium-137	0.134 U	4.36	10	Filtered		IT
RS-11		Primary	12/07/91	Cesium-137	-3.15 U	4.04	10	Filtered		IT
RS-11		Primary	03/05/92	Cesium-137	0 U	---	---	Filtered		CEP
RS-11		Primary	02/06/99	Cesium-134	14 U	---	14	Filtered		TN
RS-11		Primary	02/06/99	Cesium-137	11.2 U	---	11.2	Filtered		TN
RS-11		Primary	02/06/99	Cobalt-57	7.88 U	---	7.88	Filtered		TN
RS-11		Primary	02/06/99	Cobalt-60	14.2 U	---	14.2	Filtered		TN
RS-11		Primary	02/15/00	Cesium-134	17.4 U	---	17.4	Filtered		TR
RS-11		Primary	02/15/00	Cesium-137	14.8 U	---	14.8	Filtered		TR
RS-11		Primary	02/15/00	Cobalt-57	7.31 U	---	7.31	Filtered		TR
RS-11		Primary	02/15/00	Cobalt-60	12.9 U	---	12.9	Filtered		TR
RS-11		Primary	02/06/01	Cesium-134	19.6 U	---	19.6	Filtered		ES
RS-11		Primary	02/06/01	Cesium-137	14.6 U	---	14.6	Filtered		ES
RS-11		Primary	02/06/01	Cobalt-57	8.09 U	---	8.09	Filtered		ES
RS-11		Primary	02/06/01	Cobalt-60	14.8 U	---	14.8	Filtered		ES
RS-11		Primary	05/01/03	Cesium-134	1.58 U	---	1.58	Filtered		ES
RS-11		Primary	05/01/03	Cesium-137	1.17 U	---	1.17	Filtered		ES
RS-11		Primary	05/01/03	Cobalt-57	0.84 U	---	0.84	Filtered		ES
RS-11		Primary	05/01/03	Cobalt-60	1.48 U	---	1.48	Filtered		ES
RS-11		Primary	02/17/05	Cesium-134	1.64 U	---	1.64	Filtered		ES
RS-11		Primary	02/17/05	Cesium-137	1.32 U	---	1.32	Filtered		ES
RS-11		Primary	02/17/05	Cobalt-57	0.563 U	---	0.563	Filtered		ES
RS-11		Primary	02/17/05	Cobalt-60	1.55 U	---	1.55	Filtered		ES
RS-11		Primary	02/17/05	Europium-152	3.33 U	---	3.33	Filtered		ES
RS-11		Primary	02/17/05	Europium-154	4.36 U	---	4.36	Filtered		ES
RS-11		Primary	02/17/05	Manganese-54	1.36 U	---	1.36	Filtered		ES
RS-11		Primary	02/17/05	Sodium-22	1.48 U	---	1.48	Filtered		ES
RS-11		Primary	02/21/06	Cesium-134	0.941 U	---	0.941	Filtered		ES
RS-11		Primary	02/21/06	Cesium-137	0.844 U	---	0.844	Filtered		ES
RS-11		Primary	02/21/06	Cobalt-57	0.622 U	---	0.622	Filtered		ES
RS-11		Primary	02/21/06	Cobalt-60	0.839 U	---	0.839	Filtered		ES
RS-11		Primary	02/21/06	Europium-152	2.13 U	---	2.13	Filtered		ES
RS-11		Primary	02/21/06	Europium-154	2.44 U	---	2.44	Filtered		ES
RS-11		Primary	02/21/06	Manganese-54	0.802 U	---	0.802	Filtered		ES
RS-11		Primary	02/21/06	Sodium-22	0.844 U	---	0.844	Filtered		ES
RS-11		Primary	02/28/07	Cesium-134	1.05 U	---	1.05	Filtered		ES
RS-11		Primary	02/28/07	Cesium-137	0.949 U	---	0.949	Filtered		ES
RS-11		Primary	02/28/07	Cobalt-57	0.627 U	---	0.627	Filtered		ES
RS-11		Primary	02/28/07	Cobalt-60	0.936 U	---	0.936	Filtered		ES
RS-11		Primary	02/28/07	Europium-152	2.57 U	---	2.57	Filtered		ES
RS-11		Primary	02/28/07	Europium-154	2.88 U	---	2.88	Filtered		ES
RS-11		Primary	02/28/07	Manganese-54	0.857 U	---	0.857	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-11		Primary	02/28/07	Sodium-22	0.981 U	---	0.981	Filtered		ES
RS-11		Primary	05/02/08	Cesium-134	1.37 U	---	1.37	Filtered		ES
RS-11		Primary	05/02/08	Cesium-137	1.1 U	---	1.1	Filtered		ES
RS-11		Primary	05/02/08	Cobalt-57	0.828 U	---	0.828	Filtered		ES
RS-11		Primary	05/02/08	Cobalt-60	1.3 U	---	1.3	Filtered		ES
RS-11		Primary	05/02/08	Europium-152	3.18 U	---	3.18	Filtered		ES
RS-11		Primary	05/02/08	Europium-154	3.63 U	---	3.63	Filtered		ES
RS-11		Primary	05/02/08	Manganese-54	1.25 U	---	1.25	Filtered		ES
RS-11		Primary	05/02/08	Sodium-22	1.24 U	---	1.24	Filtered		ES
RS-16		Primary	03/09/92	Cesium-137	0 U	---	---	Filtered		CEP
RS-16		Primary	02/01/08	Cesium-134	1.01 U	---	1.01	Filtered		ES
RS-16		Primary	02/01/08	Cesium-137	0.758 U	---	0.758	Filtered		ES
RS-16		Primary	02/01/08	Cobalt-57	0.412 U	---	0.412	Filtered		ES
RS-16		Primary	02/01/08	Cobalt-60	1.3 U	---	1.3	Filtered		ES
RS-16		Primary	02/01/08	Europium-152	1.99 U	---	1.99	Filtered		ES
RS-16		Primary	02/01/08	Europium-154	2.37 U	---	2.37	Filtered		ES
RS-16		Primary	02/01/08	Manganese-54	0.738 U	---	0.738	Filtered		ES
RS-16		Primary	02/01/08	Sodium-22	0.806 U	---	0.806	Filtered		ES
RS-17		Primary	12/10/90	Cesium-137	1.9 U	4.67	10	Filtered		IT
RS-17		Primary	12/07/91	Cesium-137	-0.442 U	5.62	10	Filtered		IT
RS-17		Primary	12/05/92	Cesium-137	0 U	---	---	Filtered		CEP
RS-18		Primary	03/10/91	Cesium-137	2.4 U	4.23	10	Filtered		IT
RS-18		Duplicate	03/10/91	Cesium-137	0.985 U	4.69	10	Filtered		IT
RS-18		Primary	03/04/92	Cesium-137	0 U	---	---	Filtered		CEP
RS-18		Split	12/15/92	Cesium-134	5.2 U	---	5.2	Filtered		BL
RS-18		Primary	12/15/92	Cesium-137	0 U	---	---	Filtered		CEP
RS-18		Split	12/15/92	Cesium-137	5.2 U	---	5.2	Filtered		BL
RS-18		Split	12/15/92	Cobalt-57	5.2 U	---	5.2	Filtered		BL
RS-18		Split	12/15/92	Cobalt-60	5.2 U	---	5.2	Filtered		BL
RS-18		Primary	06/23/93	Cesium-137	0 U	---	---	Filtered		CEP
RS-18		Primary	11/06/93	Antimony-125	2.35 U	---	2.35	Filtered		LAS
RS-18		Primary	11/06/93	Beryllium-7	16.5 U	---	16.5	Filtered		LAS
RS-18		Primary	11/06/93	Cesium-134	2.53 U	---	2.53	Filtered		LAS
RS-18		Primary	11/06/93	Cesium-137	1.84 U	---	1.84	Filtered		LAS
RS-18		Primary	11/06/93	Cobalt-60	1.28 U	---	1.28	Filtered		LAS
RS-18		Primary	11/06/93	Europium-152	5.53 U	---	5.53	Filtered		LAS
RS-18		Primary	11/06/93	Europium-154	3.85 U	---	3.85	Filtered		LAS
RS-18		Primary	11/06/93	Europium-155	3.2 U	---	3.2	Filtered		LAS
RS-18		Primary	11/06/93	Manganese-54	1.11 U	---	1.11	Filtered		LAS
RS-18		Primary	11/06/93	Ruthenium-106	7.91 U	---	7.91	Filtered		LAS
RS-18		Primary	11/06/93	Silver-110m	1.9 U	---	1.9	Filtered		LAS
RS-18		Primary	05/04/94	Cesium-137	-2.2 U	5.8	7.3	Filtered		LAS
RS-18		Primary	05/04/94	Cobalt-57	0.4 U	2.1	3.5	Filtered		LAS
RS-18		Primary	05/04/94	Cobalt-60	0.1 U	4.2	7.7	Filtered		LAS
RS-18		Primary	02/17/95	Cesium-134	-2.5 U	3.2	7.6	Filtered		LAS
RS-18		Primary	02/17/95	Cesium-137	-2.7 U	3.2	11	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-18		Primary	02/17/95	Cobalt-57	1.4 U	3.7	4.4	Filtered		LAS
RS-18		Primary	02/17/95	Cobalt-60	-0.9 U	2	9.6	Filtered		LAS
RS-18		Primary	08/10/95	Cesium-134	1.7 U	4	6.2	Filtered		LAS
RS-18		Primary	08/10/95	Cesium-137	1.5 U	5.2	9.2	Filtered		LAS
RS-18		Primary	08/10/95	Cobalt-57	3.6 U	2.8	4.3	Filtered		LAS
RS-18		Primary	08/10/95	Cobalt-60	0.8 U	4.7	9.5	Filtered		LAS
RS-18		Primary	05/16/96	Cesium-134	-3.2 U	2.1	7.7	Filtered		LAS
RS-18		Primary	05/16/96	Cesium-137	-3.3 U	2.9	9.5	Filtered		LAS
RS-18		Primary	05/16/96	Cobalt-57	0.5 U	3.3	4.3	Filtered		LAS
RS-18		Primary	05/16/96	Cobalt-60	-1.8 U	3.1	11	Filtered		LAS
RS-18		Primary	02/03/97	Cesium-134	0.5 U	8.9	15	Filtered		LAS
RS-18		Primary	02/03/97	Cesium-137	-3.4 U	5.5	17	Filtered		LAS
RS-18		Primary	02/03/97	Cobalt-57	-5.8 U	3.8	12	Filtered		LAS
RS-18		Primary	02/03/97	Cobalt-60	2 U	6.2	12	Filtered		LAS
RS-18		Primary	02/05/98	Cesium-134	5.26 U	---	5.26	Filtered		TN
RS-18		Primary	02/05/98	Cesium-137	3.69 U	---	3.69	Filtered		TN
RS-18		Primary	02/05/98	Cobalt-57	2.43 U	---	2.43	Filtered		TN
RS-18		Primary	02/05/98	Cobalt-60	4.07 U	---	4.07	Filtered		TN
RS-18		Primary	08/05/98	Cesium-134	32.3 U	---	32.3	Filtered		TN
RS-18		Primary	08/05/98	Cesium-137	31.3 U	---	31.3	Filtered		TN
RS-18		Primary	08/05/98	Cobalt-57	16.5 U	---	16.5	Filtered		TN
RS-18		Primary	08/05/98	Cobalt-60	32.6 U	---	32.6	Filtered		TN
RS-18		Primary	05/12/99	Cesium-134	8.74 U	---	8.74	Filtered		TN
RS-18		Primary	05/12/99	Cesium-137	7.12 U	---	7.12	Filtered		TN
RS-18		Primary	05/12/99	Cobalt-57	3.8 U	---	3.8	Filtered		TN
RS-18		Primary	05/12/99	Cobalt-60	6.96 U	---	6.96	Filtered		TN
RS-18		Primary	05/09/00	Cesium-134	17.5 U	---	17.5	Filtered		TR
RS-18		Primary	05/09/00	Cesium-137	13.4 U	---	13.4	Filtered		TR
RS-18		Primary	05/09/00	Cobalt-57	7.1 U	---	7.1	Filtered		TR
RS-18		Primary	05/09/00	Cobalt-60	14.2 U	---	14.2	Filtered		TR
RS-18		Primary	02/19/01	Cesium-134	18.9 U	---	18.9	Filtered		ES
RS-18		Primary	02/19/01	Cesium-137	14.5 U	---	14.5	Filtered		ES
RS-18		Primary	02/19/01	Cobalt-57	9.41 U	---	9.41	Filtered		ES
RS-18		Primary	02/19/01	Cobalt-60	16.8 U	---	16.8	Filtered		ES
RS-18		Primary	05/02/03	Cesium-134	1.97 U	---	1.97	Unfiltered		ES
RS-18		Primary	05/02/03	Cesium-137	1.76 U	---	1.76	Unfiltered		ES
RS-18		Primary	05/02/03	Cobalt-57	0.978 U	---	0.978	Unfiltered		ES
RS-18		Primary	05/02/03	Cobalt-60	1.84 U	---	1.84	Unfiltered		ES
RS-18		Primary	02/23/05	Cesium-134	1.67 U	---	1.67	Filtered		ES
RS-18		Primary	02/23/05	Cesium-137	1.26 U	---	1.26	Filtered		ES
RS-18		Primary	02/23/05	Cobalt-57	0.55 U	---	0.55	Filtered		ES
RS-18		Primary	02/23/05	Cobalt-60	1.45 U	---	1.45	Filtered		ES
RS-18		Primary	02/23/05	Europium-152	3.34 U	---	3.34	Filtered		ES
RS-18		Primary	02/23/05	Europium-154	4.12 U	---	4.12	Filtered		ES
RS-18		Primary	02/23/05	Manganese-54	1.31 U	---	1.31	Filtered		ES
RS-18		Primary	02/23/05	Sodium-22	1.41 U	---	1.41	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III
RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-18		Primary	08/26/05	Cesium-134	1.65 U	---	1.65	Filtered		ES
RS-18		Primary	08/26/05	Cesium-137	1.21 U	---	1.21	Filtered		ES
RS-18		Primary	08/26/05	Cobalt-57	0.587 U	---	0.587	Filtered		ES
RS-18		Primary	08/26/05	Cobalt-60	1.46 U	---	1.46	Filtered		ES
RS-18		Primary	08/26/05	Europium-152	3.18 U	---	3.18	Filtered		ES
RS-18		Primary	08/26/05	Europium-154	4.1 U	---	4.1	Filtered		ES
RS-18		Primary	08/26/05	Manganese-54	1.36 U	---	1.36	Filtered		ES
RS-18		Primary	08/26/05	Sodium-22	1.39 U	---	1.39	Filtered		ES
RS-18		Primary	02/20/06	Cesium-134	1.05 U	---	1.05	Filtered		ES
RS-18		Primary	02/20/06	Cesium-137	0.947 U	---	0.947	Filtered		ES
RS-18		Primary	02/20/06	Cobalt-57	0.65 U	---	0.65	Filtered		ES
RS-18		Primary	02/20/06	Cobalt-60	0.973 U	---	0.973	Filtered		ES
RS-18		Primary	02/20/06	Europium-152	2.28 U	---	2.28	Filtered		ES
RS-18		Primary	02/20/06	Europium-154	2.85 U	---	2.85	Filtered		ES
RS-18		Primary	02/20/06	Manganese-54	0.905 U	---	0.905	Filtered		ES
RS-18		Primary	02/20/06	Sodium-22	0.975 U	---	0.975	Filtered		ES
RS-18		Primary	02/04/08	Cesium-134	2.08 U	---	2.08	Filtered		ES
RS-18		Primary	02/04/08	Cesium-137	1.65 U	---	1.65	Filtered		ES
RS-18		Primary	02/04/08	Cobalt-57	1.09 U	---	1.09	Filtered		ES
RS-18		Primary	02/04/08	Cobalt-60	1.61 U	---	1.61	Filtered		ES
RS-18		Primary	02/04/08	Europium-152	4.71 U	---	4.71	Filtered		ES
RS-18		Primary	02/04/08	Europium-154	5.05 U	---	5.05	Filtered		ES
RS-18		Primary	02/04/08	Manganese-54	1.63 U	---	1.63	Filtered		ES
RS-18		Primary	02/04/08	Sodium-22	1.72 U	---	1.72	Filtered		ES
RS-18		Primary	03/04/09	Antimony-125	0.854 U	3.7	6.2	Filtered		ES
RS-18		Primary	03/04/09	Antimony-125	0.27 U	1.3	2.14	Unfiltered		ES
RS-18		Primary	03/04/09	Barium-133	0.555 U	1.6	2.77	Filtered		ES
RS-18		Primary	03/04/09	Barium-133	0.502 U	0.94	1.35	Unfiltered		ES
RS-18		Primary	03/04/09	Cesium-134	-0.76 U	1.4	1.96	Filtered		ES
RS-18		Primary	03/04/09	Cesium-134	-0.279 U	0.93	1.59	Unfiltered		ES
RS-18		Primary	03/04/09	Cesium-137	0.293 U	1.2	2.12	Filtered		ES
RS-18		Primary	03/04/09	Cesium-137	-0.882 U	1.1	1.93	Unfiltered		ES
RS-18		Primary	03/04/09	Cobalt-60	0.33 U	1.3	2.26	Filtered		ES
RS-18		Primary	03/04/09	Cobalt-60	0.111 U	1.1	1.95	Unfiltered		ES
RS-18		Primary	03/04/09	Europium-152	-2.82 U	2.8	4.86	Filtered		ES
RS-18		Primary	03/04/09	Europium-152	-3.22 U	2.5	3.42	Unfiltered		ES
RS-18		Primary	03/04/09	Europium-154	0.107 U	3.5	5.96	Filtered		ES
RS-18		Primary	03/04/09	Europium-154	1.2 U	1.8	3.09	Unfiltered		ES
RS-18		Primary	03/04/09	Europium-155	0.141 U	4.9	8.27	Filtered		ES
RS-18		Primary	03/04/09	Europium-155	0.864 U	3.9	6.53	Unfiltered		ES
RS-18		Primary	03/04/09	Manganese-54	0.404 U	1	1.74	Filtered		ES
RS-18		Primary	03/04/09	Manganese-54	-0.02 U	0.5	0.873	Unfiltered		ES
RS-18		Primary	03/04/09	Sodium-22	0.037 U	1.2	2.04	Filtered		ES
RS-18		Primary	03/04/09	Sodium-22	0.409 U	0.62	1.06	Unfiltered		ES
RS-18		Primary	04/27/09	Antimony-125	0.157 U	1.2	2	Filtered		ES
RS-18		Primary	04/27/09	Antimony-125	0.448 U	1.5	2.62	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-18		Primary	04/27/09	Barium-133	-0.097 U	0.18	0.724	Filtered		ES
RS-18		Primary	04/27/09	Barium-133	0.56 U	0.43	0.922	Unfiltered		ES
RS-18		Primary	04/27/09	Cesium-134	0.183 U	0.69	1.17	Filtered		ES
RS-18		Primary	04/27/09	Cesium-134	-0.023 U	0.68	0.94	Unfiltered		ES
RS-18		Primary	04/27/09	Cesium-137	0.351 U	0.86	1.46	Filtered		ES
RS-18		Primary	04/27/09	Cesium-137	-0.48 U	0.69	1.21	Unfiltered		ES
RS-18		Primary	04/27/09	Cobalt-60	0.066 U	0.81	1.39	Filtered		ES
RS-18		Primary	04/27/09	Cobalt-60	-0.002 U	0.73	1.28	Unfiltered		ES
RS-18		Primary	04/27/09	Europium-152	0.201 U	1.4	2.34	Filtered		ES
RS-18		Primary	04/27/09	Europium-152	-0.297 U	1.2	2.13	Unfiltered		ES
RS-18		Primary	04/27/09	Europium-154	-0.012 U	1	1.8	Filtered		ES
RS-18		Primary	04/27/09	Europium-154	-0.303 U	1	1.89	Unfiltered		ES
RS-18		Primary	04/27/09	Europium-155	-0.088 U	1.6	2.76	Filtered		ES
RS-18		Primary	04/27/09	Europium-155	1.23 U	1.4	2.38	Unfiltered		ES
RS-18		Primary	04/27/09	Manganese-54	0.006 U	0.41	0.723	Filtered		ES
RS-18		Primary	04/27/09	Manganese-54	0.008 U	0.42	0.742	Unfiltered		ES
RS-18		Primary	04/27/09	Sodium-22	-0.004 U	0.34	0.61	Filtered		ES
RS-18		Primary	04/27/09	Sodium-22	-0.103 U	0.34	0.643	Unfiltered		ES
RS-25		Primary	02/25/03	Cesium-134	1.88 U	---	1.88	Filtered		ES
RS-25		Primary	02/25/03	Cesium-137	1.64 U	---	1.64	Filtered		ES
RS-25		Primary	02/25/03	Cobalt-57	1.31 U	---	1.31	Filtered		ES
RS-25		Primary	02/25/03	Cobalt-60	1.66 U	---	1.66	Filtered		ES
RS-25		Primary	02/13/08	Cesium-134	1.69 U	---	1.69	Filtered		ES
RS-25		Primary	02/13/08	Cesium-137	1.35 U	---	1.35	Filtered		ES
RS-25		Primary	02/13/08	Cobalt-57	0.95 U	---	0.95	Filtered		ES
RS-25		Primary	02/13/08	Cobalt-60	1.35 U	---	1.35	Filtered		ES
RS-25		Primary	02/13/08	Europium-152	3.98 U	---	3.98	Filtered		ES
RS-25		Primary	02/13/08	Europium-154	4.28 U	---	4.28	Filtered		ES
RS-25		Primary	02/13/08	Manganese-54	1.31 U	---	1.31	Filtered		ES
RS-25		Primary	02/13/08	Sodium-22	1.46 U	---	1.46	Filtered		ES
RS-27		Primary	03/04/91	Cesium-137	0.335 U	5.16	10	Filtered		CEP
RS-28		Primary	10/19/89	Cesium-137	2.48 U	4.22	---	Filtered		UST
RS-28		Primary	11/01/89	Cesium-137	1.77 U	3.9	---	Filtered		UST
RS-28		Primary	11/01/89	Cesium-137	-1.27 U	4.39	---	Unfiltered		UST
RS-28		Primary	12/06/90	Cesium-137	-3.02 U	4.88	10	Filtered		IT
RS-28		Primary	03/09/91	Cesium-137	0.164 U	3.62	10	Filtered		IT
RS-28		Primary	12/06/91	Cesium-137	1.78 U	---	10	Filtered		IT
RS-28		Primary	03/09/92	Cesium-137	0 U	---	---	Filtered		CEP
RS-28		Primary	06/22/93	Cesium-137	0 U	---	---	Filtered		CEP
RS-28		Primary	11/06/93	Antimony-125	6.28 U	---	6.28	Filtered		LAS
RS-28		Primary	11/06/93	Beryllium-7	26.5 U	---	26.5	Filtered		LAS
RS-28		Primary	11/06/93	Cesium-134	5.8 U	---	5.8	Filtered		LAS
RS-28		Primary	11/06/93	Cesium-137	3.05 U	---	3.05	Filtered		LAS
RS-28		Primary	11/06/93	Cobalt-60	1.51 U	---	1.51	Filtered		LAS
RS-28		Primary	11/06/93	Europium-152	6.04 U	---	6.04	Filtered		LAS
RS-28		Primary	11/06/93	Europium-154	3.41 U	---	3.41	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-28		Primary	11/06/93	Europium-155	6.91 U	---	6.91	Filtered		LAS
RS-28		Primary	11/06/93	Manganese-54	2.16 U	---	2.16	Filtered		LAS
RS-28		Primary	11/06/93	Ruthenium-106	16 U	---	16	Filtered		LAS
RS-28		Primary	11/06/93	Silver-110m	3.58 U	---	3.58	Filtered		LAS
RS-28		Primary	05/07/94	Cesium-137	1.5 U	5.7	7.6	Filtered		LAS
RS-28		Primary	05/07/94	Cobalt-57	-1.5 U	2.5	4.4	Filtered		LAS
RS-28		Primary	05/07/94	Cobalt-60	0.3 U	3.4	6.7	Filtered		LAS
RS-28		Primary	05/17/95	Cesium-134	2.6 U	4.5	8.6	Filtered		LAS
RS-28		Primary	05/17/95	Cesium-137	-2.4 U	3.7	11	Filtered		LAS
RS-28		Primary	05/17/95	Cobalt-57	-1.5 U	1.7	5.1	Filtered		LAS
RS-28		Primary	05/17/95	Cobalt-60	-1.4 U	5.5	11	Filtered		LAS
RS-28		Primary	05/16/96	Cesium-134	-2.5 U	2.1	4.8	Filtered		LAS
RS-28		Primary	05/16/96	Cesium-137	-1.7 U	1.7	4.8	Filtered		LAS
RS-28		Primary	05/16/96	Cobalt-57	2.4 U	2.9	3.8	Filtered		LAS
RS-28		Primary	05/16/96	Cobalt-60	0.8 U	1.7	3.6	Filtered		LAS
RS-28		Primary	05/08/98	Cesium-134	18.4 U	---	18.4	Filtered		TN
RS-28		Primary	05/08/98	Cesium-137	14.5 U	---	14.5	Filtered		TN
RS-28		Primary	05/08/98	Cobalt-57	8.47 U	---	8.47	Filtered		TN
RS-28		Primary	05/08/98	Cobalt-60	15.2 U	---	15.2	Filtered		TN
RS-28		Primary	11/16/98	Cesium-134	8.63 U	---	8.63	Filtered		TN
RS-28		Primary	11/16/98	Cesium-137	5.71 U	---	5.71	Filtered		TN
RS-28		Primary	11/16/98	Cobalt-57	4.21 U	---	4.21	Filtered		TN
RS-28		Primary	11/16/98	Cobalt-60	6.64 U	---	6.64	Filtered		TN
RS-28		Primary	05/05/00	Cesium-134	20.7 U	---	20.7	Filtered		TR
RS-28		Primary	05/05/00	Cesium-137	11.9 U	---	11.9	Filtered		TR
RS-28		Primary	05/05/00	Cobalt-57	9.5 U	---	9.5	Filtered		TR
RS-28		Primary	05/05/00	Cobalt-60	12.5 U	---	12.5	Filtered		TR
RS-28		Primary	05/10/01	Cesium-134	8.46 U	---	8.46	Filtered		ES
RS-28		Primary	05/10/01	Cesium-137	6.75 U	---	6.75	Filtered		ES
RS-28		Primary	05/10/01	Cobalt-57	3.69 U	---	3.69	Filtered		ES
RS-28		Primary	05/10/01	Cobalt-60	10.4 U	---	10.4	Filtered		ES
RS-28		Primary	05/20/05	Cesium-134	2.05 U	---	2.05	Filtered		ES
RS-28		Primary	05/20/05	Cesium-137	1.67 U	---	1.67	Filtered		ES
RS-28		Primary	05/20/05	Cobalt-57	1.08 U	---	1.08	Filtered		ES
RS-28		Primary	05/20/05	Cobalt-60	1.73 U	---	1.73	Filtered		ES
RS-28		Primary	05/20/05	Europium-152	4.86 U	---	4.86	Filtered		ES
RS-28		Primary	05/20/05	Europium-154	4.42 U	---	4.42	Filtered		ES
RS-28		Primary	05/20/05	Manganese-54	1.82 U	---	1.82	Filtered		ES
RS-28		Primary	05/20/05	Sodium-22	1.51 U	---	1.51	Filtered		ES
RS-28		Primary	02/17/06	Cesium-134	1.17 U	---	1.17	Filtered		ES
RS-28		Primary	02/17/06	Cesium-137	0.946 U	---	0.946	Filtered		ES
RS-28		Primary	02/17/06	Cobalt-57	0.64 U	---	0.64	Filtered		ES
RS-28		Primary	02/17/06	Cobalt-60	1.04 U	---	1.04	Filtered		ES
RS-28		Primary	02/17/06	Europium-152	2.26 U	---	2.26	Filtered		ES
RS-28		Primary	02/17/06	Europium-154	2.39 U	---	2.39	Filtered		ES
RS-28		Primary	02/17/06	Manganese-54	0.812 U	---	0.812	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-28		Primary	02/17/06	Sodium-22	0.821 U	---	0.821	Filtered		ES
RS-28		Primary	02/13/07	Cesium-134	1.38 U	---	1.38	Filtered		ES
RS-28		Primary	02/13/07	Cesium-137	1.06 U	---	1.06	Filtered		ES
RS-28		Primary	02/13/07	Cobalt-57	0.692 U	---	0.692	Filtered		ES
RS-28		Primary	02/13/07	Cobalt-60	1.05 U	---	1.05	Filtered		ES
RS-28		Primary	02/13/07	Europium-152	2.95 U	---	2.95	Filtered		ES
RS-28		Primary	02/13/07	Europium-154	3.32 U	---	3.32	Filtered		ES
RS-28		Primary	02/13/07	Manganese-54	1.02 U	---	1.02	Filtered		ES
RS-28		Primary	02/13/07	Sodium-22	1.13 U	---	1.13	Filtered		ES
RS-28		Primary	02/06/08	Cesium-134	1.29 U	---	1.29	Filtered		ES
RS-28		Primary	02/06/08	Cesium-137	1.15 U	---	1.15	Filtered		ES
RS-28		Primary	02/06/08	Cobalt-57	0.854 U	---	0.854	Filtered		ES
RS-28		Primary	02/06/08	Cobalt-60	1.06 U	---	1.06	Filtered		ES
RS-28		Primary	02/06/08	Europium-152	3.09 U	---	3.09	Filtered		ES
RS-28		Primary	02/06/08	Europium-154	2.98 U	---	2.98	Filtered		ES
RS-28		Primary	02/06/08	Manganese-54	1 U	---	1	Filtered		ES
RS-28		Primary	02/06/08	Sodium-22	1.02 U	---	1.02	Filtered		ES
RS-54		Primary	09/11/93	Cesium-137	0 U	---	---	Filtered		CEP
RS-54		Primary	09/29/93	Cesium-137	0 U	---	---	Filtered		CEP
RS-54		Primary	05/07/94	Cesium-137	1.3 U	5.8	7.9	Filtered		LAS
RS-54		Primary	05/07/94	Cobalt-57	0 U	---	3.8	Filtered		LAS
RS-54		Primary	05/07/94	Cobalt-60	0 U	---	7.5	Filtered		LAS
RS-54		Primary	08/07/94	Cesium-134	-5.3 U	---	26	Filtered		LAS
RS-54		Primary	08/07/94	Cesium-137	8 U	---	26	Filtered		LAS
RS-54		Primary	08/07/94	Cobalt-57	-3.4 U	---	19	Filtered		LAS
RS-54		Primary	08/07/94	Cobalt-60	4 U	---	28	Filtered		LAS
RS-54		Primary	08/03/95	Cesium-134	-1.6 U	3.5	8.1	Filtered		LAS
RS-54		Primary	08/03/95	Cesium-137	-0.5 U	4.9	9.1	Filtered		LAS
RS-54		Primary	08/03/95	Cobalt-57	0.5 U	2.5	4.3	Filtered		LAS
RS-54		Primary	08/03/95	Cobalt-60	-2.3 U	2.7	11	Filtered		LAS
RS-54		Primary	05/16/96	Cesium-134	-0.1 U	1.4	6.9	Filtered		LAS
RS-54		Primary	05/16/96	Cesium-137	-6.3 U	3.7	11	Filtered		LAS
RS-54		Primary	05/16/96	Cobalt-57	1.2 U	3.4	4.4	Filtered		LAS
RS-54		Primary	05/16/96	Cobalt-60	4.3 U	4.4	5.9	Filtered		LAS
RS-54		Primary	08/23/96	Cesium-134	0.3 U	3.5	7.4	Filtered		LAS
RS-54		Primary	08/23/96	Cesium-137	-1.8 U	1.7	9.7	Filtered		LAS
RS-54		Primary	08/23/96	Cobalt-57	-0.8 U	2	5	Filtered		LAS
RS-54		Primary	08/23/96	Cobalt-60	0.4 U	4	8.9	Filtered		LAS
RS-54		Primary	08/02/97	Cesium-134	-1.1 U	2.9	7.7	Filtered		LAS
RS-54		Primary	08/02/97	Cesium-137	-1.9 U	5.1	9	Filtered		LAS
RS-54		Primary	08/02/97	Cobalt-57	-1.5 U	2	4.9	Filtered		LAS
RS-54		Primary	08/02/97	Cobalt-60	3 U	4.8	7.6	Filtered		LAS
RS-54		Primary	08/27/97	Cesium-134	2.4 U	2	3.7	Filtered		LAS
RS-54		Primary	08/27/97	Cesium-134	1.6 U	2	3.4	Unfiltered		LAS
RS-54		Primary	08/27/97	Cesium-137	-0.5 U	0.75	4.5	Filtered		LAS
RS-54		Primary	08/27/97	Cesium-137	-1.8 U	1.9	5.1	Unfiltered		LAS

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-54		Primary	08/27/97	Cobalt-57	0.7 U	2.8	3.7	Filtered		LAS
RS-54		Primary	08/27/97	Cobalt-57	1.9 U	2.6	3.3	Unfiltered		LAS
RS-54		Primary	08/27/97	Cobalt-60	0.4 U	1.6	3.1	Filtered		LAS
RS-54		Primary	08/27/97	Cobalt-60	-1.2 U	1.2	4.8	Unfiltered		LAS
RS-54		Primary	02/08/98	Cesium-134	16.8 U	---	16.8	Filtered		TN
RS-54		Primary	02/08/98	Cesium-137	15.8 U	---	15.8	Filtered		TN
RS-54		Primary	02/08/98	Cobalt-57	8.86 U	---	8.86	Filtered		TN
RS-54		Primary	02/08/98	Cobalt-60	18.1 U	---	18.1	Filtered		TN
RS-54		Primary	08/04/98	Cesium-134	18.9 U	---	18.9	Filtered		TN
RS-54		Primary	08/04/98	Cesium-137	11.3 U	---	11.3	Filtered		TN
RS-54		Primary	08/04/98	Cobalt-57	7.55 U	---	7.55	Filtered		TN
RS-54		Primary	08/04/98	Cobalt-60	12 U	---	12	Filtered		TN
RS-54		Primary	02/02/99	Cesium-134	17.5 U	---	17.5	Filtered		TN
RS-54		Primary	02/02/99	Cesium-137	13.4 U	---	13.4	Filtered		TN
RS-54		Primary	02/02/99	Cobalt-57	5.81 U	---	5.81	Filtered		TN
RS-54		Primary	02/02/99	Cobalt-60	20 U	---	20	Filtered		TN
RS-54		Primary	08/18/99	Cesium-134	12.4 U	---	12.4	Filtered		TN
RS-54		Primary	08/18/99	Cesium-137	10.3 U	---	10.3	Filtered		TN
RS-54		Primary	08/18/99	Cobalt-57	8.18 U	---	8.18	Filtered		TN
RS-54		Primary	08/18/99	Cobalt-60	10.6 U	---	10.6	Filtered		TN
RS-54		Primary	03/15/00	Cesium-134	29.4 U	---	29.4	Filtered		TR
RS-54		Primary	03/15/00	Cesium-137	27.2 U	---	27.2	Filtered		TR
RS-54		Primary	03/15/00	Cobalt-57	14.4 U	---	14.4	Filtered		TR
RS-54		Primary	03/15/00	Cobalt-60	26.5 U	---	26.5	Filtered		TR
RS-54		Primary	11/01/01	Cesium-134	0.2 U	0.9	10	Filtered		DL
RS-54		Primary	11/01/01	Cesium-137	2 U	---	2	Filtered		DL
RS-54		Primary	11/01/01	Cobalt-57	0.5 U	0.6	0.9	Filtered		DL
RS-54		Primary	11/01/01	Cobalt-60	3.8 U	50	5	Filtered		DL
RS-54		Primary	03/01/02	Cesium-134	5	3	3	Filtered		DL
RS-54		Primary	03/01/02	Cesium-137	2 U	2	2	Filtered		DL
RS-54		Primary	03/01/02	Cobalt-57	3 U	3	3	Filtered		DL
RS-54		Primary	03/01/02	Cobalt-60	3 U	3	3	Filtered		DL
RS-54		Primary	11/07/02	Cesium-134	3.37 U	---	3.37	Filtered		ES
RS-54		Primary	11/07/02	Cesium-137	2.57 U	---	2.57	Filtered		ES
RS-54		Primary	11/07/02	Cobalt-57	2.34 U	---	2.34	Filtered		ES
RS-54		Primary	11/07/02	Cobalt-60	2.74 U	---	2.74	Filtered		ES
RS-54		Primary	02/16/05	Cesium-134	1.58 U	---	1.58	Filtered		ES
RS-54		Primary	02/16/05	Cesium-137	1.24 U	---	1.24	Filtered		ES
RS-54		Primary	02/16/05	Cobalt-57	0.539 U	---	0.539	Filtered		ES
RS-54		Primary	02/16/05	Cobalt-60	1.4 U	---	1.4	Filtered		ES
RS-54		Primary	02/16/05	Europium-152	3.22 U	---	3.22	Filtered		ES
RS-54		Primary	02/16/05	Europium-154	4.23 U	---	4.23	Filtered		ES
RS-54		Primary	02/16/05	Manganese-54	1.27 U	---	1.27	Filtered		ES
RS-54		Primary	02/16/05	Sodium-22	1.44 U	---	1.44	Filtered		ES
RS-54		Primary	09/06/05	Cesium-134	2.69 U	---	2.69	Filtered		ES
RS-54		Primary	09/06/05	Cesium-137	2.12 U	---	2.12	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III
RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-54		Primary	09/06/05	Cobalt-57	1.8 U	---	1.8	Filtered		ES
RS-54		Primary	09/06/05	Cobalt-60	2.21 U	---	2.21	Filtered		ES
RS-54		Primary	09/06/05	Europium-152	5.97 U	---	5.97	Filtered		ES
RS-54		Primary	09/06/05	Europium-154	6.31 U	---	6.31	Filtered		ES
RS-54		Primary	09/06/05	Manganese-54	2.28 U	---	2.28	Filtered		ES
RS-54		Primary	09/06/05	Sodium-22	2.18 U	---	2.18	Filtered		ES
RS-54		Primary	02/23/06	Cesium-134	1.04 U	---	1.04	Filtered		ES
RS-54		Split	02/23/06	Cesium-134	-1.77 U	1	2.24	Filtered		STL
RS-54		Primary	02/23/06	Cesium-137	0.928 U	---	0.928	Filtered		ES
RS-54		Split	02/23/06	Cesium-137	-0.148 U	1	2.18	Filtered		STL
RS-54		Primary	02/23/06	Cobalt-57	0.638 U	---	0.638	Filtered		ES
RS-54		Split	02/23/06	Cobalt-57	6.59 U	8	12.6	Filtered		STL
RS-54		Primary	02/23/06	Cobalt-60	1.02 U	---	1.02	Filtered		ES
RS-54		Split	02/23/06	Cobalt-60	1.68 U	2	2.95	Filtered		STL
RS-54		Primary	02/23/06	Europium-152	2.39 U	---	2.39	Filtered		ES
RS-54		Split	02/23/06	Europium-152	-2.26 U	3	4.9	Filtered		STL
RS-54		Primary	02/23/06	Europium-154	3.2 U	---	3.2	Filtered		ES
RS-54		Split	02/23/06	Europium-154	1 U	4	7.13	Filtered		STL
RS-54		Primary	02/23/06	Manganese-54	0.886 U	---	0.886	Filtered		ES
RS-54		Split	02/23/06	Manganese-54	-0.031 U	1	2.29	Filtered		STL
RS-54		Primary	02/23/06	Sodium-22	1.09 U	---	1.09	Filtered		ES
RS-54		Split	02/23/06	Sodium-22	0.14 U	1	2.55	Filtered		STL
RS-54		Primary	02/15/07	Cesium-134	1.22 U	---	1.22	Filtered		ES
RS-54		Primary	02/15/07	Cesium-137	1.04 U	---	1.04	Filtered		ES
RS-54		Primary	02/15/07	Cobalt-57	0.67 U	---	0.67	Filtered		ES
RS-54		Primary	02/15/07	Cobalt-60	1.03 U	---	1.03	Filtered		ES
RS-54		Primary	02/15/07	Europium-152	2.89 U	---	2.89	Filtered		ES
RS-54		Primary	02/15/07	Europium-154	3.14 U	---	3.14	Filtered		ES
RS-54		Primary	02/15/07	Manganese-54	0.997 U	---	0.997	Filtered		ES
RS-54		Primary	02/15/07	Sodium-22	1.08 U	---	1.08	Filtered		ES
RS-54		Primary	02/22/08	Cesium-134	1.67 U	---	1.67	Filtered		ES
RS-54		Primary	02/22/08	Cesium-137	2.1 U	---	2.1	Filtered		ES
RS-54		Primary	02/22/08	Cobalt-57	0.88 U	---	0.88	Filtered		ES
RS-54		Primary	02/22/08	Cobalt-60	1.4 U	---	1.4	Filtered		ES
RS-54		Primary	02/22/08	Europium-152	3.26 U	---	3.26	Filtered		ES
RS-54		Primary	02/22/08	Europium-154	4.06 U	---	4.06	Filtered		ES
RS-54		Primary	02/22/08	Manganese-54	1.31 U	---	1.31	Filtered		ES
RS-54		Primary	02/22/08	Sodium-22	1.39 U	---	1.39	Filtered		ES
SH-11		Primary	10/17/89	Cesium-137	2.26 U	4.55	---	Filtered		UST
SH-11		Primary	10/31/89	Cesium-137	3.24 U	4.18	---	Filtered		UST
SH-11		Primary	10/31/89	Cesium-137	-0.621 U	5.25	---	Unfiltered		UST
Chatsworth Formation Wells										
RD-06		Primary	10/18/89	Cesium-137	-4.36 U	4.83	---	Unfiltered		UST
RD-06		Primary	10/31/89	Cesium-137	0.942 U	4.43	---	Filtered		UST
RD-06		Primary	10/31/89	Cesium-137	1.96 U	2.9	---	Unfiltered		UST
RD-06		Primary	03/06/91	Cesium-137	-1.96 U	5.44	10	Filtered		IT

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-06		Primary	03/10/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-07		Primary	12/05/90	Cesium-137	2.62 U	5.48	10	Filtered		IT
RD-07		Primary	03/09/91	Cesium-137	1.47 U	5.09	10	Filtered		IT
RD-07		Primary	12/07/91	Cesium-137	-0.535 U	4.37	10	Filtered		IT
RD-07		Primary	03/06/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-07		Primary	08/25/97	Cesium-134	0.5 U	1.9	3.7	Filtered		LAS
RD-07		Primary	08/25/97	Cesium-134	0.6 U	3.2	6.8	Unfiltered		LAS
RD-07		Primary	08/25/97	Cesium-137	-1 U	1.5	4.4	Filtered		LAS
RD-07		Primary	08/25/97	Cesium-137	1.3 U	7.4	10	Unfiltered		LAS
RD-07		Primary	08/25/97	Cobalt-57	1.6 U	2.6	3.3	Filtered		LAS
RD-07		Primary	08/25/97	Cobalt-57	-0.3 U	1.9	4.8	Unfiltered		LAS
RD-07		Primary	08/25/97	Cobalt-60	0.2 U	1.6	3.3	Filtered		LAS
RD-07		Primary	08/25/97	Cobalt-60	5.9 U	5.5	11	Unfiltered		LAS
RD-07		Primary	02/06/99	Cesium-134	8.38 U	---	8.38	Filtered		TN
RD-07		Primary	02/06/99	Cesium-137	6.28 U	---	6.28	Filtered		TN
RD-07		Primary	02/06/99	Cobalt-57	4.09 U	---	4.09	Filtered		TN
RD-07		Primary	02/06/99	Cobalt-60	7.65 U	---	7.65	Filtered		TN
RD-07		Primary	03/16/00	Cesium-134	14.8 U	---	14.8	Filtered		TR
RD-07		Primary	03/16/00	Cesium-137	12.9 U	---	12.9	Filtered		TR
RD-07		Primary	03/16/00	Cobalt-57	6.38 U	---	6.38	Filtered		TR
RD-07		Primary	03/16/00	Cobalt-60	15.8 U	---	15.8	Filtered		TR
RD-07		Primary	02/23/01	Cesium-134	11.6 U	---	11.6	Filtered		ES
RD-07		Primary	02/23/01	Cesium-137	10.4 U	---	10.4	Filtered		ES
RD-07		Primary	02/23/01	Cobalt-57	7.04 U	---	7.04	Filtered		ES
RD-07		Primary	02/23/01	Cobalt-60	8.84 U	---	8.84	Filtered		ES
RD-07		Primary	02/22/02	Cesium-134	5 U	3	5	Filtered		DL
RD-07		Primary	02/22/02	Cesium-137	5 U	3	5	Filtered		DL
RD-07		Primary	02/22/02	Cobalt-57	3 U	3	3	Filtered		DL
RD-07		Primary	02/22/02	Cobalt-60	5 U	3	5	Filtered		DL
RD-07	Z03	Primary	01/29/03	Cesium-134	2.48 U	---	2.48	Filtered		ES
RD-07	Z03	Primary	01/29/03	Cesium-137	1.47 U	---	1.47	Filtered		ES
RD-07	Z03	Primary	01/29/03	Cobalt-57	0.797 U	---	0.797	Filtered		ES
RD-07	Z03	Primary	01/29/03	Cobalt-60	1.38 U	---	1.38	Filtered		ES
RD-07	Z03	Primary	02/17/05	Cesium-134	1.5 U	---	1.5	Filtered		ES
RD-07	Z03	Primary	02/17/05	Cesium-137	1.21 U	---	1.21	Filtered		ES
RD-07	Z03	Primary	02/17/05	Cobalt-57	0.956 U	---	0.956	Filtered		ES
RD-07	Z03	Primary	02/17/05	Cobalt-60	1.47 U	---	1.47	Filtered		ES
RD-07	Z03	Primary	02/17/05	Europium-152	3.13 U	---	3.13	Filtered		ES
RD-07	Z03	Primary	02/17/05	Europium-154	4.08 U	---	4.08	Filtered		ES
RD-07	Z03	Primary	02/17/05	Manganese-54	1.22 U	---	1.22	Filtered		ES
RD-07	Z03	Primary	02/17/05	Sodium-22	1.39 U	---	1.39	Filtered		ES
RD-07	Z03	Primary	02/16/06	Cesium-134	1.7 U	---	1.7	Filtered		ES
RD-07	Z03	Primary	02/16/06	Cesium-137	1.57 U	---	1.57	Filtered		ES
RD-07	Z03	Primary	02/16/06	Cobalt-57	1.29 U	---	1.29	Filtered		ES
RD-07	Z03	Primary	02/16/06	Cobalt-60	1.56 U	---	1.56	Filtered		ES
RD-07	Z03	Primary	02/16/06	Europium-152	4.25 U	---	4.25	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-07	Z03	Primary	02/16/06	Europium-154	4.84 U	---	4.84	Filtered		ES
RD-07	Z03	Primary	02/16/06	Manganese-54	1.52 U	---	1.52	Filtered		ES
RD-07	Z03	Primary	02/16/06	Sodium-22	1.67 U	---	1.67	Filtered		ES
RD-07	Z03	Primary	02/08/07	Cesium-134	1.27 U	---	1.27	Filtered		ES
RD-07	Z03	Primary	02/08/07	Cesium-137	0.991 U	---	0.991	Filtered		ES
RD-07	Z03	Primary	02/08/07	Cobalt-57	0.703 U	---	0.703	Filtered		ES
RD-07	Z03	Primary	02/08/07	Cobalt-60	1.07 U	---	1.07	Filtered		ES
RD-07	Z03	Primary	02/08/07	Europium-152	2.84 U	---	2.84	Filtered		ES
RD-07	Z03	Primary	02/08/07	Europium-154	3.2 U	---	3.2	Filtered		ES
RD-07	Z03	Primary	02/08/07	Manganese-54	0.952 U	---	0.952	Filtered		ES
RD-07	Z03	Primary	02/08/07	Sodium-22	1.09 U	---	1.09	Filtered		ES
RD-07	Z03	Primary	02/05/08	Cesium-134	0.796 U	---	0.796	Filtered		ES
RD-07	Z03	Primary	02/05/08	Cesium-137	0.664 U	---	0.664	Filtered		ES
RD-07	Z03	Primary	02/05/08	Cobalt-57	0.513 U	---	0.513	Filtered		ES
RD-07	Z03	Primary	02/05/08	Cobalt-60	0.573 U	---	0.573	Filtered		ES
RD-07	Z03	Primary	02/05/08	Europium-152	1.83 U	---	1.83	Filtered		ES
RD-07	Z03	Primary	02/05/08	Europium-154	1.75 U	---	1.75	Filtered		ES
RD-07	Z03	Primary	02/05/08	Manganese-54	0.523 U	---	0.523	Filtered		ES
RD-07	Z03	Primary	02/05/08	Sodium-22	0.595 U	---	0.595	Filtered		ES
RD-07	Z03	Primary	02/20/09	Antimony-125	0.04 U	1.5	2.64	Filtered		ES
RD-07	Z03	Primary	02/20/09	Antimony-125	0.568 U	1	1.73	Unfiltered		ES
RD-07	Z03	Primary	02/20/09	Barium-133	0.162 U	0.18	0.681	Filtered		ES
RD-07	Z03	Primary	02/20/09	Barium-133	-2.24 U	0.76	0.842	Unfiltered		ES
RD-07	Z03	Primary	02/20/09	Cesium-134	0.052 U	0.19	0.89	Filtered		ES
RD-07	Z03	Primary	02/20/09	Cesium-134	-0.025 U	0.64	1.1	Unfiltered		ES
RD-07	Z03	Primary	02/20/09	Cesium-137	0.446 U	0.69	1.16	Filtered		ES
RD-07	Z03	Primary	02/20/09	Cesium-137	0.924 U	0.65	1.08	Unfiltered		ES
RD-07	Z03	Primary	02/20/09	Cobalt-60	0.223 U	0.66	1.14	Filtered		ES
RD-07	Z03	Primary	02/20/09	Cobalt-60	0.1 U	0.62	1.07	Unfiltered		ES
RD-07	Z03	Primary	02/20/09	Europium-152	-0.207 U	1.2	2.02	Filtered		ES
RD-07	Z03	Primary	02/20/09	Europium-152	0.631 U	0.82	2.02	Unfiltered		ES
RD-07	Z03	Primary	02/20/09	Europium-154	1.71 U	1.8	2.97	Filtered		ES
RD-07	Z03	Primary	02/20/09	Europium-154	-0.351 U	0.99	1.79	Unfiltered		ES
RD-07	Z03	Primary	02/20/09	Europium-155	-1.12 U	2.4	4.1	Filtered		ES
RD-07	Z03	Primary	02/20/09	Europium-155	0.846 U	2.7	4.49	Unfiltered		ES
RD-07	Z03	Primary	02/20/09	Manganese-54	0.071 U	0.26	0.423	Filtered		ES
RD-07	Z03	Primary	02/20/09	Manganese-54	-0.049 U	0.46	0.797	Unfiltered		ES
RD-07	Z03	Primary	02/20/09	Sodium-22	0.581 U	0.6	1.01	Filtered		ES
RD-07	Z03	Primary	02/20/09	Sodium-22	-0.119 U	0.34	0.607	Unfiltered		ES
RD-07	Z03	Primary	07/16/09	Antimony-125	5.14 U	18	30.4	Filtered		ES
RD-07	Z03	Primary	07/16/09	Antimony-125	-5.92 U	8.7	15.1	Unfiltered		ES
RD-07	Z03	Primary	07/16/09	Barium-133	5.46 U	8.3	13.9	Filtered		ES
RD-07	Z03	Primary	07/16/09	Barium-133	-1.5 U	3.6	6.2	Unfiltered		ES
RD-07	Z03	Primary	07/16/09	Cesium-134	-0.904 U	6.5	11.3	Filtered		ES
RD-07	Z03	Primary	07/16/09	Cesium-134	1.28 U	1.4	4.95	Unfiltered		ES
RD-07	Z03	Primary	07/16/09	Cesium-137	-0.908 U	5.9	10.3	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-07	Z03	Primary	07/16/09	Cesium-137	1.14 U	3.5	5.95	Unfiltered		ES
RD-07	Z03	Primary	07/16/09	Cobalt-60	2.62 U	5.7	9.76	Filtered		ES
RD-07	Z03	Primary	07/16/09	Cobalt-60	0.408 U	3.8	6.58	Unfiltered		ES
RD-07	Z03	Primary	07/16/09	Europium-152	-12.9 U	17	30.1	Filtered		ES
RD-07	Z03	Primary	07/16/09	Europium-152	-2.24 U	9.6	16.5	Unfiltered		ES
RD-07	Z03	Primary	07/16/09	Europium-154	4.01 U	13	22.1	Filtered		ES
RD-07	Z03	Primary	07/16/09	Europium-154	1.29 U	8.7	15.1	Unfiltered		ES
RD-07	Z03	Primary	07/16/09	Europium-155	-13.9 U	15	25.6	Filtered		ES
RD-07	Z03	Primary	07/16/09	Europium-155	3.24 U	9.6	16.3	Unfiltered		ES
RD-07	Z03	Primary	07/16/09	Manganese-54	1.87 U	4.4	7.52	Filtered		ES
RD-07	Z03	Primary	07/16/09	Manganese-54	-0.679 U	2.7	4.73	Unfiltered		ES
RD-07	Z03	Primary	07/16/09	Sodium-22	1.36 U	4.3	7.48	Filtered		ES
RD-07	Z03	Primary	07/16/09	Sodium-22	0.438 U	2.9	5.1	Unfiltered		ES
RD-10		Primary	03/06/91	Cesium-137	-0.337 U	5.54	10	Filtered		IT
RD-10		Primary	03/07/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-13		Primary	09/12/89	Cesium-137	-1.74 U	5.09	---	Filtered		UST
RD-13		Primary	09/12/89	Cesium-137	0.83 U	3.98	---	Unfiltered		UST
RD-13		Split	09/12/89	Cesium-137	-15 U	---	---	Filtered		TMA
RD-13		Split	09/12/89	Cesium-137	-10 U	---	---	Unfiltered		TMA
RD-13		Primary	09/12/89	Cobalt-60	1.14 U	3.09	---	Filtered		UST
RD-13		Primary	09/12/89	Cobalt-60	1.51 U	3.82	---	Unfiltered		UST
RD-13		Primary	10/17/89	Cesium-137	-2.07 U	6.36	---	Filtered		UST
RD-13		Primary	10/31/89	Cesium-137	-2.26 U	4.24	---	Filtered		UST
RD-13		Primary	12/06/90	Cesium-137	3.94 U	4.39	10	Filtered		IT
RD-13		Primary	03/08/91	Cesium-137	1.26 U	4.31	10	Filtered		IT
RD-13		Primary	12/10/91	Cesium-137	1.19 U	4.88	10	Filtered		IT
RD-13		Primary	03/12/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-13		Primary	08/26/97	Cesium-134	-1.1 U	3.2	7.1	Filtered		LAS
RD-13		Primary	08/26/97	Cesium-134	1.1 U	2.9	5.3	Unfiltered		LAS
RD-13		Primary	08/26/97	Cesium-137	5.3 U	7	8.6	Filtered		LAS
RD-13		Primary	08/26/97	Cesium-137	-3.3 U	3.5	10	Unfiltered		LAS
RD-13		Primary	08/26/97	Cobalt-57	-1.4 U	1.7	4.6	Filtered		LAS
RD-13		Primary	08/26/97	Cobalt-57	-1 U	2.7	4.8	Unfiltered		LAS
RD-13		Primary	08/26/97	Cobalt-60	4.3 U	5.4	7.1	Filtered		LAS
RD-13		Primary	08/26/97	Cobalt-60	-1.6 U	2.5	9.4	Unfiltered		LAS
RD-14		Primary	10/18/89	Cesium-137	0.441 U	4.8	---	Filtered		UST
RD-14		Primary	10/18/89	Cesium-137	1.44 U	5	---	Unfiltered		UST
RD-14		Primary	10/31/89	Cesium-137	-3.1 U	5.29	---	Filtered		UST
RD-14		Primary	10/31/89	Cesium-137	-3.42 U	4.58	---	Unfiltered		UST
RD-14		Primary	12/07/90	Cesium-137	-2.79 U	5.22	10	Filtered		IT
RD-14		Primary	03/09/91	Cesium-137	0.125 U	4.09	10	Filtered		IT
RD-14		Primary	12/06/91	Cesium-137	-1.01 U	4.78	10	Filtered		IT
RD-14		Primary	03/05/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-15		Primary	10/19/89	Cesium-137	-0.166 U	4.89	---	Filtered		UST
RD-15		Primary	12/07/90	Cesium-137	-1.48 U	5.07	10	Filtered		IT

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-15		Primary	03/10/91	Cesium-137	2.25 U	3.59	10	Filtered		IT
RD-15		Primary	12/06/91	Cesium-137	1.89 U	3.93	10	Filtered		IT
RD-15		Primary	03/11/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-15		Split	03/11/92	Cesium-137	0 U	---	---	Filtered		TEL
RD-15		Primary	05/10/01	Cesium-134	14.8 U	---	14.8	Filtered		ES
RD-15		Primary	05/10/01	Cesium-137	12.7 U	---	12.7	Filtered		ES
RD-15		Primary	05/10/01	Cobalt-57	8.23 U	---	8.23	Filtered		ES
RD-15		Primary	05/10/01	Cobalt-60	13.5 U	---	13.5	Filtered		ES
RD-15		Primary	03/06/02	Cesium-134	3 U	3	3	Filtered		DL
RD-15		Primary	03/06/02	Cesium-137	2 U	2	2	Filtered		DL
RD-15		Primary	03/06/02	Cobalt-57	3 U	3	3	Filtered		DL
RD-15		Primary	03/06/02	Cobalt-60	3 U	3	3	Filtered		DL
RD-15		Primary	02/26/03	Cesium-134	0.661 U	---	0.661	Filtered		ES
RD-15		Primary	02/26/03	Cesium-137	0.633 U	---	0.633	Filtered		ES
RD-15		Primary	02/26/03	Cobalt-57	0.525 U	---	0.525	Filtered		ES
RD-15		Primary	02/26/03	Cobalt-60	0.684 U	---	0.684	Filtered		ES
RD-15		Primary	02/24/04	Cesium-134	10.8 U	---	10.8	Filtered		ES
RD-15		Primary	02/24/04	Cesium-137	10.1 U	---	10.1	Filtered		ES
RD-15		Primary	02/24/04	Cobalt-57	6.37 U	---	6.37	Filtered		ES
RD-15		Primary	02/24/04	Cobalt-60	11.3 U	---	11.3	Filtered		ES
RD-15		Primary	02/14/05	Cesium-134	1.75 U	---	1.75	Filtered		ES
RD-15		Primary	02/14/05	Cesium-137	1.48 U	---	1.48	Filtered		ES
RD-15		Primary	02/14/05	Cobalt-57	0.956 U	---	0.956	Filtered		ES
RD-15		Primary	02/14/05	Cobalt-60	1.79 U	---	1.79	Filtered		ES
RD-15		Primary	02/14/05	Europium-152	4.02 U	---	4.02	Filtered		ES
RD-15		Primary	02/14/05	Europium-154	4.75 U	---	4.75	Filtered		ES
RD-15		Primary	02/14/05	Manganese-54	1.45 U	---	1.45	Filtered		ES
RD-15		Primary	02/14/05	Sodium-22	1.62 U	---	1.62	Filtered		ES
RD-15		Primary	02/16/06	Cesium-134	1.3 U	---	1.3	Filtered		ES
RD-15		Split	02/16/06	Cesium-134	-0.537 U	1	2.36	Filtered		STL
RD-15		Primary	02/16/06	Cesium-137	0.962 U	---	0.962	Filtered		ES
RD-15		Split	02/16/06	Cesium-137	-0.543 U	1	2.02	Filtered		STL
RD-15		Primary	02/16/06	Cobalt-57	0.669 U	---	0.669	Filtered		ES
RD-15		Split	02/16/06	Cobalt-57	-0.786 U	7	11.7	Filtered		STL
RD-15		Primary	02/16/06	Cobalt-60	1.18 U	---	1.18	Filtered		ES
RD-15		Split	02/16/06	Cobalt-60	-1.3 U	2	2.48	Filtered		STL
RD-15		Primary	02/16/06	Europium-152	2.37 U	---	2.37	Filtered		ES
RD-15		Split	02/16/06	Europium-152	-0.636 U	3	5.71	Filtered		STL
RD-15		Primary	02/16/06	Europium-154	2.62 U	---	2.62	Filtered		ES
RD-15		Split	02/16/06	Europium-154	3.38 U	4	7.65	Filtered		STL
RD-15		Primary	02/16/06	Manganese-54	1.02 U	---	1.02	Filtered		ES
RD-15		Split	02/16/06	Manganese-54	-0.998 U	1	2.17	Filtered		STL
RD-15		Primary	02/16/06	Sodium-22	0.909 U	---	0.909	Filtered		ES
RD-15		Split	02/16/06	Sodium-22	0.902 U	2	2.74	Filtered		STL
RD-15		Primary	02/06/07	Cesium-134	1.34 U	---	1.34	Filtered		ES
RD-15		Primary	02/06/07	Cesium-137	1 U	---	1	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-15		Primary	02/06/07	Cobalt-57	0.647 U	---	0.647	Filtered		ES
RD-15		Primary	02/06/07	Cobalt-60	1.11 U	---	1.11	Filtered		ES
RD-15		Primary	02/06/07	Europium-152	2.74 U	---	2.74	Filtered		ES
RD-15		Primary	02/06/07	Europium-154	3.3 U	---	3.3	Filtered		ES
RD-15		Primary	02/06/07	Manganese-54	0.998 U	---	0.998	Filtered		ES
RD-15		Primary	02/06/07	Sodium-22	1.12 U	---	1.12	Filtered		ES
RD-15		Primary	02/20/08	Cesium-134	1.93 U	---	1.93	Filtered		ES
RD-15		Primary	02/20/08	Cesium-137	1.48 U	---	1.48	Filtered		ES
RD-15		Primary	02/20/08	Cobalt-57	1.02 U	---	1.02	Filtered		ES
RD-15		Primary	02/20/08	Cobalt-60	1.58 U	---	1.58	Filtered		ES
RD-15		Primary	02/20/08	Europium-152	4.12 U	---	4.12	Filtered		ES
RD-15		Primary	02/20/08	Europium-154	4.83 U	---	4.83	Filtered		ES
RD-15		Primary	02/20/08	Manganese-54	1.46 U	---	1.46	Filtered		ES
RD-15		Primary	02/20/08	Sodium-22	1.65 U	---	1.65	Filtered		ES
RD-15		Primary	02/24/09	Antimony-125	-1.14 U	1.9	3.32	Filtered		ES
RD-15		Primary	02/24/09	Antimony-125	3.69 U	3.2	5.4	Unfiltered		ES
RD-15		Split	02/24/09	Antimony-125	2.64 U	3.06	5.29	Filtered		GEL
RD-15		Split	02/24/09	Antimony-125	1.71 U	2.89	5	Unfiltered		GEL
RD-15		Primary	02/24/09	Barium-133	0.401 U	0.42	1.3	Filtered		ES
RD-15		Primary	02/24/09	Barium-133	0.574 U	1.2	2.12	Unfiltered		ES
RD-15		Split	02/24/09	Barium-133	0.277 U	1.66	2.47	Filtered		GEL
RD-15		Split	02/24/09	Barium-133	0.716 U	2.63	2.6	Unfiltered		GEL
RD-15		Primary	02/24/09	Cesium-134	-0.942 U	1.2	2.04	Filtered		ES
RD-15		Primary	02/24/09	Cesium-134	0.522 U	0.99	1.43	Unfiltered		ES
RD-15		Split	02/24/09	Cesium-134	1.27 U	1.27	2.18	Filtered		GEL
RD-15		Split	02/24/09	Cesium-134	-0.358 U	1.15	1.94	Unfiltered		GEL
RD-15		Primary	02/24/09	Cesium-137	-0.112 U	0.63	1.59	Filtered		ES
RD-15		Primary	02/24/09	Cesium-137	-2.5 U	1.5	2.6	Unfiltered		ES
RD-15		Split	02/24/09	Cesium-137	0.842 U	1.21	1.82	Filtered		GEL
RD-15		Split	02/24/09	Cesium-137	0.1 U	1.16	1.68	Unfiltered		GEL
RD-15		Primary	02/24/09	Cobalt-60	-0.598 U	0.92	1.62	Filtered		ES
RD-15		Primary	02/24/09	Cobalt-60	-1.23 U	0.92	1.73	Unfiltered		ES
RD-15		Split	02/24/09	Cobalt-60	-0.53 U	1.09	1.79	Filtered		GEL
RD-15		Split	02/24/09	Cobalt-60	0.735 U	1.05	1.8	Unfiltered		GEL
RD-15		Primary	02/24/09	Europium-152	0.542 U	2.2	3.29	Filtered		ES
RD-15		Primary	02/24/09	Europium-152	1.1 U	2	3.39	Unfiltered		ES
RD-15		Split	02/24/09	Europium-152	4.27 U	3.64	5.83	Filtered		GEL
RD-15		Split	02/24/09	Europium-152	-1.09 U	3.2	5.47	Unfiltered		GEL
RD-15		Primary	02/24/09	Europium-154	-0.886 U	2	3.59	Filtered		ES
RD-15		Primary	02/24/09	Europium-154	-0.281 U	2.3	4.09	Unfiltered		ES
RD-15		Split	02/24/09	Europium-154	1.78 U	3.47	5.26	Filtered		GEL
RD-15		Split	02/24/09	Europium-154	1.65 U	3.13	4.69	Unfiltered		GEL
RD-15		Primary	02/24/09	Europium-155	0.866 U	5	8.46	Filtered		ES
RD-15		Primary	02/24/09	Europium-155	1.41 U	3.7	6.21	Unfiltered		ES
RD-15		Split	02/24/09	Europium-155	1.85 U	4.46	7.43	Filtered		GEL
RD-15		Split	02/24/09	Europium-155	0.19 U	4	6.85	Unfiltered		GEL

See last page of table for notes and abbreviations.

TABLE E-III
RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-15		Primary	02/24/09	Manganese-54	0.413 U	0.83	1.42	Filtered		ES
RD-15		Primary	02/24/09	Manganese-54	0.224 U	0.52	0.908	Unfiltered		ES
RD-15		Split	02/24/09	Manganese-54	-1.36 U	1.06	1.63	Filtered		GEL
RD-15		Split	02/24/09	Manganese-54	-0.104 U	1.14	1.69	Unfiltered		GEL
RD-15		Primary	02/24/09	Sodium-22	-0.3 U	0.68	1.22	Filtered		ES
RD-15		Primary	02/24/09	Sodium-22	-0.095 U	0.77	1.38	Unfiltered		ES
RD-15		Split	02/24/09	Sodium-22	0.667 U	1.24	1.89	Filtered		GEL
RD-15		Split	02/24/09	Sodium-22	0.572 U	1.11	1.67	Unfiltered		GEL
RD-15		Primary	07/24/09	Antimony-125	-2.08 U	14	23.6	Unfiltered		ES
RD-15		Reanalysis of Primary	07/24/09	Antimony-125	-8.73 U	15	27.3	Filtered		ES
RD-15		Duplicate	07/24/09	Antimony-125	3.92 U	11	19.7	Unfiltered		ES
RD-15		Primary	07/24/09	Barium-133	-4.18 U	11	18.2	Unfiltered		ES
RD-15		Reanalysis of Primary	07/24/09	Barium-133	-7.89 U	5.8	10.5	Filtered		ES
RD-15		Duplicate	07/24/09	Barium-133	3.85 U	2.5	7.8	Unfiltered		ES
RD-15		Primary	07/24/09	Cesium-134	0.555 U	6.6	11.4	Unfiltered		ES
RD-15		Reanalysis of Primary	07/24/09	Cesium-134	1.7 U	7.5	13.1	Filtered		ES
RD-15		Duplicate	07/24/09	Cesium-134	-2.39 U	6.5	8.01	Unfiltered		ES
RD-15		Primary	07/24/09	Cesium-137	-5.65 U	5.5	10	Unfiltered		ES
RD-15		Reanalysis of Primary	07/24/09	Cesium-137	0.036 U	5.7	10	Filtered		ES
RD-15		Duplicate	07/24/09	Cesium-137	2.48 U	5.8	9.96	Unfiltered		ES
RD-15		Primary	07/24/09	Cobalt-60	2.04 U	3.1	5.36	Unfiltered		ES
RD-15		Reanalysis of Primary	07/24/09	Cobalt-60	-0.568 U	5.1	9.35	Filtered		ES
RD-15		Duplicate	07/24/09	Cobalt-60	-1.03 U	3.6	6.71	Unfiltered		ES
RD-15		Primary	07/24/09	Europium-152	18.5 U	32	54	Unfiltered		ES
RD-15		Reanalysis of Primary	07/24/09	Europium-152	-2.72 U	15	26.2	Filtered		ES
RD-15		Duplicate	07/24/09	Europium-152	-8 U	14	24.2	Unfiltered		ES
RD-15		Primary	07/24/09	Europium-154	6.04 U	14	22.7	Unfiltered		ES
RD-15		Reanalysis of Primary	07/24/09	Europium-154	-0.402 U	21	25.8	Filtered		ES
RD-15		Duplicate	07/24/09	Europium-154	6.75 U	12	20	Unfiltered		ES
RD-15		Primary	07/24/09	Europium-155	7.89 U	16	26.9	Unfiltered		ES
RD-15		Reanalysis of Primary	07/24/09	Europium-155	-6.46 U	12	20.3	Filtered		ES
RD-15		Duplicate	07/24/09	Europium-155	6.13 U	15	25.9	Unfiltered		ES
RD-15		Primary	07/24/09	Manganese-54	-1.27 U	4.1	7.39	Unfiltered		ES
RD-15		Reanalysis of Primary	07/24/09	Manganese-54	-2.51 U	6.5	11.6	Filtered		ES
RD-15		Duplicate	07/24/09	Manganese-54	0.921 U	5.4	9.32	Unfiltered		ES
RD-15		Primary	07/24/09	Sodium-22	2.04 U	4.9	7.69	Unfiltered		ES
RD-15		Reanalysis of Primary	07/24/09	Sodium-22	-0.143 U	7.5	9.18	Filtered		ES
RD-15		Duplicate	07/24/09	Sodium-22	-1.07 U	3.6	6.78	Unfiltered		ES
RD-16		Primary	10/25/89	Cesium-137	-0.218 U	1.64	---	Filtered		UST

See last page of table for notes and abbreviations.

TABLE E-III
RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-16		Primary	12/07/90	Cesium-137	1.68 U	4.4	10	Filtered		IT
RD-16		Primary	03/09/91	Cesium-137	-1.06 U	4.12	10	Filtered		IT
RD-16		Primary	12/05/91	Cesium-137	-1.85 U	5.11	10	Filtered		IT
RD-16		Primary	06/06/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-16		Primary	05/27/98	Cesium-134	18.1 U	---	18.1	Filtered		TN
RD-16		Primary	05/27/98	Cesium-137	15.5 U	---	15.5	Filtered		TN
RD-16		Primary	05/27/98	Cobalt-57	6.75 U	---	6.75	Filtered		TN
RD-16		Primary	05/27/98	Cobalt-60	18.4 U	---	18.4	Filtered		TN
RD-17		Primary	10/18/89	Cesium-137	-1.25 U	4.34	---	Filtered		UST
RD-17		Duplicate	10/18/89	Cesium-137	-0.386 U	4.14	---	Filtered		UST
RD-17		Primary	10/31/89	Cesium-137	-0.502 U	1.42	---	Unfiltered		UST
RD-17		Primary	12/04/90	Cesium-137	-1.47 U	1.99	10	Filtered		IT
RD-17		Primary	03/05/91	Cesium-137	1.67 U	3.59	10	Filtered		IT
RD-17		Primary	12/07/91	Cesium-137	1.55 U	2.98	10	Filtered		IT
RD-17		Split	12/07/91	Cesium-137	10 U	---	10	Filtered		CEP
RD-17		Primary	03/04/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-17		Primary	02/08/99	Cesium-134	13.4 U	---	13.4	Filtered		TN
RD-17		Primary	02/08/99	Cesium-137	10.9 U	---	10.9	Filtered		TN
RD-17		Primary	02/08/99	Cobalt-57	4.52 U	---	4.52	Filtered		TN
RD-17		Primary	02/08/99	Cobalt-60	15.8 U	---	15.8	Filtered		TN
RD-17		Primary	02/21/00	Cesium-134	17.7 U	---	17.7	Filtered		TR
RD-17		Primary	02/21/00	Cesium-137	16.4 U	---	16.4	Filtered		TR
RD-17		Primary	02/21/00	Cobalt-57	8.78 U	---	8.78	Filtered		TR
RD-17		Primary	02/21/00	Cobalt-60	18.3 U	---	18.3	Filtered		TR
RD-17		Primary	02/14/01	Cesium-134	21 U	---	21	Filtered		ES
RD-17		Primary	02/14/01	Cesium-137	18.7 U	---	18.7	Filtered		ES
RD-17		Primary	02/14/01	Cobalt-57	10.3 U	---	10.3	Filtered		ES
RD-17		Primary	02/14/01	Cobalt-60	18.8 U	---	18.8	Filtered		ES
RD-17		Primary	03/01/02	Cesium-134	3 U	1	3	Filtered		DL
RD-17		Primary	03/01/02	Cesium-137	3 U	1	3	Filtered		DL
RD-17		Primary	03/01/02	Cobalt-57	5 U	3	5	Filtered		DL
RD-17		Primary	03/01/02	Cobalt-60	5 U	3	5	Filtered		DL
RD-17		Primary	02/24/03	Cesium-134	3.27 U	---	3.27	Filtered		ES
RD-17		Primary	02/24/03	Cesium-137	1.65 U	---	1.65	Filtered		ES
RD-17		Primary	02/24/03	Cobalt-57	1.08 U	---	1.08	Filtered		ES
RD-17		Primary	02/24/03	Cobalt-60	1.99 U	---	1.99	Filtered		ES
RD-17		Primary	02/23/04	Cesium-134	13.1 U	---	13.1	Filtered		ES
RD-17		Primary	02/23/04	Cesium-137	10.7 U	---	10.7	Filtered		ES
RD-17		Primary	02/23/04	Cobalt-57	6.61 U	---	6.61	Filtered		ES
RD-17		Primary	02/23/04	Cobalt-60	10.2 U	---	10.2	Filtered		ES
RD-17		Primary	02/15/05	Cesium-134	1.44 U	---	1.44	Filtered		ES
RD-17		Primary	02/15/05	Cesium-137	1.22 U	---	1.22	Filtered		ES
RD-17		Primary	02/15/05	Cobalt-57	0.874 U	---	0.874	Filtered		ES
RD-17		Primary	02/15/05	Cobalt-60	1.26 U	---	1.26	Filtered		ES
RD-17		Primary	02/15/05	Europium-152	3.04 U	---	3.04	Filtered		ES
RD-17		Primary	02/15/05	Europium-154	3.71 U	---	3.71	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-17		Primary	02/15/05	Manganese-54	1.18 U	---	1.18	Filtered		ES
RD-17		Primary	02/15/05	Sodium-22	1.21 U	---	1.21	Filtered		ES
RD-17		Primary	02/16/06	Cesium-134	1.88 U	---	1.88	Filtered		ES
RD-17		Primary	02/16/06	Cesium-137	1.48 U	---	1.48	Filtered		ES
RD-17		Primary	02/16/06	Cobalt-57	1.37 U	---	1.37	Filtered		ES
RD-17		Primary	02/16/06	Cobalt-60	1.62 U	---	1.62	Filtered		ES
RD-17		Primary	02/16/06	Europium-152	4.05 U	---	4.05	Filtered		ES
RD-17		Primary	02/16/06	Europium-154	4.63 U	---	4.63	Filtered		ES
RD-17		Primary	02/16/06	Manganese-54	1.33 U	---	1.33	Filtered		ES
RD-17		Primary	02/16/06	Sodium-22	1.6 U	---	1.6	Filtered		ES
RD-17		Primary	02/06/07	Cesium-134	1.26 U	---	1.26	Filtered		ES
RD-17		Split	02/06/07	Cesium-134	0.118 U	0.79	1.38	Filtered		STL
RD-17		Primary	02/06/07	Cesium-137	0.992 U	---	0.992	Filtered		ES
RD-17		Split	02/06/07	Cesium-137	0.184 U	0.68	1.18	Filtered		STL
RD-17		Primary	02/06/07	Cobalt-57	0.599 U	---	0.599	Filtered		ES
RD-17		Split	02/06/07	Cobalt-57	2.93 U	3.2	5.43	Filtered		STL
RD-17		Primary	02/06/07	Cobalt-60	1.01 U	---	1.01	Filtered		ES
RD-17		Split	02/06/07	Cobalt-60	0.127 U	0.79	1.39	Filtered		STL
RD-17		Primary	02/06/07	Europium-152	2.67 U	---	2.67	Filtered		ES
RD-17		Split	02/06/07	Europium-152	0.95 U	1.7	3	Filtered		STL
RD-17		Primary	02/06/07	Europium-154	3.12 U	---	3.12	Filtered		ES
RD-17		Split	02/06/07	Europium-154	-0.0785 U	2.1	3.76	Filtered		STL
RD-17		Primary	02/06/07	Manganese-54	0.956 U	---	0.956	Filtered		ES
RD-17		Split	02/06/07	Manganese-54	0.564 U	0.73	1.3	Filtered		STL
RD-17		Primary	02/06/07	Sodium-22	1.06 U	---	1.06	Filtered		ES
RD-17		Split	02/06/07	Sodium-22	-0.0284 U	0.77	1.36	Filtered		STL
RD-17		Primary	02/22/08	Cesium-134	0.942 U	---	0.942	Filtered		ES
RD-17		Primary	02/22/08	Cesium-137	0.721 U	---	0.721	Filtered		ES
RD-17		Primary	02/22/08	Cobalt-57	0.444 U	---	0.444	Filtered		ES
RD-17		Primary	02/22/08	Cobalt-60	0.904 U	---	0.904	Filtered		ES
RD-17		Primary	02/22/08	Europium-152	1.98 U	---	1.98	Filtered		ES
RD-17		Primary	02/22/08	Europium-154	2.22 U	---	2.22	Filtered		ES
RD-17		Primary	02/22/08	Manganese-54	0.711 U	---	0.711	Filtered		ES
RD-17		Primary	02/22/08	Sodium-22	0.757 U	---	0.757	Filtered		ES
RD-17		Primary	02/25/09	Antimony-125	2.86 U	3.8	6.33	Filtered		ES
RD-17		Primary	02/25/09	Antimony-125	0.128 U	1.7	2.89	Unfiltered		ES
RD-17		Primary	02/25/09	Barium-133	0.068 U	0.39	1.66	Filtered		ES
RD-17		Primary	02/25/09	Barium-133	0.048 U	0.19	0.935	Unfiltered		ES
RD-17		Primary	02/25/09	Cesium-134	-1.76 U	1.3	2.17	Filtered		ES
RD-17		Primary	02/25/09	Cesium-134	-0.105 U	0.52	0.922	Unfiltered		ES
RD-17		Primary	02/25/09	Cesium-137	0.52 U	0.89	1.5	Unfiltered		ES
RD-17		Reanalysis of Primary	02/25/09	Cesium-137	1.79	0.9	1.49	Filtered		ES
RD-17		Primary	02/25/09	Cobalt-60	-0.088 U	1	1.78	Filtered		ES
RD-17		Primary	02/25/09	Cobalt-60	0.028 U	0.43	0.768	Unfiltered		ES
RD-17		Primary	02/25/09	Europium-152	-5.23 U	4	5.2	Filtered		ES
RD-17		Primary	02/25/09	Europium-152	-0.087 U	1.6	2.21	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-17		Primary	02/25/09	Europium-154	2.94 U	4.8	8.03	Filtered		ES
RD-17		Primary	02/25/09	Europium-154	-0.694 U	1.5	2.68	Unfiltered		ES
RD-17		Primary	02/25/09	Europium-155	-0.274 U	3.7	6.2	Filtered		ES
RD-17		Primary	02/25/09	Europium-155	0.432 U	1.5	2.61	Unfiltered		ES
RD-17		Primary	02/25/09	Manganese-54	-0.373 U	0.65	1.13	Filtered		ES
RD-17		Primary	02/25/09	Manganese-54	0.15 U	0.38	0.657	Unfiltered		ES
RD-17		Primary	02/25/09	Sodium-22	0.997 U	1.6	2.72	Filtered		ES
RD-17		Primary	02/25/09	Sodium-22	-0.235 U	0.5	0.905	Unfiltered		ES
RD-17		Primary	07/27/09	Antimony-125	1.66 U	14	24.2	Filtered		ES
RD-17		Primary	07/27/09	Antimony-125	9.29 U	19	32.5	Unfiltered		ES
RD-17		Primary	07/27/09	Barium-133	1.18 U	0.87	6.13	Filtered		ES
RD-17		Primary	07/27/09	Barium-133	13 U	13	21.3	Unfiltered		ES
RD-17		Primary	07/27/09	Cesium-134	3.64 U	5.7	7.96	Filtered		ES
RD-17		Primary	07/27/09	Cesium-134	-11.6 U	8.5	16.6	Unfiltered		ES
RD-17		Primary	07/27/09	Cesium-137	-0.098 U	4.4	7.68	Filtered		ES
RD-17		Primary	07/27/09	Cesium-137	3.04 U	8	13.9	Unfiltered		ES
RD-17		Primary	07/27/09	Cobalt-60	-0.826 U	4.5	8.18	Filtered		ES
RD-17		Primary	07/27/09	Cobalt-60	6.76 U	9.8	16.7	Unfiltered		ES
RD-17		Primary	07/27/09	Europium-152	-7.12 U	16	27.6	Filtered		ES
RD-17		Primary	07/27/09	Europium-152	-5.8 U	28	48.8	Unfiltered		ES
RD-17		Primary	07/27/09	Europium-154	5.56 U	13	18.7	Filtered		ES
RD-17		Primary	07/27/09	Europium-154	-1.76 U	21	38.9	Unfiltered		ES
RD-17		Primary	07/27/09	Europium-155	4.2 U	16	26.7	Filtered		ES
RD-17		Primary	07/27/09	Europium-155	-17.1 U	31	53.1	Unfiltered		ES
RD-17		Primary	07/27/09	Manganese-54	1.08 U	4.3	7.54	Filtered		ES
RD-17		Primary	07/27/09	Manganese-54	3.28 U	5.9	10.2	Unfiltered		ES
RD-17		Primary	07/27/09	Sodium-22	1.9 U	4.5	6.39	Filtered		ES
RD-17		Primary	07/27/09	Sodium-22	-0.602 U	7.1	13.3	Unfiltered		ES
RD-18		Primary	10/26/89	Cesium-137	1.57 U	5.41	---	Filtered		UST
RD-18		Primary	12/08/90	Cesium-137	-0.728 U	5.83	10	Filtered		IT
RD-18		Primary	03/09/91	Cesium-137	4.72 U	3.69	10	Filtered		IT
RD-18		Primary	12/11/91	Cesium-137	1.31 U	4.87	10	Filtered		IT
RD-18		Primary	03/12/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-19		Primary	10/26/89	Cesium-137	-2.32 U	5.09	---	Filtered		UST
RD-19		Primary	12/08/90	Cesium-137	-2.09 U	4.06	10	Filtered		IT
RD-19		Duplicate	12/08/90	Cesium-137	0.811 U	5.96	10	Filtered		IT
RD-19		Primary	03/08/91	Cesium-137	0.879 U	4.28	10	Filtered		IT
RD-19		Duplicate	03/08/91	Cesium-137	0.689 U	4.88	10	Filtered		IT
RD-19		Primary	12/11/91	Cesium-137	-5.66 U	6.12	10	Filtered		IT
RD-19		Primary	03/12/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-20		Primary	10/17/89	Cesium-137	3.66 U	5.29	---	Filtered		UST
RD-20		Primary	10/31/89	Cesium-137	0.497 U	4.13	---	Unfiltered		UST
RD-20		Primary	12/07/90	Cesium-137	4.2 U	4.99	10	Filtered		IT
RD-20		Primary	12/10/90	Cesium-137	10 U	---	10	Filtered		IT
RD-20		Primary	03/05/91	Cesium-137	1.88 U	5.18	10	Filtered		IT
RD-20		Primary	12/10/91	Cesium-137	0.922 U	3.26	10	Filtered		IT

See last page of table for notes and abbreviations.

TABLE E-III
RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-20		Primary	03/04/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-21		Primary	10/31/89	Cesium-137	1 U	5.89	---	Filtered		UST
RD-21		Primary	12/03/90	Cesium-137	-3.42 U	6.57	10	Filtered		IT
RD-21		Primary	03/08/91	Cesium-137	1.11 U	4.52	10	Filtered		IT
RD-21		Primary	12/05/91	Cesium-137	2.05 U	4.98	10	Filtered		IT
RD-21		Primary	03/04/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-21		Primary	03/06/93	Cesium-137	0 U	---	---	Filtered		CEP
RD-21		Primary	06/22/93	Cesium-137	0 U	---	---	Filtered		CEP
RD-21		Primary	08/06/93	Cesium-137	0 U	---	---	Filtered		CEP
RD-21		Primary	11/06/93	Antimony-125	5.16 U	---	5.16	Filtered		LAS
RD-21		Primary	11/06/93	Beryllium-7	23.3 U	---	23.3	Filtered		LAS
RD-21		Primary	11/06/93	Cesium-134	7.71 U	---	7.71	Filtered		LAS
RD-21		Primary	11/06/93	Cesium-137	3.82 U	---	3.82	Filtered		LAS
RD-21		Primary	11/06/93	Cobalt-60	3.22 U	---	3.22	Filtered		LAS
RD-21		Primary	11/06/93	Europium-152	7.52 U	---	7.52	Filtered		LAS
RD-21		Primary	11/06/93	Europium-154	4.82 U	---	4.82	Filtered		LAS
RD-21		Primary	11/06/93	Europium-155	7.68 U	---	7.68	Filtered		LAS
RD-21		Primary	11/06/93	Manganese-54	2.18 U	---	2.18	Filtered		LAS
RD-21		Primary	11/06/93	Ruthenium-106	14.4 U	---	14.4	Filtered		LAS
RD-21		Primary	11/06/93	Silver-110m	3.96 U	---	3.96	Filtered		LAS
RD-21		Primary	02/25/94	Cesium-137	0.2 U	---	2.3	Filtered		LAS
RD-21		Primary	02/25/94	Cobalt-57	-1.54 U	---	2.6	Filtered		LAS
RD-21		Primary	02/25/94	Cobalt-60	0.39 U	---	2.3	Filtered		LAS
RD-21		Primary	08/08/94	Cesium-134	0 U	---	6.3	Filtered		LAS
RD-21		Primary	08/08/94	Cesium-137	1.2 U	---	7.1	Filtered		LAS
RD-21		Primary	08/08/94	Cobalt-57	-0.4 U	---	3.5	Filtered		LAS
RD-21		Primary	08/08/94	Cobalt-60	-1.2 U	---	7.9	Filtered		LAS
RD-21		Primary	02/08/95	Cesium-134	2.4 U	3.8	5.9	Filtered		LAS
RD-21		Primary	02/08/95	Cesium-137	1.3 U	6.9	9.2	Filtered		LAS
RD-21		Primary	02/08/95	Cobalt-57	1.3 U	2.6	4.2	Filtered		LAS
RD-21		Primary	02/08/95	Cobalt-60	1 U	3.7	8.2	Filtered		LAS
RD-21		Primary	08/31/95	Cesium-134	-0.8 U	3.8	7.4	Filtered		LAS
RD-21		Primary	08/31/95	Cesium-137	-1 U	5.5	9.7	Filtered		LAS
RD-21		Primary	08/31/95	Cobalt-57	-0.6 U	3.1	5.2	Filtered		LAS
RD-21		Primary	08/31/95	Cobalt-60	-3.1 U	2.3	9.7	Filtered		LAS
RD-21		Primary	02/16/96	Cesium-134	-1.7 U	1.8	7.6	Filtered		LAS
RD-21		Primary	02/16/96	Cesium-137	-0.3 U	6.9	9.8	Filtered		LAS
RD-21		Primary	02/16/96	Cobalt-57	-2.5 U	2.5	4.6	Filtered		LAS
RD-21		Primary	02/16/96	Cobalt-60	-1 U	1.5	9.4	Filtered		LAS
RD-21		Primary	08/18/96	Cesium-134	2.3 U	3.5	6.8	Filtered		LAS
RD-21		Primary	08/18/96	Cesium-137	-4.9 U	4.2	12	Filtered		LAS
RD-21		Primary	08/18/96	Cobalt-57	-0.6 U	2	5	Filtered		LAS
RD-21		Primary	08/18/96	Cobalt-60	-0.4 U	1.6	11	Filtered		LAS
RD-21		Primary	02/06/97	Cesium-134	-4.8 U	3.1	8.6	Filtered		LAS
RD-21		Primary	02/06/97	Cesium-137	-0.6 U	5.6	9.4	Filtered		LAS
RD-21		Primary	02/06/97	Cobalt-57	-1.2 U	2.7	4.7	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-21		Primary	02/06/97	Cobalt-60	-1.3 U	4.5	7.1	Filtered		LAS
RD-21		Primary	02/09/98	Cesium-134	8.1 U	---	8.1	Filtered		TN
RD-21		Primary	02/09/98	Cesium-137	6.16 U	---	6.16	Filtered		TN
RD-21		Primary	02/09/98	Cobalt-57	3.66 U	---	3.66	Filtered		TN
RD-21		Primary	02/09/98	Cobalt-60	6.76 U	---	6.76	Filtered		TN
RD-21		Primary	02/16/99	Cesium-134	17 U	---	17	Filtered		TN
RD-21		Primary	02/16/99	Cesium-137	15.1 U	---	15.1	Filtered		TN
RD-21		Primary	02/16/99	Cobalt-57	9.51 U	---	9.51	Filtered		TN
RD-21		Primary	02/16/99	Cobalt-60	15.4 U	---	15.4	Filtered		TN
RD-21		Primary	03/15/00	Cesium-134	17.9 U	---	17.9	Filtered		TR
RD-21		Primary	03/15/00	Cesium-137	14.4 U	---	14.4	Filtered		TR
RD-21		Primary	03/15/00	Cobalt-57	8.3 U	---	8.3	Filtered		TR
RD-21		Primary	03/15/00	Cobalt-60	14.9 U	---	14.9	Filtered		TR
RD-21		Primary	10/24/01	Cesium-134	4.1 U	4.8	5	Filtered		DL
RD-21		Primary	10/24/01	Cesium-137	10 U	---	10	Filtered		DL
RD-21		Primary	10/24/01	Cobalt-57	10 U	---	10	Filtered		DL
RD-21		Primary	10/24/01	Cobalt-60	1.3 U	0.8	5	Filtered		DL
RD-21		Primary	03/06/02	Cesium-134	3 U	3	3	Filtered		DL
RD-21		Primary	03/06/02	Cesium-137	2 U	2	2	Filtered		DL
RD-21		Primary	03/06/02	Cobalt-57	3 U	3	3	Filtered		DL
RD-21		Primary	03/06/02	Cobalt-60	3 U	3	3	Filtered		DL
RD-21	Z02	Primary	02/25/03	Cesium-134	4.68 U	---	4.68	Filtered		ES
RD-21	Z02	Primary	02/25/03	Cesium-137	2.24 U	---	2.24	Filtered		ES
RD-21	Z02	Primary	02/25/03	Cobalt-57	1.34 U	---	1.34	Filtered		ES
RD-21	Z02	Primary	02/25/03	Cobalt-60	2.21 U	---	2.21	Filtered		ES
RD-21	Z02	Primary	11/04/04	Cesium-134	2.2 U	---	2.2	Filtered		ES
RD-21	Z02	Primary	11/04/04	Cesium-137	1.82 U	---	1.82	Filtered		ES
RD-21	Z02	Primary	11/04/04	Cobalt-57	1.33 U	---	1.33	Filtered		ES
RD-21	Z02	Primary	11/04/04	Cobalt-60	1.79 U	---	1.79	Filtered		ES
RD-21	Z02	Primary	11/04/04	Europium-152	4.89 U	---	4.89	Filtered		ES
RD-21	Z02	Primary	11/04/04	Europium-154	5.08 U	---	5.08	Filtered		ES
RD-21	Z02	Primary	11/04/04	Manganese-54	2.05 U	---	2.05	Filtered		ES
RD-21	Z02	Primary	11/04/04	Sodium-22	1.76 U	---	1.76	Filtered		ES
RD-21	Z02	Primary	02/16/05	Cesium-134	1.88 U	---	1.88	Filtered		ES
RD-21	Z02	Primary	02/16/05	Cesium-137	1.5 U	---	1.5	Filtered		ES
RD-21	Z02	Primary	02/16/05	Cobalt-57	0.922 U	---	0.922	Filtered		ES
RD-21	Z02	Primary	02/16/05	Cobalt-60	1.38 U	---	1.38	Filtered		ES
RD-21	Z02	Primary	02/16/05	Europium-152	4.04 U	---	4.04	Filtered		ES
RD-21	Z02	Primary	02/16/05	Europium-154	4.05 U	---	4.05	Filtered		ES
RD-21	Z02	Primary	02/16/05	Manganese-54	1.41 U	---	1.41	Filtered		ES
RD-21	Z02	Primary	02/16/05	Sodium-22	1.37 U	---	1.37	Filtered		ES
RD-21	Z02	Primary	02/16/06	Cesium-134	1.41 U	---	1.41	Filtered		ES
RD-21	Z02	Primary	02/16/06	Cesium-137	0.888 U	---	0.888	Filtered		ES
RD-21	Z02	Primary	02/16/06	Cobalt-57	0.592 U	---	0.592	Filtered		ES
RD-21	Z02	Primary	02/16/06	Cobalt-60	0.939 U	---	0.939	Filtered		ES
RD-21	Z02	Primary	02/16/06	Europium-152	2.05 U	---	2.05	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-21	Z02	Primary	02/16/06	Europium-154	2.32 U	---	2.32	Filtered		ES
RD-21	Z02	Primary	02/16/06	Manganese-54	0.814 U	---	0.814	Filtered		ES
RD-21	Z02	Primary	02/16/06	Sodium-22	0.8 U	---	0.8	Filtered		ES
RD-21	Z02	Primary	05/21/07	Cesium-134	0.716 U	---	0.716	Filtered		ES
RD-21	Z02	Primary	05/21/07	Cesium-137	0.54 U	---	0.54	Filtered		ES
RD-21	Z02	Primary	05/21/07	Cobalt-57	0.335 U	---	0.335	Filtered		ES
RD-21	Z02	Primary	05/21/07	Cobalt-60	0.611 U	---	0.611	Filtered		ES
RD-21	Z02	Primary	05/21/07	Europium-152	1.61 U	---	1.61	Filtered		ES
RD-21	Z02	Primary	05/21/07	Europium-154	1.6 U	---	1.6	Filtered		ES
RD-21	Z02	Primary	05/21/07	Manganese-54	0.521 U	---	0.521	Filtered		ES
RD-21	Z02	Primary	05/21/07	Sodium-22	0.549 U	---	0.549	Filtered		ES
RD-21	Z02	Primary	02/05/08	Cesium-134	1.41 U	---	1.41	Filtered		ES
RD-21	Z02	Primary	02/05/08	Cesium-137	1.15 U	---	1.15	Filtered		ES
RD-21	Z02	Primary	02/05/08	Cobalt-57	0.799 U	---	0.799	Filtered		ES
RD-21	Z02	Primary	02/05/08	Cobalt-60	1.22 U	---	1.22	Filtered		ES
RD-21	Z02	Primary	02/05/08	Europium-152	3.26 U	---	3.26	Filtered		ES
RD-21	Z02	Primary	02/05/08	Europium-154	3.7 U	---	3.7	Filtered		ES
RD-21	Z02	Primary	02/05/08	Manganese-54	1.28 U	---	1.28	Filtered		ES
RD-21	Z02	Primary	02/05/08	Sodium-22	1.26 U	---	1.26	Filtered		ES
RD-21	Z04	Primary	02/24/09	Antimony-125	0.723 U	2.7	4.5	Filtered		ES
RD-21	Z04	Primary	02/24/09	Antimony-125	0.365 U	1.3	2.21	Unfiltered		ES
RD-21	Z04	Primary	02/24/09	Barium-133	0.102 U	0.28	1.1	Filtered		ES
RD-21	Z04	Primary	02/24/09	Barium-133	-0.318 U	0.64	0.84	Unfiltered		ES
RD-21	Z04	Primary	02/24/09	Cesium-134	-0.151 U	1	1.3	Filtered		ES
RD-21	Z04	Primary	02/24/09	Cesium-134	0.409 U	0.62	1.05	Unfiltered		ES
RD-21	Z04	Primary	02/24/09	Cesium-137	-0.03 U	1.2	1.98	Filtered		ES
RD-21	Z04	Primary	02/24/09	Cesium-137	0.413 U	0.95	1.6	Unfiltered		ES
RD-21	Z04	Primary	02/24/09	Cobalt-60	-0.192 U	0.98	1.69	Filtered		ES
RD-21	Z04	Primary	02/24/09	Cobalt-60	-0.194 U	0.66	1.15	Unfiltered		ES
RD-21	Z04	Primary	02/24/09	Europium-152	0.766 U	0.86	2.7	Filtered		ES
RD-21	Z04	Primary	02/24/09	Europium-152	-2.24 U	1.8	2.27	Unfiltered		ES
RD-21	Z04	Primary	02/24/09	Europium-154	0.152 U	2.9	4.98	Filtered		ES
RD-21	Z04	Primary	02/24/09	Europium-154	0.919 U	1.6	2.77	Unfiltered		ES
RD-21	Z04	Primary	02/24/09	Europium-155	-1.32 U	4.5	7.69	Filtered		ES
RD-21	Z04	Primary	02/24/09	Europium-155	2.81 U	2.8	4.7	Unfiltered		ES
RD-21	Z04	Primary	02/24/09	Manganese-54	0.089 U	0.96	1.63	Filtered		ES
RD-21	Z04	Primary	02/24/09	Manganese-54	-0.229 U	0.53	0.927	Unfiltered		ES
RD-21	Z04	Primary	02/24/09	Sodium-22	0.052 U	0.99	1.69	Filtered		ES
RD-21	Z04	Primary	02/24/09	Sodium-22	0.311 U	0.55	0.939	Unfiltered		ES
RD-21	Z02	Primary	07/16/09	Antimony-125	2.01 U	15	25.4	Filtered		ES
RD-21	Z02	Primary	07/16/09	Antimony-125	-14 U	14	25.2	Unfiltered		ES
RD-21	Z02	Primary	07/16/09	Barium-133	-1.14 U	2.4	11	Filtered		ES
RD-21	Z02	Primary	07/16/09	Barium-133	-7.65 U	8.6	15	Unfiltered		ES
RD-21	Z02	Primary	07/16/09	Cesium-134	-0.039 U	2.6	10.7	Filtered		ES
RD-21	Z02	Primary	07/16/09	Cesium-134	3.51 U	5.7	9.74	Unfiltered		ES
RD-21	Z02	Primary	07/16/09	Cesium-137	-0.243 U	7.7	13	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-21	Z02	Primary	07/16/09	Cesium-137	-0.943 U	5	8.84	Unfiltered		ES
RD-21	Z02	Primary	07/16/09	Cobalt-60	-5.18 U	9.3	16.1	Filtered		ES
RD-21	Z02	Primary	07/16/09	Cobalt-60	-1.98 U	4.6	8.47	Unfiltered		ES
RD-21	Z02	Primary	07/16/09	Europium-152	-9.41 U	24	30	Filtered		ES
RD-21	Z02	Primary	07/16/09	Europium-152	2.05 U	13	23	Unfiltered		ES
RD-21	Z02	Primary	07/16/09	Europium-154	-1.18 U	16	27.2	Filtered		ES
RD-21	Z02	Primary	07/16/09	Europium-154	1.27 U	8.9	16.2	Unfiltered		ES
RD-21	Z02	Primary	07/16/09	Europium-155	2.82 U	22	37.6	Filtered		ES
RD-21	Z02	Primary	07/16/09	Europium-155	-4.66 U	15	26.7	Unfiltered		ES
RD-21	Z02	Primary	07/16/09	Manganese-54	-3.83 U	6.6	11.5	Filtered		ES
RD-21	Z02	Primary	07/16/09	Manganese-54	0.43 U	4.7	8.3	Unfiltered		ES
RD-21	Z02	Primary	07/16/09	Sodium-22	-0.4 U	5.3	9.21	Filtered		ES
RD-21	Z02	Primary	07/16/09	Sodium-22	0.436 U	3	5.55	Unfiltered		ES
RD-22		Primary	10/19/89	Cesium-137	1.41 U	4.47	---	Filtered		UST
RD-22		Primary	12/04/90	Cesium-137	-0.709 U	5.24	10	Filtered		IT
RD-22		Duplicate	12/04/90	Cesium-137	1.47 U	5.1	10	Filtered		IT
RD-22		Primary	03/11/91	Cesium-137	1.8 U	4.89	10	Filtered		IT
RD-22		Primary	12/06/91	Cesium-137	-6.37 U	5.53	10	Filtered		IT
RD-22		Primary	06/05/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-22		Primary	03/20/93	Cesium-137	0 U	---	---	Filtered		CEP
RD-22		Primary	06/22/93	Cesium-137	0 U	---	---	Filtered		CEP
RD-22		Primary	08/05/93	Cesium-137	0 U	---	---	Filtered		CEP
RD-22		Primary	11/21/93	Antimony-125	5.4 U	---	5.4	Filtered		LAS
RD-22		Primary	11/21/93	Beryllium-7	33.6 U	---	33.6	Filtered		LAS
RD-22		Primary	11/21/93	Cesium-134	6.55 U	---	6.55	Filtered		LAS
RD-22		Primary	11/21/93	Cesium-137	4.12 U	---	4.12	Filtered		LAS
RD-22		Primary	11/21/93	Cobalt-60	2.72 U	---	2.72	Filtered		LAS
RD-22		Primary	11/21/93	Europium-152	6.02 U	---	6.02	Filtered		LAS
RD-22		Primary	11/21/93	Europium-154	4.21 U	---	4.21	Filtered		LAS
RD-22		Primary	11/21/93	Europium-155	6.62 U	---	6.62	Filtered		LAS
RD-22		Primary	11/21/93	Manganese-54	1.73 U	---	1.73	Filtered		LAS
RD-22		Primary	11/21/93	Ruthenium-106	34 U	---	34	Filtered		LAS
RD-22		Primary	11/21/93	Silver-110m	4.95 U	---	4.95	Filtered		LAS
RD-22		Primary	02/24/94	Cesium-137	0.8 U	---	2.4	Filtered		LAS
RD-22		Primary	02/24/94	Cobalt-57	0.7 U	---	2.4	Filtered		LAS
RD-22		Primary	02/24/94	Cobalt-60	-0.17 U	---	2.1	Filtered		LAS
RD-22		Primary	08/09/94	Cesium-134	0 U	---	2.8	Filtered		LAS
RD-22		Primary	08/09/94	Cesium-137	0 U	---	3.1	Filtered		LAS
RD-22		Primary	08/09/94	Cobalt-57	0.7 U	---	2.8	Filtered		LAS
RD-22		Primary	08/09/94	Cobalt-60	0.5 U	---	3.2	Filtered		LAS
RD-22		Primary	02/17/95	Cesium-134	-2.5 U	2.2	8.3	Filtered		LAS
RD-22		Primary	02/17/95	Cesium-137	-1.1 U	5.9	10	Filtered		LAS
RD-22		Primary	02/17/95	Cobalt-57	-1.3 U	2.5	4.5	Filtered		LAS
RD-22		Primary	02/17/95	Cobalt-60	-1.7 U	3.6	9.6	Filtered		LAS
RD-22		Primary	08/29/95	Cesium-134	-3 U	2	8.2	Filtered		LAS
RD-22		Primary	08/29/95	Cesium-137	2.4 U	6.1	9.8	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-22		Primary	08/29/95	Cobalt-57	0 U	---	4.8	Filtered		LAS
RD-22		Primary	08/29/95	Cobalt-60	1.3 U	5.5	11	Filtered		LAS
RD-22		Primary	02/16/96	Cesium-134	0.5 U	1.6	3.2	Filtered		LAS
RD-22		Primary	02/16/96	Cesium-137	-0.2 U	2.2	4	Filtered		LAS
RD-22		Primary	02/16/96	Cobalt-57	-0.9 U	1.2	3.3	Filtered		LAS
RD-22		Primary	02/16/96	Cobalt-60	-1.3 U	1.3	4.5	Filtered		LAS
RD-22		Primary	08/18/96	Cesium-134	-1.9 U	2.6	6.9	Filtered		LAS
RD-22		Primary	08/18/96	Cesium-137	-0.9 U	4.6	8.6	Filtered		LAS
RD-22		Primary	08/18/96	Cobalt-57	-0.3 U	1.7	4.4	Filtered		LAS
RD-22		Primary	08/18/96	Cobalt-60	-0.3 U	3.8	9	Filtered		LAS
RD-22		Primary	02/26/97	Cesium-134	0 U	---	6.3	Filtered		LAS
RD-22		Primary	02/26/97	Cesium-137	-6.5 U	3.7	11	Filtered		LAS
RD-22		Primary	02/26/97	Cobalt-57	0.4 U	2.5	4.2	Filtered		LAS
RD-22		Primary	02/26/97	Cobalt-60	2.7 U	5.1	7.9	Filtered		LAS
RD-22		Primary	05/28/98	Cesium-134	16.4 U	---	16.4	Filtered		TN
RD-22		Primary	05/28/98	Cesium-137	14.4 U	---	14.4	Filtered		TN
RD-22		Primary	05/28/98	Cobalt-57	8.92 U	---	8.92	Filtered		TN
RD-22		Primary	05/28/98	Cobalt-60	17.3 U	---	17.3	Filtered		TN
RD-22		Primary	02/17/99	Cesium-134	9.12 U	---	9.12	Filtered		TN
RD-22		Primary	02/17/99	Cesium-137	5.78 U	---	5.78	Filtered		TN
RD-22		Primary	02/17/99	Cobalt-57	4.44 U	---	4.44	Filtered		TN
RD-22		Primary	02/17/99	Cobalt-60	6.58 U	---	6.58	Filtered		TN
RD-22		Primary	02/06/00	Cesium-134	15.6 U	---	15.6	Filtered		TR
RD-22		Primary	02/06/00	Cesium-137	13.6 U	---	13.6	Filtered		TR
RD-22		Primary	02/06/00	Cobalt-57	7.25 U	---	7.25	Filtered		TR
RD-22		Primary	02/06/00	Cobalt-60	13.6 U	---	13.6	Filtered		TR
RD-22		Primary	02/16/01	Cesium-134	8.09 U	---	8.09	Filtered		ES
RD-22		Primary	02/16/01	Cesium-137	5.57 U	---	5.57	Filtered		ES
RD-22		Primary	02/16/01	Cobalt-57	3.24 U	---	3.24	Filtered		ES
RD-22		Primary	02/16/01	Cobalt-60	6.08 U	---	6.08	Filtered		ES
RD-22		Primary	02/20/02	Cesium-134	5 U	3	5	Filtered		DL
RD-22		Primary	02/20/02	Cesium-137	5 U	3	5	Filtered		DL
RD-22		Primary	02/20/02	Cobalt-57	3 U	3	3	Filtered		DL
RD-22		Primary	02/20/02	Cobalt-60	5 U	3	5	Filtered		DL
RD-22	Z02	Primary	02/24/03	Cesium-134	1.6 U	---	1.6	Filtered		ES
RD-22	Z02	Primary	02/24/03	Cesium-137	1.26 U	---	1.26	Filtered		ES
RD-22	Z02	Primary	02/24/03	Cobalt-57	0.756 U	---	0.756	Filtered		ES
RD-22	Z02	Primary	02/24/03	Cobalt-60	1.35 U	---	1.35	Filtered		ES
RD-22	Z02	Primary	11/12/04	Cesium-134	1.45 U	---	1.45	Filtered		ES
RD-22	Z02	Primary	11/12/04	Cesium-137	0.98 U	---	0.98	Filtered		ES
RD-22	Z02	Primary	11/12/04	Cobalt-57	0.641 U	---	0.641	Filtered		ES
RD-22	Z02	Primary	11/12/04	Cobalt-60	1.11 U	---	1.11	Filtered		ES
RD-22	Z02	Primary	11/12/04	Europium-152	2.61 U	---	2.61	Filtered		ES
RD-22	Z02	Primary	11/12/04	Europium-154	3.15 U	---	3.15	Filtered		ES
RD-22	Z02	Primary	11/12/04	Manganese-54	1.08 U	---	1.08	Filtered		ES
RD-22	Z02	Primary	11/12/04	Sodium-22	1.09 U	---	1.09	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-22	Z02	Primary	02/17/05	Cesium-134	1.58 U	---	1.58	Filtered		ES
RD-22	Z02	Primary	02/17/05	Cesium-137	1.33 U	---	1.33	Filtered		ES
RD-22	Z02	Primary	02/17/05	Cobalt-57	0.56 U	---	0.56	Filtered		ES
RD-22	Z02	Primary	02/17/05	Cobalt-60	1.44 U	---	1.44	Filtered		ES
RD-22	Z02	Primary	02/17/05	Europium-152	3.44 U	---	3.44	Filtered		ES
RD-22	Z02	Primary	02/17/05	Europium-154	4.3 U	---	4.3	Filtered		ES
RD-22	Z02	Primary	02/17/05	Manganese-54	1.28 U	---	1.28	Filtered		ES
RD-22	Z02	Primary	02/17/05	Sodium-22	1.46 U	---	1.46	Filtered		ES
RD-22	Z02	Primary	02/15/06	Cesium-134	1.3 U	---	1.3	Filtered		ES
RD-22	Z02	Primary	02/15/06	Cesium-137	1.03 U	---	1.03	Filtered		ES
RD-22	Z02	Primary	02/15/06	Cobalt-57	0.72 U	---	0.72	Filtered		ES
RD-22	Z02	Primary	02/15/06	Cobalt-60	1.18 U	---	1.18	Filtered		ES
RD-22	Z02	Primary	02/15/06	Europium-152	2.62 U	---	2.62	Filtered		ES
RD-22	Z02	Primary	02/15/06	Europium-154	3.28 U	---	3.28	Filtered		ES
RD-22	Z02	Primary	02/15/06	Manganese-54	1.18 U	---	1.18	Filtered		ES
RD-22	Z02	Primary	02/15/06	Sodium-22	1.14 U	---	1.14	Filtered		ES
RD-22	Z02	Primary	02/07/07	Cesium-134	1.43 U	---	1.43	Filtered		ES
RD-22	Z02	Primary	02/07/07	Cesium-137	2.09 U	---	2.09	Filtered		ES
RD-22	Z02	Primary	02/07/07	Cobalt-57	0.756 U	---	0.756	Filtered		ES
RD-22	Z02	Primary	02/07/07	Cobalt-60	1.24 U	---	1.24	Filtered		ES
RD-22	Z02	Primary	02/07/07	Europium-152	3.09 U	---	3.09	Filtered		ES
RD-22	Z02	Primary	02/07/07	Europium-154	3.49 U	---	3.49	Filtered		ES
RD-22	Z02	Primary	02/07/07	Manganese-54	1.12 U	---	1.12	Filtered		ES
RD-22	Z02	Primary	02/07/07	Sodium-22	1.19 U	---	1.19	Filtered		ES
RD-22	Z02	Primary	02/05/08	Cesium-134	0.976 U	---	0.976	Filtered		ES
RD-22	Z02	Primary	02/05/08	Cesium-137	0.688 U	---	0.688	Filtered		ES
RD-22	Z02	Primary	02/05/08	Cobalt-57	0.385 U	---	0.385	Filtered		ES
RD-22	Z02	Primary	02/05/08	Cobalt-60	0.85 U	---	0.85	Filtered		ES
RD-22	Z02	Primary	02/05/08	Europium-152	1.95 U	---	1.95	Filtered		ES
RD-22	Z02	Primary	02/05/08	Europium-154	2.12 U	---	2.12	Filtered		ES
RD-22	Z02	Primary	02/05/08	Manganese-54	0.692 U	---	0.692	Filtered		ES
RD-22	Z02	Primary	02/05/08	Sodium-22	0.72 U	---	0.72	Filtered		ES
RD-22	Z02	Primary	02/23/09	Antimony-125	-0.495 U	4.6	7.87	Filtered		ES
RD-22	Z02	Primary	02/23/09	Antimony-125	0.675 U	1.7	2.94	Unfiltered		ES
RD-22	Z02	Primary	02/23/09	Barium-133	0.204 U	0.099	1.45	Filtered		ES
RD-22	Z02	Primary	02/23/09	Barium-133	-2.83 U	1.6	2.05	Unfiltered		ES
RD-22	Z02	Primary	02/23/09	Cesium-134	-0.471 U	1.6	2.72	Filtered		ES
RD-22	Z02	Primary	02/23/09	Cesium-134	-1.03 U	1.1	2.47	Unfiltered		ES
RD-22	Z02	Primary	02/23/09	Cesium-137	-0.371 U	1	1.78	Filtered		ES
RD-22	Z02	Primary	02/23/09	Cesium-137	1.93 U	1.6	2.63	Unfiltered		ES
RD-22	Z02	Primary	02/23/09	Cobalt-60	-1.32 U	0.87	1.59	Filtered		ES
RD-22	Z02	Primary	02/23/09	Cobalt-60	1.06 U	1.2	2.04	Unfiltered		ES
RD-22	Z02	Primary	02/23/09	Europium-152	0.564 U	1.1	3.98	Filtered		ES
RD-22	Z02	Primary	02/23/09	Europium-152	0.488 U	0.71	4.74	Unfiltered		ES
RD-22	Z02	Primary	02/23/09	Europium-154	-0.218 U	3.2	5.44	Filtered		ES
RD-22	Z02	Primary	02/23/09	Europium-154	-3.53 U	3.6	6.25	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-22	Z02	Primary	02/23/09	Europium-155	0.793 U	4.6	7.68	Filtered		ES
RD-22	Z02	Primary	02/23/09	Europium-155	0.333 U	4.2	7.12	Unfiltered		ES
RD-22	Z02	Primary	02/23/09	Manganese-54	-0.357 U	0.75	1.31	Filtered		ES
RD-22	Z02	Primary	02/23/09	Manganese-54	-0.078 U	0.71	1.22	Unfiltered		ES
RD-22	Z02	Primary	02/23/09	Sodium-22	-0.074 U	1.1	1.84	Filtered		ES
RD-22	Z02	Primary	02/23/09	Sodium-22	-1.2 U	1.2	2.12	Unfiltered		ES
RD-22	Z02	Primary	07/16/09	Antimony-125	-1.18 U	14	23.2	Filtered		ES
RD-22	Z02	Reanalysis of Primary	07/16/09	Antimony-125	0.623 U	9.9	17	Unfiltered		ES
RD-22	Z02	Primary	07/16/09	Barium-133	3.5 U	2.4	9.33	Filtered		ES
RD-22	Z02	Reanalysis of Primary	07/16/09	Barium-133	0.31 U	1.1	4.38	Unfiltered		ES
RD-22	Z02	Primary	07/16/09	Cesium-134	-0.54 U	7.8	13.4	Filtered		ES
RD-22	Z02	Reanalysis of Primary	07/16/09	Cesium-134	0.724 U	5.1	6.23	Unfiltered		ES
RD-22	Z02	Primary	07/16/09	Cesium-137	-3.49 U	7.7	13.2	Filtered		ES
RD-22	Z02	Reanalysis of Primary	07/16/09	Cesium-137	1.68 U	4.5	7.61	Unfiltered		ES
RD-22	Z02	Primary	07/16/09	Cobalt-60	-0.836 U	6.5	11.2	Filtered		ES
RD-22	Z02	Reanalysis of Primary	07/16/09	Cobalt-60	-1.73 U	5	8.76	Unfiltered		ES
RD-22	Z02	Primary	07/16/09	Europium-152	4.45 U	5.7	24.6	Filtered		ES
RD-22	Z02	Reanalysis of Primary	07/16/09	Europium-152	2.07 U	3.5	15.1	Unfiltered		ES
RD-22	Z02	Primary	07/16/09	Europium-154	3.13 U	13	21.9	Filtered		ES
RD-22	Z02	Reanalysis of Primary	07/16/09	Europium-154	1.52 U	8	14.1	Unfiltered		ES
RD-22	Z02	Primary	07/16/09	Europium-155	6.08 U	16	26.6	Filtered		ES
RD-22	Z02	Reanalysis of Primary	07/16/09	Europium-155	5.16 U	8.1	13.6	Unfiltered		ES
RD-22	Z02	Primary	07/16/09	Manganese-54	1.63 U	4.7	8.05	Filtered		ES
RD-22	Z02	Reanalysis of Primary	07/16/09	Manganese-54	-0.466 U	3.4	6.07	Unfiltered		ES
RD-22	Z02	Primary	07/16/09	Sodium-22	1.06 U	4.3	7.4	Filtered		ES
RD-22	Z02	Reanalysis of Primary	07/16/09	Sodium-22	0.544 U	2.9	5.05	Unfiltered		ES
RD-23		Primary	11/01/89	Cesium-137	-1.1 U	4.93	---	Filtered		UST
RD-23		Primary	06/29/90	Cesium-137	1.69 U	2.24	---	Filtered		UST
RD-23		Primary	12/05/90	Cesium-137	1.81 U	5.31	10	Filtered		IT
RD-23		Primary	03/11/91	Cesium-137	4.7 U	4.38	10	Filtered		IT
RD-23		Duplicate	03/11/91	Cesium-137	104	4.91	10	Filtered		IT
RD-23		Primary	12/05/91	Cesium-137	0.952 U	4.36	10	Filtered		IT
RD-23		Primary	03/04/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-23		Primary	03/21/93	Cesium-137	0 U	---	---	Filtered		CEP
RD-23		Primary	06/23/93	Cesium-137	0 U	---	---	Filtered		CEP
RD-23		Primary	08/06/93	Cesium-137	0 U	---	---	Filtered		CEP
RD-23		Primary	11/06/93	Antimony-125	3.74 U	---	3.74	Filtered		LAS
RD-23		Primary	11/06/93	Beryllium-7	11.9 U	---	11.9	Filtered		LAS
RD-23		Primary	11/06/93	Cesium-134	2.78 U	---	2.78	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-23		Primary	11/06/93	Cesium-137	1.39 U	---	1.39	Filtered		LAS
RD-23		Primary	11/06/93	Cobalt-60	0.906 U	---	0.906	Filtered		LAS
RD-23		Primary	11/06/93	Europium-152	1.5 U	---	1.5	Filtered		LAS
RD-23		Primary	11/06/93	Europium-154	3 U	---	3	Filtered		LAS
RD-23		Primary	11/06/93	Europium-155	5.09 U	---	5.09	Filtered		LAS
RD-23		Primary	11/06/93	Manganese-54	1.15 U	---	1.15	Filtered		LAS
RD-23		Primary	11/06/93	Ruthenium-106	12.8 U	---	12.8	Filtered		LAS
RD-23		Primary	11/06/93	Silver-110m	1.53 U	---	1.53	Filtered		LAS
RD-23		Primary	02/25/94	Cesium-137	-1.3 U	---	2.8	Filtered		LAS
RD-23		Primary	02/25/94	Cobalt-57	-0.34 U	---	2.5	Filtered		LAS
RD-23		Primary	02/25/94	Cobalt-60	0.23 U	---	2.4	Filtered		LAS
RD-23		Primary	08/08/94	Cesium-134	-0.7 U	---	3.9	Filtered		LAS
RD-23		Primary	08/08/94	Cesium-137	-0.8 U	---	5.1	Filtered		LAS
RD-23		Primary	08/08/94	Cobalt-57	-0.9 U	---	4	Filtered		LAS
RD-23		Primary	08/08/94	Cobalt-60	-0.5 U	---	4.5	Filtered		LAS
RD-23		Primary	11/22/94	Cesium-134	0 U	---	---	Filtered		LAS
RD-23		Primary	11/22/94	Cesium-137	0 U	---	---	Filtered		LAS
RD-23		Primary	11/22/94	Cobalt-57	0 U	---	---	Filtered		LAS
RD-23		Primary	11/22/94	Cobalt-60	0 U	---	---	Filtered		LAS
RD-23		Primary	02/05/95	Cesium-134	-0.8 U	3.8	8.4	Filtered		LAS
RD-23		Primary	02/05/95	Cesium-137	-0.1 U	6.5	9	Filtered		LAS
RD-23		Primary	02/05/95	Cobalt-57	0.5 U	2.7	4.5	Filtered		LAS
RD-23		Primary	02/05/95	Cobalt-60	-1.9 U	2.6	11	Filtered		LAS
RD-23		Primary	08/03/95	Cesium-134	1.8 U	3.3	6.2	Filtered		LAS
RD-23		Primary	08/03/95	Cesium-137	-1.8 U	4.6	8.9	Filtered		LAS
RD-23		Primary	08/03/95	Cobalt-57	1 U	2.6	4.3	Filtered		LAS
RD-23		Primary	08/03/95	Cobalt-60	-1.1 U	2.8	9.8	Filtered		LAS
RD-23		Primary	02/16/96	Cesium-134	-0.3 U	1.6	3.5	Filtered		LAS
RD-23		Primary	02/16/96	Cesium-137	-1.8 U	2.3	4.4	Filtered		LAS
RD-23		Primary	02/16/96	Cobalt-57	-0.6 U	1.4	3.5	Filtered		LAS
RD-23		Primary	02/16/96	Cobalt-60	0.6 U	1.7	3.3	Filtered		LAS
RD-23		Primary	08/18/96	Cesium-134	-0.9 U	3.1	7.2	Filtered		LAS
RD-23		Primary	08/18/96	Cesium-137	-2.1 U	3.1	9.7	Filtered		LAS
RD-23		Primary	08/18/96	Cobalt-57	-1.6 U	1.7	4.6	Filtered		LAS
RD-23		Primary	08/18/96	Cobalt-60	-0.2 U	3.1	12	Filtered		LAS
RD-23		Primary	02/27/97	Cesium-134	-0.1 U	3.4	7.9	Filtered		LAS
RD-23		Primary	02/27/97	Cesium-137	1.9 U	6.2	8	Filtered		LAS
RD-23		Primary	02/27/97	Cobalt-57	0.5 U	3.4	4.6	Filtered		LAS
RD-23		Primary	02/27/97	Cobalt-60	1.3 U	2.9	6.2	Filtered		LAS
RD-23		Primary	02/07/98	Cesium-134	8.14 U	---	8.14	Filtered		TN
RD-23		Primary	02/07/98	Cesium-137	5.98 U	---	5.98	Filtered		TN
RD-23		Primary	02/07/98	Cobalt-57	4.1 U	---	4.1	Filtered		TN
RD-23		Primary	02/07/98	Cobalt-60	7.92 U	---	7.92	Filtered		TN
RD-23		Primary	02/08/99	Cesium-134	16.9 U	---	16.9	Filtered		TN
RD-23		Primary	02/08/99	Cesium-137	13.3 U	---	13.3	Filtered		TN
RD-23		Primary	02/08/99	Cobalt-57	6.21 U	---	6.21	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-23		Primary	02/08/99	Cobalt-60	21.2 U	---	21.2	Filtered		TN
RD-23		Primary	02/05/00	Cesium-134	7.04 U	---	7.04	Filtered		TR
RD-23		Primary	02/05/00	Cesium-137	5.33 U	---	5.33	Filtered		TR
RD-23		Primary	02/05/00	Cobalt-57	3.08 U	---	3.08	Filtered		TR
RD-23		Primary	02/05/00	Cobalt-60	5.86 U	---	5.86	Filtered		TR
RD-23		Primary	10/25/01	Cesium-134	5 U	---	5	Filtered		DL
RD-23		Primary	10/25/01	Cesium-137	10 U	---	10	Filtered		DL
RD-23		Primary	10/25/01	Cobalt-57	14 U	---	14	Filtered		DL
RD-23		Primary	10/25/01	Cobalt-60	1.4 U	2	6	Filtered		DL
RD-23		Primary	03/01/02	Cesium-134	3 U	1	3	Filtered		DL
RD-23		Primary	03/01/02	Cesium-137	3 U	1	3	Filtered		DL
RD-23		Primary	03/01/02	Cobalt-57	5 U	3	5	Filtered		DL
RD-23		Primary	03/01/02	Cobalt-60	5 U	3	5	Filtered		DL
RD-23	Z01	Primary	02/26/03	Cesium-134	3.19 U	---	3.19	Filtered		ES
RD-23	Z01	Primary	02/26/03	Cesium-137	2.8 U	---	2.8	Filtered		ES
RD-23	Z01	Primary	02/26/03	Cobalt-57	1.74 U	---	1.74	Filtered		ES
RD-23	Z01	Primary	02/26/03	Cobalt-60	2.97 U	---	2.97	Filtered		ES
RD-23	Z02	Primary	11/03/04	Cesium-134	2.72 U	---	2.72	Filtered		ES
RD-23	Z02	Primary	11/03/04	Cesium-137	2.13 U	---	2.13	Filtered		ES
RD-23	Z02	Primary	11/03/04	Cobalt-57	1.46 U	---	1.46	Filtered		ES
RD-23	Z02	Primary	11/03/04	Cobalt-60	2.37 U	---	2.37	Filtered		ES
RD-23	Z02	Primary	11/03/04	Europium-152	5.07 U	---	5.07	Filtered		ES
RD-23	Z02	Primary	11/03/04	Europium-154	6.27 U	---	6.27	Filtered		ES
RD-23	Z02	Primary	11/03/04	Manganese-54	2.41 U	---	2.41	Filtered		ES
RD-23	Z02	Primary	11/03/04	Sodium-22	2.17 U	---	2.17	Filtered		ES
RD-23	Z02	Primary	02/14/05	Cesium-134	1.33 U	---	1.33	Filtered		ES
RD-23	Z02	Primary	02/14/05	Cesium-137	1.17 U	---	1.17	Filtered		ES
RD-23	Z02	Primary	02/14/05	Cobalt-57	0.825 U	---	0.825	Filtered		ES
RD-23	Z02	Primary	02/14/05	Cobalt-60	1.32 U	---	1.32	Filtered		ES
RD-23	Z02	Primary	02/14/05	Europium-152	3.1 U	---	3.1	Filtered		ES
RD-23	Z02	Primary	02/14/05	Europium-154	3.48 U	---	3.48	Filtered		ES
RD-23	Z02	Primary	02/14/05	Manganese-54	1.17 U	---	1.17	Filtered		ES
RD-23	Z02	Primary	02/14/05	Sodium-22	1.18 U	---	1.18	Filtered		ES
RD-23	Z03	Primary	02/17/06	Cesium-134	3.09 U	---	3.09	Filtered		ES
RD-23	Z03	Primary	02/17/06	Cesium-137	1.53 U	---	1.53	Filtered		ES
RD-23	Z03	Primary	02/17/06	Cobalt-57	1.43 U	---	1.43	Filtered		ES
RD-23	Z03	Primary	02/17/06	Cobalt-60	1.58 U	---	1.58	Filtered		ES
RD-23	Z03	Primary	02/17/06	Europium-152	4.2 U	---	4.2	Filtered		ES
RD-23	Z03	Primary	02/17/06	Europium-154	4.76 U	---	4.76	Filtered		ES
RD-23	Z03	Primary	02/17/06	Manganese-54	1.66 U	---	1.66	Filtered		ES
RD-23	Z03	Primary	02/17/06	Sodium-22	1.64 U	---	1.64	Filtered		ES
RD-23	Z03	Primary	02/07/07	Cesium-134	0.718 U	---	0.718	Filtered		ES
RD-23	Z03	Primary	02/07/07	Cesium-137	0.544 U	---	0.544	Filtered		ES
RD-23	Z03	Primary	02/07/07	Cobalt-57	0.329 U	---	0.329	Filtered		ES
RD-23	Z03	Primary	02/07/07	Cobalt-60	0.642 U	---	0.642	Filtered		ES
RD-23	Z03	Primary	02/07/07	Europium-152	1.52 U	---	1.52	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-23	Z03	Primary	02/07/07	Europium-154	1.7 U	---	1.7	Filtered		ES
RD-23	Z03	Primary	02/07/07	Manganese-54	0.535 U	---	0.535	Filtered		ES
RD-23	Z03	Primary	02/07/07	Sodium-22	0.577 U	---	0.577	Filtered		ES
RD-23	Z03	Primary	02/06/08	Cesium-134	1.79 U	---	1.79	Filtered		ES
RD-23	Z03	Primary	02/06/08	Cesium-137	1.16 U	---	1.16	Filtered		ES
RD-23	Z03	Primary	02/06/08	Cobalt-57	0.901 U	---	0.901	Filtered		ES
RD-23	Z03	Primary	02/06/08	Cobalt-60	1.24 U	---	1.24	Filtered		ES
RD-23	Z03	Primary	02/06/08	Europium-152	3.14 U	---	3.14	Filtered		ES
RD-23	Z03	Primary	02/06/08	Europium-154	3.34 U	---	3.34	Filtered		ES
RD-23	Z03	Primary	02/06/08	Manganese-54	1.25 U	---	1.25	Filtered		ES
RD-23	Z03	Primary	02/06/08	Sodium-22	1.14 U	---	1.14	Filtered		ES
RD-23	Z02	Primary	02/24/09	Antimony-125	-0.587 U	2.3	3.93	Filtered		ES
RD-23	Z02	Primary	02/24/09	Antimony-125	-2.25 U	2.7	4.59	Unfiltered		ES
RD-23	Z02	Primary	02/24/09	Barium-133	0.076 U	0.1	0.954	Filtered		ES
RD-23	Z02	Primary	02/24/09	Barium-133	0.117 U	0.3	1.19	Unfiltered		ES
RD-23	Z02	Primary	02/24/09	Cesium-134	-0.025 U	0.63	1.1	Filtered		ES
RD-23	Z02	Primary	02/24/09	Cesium-134	-0.803 U	0.96	1.66	Unfiltered		ES
RD-23	Z02	Primary	02/24/09	Cesium-137	-0.037 U	1.1	1.85	Unfiltered		ES
RD-23	Z02	Reanalysis of Primary	02/24/09	Cesium-137	3.01	1.25	2.05	Filtered		ES
RD-23	Z02	Primary	02/24/09	Cobalt-60	-0.043 U	0.46	0.825	Filtered		ES
RD-23	Z02	Primary	02/24/09	Cobalt-60	-0.122 U	1.1	1.95	Unfiltered		ES
RD-23	Z02	Primary	02/24/09	Europium-152	-0.33 U	2.5	4.25	Filtered		ES
RD-23	Z02	Primary	02/24/09	Europium-152	0.378 U	0.85	3.38	Unfiltered		ES
RD-23	Z02	Primary	02/24/09	Europium-154	-0.393 U	0.64	1.52	Filtered		ES
RD-23	Z02	Primary	02/24/09	Europium-154	0.399 U	2.8	4.76	Unfiltered		ES
RD-23	Z02	Primary	02/24/09	Europium-155	0.359 U	1.3	2.18	Filtered		ES
RD-23	Z02	Primary	02/24/09	Europium-155	-0.699 U	3.3	5.54	Unfiltered		ES
RD-23	Z02	Primary	02/24/09	Manganese-54	-0.026 U	0.6	1.04	Filtered		ES
RD-23	Z02	Primary	02/24/09	Manganese-54	0.275 U	0.53	0.906	Unfiltered		ES
RD-23	Z02	Primary	02/24/09	Sodium-22	-0.133 U	0.22	0.516	Filtered		ES
RD-23	Z02	Primary	02/24/09	Sodium-22	0.135 U	0.94	1.61	Unfiltered		ES
RD-23	Z03	Primary	07/16/09	Antimony-125	-0.648 U	13	22.5	Filtered		ES
RD-23	Z03	Primary	07/16/09	Antimony-125	0.548 U	5.9	10.2	Unfiltered		ES
RD-23	Z03	Primary	07/16/09	Barium-133	-0.003 U	7.8	9.89	Filtered		ES
RD-23	Z03	Primary	07/16/09	Barium-133	-10.5 U	5.4	5.75	Unfiltered		ES
RD-23	Z03	Primary	07/16/09	Cesium-134	0.293 U	4.1	7.5	Filtered		ES
RD-23	Z03	Primary	07/16/09	Cesium-134	0.259 U	3.8	6.52	Unfiltered		ES
RD-23	Z03	Primary	07/16/09	Cesium-137	-3.05 U	5.1	9.34	Filtered		ES
RD-23	Z03	Primary	07/16/09	Cesium-137	2.83 U	3.6	6.03	Unfiltered		ES
RD-23	Z03	Primary	07/16/09	Cobalt-60	-3.12 U	4.5	8.93	Filtered		ES
RD-23	Z03	Primary	07/16/09	Cobalt-60	0.403 U	2.8	4.87	Unfiltered		ES
RD-23	Z03	Primary	07/16/09	Europium-152	2.55 U	14	23.8	Filtered		ES
RD-23	Z03	Primary	07/16/09	Europium-152	-0.549 U	12	14.8	Unfiltered		ES
RD-23	Z03	Primary	07/16/09	Europium-154	0.973 U	22	25.7	Filtered		ES
RD-23	Z03	Primary	07/16/09	Europium-154	-0.768 U	8.2	14.7	Unfiltered		ES
RD-23	Z03	Primary	07/16/09	Europium-155	-2.68 U	11	19.7	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III
RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-23	Z03	Primary	07/16/09	Europium-155	7.11 U	7.5	12.7	Unfiltered		ES
RD-23	Z03	Primary	07/16/09	Manganese-54	0.354 U	3.3	6.1	Filtered		ES
RD-23	Z03	Primary	07/16/09	Manganese-54	2.44 U	3.6	6.11	Unfiltered		ES
RD-23	Z03	Primary	07/16/09	Sodium-22	0.333 U	7.4	8.8	Filtered		ES
RD-23	Z03	Primary	07/16/09	Sodium-22	-0.26 U	2.8	4.98	Unfiltered		ES
RD-24		Primary	09/12/89	Cesium-137	-1.71 U	4.63	---	Filtered		UST
RD-24		Primary	09/12/89	Cesium-137	1.21 U	4.2	---	Unfiltered		UST
RD-24		Split	09/12/89	Cesium-137	-18 U	---	---	Filtered		TMA
RD-24		Split	09/12/89	Cesium-137	-10 U	---	---	Unfiltered		TMA
RD-24		Primary	09/12/89	Cobalt-60	4.27 U	5.15	---	Filtered		UST
RD-24		Primary	09/12/89	Cobalt-60	1.87 U	6.95	---	Unfiltered		UST
RD-24		Primary	10/17/89	Cesium-137	-0.177 U	4.39	---	Filtered		UST
RD-24		Primary	10/31/89	Cesium-137	2.82 U	5.95	---	Unfiltered		UST
RD-24		Primary	12/05/90	Cesium-137	1.49 U	4.55	10	Filtered		IT
RD-24		Primary	03/06/91	Cesium-137	1.47 U	5.08	10	Filtered		IT
RD-24		Primary	12/11/91	Cesium-137	2.52 U	4.37	10	Filtered		IT
RD-24		Primary	03/06/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-24		Primary	02/23/94	Cesium-137	-0.4 U	---	2.3	Filtered		LAS
RD-24		Primary	02/23/94	Cobalt-57	-0.52 U	---	2.4	Filtered		LAS
RD-24		Primary	02/23/94	Cobalt-60	-0.45 U	---	2.1	Filtered		LAS
RD-24		Primary	08/08/94	Cesium-134	-1.1 U	---	6.3	Filtered		LAS
RD-24		Primary	08/08/94	Cesium-137	2.9 U	---	7.9	Filtered		LAS
RD-24		Primary	08/08/94	Cobalt-57	-1.6 U	---	4	Filtered		LAS
RD-24		Primary	08/08/94	Cobalt-60	-0.4 U	---	8.5	Filtered		LAS
RD-24		Primary	02/16/95	Cesium-134	-2.8 U	2.4	9.1	Filtered		LAS
RD-24		Primary	02/16/95	Cesium-137	4.4 U	5.6	8.5	Filtered		LAS
RD-24		Primary	02/16/95	Cobalt-57	1.6 U	2.6	4.2	Filtered		LAS
RD-24		Primary	02/16/95	Cobalt-60	6 U	2.8	12	Filtered		LAS
RD-24		Primary	02/07/96	Cesium-134	-0.7 U	2.4	7.5	Filtered		LAS
RD-24		Primary	02/07/96	Cesium-137	-1 U	6.4	9.4	Filtered		LAS
RD-24		Primary	02/07/96	Cobalt-57	0.8 U	2	10	Filtered		LAS
RD-24		Primary	02/07/96	Cobalt-60	-2.4 U	2.4	10	Filtered		LAS
RD-24		Primary	02/07/97	Cesium-134	0.6 U	4.2	8.5	Filtered		LAS
RD-24		Primary	02/07/97	Cesium-137	-5.9 U	5.2	9.9	Filtered		LAS
RD-24		Primary	02/07/97	Cobalt-57	0 U	---	5.1	Filtered		LAS
RD-24		Primary	02/07/97	Cobalt-60	-2.5 U	2.8	9.2	Filtered		LAS
RD-24		Primary	02/18/98	Cesium-134	7.53 U	---	7.53	Filtered		TN
RD-24		Primary	02/18/98	Cesium-137	6.06 U	---	6.06	Filtered		TN
RD-24		Primary	02/18/98	Cobalt-57	3.9 U	---	3.9	Filtered		TN
RD-24		Primary	02/18/98	Cobalt-60	6.67 U	---	6.67	Filtered		TN
RD-24		Primary	05/05/98	Cesium-134	16.8 U	---	16.8	Filtered		TN
RD-24		Primary	05/05/98	Cesium-137	14.1 U	---	14.1	Filtered		TN
RD-24		Primary	05/05/98	Cobalt-57	6.48 U	---	6.48	Filtered		TN
RD-24		Primary	05/05/98	Cobalt-60	19.2 U	---	19.2	Filtered		TN
RD-24		Primary	02/02/99	Cesium-134	15.6 U	---	15.6	Filtered		TN
RD-24		Primary	02/02/99	Cesium-137	14.4 U	---	14.4	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-24		Primary	02/02/99	Cobalt-57	9.09 U	---	9.09	Filtered		TN
RD-24		Primary	02/02/99	Cobalt-60	14.5 U	---	14.5	Filtered		TN
RD-24		Primary	08/11/99	Cesium-134	14.3 U	---	14.3	Filtered		TN
RD-24		Primary	08/11/99	Cesium-137	11.1 U	---	11.1	Filtered		TN
RD-24		Primary	08/11/99	Cobalt-57	9.55 U	---	9.55	Filtered		TN
RD-24		Primary	08/11/99	Cobalt-60	13.6 U	---	13.6	Filtered		TN
RD-24		Primary	02/03/00	Cesium-134	23.6 U	---	23.6	Filtered		TR
RD-24		Primary	02/03/00	Cesium-137	19.4 U	---	19.4	Filtered		TR
RD-24		Primary	02/03/00	Cobalt-57	7.82 U	---	7.82	Filtered		TR
RD-24		Primary	02/03/00	Cobalt-60	26.3 U	---	26.3	Filtered		TR
RD-24		Primary	08/04/00	Cesium-134	14.3 U	---	14.3	Filtered		TR
RD-24		Primary	08/04/00	Cesium-137	12 U	---	12	Filtered		TR
RD-24		Primary	08/04/00	Cobalt-57	8.02 U	---	8.02	Filtered		TR
RD-24		Primary	08/04/00	Cobalt-60	13.2 U	---	13.2	Filtered		TR
RD-24		Primary	02/06/01	Cesium-134	17.3 U	---	17.3	Filtered		ES
RD-24		Primary	02/06/01	Cesium-137	12.5 U	---	12.5	Filtered		ES
RD-24		Primary	02/06/01	Cobalt-57	5.23 U	---	5.23	Filtered		ES
RD-24		Primary	02/06/01	Cobalt-60	14.2 U	---	14.2	Filtered		ES
RD-24		Primary	10/25/01	Cesium-134	5 U	---	5	Filtered		DL
RD-24		Primary	10/25/01	Cesium-137	10 U	---	10	Filtered		DL
RD-24		Primary	10/25/01	Cobalt-57	0.8 U	2.7	4.5	Filtered		DL
RD-24		Primary	10/25/01	Cobalt-60	5 U	---	5	Filtered		DL
RD-24		Primary	02/25/02	Cesium-134	5 U	3	5	Filtered		DL
RD-24		Primary	02/25/02	Cesium-137	5 U	3	5	Filtered		DL
RD-24		Primary	02/25/02	Cobalt-57	3 U	3	3	Filtered		DL
RD-24		Primary	02/25/02	Cobalt-60	5 U	3	5	Filtered		DL
RD-24		Primary	11/06/02	Cesium-134	4.76 U	---	4.76	Filtered		ES
RD-24		Primary	11/06/02	Cesium-137	3.98 U	---	3.98	Filtered		ES
RD-24		Primary	11/06/02	Cobalt-57	3.28 U	---	3.28	Filtered		ES
RD-24		Primary	11/06/02	Cobalt-60	4.17 U	---	4.17	Filtered		ES
RD-24		Primary	02/12/03	Cesium-134	8.2 U	---	8.2	Filtered		ES
RD-24		Primary	02/12/03	Cesium-137	5.61 U	---	5.61	Filtered		ES
RD-24		Primary	02/12/03	Cobalt-57	3.02 U	---	3.02	Filtered		ES
RD-24		Primary	02/12/03	Cobalt-60	5.52 U	---	5.52	Filtered		ES
RD-24		Primary	11/14/03	Cesium-134	9.2 U	---	9.2	Filtered		ES
RD-24		Split	11/14/03	Cesium-134	0.434 U	1.78	3.07	Filtered		STL
RD-24		Primary	11/14/03	Cesium-137	6.76 U	---	6.76	Filtered		ES
RD-24		Split	11/14/03	Cesium-137	-0.402 U	1.57	2.67	Filtered		STL
RD-24		Primary	11/14/03	Cobalt-57	3.93 U	---	3.93	Filtered		ES
RD-24		Split	11/14/03	Cobalt-57	-1.32 U	7.52	12.5	Filtered		STL
RD-24		Primary	11/14/03	Cobalt-60	7.69 U	---	7.69	Filtered		ES
RD-24		Split	11/14/03	Cobalt-60	1.22 U	1.85	3.31	Filtered		STL
RD-24		Primary	02/23/04	Cesium-134	7.16 U	---	7.16	Filtered		ES
RD-24		Primary	02/23/04	Cesium-137	6.39 U	---	6.39	Filtered		ES
RD-24		Primary	02/23/04	Cobalt-57	4.36 U	---	4.36	Filtered		ES
RD-24		Primary	02/23/04	Cobalt-60	6.16 U	---	6.16	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-24		Primary	08/26/04	Cesium-134	10.4 U	---	10.4	Filtered		ES
RD-24		Primary	08/26/04	Cesium-137	8.62 U	---	8.62	Filtered		ES
RD-24		Primary	08/26/04	Cobalt-57	3.89 U	---	3.89	Filtered		ES
RD-24		Primary	08/26/04	Cobalt-60	9.68 U	---	9.68	Filtered		ES
RD-24		Primary	02/24/05	Cesium-134	1.78 U	---	1.78	Filtered		ES
RD-24		Primary	02/24/05	Cesium-137	1.56 U	---	1.56	Filtered		ES
RD-24		Primary	02/24/05	Cobalt-57	0.944 U	---	0.944	Filtered		ES
RD-24		Primary	02/24/05	Cobalt-60	1.41 U	---	1.41	Filtered		ES
RD-24		Primary	02/24/05	Europium-152	3.64 U	---	3.64	Filtered		ES
RD-24		Primary	02/24/05	Europium-154	4.76 U	---	4.76	Filtered		ES
RD-24		Primary	02/24/05	Manganese-54	1.49 U	---	1.49	Filtered		ES
RD-24		Primary	02/24/05	Sodium-22	1.63 U	---	1.63	Filtered		ES
RD-24		Primary	09/06/05	Cesium-134	1.2 U	---	1.2	Filtered		ES
RD-24		Primary	09/06/05	Cesium-137	0.944 U	---	0.944	Filtered		ES
RD-24		Primary	09/06/05	Cobalt-57	0.748 U	---	0.748	Filtered		ES
RD-24		Primary	09/06/05	Cobalt-60	0.808 U	---	0.808	Filtered		ES
RD-24		Primary	09/06/05	Europium-152	2.88 U	---	2.88	Filtered		ES
RD-24		Primary	09/06/05	Europium-154	2.76 U	---	2.76	Filtered		ES
RD-24		Primary	09/06/05	Manganese-54	0.971 U	---	0.971	Filtered		ES
RD-24		Primary	09/06/05	Sodium-22	0.957 U	---	0.957	Filtered		ES
RD-24		Primary	02/15/06	Cesium-134	1.84 U	---	1.84	Filtered		ES
RD-24		Primary	02/15/06	Cesium-137	1.58 U	---	1.58	Filtered		ES
RD-24		Primary	02/15/06	Cobalt-57	1.41 U	---	1.41	Filtered		ES
RD-24		Primary	02/15/06	Cobalt-60	1.56 U	---	1.56	Filtered		ES
RD-24		Primary	02/15/06	Europium-152	4.01 U	---	4.01	Filtered		ES
RD-24		Primary	02/15/06	Europium-154	4.93 U	---	4.93	Filtered		ES
RD-24		Primary	02/15/06	Manganese-54	1.58 U	---	1.58	Filtered		ES
RD-24		Primary	02/15/06	Sodium-22	1.71 U	---	1.71	Filtered		ES
RD-24		Primary	08/10/06	Cesium-134	1.91 U	---	1.91	Filtered		ES
RD-24		Primary	08/10/06	Cesium-137	1.55 U	---	1.55	Filtered		ES
RD-24		Primary	08/10/06	Cobalt-57	1.12 U	---	1.12	Filtered		ES
RD-24		Primary	08/10/06	Cobalt-60	1.66 U	---	1.66	Filtered		ES
RD-24		Primary	08/10/06	Europium-152	4.43 U	---	4.43	Filtered		ES
RD-24		Primary	08/10/06	Europium-154	4.86 U	---	4.86	Filtered		ES
RD-24		Primary	08/10/06	Manganese-54	1.52 U	---	1.52	Filtered		ES
RD-24		Primary	08/10/06	Sodium-22	1.65 U	---	1.65	Filtered		ES
RD-24		Primary	05/24/07	Cesium-134	1.88 U	---	1.88	Filtered		ES
RD-24		Primary	05/24/07	Cesium-137	1.2 U	---	1.2	Filtered		ES
RD-24		Primary	05/24/07	Cobalt-57	0.822 U	---	0.822	Filtered		ES
RD-24		Primary	05/24/07	Cobalt-60	1.22 U	---	1.22	Filtered		ES
RD-24		Primary	05/24/07	Europium-152	3.39 U	---	3.39	Filtered		ES
RD-24		Primary	05/24/07	Europium-154	3.57 U	---	3.57	Filtered		ES
RD-24		Primary	05/24/07	Manganese-54	1.12 U	---	1.12	Filtered		ES
RD-24		Primary	05/24/07	Sodium-22	1.22 U	---	1.22	Filtered		ES
RD-24		Primary	08/08/07	Cesium-134	1.01 U	---	1.01	Filtered		ES
RD-24		Reanalysis of Primary	08/08/07	Cesium-134	1.46 U	---	1.46	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III
RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-24		Primary	08/08/07	Cesium-137	1.27 U	---	1.27	Filtered		ES
RD-24		Reanalysis of Primary	08/08/07	Cesium-137	0.906 U	---	0.906	Filtered		ES
RD-24		Primary	08/08/07	Cobalt-57	0.605 U	---	0.605	Filtered		ES
RD-24		Reanalysis of Primary	08/08/07	Cobalt-57	0.687 U	---	0.687	Filtered		ES
RD-24		Primary	08/08/07	Cobalt-60	0.789 U	---	0.789	Filtered		ES
RD-24		Reanalysis of Primary	08/08/07	Cobalt-60	0.775 U	---	0.775	Filtered		ES
RD-24		Primary	08/08/07	Europium-152	2.34 U	---	2.34	Filtered		ES
RD-24		Reanalysis of Primary	08/08/07	Europium-152	2.39 U	---	2.39	Filtered		ES
RD-24		Primary	08/08/07	Europium-154	2.21 U	---	2.21	Filtered		ES
RD-24		Reanalysis of Primary	08/08/07	Europium-154	2.18 U	---	2.18	Filtered		ES
RD-24		Primary	08/08/07	Manganese-54	0.778 U	---	0.778	Filtered		ES
RD-24		Reanalysis of Primary	08/08/07	Manganese-54	0.777 U	---	0.777	Filtered		ES
RD-24		Primary	08/08/07	Sodium-22	0.755 U	---	0.755	Filtered		ES
RD-24		Reanalysis of Primary	08/08/07	Sodium-22	0.747 U	---	0.747	Filtered		ES
RD-24		Primary	02/13/08	Cesium-134	1.89 U	---	1.89	Filtered		ES
RD-24		Primary	02/13/08	Cesium-137	0.633 U	---	0.633	Filtered		ES
RD-24		Primary	02/13/08	Cobalt-57	0.512 U	---	0.512	Filtered		ES
RD-24		Primary	02/13/08	Cobalt-60	0.593 U	---	0.593	Filtered		ES
RD-24		Primary	02/13/08	Europium-152	2.03 U	---	2.03	Filtered		ES
RD-24		Primary	02/13/08	Europium-154	1.54 U	---	1.54	Filtered		ES
RD-24		Primary	02/13/08	Manganese-54	0.606 U	---	0.606	Filtered		ES
RD-24		Primary	02/13/08	Sodium-22	0.522 U	---	0.522	Filtered		ES
RD-24		Primary	10/27/09	Antimony-125	3.4 U	6.3	10.8	Filtered		TAD
RD-24		Primary	10/27/09	Antimony-125	-1.42 U	5.9	10.4	Unfiltered		TAD
RD-24		Split	10/27/09	Antimony-125	10 U	21	36	Filtered		TAI
RD-24		Split	10/27/09	Antimony-125	5 U	18	33	Unfiltered		TAI
RD-24		Primary	10/27/09	Barium-133	-0.772 U	2.7	4.86	Filtered		TAD
RD-24		Primary	10/27/09	Barium-133	-0.086 U	0.87	3.54	Unfiltered		TAD
RD-24		Split	10/27/09	Barium-133	0.1 U	8.2	15	Filtered		TAI
RD-24		Split	10/27/09	Barium-133	0.6 U	8.2	15	Unfiltered		TAI
RD-24		Primary	10/27/09	Cesium-134	-1.09 U	2.8	5.13	Filtered		TAD
RD-24		Primary	10/27/09	Cesium-134	0.371 U	1.2	4.66	Unfiltered		TAD
RD-24		Split	10/27/09	Cesium-134	0.8 U	8.9	16	Filtered		TAI
RD-24		Split	10/27/09	Cesium-134	-0.5 U	6.7	13	Unfiltered		TAI
RD-24		Primary	10/27/09	Cesium-137	-2.3 U	2.8	5.13	Filtered		TAD
RD-24		Primary	10/27/09	Cesium-137	-0.962 U	2.6	4.61	Unfiltered		TAD
RD-24		Split	10/27/09	Cesium-137	1.5 U	9.1	17	Filtered		TAI
RD-24		Split	10/27/09	Cesium-137	0.8 U	9.5	18	Unfiltered		TAI
RD-24		Primary	10/27/09	Cobalt-60	-0.595 U	2.3	4.43	Filtered		TAD
RD-24		Primary	10/27/09	Cobalt-60	1.33 U	2.4	4.22	Unfiltered		TAD
RD-24		Split	10/27/09	Cobalt-60	-3 U	16	29	Filtered		TAI

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-24		Split	10/27/09	Cobalt-60	0 U	16	30	Unfiltered		TAI
RD-24		Primary	10/27/09	Europium-152	2.06 U	12	6.89	Filtered		TAD
RD-24		Primary	10/27/09	Europium-152	-6.2 U	7.7	13.6	Unfiltered		TAD
RD-24		Split	10/27/09	Europium-152	-10 U	26	46	Filtered		TAI
RD-24		Split	10/27/09	Europium-152	1 U	17	32	Unfiltered		TAI
RD-24		Primary	10/27/09	Europium-154	5.4 U	9.1	14.8	Filtered		TAD
RD-24		Primary	10/27/09	Europium-154	1.56 U	8.7	12.7	Unfiltered		TAD
RD-24		Split	10/27/09	Europium-154	0 U	130	240	Filtered		TAI
RD-24		Split	10/27/09	Europium-154	0 U	70	140	Unfiltered		TAI
RD-24		Primary	10/27/09	Europium-155	3.71 U	6	10.2	Filtered		TAD
RD-24		Primary	10/27/09	Europium-155	0.528 U	5.6	9.57	Unfiltered		TAD
RD-24		Split	10/27/09	Europium-155	8 U	16	28	Filtered		TAI
RD-24		Split	10/27/09	Europium-155	-2 U	16	29	Unfiltered		TAI
RD-24		Primary	10/27/09	Manganese-54	-0.863 U	2.1	3.97	Filtered		TAD
RD-24		Primary	10/27/09	Manganese-54	1.77 U	2.2	3.7	Unfiltered		TAD
RD-24		Split	10/27/09	Manganese-54	0 U	12	22	Filtered		TAI
RD-24		Split	10/27/09	Manganese-54	0 U	7.8	15	Unfiltered		TAI
RD-24		Primary	10/27/09	Sodium-22	1.86 U	2.5	4.26	Filtered		TAD
RD-24		Primary	10/27/09	Sodium-22	0.528 U	2.9	4.31	Unfiltered		TAD
RD-24		Split	10/27/09	Sodium-22	0 U	31	55	Filtered		TAI
RD-24		Split	10/27/09	Sodium-22	0 U	2.6	9.7	Unfiltered		TAI
RD-25		Primary	09/12/89	Cesium-137	-1.43 U	4.93	---	Filtered		UST
RD-25		Primary	09/12/89	Cesium-137	3.76 U	5.52	---	Unfiltered		UST
RD-25		Split	09/12/89	Cesium-137	-10 U	---	---	Filtered		TMA
RD-25		Split	09/12/89	Cesium-137	-9 U	---	---	Unfiltered		TMA
RD-25		Primary	09/12/89	Cobalt-60	0.31 U	4.57	---	Filtered		UST
RD-25		Primary	09/12/89	Cobalt-60	2.63 U	5.65	---	Unfiltered		UST
RD-25		Primary	10/31/89	Cesium-137	4.7 U	5.09	---	Unfiltered		UST
RD-25		Primary	12/05/90	Cesium-137	-0.971 U	5.08	10	Filtered		IT
RD-25		Primary	03/06/91	Cesium-137	-1.34 U	4.58	10	Filtered		IT
RD-25		Primary	12/10/91	Cesium-137	2.36 U	5.26	10	Filtered		IT
RD-25		Primary	03/06/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-25		Primary	02/28/94	Cesium-137	0.1 U	---	2.5	Filtered		LAS
RD-25		Primary	02/28/94	Cobalt-57	1.1 U	---	2.4	Filtered		LAS
RD-25		Primary	02/28/94	Cobalt-60	-0.46 U	---	2.7	Filtered		LAS
RD-25		Primary	08/17/94	Cesium-134	-5 U	---	25	Filtered		LAS
RD-25		Primary	08/17/94	Cesium-137	3 U	---	27	Filtered		LAS
RD-25		Primary	08/17/94	Cobalt-57	0 U	---	18	Filtered		LAS
RD-25		Primary	08/17/94	Cobalt-60	4 U	---	26	Filtered		LAS
RD-25		Primary	02/09/95	Cesium-134	1.7 U	3.6	5.6	Filtered		LAS
RD-25		Primary	02/09/95	Cesium-137	2.3 U	6.8	8.8	Filtered		LAS
RD-25		Primary	02/09/95	Cobalt-57	0.1 U	2.7	4.6	Filtered		LAS
RD-25		Primary	02/09/95	Cobalt-60	2.2 U	3.7	11	Filtered		LAS
RD-25		Primary	08/18/95	Cesium-134	-2.6 U	2.6	6.1	Filtered		LAS
RD-25		Primary	08/18/95	Cesium-137	-3.1 U	5.6	10	Filtered		LAS
RD-25		Primary	08/18/95	Cobalt-57	-0.5 U	1.7	4.6	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-25		Primary	08/18/95	Cobalt-60	-1.8 U	2.9	11	Filtered		LAS
RD-25		Primary	02/06/96	Cesium-134	-0.3 U	1.6	5.8	Filtered		LAS
RD-25		Primary	02/06/96	Cesium-137	-4.9 U	3.4	11	Filtered		LAS
RD-25		Primary	02/06/96	Cobalt-57	0.1 U	2.6	4.5	Filtered		LAS
RD-25		Primary	02/06/96	Cobalt-60	-1.2 U	2.5	10	Filtered		LAS
RD-25		Primary	08/20/96	Cesium-134	-0.9 U	3.3	6.6	Filtered		LAS
RD-25		Primary	08/20/96	Cesium-137	1.9 U	5	8.6	Filtered		LAS
RD-25		Primary	08/20/96	Cobalt-57	0.6 U	3.3	4.4	Filtered		LAS
RD-25		Primary	08/20/96	Cobalt-60	-4.3 U	2.6	8.3	Filtered		LAS
RD-25		Primary	02/07/97	Cesium-134	-1.7 U	3.3	8.2	Filtered		LAS
RD-25		Primary	02/07/97	Cesium-137	-3.6 U	5.3	9.6	Filtered		LAS
RD-25		Primary	02/07/97	Cobalt-57	-0.4 U	2.4	5.6	Filtered		LAS
RD-25		Primary	02/07/97	Cobalt-60	-1 U	3.1	11	Filtered		LAS
RD-25		Primary	08/21/97	Cesium-134	-2.9 U	2.9	6.7	Filtered		LAS
RD-25		Primary	08/21/97	Cesium-137	-4.3 U	4.4	8.4	Filtered		LAS
RD-25		Primary	08/21/97	Cobalt-57	-0.8 U	1.8	4.5	Filtered		LAS
RD-25		Primary	08/21/97	Cobalt-60	0.7 U	3.6	7.8	Filtered		LAS
RD-25		Primary	02/05/98	Cesium-134	12 U	---	12	Filtered		TN
RD-25		Primary	02/05/98	Cesium-137	8.86 U	---	8.86	Filtered		TN
RD-25		Primary	02/05/98	Cobalt-57	3.72 U	---	3.72	Filtered		TN
RD-25		Primary	02/05/98	Cobalt-60	12.8 U	---	12.8	Filtered		TN
RD-25		Primary	08/18/98	Cesium-134	14.6 U	---	14.6	Filtered		TN
RD-25		Primary	08/18/98	Cesium-137	13.4 U	---	13.4	Filtered		TN
RD-25		Primary	08/18/98	Cobalt-57	8.39 U	---	8.39	Filtered		TN
RD-25		Primary	08/18/98	Cobalt-60	15.1 U	---	15.1	Filtered		TN
RD-25		Primary	02/16/99	Cesium-134	17 U	---	17	Filtered		TN
RD-25		Primary	02/16/99	Cesium-137	15.9 U	---	15.9	Filtered		TN
RD-25		Primary	02/16/99	Cobalt-57	10.5 U	---	10.5	Filtered		TN
RD-25		Primary	02/16/99	Cobalt-60	16.8 U	---	16.8	Filtered		TN
RD-25		Primary	08/19/99	Cesium-134	17.2 U	---	17.2	Filtered		TN
RD-25		Primary	08/19/99	Cesium-137	14.6 U	---	14.6	Filtered		TN
RD-25		Primary	08/19/99	Cobalt-57	6.91 U	---	6.91	Filtered		TN
RD-25		Primary	08/19/99	Cobalt-60	23.6 U	---	23.6	Filtered		TN
RD-25		Primary	02/16/00	Cesium-134	16.7 U	---	16.7	Filtered		TR
RD-25		Primary	02/16/00	Cesium-137	14.3 U	---	14.3	Filtered		TR
RD-25		Primary	02/16/00	Cobalt-57	5.16 U	---	5.16	Filtered		TR
RD-25		Primary	02/16/00	Cobalt-60	19.7 U	---	19.7	Filtered		TR
RD-25		Primary	08/09/00	Cesium-134	12.7 U	---	12.7	Filtered		TR
RD-25		Primary	08/09/00	Cesium-137	12 U	---	12	Filtered		TR
RD-25		Primary	08/09/00	Cobalt-57	10.2 U	---	10.2	Filtered		TR
RD-25		Primary	08/09/00	Cobalt-60	13.8 U	---	13.8	Filtered		TR
RD-25		Primary	02/07/01	Cesium-134	19 U	---	19	Filtered		ES
RD-25		Primary	02/07/01	Cesium-137	14.9 U	---	14.9	Filtered		ES
RD-25		Primary	02/07/01	Cobalt-57	9.34 U	---	9.34	Filtered		ES
RD-25		Primary	02/07/01	Cobalt-60	15.7 U	---	15.7	Filtered		ES
RD-25		Primary	10/25/01	Cesium-134	4 U	7	12	Filtered		DL

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-25		Primary	10/25/01	Cesium-137	5 U	8	13	Filtered		DL
RD-25		Primary	10/25/01	Cobalt-57	9 U	8	14	Filtered		DL
RD-25		Primary	10/25/01	Cobalt-60	2 U	3	5	Filtered		DL
RD-25		Primary	03/07/02	Cesium-134	3 U	3	3	Filtered		DL
RD-25		Primary	03/07/02	Cesium-137	2 U	2	2	Filtered		DL
RD-25		Primary	03/07/02	Cobalt-57	3 U	3	3	Filtered		DL
RD-25		Primary	03/07/02	Cobalt-60	3 U	3	3	Filtered		DL
RD-25		Primary	11/06/02	Cesium-134	5.38 U	---	5.38	Filtered		ES
RD-25		Primary	11/06/02	Cesium-137	4.56 U	---	4.56	Filtered		ES
RD-25		Primary	11/06/02	Cobalt-57	2.94 U	---	2.94	Filtered		ES
RD-25		Primary	11/06/02	Cobalt-60	4.39 U	---	4.39	Filtered		ES
RD-25		Primary	02/24/03	Cesium-134	3.7 U	---	3.7	Filtered		ES
RD-25		Primary	02/24/03	Cesium-137	3.25 U	---	3.25	Filtered		ES
RD-25		Primary	02/24/03	Cobalt-57	2.01 U	---	2.01	Filtered		ES
RD-25		Primary	02/24/03	Cobalt-60	3.58 U	---	3.58	Filtered		ES
RD-25		Primary	11/13/03	Cesium-134	14.1 U	---	14.1	Filtered		ES
RD-25		Primary	11/13/03	Cesium-137	10.8 U	---	10.8	Filtered		ES
RD-25		Primary	11/13/03	Cobalt-57	7.96 U	---	7.96	Filtered		ES
RD-25		Primary	11/13/03	Cobalt-60	12.7 U	---	12.7	Filtered		ES
RD-25		Primary	02/23/04	Cesium-134	4.68 U	---	4.68	Filtered		ES
RD-25		Split	02/23/04	Cesium-134	-0.174 U	1.63	2.74	Filtered		STL
RD-25		Primary	02/23/04	Cesium-137	3.79 U	---	3.79	Filtered		ES
RD-25		Split	02/23/04	Cesium-137	-0.932 U	1.45	2.4	Filtered		STL
RD-25		Primary	02/23/04	Cobalt-57	2.02 U	---	2.02	Filtered		ES
RD-25		Split	02/23/04	Cobalt-57	-6.35 U	6.91	11.3	Filtered		STL
RD-25		Primary	02/23/04	Cobalt-60	4.09 U	---	4.09	Filtered		ES
RD-25		Split	02/23/04	Cobalt-60	2.4 U	1.52	2.83	Filtered		STL
RD-26		Primary	10/31/89	Cesium-137	-0.166 U	4.89	---	Unfiltered		UST
RD-26		Primary	12/04/90	Cesium-137	4.03 U	5.1	10	Filtered		IT
RD-26		Primary	03/07/91	Cesium-137	0.16 U	3.54	10	Filtered		IT
RD-26		Primary	03/11/91	Cesium-137	0.16 U	3.54	10	Filtered		CEP
RD-27		Primary	10/19/89	Cesium-137	2.38 U	5.71	---	Unfiltered		UST
RD-27		Primary	12/04/90	Cesium-137	-3.42 U	4.23	10	Filtered		IT
RD-27		Primary	03/07/91	Cesium-137	0.335 U	5.16	10	Filtered		IT
RD-27		Primary	12/06/91	Cesium-137	-2.89 U	4.17	10	Filtered		IT
RD-27		Primary	03/09/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-27		Primary	02/05/96	Cesium-134	-2.7 U	2.1	8.5	Filtered		LAS
RD-27		Primary	02/05/96	Cesium-137	-2.6 U	2.3	11	Filtered		LAS
RD-27		Primary	02/05/96	Cobalt-57	-1 U	2.8	4.8	Filtered		LAS
RD-27		Primary	02/05/96	Cobalt-60	-2.7 U	2.6	11	Filtered		LAS
RD-27		Primary	08/27/97	Cesium-134	-2 U	2.6	7.4	Filtered		LAS
RD-27		Primary	08/27/97	Cesium-134	-1.4 U	2.4	5.8	Unfiltered		LAS
RD-27		Primary	08/27/97	Cesium-137	1 U	3.9	6.8	Filtered		LAS
RD-27		Primary	08/27/97	Cesium-137	-1.6 U	4.9	8.9	Unfiltered		LAS
RD-27		Primary	08/27/97	Cobalt-57	0.6 U	3.3	4.3	Filtered		LAS
RD-27		Primary	08/27/97	Cobalt-57	-0.9 U	1.6	4.3	Unfiltered		LAS

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-27		Primary	08/27/97	Cobalt-60	-1.7 U	2.5	10	Filtered		LAS
RD-27		Primary	08/27/97	Cobalt-60	-0.6 U	2.9	5.4	Unfiltered		LAS
RD-27		Primary	02/16/99	Cesium-134	7.29 U	---	7.29	Filtered		TN
RD-27		Primary	02/16/99	Cesium-137	5.56 U	---	5.56	Filtered		TN
RD-27		Primary	02/16/99	Cobalt-57	3.95 U	---	3.95	Filtered		TN
RD-27		Primary	02/16/99	Cobalt-60	7.38 U	---	7.38	Filtered		TN
RD-27		Primary	08/17/99	Cesium-134	7.35 U	---	7.35	Filtered		TN
RD-27		Primary	08/17/99	Cesium-137	5.74 U	---	5.74	Filtered		TN
RD-27		Primary	08/17/99	Cobalt-57	3.57 U	---	3.57	Filtered		TN
RD-27		Primary	08/17/99	Cobalt-60	5.68 U	---	5.68	Filtered		TN
RD-27		Primary	02/21/00	Cesium-134	8.55 U	---	8.55	Filtered		TR
RD-27		Primary	02/21/00	Cesium-137	6.45 U	---	6.45	Filtered		TR
RD-27		Primary	02/21/00	Cobalt-57	4.1 U	---	4.1	Filtered		TR
RD-27		Primary	02/21/00	Cobalt-60	8.31 U	---	8.31	Filtered		TR
RD-27		Primary	08/04/00	Cesium-134	11.1 U	---	11.1	Filtered		TR
RD-27		Primary	08/04/00	Cesium-137	10.8 U	---	10.8	Filtered		TR
RD-27		Primary	08/04/00	Cobalt-57	7.63 U	---	7.63	Filtered		TR
RD-27		Primary	08/04/00	Cobalt-60	11.9 U	---	11.9	Filtered		TR
RD-27		Primary	02/14/01	Cesium-134	8.89 U	---	8.89	Filtered		ES
RD-27		Primary	02/14/01	Cesium-137	6.89 U	---	6.89	Filtered		ES
RD-27		Primary	02/14/01	Cobalt-57	4.18 U	---	4.18	Filtered		ES
RD-27		Primary	02/14/01	Cobalt-60	7.17 U	---	7.17	Filtered		ES
RD-27		Primary	10/26/01	Cesium-134	5 U	---	5	Filtered		DL
RD-27		Primary	10/26/01	Cesium-137	10 U	---	10	Filtered		DL
RD-27		Primary	10/26/01	Cobalt-57	2.3 U	0.5	10	Filtered		DL
RD-27		Primary	10/26/01	Cobalt-60	5 U	---	5	Filtered		DL
RD-27		Primary	03/06/02	Cesium-134	1 U	0.1	1	Filtered		DL
RD-27		Primary	03/06/02	Cesium-137	1 U	0.1	1	Filtered		DL
RD-27		Primary	03/06/02	Cobalt-57	3 U	3	3	Filtered		DL
RD-27		Primary	03/06/02	Cobalt-60	1 U	0.1	1	Filtered		DL
RD-27		Primary	08/22/02	Cesium-134	109 U	---	109	Filtered		ES
RD-27		Primary	08/22/02	Cesium-137	99.2 U	---	99.2	Filtered		ES
RD-27		Primary	08/22/02	Cobalt-57	51.3 U	---	51.3	Filtered		ES
RD-27		Primary	08/22/02	Cobalt-60	83.5 U	---	83.5	Filtered		ES
RD-27		Primary	05/14/03	Cesium-134	2.83 U	---	2.83	Filtered		ES
RD-27		Primary	05/14/03	Cesium-137	1.25 U	---	1.25	Filtered		ES
RD-27		Primary	05/14/03	Cobalt-57	0.892 U	---	0.892	Filtered		ES
RD-27		Primary	05/14/03	Cobalt-60	1.53 U	---	1.53	Filtered		ES
RD-27		Primary	11/14/03	Cesium-134	17.8 U	---	17.8	Filtered		ES
RD-27		Split	11/14/03	Cesium-134	0.4 U	1.94	3.3	Filtered		STL
RD-27		Primary	11/14/03	Cesium-137	13.1 U	---	13.1	Filtered		ES
RD-27		Split	11/14/03	Cesium-137	-0.532 U	1.63	2.73	Filtered		STL
RD-27		Primary	11/14/03	Cobalt-57	7.16 U	---	7.16	Filtered		ES
RD-27		Split	11/14/03	Cobalt-57	-4.02 U	7.2	11.7	Filtered		STL
RD-27		Primary	11/14/03	Cobalt-60	14 U	---	14	Filtered		ES
RD-27		Split	11/14/03	Cobalt-60	1.31 U	1.6	2.95	Filtered		STL

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-27		Primary	02/23/04	Cesium-134	5.66 U	---	5.66	Filtered		ES
RD-27		Primary	02/23/04	Cesium-137	4.55 U	---	4.55	Filtered		ES
RD-27		Primary	02/23/04	Cobalt-57	2.33 U	---	2.33	Filtered		ES
RD-27		Primary	02/23/04	Cobalt-60	4.71 U	---	4.71	Filtered		ES
RD-27		Primary	08/10/04	Cesium-134	17.6 U	---	17.6	Filtered		ES
RD-27		Primary	08/10/04	Cesium-137	15.1 U	---	15.1	Filtered		ES
RD-27		Primary	08/10/04	Cobalt-57	9.66 U	---	9.66	Filtered		ES
RD-27		Primary	08/10/04	Cobalt-60	16.5 U	---	16.5	Filtered		ES
RD-27		Primary	02/17/05	Cesium-134	1.74 U	---	1.74	Filtered		ES
RD-27		Primary	02/17/05	Cesium-137	1.35 U	---	1.35	Filtered		ES
RD-27		Primary	02/17/05	Cobalt-57	0.559 U	---	0.559	Filtered		ES
RD-27		Primary	02/17/05	Cobalt-60	1.52 U	---	1.52	Filtered		ES
RD-27		Primary	02/17/05	Europium-152	3.34 U	---	3.34	Filtered		ES
RD-27		Primary	02/17/05	Europium-154	4.05 U	---	4.05	Filtered		ES
RD-27		Primary	02/17/05	Manganese-54	1.38 U	---	1.38	Filtered		ES
RD-27		Primary	02/17/05	Sodium-22	1.38 U	---	1.38	Filtered		ES
RD-27		Primary	08/24/05	Cesium-134	1.71 U	---	1.71	Filtered		ES
RD-27		Primary	08/24/05	Cesium-137	1.45 U	---	1.45	Filtered		ES
RD-27		Primary	08/24/05	Cobalt-57	0.919 U	---	0.919	Filtered		ES
RD-27		Primary	08/24/05	Cobalt-60	1.6 U	---	1.6	Filtered		ES
RD-27		Primary	08/24/05	Europium-152	3.75 U	---	3.75	Filtered		ES
RD-27		Primary	08/24/05	Europium-154	4.54 U	---	4.54	Filtered		ES
RD-27		Primary	08/24/05	Manganese-54	1.57 U	---	1.57	Filtered		ES
RD-27		Primary	08/24/05	Sodium-22	1.57 U	---	1.57	Filtered		ES
RD-27		Primary	02/20/06	Cesium-134	2.32 U	---	2.32	Filtered		ES
RD-27		Primary	02/20/06	Cesium-137	1.47 U	---	1.47	Filtered		ES
RD-27		Primary	02/20/06	Cobalt-57	1.14 U	---	1.14	Filtered		ES
RD-27		Primary	02/20/06	Cobalt-60	1.52 U	---	1.52	Filtered		ES
RD-27		Primary	02/20/06	Europium-152	3.78 U	---	3.78	Filtered		ES
RD-27		Primary	02/20/06	Europium-154	4.17 U	---	4.17	Filtered		ES
RD-27		Primary	02/20/06	Manganese-54	1.5 U	---	1.5	Filtered		ES
RD-27		Primary	02/20/06	Sodium-22	1.43 U	---	1.43	Filtered		ES
RD-27		Primary	08/25/06	Cesium-134	2.42 U	---	2.42	Filtered		ES
RD-27		Primary	08/25/06	Cesium-137	1.49 U	---	1.49	Filtered		ES
RD-27		Primary	08/25/06	Cobalt-57	0.77 U	---	0.77	Filtered		ES
RD-27		Primary	08/25/06	Cobalt-60	1.42 U	---	1.42	Filtered		ES
RD-27		Primary	08/25/06	Europium-152	3.69 U	---	3.69	Filtered		ES
RD-27		Primary	08/25/06	Europium-154	4.33 U	---	4.33	Filtered		ES
RD-27		Primary	08/25/06	Manganese-54	1.47 U	---	1.47	Filtered		ES
RD-27		Primary	08/25/06	Sodium-22	1.48 U	---	1.48	Filtered		ES
RD-27		Primary	02/14/07	Cesium-134	0.746 U	---	0.746	Filtered		ES
RD-27		Split	02/14/07	Cesium-134	0.307 U	0.82	1.42	Filtered		STL
RD-27		Primary	02/14/07	Cesium-137	0.57 U	---	0.57	Filtered		ES
RD-27		Split	02/14/07	Cesium-137	0.168 U	0.75	1.28	Filtered		STL
RD-27		Primary	02/14/07	Cobalt-57	0.324 U	---	0.324	Filtered		ES
RD-27		Split	02/14/07	Cobalt-57	-0.721 U	2.4	3.97	Filtered		STL

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-27		Primary	02/14/07	Cobalt-60	0.628 U	---	0.628	Filtered		ES
RD-27		Split	02/14/07	Cobalt-60	-0.546 U	0.81	1.33	Filtered		STL
RD-27		Primary	02/14/07	Europium-152	1.55 U	---	1.55	Filtered		ES
RD-27		Split	02/14/07	Europium-152	0.975 U	1.7	2.86	Filtered		STL
RD-27		Primary	02/14/07	Europium-154	1.48 U	---	1.48	Filtered		ES
RD-27		Split	02/14/07	Europium-154	1.32 U	2.3	4.05	Filtered		STL
RD-27		Primary	02/14/07	Manganese-54	0.524 U	---	0.524	Filtered		ES
RD-27		Split	02/14/07	Manganese-54	-0.423 U	0.77	1.28	Filtered		STL
RD-27		Primary	02/14/07	Sodium-22	0.503 U	---	0.503	Filtered		ES
RD-27		Split	02/14/07	Sodium-22	0.426 U	0.81	1.46	Filtered		STL
RD-27		Primary	08/09/07	Cesium-134	0.989 U	---	0.989	Filtered		ES
RD-27		Primary	08/09/07	Cesium-137	0.754 U	---	0.754	Filtered		ES
RD-27		Primary	08/09/07	Cobalt-57	0.399 U	---	0.399	Filtered		ES
RD-27		Primary	08/09/07	Cobalt-60	0.882 U	---	0.882	Filtered		ES
RD-27		Primary	08/09/07	Europium-152	2.18 U	---	2.18	Filtered		ES
RD-27		Primary	08/09/07	Europium-154	2.14 U	---	2.14	Filtered		ES
RD-27		Primary	08/09/07	Manganese-54	0.745 U	---	0.745	Filtered		ES
RD-27		Primary	08/09/07	Sodium-22	0.725 U	---	0.725	Filtered		ES
RD-27		Primary	03/05/08	Cesium-134	1.35 U	---	1.35	Filtered		ES
RD-27		Primary	03/05/08	Cesium-137	1.15 U	---	1.15	Filtered		ES
RD-27		Primary	03/05/08	Cobalt-57	0.856 U	---	0.856	Filtered		ES
RD-27		Primary	03/05/08	Cobalt-60	1.02 U	---	1.02	Filtered		ES
RD-27		Primary	03/05/08	Europium-152	3.01 U	---	3.01	Filtered		ES
RD-27		Primary	03/05/08	Europium-154	2.84 U	---	2.84	Filtered		ES
RD-27		Primary	03/05/08	Manganese-54	0.933 U	---	0.933	Filtered		ES
RD-27		Primary	03/05/08	Sodium-22	0.963 U	---	0.963	Filtered		ES
RD-27		Primary	09/04/08	Beryllium-7	6.74 U	---	6.74	Filtered		ES
RD-27		Primary	09/04/08	Cerium-139	0.44 U	---	0.44	Filtered		ES
RD-27		Primary	09/04/08	Cerium-144	2.89 U	---	2.89	Filtered		ES
RD-27		Primary	09/04/08	Cesium-134	0.922 U	---	0.922	Filtered		ES
RD-27		Primary	09/04/08	Cesium-137	0.73 U	---	0.73	Filtered		ES
RD-27		Primary	09/04/08	Chromium-51	7.5 U	---	7.5	Filtered		ES
RD-27		Primary	09/04/08	Cobalt-56	0.937 U	---	0.937	Filtered		ES
RD-27		Primary	09/04/08	Cobalt-57	0.419 U	---	0.419	Filtered		ES
RD-27		Primary	09/04/08	Cobalt-58	0.825 U	---	0.825	Filtered		ES
RD-27		Primary	09/04/08	Cobalt-60	0.755 U	---	0.755	Filtered		ES
RD-27		Primary	09/04/08	Europium-152	1.79 U	---	1.79	Filtered		ES
RD-27		Primary	09/04/08	Europium-154	2.06 U	---	2.06	Filtered		ES
RD-27		Primary	09/04/08	Manganese-54	0.698 U	---	0.698	Filtered		ES
RD-27		Primary	09/04/08	Silver-110m	0.979 U	---	0.979	Filtered		ES
RD-27		Primary	09/04/08	Sodium-22	0.702 U	---	0.702	Filtered		ES
RD-27		Primary	03/06/09	Antimony-125	0.141 U	1.3	2.24	Filtered		ES
RD-27		Primary	03/06/09	Antimony-125	-0.388 U	3.9	6.56	Unfiltered		ES
RD-27		Primary	03/06/09	Barium-133	-0.455 U	0.9	1.55	Filtered		ES
RD-27		Primary	03/06/09	Barium-133	0.109 U	0.28	1.45	Unfiltered		ES
RD-27		Primary	03/06/09	Cesium-134	-0.566 U	0.69	1.21	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III
RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-27		Primary	03/06/09	Cesium-134	-0.197 U	1.5	2.5	Unfiltered		ES
RD-27		Primary	03/06/09	Cesium-137	-0.049 U	1	1.76	Filtered		ES
RD-27		Reanalysis of Primary	03/06/09	Cesium-137	2.49	0.81	1.29	Unfiltered		ES
RD-27		Reanalysis of Primary	03/06/09	Cesium-137	3.08	0.95	1.54	Unfiltered		ES
RD-27		Reanalysis of Primary	03/06/09	Cesium-137	2.01 U	1.71	2.86	Unfiltered		ES
RD-27		Primary	03/06/09	Cobalt-60	0.077 U	0.77	1.32	Filtered		ES
RD-27		Primary	03/06/09	Cobalt-60	-0.25 U	1.2	2.14	Unfiltered		ES
RD-27		Primary	03/06/09	Europium-152	0.499 U	0.63	1.96	Filtered		ES
RD-27		Primary	03/06/09	Europium-152	0.348 U	1	4.69	Unfiltered		ES
RD-27		Primary	03/06/09	Europium-154	0.539 U	1.7	2.95	Filtered		ES
RD-27		Primary	03/06/09	Europium-154	-3.77 U	4.2	7.29	Unfiltered		ES
RD-27		Primary	03/06/09	Europium-155	-0.896 U	2.2	3.72	Filtered		ES
RD-27		Primary	03/06/09	Europium-155	-4.1 U	6.3	10.6	Unfiltered		ES
RD-27		Primary	03/06/09	Manganese-54	0.342 U	0.72	1.22	Filtered		ES
RD-27		Primary	03/06/09	Manganese-54	0.525 U	0.88	1.5	Unfiltered		ES
RD-27		Primary	03/06/09	Sodium-22	0.184 U	0.59	1.01	Filtered		ES
RD-27		Primary	03/06/09	Sodium-22	-1.29 U	1.4	2.49	Unfiltered		ES
RD-27		Primary	07/30/09	Antimony-125	12.2 U	10	16.7	Filtered		ES
RD-27		Primary	07/30/09	Antimony-125	2.81 U	13	22.9	Unfiltered		ES
RD-27		Duplicate	07/30/09	Antimony-125	-5.58 U	14	24.6	Unfiltered		ES
RD-27		Primary	07/30/09	Barium-133	0.073 U	1.6	6.98	Filtered		ES
RD-27		Primary	07/30/09	Barium-133	3.17 U	2.3	7.1	Unfiltered		ES
RD-27		Duplicate	07/30/09	Barium-133	0.958 U	1.8	7.23	Unfiltered		ES
RD-27		Primary	07/30/09	Cesium-134	-3.48 U	8.2	9.33	Filtered		ES
RD-27		Primary	07/30/09	Cesium-134	-0.069 U	6.2	8	Unfiltered		ES
RD-27		Duplicate	07/30/09	Cesium-134	-3.26 U	6.3	11.1	Unfiltered		ES
RD-27		Primary	07/30/09	Cesium-137	-9.44 U	7.7	14.2	Filtered		ES
RD-27		Primary	07/30/09	Cesium-137	-0.157 U	3.8	6.71	Unfiltered		ES
RD-27		Duplicate	07/30/09	Cesium-137	2.31 U	5.1	8.74	Unfiltered		ES
RD-27		Primary	07/30/09	Cobalt-60	-1.9 U	4.6	8.92	Filtered		ES
RD-27		Primary	07/30/09	Cobalt-60	-3.55 U	4.8	9.04	Unfiltered		ES
RD-27		Duplicate	07/30/09	Cobalt-60	1.21 U	5.4	9.52	Unfiltered		ES
RD-27		Primary	07/30/09	Europium-152	4.31 U	17	23.9	Filtered		ES
RD-27		Primary	07/30/09	Europium-152	0.283 U	15	26.6	Unfiltered		ES
RD-27		Duplicate	07/30/09	Europium-152	-3.77 U	14	23.9	Unfiltered		ES
RD-27		Primary	07/30/09	Europium-154	1.69 U	21	25.7	Filtered		ES
RD-27		Primary	07/30/09	Europium-154	-3.37 U	19	22.5	Unfiltered		ES
RD-27		Duplicate	07/30/09	Europium-154	12.4 U	16	27.9	Unfiltered		ES
RD-27		Primary	07/30/09	Europium-155	-0.206 U	11	19.1	Filtered		ES
RD-27		Primary	07/30/09	Europium-155	0.307 U	16	26.7	Unfiltered		ES
RD-27		Duplicate	07/30/09	Europium-155	-2.66 U	14	23.9	Unfiltered		ES
RD-27		Primary	07/30/09	Manganese-54	1.76 U	4.1	7.1	Filtered		ES
RD-27		Primary	07/30/09	Manganese-54	0.937 U	5.6	9.78	Unfiltered		ES
RD-27		Duplicate	07/30/09	Manganese-54	-0.218 U	4.2	7.42	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-27		Primary	07/30/09	Sodium-22	0.576 U	7.2	8.74	Filtered		ES
RD-27		Primary	07/30/09	Sodium-22	-1.14 U	6.4	7.62	Unfiltered		ES
RD-27		Duplicate	07/30/09	Sodium-22	4.21 U	5.6	9.5	Unfiltered		ES
RD-28		Primary	09/13/89	Cesium-137	-0.53 U	3.97	---	Filtered		UST
RD-28		Primary	09/13/89	Cesium-137	0.87 U	4.89	---	Unfiltered		UST
RD-28		Split	09/13/89	Cesium-137	-11 U	---	---	Filtered		TMA
RD-28		Split	09/13/89	Cesium-137	-11 U	---	---	Unfiltered		TMA
RD-28		Primary	09/13/89	Cobalt-60	3.13 U	4.89	---	Filtered		UST
RD-28		Primary	09/13/89	Cobalt-60	-1.03 U	4.9	---	Unfiltered		UST
RD-28		Primary	10/19/89	Cesium-137	2.11 U	4.85	---	Filtered		UST
RD-28		Primary	12/05/90	Cesium-137	1.83 U	5.12	10	Filtered		IT
RD-28		Primary	03/06/91	Cesium-137	-0.194 U	4.41	10	Filtered		IT
RD-28		Primary	12/10/91	Cesium-137	-0.505 U	4.5	10	Filtered		IT
RD-28		Split	12/10/91	Cesium-137	10 U	---	10	Filtered		CEP
RD-28		Primary	03/06/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-28		Split	03/06/92	Cesium-137	0 U	---	---	Filtered		TEL
RD-28		Primary	03/17/93	Cesium-137	0 U	---	---	Filtered		CEP
RD-28		Primary	02/24/94	Cesium-137	-0.5 U	---	2.3	Filtered		LAS
RD-28		Primary	02/24/94	Cobalt-57	1.1 U	---	2.4	Filtered		LAS
RD-28		Primary	02/24/94	Cobalt-60	-0.76 U	---	2.4	Filtered		LAS
RD-28		Primary	08/17/94	Cesium-134	-19 U	---	43	Filtered		LAS
RD-28		Primary	08/17/94	Cesium-137	5 U	---	50	Filtered		LAS
RD-28		Primary	08/17/94	Cobalt-57	0 U	---	21	Filtered		LAS
RD-28		Primary	08/17/94	Cobalt-60	-9 U	---	50	Filtered		LAS
RD-28		Primary	02/09/95	Cesium-134	-2.3 U	3	8.4	Filtered		LAS
RD-28		Primary	02/09/95	Cesium-137	-5.5 U	3.9	12	Filtered		LAS
RD-28		Primary	02/09/95	Cobalt-57	-0.6 U	2.9	5.1	Filtered		LAS
RD-28		Primary	02/09/95	Cobalt-60	1.4 U	5	12	Filtered		LAS
RD-28		Primary	08/18/95	Cesium-134	3 U	3.3	5.7	Filtered		LAS
RD-28		Primary	08/18/95	Cesium-137	5.5 U	4.6	6.5	Filtered		LAS
RD-28		Primary	08/18/95	Cobalt-57	1.2 U	0.5	4.2	Filtered		LAS
RD-28		Primary	08/18/95	Cobalt-60	-2.5 U	3.1	11	Filtered		LAS
RD-28		Primary	02/06/96	Cesium-134	-2 U	1.3	4.2	Filtered		LAS
RD-28		Primary	02/06/96	Cesium-137	2.2 U	3.1	3.7	Filtered		LAS
RD-28		Primary	02/06/96	Cobalt-57	0.7 U	2	3.4	Filtered		LAS
RD-28		Primary	02/06/96	Cobalt-60	-0.18 U	0.66	2.7	Filtered		LAS
RD-28		Primary	08/20/96	Cesium-134	0.5 U	3.3	6.9	Filtered		LAS
RD-28		Primary	08/20/96	Cesium-137	-1.2 U	6.4	9.3	Filtered		LAS
RD-28		Primary	08/20/96	Cobalt-57	1.3 U	3.3	4.3	Filtered		LAS
RD-28		Primary	08/20/96	Cobalt-60	0.1 U	3.9	10	Filtered		LAS
RD-28		Primary	02/06/97	Cesium-134	-0.8 U	2.6	8.5	Filtered		LAS
RD-28		Primary	02/06/97	Cesium-137	-2.8 U	5	8.6	Filtered		LAS
RD-28		Primary	02/06/97	Cobalt-57	0.3 U	2.8	4.6	Filtered		LAS
RD-28		Primary	02/06/97	Cobalt-60	2.3 U	4.5	10	Filtered		LAS
RD-28		Primary	08/28/97	Cesium-134	0.1 U	3.2	6.4	Filtered		LAS
RD-28		Primary	08/28/97	Cesium-134	-1 U	2.6	6.2	Unfiltered		LAS

See last page of table for notes and abbreviations.

TABLE E-III
RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-28		Primary	08/28/97	Cesium-137	1.4 U	4.1	7	Filtered		LAS
RD-28		Primary	08/28/97	Cesium-137	3.9 U	4.5	7.3	Unfiltered		LAS
RD-28		Primary	08/28/97	Cobalt-57	0.4 U	3.3	4.3	Filtered		LAS
RD-28		Primary	08/28/97	Cobalt-57	0.2 U	3.3	4.4	Unfiltered		LAS
RD-28		Primary	08/28/97	Cobalt-60	-6.1 U	3	8.1	Filtered		LAS
RD-28		Primary	08/28/97	Cobalt-60	-1.4 U	3.2	7.7	Unfiltered		LAS
RD-28		Primary	02/05/98	Cesium-134	12 U	---	12	Filtered		TN
RD-28		Primary	02/05/98	Cesium-137	9.65 U	---	9.65	Filtered		TN
RD-28		Primary	02/05/98	Cobalt-57	5.54 U	---	5.54	Filtered		TN
RD-28		Primary	02/05/98	Cobalt-60	9.76 U	---	9.76	Filtered		TN
RD-28		Primary	08/18/98	Cesium-134	14 U	---	14	Filtered		TN
RD-28		Primary	08/18/98	Cesium-137	11.4 U	---	11.4	Filtered		TN
RD-28		Primary	08/18/98	Cobalt-57	7.44 U	---	7.44	Filtered		TN
RD-28		Primary	08/18/98	Cobalt-60	10.2 U	---	10.2	Filtered		TN
RD-28		Primary	02/16/99	Cesium-134	15.2 U	---	15.2	Filtered		TN
RD-28		Primary	02/16/99	Cesium-137	11.6 U	---	11.6	Filtered		TN
RD-28		Primary	02/16/99	Cobalt-57	4.72 U	---	4.72	Filtered		TN
RD-28		Primary	02/16/99	Cobalt-60	17.2 U	---	17.2	Filtered		TN
RD-28		Primary	08/19/99	Cesium-134	17.5 U	---	17.5	Filtered		TN
RD-28		Primary	08/19/99	Cesium-137	15.7 U	---	15.7	Filtered		TN
RD-28		Primary	08/19/99	Cobalt-57	9.94 U	---	9.94	Filtered		TN
RD-28		Primary	08/19/99	Cobalt-60	21 U	---	21	Filtered		TN
RD-28		Primary	02/16/00	Cesium-134	14.6 U	---	14.6	Filtered		TR
RD-28		Primary	02/16/00	Cesium-137	14.7 U	---	14.7	Filtered		TR
RD-28		Primary	02/16/00	Cobalt-57	9.41 U	---	9.41	Filtered		TR
RD-28		Primary	02/16/00	Cobalt-60	14.8 U	---	14.8	Filtered		TR
RD-28		Primary	08/09/00	Cesium-134	12 U	---	12	Filtered		TR
RD-28		Primary	08/09/00	Cesium-137	12 U	---	12	Filtered		TR
RD-28		Primary	08/09/00	Cobalt-57	9.24 U	---	9.24	Filtered		TR
RD-28		Primary	08/09/00	Cobalt-60	12.7 U	---	12.7	Filtered		TR
RD-28		Primary	02/07/01	Cesium-134	8.26 U	---	8.26	Filtered		ES
RD-28		Primary	02/07/01	Cesium-137	6.49 U	---	6.49	Filtered		ES
RD-28		Primary	02/07/01	Cobalt-57	4.04 U	---	4.04	Filtered		ES
RD-28		Primary	02/07/01	Cobalt-60	7.98 U	---	7.98	Filtered		ES
RD-28		Primary	10/25/01	Cesium-134	4 U	6	12	Filtered		DL
RD-28		Primary	10/25/01	Cesium-137	1 U	---	1	Filtered		DL
RD-28		Primary	10/25/01	Cobalt-57	9 U	8	14	Filtered		DL
RD-28		Primary	10/25/01	Cobalt-60	14 U	---	14	Filtered		DL
RD-28		Primary	02/25/02	Cesium-134	5 U	3	5	Filtered		DL
RD-28		Primary	02/25/02	Cesium-137	5 U	3	5	Filtered		DL
RD-28		Primary	02/25/02	Cobalt-57	3 U	3	3	Filtered		DL
RD-28		Primary	02/25/02	Cobalt-60	5 U	3	5	Filtered		DL
RD-28		Primary	11/06/02	Cesium-134	5.4 U	---	5.4	Filtered		ES
RD-28		Primary	11/06/02	Cesium-137	4.73 U	---	4.73	Filtered		ES
RD-28		Primary	11/06/02	Cobalt-57	3.42 U	---	3.42	Filtered		ES
RD-28		Primary	11/06/02	Cobalt-60	5.3 U	---	5.3	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-28		Primary	02/24/03	Cesium-134	1.69 U	---	1.69	Filtered		ES
RD-28		Primary	02/24/03	Cesium-137	1.41 U	---	1.41	Filtered		ES
RD-28		Primary	02/24/03	Cobalt-57	0.848 U	---	0.848	Filtered		ES
RD-28		Primary	02/24/03	Cobalt-60	1.55 U	---	1.55	Filtered		ES
RD-28		Primary	11/14/03	Cesium-134	11.6 U	---	11.6	Filtered		ES
RD-28		Primary	11/14/03	Cesium-137	10.1 U	---	10.1	Filtered		ES
RD-28		Primary	11/14/03	Cobalt-57	6.6 U	---	6.6	Filtered		ES
RD-28		Primary	11/14/03	Cobalt-60	10.8 U	---	10.8	Filtered		ES
RD-28		Primary	02/23/04	Cesium-134	9.34 U	---	9.34	Filtered		ES
RD-28		Split	02/23/04	Cesium-134	1.15 U	1.69	2.97	Filtered		STL
RD-28		Primary	02/23/04	Cesium-137	8.05 U	---	8.05	Filtered		ES
RD-28		Split	02/23/04	Cesium-137	1.03 U	1.48	2.59	Filtered		STL
RD-28		Primary	02/23/04	Cobalt-57	4.73 U	---	4.73	Filtered		ES
RD-28		Split	02/23/04	Cobalt-57	-3.41 U	6.16	10.3	Filtered		STL
RD-28		Primary	02/23/04	Cobalt-60	8.56 U	---	8.56	Filtered		ES
RD-28		Split	02/23/04	Cobalt-60	0.0845 U	1.53	2.7	Filtered		STL
RD-29		Primary	10/18/89	Cesium-137	1.99 U	4.39	---	Filtered		UST
RD-29		Primary	10/31/89	Cesium-137	1.16 U	5.06	---	Filtered		UST
RD-29		Primary	12/06/90	Cesium-137	1.01 U	5.22	10	Filtered		IT
RD-29		Duplicate	12/06/90	Cesium-137	3.92 U	42	10	Filtered		IT
RD-29		Primary	03/05/91	Cesium-137	-2.51 U	4.76	10	Filtered		IT
RD-29		Primary	12/10/91	Cesium-137	-7.56 U	4.07	10	Filtered		IT
RD-29		Split	12/10/91	Cesium-137	10 U	---	10	Filtered		CEP
RD-29		Primary	03/03/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-29		Primary	03/05/93	Cesium-137	0 U	---	---	Filtered		CEP
RD-29		Primary	02/26/94	Cesium-137	0.1 U	---	6.4	Filtered		LAS
RD-29		Primary	02/26/94	Cobalt-57	-0.5 U	---	4	Filtered		LAS
RD-29		Primary	02/26/94	Cobalt-60	0.6 U	---	6.8	Filtered		LAS
RD-29		Primary	05/09/01	Cesium-134	13.4 U	---	13.4	Filtered		ES
RD-29		Primary	05/09/01	Cesium-137	12.8 U	---	12.8	Filtered		ES
RD-29		Primary	05/09/01	Cobalt-57	9.06 U	---	9.06	Filtered		ES
RD-29		Primary	05/09/01	Cobalt-60	12.6 U	---	12.6	Filtered		ES
RD-29		Primary	05/03/02	Cesium-134	1 U	3	1	Filtered		DL
RD-29		Primary	05/03/02	Cesium-137	1 U	3	1	Filtered		DL
RD-29		Primary	05/03/02	Cobalt-57	3 U	3	3	Filtered		DL
RD-29		Primary	05/03/02	Cobalt-60	1 U	3	1	Filtered		DL
RD-29		Primary	05/13/03	Cesium-134	1.88 U	---	1.88	Filtered		ES
RD-29		Primary	05/13/03	Cesium-137	1.56 U	---	1.56	Filtered		ES
RD-29		Primary	05/13/03	Cobalt-57	0.918 U	---	0.918	Filtered		ES
RD-29		Primary	05/13/03	Cobalt-60	1.88 U	---	1.88	Filtered		ES
RD-29		Primary	02/24/04	Cesium-134	8.19 U	---	8.19	Filtered		ES
RD-29		Primary	02/24/04	Cesium-137	7.42 U	---	7.42	Filtered		ES
RD-29		Primary	02/24/04	Cobalt-57	5.46 U	---	5.46	Filtered		ES
RD-29		Primary	02/24/04	Cobalt-60	7.7 U	---	7.7	Filtered		ES
RD-29		Primary	02/24/05	Cesium-134	1.44 U	---	1.44	Filtered		ES
RD-29		Primary	02/24/05	Cesium-137	1.24 U	---	1.24	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-29		Primary	02/24/05	Cobalt-57	0.862 U	---	0.862	Filtered		ES
RD-29		Primary	02/24/05	Cobalt-60	1.22 U	---	1.22	Filtered		ES
RD-29		Primary	02/24/05	Europium-152	2.97 U	---	2.97	Filtered		ES
RD-29		Primary	02/24/05	Europium-154	3.91 U	---	3.91	Filtered		ES
RD-29		Primary	02/24/05	Manganese-54	1.21 U	---	1.21	Filtered		ES
RD-29		Primary	02/24/05	Sodium-22	1.34 U	---	1.34	Filtered		ES
RD-29		Primary	02/16/06	Cesium-134	2.12 U	---	2.12	Filtered		ES
RD-29		Primary	02/16/06	Cesium-137	1.78 U	---	1.78	Filtered		ES
RD-29		Primary	02/16/06	Cobalt-57	1.23 U	---	1.23	Filtered		ES
RD-29		Primary	02/16/06	Cobalt-60	1.84 U	---	1.84	Filtered		ES
RD-29		Primary	02/16/06	Europium-152	4.54 U	---	4.54	Filtered		ES
RD-29		Primary	02/16/06	Europium-154	5.33 U	---	5.33	Filtered		ES
RD-29		Primary	02/16/06	Manganese-54	1.83 U	---	1.83	Filtered		ES
RD-29		Primary	02/16/06	Sodium-22	1.82 U	---	1.82	Filtered		ES
RD-29		Primary	02/07/07	Cesium-134	1.28 U	---	1.28	Filtered		ES
RD-29		Primary	02/07/07	Cesium-137	1.14 U	---	1.14	Filtered		ES
RD-29		Primary	02/07/07	Cobalt-57	0.767 U	---	0.767	Filtered		ES
RD-29		Primary	02/07/07	Cobalt-60	1.09 U	---	1.09	Filtered		ES
RD-29		Primary	02/07/07	Europium-152	2.92 U	---	2.92	Filtered		ES
RD-29		Primary	02/07/07	Europium-154	3.1 U	---	3.1	Filtered		ES
RD-29		Primary	02/07/07	Manganese-54	1 U	---	1	Filtered		ES
RD-29		Primary	02/07/07	Sodium-22	1.06 U	---	1.06	Filtered		ES
RD-29		Primary	02/05/08	Cesium-134	1.44 U	---	1.44	Filtered		ES
RD-29		Primary	02/05/08	Cesium-137	1.2 U	---	1.2	Filtered		ES
RD-29		Primary	02/05/08	Cobalt-57	0.789 U	---	0.789	Filtered		ES
RD-29		Primary	02/05/08	Cobalt-60	1.31 U	---	1.31	Filtered		ES
RD-29		Primary	02/05/08	Europium-152	3.35 U	---	3.35	Filtered		ES
RD-29		Primary	02/05/08	Europium-154	3.76 U	---	3.76	Filtered		ES
RD-29		Primary	02/05/08	Manganese-54	1.26 U	---	1.26	Filtered		ES
RD-29		Primary	02/05/08	Sodium-22	1.28 U	---	1.28	Filtered		ES
RD-29		Primary	03/05/09	Antimony-125	-0.001 U	1.3	2.29	Filtered		ES
RD-29		Primary	03/05/09	Antimony-125	0.196 U	2.7	4.53	Unfiltered		ES
RD-29		Duplicate	03/05/09	Antimony-125	0.93 U	1.7	2.9	Unfiltered		ES
RD-29		Primary	03/05/09	Barium-133	0.894 U	1.2	1.95	Filtered		ES
RD-29		Primary	03/05/09	Barium-133	-0.23 U	1.1	1.94	Unfiltered		ES
RD-29		Duplicate	03/05/09	Barium-133	-0.147 U	0.18	0.747	Unfiltered		ES
RD-29		Primary	03/05/09	Cesium-134	-0.214 U	0.51	0.913	Filtered		ES
RD-29		Primary	03/05/09	Cesium-134	-0.188 U	0.93	1.8	Unfiltered		ES
RD-29		Duplicate	03/05/09	Cesium-134	-0.116 U	0.18	0.896	Unfiltered		ES
RD-29		Primary	03/05/09	Cesium-137	0.386 U	0.71	1.21	Filtered		ES
RD-29		Primary	03/05/09	Cesium-137	0.366 U	1.4	2.34	Unfiltered		ES
RD-29		Duplicate	03/05/09	Cesium-137	0.499 U	0.64	1.07	Unfiltered		ES
RD-29		Primary	03/05/09	Cobalt-60	-0.06 U	0.63	1.12	Filtered		ES
RD-29		Primary	03/05/09	Cobalt-60	0.814 U	1.4	2.28	Unfiltered		ES
RD-29		Duplicate	03/05/09	Cobalt-60	-0.171 U	0.59	1.05	Unfiltered		ES
RD-29		Primary	03/05/09	Europium-152	-0.623 U	1.4	2.42	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-29		Primary	03/05/09	Europium-152	0.424 U	0.43	3.36	Unfiltered		ES
RD-29		Duplicate	03/05/09	Europium-152	0.557 U	1.4	2.43	Unfiltered		ES
RD-29		Primary	03/05/09	Europium-154	0.683 U	1.3	2.17	Filtered		ES
RD-29		Primary	03/05/09	Europium-154	0.004 U	1.5	2.58	Unfiltered		ES
RD-29		Duplicate	03/05/09	Europium-154	0.08 U	0.89	1.6	Unfiltered		ES
RD-29		Primary	03/05/09	Europium-155	0.781 U	1.7	2.9	Filtered		ES
RD-29		Primary	03/05/09	Europium-155	-0.173 U	3.5	5.93	Unfiltered		ES
RD-29		Duplicate	03/05/09	Europium-155	1.19 U	2.1	3.62	Unfiltered		ES
RD-29		Primary	03/05/09	Manganese-54	0.169 U	0.52	0.903	Filtered		ES
RD-29		Primary	03/05/09	Manganese-54	0.756 U	1.3	2.11	Unfiltered		ES
RD-29		Duplicate	03/05/09	Manganese-54	0.03 U	0.35	0.612	Unfiltered		ES
RD-29		Primary	03/05/09	Sodium-22	0.233 U	0.43	0.741	Filtered		ES
RD-29		Primary	03/05/09	Sodium-22	0.001 U	0.5	0.88	Unfiltered		ES
RD-29		Duplicate	03/05/09	Sodium-22	0.027 U	0.3	0.545	Unfiltered		ES
RD-29		Primary	07/24/09	Antimony-125	-14.2 U	35	59.2	Filtered		ES
RD-29		Primary	07/24/09	Antimony-125	2.76 U	25	42.7	Unfiltered		ES
RD-29		Primary	07/24/09	Barium-133	-5.08 U	17	29.6	Filtered		ES
RD-29		Primary	07/24/09	Barium-133	2.92 U	4.5	13.3	Unfiltered		ES
RD-29		Primary	07/24/09	Cesium-134	-0.947 U	17	28.5	Filtered		ES
RD-29		Primary	07/24/09	Cesium-134	1.34 U	4.3	17.1	Unfiltered		ES
RD-29		Primary	07/24/09	Cesium-137	-13.1 U	11	19.6	Filtered		ES
RD-29		Primary	07/24/09	Cesium-137	-5.39 U	11	18.8	Unfiltered		ES
RD-29		Primary	07/24/09	Cobalt-60	-18.7 U	13	24	Filtered		ES
RD-29		Primary	07/24/09	Cobalt-60	-3.37 U	13	23.2	Unfiltered		ES
RD-29		Primary	07/24/09	Europium-152	5.2 U	10	40.8	Filtered		ES
RD-29		Primary	07/24/09	Europium-152	-7.71 U	41	50.2	Unfiltered		ES
RD-29		Primary	07/24/09	Europium-154	27.5 U	35	58.5	Filtered		ES
RD-29		Primary	07/24/09	Europium-154	-2.56 U	25	44.9	Unfiltered		ES
RD-29		Primary	07/24/09	Europium-155	2.94 U	25	41.8	Filtered		ES
RD-29		Primary	07/24/09	Europium-155	-3.98 U	31	53.3	Unfiltered		ES
RD-29		Primary	07/24/09	Manganese-54	3.28 U	16	27.2	Filtered		ES
RD-29		Primary	07/24/09	Manganese-54	-2.31 U	8.1	14.2	Unfiltered		ES
RD-29		Primary	07/24/09	Sodium-22	9.31 U	12	19.8	Filtered		ES
RD-29		Primary	07/24/09	Sodium-22	-0.867 U	8.6	15.2	Unfiltered		ES
RD-30		Primary	10/19/89	Cesium-137	-0.177 U	4.39	---	Filtered		UST
RD-30		Primary	06/29/90	Cesium-137	1.49 U	1.93	---	Filtered		UST
RD-30		Primary	12/06/90	Cesium-137	-3.51 U	40	10	Filtered		IT
RD-30		Primary	03/09/91	Cesium-137	-1.3 U	4.99	10	Filtered		IT
RD-30		Primary	12/06/91	Cesium-137	-0.124 U	5.79	10	Filtered		IT
RD-30		Primary	06/03/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-30		Split	06/03/92	Cesium-137	0 U	---	---	Filtered		TEL
RD-30		Primary	03/21/93	Cesium-137	0 U	---	---	Filtered		CEP
RD-30		Primary	02/26/94	Cesium-137	1.3 U	---	6.5	Filtered		LAS
RD-30		Primary	02/26/94	Cobalt-57	-0.6 U	---	4	Filtered		LAS
RD-30		Primary	02/26/94	Cobalt-60	2.7 U	---	3.6	Filtered		LAS
RD-30		Primary	08/09/94	Cesium-134	-0.4 U	---	5.9	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-30		Primary	08/09/94	Cesium-137	1.3 U	---	7.4	Filtered		LAS
RD-30		Primary	08/09/94	Cobalt-57	-0.7 U	---	3.7	Filtered		LAS
RD-30		Primary	08/09/94	Cobalt-60	0.4 U	---	7.2	Filtered		LAS
RD-30		Primary	02/08/95	Cesium-134	-1.9 U	3.5	9.1	Filtered		LAS
RD-30		Primary	02/08/95	Cesium-137	-2.7 U	3.9	12	Filtered		LAS
RD-30		Primary	02/08/95	Cobalt-57	1.3 U	3.4	5.6	Filtered		LAS
RD-30		Primary	02/08/95	Cobalt-60	-0.4 U	3.8	12	Filtered		LAS
RD-30		Primary	08/19/95	Cesium-134	1 U	3.3	6.8	Filtered		LAS
RD-30		Primary	08/19/95	Cesium-137	-3 U	5.1	9.7	Filtered		LAS
RD-30		Primary	08/19/95	Cobalt-57	0 U	---	4.9	Filtered		LAS
RD-30		Primary	08/19/95	Cobalt-60	-3.8 U	3.9	8.8	Filtered		LAS
RD-30		Primary	02/28/96	Cesium-134	1.8 U	4.4	8.2	Filtered		LAS
RD-30		Primary	02/28/96	Cesium-137	0.9 U	8.9	12	Filtered		LAS
RD-30		Primary	02/28/96	Cobalt-57	-0.9 U	0.3	5.7	Filtered		LAS
RD-30		Primary	02/28/96	Cobalt-60	-0.9 U	0.7	11	Filtered		LAS
RD-30		Primary	08/20/96	Cesium-134	2.5 U	3.7	8.1	Filtered		ES
RD-30		Primary	08/20/96	Cesium-137	-6.4 U	4.2	12	Filtered		ES
RD-30		Primary	08/20/96	Cobalt-57	-1.5 U	2.3	5.6	Filtered		ES
RD-30		Primary	08/20/96	Cobalt-60	-1 U	2.7	10	Filtered		ES
RD-30		Primary	02/25/97	Cesium-134	-1.8 U	4.2	8.4	Filtered		LAS
RD-30		Primary	02/25/97	Cesium-137	-2.5 U	4.7	12	Filtered		LAS
RD-30		Primary	02/25/97	Cobalt-57	1.7 U	4.1	5.6	Filtered		LAS
RD-30		Primary	02/25/97	Cobalt-60	2.2 U	4.8	12	Filtered		LAS
RD-30		Primary	08/27/97	Cesium-134	2.3 U	3.4	6.4	Filtered		LAS
RD-30		Primary	08/27/97	Cesium-134	-0.3 U	1.2	3.8	Unfiltered		LAS
RD-30		Primary	08/27/97	Cesium-137	2.1 U	4.8	8.1	Filtered		LAS
RD-30		Primary	08/27/97	Cesium-137	-2.4 U	1.7	4.9	Unfiltered		LAS
RD-30		Primary	08/27/97	Cobalt-57	-0.5 U	1.9	4.7	Filtered		LAS
RD-30		Primary	08/27/97	Cobalt-57	-1.9 U	1.5	3.8	Unfiltered		LAS
RD-30		Primary	08/27/97	Cobalt-60	2 U	4.1	8.7	Filtered		LAS
RD-30		Primary	08/27/97	Cobalt-60	1.1 U	1.6	2.8	Unfiltered		LAS
RD-30		Primary	05/28/98	Cesium-134	7.8 U	---	7.8	Filtered		TN
RD-30		Primary	05/28/98	Cesium-137	7.26 U	---	7.26	Filtered		TN
RD-30		Primary	05/28/98	Cobalt-57	4.06 U	---	4.06	Filtered		TN
RD-30		Primary	05/28/98	Cobalt-60	6.72 U	---	6.72	Filtered		TN
RD-30		Primary	08/05/98	Cesium-134	12.1 U	---	12.1	Filtered		TN
RD-30		Primary	08/05/98	Cesium-137	10.6 U	---	10.6	Filtered		TN
RD-30		Primary	08/05/98	Cobalt-57	6 U	---	6	Filtered		TN
RD-30		Primary	08/05/98	Cobalt-60	8.97 U	---	8.97	Filtered		TN
RD-30		Primary	02/05/99	Cesium-134	7.47 U	---	7.47	Filtered		TN
RD-30		Primary	02/05/99	Cesium-137	5.26 U	---	5.26	Filtered		TN
RD-30		Primary	02/05/99	Cobalt-57	3.7 U	---	3.7	Filtered		TN
RD-30		Primary	02/05/99	Cobalt-60	7.27 U	---	7.27	Filtered		TN
RD-30		Primary	05/05/00	Cesium-134	14.6 U	---	14.6	Filtered		TR
RD-30		Primary	05/05/00	Cesium-137	11.9 U	---	11.9	Filtered		TR
RD-30		Primary	05/05/00	Cobalt-57	9.78 U	---	9.78	Filtered		TR

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-30		Primary	05/05/00	Cobalt-60	12.7 U	---	12.7	Filtered		TR
RD-30		Primary	08/08/00	Cesium-134	16.9 U	---	16.9	Filtered		TR
RD-30		Primary	08/08/00	Cesium-137	15 U	---	15	Filtered		TR
RD-30		Primary	08/08/00	Cobalt-57	6.75 U	---	6.75	Filtered		TR
RD-30		Primary	08/08/00	Cobalt-60	15.1 U	---	15.1	Filtered		TR
RD-30		Primary	05/09/01	Cesium-134	9.27 U	---	9.27	Filtered		ES
RD-30		Primary	05/09/01	Cesium-137	7.17 U	---	7.17	Filtered		ES
RD-30		Primary	05/09/01	Cobalt-57	3.85 U	---	3.85	Filtered		ES
RD-30		Primary	05/09/01	Cobalt-60	10.8 U	---	10.8	Filtered		ES
RD-30		Primary	11/09/01	Cesium-134	5 U	---	5	Filtered		DL
RD-30		Primary	11/09/01	Cesium-137	10 U	---	10	Filtered		DL
RD-30		Primary	11/09/01	Cobalt-57	5 U	---	5	Filtered		DL
RD-30		Primary	11/09/01	Cobalt-60	5 U	---	5	Filtered		DL
RD-30		Primary	03/11/02	Cesium-134	3 U	3	3	Filtered		DL
RD-30		Primary	03/11/02	Cesium-137	5 U	3	5	Filtered		DL
RD-30		Primary	03/11/02	Cobalt-57	3 U	3	3	Filtered		DL
RD-30		Primary	03/11/02	Cobalt-60	3 U	3	3	Filtered		DL
RD-30		Primary	08/30/02	Cesium-134	11.2 U	---	11.2	Filtered		ES
RD-30		Primary	08/30/02	Cesium-137	9.84 U	---	9.84	Filtered		ES
RD-30		Primary	08/30/02	Cobalt-57	5.63 U	---	5.63	Filtered		ES
RD-30		Primary	08/30/02	Cobalt-60	9.87 U	---	9.87	Filtered		ES
RD-30		Primary	02/07/03	Cesium-134	16.1 U	---	16.1	Filtered		ES
RD-30		Primary	02/07/03	Cesium-137	12.5 U	---	12.5	Filtered		ES
RD-30		Primary	02/07/03	Cobalt-57	6.98 U	---	6.98	Filtered		ES
RD-30		Primary	02/07/03	Cobalt-60	15.1 U	---	15.1	Filtered		ES
RD-30		Primary	11/14/03	Cesium-134	12.2 U	---	12.2	Filtered		ES
RD-30		Primary	11/14/03	Cesium-137	10.1 U	---	10.1	Filtered		ES
RD-30		Primary	11/14/03	Cobalt-57	7.28 U	---	7.28	Filtered		ES
RD-30		Primary	11/14/03	Cobalt-60	10.2 U	---	10.2	Filtered		ES
RD-30		Primary	02/24/04	Cesium-134	11.2 U	---	11.2	Filtered		ES
RD-30		Primary	02/24/04	Cesium-137	9.86 U	---	9.86	Filtered		ES
RD-30		Primary	02/24/04	Cobalt-57	5.63 U	---	5.63	Filtered		ES
RD-30		Primary	02/24/04	Cobalt-60	10.4 U	---	10.4	Filtered		ES
RD-30		Primary	08/10/04	Cesium-134	8.7 U	---	8.7	Filtered		ES
RD-30		Primary	08/10/04	Cesium-137	6.88 U	---	6.88	Filtered		ES
RD-30		Primary	08/10/04	Cobalt-57	3.76 U	---	3.76	Filtered		ES
RD-30		Primary	08/10/04	Cobalt-60	7.67 U	---	7.67	Filtered		ES
RD-30		Primary	08/29/05	Cesium-134	1.46 U	---	1.46	Filtered		ES
RD-30		Split	08/29/05	Cesium-134	-0.113 U	1.9	3.52	Filtered		STL
RD-30		Primary	08/29/05	Cesium-137	1.21 U	---	1.21	Filtered		ES
RD-30		Split	08/29/05	Cesium-137	1.2 U	1.9	3.63	Filtered		STL
RD-30		Primary	08/29/05	Cobalt-57	1.06 U	---	1.06	Filtered		ES
RD-30		Split	08/29/05	Cobalt-57	-1.07 U	7.4	13	Filtered		STL
RD-30		Primary	08/29/05	Cobalt-60	1.36 U	---	1.36	Filtered		ES
RD-30		Split	08/29/05	Cobalt-60	0.127 U	1.4	2.86	Filtered		STL
RD-30		Primary	08/29/05	Europium-152	3.41 U	---	3.41	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-30		Split	08/29/05	Europium-152	5.29 U	4.1	8.34	Filtered		STL
RD-30		Primary	08/29/05	Europium-154	3.8 U	---	3.8	Filtered		ES
RD-30		Split	08/29/05	Europium-154	-1.37 U	4.7	8.49	Filtered		STL
RD-30		Primary	08/29/05	Manganese-54	1.36 U	---	1.36	Filtered		ES
RD-30		Split	08/29/05	Manganese-54	-0.943 U	1.7	2.86	Filtered		STL
RD-30		Primary	08/29/05	Sodium-22	1.32 U	---	1.32	Filtered		ES
RD-30		Split	08/29/05	Sodium-22	-0.559 U	1.7	3	Filtered		STL
RD-30		Primary	02/17/06	Cesium-134	3.19 U	---	3.19	Filtered		ES
RD-30		Primary	02/17/06	Cesium-137	1.56 U	---	1.56	Filtered		ES
RD-30		Primary	02/17/06	Cobalt-57	1.3 U	---	1.3	Filtered		ES
RD-30		Primary	02/17/06	Cobalt-60	1.57 U	---	1.57	Filtered		ES
RD-30		Primary	02/17/06	Europium-152	4.04 U	---	4.04	Filtered		ES
RD-30		Primary	02/17/06	Europium-154	4.41 U	---	4.41	Filtered		ES
RD-30		Primary	02/17/06	Manganese-54	1.59 U	---	1.59	Filtered		ES
RD-30		Primary	02/17/06	Sodium-22	1.51 U	---	1.51	Filtered		ES
RD-30		Primary	08/09/06	Cesium-134	1.03 U	---	1.03	Filtered		ES
RD-30		Split	08/09/06	Cesium-134	0.289 U	0.78	1.35	Filtered		STL
RD-30		Primary	08/09/06	Cesium-137	0.907 U	---	0.907	Filtered		ES
RD-30		Split	08/09/06	Cesium-137	0.263 U	0.76	1.32	Filtered		STL
RD-30		Primary	08/09/06	Cobalt-57	0.6 U	---	0.6	Filtered		ES
RD-30		Split	08/09/06	Cobalt-57	-2.82 U	3.5	5.69	Filtered		STL
RD-30		Primary	08/09/06	Cobalt-60	0.981 U	---	0.981	Filtered		ES
RD-30		Split	08/09/06	Cobalt-60	0.738 U	0.72	1.36	Filtered		STL
RD-30		Primary	08/09/06	Europium-152	2.17 U	---	2.17	Filtered		ES
RD-30		Split	08/09/06	Europium-152	-0.834 U	1.8	3.08	Filtered		STL
RD-30		Primary	08/09/06	Europium-154	2.4 U	---	2.4	Filtered		ES
RD-30		Split	08/09/06	Europium-154	-1.14 U	2.1	3.47	Filtered		STL
RD-30		Primary	08/09/06	Manganese-54	0.772 U	---	0.772	Filtered		ES
RD-30		Split	08/09/06	Manganese-54	0.309 U	0.75	1.3	Filtered		STL
RD-30		Primary	08/09/06	Sodium-22	0.816 U	---	0.816	Filtered		ES
RD-30		Split	08/09/06	Sodium-22	-0.367 U	0.74	1.26	Filtered		STL
RD-30		Primary	05/24/07	Cesium-134	1.24 U	---	1.24	Filtered		ES
RD-30		Primary	05/24/07	Cesium-137	1.05 U	---	1.05	Filtered		ES
RD-30		Primary	05/24/07	Cobalt-57	0.761 U	---	0.761	Filtered		ES
RD-30		Primary	05/24/07	Cobalt-60	1.06 U	---	1.06	Filtered		ES
RD-30		Primary	05/24/07	Europium-152	2.99 U	---	2.99	Filtered		ES
RD-30		Primary	05/24/07	Europium-154	3.36 U	---	3.36	Filtered		ES
RD-30		Primary	05/24/07	Manganese-54	1.04 U	---	1.04	Filtered		ES
RD-30		Primary	05/24/07	Sodium-22	1.11 U	---	1.11	Filtered		ES
RD-30		Primary	08/21/07	Cesium-134	0.678 U	---	0.678	Filtered		ES
RD-30		Primary	08/21/07	Cesium-137	0.555 U	---	0.555	Filtered		ES
RD-30		Primary	08/21/07	Cobalt-57	0.33 U	---	0.33	Filtered		ES
RD-30		Primary	08/21/07	Cobalt-60	0.632 U	---	0.632	Filtered		ES
RD-30		Primary	08/21/07	Europium-152	1.74 U	---	1.74	Filtered		ES
RD-30		Primary	08/21/07	Europium-154	1.97 U	---	1.97	Filtered		ES
RD-30		Primary	08/21/07	Manganese-54	0.602 U	---	0.602	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-30		Primary	08/21/07	Sodium-22	0.669 U	---	0.669	Filtered		ES
RD-30		Primary	02/06/08	Cesium-134	0.964 U	---	0.964	Filtered		ES
RD-30		Primary	02/06/08	Cesium-137	0.743 U	---	0.743	Filtered		ES
RD-30		Primary	02/06/08	Cobalt-57	0.443 U	---	0.443	Filtered		ES
RD-30		Primary	02/06/08	Cobalt-60	1.03 U	---	1.03	Filtered		ES
RD-30		Primary	02/06/08	Europium-152	2.21 U	---	2.21	Filtered		ES
RD-30		Primary	02/06/08	Europium-154	2.15 U	---	2.15	Filtered		ES
RD-30		Primary	02/06/08	Manganese-54	0.754 U	---	0.754	Filtered		ES
RD-30		Primary	02/06/08	Sodium-22	0.733 U	---	0.733	Filtered		ES
RD-30		Primary	08/13/08	Beryllium-7	6.88 U	---	6.88	Filtered		ES
RD-30		Primary	08/13/08	Cerium-139	0.519 U	---	0.519	Filtered		ES
RD-30		Primary	08/13/08	Cerium-144	3.13 U	---	3.13	Filtered		ES
RD-30		Primary	08/13/08	Cesium-134	0.932 U	---	0.932	Filtered		ES
RD-30		Primary	08/13/08	Cesium-137	0.808 U	---	0.808	Filtered		ES
RD-30		Primary	08/13/08	Chromium-51	6.93 U	---	6.93	Filtered		ES
RD-30		Primary	08/13/08	Cobalt-56	0.871 U	---	0.871	Filtered		ES
RD-30		Primary	08/13/08	Cobalt-57	0.42 U	---	0.42	Filtered		ES
RD-30		Primary	08/13/08	Cobalt-58	0.839 U	---	0.839	Filtered		ES
RD-30		Primary	08/13/08	Cobalt-60	0.893 U	---	0.893	Filtered		ES
RD-30		Primary	08/13/08	Europium-152	1.96 U	---	1.96	Filtered		ES
RD-30		Primary	08/13/08	Europium-154	2.47 U	---	2.47	Filtered		ES
RD-30		Primary	08/13/08	Manganese-54	0.756 U	---	0.756	Filtered		ES
RD-30		Primary	08/13/08	Silver-110m	0.953 U	---	0.953	Filtered		ES
RD-30		Primary	08/13/08	Sodium-22	0.775 U	---	0.775	Filtered		ES
RD-31		Primary	10/24/89	Cesium-137	-1.86 U	4.65	---	Unfiltered		UST
RD-31		Primary	12/05/90	Cesium-137	-1.97 U	3.83	10	Filtered		IT
RD-31		Primary	03/10/91	Cesium-137	3.79 U	5.9	10	Filtered		IT
RD-31		Primary	03/05/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-33A		Primary	12/05/91	Cesium-137	2.11 U	4.74	10	Filtered		IT
RD-33A		Primary	12/12/91	Cesium-137	0.315 U	4.85	10	Filtered		IT
RD-33A		Split	12/12/91	Cesium-137	10 U	---	10	Filtered		CEP
RD-33A		Primary	06/08/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-33A		Primary	09/15/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-33A		Primary	12/05/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-33A		Primary	08/24/93	Cesium-137	0 U	---	---	Filtered		CEP
RD-33A		Primary	02/27/94	Cesium-137	-5.3 U	---	8.3	Filtered		LAS
RD-33A		Primary	02/27/94	Cobalt-57	-0.8 U	---	3.9	Filtered		LAS
RD-33A		Primary	02/27/94	Cobalt-60	-0.7 U	---	5.4	Filtered		LAS
RD-33A		Primary	05/10/94	Cesium-137	-0.6 U	2.4	3.4	Filtered		LAS
RD-33A		Primary	05/10/94	Cesium-137	5.6 U	5.5	6.5	Unfiltered		LAS
RD-33A		Primary	05/10/94	Cobalt-57	0.8 U	1.8	2.9	Filtered		LAS
RD-33A		Primary	05/10/94	Cobalt-57	1.3 U	2.3	3.8	Unfiltered		LAS
RD-33A		Primary	05/10/94	Cobalt-60	-0.1 U	1.5	3.5	Filtered		LAS
RD-33A		Primary	05/10/94	Cobalt-60	1.1 U	3.5	6.1	Unfiltered		LAS
RD-33A		Primary	08/18/94	Cesium-134	-10.5 U	---	25	Filtered		LAS
RD-33A		Primary	08/18/94	Cesium-137	-6 U	---	30	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33A		Primary	08/18/94	Cobalt-57	0 U	---	19	Filtered		LAS
RD-33A		Primary	08/18/94	Cobalt-60	-8 U	---	28	Filtered		LAS
RD-33A		Primary	02/07/95	Cesium-134	0 U	---	7.1	Filtered		LAS
RD-33A		Primary	02/07/95	Cesium-137	-3.6 U	3	9.7	Filtered		LAS
RD-33A		Primary	02/07/95	Cobalt-57	0.1 U	2.6	4.5	Filtered		LAS
RD-33A		Primary	02/07/95	Cobalt-60	-2.2 U	2.9	11	Filtered		LAS
RD-33A		Primary	08/09/95	Cesium-134	-1.9 U	3.2	7.4	Filtered		LAS
RD-33A		Primary	08/09/95	Cesium-137	-0.9 U	5	9.3	Filtered		LAS
RD-33A		Primary	08/09/95	Cobalt-57	1 U	2.5	4.3	Filtered		LAS
RD-33A		Primary	08/09/95	Cobalt-60	-1.5 U	2.6	8.6	Filtered		LAS
RD-33A		Primary	02/19/96	Cesium-134	1.1 U	3.5	6.7	Filtered		LAS
RD-33A		Primary	02/19/96	Cesium-137	-3.6 U	3.6	11	Filtered		LAS
RD-33A		Primary	02/19/96	Cobalt-57	3 U	2.5	3.9	Filtered		LAS
RD-33A		Primary	02/19/96	Cobalt-60	0.1 U	4.4	9.9	Filtered		LAS
RD-33A		Primary	08/23/96	Cesium-134	1.4 U	3.7	6.9	Filtered		LAS
RD-33A		Primary	08/23/96	Cesium-137	0.8 U	4.9	8.6	Filtered		LAS
RD-33A		Primary	08/23/96	Cobalt-57	-1.7 U	1.9	5	Filtered		LAS
RD-33A		Primary	08/23/96	Cobalt-60	-2.3 U	4.6	12	Filtered		LAS
RD-33A		Primary	02/25/97	Cesium-134	0.6 U	6.1	7.7	Filtered		LAS
RD-33A		Primary	02/25/97	Cesium-137	-5.1 U	3.5	11	Filtered		LAS
RD-33A		Primary	02/25/97	Cobalt-57	-1.4 U	1.9	5	Filtered		LAS
RD-33A		Primary	02/25/97	Cobalt-60	1.8 U	2.8	6.2	Filtered		LAS
RD-33A		Primary	08/27/97	Cesium-134	2.4 U	3.5	6.6	Filtered		LAS
RD-33A		Primary	08/27/97	Cesium-134	-2.6 U	3.5	8.3	Unfiltered		LAS
RD-33A		Primary	08/27/97	Cesium-137	4.5 U	6.5	8.1	Filtered		LAS
RD-33A		Primary	08/27/97	Cesium-137	-3.1 U	3.3	10	Unfiltered		LAS
RD-33A		Primary	08/27/97	Cobalt-57	2 U	2.7	4.4	Filtered		LAS
RD-33A		Primary	08/27/97	Cobalt-57	0.8 U	2.6	4.4	Unfiltered		LAS
RD-33A		Primary	08/27/97	Cobalt-60	-2.2 U	2.3	8.8	Filtered		LAS
RD-33A		Primary	08/27/97	Cobalt-60	-1.5 U	2.5	7.2	Unfiltered		LAS
RD-33A		Primary	05/27/98	Cesium-134	17.9 U	---	17.9	Filtered		TN
RD-33A		Primary	05/27/98	Cesium-137	14.6 U	---	14.6	Filtered		TN
RD-33A		Primary	05/27/98	Cobalt-57	9.17 U	---	9.17	Filtered		TN
RD-33A		Primary	05/27/98	Cobalt-60	20.8 U	---	20.8	Filtered		TN
RD-33A		Primary	08/17/98	Cesium-134	14.1 U	---	14.1	Filtered		TN
RD-33A		Primary	08/17/98	Cesium-137	10.2 U	---	10.2	Filtered		TN
RD-33A		Primary	08/17/98	Cobalt-57	6.73 U	---	6.73	Filtered		TN
RD-33A		Primary	08/17/98	Cobalt-60	10.4 U	---	10.4	Filtered		TN
RD-33A		Primary	02/03/99	Cesium-134	8 U	---	8	Filtered		TN
RD-33A		Primary	02/03/99	Cesium-137	6.68 U	---	6.68	Filtered		TN
RD-33A		Primary	02/03/99	Cobalt-57	3.92 U	---	3.92	Filtered		TN
RD-33A		Primary	02/03/99	Cobalt-60	7.51 U	---	7.51	Filtered		TN
RD-33A		Primary	02/09/00	Cesium-134	11.1 U	---	11.1	Filtered		TR
RD-33A		Primary	02/09/00	Cesium-137	8.15 U	---	8.15	Filtered		TR
RD-33A		Primary	02/09/00	Cobalt-57	9 U	---	9	Filtered		TR
RD-33A		Primary	02/09/00	Cobalt-60	10.7 U	---	10.7	Filtered		TR

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33A		Primary	05/14/01	Cesium-134	11 U	---	11	Filtered		ES
RD-33A		Primary	05/14/01	Cesium-137	10.5 U	---	10.5	Filtered		ES
RD-33A		Primary	05/14/01	Cobalt-57	7.52 U	---	7.52	Filtered		ES
RD-33A		Primary	05/14/01	Cobalt-60	9.59 U	---	9.59	Filtered		ES
RD-33A		Primary	02/15/02	Cesium-134	3 U	3	3	Filtered		DL
RD-33A		Primary	02/15/02	Cesium-137	3 U	3	3	Filtered		DL
RD-33A		Primary	02/15/02	Cobalt-57	5 U	1	5	Filtered		DL
RD-33A		Primary	02/15/02	Cobalt-60	5 U	1	5	Filtered		DL
RD-33A	Z04	Primary	01/30/03	Cesium-134	2.26 U	---	2.26	Filtered		ES
RD-33A	Z04	Primary	01/30/03	Cesium-137	1.98 U	---	1.98	Filtered		ES
RD-33A	Z04	Primary	01/30/03	Cobalt-57	1.4 U	---	1.4	Filtered		ES
RD-33A	Z04	Primary	01/30/03	Cobalt-60	1.98 U	---	1.98	Filtered		ES
RD-33A	Z02	Primary	11/15/04	Cesium-134	4.05 U	---	4.05	Filtered		ES
RD-33A	Z02	Primary	11/15/04	Cesium-137	3.14 U	---	3.14	Filtered		ES
RD-33A	Z02	Primary	11/15/04	Cobalt-57	1.89 U	---	1.89	Filtered		ES
RD-33A	Z02	Primary	11/15/04	Cobalt-60	3.5 U	---	3.5	Filtered		ES
RD-33A	Z02	Primary	11/15/04	Europium-152	7.47 U	---	7.47	Filtered		ES
RD-33A	Z02	Primary	11/15/04	Europium-154	9.55 U	---	9.55	Filtered		ES
RD-33A	Z02	Primary	11/15/04	Manganese-54	3.39 U	---	3.39	Filtered		ES
RD-33A	Z02	Primary	11/15/04	Sodium-22	3.28 U	---	3.28	Filtered		ES
RD-33A	Z03	Primary	02/17/05	Cesium-134	1.4 U	---	1.4	Filtered		ES
RD-33A	Z03	Primary	02/17/05	Cesium-137	1.23 U	---	1.23	Filtered		ES
RD-33A	Z03	Primary	02/17/05	Cobalt-57	0.83 U	---	0.83	Filtered		ES
RD-33A	Z03	Primary	02/17/05	Cobalt-60	1.22 U	---	1.22	Filtered		ES
RD-33A	Z03	Primary	02/17/05	Europium-152	3.32 U	---	3.32	Filtered		ES
RD-33A	Z03	Primary	02/17/05	Europium-154	3.61 U	---	3.61	Filtered		ES
RD-33A	Z03	Primary	02/17/05	Manganese-54	1.22 U	---	1.22	Filtered		ES
RD-33A	Z03	Primary	02/17/05	Sodium-22	1.23 U	---	1.23	Filtered		ES
RD-33A	Z02	Primary	02/17/06	Cesium-134	1.28 U	---	1.28	Filtered		ES
RD-33A	Z02	Primary	02/17/06	Cesium-137	1.16 U	---	1.16	Filtered		ES
RD-33A	Z02	Primary	02/17/06	Cobalt-57	0.7 U	---	0.7	Filtered		ES
RD-33A	Z02	Primary	02/17/06	Cobalt-60	1.05 U	---	1.05	Filtered		ES
RD-33A	Z02	Primary	02/17/06	Europium-152	2.8 U	---	2.8	Filtered		ES
RD-33A	Z02	Primary	02/17/06	Europium-154	3.32 U	---	3.32	Filtered		ES
RD-33A	Z02	Primary	02/17/06	Manganese-54	1.05 U	---	1.05	Filtered		ES
RD-33A	Z02	Primary	02/17/06	Sodium-22	1.15 U	---	1.15	Filtered		ES
RD-33A	Z02	Primary	02/08/07	Cesium-134	1.01 U	---	1.01	Filtered		ES
RD-33A	Z02	Primary	02/08/07	Cesium-137	0.882 U	---	0.882	Filtered		ES
RD-33A	Z02	Primary	02/08/07	Cobalt-57	0.614 U	---	0.614	Filtered		ES
RD-33A	Z02	Primary	02/08/07	Cobalt-60	0.971 U	---	0.971	Filtered		ES
RD-33A	Z02	Primary	02/08/07	Europium-152	2.26 U	---	2.26	Filtered		ES
RD-33A	Z02	Primary	02/08/07	Europium-154	2.4 U	---	2.4	Filtered		ES
RD-33A	Z02	Primary	02/08/07	Manganese-54	0.841 U	---	0.841	Filtered		ES
RD-33A	Z02	Primary	02/08/07	Sodium-22	0.848 U	---	0.848	Filtered		ES
RD-33A	Z02	Primary	02/07/08	Cesium-134	0.832 U	---	0.832	Filtered		ES
RD-33A	Z02	Primary	02/07/08	Cesium-137	0.667 U	---	0.667	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33A	Z02	Primary	02/07/08	Cobalt-57	0.531 U	---	0.531	Filtered		ES
RD-33A	Z02	Primary	02/07/08	Cobalt-60	0.562 U	---	0.562	Filtered		ES
RD-33A	Z02	Primary	02/07/08	Europium-152	1.96 U	---	1.96	Filtered		ES
RD-33A	Z02	Primary	02/07/08	Europium-154	1.75 U	---	1.75	Filtered		ES
RD-33A	Z02	Primary	02/07/08	Manganese-54	0.566 U	---	0.566	Filtered		ES
RD-33A	Z02	Primary	02/07/08	Sodium-22	0.595 U	---	0.595	Filtered		ES
RD-33A	Z02	Primary	02/25/09	Antimony-125	-0.035 U	1.8	3.02	Filtered		ES
RD-33A	Z02	Primary	02/25/09	Antimony-125	0.345 U	0.88	1.51	Unfiltered		ES
RD-33A	Z02	Primary	02/25/09	Barium-133	-0.509 U	1.5	2.56	Filtered		ES
RD-33A	Z02	Primary	02/25/09	Barium-133	0.047 U	0.17	0.675	Unfiltered		ES
RD-33A	Z02	Primary	02/25/09	Cesium-134	-0.735 U	1.1	1.96	Filtered		ES
RD-33A	Z02	Primary	02/25/09	Cesium-134	-0.151 U	0.18	0.827	Unfiltered		ES
RD-33A	Z02	Primary	02/25/09	Cesium-137	-1.28 U	0.93	1.62	Filtered		ES
RD-33A	Z02	Primary	02/25/09	Cesium-137	0.132 U	0.72	1.22	Unfiltered		ES
RD-33A	Z02	Primary	02/25/09	Cobalt-60	-0.317 U	1.1	1.88	Filtered		ES
RD-33A	Z02	Primary	02/25/09	Cobalt-60	0.289 U	0.63	1.08	Unfiltered		ES
RD-33A	Z02	Primary	02/25/09	Europium-152	0.308 U	0.46	3.07	Filtered		ES
RD-33A	Z02	Primary	02/25/09	Europium-152	0.208 U	1.6	2.78	Unfiltered		ES
RD-33A	Z02	Primary	02/25/09	Europium-154	0.726 U	3.9	6.63	Filtered		ES
RD-33A	Z02	Primary	02/25/09	Europium-154	-0.267 U	0.93	1.72	Unfiltered		ES
RD-33A	Z02	Primary	02/25/09	Europium-155	0.662 U	2.4	4.08	Filtered		ES
RD-33A	Z02	Primary	02/25/09	Europium-155	-0.792 U	1.6	2.8	Unfiltered		ES
RD-33A	Z02	Primary	02/25/09	Manganese-54	0.282 U	1.1	1.9	Filtered		ES
RD-33A	Z02	Primary	02/25/09	Manganese-54	0.18 U	0.59	1.01	Unfiltered		ES
RD-33A	Z02	Primary	02/25/09	Sodium-22	0.247 U	1.3	2.25	Filtered		ES
RD-33A	Z02	Primary	02/25/09	Sodium-22	-0.091 U	0.32	0.584	Unfiltered		ES
RD-33A	Z02	Primary	07/17/09	Antimony-125	16.8 U	14	24.2	Filtered		ES
RD-33A	Z02	Primary	07/17/09	Antimony-125	0.126 U	8.5	14.6	Unfiltered		ES
RD-33A	Z02	Primary	07/17/09	Barium-133	-1.01 U	4.2	9.7	Filtered		ES
RD-33A	Z02	Primary	07/17/09	Barium-133	-2.7 U	3.9	6.69	Unfiltered		ES
RD-33A	Z02	Primary	07/17/09	Cesium-134	-3.4 U	8.4	9.04	Filtered		ES
RD-33A	Z02	Primary	07/17/09	Cesium-134	-3.47 U	4.1	7.18	Unfiltered		ES
RD-33A	Z02	Primary	07/17/09	Cesium-137	-0.741 U	5.4	9.38	Filtered		ES
RD-33A	Z02	Primary	07/17/09	Cesium-137	-2.85 U	3.2	5.69	Unfiltered		ES
RD-33A	Z02	Primary	07/17/09	Cobalt-60	3.28 U	8.6	14.7	Filtered		ES
RD-33A	Z02	Primary	07/17/09	Cobalt-60	-0.365 U	2.2	3.85	Unfiltered		ES
RD-33A	Z02	Primary	07/17/09	Europium-152	2.96 U	2.5	18.6	Filtered		ES
RD-33A	Z02	Primary	07/17/09	Europium-152	-3.61 U	10	13.4	Unfiltered		ES
RD-33A	Z02	Primary	07/17/09	Europium-154	-3.41 U	16	28.8	Filtered		ES
RD-33A	Z02	Primary	07/17/09	Europium-154	12.7 U	9.8	16.2	Unfiltered		ES
RD-33A	Z02	Primary	07/17/09	Europium-155	-10.5 U	17	28.5	Filtered		ES
RD-33A	Z02	Primary	07/17/09	Europium-155	3.64 U	9.3	15.8	Unfiltered		ES
RD-33A	Z02	Primary	07/17/09	Manganese-54	-0.114 U	5.8	10.1	Filtered		ES
RD-33A	Z02	Primary	07/17/09	Manganese-54	0.145 U	2.8	4.84	Unfiltered		ES
RD-33A	Z02	Primary	07/17/09	Sodium-22	-1.16 U	5.5	9.78	Filtered		ES
RD-33A	Z02	Primary	07/17/09	Sodium-22	4.31 U	3.3	5.51	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33B		Primary	12/12/91	Cesium-137	-0.0595 U	5.35	10	Filtered		IT
RD-33B		Split	12/12/91	Cesium-137	10 U	---	10	Filtered		CEP
RD-33B		Primary	06/24/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-33B		Primary	09/15/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-33B		Primary	12/05/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-33B		Primary	08/24/93	Cesium-137	0 U	---	---	Filtered		CEP
RD-33B		Primary	02/27/94	Cesium-137	21.6	7.6	6.4	Filtered		LAS
RD-33B		Reanalysis of Primary	02/27/94	Cesium-137	1.7 U	---	2.5	Filtered		LAS
RD-33B		Primary	02/27/94	Cobalt-57	0 U	---	4.3	Filtered		LAS
RD-33B		Reanalysis of Primary	02/27/94	Cobalt-57	-0.3 U	---	2.7	Filtered		LAS
RD-33B		Primary	02/27/94	Cobalt-60	8.9	2	7	Filtered		LAS
RD-33B		Reanalysis of Primary	02/27/94	Cobalt-60	0.4 U	---	2.6	Filtered		LAS
RD-33B		Primary	05/10/94	Cesium-137	1.3 U	5.3	7.1	Filtered		LAS
RD-33B		Primary	05/10/94	Cesium-137	4.1 U	5.5	6.9	Unfiltered		LAS
RD-33B		Primary	05/10/94	Cobalt-57	-1.8 U	2.1	3.8	Filtered		LAS
RD-33B		Primary	05/10/94	Cobalt-57	-1.2 U	2.3	4	Unfiltered		LAS
RD-33B		Primary	05/10/94	Cobalt-60	-1.5 U	3.3	7.2	Filtered		LAS
RD-33B		Primary	05/10/94	Cobalt-60	1 U	3.9	8.1	Unfiltered		LAS
RD-33B		Primary	08/18/94	Cesium-134	-3.9 U	---	28	Filtered		LAS
RD-33B		Primary	08/18/94	Cesium-137	-13 U	---	37	Filtered		LAS
RD-33B		Primary	08/18/94	Cobalt-57	2 U	---	24	Filtered		LAS
RD-33B		Primary	08/18/94	Cobalt-60	-2 U	---	33	Filtered		LAS
RD-33B		Primary	02/07/95	Cesium-134	-2.2 U	3	6.6	Filtered		LAS
RD-33B		Primary	02/07/95	Cesium-137	-0.2 U	6.8	9.5	Filtered		LAS
RD-33B		Primary	02/07/95	Cobalt-57	-1 U	2.6	4.7	Filtered		LAS
RD-33B		Primary	02/07/95	Cobalt-60	2 U	3.7	9.3	Filtered		LAS
RD-33B		Primary	08/09/95	Cesium-134	0.8 U	3.2	6.7	Filtered		LAS
RD-33B		Primary	08/09/95	Cesium-137	-1.1 U	5.2	9.7	Filtered		LAS
RD-33B		Primary	08/09/95	Cobalt-57	1 U	2.4	4.1	Filtered		LAS
RD-33B		Primary	08/09/95	Cobalt-60	2.1 U	4.6	8.8	Filtered		LAS
RD-33B		Primary	02/19/96	Cesium-134	-0.7 U	3.1	7.3	Filtered		LAS
RD-33B		Primary	02/19/96	Cesium-137	0.5 U	6.4	8.9	Filtered		LAS
RD-33B		Primary	02/19/96	Cobalt-57	-1.1 U	2.6	4.7	Filtered		LAS
RD-33B		Primary	02/19/96	Cobalt-60	-0.4 U	1.5	9.2	Filtered		LAS
RD-33B		Primary	08/23/96	Cesium-134	-0.9 U	3.5	8	Filtered		LAS
RD-33B		Primary	08/23/96	Cesium-137	-3.9 U	2.8	9.7	Filtered		LAS
RD-33B		Primary	08/23/96	Cobalt-57	-2 U	1.8	4.7	Filtered		LAS
RD-33B		Primary	08/23/96	Cobalt-60	-0.6 U	3.9	8.3	Filtered		LAS
RD-33B		Primary	02/25/97	Cesium-134	2.5 U	3.3	5.3	Filtered		LAS
RD-33B		Primary	02/25/97	Cesium-137	3 U	6.4	8.1	Filtered		LAS
RD-33B		Primary	02/25/97	Cobalt-57	-1.1 U	1.7	4.5	Filtered		LAS
RD-33B		Primary	02/25/97	Cobalt-60	-0.9 U	3.6	7.5	Filtered		LAS
RD-33B		Primary	08/22/97	Cesium-134	-3.2 U	2	7.8	Filtered		LAS
RD-33B		Primary	08/22/97	Cesium-137	-0.7 U	5.2	9.3	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33B		Primary	08/22/97	Cobalt-57	0.2 U	2.4	4.1	Filtered		LAS
RD-33B		Primary	08/22/97	Cobalt-60	-0.5 U	2	9.4	Filtered		LAS
RD-33B		Primary	05/27/98	Cesium-134	7.63 U	---	7.63	Filtered		TN
RD-33B		Primary	05/27/98	Cesium-137	5.5 U	---	5.5	Filtered		TN
RD-33B		Primary	05/27/98	Cobalt-57	3.49 U	---	3.49	Filtered		TN
RD-33B		Primary	05/27/98	Cobalt-60	5.93 U	---	5.93	Filtered		TN
RD-33B		Primary	08/17/98	Cesium-134	14.6 U	---	14.6	Filtered		TN
RD-33B		Primary	08/17/98	Cesium-137	14.1 U	---	14.1	Filtered		TN
RD-33B		Primary	08/17/98	Cobalt-57	8.78 U	---	8.78	Filtered		TN
RD-33B		Primary	08/17/98	Cobalt-60	13.7 U	---	13.7	Filtered		TN
RD-33B		Primary	02/03/99	Cesium-134	6.02 U	---	6.02	Filtered		TN
RD-33B		Primary	02/03/99	Cesium-137	4.43 U	---	4.43	Filtered		TN
RD-33B		Primary	02/03/99	Cobalt-57	2.9 U	---	2.9	Filtered		TN
RD-33B		Primary	02/03/99	Cobalt-60	4.9 U	---	4.9	Filtered		TN
RD-33B		Primary	02/09/00	Cesium-134	13 U	---	13	Filtered		TR
RD-33B		Primary	02/09/00	Cesium-137	12 U	---	12	Filtered		TR
RD-33B		Primary	02/09/00	Cobalt-57	4.05 U	---	4.05	Filtered		TR
RD-33B		Primary	02/09/00	Cobalt-60	14.2 U	---	14.2	Filtered		TR
RD-33B		Primary	02/17/01	Cesium-134	16.2 U	---	16.2	Filtered		ES
RD-33B		Primary	02/17/01	Cesium-137	12.4 U	---	12.4	Filtered		ES
RD-33B		Primary	02/17/01	Cobalt-57	7.12 U	---	7.12	Filtered		ES
RD-33B		Primary	02/17/01	Cobalt-60	13.5 U	---	13.5	Filtered		ES
RD-33B		Primary	02/15/02	Cesium-134	3 U	1	3	Filtered		DL
RD-33B		Primary	02/15/02	Cesium-137	3 U	1	3	Filtered		DL
RD-33B		Primary	02/15/02	Cobalt-57	5 U	3	5	Filtered		DL
RD-33B		Primary	02/15/02	Cobalt-60	5 U	3	5	Filtered		DL
RD-33B		Primary	02/11/03	Cesium-134	3.46 U	---	3.46	Filtered		ES
RD-33B		Primary	02/11/03	Cesium-137	2.82 U	---	2.82	Filtered		ES
RD-33B		Primary	02/11/03	Cobalt-57	1.86 U	---	1.86	Filtered		ES
RD-33B		Primary	02/11/03	Cobalt-60	3.13 U	---	3.13	Filtered		ES
RD-33B		Primary	11/04/04	Cesium-134	2.57 U	---	2.57	Filtered		ES
RD-33B		Primary	11/04/04	Cesium-137	32.6	4.6	2.9	Filtered		ES
RD-33B		Primary	11/04/04	Cobalt-57	1.43 U	---	1.43	Filtered		ES
RD-33B		Primary	11/04/04	Cobalt-60	2.14 U	---	2.14	Filtered		ES
RD-33B		Primary	11/04/04	Europium-152	5.48 U	---	5.48	Filtered		ES
RD-33B		Primary	11/04/04	Europium-154	6.36 U	---	6.36	Filtered		ES
RD-33B		Primary	11/04/04	Manganese-54	2.26 U	---	2.26	Filtered		ES
RD-33B		Primary	11/04/04	Sodium-22	2.21 U	---	2.21	Filtered		ES
RD-33B		Primary	02/17/05	Cesium-134	1.42 U	---	1.42	Filtered		ES
RD-33B		Split	02/17/05	Cesium-134	1 U	0.79	1.42	Filtered		STL
RD-33B		Primary	02/17/05	Cesium-137	1.26 U	---	1.26	Filtered		ES
RD-33B		Split	02/17/05	Cesium-137	0.456 U	0.7	1.25	Filtered		STL
RD-33B		Primary	02/17/05	Cobalt-57	0.828 U	---	0.828	Filtered		ES
RD-33B		Split	02/17/05	Cobalt-57	0.625 U	3.2	5.39	Filtered		STL
RD-33B		Primary	02/17/05	Cobalt-60	1.25 U	---	1.25	Filtered		ES
RD-33B		Split	02/17/05	Cobalt-60	0.441 U	0.72	1.31	Filtered		STL

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33B		Primary	02/17/05	Europium-152	3.03 U	---	3.03	Filtered		ES
RD-33B		Split	02/17/05	Europium-152	1.17 U	1.8	3.04	Filtered		STL
RD-33B		Primary	02/17/05	Europium-154	3.84 U	---	3.84	Filtered		ES
RD-33B		Split	02/17/05	Europium-154	-1 U	2.1	3.54	Filtered		STL
RD-33B		Primary	02/17/05	Manganese-54	1.26 U	---	1.26	Filtered		ES
RD-33B		Split	02/17/05	Manganese-54	0.0858 U	0.75	1.27	Filtered		STL
RD-33B		Primary	02/17/05	Sodium-22	1.26 U	---	1.26	Filtered		ES
RD-33B		Split	02/17/05	Sodium-22	0.0537 U	0.73	1.29	Filtered		STL
RD-33B		Primary	02/16/06	Cesium-134	2.59 U	---	2.59	Filtered		ES
RD-33B		Primary	02/16/06	Cesium-137	1.42 U	---	1.42	Filtered		ES
RD-33B		Primary	02/16/06	Cobalt-57	1.19 U	---	1.19	Filtered		ES
RD-33B		Primary	02/16/06	Cobalt-60	1.49 U	---	1.49	Filtered		ES
RD-33B		Primary	02/16/06	Europium-152	3.56 U	---	3.56	Filtered		ES
RD-33B		Primary	02/16/06	Europium-154	4.15 U	---	4.15	Filtered		ES
RD-33B		Primary	02/16/06	Manganese-54	1.39 U	---	1.39	Filtered		ES
RD-33B		Primary	02/16/06	Sodium-22	1.44 U	---	1.44	Filtered		ES
RD-33B		Primary	02/07/07	Cesium-134	0.68 U	---	0.68	Filtered		ES
RD-33B		Primary	02/07/07	Cesium-137	0.576 U	---	0.576	Filtered		ES
RD-33B		Primary	02/07/07	Cobalt-57	0.332 U	---	0.332	Filtered		ES
RD-33B		Primary	02/07/07	Cobalt-60	0.649 U	---	0.649	Filtered		ES
RD-33B		Primary	02/07/07	Europium-152	1.52 U	---	1.52	Filtered		ES
RD-33B		Primary	02/07/07	Europium-154	1.69 U	---	1.69	Filtered		ES
RD-33B		Primary	02/07/07	Manganese-54	0.556 U	---	0.556	Filtered		ES
RD-33B		Primary	02/07/07	Sodium-22	0.575 U	---	0.575	Filtered		ES
RD-33B		Primary	02/13/08	Cesium-134	2.09 U	---	2.09	Filtered		ES
RD-33B		Primary	02/13/08	Cesium-137	1.2 U	---	1.2	Filtered		ES
RD-33B		Primary	02/13/08	Cobalt-57	0.728 U	---	0.728	Filtered		ES
RD-33B		Primary	02/13/08	Cobalt-60	1.25 U	---	1.25	Filtered		ES
RD-33B		Primary	02/13/08	Europium-152	3.19 U	---	3.19	Filtered		ES
RD-33B		Primary	02/13/08	Europium-154	3.69 U	---	3.69	Filtered		ES
RD-33B		Primary	02/13/08	Manganese-54	1.29 U	---	1.29	Filtered		ES
RD-33B		Primary	02/13/08	Sodium-22	1.26 U	---	1.26	Filtered		ES
RD-33B		Primary	03/05/09	Antimony-125	1.14 U	3.1	5.28	Filtered		ES
RD-33B		Primary	03/05/09	Antimony-125	1.06 U	2.7	4.49	Unfiltered		ES
RD-33B		Duplicate	03/05/09	Antimony-125	0.575 U	1.1	1.85	Unfiltered		ES
RD-33B		Primary	03/05/09	Barium-133	-0.562 U	1.5	2.56	Filtered		ES
RD-33B		Primary	03/05/09	Barium-133	0.552 U	0.4	1.82	Unfiltered		ES
RD-33B		Duplicate	03/05/09	Barium-133	0.006 U	0.2	0.836	Unfiltered		ES
RD-33B		Primary	03/05/09	Cesium-134	0.546 U	1	1.7	Filtered		ES
RD-33B		Primary	03/05/09	Cesium-134	-1.11 U	1.6	2.76	Unfiltered		ES
RD-33B		Duplicate	03/05/09	Cesium-134	-0.059 U	0.48	0.856	Unfiltered		ES
RD-33B		Primary	03/05/09	Cesium-137	-0.708 U	1	1.82	Filtered		ES
RD-33B		Primary	03/05/09	Cesium-137	-0.188 U	2.1	3.5	Unfiltered		ES
RD-33B		Duplicate	03/05/09	Cesium-137	-0.065 U	0.55	0.952	Unfiltered		ES
RD-33B		Primary	03/05/09	Cobalt-60	0.024 U	0.67	1.2	Filtered		ES
RD-33B		Primary	03/05/09	Cobalt-60	-1.75 U	1.8	3.06	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33B		Duplicate	03/05/09	Cobalt-60	0.308 U	0.76	1.3	Unfiltered		ES
RD-33B		Primary	03/05/09	Europium-152	0.273 U	1.7	3.47	Filtered		ES
RD-33B		Primary	03/05/09	Europium-152	0.997 U	1	4.9	Unfiltered		ES
RD-33B		Duplicate	03/05/09	Europium-152	1.55 U	2.7	4.6	Unfiltered		ES
RD-33B		Primary	03/05/09	Europium-154	-0.351 U	2.1	3.78	Filtered		ES
RD-33B		Primary	03/05/09	Europium-154	-0.309 U	3.9	6.68	Unfiltered		ES
RD-33B		Duplicate	03/05/09	Europium-154	0.131 U	0.92	1.67	Unfiltered		ES
RD-33B		Primary	03/05/09	Europium-155	0.9 U	3.7	6.31	Filtered		ES
RD-33B		Primary	03/05/09	Europium-155	-0.563 U	3.4	5.78	Unfiltered		ES
RD-33B		Duplicate	03/05/09	Europium-155	-0.121 U	1	1.72	Unfiltered		ES
RD-33B		Primary	03/05/09	Manganese-54	-0.941 U	1.3	2.2	Filtered		ES
RD-33B		Primary	03/05/09	Manganese-54	0.33 U	0.98	1.67	Unfiltered		ES
RD-33B		Duplicate	03/05/09	Manganese-54	0.092 U	0.53	0.911	Unfiltered		ES
RD-33B		Primary	03/05/09	Sodium-22	-0.12 U	0.71	1.29	Filtered		ES
RD-33B		Primary	03/05/09	Sodium-22	-0.105 U	1.3	2.28	Unfiltered		ES
RD-33B		Duplicate	03/05/09	Sodium-22	0.045 U	0.32	0.571	Unfiltered		ES
RD-33B		Primary	08/04/09	Antimony-125	-3.8 U	13	23.4	Filtered		ES
RD-33B		Primary	08/04/09	Antimony-125	1.86 U	14	23.9	Unfiltered		ES
RD-33B		Primary	08/04/09	Barium-133	-10 U	6.4	11.6	Filtered		ES
RD-33B		Primary	08/04/09	Barium-133	2.59 U	2.5	7.56	Unfiltered		ES
RD-33B		Primary	08/04/09	Cesium-134	-1.01 U	1.7	7.92	Filtered		ES
RD-33B		Primary	08/04/09	Cesium-134	1.26 U	6	10.4	Unfiltered		ES
RD-33B		Primary	08/04/09	Cesium-137	0.128 U	4.5	7.94	Filtered		ES
RD-33B		Primary	08/04/09	Cesium-137	0.611 U	5.9	10.3	Unfiltered		ES
RD-33B		Primary	08/04/09	Cobalt-60	3.06 U	6.1	10.6	Filtered		ES
RD-33B		Primary	08/04/09	Cobalt-60	-1.53 U	4.1	7.6	Unfiltered		ES
RD-33B		Primary	08/04/09	Europium-152	-0.978 U	14	24.5	Filtered		ES
RD-33B		Primary	08/04/09	Europium-152	-10.1 U	15	27	Unfiltered		ES
RD-33B		Primary	08/04/09	Europium-154	12.2 U	14	23.4	Filtered		ES
RD-33B		Primary	08/04/09	Europium-154	-5.89 U	16	20.1	Unfiltered		ES
RD-33B		Primary	08/04/09	Europium-155	-9.3 U	11	19.2	Filtered		ES
RD-33B		Primary	08/04/09	Europium-155	3.2 U	15	26	Unfiltered		ES
RD-33B		Primary	08/04/09	Manganese-54	-0.619 U	3.6	6.54	Filtered		ES
RD-33B		Primary	08/04/09	Manganese-54	2.96 U	3.4	5.74	Unfiltered		ES
RD-33B		Primary	08/04/09	Sodium-22	4.13 U	4.7	7.96	Filtered		ES
RD-33B		Primary	08/04/09	Sodium-22	-2 U	5.6	6.82	Unfiltered		ES
RD-33C		Primary	12/05/91	Cesium-137	-5.04 U	4.15	10	Filtered		IT
RD-33C		Primary	12/12/91	Cesium-137	0.87 U	5.04	10	Filtered		IT
RD-33C		Split	12/12/91	Cesium-137	10 U	---	10	Filtered		CEP
RD-33C		Primary	06/08/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-33C		Primary	09/15/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-33C		Primary	12/05/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-33C		Primary	08/24/93	Cesium-137	0 U	---	---	Filtered		CEP
RD-33C		Primary	02/27/94	Cesium-137	0.4 U	---	6.1	Filtered		LAS
RD-33C		Primary	02/27/94	Cobalt-57	0.2 U	---	3.7	Filtered		LAS
RD-33C		Primary	02/27/94	Cobalt-60	0 U	---	5.4	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33C		Primary	05/09/94	Cesium-137	-1.1 U	5	7	Filtered		LAS
RD-33C		Primary	05/09/94	Cesium-137	0 U	---	7.8	Unfiltered		LAS
RD-33C		Primary	05/09/94	Cobalt-57	1.6 U	2.2	3.7	Filtered		LAS
RD-33C		Primary	05/09/94	Cobalt-57	-1.5 U	2	3.5	Unfiltered		LAS
RD-33C		Primary	05/09/94	Cobalt-60	0.9 U	3.6	6.7	Filtered		LAS
RD-33C		Primary	05/09/94	Cobalt-60	-0.7 U	4.1	7.3	Unfiltered		LAS
RD-33C		Primary	08/17/94	Cesium-134	7 U	---	39	Filtered		LAS
RD-33C		Primary	08/17/94	Cesium-137	15 U	---	47	Filtered		LAS
RD-33C		Primary	08/17/94	Cobalt-57	5 U	---	21	Filtered		LAS
RD-33C		Primary	08/17/94	Cobalt-60	2 U	---	55	Filtered		LAS
RD-33C		Primary	02/07/95	Cesium-134	1 U	3.5	7.4	Filtered		LAS
RD-33C		Primary	02/07/95	Cesium-137	6.4 U	8.2	9.8	Filtered		LAS
RD-33C		Primary	02/07/95	Cobalt-57	-1.4 U	3	5.4	Filtered		LAS
RD-33C		Primary	02/07/95	Cobalt-60	-1.1 U	4.3	10	Filtered		LAS
RD-33C		Primary	08/09/95	Cesium-134	1.4 U	4	6.6	Filtered		LAS
RD-33C		Primary	08/09/95	Cesium-137	1.3 U	4.8	8.4	Filtered		LAS
RD-33C		Primary	08/09/95	Cobalt-57	-0.1 U	2.5	4.3	Filtered		LAS
RD-33C		Primary	08/09/95	Cobalt-60	-4.9 U	2.6	11	Filtered		LAS
RD-33C		Primary	02/19/96	Cesium-134	2.2 U	1.7	3.1	Filtered		LAS
RD-33C		Primary	02/19/96	Cesium-137	-0.4 U	2.2	4	Filtered		LAS
RD-33C		Primary	02/19/96	Cobalt-57	1 U	2.5	3.1	Filtered		LAS
RD-33C		Primary	02/19/96	Cobalt-60	0.4 U	2	3.8	Filtered		LAS
RD-33C		Primary	08/22/96	Cesium-134	-2.7 U	3.1	7.6	Filtered		LAS
RD-33C		Primary	08/22/96	Cesium-137	-0.8 U	5.3	9.7	Filtered		LAS
RD-33C		Primary	08/22/96	Cobalt-57	-1.2 U	2	5	Filtered		LAS
RD-33C		Primary	08/22/96	Cobalt-60	-1.6 U	4.6	11	Filtered		LAS
RD-33C		Primary	02/25/97	Cesium-134	2.3 U	3.2	6.9	Filtered		LAS
RD-33C		Primary	02/25/97	Cesium-137	2.5 U	6	7.5	Filtered		LAS
RD-33C		Primary	02/25/97	Cobalt-57	-1.7 U	1.9	5	Filtered		LAS
RD-33C		Primary	02/25/97	Cobalt-60	-1 U	3.3	9.8	Filtered		LAS
RD-33C		Primary	08/21/97	Cesium-134	-0.2 U	3	6.8	Filtered		LAS
RD-33C		Primary	08/21/97	Cesium-137	2.1 U	4	6.4	Filtered		LAS
RD-33C		Primary	08/21/97	Cobalt-57	-1.3 U	1.6	4.2	Filtered		LAS
RD-33C		Primary	08/21/97	Cobalt-60	-1 U	2.2	8.1	Filtered		LAS
RD-33C		Primary	05/27/98	Cesium-134	19 U	---	19	Filtered		TN
RD-33C		Primary	05/27/98	Cesium-137	15.2 U	---	15.2	Filtered		TN
RD-33C		Primary	05/27/98	Cobalt-57	6.21 U	---	6.21	Filtered		TN
RD-33C		Primary	05/27/98	Cobalt-60	21.4 U	---	21.4	Filtered		TN
RD-33C		Primary	08/17/98	Cesium-134	34.2 U	---	34.2	Filtered		TN
RD-33C		Primary	08/17/98	Cesium-137	24.8 U	---	24.8	Filtered		TN
RD-33C		Primary	08/17/98	Cobalt-57	12.6 U	---	12.6	Filtered		TN
RD-33C		Primary	08/17/98	Cobalt-60	37.8 U	---	37.8	Filtered		TN
RD-33C		Primary	02/03/99	Cesium-134	13.6 U	---	13.6	Filtered		TN
RD-33C		Primary	02/03/99	Cesium-137	12 U	---	12	Filtered		TN
RD-33C		Primary	02/03/99	Cobalt-57	4.12 U	---	4.12	Filtered		TN
RD-33C		Primary	02/03/99	Cobalt-60	16.4 U	---	16.4	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33C		Primary	02/09/00	Cesium-134	12.2 U	---	12.2	Filtered		TR
RD-33C		Primary	02/09/00	Cesium-137	11 U	---	11	Filtered		TR
RD-33C		Primary	02/09/00	Cobalt-57	9.56 U	---	9.56	Filtered		TR
RD-33C		Primary	02/09/00	Cobalt-60	14.5 U	---	14.5	Filtered		TR
RD-33C		Primary	02/17/01	Cesium-134	12.5 U	---	12.5	Filtered		ES
RD-33C		Primary	02/17/01	Cesium-137	10.2 U	---	10.2	Filtered		ES
RD-33C		Primary	02/17/01	Cobalt-57	6.76 U	---	6.76	Filtered		ES
RD-33C		Primary	02/17/01	Cobalt-60	9.64 U	---	9.64	Filtered		ES
RD-33C		Primary	02/15/02	Cesium-134	5 U	3	5	Filtered		DL
RD-33C		Primary	02/15/02	Cesium-137	5 U	3	5	Filtered		DL
RD-33C		Primary	02/15/02	Cobalt-57	3 U	1	3	Filtered		DL
RD-33C		Primary	02/15/02	Cobalt-60	3 U	1	3	Filtered		DL
RD-33C		Primary	02/10/03	Cesium-134	2.8 U	---	2.8	Filtered		ES
RD-33C		Primary	02/10/03	Cesium-137	2.37 U	---	2.37	Filtered		ES
RD-33C		Primary	02/10/03	Cobalt-57	1.8 U	---	1.8	Filtered		ES
RD-33C		Primary	02/10/03	Cobalt-60	2.39 U	---	2.39	Filtered		ES
RD-33C		Primary	11/04/04	Cesium-134	2.82 U	---	2.82	Filtered		ES
RD-33C		Split	11/04/04	Cesium-134	0.195 U	0.54	0.952	Filtered		STL
RD-33C		Primary	11/04/04	Cesium-137	2.17 U	---	2.17	Filtered		ES
RD-33C		Split	11/04/04	Cesium-137	0.202 U	0.51	0.883	Filtered		STL
RD-33C		Primary	11/04/04	Cobalt-57	1.51 U	---	1.51	Filtered		ES
RD-33C		Split	11/04/04	Cobalt-57	1.26 U	2.6	3.81	Filtered		STL
RD-33C		Primary	11/04/04	Cobalt-60	2.57 U	---	2.57	Filtered		ES
RD-33C		Split	11/04/04	Cobalt-60	0.462 U	0.5	0.923	Filtered		STL
RD-33C		Primary	11/04/04	Europium-152	5.52 U	---	5.52	Filtered		ES
RD-33C		Split	11/04/04	Europium-152	0.407 U	1.3	2.24	Filtered		STL
RD-33C		Primary	11/04/04	Europium-154	7.27 U	---	7.27	Filtered		ES
RD-33C		Split	11/04/04	Europium-154	0.31 U	1.5	2.57	Filtered		STL
RD-33C		Primary	11/04/04	Manganese-54	2.37 U	---	2.37	Filtered		ES
RD-33C		Split	11/04/04	Manganese-54	-0.26 U	0.48	0.812	Filtered		STL
RD-33C		Primary	11/04/04	Sodium-22	2.52 U	---	2.52	Filtered		ES
RD-33C		Split	11/04/04	Sodium-22	0.125 U	0.52	0.917	Filtered		STL
RD-33C		Primary	02/16/05	Cesium-134	1.71 U	---	1.71	Filtered		ES
RD-33C		Primary	02/16/05	Cesium-137	1.34 U	---	1.34	Filtered		ES
RD-33C		Primary	02/16/05	Cobalt-57	0.554 U	---	0.554	Filtered		ES
RD-33C		Primary	02/16/05	Cobalt-60	1.56 U	---	1.56	Filtered		ES
RD-33C		Primary	02/16/05	Europium-152	3.44 U	---	3.44	Filtered		ES
RD-33C		Primary	02/16/05	Europium-154	4.21 U	---	4.21	Filtered		ES
RD-33C		Primary	02/16/05	Manganese-54	1.32 U	---	1.32	Filtered		ES
RD-33C		Primary	02/16/05	Sodium-22	1.44 U	---	1.44	Filtered		ES
RD-33C		Primary	02/16/06	Cesium-134	1.85 U	---	1.85	Filtered		ES
RD-33C		Primary	02/16/06	Cesium-137	1.89 U	---	1.89	Filtered		ES
RD-33C		Primary	02/16/06	Cobalt-57	0.635 U	---	0.635	Filtered		ES
RD-33C		Primary	02/16/06	Cobalt-60	1.04 U	---	1.04	Filtered		ES
RD-33C		Primary	02/16/06	Europium-152	2.16 U	---	2.16	Filtered		ES
RD-33C		Primary	02/16/06	Europium-154	2.45 U	---	2.45	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33C		Primary	02/16/06	Manganese-54	0.91 U	---	0.91	Filtered		ES
RD-33C		Primary	02/16/06	Sodium-22	0.848 U	---	0.848	Filtered		ES
RD-33C		Primary	02/06/07	Cesium-134	0.724 U	---	0.724	Filtered		ES
RD-33C		Primary	02/06/07	Cesium-137	0.581 U	---	0.581	Filtered		ES
RD-33C		Primary	02/06/07	Cobalt-57	0.429 U	---	0.429	Filtered		ES
RD-33C		Primary	02/06/07	Cobalt-60	0.634 U	---	0.634	Filtered		ES
RD-33C		Primary	02/06/07	Europium-152	1.54 U	---	1.54	Filtered		ES
RD-33C		Primary	02/06/07	Europium-154	1.63 U	---	1.63	Filtered		ES
RD-33C		Primary	02/06/07	Manganese-54	0.54 U	---	0.54	Filtered		ES
RD-33C		Primary	02/06/07	Sodium-22	0.556 U	---	0.556	Filtered		ES
RD-33C		Primary	02/12/08	Cesium-134	1.88 U	---	1.88	Filtered		ES
RD-33C		Primary	02/12/08	Cesium-137	1.46 U	---	1.46	Filtered		ES
RD-33C		Primary	02/12/08	Cobalt-57	1.01 U	---	1.01	Filtered		ES
RD-33C		Primary	02/12/08	Cobalt-60	1.46 U	---	1.46	Filtered		ES
RD-33C		Primary	02/12/08	Europium-152	4.27 U	---	4.27	Filtered		ES
RD-33C		Primary	02/12/08	Europium-154	4.74 U	---	4.74	Filtered		ES
RD-33C		Primary	02/12/08	Manganese-54	1.45 U	---	1.45	Filtered		ES
RD-33C		Primary	02/12/08	Sodium-22	1.61 U	---	1.61	Filtered		ES
RD-33C		Primary	02/24/09	Antimony-125	-0.005 U	1.7	2.93	Filtered		ES
RD-33C		Primary	02/24/09	Antimony-125	1.04 U	3.6	6.09	Unfiltered		ES
RD-33C		Split	02/24/09	Antimony-125	2.31 U	2.95	4.95	Filtered		GEL
RD-33C		Split	02/24/09	Antimony-125	0.683 U	2.5	4.3	Unfiltered		GEL
RD-33C		Primary	02/24/09	Barium-133	0.009 U	0.02	0.684	Filtered		ES
RD-33C		Primary	02/24/09	Barium-133	1.13 U	1.4	2.39	Unfiltered		ES
RD-33C		Split	02/24/09	Barium-133	2.18 U	1.58	2.39	Filtered		GEL
RD-33C		Split	02/24/09	Barium-133	-0.314 U	1.3	1.96	Unfiltered		GEL
RD-33C		Primary	02/24/09	Cesium-134	0.06 U	0.91	1.56	Filtered		ES
RD-33C		Primary	02/24/09	Cesium-134	0.478 U	0.83	1.42	Unfiltered		ES
RD-33C		Split	02/24/09	Cesium-134	1.26 U	1.15	2	Filtered		GEL
RD-33C		Split	02/24/09	Cesium-134	0.7 U	1.06	1.88	Unfiltered		GEL
RD-33C		Primary	02/24/09	Cesium-137	0.24 U	0.61	1.03	Filtered		ES
RD-33C		Primary	02/24/09	Cesium-137	-6.29 U	1.3	2.37	Unfiltered		ES
RD-33C		Split	02/24/09	Cesium-137	1.1 U	1.18	1.82	Filtered		GEL
RD-33C		Split	02/24/09	Cesium-137	-0.324 U	0.997	1.62	Unfiltered		GEL
RD-33C		Primary	02/24/09	Cobalt-60	-0.19 U	0.48	0.857	Filtered		ES
RD-33C		Primary	02/24/09	Cobalt-60	-1.09 U	0.98	1.83	Unfiltered		ES
RD-33C		Split	02/24/09	Cobalt-60	0.295 U	1.08	1.82	Filtered		GEL
RD-33C		Split	02/24/09	Cobalt-60	-0.736 U	0.912	1.4	Unfiltered		GEL
RD-33C		Primary	02/24/09	Europium-152	0.263 U	0.056	1.62	Filtered		ES
RD-33C		Primary	02/24/09	Europium-152	-0.701 U	2.3	3.96	Unfiltered		ES
RD-33C		Split	02/24/09	Europium-152	-3.07 U	3.18	5.11	Filtered		GEL
RD-33C		Split	02/24/09	Europium-152	1.65 U	2.69	4.74	Unfiltered		GEL
RD-33C		Primary	02/24/09	Europium-154	0.204 U	0.99	1.75	Filtered		ES
RD-33C		Primary	02/24/09	Europium-154	0.41 U	1.7	2.98	Unfiltered		ES
RD-33C		Split	02/24/09	Europium-154	0.433 U	2.77	4.69	Filtered		GEL
RD-33C		Split	02/24/09	Europium-154	1.5 U	2.55	4.39	Unfiltered		GEL

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33C		Primary	02/24/09	Europium-155	-0.159 U	1.2	2.13	Filtered		ES
RD-33C		Primary	02/24/09	Europium-155	-0.027 U	4	6.84	Unfiltered		ES
RD-33C		Split	02/24/09	Europium-155	-4.58 U	4.09	6.49	Filtered		GEL
RD-33C		Split	02/24/09	Europium-155	0.568 U	3.48	6.03	Unfiltered		GEL
RD-33C		Primary	02/24/09	Manganese-54	0.073 U	0.35	0.606	Filtered		ES
RD-33C		Primary	02/24/09	Manganese-54	0.878 U	1.1	1.78	Unfiltered		ES
RD-33C		Split	02/24/09	Manganese-54	0.0954 U	1.01	1.68	Filtered		GEL
RD-33C		Split	02/24/09	Manganese-54	-1.22 U	0.876	1.39	Unfiltered		GEL
RD-33C		Primary	02/24/09	Sodium-22	0.069 U	0.33	0.592	Filtered		ES
RD-33C		Primary	02/24/09	Sodium-22	0.139 U	0.57	1.01	Unfiltered		ES
RD-33C		Split	02/24/09	Sodium-22	0.197 U	0.991	1.68	Filtered		GEL
RD-33C		Split	02/24/09	Sodium-22	0.291 U	0.922	1.56	Unfiltered		GEL
RD-33C		Primary	07/24/09	Antimony-125	10 U	11	19.1	Filtered		ES
RD-33C		Primary	07/24/09	Antimony-125	7.13 U	12	20.7	Unfiltered		ES
RD-33C		Split	07/24/09	Antimony-125	-0.112 U	8.05	13.3	Unfiltered		GEL
RD-33C		Primary	07/24/09	Barium-133	0.878 U	0.8	6.8	Filtered		ES
RD-33C		Primary	07/24/09	Barium-133	0.027 U	2.2	8.34	Unfiltered		ES
RD-33C		Split	07/24/09	Barium-133	2.96 U	4.37	6.65	Unfiltered		GEL
RD-33C		Primary	07/24/09	Cesium-134	-0.536 U	6.6	8.37	Filtered		ES
RD-33C		Primary	07/24/09	Cesium-134	2.09 U	7.6	9.65	Unfiltered		ES
RD-33C		Split	07/24/09	Cesium-134	0.864 U	3.58	6.13	Unfiltered		GEL
RD-33C		Primary	07/24/09	Cesium-137	-2.1 U	5.2	9.28	Filtered		ES
RD-33C		Primary	07/24/09	Cesium-137	2.26 U	5	8.67	Unfiltered		ES
RD-33C		Split	07/24/09	Cesium-137	-1.5 U	3.01	4.95	Unfiltered		GEL
RD-33C		Primary	07/24/09	Cobalt-60	-3.1 U	4.7	8.96	Filtered		ES
RD-33C		Primary	07/24/09	Cobalt-60	-3.65 U	5	9.8	Unfiltered		ES
RD-33C		Split	07/24/09	Cobalt-60	-0.713 U	2.94	4.86	Unfiltered		GEL
RD-33C		Primary	07/24/09	Europium-152	-1.6 U	11	18.7	Filtered		ES
RD-33C		Primary	07/24/09	Europium-152	-14.7 U	19	33.7	Unfiltered		ES
RD-33C		Split	07/24/09	Europium-152	-3.76 U	8.86	14.5	Unfiltered		GEL
RD-33C		Primary	07/24/09	Europium-154	1.79 U	12	21.4	Filtered		ES
RD-33C		Primary	07/24/09	Europium-154	-4.06 U	15	28.8	Unfiltered		ES
RD-33C		Split	07/24/09	Europium-154	-5.46 U	8.18	12.9	Unfiltered		GEL
RD-33C		Primary	07/24/09	Europium-155	-17.3 U	12	21.5	Filtered		ES
RD-33C		Primary	07/24/09	Europium-155	0.655 U	13	21.9	Unfiltered		ES
RD-33C		Split	07/24/09	Europium-155	-11.4 U	14	16.5	Unfiltered		GEL
RD-33C		Primary	07/24/09	Manganese-54	-0.336 U	3.4	6.28	Filtered		ES
RD-33C		Primary	07/24/09	Manganese-54	-7.48 U	6.8	12.6	Unfiltered		ES
RD-33C		Split	07/24/09	Manganese-54	-0.814 U	2.88	4.73	Unfiltered		GEL
RD-33C		Primary	07/24/09	Sodium-22	0.606 U	4	7.25	Filtered		ES
RD-33C		Primary	07/24/09	Sodium-22	-1.37 U	5.2	9.76	Unfiltered		ES
RD-33C		Split	07/24/09	Sodium-22	-2.01 U	2.91	4.58	Unfiltered		GEL
RD-34A		Primary	12/05/91	Cesium-137	1.39 U	4.8	10	Filtered		IT
RD-34A		Split	12/05/91	Cesium-137	10 U	---	10	Filtered		CEP
RD-34A		Primary	03/10/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-34A		Split	03/10/92	Cesium-137	0 U	---	---	Filtered		TEL

See last page of table for notes and abbreviations.

TABLE E-III
RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34A		Primary	06/08/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-34A		Split	09/13/92	Cesium-134	24 U	---	24	Filtered		BL
RD-34A		Primary	09/13/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-34A		Split	09/13/92	Cesium-137	24 U	---	24	Filtered		BL
RD-34A		Split	09/13/92	Cobalt-57	2 U	---	2	Filtered		BL
RD-34A		Split	09/13/92	Cobalt-60	2 U	---	2	Filtered		BL
RD-34A		Split	12/05/92	Cesium-134	2 U	---	2	Filtered		BL
RD-34A		Primary	12/05/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-34A		Split	12/05/92	Cesium-137	2 U	---	2	Filtered		BL
RD-34A		Split	12/05/92	Cobalt-57	24 U	---	24	Filtered		BL
RD-34A		Split	12/05/92	Cobalt-60	24 U	---	24	Filtered		BL
RD-34A		Primary	03/09/93	Cesium-137	0 U	---	---	Filtered		CEP
RD-34A		Primary	08/24/93	Cesium-137	0 U	---	---	Filtered		CEP
RD-34A		Primary	11/18/93	Antimony-125	8.33 U	---	8.33	Filtered		LAS
RD-34A		Primary	11/18/93	Beryllium-7	35.8 U	---	35.8	Filtered		LAS
RD-34A		Primary	11/18/93	Cesium-134	9.46 U	---	9.46	Filtered		CEP
RD-34A		Primary	11/18/93	Cesium-137	4.46 U	---	4.46	Filtered		CEP
RD-34A		Primary	11/18/93	Cobalt-60	2.62 U	---	2.62	Filtered		CEP
RD-34A		Primary	11/18/93	Europium-152	10.3 U	---	10.3	Filtered		LAS
RD-34A		Primary	11/18/93	Europium-154	6.16 U	---	6.16	Filtered		LAS
RD-34A		Primary	11/18/93	Europium-155	9.12 U	---	9.12	Filtered		LAS
RD-34A		Primary	11/18/93	Manganese-54	6.08 U	---	6.08	Filtered		LAS
RD-34A		Primary	11/18/93	Ruthenium-106	20 U	---	20	Filtered		LAS
RD-34A		Primary	11/18/93	Silver-110m	4.85 U	---	4.85	Filtered		CEP
RD-34A		Primary	02/26/94	Cesium-137	19	7.3	6.4	Filtered		LAS
RD-34A		Reanalysis of Primary	02/26/94	Cesium-137	-0.6 U	---	2.7	Filtered		LAS
RD-34A		Primary	02/26/94	Cobalt-57	2 U	---	3.9	Filtered		LAS
RD-34A		Reanalysis of Primary	02/26/94	Cobalt-57	-0.3 U	---	2.6	Filtered		LAS
RD-34A		Primary	02/26/94	Cobalt-60	14.6	2.3	6.8	Filtered		LAS
RD-34A		Reanalysis of Primary	02/26/94	Cobalt-60	0.1 U	---	2.4	Filtered		LAS
RD-34A		Primary	05/09/94	Cesium-137	0.9 U	6.2	8.6	Filtered		LAS
RD-34A		Primary	05/09/94	Cesium-137	0 U	---	9.2	Unfiltered		LAS
RD-34A		Primary	05/09/94	Cobalt-57	-3.1 U	2.9	5.2	Filtered		LAS
RD-34A		Primary	05/09/94	Cobalt-57	0.8 U	3.4	5.7	Unfiltered		LAS
RD-34A		Primary	05/09/94	Cobalt-60	3.7 U	4	7.2	Filtered		LAS
RD-34A		Primary	05/09/94	Cobalt-60	4.5 U	4.3	8	Unfiltered		LAS
RD-34A		Primary	08/09/94	Cesium-134	-0.2 U	---	4.6	Filtered		LAS
RD-34A		Reanalysis of Primary	08/09/94	Cesium-134	1.6 U	3.4	6.2	Filtered		LAS
RD-34A		Primary	08/09/94	Cesium-137	9.2	4.4	5	Filtered		LAS
RD-34A		Reanalysis of Primary	08/09/94	Cesium-137	-0.3 U	5.8	9	Filtered		LAS
RD-34A		Primary	08/09/94	Cobalt-57	2.6 U	---	4.9	Filtered		LAS
RD-34A		Reanalysis of Primary	08/09/94	Cobalt-57	-1.1 U	3	5.3	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-III
RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34A		Primary	08/09/94	Cobalt-60	1.5 U	---	4.6	Filtered		LAS
RD-34A		Reanalysis of Primary	08/09/94	Cobalt-60	1.1 U	4.4	8.8	Filtered		LAS
RD-34A		Primary	02/07/95	Cesium-134	2.6 U	4	7.7	Filtered		LAS
RD-34A		Primary	02/07/95	Cesium-137	-0.7 U	2.5	8.3	Filtered		LAS
RD-34A		Primary	02/07/95	Cobalt-57	1.1 U	2.8	4.6	Filtered		LAS
RD-34A		Primary	02/07/95	Cobalt-60	-0.9 U	4.4	12	Filtered		LAS
RD-34A		Primary	08/09/95	Cesium-134	0.4 U	3.9	7.2	Filtered		LAS
RD-34A		Primary	08/09/95	Cesium-137	3.3 U	4.8	7.9	Filtered		LAS
RD-34A		Primary	08/09/95	Cobalt-57	-0.9 U	2.5	4.4	Filtered		LAS
RD-34A		Primary	08/09/95	Cobalt-60	-2.7 U	2.2	11	Filtered		LAS
RD-34A		Primary	02/19/96	Cesium-134	-0.7 U	2.9	6.9	Filtered		LAS
RD-34A		Primary	02/19/96	Cesium-137	-2.8 U	3.9	11	Filtered		LAS
RD-34A		Primary	02/19/96	Cobalt-57	0.2 U	3	5.1	Filtered		LAS
RD-34A		Primary	02/19/96	Cobalt-60	-0.1 U	5.1	11	Filtered		LAS
RD-34A		Primary	08/18/96	Cesium-134	-0.2 U	4	8	Filtered		LAS
RD-34A		Primary	08/18/96	Cesium-137	-3.9 U	5.9	11	Filtered		LAS
RD-34A		Primary	08/18/96	Cobalt-57	1.1 U	3.8	5.1	Filtered		LAS
RD-34A		Primary	08/18/96	Cobalt-60	-4.4 U	2.8	9.6	Filtered		LAS
RD-34A		Primary	02/07/97	Cesium-134	-3.7 U	1.9	6.1	Filtered		LAS
RD-34A		Primary	02/07/97	Cesium-137	-13.3 U	3.6	8.5	Filtered		LAS
RD-34A		Primary	02/07/97	Cobalt-57	0.6 U	3.9	5.6	Filtered		LAS
RD-34A		Primary	02/07/97	Cobalt-60	-2.6 U	2.2	6	Filtered		LAS
RD-34A		Primary	05/27/98	Cesium-134	20.8 U	---	20.8	Filtered		TN
RD-34A		Primary	05/27/98	Cesium-137	13.8 U	---	13.8	Filtered		TN
RD-34A		Primary	05/27/98	Cobalt-57	9.04 U	---	9.04	Filtered		TN
RD-34A		Primary	05/27/98	Cobalt-60	19.5 U	---	19.5	Filtered		TN
RD-34A		Primary	08/18/98	Cesium-134	15.9 U	---	15.9	Filtered		TN
RD-34A		Primary	08/18/98	Cesium-137	14.1 U	---	14.1	Filtered		TN
RD-34A		Primary	08/18/98	Cobalt-57	7.03 U	---	7.03	Filtered		TN
RD-34A		Primary	08/18/98	Cobalt-60	16.3 U	---	16.3	Filtered		TN
RD-34A		Primary	05/09/01	Cesium-134	8.96 U	---	8.96	Filtered		ES
RD-34A		Primary	05/09/01	Cesium-137	6.86 U	---	6.86	Filtered		ES
RD-34A		Primary	05/09/01	Cobalt-57	3.61 U	---	3.61	Filtered		ES
RD-34A		Primary	05/09/01	Cobalt-60	8.2 U	---	8.2	Filtered		ES
RD-34A		Primary	05/16/03	Cesium-134	1.26 U	---	1.26	Filtered		ES
RD-34A		Primary	05/16/03	Cesium-137	0.908 U	---	0.908	Filtered		ES
RD-34A		Primary	05/16/03	Cobalt-57	0.496 U	---	0.496	Filtered		ES
RD-34A		Primary	05/16/03	Cobalt-60	1.05 U	---	1.05	Filtered		ES
RD-34A		Primary	05/17/04	Cesium-134	13.7 U	---	13.7	Filtered		ES
RD-34A		Primary	05/17/04	Cesium-137	12.2 U	---	12.2	Filtered		ES
RD-34A		Primary	05/17/04	Cobalt-57	8.87 U	---	8.87	Filtered		ES
RD-34A		Primary	05/17/04	Cobalt-60	12.2 U	---	12.2	Filtered		ES
RD-34A		Primary	02/17/05	Cesium-134	1.61 U	---	1.61	Filtered		ES
RD-34A		Primary	02/17/05	Cesium-137	1.23 U	---	1.23	Filtered		ES
RD-34A		Primary	02/17/05	Cobalt-57	0.552 U	---	0.552	Filtered		ES
RD-34A		Primary	02/17/05	Cobalt-60	1.39 U	---	1.39	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34A		Primary	02/17/05	Europium-152	3.3 U	---	3.3	Filtered		ES
RD-34A		Primary	02/17/05	Europium-154	4.26 U	---	4.26	Filtered		ES
RD-34A		Primary	02/17/05	Manganese-54	1.33 U	---	1.33	Filtered		ES
RD-34A		Primary	02/17/05	Sodium-22	1.46 U	---	1.46	Filtered		ES
RD-34A		Primary	02/21/06	Cesium-134	1.35 U	---	1.35	Filtered		ES
RD-34A		Primary	02/21/06	Cesium-137	0.937 U	---	0.937	Filtered		ES
RD-34A		Primary	02/21/06	Cobalt-57	0.662 U	---	0.662	Filtered		ES
RD-34A		Primary	02/21/06	Cobalt-60	1.02 U	---	1.02	Filtered		ES
RD-34A		Primary	02/21/06	Europium-152	2.26 U	---	2.26	Filtered		ES
RD-34A		Primary	02/21/06	Europium-154	2.48 U	---	2.48	Filtered		ES
RD-34A		Primary	02/21/06	Manganese-54	0.846 U	---	0.846	Filtered		ES
RD-34A		Primary	02/21/06	Sodium-22	0.855 U	---	0.855	Filtered		ES
RD-34A		Primary	02/15/07	Cesium-134	1.36 U	---	1.36	Filtered		ES
RD-34A		Primary	02/15/07	Cesium-137	1.19 U	---	1.19	Filtered		ES
RD-34A		Primary	02/15/07	Cobalt-57	0.866 U	---	0.866	Filtered		ES
RD-34A		Primary	02/15/07	Cobalt-60	1.11 U	---	1.11	Filtered		ES
RD-34A		Primary	02/15/07	Europium-152	3.01 U	---	3.01	Filtered		ES
RD-34A		Primary	02/15/07	Europium-154	3.1 U	---	3.1	Filtered		ES
RD-34A		Primary	02/15/07	Manganese-54	1.05 U	---	1.05	Filtered		ES
RD-34A		Primary	02/15/07	Sodium-22	1.06 U	---	1.06	Filtered		ES
RD-34A		Primary	02/06/08	Cesium-134	0.82 U	---	0.82	Filtered		ES
RD-34A		Primary	02/06/08	Cesium-137	0.707 U	---	0.707	Filtered		ES
RD-34A		Primary	02/06/08	Cobalt-57	0.542 U	---	0.542	Filtered		ES
RD-34A		Primary	02/06/08	Cobalt-60	0.599 U	---	0.599	Filtered		ES
RD-34A		Primary	02/06/08	Europium-152	2.26 U	---	2.26	Filtered		ES
RD-34A		Primary	02/06/08	Europium-154	1.84 U	---	1.84	Filtered		ES
RD-34A		Primary	02/06/08	Manganese-54	0.61 U	---	0.61	Filtered		ES
RD-34A		Primary	02/06/08	Sodium-22	0.626 U	---	0.626	Filtered		ES
RD-34A		Primary	03/05/09	Antimony-125	-0.324 U	2.4	4.02	Filtered		ES
RD-34A		Primary	03/05/09	Antimony-125	0.729 U	2.8	4.7	Unfiltered		ES
RD-34A		Primary	03/05/09	Barium-133	-0.831 U	1	1.76	Filtered		ES
RD-34A		Primary	03/05/09	Barium-133	0.024 U	0.23	1.54	Unfiltered		ES
RD-34A		Primary	03/05/09	Cesium-134	-0.476 U	1.3	2.16	Filtered		ES
RD-34A		Primary	03/05/09	Cesium-134	-0.152 U	1.4	2.37	Unfiltered		ES
RD-34A		Primary	03/05/09	Cesium-137	-0.365 U	1.2	2.12	Filtered		ES
RD-34A		Primary	03/05/09	Cesium-137	0.003 U	1	1.75	Unfiltered		ES
RD-34A		Primary	03/05/09	Cobalt-60	0.358 U	1.3	2.24	Filtered		ES
RD-34A		Primary	03/05/09	Cobalt-60	0.199 U	1.3	2.22	Unfiltered		ES
RD-34A		Primary	03/05/09	Europium-152	-0.051 U	0.77	3.62	Filtered		ES
RD-34A		Primary	03/05/09	Europium-152	-0.657 U	4.7	7.94	Unfiltered		ES
RD-34A		Primary	03/05/09	Europium-154	0.9 U	3	5.13	Filtered		ES
RD-34A		Primary	03/05/09	Europium-154	-0.581 U	2	3.5	Unfiltered		ES
RD-34A		Primary	03/05/09	Europium-155	2.55 U	3.6	6.02	Filtered		ES
RD-34A		Primary	03/05/09	Europium-155	-0.795 U	6.1	10.2	Unfiltered		ES
RD-34A		Primary	03/05/09	Manganese-54	0.021 U	0.48	0.834	Filtered		ES
RD-34A		Primary	03/05/09	Manganese-54	0.027 U	0.6	1.04	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34A		Primary	03/05/09	Sodium-22	0.307 U	1	1.75	Filtered		ES
RD-34A		Primary	03/05/09	Sodium-22	-0.198 U	0.67	1.19	Unfiltered		ES
RD-34A		Primary	07/28/09	Antimony-125	7.28 U	20	33.8	Filtered		ES
RD-34A		Primary	07/28/09	Antimony-125	-4.87 U	15	26.5	Unfiltered		ES
RD-34A		Primary	07/28/09	Barium-133	1.97 U	9.8	16.9	Filtered		ES
RD-34A		Primary	07/28/09	Barium-133	1.6 U	2.5	7.59	Unfiltered		ES
RD-34A		Primary	07/28/09	Cesium-134	-0.752 U	6.8	12.4	Filtered		ES
RD-34A		Primary	07/28/09	Cesium-134	-0.281 U	6.4	8.18	Unfiltered		ES
RD-34A		Primary	07/28/09	Cesium-137	4.01 U	6.1	10.4	Filtered		ES
RD-34A		Primary	07/28/09	Cesium-137	-0.472 U	5.4	9.41	Unfiltered		ES
RD-34A		Primary	07/28/09	Cobalt-60	5.22 U	11	18.8	Filtered		ES
RD-34A		Primary	07/28/09	Cobalt-60	0.272 U	4.2	7.5	Unfiltered		ES
RD-34A		Primary	07/28/09	Europium-152	10 U	24	40.8	Filtered		ES
RD-34A		Primary	07/28/09	Europium-152	8.2 U	41	13.8	Unfiltered		ES
RD-34A		Primary	07/28/09	Europium-154	20.5 U	19	30.7	Filtered		ES
RD-34A		Primary	07/28/09	Europium-154	0.18 U	16	21.1	Unfiltered		ES
RD-34A		Primary	07/28/09	Europium-155	9.42 U	36	61.5	Filtered		ES
RD-34A		Primary	07/28/09	Europium-155	-11 U	16	27.1	Unfiltered		ES
RD-34A		Primary	07/28/09	Manganese-54	-0.747 U	6.1	11.2	Filtered		ES
RD-34A		Primary	07/28/09	Manganese-54	0.171 U	3.4	6.01	Unfiltered		ES
RD-34A		Primary	07/28/09	Sodium-22	7 U	6.4	10.5	Filtered		ES
RD-34A		Primary	07/28/09	Sodium-22	0.061 U	5.5	7.19	Unfiltered		ES
RD-34B		Primary	12/05/91	Cesium-137	0.634 U	4.71	10	Filtered		IT
RD-34B		Primary	03/10/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-34B		Split	03/10/92	Cesium-137	0 U	---	---	Filtered		TEL
RD-34B		Primary	06/08/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-34B		Split	09/13/92	Cesium-134	26 U	---	26	Filtered		BL
RD-34B		Primary	09/13/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-34B		Split	09/13/92	Cesium-137	26 U	---	26	Filtered		BL
RD-34B		Split	09/13/92	Cobalt-57	26 U	---	26	Filtered		BL
RD-34B		Split	09/13/92	Cobalt-60	26 U	---	26	Filtered		BL
RD-34B		Primary	12/05/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-34B		Primary	03/09/93	Cesium-137	0 U	---	---	Filtered		CEP
RD-34B		Reanalysis of Primary	03/09/93	Cesium-137	0 U	---	---	Filtered		CEP
RD-34B		Primary	03/09/93	Cobalt-60	80	17	---	Filtered		CEP
RD-34B		Primary	08/24/93	Cesium-137	0 U	---	---	Filtered		CEP
RD-34B		Primary	02/26/94	Cesium-137	3.4 U	---	5.6	Filtered		LAS
RD-34B		Primary	02/26/94	Cobalt-57	-0.6 U	---	3.7	Filtered		LAS
RD-34B		Primary	02/26/94	Cobalt-60	-1 U	---	4.4	Filtered		LAS
RD-34B		Primary	05/10/94	Cesium-137	-0.6 U	2.5	3.6	Filtered		ES
RD-34B		Primary	05/10/94	Cesium-137	0.8 U	5.5	7.5	Unfiltered		LAS
RD-34B		Primary	05/10/94	Cobalt-57	-1.2 U	1.7	3	Filtered		ES
RD-34B		Primary	05/10/94	Cobalt-57	-1.4 U	2.4	4.2	Unfiltered		LAS
RD-34B		Primary	05/10/94	Cobalt-60	-0.3 U	1.6	3.6	Filtered		ES
RD-34B		Primary	05/10/94	Cobalt-60	2.4 U	3.5	6.6	Unfiltered		LAS

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34B		Primary	08/09/94	Cesium-134	-1.1 U	---	6.2	Filtered		LAS
RD-34B		Primary	08/09/94	Cesium-137	1.5 U	---	6.3	Filtered		LAS
RD-34B		Primary	08/09/94	Cobalt-57	0.4 U	---	3.4	Filtered		LAS
RD-34B		Primary	08/09/94	Cobalt-60	0 U	---	6	Filtered		LAS
RD-34B		Primary	02/07/95	Cesium-134	-0.5 U	4.6	8.9	Filtered		LAS
RD-34B		Primary	02/07/95	Cesium-137	-1.4 U	4	12	Filtered		LAS
RD-34B		Primary	02/07/95	Cobalt-57	-2 U	3.4	6.1	Filtered		LAS
RD-34B		Primary	02/07/95	Cobalt-60	2.3 U	3.2	12	Filtered		LAS
RD-34B		Primary	08/10/95	Cesium-134	-1.8 U	1.8	6.9	Filtered		LAS
RD-34B		Primary	08/10/95	Cesium-137	0.8 U	4.9	8.7	Filtered		LAS
RD-34B		Primary	08/10/95	Cobalt-57	2.1 U	2.5	4	Filtered		LAS
RD-34B		Primary	08/10/95	Cobalt-60	-0.9 U	3.1	10	Filtered		LAS
RD-34B		Primary	02/19/96	Cesium-134	-0.6 U	2.6	7.2	Filtered		LAS
RD-34B		Primary	02/19/96	Cesium-137	-1.7 U	3.6	10	Filtered		LAS
RD-34B		Primary	02/19/96	Cobalt-57	-2.1 U	2.8	5.1	Filtered		LAS
RD-34B		Primary	02/19/96	Cobalt-60	-0.2 U	4.1	9.2	Filtered		LAS
RD-34B		Primary	08/18/96	Cesium-134	-0.3 U	3.7	8	Filtered		LAS
RD-34B		Primary	08/18/96	Cesium-137	-0.7 U	6.7	9.7	Filtered		LAS
RD-34B		Primary	08/18/96	Cobalt-57	0.9 U	3.4	4.6	Filtered		LAS
RD-34B		Primary	08/18/96	Cobalt-60	-1.8 U	4.3	9	Filtered		LAS
RD-34B		Primary	02/07/97	Cesium-134	0.3 U	3.9	7.9	Filtered		LAS
RD-34B		Primary	02/07/97	Cesium-137	-0.5 U	6	11	Filtered		LAS
RD-34B		Primary	02/07/97	Cobalt-57	-2.9 U	3.1	5.6	Filtered		LAS
RD-34B		Primary	02/07/97	Cobalt-60	3.1 U	4	8.8	Filtered		LAS
RD-34B		Primary	08/21/97	Cesium-134	1 U	4.4	7.1	Filtered		LAS
RD-34B		Primary	08/21/97	Cesium-137	-1.4 U	5.5	9.9	Filtered		LAS
RD-34B		Primary	08/21/97	Cobalt-57	3 U	2.8	4.4	Filtered		LAS
RD-34B		Primary	08/21/97	Cobalt-60	-2.6 U	3.5	10	Filtered		LAS
RD-34B		Primary	05/27/98	Cesium-134	15.8 U	---	15.8	Filtered		TN
RD-34B		Primary	05/27/98	Cesium-137	13.1 U	---	13.1	Filtered		TN
RD-34B		Primary	05/27/98	Cobalt-57	5.77 U	---	5.77	Filtered		TN
RD-34B		Primary	05/27/98	Cobalt-60	18.8 U	---	18.8	Filtered		TN
RD-34B		Primary	08/18/98	Cesium-134	15 U	---	15	Filtered		TN
RD-34B		Primary	08/18/98	Cesium-137	15.6 U	---	15.6	Filtered		TN
RD-34B		Primary	08/18/98	Cobalt-57	8.12 U	---	8.12	Filtered		TN
RD-34B		Primary	08/18/98	Cobalt-60	13.9 U	---	13.9	Filtered		TN
RD-34B		Primary	02/04/99	Cesium-134	15.3 U	---	15.3	Filtered		TN
RD-34B		Primary	02/04/99	Cesium-137	13.3 U	---	13.3	Filtered		TN
RD-34B		Primary	02/04/99	Cobalt-57	8.24 U	---	8.24	Filtered		TN
RD-34B		Primary	02/04/99	Cobalt-60	16.8 U	---	16.8	Filtered		TN
RD-34B		Primary	02/05/00	Cesium-134	15.1 U	---	15.1	Filtered		TR
RD-34B		Primary	02/05/00	Cesium-137	12.7 U	---	12.7	Filtered		TR
RD-34B		Primary	02/05/00	Cobalt-57	7.83 U	---	7.83	Filtered		TR
RD-34B		Primary	02/05/00	Cobalt-60	14.7 U	---	14.7	Filtered		TR
RD-34B		Primary	02/16/01	Cesium-134	18.8 U	---	18.8	Filtered		ES
RD-34B		Primary	02/16/01	Cesium-137	14.1 U	---	14.1	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34B		Primary	02/16/01	Cobalt-57	8.04 U	---	8.04	Filtered		ES
RD-34B		Primary	02/16/01	Cobalt-60	16 U	---	16	Filtered		ES
RD-34B		Primary	02/15/02	Cesium-134	3 U	1	3	Filtered		DL
RD-34B		Primary	02/15/02	Cesium-137	3 U	1	3	Filtered		DL
RD-34B		Primary	02/15/02	Cobalt-57	5 U	3	5	Filtered		DL
RD-34B		Primary	02/15/02	Cobalt-60	5 U	3	5	Filtered		DL
RD-34B		Primary	02/06/03	Cesium-134	2.67 U	---	2.67	Filtered		ES
RD-34B		Primary	02/06/03	Cesium-137	2.33 U	---	2.33	Filtered		ES
RD-34B		Primary	02/06/03	Cobalt-57	1.44 U	---	1.44	Filtered		ES
RD-34B		Primary	02/06/03	Cobalt-60	2.64 U	---	2.64	Filtered		ES
RD-34B		Primary	02/24/04	Cesium-134	11.8 U	---	11.8	Filtered		ES
RD-34B		Primary	02/24/04	Cesium-137	8.89 U	---	8.89	Filtered		ES
RD-34B		Primary	02/24/04	Cobalt-57	6.5 U	---	6.5	Filtered		ES
RD-34B		Primary	02/24/04	Cobalt-60	11.1 U	---	11.1	Filtered		ES
RD-34B		Primary	02/15/05	Cesium-134	1.51 U	---	1.51	Filtered		ES
RD-34B		Primary	02/15/05	Cesium-137	1.23 U	---	1.23	Filtered		ES
RD-34B		Primary	02/15/05	Cobalt-57	0.859 U	---	0.859	Filtered		ES
RD-34B		Primary	02/15/05	Cobalt-60	1.33 U	---	1.33	Filtered		ES
RD-34B		Primary	02/15/05	Europium-152	3.11 U	---	3.11	Filtered		ES
RD-34B		Primary	02/15/05	Europium-154	3.9 U	---	3.9	Filtered		ES
RD-34B		Primary	02/15/05	Manganese-54	1.24 U	---	1.24	Filtered		ES
RD-34B		Primary	02/15/05	Sodium-22	1.27 U	---	1.27	Filtered		ES
RD-34B		Primary	02/17/06	Cesium-134	1.31 U	---	1.31	Filtered		ES
RD-34B		Primary	02/17/06	Cesium-137	1.16 U	---	1.16	Filtered		ES
RD-34B		Primary	02/17/06	Cobalt-57	0.671 U	---	0.671	Filtered		ES
RD-34B		Primary	02/17/06	Cobalt-60	1.26 U	---	1.26	Filtered		ES
RD-34B		Primary	02/17/06	Europium-152	2.65 U	---	2.65	Filtered		ES
RD-34B		Primary	02/17/06	Europium-154	3.17 U	---	3.17	Filtered		ES
RD-34B		Primary	02/17/06	Manganese-54	1.14 U	---	1.14	Filtered		ES
RD-34B		Primary	02/17/06	Sodium-22	1.09 U	---	1.09	Filtered		ES
RD-34B		Primary	08/14/07	Cesium-134	0.708 U	---	0.708	Filtered		ES
RD-34B		Reanalysis of Primary	08/14/07	Cesium-134	0.733 U	---	0.733	Filtered		ES
RD-34B		Primary	08/14/07	Cesium-137	0.6 U	---	0.6	Filtered		ES
RD-34B		Reanalysis of Primary	08/14/07	Cesium-137	0.586 U	---	0.586	Filtered		ES
RD-34B		Primary	08/14/07	Cobalt-57	0.338 U	---	0.338	Filtered		ES
RD-34B		Reanalysis of Primary	08/14/07	Cobalt-57	0.338 U	---	0.338	Filtered		ES
RD-34B		Primary	08/14/07	Cobalt-60	0.623 U	---	0.623	Filtered		ES
RD-34B		Reanalysis of Primary	08/14/07	Cobalt-60	0.588 U	---	0.588	Filtered		ES
RD-34B		Primary	08/14/07	Europium-152	1.75 U	---	1.75	Filtered		ES
RD-34B		Reanalysis of Primary	08/14/07	Europium-152	1.76 U	---	1.76	Filtered		ES
RD-34B		Primary	08/14/07	Europium-154	1.64 U	---	1.64	Filtered		ES
RD-34B		Reanalysis of Primary	08/14/07	Europium-154	1.72 U	---	1.72	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34B		Primary	08/14/07	Manganese-54	0.618 U	---	0.618	Filtered		ES
RD-34B		Reanalysis of Primary	08/14/07	Manganese-54	0.601 U	---	0.601	Filtered		ES
RD-34B		Primary	08/14/07	Sodium-22	0.558 U	---	0.558	Filtered		ES
RD-34B		Reanalysis of Primary	08/14/07	Sodium-22	0.587 U	---	0.587	Filtered		ES
RD-34B		Primary	02/06/08	Cesium-134	1.68 U	---	1.68	Filtered		ES
RD-34B		Primary	02/06/08	Cesium-137	1.29 U	---	1.29	Filtered		ES
RD-34B		Primary	02/06/08	Cobalt-57	0.746 U	---	0.746	Filtered		ES
RD-34B		Primary	02/06/08	Cobalt-60	1.38 U	---	1.38	Filtered		ES
RD-34B		Primary	02/06/08	Europium-152	3.36 U	---	3.36	Filtered		ES
RD-34B		Primary	02/06/08	Europium-154	4.04 U	---	4.04	Filtered		ES
RD-34B		Primary	02/06/08	Manganese-54	1.32 U	---	1.32	Filtered		ES
RD-34B		Primary	02/06/08	Sodium-22	1.38 U	---	1.38	Filtered		ES
RD-34B		Primary	02/20/09	Antimony-125	-0.233 U	3.6	6.07	Filtered		ES
RD-34B		Primary	02/20/09	Antimony-125	2.19 U	2.1	3.56	Unfiltered		ES
RD-34B		Primary	02/20/09	Barium-133	0.597 U	2.5	2.38	Filtered		ES
RD-34B		Primary	02/20/09	Barium-133	0.072 U	0.2	0.824	Unfiltered		ES
RD-34B		Primary	02/20/09	Cesium-134	-2.24 U	1.6	2.74	Filtered		ES
RD-34B		Primary	02/20/09	Cesium-134	-0.083 U	0.55	0.959	Unfiltered		ES
RD-34B		Primary	02/20/09	Cesium-137	0.244 U	1.6	2.67	Filtered		ES
RD-34B		Primary	02/20/09	Cesium-137	-0.922 U	0.63	1.14	Unfiltered		ES
RD-34B		Primary	02/20/09	Cobalt-60	0.75 U	0.99	1.67	Filtered		ES
RD-34B		Primary	02/20/09	Cobalt-60	0.627 U	0.63	1.06	Unfiltered		ES
RD-34B		Primary	02/20/09	Europium-152	0.525 U	1.3	4.63	Filtered		ES
RD-34B		Primary	02/20/09	Europium-152	2.61 U	2.4	4.04	Unfiltered		ES
RD-34B		Primary	02/20/09	Europium-154	-0.76 U	3.7	6.35	Filtered		ES
RD-34B		Primary	02/20/09	Europium-154	0 U	1.9	3.4	Unfiltered		ES
RD-34B		Primary	02/20/09	Europium-155	-0.77 U	3.6	6.01	Filtered		ES
RD-34B		Primary	02/20/09	Europium-155	-0.54 U	1.2	2.03	Unfiltered		ES
RD-34B		Primary	02/20/09	Manganese-54	-0.262 U	1.3	2.26	Filtered		ES
RD-34B		Primary	02/20/09	Manganese-54	-0.071 U	0.46	0.82	Unfiltered		ES
RD-34B		Primary	02/20/09	Sodium-22	-0.258 U	1.3	2.16	Filtered		ES
RD-34B		Primary	02/20/09	Sodium-22	0 U	0.66	1.15	Unfiltered		ES
RD-34B		Primary	07/28/09	Antimony-125	5.14 U	17	28.5	Filtered		ES
RD-34B		Primary	07/28/09	Antimony-125	3.68 U	12	20.9	Unfiltered		ES
RD-34B		Primary	07/28/09	Barium-133	0.287 U	1.5	9.17	Filtered		ES
RD-34B		Primary	07/28/09	Barium-133	-7.41 U	6.7	7.79	Unfiltered		ES
RD-34B		Primary	07/28/09	Cesium-134	2.6 U	3.9	6.76	Filtered		ES
RD-34B		Primary	07/28/09	Cesium-134	1.35 U	6	7.9	Unfiltered		ES
RD-34B		Primary	07/28/09	Cesium-137	-1.76 U	6.4	11.4	Filtered		ES
RD-34B		Primary	07/28/09	Cesium-137	-0.326 U	5.3	9.39	Unfiltered		ES
RD-34B		Primary	07/28/09	Cobalt-60	-1.16 U	4.8	9.01	Filtered		ES
RD-34B		Primary	07/28/09	Cobalt-60	-5.3 U	4.8	9.49	Unfiltered		ES
RD-34B		Primary	07/28/09	Europium-152	3.21 U	16	28	Filtered		ES
RD-34B		Primary	07/28/09	Europium-152	-16.1 U	15	27.4	Unfiltered		ES
RD-34B		Primary	07/28/09	Europium-154	-3.02 U	24	26.7	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III
RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34B		Primary	07/28/09	Europium-154	8.13 U	17	28.8	Unfiltered		ES
RD-34B		Primary	07/28/09	Europium-155	9.21 U	11	18.4	Filtered		ES
RD-34B		Primary	07/28/09	Europium-155	6.98 U	11	19.4	Unfiltered		ES
RD-34B		Primary	07/28/09	Manganese-54	-0.911 U	6.4	11.3	Filtered		ES
RD-34B		Primary	07/28/09	Manganese-54	-0.643 U	5	8.9	Unfiltered		ES
RD-34B		Primary	07/28/09	Sodium-22	-1.02 U	8.3	9.06	Filtered		ES
RD-34B		Primary	07/28/09	Sodium-22	2.76 U	5.6	9.77	Unfiltered		ES
RD-34C		Primary	12/06/91	Cesium-137	-0.676 U	4.54	10	Filtered		IT
RD-34C		Primary	03/10/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-34C		Split	03/10/92	Cesium-137	0 U	---	---	Filtered		TEL
RD-34C		Primary	06/08/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-34C		Split	09/13/92	Cesium-134	29 U	---	29	Filtered		BL
RD-34C		Primary	09/13/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-34C		Split	09/13/92	Cesium-137	29 U	---	29	Filtered		BL
RD-34C		Split	09/13/92	Cobalt-57	29 U	---	29	Filtered		BL
RD-34C		Split	09/13/92	Cobalt-60	29 U	---	29	Filtered		BL
RD-34C		Primary	12/05/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-34C		Primary	03/09/93	Cesium-137	0 U	---	---	Filtered		CEP
RD-34C		Primary	08/24/93	Cesium-137	0 U	---	---	Filtered		CEP
RD-34C		Primary	02/26/94	Cesium-137	1.9 U	---	6.4	Filtered		LAS
RD-34C		Primary	02/26/94	Cobalt-57	-0.6 U	---	3.8	Filtered		LAS
RD-34C		Primary	02/26/94	Cobalt-60	1.1 U	---	4.4	Filtered		LAS
RD-34C		Primary	05/09/94	Cesium-137	0.5 U	5.4	7.5	Filtered		LAS
RD-34C		Primary	05/09/94	Cesium-137	-2.2 U	5.7	8.3	Unfiltered		LAS
RD-34C		Primary	05/09/94	Cobalt-57	-1 U	2.2	3.9	Filtered		LAS
RD-34C		Primary	05/09/94	Cobalt-57	0.2 U	2.4	4.1	Unfiltered		LAS
RD-34C		Primary	05/09/94	Cobalt-60	0.9 U	3.6	7.6	Filtered		LAS
RD-34C		Primary	05/09/94	Cobalt-60	-0.1 U	3.7	8.4	Unfiltered		LAS
RD-34C		Primary	08/09/94	Cesium-134	-1.1 U	---	6.3	Filtered		LAS
RD-34C		Primary	08/09/94	Cesium-137	-0.4 U	---	7.5	Filtered		LAS
RD-34C		Primary	08/09/94	Cobalt-57	-0.7 U	---	3.5	Filtered		LAS
RD-34C		Primary	08/09/94	Cobalt-60	-1.6 U	---	6.5	Filtered		LAS
RD-34C		Primary	02/07/95	Cesium-134	-2.5 U	3.2	7.6	Filtered		LAS
RD-34C		Primary	02/07/95	Cesium-137	1.5 U	7.7	10	Filtered		LAS
RD-34C		Primary	02/07/95	Cobalt-57	-1.3 U	3	5.4	Filtered		LAS
RD-34C		Primary	02/07/95	Cobalt-60	-1.1 U	3.8	11	Filtered		LAS
RD-34C		Primary	08/10/95	Cesium-134	-0.3 U	1.4	7.8	Filtered		LAS
RD-34C		Primary	08/10/95	Cesium-137	-1.5 U	5.2	9.7	Filtered		LAS
RD-34C		Primary	08/10/95	Cobalt-57	0.2 U	2.5	4.3	Filtered		LAS
RD-34C		Primary	08/10/95	Cobalt-60	2.4 U	4.5	9.2	Filtered		LAS
RD-34C		Primary	02/19/96	Cesium-134	0.3 U	3.4	3.4	Filtered		LAS
RD-34C		Primary	02/19/96	Cesium-137	0.7 U	2.3	3.9	Filtered		LAS
RD-34C		Primary	02/19/96	Cobalt-57	0 U	---	3.3	Filtered		LAS
RD-34C		Primary	02/19/96	Cobalt-60	0.1 U	2	4.3	Filtered		LAS
RD-34C		Primary	08/19/96	Cesium-134	0.3 U	3.6	6.6	Filtered		LAS
RD-34C		Primary	08/19/96	Cesium-137	-1.1 U	4.7	8.9	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34C		Primary	08/19/96	Cobalt-57	0.2 U	3.6	4.8	Filtered		LAS
RD-34C		Primary	08/19/96	Cobalt-60	-0.4 U	3.9	8.3	Filtered		LAS
RD-34C		Primary	02/07/97	Cesium-134	-1.1 U	1.2	4	Filtered		LAS
RD-34C		Primary	02/07/97	Cesium-137	0.1 U	3.2	4.5	Filtered		LAS
RD-34C		Primary	02/07/97	Cobalt-57	1.8 U	2.7	3.5	Filtered		LAS
RD-34C		Primary	02/07/97	Cobalt-60	-1.3 U	1.2	4.4	Filtered		LAS
RD-34C		Primary	08/21/97	Cesium-134	-1.8 U	3.2	7.4	Filtered		LAS
RD-34C		Primary	08/21/97	Cesium-137	-2.3 U	4.9	9.5	Filtered		LAS
RD-34C		Primary	08/21/97	Cobalt-57	0.1 U	2.5	4.4	Filtered		LAS
RD-34C		Primary	08/21/97	Cobalt-60	1.4 U	3.5	8.1	Filtered		LAS
RD-34C		Primary	05/27/98	Cesium-134	11.6 U	---	11.6	Filtered		TN
RD-34C		Primary	05/27/98	Cesium-137	8.9 U	---	8.9	Filtered		TN
RD-34C		Primary	05/27/98	Cobalt-57	5.59 U	---	5.59	Filtered		TN
RD-34C		Primary	05/27/98	Cobalt-60	11 U	---	11	Filtered		TN
RD-34C		Primary	08/17/98	Cesium-134	14.2 U	---	14.2	Filtered		TN
RD-34C		Primary	08/17/98	Cesium-137	13.4 U	---	13.4	Filtered		TN
RD-34C		Primary	08/17/98	Cobalt-57	7.86 U	---	7.86	Filtered		TN
RD-34C		Primary	08/17/98	Cobalt-60	15.2 U	---	15.2	Filtered		TN
RD-34C		Primary	02/04/99	Cesium-134	12.3 U	---	12.3	Filtered		TN
RD-34C		Primary	02/04/99	Cesium-137	10.6 U	---	10.6	Filtered		TN
RD-34C		Primary	02/04/99	Cobalt-57	3.62 U	---	3.62	Filtered		TN
RD-34C		Primary	02/04/99	Cobalt-60	13.7 U	---	13.7	Filtered		TN
RD-34C		Primary	02/05/00	Cesium-134	12 U	---	12	Filtered		TR
RD-34C		Primary	02/05/00	Cesium-137	11 U	---	11	Filtered		TR
RD-34C		Primary	02/05/00	Cobalt-57	8.52 U	---	8.52	Filtered		TR
RD-34C		Primary	02/05/00	Cobalt-60	11.7 U	---	11.7	Filtered		TR
RD-34C		Primary	02/16/01	Cesium-134	13.4 U	---	13.4	Filtered		ES
RD-34C		Primary	02/16/01	Cesium-137	12.4 U	---	12.4	Filtered		ES
RD-34C		Primary	02/16/01	Cobalt-57	4.38 U	---	4.38	Filtered		ES
RD-34C		Primary	02/16/01	Cobalt-60	14.4 U	---	14.4	Filtered		ES
RD-34C		Primary	02/14/02	Cesium-134	3 U	3	3	Filtered		DL
RD-34C		Primary	02/14/02	Cesium-137	1 U	0.36	1	Filtered		DL
RD-34C		Primary	02/14/02	Cobalt-57	3 U	0.22	3	Filtered		DL
RD-34C		Primary	02/14/02	Cobalt-60	3 U	1.8	3	Filtered		DL
RD-34C		Primary	02/06/03	Cesium-134	3.73 U	---	3.73	Filtered		ES
RD-34C		Primary	02/06/03	Cesium-137	2.13 U	---	2.13	Filtered		ES
RD-34C		Primary	02/06/03	Cobalt-57	1.11 U	---	1.11	Filtered		ES
RD-34C		Primary	02/06/03	Cobalt-60	2.1 U	---	2.1	Filtered		ES
RD-34C		Primary	02/24/04	Cesium-134	5.71 U	---	5.71	Filtered		ES
RD-34C		Primary	02/24/04	Cesium-137	4.17 U	---	4.17	Filtered		ES
RD-34C		Primary	02/24/04	Cobalt-57	2.71 U	---	2.71	Filtered		ES
RD-34C		Primary	02/24/04	Cobalt-60	4.86 U	---	4.86	Filtered		ES
RD-34C		Split	08/09/04	Cesium-134	-0.074 U	0.896	1.52	Filtered		STL
RD-34C		Split	08/09/04	Cesium-137	0.584 U	0.799	1.39	Filtered		STL
RD-34C		Split	08/09/04	Cobalt-57	-3.75 U	3.34	5.41	Filtered		STL
RD-34C		Split	08/09/04	Cobalt-60	-0.0641 U	0.807	1.4	Filtered		STL

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34C		Primary	02/15/05	Cesium-134	1.48 U	---	1.48	Filtered		ES
RD-34C		Primary	02/15/05	Cesium-137	1.23 U	---	1.23	Filtered		ES
RD-34C		Primary	02/15/05	Cobalt-57	0.849 U	---	0.849	Filtered		ES
RD-34C		Primary	02/15/05	Cobalt-60	1.23 U	---	1.23	Filtered		ES
RD-34C		Primary	02/15/05	Europium-152	2.97 U	---	2.97	Filtered		ES
RD-34C		Primary	02/15/05	Europium-154	3.76 U	---	3.76	Filtered		ES
RD-34C		Primary	02/15/05	Manganese-54	1.23 U	---	1.23	Filtered		ES
RD-34C		Primary	02/15/05	Sodium-22	1.29 U	---	1.29	Filtered		ES
RD-34C		Primary	02/21/06	Cesium-134	3.42 U	---	3.42	Filtered		ES
RD-34C		Split	02/21/06	Cesium-134	-0.14 U	1	1.42	Filtered		STL
RD-34C		Primary	02/21/06	Cesium-137	1.5 U	---	1.5	Filtered		ES
RD-34C		Split	02/21/06	Cesium-137	-0.62 U	2	2.63	Filtered		STL
RD-34C		Primary	02/21/06	Cobalt-57	1.41 U	---	1.41	Filtered		ES
RD-34C		Split	02/21/06	Cobalt-57	0.0327 U	4	6.87	Filtered		STL
RD-34C		Primary	02/21/06	Cobalt-60	1.58 U	---	1.58	Filtered		ES
RD-34C		Split	02/21/06	Cobalt-60	-0.323 U	1	1.81	Filtered		STL
RD-34C		Primary	02/21/06	Europium-152	4.25 U	---	4.25	Filtered		ES
RD-34C		Split	02/21/06	Europium-152	0.035 U	2	3.85	Filtered		STL
RD-34C		Primary	02/21/06	Europium-154	4.62 U	---	4.62	Filtered		ES
RD-34C		Split	02/21/06	Europium-154	-0.0593 U	2	4.27	Filtered		STL
RD-34C		Primary	02/21/06	Manganese-54	1.59 U	---	1.59	Filtered		ES
RD-34C		Split	02/21/06	Manganese-54	0.46 U	1	1.56	Filtered		STL
RD-34C		Primary	02/21/06	Sodium-22	1.59 U	---	1.59	Filtered		ES
RD-34C		Split	02/21/06	Sodium-22	-0.141 U	1	1.54	Filtered		STL
RD-34C		Primary	02/07/07	Cesium-134	1 U	---	1	Filtered		ES
RD-34C		Primary	02/07/07	Cesium-137	0.946 U	---	0.946	Filtered		ES
RD-34C		Primary	02/07/07	Cobalt-57	0.621 U	---	0.621	Filtered		ES
RD-34C		Primary	02/07/07	Cobalt-60	1.03 U	---	1.03	Filtered		ES
RD-34C		Primary	02/07/07	Europium-152	2.21 U	---	2.21	Filtered		ES
RD-34C		Primary	02/07/07	Europium-154	2.79 U	---	2.79	Filtered		ES
RD-34C		Primary	02/07/07	Manganese-54	0.866 U	---	0.866	Filtered		ES
RD-34C		Primary	02/07/07	Sodium-22	0.983 U	---	0.983	Filtered		ES
RD-34C		Primary	02/12/08	Cesium-134	0.992 U	---	0.992	Filtered		ES
RD-34C		Primary	02/12/08	Cesium-137	0.774 U	---	0.774	Filtered		ES
RD-34C		Primary	02/12/08	Cobalt-57	0.412 U	---	0.412	Filtered		ES
RD-34C		Primary	02/12/08	Cobalt-60	0.66 U	---	0.66	Filtered		ES
RD-34C		Primary	02/12/08	Europium-152	1.99 U	---	1.99	Filtered		ES
RD-34C		Primary	02/12/08	Europium-154	2.08 U	---	2.08	Filtered		ES
RD-34C		Primary	02/12/08	Manganese-54	0.766 U	---	0.766	Filtered		ES
RD-34C		Primary	02/12/08	Sodium-22	0.708 U	---	0.708	Filtered		ES
RD-34C		Primary	02/19/09	Antimony-125	-1.18 U	2.1	3.6	Filtered		ES
RD-34C		Primary	02/19/09	Antimony-125	-0.336 U	1.5	2.5	Unfiltered		ES
RD-34C		Primary	02/19/09	Barium-133	-0.429 U	1.2	1.96	Filtered		ES
RD-34C		Primary	02/19/09	Barium-133	0 U	0.019	0.72	Unfiltered		ES
RD-34C		Primary	02/19/09	Cesium-134	-0.834 U	1.1	1.94	Filtered		ES
RD-34C		Primary	02/19/09	Cesium-134	0.013 U	0.19	0.906	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34C		Primary	02/19/09	Cesium-137	-0.56 U	1	1.75	Filtered		ES
RD-34C		Primary	02/19/09	Cesium-137	0.393 U	0.61	1.04	Unfiltered		ES
RD-34C		Primary	02/19/09	Cobalt-60	-0.166 U	0.94	1.62	Filtered		ES
RD-34C		Primary	02/19/09	Cobalt-60	0.031 U	0.66	1.15	Unfiltered		ES
RD-34C		Primary	02/19/09	Europium-152	0.494 U	0.83	3.7	Filtered		ES
RD-34C		Primary	02/19/09	Europium-152	0.518 U	1.3	2.29	Unfiltered		ES
RD-34C		Primary	02/19/09	Europium-154	-0.74 U	2.1	3.66	Filtered		ES
RD-34C		Primary	02/19/09	Europium-154	-0.457 U	1.4	2.46	Unfiltered		ES
RD-34C		Primary	02/19/09	Europium-155	-0.547 U	4.2	7.15	Filtered		ES
RD-34C		Primary	02/19/09	Europium-155	0.792 U	1.7	2.95	Unfiltered		ES
RD-34C		Primary	02/19/09	Manganese-54	0.012 U	0.52	0.898	Filtered		ES
RD-34C		Primary	02/19/09	Manganese-54	0.296 U	0.58	0.981	Unfiltered		ES
RD-34C		Primary	02/19/09	Sodium-22	-0.252 U	0.72	1.25	Filtered		ES
RD-34C		Primary	02/19/09	Sodium-22	-0.156 U	0.47	0.836	Unfiltered		ES
RD-34C		Primary	07/23/09	Antimony-125	7.54 U	12	20.1	Filtered		ES
RD-34C		Primary	07/23/09	Antimony-125	5.92 U	20	33.9	Unfiltered		ES
RD-34C		Duplicate	07/23/09	Antimony-125	-1.7 U	10	18.3	Filtered		ES
RD-34C		Duplicate	07/23/09	Antimony-125	3.16 U	12	21.2	Unfiltered		ES
RD-34C		Split	07/23/09	Antimony-125	7.54 U	5.03	9.43	Filtered		GEL
RD-34C		Split	07/23/09	Antimony-125	-2.65 U	5.21	8.47	Unfiltered		GEL
RD-34C		Primary	07/23/09	Barium-133	2.4 U	1.9	7.57	Filtered		ES
RD-34C		Primary	07/23/09	Barium-133	-7.79 U	14	24.1	Unfiltered		ES
RD-34C		Duplicate	07/23/09	Barium-133	-3.46 U	7	12.4	Filtered		ES
RD-34C		Duplicate	07/23/09	Barium-133	0.459 U	1.7	7.03	Unfiltered		ES
RD-34C		Split	07/23/09	Barium-133	-0.71 U	2.77	4.01	Filtered		GEL
RD-34C		Split	07/23/09	Barium-133	1.16 U	2.63	4.06	Unfiltered		GEL
RD-34C		Primary	07/23/09	Cesium-134	-0.201 U	2.6	9.21	Filtered		ES
RD-34C		Primary	07/23/09	Cesium-134	-0.91 U	7.7	14	Unfiltered		ES
RD-34C		Duplicate	07/23/09	Cesium-134	-4.68 U	8.4	9.36	Filtered		ES
RD-34C		Duplicate	07/23/09	Cesium-134	-0.539 U	4.7	8.44	Unfiltered		ES
RD-34C		Split	07/23/09	Cesium-134	-1.34 U	2.22	3.41	Filtered		GEL
RD-34C		Split	07/23/09	Cesium-134	-0.146 U	2.29	3.73	Unfiltered		GEL
RD-34C		Primary	07/23/09	Cesium-137	0.611 U	6.3	11	Filtered		ES
RD-34C		Primary	07/23/09	Cesium-137	3.64 U	5.9	10.2	Unfiltered		ES
RD-34C		Duplicate	07/23/09	Cesium-137	0.174 U	3.9	7.08	Filtered		ES
RD-34C		Duplicate	07/23/09	Cesium-137	-4.05 U	6.3	11.2	Unfiltered		ES
RD-34C		Split	07/23/09	Cesium-137	1.27 U	2.15	3.78	Filtered		GEL
RD-34C		Split	07/23/09	Cesium-137	-0.354 U	2.02	3.3	Unfiltered		GEL
RD-34C		Primary	07/23/09	Cobalt-60	5.11 U	6.3	10.7	Filtered		ES
RD-34C		Primary	07/23/09	Cobalt-60	4.29 U	9.9	17.4	Unfiltered		ES
RD-34C		Duplicate	07/23/09	Cobalt-60	-4.88 U	5.7	11.1	Filtered		ES
RD-34C		Duplicate	07/23/09	Cobalt-60	-4.02 U	5.9	11.1	Unfiltered		ES
RD-34C		Split	07/23/09	Cobalt-60	1.65 U	1.99	3.71	Filtered		GEL
RD-34C		Split	07/23/09	Cobalt-60	-0.214 U	2.29	3.79	Unfiltered		GEL
RD-34C		Primary	07/23/09	Europium-152	15.5 U	13	21	Filtered		ES
RD-34C		Primary	07/23/09	Europium-152	-2.21 U	26	45.3	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34C		Duplicate	07/23/09	Europium-152	0.869 U	14	24.4	Filtered		ES
RD-34C		Duplicate	07/23/09	Europium-152	4.45 U	14	24.5	Unfiltered		ES
RD-34C		Split	07/23/09	Europium-152	1.09 U	5.58	9.67	Filtered		GEL
RD-34C		Split	07/23/09	Europium-152	-1.3 U	5.69	9.31	Unfiltered		GEL
RD-34C		Primary	07/23/09	Europium-154	-3.15 U	20	23.8	Filtered		ES
RD-34C		Primary	07/23/09	Europium-154	-15.6 U	28	52.2	Unfiltered		ES
RD-34C		Duplicate	07/23/09	Europium-154	12.8 U	24	30.2	Filtered		ES
RD-34C		Duplicate	07/23/09	Europium-154	3.13 U	11	20	Unfiltered		ES
RD-34C		Split	07/23/09	Europium-154	-0.953 U	4.56	7.49	Filtered		GEL
RD-34C		Split	07/23/09	Europium-154	6.25 U	6.45	12	Unfiltered		GEL
RD-34C		Primary	07/23/09	Europium-155	-4.01 U	12	20.4	Filtered		ES
RD-34C		Primary	07/23/09	Europium-155	-13.9 U	36	62.5	Unfiltered		ES
RD-34C		Duplicate	07/23/09	Europium-155	-12.9 U	13	22.9	Filtered		ES
RD-34C		Duplicate	07/23/09	Europium-155	-2.34 U	11	19	Unfiltered		ES
RD-34C		Split	07/23/09	Europium-155	6.92 U	7.62	12.6	Filtered		GEL
RD-34C		Split	07/23/09	Europium-155	3.29 U	7.2	12.3	Unfiltered		GEL
RD-34C		Primary	07/23/09	Manganese-54	1.08 U	4.7	8.29	Filtered		ES
RD-34C		Primary	07/23/09	Manganese-54	7.8 U	7	11.6	Unfiltered		ES
RD-34C		Duplicate	07/23/09	Manganese-54	-0.926 U	4	7.36	Filtered		ES
RD-34C		Duplicate	07/23/09	Manganese-54	1.53 U	3.7	6.42	Unfiltered		ES
RD-34C		Split	07/23/09	Manganese-54	-1.3 U	1.93	2.96	Filtered		GEL
RD-34C		Split	07/23/09	Manganese-54	-0.361 U	1.84	3.1	Unfiltered		GEL
RD-34C		Primary	07/23/09	Sodium-22	-1.06 U	6.7	8.04	Filtered		ES
RD-34C		Primary	07/23/09	Sodium-22	-5.3 U	9.3	17.7	Unfiltered		ES
RD-34C		Duplicate	07/23/09	Sodium-22	1.85 U	4.8	8.52	Filtered		ES
RD-34C		Duplicate	07/23/09	Sodium-22	1.07 U	3.8	6.83	Unfiltered		ES
RD-34C		Split	07/23/09	Sodium-22	-0.237 U	1.6	2.65	Filtered		GEL
RD-34C		Split	07/23/09	Sodium-22	2.2 U	2.29	4.26	Unfiltered		GEL
RD-35B		Primary	05/07/99	Cesium-134	19.3 U	---	19.3	Filtered		TN
RD-35B		Primary	05/07/99	Cesium-137	15 U	---	15	Filtered		TN
RD-35B		Primary	05/07/99	Cobalt-57	6.25 U	---	6.25	Filtered		TN
RD-35B		Primary	05/07/99	Cobalt-60	16.4 U	---	16.4	Filtered		TN
RD-36D		Primary	11/13/97	Cesium-134	-1.9 U	2.4	6.8	Filtered		LAS
RD-36D		Primary	11/13/97	Cesium-137	-1.9 U	5.1	8.9	Filtered		LAS
RD-36D		Primary	11/13/97	Cobalt-57	-0.1 U	3.3	4.4	Filtered		LAS
RD-36D		Primary	11/13/97	Cobalt-60	-1.3 U	2.9	8.2	Filtered		LAS
RD-38B		Primary	02/17/99	Cesium-134	18.2 U	---	18.2	Filtered		TN
RD-38B		Primary	02/17/99	Cesium-137	15.8 U	---	15.8	Filtered		TN
RD-38B		Primary	02/17/99	Cobalt-57	5.93 U	---	5.93	Filtered		TN
RD-38B		Primary	02/17/99	Cobalt-60	19 U	---	19	Filtered		TN
RD-44		Primary	08/24/97	Cesium-134	-0.7 U	4.2	7.1	Filtered		LAS
RD-44		Primary	08/24/97	Cesium-137	0.4 U	5.7	9.9	Filtered		LAS
RD-44		Primary	08/24/97	Cobalt-57	0.9 U	2.8	4.7	Filtered		LAS
RD-44		Primary	08/24/97	Cobalt-60	1.9 U	3.9	8.8	Filtered		LAS
RD-46B		Primary	02/15/99	Cesium-134	18.5 U	---	18.5	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-III
RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-46B		Primary	02/15/99	Cesium-137	15.1 U	---	15.1	Filtered		TN
RD-46B		Primary	02/15/99	Cobalt-57	6.18 U	---	6.18	Filtered		TN
RD-46B		Primary	02/15/99	Cobalt-60	20.3 U	---	20.3	Filtered		TN
RD-47		Primary	08/24/97	Cesium-134	0.1 U	3.4	7.2	Filtered		LAS
RD-47		Primary	08/24/97	Cesium-137	0.8 U	5	9	Filtered		LAS
RD-47		Primary	08/24/97	Cobalt-57	-0.9 U	2.8	4.9	Filtered		LAS
RD-47		Primary	08/24/97	Cobalt-60	2 U	4.3	8.8	Filtered		LAS
RD-50		Primary	05/05/94	Cesium-137	1.2 U	5.6	7.5	Filtered		LAS
RD-50		Primary	05/05/94	Cobalt-57	-0.2 U	2.2	3.8	Filtered		LAS
RD-50		Primary	05/05/94	Cobalt-60	0 U	---	8.2	Filtered		LAS
RD-50		Primary	05/19/95	Cesium-134	-1.6 U	1.7	3.9	Filtered		LAS
RD-50		Primary	05/19/95	Cesium-137	-2.6 U	1.5	4.5	Filtered		LAS
RD-50		Primary	05/19/95	Cobalt-57	0.4 U	2.6	3.4	Filtered		LAS
RD-50		Primary	05/19/95	Cobalt-60	-1.1 U	1.3	3.7	Filtered		LAS
RD-50		Primary	05/14/96	Cesium-134	0.7 U	5.1	7.3	Filtered		LAS
RD-50		Primary	05/14/96	Cesium-137	-1.9 U	8	11	Filtered		LAS
RD-50		Primary	05/14/96	Cobalt-57	2.7 U	3.6	4.2	Filtered		LAS
RD-50		Primary	05/14/96	Cobalt-60	-0.1 U	5	9	Filtered		LAS
RD-50		Primary	05/05/97	Cobalt-57	2.1 U	3.7	4.4	Filtered		LAS
RD-50		Primary	05/05/97	Cobalt-60	3.5 U	5.5	9.6	Filtered		LAS
RD-50		Primary	05/28/98	Cesium-134	15.6 U	---	15.6	Filtered		TN
RD-50		Primary	05/28/98	Cesium-137	15.6 U	---	15.6	Filtered		TN
RD-50		Primary	05/28/98	Cobalt-57	8.87 U	---	8.87	Filtered		TN
RD-50		Primary	05/28/98	Cobalt-60	15.7 U	---	15.7	Filtered		TN
RD-51C		Primary	12/14/91	Cesium-137	-0.798 U	3.77	10	Filtered		IT
RD-51C		Primary	03/06/92	Cesium-137	0 U	---	---	Filtered		CEP
RD-54A		Primary	09/12/93	Cesium-137	0 U	---	---	Filtered		CEP
RD-54A		Primary	09/29/93	Cesium-137	0 U	---	---	Filtered		CEP
RD-54A		Primary	05/08/94	Cesium-137	-1.5 U	5.2	7.5	Filtered		LAS
RD-54A		Primary	05/08/94	Cobalt-57	-0.5 U	2.1	3.6	Filtered		LAS
RD-54A		Primary	05/08/94	Cobalt-60	-0.8 U	3.5	8.3	Filtered		LAS
RD-54A		Primary	08/09/94	Cesium-134	-2.4 U	---	4.8	Filtered		LAS
RD-54A		Primary	08/09/94	Cesium-137	0.9 U	---	5	Filtered		LAS
RD-54A		Primary	08/09/94	Cobalt-57	0.4 U	---	4.2	Filtered		LAS
RD-54A		Primary	08/09/94	Cobalt-60	0.6 U	---	3.9	Filtered		LAS
RD-54A		Primary	08/03/95	Cesium-134	-0.4 U	5.2	9	Filtered		LAS
RD-54A		Primary	08/03/95	Cesium-137	-4.1 U	5.8	12	Filtered		LAS
RD-54A		Primary	08/03/95	Cobalt-57	2.9 U	3.6	5.9	Filtered		LAS
RD-54A		Primary	08/03/95	Cobalt-60	-1.1 U	4	14	Filtered		LAS
RD-54A		Primary	05/16/96	Cesium-134	-0.4 U	1.7	3.5	Filtered		LAS
RD-54A		Primary	05/16/96	Cesium-137	1.3 U	3	3.8	Filtered		LAS
RD-54A		Primary	05/16/96	Cobalt-57	-0.1 U	2.5	3.4	Filtered		LAS
RD-54A		Primary	05/16/96	Cobalt-60	0.8 U	1.5	3.2	Filtered		LAS
RD-54A		Primary	08/23/96	Cesium-134	-3.2 U	3	6.8	Filtered		LAS
RD-54A		Primary	08/23/96	Cesium-137	2.2 U	5.1	8.6	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54A		Primary	08/23/96	Cobalt-57	1.3 U	3.5	4.6	Filtered		LAS
RD-54A		Primary	08/23/96	Cobalt-60	0 U	---	8.3	Filtered		LAS
RD-54A		Primary	08/22/97	Cesium-134	-1.6 U	2.5	8.2	Filtered		LAS
RD-54A		Primary	08/22/97	Cesium-137	-3.4 U	4.7	9.1	Filtered		LAS
RD-54A		Primary	08/22/97	Cobalt-57	0.7 U	2.7	4.5	Filtered		LAS
RD-54A		Primary	08/22/97	Cobalt-60	-1.8 U	2.5	10	Filtered		LAS
RD-54A		Primary	02/08/98	Cesium-134	17.3 U	---	17.3	Filtered		TN
RD-54A		Primary	02/08/98	Cesium-137	15.2 U	---	15.2	Filtered		TN
RD-54A		Primary	02/08/98	Cobalt-57	6.02 U	---	6.02	Filtered		TN
RD-54A		Primary	02/08/98	Cobalt-60	19.9 U	---	19.9	Filtered		TN
RD-54A		Primary	08/07/98	Cesium-134	26.4 U	---	26.4	Filtered		TN
RD-54A		Primary	08/07/98	Cesium-137	24.9 U	---	24.9	Filtered		TN
RD-54A		Primary	08/07/98	Cobalt-57	14.9 U	---	14.9	Filtered		TN
RD-54A		Primary	08/07/98	Cobalt-60	25.4 U	---	25.4	Filtered		TN
RD-54A		Primary	02/08/99	Cesium-134	8.46 U	---	8.46	Filtered		TN
RD-54A		Primary	02/08/99	Cesium-137	6.22 U	---	6.22	Filtered		TN
RD-54A		Primary	02/08/99	Cobalt-57	3.85 U	---	3.85	Filtered		TN
RD-54A		Primary	02/08/99	Cobalt-60	6.75 U	---	6.75	Filtered		TN
RD-54A		Primary	03/15/00	Cesium-134	10.6 U	---	10.6	Filtered		TR
RD-54A		Primary	03/15/00	Cesium-137	18.9 U	---	18.9	Filtered		TR
RD-54A		Primary	03/15/00	Cobalt-57	4.69 U	---	4.69	Filtered		TR
RD-54A		Primary	03/15/00	Cobalt-60	9.43 U	---	9.43	Filtered		TR
RD-54A		Primary	10/26/01	Cesium-134	5 U	---	5	Filtered		DL
RD-54A		Primary	10/26/01	Cesium-137	10 U	---	10	Filtered		DL
RD-54A		Primary	10/26/01	Cobalt-57	2.7 U	3	10	Filtered		DL
RD-54A		Primary	10/26/01	Cobalt-60	6 U	---	6	Filtered		DL
RD-54A		Primary	02/27/02	Cesium-134	3 U	1	3	Filtered		DL
RD-54A		Primary	02/27/02	Cesium-137	1 U	1	1	Filtered		DL
RD-54A		Primary	02/27/02	Cobalt-57	3 U	1	3	Filtered		DL
RD-54A		Primary	02/27/02	Cobalt-60	3 U	1	3	Filtered		DL
RD-54A	Z02	Primary	02/18/03	Cesium-134	2.52 U	---	2.52	Filtered		ES
RD-54A	Z02	Primary	02/18/03	Cesium-137	2.07 U	---	2.07	Filtered		ES
RD-54A	Z02	Primary	02/18/03	Cobalt-57	1.34 U	---	1.34	Filtered		ES
RD-54A	Z02	Primary	02/18/03	Cobalt-60	2.51 U	---	2.51	Filtered		ES
RD-54A	Z02	Primary	11/03/04	Cesium-134	3.08 U	---	3.08	Filtered		ES
RD-54A	Z02	Primary	11/03/04	Cesium-137	2.46 U	---	2.46	Filtered		ES
RD-54A	Z02	Primary	11/03/04	Cobalt-57	1.83 U	---	1.83	Filtered		ES
RD-54A	Z02	Primary	11/03/04	Cobalt-60	2.6 U	---	2.6	Filtered		ES
RD-54A	Z02	Primary	11/03/04	Europium-152	6.75 U	---	6.75	Filtered		ES
RD-54A	Z02	Primary	11/03/04	Europium-154	7.51 U	---	7.51	Filtered		ES
RD-54A	Z02	Primary	11/03/04	Manganese-54	2.4 U	---	2.4	Filtered		ES
RD-54A	Z02	Primary	11/03/04	Sodium-22	2.6 U	---	2.6	Filtered		ES
RD-54A	Z02	Primary	02/16/05	Cesium-134	1.4 U	---	1.4	Filtered		ES
RD-54A	Z02	Primary	02/16/05	Cesium-137	1.18 U	---	1.18	Filtered		ES
RD-54A	Z02	Primary	02/16/05	Cobalt-57	0.918 U	---	0.918	Filtered		ES
RD-54A	Z02	Primary	02/16/05	Cobalt-60	1.33 U	---	1.33	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54A	Z02	Primary	02/16/05	Europium-152	3.06 U	---	3.06	Filtered		ES
RD-54A	Z02	Primary	02/16/05	Europium-154	4.02 U	---	4.02	Filtered		ES
RD-54A	Z02	Primary	02/16/05	Manganese-54	1.22 U	---	1.22	Filtered		ES
RD-54A	Z02	Primary	02/16/05	Sodium-22	1.37 U	---	1.37	Filtered		ES
RD-54A	Z02	Primary	02/16/06	Cesium-134	1.08 U	---	1.08	Filtered		ES
RD-54A	Z02	Primary	02/16/06	Cesium-137	0.951 U	---	0.951	Filtered		ES
RD-54A	Z02	Primary	02/16/06	Cobalt-57	0.678 U	---	0.678	Filtered		ES
RD-54A	Z02	Primary	02/16/06	Cobalt-60	0.919 U	---	0.919	Filtered		ES
RD-54A	Z02	Primary	02/16/06	Europium-152	2.26 U	---	2.26	Filtered		ES
RD-54A	Z02	Primary	02/16/06	Europium-154	2.79 U	---	2.79	Filtered		ES
RD-54A	Z02	Primary	02/16/06	Manganese-54	0.969 U	---	0.969	Filtered		ES
RD-54A	Z02	Primary	02/16/06	Sodium-22	0.963 U	---	0.963	Filtered		ES
RD-54A	Z02	Primary	02/07/07	Cesium-134	2.08 U	---	2.08	Filtered		ES
RD-54A	Z02	Primary	02/07/07	Cesium-137	1 U	---	1	Filtered		ES
RD-54A	Z02	Primary	02/07/07	Cobalt-57	0.644 U	---	0.644	Filtered		ES
RD-54A	Z02	Primary	02/07/07	Cobalt-60	1.06 U	---	1.06	Filtered		ES
RD-54A	Z02	Primary	02/07/07	Europium-152	2.88 U	---	2.88	Filtered		ES
RD-54A	Z02	Primary	02/07/07	Europium-154	3.05 U	---	3.05	Filtered		ES
RD-54A	Z02	Primary	02/07/07	Manganese-54	0.959 U	---	0.959	Filtered		ES
RD-54A	Z02	Primary	02/07/07	Sodium-22	1.04 U	---	1.04	Filtered		ES
RD-54A	Z02	Primary	02/06/08	Cesium-134	2.02 U	---	2.02	Filtered		ES
RD-54A	Z02	Primary	02/06/08	Cesium-137	1.51 U	---	1.51	Filtered		ES
RD-54A	Z02	Primary	02/06/08	Cobalt-57	1.04 U	---	1.04	Filtered		ES
RD-54A	Z02	Primary	02/06/08	Cobalt-60	1.57 U	---	1.57	Filtered		ES
RD-54A	Z02	Primary	02/06/08	Europium-152	4.46 U	---	4.46	Filtered		ES
RD-54A	Z02	Primary	02/06/08	Europium-154	5.03 U	---	5.03	Filtered		ES
RD-54A	Z02	Primary	02/06/08	Manganese-54	1.52 U	---	1.52	Filtered		ES
RD-54A	Z02	Primary	02/06/08	Sodium-22	1.72 U	---	1.72	Filtered		ES
RD-54A	Z02	Primary	02/24/09	Antimony-125	-0.046 U	1.9	3.16	Filtered		ES
RD-54A	Z02	Primary	02/24/09	Antimony-125	-0.187 U	1.2	2.06	Unfiltered		ES
RD-54A	Z02	Primary	02/24/09	Barium-133	0.304 U	0.26	0.742	Filtered		ES
RD-54A	Z02	Primary	02/24/09	Barium-133	0.078 U	0.098	0.645	Unfiltered		ES
RD-54A	Z02	Primary	02/24/09	Cesium-134	0.517 U	0.6	0.805	Filtered		ES
RD-54A	Z02	Primary	02/24/09	Cesium-134	0.349 U	0.49	0.828	Unfiltered		ES
RD-54A	Z02	Primary	02/24/09	Cesium-137	-0.098 U	0.98	1.67	Filtered		ES
RD-54A	Z02	Primary	02/24/09	Cesium-137	0.683 U	0.52	0.866	Unfiltered		ES
RD-54A	Z02	Primary	02/24/09	Cobalt-60	-0.387 U	0.63	1.11	Filtered		ES
RD-54A	Z02	Primary	02/24/09	Cobalt-60	-0.202 U	0.74	1.29	Unfiltered		ES
RD-54A	Z02	Primary	02/24/09	Europium-152	-1.11 U	1.8	2.29	Filtered		ES
RD-54A	Z02	Primary	02/24/09	Europium-152	1.49 U	1.7	2.91	Unfiltered		ES
RD-54A	Z02	Primary	02/24/09	Europium-154	0.377 U	0.77	1.34	Filtered		ES
RD-54A	Z02	Primary	02/24/09	Europium-154	0.029 U	0.96	1.73	Unfiltered		ES
RD-54A	Z02	Primary	02/24/09	Europium-155	-1.31 U	2	3.49	Filtered		ES
RD-54A	Z02	Primary	02/24/09	Europium-155	0.295 U	1.5	2.46	Unfiltered		ES
RD-54A	Z02	Primary	02/24/09	Manganese-54	0.224 U	0.43	0.726	Filtered		ES
RD-54A	Z02	Primary	02/24/09	Manganese-54	-0.094 U	0.62	1.08	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54A	Z02	Primary	02/24/09	Sodium-22	0.128 U	0.26	0.455	Filtered		ES
RD-54A	Z02	Primary	02/24/09	Sodium-22	0.01 U	0.33	0.592	Unfiltered		ES
RD-54A	Z02	Primary	07/16/09	Antimony-125	-2.72 U	8.3	14.3	Filtered		ES
RD-54A	Z02	Reanalysis of Primary	07/16/09	Antimony-125	-7.75 U	12	22.1	Unfiltered		ES
RD-54A	Z02	Primary	07/16/09	Barium-133	0.407 U	0.91	3.87	Filtered		ES
RD-54A	Z02	Reanalysis of Primary	07/16/09	Barium-133	2.93 U	2.7	7.42	Unfiltered		ES
RD-54A	Z02	Primary	07/16/09	Cesium-134	0.607 U	4.5	7.67	Filtered		ES
RD-54A	Z02	Reanalysis of Primary	07/16/09	Cesium-134	0.63 U	2.2	9.27	Unfiltered		ES
RD-54A	Z02	Primary	07/16/09	Cesium-137	2.48 U	4.4	7.51	Filtered		ES
RD-54A	Z02	Reanalysis of Primary	07/16/09	Cesium-137	-0.292 U	6.4	11.2	Unfiltered		ES
RD-54A	Z02	Primary	07/16/09	Cobalt-60	1.72 U	2.2	3.71	Filtered		ES
RD-54A	Z02	Reanalysis of Primary	07/16/09	Cobalt-60	1.45 U	4.6	8.2	Unfiltered		ES
RD-54A	Z02	Primary	07/16/09	Europium-152	1.15 U	6.2	9.21	Filtered		ES
RD-54A	Z02	Reanalysis of Primary	07/16/09	Europium-152	4.41 U	11	18.4	Unfiltered		ES
RD-54A	Z02	Primary	07/16/09	Europium-154	5.88 U	12	15.4	Filtered		ES
RD-54A	Z02	Reanalysis of Primary	07/16/09	Europium-154	7.6 U	18	24.3	Unfiltered		ES
RD-54A	Z02	Primary	07/16/09	Europium-155	-2.82 U	6.7	11.6	Filtered		ES
RD-54A	Z02	Reanalysis of Primary	07/16/09	Europium-155	2.79 U	11	19.1	Unfiltered		ES
RD-54A	Z02	Primary	07/16/09	Manganese-54	1.45 U	3.1	5.36	Filtered		ES
RD-54A	Z02	Reanalysis of Primary	07/16/09	Manganese-54	1.44 U	4.4	7.78	Unfiltered		ES
RD-54A	Z02	Primary	07/16/09	Sodium-22	1.99 U	4.1	5.23	Filtered		ES
RD-54A	Z02	Reanalysis of Primary	07/16/09	Sodium-22	2.71 U	6.4	8.67	Unfiltered		ES
RD-54B		Primary	09/12/93	Cesium-137	0 U	---	---	Filtered		CEP
RD-54B		Primary	09/29/93	Cesium-137	0 U	---	---	Filtered		CEP
RD-54B		Primary	05/08/94	Cesium-137	2.7 U	5.3	6.9	Filtered		LAS
RD-54B		Primary	05/08/94	Cobalt-57	0.9 U	2.3	3.7	Filtered		LAS
RD-54B		Primary	05/08/94	Cobalt-60	0.8 U	3.5	7.7	Filtered		LAS
RD-54B		Primary	08/08/94	Cesium-134	-0.43 U	---	1.8	Filtered		LAS
RD-54B		Primary	08/08/94	Cesium-137	-1.5 U	---	2.7	Filtered		LAS
RD-54B		Primary	08/08/94	Cobalt-57	0.6 U	---	4.1	Filtered		LAS
RD-54B		Primary	08/08/94	Cobalt-60	-1.74 U	---	3.4	Filtered		LAS
RD-54B		Primary	08/30/95	Cesium-134	-2.2 U	3	7.4	Filtered		LAS
RD-54B		Primary	08/30/95	Cesium-137	1.5 U	5.4	8.9	Filtered		LAS
RD-54B		Primary	08/30/95	Cobalt-57	1.1 U	2.6	4.3	Filtered		LAS
RD-54B		Primary	08/30/95	Cobalt-60	-0.8 U	1.6	9.6	Filtered		LAS
RD-54B		Primary	05/14/96	Cesium-134	-3.1 U	1.9	7.7	Filtered		LAS
RD-54B		Primary	05/14/96	Cesium-137	-0.3 U	3.7	9.9	Filtered		LAS
RD-54B		Primary	05/14/96	Cobalt-57	1.2 U	3.3	4.2	Filtered		LAS
RD-54B		Primary	05/14/96	Cobalt-60	1.8 U	4.3	9	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54B		Primary	08/23/96	Cesium-134	1.3 U	3.2	6.5	Filtered		LAS
RD-54B		Primary	08/23/96	Cesium-137	1.2 U	6.8	9.5	Filtered		LAS
RD-54B		Primary	08/23/96	Cobalt-57	-1.3 U	2.1	5.2	Filtered		LAS
RD-54B		Primary	08/23/96	Cobalt-60	0.5 U	4	8.9	Filtered		LAS
RD-54B		Primary	08/22/97	Cesium-134	0.4 U	1.5	3.1	Filtered		LAS
RD-54B		Primary	08/22/97	Cesium-137	0.2 U	2	3.6	Filtered		LAS
RD-54B		Primary	08/22/97	Cobalt-57	-0.2 U	1.3	3.3	Filtered		LAS
RD-54B		Primary	08/22/97	Cobalt-60	-2.4 U	1.2	5	Filtered		LAS
RD-54B		Primary	02/08/98	Cesium-134	7.42 U	---	7.42	Filtered		TN
RD-54B		Primary	02/08/98	Cesium-137	5.16 U	---	5.16	Filtered		TN
RD-54B		Primary	02/08/98	Cobalt-57	3.14 U	---	3.14	Filtered		TN
RD-54B		Primary	02/08/98	Cobalt-60	5.4 U	---	5.4	Filtered		TN
RD-54B		Primary	08/07/98	Cesium-134	15.4 U	---	15.4	Filtered		TN
RD-54B		Primary	08/07/98	Cesium-137	9.43 U	---	9.43	Filtered		TN
RD-54B		Primary	08/07/98	Cobalt-57	6.07 U	---	6.07	Filtered		TN
RD-54B		Primary	08/07/98	Cobalt-60	7.5 U	---	7.5	Filtered		TN
RD-54B		Primary	02/08/99	Cesium-134	18.3 U	---	18.3	Filtered		TN
RD-54B		Primary	02/08/99	Cesium-137	15.2 U	---	15.2	Filtered		TN
RD-54B		Primary	02/08/99	Cobalt-57	9.48 U	---	9.48	Filtered		TN
RD-54B		Primary	02/08/99	Cobalt-60	13.1 U	---	13.1	Filtered		TN
RD-54B		Primary	03/15/00	Cesium-134	8.14 U	---	8.14	Filtered		TR
RD-54B		Primary	03/15/00	Cesium-137	6.64 U	---	6.64	Filtered		TR
RD-54B		Primary	03/15/00	Cobalt-57	5.96 U	---	5.96	Filtered		TR
RD-54B		Primary	03/15/00	Cobalt-60	8.56 U	---	8.56	Filtered		TR
RD-54B		Primary	10/25/01	Cesium-134	0.3 U	6	14	Filtered		DL
RD-54B		Primary	10/25/01	Cesium-137	13 U	---	13	Filtered		DL
RD-54B		Primary	10/25/01	Cobalt-57	14 U	---	14	Filtered		DL
RD-54B		Primary	10/25/01	Cobalt-60	4.6 U	2	6	Filtered		DL
RD-54B		Primary	02/27/02	Cesium-134	5 U	3	5	Filtered		DL
RD-54B		Primary	02/27/02	Cesium-137	5 U	3	5	Filtered		DL
RD-54B		Primary	02/27/02	Cobalt-57	3 U	1	3	Filtered		DL
RD-54B		Primary	02/27/02	Cobalt-60	3 U	1	3	Filtered		DL
RD-54B		Primary	02/26/03	Cesium-134	4.17 U	---	4.17	Filtered		ES
RD-54B		Primary	02/26/03	Cesium-137	1.8 U	---	1.8	Filtered		ES
RD-54B		Primary	02/26/03	Cobalt-57	1.41 U	---	1.41	Filtered		ES
RD-54B		Primary	02/26/03	Cobalt-60	2.28 U	---	2.28	Filtered		ES
RD-54B		Primary	02/16/05	Cesium-134	1.71 U	---	1.71	Filtered		ES
RD-54B		Primary	02/16/05	Cesium-137	1.31 U	---	1.31	Filtered		ES
RD-54B		Primary	02/16/05	Cobalt-57	0.575 U	---	0.575	Filtered		ES
RD-54B		Primary	02/16/05	Cobalt-60	1.5 U	---	1.5	Filtered		ES
RD-54B		Primary	02/16/05	Europium-152	3.43 U	---	3.43	Filtered		ES
RD-54B		Primary	02/16/05	Europium-154	4.39 U	---	4.39	Filtered		ES
RD-54B		Primary	02/16/05	Manganese-54	1.38 U	---	1.38	Filtered		ES
RD-54B		Primary	02/16/05	Sodium-22	1.51 U	---	1.51	Filtered		ES
RD-54B		Primary	02/20/06	Cesium-134	1.56 U	---	1.56	Filtered		ES
RD-54B		Primary	02/20/06	Cesium-137	1.23 U	---	1.23	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54B		Primary	02/20/06	Cobalt-57	0.871 U	---	0.871	Filtered		ES
RD-54B		Primary	02/20/06	Cobalt-60	1.13 U	---	1.13	Filtered		ES
RD-54B		Primary	02/20/06	Europium-152	3.22 U	---	3.22	Filtered		ES
RD-54B		Primary	02/20/06	Europium-154	2.8 U	---	2.8	Filtered		ES
RD-54B		Primary	02/20/06	Manganese-54	1.09 U	---	1.09	Filtered		ES
RD-54B		Primary	02/20/06	Sodium-22	0.955 U	---	0.955	Filtered		ES
RD-54B		Primary	02/12/07	Cesium-134	1.42 U	---	1.42	Filtered		ES
RD-54B		Primary	02/12/07	Cesium-137	1.25 U	---	1.25	Filtered		ES
RD-54B		Primary	02/12/07	Cobalt-57	0.981 U	---	0.981	Filtered		ES
RD-54B		Primary	02/12/07	Cobalt-60	1.18 U	---	1.18	Filtered		ES
RD-54B		Primary	02/12/07	Europium-152	3.53 U	---	3.53	Filtered		ES
RD-54B		Primary	02/12/07	Europium-154	3.42 U	---	3.42	Filtered		ES
RD-54B		Primary	02/12/07	Manganese-54	1.16 U	---	1.16	Filtered		ES
RD-54B		Primary	02/12/07	Sodium-22	1.16 U	---	1.16	Filtered		ES
RD-54B		Primary	02/14/08	Cesium-134	1.41 U	---	1.41	Filtered		ES
RD-54B		Primary	02/14/08	Cesium-137	1.22 U	---	1.22	Filtered		ES
RD-54B		Primary	02/14/08	Cobalt-57	0.935 U	---	0.935	Filtered		ES
RD-54B		Primary	02/14/08	Cobalt-60	1.12 U	---	1.12	Filtered		ES
RD-54B		Primary	02/14/08	Europium-152	3.3 U	---	3.3	Filtered		ES
RD-54B		Primary	02/14/08	Europium-154	3.28 U	---	3.28	Filtered		ES
RD-54B		Primary	02/14/08	Manganese-54	1.1 U	---	1.1	Filtered		ES
RD-54B		Primary	02/14/08	Sodium-22	1.11 U	---	1.11	Filtered		ES
RD-54B		Primary	11/07/08	Antimony-125	1.72 U	---	1.72	Filtered		ES
RD-54B		Primary	11/07/08	Antimony-125	1.56 U	---	1.56	Unfiltered		ES
RD-54B		Primary	11/07/08	Barium-133	0.726 U	---	0.726	Filtered		ES
RD-54B		Primary	11/07/08	Barium-133	0.701 U	---	0.701	Unfiltered		ES
RD-54B		Primary	11/07/08	Cesium-134	0.947 U	---	0.947	Filtered		ES
RD-54B		Primary	11/07/08	Cesium-134	1.22 U	---	1.22	Unfiltered		ES
RD-54B		Primary	11/07/08	Cesium-137	0.772 U	---	0.772	Filtered		ES
RD-54B		Primary	11/07/08	Cesium-137	0.585 U	---	0.585	Unfiltered		ES
RD-54B		Primary	11/07/08	Cobalt-60	0.766 U	---	0.766	Filtered		ES
RD-54B		Primary	11/07/08	Cobalt-60	0.617 U	---	0.617	Unfiltered		ES
RD-54B		Primary	11/07/08	Europium-152	1.76 U	---	1.76	Filtered		ES
RD-54B		Primary	11/07/08	Europium-152	1.91 U	---	1.91	Unfiltered		ES
RD-54B		Primary	11/07/08	Europium-154	2.29 U	---	2.29	Filtered		ES
RD-54B		Primary	11/07/08	Europium-154	1.62 U	---	1.62	Unfiltered		ES
RD-54B		Primary	11/07/08	Europium-155	1.65 U	---	1.65	Filtered		ES
RD-54B		Primary	11/07/08	Europium-155	2.17 U	---	2.17	Unfiltered		ES
RD-54B		Primary	11/07/08	Manganese-54	0.727 U	---	0.727	Filtered		ES
RD-54B		Primary	11/07/08	Manganese-54	0.611 U	---	0.611	Unfiltered		ES
RD-54B		Primary	11/07/08	Sodium-22	0.778 U	---	0.778	Filtered		ES
RD-54B		Primary	11/07/08	Sodium-22	0.548 U	---	0.548	Unfiltered		ES
RD-54B		Primary	02/23/09	Antimony-125	0.741 U	2	3.4	Filtered		ES
RD-54B		Primary	02/23/09	Antimony-125	-0.659 U	2.6	4.36	Unfiltered		ES
RD-54B		Primary	02/23/09	Barium-133	0.472 U	1.9	3.24	Filtered		ES
RD-54B		Primary	02/23/09	Barium-133	0.071 U	0.52	1.84	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54B		Primary	02/23/09	Cesium-134	-0.868 U	1.4	2.39	Filtered		ES
RD-54B		Primary	02/23/09	Cesium-134	-1.6 U	1.4	2.49	Unfiltered		ES
RD-54B		Primary	02/23/09	Cesium-137	0.56 U	1	1.7	Filtered		ES
RD-54B		Primary	02/23/09	Cesium-137	-0.594 U	1.4	2.4	Unfiltered		ES
RD-54B		Primary	02/23/09	Cobalt-60	-0.739 U	0.82	1.54	Filtered		ES
RD-54B		Primary	02/23/09	Cobalt-60	0.458 U	0.86	1.46	Unfiltered		ES
RD-54B		Primary	02/23/09	Europium-152	1.07 U	1.3	4.93	Filtered		ES
RD-54B		Primary	02/23/09	Europium-152	0.021 U	1.2	4.01	Unfiltered		ES
RD-54B		Primary	02/23/09	Europium-154	-0.164 U	2.1	3.81	Filtered		ES
RD-54B		Primary	02/23/09	Europium-154	-2.31 U	2.2	4.02	Unfiltered		ES
RD-54B		Primary	02/23/09	Europium-155	0.666 U	4.1	6.86	Filtered		ES
RD-54B		Primary	02/23/09	Europium-155	-0.794 U	3.4	5.74	Unfiltered		ES
RD-54B		Primary	02/23/09	Manganese-54	0.561 U	0.92	1.56	Filtered		ES
RD-54B		Primary	02/23/09	Manganese-54	-0.124 U	1.3	2.18	Unfiltered		ES
RD-54B		Primary	02/23/09	Sodium-22	-0.056 U	0.72	1.3	Filtered		ES
RD-54B		Primary	02/23/09	Sodium-22	-0.785 U	0.76	1.36	Unfiltered		ES
RD-54B		Primary	10/30/09	Antimony-125	2.3 U	5.9	10.2	Filtered		TAD
RD-54B		Primary	10/30/09	Antimony-125	0.43 U	7.3	12.6	Unfiltered		TAD
RD-54B		Duplicate	10/30/09	Antimony-125	4.85 U	12	20.4	Filtered		TAD
RD-54B		Duplicate	10/30/09	Antimony-125	-1.44 U	6.8	12	Unfiltered		TAD
RD-54B		Primary	10/30/09	Barium-133	0.687 U	5.2	3.24	Filtered		TAD
RD-54B		Primary	10/30/09	Barium-133	0.912 U	1.1	3.95	Unfiltered		TAD
RD-54B		Duplicate	10/30/09	Barium-133	2.16 U	4.4	7.44	Filtered		TAD
RD-54B		Duplicate	10/30/09	Barium-133	0.579 U	1.1	3.53	Unfiltered		TAD
RD-54B		Primary	10/30/09	Cesium-134	0.382 U	1.2	4.36	Filtered		TAD
RD-54B		Primary	10/30/09	Cesium-134	3.2 U	3.3	5.48	Unfiltered		TAD
RD-54B		Duplicate	10/30/09	Cesium-134	-1.96 U	5.9	6.87	Filtered		TAD
RD-54B		Duplicate	10/30/09	Cesium-134	0.933 U	2.4	4.25	Unfiltered		TAD
RD-54B		Primary	10/30/09	Cesium-137	-1.13 U	2.4	4.29	Filtered		TAD
RD-54B		Primary	10/30/09	Cesium-137	-1.31 U	1.9	3.55	Unfiltered		TAD
RD-54B		Duplicate	10/30/09	Cesium-137	-0.75 U	4.2	7.46	Filtered		TAD
RD-54B		Duplicate	10/30/09	Cesium-137	-0.92 U	2.4	4.39	Unfiltered		TAD
RD-54B		Primary	10/30/09	Cobalt-60	-1.22 U	3	5.45	Filtered		TAD
RD-54B		Primary	10/30/09	Cobalt-60	-1.4 U	2.1	4.02	Unfiltered		TAD
RD-54B		Duplicate	10/30/09	Cobalt-60	-1.78 U	4.7	8.87	Filtered		TAD
RD-54B		Duplicate	10/30/09	Cobalt-60	-2.78 U	3.1	5.91	Unfiltered		TAD
RD-54B		Primary	10/30/09	Europium-152	-4.1 U	8	14	Filtered		TAD
RD-54B		Primary	10/30/09	Europium-152	0.391 U	8.7	11.8	Unfiltered		TAD
RD-54B		Duplicate	10/30/09	Europium-152	2.77 U	11	19.4	Filtered		TAD
RD-54B		Duplicate	10/30/09	Europium-152	2.82 U	3.2	8.92	Unfiltered		TAD
RD-54B		Primary	10/30/09	Europium-154	4.22 U	8.8	12.1	Filtered		TAD
RD-54B		Primary	10/30/09	Europium-154	2.72 U	9.4	12.1	Unfiltered		TAD
RD-54B		Duplicate	10/30/09	Europium-154	-5.58 U	11	21.9	Filtered		TAD
RD-54B		Duplicate	10/30/09	Europium-154	-1.91 U	9.6	17.5	Unfiltered		TAD
RD-54B		Primary	10/30/09	Europium-155	1.76 U	5.6	9.5	Filtered		TAD
RD-54B		Primary	10/30/09	Europium-155	0.927 U	7.8	13.3	Unfiltered		TAD

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54B		Duplicate	10/30/09	Europium-155	-1.81 U	14	23.4	Filtered		TAD
RD-54B		Duplicate	10/30/09	Europium-155	3.84 U	5.5	9.25	Unfiltered		TAD
RD-54B		Primary	10/30/09	Manganese-54	1.4 U	2.2	3.8	Filtered		TAD
RD-54B		Primary	10/30/09	Manganese-54	-0.451 U	2.3	4.08	Unfiltered		TAD
RD-54B		Duplicate	10/30/09	Manganese-54	2.06 U	4.5	7.74	Filtered		TAD
RD-54B		Duplicate	10/30/09	Manganese-54	0.758 U	1.8	3.13	Unfiltered		TAD
RD-54B		Primary	10/30/09	Sodium-22	1.44 U	3	4.12	Filtered		TAD
RD-54B		Primary	10/30/09	Sodium-22	-0.507 U	2.6	4.61	Unfiltered		TAD
RD-54B		Duplicate	10/30/09	Sodium-22	-1.89 U	3.8	7.4	Filtered		TAD
RD-54B		Duplicate	10/30/09	Sodium-22	-0.651 U	3.3	5.94	Unfiltered		TAD
RD-54C		Primary	09/11/93	Cesium-137	0 U	---	---	Filtered		CEP
RD-54C		Primary	09/29/93	Cesium-137	0 U	---	---	Filtered		CEP
RD-54C		Primary	05/08/94	Cesium-137	2.7 U	5.7	6.5	Filtered		LAS
RD-54C		Primary	05/08/94	Cobalt-57	0 U	---	3.4	Filtered		LAS
RD-54C		Primary	05/08/94	Cobalt-60	-2.5 U	3.6	6.9	Filtered		LAS
RD-54C		Primary	08/08/94	Cesium-134	5 U	---	25	Filtered		LAS
RD-54C		Primary	08/08/94	Cesium-137	5 U	---	27	Filtered		LAS
RD-54C		Primary	08/08/94	Cobalt-57	-7.1 U	---	19	Filtered		LAS
RD-54C		Primary	08/08/94	Cobalt-60	-8 U	---	31	Filtered		LAS
RD-54C		Primary	08/30/95	Cesium-134	-3.3 U	2.2	7.8	Filtered		LAS
RD-54C		Primary	08/30/95	Cesium-137	5.6 U	5.5	8	Filtered		LAS
RD-54C		Primary	08/30/95	Cobalt-57	-1.1 U	1.8	4.7	Filtered		LAS
RD-54C		Primary	08/30/95	Cobalt-60	-3.3 U	2.3	11	Filtered		LAS
RD-54C		Primary	05/16/96	Cesium-134	0.3 U	5.1	7.5	Filtered		LAS
RD-54C		Primary	05/16/96	Cesium-137	-1.3 U	7.2	9.7	Filtered		LAS
RD-54C		Primary	05/16/96	Cobalt-57	-0.2 U	1.5	4.5	Filtered		LAS
RD-54C		Primary	05/16/96	Cobalt-60	-4.3 U	2.2	10	Filtered		LAS
RD-54C		Primary	08/23/96	Cesium-134	-2.4 U	2.9	7.7	Filtered		LAS
RD-54C		Primary	08/23/96	Cesium-137	2.3 U	5	8.4	Filtered		LAS
RD-54C		Primary	08/23/96	Cobalt-57	0.9 U	3.3	4.3	Filtered		LAS
RD-54C		Primary	08/23/96	Cobalt-60	2 U	4	8.3	Filtered		LAS
RD-54C		Primary	08/24/97	Cesium-134	1.2 U	2.9	6.2	Filtered		LAS
RD-54C		Primary	08/24/97	Cesium-137	1 U	4.5	7.6	Filtered		LAS
RD-54C		Primary	08/24/97	Cobalt-57	0.2 U	3.4	4.6	Filtered		LAS
RD-54C		Primary	08/24/97	Cobalt-60	-1.4 U	2.3	8.5	Filtered		LAS
RD-54C		Primary	02/08/98	Cesium-134	15.1 U	---	15.1	Filtered		TN
RD-54C		Primary	02/08/98	Cesium-137	11 U	---	11	Filtered		TN
RD-54C		Primary	02/08/98	Cobalt-57	7.21 U	---	7.21	Filtered		TN
RD-54C		Primary	02/08/98	Cobalt-60	12.4 U	---	12.4	Filtered		TN
RD-54C		Primary	08/07/98	Cesium-134	22.6 U	---	22.6	Filtered		TN
RD-54C		Primary	08/07/98	Cesium-137	25.8 U	---	25.8	Filtered		TN
RD-54C		Primary	08/07/98	Cobalt-57	13.6 U	---	13.6	Filtered		TN
RD-54C		Primary	08/07/98	Cobalt-60	24.4 U	---	24.4	Filtered		TN
RD-54C		Primary	02/09/99	Cesium-134	20.4 U	---	20.4	Filtered		TN
RD-54C		Primary	02/09/99	Cesium-137	15.7 U	---	15.7	Filtered		TN
RD-54C		Primary	02/09/99	Cobalt-57	6.02 U	---	6.02	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54C		Primary	02/09/99	Cobalt-60	21.9 U	---	21.9	Filtered		TN
RD-54C		Primary	03/15/00	Cesium-134	5.14 U	---	5.14	Filtered		TR
RD-54C		Primary	03/15/00	Cesium-137	3.84 U	---	3.84	Filtered		TR
RD-54C		Primary	03/15/00	Cobalt-57	2.45 U	---	2.45	Filtered		TR
RD-54C		Primary	03/15/00	Cobalt-60	4.65 U	---	4.65	Filtered		TR
RD-54C		Primary	11/02/01	Cesium-134	5 U	---	5	Filtered		DL
RD-54C		Primary	11/02/01	Cesium-137	10 U	---	10	Filtered		DL
RD-54C		Primary	11/02/01	Cobalt-57	1.2 U	2.3	5	Filtered		DL
RD-54C		Primary	11/02/01	Cobalt-60	5 U	---	5	Filtered		DL
RD-54C		Primary	02/27/02	Cesium-134	5 U	3	5	Filtered		DL
RD-54C		Primary	02/27/02	Cesium-137	5 U	3	5	Filtered		DL
RD-54C		Primary	02/27/02	Cobalt-57	5 U	5	5	Filtered		DL
RD-54C		Primary	02/27/02	Cobalt-60	5 U	5	5	Filtered		DL
RD-54C		Primary	02/26/03	Cesium-134	1.88 U	---	1.88	Filtered		ES
RD-54C		Primary	02/26/03	Cesium-137	1.57 U	---	1.57	Filtered		ES
RD-54C		Primary	02/26/03	Cobalt-57	0.946 U	---	0.946	Filtered		ES
RD-54C		Primary	02/26/03	Cobalt-60	1.63 U	---	1.63	Filtered		ES
RD-54C		Primary	11/05/04	Cesium-134	2.87 U	---	2.87	Filtered		ES
RD-54C		Primary	11/05/04	Cesium-137	2.35 U	---	2.35	Filtered		ES
RD-54C		Primary	11/05/04	Cobalt-57	1.41 U	---	1.41	Filtered		ES
RD-54C		Primary	11/05/04	Cobalt-60	2.26 U	---	2.26	Filtered		ES
RD-54C		Primary	11/05/04	Europium-152	5.47 U	---	5.47	Filtered		ES
RD-54C		Primary	11/05/04	Europium-154	6.22 U	---	6.22	Filtered		ES
RD-54C		Primary	11/05/04	Manganese-54	2.32 U	---	2.32	Filtered		ES
RD-54C		Primary	11/05/04	Sodium-22	2.16 U	---	2.16	Filtered		ES
RD-54C		Primary	02/17/05	Cesium-134	1.75 U	---	1.75	Filtered		ES
RD-54C		Split	02/17/05	Cesium-134	-0.202 U	0.85	1.44	Filtered		STL
RD-54C		Primary	02/17/05	Cesium-137	1.45 U	---	1.45	Filtered		ES
RD-54C		Split	02/17/05	Cesium-137	0.857 U	0.76	1.34	Filtered		STL
RD-54C		Primary	02/17/05	Cobalt-57	0.928 U	---	0.928	Filtered		ES
RD-54C		Split	02/17/05	Cobalt-57	-4.38 U	3.4	5.55	Filtered		STL
RD-54C		Primary	02/17/05	Cobalt-60	1.67 U	---	1.67	Filtered		ES
RD-54C		Split	02/17/05	Cobalt-60	0.637 U	0.83	1.51	Filtered		STL
RD-54C		Primary	02/17/05	Europium-152	3.43 U	---	3.43	Filtered		ES
RD-54C		Split	02/17/05	Europium-152	-1.07 U	1.9	3.15	Filtered		STL
RD-54C		Primary	02/17/05	Europium-154	4.61 U	---	4.61	Filtered		ES
RD-54C		Split	02/17/05	Europium-154	1.17 U	2.4	4.28	Filtered		STL
RD-54C		Primary	02/17/05	Manganese-54	1.43 U	---	1.43	Filtered		ES
RD-54C		Split	02/17/05	Manganese-54	-0.0764 U	0.8	1.36	Filtered		STL
RD-54C		Primary	02/17/05	Sodium-22	1.58 U	---	1.58	Filtered		ES
RD-54C		Split	02/17/05	Sodium-22	0.411 U	0.87	1.54	Filtered		STL
RD-54C		Primary	02/23/06	Cesium-134	1.26 U	---	1.26	Filtered		ES
RD-54C		Primary	02/23/06	Cesium-137	1.1 U	---	1.1	Filtered		ES
RD-54C		Primary	02/23/06	Cobalt-57	0.667 U	---	0.667	Filtered		ES
RD-54C		Primary	02/23/06	Cobalt-60	1.1 U	---	1.1	Filtered		ES
RD-54C		Primary	02/23/06	Europium-152	2.82 U	---	2.82	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54C		Primary	02/23/06	Europium-154	3.17 U	---	3.17	Filtered		ES
RD-54C		Primary	02/23/06	Manganese-54	1.01 U	---	1.01	Filtered		ES
RD-54C		Primary	02/23/06	Sodium-22	1.08 U	---	1.08	Filtered		ES
RD-54C		Primary	02/12/07	Cesium-134	1.03 U	---	1.03	Filtered		ES
RD-54C		Primary	02/12/07	Cesium-137	0.842 U	---	0.842	Filtered		ES
RD-54C		Primary	02/12/07	Cobalt-57	0.6 U	---	0.6	Filtered		ES
RD-54C		Primary	02/12/07	Cobalt-60	0.982 U	---	0.982	Filtered		ES
RD-54C		Primary	02/12/07	Europium-152	2.26 U	---	2.26	Filtered		ES
RD-54C		Primary	02/12/07	Europium-154	2.53 U	---	2.53	Filtered		ES
RD-54C		Primary	02/12/07	Manganese-54	0.894 U	---	0.894	Filtered		ES
RD-54C		Primary	02/12/07	Sodium-22	0.915 U	---	0.915	Filtered		ES
RD-54C		Primary	02/14/08	Cesium-134	1.32 U	---	1.32	Filtered		ES
RD-54C		Primary	02/14/08	Cesium-137	1.19 U	---	1.19	Filtered		ES
RD-54C		Primary	02/14/08	Cobalt-57	1.65 U	---	1.65	Filtered		ES
RD-54C		Primary	02/14/08	Cobalt-60	1.2 U	---	1.2	Filtered		ES
RD-54C		Primary	02/14/08	Europium-152	3.08 U	---	3.08	Filtered		ES
RD-54C		Primary	02/14/08	Europium-154	3.65 U	---	3.65	Filtered		ES
RD-54C		Primary	02/14/08	Manganese-54	1.26 U	---	1.26	Filtered		ES
RD-54C		Primary	02/14/08	Sodium-22	1.24 U	---	1.24	Filtered		ES
RD-54C		Primary	02/24/09	Antimony-125	0.404 U	1.5	2.63	Filtered		ES
RD-54C		Primary	02/24/09	Antimony-125	0.368 U	1.4	2.43	Unfiltered		ES
RD-54C		Primary	02/24/09	Barium-133	0.064 U	0.054	0.857	Filtered		ES
RD-54C		Primary	02/24/09	Barium-133	0.086 U	0.33	1.05	Unfiltered		ES
RD-54C		Primary	02/24/09	Cesium-134	-0.06 U	0.53	0.93	Filtered		ES
RD-54C		Primary	02/24/09	Cesium-134	0.621 U	0.93	1.3	Unfiltered		ES
RD-54C		Primary	02/24/09	Cesium-137	-0.615 U	0.61	1.09	Filtered		ES
RD-54C		Primary	02/24/09	Cesium-137	-0.88 U	1.1	1.82	Unfiltered		ES
RD-54C		Primary	02/24/09	Cobalt-60	-0.074 U	0.32	0.602	Filtered		ES
RD-54C		Primary	02/24/09	Cobalt-60	0.065 U	1	1.77	Unfiltered		ES
RD-54C		Primary	02/24/09	Europium-152	1.09 U	1.8	3.11	Filtered		ES
RD-54C		Primary	02/24/09	Europium-152	0.622 U	1.1	3.34	Unfiltered		ES
RD-54C		Primary	02/24/09	Europium-154	-0.008 U	1.2	2.22	Filtered		ES
RD-54C		Primary	02/24/09	Europium-154	-0.587 U	3.2	5.42	Unfiltered		ES
RD-54C		Primary	02/24/09	Europium-155	0.176 U	1.4	2.46	Filtered		ES
RD-54C		Primary	02/24/09	Europium-155	0.423 U	2.7	4.54	Unfiltered		ES
RD-54C		Primary	02/24/09	Manganese-54	-0.021 U	0.38	0.674	Filtered		ES
RD-54C		Primary	02/24/09	Manganese-54	0.297 U	0.87	1.47	Unfiltered		ES
RD-54C		Primary	02/24/09	Sodium-22	-0.003 U	0.42	0.754	Filtered		ES
RD-54C		Primary	02/24/09	Sodium-22	-0.199 U	1.1	1.84	Unfiltered		ES
RD-54C		Primary	08/04/09	Antimony-125	-0.678 U	12	21.4	Filtered		ES
RD-54C		Primary	08/04/09	Antimony-125	12.2 U	12	19.6	Unfiltered		ES
RD-54C		Primary	08/04/09	Barium-133	1.68 U	1.9	5.52	Filtered		ES
RD-54C		Primary	08/04/09	Barium-133	0.426 U	1.5	6.54	Unfiltered		ES
RD-54C		Primary	08/04/09	Cesium-134	-1.78 U	4.8	8.78	Filtered		ES
RD-54C		Primary	08/04/09	Cesium-134	1.05 U	5	8.79	Unfiltered		ES
RD-54C		Primary	08/04/09	Cesium-137	-0.202 U	5.5	9.69	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54C		Primary	08/04/09	Cesium-137	-0.982 U	4.5	8.08	Unfiltered		ES
RD-54C		Primary	08/04/09	Cobalt-60	0.222 U	4.2	7.68	Filtered		ES
RD-54C		Primary	08/04/09	Cobalt-60	1.6 U	4.7	8.38	Unfiltered		ES
RD-54C		Primary	08/04/09	Europium-152	-12 U	15	26	Filtered		ES
RD-54C		Primary	08/04/09	Europium-152	8.74 U	14	24.2	Unfiltered		ES
RD-54C		Primary	08/04/09	Europium-154	-1.44 U	17	31.2	Filtered		ES
RD-54C		Primary	08/04/09	Europium-154	-2.18 U	15	27.5	Unfiltered		ES
RD-54C		Primary	08/04/09	Europium-155	3.73 U	11	18.4	Filtered		ES
RD-54C		Primary	08/04/09	Europium-155	1.75 U	11	18.2	Unfiltered		ES
RD-54C		Primary	08/04/09	Manganese-54	1.66 U	3.9	6.81	Filtered		ES
RD-54C		Primary	08/04/09	Manganese-54	1.57 U	6.3	10.9	Unfiltered		ES
RD-54C		Primary	08/04/09	Sodium-22	-0.489 U	5.9	10.6	Filtered		ES
RD-54C		Primary	08/04/09	Sodium-22	-0.739 U	5.1	9.32	Unfiltered		ES
RD-56A		Primary	05/28/98	Cesium-134	7.87 U	---	7.87	Filtered		TN
RD-56A		Primary	05/28/98	Cesium-137	6.38 U	---	6.38	Filtered		TN
RD-56A		Primary	05/28/98	Cobalt-57	3.99 U	---	3.99	Filtered		TN
RD-56A		Primary	05/28/98	Cobalt-60	8 U	---	8	Filtered		TN
RD-56B		Primary	05/28/98	Cesium-134	17.2 U	---	17.2	Filtered		TN
RD-56B		Primary	05/28/98	Cesium-137	15.6 U	---	15.6	Filtered		TN
RD-56B		Primary	05/28/98	Cobalt-57	8.48 U	---	8.48	Filtered		TN
RD-56B		Primary	05/28/98	Cobalt-60	19.3 U	---	19.3	Filtered		TN
RD-57		Primary	03/16/94	Cesium-134	0 U	---	---	Filtered		LAS
RD-57		Primary	03/16/94	Cesium-137	0 U	---	---	Filtered		LAS
RD-57		Primary	03/16/94	Cobalt-57	0 U	---	---	Filtered		LAS
RD-57		Primary	03/16/94	Cobalt-60	0 U	---	---	Filtered		LAS
RD-57		Primary	05/10/94	Cesium-137	-0.3 U	2.5	3.6	Filtered		LAS
RD-57		Primary	05/10/94	Cobalt-57	0.7 U	1.7	2.9	Filtered		LAS
RD-57		Primary	05/10/94	Cobalt-60	-0.2 U	1.5	3.3	Filtered		LAS
RD-57		Primary	08/18/94	Cesium-134	-5 U	---	28	Filtered		LAS
RD-57		Primary	08/18/94	Cesium-137	0 U	---	30	Filtered		LAS
RD-57		Primary	08/18/94	Cobalt-57	-2.7 U	---	22	Filtered		LAS
RD-57		Primary	08/18/94	Cobalt-60	8 U	---	31	Filtered		LAS
RD-57		Primary	02/07/95	Cesium-134	-4.1 U	3	6.2	Filtered		LAS
RD-57		Primary	02/07/95	Cesium-137	-0.7 U	3.8	10	Filtered		LAS
RD-57		Primary	02/07/95	Cobalt-57	1.1 U	2.5	4.1	Filtered		LAS
RD-57		Primary	02/07/95	Cobalt-60	-2.5 U	3.8	13	Filtered		LAS
RD-57		Primary	08/09/95	Cesium-134	0.7 U	3.7	7.2	Filtered		LAS
RD-57		Primary	08/09/95	Cesium-137	-1.1 U	4.8	9.1	Filtered		LAS
RD-57		Primary	08/09/95	Cobalt-57	-0.8 U	2.7	4.8	Filtered		LAS
RD-57		Primary	08/09/95	Cobalt-60	3.9 U	5	8.2	Filtered		LAS
RD-57		Primary	02/19/96	Cesium-134	-1.4 U	3.4	7	Filtered		LAS
RD-57		Primary	02/19/96	Cesium-137	-0.1 U	6.7	9.3	Filtered		LAS
RD-57		Primary	02/19/96	Cobalt-57	-1.1 U	2.5	4.5	Filtered		LAS
RD-57		Primary	02/19/96	Cobalt-60	0.2 U	4.2	8	Filtered		LAS
RD-57		Primary	08/22/96	Cesium-134	3.2 U	3.2	5.8	Filtered		LAS
RD-57		Primary	08/22/96	Cesium-137	1.4 U	6.2	8.4	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-57		Primary	08/22/96	Cobalt-57	-3.3 U	1.7	4.8	Filtered		LAS
RD-57		Primary	08/22/96	Cobalt-60	1.1 U	3.9	8.3	Filtered		LAS
RD-57		Primary	02/25/97	Cesium-134	-0.2 U	3.4	7.1	Filtered		LAS
RD-57		Primary	02/25/97	Cesium-137	0.1 U	6.6	9.1	Filtered		LAS
RD-57		Primary	02/25/97	Cobalt-57	-0.8 U	1.8	4.6	Filtered		LAS
RD-57		Primary	02/25/97	Cobalt-60	-4.3 U	3.3	9.5	Filtered		LAS
RD-57		Primary	08/27/97	Cesium-134	-1.9 U	3.3	7.9	Filtered		LAS
RD-57		Primary	08/27/97	Cesium-134	-0.1 U	3.1	7.3	Unfiltered		LAS
RD-57		Primary	08/27/97	Cesium-137	3.6 U	7.5	9.9	Filtered		LAS
RD-57		Primary	08/27/97	Cesium-137	2.6 U	7	9.3	Unfiltered		LAS
RD-57		Primary	08/27/97	Cobalt-57	0.6 U	3.3	4.3	Filtered		LAS
RD-57		Primary	08/27/97	Cobalt-57	-1.4 U	1.6	4.4	Unfiltered		LAS
RD-57		Primary	08/27/97	Cobalt-60	2.9 U	5.7	11	Filtered		LAS
RD-57		Primary	08/27/97	Cobalt-60	-1 U	3.2	10	Unfiltered		LAS
RD-57		Primary	05/26/98	Cesium-134	8.26 U	---	8.26	Filtered		TN
RD-57		Primary	05/26/98	Cesium-137	6.41 U	---	6.41	Filtered		TN
RD-57		Primary	05/26/98	Cobalt-57	3.9 U	---	3.9	Filtered		TN
RD-57		Primary	05/26/98	Cobalt-60	6.88 U	---	6.88	Filtered		TN
RD-57		Primary	08/17/98	Cesium-134	18.8 U	---	18.8	Filtered		TN
RD-57		Primary	08/17/98	Cesium-137	12.4 U	---	12.4	Filtered		TN
RD-57		Primary	08/17/98	Cobalt-57	8.57 U	---	8.57	Filtered		TN
RD-57		Primary	08/17/98	Cobalt-60	10.9 U	---	10.9	Filtered		TN
RD-57		Primary	05/13/99	Cesium-134	7.92 U	---	7.92	Filtered		TN
RD-57		Primary	05/13/99	Cesium-137	6.32 U	---	6.32	Filtered		TN
RD-57		Primary	05/13/99	Cobalt-57	3.62 U	---	3.62	Filtered		TN
RD-57		Primary	05/13/99	Cobalt-60	6.11 U	---	6.11	Filtered		TN
RD-57		Primary	02/09/00	Cesium-134	16.4 U	---	16.4	Filtered		TR
RD-57		Primary	02/09/00	Cesium-137	13.4 U	---	13.4	Filtered		TR
RD-57		Primary	02/09/00	Cobalt-57	6.95 U	---	6.95	Filtered		TR
RD-57		Primary	02/09/00	Cobalt-60	14.7 U	---	14.7	Filtered		TR
RD-57		Primary	05/11/01	Cesium-134	7.56 U	---	7.56	Filtered		ES
RD-57		Primary	05/11/01	Cesium-137	6.06 U	---	6.06	Filtered		ES
RD-57		Primary	05/11/01	Cobalt-57	3.27 U	---	3.27	Filtered		ES
RD-57		Primary	05/11/01	Cobalt-60	7.44 U	---	7.44	Filtered		ES
RD-57		Primary	02/14/02	Cesium-134	5 U	1	5	Filtered		DL
RD-57		Primary	02/14/02	Cesium-137	5 U	0.4	5	Filtered		DL
RD-57		Primary	02/14/02	Cobalt-57	5 U	1	5	Filtered		DL
RD-57		Primary	02/14/02	Cobalt-60	5 U	1	5	Filtered		DL
RD-57	Z08	Primary	01/29/03	Cesium-134	2.11 U	---	2.11	Filtered		ES
RD-57	Z08	Primary	01/29/03	Cesium-137	1.59 U	---	1.59	Filtered		ES
RD-57	Z08	Primary	01/29/03	Cobalt-57	1.16 U	---	1.16	Filtered		ES
RD-57	Z08	Primary	01/29/03	Cobalt-60	2.12 U	---	2.12	Filtered		ES
RD-57	Z08	Primary	04/30/03	Cesium-134	3.63 U	---	3.63	Filtered		ES
RD-57	Z08	Primary	04/30/03	Cesium-137	1.25 U	---	1.25	Filtered		ES
RD-57	Z08	Primary	04/30/03	Cobalt-57	0.901 U	---	0.901	Filtered		ES
RD-57	Z08	Primary	04/30/03	Cobalt-60	1.58 U	---	1.58	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-57	Z07	Primary	03/08/05	Cesium-134	1.53 U	---	1.53	Filtered		ES
RD-57	Z07	Primary	03/08/05	Cesium-137	1.32 U	---	1.32	Filtered		ES
RD-57	Z07	Primary	03/08/05	Cobalt-57	0.908 U	---	0.908	Filtered		ES
RD-57	Z07	Primary	03/08/05	Cobalt-60	1.4 U	---	1.4	Filtered		ES
RD-57	Z07	Primary	03/08/05	Europium-152	3.46 U	---	3.46	Filtered		ES
RD-57	Z07	Primary	03/08/05	Europium-154	4.2 U	---	4.2	Filtered		ES
RD-57	Z07	Primary	03/08/05	Manganese-54	1.38 U	---	1.38	Filtered		ES
RD-57	Z07	Primary	03/08/05	Sodium-22	1.44 U	---	1.44	Filtered		ES
RD-57	Z07	Primary	02/20/06	Cesium-134	1.14 U	---	1.14	Filtered		ES
RD-57	Z07	Primary	02/20/06	Cesium-137	0.942 U	---	0.942	Filtered		ES
RD-57	Z07	Primary	02/20/06	Cobalt-57	0.704 U	---	0.704	Filtered		ES
RD-57	Z07	Primary	02/20/06	Cobalt-60	1.02 U	---	1.02	Filtered		ES
RD-57	Z07	Primary	02/20/06	Europium-152	2.4 U	---	2.4	Filtered		ES
RD-57	Z07	Primary	02/20/06	Europium-154	3.15 U	---	3.15	Filtered		ES
RD-57	Z07	Primary	02/20/06	Manganese-54	0.939 U	---	0.939	Filtered		ES
RD-57	Z07	Primary	02/20/06	Sodium-22	1.09 U	---	1.09	Filtered		ES
RD-57	Z07	Primary	02/08/07	Cesium-134	1.35 U	---	1.35	Filtered		ES
RD-57	Z07	Primary	02/08/07	Cesium-137	1.04 U	---	1.04	Filtered		ES
RD-57	Z07	Primary	02/08/07	Cobalt-57	0.706 U	---	0.706	Filtered		ES
RD-57	Z07	Primary	02/08/07	Cobalt-60	1.07 U	---	1.07	Filtered		ES
RD-57	Z07	Primary	02/08/07	Europium-152	2.93 U	---	2.93	Filtered		ES
RD-57	Z07	Primary	02/08/07	Europium-154	3.3 U	---	3.3	Filtered		ES
RD-57	Z07	Primary	02/08/07	Manganese-54	1.01 U	---	1.01	Filtered		ES
RD-57	Z07	Primary	02/08/07	Sodium-22	1.12 U	---	1.12	Filtered		ES
RD-57	Z08	Primary	02/07/08	Cesium-134	1.05 U	---	1.05	Filtered		ES
RD-57	Z08	Primary	02/07/08	Cesium-137	0.861 U	---	0.861	Filtered		ES
RD-57	Z08	Primary	02/07/08	Cobalt-57	0.705 U	---	0.705	Filtered		ES
RD-57	Z08	Primary	02/07/08	Cobalt-60	0.753 U	---	0.753	Filtered		ES
RD-57	Z08	Primary	02/07/08	Europium-152	2.72 U	---	2.72	Filtered		ES
RD-57	Z08	Primary	02/07/08	Europium-154	2.26 U	---	2.26	Filtered		ES
RD-57	Z08	Primary	02/07/08	Manganese-54	0.769 U	---	0.769	Filtered		ES
RD-57	Z08	Primary	02/07/08	Sodium-22	0.769 U	---	0.769	Filtered		ES
RD-57	Z07	Primary	07/17/09	Antimony-125	14.3 U	23	39.7	Unfiltered		ES
RD-57	Z07	Primary	07/17/09	Barium-133	6.1 U	9.7	16.5	Unfiltered		ES
RD-57	Z07	Primary	07/17/09	Cesium-134	-10.5 U	11	20.1	Unfiltered		ES
RD-57	Z07	Primary	07/17/09	Cesium-137	2.67 U	10	17.9	Unfiltered		ES
RD-57	Z07	Primary	07/17/09	Cobalt-60	2.05 U	6.8	12.3	Unfiltered		ES
RD-57	Z07	Primary	07/17/09	Europium-152	6.38 U	19	32.2	Unfiltered		ES
RD-57	Z07	Primary	07/17/09	Europium-154	8.62 U	21	37	Unfiltered		ES
RD-57	Z07	Primary	07/17/09	Europium-155	4.52 U	30	50.6	Unfiltered		ES
RD-57	Z07	Primary	07/17/09	Manganese-54	4.08 U	7.1	12.3	Unfiltered		ES
RD-57	Z07	Primary	07/17/09	Sodium-22	2.95 U	7.1	12.7	Unfiltered		ES
RD-59A		Primary	08/16/94	Cesium-134	1 U	---	34	Filtered		LAS
RD-59A		Primary	08/16/94	Cesium-137	-6 U	---	40	Filtered		LAS
RD-59A		Primary	08/16/94	Cobalt-57	-12.5 U	---	26	Filtered		LAS
RD-59A		Primary	08/16/94	Cobalt-60	8 U	---	38	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-59A		Primary	02/06/95	Cesium-134	-4.1 U	3.4	8.5	Filtered		LAS
RD-59A		Primary	02/06/95	Cesium-134	1.7 U	3.7	7.3	Filtered		LAS
RD-59A		Duplicate	02/06/95	Cesium-134	7.3 U	---	7.3	Filtered		LAS
RD-59A		Primary	02/06/95	Cesium-137	0.6 U	7.5	10	Filtered		LAS
RD-59A		Primary	02/06/95	Cesium-137	-0.6 U	1.7	11	Filtered		LAS
RD-59A		Duplicate	02/06/95	Cesium-137	11 U	---	11	Filtered		LAS
RD-59A		Primary	02/06/95	Cobalt-57	-1.6 U	2.9	5.1	Filtered		LAS
RD-59A		Primary	02/06/95	Cobalt-57	-0.9 U	3.2	5.6	Filtered		LAS
RD-59A		Duplicate	02/06/95	Cobalt-57	5.1 U	---	5.1	Filtered		LAS
RD-59A		Primary	02/06/95	Cobalt-60	-0.7 U	4.7	12	Filtered		LAS
RD-59A		Primary	02/06/95	Cobalt-60	-1.1 U	5.1	13	Filtered		LAS
RD-59A		Duplicate	02/06/95	Cobalt-60	12 U	---	12	Filtered		LAS
RD-59A		Primary	08/08/95	Cesium-134	-0.7 U	2.6	8.2	Filtered		LAS
RD-59A		Primary	08/08/95	Cesium-137	-5.3 U	5	10	Filtered		LAS
RD-59A		Primary	08/08/95	Cobalt-57	1.2 U	2.9	4.9	Filtered		LAS
RD-59A		Primary	08/08/95	Cobalt-60	0 U	---	10	Filtered		LAS
RD-59A		Primary	03/12/96	Cesium-134	-4 U	3.1	8.3	Filtered		LAS
RD-59A		Primary	03/12/96	Cesium-137	-0.4 U	2.3	9.9	Filtered		LAS
RD-59A		Primary	03/12/96	Cobalt-57	-1.5 U	3	5.2	Filtered		LAS
RD-59A		Primary	03/12/96	Cobalt-60	-3.3 U	3.4	14	Filtered		LAS
RD-59A		Primary	08/21/96	Cesium-134	-3.7 U	3.5	9	Filtered		LAS
RD-59A		Primary	08/21/96	Cesium-137	-7.8 U	6.4	13	Filtered		LAS
RD-59A		Primary	08/21/96	Cobalt-57	-1.3 U	2.4	5.6	Filtered		LAS
RD-59A		Primary	08/21/96	Cobalt-60	-3.2 U	3.6	8.3	Filtered		LAS
RD-59A		Primary	02/16/97	Cesium-134	3.4 U	4.4	7.4	Filtered		LAS
RD-59A		Primary	02/16/97	Cesium-137	6.8 U	9.6	12	Filtered		LAS
RD-59A		Primary	02/16/97	Cobalt-57	2.4 U	2.9	4.7	Filtered		LAS
RD-59A		Primary	02/16/97	Cobalt-60	-1.5 U	3.8	13	Filtered		LAS
RD-59A		Primary	08/22/97	Cesium-134	-0.5 U	1.6	3.6	Filtered		LAS
RD-59A		Primary	08/22/97	Cesium-137	-3.3 U	2.5	4.9	Filtered		LAS
RD-59A		Primary	08/22/97	Cobalt-57	0.4 U	2.8	3.8	Filtered		LAS
RD-59A		Primary	08/22/97	Cobalt-60	-1 U	1.1	4.8	Filtered		LAS
RD-59A		Primary	08/19/98	Cesium-134	34 U	---	34	Filtered		TN
RD-59A		Primary	08/19/98	Cesium-137	24.3 U	---	24.3	Filtered		TN
RD-59A		Primary	08/19/98	Cobalt-57	19.6 U	---	19.6	Filtered		TN
RD-59A		Primary	08/19/98	Cobalt-60	22.6 U	---	22.6	Filtered		TN
RD-59A		Primary	02/16/99	Cesium-134	7.58 U	---	7.58	Filtered		TN
RD-59A		Primary	02/16/99	Cesium-137	5.3 U	---	5.3	Filtered		TN
RD-59A		Primary	02/16/99	Cobalt-57	3.82 U	---	3.82	Filtered		TN
RD-59A		Primary	02/16/99	Cobalt-60	6.82 U	---	6.82	Filtered		TN
RD-59A		Primary	03/14/00	Cesium-134	15.4 U	---	15.4	Filtered		TR
RD-59A		Primary	03/14/00	Cesium-137	14.6 U	---	14.6	Filtered		TR
RD-59A		Primary	03/14/00	Cobalt-57	8.7 U	---	8.7	Filtered		TR
RD-59A		Primary	03/14/00	Cobalt-60	13.1 U	---	13.1	Filtered		TR
RD-59A		Primary	05/16/01	Cesium-134	14.1 U	---	14.1	Filtered		ES
RD-59A		Primary	05/16/01	Cesium-137	17.8 U	---	17.8	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-59A		Primary	05/16/01	Cobalt-57	6.88 U	---	6.88	Filtered		ES
RD-59A		Primary	05/16/01	Cobalt-60	12.2 U	---	12.2	Filtered		ES
RD-59A		Primary	02/28/02	Cesium-134	3 U	1	3	Filtered		DL
RD-59A		Primary	02/28/02	Cesium-137	3 U	1	3	Filtered		DL
RD-59A		Primary	02/28/02	Cobalt-57	5 U	3	5	Filtered		DL
RD-59A		Primary	02/28/02	Cobalt-60	5 U	3	5	Filtered		DL
RD-59A		Primary	01/31/03	Cesium-134	1.69 U	---	1.69	Filtered		ES
RD-59A		Primary	01/31/03	Cesium-137	1.39 U	---	1.39	Filtered		ES
RD-59A		Primary	01/31/03	Cobalt-57	0.979 U	---	0.979	Filtered		ES
RD-59A		Primary	01/31/03	Cobalt-60	1.3 U	---	1.3	Filtered		ES
RD-59A		Primary	05/15/03	Cesium-134	2.26 U	---	2.26	Filtered		ES
RD-59A		Primary	05/15/03	Cesium-137	1.42 U	---	1.42	Filtered		ES
RD-59A		Primary	05/15/03	Cobalt-57	1.24 U	---	1.24	Filtered		ES
RD-59A		Primary	05/15/03	Cobalt-60	1.47 U	---	1.47	Filtered		ES
RD-59A		Primary	11/16/04	Cesium-134	1.99 U	---	1.99	Filtered		ES
RD-59A		Primary	11/16/04	Cesium-137	1.81 U	---	1.81	Filtered		ES
RD-59A		Primary	11/16/04	Cobalt-57	1.31 U	---	1.31	Filtered		ES
RD-59A		Primary	11/16/04	Cobalt-60	1.9 U	---	1.9	Filtered		ES
RD-59A		Primary	11/16/04	Europium-152	4.44 U	---	4.44	Filtered		ES
RD-59A		Primary	11/16/04	Europium-154	5.02 U	---	5.02	Filtered		ES
RD-59A		Primary	11/16/04	Manganese-54	1.82 U	---	1.82	Filtered		ES
RD-59A		Primary	11/16/04	Sodium-22	1.72 U	---	1.72	Filtered		ES
RD-59A		Primary	09/07/05	Cesium-134	1.12 U	---	1.12	Filtered		ES
RD-59A		Primary	09/07/05	Cesium-137	0.933 U	---	0.933	Filtered		ES
RD-59A		Primary	09/07/05	Cobalt-57	0.764 U	---	0.764	Filtered		ES
RD-59A		Primary	09/07/05	Cobalt-60	0.922 U	---	0.922	Filtered		ES
RD-59A		Primary	09/07/05	Europium-152	2.81 U	---	2.81	Filtered		ES
RD-59A		Primary	09/07/05	Europium-154	2.8 U	---	2.8	Filtered		ES
RD-59A		Primary	09/07/05	Manganese-54	0.986 U	---	0.986	Filtered		ES
RD-59A		Primary	09/07/05	Sodium-22	0.97 U	---	0.97	Filtered		ES
RD-59A		Primary	08/23/06	Cesium-134	2.05 U	---	2.05	Filtered		ES
RD-59A		Primary	08/23/06	Cesium-137	1.69 U	---	1.69	Filtered		ES
RD-59A		Primary	08/23/06	Cobalt-57	0.995 U	---	0.995	Filtered		ES
RD-59A		Primary	08/23/06	Cobalt-60	1.62 U	---	1.62	Filtered		ES
RD-59A		Primary	08/23/06	Europium-152	4.34 U	---	4.34	Filtered		ES
RD-59A		Primary	08/23/06	Europium-154	4.83 U	---	4.83	Filtered		ES
RD-59A		Primary	08/23/06	Manganese-54	1.68 U	---	1.68	Filtered		ES
RD-59A		Primary	08/23/06	Sodium-22	1.65 U	---	1.65	Filtered		ES
RD-59A		Primary	11/14/06	Cesium-134	3.02 U	---	3.02	Filtered		ES
RD-59A		Primary	11/14/06	Cesium-137	2.57 U	---	2.57	Filtered		ES
RD-59A		Primary	11/14/06	Cobalt-57	1.83 U	---	1.83	Filtered		ES
RD-59A		Primary	11/14/06	Cobalt-60	2.65 U	---	2.65	Filtered		ES
RD-59A		Primary	11/14/06	Europium-152	7.38 U	---	7.38	Filtered		ES
RD-59A		Primary	11/14/06	Europium-154	8.03 U	---	8.03	Filtered		ES
RD-59A		Primary	11/14/06	Manganese-54	2.48 U	---	2.48	Filtered		ES
RD-59A		Primary	11/14/06	Sodium-22	2.73 U	---	2.73	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-59A		Primary	02/28/07	Cesium-134	1.29 U	---	1.29	Filtered		ES
RD-59A		Primary	02/28/07	Cesium-137	1.03 U	---	1.03	Filtered		ES
RD-59A		Primary	02/28/07	Cobalt-57	0.715 U	---	0.715	Filtered		ES
RD-59A		Primary	02/28/07	Cobalt-60	1.09 U	---	1.09	Filtered		ES
RD-59A		Primary	02/28/07	Europium-152	2.91 U	---	2.91	Filtered		ES
RD-59A		Primary	02/28/07	Europium-154	3.14 U	---	3.14	Filtered		ES
RD-59A		Primary	02/28/07	Manganese-54	0.978 U	---	0.978	Filtered		ES
RD-59A		Primary	02/28/07	Sodium-22	1.07 U	---	1.07	Filtered		ES
RD-59A		Primary	05/20/08	Cesium-134	1.3 U	---	1.3	Filtered		ES
RD-59A		Primary	05/20/08	Cesium-137	1.17 U	---	1.17	Filtered		ES
RD-59A		Primary	05/20/08	Cobalt-57	0.857 U	---	0.857	Filtered		ES
RD-59A		Primary	05/20/08	Cobalt-60	1.01 U	---	1.01	Filtered		ES
RD-59A		Primary	05/20/08	Europium-152	3.01 U	---	3.01	Filtered		ES
RD-59A		Primary	05/20/08	Europium-154	2.76 U	---	2.76	Filtered		ES
RD-59A		Primary	05/20/08	Manganese-54	0.896 U	---	0.896	Filtered		ES
RD-59A		Primary	05/20/08	Sodium-22	0.935 U	---	0.935	Filtered		ES
RD-59A		Primary	03/03/09	Antimony-125	1.48 U	1.9	3.21	Filtered		ES
RD-59A		Primary	03/03/09	Antimony-125	0.714 U	3.6	6.05	Unfiltered		ES
RD-59A		Primary	03/03/09	Barium-133	0.113 U	0.18	0.867	Filtered		ES
RD-59A		Primary	03/03/09	Barium-133	0.64 U	0.47	1.56	Unfiltered		ES
RD-59A		Primary	03/03/09	Cesium-134	-0.098 U	0.22	0.82	Filtered		ES
RD-59A		Primary	03/03/09	Cesium-134	0.558 U	0.92	1.55	Unfiltered		ES
RD-59A		Primary	03/03/09	Cesium-137	0.018 U	0.74	1.26	Filtered		ES
RD-59A		Primary	03/03/09	Cesium-137	0.87 U	1.8	3.11	Unfiltered		ES
RD-59A		Primary	03/03/09	Cobalt-60	-0.546 U	0.88	1.54	Filtered		ES
RD-59A		Primary	03/03/09	Cobalt-60	0.132 U	1.7	2.86	Unfiltered		ES
RD-59A		Primary	03/03/09	Europium-152	0.732 U	0.91	2.72	Filtered		ES
RD-59A		Primary	03/03/09	Europium-152	1.27 U	3.5	5.9	Unfiltered		ES
RD-59A		Primary	03/03/09	Europium-154	-0.277 U	0.87	1.59	Filtered		ES
RD-59A		Primary	03/03/09	Europium-154	1.06 U	4.3	7.33	Unfiltered		ES
RD-59A		Primary	03/03/09	Europium-155	-0.579 U	2.6	4.35	Filtered		ES
RD-59A		Primary	03/03/09	Europium-155	0.91 U	4	6.72	Unfiltered		ES
RD-59A		Primary	03/03/09	Manganese-54	0.031 U	0.39	0.683	Filtered		ES
RD-59A		Primary	03/03/09	Manganese-54	-0.642 U	1.2	2.05	Unfiltered		ES
RD-59A		Primary	03/03/09	Sodium-22	-0.094 U	0.3	0.54	Filtered		ES
RD-59A		Primary	03/03/09	Sodium-22	0.361 U	1.5	2.49	Unfiltered		ES
RD-59A		Primary	08/04/09	Antimony-125	11.2 U	14	24.4	Filtered		ES
RD-59A		Primary	08/04/09	Antimony-125	1.32 U	22	37.7	Unfiltered		ES
RD-59A		Primary	08/04/09	Barium-133	4.55 U	7.8	13.2	Filtered		ES
RD-59A		Primary	08/04/09	Barium-133	10.9 U	15	18.4	Unfiltered		ES
RD-59A		Primary	08/04/09	Cesium-134	3.86 U	5.9	8.02	Filtered		ES
RD-59A		Primary	08/04/09	Cesium-134	-0.206 U	7.3	13.3	Unfiltered		ES
RD-59A		Primary	08/04/09	Cesium-137	-2.48 U	6.5	11.4	Filtered		ES
RD-59A		Primary	08/04/09	Cesium-137	5.68 U	5.6	9.37	Unfiltered		ES
RD-59A		Primary	08/04/09	Cobalt-60	-1.62 U	3.7	6.98	Filtered		ES
RD-59A		Primary	08/04/09	Cobalt-60	0.591 U	7.9	14.4	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-59A		Primary	08/04/09	Europium-152	8.62 U	14	24.1	Filtered		ES
RD-59A		Primary	08/04/09	Europium-152	12.9 U	7.5	27.6	Unfiltered		ES
RD-59A		Primary	08/04/09	Europium-154	-10.8 U	21	37	Filtered		ES
RD-59A		Primary	08/04/09	Europium-154	-17.4 U	27	51.4	Unfiltered		ES
RD-59A		Primary	08/04/09	Europium-155	8.46 U	16	27	Filtered		ES
RD-59A		Primary	08/04/09	Europium-155	-37.2 U	38	66.5	Unfiltered		ES
RD-59A		Primary	08/04/09	Manganese-54	1.62 U	5.3	9.12	Filtered		ES
RD-59A		Primary	08/04/09	Manganese-54	4.62 U	6.8	11.5	Unfiltered		ES
RD-59A		Primary	08/04/09	Sodium-22	-3.68 U	7	12.5	Filtered		ES
RD-59A		Primary	08/04/09	Sodium-22	-5.9 U	9.2	17.5	Unfiltered		ES
RD-59B		Primary	08/16/94	Cesium-134	-15 U	---	46	Filtered		LAS
RD-59B		Primary	08/16/94	Cesium-137	4 U	---	50	Filtered		LAS
RD-59B		Primary	08/16/94	Cobalt-57	-7 U	---	21	Filtered		LAS
RD-59B		Primary	08/16/94	Cobalt-60	-19 U	---	53	Filtered		LAS
RD-59B		Primary	02/06/95	Cesium-134	1.6 U	3.9	6.7	Filtered		LAS
RD-59B		Primary	02/06/95	Cesium-137	2.5 U	6.9	8.8	Filtered		LAS
RD-59B		Primary	02/06/95	Cobalt-57	-0.7 U	2.8	5	Filtered		LAS
RD-59B		Primary	02/06/95	Cobalt-60	-2.4 U	3.9	11	Filtered		LAS
RD-59B		Primary	08/08/95	Cesium-134	0.3 U	3.6	7.4	Filtered		LAS
RD-59B		Primary	08/08/95	Cesium-137	2.1 U	6	10	Filtered		LAS
RD-59B		Primary	08/08/95	Cobalt-57	1.1 U	2.9	4.8	Filtered		LAS
RD-59B		Primary	08/08/95	Cobalt-60	1.2 U	4.8	9.9	Filtered		LAS
RD-59B		Primary	03/12/96	Cesium-134	-0.7 U	2	3.6	Filtered		LAS
RD-59B		Primary	03/12/96	Cesium-137	-1.1 U	1.6	4.5	Filtered		LAS
RD-59B		Primary	03/12/96	Cobalt-57	-0.4 U	1.3	3.4	Filtered		LAS
RD-59B		Primary	03/12/96	Cobalt-60	0.7 U	2	4	Filtered		LAS
RD-59B		Primary	08/21/96	Cesium-134	2.2 U	3.4	6.3	Filtered		LAS
RD-59B		Primary	08/21/96	Cesium-137	-6.2 U	3.2	11	Filtered		LAS
RD-59B		Primary	08/21/96	Cobalt-57	-0.1 U	3.5	4.9	Filtered		LAS
RD-59B		Primary	08/21/96	Cobalt-60	3.5 U	3.7	9	Filtered		LAS
RD-59B		Primary	02/16/97	Cesium-134	0.6 U	4.2	7.8	Filtered		LAS
RD-59B		Primary	02/16/97	Cesium-137	-0.7 U	3.1	9.9	Filtered		LAS
RD-59B		Primary	02/16/97	Cobalt-57	1.4 U	2.6	4.3	Filtered		LAS
RD-59B		Primary	02/16/97	Cobalt-60	-1.2 U	2.8	10	Filtered		LAS
RD-59B		Primary	08/22/97	Cesium-134	0.3 U	1.7	3.7	Filtered		LAS
RD-59B		Primary	08/22/97	Cesium-137	1.7 U	2.2	3.5	Filtered		LAS
RD-59B		Primary	08/22/97	Cobalt-57	-1.4 U	1.3	3.5	Filtered		LAS
RD-59B		Primary	08/22/97	Cobalt-60	1.6 U	1.8	3.5	Filtered		LAS
RD-59B		Primary	08/19/98	Cesium-134	14.6 U	---	14.6	Filtered		TN
RD-59B		Primary	08/19/98	Cesium-137	12.9 U	---	12.9	Filtered		TN
RD-59B		Primary	08/19/98	Cobalt-57	7.76 U	---	7.76	Filtered		TN
RD-59B		Primary	08/19/98	Cobalt-60	15.2 U	---	15.2	Filtered		TN
RD-59B		Primary	02/16/99	Cesium-134	17.1 U	---	17.1	Filtered		TN
RD-59B		Primary	02/16/99	Cesium-137	14.6 U	---	14.6	Filtered		TN
RD-59B		Primary	02/16/99	Cobalt-57	9.33 U	---	9.33	Filtered		TN
RD-59B		Primary	02/16/99	Cobalt-60	18.1 U	---	18.1	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-59B		Primary	03/14/00	Cesium-134	8.51 U	---	8.51	Filtered		TR
RD-59B		Primary	03/14/00	Cesium-137	6.81 U	---	6.81	Filtered		TR
RD-59B		Primary	03/14/00	Cobalt-57	3.92 U	---	3.92	Filtered		TR
RD-59B		Primary	03/14/00	Cobalt-60	7.31 U	---	7.31	Filtered		TR
RD-59B		Primary	02/17/01	Cesium-134	15.9 U	---	15.9	Filtered		ES
RD-59B		Primary	02/17/01	Cesium-137	13.3 U	---	13.3	Filtered		ES
RD-59B		Primary	02/17/01	Cobalt-57	5.53 U	---	5.53	Filtered		ES
RD-59B		Primary	02/17/01	Cobalt-60	17.7 U	---	17.7	Filtered		ES
RD-59B		Primary	02/28/02	Cesium-134	3 U	1	3	Filtered		DL
RD-59B		Primary	02/28/02	Cesium-137	3 U	1	3	Filtered		DL
RD-59B		Primary	02/28/02	Cobalt-57	5 U	3	5	Filtered		DL
RD-59B		Primary	02/28/02	Cobalt-60	5 U	3	5	Filtered		DL
RD-59B		Primary	01/31/03	Cesium-134	2.25 U	---	2.25	Filtered		ES
RD-59B		Primary	01/31/03	Cesium-137	1.98 U	---	1.98	Filtered		ES
RD-59B		Primary	01/31/03	Cobalt-57	1.42 U	---	1.42	Filtered		ES
RD-59B		Primary	01/31/03	Cobalt-60	1.99 U	---	1.99	Filtered		ES
RD-59B		Primary	11/05/04	Cesium-134	2.19 U	---	2.19	Filtered		ES
RD-59B		Primary	11/05/04	Cesium-137	1.85 U	---	1.85	Filtered		ES
RD-59B		Primary	11/05/04	Cobalt-57	1.34 U	---	1.34	Filtered		ES
RD-59B		Primary	11/05/04	Cobalt-60	1.91 U	---	1.91	Filtered		ES
RD-59B		Primary	11/05/04	Europium-152	5.01 U	---	5.01	Filtered		ES
RD-59B		Primary	11/05/04	Europium-154	5.8 U	---	5.8	Filtered		ES
RD-59B		Primary	11/05/04	Manganese-54	1.82 U	---	1.82	Filtered		ES
RD-59B		Primary	11/05/04	Sodium-22	2.01 U	---	2.01	Filtered		ES
RD-59B		Primary	09/07/05	Cesium-134	1.67 U	---	1.67	Filtered		ES
RD-59B		Primary	09/07/05	Cesium-137	1.31 U	---	1.31	Filtered		ES
RD-59B		Primary	09/07/05	Cobalt-57	0.622 U	---	0.622	Filtered		ES
RD-59B		Primary	09/07/05	Cobalt-60	1.55 U	---	1.55	Filtered		ES
RD-59B		Primary	09/07/05	Europium-152	3.38 U	---	3.38	Filtered		ES
RD-59B		Primary	09/07/05	Europium-154	4.51 U	---	4.51	Filtered		ES
RD-59B		Primary	09/07/05	Manganese-54	1.42 U	---	1.42	Filtered		ES
RD-59B		Primary	09/07/05	Sodium-22	1.56 U	---	1.56	Filtered		ES
RD-59B		Primary	02/22/06	Cesium-134	1.78 U	---	1.78	Filtered		ES
RD-59B		Primary	02/22/06	Cesium-137	1.46 U	---	1.46	Filtered		ES
RD-59B		Primary	02/22/06	Cobalt-57	1.17 U	---	1.17	Filtered		ES
RD-59B		Primary	02/22/06	Cobalt-60	1.46 U	---	1.46	Filtered		ES
RD-59B		Primary	02/22/06	Europium-152	3.74 U	---	3.74	Filtered		ES
RD-59B		Primary	02/22/06	Europium-154	4.35 U	---	4.35	Filtered		ES
RD-59B		Primary	02/22/06	Manganese-54	1.47 U	---	1.47	Filtered		ES
RD-59B		Primary	02/22/06	Sodium-22	1.49 U	---	1.49	Filtered		ES
RD-59B		Primary	11/14/06	Cesium-134	1.38 U	---	1.38	Filtered		ES
RD-59B		Primary	11/14/06	Cesium-137	1.27 U	---	1.27	Filtered		ES
RD-59B		Primary	11/14/06	Cobalt-57	0.862 U	---	0.862	Filtered		ES
RD-59B		Primary	11/14/06	Cobalt-60	1.45 U	---	1.45	Filtered		ES
RD-59B		Primary	11/14/06	Europium-152	3.34 U	---	3.34	Filtered		ES
RD-59B		Primary	11/14/06	Europium-154	3.25 U	---	3.25	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-59B		Primary	11/14/06	Manganese-54	1.12 U	---	1.12	Filtered		ES
RD-59B		Primary	11/14/06	Sodium-22	1.1 U	---	1.1	Filtered		ES
RD-59B		Split	02/28/07	Beryllium-7	1.91 U	7.2	12.4	Filtered		STL
RD-59B		Primary	02/28/07	Cesium-134	1.06 U	---	1.06	Filtered		ES
RD-59B		Split	02/28/07	Cesium-134	-0.171 U	0.8	1.36	Filtered		STL
RD-59B		Primary	02/28/07	Cesium-137	0.947 U	---	0.947	Filtered		ES
RD-59B		Split	02/28/07	Cesium-137	-0.499 U	0.74	1.24	Filtered		STL
RD-59B		Primary	02/28/07	Cobalt-57	0.615 U	---	0.615	Filtered		ES
RD-59B		Primary	02/28/07	Cobalt-60	0.976 U	---	0.976	Filtered		ES
RD-59B		Split	02/28/07	Cobalt-60	-0.457 U	0.7	1.15	Filtered		STL
RD-59B		Primary	02/28/07	Europium-152	2.53 U	---	2.53	Filtered		ES
RD-59B		Split	02/28/07	Europium-152	-0.871 U	1.9	3.08	Filtered		STL
RD-59B		Primary	02/28/07	Europium-154	2.73 U	---	2.73	Filtered		ES
RD-59B		Split	02/28/07	Europium-154	-0.326 U	2.1	3.61	Filtered		STL
RD-59B		Primary	02/28/07	Manganese-54	0.97 U	---	0.97	Filtered		ES
RD-59B		Split	02/28/07	Manganese-54	0.264 U	0.73	1.27	Filtered		STL
RD-59B		Primary	02/28/07	Sodium-22	0.93 U	---	0.93	Filtered		ES
RD-59B		Split	02/28/07	Sodium-22	-0.0745 U	0.76	1.31	Filtered		STL
RD-59B		Primary	05/20/08	Cesium-134	1.24 U	---	1.24	Filtered		ES
RD-59B		Primary	05/20/08	Cesium-137	1.1 U	---	1.1	Filtered		ES
RD-59B		Primary	05/20/08	Cobalt-57	0.718 U	---	0.718	Filtered		ES
RD-59B		Primary	05/20/08	Cobalt-60	1.02 U	---	1.02	Filtered		ES
RD-59B		Primary	05/20/08	Europium-152	2.86 U	---	2.86	Filtered		ES
RD-59B		Primary	05/20/08	Europium-154	2.97 U	---	2.97	Filtered		ES
RD-59B		Primary	05/20/08	Manganese-54	0.94 U	---	0.94	Filtered		ES
RD-59B		Primary	05/20/08	Sodium-22	1.01 U	---	1.01	Filtered		ES
RD-59B		Primary	03/03/09	Antimony-125	-0.325 U	3.7	6.29	Filtered		ES
RD-59B		Primary	03/03/09	Antimony-125	-1.55 U	2.1	3.71	Unfiltered		ES
RD-59B		Primary	03/03/09	Barium-133	-0.042 U	0.39	1.55	Filtered		ES
RD-59B		Primary	03/03/09	Barium-133	0.108 U	0.26	0.948	Unfiltered		ES
RD-59B		Primary	03/03/09	Cesium-134	0.499 U	1	1.73	Filtered		ES
RD-59B		Primary	03/03/09	Cesium-134	0.441 U	0.58	0.978	Unfiltered		ES
RD-59B		Primary	03/03/09	Cesium-137	0.678 U	1.6	2.73	Filtered		ES
RD-59B		Primary	03/03/09	Cesium-137	0.23 U	0.96	1.63	Unfiltered		ES
RD-59B		Primary	03/03/09	Cobalt-60	0.084 U	1.5	2.73	Filtered		ES
RD-59B		Primary	03/03/09	Cobalt-60	-0.057 U	0.32	0.598	Unfiltered		ES
RD-59B		Primary	03/03/09	Europium-152	0.388 U	1	4.35	Filtered		ES
RD-59B		Primary	03/03/09	Europium-152	0.344 U	1.4	2.32	Unfiltered		ES
RD-59B		Primary	03/03/09	Europium-154	0.072 U	2.1	3.68	Filtered		ES
RD-59B		Primary	03/03/09	Europium-154	0.392 U	0.91	1.6	Unfiltered		ES
RD-59B		Primary	03/03/09	Europium-155	-6.55 U	6.5	11	Filtered		ES
RD-59B		Primary	03/03/09	Europium-155	-0.156 U	1	1.78	Unfiltered		ES
RD-59B		Primary	03/03/09	Manganese-54	1.06 U	1.8	3.03	Filtered		ES
RD-59B		Primary	03/03/09	Manganese-54	-0.215 U	0.39	0.704	Unfiltered		ES
RD-59B		Primary	03/03/09	Sodium-22	0.024 U	0.72	1.25	Filtered		ES
RD-59B		Primary	03/03/09	Sodium-22	0.133 U	0.31	0.543	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-59B		Primary	08/04/09	Antimony-125	-4.2 U	13	23.4	Filtered		ES
RD-59B		Primary	08/04/09	Antimony-125	11.6 U	14	23.3	Unfiltered		ES
RD-59B		Primary	08/04/09	Barium-133	-4.56 U	5.7	10.1	Filtered		ES
RD-59B		Primary	08/04/09	Barium-133	1.79 U	2.3	7.08	Unfiltered		ES
RD-59B		Primary	08/04/09	Cesium-134	1.1 U	6.6	8.74	Filtered		ES
RD-59B		Primary	08/04/09	Cesium-134	-1.6 U	8.1	9.48	Unfiltered		ES
RD-59B		Primary	08/04/09	Cesium-137	5.75 U	5.9	9.95	Filtered		ES
RD-59B		Primary	08/04/09	Cesium-137	-0.923 U	5.6	10.1	Unfiltered		ES
RD-59B		Primary	08/04/09	Cobalt-60	-2.4 U	5	9.42	Filtered		ES
RD-59B		Primary	08/04/09	Cobalt-60	-3.84 U	5.5	10.7	Unfiltered		ES
RD-59B		Primary	08/04/09	Europium-152	1.32 U	12	20.2	Filtered		ES
RD-59B		Primary	08/04/09	Europium-152	7.39 U	16	27.5	Unfiltered		ES
RD-59B		Primary	08/04/09	Europium-154	6.91 U	18	31	Filtered		ES
RD-59B		Primary	08/04/09	Europium-154	-3.38 U	25	27.4	Unfiltered		ES
RD-59B		Primary	08/04/09	Europium-155	-1.34 U	11	18.6	Filtered		ES
RD-59B		Primary	08/04/09	Europium-155	4.65 U	11	19.5	Unfiltered		ES
RD-59B		Primary	08/04/09	Manganese-54	5.05 U	4.8	8.01	Filtered		ES
RD-59B		Primary	08/04/09	Manganese-54	1.4 U	3.9	6.89	Unfiltered		ES
RD-59B		Primary	08/04/09	Sodium-22	2.36 U	6.1	10.6	Filtered		ES
RD-59B		Primary	08/04/09	Sodium-22	-1.14 U	8.4	9.29	Unfiltered		ES
RD-59C		Primary	08/16/94	Cesium-134	-29 U	---	49	Filtered		LAS
RD-59C		Primary	08/16/94	Cesium-137	10 U	---	47	Filtered		LAS
RD-59C		Primary	08/16/94	Cobalt-57	12 U	---	21	Filtered		LAS
RD-59C		Primary	08/16/94	Cobalt-60	0 U	---	47	Filtered		LAS
RD-59C		Primary	02/06/95	Cesium-134	-1.8 U	3.7	7	Filtered		LAS
RD-59C		Primary	02/06/95	Cesium-137	2.4 U	7.3	9.5	Filtered		LAS
RD-59C		Primary	02/06/95	Cobalt-57	-2.5 U	2.9	5.4	Filtered		LAS
RD-59C		Primary	02/06/95	Cobalt-60	-4.1 U	3.9	13	Filtered		LAS
RD-59C		Primary	08/08/95	Cesium-134	2.3 U	4.5	7.9	Filtered		LAS
RD-59C		Primary	08/08/95	Cesium-137	0.1 U	5.5	9.9	Filtered		LAS
RD-59C		Primary	08/08/95	Cobalt-57	2.5 U	3	4.8	Filtered		LAS
RD-59C		Primary	08/08/95	Cobalt-60	-3 U	3.5	12	Filtered		LAS
RD-59C		Primary	03/12/96	Cesium-134	-1.7 U	3	7.4	Filtered		LAS
RD-59C		Primary	03/12/96	Cesium-137	0.7 U	6.2	8.4	Filtered		LAS
RD-59C		Primary	03/12/96	Cobalt-57	0.3 U	3.5	4.8	Filtered		LAS
RD-59C		Primary	03/12/96	Cobalt-60	-0.9 U	2.5	9.3	Filtered		LAS
RD-59C		Primary	08/21/96	Cesium-134	-1.5 U	2.6	6	Filtered		LAS
RD-59C		Primary	08/21/96	Cesium-137	-1.1 U	5.1	9.5	Filtered		LAS
RD-59C		Primary	08/21/96	Cobalt-57	-0.1 U	3.3	4.4	Filtered		LAS
RD-59C		Primary	08/21/96	Cobalt-60	-1 U	4.1	9.6	Filtered		LAS
RD-59C		Primary	02/16/97	Cesium-134	0.4 U	3.4	6.4	Filtered		LAS
RD-59C		Primary	02/16/97	Cesium-137	-0.1 U	6	8.2	Filtered		LAS
RD-59C		Primary	02/16/97	Cobalt-57	1.9 U	2.5	4	Filtered		LAS
RD-59C		Primary	02/16/97	Cobalt-60	-0.8 U	1.4	6.9	Filtered		LAS
RD-59C		Primary	08/22/97	Cesium-134	-0.7 U	1.5	3.8	Filtered		LAS
RD-59C		Primary	08/22/97	Cesium-137	0.7 U	2.1	3.6	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-59C		Primary	08/22/97	Cobalt-57	0.6 U	2.6	3.3	Filtered		LAS
RD-59C		Primary	08/22/97	Cobalt-60	0.2 U	1.7	3	Filtered		LAS
RD-59C		Primary	08/19/98	Cesium-134	17.8 U	---	17.8	Filtered		TN
RD-59C		Primary	08/19/98	Cesium-137	13.4 U	---	13.4	Filtered		TN
RD-59C		Primary	08/19/98	Cobalt-57	7.64 U	---	7.64	Filtered		TN
RD-59C		Primary	08/19/98	Cobalt-60	18.5 U	---	18.5	Filtered		TN
RD-59C		Primary	02/16/99	Cesium-134	8.54 U	---	8.54	Filtered		TN
RD-59C		Primary	02/16/99	Cesium-137	6.57 U	---	6.57	Filtered		TN
RD-59C		Primary	02/16/99	Cobalt-57	4.08 U	---	4.08	Filtered		TN
RD-59C		Primary	02/16/99	Cobalt-60	7.02 U	---	7.02	Filtered		TN
RD-59C		Primary	03/14/00	Cesium-134	17 U	---	17	Filtered		TR
RD-59C		Primary	03/14/00	Cesium-137	15 U	---	15	Filtered		TR
RD-59C		Primary	03/14/00	Cobalt-57	8.02 U	---	8.02	Filtered		TR
RD-59C		Primary	03/14/00	Cobalt-60	15 U	---	15	Filtered		TR
RD-59C		Primary	02/17/01	Cesium-134	15.2 U	---	15.2	Filtered		ES
RD-59C		Primary	02/17/01	Cesium-137	13.9 U	---	13.9	Filtered		ES
RD-59C		Primary	02/17/01	Cobalt-57	8.41 U	---	8.41	Filtered		ES
RD-59C		Primary	02/17/01	Cobalt-60	13.9 U	---	13.9	Filtered		ES
RD-59C		Primary	02/28/02	Cesium-134	3 U	1	3	Filtered		DL
RD-59C		Primary	02/28/02	Cesium-137	3 U	1	3	Filtered		DL
RD-59C		Primary	02/28/02	Cobalt-57	5 U	3	5	Filtered		DL
RD-59C		Primary	02/28/02	Cobalt-60	5 U	3	5	Filtered		DL
RD-59C		Primary	01/31/03	Cesium-134	2.61 U	---	2.61	Filtered		ES
RD-59C		Primary	01/31/03	Cesium-137	2.18 U	---	2.18	Filtered		ES
RD-59C		Primary	01/31/03	Cobalt-57	1.47 U	---	1.47	Filtered		ES
RD-59C		Primary	01/31/03	Cobalt-60	2.26 U	---	2.26	Filtered		ES
RD-59C		Primary	11/05/04	Cesium-134	1.02 U	---	1.02	Filtered		ES
RD-59C		Primary	11/05/04	Cesium-137	0.793 U	---	0.793	Filtered		ES
RD-59C		Primary	11/05/04	Cobalt-57	0.49 U	---	0.49	Filtered		ES
RD-59C		Primary	11/05/04	Cobalt-60	0.805 U	---	0.805	Filtered		ES
RD-59C		Primary	11/05/04	Europium-152	2.06 U	---	2.06	Filtered		ES
RD-59C		Primary	11/05/04	Europium-154	2.24 U	---	2.24	Filtered		ES
RD-59C		Primary	11/05/04	Manganese-54	0.787 U	---	0.787	Filtered		ES
RD-59C		Primary	11/05/04	Sodium-22	0.776 U	---	0.776	Filtered		ES
RD-59C		Primary	09/07/05	Cesium-134	2.04 U	---	2.04	Filtered		ES
RD-59C		Primary	09/07/05	Cesium-137	1.5 U	---	1.5	Filtered		ES
RD-59C		Primary	09/07/05	Cobalt-57	0.98 U	---	0.98	Filtered		ES
RD-59C		Primary	09/07/05	Cobalt-60	1.44 U	---	1.44	Filtered		ES
RD-59C		Primary	09/07/05	Europium-152	3.78 U	---	3.78	Filtered		ES
RD-59C		Primary	09/07/05	Europium-154	4.44 U	---	4.44	Filtered		ES
RD-59C		Primary	09/07/05	Manganese-54	1.56 U	---	1.56	Filtered		ES
RD-59C		Primary	09/07/05	Sodium-22	1.46 U	---	1.46	Filtered		ES
RD-59C		Primary	02/22/06	Cesium-134	1.49 U	---	1.49	Filtered		ES
RD-59C		Split	02/22/06	Cesium-134	-0.11 U	1	1.68	Filtered		STL
RD-59C		Primary	02/22/06	Cesium-137	1.13 U	---	1.13	Filtered		ES
RD-59C		Split	02/22/06	Cesium-137	1.26 U	1	1.66	Filtered		STL

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-59C		Primary	02/22/06	Cobalt-57	0.731 U	---	0.731	Filtered		ES
RD-59C		Split	02/22/06	Cobalt-57	-2.03 U	4	6.54	Filtered		STL
RD-59C		Primary	02/22/06	Cobalt-60	1.14 U	---	1.14	Filtered		ES
RD-59C		Split	02/22/06	Cobalt-60	-0.112 U	1	1.81	Filtered		STL
RD-59C		Primary	02/22/06	Europium-152	2.84 U	---	2.84	Filtered		ES
RD-59C		Split	02/22/06	Europium-152	-1.45 U	2	3.52	Filtered		STL
RD-59C		Primary	02/22/06	Europium-154	3.19 U	---	3.19	Filtered		ES
RD-59C		Split	02/22/06	Europium-154	2.73 U	3	5.35	Filtered		STL
RD-59C		Primary	02/22/06	Manganese-54	1.14 U	---	1.14	Filtered		ES
RD-59C		Split	02/22/06	Manganese-54	-0.169 U	1	1.54	Filtered		STL
RD-59C		Primary	02/22/06	Sodium-22	1.09 U	---	1.09	Filtered		ES
RD-59C		Split	02/22/06	Sodium-22	0.877 U	1	1.91	Filtered		STL
RD-59C		Primary	11/14/06	Cesium-134	1.21 U	---	1.21	Filtered		ES
RD-59C		Primary	11/14/06	Cesium-137	1.18 U	---	1.18	Filtered		ES
RD-59C		Primary	11/14/06	Cobalt-57	0.785 U	---	0.785	Filtered		ES
RD-59C		Primary	11/14/06	Cobalt-60	1.18 U	---	1.18	Filtered		ES
RD-59C		Primary	11/14/06	Europium-152	2.92 U	---	2.92	Filtered		ES
RD-59C		Primary	11/14/06	Europium-154	3.34 U	---	3.34	Filtered		ES
RD-59C		Primary	11/14/06	Manganese-54	1.09 U	---	1.09	Filtered		ES
RD-59C		Primary	11/14/06	Sodium-22	1.14 U	---	1.14	Filtered		ES
RD-59C		Primary	02/28/07	Cesium-134	1.35 U	---	1.35	Filtered		ES
RD-59C		Primary	02/28/07	Cesium-137	1.03 U	---	1.03	Filtered		ES
RD-59C		Primary	02/28/07	Cobalt-57	0.666 U	---	0.666	Filtered		ES
RD-59C		Primary	02/28/07	Cobalt-60	1.06 U	---	1.06	Filtered		ES
RD-59C		Primary	02/28/07	Europium-152	2.79 U	---	2.79	Filtered		ES
RD-59C		Primary	02/28/07	Europium-154	3.21 U	---	3.21	Filtered		ES
RD-59C		Primary	02/28/07	Manganese-54	1.01 U	---	1.01	Filtered		ES
RD-59C		Primary	02/28/07	Sodium-22	1.09 U	---	1.09	Filtered		ES
RD-59C		Primary	05/20/08	Cesium-134	1.67 U	---	1.67	Filtered		ES
RD-59C		Primary	05/20/08	Cesium-137	1.36 U	---	1.36	Filtered		ES
RD-59C		Primary	05/20/08	Cobalt-57	0.808 U	---	0.808	Filtered		ES
RD-59C		Primary	05/20/08	Cobalt-60	1.46 U	---	1.46	Filtered		ES
RD-59C		Primary	05/20/08	Europium-152	3.43 U	---	3.43	Filtered		ES
RD-59C		Primary	05/20/08	Europium-154	3.99 U	---	3.99	Filtered		ES
RD-59C		Primary	05/20/08	Manganese-54	1.32 U	---	1.32	Filtered		ES
RD-59C		Primary	05/20/08	Sodium-22	1.36 U	---	1.36	Filtered		ES
RD-59C		Primary	03/03/09	Antimony-125	0.846 U	1.8	2.98	Filtered		ES
RD-59C		Primary	03/03/09	Antimony-125	0.789 U	1.6	2.65	Unfiltered		ES
RD-59C		Primary	03/03/09	Barium-133	0.081 U	0.17	0.746	Filtered		ES
RD-59C		Primary	03/03/09	Barium-133	0.406 U	0.24	0.779	Unfiltered		ES
RD-59C		Primary	03/03/09	Cesium-134	-0.014 U	0.62	0.901	Filtered		ES
RD-59C		Primary	03/03/09	Cesium-134	0.213 U	1	1.73	Unfiltered		ES
RD-59C		Primary	03/03/09	Cesium-137	0.666 U	0.96	1.63	Filtered		ES
RD-59C		Primary	03/03/09	Cesium-137	0.367 U	0.73	1.24	Unfiltered		ES
RD-59C		Primary	03/03/09	Cobalt-60	-0.109 U	0.58	1.02	Filtered		ES
RD-59C		Primary	03/03/09	Cobalt-60	-0.163 U	0.64	1.11	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-III
RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-59C		Primary	03/03/09	Europium-152	0.213 U	0.89	1.88	Filtered		ES
RD-59C		Primary	03/03/09	Europium-152	0.415 U	6.4	2.16	Unfiltered		ES
RD-59C		Primary	03/03/09	Europium-154	0.37 U	1.4	2.36	Filtered		ES
RD-59C		Primary	03/03/09	Europium-154	-0.61 U	0.97	1.79	Unfiltered		ES
RD-59C		Primary	03/03/09	Europium-155	-1.4 U	2	3.46	Filtered		ES
RD-59C		Primary	03/03/09	Europium-155	-0.224 U	1.8	3.09	Unfiltered		ES
RD-59C		Primary	03/03/09	Manganese-54	-0.053 U	0.44	0.765	Filtered		ES
RD-59C		Primary	03/03/09	Manganese-54	0.143 U	0.77	1.32	Unfiltered		ES
RD-59C		Primary	03/03/09	Sodium-22	0.126 U	0.46	0.808	Filtered		ES
RD-59C		Primary	03/03/09	Sodium-22	-0.209 U	0.33	0.614	Unfiltered		ES
RD-59C		Primary	08/04/09	Antimony-125	22.1 U	19	32.4	Filtered		ES
RD-59C		Primary	08/04/09	Antimony-125	-7.79 U	22	38.7	Unfiltered		ES
RD-59C		Primary	08/04/09	Barium-133	-0.522 U	12	19.9	Filtered		ES
RD-59C		Primary	08/04/09	Barium-133	3.12 U	13	21.5	Unfiltered		ES
RD-59C		Primary	08/04/09	Cesium-134	-2.22 U	10	18	Filtered		ES
RD-59C		Primary	08/04/09	Cesium-134	-6.29 U	7.3	14.1	Unfiltered		ES
RD-59C		Primary	08/04/09	Cesium-137	-8.38 U	10	17.8	Filtered		ES
RD-59C		Primary	08/04/09	Cesium-137	0.847 U	7.5	13.3	Unfiltered		ES
RD-59C		Primary	08/04/09	Cobalt-60	0.145 U	7.9	13.7	Filtered		ES
RD-59C		Primary	08/04/09	Cobalt-60	-0.132 U	6.4	12	Unfiltered		ES
RD-59C		Primary	08/04/09	Europium-152	-3.48 U	23	39.4	Filtered		ES
RD-59C		Primary	08/04/09	Europium-152	-16.6 U	26	45.5	Unfiltered		ES
RD-59C		Primary	08/04/09	Europium-154	23.2 U	30	49.8	Filtered		ES
RD-59C		Primary	08/04/09	Europium-154	19.2 U	25	42.4	Unfiltered		ES
RD-59C		Primary	08/04/09	Europium-155	5.86 U	22	38.1	Filtered		ES
RD-59C		Primary	08/04/09	Europium-155	1.12 U	29	49.6	Unfiltered		ES
RD-59C		Primary	08/04/09	Manganese-54	4.27 U	8.3	14.2	Filtered		ES
RD-59C		Primary	08/04/09	Manganese-54	1.82 U	5.6	10	Unfiltered		ES
RD-59C		Primary	08/04/09	Sodium-22	7.88 U	10	16.9	Filtered		ES
RD-59C		Primary	08/04/09	Sodium-22	6.49 U	8.5	14.4	Unfiltered		ES
RD-61		Primary	05/28/98	Cesium-134	8.17 U	---	8.17	Filtered		TN
RD-61		Primary	05/28/98	Cesium-137	6.76 U	---	6.76	Filtered		TN
RD-61		Primary	05/28/98	Cobalt-57	4.29 U	---	4.29	Filtered		TN
RD-61		Primary	05/28/98	Cobalt-60	7.54 U	---	7.54	Filtered		TN
RD-63		Primary	02/02/99	Cesium-134	8.62 U	---	8.62	Filtered		TN
RD-63		Primary	02/02/99	Cesium-137	6.68 U	---	6.68	Filtered		TN
RD-63		Primary	02/02/99	Cobalt-57	4.11 U	---	4.11	Filtered		TN
RD-63		Primary	02/02/99	Cobalt-60	7.41 U	---	7.41	Filtered		TN
RD-63		Primary	02/16/00	Cesium-134	13.9 U	---	13.9	Filtered		TR
RD-63		Primary	02/16/00	Cesium-137	12.2 U	---	12.2	Filtered		TR
RD-63		Primary	02/16/00	Cobalt-57	5.96 U	---	5.96	Filtered		TR
RD-63		Primary	02/16/00	Cobalt-60	11 U	---	11	Filtered		TR
RD-63		Primary	02/23/01	Cesium-134	13.9 U	---	13.9	Filtered		ES
RD-63		Primary	02/23/01	Cesium-137	12.6 U	---	12.6	Filtered		ES
RD-63		Primary	02/23/01	Cobalt-57	9.06 U	---	9.06	Filtered		ES
RD-63		Primary	02/23/01	Cobalt-60	14 U	---	14	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-63		Primary	02/14/02	Cesium-134	3 U	0.11	3	Filtered		DL
RD-63		Primary	02/14/02	Cesium-137	2 U	2	2	Filtered		DL
RD-63		Primary	02/14/02	Cobalt-57	3 U	3	3	Filtered		DL
RD-63		Primary	02/14/02	Cobalt-60	3 U	3	3	Filtered		DL
RD-63		Primary	02/05/03	Cesium-134	2.97 U	---	2.97	Filtered		ES
RD-63		Primary	02/05/03	Cesium-137	2.04 U	---	2.04	Filtered		ES
RD-63		Primary	02/05/03	Cobalt-57	1.3 U	---	1.3	Filtered		ES
RD-63		Primary	02/05/03	Cobalt-60	2.61 U	---	2.61	Filtered		ES
RD-63		Primary	02/24/04	Cesium-134	8.47 U	---	8.47	Filtered		ES
RD-63		Primary	02/24/04	Cesium-137	7.37 U	---	7.37	Filtered		ES
RD-63		Primary	02/24/04	Cobalt-57	5.27 U	---	5.27	Filtered		ES
RD-63		Primary	02/24/04	Cobalt-60	8.16 U	---	8.16	Filtered		ES
RD-63		Primary	08/25/05	Cesium-134	1.78 U	---	1.78	Filtered		ES
RD-63		Primary	08/25/05	Cesium-137	1.3 U	---	1.3	Filtered		ES
RD-63		Primary	08/25/05	Cobalt-57	0.64 U	---	0.64	Filtered		ES
RD-63		Primary	08/25/05	Cobalt-60	1.55 U	---	1.55	Filtered		ES
RD-63		Primary	08/25/05	Europium-152	3.49 U	---	3.49	Filtered		ES
RD-63		Primary	08/25/05	Europium-154	4.51 U	---	4.51	Filtered		ES
RD-63		Primary	08/25/05	Manganese-54	1.48 U	---	1.48	Filtered		ES
RD-63		Primary	08/25/05	Sodium-22	1.56 U	---	1.56	Filtered		ES
RD-63		Primary	02/16/06	Cesium-134	2.7 U	---	2.7	Filtered		ES
RD-63		Primary	02/16/06	Cesium-137	1.46 U	---	1.46	Filtered		ES
RD-63		Primary	02/16/06	Cobalt-57	1.36 U	---	1.36	Filtered		ES
RD-63		Primary	02/16/06	Cobalt-60	1.47 U	---	1.47	Filtered		ES
RD-63		Primary	02/16/06	Europium-152	3.94 U	---	3.94	Filtered		ES
RD-63		Primary	02/16/06	Europium-154	4.53 U	---	4.53	Filtered		ES
RD-63		Primary	02/16/06	Manganese-54	1.56 U	---	1.56	Filtered		ES
RD-63		Primary	02/16/06	Sodium-22	1.56 U	---	1.56	Filtered		ES
RD-63		Primary	05/24/07	Cesium-134	1.09 U	---	1.09	Filtered		ES
RD-63		Split	05/24/07	Cesium-134	0.185 U	0.84	1.46	Filtered		STL
RD-63		Primary	05/24/07	Cesium-137	0.93 U	---	0.93	Filtered		ES
RD-63		Split	05/24/07	Cesium-137	-0.264 U	0.77	1.29	Filtered		STL
RD-63		Primary	05/24/07	Cobalt-57	0.636 U	---	0.636	Filtered		ES
RD-63		Split	05/24/07	Cobalt-57	-2.53 U	3.8	6.08	Filtered		STL
RD-63		Primary	05/24/07	Cobalt-60	0.898 U	---	0.898	Filtered		ES
RD-63		Split	05/24/07	Cobalt-60	0.0408 U	0.79	1.36	Filtered		STL
RD-63		Primary	05/24/07	Europium-152	2.49 U	---	2.49	Filtered		ES
RD-63		Split	05/24/07	Europium-152	0.36 U	2.1	3.51	Filtered		STL
RD-63		Primary	05/24/07	Europium-154	3 U	---	3	Filtered		ES
RD-63		Split	05/24/07	Europium-154	0.412 U	2.4	4.17	Filtered		STL
RD-63		Primary	05/24/07	Manganese-54	0.895 U	---	0.895	Filtered		ES
RD-63		Split	05/24/07	Manganese-54	0.386 U	0.81	1.41	Filtered		STL
RD-63		Primary	05/24/07	Sodium-22	1.02 U	---	1.02	Filtered		ES
RD-63		Split	05/24/07	Sodium-22	0.245 U	0.85	1.49	Filtered		STL
RD-63		Primary	02/06/08	Cesium-134	0.938 U	---	0.938	Filtered		ES
RD-63		Primary	02/06/08	Cesium-137	0.795 U	---	0.795	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-63		Primary	02/06/08	Cobalt-57	0.449 U	---	0.449	Filtered		ES
RD-63		Primary	02/06/08	Cobalt-60	0.723 U	---	0.723	Filtered		ES
RD-63		Primary	02/06/08	Europium-152	2 U	---	2	Filtered		ES
RD-63		Primary	02/06/08	Europium-154	2.36 U	---	2.36	Filtered		ES
RD-63		Primary	02/06/08	Manganese-54	0.732 U	---	0.732	Filtered		ES
RD-63		Primary	02/06/08	Sodium-22	0.804 U	---	0.804	Filtered		ES
RD-63		Primary	02/20/09	Antimony-125	0.108 U	1.5	2.54	Filtered		ES
RD-63		Primary	02/20/09	Antimony-125	0.375 U	1.6	2.7	Unfiltered		ES
RD-63		Split	02/20/09	Antimony-125	-0.0616 U	3.41	5.77	Filtered		GEL
RD-63		Split	02/20/09	Antimony-125	0.0569 U	3.1	5.23	Unfiltered		GEL
RD-63		Primary	02/20/09	Barium-133	-1.61 U	0.8	1.08	Filtered		ES
RD-63		Primary	02/20/09	Barium-133	0.183 U	0.23	0.681	Unfiltered		ES
RD-63		Split	02/20/09	Barium-133	0.0943 U	1.81	2.68	Filtered		GEL
RD-63		Split	02/20/09	Barium-133	0.851 U	1.7	2.55	Unfiltered		GEL
RD-63		Primary	02/20/09	Cesium-134	0.236 U	0.88	1.49	Filtered		ES
RD-63		Primary	02/20/09	Cesium-134	0.684 U	0.61	0.829	Unfiltered		ES
RD-63		Split	02/20/09	Cesium-134	-0.702 U	1.38	2.22	Filtered		GEL
RD-63		Split	02/20/09	Cesium-134	0.109 U	1.33	2.21	Unfiltered		GEL
RD-63		Primary	02/20/09	Cesium-137	0.087 U	1.2	1.97	Filtered		ES
RD-63		Primary	02/20/09	Cesium-137	-0.124 U	0.61	1.04	Unfiltered		ES
RD-63		Split	02/20/09	Cesium-137	0.478 U	1.29	1.89	Filtered		GEL
RD-63		Split	02/20/09	Cesium-137	0.877 U	1.3	1.94	Unfiltered		GEL
RD-63		Primary	02/20/09	Cobalt-60	-0.172 U	0.87	1.51	Filtered		ES
RD-63		Primary	02/20/09	Cobalt-60	-0.374 U	0.52	0.928	Unfiltered		ES
RD-63		Split	02/20/09	Cobalt-60	0.584 U	1.2	2.07	Filtered		GEL
RD-63		Split	02/20/09	Cobalt-60	0.446 U	1.15	1.99	Unfiltered		GEL
RD-63		Primary	02/20/09	Europium-152	-0.071 U	1.6	2.73	Filtered		ES
RD-63		Primary	02/20/09	Europium-152	0.713 U	0.6	1.7	Unfiltered		ES
RD-63		Split	02/20/09	Europium-152	-2.22 U	4.02	6.38	Filtered		GEL
RD-63		Split	02/20/09	Europium-152	-1.56 U	4.09	5.94	Unfiltered		GEL
RD-63		Primary	02/20/09	Europium-154	-0.45 U	1.6	2.87	Filtered		ES
RD-63		Primary	02/20/09	Europium-154	0.336 U	1.2	2.06	Unfiltered		ES
RD-63		Split	02/20/09	Europium-154	-0.948 U	3.51	5.81	Filtered		GEL
RD-63		Split	02/20/09	Europium-154	0.698 U	3.47	5.14	Unfiltered		GEL
RD-63		Primary	02/20/09	Europium-155	0.695 U	9.3	2.37	Filtered		ES
RD-63		Primary	02/20/09	Europium-155	-1.97 U	3.5	5.89	Unfiltered		ES
RD-63		Split	02/20/09	Europium-155	0.604 U	4.83	8.11	Filtered		GEL
RD-63		Split	02/20/09	Europium-155	-1.28 U	4.76	7.82	Unfiltered		GEL
RD-63		Primary	02/20/09	Manganese-54	0.209 U	0.73	1.24	Filtered		ES
RD-63		Primary	02/20/09	Manganese-54	0.552 U	0.5	0.838	Unfiltered		ES
RD-63		Split	02/20/09	Manganese-54	0.318 U	1.23	1.85	Filtered		GEL
RD-63		Split	02/20/09	Manganese-54	-0.856 U	1.15	1.83	Unfiltered		GEL
RD-63		Primary	02/20/09	Sodium-22	-0.153 U	0.55	0.979	Filtered		ES
RD-63		Primary	02/20/09	Sodium-22	0.114 U	0.4	0.701	Unfiltered		ES
RD-63		Split	02/20/09	Sodium-22	-0.283 U	1.26	2.09	Filtered		GEL
RD-63		Split	02/20/09	Sodium-22	0.22 U	1.24	1.83	Unfiltered		GEL

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-63		Primary	07/31/09	Antimony-125	7.56 U	26	44.6	Filtered		ES
RD-63		Primary	07/31/09	Antimony-125	-6.2 U	15	26.6	Unfiltered		ES
RD-63		Primary	07/31/09	Barium-133	-10.1 U	10	18.8	Filtered		ES
RD-63		Primary	07/31/09	Barium-133	0.303 U	1.4	8.02	Unfiltered		ES
RD-63		Primary	07/31/09	Cesium-134	-6.63 U	8.5	15.9	Filtered		ES
RD-63		Primary	07/31/09	Cesium-134	2.66 U	6.1	8.22	Unfiltered		ES
RD-63		Primary	07/31/09	Cesium-137	9.52 U	8.9	14.7	Filtered		ES
RD-63		Primary	07/31/09	Cesium-137	-1.63 U	6.4	11.1	Unfiltered		ES
RD-63		Primary	07/31/09	Cobalt-60	3.23 U	6.4	11.3	Filtered		ES
RD-63		Primary	07/31/09	Cobalt-60	-2.13 U	4	7.49	Unfiltered		ES
RD-63		Primary	07/31/09	Europium-152	-6.57 U	29	51.1	Filtered		ES
RD-63		Primary	07/31/09	Europium-152	2.62 U	5.4	13.5	Unfiltered		ES
RD-63		Primary	07/31/09	Europium-154	-18.4 U	24	47.1	Filtered		ES
RD-63		Primary	07/31/09	Europium-154	8.89 U	19	24.7	Unfiltered		ES
RD-63		Primary	07/31/09	Europium-155	-1.52 U	27	46.4	Filtered		ES
RD-63		Primary	07/31/09	Europium-155	4.16 U	15	26.3	Unfiltered		ES
RD-63		Primary	07/31/09	Manganese-54	-2.16 U	5.7	10.8	Filtered		ES
RD-63		Primary	07/31/09	Manganese-54	-6.25 U	6.2	11.1	Unfiltered		ES
RD-63		Primary	07/31/09	Sodium-22	-6.24 U	8.2	16	Filtered		ES
RD-63		Primary	07/31/09	Sodium-22	3.02 U	6.4	8.38	Unfiltered		ES
RD-64		Primary	05/10/01	Cesium-134	8.14 U	---	8.14	Filtered		ES
RD-64		Primary	05/10/01	Cesium-137	6.02 U	---	6.02	Filtered		ES
RD-64		Primary	05/10/01	Cobalt-57	3.28 U	---	3.28	Filtered		ES
RD-64		Primary	05/10/01	Cobalt-60	7.46 U	---	7.46	Filtered		ES
RD-64		Primary	02/28/02	Cesium-134	3 U	1	3	Filtered		DL
RD-64		Primary	02/28/02	Cesium-137	3 U	1	3	Filtered		DL
RD-64		Primary	02/28/02	Cobalt-57	5 U	3	5	Filtered		DL
RD-64		Primary	02/28/02	Cobalt-60	5 U	3	5	Filtered		DL
RD-64	Z06	Primary	01/29/03	Cesium-134	1.14 U	---	1.14	Filtered		ES
RD-64	Z06	Primary	01/29/03	Cesium-137	0.879 U	---	0.879	Filtered		ES
RD-64	Z06	Primary	01/29/03	Cobalt-57	0.668 U	---	0.668	Filtered		ES
RD-64	Z06	Primary	01/29/03	Cobalt-60	0.834 U	---	0.834	Filtered		ES
RD-64	Z06	Primary	02/14/05	Cesium-134	1.73 U	---	1.73	Filtered		ES
RD-64	Z06	Primary	02/14/05	Cesium-137	1.3 U	---	1.3	Filtered		ES
RD-64	Z06	Primary	02/14/05	Cobalt-57	0.569 U	---	0.569	Filtered		ES
RD-64	Z06	Primary	02/14/05	Cobalt-60	1.55 U	---	1.55	Filtered		ES
RD-64	Z06	Primary	02/14/05	Europium-152	3.42 U	---	3.42	Filtered		ES
RD-64	Z06	Primary	02/14/05	Europium-154	4.24 U	---	4.24	Filtered		ES
RD-64	Z06	Primary	02/14/05	Manganese-54	1.38 U	---	1.38	Filtered		ES
RD-64	Z06	Primary	02/14/05	Sodium-22	1.45 U	---	1.45	Filtered		ES
RD-64	Z06	Primary	02/16/06	Cesium-134	3.79 U	---	3.79	Filtered		ES
RD-64	Z06	Primary	02/16/06	Cesium-137	1.57 U	---	1.57	Filtered		ES
RD-64	Z06	Primary	02/16/06	Cobalt-57	1.5 U	---	1.5	Filtered		ES
RD-64	Z06	Primary	02/16/06	Cobalt-60	1.63 U	---	1.63	Filtered		ES
RD-64	Z06	Primary	02/16/06	Europium-152	4.31 U	---	4.31	Filtered		ES
RD-64	Z06	Primary	02/16/06	Europium-154	4.83 U	---	4.83	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-64	Z06	Primary	02/16/06	Manganese-54	1.68 U	---	1.68	Filtered		ES
RD-64	Z06	Primary	02/16/06	Sodium-22	1.67 U	---	1.67	Filtered		ES
RD-64	Z06	Primary	02/08/07	Cesium-134	1.26 U	---	1.26	Filtered		ES
RD-64	Z06	Primary	02/08/07	Cesium-137	0.984 U	---	0.984	Filtered		ES
RD-64	Z06	Primary	02/08/07	Cobalt-57	0.59 U	---	0.59	Filtered		ES
RD-64	Z06	Primary	02/08/07	Cobalt-60	1 U	---	1	Filtered		ES
RD-64	Z06	Primary	02/08/07	Europium-152	2.67 U	---	2.67	Filtered		ES
RD-64	Z06	Primary	02/08/07	Europium-154	3.04 U	---	3.04	Filtered		ES
RD-64	Z06	Primary	02/08/07	Manganese-54	0.969 U	---	0.969	Filtered		ES
RD-64	Z06	Primary	02/08/07	Sodium-22	1.04 U	---	1.04	Filtered		ES
RD-64	Z07	Primary	02/06/08	Cesium-134	1.29 U	---	1.29	Filtered		ES
RD-64	Z07	Primary	02/06/08	Cesium-137	1.16 U	---	1.16	Filtered		ES
RD-64	Z07	Primary	02/06/08	Cobalt-57	0.886 U	---	0.886	Filtered		ES
RD-64	Z07	Primary	02/06/08	Cobalt-60	1.24 U	---	1.24	Filtered		ES
RD-64	Z07	Primary	02/06/08	Europium-152	3.1 U	---	3.1	Filtered		ES
RD-64	Z07	Primary	02/06/08	Europium-154	3.78 U	---	3.78	Filtered		ES
RD-64	Z07	Primary	02/06/08	Manganese-54	1.2 U	---	1.2	Filtered		ES
RD-64	Z07	Primary	02/06/08	Sodium-22	1.29 U	---	1.29	Filtered		ES
RD-64	Z08	Primary	02/23/09	Antimony-125	1.24 U	1.9	3.23	Filtered		ES
RD-64	Z08	Primary	02/23/09	Antimony-125	0.338 U	1.9	3.17	Unfiltered		ES
RD-64	Z08	Primary	02/23/09	Barium-133	0.023 U	0.35	1.37	Filtered		ES
RD-64	Z08	Primary	02/23/09	Barium-133	0.827 U	2.3	3.84	Unfiltered		ES
RD-64	Z08	Primary	02/23/09	Cesium-134	-0.776 U	1.4	2.39	Filtered		ES
RD-64	Z08	Primary	02/23/09	Cesium-134	-1.49 U	1.4	2.44	Unfiltered		ES
RD-64	Z08	Primary	02/23/09	Cesium-137	-0.616 U	0.97	1.69	Filtered		ES
RD-64	Z08	Primary	02/23/09	Cesium-137	0.898 U	1.5	2.59	Unfiltered		ES
RD-64	Z08	Primary	02/23/09	Cobalt-60	0.006 U	1	1.81	Filtered		ES
RD-64	Z08	Primary	02/23/09	Cobalt-60	-0.211 U	0.78	1.37	Unfiltered		ES
RD-64	Z08	Primary	02/23/09	Europium-152	2.18 U	2.6	4.35	Filtered		ES
RD-64	Z08	Primary	02/23/09	Europium-152	-0.121 U	3.4	5.8	Unfiltered		ES
RD-64	Z08	Primary	02/23/09	Europium-154	0.019 U	1.7	2.92	Filtered		ES
RD-64	Z08	Primary	02/23/09	Europium-154	-1.37 U	3.6	6.26	Unfiltered		ES
RD-64	Z08	Primary	02/23/09	Europium-155	-3.43 U	5.6	9.45	Filtered		ES
RD-64	Z08	Primary	02/23/09	Europium-155	-1.02 U	2.7	3.84	Unfiltered		ES
RD-64	Z08	Primary	02/23/09	Manganese-54	-0.238 U	0.64	1.13	Filtered		ES
RD-64	Z08	Primary	02/23/09	Manganese-54	0.074 U	1.3	2.25	Unfiltered		ES
RD-64	Z08	Primary	02/23/09	Sodium-22	0.007 U	0.56	0.994	Filtered		ES
RD-64	Z08	Primary	02/23/09	Sodium-22	-0.467 U	1.2	2.13	Unfiltered		ES
RD-64	Z04	Primary	07/16/09	Antimony-125	0.226 U	9.7	16.6	Filtered		ES
RD-64	Z04	Primary	07/16/09	Antimony-125	10.4 U	22	37.8	Unfiltered		ES
RD-64	Z04	Primary	07/16/09	Barium-133	2.48 U	5.9	10	Filtered		ES
RD-64	Z04	Primary	07/16/09	Barium-133	0.745 U	3.6	11.6	Unfiltered		ES
RD-64	Z04	Primary	07/16/09	Cesium-134	-0.498 U	5.6	7.89	Filtered		ES
RD-64	Z04	Primary	07/16/09	Cesium-134	-3.09 U	11	19.5	Unfiltered		ES
RD-64	Z04	Primary	07/16/09	Cesium-137	-5.05 U	6.8	11.7	Filtered		ES
RD-64	Z04	Primary	07/16/09	Cesium-137	-3.79 U	9.1	15.6	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-III
RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-64	Z04	Primary	07/16/09	Cobalt-60	6.08 U	7.3	12.2	Filtered		ES
RD-64	Z04	Primary	07/16/09	Cobalt-60	2.55 U	7.8	13.2	Unfiltered		ES
RD-64	Z04	Primary	07/16/09	Europium-152	-5.85 U	19	31.5	Filtered		ES
RD-64	Z04	Primary	07/16/09	Europium-152	-9.82 U	26	30.3	Unfiltered		ES
RD-64	Z04	Primary	07/16/09	Europium-154	2.65 U	6.5	22.8	Filtered		ES
RD-64	Z04	Primary	07/16/09	Europium-154	57.4 U	42	70.5	Unfiltered		ES
RD-64	Z04	Primary	07/16/09	Europium-155	5.77 U	12	20.7	Filtered		ES
RD-64	Z04	Primary	07/16/09	Europium-155	4.28 U	16	26.9	Unfiltered		ES
RD-64	Z04	Primary	07/16/09	Manganese-54	0.955 U	5	8.46	Filtered		ES
RD-64	Z04	Primary	07/16/09	Manganese-54	3.35 U	8.9	15.1	Unfiltered		ES
RD-64	Z04	Primary	07/16/09	Sodium-22	0.896 U	2.2	7.71	Filtered		ES
RD-64	Z04	Primary	07/16/09	Sodium-22	19.4 U	14	23.9	Unfiltered		ES
RD-66		Primary	09/30/97	Cesium-134	-2 U	1.4	3.7	Filtered		LAS
RD-66		Primary	09/30/97	Cesium-137	0.1 U	3.3	4.5	Filtered		LAS
RD-66		Primary	09/30/97	Cobalt-57	-0.2 U	2	3.4	Filtered		LAS
RD-66		Primary	09/30/97	Cobalt-60	0.6 U	1.6	4	Filtered		LAS
RD-68A		Primary	07/09/97	Cesium-134	-3.6 U	3.5	7.8	Filtered		LAS
RD-68A		Primary	07/09/97	Cesium-137	-0.8 U	6.6	9.6	Filtered		LAS
RD-68A		Primary	07/09/97	Cobalt-57	-2.9 U	1.6	4.6	Filtered		LAS
RD-68A		Primary	07/09/97	Cobalt-60	1.1 U	4	7.7	Filtered		LAS
RD-68B		Primary	07/10/97	Cesium-134	-2.1 U	3.5	7.7	Filtered		LAS
RD-68B		Primary	07/10/97	Cesium-137	4.5 U	5.3	8	Filtered		LAS
RD-68B		Primary	07/10/97	Cobalt-57	-0.1 U	2.6	4.5	Filtered		LAS
RD-68B		Primary	07/10/97	Cobalt-60	-22 U	3.4	8.5	Filtered		LAS
RD-69		Primary	05/28/98	Cesium-134	8.9 U	---	8.9	Filtered		TN
RD-69		Primary	05/28/98	Cesium-137	5.84 U	---	5.84	Filtered		TN
RD-69		Primary	05/28/98	Cobalt-57	3.94 U	---	3.94	Filtered		TN
RD-69		Primary	05/28/98	Cobalt-60	7.21 U	---	7.21	Filtered		TN
RD-71		Primary	09/30/97	Cesium-134	0.1 U	1.9	4.4	Filtered		LAS
RD-71		Primary	09/30/97	Cesium-137	-0.9 U	1.8	4.8	Filtered		LAS
RD-71		Primary	09/30/97	Cobalt-57	1.5 U	2.3	3.7	Filtered		LAS
RD-71		Primary	09/30/97	Cobalt-60	-0.5 U	1.7	3.9	Filtered		LAS
RD-74		Primary	05/13/99	Cesium-134	18.2 U	---	18.2	Filtered		TN
RD-74		Primary	05/13/99	Cesium-137	13 U	---	13	Filtered		TN
RD-74		Primary	05/13/99	Cobalt-57	5.96 U	---	5.96	Filtered		TN
RD-74		Primary	05/13/99	Cobalt-60	20.8 U	---	20.8	Filtered		TN
RD-75		Primary	08/30/05	Cesium-134	2.63 U	---	2.63	Filtered		ES
RD-75		Primary	08/30/05	Cesium-137	2.1 U	---	2.1	Filtered		ES
RD-75		Primary	08/30/05	Cobalt-57	1.72 U	---	1.72	Filtered		ES
RD-75		Primary	08/30/05	Cobalt-60	2.19 U	---	2.19	Filtered		ES
RD-75		Primary	08/30/05	Europium-152	5.92 U	---	5.92	Filtered		ES
RD-75		Primary	08/30/05	Europium-154	6.41 U	---	6.41	Filtered		ES
RD-75		Primary	08/30/05	Manganese-54	2.31 U	---	2.31	Filtered		ES
RD-75		Primary	08/30/05	Sodium-22	2.22 U	---	2.22	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-85		Primary	08/13/04	Cesium-134	14.8 U	---	14.8	Filtered		ES
RD-85		Primary	08/13/04	Cesium-137	11.2 U	---	11.2	Filtered		ES
RD-85		Primary	08/13/04	Cobalt-57	4.93 U	---	4.93	Filtered		ES
RD-85		Primary	08/13/04	Cobalt-60	14 U	---	14	Filtered		ES
RD-85		Primary	02/23/05	Cesium-134	3.09 U	---	3.09	Filtered		ES
RD-85		Primary	02/23/05	Cesium-137	2.41 U	---	2.41	Filtered		ES
RD-85		Primary	02/23/05	Cobalt-57	1.56 U	---	1.56	Filtered		ES
RD-85		Primary	02/23/05	Cobalt-60	2.48 U	---	2.48	Filtered		ES
RD-85		Primary	02/23/05	Europium-152	6.07 U	---	6.07	Filtered		ES
RD-85		Primary	02/23/05	Europium-154	7.36 U	---	7.36	Filtered		ES
RD-85		Primary	02/23/05	Manganese-54	2.42 U	---	2.42	Filtered		ES
RD-85		Primary	02/23/05	Sodium-22	2.52 U	---	2.52	Filtered		ES
RD-86		Primary	08/13/04	Cesium-134	17.9 U	---	17.9	Filtered		ES
RD-86		Primary	08/13/04	Cesium-137	16 U	---	16	Filtered		ES
RD-86		Primary	08/13/04	Cobalt-57	9.47 U	---	9.47	Filtered		ES
RD-86		Primary	08/13/04	Cobalt-60	16.6 U	---	16.6	Filtered		ES
RD-86		Primary	02/23/05	Cesium-134	2.32 U	---	2.32	Filtered		ES
RD-86		Primary	02/23/05	Cesium-137	2.07 U	---	2.07	Filtered		ES
RD-86		Primary	02/23/05	Cobalt-57	1.37 U	---	1.37	Filtered		ES
RD-86		Primary	02/23/05	Cobalt-60	2.12 U	---	2.12	Filtered		ES
RD-86		Primary	02/23/05	Europium-152	4.88 U	---	4.88	Filtered		ES
RD-86		Primary	02/23/05	Europium-154	6.07 U	---	6.07	Filtered		ES
RD-86		Primary	02/23/05	Manganese-54	1.97 U	---	1.97	Filtered		ES
RD-86		Primary	02/23/05	Sodium-22	2.08 U	---	2.08	Filtered		ES
RD-87		Primary	08/18/04	Cesium-134	17.3 U	---	17.3	Filtered		ES
RD-87		Primary	08/18/04	Cesium-137	13.2 U	---	13.2	Filtered		ES
RD-87		Primary	08/18/04	Cobalt-57	8.63 U	---	8.63	Filtered		ES
RD-87		Primary	08/18/04	Cobalt-60	14.9 U	---	14.9	Filtered		ES
RD-87		Primary	08/24/05	Cesium-134	1.81 U	---	1.81	Filtered		ES
RD-87		Primary	08/24/05	Cesium-137	1.32 U	---	1.32	Filtered		ES
RD-87		Primary	08/24/05	Cobalt-57	0.628 U	---	0.628	Filtered		ES
RD-87		Primary	08/24/05	Cobalt-60	1.46 U	---	1.46	Filtered		ES
RD-87		Primary	08/24/05	Europium-152	3.39 U	---	3.39	Filtered		ES
RD-87		Primary	08/24/05	Europium-154	4.39 U	---	4.39	Filtered		ES
RD-87		Primary	08/24/05	Manganese-54	1.44 U	---	1.44	Filtered		ES
RD-87		Primary	08/24/05	Sodium-22	1.51 U	---	1.51	Filtered		ES
RD-88		Primary	08/20/04	Cesium-134	15.4 U	---	15.4	Filtered		ES
RD-88		Primary	08/20/04	Cesium-137	11.8 U	---	11.8	Filtered		ES
RD-88		Primary	08/20/04	Cobalt-57	4.94 U	---	4.94	Filtered		ES
RD-88		Primary	08/20/04	Cobalt-60	14.6 U	---	14.6	Filtered		ES
RD-88		Primary	08/25/05	Cesium-134	2.06 U	---	2.06	Filtered		ES
RD-88		Primary	08/25/05	Cesium-137	1.78 U	---	1.78	Filtered		ES
RD-88		Primary	08/25/05	Cobalt-57	1.07 U	---	1.07	Filtered		ES
RD-88		Primary	08/25/05	Cobalt-60	1.78 U	---	1.78	Filtered		ES
RD-88		Primary	08/25/05	Europium-152	4.08 U	---	4.08	Filtered		ES
RD-88		Primary	08/25/05	Europium-154	4.81 U	---	4.81	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III
RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-88		Primary	08/25/05	Manganese-54	1.77 U	---	1.77	Filtered		ES
RD-88		Primary	08/25/05	Sodium-22	1.66 U	---	1.66	Filtered		ES
RD-89		Primary	05/24/05	Cesium-134	2.12 U	---	2.12	Filtered		ES
RD-89		Duplicate	05/24/05	Cesium-134	2.31 U	---	2.31	Filtered		ES
RD-89		Primary	05/24/05	Cesium-137	1.99 U	---	1.99	Filtered		ES
RD-89		Duplicate	05/24/05	Cesium-137	1.85 U	---	1.85	Filtered		ES
RD-89		Primary	05/24/05	Cobalt-57	1.28 U	---	1.28	Filtered		ES
RD-89		Duplicate	05/24/05	Cobalt-57	0.829 U	---	0.829	Filtered		ES
RD-89		Primary	05/24/05	Cobalt-60	2.02 U	---	2.02	Filtered		ES
RD-89		Duplicate	05/24/05	Cobalt-60	2.2 U	---	2.2	Filtered		ES
RD-89		Primary	05/24/05	Europium-152	4.66 U	---	4.66	Filtered		ES
RD-89		Duplicate	05/24/05	Europium-152	5.02 U	---	5.02	Filtered		ES
RD-89		Primary	05/24/05	Europium-154	6.05 U	---	6.05	Filtered		ES
RD-89		Duplicate	05/24/05	Europium-154	6.09 U	---	6.09	Filtered		ES
RD-89		Primary	05/24/05	Manganese-54	1.86 U	---	1.86	Filtered		ES
RD-89		Duplicate	05/24/05	Manganese-54	1.97 U	---	1.97	Filtered		ES
RD-89		Primary	05/24/05	Sodium-22	2.06 U	---	2.06	Filtered		ES
RD-89		Duplicate	05/24/05	Sodium-22	2.07 U	---	2.07	Filtered		ES
RD-89		Primary	06/01/05	Cesium-134	1.74 U	---	1.74	Filtered		ES
RD-89		Primary	06/01/05	Cesium-137	1.47 U	---	1.47	Filtered		ES
RD-89		Primary	06/01/05	Cobalt-57	0.861 U	---	0.861	Filtered		ES
RD-89		Primary	06/01/05	Cobalt-60	1.62 U	---	1.62	Filtered		ES
RD-89		Primary	06/01/05	Europium-152	4.1 U	---	4.1	Filtered		ES
RD-89		Primary	06/01/05	Europium-154	4.32 U	---	4.32	Filtered		ES
RD-89		Primary	06/01/05	Manganese-54	1.5 U	---	1.5	Filtered		ES
RD-89		Primary	06/01/05	Sodium-22	1.46 U	---	1.46	Filtered		ES
RD-90		Primary	03/25/04	Cesium-134	12.4 U	---	12.4	Filtered		ES
RD-90		Primary	03/25/04	Cesium-137	10.2 U	---	10.2	Filtered		ES
RD-90		Primary	03/25/04	Cobalt-57	6.68 U	---	6.68	Filtered		ES
RD-90		Primary	03/25/04	Cobalt-60	12.3 U	---	12.3	Filtered		ES
RD-90		Primary	04/15/04	Cesium-134	12.7 U	---	12.7	Filtered		ES
RD-90		Primary	04/15/04	Cesium-137	11 U	---	11	Filtered		ES
RD-90		Primary	04/15/04	Cobalt-57	7.66 U	---	7.66	Filtered		ES
RD-90		Primary	04/15/04	Cobalt-60	12.2 U	---	12.2	Filtered		ES
RD-90		Primary	08/25/05	Cesium-134	1.05 U	---	1.05	Filtered		ES
RD-90		Primary	08/25/05	Cesium-137	0.892 U	---	0.892	Filtered		ES
RD-90		Primary	08/25/05	Cobalt-57	0.727 U	---	0.727	Filtered		ES
RD-90		Primary	08/25/05	Cobalt-60	0.895 U	---	0.895	Filtered		ES
RD-90		Primary	08/25/05	Europium-152	2.74 U	---	2.74	Filtered		ES
RD-90		Primary	08/25/05	Europium-154	2.39 U	---	2.39	Filtered		ES
RD-90		Primary	08/25/05	Manganese-54	0.897 U	---	0.897	Filtered		ES
RD-90		Primary	08/25/05	Sodium-22	0.826 U	---	0.826	Filtered		ES
RD-91		Primary	03/25/04	Cesium-134	6.05 U	---	6.05	Filtered		ES
RD-91		Primary	03/25/04	Cesium-137	4.67 U	---	4.67	Filtered		ES
RD-91		Primary	03/25/04	Cobalt-57	2.9 U	---	2.9	Filtered		ES
RD-91		Primary	03/25/04	Cobalt-60	5.29 U	---	5.29	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-91		Primary	04/15/04	Cesium-134	10.9 U	---	10.9	Filtered		ES
RD-91		Primary	04/15/04	Cesium-137	9.36 U	---	9.36	Filtered		ES
RD-91		Primary	04/15/04	Cobalt-57	5.3 U	---	5.3	Filtered		ES
RD-91		Primary	04/15/04	Cobalt-60	9.6 U	---	9.6	Filtered		ES
RD-92		Primary	03/25/04	Cesium-134	53.1 U	---	53.1	Filtered		ES
RD-92		Primary	03/25/04	Cesium-137	49.7 U	---	49.7	Filtered		ES
RD-92		Primary	03/25/04	Cobalt-57	29.4 U	---	29.4	Filtered		ES
RD-92		Primary	03/25/04	Cobalt-60	54.4 U	---	54.4	Filtered		ES
RD-92		Primary	04/15/04	Cesium-134	10.9 U	---	10.9	Filtered		ES
RD-92		Primary	04/15/04	Cesium-137	10.9 U	---	10.9	Filtered		ES
RD-92		Primary	04/15/04	Cobalt-57	6.16 U	---	6.16	Filtered		ES
RD-92		Primary	04/15/04	Cobalt-60	10.5 U	---	10.5	Filtered		ES
RD-93		Primary	05/23/05	Cesium-134	1.85 U	---	1.85	Filtered		ES
RD-93		Duplicate	05/23/05	Cesium-134	1.96 U	---	1.96	Filtered		ES
RD-93		Primary	05/23/05	Cesium-137	1.49 U	---	1.49	Filtered		ES
RD-93		Duplicate	05/23/05	Cesium-137	1.86 U	---	1.86	Filtered		ES
RD-93		Primary	05/23/05	Cobalt-57	1.08 U	---	1.08	Filtered		ES
RD-93		Duplicate	05/23/05	Cobalt-57	1.25 U	---	1.25	Filtered		ES
RD-93		Primary	05/23/05	Cobalt-60	1.29 U	---	1.29	Filtered		ES
RD-93		Duplicate	05/23/05	Cobalt-60	1.86 U	---	1.86	Filtered		ES
RD-93		Primary	05/23/05	Europium-152	4.34 U	---	4.34	Filtered		ES
RD-93		Duplicate	05/23/05	Europium-152	4.59 U	---	4.59	Filtered		ES
RD-93		Primary	05/23/05	Europium-154	4.19 U	---	4.19	Filtered		ES
RD-93		Duplicate	05/23/05	Europium-154	5.96 U	---	5.96	Filtered		ES
RD-93		Primary	05/23/05	Manganese-54	1.35 U	---	1.35	Filtered		ES
RD-93		Duplicate	05/23/05	Manganese-54	1.78 U	---	1.78	Filtered		ES
RD-93		Primary	05/23/05	Sodium-22	1.42 U	---	1.42	Filtered		ES
RD-93		Duplicate	05/23/05	Sodium-22	2.02 U	---	2.02	Filtered		ES
RD-93		Primary	06/01/05	Cesium-134	1.36 U	---	1.36	Filtered		ES
RD-93		Primary	06/01/05	Cesium-137	1.24 U	---	1.24	Filtered		ES
RD-93		Primary	06/01/05	Cobalt-57	0.799 U	---	0.799	Filtered		ES
RD-93		Primary	06/01/05	Cobalt-60	1.35 U	---	1.35	Filtered		ES
RD-93		Primary	06/01/05	Europium-152	3.01 U	---	3.01	Filtered		ES
RD-93		Primary	06/01/05	Europium-154	3.86 U	---	3.86	Filtered		ES
RD-93		Primary	06/01/05	Manganese-54	1.15 U	---	1.15	Filtered		ES
RD-93		Primary	06/01/05	Sodium-22	1.31 U	---	1.31	Filtered		ES
RD-93		Primary	08/24/05	Cesium-134	1.19 U	---	1.19	Filtered		ES
RD-93		Primary	08/24/05	Cesium-137	0.92 U	---	0.92	Filtered		ES
RD-93		Primary	08/24/05	Cobalt-57	0.751 U	---	0.751	Filtered		ES
RD-93		Primary	08/24/05	Cobalt-60	0.942 U	---	0.942	Filtered		ES
RD-93		Primary	08/24/05	Europium-152	2.91 U	---	2.91	Filtered		ES
RD-93		Primary	08/24/05	Europium-154	2.5 U	---	2.5	Filtered		ES
RD-93		Primary	08/24/05	Manganese-54	0.962 U	---	0.962	Filtered		ES
RD-93		Primary	08/24/05	Sodium-22	0.865 U	---	0.865	Filtered		ES
RD-94		Primary	05/23/05	Cesium-134	2.73 U	---	2.73	Filtered		ES
RD-94		Primary	05/23/05	Cesium-137	2.08 U	---	2.08	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-94		Primary	05/23/05	Cobalt-57	0.916 U	---	0.916	Filtered		ES
RD-94		Primary	05/23/05	Cobalt-60	2.35 U	---	2.35	Filtered		ES
RD-94		Primary	05/23/05	Europium-152	5.5 U	---	5.5	Filtered		ES
RD-94		Primary	05/23/05	Europium-154	6.78 U	---	6.78	Filtered		ES
RD-94		Primary	05/23/05	Manganese-54	2.18 U	---	2.18	Filtered		ES
RD-94		Primary	05/23/05	Sodium-22	2.3 U	---	2.3	Filtered		ES
RD-94		Primary	06/01/05	Cesium-134	1.62 U	---	1.62	Filtered		ES
RD-94		Primary	06/01/05	Cesium-137	1.3 U	---	1.3	Filtered		ES
RD-94		Primary	06/01/05	Cobalt-57	0.551 U	---	0.551	Filtered		ES
RD-94		Primary	06/01/05	Cobalt-60	1.47 U	---	1.47	Filtered		ES
RD-94		Primary	06/01/05	Europium-152	3.46 U	---	3.46	Filtered		ES
RD-94		Primary	06/01/05	Europium-154	4.38 U	---	4.38	Filtered		ES
RD-94		Primary	06/01/05	Manganese-54	1.33 U	---	1.33	Filtered		ES
RD-94		Primary	06/01/05	Sodium-22	1.49 U	---	1.49	Filtered		ES
RD-94		Primary	08/25/05	Cesium-134	1.49 U	---	1.49	Filtered		ES
RD-94		Primary	08/25/05	Cesium-137	1.17 U	---	1.17	Filtered		ES
RD-94		Primary	08/25/05	Cobalt-57	1.03 U	---	1.03	Filtered		ES
RD-94		Primary	08/25/05	Cobalt-60	1.36 U	---	1.36	Filtered		ES
RD-94		Primary	08/25/05	Europium-152	3.45 U	---	3.45	Filtered		ES
RD-94		Primary	08/25/05	Europium-154	3.82 U	---	3.82	Filtered		ES
RD-94		Primary	08/25/05	Manganese-54	1.25 U	---	1.25	Filtered		ES
RD-94		Primary	08/25/05	Sodium-22	1.32 U	---	1.32	Filtered		ES
RD-95		Primary	05/23/05	Cesium-134	2.97 U	---	2.97	Filtered		ES
RD-95		Primary	05/23/05	Cesium-137	2.39 U	---	2.39	Filtered		ES
RD-95		Primary	05/23/05	Cobalt-57	1.53 U	---	1.53	Filtered		ES
RD-95		Primary	05/23/05	Cobalt-60	2.69 U	---	2.69	Filtered		ES
RD-95		Primary	05/23/05	Europium-152	6.62 U	---	6.62	Filtered		ES
RD-95		Primary	05/23/05	Europium-154	7.48 U	---	7.48	Filtered		ES
RD-95		Primary	05/23/05	Manganese-54	2.48 U	---	2.48	Filtered		ES
RD-95		Primary	05/23/05	Sodium-22	2.54 U	---	2.54	Filtered		ES
RD-95		Primary	06/01/05	Cesium-134	1.63 U	---	1.63	Filtered		ES
RD-95		Primary	06/01/05	Cesium-137	1.58 U	---	1.58	Filtered		ES
RD-95		Primary	06/01/05	Cobalt-57	0.897 U	---	0.897	Filtered		ES
RD-95		Primary	06/01/05	Cobalt-60	1.42 U	---	1.42	Filtered		ES
RD-95		Primary	06/01/05	Europium-152	3.83 U	---	3.83	Filtered		ES
RD-95		Primary	06/01/05	Europium-154	4.31 U	---	4.31	Filtered		ES
RD-95		Primary	06/01/05	Manganese-54	1.36 U	---	1.36	Filtered		ES
RD-95		Primary	06/01/05	Sodium-22	1.46 U	---	1.46	Filtered		ES
RD-95		Primary	08/24/05	Cesium-134	1.63 U	---	1.63	Filtered		ES
RD-95		Primary	08/24/05	Cesium-137	1.27 U	---	1.27	Filtered		ES
RD-95		Primary	08/24/05	Cobalt-57	1.1 U	---	1.1	Filtered		ES
RD-95		Primary	08/24/05	Cobalt-60	1.49 U	---	1.49	Filtered		ES
RD-95		Primary	08/24/05	Europium-152	3.49 U	---	3.49	Filtered		ES
RD-95		Primary	08/24/05	Europium-154	3.96 U	---	3.96	Filtered		ES
RD-95		Primary	08/24/05	Manganese-54	1.38 U	---	1.38	Filtered		ES
RD-95		Primary	08/24/05	Sodium-22	1.37 U	---	1.37	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-96		Primary	05/09/06	Cesium-134	2.03 U	---	2.03	Filtered		ES
RD-96		Primary	05/09/06	Cesium-134	1.48 U	---	1.48	Unfiltered		ES
RD-96		Primary	05/09/06	Cesium-137	1.81 U	---	1.81	Filtered		ES
RD-96		Primary	05/09/06	Cesium-137	1.3 U	---	1.3	Unfiltered		ES
RD-96		Primary	05/09/06	Cobalt-57	1.39 U	---	1.39	Filtered		ES
RD-96		Primary	05/09/06	Cobalt-57	0.67 U	---	0.67	Unfiltered		ES
RD-96		Primary	05/09/06	Cobalt-60	1.84 U	---	1.84	Filtered		ES
RD-96		Primary	05/09/06	Cobalt-60	1.47 U	---	1.47	Unfiltered		ES
RD-96		Primary	05/09/06	Europium-152	5 U	---	5	Filtered		ES
RD-96		Primary	05/09/06	Europium-152	3.03 U	---	3.03	Unfiltered		ES
RD-96		Primary	05/09/06	Europium-154	5.43 U	---	5.43	Filtered		ES
RD-96		Primary	05/09/06	Europium-154	3.51 U	---	3.51	Unfiltered		ES
RD-96		Primary	05/09/06	Manganese-54	1.66 U	---	1.66	Filtered		ES
RD-96		Primary	05/09/06	Manganese-54	1.16 U	---	1.16	Unfiltered		ES
RD-96		Primary	05/09/06	Sodium-22	1.83 U	---	1.83	Filtered		ES
RD-96		Primary	05/09/06	Sodium-22	1.18 U	---	1.18	Unfiltered		ES
RD-97		Primary	05/09/06	Cesium-134	2.07 U	---	2.07	Filtered		ES
RD-97		Primary	05/09/06	Cesium-134	1.26 U	---	1.26	Unfiltered		ES
RD-97		Primary	05/09/06	Cesium-137	1.14 U	---	1.14	Filtered		ES
RD-97		Primary	05/09/06	Cesium-137	1.08 U	---	1.08	Unfiltered		ES
RD-97		Primary	05/09/06	Cobalt-57	0.725 U	---	0.725	Filtered		ES
RD-97		Primary	05/09/06	Cobalt-57	0.706 U	---	0.706	Unfiltered		ES
RD-97		Primary	05/09/06	Cobalt-60	1.22 U	---	1.22	Filtered		ES
RD-97		Primary	05/09/06	Cobalt-60	1.12 U	---	1.12	Unfiltered		ES
RD-97		Primary	05/09/06	Europium-152	2.68 U	---	2.68	Filtered		ES
RD-97		Primary	05/09/06	Europium-152	2.57 U	---	2.57	Unfiltered		ES
RD-97		Primary	05/09/06	Europium-154	2.94 U	---	2.94	Filtered		ES
RD-97		Primary	05/09/06	Europium-154	2.87 U	---	2.87	Unfiltered		ES
RD-97		Primary	05/09/06	Manganese-54	0.922 U	---	0.922	Filtered		ES
RD-97		Primary	05/09/06	Manganese-54	1.03 U	---	1.03	Unfiltered		ES
RD-97		Primary	05/09/06	Sodium-22	0.991 U	---	0.991	Filtered		ES
RD-97		Primary	05/09/06	Sodium-22	0.969 U	---	0.969	Unfiltered		ES
RD-98		Primary	06/26/08	Beryllium-7	9.34 U	---	9.34	Filtered		ES
RD-98		Primary	06/26/08	Cerium-139	0.821 U	---	0.821	Filtered		ES
RD-98		Primary	06/26/08	Cerium-144	5.78 U	---	5.78	Filtered		ES
RD-98		Primary	06/26/08	Cesium-134	1.25 U	---	1.25	Filtered		ES
RD-98		Primary	06/26/08	Cesium-137	1.09 U	---	1.09	Filtered		ES
RD-98		Primary	06/26/08	Chromium-51	11.1 U	---	11.1	Filtered		ES
RD-98		Primary	06/26/08	Cobalt-56	1.11 U	---	1.11	Filtered		ES
RD-98		Primary	06/26/08	Cobalt-57	0.667 U	---	0.667	Filtered		ES
RD-98		Primary	06/26/08	Cobalt-58	0.985 U	---	0.985	Filtered		ES
RD-98		Primary	06/26/08	Cobalt-60	1.02 U	---	1.02	Filtered		ES
RD-98		Primary	06/26/08	Europium-152	2.9 U	---	2.9	Filtered		ES
RD-98		Primary	06/26/08	Europium-154	3.14 U	---	3.14	Filtered		ES
RD-98		Primary	06/26/08	Manganese-54	0.977 U	---	0.977	Filtered		ES
RD-98		Primary	06/26/08	Silver-110m	1.28 U	---	1.28	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-98		Primary	06/26/08	Sodium-22	1.06 U	---	1.06	Filtered		ES
RD-98		Primary	09/11/08	Beryllium-7	6.63 U	---	6.63	Filtered		ES
RD-98		Primary	09/11/08	Cerium-139	0.473 U	---	0.473	Filtered		ES
RD-98		Primary	09/11/08	Cerium-144	3.17 U	---	3.17	Filtered		ES
RD-98		Primary	09/11/08	Cesium-134	1.12 U	---	1.12	Filtered		ES
RD-98		Primary	09/11/08	Cesium-137	0.808 U	---	0.808	Filtered		ES
RD-98		Primary	09/11/08	Chromium-51	7.33 U	---	7.33	Filtered		ES
RD-98		Primary	09/11/08	Cobalt-56	0.878 U	---	0.878	Filtered		ES
RD-98		Primary	09/11/08	Cobalt-57	0.385 U	---	0.385	Filtered		ES
RD-98		Primary	09/11/08	Cobalt-58	0.899 U	---	0.899	Filtered		ES
RD-98		Primary	09/11/08	Cobalt-60	0.865 U	---	0.865	Filtered		ES
RD-98		Primary	09/11/08	Europium-152	2.14 U	---	2.14	Filtered		ES
RD-98		Primary	09/11/08	Europium-154	2.6 U	---	2.6	Filtered		ES
RD-98		Primary	09/11/08	Manganese-54	0.734 U	---	0.734	Filtered		ES
RD-98		Primary	09/11/08	Silver-110m	1.11 U	---	1.11	Filtered		ES
RD-98		Primary	09/11/08	Sodium-22	0.846 U	---	0.846	Filtered		ES
RD-98		Primary	11/14/08	Antimony-125	1.86 U	---	1.86	Filtered		ES
RD-98		Primary	11/14/08	Antimony-125	3.03 U	---	3.03	Unfiltered		ES
RD-98		Primary	11/14/08	Barium-133	0.875 U	---	0.875	Filtered		ES
RD-98		Primary	11/14/08	Barium-133	1.21 U	---	1.21	Unfiltered		ES
RD-98		Primary	11/14/08	Cesium-134	0.815 U	---	0.815	Filtered		ES
RD-98		Primary	11/14/08	Cesium-134	1.41 U	---	1.41	Unfiltered		ES
RD-98		Primary	11/14/08	Cesium-137	0.705 U	---	0.705	Filtered		ES
RD-98		Primary	11/14/08	Cesium-137	1.16 U	---	1.16	Unfiltered		ES
RD-98		Primary	11/14/08	Cobalt-60	0.667 U	---	0.667	Filtered		ES
RD-98		Primary	11/14/08	Cobalt-60	1.17 U	---	1.17	Unfiltered		ES
RD-98		Primary	11/14/08	Europium-152	2.02 U	---	2.02	Filtered		ES
RD-98		Primary	11/14/08	Europium-152	3.52 U	---	3.52	Unfiltered		ES
RD-98		Primary	11/14/08	Europium-154	1.76 U	---	1.76	Filtered		ES
RD-98		Primary	11/14/08	Europium-154	3.67 U	---	3.67	Unfiltered		ES
RD-98		Primary	11/14/08	Europium-155	2.35 U	---	2.35	Filtered		ES
RD-98		Primary	11/14/08	Europium-155	3.54 U	---	3.54	Unfiltered		ES
RD-98		Primary	11/14/08	Manganese-54	0.621 U	---	0.621	Filtered		ES
RD-98		Primary	11/14/08	Manganese-54	1.2 U	---	1.2	Unfiltered		ES
RD-98		Primary	11/14/08	Sodium-22	0.597 U	---	0.597	Filtered		ES
RD-98		Primary	11/14/08	Sodium-22	1.25 U	---	1.25	Unfiltered		ES
WS-04A		Primary	12/05/90	Cesium-137	-1.82 U	4.56	10	Filtered		IT
WS-07		Primary	12/06/90	Cesium-137	-1.84 U	6.36	10	Filtered		IT
WS-07		Duplicate	12/06/90	Cesium-137	2.21 U	5.27	10	Filtered		IT
WS-07		Primary	03/08/91	Cesium-137	-2.9 U	4.3	10	Filtered		IT
WS-07		Primary	12/07/91	Cesium-137	1.9 U	4.94	10	Filtered		IT
WS-07		Split	12/07/91	Cesium-137	10 U	---	10	Filtered		CEP
WS-07		Primary	03/25/92	Cesium-137	0 U	---	---	Filtered		CEP
WS-13		Primary	10/17/89	Cesium-137	2.65 U	3.78	---	Filtered		UST
WS-13		Duplicate	10/17/89	Cesium-137	1.44 U	5	---	Filtered		UST
WS-13		Primary	11/01/89	Cesium-137	2.59 U	5.42	---	Filtered		UST

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
WS-13		Primary	11/01/89	Cesium-137	1.57 U	4.11	---	Unfiltered		UST
Private Off-site Wells										
OS-01		Primary	12/11/90	Cesium-137	5.12 U	4.28	10	Filtered		IT
OS-01		Primary	03/09/91	Cesium-137	-0.802 U	5.2	10	Filtered		IT
OS-01		Primary	12/09/91	Cesium-137	-0.303 U	4.99	10	Filtered		IT
OS-01		Primary	06/09/92	Cesium-137	0 U	---	---	Filtered		CEP
OS-01		Primary	09/15/92	Cesium-137	0 U	---	---	Filtered		CEP
OS-01		Primary	12/17/92	Cesium-137	0 U	---	---	Filtered		CEP
OS-01		Primary	08/23/93	Cesium-137	0 U	---	---	Filtered		CEP
OS-01		Primary	02/23/94	Cesium-137	2.4 U	---	6.8	Filtered		LAS
OS-01		Primary	02/23/94	Cobalt-57	0 U	---	3.6	Filtered		LAS
OS-01		Primary	02/23/94	Cobalt-60	2.7 U	---	5.6	Filtered		LAS
OS-01		Primary	08/15/94	Cesium-134	-8 U	---	42	Filtered		LAS
OS-01		Primary	08/15/94	Cesium-137	13 U	---	46	Filtered		LAS
OS-01		Primary	08/15/94	Cobalt-57	-6 U	---	22	Filtered		LAS
OS-01		Primary	08/15/94	Cobalt-60	5 U	---	45	Filtered		LAS
OS-02		Primary	12/11/90	Cesium-137	-3.2 U	5.17	10	Filtered		IT
OS-02		Primary	03/08/91	Cesium-137	0.755 U	3.7	10	Filtered		IT
OS-02		Duplicate	03/08/91	Cesium-137	-1.27 U	4.91	10	Filtered		IT
OS-02		Primary	12/09/91	Cesium-137	-1.5 U	4.7	10	Filtered		IT
OS-02		Primary	06/09/92	Cesium-137	0 U	---	---	Filtered		CEP
OS-02		Primary	09/15/92	Cesium-137	0 U	---	---	Filtered		CEP
OS-02		Primary	12/17/92	Cesium-137	0 U	---	---	Filtered		CEP
OS-02		Primary	08/23/93	Cesium-137	0 U	---	---	Filtered		CEP
OS-02		Primary	02/23/94	Cesium-137	-1.5 U	---	7.2	Filtered		LAS
OS-02		Primary	02/23/94	Cobalt-57	-0.8 U	---	3.8	Filtered		LAS
OS-02		Primary	02/23/94	Cobalt-60	-2.27 U	---	6.6	Filtered		LAS
OS-02		Primary	08/15/94	Cesium-134	5 U	---	24	Filtered		LAS
OS-02		Primary	08/15/94	Cesium-137	-7 U	---	29	Filtered		LAS
OS-02		Primary	08/15/94	Cobalt-57	-3.1 U	---	18	Filtered		LAS
OS-02		Primary	08/15/94	Cobalt-60	0 U	---	29	Filtered		LAS
OS-03		Primary	12/11/90	Cesium-137	-0.932 U	4.54	10	Filtered		IT
OS-03		Primary	03/08/91	Cesium-137	-0.957 U	4.63	10	Filtered		IT
OS-03		Primary	12/09/91	Cesium-137	0.463 U	5.54	10	Filtered		IT
OS-03		Primary	06/09/92	Cesium-137	0 U	---	---	Filtered		CEP
OS-03		Primary	08/23/93	Cesium-137	0 U	---	---	Filtered		CEP
OS-03		Primary	02/23/94	Cesium-137	-2.3 U	---	7.1	Filtered		LAS
OS-03		Primary	02/23/94	Cobalt-57	-0.4 U	---	4	Filtered		LAS
OS-03		Primary	02/23/94	Cobalt-60	-0.4 U	---	5.6	Filtered		LAS
OS-03		Primary	08/15/94	Cesium-134	-1 U	---	24	Filtered		LAS
OS-03		Primary	08/15/94	Cesium-137	0 U	---	29	Filtered		LAS
OS-03		Primary	08/15/94	Cobalt-57	11 U	---	18	Filtered		LAS
OS-03		Primary	08/15/94	Cobalt-60	-1 U	---	26	Filtered		LAS
OS-04		Primary	12/11/90	Cesium-137	1.41 U	4.76	10	Filtered		IT
OS-04		Primary	06/09/92	Cesium-137	0 U	---	---	Filtered		CEP

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Private Off-site Wells										
OS-04		Primary	06/22/93	Cesium-137	0 U	---	---	Filtered		CEP
OS-04		Primary	08/23/93	Cesium-137	0 U	---	---	Filtered		CEP
OS-04		Primary	02/23/94	Cesium-137	3.3 U	---	6.2	Filtered		LAS
OS-04		Primary	02/23/94	Cobalt-57	0 U	---	3.9	Filtered		LAS
OS-04		Primary	02/23/94	Cobalt-60	-1.97 U	---	7	Filtered		LAS
OS-04		Primary	08/15/94	Cesium-134	-4 U	---	43	Filtered		LAS
OS-04		Primary	08/15/94	Cesium-137	11 U	---	47	Filtered		LAS
OS-04		Primary	08/15/94	Cobalt-57	-1 U	---	23	Filtered		LAS
OS-04		Primary	08/15/94	Cobalt-60	26 U	---	48	Filtered		LAS
OS-05		Primary	12/11/90	Cesium-137	-0.136 U	4.91	10	Filtered		IT
OS-05		Primary	03/08/91	Cesium-137	0.885 U	5.12	10	Filtered		IT
OS-05		Primary	12/09/91	Cesium-137	3.81 U	3.16	10	Filtered		IT
OS-05		Primary	06/09/92	Cesium-137	0 U	---	---	Filtered		CEP
OS-05		Split	09/15/92	Cesium-134	32 U	---	32	Filtered		BL
OS-05		Primary	09/15/92	Cesium-137	0 U	---	---	Filtered		CEP
OS-05		Split	09/15/92	Cesium-137	32 U	---	32	Filtered		BL
OS-05		Split	09/15/92	Cobalt-57	32 U	---	32	Filtered		BL
OS-05		Split	09/15/92	Cobalt-60	32 U	---	32	Filtered		BL
OS-05		Primary	12/17/92	Cesium-137	0 U	---	---	Filtered		CEP
OS-05		Primary	08/23/93	Cesium-137	0 U	---	---	Filtered		CEP
OS-05		Primary	02/23/94	Cesium-137	-2.6 U	---	7.6	Filtered		LAS
OS-05		Primary	02/23/94	Cobalt-57	0.3 U	---	4.2	Filtered		LAS
OS-05		Primary	02/23/94	Cobalt-60	1.6 U	---	5.9	Filtered		LAS
OS-08		Primary	06/09/92	Cesium-137	0 U	---	---	Filtered		CEP
OS-08		Primary	08/15/94	Cesium-134	-1 U	---	24	Filtered		LAS
OS-08		Primary	08/15/94	Cesium-137	-6 U	---	29	Filtered		LAS
OS-08		Primary	08/15/94	Cobalt-57	5 U	---	18	Filtered		LAS
OS-08		Primary	08/15/94	Cobalt-60	4 U	---	28	Filtered		LAS
OS-09R		Primary	01/26/04	Cesium-134	9.02 U	---	9.02	Filtered		ES
OS-09R		Primary	01/26/04	Cesium-137	7.24 U	---	7.24	Filtered		ES
OS-09R		Primary	01/26/04	Cobalt-57	4.2 U	---	4.2	Filtered		ES
OS-09R		Primary	01/26/04	Cobalt-60	7.03 U	---	7.03	Filtered		ES
OS-10		Primary	12/09/91	Cesium-137	-0.252 U	5.38	10	Filtered		IT
OS-10		Primary	08/05/94	Cesium-134	14 U	---	36	Filtered		LAS
OS-10		Primary	08/05/94	Cesium-137	16 U	---	48	Filtered		LAS
OS-10		Primary	08/05/94	Cobalt-57	-2.1 U	---	22	Filtered		LAS
OS-10		Primary	08/05/94	Cobalt-60	8 U	---	40	Filtered		LAS
OS-15		Primary	12/10/91	Cesium-137	0.893 U	4.6	10	Filtered		IT
OS-16		Primary	11/01/89	Cesium-137	-1.12 U	4.77	---	Filtered		UST
OS-16		Primary	11/01/89	Cesium-137	-3.32 U	5.87	---	Unfiltered		UST
OS-16		Duplicate	11/01/89	Cesium-137	0.386 U	4.63	---	Filtered		UST
OS-16		Duplicate	11/01/89	Cesium-137	3.07 U	4.38	---	Unfiltered		UST
OS-16		Primary	12/10/91	Cesium-137	-3.41 U	4.48	10	Filtered		IT
OS-16		Primary	03/12/92	Cesium-137	0 U	---	---	Filtered		CEP
OS-17		Primary	12/09/91	Cesium-137	-6.39 U	5.37	10	Filtered		IT

See last page of table for notes and abbreviations.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Private Off-site Wells										
OS-17		Primary	03/12/92	Cesium-137	0 U	---	---	Filtered		CEP
OS-21		Primary	11/01/89	Cesium-137	1.65 U	4.55	---	Filtered		UST
OS-21		Primary	11/01/89	Cesium-137	1.84 U	3.97	---	Unfiltered		UST
OS-21		Primary	03/09/91	Cesium-137	1.33 U	4.95	10	Filtered		IT
OS-21		Primary	12/10/91	Cesium-137	-0.834 U	4.06	10	Filtered		IT
OS-21		Primary	03/12/92	Cesium-137	0 U	---	---	Filtered		CEP
OS-21		Primary	03/19/93	Cesium-137	0 U	---	---	Filtered		CEP
OS-27		Primary	05/15/97	Cesium-134	0 U	2.1	4.3	Filtered		LAS
OS-27		Primary	05/15/97	Cesium-137	-1.3 U	3.1	5.6	Filtered		LAS
OS-27		Primary	05/15/97	Cobalt-57	-2.2 U	2.1	4.8	Filtered		LAS
OS-27		Primary	05/15/97	Cobalt-60	-1.1 U	1.6	5.3	Filtered		LAS
Municipal Water Supply										
Calleguas		Primary	12/14/90	Cesium-137	-1.13 U	5.35	10	Filtered		IT
Calleguas		Primary	03/10/91	Cesium-137	2.15 U	4.74	10	Filtered		IT
Calleguas		Primary	03/12/92	Cesium-137	0 U	---	---	Filtered		CEP

See last page of table for notes and abbreviations.

TABLE E-III
RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

NOTES AND ABBREVIATIONS

BL = Barringer Laboratories, Inc., Golden, Colorado
CEP = Controls for Environmental Pollution, Santa Fe, New Mexico
DL = Davi Laboratories, Pinole, California
ES = Eberline Services, (formerly Thermo Retec), Richmond, California
GEL = General Engineering Laboratories, LLC, Charleston, South Carolina
IT = International Technologies, Inc., (formerly United States Testing), Richland, Washington
LAS = LAS Laboratories, (formerly Lockheed Martin), Las Vegas, Nevada
STL = Severn Trent Laboratories, (formerly International Technologies, Inc.), Richland, Washington
TAD = TestAmerica, Denver, Colorado
TAI = TestAmerica, Irvine, California
TEL = Teledyne Isotopes, Westwood, New Jersey
TMA = Thermoanalytical Inc. (TMA/NORCAL), Richmond, California
TN = Thermo NUtech, (formerly Thermoanalytical Inc. (TMA/NORCAL)), Richmond, California
TR = Thermo Retec, (formerly Thermo NUtech), Richmond, California
UST = United States Testing, Richland, Washington

MDA	=	Minimum detectable activity.
Z	=	Flute port number.
---	=	Analysis not performed.
U	=	Not detected above the MDA, numerical value is the activity for the radionuclide.
pCi/L	=	picoCuries per liter.

NOTES:
Samples were analyzed for gamma-emitting radionuclides by EPA method 901.1 or equivalent or superior in-house laboratory procedures. Laboratories used the most current verion of EPA method at the time of analysis.

Man-made gamma-emitting radionuclides include antimony-125, barium-133, beryllium-7, cesium-134, cesium-137, chromium-51, cobalt-56, cobalt-57, cobalt-58, cobalt-60, europium-152, europium-154, europium-155, manganese-54, ruthenium-106, silver-110m and sodium-22.

Any activity detected is reported by the laboratory, though the reported activity may be less than the overall laboratory error. Analytical results that are less than the instrument background count are shown as negative values.

Filtered samples were collected using a 0.45 micron filter in the field.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Piezometers										
PZ-101		Primary	06/02/05	Potassium-40	14.1 U	---	14.1	Filtered		ES
PZ-107		Primary	06/02/05	Potassium-40	35.1 U	---	35.1	Filtered		ES
PZ-111		Primary	06/02/05	Potassium-40	13.1 U	---	13.1	Filtered		ES
PZ-116		Primary	06/02/05	Potassium-40	15.6 U	---	15.6	Filtered		ES
Shallow Wells										
ES-31		Primary	02/06/99	Actinium-228	67.2 U	---	67.2	Filtered		TN
ES-31		Primary	02/06/99	Bismuth-212	112 U	---	112	Filtered		TN
ES-31		Primary	02/06/99	Bismuth-214	28.2 U	---	28.2	Filtered		TN
ES-31		Primary	02/06/99	Lead-210	795 U	---	795	Filtered		TN
ES-31		Primary	02/06/99	Lead-212	22.1 U	---	22.1	Filtered		TN
ES-31		Primary	02/06/99	Lead-214	27 U	---	27	Filtered		TN
ES-31		Primary	02/06/99	Potassium-40	227 U	---	227	Filtered		TN
ES-31		Primary	02/06/99	Radium-226	206 U	---	206	Filtered		TN
ES-31		Primary	02/06/99	Thallium-208	16.4 U	---	16.4	Filtered		TN
ES-31		Primary	02/06/99	Thorium-234	327 U	---	327	Filtered		TN
ES-31		Primary	02/06/99	Uranium-235	75.8 U	---	75.8	Filtered		TN
ES-31		Primary	02/06/00	Actinium-228	58.2 U	---	58.2	Filtered		TR
ES-31		Primary	02/06/00	Bismuth-212	104 U	---	104	Filtered		TR
ES-31		Primary	02/06/00	Bismuth-214	27.2 U	---	27.2	Filtered		TR
ES-31		Primary	02/06/00	Lead-210	904 U	---	904	Filtered		TR
ES-31		Primary	02/06/00	Lead-212	26.2 U	---	26.2	Filtered		TR
ES-31		Primary	02/06/00	Lead-214	23.7 U	---	23.7	Filtered		TR
ES-31		Primary	02/06/00	Potassium-40	226 U	---	226	Filtered		TR
ES-31		Primary	02/06/00	Radium-226	175 U	---	175	Filtered		TR
ES-31		Primary	02/06/00	Thallium-208	14.6 U	---	14.6	Filtered		TR
ES-31		Primary	02/06/00	Thorium-234	316 U	---	316	Filtered		TR
ES-31		Primary	02/06/00	Uranium-235	68.4 U	---	68.4	Filtered		TR
ES-31		Primary	02/15/01	Actinium-228	59.4 U	---	59.4	Filtered		ES
ES-31		Primary	02/15/01	Bismuth-212	90.5 U	---	90.5	Filtered		ES
ES-31		Primary	02/15/01	Bismuth-214	165	28	26.7	Filtered		ES
ES-31		Primary	02/15/01	Lead-210	2940 U	---	2940	Filtered		ES
ES-31		Primary	02/15/01	Lead-212	19 U	---	19	Filtered		ES
ES-31		Primary	02/15/01	Lead-214	162	27	28.4	Filtered		ES
ES-31		Primary	02/15/01	Potassium-40	222 U	---	222	Filtered		ES
ES-31		Primary	02/15/01	Radium-226	205 U	---	205	Filtered		ES
ES-31		Primary	02/15/01	Thallium-208	13 U	---	13	Filtered		ES
ES-31		Primary	02/15/01	Thorium-234	384 U	---	384	Filtered		ES
ES-31		Primary	02/15/01	Uranium-235	72.2 U	---	72.2	Filtered		ES
ES-31		Primary	02/18/02	Actinium-228	5 U	3	5	Filtered		DL
ES-31		Primary	02/18/02	Bismuth-212	3 U	3	3	Filtered		DL
ES-31		Primary	02/18/02	Bismuth-214	3 U	3	3	Filtered		DL
ES-31		Primary	02/18/02	Lead-210	5 U	5	5	Filtered		DL
ES-31		Primary	02/18/02	Lead-212	3 U	3	3	Filtered		DL
ES-31		Primary	02/18/02	Lead-214	5 U	3	5	Filtered		DL

See last page of table for notes and abbreviations.

TABLE E-IV
RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
ES-31		Primary	02/18/02	Potassium-40	5 U	3	5	Filtered		DL
ES-31		Primary	02/18/02	Radium-226	3 U	3	3	Filtered		DL
ES-31		Primary	02/18/02	Thorium-234	5 U	5	5	Filtered		DL
ES-31		Primary	02/18/02	Uranium-235	3 U	3	3	Filtered		DL
ES-31		Primary	02/19/03	Actinium-228	8.96 U	---	8.96	Filtered		ES
ES-31		Primary	02/19/03	Bismuth-212	14.5 U	---	14.5	Filtered		ES
ES-31		Primary	02/19/03	Bismuth-214	3.89 U	---	3.89	Filtered		ES
ES-31		Primary	02/19/03	Lead-210	429 U	---	429	Filtered		ES
ES-31		Primary	02/19/03	Lead-212	2.68 U	---	2.68	Filtered		ES
ES-31		Primary	02/19/03	Lead-214	3.77 U	---	3.77	Filtered		ES
ES-31		Primary	02/19/03	Potassium-40	41.3 U	---	41.3	Filtered		ES
ES-31		Primary	02/19/03	Radium-226	29.8 U	---	29.8	Filtered		ES
ES-31		Primary	02/19/03	Thorium-234	60.4 U	---	60.4	Filtered		ES
ES-31		Primary	02/19/03	Uranium-235	11.4 U	---	11.4	Filtered		ES
ES-31		Primary	03/10/05	Potassium-40	13.7 U	---	13.7	Filtered		ES
ES-31		Primary	02/21/06	Potassium-40	19.5 U	---	19.5	Filtered		ES
ES-31		Primary	02/28/07	Potassium-40	28.9 U	---	28.9	Filtered		ES
ES-31		Primary	02/01/08	Potassium-40	34.4 U	---	34.4	Filtered		ES
ES-31		Primary	03/04/09	Potassium-40	26.9 U	18	29.5	Filtered		ES
ES-31		Primary	03/04/09	Potassium-40	-82.1 U	47	47.6	Unfiltered		ES
ES-31		Primary	03/04/09	Radium-228	-4.17 U	4.4	7.84	Filtered		ES
ES-31		Primary	03/04/09	Radium-228	-5.67 U	6.1	10.5	Unfiltered		ES
ES-31		Primary	07/17/09	Potassium-40	23.1 U	54	92.5	Filtered		ES
ES-31		Primary	07/17/09	Potassium-40	16.9 U	47	80.7	Unfiltered		ES
RS-11		Primary	02/06/99	Actinium-228	61.3 U	---	61.3	Filtered		TN
RS-11		Primary	02/06/99	Bismuth-212	103 U	---	103	Filtered		TN
RS-11		Primary	02/06/99	Bismuth-214	28.5 U	---	28.5	Filtered		TN
RS-11		Primary	02/06/99	Lead-210	472 U	---	472	Filtered		TN
RS-11		Primary	02/06/99	Lead-212	19.8 U	---	19.8	Filtered		TN
RS-11		Primary	02/06/99	Lead-214	26.7 U	---	26.7	Filtered		TN
RS-11		Primary	02/06/99	Potassium-40	403 U	---	403	Filtered		TN
RS-11		Primary	02/06/99	Radium-226	190 U	---	190	Filtered		TN
RS-11		Primary	02/06/99	Thallium-208	14.4 U	---	14.4	Filtered		TN
RS-11		Primary	02/06/99	Thorium-234	236 U	---	236	Filtered		TN
RS-11		Primary	02/06/99	Uranium-235	70.8 U	---	70.8	Filtered		TN
RS-11		Primary	02/15/00	Actinium-228	61.3 U	---	61.3	Filtered		TR
RS-11		Primary	02/15/00	Bismuth-212	103 U	---	103	Filtered		TR
RS-11		Primary	02/15/00	Bismuth-214	28.5 U	---	28.5	Filtered		TR
RS-11		Primary	02/15/00	Lead-210	472 U	---	472	Filtered		TR
RS-11		Primary	02/15/00	Lead-212	19.8 U	---	19.8	Filtered		TR
RS-11		Primary	02/15/00	Lead-214	26.7 U	---	26.7	Filtered		TR
RS-11		Primary	02/15/00	Potassium-40	403 U	---	403	Filtered		TR
RS-11		Primary	02/15/00	Radium-226	190 U	---	190	Filtered		TR
RS-11		Primary	02/15/00	Thallium-208	14.4 U	---	14.4	Filtered		TR
RS-11		Primary	02/15/00	Thorium-234	236 U	---	236	Filtered		TR

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-11		Primary	02/15/00	Uranium-235	70.8 U	---	70.8	Filtered		TR
RS-11		Primary	02/06/01	Actinium-228	62.9 U	---	62.9	Filtered		ES
RS-11		Primary	02/06/01	Bismuth-212	103 U	---	103	Filtered		ES
RS-11		Primary	02/06/01	Bismuth-214	32.6 U	---	32.6	Filtered		ES
RS-11		Primary	02/06/01	Lead-210	484 U	---	484	Filtered		ES
RS-11		Primary	02/06/01	Lead-212	21 U	---	21	Filtered		ES
RS-11		Primary	02/06/01	Lead-214	30.4 U	---	30.4	Filtered		ES
RS-11		Primary	02/06/01	Potassium-40	418 U	---	418	Filtered		ES
RS-11		Primary	02/06/01	Radium-226	31.6 U	---	31.6	Filtered		ES
RS-11		Primary	02/06/01	Thallium-208	15.2 U	---	15.2	Filtered		ES
RS-11		Primary	02/06/01	Thorium-234	237 U	---	237	Filtered		ES
RS-11		Primary	02/06/01	Uranium-235	63.3 U	---	63.3	Filtered		ES
RS-11		Primary	05/01/03	Actinium-228	5.61 U	---	5.61	Filtered		ES
RS-11		Primary	05/01/03	Bismuth-212	8.51 U	---	8.51	Filtered		ES
RS-11		Primary	05/01/03	Bismuth-214	2.49 U	---	2.49	Filtered		ES
RS-11		Primary	05/01/03	Lead-210	261 U	---	261	Filtered		ES
RS-11		Primary	05/01/03	Lead-212	1.78 U	---	1.78	Filtered		ES
RS-11		Primary	05/01/03	Lead-214	2.36 U	---	2.36	Filtered		ES
RS-11		Primary	05/01/03	Potassium-40	30.4 U	---	30.4	Filtered		ES
RS-11		Primary	05/01/03	Radium-226	17.1 U	---	17.1	Filtered		ES
RS-11		Primary	05/01/03	Thorium-234	34.7 U	---	34.7	Filtered		ES
RS-11		Primary	05/01/03	Uranium-235	6.58 U	---	6.58	Filtered		ES
RS-11		Primary	02/17/05	Potassium-40	14.8 U	---	14.8	Filtered		ES
RS-11		Primary	02/21/06	Potassium-40	15.1 U	---	15.1	Filtered		ES
RS-11		Primary	02/28/07	Potassium-40	17.6 U	---	17.6	Filtered		ES
RS-11		Primary	05/02/08	Potassium-40	28 U	---	28	Filtered		ES
RS-16		Primary	02/01/08	Potassium-40	8.39 U	---	8.39	Filtered		ES
RS-18		Primary	11/06/93	Actinium-228	8.1 U	---	8.1	Filtered		LAS
RS-18		Primary	11/06/93	Bismuth-212	24.1 U	---	24.1	Filtered		LAS
RS-18		Primary	11/06/93	Bismuth-214	4.7 U	---	4.7	Filtered		LAS
RS-18		Primary	11/06/93	Lead-210	230 U	---	230	Filtered		LAS
RS-18		Primary	11/06/93	Lead-212	4.46 U	---	4.46	Filtered		LAS
RS-18		Primary	11/06/93	Lead-214	4.58 U	---	4.58	Filtered		LAS
RS-18		Primary	11/06/93	Potassium-40	24.6 U	---	24.6	Filtered		LAS
RS-18		Primary	11/06/93	Thallium-208	3.9 U	---	3.9	Filtered		LAS
RS-18		Primary	11/06/93	Thorium-234	94.2 U	---	94.2	Filtered		LAS
RS-18		Primary	11/06/93	Uranium-235	2.46 U	---	2.46	Filtered		LAS
RS-18		Primary	05/04/94	Actinium-228	14 U	21	28	Filtered		LAS
RS-18		Primary	05/04/94	Bismuth-214	16	13	15	Filtered		LAS
RS-18		Primary	05/04/94	Lead-212	2.1 U	9.7	12	Filtered		LAS
RS-18		Primary	05/04/94	Lead-214	15 U	12	16	Filtered		LAS
RS-18		Primary	05/04/94	Potassium-40	-15 U	66	92	Filtered		LAS
RS-18		Primary	05/04/94	Thallium-208	2.6 U	7.8	9.5	Filtered		LAS
RS-18		Primary	05/04/94	Thorium-234	41 U	65	130	Filtered		LAS
RS-18		Primary	02/17/95	Actinium-228	-9 U	27	48	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-18		Primary	02/17/95	Bismuth-214	0 U	15	22	Filtered		LAS
RS-18		Primary	02/17/95	Lead-212	-11 U	11	17	Filtered		LAS
RS-18		Primary	02/17/95	Lead-214	8 U	12	18	Filtered		LAS
RS-18		Primary	02/17/95	Potassium-40	-16 U	86	130	Filtered		LAS
RS-18		Primary	02/17/95	Thallium-208	-6.6 U	7.5	12	Filtered		LAS
RS-18		Primary	02/17/95	Thorium-234	20 U	110	160	Filtered		LAS
RS-18		Primary	08/10/95	Actinium-228	8 U	21	44	Filtered		LAS
RS-18		Primary	08/10/95	Bismuth-214	-5 U	11	20	Filtered		LAS
RS-18		Primary	08/10/95	Lead-212	-7 U	10	16	Filtered		LAS
RS-18		Primary	08/10/95	Lead-214	4 U	11	17	Filtered		LAS
RS-18		Primary	08/10/95	Potassium-40	48 U	76	100	Filtered		LAS
RS-18		Primary	08/10/95	Thallium-208	0.2 U	7.2	11	Filtered		LAS
RS-18		Primary	08/10/95	Thorium-234	7 U	68	160	Filtered		LAS
RS-18		Primary	05/16/96	Actinium-228	6 U	21	33	Filtered		LAS
RS-18		Primary	05/16/96	Bismuth-214	29	15	19	Filtered		LAS
RS-18		Primary	05/16/96	Lead-212	-6.2 U	9.8	15	Filtered		LAS
RS-18		Primary	05/16/96	Lead-214	18	12	17	Filtered		LAS
RS-18		Primary	05/16/96	Potassium-40	17 U	80	120	Filtered		LAS
RS-18		Primary	05/16/96	Thallium-208	0 U	6.9	10	Filtered		LAS
RS-18		Primary	05/16/96	Thorium-234	39 U	71	180	Filtered		LAS
RS-18		Primary	05/16/96	Uranium-235	25 U	27	39	Filtered		LAS
RS-18		Primary	02/03/97	Actinium-228	-8 U	40	68	Filtered		LAS
RS-18		Primary	02/03/97	Bismuth-214	9 U	29	42	Filtered		LAS
RS-18		Primary	02/03/97	Lead-212	-6 U	26	37	Filtered		LAS
RS-18		Primary	02/03/97	Lead-214	19 U	26	38	Filtered		LAS
RS-18		Primary	02/03/97	Potassium-40	-10 U	140	210	Filtered		LAS
RS-18		Primary	02/03/97	Thallium-208	4 U	15	20	Filtered		LAS
RS-18		Primary	02/03/97	Thorium-234	30 U	220	660	Filtered		LAS
RS-18		Primary	02/05/98	Actinium-228	18 U	---	18	Filtered		TN
RS-18		Primary	02/05/98	Bismuth-212	29.5 U	---	29.5	Filtered		TN
RS-18		Primary	02/05/98	Bismuth-214	11.1 U	---	11.1	Filtered		TN
RS-18		Primary	02/05/98	Lead-210	245 U	---	245	Filtered		TN
RS-18		Primary	02/05/98	Lead-212	6.76 U	---	6.76	Filtered		TN
RS-18		Primary	02/05/98	Lead-214	9.27	8.4	---	Filtered		TN
RS-18		Primary	02/05/98	Potassium-40	81.8 U	---	81.8	Filtered		TN
RS-18		Primary	02/05/98	Thallium-208	3.95 U	---	3.95	Filtered		TN
RS-18		Primary	02/05/98	Thorium-234	109 U	---	109	Filtered		TN
RS-18		Primary	08/05/98	Actinium-228	107 U	---	107	Filtered		TN
RS-18		Primary	08/05/98	Bismuth-212	190 U	---	190	Filtered		TN
RS-18		Primary	08/05/98	Bismuth-214	56.9 U	---	56.9	Filtered		TN
RS-18		Primary	08/05/98	Lead-210	1280 U	---	1280	Filtered		TN
RS-18		Primary	08/05/98	Lead-212	39 U	---	39	Filtered		TN
RS-18		Primary	08/05/98	Lead-214	50 U	---	50	Filtered		TN
RS-18		Primary	08/05/98	Potassium-40	354 U	---	354	Filtered		TN
RS-18		Primary	08/05/98	Thallium-208	29.3 U	---	29.3	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-18		Primary	08/05/98	Thorium-234	621 U	---	621	Filtered		TN
RS-18		Primary	05/12/99	Actinium-228	29.6 U	---	29.6	Filtered		TN
RS-18		Primary	05/12/99	Bismuth-212	51.4 U	---	51.4	Filtered		TN
RS-18		Primary	05/12/99	Bismuth-214	13.2 U	---	13.2	Filtered		TN
RS-18		Primary	05/12/99	Lead-210	460 U	---	460	Filtered		TN
RS-18		Primary	05/12/99	Lead-212	11.1 U	---	11.1	Filtered		TN
RS-18		Primary	05/12/99	Lead-214	12.7 U	---	12.7	Filtered		TN
RS-18		Primary	05/12/99	Potassium-40	104 U	---	104	Filtered		TN
RS-18		Primary	05/12/99	Radium-226	110 U	---	110	Filtered		TN
RS-18		Primary	05/12/99	Thallium-208	7.12 U	---	7.12	Filtered		TN
RS-18		Primary	05/12/99	Thorium-234	190 U	---	190	Filtered		TN
RS-18		Primary	05/12/99	Uranium-235	35.5 U	---	35.5	Filtered		TN
RS-18		Primary	05/09/00	Actinium-228	59.7 U	---	59.7	Filtered		TR
RS-18		Primary	05/09/00	Bismuth-212	98 U	---	98	Filtered		TR
RS-18		Primary	05/09/00	Bismuth-214	29.6 U	---	29.6	Filtered		TR
RS-18		Primary	05/09/00	Lead-210	560 U	---	560	Filtered		TR
RS-18		Primary	05/09/00	Lead-212	17.6 U	---	17.6	Filtered		TR
RS-18		Primary	05/09/00	Lead-214	25.7 U	---	25.7	Filtered		TR
RS-18		Primary	05/09/00	Potassium-40	393 U	---	393	Filtered		TR
RS-18		Primary	05/09/00	Radium-226	283 U	---	283	Filtered		TR
RS-18		Primary	05/09/00	Thallium-208	12.9 U	---	12.9	Filtered		TR
RS-18		Primary	05/09/00	Thorium-234	199 U	---	199	Filtered		TR
RS-18		Primary	05/09/00	Uranium-235	57 U	---	57	Filtered		TR
RS-18		Primary	02/19/01	Actinium-228	64.5 U	---	64.5	Filtered		ES
RS-18		Primary	02/19/01	Bismuth-212	105 U	---	105	Filtered		ES
RS-18		Primary	02/19/01	Bismuth-214	32.7 U	---	32.7	Filtered		ES
RS-18		Primary	02/19/01	Lead-210	1050 U	---	1050	Filtered		ES
RS-18		Primary	02/19/01	Lead-212	21.1 U	---	21.1	Filtered		ES
RS-18		Primary	02/19/01	Lead-214	46.4 U	---	46.4	Filtered		ES
RS-18		Primary	02/19/01	Potassium-40	265 U	---	265	Filtered		ES
RS-18		Primary	02/19/01	Radium-226	218 U	---	218	Filtered		ES
RS-18		Primary	02/19/01	Thallium-208	13.7 U	---	13.7	Filtered		ES
RS-18		Primary	02/19/01	Thorium-234	314 U	---	314	Filtered		ES
RS-18		Primary	02/19/01	Uranium-235	75.3 U	---	75.3	Filtered		ES
RS-18		Primary	05/02/03	Actinium-228	7.57 U	---	7.57	Unfiltered		ES
RS-18		Primary	05/02/03	Bismuth-212	11.9 U	---	11.9	Unfiltered		ES
RS-18		Primary	05/02/03	Bismuth-214	3.53 U	---	3.53	Unfiltered		ES
RS-18		Primary	05/02/03	Lead-210	90.1 U	---	90.1	Unfiltered		ES
RS-18		Primary	05/02/03	Lead-212	2.33 U	---	2.33	Unfiltered		ES
RS-18		Primary	05/02/03	Lead-214	3.09 U	---	3.09	Unfiltered		ES
RS-18		Primary	05/02/03	Potassium-40	44.9 U	---	44.9	Unfiltered		ES
RS-18		Primary	05/02/03	Radium-226	32.5 U	---	32.5	Unfiltered		ES
RS-18		Primary	05/02/03	Thorium-234	25.4 U	---	25.4	Unfiltered		ES
RS-18		Primary	05/02/03	Uranium-235	8.43 U	---	8.43	Unfiltered		ES
RS-18		Primary	02/23/05	Potassium-40	14.4 U	---	14.4	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-18		Primary	08/26/05	Potassium-40	13.8 U	---	13.8	Filtered		ES
RS-18		Primary	02/20/06	Potassium-40	18.1 U	---	18.1	Filtered		ES
RS-18		Primary	02/04/08	Potassium-40	45.4 U	---	45.4	Filtered		ES
RS-18		Primary	03/04/09	Potassium-40	-75.2 U	40	69.2	Filtered		ES
RS-18		Primary	03/04/09	Potassium-40	-32.7 U	21	35.8	Unfiltered		ES
RS-18		Primary	03/04/09	Radium-228	-1.52 U	7.3	12.5	Filtered		ES
RS-18		Primary	03/04/09	Radium-228	-3.79 U	4.9	8.37	Unfiltered		ES
RS-18		Primary	04/27/09	Potassium-40	0.012 U	6.8	11.9	Filtered		ES
RS-18		Primary	04/27/09	Potassium-40	3.38 U	8.2	14.1	Unfiltered		ES
RS-25		Primary	02/25/03	Actinium-228	7.2 U	---	7.2	Filtered		ES
RS-25		Primary	02/25/03	Bismuth-212	12.2 U	---	12.2	Filtered		ES
RS-25		Primary	02/25/03	Bismuth-214	3.1 U	---	3.1	Filtered		ES
RS-25		Primary	02/25/03	Lead-210	366 U	---	366	Filtered		ES
RS-25		Primary	02/25/03	Lead-212	2.46 U	---	2.46	Filtered		ES
RS-25		Primary	02/25/03	Lead-214	3.23 U	---	3.23	Filtered		ES
RS-25		Primary	02/25/03	Potassium-40	34.7 U	---	34.7	Filtered		ES
RS-25		Primary	02/25/03	Radium-226	25.5 U	---	25.5	Filtered		ES
RS-25		Primary	02/25/03	Thorium-234	51 U	---	51	Filtered		ES
RS-25		Primary	02/25/03	Uranium-235	9.81 U	---	9.81	Filtered		ES
RS-25		Primary	02/13/08	Potassium-40	33.8 U	---	33.8	Filtered		ES
RS-28		Primary	11/06/93	Actinium-228	14.3 U	---	14.3	Filtered		LAS
RS-28		Primary	11/06/93	Bismuth-212	41.1 U	---	41.1	Filtered		LAS
RS-28		Primary	11/06/93	Bismuth-214	35.705	6.02	---	Filtered		LAS
RS-28		Primary	11/06/93	Lead-210	73.448	40.96	---	Filtered		LAS
RS-28		Primary	11/06/93	Lead-212	7.51 U	---	7.51	Filtered		LAS
RS-28		Primary	11/06/93	Lead-214	44.116	6.64	---	Filtered		LAS
RS-28		Primary	11/06/93	Potassium-40	45.2 U	---	45.2	Filtered		LAS
RS-28		Primary	11/06/93	Thallium-208	3.0516	2.58	---	Filtered		LAS
RS-28		Primary	11/06/93	Thorium-234	76.7 U	---	76.7	Filtered		LAS
RS-28		Primary	11/06/93	Uranium-235	4.07 U	---	4.07	Filtered		LAS
RS-28		Primary	05/07/94	Actinium-228	-25 U	13	30	Filtered		LAS
RS-28		Primary	05/07/94	Bismuth-214	91	20	15	Filtered		LAS
RS-28		Primary	05/07/94	Lead-212	3.4 U	9.5	13	Filtered		LAS
RS-28		Primary	05/07/94	Lead-214	119	18	17	Filtered		LAS
RS-28		Primary	05/07/94	Potassium-40	-8 U	66	100	Filtered		LAS
RS-28		Primary	05/07/94	Thallium-208	-1 U	7.6	11	Filtered		LAS
RS-28		Primary	05/07/94	Thorium-234	65 U	59	130	Filtered		LAS
RS-28		Primary	05/17/95	Actinium-228	2 U	26	41	Filtered		LAS
RS-28		Primary	05/17/95	Bismuth-214	85	24	24	Filtered		LAS
RS-28		Primary	05/17/95	Lead-212	2 U	12	17	Filtered		LAS
RS-28		Primary	05/17/95	Lead-214	86	19	20	Filtered		LAS
RS-28		Primary	05/17/95	Potassium-40	46 U	89	120	Filtered		LAS
RS-28		Primary	05/17/95	Thallium-208	-0.6 U	8.8	12	Filtered		LAS
RS-28		Primary	05/17/95	Thorium-234	-10 U	130	190	Filtered		LAS
RS-28		Primary	05/16/96	Actinium-228	0 U	11	19	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV
RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-28		Primary	05/16/96	Bismuth-214	103	16	12	Filtered		LAS
RS-28		Primary	05/16/96	Lead-212	-0.4 U	6.6	10	Filtered		LAS
RS-28		Primary	05/16/96	Lead-214	120	14	9.7	Filtered		LAS
RS-28		Primary	05/16/96	Potassium-40	-15 U	36	62	Filtered		LAS
RS-28		Primary	05/16/96	Thallium-208	-0.5 U	3.6	5.4	Filtered		LAS
RS-28		Primary	05/16/96	Thorium-234	-2 U	65	270	Filtered		LAS
RS-28		Primary	05/16/96	Uranium-235	6 U	21	32	Filtered		LAS
RS-28		Primary	05/08/98	Actinium-228	59 U	---	59	Filtered		TN
RS-28		Primary	05/08/98	Bismuth-212	103 U	---	103	Filtered		TN
RS-28		Primary	05/08/98	Bismuth-214	29.8 U	---	29.8	Filtered		TN
RS-28		Primary	05/08/98	Lead-210	758 U	---	758	Filtered		TN
RS-28		Primary	05/08/98	Lead-212	21.7 U	---	21.7	Filtered		TN
RS-28		Primary	05/08/98	Lead-214	39.4 U	---	39.4	Filtered		TN
RS-28		Primary	05/08/98	Potassium-40	254 U	---	254	Filtered		TN
RS-28		Primary	05/08/98	Thallium-208	14.1 U	---	14.1	Filtered		TN
RS-28		Primary	05/08/98	Thorium-234	298 U	---	298	Filtered		TN
RS-28		Primary	11/16/98	Actinium-228	29.1 U	---	29.1	Filtered		TN
RS-28		Primary	11/16/98	Bismuth-212	50.9 U	---	50.9	Filtered		TN
RS-28		Primary	11/16/98	Bismuth-214	13.3 U	---	13.3	Filtered		TN
RS-28		Primary	11/16/98	Lead-210	337 U	---	337	Filtered		TN
RS-28		Primary	11/16/98	Lead-212	19.1 U	---	19.1	Filtered		TN
RS-28		Primary	11/16/98	Lead-214	12.3 U	---	12.3	Filtered		TN
RS-28		Primary	11/16/98	Potassium-40	150 U	---	150	Filtered		TN
RS-28		Primary	11/16/98	Thallium-208	6.25 U	---	6.25	Filtered		TN
RS-28		Primary	11/16/98	Thorium-234	179 U	---	179	Filtered		TN
RS-28		Primary	05/05/00	Actinium-228	56 U	---	56	Filtered		TR
RS-28		Primary	05/05/00	Bismuth-212	93.8 U	---	93.8	Filtered		TR
RS-28		Primary	05/05/00	Bismuth-214	23.1 U	---	23.1	Filtered		TR
RS-28		Primary	05/05/00	Lead-210	2810 U	---	2810	Filtered		TR
RS-28		Primary	05/05/00	Lead-212	24.2 U	---	24.2	Filtered		TR
RS-28		Primary	05/05/00	Lead-214	23.2 U	---	23.2	Filtered		TR
RS-28		Primary	05/05/00	Potassium-40	215 U	---	215	Filtered		TR
RS-28		Primary	05/05/00	Radium-226	184 U	---	184	Filtered		TR
RS-28		Primary	05/05/00	Thallium-208	12.6 U	---	12.6	Filtered		TR
RS-28		Primary	05/05/00	Thorium-234	384 U	---	384	Filtered		TR
RS-28		Primary	05/05/00	Uranium-235	77.7 U	---	77.7	Filtered		TR
RS-28		Primary	05/10/01	Actinium-228	27.6 U	---	27.6	Filtered		ES
RS-28		Primary	05/10/01	Bismuth-212	53.8 U	---	53.8	Filtered		ES
RS-28		Primary	05/10/01	Bismuth-214	15.4 U	---	15.4	Filtered		ES
RS-28		Primary	05/10/01	Lead-210	399 U	---	399	Filtered		ES
RS-28		Primary	05/10/01	Lead-212	9.79 U	---	9.79	Filtered		ES
RS-28		Primary	05/10/01	Lead-214	12.9 U	---	12.9	Filtered		ES
RS-28		Primary	05/10/01	Potassium-40	75.8 U	---	75.8	Filtered		ES
RS-28		Primary	05/10/01	Radium-226	104 U	---	104	Filtered		ES
RS-28		Primary	05/10/01	Thallium-208	6.84 U	---	6.84	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-IV
RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-28		Primary	05/10/01	Thorium-234	183 U	---	183	Filtered		ES
RS-28		Primary	05/10/01	Uranium-235	32.6 U	---	32.6	Filtered		ES
RS-28		Primary	05/20/05	Potassium-40	28.9 U	---	28.9	Filtered		ES
RS-28		Primary	02/17/06	Potassium-40	24.2 U	---	24.2	Filtered		ES
RS-28		Primary	02/13/07	Potassium-40	24.9 U	---	24.9	Filtered		ES
RS-28		Primary	02/06/08	Potassium-40	27.6 U	---	27.6	Filtered		ES
RS-54		Primary	05/07/94	Actinium-228	10 U	19	29	Filtered		LAS
RS-54		Primary	05/07/94	Bismuth-214	11 U	12	16	Filtered		LAS
RS-54		Primary	05/07/94	Lead-212	4.2 U	9.4	13	Filtered		LAS
RS-54		Primary	05/07/94	Lead-214	12 U	11	15	Filtered		LAS
RS-54		Primary	05/07/94	Potassium-40	-14 U	66	100	Filtered		LAS
RS-54		Primary	05/07/94	Thallium-208	6.7 U	7.4	9.4	Filtered		LAS
RS-54		Primary	05/07/94	Thorium-234	54 U	60	130	Filtered		LAS
RS-54		Primary	08/07/94	Actinium-228	24 U	89	170	Filtered		LAS
RS-54		Primary	08/07/94	Bismuth-214	10 U	56	87	Filtered		LAS
RS-54		Primary	08/07/94	Lead-212	33 U	42	57	Filtered		LAS
RS-54		Primary	08/07/94	Lead-214	-50 U	43	74	Filtered		LAS
RS-54		Primary	08/07/94	Potassium-40	220 U	340	500	Filtered		LAS
RS-54		Primary	08/07/94	Radium-226	-110 U	440	590	Filtered		LAS
RS-54		Primary	08/07/94	Thallium-208	6 U	30	42	Filtered		LAS
RS-54		Primary	08/07/94	Thorium-234	40 U	280	680	Filtered		LAS
RS-54		Primary	08/07/94	Uranium-235	20 U	110	150	Filtered		LAS
RS-54		Primary	08/03/95	Actinium-228	-15.4 U	9.6	39	Filtered		LAS
RS-54		Primary	08/03/95	Bismuth-214	-4 U	13	21	Filtered		LAS
RS-54		Primary	08/03/95	Lead-212	3.6 U	9.9	14	Filtered		LAS
RS-54		Primary	08/03/95	Lead-214	8 U	11	17	Filtered		LAS
RS-54		Primary	08/03/95	Potassium-40	-5 U	61	98	Filtered		LAS
RS-54		Primary	08/03/95	Thallium-208	-0.8 U	6.8	10	Filtered		LAS
RS-54		Primary	08/03/95	Thorium-234	3 U	65	150	Filtered		LAS
RS-54		Primary	05/16/96	Actinium-228	-19 U	11	41	Filtered		LAS
RS-54		Primary	05/16/96	Bismuth-214	24	15	20	Filtered		LAS
RS-54		Primary	05/16/96	Lead-212	3.5 U	9.5	14	Filtered		LAS
RS-54		Primary	05/16/96	Lead-214	15 U	12	19	Filtered		LAS
RS-54		Primary	05/16/96	Potassium-40	-5 U	72	110	Filtered		LAS
RS-54		Primary	05/16/96	Thallium-208	-2.6 U	7.5	11	Filtered		LAS
RS-54		Primary	05/16/96	Thorium-234	31 U	70	180	Filtered		LAS
RS-54		Primary	05/16/96	Uranium-235	-4 U	27	41	Filtered		LAS
RS-54		Primary	08/23/96	Actinium-228	16 U	21	34	Filtered		LAS
RS-54		Primary	08/23/96	Bismuth-214	107	24	21	Filtered		LAS
RS-54		Primary	08/23/96	Lead-212	4 U	10	15	Filtered		LAS
RS-54		Primary	08/23/96	Lead-214	119	20	18	Filtered		LAS
RS-54		Primary	08/23/96	Potassium-40	-27 U	65	120	Filtered		LAS
RS-54		Primary	08/23/96	Thallium-208	3.3 U	6.9	9.4	Filtered		LAS
RS-54		Primary	08/23/96	Thorium-234	9 U	73	200	Filtered		LAS
RS-54		Primary	05/03/97	Actinium-228	3 U	27	42	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-54		Primary	05/03/97	Bismuth-214	51	20	23	Filtered		LAS
RS-54		Primary	05/03/97	Lead-212	2 U	11	15	Filtered		LAS
RS-54		Primary	05/03/97	Lead-214	39	15	18	Filtered		LAS
RS-54		Primary	05/03/97	Potassium-40	22 U	77	110	Filtered		LAS
RS-54		Primary	05/03/97	Thallium-208	4.6 U	8	9.8	Filtered		LAS
RS-54		Primary	05/03/97	Thorium-234	20 U	130	200	Filtered		LAS
RS-54		Primary	08/02/97	Actinium-228	10 U	22	36	Filtered		LAS
RS-54		Primary	08/02/97	Bismuth-212	22 U	34	55	Filtered		LAS
RS-54		Primary	08/02/97	Bismuth-214	185	28	19	Filtered		LAS
RS-54		Primary	08/02/97	Lead-210	70 U	120	190	Filtered		LAS
RS-54		Primary	08/02/97	Lead-212	5 U	11	16	Filtered		LAS
RS-54		Primary	08/02/97	Lead-214	235	26	18	Filtered		LAS
RS-54		Primary	08/02/97	Potassium-40	38 U	69	100	Filtered		LAS
RS-54		Primary	08/02/97	Thallium-208	-0.9 U	6.8	10	Filtered		LAS
RS-54		Primary	08/02/97	Thorium-234	42 U	83	160	Filtered		LAS
RS-54		Primary	08/27/97	Actinium-228	-0.3 U	9.9	18	Filtered		LAS
RS-54		Primary	08/27/97	Actinium-228	8 U	11	18	Unfiltered		LAS
RS-54		Primary	08/27/97	Bismuth-212	2 U	25	34	Filtered		LAS
RS-54		Primary	08/27/97	Bismuth-212	-1.9 U	8	26	Unfiltered		LAS
RS-54		Primary	08/27/97	Bismuth-214	80	13	11	Filtered		LAS
RS-54		Primary	08/27/97	Bismuth-214	55	11	11	Unfiltered		LAS
RS-54		Primary	08/27/97	Lead-210	-130 U	400	590	Filtered		LAS
RS-54		Primary	08/27/97	Lead-210	-20 U	380	540	Unfiltered		LAS
RS-54		Primary	08/27/97	Lead-212	2.1 U	5	3	Filtered		LAS
RS-54		Primary	08/27/97	Lead-212	2.9 U	6.2	9.1	Unfiltered		LAS
RS-54		Primary	08/27/97	Lead-214	92	12	10	Filtered		LAS
RS-54		Primary	08/27/97	Lead-214	54.4	9.9	10	Unfiltered		LAS
RS-54		Primary	08/27/97	Potassium-40	14 U	37	57	Filtered		LAS
RS-54		Primary	08/27/97	Potassium-40	35 U	37	52	Unfiltered		LAS
RS-54		Primary	08/27/97	Thallium-208	1.4 U	3.4	4.8	Filtered		LAS
RS-54		Primary	08/27/97	Thallium-208	0.6 U	3.6	5.2	Unfiltered		LAS
RS-54		Primary	08/27/97	Thorium-234	-7 U	64	100	Filtered		LAS
RS-54		Primary	08/27/97	Thorium-234	20 U	64	100	Unfiltered		LAS
RS-54		Primary	02/08/98	Actinium-228	63.9 U	---	63.9	Filtered		TN
RS-54		Primary	02/08/98	Bismuth-212	130 U	---	130	Filtered		TN
RS-54		Primary	02/08/98	Bismuth-214	30.4 U	---	30.4	Filtered		TN
RS-54		Primary	02/08/98	Lead-210	763 U	---	763	Filtered		TN
RS-54		Primary	02/08/98	Lead-212	21.6 U	---	21.6	Filtered		TN
RS-54		Primary	02/08/98	Lead-214	28.5 U	---	28.5	Filtered		TN
RS-54		Primary	02/08/98	Potassium-40	236 U	---	236	Filtered		TN
RS-54		Primary	02/08/98	Thallium-208	16 U	---	16	Filtered		TN
RS-54		Primary	02/08/98	Thorium-234	321 U	---	321	Filtered		TN
RS-54		Primary	08/04/98	Actinium-228	52.1 U	---	52.1	Filtered		TN
RS-54		Primary	08/04/98	Bismuth-212	92.7 U	---	92.7	Filtered		TN
RS-54		Primary	08/04/98	Bismuth-214	25.2 U	---	25.2	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-54		Primary	08/04/98	Lead-210	501 U	---	501	Filtered		TN
RS-54		Primary	08/04/98	Lead-212	19.5 U	---	19.5	Filtered		TN
RS-54		Primary	08/04/98	Lead-214	22.2 U	---	22.2	Filtered		TN
RS-54		Primary	08/04/98	Potassium-40	154 U	---	154	Filtered		TN
RS-54		Primary	08/04/98	Thallium-208	11.2 U	---	11.2	Filtered		TN
RS-54		Primary	08/04/98	Thorium-234	309 U	---	309	Filtered		TN
RS-54		Primary	02/02/99	Bismuth-212	101 U	---	101	Filtered		TN
RS-54		Primary	02/02/99	Lead-210	99 U	---	99	Filtered		TN
RS-54		Primary	02/02/99	Lead-212	14.6 U	---	14.6	Filtered		TN
RS-54		Primary	02/02/99	Lead-214	24 U	---	24	Filtered		TN
RS-54		Primary	02/02/99	Potassium-40	184 U	---	184	Filtered		TN
RS-54		Primary	02/02/99	Radium-226	145 U	---	145	Filtered		TN
RS-54		Primary	02/02/99	Thallium-208	13.2 U	---	13.2	Filtered		TN
RS-54		Primary	02/02/99	Thorium-234	192 U	---	192	Filtered		TN
RS-54		Primary	02/02/99	Uranium-235	40.4 U	---	40.4	Filtered		TN
RS-54		Primary	08/18/99	Actinium-228	49.3 U	---	49.3	Filtered		TN
RS-54		Primary	08/18/99	Bismuth-212	83.6 U	---	83.6	Filtered		TN
RS-54		Primary	08/18/99	Bismuth-214	19.3 U	---	19.3	Filtered		TN
RS-54		Primary	08/18/99	Lead-210	2380 U	---	2380	Filtered		TN
RS-54		Primary	08/18/99	Lead-212	15.7 U	---	15.7	Filtered		TN
RS-54		Primary	08/18/99	Lead-214	17.9 U	---	17.9	Filtered		TN
RS-54		Primary	08/18/99	Potassium-40	190 U	---	190	Filtered		TN
RS-54		Primary	08/18/99	Radium-226	172 U	---	172	Filtered		TN
RS-54		Primary	08/18/99	Thallium-208	10.4 U	---	10.4	Filtered		TN
RS-54		Primary	08/18/99	Thorium-234	341 U	---	341	Filtered		TN
RS-54		Primary	08/18/99	Uranium-235	60.2 U	---	60.2	Filtered		TN
RS-54		Primary	03/15/00	Actinium-228	112 U	---	112	Filtered		TR
RS-54		Primary	03/15/00	Bismuth-212	183 U	---	183	Filtered		TR
RS-54		Primary	03/15/00	Bismuth-214	51.5 U	---	51.5	Filtered		TR
RS-54		Primary	03/15/00	Lead-210	1090 U	---	1090	Filtered		TR
RS-54		Primary	03/15/00	Lead-212	35.8 U	---	35.8	Filtered		TR
RS-54		Primary	03/15/00	Lead-214	42.5 U	---	42.5	Filtered		TR
RS-54		Primary	03/15/00	Potassium-40	444 U	---	444	Filtered		TR
RS-54		Primary	03/15/00	Radium-226	316 U	---	316	Filtered		TR
RS-54		Primary	03/15/00	Thallium-208	26.5 U	---	26.5	Filtered		TR
RS-54		Primary	03/15/00	Thorium-234	486 U	---	486	Filtered		TR
RS-54		Primary	03/15/00	Uranium-235	132 U	---	132	Filtered		TR
RS-54		Primary	11/01/01	Actinium-228	1.5 U	5	9	Filtered		DL
RS-54		Primary	11/01/01	Bismuth-212	2.1 U	5	3	Filtered		DL
RS-54		Primary	11/01/01	Bismuth-214	3 U	---	3	Filtered		DL
RS-54		Primary	11/01/01	Lead-210	7 U	---	7	Filtered		DL
RS-54		Primary	11/01/01	Lead-212	2.1 U	6.3	9.2	Filtered		DL
RS-54		Primary	11/01/01	Lead-214	3 U	---	3	Filtered		DL
RS-54		Primary	11/01/01	Potassium-40	10 U	---	10	Filtered		DL
RS-54		Primary	11/01/01	Radium-226	3.2	5	1	Filtered		DL

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-54		Primary	11/01/01	Thallium-208	0.3 U	3	5	Filtered		DL
RS-54		Primary	11/01/01	Thorium-234	5 U	---	5	Filtered		DL
RS-54		Primary	11/01/01	Uranium-235	0.8 U	0.1	1	Filtered		DL
RS-54		Primary	03/01/02	Actinium-228	3 U	3	3	Filtered		DL
RS-54		Primary	03/01/02	Bismuth-212	3 U	1.82	3	Filtered		DL
RS-54		Primary	03/01/02	Bismuth-214	3 U	1.08	3	Filtered		DL
RS-54		Primary	03/01/02	Lead-210	5 U	5	5	Filtered		DL
RS-54		Primary	03/01/02	Lead-212	3 U	3	3	Filtered		DL
RS-54		Primary	03/01/02	Lead-214	5 U	3	5	Filtered		DL
RS-54		Primary	03/01/02	Potassium-40	5 U	3	5	Filtered		DL
RS-54		Primary	03/01/02	Radium-226	3 U	1.82	3	Filtered		DL
RS-54		Primary	03/01/02	Thorium-234	5 U	5	5	Filtered		DL
RS-54		Primary	03/01/02	Uranium-235	7.47 U	4.5	7.47	Filtered		DL
RS-54		Primary	11/07/02	Actinium-228	10.6 U	---	10.6	Filtered		ES
RS-54		Primary	11/07/02	Bismuth-212	19.6 U	---	19.6	Filtered		ES
RS-54		Primary	11/07/02	Bismuth-214	5.21 U	---	5.21	Filtered		ES
RS-54		Primary	11/07/02	Lead-210	242 U	---	242	Filtered		ES
RS-54		Primary	11/07/02	Lead-212	4.22 U	---	4.22	Filtered		ES
RS-54		Primary	11/07/02	Lead-214	5.59 U	---	5.59	Filtered		ES
RS-54		Primary	11/07/02	Potassium-40	27.4 U	---	27.4	Filtered		ES
RS-54		Primary	11/07/02	Radium-226	44.4 U	---	44.4	Filtered		ES
RS-54		Primary	11/07/02	Thorium-234	82 U	---	82	Filtered		ES
RS-54		Primary	11/07/02	Uranium-235	16.6 U	---	16.6	Filtered		ES
RS-54		Primary	02/16/05	Potassium-40	13.5 U	---	13.5	Filtered		ES
RS-54		Primary	09/06/05	Potassium-40	62.2 U	---	62.2	Filtered		ES
RS-54		Primary	02/23/06	Potassium-40	29.1 U	---	29.1	Filtered		ES
RS-54		Split	02/23/06	Potassium-40	-21.8 U	26	44.9	Filtered		STL
RS-54		Primary	02/15/07	Potassium-40	26.3 U	---	26.3	Filtered		ES
RS-54		Primary	02/22/08	Potassium-40	32.3 U	---	32.3	Filtered		ES
Chatsworth Formation Wells										
RD-07		Primary	08/25/97	Actinium-228	-4.9 U	4.2	18	Filtered		LAS
RD-07		Primary	08/25/97	Actinium-228	7 U	22	38	Unfiltered		LAS
RD-07		Primary	08/25/97	Bismuth-212	14 U	21	24	Filtered		LAS
RD-07		Primary	08/25/97	Bismuth-212	-12 U	38	72	Unfiltered		LAS
RD-07		Primary	08/25/97	Bismuth-214	39.3	9.6	10	Filtered		LAS
RD-07		Primary	08/25/97	Bismuth-214	51	18	19	Unfiltered		LAS
RD-07		Primary	08/25/97	Lead-210	40 U	400	560	Filtered		LAS
RD-07		Primary	08/25/97	Lead-210	-60 U	110	180	Unfiltered		LAS
RD-07		Primary	08/25/97	Lead-212	0.6 U	5.9	8.8	Filtered		LAS
RD-07		Primary	08/25/97	Lead-212	3 U	11	15	Unfiltered		LAS
RD-07		Primary	08/25/97	Lead-214	43.6	9.3	11	Filtered		LAS
RD-07		Primary	08/25/97	Lead-214	51	15	18	Unfiltered		LAS
RD-07		Primary	08/25/97	Potassium-40	16 U	33	50	Filtered		LAS
RD-07		Primary	08/25/97	Potassium-40	2 U	67	110	Unfiltered		LAS
RD-07		Primary	08/25/97	Thallium-208	3.4 U	3.4	4.5	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-07		Primary	08/25/97	Thallium-208	-0.8 U	6.9	10	Unfiltered		LAS
RD-07		Primary	08/25/97	Thorium-234	35 U	62	97	Filtered		LAS
RD-07		Primary	08/25/97	Thorium-234	1 U	70	130	Unfiltered		LAS
RD-07		Primary	02/06/99	Actinium-228	29.5 U	---	29.5	Filtered		TN
RD-07		Primary	02/06/99	Bismuth-212	45.1 U	---	45.1	Filtered		TN
RD-07		Primary	02/06/99	Bismuth-214	11.8 U	---	11.8	Filtered		TN
RD-07		Primary	02/06/99	Lead-210	280 U	---	280	Filtered		TN
RD-07		Primary	02/06/99	Lead-212	10.6 U	---	10.6	Filtered		TN
RD-07		Primary	02/06/99	Lead-214	11.7 U	---	11.7	Filtered		TN
RD-07		Primary	02/06/99	Potassium-40	148 U	---	148	Filtered		TN
RD-07		Primary	02/06/99	Radium-226	134 U	---	134	Filtered		TN
RD-07		Primary	02/06/99	Thallium-208	6.53 U	---	6.53	Filtered		TN
RD-07		Primary	02/06/99	Thorium-234	182 U	---	182	Filtered		TN
RD-07		Primary	02/06/99	Uranium-235	34 U	---	34	Filtered		TN
RD-07		Primary	03/16/00	Actinium-228	46.8 U	---	46.8	Filtered		TR
RD-07		Primary	03/16/00	Bismuth-212	76.2 U	---	76.2	Filtered		TR
RD-07		Primary	03/16/00	Bismuth-214	40.9 U	---	40.9	Filtered		TR
RD-07		Primary	03/16/00	Lead-210	497 U	---	497	Filtered		TR
RD-07		Primary	03/16/00	Lead-212	17.8 U	---	17.8	Filtered		TR
RD-07		Primary	03/16/00	Lead-214	41 U	---	41	Filtered		TR
RD-07		Primary	03/16/00	Potassium-40	136 U	---	136	Filtered		TR
RD-07		Primary	03/16/00	Radium-226	179 U	---	179	Filtered		TR
RD-07		Primary	03/16/00	Thallium-208	10.2 U	---	10.2	Filtered		TR
RD-07		Primary	03/16/00	Thorium-234	268 U	---	268	Filtered		TR
RD-07		Primary	03/16/00	Uranium-235	54.6 U	---	54.6	Filtered		TR
RD-07		Primary	02/23/01	Actinium-228	46.4 U	---	46.4	Filtered		ES
RD-07		Primary	02/23/01	Bismuth-212	77.5 U	---	77.5	Filtered		ES
RD-07		Primary	02/23/01	Bismuth-214	172	25	23.6	Filtered		ES
RD-07		Primary	02/23/01	Lead-210	2470 U	---	2470	Filtered		ES
RD-07		Primary	02/23/01	Lead-212	16.4 U	---	16.4	Filtered		ES
RD-07		Primary	02/23/01	Lead-214	179	20	20.3	Filtered		ES
RD-07		Primary	02/23/01	Potassium-40	185 U	---	185	Filtered		ES
RD-07		Primary	02/23/01	Radium-226	239 U	---	239	Filtered		ES
RD-07		Primary	02/23/01	Thallium-208	10 U	---	10	Filtered		ES
RD-07		Primary	02/23/01	Thorium-234	334 U	---	334	Filtered		ES
RD-07		Primary	02/23/01	Uranium-235	58.5 U	---	58.5	Filtered		ES
RD-07		Primary	02/22/02	Actinium-228	5 U	3	5	Filtered		DL
RD-07		Primary	02/22/02	Bismuth-212	3 U	3	3	Filtered		DL
RD-07		Primary	02/22/02	Bismuth-214	3 U	3	3	Filtered		DL
RD-07		Primary	02/22/02	Lead-210	5 U	5	5	Filtered		DL
RD-07		Primary	02/22/02	Lead-212	3 U	3	3	Filtered		DL
RD-07		Primary	02/22/02	Lead-214	5 U	3	5	Filtered		DL
RD-07		Primary	02/22/02	Potassium-40	5 U	3	5	Filtered		DL
RD-07		Primary	02/22/02	Radium-226	3 U	3	3	Filtered		DL
RD-07		Primary	02/22/02	Thorium-234	5 U	5	5	Filtered		DL

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-07		Primary	02/22/02	Uranium-235	5 U	3	5	Filtered		DL
RD-07	Z03	Primary	01/29/03	Actinium-228	6.45 U	---	6.45	Filtered		ES
RD-07	Z03	Primary	01/29/03	Bismuth-212	9.4 U	---	9.4	Filtered		ES
RD-07	Z03	Primary	01/29/03	Bismuth-214	2.78 U	---	2.78	Filtered		ES
RD-07	Z03	Primary	01/29/03	Lead-210	99.1 U	---	99.1	Filtered		ES
RD-07	Z03	Primary	01/29/03	Lead-212	1.77 U	---	1.77	Filtered		ES
RD-07	Z03	Primary	01/29/03	Lead-214	2.6 U	---	2.6	Filtered		ES
RD-07	Z03	Primary	01/29/03	Potassium-40	37.7 U	---	37.7	Filtered		ES
RD-07	Z03	Primary	01/29/03	Radium-226	19.1 U	---	19.1	Filtered		ES
RD-07	Z03	Primary	01/29/03	Thorium-234	20.9 U	---	20.9	Filtered		ES
RD-07	Z03	Primary	01/29/03	Uranium-235	6.09 U	---	6.09	Filtered		ES
RD-07	Z03	Primary	02/17/05	Potassium-40	39.3 U	---	39.3	Filtered		ES
RD-07	Z03	Primary	02/16/06	Potassium-40	45.8 U	---	45.8	Filtered		ES
RD-07	Z03	Primary	02/08/07	Potassium-40	27.3 U	---	27.3	Filtered		ES
RD-07	Z03	Primary	02/05/08	Potassium-40	12.5 U	---	12.5	Filtered		ES
RD-07	Z03	Primary	02/20/09	Potassium-40	-2.01 U	7.7	13.4	Filtered		ES
RD-07	Z03	Primary	02/20/09	Potassium-40	5.54 U	15	14.2	Unfiltered		ES
RD-07	Z03	Primary	02/20/09	Radium-228	0.633 U	3.2	5.52	Filtered		ES
RD-07	Z03	Primary	02/20/09	Radium-228	1.96 U	2.7	4.57	Unfiltered		ES
RD-07	Z03	Primary	07/16/09	Potassium-40	58.7 U	100	178	Filtered		ES
RD-07	Z03	Primary	07/16/09	Potassium-40	-112 U	84	92.6	Unfiltered		ES
RD-13		Primary	08/26/97	Actinium-228	-3 U	24	43	Filtered		LAS
RD-13		Primary	08/26/97	Actinium-228	-9 U	24	46	Unfiltered		LAS
RD-13		Primary	08/26/97	Bismuth-212	-16 U	38	74	Filtered		LAS
RD-13		Primary	08/26/97	Bismuth-212	-25 U	35	70	Unfiltered		LAS
RD-13		Primary	08/26/97	Bismuth-214	40	16	18	Filtered		LAS
RD-13		Primary	08/26/97	Bismuth-214	48	17	18	Unfiltered		LAS
RD-13		Primary	08/26/97	Lead-210	50 U	120	180	Filtered		LAS
RD-13		Primary	08/26/97	Lead-210	60 U	110	170	Unfiltered		LAS
RD-13		Primary	08/26/97	Lead-212	-7 U	11	17	Filtered		LAS
RD-13		Primary	08/26/97	Lead-212	3 U	10	15	Unfiltered		LAS
RD-13		Primary	08/26/97	Lead-214	35	14	17	Filtered		LAS
RD-13		Primary	08/26/97	Lead-214	34	14	19	Unfiltered		LAS
RD-13		Primary	08/26/97	Potassium-40	-32 U	72	130	Filtered		LAS
RD-13		Primary	08/26/97	Potassium-40	75 U	75	94	Unfiltered		LAS
RD-13		Primary	08/26/97	Thallium-208	-0.7 U	6.7	9.8	Filtered		LAS
RD-13		Primary	08/26/97	Thallium-208	4.2 U	7.3	9.9	Unfiltered		LAS
RD-13		Primary	08/26/97	Thorium-234	23 U	71	140	Filtered		LAS
RD-13		Primary	08/26/97	Thorium-234	32 U	75	140	Unfiltered		LAS
RD-15		Primary	05/10/01	Actinium-228	57.5 U	---	57.5	Filtered		ES
RD-15		Primary	05/10/01	Bismuth-212	102 U	---	102	Filtered		ES
RD-15		Primary	05/10/01	Bismuth-214	23.9 U	---	23.9	Filtered		ES
RD-15		Primary	05/10/01	Lead-210	842 U	---	842	Filtered		ES
RD-15		Primary	05/10/01	Lead-212	18.8 U	---	18.8	Filtered		ES
RD-15		Primary	05/10/01	Lead-214	23.9 U	---	23.9	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-15		Primary	05/10/01	Potassium-40	210 U	---	210	Filtered		ES
RD-15		Primary	05/10/01	Radium-226	179 U	---	179	Filtered		ES
RD-15		Primary	05/10/01	Thallium-208	12.8 U	---	12.8	Filtered		ES
RD-15		Primary	05/10/01	Thorium-234	270 U	---	270	Filtered		ES
RD-15		Primary	05/10/01	Uranium-235	61.5 U	---	61.5	Filtered		ES
RD-15		Primary	03/06/02	Actinium-228	7.53 U	3.28	7.53	Filtered		DL
RD-15		Primary	03/06/02	Bismuth-212	3 U	3	3	Filtered		DL
RD-15		Primary	03/06/02	Bismuth-214	3 U	3	3	Filtered		DL
RD-15		Primary	03/06/02	Lead-210	5 U	5	5	Filtered		DL
RD-15		Primary	03/06/02	Lead-212	3 U	3	3	Filtered		DL
RD-15		Primary	03/06/02	Lead-214	3 U	3	3	Filtered		DL
RD-15		Primary	03/06/02	Potassium-40	5 U	3	5	Filtered		DL
RD-15		Primary	03/06/02	Radium-226	3 U	3	3	Filtered		DL
RD-15		Primary	03/06/02	Thorium-234	10 U	8.453	10	Filtered		DL
RD-15		Primary	03/06/02	Uranium-235	1 U	---	1	Filtered		DL
RD-15		Primary	02/26/03	Actinium-228	3.4 U	---	3.4	Filtered		ES
RD-15		Primary	02/26/03	Bismuth-212	4.94 U	---	4.94	Filtered		ES
RD-15		Primary	02/26/03	Bismuth-214	1.44 U	---	1.44	Filtered		ES
RD-15		Primary	02/26/03	Lead-210	177 U	---	177	Filtered		ES
RD-15		Primary	02/26/03	Lead-212	0.888 U	---	0.888	Filtered		ES
RD-15		Primary	02/26/03	Lead-214	1.35 U	---	1.35	Filtered		ES
RD-15		Primary	02/26/03	Potassium-40	14.4 U	---	14.4	Filtered		ES
RD-15		Primary	02/26/03	Radium-226	11.1 U	---	11.1	Filtered		ES
RD-15		Primary	02/26/03	Thorium-234	26.6 U	---	26.6	Filtered		ES
RD-15		Primary	02/26/03	Uranium-235	4.99 U	---	4.99	Filtered		ES
RD-15		Primary	02/24/04	Actinium-228	43.7 U	---	43.7	Filtered		ES
RD-15		Primary	02/24/04	Bismuth-212	78.4 U	---	78.4	Filtered		ES
RD-15		Primary	02/24/04	Bismuth-214	19.3 U	---	19.3	Filtered		ES
RD-15		Primary	02/24/04	Lead-210	648 U	---	648	Filtered		ES
RD-15		Primary	02/24/04	Lead-212	14.6 U	---	14.6	Filtered		ES
RD-15		Primary	02/24/04	Lead-214	18.4 U	---	18.4	Filtered		ES
RD-15		Primary	02/24/04	Potassium-40	256 U	---	256	Filtered		ES
RD-15		Primary	02/24/04	Radium-226	128 U	---	128	Filtered		ES
RD-15		Primary	02/24/04	Thallium-208	9.89 U	---	9.89	Filtered		ES
RD-15		Primary	02/24/04	Thorium-234	206 U	---	206	Filtered		ES
RD-15		Primary	02/24/04	Uranium-235	47.2 U	---	47.2	Filtered		ES
RD-15		Primary	02/14/05	Potassium-40	29.1 U	---	29.1	Filtered		ES
RD-15		Primary	02/16/06	Potassium-40	22.3 U	---	22.3	Filtered		ES
RD-15		Split	02/16/06	Potassium-40	-15.1 U	43	82.9	Filtered		STL
RD-15		Primary	02/06/07	Potassium-40	28.5 U	---	28.5	Filtered		ES
RD-15		Primary	02/20/08	Potassium-40	41.3 U	---	41.3	Filtered		ES
RD-15		Primary	02/24/09	Potassium-40	4.14 U	16	27.8	Unfiltered		ES
RD-15		Reanalysis of Primary	02/24/09	Potassium-40	-0.7 U	6.63	11.57	Filtered		ES
RD-15		Split	02/24/09	Potassium-40	-18.1 U	20.6	22.6	Filtered		GEL
RD-15		Split	02/24/09	Potassium-40	-11.3 U	19.8	22.3	Unfiltered		GEL

See last page of table for notes and abbreviations.

TABLE E-IV
RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-15		Primary	02/24/09	Radium-228	4.02 U	5.4	9.04	Filtered		ES
RD-15		Primary	02/24/09	Radium-228	2.02 U	4.3	7.3	Unfiltered		ES
RD-15		Split	02/24/09	Radium-228	-0.0246 U	4.86	6.7	Filtered		GEL
RD-15		Split	02/24/09	Radium-228	-4.13 U	6.01	6.86	Unfiltered		GEL
RD-15		Primary	07/24/09	Potassium-40	-6.73 U	77	135	Unfiltered		ES
RD-15		Reanalysis of Primary	07/24/09	Potassium-40	4.73 U	64	113	Filtered		ES
RD-15		Duplicate	07/24/09	Potassium-40	-27.3 U	83	146	Unfiltered		ES
RD-16		Primary	05/27/98	Actinium-228	64.4 U	---	64.4	Filtered		TN
RD-16		Primary	05/27/98	Bismuth-212	114 U	---	114	Filtered		TN
RD-16		Primary	05/27/98	Bismuth-214	28.9 U	---	28.9	Filtered		TN
RD-16		Primary	05/27/98	Lead-210	130 U	---	130	Filtered		TN
RD-16		Primary	05/27/98	Lead-212	18.1 U	---	18.1	Filtered		TN
RD-16		Primary	05/27/98	Lead-214	28.4 U	---	28.4	Filtered		TN
RD-16		Primary	05/27/98	Potassium-40	174 U	---	174	Filtered		TN
RD-16		Primary	05/27/98	Thallium-208	24.3 U	---	24.3	Filtered		TN
RD-16		Primary	05/27/98	Thorium-234	235 U	---	235	Filtered		TN
RD-17		Primary	02/08/99	Actinium-228	45.9 U	---	45.9	Filtered		TN
RD-17		Primary	02/08/99	Bismuth-212	85.6 U	---	85.6	Filtered		TN
RD-17		Primary	02/08/99	Lead-210	148 U	---	148	Filtered		TN
RD-17		Primary	02/08/99	Lead-212	12.4 U	---	12.4	Filtered		TN
RD-17		Primary	02/08/99	Lead-214	18.9 U	---	18.9	Filtered		TN
RD-17		Primary	02/08/99	Potassium-40	135 U	---	135	Filtered		TN
RD-17		Primary	02/08/99	Radium-226	129 U	---	129	Filtered		TN
RD-17		Primary	02/08/99	Thallium-208	9.91 U	---	9.91	Filtered		TN
RD-17		Primary	02/08/99	Thorium-234	159 U	---	159	Filtered		TN
RD-17		Primary	02/08/99	Uranium-235	33.1 U	---	33.1	Filtered		TN
RD-17		Primary	02/21/00	Actinium-228	68.6 U	---	68.6	Filtered		TR
RD-17		Primary	02/21/00	Bismuth-212	119 U	---	119	Filtered		TR
RD-17		Primary	02/21/00	Bismuth-214	29 U	---	29	Filtered		TR
RD-17		Primary	02/21/00	Lead-210	1010 U	---	1010	Filtered		TR
RD-17		Primary	02/21/00	Lead-212	20.2 U	---	20.2	Filtered		TR
RD-17		Primary	02/21/00	Lead-214	25.6 U	---	25.6	Filtered		TR
RD-17		Primary	02/21/00	Potassium-40	244 U	---	244	Filtered		TR
RD-17		Primary	02/21/00	Radium-226	194 U	---	194	Filtered		TR
RD-17		Primary	02/21/00	Thallium-208	16.4 U	---	16.4	Filtered		TR
RD-17		Primary	02/21/00	Thorium-234	322 U	---	322	Filtered		TR
RD-17		Primary	02/21/00	Uranium-235	81.3 U	---	81.3	Filtered		TR
RD-17		Primary	02/14/01	Actinium-228	63.8 U	---	63.8	Filtered		ES
RD-17		Primary	02/14/01	Bismuth-212	119 U	---	119	Filtered		ES
RD-17		Primary	02/14/01	Bismuth-214	125	32	32.2	Filtered		ES
RD-17		Primary	02/14/01	Lead-210	1080 U	---	1080	Filtered		ES
RD-17		Primary	02/14/01	Lead-212	23.1 U	---	23.1	Filtered		ES
RD-17		Primary	02/14/01	Lead-214	112	31	36.8	Filtered		ES
RD-17		Primary	02/14/01	Potassium-40	244 U	---	244	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-17		Primary	02/14/01	Radium-226	268	210	260	Filtered		ES
RD-17		Primary	02/14/01	Thallium-208	17.2 U	---	17.2	Filtered		ES
RD-17		Primary	02/14/01	Thorium-234	350 U	---	350	Filtered		ES
RD-17		Primary	02/14/01	Uranium-235	78.3 U	---	78.3	Filtered		ES
RD-17		Primary	03/01/02	Actinium-228	5 U	5	5	Filtered		DL
RD-17		Primary	03/01/02	Bismuth-212	5 U	3	5	Filtered		DL
RD-17		Primary	03/01/02	Bismuth-214	5 U	3	5	Filtered		DL
RD-17		Primary	03/01/02	Lead-210	5 U	3	5	Filtered		DL
RD-17		Primary	03/01/02	Lead-212	5 U	3	5	Filtered		DL
RD-17		Primary	03/01/02	Lead-214	5 U	3	5	Filtered		DL
RD-17		Primary	03/01/02	Potassium-40	22.46	6.67	10	Filtered		DL
RD-17		Primary	03/01/02	Radium-226	5 U	5	5	Filtered		DL
RD-17		Primary	03/01/02	Thorium-234	5 U	5	5	Filtered		DL
RD-17		Primary	03/01/02	Uranium-235	5 U	3	5	Filtered		DL
RD-17		Primary	02/24/03	Actinium-228	7.5 U	---	7.5	Filtered		ES
RD-17		Primary	02/24/03	Bismuth-212	12.4 U	---	12.4	Filtered		ES
RD-17		Primary	02/24/03	Bismuth-214	3.55 U	---	3.55	Filtered		ES
RD-17		Primary	02/24/03	Lead-210	335 U	---	335	Filtered		ES
RD-17		Primary	02/24/03	Lead-212	2.43 U	---	2.43	Filtered		ES
RD-17		Primary	02/24/03	Lead-214	3.3 U	---	3.3	Filtered		ES
RD-17		Primary	02/24/03	Potassium-40	40.9 U	---	40.9	Filtered		ES
RD-17		Primary	02/24/03	Radium-226	24.1 U	---	24.1	Filtered		ES
RD-17		Primary	02/24/03	Thorium-234	47.8 U	---	47.8	Filtered		ES
RD-17		Primary	02/24/03	Uranium-235	9.44 U	---	9.44	Filtered		ES
RD-17		Primary	02/23/04	Actinium-228	42.4 U	---	42.4	Filtered		ES
RD-17		Primary	02/23/04	Bismuth-212	77.6 U	---	77.6	Filtered		ES
RD-17		Primary	02/23/04	Bismuth-214	22 U	---	22	Filtered		ES
RD-17		Primary	02/23/04	Lead-210	187 U	---	187	Filtered		ES
RD-17		Primary	02/23/04	Lead-212	15.9 U	---	15.9	Filtered		ES
RD-17		Primary	02/23/04	Lead-214	48.8 U	---	48.8	Filtered		ES
RD-17		Primary	02/23/04	Potassium-40	200 U	---	200	Filtered		ES
RD-17		Primary	02/23/04	Radium-226	154 U	---	154	Filtered		ES
RD-17		Primary	02/23/04	Thallium-208	10.3 U	---	10.3	Filtered		ES
RD-17		Primary	02/23/04	Thorium-234	195 U	---	195	Filtered		ES
RD-17		Primary	02/23/04	Uranium-235	59.2 U	---	59.2	Filtered		ES
RD-17		Primary	02/15/05	Potassium-40	31.5 U	---	31.5	Filtered		ES
RD-17		Primary	02/16/06	Potassium-40	48.1 U	---	48.1	Filtered		ES
RD-17		Primary	02/06/07	Potassium-40	21.4 U	---	21.4	Filtered		ES
RD-17		Split	02/06/07	Potassium-40	-19.7 U	26	36.9	Filtered		STL
RD-17		Primary	02/22/08	Potassium-40	9.5 U	---	9.5	Filtered		ES
RD-17		Primary	02/25/09	Potassium-40	23.5 U	29	48.3	Filtered		ES
RD-17		Primary	02/25/09	Potassium-40	6.15 U	7.2	12.1	Unfiltered		ES
RD-17		Primary	02/25/09	Radium-228	-0.63 U	6.4	11	Filtered		ES
RD-17		Primary	02/25/09	Radium-228	1.73 U	2.9	4.92	Unfiltered		ES
RD-17		Primary	07/27/09	Potassium-40	66 U	79	132	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-17		Primary	07/27/09	Potassium-40	104 U	140	246	Unfiltered		ES
RD-21		Primary	11/06/93	Actinium-228	15.9 U	---	15.9	Filtered		LAS
RD-21		Primary	11/06/93	Bismuth-212	64.4 U	---	64.4	Filtered		LAS
RD-21		Primary	11/06/93	Bismuth-214	62.007	8.32	---	Filtered		LAS
RD-21		Primary	11/06/93	Lead-210	97.6 U	---	97.6	Filtered		LAS
RD-21		Primary	11/06/93	Lead-212	8.91 U	---	8.91	Filtered		LAS
RD-21		Primary	11/06/93	Lead-214	62.923	8.81	---	Filtered		LAS
RD-21		Primary	11/06/93	Potassium-40	49.7 U	---	49.7	Filtered		LAS
RD-21		Primary	11/06/93	Thallium-208	4.72 U	---	4.72	Filtered		LAS
RD-21		Primary	11/06/93	Thorium-234	91.8 U	---	91.8	Filtered		LAS
RD-21		Primary	11/06/93	Uranium-235	5.3 U	---	5.3	Filtered		LAS
RD-21		Primary	02/25/94	Actinium-228	-3.2 U	3.8	14	Filtered		LAS
RD-21		Primary	02/25/94	Bismuth-214	1.1 U	2.7	8.3	Filtered		LAS
RD-21		Primary	02/25/94	Lead-212	7.4	5.1	6.9	Filtered		LAS
RD-21		Primary	02/25/94	Lead-214	0.2 U	2.4	7.8	Filtered		LAS
RD-21		Primary	02/25/94	Potassium-40	-8 U	27	44	Filtered		LAS
RD-21		Primary	02/25/94	Radium-226	-21 U	48	69	Filtered		LAS
RD-21		Primary	02/25/94	Thallium-208	4.4	3	3.8	Filtered		LAS
RD-21		Primary	02/25/94	Thorium-234	-20 U	19	100	Filtered		LAS
RD-21		Primary	02/25/94	Uranium-235	-2.8 U	3	19	Filtered		LAS
RD-21		Primary	08/08/94	Actinium-228	12 U	18	29	Filtered		LAS
RD-21		Primary	08/08/94	Bismuth-214	-6 U	10	18	Filtered		LAS
RD-21		Primary	08/08/94	Lead-212	1.6 U	8.6	12	Filtered		LAS
RD-21		Primary	08/08/94	Lead-214	14.1	9.9	14	Filtered		LAS
RD-21		Primary	08/08/94	Potassium-40	15 U	59	82	Filtered		LAS
RD-21		Primary	08/08/94	Radium-226	40 U	100	140	Filtered		LAS
RD-21		Primary	08/08/94	Thallium-208	2.3 U	7	9	Filtered		LAS
RD-21		Primary	08/08/94	Thorium-234	4 U	55	120	Filtered		LAS
RD-21		Primary	08/08/94	Uranium-235	3 U	23	32	Filtered		LAS
RD-21		Primary	02/08/95	Actinium-228	1 U	23	42	Filtered		LAS
RD-21		Primary	02/08/95	Bismuth-214	47	18	20	Filtered		LAS
RD-21		Primary	02/08/95	Lead-212	11 U	12	16	Filtered		LAS
RD-21		Primary	02/08/95	Lead-214	41	14	19	Filtered		LAS
RD-21		Primary	02/08/95	Potassium-40	-14 U	75	130	Filtered		LAS
RD-21		Primary	02/08/95	Thallium-208	5.1 U	8.7	12	Filtered		LAS
RD-21		Primary	02/08/95	Thorium-234	0 U	110	170	Filtered		LAS
RD-21		Primary	08/31/95	Actinium-228	16 U	22	39	Filtered		LAS
RD-21		Primary	08/31/95	Bismuth-214	150	29	21	Filtered		LAS
RD-21		Primary	08/31/95	Lead-212	1 U	11	16	Filtered		LAS
RD-21		Primary	08/31/95	Lead-214	160	23	21	Filtered		LAS
RD-21		Primary	08/31/95	Potassium-40	11 U	66	100	Filtered		LAS
RD-21		Primary	08/31/95	Thallium-208	-1.2 U	7.9	12	Filtered		LAS
RD-21		Primary	08/31/95	Thorium-234	-19 U	73	180	Filtered		LAS
RD-21		Primary	02/16/96	Actinium-228	12 U	22	36	Filtered		LAS
RD-21		Primary	02/16/96	Bismuth-214	28	16	20	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-21		Primary	02/16/96	Lead-212	4.5 U	9.9	14	Filtered		LAS
RD-21		Primary	02/16/96	Lead-214	46	14	18	Filtered		LAS
RD-21		Primary	02/16/96	Potassium-40	-17 U	66	110	Filtered		LAS
RD-21		Primary	02/16/96	Thallium-208	-0.7 U	6.8	10	Filtered		LAS
RD-21		Primary	02/16/96	Thorium-234	20 U	120	190	Filtered		LAS
RD-21		Primary	08/18/96	Actinium-228	4 U	19	38	Filtered		LAS
RD-21		Primary	08/18/96	Bismuth-214	94	23	20	Filtered		LAS
RD-21		Primary	08/18/96	Lead-212	5.7 U	9.8	14	Filtered		LAS
RD-21		Primary	08/18/96	Lead-214	92	18	19	Filtered		LAS
RD-21		Primary	08/18/96	Potassium-40	-21 U	56	100	Filtered		LAS
RD-21		Primary	08/18/96	Thallium-208	4.2 U	7.2	9.7	Filtered		LAS
RD-21		Primary	08/18/96	Thorium-234	-40 U	130	200	Filtered		LAS
RD-21		Primary	02/06/97	Actinium-228	5 U	27	43	Filtered		LAS
RD-21		Primary	02/06/97	Bismuth-214	88	23	23	Filtered		LAS
RD-21		Primary	02/06/97	Lead-212	0 U	11	16	Filtered		LAS
RD-21		Primary	02/06/97	Lead-214	109	20	18	Filtered		LAS
RD-21		Primary	02/06/97	Potassium-40	-42 U	95	150	Filtered		LAS
RD-21		Primary	02/06/97	Thallium-208	2.1 U	8.8	12	Filtered		LAS
RD-21		Primary	02/06/97	Thorium-234	-2 U	83	220	Filtered		LAS
RD-21		Primary	02/09/98	Actinium-228	24.8 U	---	24.8	Filtered		TN
RD-21		Primary	02/09/98	Bismuth-212	43.5 U	---	43.5	Filtered		TN
RD-21		Primary	02/09/98	Bismuth-214	19.8	13	---	Filtered		TN
RD-21		Primary	02/09/98	Lead-210	470	280	---	Filtered		TN
RD-21		Primary	02/09/98	Lead-212	10.3 U	---	10.3	Filtered		TN
RD-21		Primary	02/09/98	Lead-214	16.7 U	---	16.7	Filtered		TN
RD-21		Primary	02/09/98	Potassium-40	77.2 U	---	77.2	Filtered		TN
RD-21		Primary	02/09/98	Thallium-208	6.26 U	---	6.26	Filtered		TN
RD-21		Primary	02/09/98	Thorium-234	167 U	---	167	Filtered		TN
RD-21		Primary	02/16/99	Actinium-228	73.4 U	---	73.4	Filtered		TN
RD-21		Primary	02/16/99	Bismuth-212	119 U	---	119	Filtered		TN
RD-21		Primary	02/16/99	Bismuth-214	28.1 U	---	28.1	Filtered		TN
RD-21		Primary	02/16/99	Lead-210	779 U	---	779	Filtered		TN
RD-21		Primary	02/16/99	Lead-212	22.2 U	---	22.2	Filtered		TN
RD-21		Primary	02/16/99	Lead-214	26.4 U	---	26.4	Filtered		TN
RD-21		Primary	02/16/99	Potassium-40	277 U	---	277	Filtered		TN
RD-21		Primary	02/16/99	Radium-226	214 U	---	214	Filtered		TN
RD-21		Primary	02/16/99	Thallium-208	20.7 U	---	20.7	Filtered		TN
RD-21		Primary	02/16/99	Thorium-234	333 U	---	333	Filtered		TN
RD-21		Primary	02/16/99	Uranium-235	81.2 U	---	81.2	Filtered		TN
RD-21		Primary	03/15/00	Actinium-228	75.5 U	---	75.5	Filtered		TR
RD-21		Primary	03/15/00	Bismuth-212	113 U	---	113	Filtered		TR
RD-21		Primary	03/15/00	Bismuth-214	33 U	---	33	Filtered		TR
RD-21		Primary	03/15/00	Lead-210	582 U	---	582	Filtered		TR
RD-21		Primary	03/15/00	Lead-212	21.2 U	---	21.2	Filtered		TR
RD-21		Primary	03/15/00	Lead-214	30.3 U	---	30.3	Filtered		TR

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-21		Primary	03/15/00	Potassium-40	440 U	---	440	Filtered		TR
RD-21		Primary	03/15/00	Radium-226	220 U	---	220	Filtered		TR
RD-21		Primary	03/15/00	Thallium-208	16.2 U	---	16.2	Filtered		TR
RD-21		Primary	03/15/00	Thorium-234	240 U	---	240	Filtered		TR
RD-21		Primary	03/15/00	Uranium-235	80.7 U	---	80.7	Filtered		TR
RD-21		Primary	10/24/01	Actinium-228	7 U	---	7	Filtered		DL
RD-21		Primary	10/24/01	Bismuth-212	6.2 U	7	7	Filtered		DL
RD-21		Primary	10/24/01	Bismuth-214	10 U	---	10	Filtered		DL
RD-21		Primary	10/24/01	Lead-210	7 U	---	7	Filtered		DL
RD-21		Primary	10/24/01	Lead-212	6.2 U	7	7	Filtered		DL
RD-21		Primary	10/24/01	Lead-214	10 U	---	10	Filtered		DL
RD-21		Primary	10/24/01	Potassium-40	340	148	220	Filtered		DL
RD-21		Primary	10/24/01	Radium-226	0.6 U	2.2	3	Filtered		DL
RD-21		Primary	10/24/01	Thallium-208	5 U	---	5	Filtered		DL
RD-21		Primary	10/24/01	Thorium-234	3.4 U	1.5	5	Filtered		DL
RD-21		Primary	10/24/01	Uranium-235	5 U	---	5	Filtered		DL
RD-21		Primary	03/06/02	Actinium-228	5 U	3	5	Filtered		DL
RD-21		Primary	03/06/02	Bismuth-212	3 U	3	3	Filtered		DL
RD-21		Primary	03/06/02	Bismuth-214	3 U	3	3	Filtered		DL
RD-21		Primary	03/06/02	Lead-210	5 U	5	5	Filtered		DL
RD-21		Primary	03/06/02	Lead-212	3 U	3	3	Filtered		DL
RD-21		Primary	03/06/02	Lead-214	5 U	3	5	Filtered		DL
RD-21		Primary	03/06/02	Potassium-40	5 U	3	5	Filtered		DL
RD-21		Primary	03/06/02	Radium-226	3 U	3	3	Filtered		DL
RD-21		Primary	03/06/02	Thorium-234	5 U	5	5	Filtered		DL
RD-21		Primary	03/06/02	Uranium-235	1 U	0.38	1	Filtered		DL
RD-21	Z02	Primary	02/25/03	Actinium-228	10.2 U	---	10.2	Filtered		ES
RD-21	Z02	Primary	02/25/03	Bismuth-212	14.4 U	---	14.4	Filtered		ES
RD-21	Z02	Primary	02/25/03	Bismuth-214	4.6 U	---	4.6	Filtered		ES
RD-21	Z02	Primary	02/25/03	Lead-210	182 U	---	182	Filtered		ES
RD-21	Z02	Primary	02/25/03	Lead-212	2.94 U	---	2.94	Filtered		ES
RD-21	Z02	Primary	02/25/03	Lead-214	4.22 U	---	4.22	Filtered		ES
RD-21	Z02	Primary	02/25/03	Potassium-40	62.2 U	---	62.2	Filtered		ES
RD-21	Z02	Primary	02/25/03	Radium-226	31.1 U	---	31.1	Filtered		ES
RD-21	Z02	Primary	02/25/03	Thorium-234	33.9 U	---	33.9	Filtered		ES
RD-21	Z02	Primary	02/25/03	Uranium-235	10.3 U	---	10.3	Filtered		ES
RD-21	Z02	Primary	11/04/04	Potassium-40	36 U	---	36	Filtered		ES
RD-21	Z02	Primary	02/16/05	Potassium-40	26.3 U	---	26.3	Filtered		ES
RD-21	Z02	Primary	02/16/06	Potassium-40	21.6 U	---	21.6	Filtered		ES
RD-21	Z02	Primary	05/21/07	Potassium-40	7.14 U	---	7.14	Filtered		ES
RD-21	Z02	Primary	02/05/08	Potassium-40	21.8 U	---	21.8	Filtered		ES
RD-21	Z04	Primary	02/24/09	Potassium-40	-70.3 U	21	35.1	Filtered		ES
RD-21	Z04	Primary	02/24/09	Potassium-40	5.82 U	10	17.6	Unfiltered		ES
RD-21	Z04	Primary	02/24/09	Radium-228	-3.59 U	4.5	7.79	Filtered		ES
RD-21	Z04	Primary	02/24/09	Radium-228	2.2 U	3	4.99	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-21	Z02	Primary	07/16/09	Potassium-40	-310 U	290	267	Filtered		ES
RD-21	Z02	Primary	07/16/09	Potassium-40	27.7 U	80	137	Unfiltered		ES
RD-22		Primary	11/21/93	Actinium-228	18.3 U	---	18.3	Filtered		LAS
RD-22		Primary	11/21/93	Bismuth-212	65.5 U	---	65.5	Filtered		LAS
RD-22		Primary	11/21/93	Bismuth-214	11 U	---	11	Filtered		LAS
RD-22		Primary	11/21/93	Lead-210	102 U	---	102	Filtered		LAS
RD-22		Primary	11/21/93	Lead-212	6.4687	5.4	---	Filtered		LAS
RD-22		Primary	11/21/93	Lead-214	10.4 U	---	10.4	Filtered		LAS
RD-22		Primary	11/21/93	Potassium-40	70.8 U	---	70.8	Filtered		LAS
RD-22		Primary	11/21/93	Thallium-208	5.78 U	---	5.78	Filtered		LAS
RD-22		Primary	11/21/93	Thorium-234	105 U	---	105	Filtered		LAS
RD-22		Primary	11/21/93	Uranium-235	5.79 U	---	5.79	Filtered		LAS
RD-22		Primary	02/24/94	Actinium-228	-1.4 U	3.8	14	Filtered		LAS
RD-22		Primary	02/24/94	Bismuth-214	9	3	8.2	Filtered		LAS
RD-22		Primary	02/24/94	Lead-212	4.4 U	4.9	6.8	Filtered		LAS
RD-22		Primary	02/24/94	Lead-214	9.8	2.6	7.7	Filtered		LAS
RD-22		Primary	02/24/94	Potassium-40	-1 U	27	43	Filtered		LAS
RD-22		Primary	02/24/94	Radium-226	-17 U	50	71	Filtered		LAS
RD-22		Primary	02/24/94	Thallium-208	1.9 U	3	4	Filtered		LAS
RD-22		Primary	02/24/94	Thorium-234	24 U	19	100	Filtered		LAS
RD-22		Primary	02/24/94	Uranium-235	7.2 U	6.4	19	Filtered		LAS
RD-22		Primary	08/09/94	Actinium-228	4.6 U	9.9	18	Filtered		LAS
RD-22		Primary	08/09/94	Bismuth-214	2.7 U	6.7	10	Filtered		LAS
RD-22		Primary	08/09/94	Lead-212	1.5 U	5.9	8.3	Filtered		LAS
RD-22		Primary	08/09/94	Lead-214	6.6 U	5.9	9.2	Filtered		LAS
RD-22		Primary	08/09/94	Potassium-40	-3 U	35	56	Filtered		LAS
RD-22		Primary	08/09/94	Radium-226	-78 U	58	78	Filtered		LAS
RD-22		Primary	08/09/94	Thallium-208	1.9 U	3.6	5	Filtered		LAS
RD-22		Primary	08/09/94	Thorium-234	14 U	47	140	Filtered		LAS
RD-22		Primary	08/09/94	Uranium-235	3 U	17	24	Filtered		LAS
RD-22		Primary	02/17/95	Actinium-228	21 U	27	42	Filtered		LAS
RD-22		Primary	02/17/95	Bismuth-214	6 U	14	19	Filtered		LAS
RD-22		Primary	02/17/95	Lead-212	6 U	11	15	Filtered		LAS
RD-22		Primary	02/17/95	Lead-214	-5 U	13	21	Filtered		LAS
RD-22		Primary	02/17/95	Potassium-40	7 U	92	140	Filtered		LAS
RD-22		Primary	02/17/95	Thallium-208	2 U	7.9	11	Filtered		LAS
RD-22		Primary	02/17/95	Thorium-234	11 U	77	180	Filtered		LAS
RD-22		Primary	08/29/95	Actinium-228	-47 U	19	46	Filtered		LAS
RD-22		Primary	08/29/95	Bismuth-214	2 U	16	23	Filtered		LAS
RD-22		Primary	08/29/95	Lead-212	3 U	11	15	Filtered		LAS
RD-22		Primary	08/29/95	Lead-214	3 U	13	19	Filtered		LAS
RD-22		Primary	08/29/95	Potassium-40	48 U	86	110	Filtered		LAS
RD-22		Primary	08/29/95	Thallium-208	4.6 U	8.5	11	Filtered		LAS
RD-22		Primary	08/29/95	Thorium-234	-66 U	76	170	Filtered		LAS
RD-22		Primary	02/16/96	Actinium-228	3.6 U	9.7	17	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-22		Primary	02/16/96	Bismuth-214	4.3 U	6.5	9.7	Filtered		LAS
RD-22		Primary	02/16/96	Lead-212	3.4 U	5.9	8.6	Filtered		LAS
RD-22		Primary	02/16/96	Lead-214	5.2 U	6.1	9.2	Filtered		LAS
RD-22		Primary	02/16/96	Potassium-40	10 U	32	49	Filtered		LAS
RD-22		Primary	02/16/96	Thallium-208	-3.9 U	3.6	5.9	Filtered		LAS
RD-22		Primary	02/16/96	Thorium-234	22 U	63	230	Filtered		LAS
RD-22		Primary	08/18/96	Actinium-228	-1 U	23	43	Filtered		LAS
RD-22		Primary	08/18/96	Bismuth-214	11 U	13	20	Filtered		LAS
RD-22		Primary	08/18/96	Lead-212	7.5 U	9.8	13	Filtered		LAS
RD-22		Primary	08/18/96	Lead-214	10 U	11	17	Filtered		LAS
RD-22		Primary	08/18/96	Potassium-40	9 U	65	110	Filtered		LAS
RD-22		Primary	08/18/96	Thallium-208	2.5 U	5.5	7.2	Filtered		LAS
RD-22		Primary	08/18/96	Thorium-234	-50 U	70	190	Filtered		LAS
RD-22		Primary	02/26/97	Actinium-228	1 U	16	34	Filtered		LAS
RD-22		Primary	02/26/97	Bismuth-214	16 U	16	23	Filtered		LAS
RD-22		Primary	02/26/97	Lead-212	-1.8 U	9.7	14	Filtered		LAS
RD-22		Primary	02/26/97	Lead-214	36	13	14	Filtered		LAS
RD-22		Primary	02/26/97	Potassium-40	-11 U	71	120	Filtered		LAS
RD-22		Primary	02/26/97	Thallium-208	8 U	6.9	8.1	Filtered		LAS
RD-22		Primary	02/26/97	Thorium-234	42 U	72	180	Filtered		LAS
RD-22		Primary	05/28/98	Actinium-228	65.6 U	---	65.6	Filtered		TN
RD-22		Primary	05/28/98	Bismuth-212	118 U	---	118	Filtered		TN
RD-22		Primary	05/28/98	Bismuth-214	30.1 U	---	30.1	Filtered		TN
RD-22		Primary	05/28/98	Lead-210	792 U	---	792	Filtered		TN
RD-22		Primary	05/28/98	Lead-212	22.5 U	---	22.5	Filtered		TN
RD-22		Primary	05/28/98	Lead-214	28 U	---	28	Filtered		TN
RD-22		Primary	05/28/98	Potassium-40	246 U	---	246	Filtered		TN
RD-22		Primary	05/28/98	Thallium-208	13.5 U	---	13.5	Filtered		TN
RD-22		Primary	05/28/98	Thorium-234	318 U	---	318	Filtered		TN
RD-22		Primary	02/17/99	Actinium-228	27.2 U	---	27.2	Filtered		TN
RD-22		Primary	02/17/99	Bismuth-212	49.6 U	---	49.6	Filtered		TN
RD-22		Primary	02/17/99	Bismuth-214	12.8 U	---	12.8	Filtered		TN
RD-22		Primary	02/17/99	Lead-210	488 U	---	488	Filtered		TN
RD-22		Primary	02/17/99	Lead-212	11.8 U	---	11.8	Filtered		TN
RD-22		Primary	02/17/99	Lead-214	12.7 U	---	12.7	Filtered		TN
RD-22		Primary	02/17/99	Potassium-40	107 U	---	107	Filtered		TN
RD-22		Primary	02/17/99	Radium-226	110 U	---	110	Filtered		TN
RD-22		Primary	02/17/99	Thallium-208	6.78 U	---	6.78	Filtered		TN
RD-22		Primary	02/17/99	Thorium-234	195 U	---	195	Filtered		TN
RD-22		Primary	02/17/99	Uranium-235	35.6 U	---	35.6	Filtered		TN
RD-22		Primary	02/06/00	Actinium-228	56.2 U	---	56.2	Filtered		TR
RD-22		Primary	02/06/00	Bismuth-212	94.6 U	---	94.6	Filtered		TR
RD-22		Primary	02/06/00	Bismuth-214	26.4 U	---	26.4	Filtered		TR
RD-22		Primary	02/06/00	Lead-210	482 U	---	482	Filtered		TR
RD-22		Primary	02/06/00	Lead-212	18.8 U	---	18.8	Filtered		TR

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-22		Primary	02/06/00	Lead-214	25.1 U	---	25.1	Filtered		TR
RD-22		Primary	02/06/00	Potassium-40	335 U	---	335	Filtered		TR
RD-22		Primary	02/06/00	Radium-226	172 U	---	172	Filtered		TR
RD-22		Primary	02/06/00	Thallium-208	12.9 U	---	12.9	Filtered		TR
RD-22		Primary	02/06/00	Thorium-234	219 U	---	219	Filtered		TR
RD-22		Primary	02/06/00	Uranium-235	62.9 U	---	62.9	Filtered		TR
RD-22		Primary	02/16/01	Actinium-228	23.6 U	---	23.6	Filtered		ES
RD-22		Primary	02/16/01	Bismuth-212	42.4 U	---	42.4	Filtered		ES
RD-22		Primary	02/16/01	Bismuth-214	20.2 U	---	20.2	Filtered		ES
RD-22		Primary	02/16/01	Lead-210	422 U	---	422	Filtered		ES
RD-22		Primary	02/16/01	Lead-212	8.96 U	---	8.96	Filtered		ES
RD-22		Primary	02/16/01	Lead-214	20 U	---	20	Filtered		ES
RD-22		Primary	02/16/01	Potassium-40	74.4 U	---	74.4	Filtered		ES
RD-22		Primary	02/16/01	Radium-226	93.2 U	---	93.2	Filtered		ES
RD-22		Primary	02/16/01	Thallium-208	6.21 U	---	6.21	Filtered		ES
RD-22		Primary	02/16/01	Thorium-234	158 U	---	158	Filtered		ES
RD-22		Primary	02/16/01	Uranium-235	30.3 U	---	30.3	Filtered		ES
RD-22		Primary	02/20/02	Actinium-228	5 U	3	5	Filtered		DL
RD-22		Primary	02/20/02	Bismuth-212	3 U	3	3	Filtered		DL
RD-22		Primary	02/20/02	Bismuth-214	3 U	3	3	Filtered		DL
RD-22		Primary	02/20/02	Lead-210	5 U	5	5	Filtered		DL
RD-22		Primary	02/20/02	Lead-212	3 U	3	3	Filtered		DL
RD-22		Primary	02/20/02	Lead-214	5 U	3	5	Filtered		DL
RD-22		Primary	02/20/02	Potassium-40	5 U	3	5	Filtered		DL
RD-22		Primary	02/20/02	Radium-226	3 U	3	3	Filtered		DL
RD-22		Primary	02/20/02	Thorium-234	5 U	5	5	Filtered		DL
RD-22		Primary	02/20/02	Uranium-235	5 U	3	5	Filtered		DL
RD-22	Z02	Primary	02/24/03	Actinium-228	5.7 U	---	5.7	Filtered		ES
RD-22	Z02	Primary	02/24/03	Bismuth-212	10 U	---	10	Filtered		ES
RD-22	Z02	Primary	02/24/03	Bismuth-214	2.67 U	---	2.67	Filtered		ES
RD-22	Z02	Primary	02/24/03	Lead-210	249 U	---	249	Filtered		ES
RD-22	Z02	Primary	02/24/03	Lead-212	1.83 U	---	1.83	Filtered		ES
RD-22	Z02	Primary	02/24/03	Lead-214	2.41 U	---	2.41	Filtered		ES
RD-22	Z02	Primary	02/24/03	Potassium-40	16.5 U	---	16.5	Filtered		ES
RD-22	Z02	Primary	02/24/03	Radium-226	19.5 U	---	19.5	Filtered		ES
RD-22	Z02	Primary	02/24/03	Thorium-234	36.4 U	---	36.4	Filtered		ES
RD-22	Z02	Primary	02/24/03	Uranium-235	5.73 U	---	5.73	Filtered		ES
RD-22	Z02	Primary	11/12/04	Potassium-40	13.6 U	---	13.6	Filtered		ES
RD-22	Z02	Primary	02/17/05	Potassium-40	14.9 U	---	14.9	Filtered		ES
RD-22	Z02	Primary	02/15/06	Potassium-40	18.3 U	---	18.3	Filtered		ES
RD-22	Z02	Primary	02/07/07	Potassium-40	24.4 U	---	24.4	Filtered		ES
RD-22	Z02	Primary	02/05/08	Potassium-40	8.59 U	---	8.59	Filtered		ES
RD-22	Z02	Reanalysis of Primary	02/23/09	Potassium-40	-0.52 U	14.91	25.86	Filtered		ES
RD-22	Z02	Reanalysis of Primary	02/23/09	Potassium-40	-0.56 U	7.49	13.11	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-IV
RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-22	Z02	Primary	02/23/09	Radium-228	6.05 U	5.9	9.82	Filtered		ES
RD-22	Z02	Primary	02/23/09	Radium-228	3.78 U	6.4	10.8	Unfiltered		ES
RD-22	Z02	Primary	07/16/09	Potassium-40	-236 U	150	254	Filtered		ES
RD-22	Z02	Reanalysis of Primary	07/16/09	Potassium-40	-13.2 U	51	89	Unfiltered		ES
RD-23		Primary	11/06/93	Actinium-228	8.23 U	---	8.23	Filtered		LAS
RD-23		Primary	11/06/93	Bismuth-212	22.5 U	---	22.5	Filtered		LAS
RD-23		Primary	11/06/93	Bismuth-214	10.499	2.75	---	Filtered		LAS
RD-23		Primary	11/06/93	Lead-210	265 U	---	265	Filtered		LAS
RD-23		Primary	11/06/93	Lead-212	4.63 U	---	4.63	Filtered		LAS
RD-23		Primary	11/06/93	Lead-214	7.6009	3.41	---	Filtered		LAS
RD-23		Primary	11/06/93	Potassium-40	25.1 U	---	25.1	Filtered		LAS
RD-23		Primary	11/06/93	Thallium-208	3.85 U	---	3.85	Filtered		LAS
RD-23		Primary	11/06/93	Thorium-234	95.7 U	---	95.7	Filtered		LAS
RD-23		Primary	11/06/93	Uranium-235	2.29 U	---	2.29	Filtered		LAS
RD-23		Primary	02/25/94	Actinium-228	3.9 U	3.9	14	Filtered		LAS
RD-23		Primary	02/25/94	Bismuth-214	3.1 U	3.7	8.1	Filtered		LAS
RD-23		Primary	02/25/94	Lead-212	19.2	5.9	7	Filtered		LAS
RD-23		Primary	02/25/94	Lead-214	16	2.9	8.3	Filtered		LAS
RD-23		Primary	02/25/94	Potassium-40	-1 U	28	44	Filtered		LAS
RD-23		Primary	02/25/94	Radium-226	24 U	52	70	Filtered		LAS
RD-23		Primary	02/25/94	Thallium-208	7.4	3.4	4.2	Filtered		LAS
RD-23		Primary	02/25/94	Thorium-234	5 U	19	100	Filtered		LAS
RD-23		Primary	02/25/94	Uranium-235	2.1 U	6.4	19	Filtered		LAS
RD-23		Primary	08/08/94	Actinium-228	1 U	13	25	Filtered		LAS
RD-23		Primary	08/08/94	Bismuth-214	20	10	14	Filtered		LAS
RD-23		Primary	08/08/94	Lead-212	0.7 U	7.6	11	Filtered		LAS
RD-23		Primary	08/08/94	Lead-214	22.5	8.9	13	Filtered		LAS
RD-23		Primary	08/08/94	Potassium-40	-16 U	47	82	Filtered		LAS
RD-23		Primary	08/08/94	Radium-226	-16 U	78	120	Filtered		LAS
RD-23		Primary	08/08/94	Thallium-208	4.5 U	4.8	6.8	Filtered		LAS
RD-23		Primary	08/08/94	Thorium-234	0 U	63	200	Filtered		LAS
RD-23		Primary	08/08/94	Uranium-235	-9 U	12	33	Filtered		LAS
RD-23		Primary	02/05/95	Actinium-228	1 U	21	37	Filtered		LAS
RD-23		Primary	02/05/95	Bismuth-214	30	16	20	Filtered		LAS
RD-23		Primary	02/05/95	Lead-212	3 U	11	16	Filtered		LAS
RD-23		Primary	02/05/95	Lead-214	17 U	12	18	Filtered		LAS
RD-23		Primary	02/05/95	Potassium-40	-23 U	71	120	Filtered		LAS
RD-23		Primary	02/05/95	Thallium-208	2.4 U	7.4	10	Filtered		LAS
RD-23		Primary	02/05/95	Thorium-234	10 U	67	160	Filtered		LAS
RD-23		Primary	08/03/95	Actinium-228	5 U	21	36	Filtered		LAS
RD-23		Primary	08/03/95	Bismuth-214	27	15	20	Filtered		LAS
RD-23		Primary	08/03/95	Lead-212	0.9 U	9.4	14	Filtered		LAS
RD-23		Primary	08/03/95	Lead-214	1 U	12	19	Filtered		LAS
RD-23		Primary	08/03/95	Potassium-40	26 U	71	100	Filtered		LAS
RD-23		Primary	08/03/95	Thallium-208	2 U	7.6	11	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-23		Primary	08/03/95	Thorium-234	31 U	66	150	Filtered		LAS
RD-23		Primary	02/16/96	Actinium-228	3 U	22	41	Filtered		LAS
RD-23		Primary	02/16/96	Bismuth-214	11.5	7.2	10	Filtered		LAS
RD-23		Primary	02/16/96	Lead-212	7 U	6.2	8.6	Filtered		LAS
RD-23		Primary	02/16/96	Lead-214	9.9	6.6	9.7	Filtered		LAS
RD-23		Primary	02/16/96	Potassium-40	4 U	29	46	Filtered		LAS
RD-23		Primary	02/16/96	Thallium-208	0.9 U	3.4	5.1	Filtered		LAS
RD-23		Primary	02/16/96	Thorium-234	18 U	62	220	Filtered		LAS
RD-23		Primary	08/18/96	Actinium-228	4 U	18	35	Filtered		LAS
RD-23		Primary	08/18/96	Bismuth-214	13 U	14	20	Filtered		LAS
RD-23		Primary	08/18/96	Lead-212	-6.4 U	9.5	15	Filtered		LAS
RD-23		Primary	08/18/96	Lead-214	11 U	12	18	Filtered		LAS
RD-23		Primary	08/18/96	Potassium-40	27 U	70	110	Filtered		LAS
RD-23		Primary	08/18/96	Thallium-208	3.3 U	6.9	9.4	Filtered		LAS
RD-23		Primary	08/18/96	Thorium-234	-29 U	70	190	Filtered		LAS
RD-23		Primary	02/27/97	Actinium-228	3 U	10	20	Filtered		LAS
RD-23		Primary	02/27/97	Bismuth-214	12 U	14	21	Filtered		LAS
RD-23		Primary	02/27/97	Lead-212	5 U	10	5	Filtered		LAS
RD-23		Primary	02/27/97	Lead-214	16 U	12	18	Filtered		LAS
RD-23		Primary	02/27/97	Potassium-40	-23 U	57	100	Filtered		LAS
RD-23		Primary	02/27/97	Thallium-208	1.2 U	6.4	9.2	Filtered		LAS
RD-23		Primary	02/27/97	Thorium-234	-20 U	120	180	Filtered		LAS
RD-23		Primary	02/07/98	Actinium-228	30.2 U	---	30.2	Filtered		TN
RD-23		Primary	02/07/98	Bismuth-212	49.4 U	---	49.4	Filtered		TN
RD-23		Primary	02/07/98	Bismuth-214	12.9 U	---	12.9	Filtered		TN
RD-23		Primary	02/07/98	Lead-210	334	220	---	Filtered		TN
RD-23		Primary	02/07/98	Lead-212	10.5 U	---	10.5	Filtered		TN
RD-23		Primary	02/07/98	Lead-214	11.3 U	---	11.3	Filtered		TN
RD-23		Primary	02/07/98	Potassium-40	82.5 U	---	82.5	Filtered		TN
RD-23		Primary	02/07/98	Thallium-208	6.5 U	---	6.5	Filtered		TN
RD-23		Primary	02/07/98	Thorium-234	174 U	---	174	Filtered		TN
RD-23		Primary	02/08/99	Actinium-228	67.7 U	---	67.7	Filtered		TN
RD-23		Primary	02/08/99	Bismuth-212	112 U	---	112	Filtered		TN
RD-23		Primary	02/08/99	Lead-210	113 U	---	113	Filtered		TN
RD-23		Primary	02/08/99	Lead-212	19.2 U	---	19.2	Filtered		TN
RD-23		Primary	02/08/99	Lead-214	26 U	---	26	Filtered		TN
RD-23		Primary	02/08/99	Potassium-40	162 U	---	162	Filtered		TN
RD-23		Primary	02/08/99	Radium-226	178 U	---	178	Filtered		TN
RD-23		Primary	02/08/99	Thallium-208	13.1 U	---	13.1	Filtered		TN
RD-23		Primary	02/08/99	Thorium-234	211 U	---	211	Filtered		TN
RD-23		Primary	02/08/99	Uranium-235	51.9 U	---	51.9	Filtered		TN
RD-23		Primary	02/05/00	Actinium-228	26.8 U	---	26.8	Filtered		TR
RD-23		Primary	02/05/00	Bismuth-212	44.8 U	---	44.8	Filtered		TR
RD-23		Primary	02/05/00	Bismuth-214	11.1 U	---	11.1	Filtered		TR
RD-23		Primary	02/05/00	Lead-210	355 U	---	355	Filtered		TR

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-23		Primary	02/05/00	Lead-212	12.5 U	---	12.5	Filtered		TR
RD-23		Primary	02/05/00	Lead-214	10.5 U	---	10.5	Filtered		TR
RD-23		Primary	02/05/00	Potassium-40	63.1 U	---	63.1	Filtered		TR
RD-23		Primary	02/05/00	Radium-226	86 U	---	86	Filtered		TR
RD-23		Primary	02/05/00	Thallium-208	6.06 U	---	6.06	Filtered		TR
RD-23		Primary	02/05/00	Thorium-234	165 U	---	165	Filtered		TR
RD-23		Primary	02/05/00	Uranium-235	27.8 U	---	27.8	Filtered		TR
RD-23		Primary	10/25/01	Actinium-228	5.6 U	---	5.6	Filtered		DL
RD-23		Primary	10/25/01	Bismuth-212	5 U	---	5	Filtered		DL
RD-23		Primary	10/25/01	Bismuth-214	2.4 U	---	2.4	Filtered		DL
RD-23		Primary	10/25/01	Lead-210	8 U	---	8	Filtered		DL
RD-23		Primary	10/25/01	Lead-212	5 U	---	14	Filtered		DL
RD-23		Primary	10/25/01	Lead-214	5 U	---	5	Filtered		DL
RD-23		Primary	10/25/01	Potassium-40	13 U	---	13	Filtered		DL
RD-23		Primary	10/25/01	Radium-226	5 U	---	5	Filtered		DL
RD-23		Primary	10/25/01	Thallium-208	5 U	---	5	Filtered		DL
RD-23		Primary	10/25/01	Thorium-234	5 U	---	5	Filtered		DL
RD-23		Primary	10/25/01	Uranium-235	1.8 U	3	5	Filtered		DL
RD-23		Primary	03/01/02	Actinium-228	5 U	5	5	Filtered		DL
RD-23		Primary	03/01/02	Bismuth-212	5 U	3	5	Filtered		DL
RD-23		Primary	03/01/02	Bismuth-214	5 U	3	5	Filtered		DL
RD-23		Primary	03/01/02	Lead-210	5 U	3	5	Filtered		DL
RD-23		Primary	03/01/02	Lead-212	5 U	3	5	Filtered		DL
RD-23		Primary	03/01/02	Lead-214	5 U	3	5	Filtered		DL
RD-23		Primary	03/01/02	Potassium-40	25.64	5.57	10	Filtered		DL
RD-23		Primary	03/01/02	Radium-226	5 U	5	5	Filtered		DL
RD-23		Primary	03/01/02	Thorium-234	5 U	5	5	Filtered		DL
RD-23		Primary	03/01/02	Uranium-235	5 U	3	5	Filtered		DL
RD-23	Z01	Primary	02/26/03	Actinium-228	12.4 U	---	12.4	Filtered		ES
RD-23	Z01	Primary	02/26/03	Bismuth-212	20.9 U	---	20.9	Filtered		ES
RD-23	Z01	Primary	02/26/03	Bismuth-214	5.48 U	---	5.48	Filtered		ES
RD-23	Z01	Primary	02/26/03	Lead-210	197 U	---	197	Filtered		ES
RD-23	Z01	Primary	02/26/03	Lead-212	4.05 U	---	4.05	Filtered		ES
RD-23	Z01	Primary	02/26/03	Lead-214	5.26 U	---	5.26	Filtered		ES
RD-23	Z01	Primary	02/26/03	Potassium-40	116 U	---	116	Filtered		ES
RD-23	Z01	Primary	02/26/03	Radium-226	41.6 U	---	41.6	Filtered		ES
RD-23	Z01	Primary	02/26/03	Thorium-234	61.6 U	---	61.6	Filtered		ES
RD-23	Z01	Primary	02/26/03	Uranium-235	15.5 U	---	15.5	Filtered		ES
RD-23	Z02	Primary	11/03/04	Potassium-40	35.8 U	---	35.8	Filtered		ES
RD-23	Z02	Primary	02/14/05	Potassium-40	23.9 U	---	23.9	Filtered		ES
RD-23	Z03	Primary	02/17/06	Potassium-40	50.5 U	---	50.5	Filtered		ES
RD-23	Z03	Primary	02/07/07	Potassium-40	6.96 U	---	6.96	Filtered		ES
RD-23	Z03	Primary	02/06/08	Potassium-40	23.1 U	---	23.1	Filtered		ES
RD-23	Z02	Primary	02/24/09	Potassium-40	1.39 U	7.1	12.3	Filtered		ES
RD-23	Z02	Primary	02/24/09	Potassium-40	-116 U	20	33.3	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-23	Z02	Primary	02/24/09	Radium-228	0.498 U	2.7	4.68	Filtered		ES
RD-23	Z02	Primary	02/24/09	Radium-228	-3.81 U	5.1	8.7	Unfiltered		ES
RD-23	Z03	Primary	07/16/09	Potassium-40	-84.6 U	87	162	Filtered		ES
RD-23	Z03	Primary	07/16/09	Potassium-40	36.7 U	42	70.6	Unfiltered		ES
RD-24		Primary	02/23/94	Actinium-228	0.5 U	3.9	14	Filtered		LAS
RD-24		Primary	02/23/94	Bismuth-214	-2.7 U	2.5	8.1	Filtered		LAS
RD-24		Primary	02/23/94	Lead-212	-0.7 U	4.6	6.7	Filtered		LAS
RD-24		Primary	02/23/94	Lead-214	-3.1 U	2.3	7.5	Filtered		LAS
RD-24		Primary	02/23/94	Potassium-40	2 U	27	43	Filtered		LAS
RD-24		Primary	02/23/94	Radium-226	-10 U	48	68	Filtered		LAS
RD-24		Primary	02/23/94	Thallium-208	1.2 U	2.9	4	Filtered		LAS
RD-24		Primary	02/23/94	Thorium-234	-35 U	19	100	Filtered		LAS
RD-24		Primary	02/23/94	Uranium-235	1.5 U	6.2	18	Filtered		LAS
RD-24		Primary	08/08/94	Actinium-228	18 U	20	30	Filtered		LAS
RD-24		Primary	08/08/94	Bismuth-214	-5 U	11	17	Filtered		LAS
RD-24		Primary	08/08/94	Lead-212	2.1 U	8.6	12	Filtered		LAS
RD-24		Primary	08/08/94	Lead-214	-9.1 U	7.1	16	Filtered		LAS
RD-24		Primary	08/08/94	Potassium-40	-10 U	64	99	Filtered		LAS
RD-24		Primary	08/08/94	Radium-226	0 U	110	160	Filtered		LAS
RD-24		Primary	08/08/94	Thallium-208	-0.3 U	6.6	9	Filtered		LAS
RD-24		Primary	08/08/94	Thorium-234	0 U	58	130	Filtered		LAS
RD-24		Primary	08/08/94	Uranium-235	-17 U	19	35	Filtered		LAS
RD-24		Primary	02/16/95	Actinium-228	-5 U	26	43	Filtered		LAS
RD-24		Primary	02/16/95	Bismuth-214	3 U	16	22	Filtered		LAS
RD-24		Primary	02/16/95	Lead-212	-1 U	12	17	Filtered		LAS
RD-24		Primary	02/16/95	Lead-214	-7 U	13	21	Filtered		LAS
RD-24		Primary	02/16/95	Potassium-40	9 U	94	140	Filtered		LAS
RD-24		Primary	02/16/95	Thallium-208	-6.6 U	8.7	13	Filtered		LAS
RD-24		Primary	02/16/95	Thorium-234	9 U	81	190	Filtered		LAS
RD-24		Primary	02/07/96	Actinium-228	4 U	21	39	Filtered		LAS
RD-24		Primary	02/07/96	Bismuth-214	17 U	13	18	Filtered		LAS
RD-24		Primary	02/07/96	Lead-212	3.8 U	9.3	13	Filtered		LAS
RD-24		Primary	02/07/96	Lead-214	15 U	12	17	Filtered		LAS
RD-24		Primary	02/07/96	Potassium-40	-23 U	72	120	Filtered		LAS
RD-24		Primary	02/07/96	Thallium-208	5.8 U	7.2	9.5	Filtered		LAS
RD-24		Primary	02/07/96	Thorium-234	-1 U	68	180	Filtered		LAS
RD-24		Primary	02/07/97	Actinium-228	-11 U	16	39	Filtered		LAS
RD-24		Primary	02/07/97	Bismuth-214	140	27	21	Filtered		LAS
RD-24		Primary	02/07/97	Lead-212	42	14	16	Filtered		LAS
RD-24		Primary	02/07/97	Lead-214	134	22	20	Filtered		LAS
RD-24		Primary	02/07/97	Potassium-40	22 U	75	120	Filtered		LAS
RD-24		Primary	02/07/97	Thallium-208	13.8	8.8	11	Filtered		LAS
RD-24		Primary	02/07/97	Thorium-234	-30 U	130	200	Filtered		LAS
RD-24		Primary	02/18/98	Actinium-228	29.2 U	---	29.2	Filtered		TN
RD-24		Primary	02/18/98	Bismuth-212	47.1 U	---	47.1	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-24		Primary	02/18/98	Bismuth-214	86.1	14	---	Filtered		TN
RD-24		Primary	02/18/98	Lead-210	318 U	---	318	Filtered		TN
RD-24		Primary	02/18/98	Lead-212	10.6 U	---	10.6	Filtered		TN
RD-24		Primary	02/18/98	Lead-214	84.6	14	---	Filtered		TN
RD-24		Primary	02/18/98	Potassium-40	81.9 U	---	81.9	Filtered		TN
RD-24		Primary	02/18/98	Thallium-208	6.25 U	---	6.25	Filtered		TN
RD-24		Primary	02/18/98	Thorium-234	173 U	---	173	Filtered		TN
RD-24		Primary	05/05/98	Actinium-228	66.1 U	---	66.1	Filtered		TN
RD-24		Primary	05/05/98	Bismuth-212	111 U	---	111	Filtered		TN
RD-24		Primary	05/05/98	Bismuth-214	28.4 U	---	28.4	Filtered		TN
RD-24		Primary	05/05/98	Lead-210	126 U	---	126	Filtered		TN
RD-24		Primary	05/05/98	Lead-212	18.6 U	---	18.6	Filtered		TN
RD-24		Primary	05/05/98	Lead-214	26.7 U	---	26.7	Filtered		TN
RD-24		Primary	05/05/98	Potassium-40	181 U	---	181	Filtered		TN
RD-24		Primary	05/05/98	Thallium-208	13.9 U	---	13.9	Filtered		TN
RD-24		Primary	05/05/98	Thorium-234	232 U	---	232	Filtered		TN
RD-24		Primary	02/02/99	Actinium-228	60.9 U	---	60.9	Filtered		TN
RD-24		Primary	02/02/99	Bismuth-212	113 U	---	113	Filtered		TN
RD-24		Primary	02/02/99	Bismuth-214	27.4 U	---	27.4	Filtered		TN
RD-24		Primary	02/02/99	Lead-210	770 U	---	770	Filtered		TN
RD-24		Primary	02/02/99	Lead-212	21.8 U	---	21.8	Filtered		TN
RD-24		Primary	02/02/99	Lead-214	28.7 U	---	28.7	Filtered		TN
RD-24		Primary	02/02/99	Potassium-40	248 U	---	248	Filtered		TN
RD-24		Primary	02/02/99	Radium-226	210 U	---	210	Filtered		TN
RD-24		Primary	02/02/99	Thallium-208	15.2 U	---	15.2	Filtered		TN
RD-24		Primary	02/02/99	Thorium-234	320 U	---	320	Filtered		TN
RD-24		Primary	02/02/99	Uranium-235	70.1 U	---	70.1	Filtered		TN
RD-24		Primary	08/11/99	Actinium-228	56.5 U	---	56.5	Filtered		TN
RD-24		Primary	08/11/99	Bismuth-212	89.8 U	---	89.8	Filtered		TN
RD-24		Primary	08/11/99	Bismuth-214	23.7 U	---	23.7	Filtered		TN
RD-24		Primary	08/11/99	Lead-210	3820 U	---	3820	Filtered		TN
RD-24		Primary	08/11/99	Lead-212	36.3 U	---	36.3	Filtered		TN
RD-24		Primary	08/11/99	Lead-214	22.6 U	---	22.6	Filtered		TN
RD-24		Primary	08/11/99	Potassium-40	217 U	---	217	Filtered		TN
RD-24		Primary	08/11/99	Radium-226	192 U	---	192	Filtered		TN
RD-24		Primary	08/11/99	Thallium-208	12.1 U	---	12.1	Filtered		TN
RD-24		Primary	08/11/99	Thorium-234	387 U	---	387	Filtered		TN
RD-24		Primary	08/11/99	Uranium-235	65 U	---	65	Filtered		TN
RD-24		Primary	02/03/00	Actinium-228	86.8 U	---	86.8	Filtered		TR
RD-24		Primary	02/03/00	Bismuth-212	147 U	---	147	Filtered		TR
RD-24		Primary	02/03/00	Bismuth-214	36 U	---	36	Filtered		TR
RD-24		Primary	02/03/00	Lead-210	188 U	---	188	Filtered		TR
RD-24		Primary	02/03/00	Lead-212	19.9 U	---	19.9	Filtered		TR
RD-24		Primary	02/03/00	Lead-214	30.6 U	---	30.6	Filtered		TR
RD-24		Primary	02/03/00	Potassium-40	242 U	---	242	Filtered		TR

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-24		Primary	02/03/00	Radium-226	217 U	---	217	Filtered		TR
RD-24		Primary	02/03/00	Thallium-208	17.7 U	---	17.7	Filtered		TR
RD-24		Primary	02/03/00	Thorium-234	266 U	---	266	Filtered		TR
RD-24		Primary	02/03/00	Uranium-235	62.2 U	---	62.2	Filtered		TR
RD-24		Primary	08/04/00	Actinium-228	54 U	---	54	Filtered		TR
RD-24		Primary	08/04/00	Bismuth-212	84.5 U	---	84.5	Filtered		TR
RD-24		Primary	08/04/00	Bismuth-214	22.1 U	---	22.1	Filtered		TR
RD-24		Primary	08/04/00	Lead-210	2580 U	---	2580	Filtered		TR
RD-24		Primary	08/04/00	Lead-212	18.5 U	---	18.5	Filtered		TR
RD-24		Primary	08/04/00	Lead-214	22.5 U	---	22.5	Filtered		TR
RD-24		Primary	08/04/00	Potassium-40	213 U	---	213	Filtered		TR
RD-24		Primary	08/04/00	Radium-226	254 U	---	254	Filtered		TR
RD-24		Primary	08/04/00	Thallium-208	13.3 U	---	13.3	Filtered		TR
RD-24		Primary	08/04/00	Thorium-234	374 U	---	374	Filtered		TR
RD-24		Primary	08/04/00	Uranium-235	70.5 U	---	70.5	Filtered		TR
RD-24		Primary	02/06/01	Actinium-228	62.6 U	---	62.6	Filtered		ES
RD-24		Primary	02/06/01	Bismuth-212	103 U	---	103	Filtered		ES
RD-24		Primary	02/06/01	Bismuth-214	27.3 U	---	27.3	Filtered		ES
RD-24		Primary	02/06/01	Lead-210	134 U	---	134	Filtered		ES
RD-24		Primary	02/06/01	Lead-212	14 U	---	14	Filtered		ES
RD-24		Primary	02/06/01	Lead-214	41.2 U	---	41.2	Filtered		ES
RD-24		Primary	02/06/01	Potassium-40	190 U	---	190	Filtered		ES
RD-24		Primary	02/06/01	Radium-226	26.5 U	---	26.5	Filtered		ES
RD-24		Primary	02/06/01	Thallium-208	12.5 U	---	12.5	Filtered		ES
RD-24		Primary	02/06/01	Thorium-234	189 U	---	189	Filtered		ES
RD-24		Primary	02/06/01	Uranium-235	42 U	---	42	Filtered		ES
RD-24		Primary	10/25/01	Actinium-228	7 U	---	7	Filtered		DL
RD-24		Primary	10/25/01	Bismuth-212	5 U	---	5	Filtered		DL
RD-24		Primary	10/25/01	Bismuth-214	5 U	---	5	Filtered		DL
RD-24		Primary	10/25/01	Lead-210	7 U	---	7	Filtered		DL
RD-24		Primary	10/25/01	Lead-212	7 U	---	7	Filtered		DL
RD-24		Primary	10/25/01	Lead-214	7 U	---	7	Filtered		DL
RD-24		Primary	10/25/01	Potassium-40	10 U	---	10	Filtered		DL
RD-24		Primary	10/25/01	Radium-226	3 U	---	3	Filtered		DL
RD-24		Primary	10/25/01	Thallium-208	5 U	---	5	Filtered		DL
RD-24		Primary	10/25/01	Thorium-234	3 U	---	3	Filtered		DL
RD-24		Primary	02/25/02	Actinium-228	5.43	0.84	0.93	Filtered		DL
RD-24		Primary	02/25/02	Bismuth-212	3 U	3	3	Filtered		DL
RD-24		Primary	02/25/02	Bismuth-214	3 U	3	3	Filtered		DL
RD-24		Primary	02/25/02	Lead-210	5 U	5	5	Filtered		DL
RD-24		Primary	02/25/02	Lead-212	3 U	3	3	Filtered		DL
RD-24		Primary	02/25/02	Lead-214	5 U	3	5	Filtered		DL
RD-24		Primary	02/25/02	Potassium-40	15.65	1.06	1	Filtered		DL
RD-24		Primary	02/25/02	Radium-226	3 U	3	3	Filtered		DL
RD-24		Primary	02/25/02	Thorium-234	5 U	5	5	Filtered		DL

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-24		Primary	02/25/02	Uranium-235	5 U	3	5	Filtered		DL
RD-24		Primary	11/06/02	Actinium-228	17.7 U	---	17.7	Filtered		ES
RD-24		Primary	11/06/02	Bismuth-212	30.5 U	---	30.5	Filtered		ES
RD-24		Primary	11/06/02	Bismuth-214	8.27 U	---	8.27	Filtered		ES
RD-24		Primary	11/06/02	Lead-210	899 U	---	899	Filtered		ES
RD-24		Primary	11/06/02	Lead-212	5.58 U	---	5.58	Filtered		ES
RD-24		Primary	11/06/02	Lead-214	7.94 U	---	7.94	Filtered		ES
RD-24		Primary	11/06/02	Potassium-40	82.7 U	---	82.7	Filtered		ES
RD-24		Primary	11/06/02	Radium-226	62.7 U	---	62.7	Filtered		ES
RD-24		Primary	11/06/02	Thorium-234	126 U	---	126	Filtered		ES
RD-24		Primary	11/06/02	Uranium-235	24.1 U	---	24.1	Filtered		ES
RD-24		Primary	02/12/03	Actinium-228	24.1 U	---	24.1	Filtered		ES
RD-24		Primary	02/12/03	Bismuth-212	33.6 U	---	33.6	Filtered		ES
RD-24		Primary	02/12/03	Bismuth-214	10.2 U	---	10.2	Filtered		ES
RD-24		Primary	02/12/03	Lead-210	353 U	---	353	Filtered		ES
RD-24		Primary	02/12/03	Lead-212	6.48 U	---	6.48	Filtered		ES
RD-24		Primary	02/12/03	Lead-214	9.65 U	---	9.65	Filtered		ES
RD-24		Primary	02/12/03	Potassium-40	137 U	---	137	Filtered		ES
RD-24		Primary	02/12/03	Radium-226	71.1 U	---	71.1	Filtered		ES
RD-24		Primary	02/12/03	Thorium-234	78.3 U	---	78.3	Filtered		ES
RD-24		Primary	02/12/03	Uranium-235	23.1 U	---	23.1	Filtered		ES
RD-24		Primary	11/14/03	Actinium-228	33.3 U	---	33.3	Filtered		ES
RD-24		Split	11/14/03	Actinium-228	-3.74 U	11.8	13	Filtered		STL
RD-24		Primary	11/14/03	Bismuth-212	50 U	---	50	Filtered		ES
RD-24		Split	11/14/03	Bismuth-212	-0.48 U	22.7	38.8	Filtered		STL
RD-24		Primary	11/14/03	Bismuth-214	23.2 U	---	23.2	Filtered		ES
RD-24		Split	11/14/03	Bismuth-214	4.74 U	7.96	6.86	Filtered		STL
RD-24		Primary	11/14/03	Lead-210	473 U	---	473	Filtered		ES
RD-24		Primary	11/14/03	Lead-212	10.9 U	---	10.9	Filtered		ES
RD-24		Split	11/14/03	Lead-212	1.04 U	4.29	3.39	Filtered		STL
RD-24		Primary	11/14/03	Lead-214	26.7 U	---	26.7	Filtered		ES
RD-24		Split	11/14/03	Lead-214	-3.52 U	5.68	5.78	Filtered		STL
RD-24		Primary	11/14/03	Potassium-40	145 U	---	145	Filtered		ES
RD-24		Split	11/14/03	Potassium-40	-95.4 U	59.9	88.8	Filtered		STL
RD-24		Primary	11/14/03	Radium-226	106 U	---	106	Filtered		ES
RD-24		Primary	11/14/03	Thallium-208	7.55 U	---	7.55	Filtered		ES
RD-24		Split	11/14/03	Thallium-208	1.65 U	3.64	2.74	Filtered		STL
RD-24		Primary	11/14/03	Thorium-234	189 U	---	189	Filtered		ES
RD-24		Split	11/14/03	Thorium-234	124 U	236	417	Filtered		STL
RD-24		Primary	11/14/03	Uranium-235	35.3 U	---	35.3	Filtered		ES
RD-24		Primary	02/23/04	Actinium-228	27.6 U	---	27.6	Filtered		ES
RD-24		Primary	02/23/04	Bismuth-212	50.7 U	---	50.7	Filtered		ES
RD-24		Primary	02/23/04	Bismuth-214	30 U	---	30	Filtered		ES
RD-24		Primary	02/23/04	Lead-210	1480 U	---	1480	Filtered		ES
RD-24		Primary	02/23/04	Lead-212	9.71 U	---	9.71	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-IV
RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-24		Primary	02/23/04	Lead-214	39 U	---	39	Filtered		ES
RD-24		Primary	02/23/04	Potassium-40	122 U	---	122	Filtered		ES
RD-24		Primary	02/23/04	Radium-226	101 U	---	101	Filtered		ES
RD-24		Primary	02/23/04	Thallium-208	6.7 U	---	6.7	Filtered		ES
RD-24		Primary	02/23/04	Thorium-234	197 U	---	197	Filtered		ES
RD-24		Primary	02/23/04	Uranium-235	38.7 U	---	38.7	Filtered		ES
RD-24		Primary	08/26/04	Actinium-228	32.2 U	---	32.2	Filtered		ES
RD-24		Primary	08/26/04	Bismuth-212	66.3 U	---	66.3	Filtered		ES
RD-24		Primary	08/26/04	Bismuth-214	15.8 U	---	15.8	Filtered		ES
RD-24		Primary	08/26/04	Lead-210	101 U	---	101	Filtered		ES
RD-24		Primary	08/26/04	Lead-212	10.8 U	---	10.8	Filtered		ES
RD-24		Primary	08/26/04	Lead-214	14.7 U	---	14.7	Filtered		ES
RD-24		Primary	08/26/04	Potassium-40	93.6 U	---	93.6	Filtered		ES
RD-24		Primary	08/26/04	Radium-226	99.6 U	---	99.6	Filtered		ES
RD-24		Primary	08/26/04	Thallium-208	7.7 U	---	7.7	Filtered		ES
RD-24		Primary	08/26/04	Thorium-234	121 U	---	121	Filtered		ES
RD-24		Primary	08/26/04	Uranium-235	33.7 U	---	33.7	Filtered		ES
RD-24		Primary	02/24/05	Potassium-40	22.1 J	17	13.4	Filtered		ES
RD-24		Primary	09/06/05	Potassium-40	9.81 U	---	9.81	Filtered		ES
RD-24		Primary	02/15/06	Potassium-40	47.6 U	---	47.6	Filtered		ES
RD-24		Primary	08/10/06	Potassium-40	46.8 U	---	46.8	Filtered		ES
RD-24		Primary	05/24/07	Potassium-40	30.6 U	---	30.6	Filtered		ES
RD-24		Primary	08/08/07	Potassium-40	19.7 U	---	19.7	Filtered		ES
RD-24		Reanalysis of Primary	08/08/07	Potassium-40	19.1 U	---	19.1	Filtered		ES
RD-24		Primary	02/13/08	Potassium-40	13.3 U	---	13.3	Filtered		ES
RD-24		Primary	10/27/09	Potassium-40	-15.9 U	28	54	Filtered		TAD
RD-24		Primary	10/27/09	Potassium-40	-22.6 U	29	54.3	Unfiltered		TAD
RD-24		Split	10/27/09	Potassium-40	-50 U	280	280	Filtered		TAI
RD-24		Split	10/27/09	Potassium-40	-80 U	520	250	Unfiltered		TAI
RD-25		Primary	02/28/94	Actinium-228	1.5 U	3.9	14	Filtered		LAS
RD-25		Primary	02/28/94	Bismuth-214	4.8 U	2.7	8	Filtered		LAS
RD-25		Primary	02/28/94	Lead-212	3.5 U	4.9	6.9	Filtered		LAS
RD-25		Primary	02/28/94	Lead-214	2.9 U	2.5	8	Filtered		LAS
RD-25		Primary	02/28/94	Potassium-40	0 U	26	42	Filtered		LAS
RD-25		Primary	02/28/94	Radium-226	-6 U	48	67	Filtered		LAS
RD-25		Primary	02/28/94	Thallium-208	2.1 U	2.9	4	Filtered		LAS
RD-25		Primary	02/28/94	Thorium-234	-11 U	19	100	Filtered		LAS
RD-25		Primary	02/28/94	Uranium-235	4.6 U	6.3	18	Filtered		LAS
RD-25		Primary	08/17/94	Actinium-228	15 U	87	150	Filtered		LAS
RD-25		Primary	08/17/94	Bismuth-214	-35 U	53	83	Filtered		LAS
RD-25		Primary	08/17/94	Lead-212	-2 U	43	61	Filtered		LAS
RD-25		Primary	08/17/94	Lead-214	15 U	46	75	Filtered		LAS
RD-25		Primary	08/17/94	Potassium-40	30 U	310	490	Filtered		LAS
RD-25		Primary	08/17/94	Radium-226	-60 U	410	570	Filtered		LAS
RD-25		Primary	08/17/94	Thallium-208	-4 U	31	45	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-25		Primary	08/17/94	Thorium-234	60 U	270	680	Filtered		LAS
RD-25		Primary	08/17/94	Uranium-235	-77 U	84	160	Filtered		LAS
RD-25		Primary	02/09/95	Actinium-228	13 U	23	39	Filtered		LAS
RD-25		Primary	02/09/95	Bismuth-214	16 U	15	21	Filtered		LAS
RD-25		Primary	02/09/95	Lead-212	5 U	11	15	Filtered		LAS
RD-25		Primary	02/09/95	Lead-214	22	13	18	Filtered		LAS
RD-25		Primary	02/09/95	Potassium-40	-21 U	77	130	Filtered		LAS
RD-25		Primary	02/09/95	Thallium-208	-0.1 U	7.5	11	Filtered		LAS
RD-25		Primary	02/09/95	Thorium-234	-52 U	70	180	Filtered		LAS
RD-25		Primary	08/18/95	Actinium-228	-3 U	22	41	Filtered		LAS
RD-25		Primary	08/18/95	Bismuth-214	9 U	14	20	Filtered		LAS
RD-25		Primary	08/18/95	Lead-212	0.2 U	9.4	14	Filtered		LAS
RD-25		Primary	08/18/95	Lead-214	11 U	13	19	Filtered		LAS
RD-25		Primary	08/18/95	Potassium-40	-18 U	78	130	Filtered		LAS
RD-25		Primary	08/18/95	Thallium-208	3.1 U	6.8	9.2	Filtered		LAS
RD-25		Primary	08/18/95	Thorium-234	13 U	69	170	Filtered		LAS
RD-25		Primary	02/06/96	Actinium-228	-9 U	22	42	Filtered		LAS
RD-25		Primary	02/06/96	Bismuth-214	26	15	18	Filtered		LAS
RD-25		Primary	02/06/96	Lead-212	2.7 U	9.7	14	Filtered		LAS
RD-25		Primary	02/06/96	Lead-214	13 U	12	18	Filtered		LAS
RD-25		Primary	02/06/96	Potassium-40	30 U	70	100	Filtered		LAS
RD-25		Primary	02/06/96	Thallium-208	2.7 U	7.4	10	Filtered		LAS
RD-25		Primary	02/06/96	Thorium-234	10 U	120	180	Filtered		LAS
RD-25		Primary	08/20/96	Actinium-228	8 U	22	40	Filtered		LAS
RD-25		Primary	08/20/96	Bismuth-214	46	16	19	Filtered		LAS
RD-25		Primary	08/20/96	Lead-212	7.5 U	9.7	13	Filtered		LAS
RD-25		Primary	08/20/96	Lead-214	38	14	17	Filtered		LAS
RD-25		Primary	08/20/96	Potassium-40	58 U	77	110	Filtered		LAS
RD-25		Primary	08/20/96	Thallium-208	-1.8 U	7	10	Filtered		LAS
RD-25		Primary	08/20/96	Thorium-234	-3 U	72	190	Filtered		LAS
RD-25		Primary	02/07/97	Actinium-228	-7.8 U	7.9	41	Filtered		LAS
RD-25		Primary	02/07/97	Bismuth-214	236	36	20	Filtered		LAS
RD-25		Primary	02/07/97	Lead-212	-1 U	11	16	Filtered		LAS
RD-25		Primary	02/07/97	Lead-214	237	28	20	Filtered		LAS
RD-25		Primary	02/07/97	Potassium-40	21 U	74	120	Filtered		LAS
RD-25		Primary	02/07/97	Thallium-208	6.5 U	7.7	10	Filtered		LAS
RD-25		Primary	02/07/97	Thorium-234	-30 U	140	210	Filtered		LAS
RD-25		Primary	08/21/97	Actinium-228	0 U	20	37	Filtered		LAS
RD-25		Primary	08/21/97	Bismuth-212	-1 U	45	63	Filtered		LAS
RD-25		Primary	08/21/97	Bismuth-214	20	13	16	Filtered		LAS
RD-25		Primary	08/21/97	Lead-210	0 U	120	180	Filtered		LAS
RD-25		Primary	08/21/97	Lead-212	-3.1 U	9.8	15	Filtered		LAS
RD-25		Primary	08/21/97	Lead-214	21	12	16	Filtered		LAS
RD-25		Primary	08/21/97	Potassium-40	-9 U	60	96	Filtered		LAS
RD-25		Primary	08/21/97	Thallium-208	-2.5 U	6.3	9.6	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-25		Primary	08/21/97	Thorium-234	62 U	79	150	Filtered		LAS
RD-25		Primary	02/05/98	Actinium-228	38.8 U	---	38.8	Filtered		TN
RD-25		Primary	02/05/98	Bismuth-212	70.3 U	---	70.3	Filtered		TN
RD-25		Primary	02/05/98	Bismuth-214	26	19	---	Filtered		TN
RD-25		Primary	02/05/98	Lead-210	108 U	---	108	Filtered		TN
RD-25		Primary	02/05/98	Lead-212	12.6 U	---	12.6	Filtered		TN
RD-25		Primary	02/05/98	Lead-214	29.8	18	---	Filtered		TN
RD-25		Primary	02/05/98	Potassium-40	98.9 U	---	98.9	Filtered		TN
RD-25		Primary	02/05/98	Thallium-208	9.15 U	---	9.15	Filtered		TN
RD-25		Primary	02/05/98	Thorium-234	157 U	---	157	Filtered		TN
RD-25		Primary	08/18/98	Actinium-228	51.7 U	---	51.7	Filtered		TN
RD-25		Primary	08/18/98	Bismuth-212	97.2 U	---	97.2	Filtered		TN
RD-25		Primary	08/18/98	Bismuth-214	27.7 U	---	27.7	Filtered		TN
RD-25		Primary	08/18/98	Lead-210	628 U	---	628	Filtered		TN
RD-25		Primary	08/18/98	Lead-212	18.9 U	---	18.9	Filtered		TN
RD-25		Primary	08/18/98	Lead-214	25.1 U	---	25.1	Filtered		TN
RD-25		Primary	08/18/98	Potassium-40	171 U	---	171	Filtered		TN
RD-25		Primary	08/18/98	Thallium-208	12.9 U	---	12.9	Filtered		TN
RD-25		Primary	08/18/98	Thorium-234	331 U	---	331	Filtered		TN
RD-25		Primary	02/16/99	Actinium-228	67.2 U	---	67.2	Filtered		TN
RD-25		Primary	02/16/99	Bismuth-212	117 U	---	117	Filtered		TN
RD-25		Primary	02/16/99	Bismuth-214	29.2 U	---	29.2	Filtered		TN
RD-25		Primary	02/16/99	Lead-210	819 U	---	819	Filtered		TN
RD-25		Primary	02/16/99	Lead-212	23.2 U	---	23.2	Filtered		TN
RD-25		Primary	02/16/99	Lead-214	27.5 U	---	27.5	Filtered		TN
RD-25		Primary	02/16/99	Potassium-40	264 U	---	264	Filtered		TN
RD-25		Primary	02/16/99	Radium-226	215 U	---	215	Filtered		TN
RD-25		Primary	02/16/99	Thallium-208	16.4 U	---	16.4	Filtered		TN
RD-25		Primary	02/16/99	Thorium-234	338 U	---	338	Filtered		TN
RD-25		Primary	02/16/99	Uranium-235	83.6 U	---	83.6	Filtered		TN
RD-25		Primary	08/19/99	Actinium-228	70.6 U	---	70.6	Filtered		TN
RD-25		Primary	08/19/99	Bismuth-212	126 U	---	126	Filtered		TN
RD-25		Primary	08/19/99	Bismuth-214	29 U	---	29	Filtered		TN
RD-25		Primary	08/19/99	Lead-210	141 U	---	141	Filtered		TN
RD-25		Primary	08/19/99	Lead-212	20.6 U	---	20.6	Filtered		TN
RD-25		Primary	08/19/99	Lead-214	27.8 U	---	27.8	Filtered		TN
RD-25		Primary	08/19/99	Potassium-40	177 U	---	177	Filtered		TN
RD-25		Primary	08/19/99	Radium-226	186 U	---	186	Filtered		TN
RD-25		Primary	08/19/99	Thallium-208	16.1 U	---	16.1	Filtered		TN
RD-25		Primary	08/19/99	Thorium-234	240 U	---	240	Filtered		TN
RD-25		Primary	08/19/99	Uranium-235	57.5 U	---	57.5	Filtered		TN
RD-25		Primary	02/16/00	Actinium-228	60.4 U	---	60.4	Filtered		TR
RD-25		Primary	02/16/00	Bismuth-212	119 U	---	119	Filtered		TR
RD-25		Primary	02/16/00	Bismuth-214	26.3 U	---	26.3	Filtered		TR
RD-25		Primary	02/16/00	Lead-210	135 U	---	135	Filtered		TR

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-25		Primary	02/16/00	Lead-212	14.8 U	---	14.8	Filtered		TR
RD-25		Primary	02/16/00	Lead-214	21 U	---	21	Filtered		TR
RD-25		Primary	02/16/00	Potassium-40	172 U	---	172	Filtered		TR
RD-25		Primary	02/16/00	Radium-226	140 U	---	140	Filtered		TR
RD-25		Primary	02/16/00	Thallium-208	12.5 U	---	12.5	Filtered		TR
RD-25		Primary	02/16/00	Thorium-234	196 U	---	196	Filtered		TR
RD-25		Primary	02/16/00	Uranium-235	46 U	---	46	Filtered		TR
RD-25		Primary	08/09/00	Actinium-228	55.4 U	---	55.4	Filtered		TR
RD-25		Primary	08/09/00	Bismuth-212	99.5 U	---	99.5	Filtered		TR
RD-25		Primary	08/09/00	Bismuth-214	24.6 U	---	24.6	Filtered		TR
RD-25		Primary	08/09/00	Lead-210	2880 U	---	2880	Filtered		TR
RD-25		Primary	08/09/00	Lead-212	17.9 U	---	17.9	Filtered		TR
RD-25		Primary	08/09/00	Lead-214	22 U	---	22	Filtered		TR
RD-25		Primary	08/09/00	Potassium-40	219 U	---	219	Filtered		TR
RD-25		Primary	08/09/00	Radium-226	322 U	---	322	Filtered		TR
RD-25		Primary	08/09/00	Thallium-208	12.5 U	---	12.5	Filtered		TR
RD-25		Primary	08/09/00	Thorium-234	402 U	---	402	Filtered		TR
RD-25		Primary	08/09/00	Uranium-235	68.4 U	---	68.4	Filtered		TR
RD-25		Primary	02/07/01	Actinium-228	65.5 U	---	65.5	Filtered		ES
RD-25		Primary	02/07/01	Bismuth-212	107 U	---	107	Filtered		ES
RD-25		Primary	02/07/01	Bismuth-214	28 U	---	28	Filtered		ES
RD-25		Primary	02/07/01	Lead-210	989 U	---	989	Filtered		ES
RD-25		Primary	02/07/01	Lead-212	20.6 U	---	20.6	Filtered		ES
RD-25		Primary	02/07/01	Lead-214	24.7 U	---	24.7	Filtered		ES
RD-25		Primary	02/07/01	Potassium-40	249 U	---	249	Filtered		ES
RD-25		Primary	02/07/01	Radium-226	27.2 U	---	27.2	Filtered		ES
RD-25		Primary	02/07/01	Thallium-208	16.8 U	---	16.8	Filtered		ES
RD-25		Primary	02/07/01	Thorium-234	319 U	---	319	Filtered		ES
RD-25		Primary	02/07/01	Uranium-235	70.2 U	---	70.2	Filtered		ES
RD-25		Primary	10/25/01	Actinium-228	15 U	---	15	Filtered		DL
RD-25		Primary	10/25/01	Bismuth-212	7 U	---	7	Filtered		DL
RD-25		Primary	10/25/01	Bismuth-214	2.9 U	5	25	Filtered		DL
RD-25		Primary	10/25/01	Lead-210	7 U	---	7	Filtered		DL
RD-25		Primary	10/25/01	Lead-212	7 U	---	7	Filtered		DL
RD-25		Primary	10/25/01	Lead-214	2.9 U	5	5.6	Filtered		DL
RD-25		Primary	10/25/01	Potassium-40	14 U	---	14	Filtered		DL
RD-25		Primary	10/25/01	Radium-226	3 U	---	3	Filtered		DL
RD-25		Primary	10/25/01	Thallium-208	3 U	3	5	Filtered		DL
RD-25		Primary	10/25/01	Thorium-234	5 U	---	5	Filtered		DL
RD-25		Primary	03/07/02	Actinium-228	5 U	3	5	Filtered		DL
RD-25		Primary	03/07/02	Bismuth-212	3 U	3	3	Filtered		DL
RD-25		Primary	03/07/02	Bismuth-214	3 U	3	3	Filtered		DL
RD-25		Primary	03/07/02	Lead-210	5 U	5	5	Filtered		DL
RD-25		Primary	03/07/02	Lead-212	3 U	3	3	Filtered		DL
RD-25		Primary	03/07/02	Lead-214	5 U	3	5	Filtered		DL

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-25		Primary	03/07/02	Potassium-40	5 U	3	5	Filtered		DL
RD-25		Primary	03/07/02	Radium-226	3 U	3	3	Filtered		DL
RD-25		Primary	03/07/02	Thorium-234	5 U	5	5	Filtered		DL
RD-25		Primary	03/07/02	Uranium-235	5 U	3	5	Filtered		DL
RD-25		Primary	11/06/02	Actinium-228	19.2 U	---	19.2	Filtered		ES
RD-25		Primary	11/06/02	Bismuth-212	27.7 U	---	27.7	Filtered		ES
RD-25		Primary	11/06/02	Bismuth-214	8.67 U	---	8.67	Filtered		ES
RD-25		Primary	11/06/02	Lead-210	289 U	---	289	Filtered		ES
RD-25		Primary	11/06/02	Lead-212	5.42 U	---	5.42	Filtered		ES
RD-25		Primary	11/06/02	Lead-214	8.09 U	---	8.09	Filtered		ES
RD-25		Primary	11/06/02	Potassium-40	110 U	---	110	Filtered		ES
RD-25		Primary	11/06/02	Radium-226	59.5 U	---	59.5	Filtered		ES
RD-25		Primary	11/06/02	Thorium-234	65.2 U	---	65.2	Filtered		ES
RD-25		Primary	11/06/02	Uranium-235	19.5 U	---	19.5	Filtered		ES
RD-25		Primary	02/24/03	Actinium-228	13.6 U	---	13.6	Filtered		ES
RD-25		Primary	02/24/03	Bismuth-212	24.1 U	---	24.1	Filtered		ES
RD-25		Primary	02/24/03	Bismuth-214	9.54 U	---	9.54	Filtered		ES
RD-25		Primary	02/24/03	Lead-210	220 U	---	220	Filtered		ES
RD-25		Primary	02/24/03	Lead-212	4.52 U	---	4.52	Filtered		ES
RD-25		Primary	02/24/03	Lead-214	6.09 U	---	6.09	Filtered		ES
RD-25		Primary	02/24/03	Potassium-40	88.1 U	---	88.1	Filtered		ES
RD-25		Primary	02/24/03	Radium-226	46.1 U	---	46.1	Filtered		ES
RD-25		Primary	02/24/03	Thorium-234	70.4 U	---	70.4	Filtered		ES
RD-25		Primary	02/24/03	Uranium-235	17.5 U	---	17.5	Filtered		ES
RD-25		Primary	11/13/03	Actinium-228	56.7 U	---	56.7	Filtered		ES
RD-25		Primary	11/13/03	Bismuth-212	85.6 U	---	85.6	Filtered		ES
RD-25		Primary	11/13/03	Bismuth-214	49.2 U	---	49.2	Filtered		ES
RD-25		Primary	11/13/03	Lead-210	2720 U	---	2720	Filtered		ES
RD-25		Primary	11/13/03	Lead-212	18.8 U	---	18.8	Filtered		ES
RD-25		Primary	11/13/03	Lead-214	23.3 U	---	23.3	Filtered		ES
RD-25		Primary	11/13/03	Potassium-40	227 U	---	227	Filtered		ES
RD-25		Primary	11/13/03	Radium-226	224 U	---	224	Filtered		ES
RD-25		Primary	11/13/03	Thallium-208	12.8 U	---	12.8	Filtered		ES
RD-25		Primary	11/13/03	Thorium-234	368 U	---	368	Filtered		ES
RD-25		Primary	11/13/03	Uranium-235	74.7 U	---	74.7	Filtered		ES
RD-25		Primary	02/23/04	Actinium-228	15.9 U	---	15.9	Filtered		ES
RD-25		Split	02/23/04	Actinium-228	10.7	5.59	10.1	Filtered		STL
RD-25		Primary	02/23/04	Bismuth-212	30.2 U	---	30.2	Filtered		ES
RD-25		Split	02/23/04	Bismuth-212	-6.13 U	20.1	33.6	Filtered		STL
RD-25		Primary	02/23/04	Bismuth-214	27.2 U	---	27.2	Filtered		ES
RD-25		Split	02/23/04	Bismuth-214	2.04 U	4.84	5.76	Filtered		STL
RD-25		Primary	02/23/04	Lead-210	431 U	---	431	Filtered		ES
RD-25		Primary	02/23/04	Lead-212	5.7 U	---	5.7	Filtered		ES
RD-25		Split	02/23/04	Lead-212	0.336 U	3.4	3.21	Filtered		STL
RD-25		Primary	02/23/04	Lead-214	23.2 U	---	23.2	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-25		Split	02/23/04	Lead-214	3.76 U	2.86	4.9	Filtered		STL
RD-25		Primary	02/23/04	Potassium-40	49 U	---	49	Filtered		ES
RD-25		Split	02/23/04	Potassium-40	70.4	46	21.1	Filtered		STL
RD-25		Primary	02/23/04	Radium-226	59.5 U	---	59.5	Filtered		ES
RD-25		Primary	02/23/04	Thallium-208	4.04 U	---	4.04	Filtered		ES
RD-25		Split	02/23/04	Thallium-208	1.95 U	1.53	2.71	Filtered		STL
RD-25		Primary	02/23/04	Thorium-234	102 U	---	102	Filtered		ES
RD-25		Split	02/23/04	Thorium-234	211 U	225	402	Filtered		STL
RD-25		Primary	02/23/04	Uranium-235	17.8 U	---	17.8	Filtered		ES
RD-25		Split	02/23/04	Uranium-235	-9.35 U	6.71	10.7	Filtered		STL
RD-27		Primary	02/05/96	Actinium-228	-4 U	26	46	Filtered		LAS
RD-27		Primary	02/05/96	Bismuth-214	24	16	19	Filtered		LAS
RD-27		Primary	02/05/96	Lead-212	22	12	14	Filtered		LAS
RD-27		Primary	02/05/96	Lead-214	9 U	12	17	Filtered		LAS
RD-27		Primary	02/05/96	Potassium-40	-45 U	21	120	Filtered		LAS
RD-27		Primary	02/05/96	Thallium-208	2.3 U	8.3	11	Filtered		LAS
RD-27		Primary	02/05/96	Thorium-234	-42 U	78	190	Filtered		LAS
RD-27		Primary	08/27/97	Actinium-228	3 U	19	32	Filtered		LAS
RD-27		Primary	08/27/97	Actinium-228	0 U	23	32	Unfiltered		LAS
RD-27		Primary	08/27/97	Bismuth-212	2 U	45	62	Filtered		LAS
RD-27		Primary	08/27/97	Bismuth-212	43 U	44	51	Unfiltered		LAS
RD-27		Primary	08/27/97	Bismuth-214	28	14	18	Filtered		LAS
RD-27		Primary	08/27/97	Bismuth-214	30	13	15	Unfiltered		LAS
RD-27		Primary	08/27/97	Lead-210	10 U	120	180	Filtered		LAS
RD-27		Primary	08/27/97	Lead-210	60 U	120	180	Unfiltered		LAS
RD-27		Primary	08/27/97	Lead-212	0 U	10	15	Filtered		LAS
RD-27		Primary	08/27/97	Lead-212	-4 U	10	16	Unfiltered		LAS
RD-27		Primary	08/27/97	Lead-214	30	12	16	Filtered		LAS
RD-27		Primary	08/27/97	Lead-214	34	12	16	Unfiltered		LAS
RD-27		Primary	08/27/97	Potassium-40	-18 U	65	110	Filtered		LAS
RD-27		Primary	08/27/97	Potassium-40	23 U	64	94	Unfiltered		LAS
RD-27		Primary	08/27/97	Thallium-208	0.1 U	6.5	9.3	Filtered		LAS
RD-27		Primary	08/27/97	Thallium-208	2.2 U	6.5	9.1	Unfiltered		LAS
RD-27		Primary	08/27/97	Thorium-234	-4 U	78	150	Filtered		LAS
RD-27		Primary	08/27/97	Thorium-234	-11 U	79	150	Unfiltered		LAS
RD-27		Primary	02/16/99	Actinium-228	29.8 U	---	29.8	Filtered		TN
RD-27		Primary	02/16/99	Bismuth-212	45.8 U	---	45.8	Filtered		TN
RD-27		Primary	02/16/99	Bismuth-214	11.8 U	---	11.8	Filtered		TN
RD-27		Primary	02/16/99	Lead-210	481 U	---	481	Filtered		TN
RD-27		Primary	02/16/99	Lead-212	10.6 U	---	10.6	Filtered		TN
RD-27		Primary	02/16/99	Lead-214	12 U	---	12	Filtered		TN
RD-27		Primary	02/16/99	Potassium-40	99.8 U	---	99.8	Filtered		TN
RD-27		Primary	02/16/99	Radium-226	148 U	---	148	Filtered		TN
RD-27		Primary	02/16/99	Thallium-208	6.22 U	---	6.22	Filtered		TN
RD-27		Primary	02/16/99	Thorium-234	182 U	---	182	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-27		Primary	02/16/99	Uranium-235	32.8 U	---	32.8	Filtered		TN
RD-27		Primary	08/17/99	Actinium-228	26 U	---	26	Filtered		TN
RD-27		Primary	08/17/99	Bismuth-212	40 U	---	40	Filtered		TN
RD-27		Primary	08/17/99	Bismuth-214	12 U	---	12	Filtered		TN
RD-27		Primary	08/17/99	Lead-210	365 U	---	365	Filtered		TN
RD-27		Primary	08/17/99	Lead-212	9.75 U	---	9.75	Filtered		TN
RD-27		Primary	08/17/99	Lead-214	11 U	---	11	Filtered		TN
RD-27		Primary	08/17/99	Potassium-40	75 U	---	75	Filtered		TN
RD-27		Primary	08/17/99	Radium-226	91.7 U	---	91.7	Filtered		TN
RD-27		Primary	08/17/99	Thallium-208	5.77 U	---	5.77	Filtered		TN
RD-27		Primary	08/17/99	Thorium-234	151 U	---	151	Filtered		TN
RD-27		Primary	08/17/99	Uranium-235	28.9 U	---	28.9	Filtered		TN
RD-27		Primary	02/21/00	Actinium-228	28.7 U	---	28.7	Filtered		TR
RD-27		Primary	02/21/00	Bismuth-212	48.8 U	---	48.8	Filtered		TR
RD-27		Primary	02/21/00	Bismuth-214	13.9 U	---	13.9	Filtered		TR
RD-27		Primary	02/21/00	Lead-210	478 U	---	478	Filtered		TR
RD-27		Primary	02/21/00	Lead-212	10.3 U	---	10.3	Filtered		TR
RD-27		Primary	02/21/00	Lead-214	16.2 U	---	16.2	Filtered		TR
RD-27		Primary	02/21/00	Potassium-40	86.8 U	---	86.8	Filtered		TR
RD-27		Primary	02/21/00	Radium-226	107 U	---	107	Filtered		TR
RD-27		Primary	02/21/00	Thallium-208	6.77 U	---	6.77	Filtered		TR
RD-27		Primary	02/21/00	Thorium-234	183 U	---	183	Filtered		TR
RD-27		Primary	02/21/00	Uranium-235	31.3 U	---	31.3	Filtered		TR
RD-27		Primary	08/04/00	Actinium-228	51 U	---	51	Filtered		TR
RD-27		Primary	08/04/00	Bismuth-212	79.7 U	---	79.7	Filtered		TR
RD-27		Primary	08/04/00	Bismuth-214	21.4 U	---	21.4	Filtered		TR
RD-27		Primary	08/04/00	Lead-210	2470 U	---	2470	Filtered		TR
RD-27		Primary	08/04/00	Lead-212	17.3 U	---	17.3	Filtered		TR
RD-27		Primary	08/04/00	Lead-214	21 U	---	21	Filtered		TR
RD-27		Primary	08/04/00	Potassium-40	203 U	---	203	Filtered		TR
RD-27		Primary	08/04/00	Radium-226	171 U	---	171	Filtered		TR
RD-27		Primary	08/04/00	Thallium-208	11.8 U	---	11.8	Filtered		TR
RD-27		Primary	08/04/00	Thorium-234	348 U	---	348	Filtered		TR
RD-27		Primary	08/04/00	Uranium-235	63.5 U	---	63.5	Filtered		TR
RD-27		Primary	02/14/01	Actinium-228	30.6 U	---	30.6	Filtered		ES
RD-27		Primary	02/14/01	Bismuth-212	53.8 U	---	53.8	Filtered		ES
RD-27		Primary	02/14/01	Bismuth-214	19.9 U	---	19.9	Filtered		ES
RD-27		Primary	02/14/01	Lead-210	502 U	---	502	Filtered		ES
RD-27		Primary	02/14/01	Lead-212	10 U	---	10	Filtered		ES
RD-27		Primary	02/14/01	Lead-214	22.8	13	13.2	Filtered		ES
RD-27		Primary	02/14/01	Potassium-40	97.7 U	---	97.7	Filtered		ES
RD-27		Primary	02/14/01	Radium-226	117 U	---	117	Filtered		ES
RD-27		Primary	02/14/01	Thallium-208	9.59 U	---	9.59	Filtered		ES
RD-27		Primary	02/14/01	Thorium-234	188 U	---	188	Filtered		ES
RD-27		Primary	02/14/01	Uranium-235	34.4 U	---	34.4	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-27		Primary	10/26/01	Actinium-228	5 U	---	5	Filtered		DL
RD-27		Primary	10/26/01	Bismuth-212	5 U	---	5	Filtered		DL
RD-27		Primary	10/26/01	Bismuth-214	2.4 U	---	2.4	Filtered		DL
RD-27		Primary	10/26/01	Lead-210	8 U	---	8	Filtered		DL
RD-27		Primary	10/26/01	Lead-212	5 U	---	5	Filtered		DL
RD-27		Primary	10/26/01	Lead-214	5 U	---	5	Filtered		DL
RD-27		Primary	10/26/01	Potassium-40	13 U	---	13	Filtered		DL
RD-27		Primary	10/26/01	Radium-226	1.2 U	0.4	5	Filtered		DL
RD-27		Primary	10/26/01	Thallium-208	5 U	---	5	Filtered		DL
RD-27		Primary	10/26/01	Thorium-234	5 U	---	5	Filtered		DL
RD-27		Primary	03/06/02	Actinium-228	5 U	3	5	Filtered		DL
RD-27		Primary	03/06/02	Bismuth-212	3 U	3	3	Filtered		DL
RD-27		Primary	03/06/02	Bismuth-214	3 U	3	3	Filtered		DL
RD-27		Primary	03/06/02	Lead-210	5 U	5	5	Filtered		DL
RD-27		Primary	03/06/02	Lead-212	3 U	3	3	Filtered		DL
RD-27		Primary	03/06/02	Lead-214	5 U	3	5	Filtered		DL
RD-27		Primary	03/06/02	Potassium-40	5 U	3	5	Filtered		DL
RD-27		Primary	03/06/02	Radium-226	3 U	3	3	Filtered		DL
RD-27		Primary	03/06/02	Thorium-234	5 U	5	5	Filtered		DL
RD-27		Primary	03/06/02	Uranium-235	1 U	0.38	1	Filtered		DL
RD-27		Primary	08/22/02	Actinium-228	354 U	---	354	Filtered		ES
RD-27		Primary	08/22/02	Bismuth-212	608 U	---	608	Filtered		ES
RD-27		Primary	08/22/02	Bismuth-214	182 U	---	182	Filtered		ES
RD-27		Primary	08/22/02	Lead-210	3850 U	---	3850	Filtered		ES
RD-27		Primary	08/22/02	Lead-212	159 U	---	159	Filtered		ES
RD-27		Primary	08/22/02	Lead-214	175 U	---	175	Filtered		ES
RD-27		Primary	08/22/02	Potassium-40	1430 U	---	1430	Filtered		ES
RD-27		Primary	08/22/02	Radium-226	1340 U	---	1340	Filtered		ES
RD-27		Primary	08/22/02	Thorium-234	1880 U	---	1880	Filtered		ES
RD-27		Primary	08/22/02	Uranium-235	498 U	---	498	Filtered		ES
RD-27		Primary	05/14/03	Actinium-228	5.67 U	---	5.67	Filtered		ES
RD-27		Primary	05/14/03	Bismuth-212	8.75 U	---	8.75	Filtered		ES
RD-27		Primary	05/14/03	Bismuth-214	2.64 U	---	2.64	Filtered		ES
RD-27		Primary	05/14/03	Lead-210	238 U	---	238	Filtered		ES
RD-27		Primary	05/14/03	Lead-212	1.9 U	---	1.9	Filtered		ES
RD-27		Primary	05/14/03	Lead-214	2.58 U	---	2.58	Filtered		ES
RD-27		Primary	05/14/03	Potassium-40	30.1 U	---	30.1	Filtered		ES
RD-27		Primary	05/14/03	Radium-226	18.8 U	---	18.8	Filtered		ES
RD-27		Primary	05/14/03	Thorium-234	37.6 U	---	37.6	Filtered		ES
RD-27		Primary	05/14/03	Uranium-235	7.2 U	---	7.2	Filtered		ES
RD-27		Primary	11/14/03	Actinium-228	71.6 U	---	71.6	Filtered		ES
RD-27		Split	11/14/03	Actinium-228	0.533 U	12	12.8	Filtered		STL
RD-27		Primary	11/14/03	Bismuth-212	112 U	---	112	Filtered		ES
RD-27		Split	11/14/03	Bismuth-212	19.7 U	23.1	40.4	Filtered		STL
RD-27		Primary	11/14/03	Bismuth-214	32.4 U	---	32.4	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-27		Split	11/14/03	Bismuth-214	6.2 U	6.84	6.27	Filtered		STL
RD-27		Primary	11/14/03	Lead-210	522 U	---	522	Filtered		ES
RD-27		Primary	11/14/03	Lead-212	20.8 U	---	20.8	Filtered		ES
RD-27		Split	11/14/03	Lead-212	-1.89 U	4.24	4.15	Filtered		STL
RD-27		Primary	11/14/03	Lead-214	27.6 U	---	27.6	Filtered		ES
RD-27		Split	11/14/03	Lead-214	0.587 U	5.38	5.41	Filtered		STL
RD-27		Primary	11/14/03	Potassium-40	429 U	---	429	Filtered		ES
RD-27		Split	11/14/03	Potassium-40	-29.1 U	53.2	77.1	Filtered		STL
RD-27		Primary	11/14/03	Radium-226	178 U	---	178	Filtered		ES
RD-27		Primary	11/14/03	Thallium-208	15.4 U	---	15.4	Filtered		ES
RD-27		Split	11/14/03	Thallium-208	-0.815 U	3.29	3.13	Filtered		STL
RD-27		Primary	11/14/03	Thorium-234	227 U	---	227	Filtered		ES
RD-27		Split	11/14/03	Thorium-234	198 U	268	475	Filtered		STL
RD-27		Primary	11/14/03	Uranium-235	69.1 U	---	69.1	Filtered		ES
RD-27		Primary	02/23/04	Actinium-228	18.4 U	---	18.4	Filtered		ES
RD-27		Primary	02/23/04	Bismuth-212	32.9 U	---	32.9	Filtered		ES
RD-27		Primary	02/23/04	Bismuth-214	9.22 U	---	9.22	Filtered		ES
RD-27		Primary	02/23/04	Lead-210	400 U	---	400	Filtered		ES
RD-27		Primary	02/23/04	Lead-212	6.39 U	---	6.39	Filtered		ES
RD-27		Primary	02/23/04	Lead-214	12.1 U	---	12.1	Filtered		ES
RD-27		Primary	02/23/04	Potassium-40	54.9 U	---	54.9	Filtered		ES
RD-27		Primary	02/23/04	Radium-226	64.6 U	---	64.6	Filtered		ES
RD-27		Primary	02/23/04	Thallium-208	4.48 U	---	4.48	Filtered		ES
RD-27		Primary	02/23/04	Thorium-234	118 U	---	118	Filtered		ES
RD-27		Primary	02/23/04	Uranium-235	20 U	---	20	Filtered		ES
RD-27		Primary	08/10/04	Actinium-228	68.9 U	---	68.9	Filtered		ES
RD-27		Primary	08/10/04	Bismuth-212	112 U	---	112	Filtered		ES
RD-27		Primary	08/10/04	Bismuth-214	35.1 U	---	35.1	Filtered		ES
RD-27		Primary	08/10/04	Lead-210	1020 U	---	1020	Filtered		ES
RD-27		Primary	08/10/04	Lead-212	22.2 U	---	22.2	Filtered		ES
RD-27		Primary	08/10/04	Lead-214	26.6 U	---	26.6	Filtered		ES
RD-27		Primary	08/10/04	Potassium-40	234 U	---	234	Filtered		ES
RD-27		Primary	08/10/04	Radium-226	217 U	---	217	Filtered		ES
RD-27		Primary	08/10/04	Thallium-208	16.6 U	---	16.6	Filtered		ES
RD-27		Primary	08/10/04	Thorium-234	311 U	---	311	Filtered		ES
RD-27		Primary	08/10/04	Uranium-235	74.3 U	---	74.3	Filtered		ES
RD-27		Primary	02/17/05	Potassium-40	14.2 U	---	14.2	Filtered		ES
RD-27		Primary	08/24/05	Potassium-40	24 U	---	24	Filtered		ES
RD-27		Primary	02/20/06	Potassium-40	42 U	---	42	Filtered		ES
RD-27		Primary	08/25/06	Potassium-40	32.5 U	---	32.5	Filtered		ES
RD-27		Primary	02/14/07	Potassium-40	7.7 U	---	7.7	Filtered		ES
RD-27		Split	02/14/07	Potassium-40	-7.95 U	23	33	Filtered		STL
RD-27		Primary	08/09/07	Potassium-40	10 U	---	10	Filtered		ES
RD-27		Primary	03/05/08	Potassium-40	26.9 U	---	26.9	Filtered		ES
RD-27		Primary	09/04/08	Aluminum-26	0.771 U	---	0.771	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-27		Primary	09/04/08	Potassium-40	9.3 U	---	9.3	Filtered		ES
RD-27		Primary	03/06/09	Potassium-40	-0.128 U	9.6	16.5	Filtered		ES
RD-27		Primary	03/06/09	Potassium-40	13.1 U	26	44.2	Unfiltered		ES
RD-27		Primary	03/06/09	Radium-228	2.77 U	3.1	5.13	Filtered		ES
RD-27		Primary	03/06/09	Radium-228	2.69 U	6.2	10.4	Unfiltered		ES
RD-27		Primary	07/30/09	Potassium-40	-15.4 U	64	117	Filtered		ES
RD-27		Primary	07/30/09	Potassium-40	-84.3 U	82	148	Unfiltered		ES
RD-27		Duplicate	07/30/09	Potassium-40	120 U	88	145	Unfiltered		ES
RD-28		Primary	02/24/94	Actinium-228	-0.6 U	4	15	Filtered		LAS
RD-28		Primary	02/24/94	Bismuth-214	-0.5 U	2.6	8.1	Filtered		LAS
RD-28		Primary	02/24/94	Lead-212	2.9 U	4.8	6.7	Filtered		LAS
RD-28		Primary	02/24/94	Lead-214	0.6 U	2.3	7.8	Filtered		LAS
RD-28		Primary	02/24/94	Potassium-40	-14 U	3	42	Filtered		LAS
RD-28		Primary	02/24/94	Radium-226	-8 U	48	67	Filtered		LAS
RD-28		Primary	02/24/94	Thallium-208	1.7 U	3	4.1	Filtered		LAS
RD-28		Primary	02/24/94	Thorium-234	20 U	19	100	Filtered		LAS
RD-28		Primary	02/24/94	Uranium-235	5.1 U	6.2	18	Filtered		LAS
RD-28		Primary	08/17/94	Actinium-228	100 U	120	190	Filtered		LAS
RD-28		Primary	08/17/94	Bismuth-214	-34 U	75	120	Filtered		LAS
RD-28		Primary	08/17/94	Lead-212	18 U	55	76	Filtered		LAS
RD-28		Primary	08/17/94	Lead-214	-34 U	60	100	Filtered		LAS
RD-28		Primary	08/17/94	Potassium-40	-110 U	410	690	Filtered		LAS
RD-28		Primary	08/17/94	Radium-226	-550 U	630	930	Filtered		LAS
RD-28		Primary	08/17/94	Thallium-208	-9 U	43	60	Filtered		LAS
RD-28		Primary	08/17/94	Thorium-234	-70 U	320	720	Filtered		LAS
RD-28		Primary	08/17/94	Uranium-235	30 U	140	200	Filtered		LAS
RD-28		Primary	02/09/95	Actinium-228	-3 U	25	47	Filtered		LAS
RD-28		Primary	02/09/95	Bismuth-214	18 U	17	23	Filtered		LAS
RD-28		Primary	02/09/95	Lead-212	-2 U	12	18	Filtered		LAS
RD-28		Primary	02/09/95	Lead-214	16 U	14	21	Filtered		LAS
RD-28		Primary	02/09/95	Potassium-40	38 U	95	140	Filtered		LAS
RD-28		Primary	02/09/95	Thallium-208	0.5 U	8	12	Filtered		LAS
RD-28		Primary	02/09/95	Thorium-234	0 U	120	180	Filtered		LAS
RD-28		Primary	08/18/95	Actinium-228	-20 U	11	41	Filtered		LAS
RD-28		Primary	08/18/95	Bismuth-214	14 U	14	18	Filtered		LAS
RD-28		Primary	08/18/95	Lead-212	-2 U	9.5	14	Filtered		LAS
RD-28		Primary	08/18/95	Lead-214	6 U	11	17	Filtered		LAS
RD-28		Primary	08/18/95	Potassium-40	1 U	65	100	Filtered		LAS
RD-28		Primary	08/18/95	Thallium-208	-1.9 U	6.7	11	Filtered		LAS
RD-28		Primary	08/18/95	Thorium-234	-40 U	64	150	Filtered		LAS
RD-28		Primary	02/06/96	Actinium-228	0.3 U	9.9	17	Filtered		LAS
RD-28		Primary	02/06/96	Bismuth-214	18.4	8.3	11	Filtered		LAS
RD-28		Primary	02/06/96	Lead-212	3.3 U	6.6	9.7	Filtered		LAS
RD-28		Primary	02/06/96	Lead-214	23.1	7.6	10	Filtered		LAS
RD-28		Primary	02/06/96	Potassium-40	3 U	34	55	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-28		Primary	02/06/96	Thallium-208	1 U	3.3	4.9	Filtered		LAS
RD-28		Primary	02/06/96	Thorium-234	19 U	62	210	Filtered		LAS
RD-28		Primary	08/20/96	Actinium-228	-5 U	12	41	Filtered		LAS
RD-28		Primary	08/20/96	Bismuth-214	29	16	20	Filtered		LAS
RD-28		Primary	08/20/96	Lead-212	4 U	10	14	Filtered		LAS
RD-28		Primary	08/20/96	Lead-214	16 U	12	18	Filtered		LAS
RD-28		Primary	08/20/96	Potassium-40	27 U	63	94	Filtered		LAS
RD-28		Primary	08/20/96	Thallium-208	0.6 U	6.9	10	Filtered		LAS
RD-28		Primary	08/20/96	Thorium-234	51 U	71	180	Filtered		LAS
RD-28		Primary	02/06/97	Actinium-228	15 U	26	39	Filtered		LAS
RD-28		Primary	02/06/97	Bismuth-214	15 U	16	22	Filtered		LAS
RD-28		Primary	02/06/97	Lead-212	-7 U	11	15	Filtered		LAS
RD-28		Primary	02/06/97	Lead-214	24	16	15	Filtered		LAS
RD-28		Primary	02/06/97	Potassium-40	-17 U	85	130	Filtered		LAS
RD-28		Primary	02/06/97	Thallium-208	-2.1 U	7.9	12	Filtered		LAS
RD-28		Primary	02/06/97	Thorium-234	5 U	81	5	Filtered		LAS
RD-28		Primary	08/28/97	Actinium-228	6 U	19	31	Filtered		LAS
RD-28		Primary	08/28/97	Actinium-228	0 U	19	31	Unfiltered		LAS
RD-28		Primary	08/28/97	Bismuth-212	6 U	47	64	Filtered		LAS
RD-28		Primary	08/28/97	Bismuth-212	-26 U	25	71	Unfiltered		LAS
RD-28		Primary	08/28/97	Bismuth-214	45	15	17	Filtered		LAS
RD-28		Primary	08/28/97	Bismuth-214	63	17	18	Unfiltered		LAS
RD-28		Primary	08/28/97	Lead-210	-50 U	110	180	Filtered		LAS
RD-28		Primary	08/28/97	Lead-210	-50 U	110	180	Unfiltered		LAS
RD-28		Primary	08/28/97	Lead-212	6 U	10	15	Filtered		LAS
RD-28		Primary	08/28/97	Lead-212	-4 U	10	15	Unfiltered		LAS
RD-28		Primary	08/28/97	Lead-214	53	14	17	Filtered		LAS
RD-28		Primary	08/28/97	Lead-214	60	15	17	Unfiltered		LAS
RD-28		Primary	08/28/97	Potassium-40	20 U	72	110	Filtered		LAS
RD-28		Primary	08/28/97	Potassium-40	-36 U	62	110	Unfiltered		LAS
RD-28		Primary	08/28/97	Thallium-208	-0.1 U	6.4	9.3	Filtered		LAS
RD-28		Primary	08/28/97	Thallium-208	4.7 U	6.4	8.5	Unfiltered		LAS
RD-28		Primary	08/28/97	Thorium-234	-2 U	81	160	Filtered		LAS
RD-28		Primary	08/28/97	Thorium-234	-33 U	79	160	Unfiltered		LAS
RD-28		Primary	02/05/98	Actinium-228	42.1 U	---	42.1	Filtered		TN
RD-28		Primary	02/05/98	Bismuth-212	73.2 U	---	73.2	Filtered		TN
RD-28		Primary	02/05/98	Bismuth-214	29.1	18	---	Filtered		TN
RD-28		Primary	02/05/98	Lead-210	498 U	---	498	Filtered		TN
RD-28		Primary	02/05/98	Lead-212	13.1 U	---	13.1	Filtered		TN
RD-28		Primary	02/05/98	Lead-214	24	13	---	Filtered		TN
RD-28		Primary	02/05/98	Potassium-40	146 U	---	146	Filtered		TN
RD-28		Primary	02/05/98	Thallium-208	9.85 U	---	9.85	Filtered		TN
RD-28		Primary	02/05/98	Thorium-234	194 U	---	194	Filtered		TN
RD-28		Primary	08/18/98	Actinium-228	51.7 U	---	51.7	Filtered		TN
RD-28		Primary	08/18/98	Bismuth-212	68.4 U	---	68.4	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-28		Primary	08/18/98	Bismuth-214	28.5 U	---	28.5	Filtered		TN
RD-28		Primary	08/18/98	Lead-210	572 U	---	572	Filtered		TN
RD-28		Primary	08/18/98	Lead-212	19.7 U	---	19.7	Filtered		TN
RD-28		Primary	08/18/98	Lead-214	25.6 U	---	25.6	Filtered		TN
RD-28		Primary	08/18/98	Potassium-40	161 U	---	161	Filtered		TN
RD-28		Primary	08/18/98	Thallium-208	12.1 U	---	12.1	Filtered		TN
RD-28		Primary	08/18/98	Thorium-234	333 U	---	333	Filtered		TN
RD-28		Primary	02/16/99	Actinium-228	46.2 U	---	46.2	Filtered		TN
RD-28		Primary	02/16/99	Bismuth-212	92.5 U	---	92.5	Filtered		TN
RD-28		Primary	02/16/99	Bismuth-214	23 U	---	23	Filtered		TN
RD-28		Primary	02/16/99	Lead-210	147 U	---	147	Filtered		TN
RD-28		Primary	02/16/99	Lead-212	14.9 U	---	14.9	Filtered		TN
RD-28		Primary	02/16/99	Lead-214	20.8 U	---	20.8	Filtered		TN
RD-28		Primary	02/16/99	Potassium-40	158 U	---	158	Filtered		TN
RD-28		Primary	02/16/99	Radium-226	141 U	---	141	Filtered		TN
RD-28		Primary	02/16/99	Thallium-208	11.8 U	---	11.8	Filtered		TN
RD-28		Primary	02/16/99	Thorium-234	187 U	---	187	Filtered		TN
RD-28		Primary	02/16/99	Uranium-235	40.9 U	---	40.9	Filtered		TN
RD-28		Primary	08/19/99	Actinium-228	72.3 U	---	72.3	Filtered		TN
RD-28		Primary	08/19/99	Bismuth-212	107 U	---	107	Filtered		TN
RD-28		Primary	08/19/99	Bismuth-214	30.1 U	---	30.1	Filtered		TN
RD-28		Primary	08/19/99	Lead-210	839 U	---	839	Filtered		TN
RD-28		Primary	08/19/99	Lead-212	23.6 U	---	23.6	Filtered		TN
RD-28		Primary	08/19/99	Lead-214	28.8 U	---	28.8	Filtered		TN
RD-28		Primary	08/19/99	Potassium-40	439 U	---	439	Filtered		TN
RD-28		Primary	08/19/99	Radium-226	199 U	---	199	Filtered		TN
RD-28		Primary	08/19/99	Thallium-208	16.9 U	---	16.9	Filtered		TN
RD-28		Primary	08/19/99	Thorium-234	367 U	---	367	Filtered		TN
RD-28		Primary	08/19/99	Uranium-235	75.8 U	---	75.8	Filtered		TN
RD-28		Primary	02/16/00	Actinium-228	68.5 U	---	68.5	Filtered		TR
RD-28		Primary	02/16/00	Bismuth-212	118 U	---	118	Filtered		TR
RD-28		Primary	02/16/00	Bismuth-214	27 U	---	27	Filtered		TR
RD-28		Primary	02/16/00	Lead-210	998 U	---	998	Filtered		TR
RD-28		Primary	02/16/00	Lead-212	21.4 U	---	21.4	Filtered		TR
RD-28		Primary	02/16/00	Lead-214	25.5 U	---	25.5	Filtered		TR
RD-28		Primary	02/16/00	Potassium-40	271 U	---	271	Filtered		TR
RD-28		Primary	02/16/00	Radium-226	196 U	---	196	Filtered		TR
RD-28		Primary	02/16/00	Thallium-208	16 U	---	16	Filtered		TR
RD-28		Primary	02/16/00	Thorium-234	318 U	---	318	Filtered		TR
RD-28		Primary	02/16/00	Uranium-235	82.8 U	---	82.8	Filtered		TR
RD-28		Primary	08/09/00	Actinium-228	52.6 U	---	52.6	Filtered		TR
RD-28		Primary	08/09/00	Bismuth-212	88.4 U	---	88.4	Filtered		TR
RD-28		Primary	08/09/00	Bismuth-214	23.4 U	---	23.4	Filtered		TR
RD-28		Primary	08/09/00	Lead-210	2800 U	---	2800	Filtered		TR
RD-28		Primary	08/09/00	Lead-212	18.7 U	---	18.7	Filtered		TR

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-28		Primary	08/09/00	Lead-214	22.9 U	---	22.9	Filtered		TR
RD-28		Primary	08/09/00	Potassium-40	220 U	---	220	Filtered		TR
RD-28		Primary	08/09/00	Radium-226	177 U	---	177	Filtered		TR
RD-28		Primary	08/09/00	Thallium-208	12.6 U	---	12.6	Filtered		TR
RD-28		Primary	08/09/00	Thorium-234	386 U	---	386	Filtered		TR
RD-28		Primary	08/09/00	Uranium-235	69.6 U	---	69.6	Filtered		TR
RD-28		Primary	02/07/01	Actinium-228	28.6 U	---	28.6	Filtered		ES
RD-28		Primary	02/07/01	Bismuth-212	50 U	---	50	Filtered		ES
RD-28		Primary	02/07/01	Bismuth-214	15.4 U	---	15.4	Filtered		ES
RD-28		Primary	02/07/01	Lead-210	505 U	---	505	Filtered		ES
RD-28		Primary	02/07/01	Lead-212	9.68 U	---	9.68	Filtered		ES
RD-28		Primary	02/07/01	Lead-214	23.7 U	---	23.7	Filtered		ES
RD-28		Primary	02/07/01	Potassium-40	80.3 U	---	80.3	Filtered		ES
RD-28		Primary	02/07/01	Radium-226	15 U	---	15	Filtered		ES
RD-28		Primary	02/07/01	Thallium-208	7.16 U	---	7.16	Filtered		ES
RD-28		Primary	02/07/01	Thorium-234	186 U	---	186	Filtered		ES
RD-28		Primary	02/07/01	Uranium-235	33.9 U	---	33.9	Filtered		ES
RD-28		Primary	10/25/01	Actinium-228	6.9 U	---	6.9	Filtered		DL
RD-28		Primary	10/25/01	Bismuth-212	51 U	18	70	Filtered		DL
RD-28		Primary	10/25/01	Bismuth-214	7.1	1.8	2.8	Filtered		DL
RD-28		Primary	10/25/01	Lead-210	7 U	---	7	Filtered		DL
RD-28		Primary	10/25/01	Lead-212	6.3 U	7	7	Filtered		DL
RD-28		Primary	10/25/01	Lead-214	7.1	1.8	2.8	Filtered		DL
RD-28		Primary	10/25/01	Potassium-40	260	241	260	Filtered		DL
RD-28		Primary	10/25/01	Radium-226	3 U	---	3	Filtered		DL
RD-28		Primary	10/25/01	Thallium-208	5 U	---	5	Filtered		DL
RD-28		Primary	10/25/01	Thorium-234	5 U	---	210	Filtered		DL
RD-28		Primary	10/25/01	Uranium-235	5 U	---	5	Filtered		DL
RD-28		Primary	02/25/02	Actinium-228	5 U	3	5	Filtered		DL
RD-28		Primary	02/25/02	Bismuth-212	3 U	1.82	3	Filtered		DL
RD-28		Primary	02/25/02	Bismuth-214	3 U	1.08	3	Filtered		DL
RD-28		Primary	02/25/02	Lead-210	5 U	5	5	Filtered		DL
RD-28		Primary	02/25/02	Lead-212	3 U	3	3	Filtered		DL
RD-28		Primary	02/25/02	Lead-214	5 U	3	5	Filtered		DL
RD-28		Primary	02/25/02	Potassium-40	5 U	3	5	Filtered		DL
RD-28		Primary	02/25/02	Radium-226	3 U	1.82	3	Filtered		DL
RD-28		Primary	02/25/02	Thorium-234	5 U	5	5	Filtered		DL
RD-28		Primary	02/25/02	Uranium-235	5 U	3	5	Filtered		DL
RD-28		Primary	11/06/02	Actinium-228	21.3 U	---	21.3	Filtered		ES
RD-28		Primary	11/06/02	Bismuth-212	35 U	---	35	Filtered		ES
RD-28		Primary	11/06/02	Bismuth-214	8.81 U	---	8.81	Filtered		ES
RD-28		Primary	11/06/02	Lead-210	327 U	---	327	Filtered		ES
RD-28		Primary	11/06/02	Lead-212	6.71 U	---	6.71	Filtered		ES
RD-28		Primary	11/06/02	Lead-214	9.09 U	---	9.09	Filtered		ES
RD-28		Primary	11/06/02	Potassium-40	79.3 U	---	79.3	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-28		Primary	11/06/02	Radium-226	69.2 U	---	69.2	Filtered		ES
RD-28		Primary	11/06/02	Thorium-234	105 U	---	105	Filtered		ES
RD-28		Primary	11/06/02	Uranium-235	25.8 U	---	25.8	Filtered		ES
RD-28		Primary	02/24/03	Actinium-228	6.56 U	---	6.56	Filtered		ES
RD-28		Primary	02/24/03	Bismuth-212	10.2 U	---	10.2	Filtered		ES
RD-28		Primary	02/24/03	Bismuth-214	3.17 U	---	3.17	Filtered		ES
RD-28		Primary	02/24/03	Lead-210	97.6 U	---	97.6	Filtered		ES
RD-28		Primary	02/24/03	Lead-212	1.96 U	---	1.96	Filtered		ES
RD-28		Primary	02/24/03	Lead-214	2.84 U	---	2.84	Filtered		ES
RD-28		Primary	02/24/03	Potassium-40	39.9 U	---	39.9	Filtered		ES
RD-28		Primary	02/24/03	Radium-226	21.4 U	---	21.4	Filtered		ES
RD-28		Primary	02/24/03	Thorium-234	23.7 U	---	23.7	Filtered		ES
RD-28		Primary	02/24/03	Uranium-235	7.16 U	---	7.16	Filtered		ES
RD-28		Primary	11/14/03	Actinium-228	46.9 U	---	46.9	Filtered		ES
RD-28		Primary	11/14/03	Bismuth-212	74.2 U	---	74.2	Filtered		ES
RD-28		Primary	11/14/03	Bismuth-214	58.2 U	---	58.2	Filtered		ES
RD-28		Primary	11/14/03	Lead-210	698 U	---	698	Filtered		ES
RD-28		Primary	11/14/03	Lead-212	24.3 U	---	24.3	Filtered		ES
RD-28		Primary	11/14/03	Lead-214	18.6 U	---	18.6	Filtered		ES
RD-28		Primary	11/14/03	Potassium-40	164 U	---	164	Filtered		ES
RD-28		Primary	11/14/03	Radium-226	135 U	---	135	Filtered		ES
RD-28		Primary	11/14/03	Thallium-208	10.7 U	---	10.7	Filtered		ES
RD-28		Primary	11/14/03	Thorium-234	222 U	---	222	Filtered		ES
RD-28		Primary	11/14/03	Uranium-235	51.2 U	---	51.2	Filtered		ES
RD-28		Primary	02/23/04	Actinium-228	38.6 U	---	38.6	Filtered		ES
RD-28		Split	02/23/04	Actinium-228	-5.16 U	9.82	11	Filtered		STL
RD-28		Primary	02/23/04	Bismuth-212	65.1 U	---	65.1	Filtered		ES
RD-28		Split	02/23/04	Bismuth-212	25.7 U	20.9	37.3	Filtered		STL
RD-28		Primary	02/23/04	Bismuth-214	39.3 U	---	39.3	Filtered		ES
RD-28		Split	02/23/04	Bismuth-214	-0.951 U	4.97	5.88	Filtered		STL
RD-28		Primary	02/23/04	Lead-210	563 U	---	563	Filtered		ES
RD-28		Primary	02/23/04	Lead-212	12.4 U	---	12.4	Filtered		ES
RD-28		Split	02/23/04	Lead-212	1.7 U	3.15	3.03	Filtered		STL
RD-28		Primary	02/23/04	Lead-214	30.8 U	---	30.8	Filtered		ES
RD-28		Split	02/23/04	Lead-214	-8.79 U	5.53	4.75	Filtered		STL
RD-28		Primary	02/23/04	Potassium-40	133 U	---	133	Filtered		ES
RD-28		Split	02/23/04	Potassium-40	-75.4 U	51.4	76.2	Filtered		STL
RD-28		Primary	02/23/04	Radium-226	108 U	---	108	Filtered		ES
RD-28		Primary	02/23/04	Thallium-208	8.15 U	---	8.15	Filtered		ES
RD-28		Split	02/23/04	Thallium-208	-1.33 U	2.87	2.93	Filtered		STL
RD-28		Primary	02/23/04	Thorium-234	179 U	---	179	Filtered		ES
RD-28		Split	02/23/04	Thorium-234	271 U	237	427	Filtered		STL
RD-28		Primary	02/23/04	Uranium-235	41.3 U	---	41.3	Filtered		ES
RD-28		Split	02/23/04	Uranium-235	11.2	6	10.4	Filtered		STL
RD-29		Primary	02/26/94	Actinium-228	-9.2 U	8.8	30	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-29		Primary	02/26/94	Bismuth-214	-4.8 U	4.7	16	Filtered		LAS
RD-29		Primary	02/26/94	Lead-212	0.4 U	8.6	12	Filtered		LAS
RD-29		Primary	02/26/94	Lead-214	0.9 U	4.8	15	Filtered		LAS
RD-29		Primary	02/26/94	Potassium-40	-73 U	17	99	Filtered		LAS
RD-29		Primary	02/26/94	Radium-226	25 U	98	140	Filtered		LAS
RD-29		Primary	02/26/94	Thallium-208	1.7 U	6.6	8.5	Filtered		LAS
RD-29		Primary	02/26/94	Thorium-234	-3 U	28	130	Filtered		LAS
RD-29		Primary	02/26/94	Uranium-235	-5 U	12	34	Filtered		LAS
RD-29		Primary	05/09/01	Actinium-228	54.3 U	---	54.3	Filtered		ES
RD-29		Primary	05/09/01	Bismuth-212	91.3 U	---	91.3	Filtered		ES
RD-29		Primary	05/09/01	Bismuth-214	32.2	21	23.6	Filtered		ES
RD-29		Primary	05/09/01	Lead-210	2690 U	---	2690	Filtered		ES
RD-29		Primary	05/09/01	Lead-212	29.9 U	---	29.9	Filtered		ES
RD-29		Primary	05/09/01	Lead-214	21.6 U	---	21.6	Filtered		ES
RD-29		Primary	05/09/01	Potassium-40	223 U	---	223	Filtered		ES
RD-29		Primary	05/09/01	Radium-226	185 U	---	185	Filtered		ES
RD-29		Primary	05/09/01	Thallium-208	12 U	---	12	Filtered		ES
RD-29		Primary	05/09/01	Thorium-234	400 U	---	400	Filtered		ES
RD-29		Primary	05/09/01	Uranium-235	69.9 U	---	69.9	Filtered		ES
RD-29		Primary	05/03/02	Actinium-228	5 U	3	5	Filtered		DL
RD-29		Primary	05/03/02	Bismuth-212	3 U	3	3	Filtered		DL
RD-29		Primary	05/03/02	Bismuth-214	3 U	3	3	Filtered		DL
RD-29		Primary	05/03/02	Lead-210	5 U	5	5	Filtered		DL
RD-29		Primary	05/03/02	Lead-212	3 U	3	3	Filtered		DL
RD-29		Primary	05/03/02	Lead-214	5 U	3	5	Filtered		DL
RD-29		Primary	05/03/02	Potassium-40	5 U	3	5	Filtered		DL
RD-29		Primary	05/03/02	Radium-226	3 U	3	3	Filtered		DL
RD-29		Primary	05/03/02	Thorium-234	5 U	5	5	Filtered		DL
RD-29		Primary	05/03/02	Uranium-235	1 U	1	1	Filtered		DL
RD-29		Primary	05/13/03	Actinium-228	7 U	---	7	Filtered		ES
RD-29		Primary	05/13/03	Bismuth-212	11.1 U	---	11.1	Filtered		ES
RD-29		Primary	05/13/03	Bismuth-214	3.36 U	---	3.36	Filtered		ES
RD-29		Primary	05/13/03	Lead-210	102 U	---	102	Filtered		ES
RD-29		Primary	05/13/03	Lead-212	2.04 U	---	2.04	Filtered		ES
RD-29		Primary	05/13/03	Lead-214	2.99 U	---	2.99	Filtered		ES
RD-29		Primary	05/13/03	Potassium-40	42.2 U	---	42.2	Filtered		ES
RD-29		Primary	05/13/03	Radium-226	22.2 U	---	22.2	Filtered		ES
RD-29		Primary	05/13/03	Thorium-234	24.1 U	---	24.1	Filtered		ES
RD-29		Primary	05/13/03	Uranium-235	7.2 U	---	7.2	Filtered		ES
RD-29		Primary	02/24/04	Actinium-228	30 U	---	30	Filtered		ES
RD-29		Primary	02/24/04	Bismuth-212	56.4 U	---	56.4	Filtered		ES
RD-29		Primary	02/24/04	Bismuth-214	21.6 U	---	21.6	Filtered		ES
RD-29		Primary	02/24/04	Lead-210	1780 U	---	1780	Filtered		ES
RD-29		Primary	02/24/04	Lead-212	11 U	---	11	Filtered		ES
RD-29		Primary	02/24/04	Lead-214	33.3 U	---	33.3	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-29		Primary	02/24/04	Potassium-40	147 U	---	147	Filtered		ES
RD-29		Primary	02/24/04	Radium-226	174 U	---	174	Filtered		ES
RD-29		Primary	02/24/04	Thallium-208	7.78 U	---	7.78	Filtered		ES
RD-29		Primary	02/24/04	Thorium-234	232 U	---	232	Filtered		ES
RD-29		Primary	02/24/04	Uranium-235	43.2 U	---	43.2	Filtered		ES
RD-29		Primary	02/24/05	Potassium-40	23.9 U	---	23.9	Filtered		ES
RD-29		Primary	02/16/06	Potassium-40	52 U	---	52	Filtered		ES
RD-29		Primary	02/07/07	Potassium-40	22.4 U	---	22.4	Filtered		ES
RD-29		Primary	02/05/08	Potassium-40	32.8 U	---	32.8	Filtered		ES
RD-29		Primary	03/05/09	Potassium-40	-0.717 U	8.8	15.2	Filtered		ES
RD-29		Primary	03/05/09	Potassium-40	7.21 U	19	32	Unfiltered		ES
RD-29		Duplicate	03/05/09	Potassium-40	3.16 U	7.8	13.3	Unfiltered		ES
RD-29		Primary	03/05/09	Radium-228	-1.28 U	3.1	5.34	Filtered		ES
RD-29		Primary	03/05/09	Radium-228	0.296 U	5.5	9.33	Unfiltered		ES
RD-29		Duplicate	03/05/09	Radium-228	-0.442 U	3.2	5.43	Unfiltered		ES
RD-29		Primary	07/24/09	Potassium-40	342 U	320	544	Filtered		ES
RD-29		Primary	07/24/09	Potassium-40	-202 U	250	434	Unfiltered		ES
RD-30		Primary	02/26/94	Actinium-228	0 U	0	34	Filtered		LAS
RD-30		Primary	02/26/94	Bismuth-214	-9.2 U	4.4	16	Filtered		LAS
RD-30		Primary	02/26/94	Lead-212	-1.1 U	8.7	12	Filtered		LAS
RD-30		Primary	02/26/94	Lead-214	-2.5 U	4.6	14	Filtered		LAS
RD-30		Primary	02/26/94	Potassium-40	0 U	56	86	Filtered		LAS
RD-30		Primary	02/26/94	Radium-226	0 U	100	150	Filtered		LAS
RD-30		Primary	02/26/94	Thallium-208	-0.4 U	7.1	10	Filtered		LAS
RD-30		Primary	02/26/94	Thorium-234	13 U	29	120	Filtered		LAS
RD-30		Primary	02/26/94	Uranium-235	-4 U	12	34	Filtered		LAS
RD-30		Primary	08/09/94	Actinium-228	0 U	19	34	Filtered		LAS
RD-30		Primary	08/09/94	Bismuth-214	17	13	17	Filtered		LAS
RD-30		Primary	08/09/94	Lead-212	10.3 U	9.5	12	Filtered		LAS
RD-30		Primary	08/09/94	Lead-214	16	11	14	Filtered		LAS
RD-30		Primary	08/09/94	Potassium-40	-3 U	66	97	Filtered		LAS
RD-30		Primary	08/09/94	Radium-226	-54 U	99	150	Filtered		LAS
RD-30		Primary	08/09/94	Thallium-208	3.9 U	7	8.8	Filtered		LAS
RD-30		Primary	08/09/94	Thorium-234	0 U	57	130	Filtered		LAS
RD-30		Primary	08/09/94	Uranium-235	-19 U	18	33	Filtered		LAS
RD-30		Primary	02/08/95	Actinium-228	8 U	27	42	Filtered		LAS
RD-30		Primary	02/08/95	Bismuth-214	88	26	27	Filtered		LAS
RD-30		Primary	02/08/95	Lead-212	6 U	13	19	Filtered		LAS
RD-30		Primary	02/08/95	Lead-214	114	22	24	Filtered		LAS
RD-30		Primary	02/08/95	Potassium-40	6 U	92	140	Filtered		LAS
RD-30		Primary	02/08/95	Thallium-208	-1.6 U	9	13	Filtered		LAS
RD-30		Primary	02/08/95	Thorium-234	-34 U	84	210	Filtered		LAS
RD-30		Primary	08/19/95	Actinium-228	-16 U	11	40	Filtered		LAS
RD-30		Primary	08/19/95	Bismuth-214	79	22	21	Filtered		LAS
RD-30		Primary	08/19/95	Lead-212	4 U	10	15	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-30		Primary	08/19/95	Lead-214	68	17	20	Filtered		LAS
RD-30		Primary	08/19/95	Potassium-40	-14 U	75	120	Filtered		LAS
RD-30		Primary	08/19/95	Thallium-208	7.1 U	7.5	10	Filtered		LAS
RD-30		Primary	08/19/95	Thorium-234	-30 U	110	160	Filtered		LAS
RD-30		Primary	02/28/96	Actinium-228	14 U	28	45	Filtered		LAS
RD-30		Primary	02/28/96	Bismuth-214	428	55	24	Filtered		LAS
RD-30		Primary	02/28/96	Lead-212	0 U	12	17	Filtered		LAS
RD-30		Primary	02/28/96	Lead-214	469	45	23	Filtered		LAS
RD-30		Primary	02/28/96	Potassium-40	-54 U	97	160	Filtered		LAS
RD-30		Primary	02/28/96	Thallium-208	0.3 U	9.1	13	Filtered		LAS
RD-30		Primary	02/28/96	Thorium-234	61 U	91	250	Filtered		LAS
RD-30		Primary	08/20/96	Actinium-228	0 U	20	39	Filtered		LAS
RD-30		Primary	08/20/96	Bismuth-214	222	35	22	Filtered		LAS
RD-30		Primary	08/20/96	Lead-212	-2 U	10	16	Filtered		LAS
RD-30		Primary	08/20/96	Lead-214	207	26	19	Filtered		LAS
RD-30		Primary	08/20/96	Potassium-40	-32 U	69	120	Filtered		LAS
RD-30		Primary	08/20/96	Thallium-208	-1.5 U	6.9	10	Filtered		LAS
RD-30		Primary	08/20/96	Thorium-234	30 U	130	210	Filtered		LAS
RD-30		Primary	02/25/97	Actinium-228	13 U	25	41	Filtered		LAS
RD-30		Primary	02/25/97	Bismuth-214	327	46	23	Filtered		LAS
RD-30		Primary	02/25/97	Lead-212	5 U	11	16	Filtered		LAS
RD-30		Primary	02/25/97	Lead-214	377	38	20	Filtered		LAS
RD-30		Primary	02/25/97	Potassium-40	12 U	89	140	Filtered		LAS
RD-30		Primary	02/25/97	Thallium-208	-7.2 U	4.6	13	Filtered		LAS
RD-30		Primary	02/25/97	Thorium-234	13 U	79	220	Filtered		LAS
RD-30		Primary	08/27/97	Actinium-228	-4 U	21	36	Filtered		LAS
RD-30		Primary	08/27/97	Actinium-228	0.9 U	9.7	18	Unfiltered		LAS
RD-30		Primary	08/27/97	Bismuth-212	-61 U	26	77	Filtered		LAS
RD-30		Primary	08/27/97	Bismuth-212	16 U	23	29	Unfiltered		LAS
RD-30		Primary	08/27/97	Bismuth-214	120	21	16	Filtered		LAS
RD-30		Primary	08/27/97	Bismuth-214	81	13	11	Unfiltered		LAS
RD-30		Primary	08/27/97	Lead-210	20 U	120	190	Filtered		LAS
RD-30		Primary	08/27/97	Lead-210	320 U	390	520	Unfiltered		LAS
RD-30		Primary	08/27/97	Lead-212	-1 U	10	15	Filtered		LAS
RD-30		Primary	08/27/97	Lead-212	6.4 U	6.2	8.7	Unfiltered		LAS
RD-30		Primary	08/27/97	Lead-214	125	19	19	Filtered		LAS
RD-30		Primary	08/27/97	Lead-214	94	13	11	Unfiltered		LAS
RD-30		Primary	08/27/97	Potassium-40	31 U	69	100	Filtered		LAS
RD-30		Primary	08/27/97	Potassium-40	16 U	33	50	Unfiltered		LAS
RD-30		Primary	08/27/97	Thallium-208	1.3 U	6.4	9.1	Filtered		LAS
RD-30		Primary	08/27/97	Thallium-208	0.4 U	3.5	5.2	Unfiltered		LAS
RD-30		Primary	08/27/97	Thorium-234	-52 U	81	160	Filtered		LAS
RD-30		Primary	08/27/97	Thorium-234	15 U	62	99	Unfiltered		LAS
RD-30		Primary	05/28/98	Actinium-228	28.9 U	---	28.9	Filtered		TN
RD-30		Primary	05/28/98	Bismuth-212	52.4 U	---	52.4	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-30		Primary	05/28/98	Bismuth-214	13.7 U	---	13.7	Filtered		TN
RD-30		Primary	05/28/98	Lead-210	523 U	---	523	Filtered		TN
RD-30		Primary	05/28/98	Lead-212	10.4 U	---	10.4	Filtered		TN
RD-30		Primary	05/28/98	Lead-214	13.6 U	---	13.6	Filtered		TN
RD-30		Primary	05/28/98	Potassium-40	98.7 U	---	98.7	Filtered		TN
RD-30		Primary	05/28/98	Thallium-208	6.55 U	---	6.55	Filtered		TN
RD-30		Primary	05/28/98	Thorium-234	197 U	---	197	Filtered		TN
RD-30		Primary	08/05/98	Actinium-228	50.7 U	---	50.7	Filtered		TN
RD-30		Primary	08/05/98	Bismuth-212	80.4 U	---	80.4	Filtered		TN
RD-30		Primary	08/05/98	Bismuth-214	21.4 U	---	21.4	Filtered		TN
RD-30		Primary	08/05/98	Lead-210	439 U	---	439	Filtered		TN
RD-30		Primary	08/05/98	Lead-212	16.1 U	---	16.1	Filtered		TN
RD-30		Primary	08/05/98	Lead-214	21.7 U	---	21.7	Filtered		TN
RD-30		Primary	08/05/98	Potassium-40	144 U	---	144	Filtered		TN
RD-30		Primary	08/05/98	Thallium-208	13.6 U	---	13.6	Filtered		TN
RD-30		Primary	08/05/98	Thorium-234	290 U	---	290	Filtered		TN
RD-30		Primary	02/05/99	Actinium-228	26.6 U	---	26.6	Filtered		TN
RD-30		Primary	02/05/99	Bismuth-212	43.3 U	---	43.3	Filtered		TN
RD-30		Primary	02/05/99	Bismuth-214	20.2 U	---	20.2	Filtered		TN
RD-30		Primary	02/05/99	Lead-210	270 U	---	270	Filtered		TN
RD-30		Primary	02/05/99	Lead-212	10.5 U	---	10.5	Filtered		TN
RD-30		Primary	02/05/99	Lead-214	20.1 U	---	20.1	Filtered		TN
RD-30		Primary	02/05/99	Potassium-40	97.5 U	---	97.5	Filtered		TN
RD-30		Primary	02/05/99	Radium-226	95.2 U	---	95.2	Filtered		TN
RD-30		Primary	02/05/99	Thallium-208	6.22 U	---	6.22	Filtered		TN
RD-30		Primary	02/05/99	Thorium-234	174 U	---	174	Filtered		TN
RD-30		Primary	02/05/99	Uranium-235	31.9 U	---	31.9	Filtered		TN
RD-30		Primary	05/05/00	Actinium-228	52.6 U	---	52.6	Filtered		TR
RD-30		Primary	05/05/00	Bismuth-212	95.9 U	---	95.9	Filtered		TR
RD-30		Primary	05/05/00	Bismuth-214	36.2	24	26.1	Filtered		TR
RD-30		Primary	05/05/00	Lead-210	2920 U	---	2920	Filtered		TR
RD-30		Primary	05/05/00	Lead-212	19.3 U	---	19.3	Filtered		TR
RD-30		Primary	05/05/00	Lead-214	34.5	25	28.1	Filtered		TR
RD-30		Primary	05/05/00	Potassium-40	208 U	---	208	Filtered		TR
RD-30		Primary	05/05/00	Radium-226	177 U	---	177	Filtered		TR
RD-30		Primary	05/05/00	Thallium-208	13 U	---	13	Filtered		TR
RD-30		Primary	05/05/00	Thorium-234	406 U	---	406	Filtered		TR
RD-30		Primary	05/05/00	Uranium-235	75 U	---	75	Filtered		TR
RD-30		Primary	08/08/00	Actinium-228	69.1 U	---	69.1	Filtered		TR
RD-30		Primary	08/08/00	Bismuth-212	102 U	---	102	Filtered		TR
RD-30		Primary	08/08/00	Bismuth-214	31.2 U	---	31.2	Filtered		TR
RD-30		Primary	08/08/00	Lead-210	473 U	---	473	Filtered		TR
RD-30		Primary	08/08/00	Lead-212	18.6 U	---	18.6	Filtered		TR
RD-30		Primary	08/08/00	Lead-214	28 U	---	28	Filtered		TR
RD-30		Primary	08/08/00	Potassium-40	421 U	---	421	Filtered		TR

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-30		Primary	08/08/00	Radium-226	184 U	---	184	Filtered		TR
RD-30		Primary	08/08/00	Thallium-208	15.5 U	---	15.5	Filtered		TR
RD-30		Primary	08/08/00	Thorium-234	202 U	---	202	Filtered		TR
RD-30		Primary	08/08/00	Uranium-235	60.6 U	---	60.6	Filtered		TR
RD-30		Primary	05/09/01	Actinium-228	31.7 U	---	31.7	Filtered		ES
RD-30		Primary	05/09/01	Bismuth-212	56.9 U	---	56.9	Filtered		ES
RD-30		Primary	05/09/01	Bismuth-214	25.3 U	---	25.3	Filtered		ES
RD-30		Primary	05/09/01	Lead-210	425 U	---	425	Filtered		ES
RD-30		Primary	05/09/01	Lead-212	10.6 U	---	10.6	Filtered		ES
RD-30		Primary	05/09/01	Lead-214	15.2 U	---	15.2	Filtered		ES
RD-30		Primary	05/09/01	Potassium-40	94.5 U	---	94.5	Filtered		ES
RD-30		Primary	05/09/01	Radium-226	136 U	---	136	Filtered		ES
RD-30		Primary	05/09/01	Thallium-208	7.62 U	---	7.62	Filtered		ES
RD-30		Primary	05/09/01	Thorium-234	199 U	---	199	Filtered		ES
RD-30		Primary	05/09/01	Uranium-235	35 U	---	35	Filtered		ES
RD-30		Primary	11/09/01	Actinium-228	5 U	---	5	Filtered		DL
RD-30		Primary	11/09/01	Bismuth-212	2.8 U	1.9	5	Filtered		DL
RD-30		Primary	11/09/01	Bismuth-214	10 U	---	10	Filtered		DL
RD-30		Primary	11/09/01	Lead-210	8 U	---	8	Filtered		DL
RD-30		Primary	11/09/01	Lead-212	5 U	---	5	Filtered		DL
RD-30		Primary	11/09/01	Lead-214	5 U	---	5	Filtered		DL
RD-30		Primary	11/09/01	Potassium-40	10 U	---	10	Filtered		DL
RD-30		Primary	11/09/01	Radium-226	5 U	---	5	Filtered		DL
RD-30		Primary	11/09/01	Thallium-208	5 U	---	5	Filtered		DL
RD-30		Primary	11/09/01	Thorium-234	5 U	---	5	Filtered		DL
RD-30		Primary	11/09/01	Uranium-235	5 U	---	5	Filtered		DL
RD-30		Primary	03/11/02	Actinium-228	3 U	3	3	Filtered		DL
RD-30		Primary	03/11/02	Bismuth-212	3 U	3	3	Filtered		DL
RD-30		Primary	03/11/02	Bismuth-214	3 U	3	3	Filtered		DL
RD-30		Primary	03/11/02	Lead-210	3 U	5	3	Filtered		DL
RD-30		Primary	03/11/02	Lead-212	3 U	3	3	Filtered		DL
RD-30		Primary	03/11/02	Lead-214	5 U	3	5	Filtered		DL
RD-30		Primary	03/11/02	Potassium-40	5 U	3	5	Filtered		DL
RD-30		Primary	03/11/02	Radium-226	3 U	3	3	Filtered		DL
RD-30		Primary	03/11/02	Thorium-234	5 U	5	5	Filtered		DL
RD-30		Primary	03/11/02	Uranium-235	5 U	3	5	Filtered		DL
RD-30		Primary	08/30/02	Actinium-228	41.7 U	---	41.7	Filtered		ES
RD-30		Primary	08/30/02	Bismuth-212	67 U	---	67	Filtered		ES
RD-30		Primary	08/30/02	Bismuth-214	25.3	20	22.8	Filtered		ES
RD-30		Primary	08/30/02	Lead-210	654 U	---	654	Filtered		ES
RD-30		Primary	08/30/02	Lead-212	13.6 U	---	13.6	Filtered		ES
RD-30		Primary	08/30/02	Lead-214	32.2	22	19.7	Filtered		ES
RD-30		Primary	08/30/02	Potassium-40	152 U	---	152	Filtered		ES
RD-30		Primary	08/30/02	Radium-226	136 U	---	136	Filtered		ES
RD-30		Primary	08/30/02	Thorium-234	207 U	---	207	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-30		Primary	08/30/02	Uranium-235	52.5 U	---	52.5	Filtered		ES
RD-30		Primary	02/07/03	Actinium-228	57.3 U	---	57.3	Filtered		ES
RD-30		Primary	02/07/03	Bismuth-212	104 U	---	104	Filtered		ES
RD-30		Primary	02/07/03	Bismuth-214	25.4 U	---	25.4	Filtered		ES
RD-30		Primary	02/07/03	Lead-210	858 U	---	858	Filtered		ES
RD-30		Primary	02/07/03	Lead-212	18.3 U	---	18.3	Filtered		ES
RD-30		Primary	02/07/03	Lead-214	22.8 U	---	22.8	Filtered		ES
RD-30		Primary	02/07/03	Potassium-40	171 U	---	171	Filtered		ES
RD-30		Primary	02/07/03	Radium-226	182 U	---	182	Filtered		ES
RD-30		Primary	02/07/03	Thorium-234	308 U	---	308	Filtered		ES
RD-30		Primary	02/07/03	Uranium-235	52.6 U	---	52.6	Filtered		ES
RD-30		Primary	11/14/03	Actinium-228	46.9 U	---	46.9	Filtered		ES
RD-30		Primary	11/14/03	Bismuth-212	72.5 U	---	72.5	Filtered		ES
RD-30		Primary	11/14/03	Bismuth-214	46.7 U	---	46.7	Filtered		ES
RD-30		Primary	11/14/03	Lead-210	2550 U	---	2550	Filtered		ES
RD-30		Primary	11/14/03	Lead-212	18 U	---	18	Filtered		ES
RD-30		Primary	11/14/03	Lead-214	48.2 U	---	48.2	Filtered		ES
RD-30		Primary	11/14/03	Potassium-40	321 U	---	321	Filtered		ES
RD-30		Primary	11/14/03	Radium-226	367 U	---	367	Filtered		ES
RD-30		Primary	11/14/03	Thallium-208	12.5 U	---	12.5	Filtered		ES
RD-30		Primary	11/14/03	Thorium-234	341 U	---	341	Filtered		ES
RD-30		Primary	11/14/03	Uranium-235	66.8 U	---	66.8	Filtered		ES
RD-30		Primary	02/24/04	Actinium-228	44 U	---	44	Filtered		ES
RD-30		Primary	02/24/04	Bismuth-212	76.1 U	---	76.1	Filtered		ES
RD-30		Primary	02/24/04	Bismuth-214	51.9 U	---	51.9	Filtered		ES
RD-30		Primary	02/24/04	Lead-210	640 U	---	640	Filtered		ES
RD-30		Primary	02/24/04	Lead-212	31.3 U	---	31.3	Filtered		ES
RD-30		Primary	02/24/04	Lead-214	54.2 U	---	54.2	Filtered		ES
RD-30		Primary	02/24/04	Potassium-40	161 U	---	161	Filtered		ES
RD-30		Primary	02/24/04	Radium-226	126 U	---	126	Filtered		ES
RD-30		Primary	02/24/04	Thallium-208	10.1 U	---	10.1	Filtered		ES
RD-30		Primary	02/24/04	Thorium-234	205 U	---	205	Filtered		ES
RD-30		Primary	02/24/04	Uranium-235	47.8 U	---	47.8	Filtered		ES
RD-30		Primary	08/10/04	Actinium-228	30.9 U	---	30.9	Filtered		ES
RD-30		Primary	08/10/04	Bismuth-212	49.1 U	---	49.1	Filtered		ES
RD-30		Primary	08/10/04	Bismuth-214	32.1	17	15.9	Filtered		ES
RD-30		Primary	08/10/04	Lead-210	423 U	---	423	Filtered		ES
RD-30		Primary	08/10/04	Lead-212	11.4 J	10	11.2	Filtered		ES
RD-30		Primary	08/10/04	Lead-214	41.1	15	15.5	Filtered		ES
RD-30		Primary	08/10/04	Potassium-40	82.3 U	---	82.3	Filtered		ES
RD-30		Primary	08/10/04	Radium-226	104 U	---	104	Filtered		ES
RD-30		Primary	08/10/04	Thallium-208	7.54 U	---	7.54	Filtered		ES
RD-30		Primary	08/10/04	Thorium-234	170 U	---	170	Filtered		ES
RD-30		Primary	08/10/04	Uranium-235	34.5 U	---	34.5	Filtered		ES
RD-30		Primary	08/29/05	Potassium-40	24.6 U	---	24.6	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-30		Split	08/29/05	Potassium-40	-1.42 U	26	56.5	Filtered		STL
RD-30		Primary	02/17/06	Potassium-40	46.4 U	---	46.4	Filtered		ES
RD-30		Primary	08/09/06	Potassium-40	23.2 U	---	23.2	Filtered		ES
RD-30		Split	08/09/06	Potassium-40	-35.5 U	21	30.2	Filtered		STL
RD-30		Primary	05/24/07	Potassium-40	25.6 U	---	25.6	Filtered		ES
RD-30		Primary	08/21/07	Potassium-40	7.76 U	---	7.76	Filtered		ES
RD-30		Primary	02/06/08	Potassium-40	10 U	---	10	Filtered		ES
RD-30		Primary	08/13/08	Aluminum-26	0.877 U	---	0.877	Filtered		ES
RD-30		Primary	08/13/08	Potassium-40	9.88 U	---	9.88	Filtered		ES
RD-33A		Primary	02/27/94	Actinium-228	-9.2 U	4.1	31	Filtered		LAS
RD-33A		Primary	02/27/94	Bismuth-214	-5.5 U	5.5	17	Filtered		LAS
RD-33A		Primary	02/27/94	Lead-212	7.2 U	8.9	12	Filtered		LAS
RD-33A		Primary	02/27/94	Lead-214	5.4 U	4.9	15	Filtered		LAS
RD-33A		Primary	02/27/94	Potassium-40	-4 U	58	90	Filtered		LAS
RD-33A		Primary	02/27/94	Radium-226	-24 U	97	140	Filtered		LAS
RD-33A		Primary	02/27/94	Thallium-208	-4.4 U	6.5	9.7	Filtered		LAS
RD-33A		Primary	02/27/94	Thorium-234	4 U	28	120	Filtered		LAS
RD-33A		Primary	02/27/94	Uranium-235	-18.6 U	8.9	34	Filtered		LAS
RD-33A		Primary	05/10/94	Actinium-228	0 U	10	18	Filtered		LAS
RD-33A		Primary	05/10/94	Actinium-228	-5 U	12	31	Unfiltered		LAS
RD-33A		Primary	05/10/94	Bismuth-214	49	10	11	Filtered		LAS
RD-33A		Primary	05/10/94	Bismuth-214	73	17	15	Unfiltered		LAS
RD-33A		Primary	05/10/94	Lead-212	12.7	6.6	8.4	Filtered		LAS
RD-33A		Primary	05/10/94	Lead-212	9.5 U	9.7	13	Unfiltered		LAS
RD-33A		Primary	05/10/94	Lead-214	52.5	8.9	9.7	Filtered		LAS
RD-33A		Primary	05/10/94	Lead-214	69	14	14	Unfiltered		LAS
RD-33A		Primary	05/10/94	Potassium-40	-14 U	36	59	Filtered		LAS
RD-33A		Primary	05/10/94	Potassium-40	-3 U	62	95	Unfiltered		LAS
RD-33A		Primary	05/10/94	Thallium-208	5.5	4.2	5.5	Filtered		LAS
RD-33A		Primary	05/10/94	Thallium-208	1 U	7.2	9.8	Unfiltered		LAS
RD-33A		Primary	05/10/94	Thorium-234	-7 U	51	140	Filtered		LAS
RD-33A		Primary	05/10/94	Thorium-234	27 U	57	130	Unfiltered		LAS
RD-33A		Primary	08/18/94	Actinium-228	-12 U	85	160	Filtered		LAS
RD-33A		Primary	08/18/94	Bismuth-214	37 U	58	87	Filtered		LAS
RD-33A		Primary	08/18/94	Lead-212	0 U	43	61	Filtered		LAS
RD-33A		Primary	08/18/94	Lead-214	-4 U	44	75	Filtered		LAS
RD-33A		Primary	08/18/94	Potassium-40	-20 U	280	460	Filtered		LAS
RD-33A		Primary	08/18/94	Radium-226	-850 U	410	570	Filtered		LAS
RD-33A		Primary	08/18/94	Thallium-208	13 U	31	43	Filtered		LAS
RD-33A		Primary	08/18/94	Thorium-234	110 U	270	700	Filtered		LAS
RD-33A		Primary	08/18/94	Uranium-235	0 U	110	140	Filtered		LAS
RD-33A		Primary	02/07/95	Actinium-228	20 U	23	37	Filtered		LAS
RD-33A		Primary	02/07/95	Bismuth-214	13 U	15	21	Filtered		LAS
RD-33A		Primary	02/07/95	Lead-212	3 U	10	15	Filtered		LAS
RD-33A		Primary	02/07/95	Lead-214	7 U	12	19	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33A		Primary	02/07/95	Potassium-40	-35 U	69	120	Filtered		LAS
RD-33A		Primary	02/07/95	Thallium-208	0.9 U	6.8	9.7	Filtered		LAS
RD-33A		Primary	02/07/95	Thorium-234	-1 U	68	160	Filtered		LAS
RD-33A		Primary	08/09/95	Actinium-228	-9 U	11	38	Filtered		LAS
RD-33A		Primary	08/09/95	Bismuth-214	9 U	13	18	Filtered		LAS
RD-33A		Primary	08/09/95	Lead-212	2.6 U	9.2	13	Filtered		LAS
RD-33A		Primary	08/09/95	Lead-214	0 U	11	18	Filtered		LAS
RD-33A		Primary	08/09/95	Potassium-40	44 U	69	94	Filtered		LAS
RD-33A		Primary	08/09/95	Thallium-208	-0.2 U	6.9	10	Filtered		LAS
RD-33A		Primary	08/09/95	Thorium-234	33 U	66	150	Filtered		LAS
RD-33A		Primary	02/19/96	Actinium-228	3 U	22	38	Filtered		LAS
RD-33A		Primary	02/19/96	Bismuth-214	35	16	18	Filtered		LAS
RD-33A		Primary	02/19/96	Lead-212	2 U	10	15	Filtered		LAS
RD-33A		Primary	02/19/96	Lead-214	23	13	18	Filtered		LAS
RD-33A		Primary	02/19/96	Potassium-40	37 U	79	120	Filtered		LAS
RD-33A		Primary	02/19/96	Thallium-208	-1.4 U	7.8	12	Filtered		LAS
RD-33A		Primary	02/19/96	Thorium-234	-14 U	71	180	Filtered		LAS
RD-33A		Primary	08/23/96	Actinium-228	-3 U	22	42	Filtered		LAS
RD-33A		Primary	08/23/96	Bismuth-214	109	24	22	Filtered		LAS
RD-33A		Primary	08/23/96	Lead-212	12 U	10	13	Filtered		LAS
RD-33A		Primary	08/23/96	Lead-214	130	21	20	Filtered		LAS
RD-33A		Primary	08/23/96	Potassium-40	-24 U	86	150	Filtered		LAS
RD-33A		Primary	08/23/96	Thallium-208	4.9 U	7.3	9.6	Filtered		LAS
RD-33A		Primary	08/23/96	Thorium-234	-18 U	76	210	Filtered		LAS
RD-33A		Primary	02/25/97	Actinium-228	-5 U	23	42	Filtered		LAS
RD-33A		Primary	02/25/97	Bismuth-214	58	19	20	Filtered		LAS
RD-33A		Primary	02/25/97	Lead-212	8 U	10	14	Filtered		LAS
RD-33A		Primary	02/25/97	Lead-214	43	15	19	Filtered		LAS
RD-33A		Primary	02/25/97	Potassium-40	15 U	82	130	Filtered		LAS
RD-33A		Primary	02/25/97	Thallium-208	1.2 U	7	10	Filtered		LAS
RD-33A		Primary	02/25/97	Thorium-234	15 U	72	190	Filtered		LAS
RD-33A		Primary	08/27/97	Actinium-228	-16 U	17	38	Filtered		LAS
RD-33A		Primary	08/27/97	Actinium-228	7 U	23	40	Unfiltered		LAS
RD-33A		Primary	08/27/97	Bismuth-212	6 U	43	77	Filtered		LAS
RD-33A		Primary	08/27/97	Bismuth-212	-8 U	37	70	Unfiltered		LAS
RD-33A		Primary	08/27/97	Bismuth-214	34	16	18	Filtered		LAS
RD-33A		Primary	08/27/97	Bismuth-214	29	15	17	Unfiltered		LAS
RD-33A		Primary	08/27/97	Lead-210	80 U	110	160	Filtered		LAS
RD-33A		Primary	08/27/97	Lead-210	100 U	110	160	Unfiltered		LAS
RD-33A		Primary	08/27/97	Lead-212	8.5 U	9.9	13	Filtered		LAS
RD-33A		Primary	08/27/97	Lead-212	-1 U	10	15	Unfiltered		LAS
RD-33A		Primary	08/27/97	Lead-214	40	14	17	Filtered		LAS
RD-33A		Primary	08/27/97	Lead-214	24	13	18	Unfiltered		LAS
RD-33A		Primary	08/27/97	Potassium-40	1 U	67	110	Filtered		LAS
RD-33A		Primary	08/27/97	Potassium-40	18 U	73	110	Unfiltered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33A		Primary	08/27/97	Thallium-208	7.8 U	7.3	8.9	Filtered		LAS
RD-33A		Primary	08/27/97	Thallium-208	-0.4 U	6.7	9.7	Unfiltered		LAS
RD-33A		Primary	08/27/97	Thorium-234	-4 U	73	140	Filtered		LAS
RD-33A		Primary	08/27/97	Thorium-234	-35 U	73	140	Unfiltered		LAS
RD-33A		Primary	05/27/98	Actinium-228	72.9 U	---	72.9	Filtered		TN
RD-33A		Primary	05/27/98	Bismuth-212	115 U	---	115	Filtered		TN
RD-33A		Primary	05/27/98	Bismuth-214	28.9 U	---	28.9	Filtered		TN
RD-33A		Primary	05/27/98	Lead-210	797 U	---	797	Filtered		TN
RD-33A		Primary	05/27/98	Lead-212	21.8 U	---	21.8	Filtered		TN
RD-33A		Primary	05/27/98	Lead-214	26.9 U	---	26.9	Filtered		TN
RD-33A		Primary	05/27/98	Potassium-40	264 U	---	264	Filtered		TN
RD-33A		Primary	05/27/98	Thallium-208	14.6 U	---	14.6	Filtered		TN
RD-33A		Primary	05/27/98	Thorium-234	318 U	---	318	Filtered		TN
RD-33A		Primary	08/17/98	Actinium-228	46.2 U	---	46.2	Filtered		TN
RD-33A		Primary	08/17/98	Bismuth-212	71.1 U	---	71.1	Filtered		TN
RD-33A		Primary	08/17/98	Bismuth-214	22.7 U	---	22.7	Filtered		TN
RD-33A		Primary	08/17/98	Lead-210	491 U	---	491	Filtered		TN
RD-33A		Primary	08/17/98	Lead-212	17.8 U	---	17.8	Filtered		TN
RD-33A		Primary	08/17/98	Lead-214	23.1 U	---	23.1	Filtered		TN
RD-33A		Primary	08/17/98	Potassium-40	127 U	---	127	Filtered		TN
RD-33A		Primary	08/17/98	Thallium-208	12 U	---	12	Filtered		TN
RD-33A		Primary	08/17/98	Thorium-234	290 U	---	290	Filtered		TN
RD-33A		Primary	02/03/99	Actinium-228	28 U	---	28	Filtered		TN
RD-33A		Primary	02/03/99	Bismuth-212	47.7 U	---	47.7	Filtered		TN
RD-33A		Primary	02/03/99	Bismuth-214	13.1 U	---	13.1	Filtered		TN
RD-33A		Primary	02/03/99	Lead-210	302 U	---	302	Filtered		TN
RD-33A		Primary	02/03/99	Lead-212	11.2 U	---	11.2	Filtered		TN
RD-33A		Primary	02/03/99	Lead-214	12.3 U	---	12.3	Filtered		TN
RD-33A		Primary	02/03/99	Potassium-40	93.5 U	---	93.5	Filtered		TN
RD-33A		Primary	02/03/99	Radium-226	106 U	---	106	Filtered		TN
RD-33A		Primary	02/03/99	Thallium-208	6.84 U	---	6.84	Filtered		TN
RD-33A		Primary	02/03/99	Thorium-234	190 U	---	190	Filtered		TN
RD-33A		Primary	02/03/99	Uranium-235	32.8 U	---	32.8	Filtered		TN
RD-33A		Primary	02/09/00	Actinium-228	44.9 U	---	44.9	Filtered		TR
RD-33A		Primary	02/09/00	Bismuth-212	58 U	---	58	Filtered		TR
RD-33A		Primary	02/09/00	Bismuth-214	19.7 U	---	19.7	Filtered		TR
RD-33A		Primary	02/09/00	Lead-210	1440 U	---	1440	Filtered		TR
RD-33A		Primary	02/09/00	Lead-212	18.2 U	---	18.2	Filtered		TR
RD-33A		Primary	02/09/00	Lead-214	22.5 U	---	22.5	Filtered		TR
RD-33A		Primary	02/09/00	Potassium-40	335 U	---	335	Filtered		TR
RD-33A		Primary	02/09/00	Radium-226	188 U	---	188	Filtered		TR
RD-33A		Primary	02/09/00	Thallium-208	10.9 U	---	10.9	Filtered		TR
RD-33A		Primary	02/09/00	Thorium-234	327 U	---	327	Filtered		TR
RD-33A		Primary	02/09/00	Uranium-235	67.2 U	---	67.2	Filtered		TR
RD-33A		Primary	05/14/01	Actinium-228	47.4 U	---	47.4	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33A		Primary	05/14/01	Bismuth-212	80.1 U	---	80.1	Filtered		ES
RD-33A		Primary	05/14/01	Bismuth-214	21 U	---	21	Filtered		ES
RD-33A		Primary	05/14/01	Lead-210	2220 U	---	2220	Filtered		ES
RD-33A		Primary	05/14/01	Lead-212	15.2 U	---	15.2	Filtered		ES
RD-33A		Primary	05/14/01	Lead-214	19.6 U	---	19.6	Filtered		ES
RD-33A		Primary	05/14/01	Potassium-40	198 U	---	198	Filtered		ES
RD-33A		Primary	05/14/01	Radium-226	150 U	---	150	Filtered		ES
RD-33A		Primary	05/14/01	Thallium-208	10.4 U	---	10.4	Filtered		ES
RD-33A		Primary	05/14/01	Thorium-234	343 U	---	343	Filtered		ES
RD-33A		Primary	05/14/01	Uranium-235	59 U	---	59	Filtered		ES
RD-33A		Primary	02/15/02	Actinium-228	5 U	5	5	Filtered		DL
RD-33A		Primary	02/15/02	Bismuth-212	5 U	3	5	Filtered		DL
RD-33A		Primary	02/15/02	Bismuth-214	5 U	4	5	Filtered		DL
RD-33A		Primary	02/15/02	Lead-210	3 U	3	3	Filtered		DL
RD-33A		Primary	02/15/02	Lead-212	5 U	3	5	Filtered		DL
RD-33A		Primary	02/15/02	Lead-214	5 U	3	5	Filtered		DL
RD-33A		Primary	02/15/02	Potassium-40	38.59	6.2	8	Filtered		DL
RD-33A		Primary	02/15/02	Radium-226	5 U	3	5	Filtered		DL
RD-33A		Primary	02/15/02	Thorium-234	5 U	5	5	Filtered		DL
RD-33A		Primary	02/15/02	Uranium-235	5 U	3	5	Filtered		DL
RD-33A	Z04	Primary	01/30/03	Actinium-228	9.02 U	---	9.02	Filtered		ES
RD-33A	Z04	Primary	01/30/03	Bismuth-212	15 U	---	15	Filtered		ES
RD-33A	Z04	Primary	01/30/03	Bismuth-214	4.01 U	---	4.01	Filtered		ES
RD-33A	Z04	Primary	01/30/03	Lead-210	452 U	---	452	Filtered		ES
RD-33A	Z04	Primary	01/30/03	Lead-212	2.8 U	---	2.8	Filtered		ES
RD-33A	Z04	Primary	01/30/03	Lead-214	3.91 U	---	3.91	Filtered		ES
RD-33A	Z04	Primary	01/30/03	Potassium-40	41.5 U	---	41.5	Filtered		ES
RD-33A	Z04	Primary	01/30/03	Radium-226	31.4 U	---	31.4	Filtered		ES
RD-33A	Z04	Primary	01/30/03	Thorium-234	62.6 U	---	62.6	Filtered		ES
RD-33A	Z04	Primary	01/30/03	Uranium-235	12.2 U	---	12.2	Filtered		ES
RD-33A	Z02	Primary	11/15/04	Potassium-40	52.2 U	---	52.2	Filtered		ES
RD-33A	Z03	Primary	02/17/05	Potassium-40	41.5 U	---	41.5	Filtered		ES
RD-33A	Z02	Primary	02/17/06	Potassium-40	18.7 U	---	18.7	Filtered		ES
RD-33A	Z02	Primary	02/08/07	Potassium-40	16.3 U	---	16.3	Filtered		ES
RD-33A	Z02	Primary	02/07/08	Potassium-40	18.4 U	---	18.4	Filtered		ES
RD-33A	Z02	Primary	02/25/09	Potassium-40	-41.9 U	22	38	Filtered		ES
RD-33A	Z02	Primary	02/25/09	Potassium-40	1.01 U	9.3	16	Unfiltered		ES
RD-33A	Z02	Primary	02/25/09	Radium-228	-1.48 U	5.1	8.71	Filtered		ES
RD-33A	Z02	Primary	02/25/09	Radium-228	2.37 U	3.2	5.34	Unfiltered		ES
RD-33A	Z02	Primary	07/17/09	Potassium-40	53.7 U	95	161	Filtered		ES
RD-33A	Z02	Primary	07/17/09	Potassium-40	10.6 U	55	94	Unfiltered		ES
RD-33B		Reanalysis of Primary	02/27/94	Actinium-228	-4.8 U	7.9	15	Filtered		LAS
RD-33B		Reanalysis of Primary	02/27/94	Bismuth-214	0.6 U	5.2	7.9	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV
RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33B		Reanalysis of Primary	02/27/94	Lead-212	1 U	4.8	6.8	Filtered		LAS
RD-33B		Reanalysis of Primary	02/27/94	Lead-214	4.7 U	4.8	4.6	Filtered		LAS
RD-33B		Reanalysis of Primary	02/27/94	Potassium-40	-20 U	26	45	Filtered		LAS
RD-33B		Reanalysis of Primary	02/27/94	Radium-226	-12 U	48	67	Filtered		LAS
RD-33B		Reanalysis of Primary	02/27/94	Thallium-208	-1.2 U	2.9	4.3	Filtered		LAS
RD-33B		Reanalysis of Primary	02/27/94	Thorium-234	18 U	37	110	Filtered		LAS
RD-33B		Reanalysis of Primary	02/27/94	Uranium-235	-10.1 U	6.5	20	Filtered		LAS
RD-33B		Primary	05/10/94	Actinium-228	-3 U	9.1	30	Filtered		LAS
RD-33B		Primary	05/10/94	Actinium-228	-3 U	19	33	Unfiltered		LAS
RD-33B		Primary	05/10/94	Bismuth-214	6.9 U	8.3	15	Filtered		LAS
RD-33B		Primary	05/10/94	Bismuth-214	44	16	16	Unfiltered		LAS
RD-33B		Primary	05/10/94	Lead-212	4.3 U	9.2	13	Filtered		LAS
RD-33B		Primary	05/10/94	Lead-212	5.8 U	9.4	13	Unfiltered		LAS
RD-33B		Primary	05/10/94	Lead-214	24	11	14	Filtered		LAS
RD-33B		Primary	05/10/94	Lead-214	38	12	15	Unfiltered		LAS
RD-33B		Primary	05/10/94	Potassium-40	-25 U	61	99	Filtered		LAS
RD-33B		Primary	05/10/94	Potassium-40	71 U	73	95	Unfiltered		LAS
RD-33B		Primary	05/10/94	Thallium-208	-1.7 U	6.6	9.3	Filtered		LAS
RD-33B		Primary	05/10/94	Thallium-208	5.6 U	7	8.9	Unfiltered		LAS
RD-33B		Primary	05/10/94	Thorium-234	-8 U	55	120	Filtered		LAS
RD-33B		Primary	05/10/94	Thorium-234	37 U	57	130	Unfiltered		LAS
RD-33B		Primary	08/18/94	Actinium-228	0 U	100	190	Filtered		LAS
RD-33B		Primary	08/18/94	Bismuth-214	10 U	64	100	Filtered		LAS
RD-33B		Primary	08/18/94	Lead-212	-21 U	50	78	Filtered		LAS
RD-33B		Primary	08/18/94	Lead-214	-15 U	52	91	Filtered		LAS
RD-33B		Primary	08/18/94	Potassium-40	60 U	330	570	Filtered		LAS
RD-33B		Primary	08/18/94	Radium-226	90 U	500	730	Filtered		LAS
RD-33B		Primary	08/18/94	Thallium-208	0 U	37	57	Filtered		LAS
RD-33B		Primary	08/18/94	Thorium-234	-20 U	320	860	Filtered		LAS
RD-33B		Primary	08/18/94	Uranium-235	-50 U	110	200	Filtered		LAS
RD-33B		Primary	02/07/95	Actinium-228	-9 U	13	45	Filtered		LAS
RD-33B		Primary	02/07/95	Bismuth-214	6 U	13	20	Filtered		LAS
RD-33B		Primary	02/07/95	Lead-212	2 U	10	15	Filtered		LAS
RD-33B		Primary	02/07/95	Lead-214	-3 U	10	17	Filtered		LAS
RD-33B		Primary	02/07/95	Potassium-40	38 U	87	130	Filtered		LAS
RD-33B		Primary	02/07/95	Thallium-208	-0.3 U	7.4	11	Filtered		LAS
RD-33B		Primary	02/07/95	Thorium-234	-10 U	110	170	Filtered		LAS
RD-33B		Primary	08/09/95	Actinium-228	6 U	20	39	Filtered		LAS
RD-33B		Primary	08/09/95	Bismuth-214	0 U	13	21	Filtered		LAS
RD-33B		Primary	08/09/95	Lead-212	2.4 U	9.7	14	Filtered		LAS
RD-33B		Primary	08/09/95	Lead-214	-1.4 U	9.1	18	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV
RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33B		Primary	08/09/95	Potassium-40	-10 U	75	120	Filtered		LAS
RD-33B		Primary	08/09/95	Thallium-208	0.3 U	6.7	9.7	Filtered		LAS
RD-33B		Primary	08/09/95	Thorium-234	10 U	100	160	Filtered		LAS
RD-33B		Primary	02/19/96	Actinium-228	-1 U	21	40	Filtered		LAS
RD-33B		Primary	02/19/96	Bismuth-214	13 U	14	20	Filtered		LAS
RD-33B		Primary	02/19/96	Lead-212	14	10	13	Filtered		LAS
RD-33B		Primary	02/19/96	Lead-214	9 U	12	19	Filtered		LAS
RD-33B		Primary	02/19/96	Potassium-40	40 U	79	110	Filtered		LAS
RD-33B		Primary	02/19/96	Thallium-208	-0.8 U	7.3	11	Filtered		LAS
RD-33B		Primary	02/19/96	Thorium-234	-37 U	69	190	Filtered		LAS
RD-33B		Primary	08/23/96	Actinium-228	6 U	22	38	Filtered		LAS
RD-33B		Primary	08/23/96	Bismuth-214	24	16	20	Filtered		LAS
RD-33B		Primary	08/23/96	Lead-212	1 U	10	15	Filtered		LAS
RD-33B		Primary	08/23/96	Lead-214	29	13	18	Filtered		LAS
RD-33B		Primary	08/23/96	Potassium-40	11 U	64	100	Filtered		LAS
RD-33B		Primary	08/23/96	Thallium-208	6.5 U	6.8	8.6	Filtered		LAS
RD-33B		Primary	08/23/96	Thorium-234	6 U	69	180	Filtered		LAS
RD-33B		Primary	02/25/97	Actinium-228	9 U	23	42	Filtered		LAS
RD-33B		Primary	02/25/97	Bismuth-214	3 U	13	19	Filtered		LAS
RD-33B		Primary	02/25/97	Lead-212	0.3 U	8.5	12	Filtered		LAS
RD-33B		Primary	02/25/97	Lead-214	-3 U	12	20	Filtered		LAS
RD-33B		Primary	02/25/97	Potassium-40	2 U	66	100	Filtered		LAS
RD-33B		Primary	02/25/97	Thallium-208	1 U	6.1	8.7	Filtered		LAS
RD-33B		Primary	02/25/97	Thorium-234	-10 U	110	170	Filtered		LAS
RD-33B		Primary	08/22/97	Actinium-228	11 U	22	38	Filtered		LAS
RD-33B		Primary	08/22/97	Bismuth-212	14 U	46	60	Filtered		LAS
RD-33B		Primary	08/22/97	Bismuth-214	-15.5 U	9.9	17	Filtered		LAS
RD-33B		Primary	08/22/97	Lead-210	-50 U	100	170	Filtered		LAS
RD-33B		Primary	08/22/97	Lead-212	0.1 U	8.6	12	Filtered		LAS
RD-33B		Primary	08/22/97	Lead-214	8 U	11	18	Filtered		LAS
RD-33B		Primary	08/22/97	Potassium-40	-16 U	66	120	Filtered		LAS
RD-33B		Primary	08/22/97	Thallium-208	-3.2 U	6.2	10	Filtered		LAS
RD-33B		Primary	08/22/97	Thorium-234	-47 U	69	140	Filtered		LAS
RD-33B		Primary	05/27/98	Actinium-228	29.1 U	---	29.1	Filtered		TN
RD-33B		Primary	05/27/98	Bismuth-212	41.3 U	---	41.3	Filtered		TN
RD-33B		Primary	05/27/98	Bismuth-214	11.9 U	---	11.9	Filtered		TN
RD-33B		Primary	05/27/98	Lead-210	272 U	---	272	Filtered		TN
RD-33B		Primary	05/27/98	Lead-212	15.6 U	---	15.6	Filtered		TN
RD-33B		Primary	05/27/98	Lead-214	13.4 U	---	13.4	Filtered		TN
RD-33B		Primary	05/27/98	Potassium-40	75.6 U	---	75.6	Filtered		TN
RD-33B		Primary	05/27/98	Thallium-208	6.38 U	---	6.38	Filtered		TN
RD-33B		Primary	05/27/98	Thorium-234	166 U	---	166	Filtered		TN
RD-33B		Primary	08/17/98	Actinium-228	47 U	---	47	Filtered		TN
RD-33B		Primary	08/17/98	Bismuth-212	72.2 U	---	72.2	Filtered		TN
RD-33B		Primary	08/17/98	Bismuth-214	29.7 U	---	29.7	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33B		Primary	08/17/98	Lead-210	617 U	---	617	Filtered		TN
RD-33B		Primary	08/17/98	Lead-212	22.4 U	---	22.4	Filtered		TN
RD-33B		Primary	08/17/98	Lead-214	29.7 U	---	29.7	Filtered		TN
RD-33B		Primary	08/17/98	Potassium-40	186 U	---	186	Filtered		TN
RD-33B		Primary	08/17/98	Thallium-208	14.5 U	---	14.5	Filtered		TN
RD-33B		Primary	08/17/98	Thorium-234	362 U	---	362	Filtered		TN
RD-33B		Primary	02/03/99	Actinium-228	19.7 U	---	19.7	Filtered		TN
RD-33B		Primary	02/03/99	Bismuth-212	34.6 U	---	34.6	Filtered		TN
RD-33B		Primary	02/03/99	Bismuth-214	9.07 U	---	9.07	Filtered		TN
RD-33B		Primary	02/03/99	Lead-210	226 U	---	226	Filtered		TN
RD-33B		Primary	02/03/99	Lead-212	7.91 U	---	7.91	Filtered		TN
RD-33B		Primary	02/03/99	Lead-214	9.12 U	---	9.12	Filtered		TN
RD-33B		Primary	02/03/99	Potassium-40	71.7 U	---	71.7	Filtered		TN
RD-33B		Primary	02/03/99	Radium-226	76.3 U	---	76.3	Filtered		TN
RD-33B		Primary	02/03/99	Thallium-208	4.48 U	---	4.48	Filtered		TN
RD-33B		Primary	02/03/99	Thorium-234	136 U	---	136	Filtered		TN
RD-33B		Primary	02/03/99	Uranium-235	25.4 U	---	25.4	Filtered		TN
RD-33B		Primary	02/09/00	Actinium-228	48.6 U	---	48.6	Filtered		TR
RD-33B		Primary	02/09/00	Bismuth-212	88.2 U	---	88.2	Filtered		TR
RD-33B		Primary	02/09/00	Bismuth-214	22 U	---	22	Filtered		TR
RD-33B		Primary	02/09/00	Lead-210	280 U	---	280	Filtered		TR
RD-33B		Primary	02/09/00	Lead-212	12.3 U	---	12.3	Filtered		TR
RD-33B		Primary	02/09/00	Lead-214	18 U	---	18	Filtered		TR
RD-33B		Primary	02/09/00	Potassium-40	232 U	---	232	Filtered		TR
RD-33B		Primary	02/09/00	Radium-226	119 U	---	119	Filtered		TR
RD-33B		Primary	02/09/00	Thallium-208	11.4 U	---	11.4	Filtered		TR
RD-33B		Primary	02/09/00	Thorium-234	148 U	---	148	Filtered		TR
RD-33B		Primary	02/09/00	Uranium-235	35.9 U	---	35.9	Filtered		TR
RD-33B		Primary	02/17/01	Actinium-228	58.5 U	---	58.5	Filtered		ES
RD-33B		Primary	02/17/01	Bismuth-212	92 U	---	92	Filtered		ES
RD-33B		Primary	02/17/01	Bismuth-214	29.2 U	---	29.2	Filtered		ES
RD-33B		Primary	02/17/01	Lead-210	435 U	---	435	Filtered		ES
RD-33B		Primary	02/17/01	Lead-212	18.8 U	---	18.8	Filtered		ES
RD-33B		Primary	02/17/01	Lead-214	26.4 U	---	26.4	Filtered		ES
RD-33B		Primary	02/17/01	Potassium-40	386 U	---	386	Filtered		ES
RD-33B		Primary	02/17/01	Radium-226	175 U	---	175	Filtered		ES
RD-33B		Primary	02/17/01	Thallium-208	13.8 U	---	13.8	Filtered		ES
RD-33B		Primary	02/17/01	Thorium-234	213 U	---	213	Filtered		ES
RD-33B		Primary	02/17/01	Uranium-235	58 U	---	58	Filtered		ES
RD-33B		Primary	02/15/02	Actinium-228	5 U	5	5	Filtered		DL
RD-33B		Primary	02/15/02	Bismuth-212	5 U	3	5	Filtered		DL
RD-33B		Primary	02/15/02	Bismuth-214	5 U	3	5	Filtered		DL
RD-33B		Primary	02/15/02	Lead-210	5 U	3	5	Filtered		DL
RD-33B		Primary	02/15/02	Lead-212	5 U	3	5	Filtered		DL
RD-33B		Primary	02/15/02	Lead-214	5 U	3	5	Filtered		DL

See last page of table for notes and abbreviations.

TABLE E-IV
RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33B		Primary	02/15/02	Potassium-40	6 U	3	6	Filtered		DL
RD-33B		Primary	02/15/02	Radium-226	5 U	5	5	Filtered		DL
RD-33B		Primary	02/15/02	Thorium-234	5 U	5	5	Filtered		DL
RD-33B		Primary	02/15/02	Uranium-235	5 U	3	5	Filtered		DL
RD-33B		Primary	02/11/03	Actinium-228	13.3 U	---	13.3	Filtered		ES
RD-33B		Primary	02/11/03	Bismuth-212	21.6 U	---	21.6	Filtered		ES
RD-33B		Primary	02/11/03	Bismuth-214	8.56 U	---	8.56	Filtered		ES
RD-33B		Primary	02/11/03	Lead-210	198 U	---	198	Filtered		ES
RD-33B		Primary	02/11/03	Lead-212	4.15 U	---	4.15	Filtered		ES
RD-33B		Primary	02/11/03	Lead-214	5.63 U	---	5.63	Filtered		ES
RD-33B		Primary	02/11/03	Potassium-40	60.8 U	---	60.8	Filtered		ES
RD-33B		Primary	02/11/03	Radium-226	42.3 U	---	42.3	Filtered		ES
RD-33B		Primary	02/11/03	Thorium-234	64.6 U	---	64.6	Filtered		ES
RD-33B		Primary	02/11/03	Uranium-235	16.1 U	---	16.1	Filtered		ES
RD-33B		Primary	11/04/04	Potassium-40	38.9 U	---	38.9	Filtered		ES
RD-33B		Primary	02/17/05	Potassium-40	39.7 U	---	39.7	Filtered		ES
RD-33B		Split	02/17/05	Potassium-40	-35.9 U	25	35.8	Filtered		STL
RD-33B		Primary	02/16/06	Potassium-40	37.9 U	---	37.9	Filtered		ES
RD-33B		Primary	02/07/07	Potassium-40	11.6 U	---	11.6	Filtered		ES
RD-33B		Primary	02/13/08	Potassium-40	34.7 U	---	34.7	Filtered		ES
RD-33B		Primary	03/05/09	Potassium-40	-108 U	46	47.2	Unfiltered		ES
RD-33B		Reanalysis of Primary	03/05/09	Potassium-40	-228.62 U	25.53	47.67	Filtered		ES
RD-33B		Reanalysis of Primary	03/05/09	Potassium-40	1.74 U	6.72	11.57	Filtered		ES
RD-33B		Duplicate	03/05/09	Potassium-40	-2.65 U	8.1	14.3	Unfiltered		ES
RD-33B		Primary	03/05/09	Radium-228	5.83 U	5.3	8.87	Filtered		ES
RD-33B		Primary	03/05/09	Radium-228	-8.82 U	6.7	11.5	Unfiltered		ES
RD-33B		Duplicate	03/05/09	Radium-228	-0.511 U	3.4	5.92	Unfiltered		ES
RD-33B		Primary	08/04/09	Potassium-40	18 U	57	100	Filtered		ES
RD-33B		Primary	08/04/09	Potassium-40	1.15 U	76	133	Unfiltered		ES
RD-33C		Primary	02/27/94	Actinium-228	-6.7 U	4.2	31	Filtered		LAS
RD-33C		Primary	02/27/94	Bismuth-214	10.6 U	5.7	15	Filtered		LAS
RD-33C		Primary	02/27/94	Lead-212	2.7 U	8.8	12	Filtered		LAS
RD-33C		Primary	02/27/94	Lead-214	9.4 U	4.7	13	Filtered		LAS
RD-33C		Primary	02/27/94	Potassium-40	3 U	61	92	Filtered		LAS
RD-33C		Primary	02/27/94	Radium-226	-10 U	100	150	Filtered		LAS
RD-33C		Primary	02/27/94	Thallium-208	-7.9 U	2.9	10	Filtered		LAS
RD-33C		Primary	02/27/94	Thorium-234	5 U	28	120	Filtered		LAS
RD-33C		Primary	02/27/94	Uranium-235	-7 U	11	34	Filtered		LAS
RD-33C		Primary	05/09/94	Actinium-228	4 U	20	29	Filtered		LAS
RD-33C		Primary	05/09/94	Actinium-228	12 U	21	28	Unfiltered		LAS
RD-33C		Primary	05/09/94	Bismuth-214	28	15	18	Filtered		LAS
RD-33C		Primary	05/09/94	Bismuth-214	66	17	16	Unfiltered		LAS
RD-33C		Primary	05/09/94	Lead-212	1.1 U	8.9	12	Filtered		LAS
RD-33C		Primary	05/09/94	Lead-212	2.6 U	9.5	12	Unfiltered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33C		Primary	05/09/94	Lead-214	35	12	16	Filtered		LAS
RD-33C		Primary	05/09/94	Lead-214	60	14	14	Unfiltered		LAS
RD-33C		Primary	05/09/94	Potassium-40	-19 U	59	95	Filtered		LAS
RD-33C		Primary	05/09/94	Potassium-40	16 U	66	85	Unfiltered		LAS
RD-33C		Primary	05/09/94	Thallium-208	0.5 U	6.6	9.1	Filtered		LAS
RD-33C		Primary	05/09/94	Thallium-208	5.4 U	7.9	9.3	Unfiltered		LAS
RD-33C		Primary	05/09/94	Thorium-234	58 U	58	120	Filtered		LAS
RD-33C		Primary	05/09/94	Thorium-234	79 U	63	130	Unfiltered		LAS
RD-33C		Primary	08/17/94	Actinium-228	0 U	120	200	Filtered		LAS
RD-33C		Primary	08/17/94	Bismuth-214	37 U	71	97	Filtered		LAS
RD-33C		Primary	08/17/94	Lead-212	0 U	55	78	Filtered		LAS
RD-33C		Primary	08/17/94	Lead-214	-43 U	61	100	Filtered		LAS
RD-33C		Primary	08/17/94	Potassium-40	-220 U	420	720	Filtered		LAS
RD-33C		Primary	08/17/94	Radium-226	-130 U	630	900	Filtered		LAS
RD-33C		Primary	08/17/94	Thallium-208	2 U	45	60	Filtered		LAS
RD-33C		Primary	08/17/94	Thorium-234	-70 U	310	680	Filtered		LAS
RD-33C		Primary	08/17/94	Uranium-235	40 U	140	180	Filtered		LAS
RD-33C		Primary	02/07/95	Actinium-228	4 U	26	43	Filtered		LAS
RD-33C		Primary	02/07/95	Bismuth-214	26	16	19	Filtered		LAS
RD-33C		Primary	02/07/95	Lead-212	-10 U	11	18	Filtered		LAS
RD-33C		Primary	02/07/95	Lead-214	31	16	22	Filtered		LAS
RD-33C		Primary	02/07/95	Potassium-40	-3 U	75	120	Filtered		LAS
RD-33C		Primary	02/07/95	Thallium-208	-1.5 U	8.2	12	Filtered		LAS
RD-33C		Primary	02/07/95	Thorium-234	11 U	82	190	Filtered		LAS
RD-33C		Primary	08/09/95	Actinium-228	7 U	18	30	Filtered		LAS
RD-33C		Primary	08/09/95	Bismuth-214	8 U	14	20	Filtered		LAS
RD-33C		Primary	08/09/95	Lead-212	7 U	10	14	Filtered		LAS
RD-33C		Primary	08/09/95	Lead-214	9 U	12	19	Filtered		LAS
RD-33C		Primary	08/09/95	Potassium-40	33 U	79	110	Filtered		LAS
RD-33C		Primary	08/09/95	Thallium-208	-1.2 U	7	11	Filtered		LAS
RD-33C		Primary	08/09/95	Thorium-234	40 U	100	160	Filtered		LAS
RD-33C		Primary	02/19/96	Actinium-228	8 U	10	19	Filtered		LAS
RD-33C		Primary	02/19/96	Bismuth-214	12.7	7.7	11	Filtered		LAS
RD-33C		Primary	02/19/96	Lead-212	1.5 U	6.2	9.2	Filtered		LAS
RD-33C		Primary	02/19/96	Lead-214	20.3	7.4	10	Filtered		LAS
RD-33C		Primary	02/19/96	Potassium-40	4 U	33	51	Filtered		LAS
RD-33C		Primary	02/19/96	Thallium-208	-2.4 U	3.4	5.6	Filtered		LAS
RD-33C		Primary	02/19/96	Thorium-234	-8 U	62	220	Filtered		LAS
RD-33C		Primary	08/22/96	Actinium-228	7 U	23	39	Filtered		LAS
RD-33C		Primary	08/22/96	Bismuth-214	106	23	22	Filtered		LAS
RD-33C		Primary	08/22/96	Lead-212	4 U	10	14	Filtered		LAS
RD-33C		Primary	08/22/96	Lead-214	106	19	19	Filtered		LAS
RD-33C		Primary	08/22/96	Potassium-40	9 U	74	120	Filtered		LAS
RD-33C		Primary	08/22/96	Thallium-208	1 U	6.9	9.7	Filtered		LAS
RD-33C		Primary	08/22/96	Thorium-234	-24 U	73	190	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33C		Primary	02/25/97	Actinium-228	-22 U	18	41	Filtered		LAS
RD-33C		Primary	02/25/97	Bismuth-214	26	19	25	Filtered		LAS
RD-33C		Primary	02/25/97	Lead-212	6.4 U	9.5	13	Filtered		LAS
RD-33C		Primary	02/25/97	Lead-214	34	14	20	Filtered		LAS
RD-33C		Primary	02/25/97	Potassium-40	-1 U	65	110	Filtered		LAS
RD-33C		Primary	02/25/97	Thallium-208	2.1 U	6.6	9.3	Filtered		LAS
RD-33C		Primary	02/25/97	Thorium-234	49 U	74	180	Filtered		LAS
RD-33C		Primary	08/21/97	Actinium-228	0 U	21	38	Filtered		LAS
RD-33C		Primary	08/21/97	Bismuth-212	-37 U	24	69	Filtered		LAS
RD-33C		Primary	08/21/97	Bismuth-214	7 U	12	17	Filtered		LAS
RD-33C		Primary	08/21/97	Lead-210	-70 U	110	180	Filtered		LAS
RD-33C		Primary	08/21/97	Lead-212	6 U	10	15	Filtered		LAS
RD-33C		Primary	08/21/97	Lead-214	8 U	11	16	Filtered		LAS
RD-33C		Primary	08/21/97	Potassium-40	-9 U	62	97	Filtered		LAS
RD-33C		Primary	08/21/97	Thallium-208	1.5 U	6.4	9.1	Filtered		LAS
RD-33C		Primary	08/21/97	Thorium-234	19 U	79	160	Filtered		LAS
RD-33C		Primary	05/27/98	Actinium-228	64.7 U	---	64.7	Filtered		TN
RD-33C		Primary	05/27/98	Bismuth-212	116 U	---	116	Filtered		TN
RD-33C		Primary	05/27/98	Bismuth-214	27.5 U	---	27.5	Filtered		TN
RD-33C		Primary	05/27/98	Lead-210	138 U	---	138	Filtered		TN
RD-33C		Primary	05/27/98	Lead-212	18.6 U	---	18.6	Filtered		TN
RD-33C		Primary	05/27/98	Lead-214	29.1 U	---	29.1	Filtered		TN
RD-33C		Primary	05/27/98	Potassium-40	179 U	---	179	Filtered		TN
RD-33C		Primary	05/27/98	Thallium-208	13.7 U	---	13.7	Filtered		TN
RD-33C		Primary	05/27/98	Thorium-234	245 U	---	245	Filtered		TN
RD-33C		Primary	08/17/98	Actinium-228	118 U	---	118	Filtered		TN
RD-33C		Primary	08/17/98	Bismuth-212	208 U	---	208	Filtered		TN
RD-33C		Primary	08/17/98	Bismuth-214	54 U	---	54	Filtered		TN
RD-33C		Primary	08/17/98	Lead-210	274 U	---	274	Filtered		TN
RD-33C		Primary	08/17/98	Lead-212	41.1 U	---	41.1	Filtered		TN
RD-33C		Primary	08/17/98	Lead-214	47.2 U	---	47.2	Filtered		TN
RD-33C		Primary	08/17/98	Potassium-40	335 U	---	335	Filtered		TN
RD-33C		Primary	08/17/98	Thallium-208	30.2 U	---	30.2	Filtered		TN
RD-33C		Primary	08/17/98	Thorium-234	456 U	---	456	Filtered		TN
RD-33C		Primary	02/03/99	Actinium-228	50.2 U	---	50.2	Filtered		TN
RD-33C		Primary	02/03/99	Bismuth-212	91 U	---	91	Filtered		TN
RD-33C		Primary	02/03/99	Bismuth-214	22.4 U	---	22.4	Filtered		TN
RD-33C		Primary	02/03/99	Lead-210	88.8 U	64	92.5	Filtered		TN
RD-33C		Primary	02/03/99	Lead-212	24 U	---	24	Filtered		TN
RD-33C		Primary	02/03/99	Lead-214	20.8 U	---	20.8	Filtered		TN
RD-33C		Primary	02/03/99	Potassium-40	139 U	---	139	Filtered		TN
RD-33C		Primary	02/03/99	Radium-226	127 U	---	127	Filtered		TN
RD-33C		Primary	02/03/99	Thallium-208	9.78 U	---	9.78	Filtered		TN
RD-33C		Primary	02/03/99	Thorium-234	162 U	---	162	Filtered		TN
RD-33C		Primary	02/03/99	Uranium-235	38.7 U	---	38.7	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33C		Primary	02/09/00	Actinium-228	51.7 U	---	51.7	Filtered		TR
RD-33C		Primary	02/09/00	Bismuth-212	87.2 U	---	87.2	Filtered		TR
RD-33C		Primary	02/09/00	Bismuth-214	21.5 U	---	21.5	Filtered		TR
RD-33C		Primary	02/09/00	Lead-210	2840 U	---	2840	Filtered		TR
RD-33C		Primary	02/09/00	Lead-212	18.5 U	---	18.5	Filtered		TR
RD-33C		Primary	02/09/00	Lead-214	22.2 U	---	22.2	Filtered		TR
RD-33C		Primary	02/09/00	Potassium-40	224 U	---	224	Filtered		TR
RD-33C		Primary	02/09/00	Radium-226	178 U	---	178	Filtered		TR
RD-33C		Primary	02/09/00	Thallium-208	11.7 U	---	11.7	Filtered		TR
RD-33C		Primary	02/09/00	Thorium-234	386 U	---	386	Filtered		TR
RD-33C		Primary	02/09/00	Uranium-235	70 U	---	70	Filtered		TR
RD-33C		Primary	02/17/01	Actinium-228	46.3 U	---	46.3	Filtered		ES
RD-33C		Primary	02/17/01	Bismuth-212	73.5 U	---	73.5	Filtered		ES
RD-33C		Primary	02/17/01	Bismuth-214	48.9	20	21.9	Filtered		ES
RD-33C		Primary	02/17/01	Lead-210	2280 U	---	2280	Filtered		ES
RD-33C		Primary	02/17/01	Lead-212	14.8 U	---	14.8	Filtered		ES
RD-33C		Primary	02/17/01	Lead-214	52.3	21	23.2	Filtered		ES
RD-33C		Primary	02/17/01	Potassium-40	185 U	---	185	Filtered		ES
RD-33C		Primary	02/17/01	Radium-226	158 U	---	158	Filtered		ES
RD-33C		Primary	02/17/01	Thallium-208	10.6 U	---	10.6	Filtered		ES
RD-33C		Primary	02/17/01	Thorium-234	307 U	---	307	Filtered		ES
RD-33C		Primary	02/17/01	Uranium-235	54.4 U	---	54.4	Filtered		ES
RD-33C		Primary	02/15/02	Actinium-228	5 U	5	5	Filtered		DL
RD-33C		Primary	02/15/02	Bismuth-212	3 U	3	3	Filtered		DL
RD-33C		Primary	02/15/02	Bismuth-214	5 U	5	5	Filtered		DL
RD-33C		Primary	02/15/02	Lead-210	8 U	3	8	Filtered		DL
RD-33C		Primary	02/15/02	Lead-212	3 U	3	3	Filtered		DL
RD-33C		Primary	02/15/02	Lead-214	5 U	5	5	Filtered		DL
RD-33C		Primary	02/15/02	Potassium-40	8 U	5	8	Filtered		DL
RD-33C		Primary	02/15/02	Radium-226	5 U	3.3	5	Filtered		DL
RD-33C		Primary	02/15/02	Thorium-234	5 U	5	5	Filtered		DL
RD-33C		Primary	02/15/02	Uranium-235	5 U	3	5	Filtered		DL
RD-33C		Primary	02/10/03	Actinium-228	11.8 U	---	11.8	Filtered		ES
RD-33C		Primary	02/10/03	Bismuth-212	18.9 U	---	18.9	Filtered		ES
RD-33C		Primary	02/10/03	Bismuth-214	5.06 U	---	5.06	Filtered		ES
RD-33C		Primary	02/10/03	Lead-210	550 U	---	550	Filtered		ES
RD-33C		Primary	02/10/03	Lead-212	3.4 U	---	3.4	Filtered		ES
RD-33C		Primary	02/10/03	Lead-214	4.82 U	---	4.82	Filtered		ES
RD-33C		Primary	02/10/03	Potassium-40	71.6	61	25.6	Filtered		ES
RD-33C		Primary	02/10/03	Radium-226	63.4 U	---	63.4	Filtered		ES
RD-33C		Primary	02/10/03	Thorium-234	76.5 U	---	76.5	Filtered		ES
RD-33C		Primary	02/10/03	Uranium-235	14.8 U	---	14.8	Filtered		ES
RD-33C		Primary	11/04/04	Potassium-40	37.4 U	---	37.4	Filtered		ES
RD-33C		Split	11/04/04	Potassium-40	-16.4 U	13	16.4	Filtered		STL
RD-33C		Primary	02/16/05	Potassium-40	14.6 U	---	14.6	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33C		Primary	02/16/06	Potassium-40	22.3 U	---	22.3	Filtered		ES
RD-33C		Primary	02/06/07	Potassium-40	7.89 U	---	7.89	Filtered		ES
RD-33C		Primary	02/12/08	Potassium-40	41.2 U	---	41.2	Filtered		ES
RD-33C		Primary	02/24/09	Potassium-40	3.42 U	8.3	14.1	Filtered		ES
RD-33C		Primary	02/24/09	Potassium-40	2.16 U	15	26.1	Unfiltered		ES
RD-33C		Split	02/24/09	Potassium-40	-4.15 U	18.2	21.5	Filtered		GEL
RD-33C		Split	02/24/09	Potassium-40	0.698 U	23.5	15.2	Unfiltered		GEL
RD-33C		Primary	02/24/09	Radium-228	-0.55 U	3.7	6.28	Filtered		ES
RD-33C		Primary	02/24/09	Radium-228	3.28 U	4.2	7.01	Unfiltered		ES
RD-33C		Split	02/24/09	Radium-228	-2.07 U	6.28	6.81	Filtered		GEL
RD-33C		Split	02/24/09	Radium-228	4.76 U	6.96	5.17	Unfiltered		GEL
RD-33C		Primary	07/24/09	Potassium-40	-7.58 U	62	111	Filtered		ES
RD-33C		Primary	07/24/09	Potassium-40	41.8 U	73	126	Unfiltered		ES
RD-33C		Split	07/24/09	Potassium-40	-20.2 U	53.8	72	Unfiltered		GEL
RD-34A		Primary	11/18/93	Actinium-228	15.1 U	---	15.1	Filtered		LAS
RD-34A		Primary	11/18/93	Bismuth-212	57.6 U	---	57.6	Filtered		LAS
RD-34A		Primary	11/18/93	Bismuth-214	67.236	11.34	---	Filtered		LAS
RD-34A		Primary	11/18/93	Lead-210	115 U	---	115	Filtered		LAS
RD-34A		Primary	11/18/93	Lead-212	10.8 U	---	10.8	Filtered		LAS
RD-34A		Primary	11/18/93	Lead-214	79.345	11.46	---	Filtered		LAS
RD-34A		Primary	11/18/93	Potassium-40	57.3 U	---	57.3	Filtered		LAS
RD-34A		Primary	11/18/93	Thallium-208	5.57 U	---	5.57	Filtered		LAS
RD-34A		Primary	11/18/93	Thorium-234	113 U	---	113	Filtered		LAS
RD-34A		Primary	11/18/93	Uranium-235	6.19 U	---	6.19	Filtered		LAS
RD-34A		Reanalysis of Primary	02/26/94	Actinium-228	1.7 U	8.3	14	Filtered		LAS
RD-34A		Reanalysis of Primary	02/26/94	Bismuth-214	6.6 U	5.6	7.9	Filtered		LAS
RD-34A		Reanalysis of Primary	02/26/94	Lead-212	7.4	5	6.7	Filtered		LAS
RD-34A		Reanalysis of Primary	02/26/94	Lead-214	3.5 U	4.9	7.6	Filtered		LAS
RD-34A		Reanalysis of Primary	02/26/94	Potassium-40	-17 U	28	46	Filtered		LAS
RD-34A		Reanalysis of Primary	02/26/94	Radium-226	15 U	48	66	Filtered		LAS
RD-34A		Reanalysis of Primary	02/26/94	Thallium-208	0.3 U	3.2	4.5	Filtered		LAS
RD-34A		Reanalysis of Primary	02/26/94	Thorium-234	23 U	37	110	Filtered		LAS
RD-34A		Reanalysis of Primary	02/26/94	Uranium-235	-7 U	13	20	Filtered		LAS
RD-34A		Primary	05/09/94	Actinium-228	13 U	21	35	Filtered		LAS
RD-34A		Primary	05/09/94	Actinium-228	-3 U	13	38	Unfiltered		LAS
RD-34A		Primary	05/09/94	Bismuth-214	329	43	19	Filtered		LAS
RD-34A		Primary	05/09/94	Bismuth-214	517	60	18	Unfiltered		LAS
RD-34A		Primary	05/09/94	Lead-212	6 U	10	14	Filtered		LAS
RD-34A		Primary	05/09/94	Lead-212	3 U	11	16	Unfiltered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34A		Primary	05/09/94	Lead-214	366	35	18	Filtered		LAS
RD-34A		Primary	05/09/94	Lead-214	586	50	19	Unfiltered		LAS
RD-34A		Primary	05/09/94	Potassium-40	15 U	70	100	Filtered		LAS
RD-34A		Primary	05/09/94	Potassium-40	-33 U	77	120	Unfiltered		LAS
RD-34A		Primary	05/09/94	Thallium-208	-1 U	6.8	9.6	Filtered		LAS
RD-34A		Primary	05/09/94	Thallium-208	-0.3 U	8	11	Unfiltered		LAS
RD-34A		Primary	05/09/94	Thorium-234	90 U	65	140	Filtered		LAS
RD-34A		Primary	05/09/94	Thorium-234	139 U	72	150	Unfiltered		LAS
RD-34A		Primary	08/09/94	Actinium-228	82	20	27	Filtered		LAS
RD-34A		Reanalysis of Primary	08/09/94	Actinium-228	-18 U	17	42	Filtered		LAS
RD-34A		Primary	08/09/94	Bismuth-214	55	14	16	Filtered		LAS
RD-34A		Reanalysis of Primary	08/09/94	Bismuth-214	-2 U	14	24	Filtered		LAS
RD-34A		Primary	08/09/94	Lead-212	6.4 U	8.9	13	Filtered		LAS
RD-34A		Reanalysis of Primary	08/09/94	Lead-212	8 U	10	15	Filtered		LAS
RD-34A		Primary	08/09/94	Lead-214	378	33	15	Filtered		LAS
RD-34A		Reanalysis of Primary	08/09/94	Lead-214	-7.8 U	9	19	Filtered		LAS
RD-34A		Primary	08/09/94	Potassium-40	1400	190	77	Filtered		LAS
RD-34A		Reanalysis of Primary	08/09/94	Potassium-40	-3 U	66	110	Filtered		LAS
RD-34A		Primary	08/09/94	Radium-226	-126 U	94	130	Filtered		LAS
RD-34A		Reanalysis of Primary	08/09/94	Radium-226	20 U	120	180	Filtered		LAS
RD-34A		Primary	08/09/94	Thallium-208	29.4	7.5	7.8	Filtered		LAS
RD-34A		Reanalysis of Primary	08/09/94	Thallium-208	1.2 U	8.4	12	Filtered		LAS
RD-34A		Primary	08/09/94	Thorium-234	38 U	70	230	Filtered		LAS
RD-34A		Reanalysis of Primary	08/09/94	Thorium-234	30 U	68	160	Filtered		LAS
RD-34A		Primary	08/09/94	Uranium-235	4 U	28	43	Filtered		LAS
RD-34A		Reanalysis of Primary	08/09/94	Uranium-235	-12 U	28	44	Filtered		LAS
RD-34A		Primary	02/07/95	Actinium-228	-5 U	10	39	Filtered		LAS
RD-34A		Primary	02/07/95	Bismuth-214	97	23	21	Filtered		LAS
RD-34A		Primary	02/07/95	Lead-212	-3 U	11	17	Filtered		LAS
RD-34A		Primary	02/07/95	Lead-214	91	19	21	Filtered		LAS
RD-34A		Primary	02/07/95	Potassium-40	-4 U	82	130	Filtered		LAS
RD-34A		Primary	02/07/95	Thallium-208	0.4 U	7.5	11	Filtered		LAS
RD-34A		Primary	02/07/95	Thorium-234	-17 U	70	160	Filtered		LAS
RD-34A		Primary	08/09/95	Actinium-228	-6 U	13	43	Filtered		LAS
RD-34A		Primary	08/09/95	Bismuth-214	25	16	21	Filtered		LAS
RD-34A		Primary	08/09/95	Lead-212	2.9 U	9.7	14	Filtered		LAS
RD-34A		Primary	08/09/95	Lead-214	20	13	18	Filtered		LAS
RD-34A		Primary	08/09/95	Potassium-40	49 U	82	110	Filtered		LAS
RD-34A		Primary	08/09/95	Thallium-208	-1.3 U	6.7	10	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34A		Primary	08/09/95	Thorium-234	-25 U	66	160	Filtered		LAS
RD-34A		Primary	02/19/96	Actinium-228	-14 U	13	44	Filtered		LAS
RD-34A		Primary	02/19/96	Bismuth-214	149	28	22	Filtered		LAS
RD-34A		Primary	02/19/96	Lead-212	7 U	11	15	Filtered		LAS
RD-34A		Primary	02/19/96	Lead-214	115	20	19	Filtered		LAS
RD-34A		Primary	02/19/96	Potassium-40	30 U	68	100	Filtered		LAS
RD-34A		Primary	02/19/96	Thallium-208	4.9 U	7.6	11	Filtered		LAS
RD-34A		Primary	02/19/96	Thorium-234	67 U	76	200	Filtered		LAS
RD-34A		Primary	08/18/96	Actinium-228	8 U	24	44	Filtered		LAS
RD-34A		Primary	08/18/96	Bismuth-214	149	28	20	Filtered		LAS
RD-34A		Primary	08/18/96	Lead-212	1 U	10	15	Filtered		LAS
RD-34A		Primary	08/18/96	Lead-214	160	23	19	Filtered		LAS
RD-34A		Primary	08/18/96	Potassium-40	-51 U	18	130	Filtered		LAS
RD-34A		Primary	08/18/96	Thallium-208	-0.6 U	7.3	11	Filtered		LAS
RD-34A		Primary	08/18/96	Thorium-234	-1 U	76	210	Filtered		LAS
RD-34A		Primary	02/07/97	Actinium-228	0 U	13	23	Filtered		LAS
RD-34A		Primary	02/07/97	Bismuth-214	626	65	19	Filtered		LAS
RD-34A		Primary	02/07/97	Lead-212	0.1 U	8.3	13	Filtered		LAS
RD-34A		Primary	02/07/97	Lead-214	808	62	14	Filtered		LAS
RD-34A		Primary	02/07/97	Potassium-40	-25 U	42	71	Filtered		LAS
RD-34A		Primary	02/07/97	Thallium-208	0.2 U	4.4	6.6	Filtered		LAS
RD-34A		Primary	02/07/97	Thorium-234	-114 U	76	370	Filtered		LAS
RD-34A		Primary	05/27/98	Actinium-228	62.4 U	---	62.4	Filtered		TN
RD-34A		Primary	05/27/98	Bismuth-212	112 U	---	112	Filtered		TN
RD-34A		Primary	05/27/98	Bismuth-214	27.3 U	---	27.3	Filtered		TN
RD-34A		Primary	05/27/98	Lead-210	742 U	---	742	Filtered		TN
RD-34A		Primary	05/27/98	Lead-212	35.9 U	---	35.9	Filtered		TN
RD-34A		Primary	05/27/98	Lead-214	28.4 U	---	28.4	Filtered		TN
RD-34A		Primary	05/27/98	Potassium-40	253 U	---	253	Filtered		TN
RD-34A		Primary	05/27/98	Thallium-208	13.3 U	---	13.3	Filtered		TN
RD-34A		Primary	05/27/98	Thorium-234	311 U	---	311	Filtered		TN
RD-34A		Primary	08/18/98	Actinium-228	48.9 U	---	48.9	Filtered		TN
RD-34A		Primary	08/18/98	Bismuth-212	83.2 U	---	83.2	Filtered		TN
RD-34A		Primary	08/18/98	Bismuth-214	26.9 U	---	26.9	Filtered		TN
RD-34A		Primary	08/18/98	Lead-210	622 U	---	622	Filtered		TN
RD-34A		Primary	08/18/98	Lead-212	19 U	---	19	Filtered		TN
RD-34A		Primary	08/18/98	Lead-214	23.6 U	---	23.6	Filtered		TN
RD-34A		Primary	08/18/98	Potassium-40	144 U	---	144	Filtered		TN
RD-34A		Primary	08/18/98	Thallium-208	13.5 U	---	13.5	Filtered		TN
RD-34A		Primary	08/18/98	Thorium-234	347 U	---	347	Filtered		TN
RD-34A		Primary	05/09/01	Actinium-228	32.3 U	---	32.3	Filtered		ES
RD-34A		Primary	05/09/01	Bismuth-212	53.1 U	---	53.1	Filtered		ES
RD-34A		Primary	05/09/01	Bismuth-214	12.2 U	11	12.9	Filtered		ES
RD-34A		Primary	05/09/01	Lead-210	424 U	---	424	Filtered		ES
RD-34A		Primary	05/09/01	Lead-212	10.2 U	---	10.2	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34A		Primary	05/09/01	Lead-214	14.2 U	---	14.2	Filtered		ES
RD-34A		Primary	05/09/01	Potassium-40	71.3 U	---	71.3	Filtered		ES
RD-34A		Primary	05/09/01	Radium-226	110 U	---	110	Filtered		ES
RD-34A		Primary	05/09/01	Thallium-208	7.31 U	---	7.31	Filtered		ES
RD-34A		Primary	05/09/01	Thorium-234	188 U	---	188	Filtered		ES
RD-34A		Primary	05/09/01	Uranium-235	34.6 U	---	34.6	Filtered		ES
RD-34A		Primary	05/16/03	Actinium-228	4.11 U	---	4.11	Filtered		ES
RD-34A		Primary	05/16/03	Bismuth-212	7.08 U	---	7.08	Filtered		ES
RD-34A		Primary	05/16/03	Bismuth-214	1.88 U	---	1.88	Filtered		ES
RD-34A		Primary	05/16/03	Lead-210	53.4 U	---	53.4	Filtered		ES
RD-34A		Primary	05/16/03	Lead-212	1.45 U	---	1.45	Filtered		ES
RD-34A		Primary	05/16/03	Lead-214	1.71 U	---	1.71	Filtered		ES
RD-34A		Primary	05/16/03	Potassium-40	11.2 U	---	11.2	Filtered		ES
RD-34A		Primary	05/16/03	Radium-226	23.2 U	---	23.2	Filtered		ES
RD-34A		Primary	05/16/03	Thorium-234	25.4 U	---	25.4	Filtered		ES
RD-34A		Primary	05/16/03	Uranium-235	4.68 U	---	4.68	Filtered		ES
RD-34A		Primary	05/17/04	Actinium-228	51 U	---	51	Filtered		ES
RD-34A		Primary	05/17/04	Bismuth-212	96.2 U	---	96.2	Filtered		ES
RD-34A		Primary	05/17/04	Bismuth-214	25.5 U	---	25.5	Filtered		ES
RD-34A		Primary	05/17/04	Lead-210	2740 U	---	2740	Filtered		ES
RD-34A		Primary	05/17/04	Lead-212	18.1 U	---	18.1	Filtered		ES
RD-34A		Primary	05/17/04	Lead-214	26.5 U	---	26.5	Filtered		ES
RD-34A		Primary	05/17/04	Potassium-40	306 U	---	306	Filtered		ES
RD-34A		Primary	05/17/04	Radium-226	268 U	---	268	Filtered		ES
RD-34A		Primary	05/17/04	Thallium-208	12.3 U	---	12.3	Filtered		ES
RD-34A		Primary	05/17/04	Thorium-234	368 U	---	368	Filtered		ES
RD-34A		Primary	05/17/04	Uranium-235	69.2 U	---	69.2	Filtered		ES
RD-34A		Primary	02/17/05	Potassium-40	14.8 U	---	14.8	Filtered		ES
RD-34A		Primary	02/21/06	Potassium-40	24.5 U	---	24.5	Filtered		ES
RD-34A		Primary	02/15/07	Potassium-40	22.4 U	---	22.4	Filtered		ES
RD-34A		Primary	02/06/08	Potassium-40	14 U	---	14	Filtered		ES
RD-34A		Primary	03/05/09	Potassium-40	-31.9 U	25	42.7	Unfiltered		ES
RD-34A		Reanalysis of Primary	03/05/09	Potassium-40	-0.74 U	7.21	12.65	Filtered		ES
RD-34A		Primary	03/05/09	Radium-228	6.28 U	5.8	9.7	Filtered		ES
RD-34A		Primary	03/05/09	Radium-228	-2.2 U	5.9	10.1	Unfiltered		ES
RD-34A		Primary	07/28/09	Potassium-40	-45 U	160	282	Filtered		ES
RD-34A		Primary	07/28/09	Potassium-40	45 U	83	141	Unfiltered		ES
RD-34B		Primary	02/26/94	Actinium-228	1.3 U	9	29	Filtered		LAS
RD-34B		Primary	02/26/94	Bismuth-214	-1.2 U	5.4	16	Filtered		LAS
RD-34B		Primary	02/26/94	Lead-212	11.7 U	9.4	12	Filtered		LAS
RD-34B		Primary	02/26/94	Lead-214	-6.4 U	1.8	14	Filtered		LAS
RD-34B		Primary	02/26/94	Potassium-40	18 U	62	90	Filtered		LAS
RD-34B		Primary	02/26/94	Radium-226	14 U	95	140	Filtered		LAS
RD-34B		Primary	02/26/94	Thallium-208	-4.4 U	7	10	Filtered		LAS
RD-34B		Primary	02/26/94	Thorium-234	-5 U	28	120	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34B		Primary	02/26/94	Uranium-235	0 U	12	34	Filtered		LAS
RD-34B		Primary	05/10/94	Actinium-228	5 U	11	19	Filtered		LAS
RD-34B		Primary	05/10/94	Actinium-228	3 U	20	36	Unfiltered		LAS
RD-34B		Primary	05/10/94	Bismuth-214	55	11	11	Filtered		LAS
RD-34B		Primary	05/10/94	Bismuth-214	126	23	17	Unfiltered		LAS
RD-34B		Primary	05/10/94	Lead-212	5.3 U	6.3	8.6	Filtered		LAS
RD-34B		Primary	05/10/94	Lead-212	5 U	9.2	12	Unfiltered		LAS
RD-34B		Primary	05/10/94	Lead-214	63.9	9.6	9.8	Filtered		LAS
RD-34B		Primary	05/10/94	Lead-214	147	20	15	Unfiltered		LAS
RD-34B		Primary	05/10/94	Potassium-40	21 U	39	60	Filtered		LAS
RD-34B		Primary	05/10/94	Potassium-40	23 U	65	93	Unfiltered		LAS
RD-34B		Primary	05/10/94	Thallium-208	2.6 U	3.9	5.4	Filtered		LAS
RD-34B		Primary	05/10/94	Thallium-208	3.2 U	6.6	8.7	Unfiltered		LAS
RD-34B		Primary	05/10/94	Thorium-234	34 U	51	150	Filtered		LAS
RD-34B		Primary	05/10/94	Thorium-234	-9 U	58	130	Unfiltered		LAS
RD-34B		Primary	08/09/94	Actinium-228	-19.2 U	9.8	36	Filtered		LAS
RD-34B		Primary	08/09/94	Bismuth-214	8 U	12	16	Filtered		LAS
RD-34B		Primary	08/09/94	Lead-212	4.7 U	8.9	12	Filtered		LAS
RD-34B		Primary	08/09/94	Lead-214	3.5 U	9.4	14	Filtered		LAS
RD-34B		Primary	08/09/94	Potassium-40	15 U	55	78	Filtered		LAS
RD-34B		Primary	08/09/94	Radium-226	-140 U	100	150	Filtered		LAS
RD-34B		Primary	08/09/94	Thallium-208	2.8 U	6.9	9.1	Filtered		LAS
RD-34B		Primary	08/09/94	Thorium-234	0 U	56	130	Filtered		LAS
RD-34B		Primary	08/09/94	Uranium-235	7 U	24	34	Filtered		LAS
RD-34B		Primary	02/07/95	Actinium-228	3 U	27	50	Filtered		LAS
RD-34B		Primary	02/07/95	Bismuth-214	23 U	19	26	Filtered		LAS
RD-34B		Primary	02/07/95	Lead-212	10 U	13	18	Filtered		LAS
RD-34B		Primary	02/07/95	Lead-214	23	15	21	Filtered		LAS
RD-34B		Primary	02/07/95	Potassium-40	-1 U	86	140	Filtered		LAS
RD-34B		Primary	02/07/95	Thallium-208	1.6 U	8.3	12	Filtered		LAS
RD-34B		Primary	02/07/95	Thorium-234	5 U	83	200	Filtered		LAS
RD-34B		Primary	08/10/95	Actinium-228	12 U	19	39	Filtered		LAS
RD-34B		Primary	08/10/95	Bismuth-214	13 U	14	20	Filtered		LAS
RD-34B		Primary	08/10/95	Lead-212	1 U	10	15	Filtered		LAS
RD-34B		Primary	08/10/95	Lead-214	12 U	12	17	Filtered		LAS
RD-34B		Primary	08/10/95	Potassium-40	30 U	71	100	Filtered		LAS
RD-34B		Primary	08/10/95	Thallium-208	3.1 U	6.2	8.6	Filtered		LAS
RD-34B		Primary	08/10/95	Thorium-234	-20 U	100	160	Filtered		LAS
RD-34B		Primary	02/19/96	Actinium-228	9 U	22	38	Filtered		LAS
RD-34B		Primary	02/19/96	Bismuth-214	68	19	18	Filtered		LAS
RD-34B		Primary	02/19/96	Lead-212	2.9 U	9.9	14	Filtered		LAS
RD-34B		Primary	02/19/96	Lead-214	62	16	17	Filtered		LAS
RD-34B		Primary	02/19/96	Potassium-40	64 U	78	110	Filtered		LAS
RD-34B		Primary	02/19/96	Thallium-208	-3.5 U	7.2	11	Filtered		LAS
RD-34B		Primary	02/19/96	Thorium-234	20 U	70	180	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV
RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34B		Primary	08/18/96	Actinium-228	16 U	20	34	Filtered		LAS
RD-34B		Primary	08/18/96	Bismuth-214	33	17	23	Filtered		LAS
RD-34B		Primary	08/18/96	Lead-212	1.4 U	9.6	14	Filtered		LAS
RD-34B		Primary	08/18/96	Lead-214	46	15	20	Filtered		LAS
RD-34B		Primary	08/18/96	Potassium-40	16 U	70	110	Filtered		LAS
RD-34B		Primary	08/18/96	Thallium-208	1.7 U	7.3	10	Filtered		LAS
RD-34B		Primary	08/18/96	Thorium-234	20 U	120	190	Filtered		LAS
RD-34B		Primary	02/07/97	Actinium-228	8 U	24	38	Filtered		LAS
RD-34B		Primary	02/07/97	Bismuth-214	217	35	21	Filtered		LAS
RD-34B		Primary	02/07/97	Lead-212	-1 U	11	16	Filtered		LAS
RD-34B		Primary	02/07/97	Lead-214	234	28	20	Filtered		LAS
RD-34B		Primary	02/07/97	Potassium-40	50 U	78	110	Filtered		LAS
RD-34B		Primary	02/07/97	Thallium-208	-1.9 U	7.4	11	Filtered		LAS
RD-34B		Primary	02/07/97	Thorium-234	80 U	140	210	Filtered		LAS
RD-34B		Primary	08/21/97	Actinium-228	1 U	21	40	Filtered		LAS
RD-34B		Primary	08/21/97	Bismuth-212	-11 U	17	60	Filtered		LAS
RD-34B		Primary	08/21/97	Bismuth-214	65	19	17	Filtered		LAS
RD-34B		Primary	08/21/97	Lead-210	10 U	110	180	Filtered		LAS
RD-34B		Primary	08/21/97	Lead-212	8 U	10	14	Filtered		LAS
RD-34B		Primary	08/21/97	Lead-214	80	17	18	Filtered		LAS
RD-34B		Primary	08/21/97	Potassium-40	33 U	75	110	Filtered		LAS
RD-34B		Primary	08/21/97	Thallium-208	-2.7 U	6.5	10	Filtered		LAS
RD-34B		Primary	08/21/97	Thorium-234	7 U	72	140	Filtered		LAS
RD-34B		Primary	05/27/98	Actinium-228	60.2 U	---	60.2	Filtered		TN
RD-34B		Primary	05/27/98	Bismuth-212	110 U	---	110	Filtered		TN
RD-34B		Primary	05/27/98	Bismuth-214	27 U	---	27	Filtered		TN
RD-34B		Primary	05/27/98	Lead-210	118 U	---	118	Filtered		TN
RD-34B		Primary	05/27/98	Lead-212	16.9 U	---	16.9	Filtered		TN
RD-34B		Primary	05/27/98	Lead-214	24.7 U	---	24.7	Filtered		TN
RD-34B		Primary	05/27/98	Potassium-40	152 U	---	152	Filtered		TN
RD-34B		Primary	05/27/98	Radium-226	165 U	---	165	Filtered		TN
RD-34B		Primary	05/27/98	Thallium-208	13.1 U	---	13.1	Filtered		TN
RD-34B		Primary	05/27/98	Thorium-234	212 U	---	212	Filtered		TN
RD-34B		Primary	08/18/98	Actinium-228	60 U	---	60	Filtered		TN
RD-34B		Primary	08/18/98	Bismuth-212	98.5 U	---	98.5	Filtered		TN
RD-34B		Primary	08/18/98	Bismuth-214	24.6 U	---	24.6	Filtered		TN
RD-34B		Primary	08/18/98	Lead-210	609 U	---	609	Filtered		TN
RD-34B		Primary	08/18/98	Lead-212	31.7 U	---	31.7	Filtered		TN
RD-34B		Primary	08/18/98	Lead-214	27.8 U	---	27.8	Filtered		TN
RD-34B		Primary	08/18/98	Potassium-40	200 U	---	200	Filtered		TN
RD-34B		Primary	08/18/98	Thallium-208	13.8 U	---	13.8	Filtered		TN
RD-34B		Primary	08/18/98	Thorium-234	358 U	---	358	Filtered		TN
RD-34B		Primary	02/04/99	Actinium-228	64.8 U	---	64.8	Filtered		TN
RD-34B		Primary	02/04/99	Bismuth-212	98 U	---	98	Filtered		TN
RD-34B		Primary	02/04/99	Bismuth-214	26.3 U	---	26.3	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34B		Primary	02/04/99	Lead-210	738 U	---	738	Filtered		TN
RD-34B		Primary	02/04/99	Lead-212	32.2	26	25.9	Filtered		TN
RD-34B		Primary	02/04/99	Lead-214	27.1 U	---	27.1	Filtered		TN
RD-34B		Primary	02/04/99	Potassium-40	226 U	---	226	Filtered		TN
RD-34B		Primary	02/04/99	Radium-226	190 U	---	190	Filtered		TN
RD-34B		Primary	02/04/99	Thallium-208	13.6 U	---	13.6	Filtered		TN
RD-34B		Primary	02/04/99	Thorium-234	293 U	---	293	Filtered		TN
RD-34B		Primary	02/04/99	Uranium-235	74.5 U	---	74.5	Filtered		TN
RD-34B		Primary	02/05/00	Actinium-228	55.2 U	---	55.2	Filtered		TR
RD-34B		Primary	02/05/00	Bismuth-212	97.1 U	---	97.1	Filtered		TR
RD-34B		Primary	02/05/00	Bismuth-214	25.2 U	---	25.2	Filtered		TR
RD-34B		Primary	02/05/00	Lead-210	856 U	---	856	Filtered		TR
RD-34B		Primary	02/05/00	Lead-212	31.8 U	---	31.8	Filtered		TR
RD-34B		Primary	02/05/00	Lead-214	21.8 U	---	21.8	Filtered		TR
RD-34B		Primary	02/05/00	Potassium-40	215 U	---	215	Filtered		TR
RD-34B		Primary	02/05/00	Thallium-208	13.6 U	---	13.6	Filtered		TR
RD-34B		Primary	02/05/00	Thorium-234	297 U	---	297	Filtered		TR
RD-34B		Primary	02/05/00	Uranium-235	62.1 U	---	62.1	Filtered		TR
RD-34B		Primary	02/16/01	Actinium-228	65.5 U	---	65.5	Filtered		ES
RD-34B		Primary	02/16/01	Bismuth-212	105 U	---	105	Filtered		ES
RD-34B		Primary	02/16/01	Bismuth-214	38.3 U	---	38.3	Filtered		ES
RD-34B		Primary	02/16/01	Lead-210	532 U	---	532	Filtered		ES
RD-34B		Primary	02/16/01	Lead-212	20.3 U	---	20.3	Filtered		ES
RD-34B		Primary	02/16/01	Lead-214	35.5 U	---	35.5	Filtered		ES
RD-34B		Primary	02/16/01	Potassium-40	394 U	---	394	Filtered		ES
RD-34B		Primary	02/16/01	Radium-226	200 U	---	200	Filtered		ES
RD-34B		Primary	02/16/01	Thallium-208	15.3 U	---	15.3	Filtered		ES
RD-34B		Primary	02/16/01	Thorium-234	242 U	---	242	Filtered		ES
RD-34B		Primary	02/16/01	Uranium-235	66.1 U	---	66.1	Filtered		ES
RD-34B		Primary	02/15/02	Actinium-228	5 U	5	5	Filtered		DL
RD-34B		Primary	02/15/02	Bismuth-212	5 U	3	5	Filtered		DL
RD-34B		Primary	02/15/02	Bismuth-214	5 U	3	5	Filtered		DL
RD-34B		Primary	02/15/02	Lead-210	5 U	3	5	Filtered		DL
RD-34B		Primary	02/15/02	Lead-212	5 U	3	5	Filtered		DL
RD-34B		Primary	02/15/02	Lead-214	5 U	3	5	Filtered		DL
RD-34B		Primary	02/15/02	Potassium-40	5 U	3	5	Filtered		DL
RD-34B		Primary	02/15/02	Radium-226	5 U	5	5	Filtered		DL
RD-34B		Primary	02/15/02	Thorium-234	5 U	5	5	Filtered		DL
RD-34B		Primary	02/15/02	Uranium-235	5 U	3	5	Filtered		DL
RD-34B		Primary	02/06/03	Actinium-228	10.6 U	---	10.6	Filtered		ES
RD-34B		Primary	02/06/03	Bismuth-212	17.6 U	---	17.6	Filtered		ES
RD-34B		Primary	02/06/03	Bismuth-214	4.38 U	---	4.38	Filtered		ES
RD-34B		Primary	02/06/03	Lead-210	167 U	---	167	Filtered		ES
RD-34B		Primary	02/06/03	Lead-212	3.38 U	---	3.38	Filtered		ES
RD-34B		Primary	02/06/03	Lead-214	4.57 U	---	4.57	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34B		Primary	02/06/03	Potassium-40	39.2 U	---	39.2	Filtered		ES
RD-34B		Primary	02/06/03	Radium-226	34.2 U	---	34.2	Filtered		ES
RD-34B		Primary	02/06/03	Thorium-234	51.7 U	---	51.7	Filtered		ES
RD-34B		Primary	02/06/03	Uranium-235	12.9 U	---	12.9	Filtered		ES
RD-34B		Primary	02/24/04	Actinium-228	41.4 U	---	41.4	Filtered		ES
RD-34B		Primary	02/24/04	Bismuth-212	71.5 U	---	71.5	Filtered		ES
RD-34B		Primary	02/24/04	Bismuth-214	18 U	---	18	Filtered		ES
RD-34B		Primary	02/24/04	Lead-210	652 U	---	652	Filtered		ES
RD-34B		Primary	02/24/04	Lead-212	14.6 U	---	14.6	Filtered		ES
RD-34B		Primary	02/24/04	Lead-214	18.3 U	---	18.3	Filtered		ES
RD-34B		Primary	02/24/04	Potassium-40	166 U	---	166	Filtered		ES
RD-34B		Primary	02/24/04	Radium-226	130 U	---	130	Filtered		ES
RD-34B		Primary	02/24/04	Thallium-208	10.4 U	---	10.4	Filtered		ES
RD-34B		Primary	02/24/04	Thorium-234	207 U	---	207	Filtered		ES
RD-34B		Primary	02/24/04	Uranium-235	46.9 U	---	46.9	Filtered		ES
RD-34B		Primary	02/15/05	Potassium-40	29.7 J	19	13.7	Filtered		ES
RD-34B		Primary	02/17/06	Potassium-40	18.9 U	---	18.9	Filtered		ES
RD-34B		Primary	08/14/07	Potassium-40	6.83 U	---	6.83	Filtered		ES
RD-34B		Reanalysis of Primary	08/14/07	Potassium-40	6.78 U	---	6.78	Filtered		ES
RD-34B		Primary	02/06/08	Potassium-40	34.8 U	---	34.8	Filtered		ES
RD-34B		Primary	02/20/09	Potassium-40	4.79 U	6.8	11.6	Unfiltered		ES
RD-34B		Reanalysis of Primary	02/20/09	Potassium-40	-1.4 U	6.87	12.14	Filtered		ES
RD-34B		Primary	02/20/09	Radium-228	5.53 U	6.2	10.4	Filtered		ES
RD-34B		Primary	02/20/09	Radium-228	1.34 U	3.7	6.35	Unfiltered		ES
RD-34B		Primary	07/28/09	Potassium-40	-12.8 U	64	118	Filtered		ES
RD-34B		Primary	07/28/09	Potassium-40	11.8 U	57	101	Unfiltered		ES
RD-34C		Primary	02/26/94	Actinium-228	-9.6 U	4.4	32	Filtered		LAS
RD-34C		Primary	02/26/94	Bismuth-214	-1.2 U	5.5	16	Filtered		LAS
RD-34C		Primary	02/26/94	Lead-212	-1.7 U	9	13	Filtered		LAS
RD-34C		Primary	02/26/94	Lead-214	1.7 U	4.8	14	Filtered		LAS
RD-34C		Primary	02/26/94	Potassium-40	10 U	56	82	Filtered		LAS
RD-34C		Primary	02/26/94	Radium-226	30 U	99	140	Filtered		LAS
RD-34C		Primary	02/26/94	Thallium-208	-2.1 U	7	10	Filtered		LAS
RD-34C		Primary	02/26/94	Thorium-234	2 U	28	120	Filtered		LAS
RD-34C		Primary	02/26/94	Uranium-235	-2.7 U	9.2	34	Filtered		LAS
RD-34C		Primary	05/09/94	Actinium-228	-2 U	11	28	Filtered		LAS
RD-34C		Primary	05/09/94	Actinium-228	-7 U	13	35	Unfiltered		LAS
RD-34C		Primary	05/09/94	Bismuth-214	32	14	14	Filtered		LAS
RD-34C		Primary	05/09/94	Bismuth-214	95	20	16	Unfiltered		LAS
RD-34C		Primary	05/09/94	Lead-212	-4 U	8.8	13	Filtered		LAS
RD-34C		Primary	05/09/94	Lead-212	11 U	10	14	Unfiltered		LAS
RD-34C		Primary	05/09/94	Lead-214	28	11	14	Filtered		LAS
RD-34C		Primary	05/09/94	Lead-214	78	15	15	Unfiltered		LAS
RD-34C		Primary	05/09/94	Potassium-40	-42 U	56	97	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34C		Primary	05/09/94	Potassium-40	-52 U	62	110	Unfiltered		LAS
RD-34C		Primary	05/09/94	Thallium-208	-0.6 U	6.7	9.4	Filtered		LAS
RD-34C		Primary	05/09/94	Thallium-208	1.5 U	7.1	9.6	Unfiltered		LAS
RD-34C		Primary	05/09/94	Thorium-234	0 U	54	120	Filtered		LAS
RD-34C		Primary	05/09/94	Thorium-234	20 U	60	130	Unfiltered		LAS
RD-34C		Primary	08/09/94	Actinium-228	9 U	18	29	Filtered		LAS
RD-34C		Primary	08/09/94	Bismuth-214	7 U	11	15	Filtered		LAS
RD-34C		Primary	08/09/94	Lead-212	1 U	8.8	12	Filtered		LAS
RD-34C		Primary	08/09/94	Lead-214	6.8 U	9.5	14	Filtered		LAS
RD-34C		Primary	08/09/94	Potassium-40	7 U	56	82	Filtered		LAS
RD-34C		Primary	08/09/94	Radium-226	-57 U	98	150	Filtered		LAS
RD-34C		Primary	08/09/94	Thallium-208	0.6 U	6.1	8.3	Filtered		LAS
RD-34C		Primary	08/09/94	Thorium-234	33 U	57	130	Filtered		LAS
RD-34C		Primary	08/09/94	Uranium-235	-11 U	23	35	Filtered		LAS
RD-34C		Primary	02/07/95	Actinium-228	-13 U	18	38	Filtered		LAS
RD-34C		Primary	02/07/95	Bismuth-214	25	18	24	Filtered		LAS
RD-34C		Primary	02/07/95	Lead-212	10 U	11	16	Filtered		LAS
RD-34C		Primary	02/07/95	Lead-214	10 U	13	20	Filtered		LAS
RD-34C		Primary	02/07/95	Potassium-40	-51 U	29	130	Filtered		LAS
RD-34C		Primary	02/07/95	Thallium-208	1.5 U	8.5	13	Filtered		LAS
RD-34C		Primary	02/07/95	Thorium-234	-16 U	74	180	Filtered		LAS
RD-34C		Primary	08/10/95	Actinium-228	1 U	21	39	Filtered		LAS
RD-34C		Primary	08/10/95	Bismuth-214	2 U	12	18	Filtered		LAS
RD-34C		Primary	08/10/95	Lead-212	-6.8 U	9.4	15	Filtered		LAS
RD-34C		Primary	08/10/95	Lead-214	4 U	11	17	Filtered		LAS
RD-34C		Primary	08/10/95	Potassium-40	23 U	72	110	Filtered		LAS
RD-34C		Primary	08/10/95	Thallium-208	-1.5 U	6.9	11	Filtered		LAS
RD-34C		Primary	08/10/95	Thorium-234	10 U	100	160	Filtered		LAS
RD-34C		Primary	02/19/96	Actinium-228	6.6 U	9.8	16	Filtered		LAS
RD-34C		Primary	02/19/96	Bismuth-214	15.1	7.8	11	Filtered		LAS
RD-34C		Primary	02/19/96	Lead-212	-1.4 U	6.1	9.3	Filtered		LAS
RD-34C		Primary	02/19/96	Lead-214	12.7	6.9	10	Filtered		LAS
RD-34C		Primary	02/19/96	Potassium-40	18 U	38	56	Filtered		LAS
RD-34C		Primary	02/19/96	Thallium-208	2.4 U	3.7	5.3	Filtered		LAS
RD-34C		Primary	02/19/96	Thorium-234	-11 U	61	230	Filtered		LAS
RD-34C		Primary	08/19/96	Actinium-228	-8 U	12	39	Filtered		LAS
RD-34C		Primary	08/19/96	Bismuth-214	16 U	13	18	Filtered		LAS
RD-34C		Primary	08/19/96	Lead-212	89	17	14	Filtered		LAS
RD-34C		Primary	08/19/96	Lead-214	18 U	13	19	Filtered		LAS
RD-34C		Primary	08/19/96	Potassium-40	-73 U	28	130	Filtered		LAS
RD-34C		Primary	08/19/96	Thallium-208	27	10	10	Filtered		LAS
RD-34C		Primary	08/19/96	Thorium-234	3 U	74	190	Filtered		LAS
RD-34C		Primary	02/07/97	Actinium-228	2 U	10	17	Filtered		LAS
RD-34C		Primary	02/07/97	Bismuth-214	58	12	10	Filtered		LAS
RD-34C		Primary	02/07/97	Lead-212	2 U	6.5	9.6	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34C		Primary	02/07/97	Lead-214	78	11	10	Filtered		LAS
RD-34C		Primary	02/07/97	Potassium-40	6 U	35	57	Filtered		LAS
RD-34C		Primary	02/07/97	Thallium-208	-0.3 U	3.4	5.1	Filtered		LAS
RD-34C		Primary	02/07/97	Thorium-234	-27 U	63	240	Filtered		LAS
RD-34C		Primary	08/21/97	Actinium-228	8 U	20	44	Filtered		LAS
RD-34C		Primary	08/21/97	Bismuth-212	17 U	48	64	Filtered		LAS
RD-34C		Primary	08/21/97	Bismuth-214	14 U	15	20	Filtered		LAS
RD-34C		Primary	08/21/97	Lead-210	-30 U	110	180	Filtered		LAS
RD-34C		Primary	08/21/97	Lead-212	-2.7 U	9.3	14	Filtered		LAS
RD-34C		Primary	08/21/97	Lead-214	12 U	12	19	Filtered		LAS
RD-34C		Primary	08/21/97	Potassium-40	36 U	73	110	Filtered		LAS
RD-34C		Primary	08/21/97	Thallium-208	-1.4 U	7	11	Filtered		LAS
RD-34C		Primary	08/21/97	Thorium-234	2 U	74	140	Filtered		LAS
RD-34C		Primary	05/27/98	Actinium-228	37.6 U	---	37.6	Filtered		TN
RD-34C		Primary	05/27/98	Bismuth-212	62.7 U	---	62.7	Filtered		TN
RD-34C		Primary	05/27/98	Bismuth-214	27.7 U	---	27.7	Filtered		TN
RD-34C		Primary	05/27/98	Lead-210	500 U	---	500	Filtered		TN
RD-34C		Primary	05/27/98	Lead-212	26.9 U	---	26.9	Filtered		TN
RD-34C		Primary	05/27/98	Lead-214	42.9 U	---	42.9	Filtered		TN
RD-34C		Primary	05/27/98	Potassium-40	158 U	---	158	Filtered		TN
RD-34C		Primary	05/27/98	Thallium-208	9.49 U	---	9.49	Filtered		TN
RD-34C		Primary	05/27/98	Thorium-234	200 U	---	200	Filtered		TN
RD-34C		Primary	08/17/98	Actinium-228	42 U	---	42	Filtered		TN
RD-34C		Primary	08/17/98	Bismuth-212	95.6 U	---	95.6	Filtered		TN
RD-34C		Primary	08/17/98	Bismuth-214	25.5 U	---	25.5	Filtered		TN
RD-34C		Primary	08/17/98	Lead-210	577 U	---	577	Filtered		TN
RD-34C		Primary	08/17/98	Lead-212	21.8 U	---	21.8	Filtered		TN
RD-34C		Primary	08/17/98	Lead-214	26.2 U	---	26.2	Filtered		TN
RD-34C		Primary	08/17/98	Potassium-40	165 U	---	165	Filtered		TN
RD-34C		Primary	08/17/98	Thallium-208	13.6 U	---	13.6	Filtered		TN
RD-34C		Primary	08/17/98	Thorium-234	345 U	---	345	Filtered		TN
RD-34C		Primary	02/04/99	Actinium-228	43.3 U	---	43.3	Filtered		TN
RD-34C		Primary	02/04/99	Bismuth-212	81.1 U	---	81.1	Filtered		TN
RD-34C		Primary	02/04/99	Bismuth-214	20.5 U	---	20.5	Filtered		TN
RD-34C		Primary	02/04/99	Lead-210	94.2	62	87.9	Filtered		TN
RD-34C		Primary	02/04/99	Lead-212	13 U	---	13	Filtered		TN
RD-34C		Primary	02/04/99	Lead-214	18.7 U	---	18.7	Filtered		TN
RD-34C		Primary	02/04/99	Potassium-40	140 U	---	140	Filtered		TN
RD-34C		Primary	02/04/99	Radium-226	120 U	---	120	Filtered		TN
RD-34C		Primary	02/04/99	Thallium-208	9.64 U	---	9.64	Filtered		TN
RD-34C		Primary	02/04/99	Thorium-234	147 U	---	147	Filtered		TN
RD-34C		Primary	02/04/99	Uranium-235	36.9 U	---	36.9	Filtered		TN
RD-34C		Primary	02/05/00	Actinium-228	43.5 U	---	43.5	Filtered		TR
RD-34C		Primary	02/05/00	Bismuth-212	81.8 U	---	81.8	Filtered		TR
RD-34C		Primary	02/05/00	Bismuth-214	20 U	---	20	Filtered		TR

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34C		Primary	02/05/00	Lead-210	2660 U	---	2660	Filtered		TR
RD-34C		Primary	02/05/00	Lead-212	20.9 U	---	20.9	Filtered		TR
RD-34C		Primary	02/05/00	Lead-214	19.5 U	---	19.5	Filtered		TR
RD-34C		Primary	02/05/00	Potassium-40	190 U	---	190	Filtered		TR
RD-34C		Primary	02/05/00	Radium-226	174 U	---	174	Filtered		TR
RD-34C		Primary	02/05/00	Thallium-208	11.6 U	---	11.6	Filtered		TR
RD-34C		Primary	02/05/00	Thorium-234	334 U	---	334	Filtered		TR
RD-34C		Primary	02/05/00	Uranium-235	60.9 U	---	60.9	Filtered		TR
RD-34C		Primary	02/16/01	Actinium-228	50.5 U	---	50.5	Filtered		ES
RD-34C		Primary	02/16/01	Bismuth-212	99.4 U	---	99.4	Filtered		ES
RD-34C		Primary	02/16/01	Bismuth-214	30.6 U	---	30.6	Filtered		ES
RD-34C		Primary	02/16/01	Lead-210	117 U	---	117	Filtered		ES
RD-34C		Primary	02/16/01	Lead-212	13.4 U	---	13.4	Filtered		ES
RD-34C		Primary	02/16/01	Lead-214	31	18	19.4	Filtered		ES
RD-34C		Primary	02/16/01	Potassium-40	150 U	---	150	Filtered		ES
RD-34C		Primary	02/16/01	Radium-226	135 U	---	135	Filtered		ES
RD-34C		Primary	02/16/01	Thallium-208	11.3 U	---	11.3	Filtered		ES
RD-34C		Primary	02/16/01	Thorium-234	167 U	---	167	Filtered		ES
RD-34C		Primary	02/16/01	Uranium-235	38.2 U	---	38.2	Filtered		ES
RD-34C		Primary	02/14/02	Actinium-228	3 U	2.25	3	Filtered		DL
RD-34C		Primary	02/14/02	Bismuth-212	3 U	3	3	Filtered		DL
RD-34C		Primary	02/14/02	Bismuth-214	3 U	3	3	Filtered		DL
RD-34C		Primary	02/14/02	Lead-210	3 U	5	3	Filtered		DL
RD-34C		Primary	02/14/02	Lead-212	3 U	3	3	Filtered		DL
RD-34C		Primary	02/14/02	Lead-214	5 U	3.13	5	Filtered		DL
RD-34C		Primary	02/14/02	Potassium-40	32.2	11.03	5	Filtered		DL
RD-34C		Primary	02/14/02	Radium-226	3 U	1.2	3	Filtered		DL
RD-34C		Primary	02/14/02	Thorium-234	5 U	5	5	Filtered		DL
RD-34C		Primary	02/14/02	Uranium-235	5 U	3	5	Filtered		DL
RD-34C		Primary	02/06/03	Actinium-228	9.17 U	---	9.17	Filtered		ES
RD-34C		Primary	02/06/03	Bismuth-212	13.5 U	---	13.5	Filtered		ES
RD-34C		Primary	02/06/03	Bismuth-214	3.93 U	---	3.93	Filtered		ES
RD-34C		Primary	02/06/03	Lead-210	145 U	---	145	Filtered		ES
RD-34C		Primary	02/06/03	Lead-212	2.5 U	---	2.5	Filtered		ES
RD-34C		Primary	02/06/03	Lead-214	3.71 U	---	3.71	Filtered		ES
RD-34C		Primary	02/06/03	Potassium-40	51.2 U	---	51.2	Filtered		ES
RD-34C		Primary	02/06/03	Radium-226	27.2 U	---	27.2	Filtered		ES
RD-34C		Primary	02/06/03	Thorium-234	30.4 U	---	30.4	Filtered		ES
RD-34C		Primary	02/06/03	Uranium-235	8.9 U	---	8.9	Filtered		ES
RD-34C		Primary	02/24/04	Actinium-228	20.7 U	---	20.7	Filtered		ES
RD-34C		Primary	02/24/04	Bismuth-212	35.4 U	---	35.4	Filtered		ES
RD-34C		Primary	02/24/04	Bismuth-214	19.8 U	---	19.8	Filtered		ES
RD-34C		Primary	02/24/04	Lead-210	499 U	---	499	Filtered		ES
RD-34C		Primary	02/24/04	Lead-212	6.64 U	---	6.64	Filtered		ES
RD-34C		Primary	02/24/04	Lead-214	8.41 U	---	8.41	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34C		Primary	02/24/04	Potassium-40	53.9 U	---	53.9	Filtered		ES
RD-34C		Primary	02/24/04	Radium-226	70.8 U	---	70.8	Filtered		ES
RD-34C		Primary	02/24/04	Thallium-208	4.88 U	---	4.88	Filtered		ES
RD-34C		Primary	02/24/04	Thorium-234	127 U	---	127	Filtered		ES
RD-34C		Primary	02/24/04	Uranium-235	20.6 U	---	20.6	Filtered		ES
RD-34C		Split	08/09/04	Actinium-228	6.15	3.11	5.59	Filtered		STL
RD-34C		Split	08/09/04	Bismuth-212	5.81 U	11.3	19.7	Filtered		STL
RD-34C		Split	08/09/04	Bismuth-214	1.7 U	1.74	3.02	Filtered		STL
RD-34C		Split	08/09/04	Lead-212	0.912 U	1.46	1.84	Filtered		STL
RD-34C		Split	08/09/04	Lead-214	1.68 U	1.49	2.56	Filtered		STL
RD-34C		Split	08/09/04	Potassium-40	-24.1 U	22	29.7	Filtered		STL
RD-34C		Split	08/09/04	Thallium-208	1.18 U	0.805	1.42	Filtered		STL
RD-34C		Primary	02/15/05	Potassium-40	37.5 U	---	37.5	Filtered		ES
RD-34C		Primary	02/21/06	Potassium-40	49.3 U	---	49.3	Filtered		ES
RD-34C		Split	02/21/06	Potassium-40	-4.81 U	20	39.5	Filtered		STL
RD-34C		Primary	02/07/07	Potassium-40	20.5 U	---	20.5	Filtered		ES
RD-34C		Primary	02/12/08	Potassium-40	5.58 U	---	5.58	Filtered		ES
RD-34C		Primary	02/19/09	Potassium-40	-57.9 U	20	34.1	Filtered		ES
RD-34C		Primary	02/19/09	Potassium-40	-0.14 U	7.8	13.4	Unfiltered		ES
RD-34C		Primary	02/19/09	Radium-228	-3.1 U	5.2	8.84	Filtered		ES
RD-34C		Primary	02/19/09	Radium-228	2.01 U	3	5.01	Unfiltered		ES
RD-34C		Primary	07/23/09	Potassium-40	-36.8 U	69	126	Filtered		ES
RD-34C		Primary	07/23/09	Potassium-40	128 U	140	228	Unfiltered		ES
RD-34C		Duplicate	07/23/09	Potassium-40	5.24 U	12	52.3	Filtered		ES
RD-34C		Duplicate	07/23/09	Potassium-40	20.1 U	63	110	Unfiltered		ES
RD-34C		Split	07/23/09	Potassium-40	-20 U	27.2	43.2	Filtered		GEL
RD-34C		Split	07/23/09	Potassium-40	8.47 U	29.1	44.9	Unfiltered		GEL
RD-35B		Primary	05/07/99	Actinium-228	71.3 U	---	71.3	Filtered		TN
RD-35B		Primary	05/07/99	Bismuth-212	113 U	---	113	Filtered		TN
RD-35B		Primary	05/07/99	Bismuth-214	27.2 U	---	27.2	Filtered		TN
RD-35B		Primary	05/07/99	Lead-210	117 U	---	117	Filtered		TN
RD-35B		Primary	05/07/99	Lead-212	18.4 U	---	18.4	Filtered		TN
RD-35B		Primary	05/07/99	Lead-214	26.3 U	---	26.3	Filtered		TN
RD-35B		Primary	05/07/99	Potassium-40	181 U	---	181	Filtered		TN
RD-35B		Primary	05/07/99	Radium-226	176 U	---	176	Filtered		TN
RD-35B		Primary	05/07/99	Thallium-208	14.3 U	---	14.3	Filtered		TN
RD-35B		Primary	05/07/99	Thorium-234	222 U	---	222	Filtered		TN
RD-35B		Primary	05/07/99	Uranium-235	54.2 U	---	54.2	Filtered		TN
RD-36D		Primary	11/13/97	Actinium-228	-15.7 U	9.4	38	Filtered		LAS
RD-36D		Primary	11/13/97	Bismuth-212	-24 U	27	79	Filtered		LAS
RD-36D		Primary	11/13/97	Bismuth-214	32	15	17	Filtered		LAS
RD-36D		Primary	11/13/97	Lead-210	70 U	110	180	Filtered		LAS
RD-36D		Primary	11/13/97	Lead-212	3 U	10	15	Filtered		LAS
RD-36D		Primary	11/13/97	Lead-214	30	14	19	Filtered		LAS
RD-36D		Primary	11/13/97	Potassium-40	30 U	73	110	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-36D		Primary	11/13/97	Radium-226	-40 U	120	190	Filtered		LAS
RD-36D		Primary	11/13/97	Thallium-208	-2 U	6.4	9.8	Filtered		LAS
RD-36D		Primary	11/13/97	Thorium-234	-40 U	71	140	Filtered		LAS
RD-36D		Primary	11/13/97	Uranium-235	37 U	30	41	Filtered		LAS
RD-38B		Primary	02/17/99	Actinium-228	63.2 U	---	63.2	Filtered		TN
RD-38B		Primary	02/17/99	Bismuth-212	127 U	---	127	Filtered		TN
RD-38B		Primary	02/17/99	Bismuth-214	27.3 U	---	27.3	Filtered		TN
RD-38B		Primary	02/17/99	Lead-210	193 U	---	193	Filtered		TN
RD-38B		Primary	02/17/99	Lead-212	18.6 U	---	18.6	Filtered		TN
RD-38B		Primary	02/17/99	Lead-214	24.1 U	---	24.1	Filtered		TN
RD-38B		Primary	02/17/99	Potassium-40	171 U	---	171	Filtered		TN
RD-38B		Primary	02/17/99	Radium-226	184 U	---	184	Filtered		TN
RD-38B		Primary	02/17/99	Thallium-208	13.6 U	---	13.6	Filtered		TN
RD-38B		Primary	02/17/99	Thorium-234	231 U	---	231	Filtered		TN
RD-38B		Primary	02/17/99	Uranium-235	51.1 U	---	51.1	Filtered		TN
RD-44		Primary	08/24/97	Actinium-228	-6 U	21	39	Filtered		TN
RD-44		Primary	08/24/97	Bismuth-212	35 U	48	58	Filtered		TN
RD-44		Primary	08/24/97	Bismuth-214	33	16	20	Filtered		TN
RD-44		Primary	08/24/97	Lead-210	-20 U	110	170	Filtered		TN
RD-44		Primary	08/24/97	Lead-212	7.2 U	9.5	13	Filtered		TN
RD-44		Primary	08/24/97	Lead-214	14 U	12	19	Filtered		TN
RD-44		Primary	08/24/97	Potassium-40	-5 U	76	130	Filtered		TN
RD-44		Primary	08/24/97	Thallium-208	2.5 U	6.5	9.3	Filtered		TN
RD-44		Primary	08/24/97	Thorium-234	-18 U	69	140	Filtered		TN
RD-46B		Primary	02/15/99	Actinium-228	62.6 U	---	62.6	Filtered		TN
RD-46B		Primary	02/15/99	Bismuth-212	127 U	---	127	Filtered		TN
RD-46B		Primary	02/15/99	Bismuth-214	29.5 U	---	29.5	Filtered		TN
RD-46B		Primary	02/15/99	Lead-210	238 U	---	238	Filtered		TN
RD-46B		Primary	02/15/99	Lead-212	18.5 U	---	18.5	Filtered		TN
RD-46B		Primary	02/15/99	Lead-214	27.1 U	---	27.1	Filtered		TN
RD-46B		Primary	02/15/99	Potassium-40	168 U	---	168	Filtered		TN
RD-46B		Primary	02/15/99	Radium-226	177 U	---	177	Filtered		TN
RD-46B		Primary	02/15/99	Thallium-208	13.8 U	---	13.8	Filtered		TN
RD-46B		Primary	02/15/99	Thorium-234	216 U	---	216	Filtered		TN
RD-46B		Primary	02/15/99	Uranium-235	44.8 U	---	44.8	Filtered		TN
RD-47		Primary	08/24/97	Actinium-228	-5 U	19	38	Filtered		LAS
RD-47		Primary	08/24/97	Bismuth-212	-7 U	30	78	Filtered		LAS
RD-47		Primary	08/24/97	Bismuth-214	56	18	18	Filtered		LAS
RD-47		Primary	08/24/97	Lead-210	-20 U	110	170	Filtered		LAS
RD-47		Primary	08/24/97	Lead-212	2.1 U	9.7	14	Filtered		LAS
RD-47		Primary	08/24/97	Lead-214	43	15	20	Filtered		LAS
RD-47		Primary	08/24/97	Potassium-40	30 U	77	120	Filtered		LAS
RD-47		Primary	08/24/97	Thallium-208	0.3 U	7.7	11	Filtered		LAS
RD-47		Primary	08/24/97	Thorium-234	-43 U	74	150	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-50		Primary	05/05/94	Actinium-228	-1 U	19	34	Filtered		LAS
RD-50		Primary	05/05/94	Bismuth-214	65	17	16	Filtered		LAS
RD-50		Primary	05/05/94	Lead-212	13.9	9.5	12	Filtered		LAS
RD-50		Primary	05/05/94	Lead-214	43	13	16	Filtered		LAS
RD-50		Primary	05/05/94	Potassium-40	-44 U	62	100	Filtered		LAS
RD-50		Primary	05/05/94	Thallium-208	4 U	7.3	9.6	Filtered		LAS
RD-50		Primary	05/05/94	Thorium-234	54 U	59	130	Filtered		LAS
RD-50		Primary	05/19/95	Actinium-228	-4.4 U	4.1	18	Filtered		LAS
RD-50		Primary	05/19/95	Bismuth-214	25.6	8.9	11	Filtered		LAS
RD-50		Primary	05/19/95	Lead-212	8.5 U	7	9.8	Filtered		LAS
RD-50		Primary	05/19/95	Lead-214	27.8	7.8	9.6	Filtered		LAS
RD-50		Primary	05/19/95	Potassium-40	-17 U	36	62	Filtered		LAS
RD-50		Primary	05/19/95	Thallium-208	1.6 U	3.7	5.4	Filtered		LAS
RD-50		Primary	05/19/95	Thorium-234	20 U	60	200	Filtered		LAS
RD-50		Primary	05/14/96	Actinium-228	1 U	28	46	Filtered		LAS
RD-50		Primary	05/14/96	Bismuth-214	44	19	21	Filtered		LAS
RD-50		Primary	05/14/96	Lead-212	-6 U	11	16	Filtered		LAS
RD-50		Primary	05/14/96	Lead-214	47	15	18	Filtered		LAS
RD-50		Primary	05/14/96	Potassium-40	25 U	92	130	Filtered		LAS
RD-50		Primary	05/14/96	Thallium-208	-2.8 U	7.7	11	Filtered		LAS
RD-50		Primary	05/14/96	Thorium-234	54 U	83	210	Filtered		LAS
RD-50		Primary	05/14/96	Uranium-235	3 U	29	41	Filtered		LAS
RD-50		Primary	05/05/97	Actinium-228	-30 U	16	44	Filtered		LAS
RD-50		Primary	05/05/97	Bismuth-214	14 U	16	21	Filtered		LAS
RD-50		Primary	05/05/97	Lead-212	12 U	11	13	Filtered		LAS
RD-50		Primary	05/05/97	Lead-214	13 U	13	20	Filtered		LAS
RD-50		Primary	05/05/97	Potassium-40	33 U	85	120	Filtered		LAS
RD-50		Primary	05/05/97	Thallium-208	-5.7 U	7.6	11	Filtered		LAS
RD-50		Primary	05/05/97	Thorium-234	-20 U	150	220	Filtered		LAS
RD-50		Primary	05/28/98	Actinium-228	71.6 U	---	71.6	Filtered		TN
RD-50		Primary	05/28/98	Bismuth-212	107 U	---	107	Filtered		TN
RD-50		Primary	05/28/98	Bismuth-214	31.8 U	---	31.8	Filtered		TN
RD-50		Primary	05/28/98	Lead-210	745 U	---	745	Filtered		TN
RD-50		Primary	05/28/98	Lead-212	32.2 U	---	32.2	Filtered		TN
RD-50		Primary	05/28/98	Lead-214	28.3 U	---	28.3	Filtered		TN
RD-50		Primary	05/28/98	Potassium-40	240 U	---	240	Filtered		TN
RD-50		Primary	05/28/98	Thallium-208	16.7 U	---	16.7	Filtered		TN
RD-50		Primary	05/28/98	Thorium-234	308 U	---	308	Filtered		TN
RD-54A		Primary	05/08/94	Actinium-228	-15.3 U	8.9	33	Filtered		LAS
RD-54A		Primary	05/08/94	Bismuth-214	24	13	15	Filtered		LAS
RD-54A		Primary	05/08/94	Lead-212	-0.8 U	8.8	12	Filtered		LAS
RD-54A		Primary	05/08/94	Lead-214	19	11	15	Filtered		LAS
RD-54A		Primary	05/08/94	Potassium-40	-14 U	61	97	Filtered		LAS
RD-54A		Primary	05/08/94	Thallium-208	-1.1 U	6.6	9.2	Filtered		LAS
RD-54A		Primary	05/08/94	Thorium-234	47 U	56	120	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54A		Primary	08/09/94	Actinium-228	6 U	13	26	Filtered		LAS
RD-54A		Primary	08/09/94	Bismuth-214	25	12	17	Filtered		LAS
RD-54A		Primary	08/09/94	Lead-212	8.4 U	8.2	12	Filtered		LAS
RD-54A		Primary	08/09/94	Lead-214	38	10	14	Filtered		LAS
RD-54A		Primary	08/09/94	Potassium-40	17 U	47	77	Filtered		LAS
RD-54A		Primary	08/09/94	Radium-226	-28 U	82	120	Filtered		LAS
RD-54A		Primary	08/09/94	Thallium-208	7 U	5.3	7.2	Filtered		LAS
RD-54A		Primary	08/09/94	Thorium-234	45 U	65	190	Filtered		LAS
RD-54A		Primary	08/09/94	Uranium-235	8 U	23	34	Filtered		LAS
RD-54A		Primary	08/03/95	Actinium-228	32 U	24	50	Filtered		LAS
RD-54A		Primary	08/03/95	Bismuth-214	13 U	19	26	Filtered		LAS
RD-54A		Primary	08/03/95	Lead-212	11 U	14	19	Filtered		LAS
RD-54A		Primary	08/03/95	Lead-214	15 U	16	25	Filtered		LAS
RD-54A		Primary	08/03/95	Potassium-40	1 U	97	150	Filtered		LAS
RD-54A		Primary	08/03/95	Thallium-208	0 U	10	15	Filtered		LAS
RD-54A		Primary	08/03/95	Thorium-234	-75 U	90	240	Filtered		LAS
RD-54A		Primary	05/16/96	Actinium-228	-1 U	9.3	16	Filtered		LAS
RD-54A		Primary	05/16/96	Bismuth-214	14.6	8	10	Filtered		LAS
RD-54A		Primary	05/16/96	Lead-212	0 U	5.9	9	Filtered		LAS
RD-54A		Primary	05/16/96	Lead-214	13.4	6.7	9.7	Filtered		LAS
RD-54A		Primary	05/16/96	Potassium-40	6 U	36	57	Filtered		LAS
RD-54A		Primary	05/16/96	Thallium-208	-0.1 U	3.3	5	Filtered		LAS
RD-54A		Primary	05/16/96	Thorium-234	11 U	63	230	Filtered		LAS
RD-54A		Primary	05/16/96	Uranium-235	1 U	18	28	Filtered		LAS
RD-54A		Primary	08/23/96	Actinium-228	-2 U	21	41	Filtered		LAS
RD-54A		Primary	08/23/96	Bismuth-214	54	18	21	Filtered		LAS
RD-54A		Primary	08/23/96	Lead-212	6.2 U	9.7	13	Filtered		LAS
RD-54A		Primary	08/23/96	Lead-214	56	15	19	Filtered		LAS
RD-54A		Primary	08/23/96	Potassium-40	-46 U	65	120	Filtered		LAS
RD-54A		Primary	08/23/96	Thallium-208	3.4 U	6.9	9.3	Filtered		LAS
RD-54A		Primary	08/23/96	Thorium-234	3 U	73	190	Filtered		LAS
RD-54A		Primary	05/05/97	Actinium-228	2 U	10	18	Filtered		LAS
RD-54A		Primary	05/05/97	Bismuth-214	12.5	8	11	Filtered		LAS
RD-54A		Primary	05/05/97	Lead-212	-3.9 U	6.2	9.6	Filtered		LAS
RD-54A		Primary	05/05/97	Lead-214	13.7	7.1	9.8	Filtered		LAS
RD-54A		Primary	05/05/97	Potassium-40	28 U	39	58	Filtered		LAS
RD-54A		Primary	05/05/97	Thallium-208	0.5 U	3.6	5.3	Filtered		LAS
RD-54A		Primary	05/05/97	Thorium-234	-30 U	170	230	Filtered		LAS
RD-54A		Primary	08/22/97	Actinium-228	-10.9 U	8.8	37	Filtered		LAS
RD-54A		Primary	08/22/97	Bismuth-212	-11 U	25	72	Filtered		LAS
RD-54A		Primary	08/22/97	Bismuth-214	20	15	19	Filtered		LAS
RD-54A		Primary	08/22/97	Lead-210	30 U	110	170	Filtered		LAS
RD-54A		Primary	08/22/97	Lead-212	-0.1 U	9.3	14	Filtered		LAS
RD-54A		Primary	08/22/97	Lead-214	12 U	12	19	Filtered		LAS
RD-54A		Primary	08/22/97	Potassium-40	17 U	80	130	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54A		Primary	08/22/97	Thallium-208	-0.8 U	7.4	11	Filtered		LAS
RD-54A		Primary	08/22/97	Thorium-234	20 U	70	140	Filtered		LAS
RD-54A		Primary	02/08/98	Actinium-228	64.6 U	---	64.6	Filtered		TN
RD-54A		Primary	02/08/98	Bismuth-212	123 U	---	123	Filtered		TN
RD-54A		Primary	02/08/98	Bismuth-214	27.6 U	---	27.6	Filtered		TN
RD-54A		Primary	02/08/98	Lead-210	169	97	---	Filtered		TN
RD-54A		Primary	02/08/98	Lead-212	19 U	---	19	Filtered		TN
RD-54A		Primary	02/08/98	Lead-214	29.7 U	---	29.7	Filtered		TN
RD-54A		Primary	02/08/98	Potassium-40	198 U	---	198	Filtered		TN
RD-54A		Primary	02/08/98	Thallium-208	13 U	---	13	Filtered		TN
RD-54A		Primary	02/08/98	Thorium-234	244 U	---	244	Filtered		TN
RD-54A		Primary	08/07/98	Actinium-228	112 U	---	112	Filtered		TN
RD-54A		Primary	08/07/98	Bismuth-212	138 U	---	138	Filtered		TN
RD-54A		Primary	08/07/98	Bismuth-214	47.7 U	---	47.7	Filtered		TN
RD-54A		Primary	08/07/98	Lead-210	1240 U	---	1240	Filtered		TN
RD-54A		Primary	08/07/98	Lead-212	37 U	---	37	Filtered		TN
RD-54A		Primary	08/07/98	Lead-214	42.9 U	---	42.9	Filtered		TN
RD-54A		Primary	08/07/98	Potassium-40	455 U	---	455	Filtered		TN
RD-54A		Primary	08/07/98	Thallium-208	24.5 U	---	24.5	Filtered		TN
RD-54A		Primary	08/07/98	Thorium-234	526 U	---	526	Filtered		TN
RD-54A		Primary	02/08/99	Actinium-228	27.2 U	---	27.2	Filtered		TN
RD-54A		Primary	02/08/99	Bismuth-212	49.7 U	---	49.7	Filtered		TN
RD-54A		Primary	02/08/99	Lead-210	384 U	---	384	Filtered		TN
RD-54A		Primary	02/08/99	Lead-212	11.8 U	---	11.8	Filtered		TN
RD-54A		Primary	02/08/99	Lead-214	11.5 U	---	11.5	Filtered		TN
RD-54A		Primary	02/08/99	Potassium-40	100 U	---	100	Filtered		TN
RD-54A		Primary	02/08/99	Radium-226	107 U	---	107	Filtered		TN
RD-54A		Primary	02/08/99	Thallium-208	6.28 U	---	6.28	Filtered		TN
RD-54A		Primary	02/08/99	Thorium-234	177 U	---	177	Filtered		TN
RD-54A		Primary	02/08/99	Uranium-235	34.5 U	---	34.5	Filtered		TN
RD-54A		Primary	03/15/00	Actinium-228	41.4 U	---	41.4	Filtered		TR
RD-54A		Primary	03/15/00	Bismuth-212	65.1 U	---	65.1	Filtered		TR
RD-54A		Primary	03/15/00	Bismuth-214	19.2 U	---	19.2	Filtered		TR
RD-54A		Primary	03/15/00	Lead-210	439 U	---	439	Filtered		TR
RD-54A		Primary	03/15/00	Lead-212	13.3 U	---	13.3	Filtered		TR
RD-54A		Primary	03/15/00	Lead-214	17.3 U	---	17.3	Filtered		TR
RD-54A		Primary	03/15/00	Potassium-40	268 U	---	268	Filtered		TR
RD-54A		Primary	03/15/00	Radium-226	116 U	---	116	Filtered		TR
RD-54A		Primary	03/15/00	Thallium-208	9.39 U	---	9.39	Filtered		TR
RD-54A		Primary	03/15/00	Thorium-234	154 U	---	154	Filtered		TR
RD-54A		Primary	03/15/00	Uranium-235	45.3 U	---	45.3	Filtered		TR
RD-54A		Primary	10/26/01	Actinium-228	5.6 U	---	5.6	Filtered		DL
RD-54A		Primary	10/26/01	Bismuth-212	0.4 U	1	5	Filtered		DL
RD-54A		Primary	10/26/01	Bismuth-214	5 U	---	5	Filtered		DL
RD-54A		Primary	10/26/01	Lead-210	8 U	---	8	Filtered		DL

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54A		Primary	10/26/01	Lead-212	0.4 U	1	5	Filtered		DL
RD-54A		Primary	10/26/01	Lead-214	5 U	---	5	Filtered		DL
RD-54A		Primary	10/26/01	Potassium-40	13 U	---	13	Filtered		DL
RD-54A		Primary	10/26/01	Radium-226	1.1 U	0.2	3	Filtered		DL
RD-54A		Primary	10/26/01	Thallium-208	5 U	---	5	Filtered		DL
RD-54A		Primary	10/26/01	Thorium-234	5 U	---	5	Filtered		DL
RD-54A		Primary	10/26/01	Uranium-235	1.3 U	0.7	5	Filtered		DL
RD-54A		Primary	02/27/02	Actinium-228	3 U	1	3	Filtered		DL
RD-54A		Primary	02/27/02	Bismuth-212	3 U	1.82	3	Filtered		DL
RD-54A		Primary	02/27/02	Bismuth-214	3 U	1.85	3	Filtered		DL
RD-54A		Primary	02/27/02	Lead-210	3 U	1.1	3	Filtered		DL
RD-54A		Primary	02/27/02	Lead-212	3 U	1.1	3	Filtered		DL
RD-54A		Primary	02/27/02	Lead-214	5 U	5	5	Filtered		DL
RD-54A		Primary	02/27/02	Potassium-40	5 U	3	5	Filtered		DL
RD-54A		Primary	02/27/02	Radium-226	3 U	2	3	Filtered		DL
RD-54A		Primary	02/27/02	Thorium-234	5 U	5	5	Filtered		DL
RD-54A		Primary	02/27/02	Uranium-235	5 U	3	5	Filtered		DL
RD-54A	Z02	Primary	02/18/03	Actinium-228	9.26 U	---	9.26	Filtered		ES
RD-54A	Z02	Primary	02/18/03	Bismuth-212	15.8 U	---	15.8	Filtered		ES
RD-54A	Z02	Primary	02/18/03	Bismuth-214	4.41 U	---	4.41	Filtered		ES
RD-54A	Z02	Primary	02/18/03	Lead-210	436 U	---	436	Filtered		ES
RD-54A	Z02	Primary	02/18/03	Lead-212	3.07 U	---	3.07	Filtered		ES
RD-54A	Z02	Primary	02/18/03	Lead-214	4.11 U	---	4.11	Filtered		ES
RD-54A	Z02	Primary	02/18/03	Potassium-40	49.7 U	---	49.7	Filtered		ES
RD-54A	Z02	Primary	02/18/03	Radium-226	30.7 U	---	30.7	Filtered		ES
RD-54A	Z02	Primary	02/18/03	Thorium-234	60.6 U	---	60.6	Filtered		ES
RD-54A	Z02	Primary	02/18/03	Uranium-235	12 U	---	12	Filtered		ES
RD-54A	Z02	Primary	11/03/04	Potassium-40	48.2 U	---	48.2	Filtered		ES
RD-54A	Z02	Primary	02/16/05	Potassium-40	27.4 U	---	27.4	Filtered		ES
RD-54A	Z02	Primary	02/16/06	Potassium-40	28.9 U	---	28.9	Filtered		ES
RD-54A	Z02	Primary	02/07/07	Potassium-40	28.3 U	---	28.3	Filtered		ES
RD-54A	Z02	Primary	02/06/08	Potassium-40	41.7 U	---	41.7	Filtered		ES
RD-54A	Z02	Primary	02/24/09	Potassium-40	12.7 U	9.7	16.2	Filtered		ES
RD-54A	Z02	Primary	02/24/09	Potassium-40	-1.03 U	9.5	16.3	Unfiltered		ES
RD-54A	Z02	Primary	02/24/09	Radium-228	3.46 U	3.5	5.85	Filtered		ES
RD-54A	Z02	Primary	02/24/09	Radium-228	-0.328 U	3.2	5.44	Unfiltered		ES
RD-54A	Z02	Primary	07/16/09	Potassium-40	-16.6 U	49	86.3	Filtered		ES
RD-54A	Z02	Reanalysis of Primary	07/16/09	Potassium-40	-65.7 U	54	105	Unfiltered		ES
RD-54B		Primary	05/08/94	Actinium-228	0 U	20	32	Filtered		LAS
RD-54B		Primary	05/08/94	Bismuth-214	70	18	16	Filtered		LAS
RD-54B		Primary	05/08/94	Lead-212	-3 U	9.1	13	Filtered		LAS
RD-54B		Primary	05/08/94	Lead-214	64	14	16	Filtered		LAS
RD-54B		Primary	05/08/94	Potassium-40	12 U	61	92	Filtered		LAS
RD-54B		Primary	05/08/94	Thallium-208	-0.9 U	7.2	10	Filtered		LAS
RD-54B		Primary	05/08/94	Thorium-234	-6 U	56	130	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54B		Primary	08/08/94	Actinium-228	-26.7 U	4	22	Filtered		LAS
RD-54B		Primary	08/08/94	Bismuth-214	-19.6 U	3	12	Filtered		LAS
RD-54B		Primary	08/08/94	Lead-212	4.1 U	7.8	11	Filtered		LAS
RD-54B		Primary	08/08/94	Lead-214	48	11	14	Filtered		LAS
RD-54B		Primary	08/08/94	Potassium-40	-93 U	15	72	Filtered		LAS
RD-54B		Primary	08/08/94	Radium-226	39 U	80	110	Filtered		LAS
RD-54B		Primary	08/08/94	Thallium-208	-8.4 U	1.5	5.5	Filtered		LAS
RD-54B		Primary	08/08/94	Thorium-234	19 U	61	210	Filtered		LAS
RD-54B		Primary	08/08/94	Uranium-235	-20 U	12	35	Filtered		LAS
RD-54B		Primary	08/30/95	Actinium-228	17 U	21	36	Filtered		LAS
RD-54B		Primary	08/30/95	Bismuth-214	50	18	21	Filtered		LAS
RD-54B		Primary	08/30/95	Lead-212	-2 U	11	17	Filtered		LAS
RD-54B		Primary	08/30/95	Lead-214	59	16	19	Filtered		LAS
RD-54B		Primary	08/30/95	Potassium-40	11 U	65	100	Filtered		LAS
RD-54B		Primary	08/30/95	Thallium-208	2.1 U	7.6	11	Filtered		LAS
RD-54B		Primary	08/30/95	Thorium-234	-15 U	70	160	Filtered		LAS
RD-54B		Primary	05/14/96	Actinium-228	6 U	20	35	Filtered		LAS
RD-54B		Primary	05/14/96	Bismuth-214	13 U	15	21	Filtered		LAS
RD-54B		Primary	05/14/96	Lead-212	5.4 U	9.6	13	Filtered		LAS
RD-54B		Primary	05/14/96	Lead-214	22	12	18	Filtered		LAS
RD-54B		Primary	05/14/96	Potassium-40	4 U	66	100	Filtered		LAS
RD-54B		Primary	05/14/96	Thallium-208	1.1 U	7	10	Filtered		LAS
RD-54B		Primary	05/14/96	Thorium-234	65 U	72	180	Filtered		LAS
RD-54B		Primary	05/14/96	Uranium-235	14 U	28	40	Filtered		LAS
RD-54B		Primary	08/23/96	Actinium-228	11 U	22	43	Filtered		LAS
RD-54B		Primary	08/23/96	Bismuth-214	155	28	19	Filtered		LAS
RD-54B		Primary	08/23/96	Lead-212	-11.2 U	2.6	17	Filtered		LAS
RD-54B		Primary	08/23/96	Lead-214	167	23	19	Filtered		LAS
RD-54B		Primary	08/23/96	Potassium-40	54 U	79	110	Filtered		LAS
RD-54B		Primary	08/23/96	Thallium-208	7 U	9	10	Filtered		LAS
RD-54B		Primary	08/23/96	Thorium-234	-40 U	120	190	Filtered		LAS
RD-54B		Primary	08/22/97	Actinium-228	0.6 U	9.5	17	Filtered		LAS
RD-54B		Primary	08/22/97	Bismuth-212	-1 U	22	32	Filtered		LAS
RD-54B		Primary	08/22/97	Bismuth-214	7.7 U	7.1	10	Filtered		LAS
RD-54B		Primary	08/22/97	Lead-210	-40 U	370	540	Filtered		LAS
RD-54B		Primary	08/22/97	Lead-212	2.4 U	5.6	8.1	Filtered		LAS
RD-54B		Primary	08/22/97	Lead-214	7.7 U	6.4	9.7	Filtered		LAS
RD-54B		Primary	08/22/97	Potassium-40	29 U	39	58	Filtered		LAS
RD-54B		Primary	08/22/97	Thallium-208	3.2 U	3.5	4.6	Filtered		LAS
RD-54B		Primary	08/22/97	Thorium-234	-7 U	59	96	Filtered		LAS
RD-54B		Primary	02/08/98	Actinium-228	23.6 U	---	23.6	Filtered		TN
RD-54B		Primary	02/08/98	Bismuth-212	41.5 U	---	41.5	Filtered		TN
RD-54B		Primary	02/08/98	Bismuth-214	10 U	---	10	Filtered		TN
RD-54B		Primary	02/08/98	Lead-210	197	150	---	Filtered		TN
RD-54B		Primary	02/08/98	Lead-212	8.84 U	---	8.84	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54B		Primary	02/08/98	Lead-214	10.1 U	---	10.1	Filtered		TN
RD-54B		Primary	02/08/98	Potassium-40	68.7 U	---	68.7	Filtered		TN
RD-54B		Primary	02/08/98	Thallium-208	5.12 U	---	5.12	Filtered		TN
RD-54B		Primary	02/08/98	Thorium-234	144 U	---	144	Filtered		TN
RD-54B		Primary	08/07/98	Actinium-228	50.6 U	---	50.6	Filtered		TN
RD-54B		Primary	08/07/98	Bismuth-212	72.1 U	---	72.1	Filtered		TN
RD-54B		Primary	08/07/98	Bismuth-214	20.4 U	---	20.4	Filtered		TN
RD-54B		Primary	08/07/98	Lead-210	479 U	---	479	Filtered		TN
RD-54B		Primary	08/07/98	Lead-212	16.6 U	---	16.6	Filtered		TN
RD-54B		Primary	08/07/98	Lead-214	19 U	---	19	Filtered		TN
RD-54B		Primary	08/07/98	Potassium-40	147 U	---	147	Filtered		TN
RD-54B		Primary	08/07/98	Thallium-208	10.9 U	---	10.9	Filtered		TN
RD-54B		Primary	08/07/98	Thorium-234	292 U	---	292	Filtered		TN
RD-54B		Primary	02/08/99	Actinium-228	65.3 U	---	65.3	Filtered		TN
RD-54B		Primary	02/08/99	Bismuth-212	111 U	---	111	Filtered		TN
RD-54B		Primary	02/08/99	Lead-210	771 U	---	771	Filtered		TN
RD-54B		Primary	02/08/99	Lead-212	22.4 U	---	22.4	Filtered		TN
RD-54B		Primary	02/08/99	Lead-214	24.9 U	---	24.9	Filtered		TN
RD-54B		Primary	02/08/99	Potassium-40	240 U	---	240	Filtered		TN
RD-54B		Primary	02/08/99	Radium-226	214 U	---	214	Filtered		TN
RD-54B		Primary	02/08/99	Thallium-208	15.8 U	---	15.8	Filtered		TN
RD-54B		Primary	02/08/99	Thorium-234	322 U	---	322	Filtered		TN
RD-54B		Primary	02/08/99	Uranium-235	82.6 U	---	82.6	Filtered		TN
RD-54B		Primary	03/15/00	Actinium-228	30.8 U	---	30.8	Filtered		TR
RD-54B		Primary	03/15/00	Bismuth-212	54.6 U	---	54.6	Filtered		TR
RD-54B		Primary	03/15/00	Bismuth-214	13.8 U	---	13.8	Filtered		TR
RD-54B		Primary	03/15/00	Lead-210	1740 U	---	1740	Filtered		TR
RD-54B		Primary	03/15/00	Lead-212	11.3 U	---	11.3	Filtered		TR
RD-54B		Primary	03/15/00	Lead-214	13.6 U	---	13.6	Filtered		TR
RD-54B		Primary	03/15/00	Potassium-40	130 U	---	130	Filtered		TR
RD-54B		Primary	03/15/00	Radium-226	110 U	---	110	Filtered		TR
RD-54B		Primary	03/15/00	Thallium-208	7.5 U	---	7.5	Filtered		TR
RD-54B		Primary	03/15/00	Thorium-234	242 U	---	242	Filtered		TR
RD-54B		Primary	03/15/00	Uranium-235	42.7 U	---	42.7	Filtered		TR
RD-54B		Primary	10/25/01	Actinium-228	5.6 U	---	5.6	Filtered		DL
RD-54B		Primary	10/25/01	Bismuth-212	2.3 U	3	3.3	Filtered		DL
RD-54B		Primary	10/25/01	Bismuth-214	2.4 U	---	2.4	Filtered		DL
RD-54B		Primary	10/25/01	Lead-210	8 U	---	8	Filtered		DL
RD-54B		Primary	10/25/01	Lead-212	1 U	3	3.3	Filtered		DL
RD-54B		Primary	10/25/01	Lead-214	2.4 U	---	2.4	Filtered		DL
RD-54B		Primary	10/25/01	Potassium-40	13 U	---	13	Filtered		DL
RD-54B		Primary	10/25/01	Radium-226	3.5 U	5	6	Filtered		DL
RD-54B		Primary	10/25/01	Thallium-208	7 U	7.5	9.7	Filtered		DL
RD-54B		Primary	10/25/01	Thorium-234	5 U	---	5	Filtered		DL
RD-54B		Primary	10/25/01	Uranium-235	1.7 U	2.5	5	Filtered		DL

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54B		Primary	02/27/02	Actinium-228	5 U	5	5	Filtered		DL
RD-54B		Primary	02/27/02	Bismuth-212	3 U	3	3	Filtered		DL
RD-54B		Primary	02/27/02	Bismuth-214	5 U	4	5	Filtered		DL
RD-54B		Primary	02/27/02	Lead-210	8 U	3	8	Filtered		DL
RD-54B		Primary	02/27/02	Lead-212	3 U	3	3	Filtered		DL
RD-54B		Primary	02/27/02	Lead-214	5 U	4	5	Filtered		DL
RD-54B		Primary	02/27/02	Potassium-40	8 U	5	8	Filtered		DL
RD-54B		Primary	02/27/02	Radium-226	5 U	3	5	Filtered		DL
RD-54B		Primary	02/27/02	Thorium-234	5 U	5	5	Filtered		DL
RD-54B		Primary	02/27/02	Uranium-235	5 U	3	5	Filtered		DL
RD-54B		Primary	02/26/03	Actinium-228	7.99 U	---	7.99	Filtered		ES
RD-54B		Primary	02/26/03	Bismuth-212	12.6 U	---	12.6	Filtered		ES
RD-54B		Primary	02/26/03	Bismuth-214	3.84 U	---	3.84	Filtered		ES
RD-54B		Primary	02/26/03	Lead-210	326 U	---	326	Filtered		ES
RD-54B		Primary	02/26/03	Lead-212	2.8 U	---	2.8	Filtered		ES
RD-54B		Primary	02/26/03	Lead-214	3.71 U	---	3.71	Filtered		ES
RD-54B		Primary	02/26/03	Potassium-40	44.8 U	---	44.8	Filtered		ES
RD-54B		Primary	02/26/03	Radium-226	27.8 U	---	27.8	Filtered		ES
RD-54B		Primary	02/26/03	Thorium-234	55.7 U	---	55.7	Filtered		ES
RD-54B		Primary	02/26/03	Uranium-235	10.8 U	---	10.8	Filtered		ES
RD-54B		Primary	02/16/05	Potassium-40	12.9 U	---	12.9	Filtered		ES
RD-54B		Primary	02/20/06	Potassium-40	24.8 U	---	24.8	Filtered		ES
RD-54B		Primary	02/12/07	Potassium-40	28.2 U	---	28.2	Filtered		ES
RD-54B		Primary	02/14/08	Potassium-40	30.7 U	---	30.7	Filtered		ES
RD-54B		Primary	11/07/08	Actinium-228	3.34 U	---	3.34	Filtered		ES
RD-54B		Primary	11/07/08	Actinium-228	3.17 U	---	3.17	Unfiltered		ES
RD-54B		Primary	11/07/08	Potassium-40	8.97 U	---	8.97	Filtered		ES
RD-54B		Primary	11/07/08	Potassium-40	12.2 U	---	12.2	Unfiltered		ES
RD-54B		Primary	11/07/08	Radium-228	3.34 U	---	3.34	Filtered		ES
RD-54B		Primary	11/07/08	Radium-228	3.17 U	---	3.17	Unfiltered		ES
RD-54B		Primary	02/23/09	Potassium-40	8.02 U	18	30.4	Filtered		ES
RD-54B		Primary	02/23/09	Potassium-40	-76.9 U	29	47.9	Unfiltered		ES
RD-54B		Primary	02/23/09	Radium-228	3.41 U	4.8	8.16	Filtered		ES
RD-54B		Primary	02/23/09	Radium-228	-1.48 U	6.3	10.7	Unfiltered		ES
RD-54B		Primary	10/30/09	Potassium-40	14.4 U	31	54.4	Filtered		TAD
RD-54B		Primary	10/30/09	Potassium-40	1.82 U	7.6	21.2	Unfiltered		TAD
RD-54B		Duplicate	10/30/09	Potassium-40	-29.2 U	73	132	Filtered		TAD
RD-54B		Duplicate	10/30/09	Potassium-40	33.6 U	37	62.6	Unfiltered		TAD
RD-54C		Primary	05/08/94	Actinium-228	28	21	24	Filtered		LAS
RD-54C		Primary	05/08/94	Bismuth-214	14 U	13	15	Filtered		LAS
RD-54C		Primary	05/08/94	Lead-212	18	10	11	Filtered		LAS
RD-54C		Primary	05/08/94	Lead-214	2 U	10	15	Filtered		LAS
RD-54C		Primary	05/08/94	Potassium-40	26 U	64	81	Filtered		LAS
RD-54C		Primary	05/08/94	Thallium-208	8.4 U	7.7	8.7	Filtered		LAS
RD-54C		Primary	05/08/94	Thorium-234	59 U	62	130	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54C		Primary	08/08/94	Actinium-228	-15 U	86	160	Filtered		LAS
RD-54C		Primary	08/08/94	Bismuth-214	-13 U	54	86	Filtered		LAS
RD-54C		Primary	08/08/94	Lead-212	21 U	44	61	Filtered		LAS
RD-54C		Primary	08/08/94	Lead-214	6 U	44	73	Filtered		LAS
RD-54C		Primary	08/08/94	Potassium-40	-30 U	300	480	Filtered		LAS
RD-54C		Primary	08/08/94	Radium-226	-80 U	420	570	Filtered		LAS
RD-54C		Primary	08/08/94	Thallium-208	-3 U	31	44	Filtered		LAS
RD-54C		Primary	08/08/94	Thorium-234	90 U	280	700	Filtered		LAS
RD-54C		Primary	08/08/94	Uranium-235	-61 U	50	160	Filtered		LAS
RD-54C		Primary	08/30/95	Actinium-228	13 U	20	33	Filtered		LAS
RD-54C		Primary	08/30/95	Bismuth-214	5 U	13	21	Filtered		LAS
RD-54C		Primary	08/30/95	Lead-212	4 U	10	15	Filtered		LAS
RD-54C		Primary	08/30/95	Lead-214	19	13	19	Filtered		LAS
RD-54C		Primary	08/30/95	Potassium-40	-11 U	73	120	Filtered		LAS
RD-54C		Primary	08/30/95	Thallium-208	2.4 U	7.1	9.7	Filtered		LAS
RD-54C		Primary	08/30/95	Thorium-234	-10 U	100	160	Filtered		LAS
RD-54C		Primary	05/16/96	Actinium-228	-14 U	11	43	Filtered		LAS
RD-54C		Primary	05/16/96	Bismuth-214	24	16	18	Filtered		LAS
RD-54C		Primary	05/16/96	Lead-212	11 U	12	15	Filtered		LAS
RD-54C		Primary	05/16/96	Lead-214	21	14	19	Filtered		LAS
RD-54C		Primary	05/16/96	Potassium-40	11 U	86	130	Filtered		LAS
RD-54C		Primary	05/16/96	Thallium-208	13.3	8.7	9.7	Filtered		LAS
RD-54C		Primary	05/16/96	Thorium-234	30 U	150	220	Filtered		LAS
RD-54C		Primary	05/16/96	Uranium-235	-3 U	29	41	Filtered		LAS
RD-54C		Primary	08/23/96	Actinium-228	12 U	22	36	Filtered		LAS
RD-54C		Primary	08/23/96	Bismuth-214	17 U	13	19	Filtered		LAS
RD-54C		Primary	08/23/96	Lead-212	4.3 U	9.4	13	Filtered		LAS
RD-54C		Primary	08/23/96	Lead-214	5 U	11	18	Filtered		LAS
RD-54C		Primary	08/23/96	Potassium-40	20 U	67	110	Filtered		LAS
RD-54C		Primary	08/23/96	Thallium-208	2.2 U	6.7	9.3	Filtered		LAS
RD-54C		Primary	08/23/96	Thorium-234	-4 U	72	190	Filtered		LAS
RD-54C		Primary	05/05/97	Actinium-228	1.9 U	9.9	17	Filtered		LAS
RD-54C		Primary	05/05/97	Bismuth-214	-3.9 U	5.4	11	Filtered		LAS
RD-54C		Primary	05/05/97	Lead-212	1.5 U	5.9	8.8	Filtered		LAS
RD-54C		Primary	05/05/97	Lead-214	3.1 U	5.7	8.8	Filtered		LAS
RD-54C		Primary	05/05/97	Potassium-40	-2 U	32	55	Filtered		LAS
RD-54C		Primary	05/05/97	Thallium-208	1.2 U	3.8	5.5	Filtered		LAS
RD-54C		Primary	05/05/97	Thorium-234	10 U	64	210	Filtered		LAS
RD-54C		Primary	08/24/97	Actinium-228	-20 U	11	38	Filtered		LAS
RD-54C		Primary	08/24/97	Bismuth-212	19 U	46	60	Filtered		LAS
RD-54C		Primary	08/24/97	Bismuth-214	18	13	17	Filtered		LAS
RD-54C		Primary	08/24/97	Lead-210	0 U	120	190	Filtered		LAS
RD-54C		Primary	08/24/97	Lead-212	5 U	11	5	Filtered		LAS
RD-54C		Primary	08/24/97	Lead-214	21	12	17	Filtered		LAS
RD-54C		Primary	08/24/97	Potassium-40	-9 U	64	100	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54C		Primary	08/24/97	Thallium-208	-1.6 U	7	10	Filtered		LAS
RD-54C		Primary	08/24/97	Thorium-234	-12 U	79	160	Filtered		LAS
RD-54C		Primary	02/08/98	Actinium-228	53.1 U	---	53.1	Filtered		TN
RD-54C		Primary	02/08/98	Bismuth-212	92 U	---	92	Filtered		TN
RD-54C		Primary	02/08/98	Bismuth-214	25.6 U	---	25.6	Filtered		TN
RD-54C		Primary	02/08/98	Lead-210	667 U	---	667	Filtered		TN
RD-54C		Primary	02/08/98	Lead-212	16.4 U	---	16.4	Filtered		TN
RD-54C		Primary	02/08/98	Lead-214	22.8 U	---	22.8	Filtered		TN
RD-54C		Primary	02/08/98	Potassium-40	227 U	---	227	Filtered		TN
RD-54C		Primary	02/08/98	Thallium-208	13.4 U	---	13.4	Filtered		TN
RD-54C		Primary	02/08/98	Thorium-234	256 U	---	256	Filtered		TN
RD-54C		Primary	08/07/98	Actinium-228	80.1 U	---	80.1	Filtered		TN
RD-54C		Primary	08/07/98	Bismuth-212	180 U	---	180	Filtered		TN
RD-54C		Primary	08/07/98	Bismuth-214	48.8 U	---	48.8	Filtered		TN
RD-54C		Primary	08/07/98	Lead-210	1200 U	---	1200	Filtered		TN
RD-54C		Primary	08/07/98	Lead-212	34.8 U	---	34.8	Filtered		TN
RD-54C		Primary	08/07/98	Lead-214	41.6 U	---	41.6	Filtered		TN
RD-54C		Primary	08/07/98	Potassium-40	423 U	---	423	Filtered		TN
RD-54C		Primary	08/07/98	Thallium-208	22.9 U	---	22.9	Filtered		TN
RD-54C		Primary	08/07/98	Thorium-234	501 U	---	501	Filtered		TN
RD-54C		Primary	02/09/99	Actinium-228	65.3 U	---	65.3	Filtered		TN
RD-54C		Primary	02/09/99	Bismuth-212	126 U	---	126	Filtered		TN
RD-54C		Primary	02/09/99	Lead-210	168 U	---	168	Filtered		TN
RD-54C		Primary	02/09/99	Lead-212	19.2 U	---	19.2	Filtered		TN
RD-54C		Primary	02/09/99	Lead-214	25.4 U	---	25.4	Filtered		TN
RD-54C		Primary	02/09/99	Potassium-40	180 U	---	180	Filtered		TN
RD-54C		Primary	02/09/99	Radium-226	182 U	---	182	Filtered		TN
RD-54C		Primary	02/09/99	Thallium-208	13.9 U	---	13.9	Filtered		TN
RD-54C		Primary	02/09/99	Thorium-234	236 U	---	236	Filtered		TN
RD-54C		Primary	02/09/99	Uranium-235	51.4 U	---	51.4	Filtered		TN
RD-54C		Primary	03/15/00	Actinium-228	16.9 U	---	16.9	Filtered		TR
RD-54C		Primary	03/15/00	Bismuth-212	30.8 U	---	30.8	Filtered		TR
RD-54C		Primary	03/15/00	Bismuth-214	7.16 U	---	7.16	Filtered		TR
RD-54C		Primary	03/15/00	Lead-210	494 U	---	494	Filtered		TR
RD-54C		Primary	03/15/00	Lead-212	5.91 U	---	5.91	Filtered		TR
RD-54C		Primary	03/15/00	Lead-214	7.07 U	---	7.07	Filtered		TR
RD-54C		Primary	03/15/00	Potassium-40	48.2 U	---	48.2	Filtered		TR
RD-54C		Primary	03/15/00	Radium-226	62.9 U	---	62.9	Filtered		TR
RD-54C		Primary	03/15/00	Thallium-208	6.51 U	---	6.51	Filtered		TR
RD-54C		Primary	03/15/00	Thorium-234	116 U	---	116	Filtered		TR
RD-54C		Primary	03/15/00	Uranium-235	18.6 U	---	18.6	Filtered		TR
RD-54C		Primary	11/02/01	Actinium-228	5 U	---	5	Filtered		DL
RD-54C		Primary	11/02/01	Bismuth-212	5 U	---	5	Filtered		DL
RD-54C		Primary	11/02/01	Bismuth-214	10 U	---	10	Filtered		DL
RD-54C		Primary	11/02/01	Lead-210	8 U	---	8	Filtered		DL

See last page of table for notes and abbreviations.

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RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54C		Primary	11/02/01	Lead-212	5 U	---	15	Filtered		DL
RD-54C		Primary	11/02/01	Lead-214	5 U	---	5	Filtered		DL
RD-54C		Primary	11/02/01	Potassium-40	13 U	---	13	Filtered		DL
RD-54C		Primary	11/02/01	Radium-226	5 U	---	5	Filtered		DL
RD-54C		Primary	11/02/01	Thallium-208	5 U	---	5	Filtered		DL
RD-54C		Primary	11/02/01	Thorium-234	5 U	---	5	Filtered		DL
RD-54C		Primary	11/02/01	Uranium-235	1 U	3	5	Filtered		DL
RD-54C		Primary	02/27/02	Actinium-228	5 U	3	5	Filtered		DL
RD-54C		Primary	02/27/02	Bismuth-212	5 U	5	5	Filtered		DL
RD-54C		Primary	02/27/02	Bismuth-214	5 U	5	5	Filtered		DL
RD-54C		Primary	02/27/02	Lead-210	5 U	3	5	Filtered		DL
RD-54C		Primary	02/27/02	Lead-212	7 U	5	7	Filtered		DL
RD-54C		Primary	02/27/02	Lead-214	5.6	5	5.6	Filtered		DL
RD-54C		Primary	02/27/02	Potassium-40	5 U	5	5	Filtered		DL
RD-54C		Primary	02/27/02	Radium-226	5 U	3.3	5	Filtered		DL
RD-54C		Primary	02/27/02	Thorium-234	5 U	5	5	Filtered		DL
RD-54C		Primary	02/27/02	Uranium-235	5 U	3	5	Filtered		DL
RD-54C		Primary	02/26/03	Actinium-228	6.76 U	---	6.76	Filtered		ES
RD-54C		Primary	02/26/03	Bismuth-212	12 U	---	12	Filtered		ES
RD-54C		Primary	02/26/03	Bismuth-214	3.02 U	---	3.02	Filtered		ES
RD-54C		Primary	02/26/03	Lead-210	234 U	---	234	Filtered		ES
RD-54C		Primary	02/26/03	Lead-212	2.24 U	---	2.24	Filtered		ES
RD-54C		Primary	02/26/03	Lead-214	2.83 U	---	2.83	Filtered		ES
RD-54C		Primary	02/26/03	Potassium-40	20 U	---	20	Filtered		ES
RD-54C		Primary	02/26/03	Radium-226	22.9 U	---	22.9	Filtered		ES
RD-54C		Primary	02/26/03	Thorium-234	43.7 U	---	43.7	Filtered		ES
RD-54C		Primary	02/26/03	Uranium-235	6.95 U	---	6.95	Filtered		ES
RD-54C		Primary	11/05/04	Potassium-40	36.4 U	---	36.4	Filtered		ES
RD-54C		Primary	02/17/05	Potassium-40	26.5 U	---	26.5	Filtered		ES
RD-54C		Split	02/17/05	Potassium-40	-48.2 U	28	41.6	Filtered		STL
RD-54C		Primary	02/23/06	Potassium-40	18.5 U	---	18.5	Filtered		ES
RD-54C		Primary	02/12/07	Potassium-40	22.7 U	---	22.7	Filtered		ES
RD-54C		Primary	02/14/08	Potassium-40	33.3 U	---	33.3	Filtered		ES
RD-54C		Primary	02/24/09	Potassium-40	6.45 U	7	11.7	Filtered		ES
RD-54C		Primary	02/24/09	Potassium-40	-33.4 U	20	35.1	Unfiltered		ES
RD-54C		Primary	02/24/09	Radium-228	5.06 U	3.8	6.3	Filtered		ES
RD-54C		Primary	02/24/09	Radium-228	-3.26 U	4.9	8.45	Unfiltered		ES
RD-54C		Primary	08/04/09	Potassium-40	4.35 U	64	113	Filtered		ES
RD-54C		Primary	08/04/09	Potassium-40	31.1 U	70	122	Unfiltered		ES
RD-56A		Primary	05/28/98	Actinium-228	27.5 U	---	27.5	Filtered		TN
RD-56A		Primary	05/28/98	Bismuth-212	44.4 U	---	44.4	Filtered		TN
RD-56A		Primary	05/28/98	Bismuth-214	12 U	---	12	Filtered		TN
RD-56A		Primary	05/28/98	Lead-210	300 U	---	300	Filtered		TN
RD-56A		Primary	05/28/98	Lead-212	10.4 U	---	10.4	Filtered		TN
RD-56A		Primary	05/28/98	Lead-214	12.2 U	---	12.2	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-56A		Primary	05/28/98	Potassium-40	88.3 U	---	88.3	Filtered		TN
RD-56A		Primary	05/28/98	Thallium-208	6.76 U	---	6.76	Filtered		TN
RD-56A		Primary	05/28/98	Thorium-234	179 U	---	179	Filtered		TN
RD-56B		Primary	05/28/98	Actinium-228	68.1 U	---	68.1	Filtered		TN
RD-56B		Primary	05/28/98	Bismuth-212	110 U	---	110	Filtered		TN
RD-56B		Primary	05/28/98	Bismuth-214	28.8 U	---	28.8	Filtered		TN
RD-56B		Primary	05/28/98	Lead-210	761 U	---	761	Filtered		TN
RD-56B		Primary	05/28/98	Lead-212	22.9 U	---	22.9	Filtered		TN
RD-56B		Primary	05/28/98	Lead-214	27.9 U	---	27.9	Filtered		TN
RD-56B		Primary	05/28/98	Potassium-40	290 U	---	290	Filtered		TN
RD-56B		Primary	05/28/98	Thallium-208	16.1 U	---	16.1	Filtered		TN
RD-56B		Primary	05/28/98	Thorium-234	314 U	---	314	Filtered		TN
RD-57		Primary	05/10/94	Actinium-228	5 U	10	18	Filtered		LAS
RD-57		Primary	05/10/94	Bismuth-214	47	10	11	Filtered		LAS
RD-57		Primary	05/10/94	Lead-212	12.5	6.5	8.4	Filtered		LAS
RD-57		Primary	05/10/94	Lead-214	34.8	7.8	9.8	Filtered		LAS
RD-57		Primary	05/10/94	Potassium-40	-2 U	37	59	Filtered		LAS
RD-57		Primary	05/10/94	Thallium-208	2 U	4.1	5.7	Filtered		LAS
RD-57		Primary	05/10/94	Thorium-234	43 U	50	140	Filtered		LAS
RD-57		Primary	08/18/94	Actinium-228	9 U	95	190	Filtered		LAS
RD-57		Primary	08/18/94	Bismuth-214	-12 U	58	93	Filtered		LAS
RD-57		Primary	08/18/94	Lead-212	3 U	48	72	Filtered		LAS
RD-57		Primary	08/18/94	Lead-214	-17 U	48	87	Filtered		LAS
RD-57		Primary	08/18/94	Potassium-40	-40 U	340	580	Filtered		LAS
RD-57		Primary	08/18/94	Radium-226	30 U	460	670	Filtered		LAS
RD-57		Primary	08/18/94	Thallium-208	5 U	33	50	Filtered		LAS
RD-57		Primary	08/18/94	Thorium-234	-20 U	300	820	Filtered		LAS
RD-57		Primary	08/18/94	Uranium-235	-90 U	100	190	Filtered		LAS
RD-57		Primary	02/07/95	Actinium-228	-22 U	18	38	Filtered		LAS
RD-57		Primary	02/07/95	Bismuth-214	-4 U	11	20	Filtered		LAS
RD-57		Primary	02/07/95	Lead-212	7.1 U	9.4	13	Filtered		LAS
RD-57		Primary	02/07/95	Lead-214	3 U	12	19	Filtered		LAS
RD-57		Primary	02/07/95	Potassium-40	27 U	82	120	Filtered		LAS
RD-57		Primary	02/07/95	Thallium-208	-3 U	7.1	11	Filtered		LAS
RD-57		Primary	02/07/95	Thorium-234	13 U	72	170	Filtered		LAS
RD-57		Primary	08/09/95	Actinium-228	-28 U	17	40	Filtered		LAS
RD-57		Primary	08/09/95	Bismuth-214	61	20	22	Filtered		LAS
RD-57		Primary	08/09/95	Lead-212	5 U	11	15	Filtered		LAS
RD-57		Primary	08/09/95	Lead-214	58	15	17	Filtered		LAS
RD-57		Primary	08/09/95	Potassium-40	-53 U	42	140	Filtered		LAS
RD-57		Primary	08/09/95	Thallium-208	2.7 U	6.9	9.4	Filtered		LAS
RD-57		Primary	08/09/95	Thorium-234	-8 U	68	160	Filtered		LAS
RD-57		Primary	02/19/96	Actinium-228	12 U	22	34	Filtered		LAS
RD-57		Primary	02/19/96	Bismuth-214	18 U	14	19	Filtered		LAS
RD-57		Primary	02/19/96	Lead-212	6 U	9.7	13	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-57		Primary	02/19/96	Lead-214	10 U	12	17	Filtered		LAS
RD-57		Primary	02/19/96	Potassium-40	-15 U	77	130	Filtered		LAS
RD-57		Primary	02/19/96	Thallium-208	-2.8 U	6.8	11	Filtered		LAS
RD-57		Primary	02/19/96	Thorium-234	-42 U	71	190	Filtered		LAS
RD-57		Primary	08/22/96	Actinium-228	14 U	19	34	Filtered		LAS
RD-57		Primary	08/22/96	Bismuth-214	35	17	21	Filtered		LAS
RD-57		Primary	08/22/96	Lead-212	-4.9 U	9.4	14	Filtered		LAS
RD-57		Primary	08/22/96	Lead-214	30	13	19	Filtered		LAS
RD-57		Primary	08/22/96	Potassium-40	0 U	71	120	Filtered		LAS
RD-57		Primary	08/22/96	Thallium-208	-2.1 U	6.8	10	Filtered		LAS
RD-57		Primary	08/22/96	Thorium-234	1 U	69	180	Filtered		LAS
RD-57		Primary	02/25/97	Actinium-228	7 U	21	38	Filtered		LAS
RD-57		Primary	02/25/97	Bismuth-214	9 U	13	19	Filtered		LAS
RD-57		Primary	02/25/97	Lead-212	8.8 U	9.4	12	Filtered		LAS
RD-57		Primary	02/25/97	Lead-214	21	12	17	Filtered		LAS
RD-57		Primary	02/25/97	Potassium-40	51 U	72	97	Filtered		LAS
RD-57		Primary	02/25/97	Thallium-208	-6.4 U	3.7	11	Filtered		LAS
RD-57		Primary	02/25/97	Thorium-234	18 U	69	180	Filtered		LAS
RD-57		Primary	08/27/97	Actinium-228	6 U	22	40	Filtered		LAS
RD-57		Primary	08/27/97	Actinium-228	-13 U	11	40	Unfiltered		LAS
RD-57		Primary	08/27/97	Bismuth-212	-14 U	37	72	Filtered		LAS
RD-57		Primary	08/27/97	Bismuth-212	24 U	33	55	Unfiltered		LAS
RD-57		Primary	08/27/97	Bismuth-214	13 U	14	18	Filtered		LAS
RD-57		Primary	08/27/97	Bismuth-214	8 U	14	19	Unfiltered		LAS
RD-57		Primary	08/27/97	Lead-210	-30 U	110	180	Filtered		LAS
RD-57		Primary	08/27/97	Lead-210	10 U	120	190	Unfiltered		LAS
RD-57		Primary	08/27/97	Lead-212	-7 U	10	16	Filtered		LAS
RD-57		Primary	08/27/97	Lead-212	7.3 U	9.8	14	Unfiltered		LAS
RD-57		Primary	08/27/97	Lead-214	10 U	11	17	Filtered		LAS
RD-57		Primary	08/27/97	Lead-214	7 U	11	17	Unfiltered		LAS
RD-57		Primary	08/27/97	Potassium-40	2 U	81	130	Filtered		LAS
RD-57		Primary	08/27/97	Potassium-40	13 U	67	100	Unfiltered		LAS
RD-57		Primary	08/27/97	Thallium-208	-3.3 U	3.2	10	Filtered		LAS
RD-57		Primary	08/27/97	Thallium-208	1.7 U	6.7	9.4	Unfiltered		LAS
RD-57		Primary	08/27/97	Thorium-234	-21 U	70	140	Filtered		LAS
RD-57		Primary	08/27/97	Thorium-234	-8 U	73	140	Unfiltered		LAS
RD-57		Primary	05/26/98	Actinium-228	27.6 U	---	27.6	Filtered		TN
RD-57		Primary	05/26/98	Bismuth-212	46 U	---	46	Filtered		TN
RD-57		Primary	05/26/98	Bismuth-214	12.8 U	---	12.8	Filtered		TN
RD-57		Primary	05/26/98	Lead-210	497 U	---	497	Filtered		TN
RD-57		Primary	05/26/98	Lead-212	10.5 U	---	10.5	Filtered		TN
RD-57		Primary	05/26/98	Lead-214	12.9 U	---	12.9	Filtered		TN
RD-57		Primary	05/26/98	Potassium-40	86.7 U	---	86.7	Filtered		TN
RD-57		Primary	05/26/98	Thallium-208	6.27 U	---	6.27	Filtered		TN
RD-57		Primary	05/26/98	Thorium-234	178 U	---	178	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-57		Primary	08/17/98	Actinium-228	47.7 U	---	47.7	Filtered		TN
RD-57		Primary	08/17/98	Bismuth-212	101 U	---	101	Filtered		TN
RD-57		Primary	08/17/98	Bismuth-214	27.7 U	---	27.7	Filtered		TN
RD-57		Primary	08/17/98	Lead-210	611 U	---	611	Filtered		TN
RD-57		Primary	08/17/98	Lead-212	20.4 U	---	20.4	Filtered		TN
RD-57		Primary	08/17/98	Lead-214	28 U	---	28	Filtered		TN
RD-57		Primary	08/17/98	Potassium-40	180 U	---	180	Filtered		TN
RD-57		Primary	08/17/98	Thallium-208	14.2 U	---	14.2	Filtered		TN
RD-57		Primary	08/17/98	Thorium-234	376 U	---	376	Filtered		TN
RD-57		Primary	05/13/99	Actinium-228	27.1 U	---	27.1	Filtered		TN
RD-57		Primary	05/13/99	Bismuth-212	49.1 U	---	49.1	Filtered		TN
RD-57		Primary	05/13/99	Bismuth-214	11.4 U	---	11.4	Filtered		TN
RD-57		Primary	05/13/99	Lead-210	468 U	---	468	Filtered		TN
RD-57		Primary	05/13/99	Lead-212	10.7 U	---	10.7	Filtered		TN
RD-57		Primary	05/13/99	Lead-214	11.9 U	---	11.9	Filtered		TN
RD-57		Primary	05/13/99	Potassium-40	91.7 U	---	91.7	Filtered		TN
RD-57		Primary	05/13/99	Radium-226	135 U	---	135	Filtered		TN
RD-57		Primary	05/13/99	Thallium-208	6.22 U	---	6.22	Filtered		TN
RD-57		Primary	05/13/99	Thorium-234	174 U	---	174	Filtered		TN
RD-57		Primary	05/13/99	Uranium-235	32.2 U	---	32.2	Filtered		TN
RD-57		Primary	02/09/00	Actinium-228	61.5 U	---	61.5	Filtered		TR
RD-57		Primary	02/09/00	Bismuth-212	96.9 U	---	96.9	Filtered		TR
RD-57		Primary	02/09/00	Bismuth-214	28.4 U	---	28.4	Filtered		TR
RD-57		Primary	02/09/00	Lead-210	556 U	---	556	Filtered		TR
RD-57		Primary	02/09/00	Lead-212	17.9 U	---	17.9	Filtered		TR
RD-57		Primary	02/09/00	Lead-214	24.6 U	---	24.6	Filtered		TR
RD-57		Primary	02/09/00	Potassium-40	373 U	---	373	Filtered		TR
RD-57		Primary	02/09/00	Radium-226	278 U	---	278	Filtered		TR
RD-57		Primary	02/09/00	Thallium-208	13.5 U	---	13.5	Filtered		TR
RD-57		Primary	02/09/00	Thorium-234	209 U	---	209	Filtered		TR
RD-57		Primary	02/09/00	Uranium-235	59.9 U	---	59.9	Filtered		TR
RD-57		Primary	05/11/01	Actinium-228	26 U	---	26	Filtered		ES
RD-57		Primary	05/11/01	Bismuth-212	45.6 U	---	45.6	Filtered		ES
RD-57		Primary	05/11/01	Bismuth-214	12.6 U	---	12.6	Filtered		ES
RD-57		Primary	05/11/01	Lead-210	545 U	---	545	Filtered		ES
RD-57		Primary	05/11/01	Lead-212	19.4 U	---	19.4	Filtered		ES
RD-57		Primary	05/11/01	Lead-214	14.4 U	---	14.4	Filtered		ES
RD-57		Primary	05/11/01	Potassium-40	74.7 U	---	74.7	Filtered		ES
RD-57		Primary	05/11/01	Radium-226	91.2 U	---	91.2	Filtered		ES
RD-57		Primary	05/11/01	Thallium-208	6.41 U	---	6.41	Filtered		ES
RD-57		Primary	05/11/01	Thorium-234	160 U	---	160	Filtered		ES
RD-57		Primary	05/11/01	Uranium-235	26.1 U	---	26.1	Filtered		ES
RD-57		Primary	02/14/02	Actinium-228	5 U	1	5	Filtered		DL
RD-57		Primary	02/14/02	Bismuth-212	5 U	3	5	Filtered		DL
RD-57		Primary	02/14/02	Bismuth-214	5 U	5	5	Filtered		DL

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-57		Primary	02/14/02	Lead-210	5 U	3	5	Filtered		DL
RD-57		Primary	02/14/02	Lead-212	7 U	5	7	Filtered		DL
RD-57		Primary	02/14/02	Lead-214	5.6	5	5.6	Filtered		DL
RD-57		Primary	02/14/02	Potassium-40	29.04	10.42	15	Filtered		DL
RD-57		Primary	02/14/02	Radium-226	5 U	3.3	5	Filtered		DL
RD-57		Primary	02/14/02	Thorium-234	5 U	5	5	Filtered		DL
RD-57		Primary	02/14/02	Uranium-235	5 U	3	5	Filtered		DL
RD-57	Z08	Primary	01/29/03	Actinium-228	7.2 U	---	7.2	Filtered		ES
RD-57	Z08	Primary	01/29/03	Bismuth-212	12.2 U	---	12.2	Filtered		ES
RD-57	Z08	Primary	01/29/03	Bismuth-214	3.35 U	---	3.35	Filtered		ES
RD-57	Z08	Primary	01/29/03	Lead-210	317 U	---	317	Filtered		ES
RD-57	Z08	Primary	01/29/03	Lead-212	2.41 U	---	2.41	Filtered		ES
RD-57	Z08	Primary	01/29/03	Lead-214	3.21 U	---	3.21	Filtered		ES
RD-57	Z08	Primary	01/29/03	Potassium-40	40 U	---	40	Filtered		ES
RD-57	Z08	Primary	01/29/03	Radium-226	23.4 U	---	23.4	Filtered		ES
RD-57	Z08	Primary	01/29/03	Thorium-234	43.7 U	---	43.7	Filtered		ES
RD-57	Z08	Primary	01/29/03	Uranium-235	8.96 U	---	8.96	Filtered		ES
RD-57	Z08	Primary	04/30/03	Actinium-228	5.26 U	---	5.26	Filtered		ES
RD-57	Z08	Primary	04/30/03	Bismuth-212	8.85 U	---	8.85	Filtered		ES
RD-57	Z08	Primary	04/30/03	Bismuth-214	2.6 U	---	2.6	Filtered		ES
RD-57	Z08	Primary	04/30/03	Lead-210	301 U	---	301	Filtered		ES
RD-57	Z08	Primary	04/30/03	Lead-212	1.86 U	---	1.86	Filtered		ES
RD-57	Z08	Primary	04/30/03	Lead-214	2.48 U	---	2.48	Filtered		ES
RD-57	Z08	Primary	04/30/03	Potassium-40	30.9 U	---	30.9	Filtered		ES
RD-57	Z08	Primary	04/30/03	Radium-226	18.1 U	---	18.1	Filtered		ES
RD-57	Z08	Primary	04/30/03	Thorium-234	36.4 U	---	36.4	Filtered		ES
RD-57	Z08	Primary	04/30/03	Uranium-235	6.22 U	---	6.22	Filtered		ES
RD-57	Z07	Primary	03/08/05	Potassium-40	25.9 U	---	25.9	Filtered		ES
RD-57	Z07	Primary	02/20/06	Potassium-40	19 U	---	19	Filtered		ES
RD-57	Z07	Primary	02/08/07	Potassium-40	25.2 U	---	25.2	Filtered		ES
RD-57	Z08	Primary	02/07/08	Potassium-40	17.4 U	---	17.4	Filtered		ES
RD-57	Z07	Primary	07/17/09	Potassium-40	-74.2 U	140	258	Unfiltered		ES
RD-59A		Primary	08/16/94	Actinium-228	30 U	110	220	Filtered		LAS
RD-59A		Primary	08/16/94	Bismuth-214	-3 U	68	110	Filtered		LAS
RD-59A		Primary	08/16/94	Lead-212	-2 U	53	84	Filtered		LAS
RD-59A		Primary	08/16/94	Lead-214	-4 U	55	100	Filtered		LAS
RD-59A		Primary	08/16/94	Potassium-40	40 U	390	690	Filtered		LAS
RD-59A		Primary	08/16/94	Thallium-208	-12 U	39	63	Filtered		LAS
RD-59A		Primary	08/16/94	Thorium-234	-80 U	330	920	Filtered		LAS
RD-59A		Primary	08/16/94	Uranium-235	100 U	140	200	Filtered		LAS
RD-59A		Primary	02/06/95	Actinium-228	1 U	25	46	Filtered		LAS
RD-59A		Duplicate	02/06/95	Actinium-228	13 U	22	33	Filtered		LAS
RD-59A		Primary	02/06/95	Bismuth-214	80	23	22	Filtered		LAS
RD-59A		Duplicate	02/06/95	Bismuth-214	90	23	22	Filtered		LAS
RD-59A		Primary	02/06/95	Lead-212	6 U	11	15	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-59A		Duplicate	02/06/95	Lead-212	8 U	12	18	Filtered		LAS
RD-59A		Primary	02/06/95	Lead-214	74	18	20	Filtered		LAS
RD-59A		Duplicate	02/06/95	Lead-214	81	18	20	Filtered		LAS
RD-59A		Primary	02/06/95	Potassium-40	17 U	86	130	Filtered		LAS
RD-59A		Duplicate	02/06/95	Potassium-40	-13 U	76	120	Filtered		LAS
RD-59A		Primary	02/06/95	Thallium-208	4.8 U	8.7	12	Filtered		LAS
RD-59A		Duplicate	02/06/95	Thallium-208	2.1 U	7	9.8	Filtered		LAS
RD-59A		Primary	02/06/95	Thorium-234	12 U	77	180	Filtered		LAS
RD-59A		Duplicate	02/06/95	Thorium-234	11 U	70	170	Filtered		LAS
RD-59A		Primary	08/08/95	Actinium-228	-3 U	20	39	Filtered		LAS
RD-59A		Primary	08/08/95	Bismuth-214	54	20	22	Filtered		LAS
RD-59A		Primary	08/08/95	Lead-212	8 U	11	15	Filtered		LAS
RD-59A		Primary	08/08/95	Lead-214	55	16	18	Filtered		LAS
RD-59A		Primary	08/08/95	Potassium-40	-29 U	70	120	Filtered		LAS
RD-59A		Primary	08/08/95	Thallium-208	0.3 U	7.2	11	Filtered		LAS
RD-59A		Primary	08/08/95	Thorium-234	20 U	110	170	Filtered		LAS
RD-59A		Primary	03/12/96	Actinium-228	-7 U	24	44	Filtered		LAS
RD-59A		Primary	03/12/96	Bismuth-214	182	31	22	Filtered		LAS
RD-59A		Primary	03/12/96	Lead-212	5 U	12	16	Filtered		LAS
RD-59A		Primary	03/12/96	Lead-214	180	25	20	Filtered		LAS
RD-59A		Primary	03/12/96	Potassium-40	52 U	92	120	Filtered		LAS
RD-59A		Primary	03/12/96	Thallium-208	-1 U	8.2	12	Filtered		LAS
RD-59A		Primary	03/12/96	Thorium-234	-13 U	86	240	Filtered		LAS
RD-59A		Primary	08/21/96	Actinium-228	-17 U	13	45	Filtered		LAS
RD-59A		Primary	08/21/96	Bismuth-214	281	40	23	Filtered		LAS
RD-59A		Primary	08/21/96	Lead-212	4 U	11	16	Filtered		LAS
RD-59A		Primary	08/21/96	Lead-214	302	33	22	Filtered		LAS
RD-59A		Primary	08/21/96	Potassium-40	75 U	80	110	Filtered		LAS
RD-59A		Primary	08/21/96	Thallium-208	-1.5 U	3.5	5.5	Filtered		LAS
RD-59A		Primary	08/21/96	Thorium-234	30 U	140	220	Filtered		LAS
RD-59A		Primary	02/16/97	Actinium-228	-13 U	24	43	Filtered		LAS
RD-59A		Primary	02/16/97	Bismuth-214	163	30	21	Filtered		LAS
RD-59A		Primary	02/16/97	Lead-212	-2 U	11	16	Filtered		LAS
RD-59A		Primary	02/16/97	Lead-214	185	25	19	Filtered		LAS
RD-59A		Primary	02/16/97	Potassium-40	45 U	89	130	Filtered		LAS
RD-59A		Primary	02/16/97	Thallium-208	-0.4 U	8.5	12	Filtered		LAS
RD-59A		Primary	02/16/97	Thorium-234	5 U	85	230	Filtered		LAS
RD-59A		Primary	08/22/97	Actinium-228	1 U	10	19	Filtered		LAS
RD-59A		Primary	08/22/97	Bismuth-212	2 U	22	31	Filtered		LAS
RD-59A		Primary	08/22/97	Bismuth-214	99	15	11	Filtered		LAS
RD-59A		Primary	08/22/97	Lead-210	-110 U	390	580	Filtered		LAS
RD-59A		Primary	08/22/97	Lead-212	5.2 U	6.8	9.6	Filtered		LAS
RD-59A		Primary	08/22/97	Lead-214	129	15	10	Filtered		LAS
RD-59A		Primary	08/22/97	Potassium-40	-7 U	34	58	Filtered		LAS
RD-59A		Primary	08/22/97	Thallium-208	-1.5 U	7.6	11	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-59A		Primary	08/22/97	Thorium-234	-4 U	61	98	Filtered		LAS
RD-59A		Primary	08/19/98	Actinium-228	153 U	---	153	Filtered		TN
RD-59A		Primary	08/19/98	Bismuth-212	254 U	---	254	Filtered		TN
RD-59A		Primary	08/19/98	Bismuth-214	57.9 U	---	57.9	Filtered		TN
RD-59A		Primary	08/19/98	Lead-210	1540 U	---	1540	Filtered		TN
RD-59A		Primary	08/19/98	Lead-212	40.8 U	---	40.8	Filtered		TN
RD-59A		Primary	08/19/98	Lead-214	53.3 U	---	53.3	Filtered		TN
RD-59A		Primary	08/19/98	Potassium-40	390 U	---	390	Filtered		TN
RD-59A		Primary	08/19/98	Thallium-208	30.7 U	---	30.7	Filtered		TN
RD-59A		Primary	08/19/98	Thorium-234	718 U	---	718	Filtered		TN
RD-59A		Primary	02/16/99	Actinium-228	25.8 U	---	25.8	Filtered		TN
RD-59A		Primary	02/16/99	Bismuth-212	45 U	---	45	Filtered		TN
RD-59A		Primary	02/16/99	Bismuth-214	11.8 U	---	11.8	Filtered		TN
RD-59A		Primary	02/16/99	Lead-210	425 U	---	425	Filtered		TN
RD-59A		Primary	02/16/99	Lead-212	10.5 U	---	10.5	Filtered		TN
RD-59A		Primary	02/16/99	Lead-214	11.9 U	---	11.9	Filtered		TN
RD-59A		Primary	02/16/99	Potassium-40	87 U	---	87	Filtered		TN
RD-59A		Primary	02/16/99	Radium-226	102 U	---	102	Filtered		TN
RD-59A		Primary	02/16/99	Thallium-208	6.01 U	---	6.01	Filtered		TN
RD-59A		Primary	02/16/99	Thorium-234	161 U	---	161	Filtered		TN
RD-59A		Primary	02/16/99	Uranium-235	31.3 U	---	31.3	Filtered		TN
RD-59A		Primary	03/14/00	Actinium-228	62.4 U	---	62.4	Filtered		TR
RD-59A		Primary	03/14/00	Bismuth-212	122 U	---	122	Filtered		TR
RD-59A		Primary	03/14/00	Bismuth-214	31.7 U	---	31.7	Filtered		TR
RD-59A		Primary	03/14/00	Lead-210	960 U	---	960	Filtered		TR
RD-59A		Primary	03/14/00	Lead-212	20.9 U	---	20.9	Filtered		TR
RD-59A		Primary	03/14/00	Lead-214	33.1 U	---	33.1	Filtered		TR
RD-59A		Primary	03/14/00	Potassium-40	263 U	---	263	Filtered		TR
RD-59A		Primary	03/14/00	Radium-226	200 U	---	200	Filtered		TR
RD-59A		Primary	03/14/00	Thallium-208	12.7 U	---	12.7	Filtered		TR
RD-59A		Primary	03/14/00	Thorium-234	318 U	---	318	Filtered		TR
RD-59A		Primary	03/14/00	Uranium-235	78.1 U	---	78.1	Filtered		TR
RD-59A		Primary	05/16/01	Actinium-228	57.2 U	---	57.2	Filtered		ES
RD-59A		Primary	05/16/01	Bismuth-212	89.4 U	---	89.4	Filtered		ES
RD-59A		Primary	05/16/01	Bismuth-214	25.1 U	---	25.1	Filtered		ES
RD-59A		Primary	05/16/01	Lead-210	487 U	---	487	Filtered		ES
RD-59A		Primary	05/16/01	Lead-212	44 U	---	44	Filtered		ES
RD-59A		Primary	05/16/01	Lead-214	23.7 U	---	23.7	Filtered		ES
RD-59A		Primary	05/16/01	Potassium-40	359 U	---	359	Filtered		ES
RD-59A		Primary	05/16/01	Radium-226	169 U	---	169	Filtered		ES
RD-59A		Primary	05/16/01	Thallium-208	12.1 U	---	12.1	Filtered		ES
RD-59A		Primary	05/16/01	Thorium-234	179 U	---	179	Filtered		ES
RD-59A		Primary	05/16/01	Uranium-235	54 U	---	54	Filtered		ES
RD-59A		Primary	02/28/02	Actinium-228	5 U	5	5	Filtered		DL
RD-59A		Primary	02/28/02	Bismuth-212	5 U	3	5	Filtered		DL

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-59A		Primary	02/28/02	Bismuth-214	5 U	3	5	Filtered		DL
RD-59A		Primary	02/28/02	Lead-210	5 U	3	5	Filtered		DL
RD-59A		Primary	02/28/02	Lead-212	5 U	3	5	Filtered		DL
RD-59A		Primary	02/28/02	Lead-214	5 U	3	5	Filtered		DL
RD-59A		Primary	02/28/02	Potassium-40	16.54	6.8	10	Filtered		DL
RD-59A		Primary	02/28/02	Radium-226	5 U	5	5	Filtered		DL
RD-59A		Primary	02/28/02	Thorium-234	5 U	5	5	Filtered		DL
RD-59A		Primary	02/28/02	Uranium-235	5 U	3	5	Filtered		DL
RD-59A		Primary	01/31/03	Actinium-228	5.39 U	---	5.39	Filtered		ES
RD-59A		Primary	01/31/03	Bismuth-212	10.1 U	---	10.1	Filtered		ES
RD-59A		Primary	01/31/03	Bismuth-214	2.6 U	---	2.6	Filtered		ES
RD-59A		Primary	01/31/03	Lead-210	121 U	---	121	Filtered		ES
RD-59A		Primary	01/31/03	Lead-212	2.18 U	---	2.18	Filtered		ES
RD-59A		Primary	01/31/03	Lead-214	2.75 U	---	2.75	Filtered		ES
RD-59A		Primary	01/31/03	Potassium-40	14 U	---	14	Filtered		ES
RD-59A		Primary	01/31/03	Radium-226	22.1 U	---	22.1	Filtered		ES
RD-59A		Primary	01/31/03	Thorium-234	42.4 U	---	42.4	Filtered		ES
RD-59A		Primary	01/31/03	Uranium-235	8.15 U	---	8.15	Filtered		ES
RD-59A		Primary	05/15/03	Actinium-228	6.54 U	---	6.54	Filtered		ES
RD-59A		Primary	05/15/03	Bismuth-212	11.9 U	---	11.9	Filtered		ES
RD-59A		Primary	05/15/03	Bismuth-214	4.7 U	---	4.7	Filtered		ES
RD-59A		Primary	05/15/03	Lead-210	395 U	---	395	Filtered		ES
RD-59A		Primary	05/15/03	Lead-212	2.32 U	---	2.32	Filtered		ES
RD-59A		Primary	05/15/03	Lead-214	2.98 U	---	2.98	Filtered		ES
RD-59A		Primary	05/15/03	Potassium-40	30.6 U	---	30.6	Filtered		ES
RD-59A		Primary	05/15/03	Radium-226	24.2 U	---	24.2	Filtered		ES
RD-59A		Primary	05/15/03	Thorium-234	54.3 U	---	54.3	Filtered		ES
RD-59A		Primary	05/15/03	Uranium-235	9.36 U	---	9.36	Filtered		ES
RD-59A		Primary	11/16/04	Potassium-40	35 U	---	35	Filtered		ES
RD-59A		Primary	09/07/05	Potassium-40	9.84 U	---	9.84	Filtered		ES
RD-59A		Primary	08/23/06	Potassium-40	39.8 U	---	39.8	Filtered		ES
RD-59A		Primary	11/14/06	Potassium-40	54.5 U	---	54.5	Filtered		ES
RD-59A		Primary	02/28/07	Potassium-40	21.6 U	---	21.6	Filtered		ES
RD-59A		Primary	05/20/08	Potassium-40	26.5 U	---	26.5	Filtered		ES
RD-59A		Primary	03/03/09	Potassium-40	-2.38 U	11	19	Filtered		ES
RD-59A		Primary	03/03/09	Potassium-40	-36 U	33	56.9	Unfiltered		ES
RD-59A		Primary	03/03/09	Radium-228	0.537 U	3.7	6.33	Filtered		ES
RD-59A		Primary	03/03/09	Radium-228	-0.593 U	8.1	13.7	Unfiltered		ES
RD-59A		Primary	08/04/09	Potassium-40	2.26 U	81	141	Filtered		ES
RD-59A		Primary	08/04/09	Potassium-40	61.2 U	150	262	Unfiltered		ES
RD-59B		Primary	08/16/94	Actinium-228	50 U	120	190	Filtered		LAS
RD-59B		Primary	08/16/94	Bismuth-214	-35 U	59	110	Filtered		LAS
RD-59B		Primary	08/16/94	Lead-212	-31 U	34	79	Filtered		LAS
RD-59B		Primary	08/16/94	Lead-214	-47 U	62	100	Filtered		LAS
RD-59B		Primary	08/16/94	Potassium-40	-180 U	380	660	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-59B		Primary	08/16/94	Thallium-208	-3 U	47	65	Filtered		LAS
RD-59B		Primary	08/16/94	Thorium-234	-80 U	320	710	Filtered		LAS
RD-59B		Primary	08/16/94	Uranium-235	0.07 U	0.7	1.2	Filtered		LAS
RD-59B		Primary	02/06/95	Actinium-228	-14 U	21	40	Filtered		LAS
RD-59B		Primary	02/06/95	Bismuth-214	0 U	13	20	Filtered		LAS
RD-59B		Primary	02/06/95	Lead-212	5 U	10	14	Filtered		LAS
RD-59B		Primary	02/06/95	Lead-214	14 U	13	19	Filtered		LAS
RD-59B		Primary	02/06/95	Potassium-40	5 U	76	120	Filtered		LAS
RD-59B		Primary	02/06/95	Thallium-208	1.8 U	7.8	11	Filtered		LAS
RD-59B		Primary	02/06/95	Thorium-234	1 U	71	170	Filtered		LAS
RD-59B		Primary	08/08/95	Actinium-228	-4 U	18	36	Filtered		LAS
RD-59B		Primary	08/08/95	Bismuth-214	3 U	13	20	Filtered		LAS
RD-59B		Primary	08/08/95	Lead-212	0.3 U	9.5	14	Filtered		LAS
RD-59B		Primary	08/08/95	Lead-214	-2 U	12	21	Filtered		LAS
RD-59B		Primary	08/08/95	Potassium-40	-30 U	19	110	Filtered		LAS
RD-59B		Primary	08/08/95	Thallium-208	1.1 U	7.1	10	Filtered		LAS
RD-59B		Primary	08/08/95	Thorium-234	6 U	69	160	Filtered		LAS
RD-59B		Primary	03/12/96	Actinium-228	-1.9 U	9	17	Filtered		LAS
RD-59B		Primary	03/12/96	Bismuth-214	32.3	9.4	11	Filtered		LAS
RD-59B		Primary	03/12/96	Lead-212	0.8 U	6.5	9.7	Filtered		LAS
RD-59B		Primary	03/12/96	Lead-214	31.6	8.2	10	Filtered		LAS
RD-59B		Primary	03/12/96	Potassium-40	-19 U	35	61	Filtered		LAS
RD-59B		Primary	03/12/96	Thallium-208	3.7 U	3.8	5.2	Filtered		LAS
RD-59B		Primary	03/12/96	Thorium-234	-15 U	61	220	Filtered		LAS
RD-59B		Primary	08/21/96	Actinium-228	11 U	20	38	Filtered		LAS
RD-59B		Primary	08/21/96	Bismuth-214	76	20	18	Filtered		LAS
RD-59B		Primary	08/21/96	Lead-212	1 U	10	15	Filtered		LAS
RD-59B		Primary	08/21/96	Lead-214	72	16	19	Filtered		LAS
RD-59B		Primary	08/21/96	Potassium-40	0 U	69	110	Filtered		LAS
RD-59B		Primary	08/21/96	Thallium-208	-1.7 U	6.7	10	Filtered		LAS
RD-59B		Primary	08/21/96	Thorium-234	-8 U	71	190	Filtered		LAS
RD-59B		Primary	02/16/97	Actinium-228	-1 U	26	48	Filtered		LAS
RD-59B		Primary	02/16/97	Bismuth-214	2 U	14	20	Filtered		LAS
RD-59B		Primary	02/16/97	Lead-212	4 U	11	15	Filtered		LAS
RD-59B		Primary	02/16/97	Lead-214	22	14	20	Filtered		LAS
RD-59B		Primary	02/16/97	Potassium-40	9 U	88	130	Filtered		LAS
RD-59B		Primary	02/16/97	Thallium-208	-0.4 U	8	11	Filtered		LAS
RD-59B		Primary	02/16/97	Thorium-234	15 U	81	210	Filtered		LAS
RD-59B		Primary	08/22/97	Actinium-228	-5.8 U	9.5	19	Filtered		LAS
RD-59B		Primary	08/22/97	Bismuth-212	18 U	20	25	Filtered		LAS
RD-59B		Primary	08/22/97	Bismuth-214	5.9 U	7.2	11	Filtered		LAS
RD-59B		Primary	08/22/97	Lead-210	-160 U	370	550	Filtered		LAS
RD-59B		Primary	08/22/97	Lead-212	8.1 U	6.3	8.6	Filtered		LAS
RD-59B		Primary	08/22/97	Lead-214	11.7	6.8	10	Filtered		LAS
RD-59B		Primary	08/22/97	Potassium-40	-17 U	32	58	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-59B		Primary	08/22/97	Thallium-208	1.7 U	3.6	5.1	Filtered		LAS
RD-59B		Primary	08/22/97	Thorium-234	8 U	60	97	Filtered		LAS
RD-59B		Primary	08/19/98	Actinium-228	59.5 U	---	59.5	Filtered		TN
RD-59B		Primary	08/19/98	Bismuth-212	90.5 U	---	90.5	Filtered		TN
RD-59B		Primary	08/19/98	Bismuth-214	46.5 U	---	46.5	Filtered		TN
RD-59B		Primary	08/19/98	Lead-210	563 U	---	563	Filtered		TN
RD-59B		Primary	08/19/98	Lead-212	20.3 U	---	20.3	Filtered		TN
RD-59B		Primary	08/19/98	Lead-214	30.6 U	---	30.6	Filtered		TN
RD-59B		Primary	08/19/98	Potassium-40	146 U	---	146	Filtered		TN
RD-59B		Primary	08/19/98	Thallium-208	14.9 U	---	14.9	Filtered		TN
RD-59B		Primary	08/19/98	Thorium-234	336 U	---	336	Filtered		TN
RD-59B		Primary	02/16/99	Actinium-228	66.6 U	---	66.6	Filtered		TN
RD-59B		Primary	02/16/99	Bismuth-212	104 U	---	104	Filtered		TN
RD-59B		Primary	02/16/99	Bismuth-214	28.1 U	---	28.1	Filtered		TN
RD-59B		Primary	02/16/99	Lead-210	765 U	---	765	Filtered		TN
RD-59B		Primary	02/16/99	Lead-212	21.7 U	---	21.7	Filtered		TN
RD-59B		Primary	02/16/99	Lead-214	26.6 U	---	26.6	Filtered		TN
RD-59B		Primary	02/16/99	Potassium-40	262 U	---	262	Filtered		TN
RD-59B		Primary	02/16/99	Radium-226	204 U	---	204	Filtered		TN
RD-59B		Primary	02/16/99	Thallium-208	14.8 U	---	14.8	Filtered		TN
RD-59B		Primary	02/16/99	Thorium-234	324 U	---	324	Filtered		TN
RD-59B		Primary	02/16/99	Uranium-235	80.4 U	---	80.4	Filtered		TN
RD-59B		Primary	03/14/00	Actinium-228	30.2 U	---	30.2	Filtered		TR
RD-59B		Primary	03/14/00	Bismuth-212	53.1 U	---	53.1	Filtered		TR
RD-59B		Primary	03/14/00	Bismuth-214	12.3 U	---	12.3	Filtered		TR
RD-59B		Primary	03/14/00	Lead-210	815 U	---	815	Filtered		TR
RD-59B		Primary	03/14/00	Lead-212	15.3 U	---	15.3	Filtered		TR
RD-59B		Primary	03/14/00	Lead-214	12.6 U	---	12.6	Filtered		TR
RD-59B		Primary	03/14/00	Potassium-40	85.8 U	---	85.8	Filtered		TR
RD-59B		Primary	03/14/00	Radium-226	145 U	---	145	Filtered		TR
RD-59B		Primary	03/14/00	Thallium-208	7.34 U	---	7.34	Filtered		TR
RD-59B		Primary	03/14/00	Thorium-234	191 U	---	191	Filtered		TR
RD-59B		Primary	03/14/00	Uranium-235	35.3 U	---	35.3	Filtered		TR
RD-59B		Primary	02/17/01	Actinium-228	66.7 U	---	66.7	Filtered		ES
RD-59B		Primary	02/17/01	Bismuth-212	98.8 U	---	98.8	Filtered		ES
RD-59B		Primary	02/17/01	Bismuth-214	32.6 U	---	32.6	Filtered		ES
RD-59B		Primary	02/17/01	Lead-210	134 U	---	134	Filtered		ES
RD-59B		Primary	02/17/01	Lead-212	15.2 U	---	15.2	Filtered		ES
RD-59B		Primary	02/17/01	Lead-214	33.4	21	24.1	Filtered		ES
RD-59B		Primary	02/17/01	Potassium-40	156 U	---	156	Filtered		ES
RD-59B		Primary	02/17/01	Radium-226	157 U	---	157	Filtered		ES
RD-59B		Primary	02/17/01	Thallium-208	11.5 U	---	11.5	Filtered		ES
RD-59B		Primary	02/17/01	Thorium-234	203 U	---	203	Filtered		ES
RD-59B		Primary	02/17/01	Uranium-235	45 U	---	45	Filtered		ES
RD-59B		Primary	02/28/02	Actinium-228	5 U	5	5	Filtered		DL

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-59B		Primary	02/28/02	Bismuth-212	5 U	3	5	Filtered		DL
RD-59B		Primary	02/28/02	Bismuth-214	5 U	3	5	Filtered		DL
RD-59B		Primary	02/28/02	Lead-210	5 U	3	5	Filtered		DL
RD-59B		Primary	02/28/02	Lead-212	5 U	3	5	Filtered		DL
RD-59B		Primary	02/28/02	Lead-214	5 U	3	5	Filtered		DL
RD-59B		Primary	02/28/02	Potassium-40	5 U	3	5	Filtered		DL
RD-59B		Primary	02/28/02	Radium-226	5 U	5	5	Filtered		DL
RD-59B		Primary	02/28/02	Thorium-234	5 U	5	5	Filtered		DL
RD-59B		Primary	02/28/02	Uranium-235	5 U	3	5	Filtered		DL
RD-59B		Primary	01/31/03	Actinium-228	9.42 U	---	9.42	Filtered		ES
RD-59B		Primary	01/31/03	Bismuth-212	14.9 U	---	14.9	Filtered		ES
RD-59B		Primary	01/31/03	Bismuth-214	4.08 U	---	4.08	Filtered		ES
RD-59B		Primary	01/31/03	Lead-210	449 U	---	449	Filtered		ES
RD-59B		Primary	01/31/03	Lead-212	2.78 U	---	2.78	Filtered		ES
RD-59B		Primary	01/31/03	Lead-214	3.94 U	---	3.94	Filtered		ES
RD-59B		Primary	01/31/03	Potassium-40	42.6 U	---	42.6	Filtered		ES
RD-59B		Primary	01/31/03	Radium-226	31 U	---	31	Filtered		ES
RD-59B		Primary	01/31/03	Thorium-234	62.9 U	---	62.9	Filtered		ES
RD-59B		Primary	01/31/03	Uranium-235	12.1 U	---	12.1	Filtered		ES
RD-59B		Primary	11/05/04	Potassium-40	37 U	---	37	Filtered		ES
RD-59B		Primary	09/07/05	Potassium-40	14.5 U	---	14.5	Filtered		ES
RD-59B		Primary	02/22/06	Potassium-40	40.9 U	---	40.9	Filtered		ES
RD-59B		Primary	11/14/06	Potassium-40	30.7 U	---	30.7	Filtered		ES
RD-59B		Primary	02/28/07	Potassium-40	16.6 U	---	16.6	Filtered		ES
RD-59B		Split	02/28/07	Potassium-40	-20.4 U	24	31.6	Filtered		STL
RD-59B		Primary	05/20/08	Potassium-40	26.9 U	---	26.9	Filtered		ES
RD-59B		Primary	03/03/09	Potassium-40	-7.74 U	33	55.8	Filtered		ES
RD-59B		Primary	03/03/09	Potassium-40	10.2 U	6.6	10.7	Unfiltered		ES
RD-59B		Primary	03/03/09	Radium-228	3.99 U	7.8	13.2	Filtered		ES
RD-59B		Primary	03/03/09	Radium-228	0.25 U	3.6	6.17	Unfiltered		ES
RD-59B		Primary	08/04/09	Potassium-40	17 U	61	106	Filtered		ES
RD-59B		Primary	08/04/09	Potassium-40	9.76 U	82	144	Unfiltered		ES
RD-59C		Primary	08/16/94	Actinium-228	20 U	130	210	Filtered		LAS
RD-59C		Primary	08/16/94	Bismuth-214	16 U	81	120	Filtered		LAS
RD-59C		Primary	08/16/94	Lead-212	28 U	57	78	Filtered		LAS
RD-59C		Primary	08/16/94	Lead-214	21 U	61	96	Filtered		LAS
RD-59C		Primary	08/16/94	Potassium-40	-70 U	390	650	Filtered		LAS
RD-59C		Primary	08/16/94	Thallium-208	-23 U	44	62	Filtered		LAS
RD-59C		Primary	08/16/94	Thorium-234	150 U	330	700	Filtered		LAS
RD-59C		Primary	08/16/94	Uranium-235	50 U	150	200	Filtered		LAS
RD-59C		Primary	02/06/95	Actinium-228	13 U	23	41	Filtered		LAS
RD-59C		Primary	02/06/95	Bismuth-214	12 U	16	23	Filtered		LAS
RD-59C		Primary	02/06/95	Lead-212	-2 U	11	17	Filtered		LAS
RD-59C		Primary	02/06/95	Lead-214	6 U	13	21	Filtered		LAS
RD-59C		Primary	02/06/95	Potassium-40	-36 U	83	140	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-59C		Primary	02/06/95	Thallium-208	3.7 U	8.3	12	Filtered		LAS
RD-59C		Primary	02/06/95	Thorium-234	-48 U	76	190	Filtered		LAS
RD-59C		Primary	08/08/95	Actinium-228	-13 U	16	52	Filtered		LAS
RD-59C		Primary	08/08/95	Bismuth-214	3 U	15	23	Filtered		LAS
RD-59C		Primary	08/08/95	Lead-212	-6.2 U	9.7	15	Filtered		LAS
RD-59C		Primary	08/08/95	Lead-214	10 U	12	19	Filtered		LAS
RD-59C		Primary	08/08/95	Potassium-40	-27 U	80	130	Filtered		LAS
RD-59C		Primary	08/08/95	Thallium-208	0.8 U	8.2	12	Filtered		LAS
RD-59C		Primary	08/08/95	Thorium-234	20 U	110	170	Filtered		LAS
RD-59C		Primary	03/12/96	Actinium-228	-38 U	18	41	Filtered		LAS
RD-59C		Primary	03/12/96	Bismuth-214	60	19	19	Filtered		LAS
RD-59C		Primary	03/12/96	Lead-212	3.4 U	9.7	14	Filtered		LAS
RD-59C		Primary	03/12/96	Lead-214	62	16	19	Filtered		LAS
RD-59C		Primary	03/12/96	Potassium-40	45 U	72	97	Filtered		LAS
RD-59C		Primary	03/12/96	Thallium-208	0.9 U	6.5	9.2	Filtered		LAS
RD-59C		Primary	03/12/96	Thorium-234	-3 U	71	190	Filtered		LAS
RD-59C		Primary	03/12/96	Uranium-235	11 U	28	41	Filtered		LAS
RD-59C		Primary	08/21/96	Actinium-228	8 U	20	37	Filtered		LAS
RD-59C		Primary	08/21/96	Bismuth-214	36	16	20	Filtered		LAS
RD-59C		Primary	08/21/96	Lead-212	-3.4 U	9.4	14	Filtered		LAS
RD-59C		Primary	08/21/96	Lead-214	41	14	18	Filtered		LAS
RD-59C		Primary	08/21/96	Potassium-40	-13 U	74	130	Filtered		LAS
RD-59C		Primary	08/21/96	Thallium-208	-2.4 U	6.9	10	Filtered		LAS
RD-59C		Primary	08/21/96	Thorium-234	2 U	72	190	Filtered		LAS
RD-59C		Primary	02/16/97	Actinium-228	-15 U	18	41	Filtered		LAS
RD-59C		Primary	02/16/97	Bismuth-214	9 U	14	20	Filtered		LAS
RD-59C		Primary	02/16/97	Lead-212	3 U	9.6	14	Filtered		LAS
RD-59C		Primary	02/16/97	Lead-214	15 U	12	19	Filtered		LAS
RD-59C		Primary	02/16/97	Potassium-40	-10 U	69	120	Filtered		LAS
RD-59C		Primary	02/16/97	Thallium-208	4.2 U	7.3	10	Filtered		LAS
RD-59C		Primary	02/16/97	Thorium-234	-31 U	70	180	Filtered		LAS
RD-59C		Primary	08/22/97	Actinium-228	0.4 U	9.1	16	Filtered		LAS
RD-59C		Primary	08/22/97	Bismuth-212	5 U	20	27	Filtered		LAS
RD-59C		Primary	08/22/97	Bismuth-214	15.4	7.8	10	Filtered		LAS
RD-59C		Primary	08/22/97	Lead-210	-190 U	350	530	Filtered		LAS
RD-59C		Primary	08/22/97	Lead-212	2.5 U	6.1	8.8	Filtered		LAS
RD-59C		Primary	08/22/97	Lead-214	16.3	6.7	8.7	Filtered		LAS
RD-59C		Primary	08/22/97	Potassium-40	14 U	33	52	Filtered		LAS
RD-59C		Primary	08/22/97	Thallium-208	2.3 U	3.6	5	Filtered		LAS
RD-59C		Primary	08/22/97	Thorium-234	-36 U	59	99	Filtered		LAS
RD-59C		Primary	08/19/98	Actinium-228	49.9 U	---	49.9	Filtered		TN
RD-59C		Primary	08/19/98	Bismuth-212	99.7 U	---	99.7	Filtered		TN
RD-59C		Primary	08/19/98	Bismuth-214	28 U	---	28	Filtered		TN
RD-59C		Primary	08/19/98	Lead-210	601 U	---	601	Filtered		TN
RD-59C		Primary	08/19/98	Lead-212	21.6 U	---	21.6	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-59C		Primary	08/19/98	Lead-214	26.3 U	---	26.3	Filtered		TN
RD-59C		Primary	08/19/98	Potassium-40	159 U	---	159	Filtered		TN
RD-59C		Primary	08/19/98	Thallium-208	14.4 U	---	14.4	Filtered		TN
RD-59C		Primary	08/19/98	Thorium-234	369 U	---	369	Filtered		TN
RD-59C		Primary	02/16/99	Actinium-228	28 U	---	28	Filtered		TN
RD-59C		Primary	02/16/99	Bismuth-212	52.2 U	---	52.2	Filtered		TN
RD-59C		Primary	02/16/99	Bismuth-214	13.3 U	---	13.3	Filtered		TN
RD-59C		Primary	02/16/99	Lead-210	280 U	---	280	Filtered		TN
RD-59C		Primary	02/16/99	Lead-212	11.6 U	---	11.6	Filtered		TN
RD-59C		Primary	02/16/99	Lead-214	12.2 U	---	12.2	Filtered		TN
RD-59C		Primary	02/16/99	Potassium-40	102 U	---	102	Filtered		TN
RD-59C		Primary	02/16/99	Radium-226	121 U	---	121	Filtered		TN
RD-59C		Primary	02/16/99	Thallium-208	6.8 U	---	6.8	Filtered		TN
RD-59C		Primary	02/16/99	Thorium-234	176 U	---	176	Filtered		TN
RD-59C		Primary	02/16/99	Uranium-235	35.4 U	---	35.4	Filtered		TN
RD-59C		Primary	03/14/00	Actinium-228	70 U	---	70	Filtered		TR
RD-59C		Primary	03/14/00	Bismuth-212	113 U	---	113	Filtered		TR
RD-59C		Primary	03/14/00	Bismuth-214	32.2 U	---	32.2	Filtered		TR
RD-59C		Primary	03/14/00	Lead-210	637 U	---	637	Filtered		TR
RD-59C		Primary	03/14/00	Lead-212	20.6 U	---	20.6	Filtered		TR
RD-59C		Primary	03/14/00	Lead-214	29 U	---	29	Filtered		TR
RD-59C		Primary	03/14/00	Potassium-40	436 U	---	436	Filtered		TR
RD-59C		Primary	03/14/00	Radium-226	285 U	---	285	Filtered		TR
RD-59C		Primary	03/14/00	Thallium-208	33.1 U	---	33.1	Filtered		TR
RD-59C		Primary	03/14/00	Thorium-234	235 U	---	235	Filtered		TR
RD-59C		Primary	03/14/00	Uranium-235	75.5 U	---	75.5	Filtered		TR
RD-59C		Primary	02/17/01	Actinium-228	53.3 U	---	53.3	Filtered		ES
RD-59C		Primary	02/17/01	Bismuth-212	93 U	---	93	Filtered		ES
RD-59C		Primary	02/17/01	Bismuth-214	28.6	24	26.5	Filtered		ES
RD-59C		Primary	02/17/01	Lead-210	897 U	---	897	Filtered		ES
RD-59C		Primary	02/17/01	Lead-212	18 U	---	18	Filtered		ES
RD-59C		Primary	02/17/01	Lead-214	55.2	27	30.1	Filtered		ES
RD-59C		Primary	02/17/01	Potassium-40	218 U	---	218	Filtered		ES
RD-59C		Primary	02/17/01	Radium-226	185 U	---	185	Filtered		ES
RD-59C		Primary	02/17/01	Thallium-208	13.7 U	---	13.7	Filtered		ES
RD-59C		Primary	02/17/01	Thorium-234	287 U	---	287	Filtered		ES
RD-59C		Primary	02/17/01	Uranium-235	66.4 U	---	66.4	Filtered		ES
RD-59C		Primary	02/28/02	Actinium-228	5 U	5	5	Filtered		DL
RD-59C		Primary	02/28/02	Bismuth-212	5 U	3	5	Filtered		DL
RD-59C		Primary	02/28/02	Bismuth-214	5 U	3	5	Filtered		DL
RD-59C		Primary	02/28/02	Lead-210	5 U	3	5	Filtered		DL
RD-59C		Primary	02/28/02	Lead-212	5 U	3	5	Filtered		DL
RD-59C		Primary	02/28/02	Lead-214	5 U	3	5	Filtered		DL
RD-59C		Primary	02/28/02	Potassium-40	5 U	3	5	Filtered		DL
RD-59C		Primary	02/28/02	Radium-226	5 U	5	5	Filtered		DL

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-59C		Primary	02/28/02	Thorium-234	5 U	5	5	Filtered		DL
RD-59C		Primary	02/28/02	Uranium-235	5 U	3	5	Filtered		DL
RD-59C		Primary	01/31/03	Actinium-228	9.29 U	---	9.29	Filtered		ES
RD-59C		Primary	01/31/03	Bismuth-212	16.4 U	---	16.4	Filtered		ES
RD-59C		Primary	01/31/03	Bismuth-214	4.01 U	---	4.01	Filtered		ES
RD-59C		Primary	01/31/03	Lead-210	172 U	---	172	Filtered		ES
RD-59C		Primary	01/31/03	Lead-212	3.1 U	---	3.1	Filtered		ES
RD-59C		Primary	01/31/03	Lead-214	4.3 U	---	4.3	Filtered		ES
RD-59C		Primary	01/31/03	Potassium-40	28.8 U	---	28.8	Filtered		ES
RD-59C		Primary	01/31/03	Radium-226	32.7 U	---	32.7	Filtered		ES
RD-59C		Primary	01/31/03	Thorium-234	51.5 U	---	51.5	Filtered		ES
RD-59C		Primary	01/31/03	Uranium-235	12.7 U	---	12.7	Filtered		ES
RD-59C		Primary	11/05/04	Potassium-40	9.69 U	---	9.69	Filtered		ES
RD-59C		Primary	09/07/05	Potassium-40	25.3 U	---	25.3	Filtered		ES
RD-59C		Primary	02/22/06	Potassium-40	19.2 U	---	19.2	Filtered		ES
RD-59C		Split	02/22/06	Potassium-40	-27.2 U	22	39.1	Filtered		STL
RD-59C		Primary	11/14/06	Potassium-40	22 U	---	22	Filtered		ES
RD-59C		Primary	02/28/07	Potassium-40	23.8 U	---	23.8	Filtered		ES
RD-59C		Primary	05/20/08	Potassium-40	33.2 U	---	33.2	Filtered		ES
RD-59C		Primary	03/03/09	Potassium-40	3.66 U	7.4	12.6	Filtered		ES
RD-59C		Primary	03/03/09	Potassium-40	0.601 U	10	17.4	Unfiltered		ES
RD-59C		Primary	03/03/09	Radium-228	3.18 U	2.8	4.68	Filtered		ES
RD-59C		Primary	03/03/09	Radium-228	2.34 U	3.4	5.71	Unfiltered		ES
RD-59C		Primary	08/04/09	Potassium-40	142 U	180	304	Filtered		ES
RD-59C		Primary	08/04/09	Potassium-40	-163 U	140	268	Unfiltered		ES
RD-61		Primary	05/28/98	Actinium-228	29.2 U	---	29.2	Filtered		TN
RD-61		Primary	05/28/98	Bismuth-212	49.7 U	---	49.7	Filtered		TN
RD-61		Primary	05/28/98	Bismuth-214	13.2 U	---	13.2	Filtered		TN
RD-61		Primary	05/28/98	Lead-210	534 U	---	534	Filtered		TN
RD-61		Primary	05/28/98	Lead-212	10 U	---	10	Filtered		TN
RD-61		Primary	05/28/98	Lead-214	12.7 U	---	12.7	Filtered		TN
RD-61		Primary	05/28/98	Potassium-40	83.5 U	---	83.5	Filtered		TN
RD-61		Primary	05/28/98	Thallium-208	7.19 U	---	7.19	Filtered		TN
RD-61		Primary	05/28/98	Thorium-234	180 U	---	180	Filtered		TN
RD-63		Primary	02/02/99	Actinium-228	30 U	---	30	Filtered		TN
RD-63		Primary	02/02/99	Bismuth-212	45.7 U	---	45.7	Filtered		TN
RD-63		Primary	02/02/99	Bismuth-214	13 U	---	13	Filtered		TN
RD-63		Primary	02/02/99	Lead-210	327 U	---	327	Filtered		TN
RD-63		Primary	02/02/99	Lead-212	10.6 U	---	10.6	Filtered		TN
RD-63		Primary	02/02/99	Lead-214	12.7 U	---	12.7	Filtered		TN
RD-63		Primary	02/02/99	Potassium-40	100 U	---	100	Filtered		TN
RD-63		Primary	02/02/99	Radium-226	108 U	---	108	Filtered		TN
RD-63		Primary	02/02/99	Thallium-208	10.3 U	---	10.3	Filtered		TN
RD-63		Primary	02/02/99	Thorium-234	195 U	---	195	Filtered		TN
RD-63		Primary	02/02/99	Uranium-235	35.4 U	---	35.4	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-63		Primary	02/16/00	Actinium-228	52.1 U	---	52.1	Filtered		TR
RD-63		Primary	02/16/00	Bismuth-212	134 U	---	134	Filtered		TR
RD-63		Primary	02/16/00	Bismuth-214	24.5 U	---	24.5	Filtered		TR
RD-63		Primary	02/16/00	Lead-210	477 U	---	477	Filtered		TR
RD-63		Primary	02/16/00	Lead-212	16.4 U	---	16.4	Filtered		TR
RD-63		Primary	02/16/00	Lead-214	46.3 U	---	46.3	Filtered		TR
RD-63		Primary	02/16/00	Potassium-40	345 U	---	345	Filtered		TR
RD-63		Primary	02/16/00	Radium-226	225 U	---	225	Filtered		TR
RD-63		Primary	02/16/00	Thallium-208	19 U	---	19	Filtered		TR
RD-63		Primary	02/16/00	Thorium-234	190 U	---	190	Filtered		TR
RD-63		Primary	02/16/00	Uranium-235	58.5 U	---	58.5	Filtered		TR
RD-63		Primary	02/23/01	Actinium-228	54.1 U	---	54.1	Filtered		ES
RD-63		Primary	02/23/01	Bismuth-212	92.7 U	---	92.7	Filtered		ES
RD-63		Primary	02/23/01	Bismuth-214	220	32	30.1	Filtered		ES
RD-63		Primary	02/23/01	Lead-210	3160 U	---	3160	Filtered		ES
RD-63		Primary	02/23/01	Lead-212	19.6 U	---	19.6	Filtered		ES
RD-63		Primary	02/23/01	Lead-214	218	32	33.8	Filtered		ES
RD-63		Primary	02/23/01	Potassium-40	239 U	---	239	Filtered		ES
RD-63		Primary	02/23/01	Radium-226	362 U	---	362	Filtered		ES
RD-63		Primary	02/23/01	Thallium-208	18.4 U	---	18.4	Filtered		ES
RD-63		Primary	02/23/01	Thorium-234	394 U	---	394	Filtered		ES
RD-63		Primary	02/23/01	Uranium-235	75.8 U	---	75.8	Filtered		ES
RD-63		Primary	02/14/02	Actinium-228	3 U	0.16	3	Filtered		DL
RD-63		Primary	02/14/02	Bismuth-212	3 U	3	3	Filtered		DL
RD-63		Primary	02/14/02	Bismuth-214	3 U	3	3	Filtered		DL
RD-63		Primary	02/14/02	Lead-210	5 U	5	5	Filtered		DL
RD-63		Primary	02/14/02	Lead-212	3 U	3	3	Filtered		DL
RD-63		Primary	02/14/02	Lead-214	5 U	3	5	Filtered		DL
RD-63		Primary	02/14/02	Potassium-40	5 U	3	5	Filtered		DL
RD-63		Primary	02/14/02	Radium-226	3 U	3	3	Filtered		DL
RD-63		Primary	02/14/02	Thorium-234	5 U	5	5	Filtered		DL
RD-63		Primary	02/14/02	Uranium-235	5 U	0.7	5	Filtered		DL
RD-63		Primary	02/05/03	Actinium-228	9.39 U	---	9.39	Filtered		ES
RD-63		Primary	02/05/03	Bismuth-212	15.6 U	---	15.6	Filtered		ES
RD-63		Primary	02/05/03	Bismuth-214	4.39 U	---	4.39	Filtered		ES
RD-63		Primary	02/05/03	Lead-210	302 U	---	302	Filtered		ES
RD-63		Primary	02/05/03	Lead-212	2.94 U	---	2.94	Filtered		ES
RD-63		Primary	02/05/03	Lead-214	3.9 U	---	3.9	Filtered		ES
RD-63		Primary	02/05/03	Potassium-40	51.2 U	---	51.2	Filtered		ES
RD-63		Primary	02/05/03	Radium-226	28.5 U	---	28.5	Filtered		ES
RD-63		Primary	02/05/03	Thorium-234	57 U	---	57	Filtered		ES
RD-63		Primary	02/05/03	Uranium-235	10.9 U	---	10.9	Filtered		ES
RD-63		Primary	02/24/04	Actinium-228	36.1 U	---	36.1	Filtered		ES
RD-63		Primary	02/24/04	Bismuth-212	60.1 U	---	60.1	Filtered		ES
RD-63		Primary	02/24/04	Bismuth-214	19.5 U	---	19.5	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-63		Primary	02/24/04	Lead-210	1660 U	---	1660	Filtered		ES
RD-63		Primary	02/24/04	Lead-212	11.7 U	---	11.7	Filtered		ES
RD-63		Primary	02/24/04	Lead-214	22.2 U	---	22.2	Filtered		ES
RD-63		Primary	02/24/04	Potassium-40	156 U	---	156	Filtered		ES
RD-63		Primary	02/24/04	Radium-226	118 U	---	118	Filtered		ES
RD-63		Primary	02/24/04	Thallium-208	8.46 U	---	8.46	Filtered		ES
RD-63		Primary	02/24/04	Thorium-234	235 U	---	235	Filtered		ES
RD-63		Primary	02/24/04	Uranium-235	46.7 U	---	46.7	Filtered		ES
RD-63		Primary	08/25/05	Potassium-40	14.3 U	---	14.3	Filtered		ES
RD-63		Primary	02/16/06	Potassium-40	46.3 U	---	46.3	Filtered		ES
RD-63		Primary	05/24/07	Potassium-40	17.3 U	---	17.3	Filtered		ES
RD-63		Split	05/24/07	Potassium-40	-42.4 U	27	38.8	Filtered		STL
RD-63		Primary	02/06/08	Potassium-40	10.3 U	---	10.3	Filtered		ES
RD-63		Primary	02/20/09	Potassium-40	15.2 U	12	20.7	Filtered		ES
RD-63		Reanalysis of Primary	02/20/09	Potassium-40	16.18 U	9.81	16.2	Unfiltered		ES
RD-63		Split	02/20/09	Potassium-40	-12.7 U	23.7	24.7	Filtered		GEL
RD-63		Split	02/20/09	Potassium-40	-16.7 U	21.3	24.5	Unfiltered		GEL
RD-63		Primary	02/20/09	Radium-228	5.01 U	4.7	7.86	Filtered		ES
RD-63		Primary	02/20/09	Radium-228	3.15 U	2.8	4.6	Unfiltered		ES
RD-63		Split	02/20/09	Radium-228	1.26 U	5.16	7.71	Filtered		GEL
RD-63		Split	02/20/09	Radium-228	2.5 U	5.03	7.19	Unfiltered		GEL
RD-63		Primary	07/31/09	Potassium-40	-39.7 U	140	249	Filtered		ES
RD-63		Primary	07/31/09	Potassium-40	54.8 U	84	143	Unfiltered		ES
RD-64		Primary	05/10/01	Actinium-228	26.7 U	---	26.7	Filtered		ES
RD-64		Primary	05/10/01	Bismuth-212	45.9 U	---	45.9	Filtered		ES
RD-64		Primary	05/10/01	Bismuth-214	11.5 U	---	11.5	Filtered		ES
RD-64		Primary	05/10/01	Lead-210	676 U	---	676	Filtered		ES
RD-64		Primary	05/10/01	Lead-212	13.4 U	---	13.4	Filtered		ES
RD-64		Primary	05/10/01	Lead-214	10.9 U	---	10.9	Filtered		ES
RD-64		Primary	05/10/01	Potassium-40	70.1 U	---	70.1	Filtered		ES
RD-64		Primary	05/10/01	Radium-226	92.2 U	---	92.2	Filtered		ES
RD-64		Primary	05/10/01	Thallium-208	9.4 U	---	9.4	Filtered		ES
RD-64		Primary	05/10/01	Thorium-234	157 U	---	157	Filtered		ES
RD-64		Primary	05/10/01	Uranium-235	27 U	---	27	Filtered		ES
RD-64		Primary	02/28/02	Actinium-228	5 U	5	5	Filtered		DL
RD-64		Primary	02/28/02	Bismuth-212	5 U	3	5	Filtered		DL
RD-64		Primary	02/28/02	Bismuth-214	3 U	3	3	Filtered		DL
RD-64		Primary	02/28/02	Lead-210	3 U	3	3	Filtered		DL
RD-64		Primary	02/28/02	Lead-212	5 U	3	5	Filtered		DL
RD-64		Primary	02/28/02	Lead-214	5 U	3	5	Filtered		DL
RD-64		Primary	02/28/02	Potassium-40	7	3	6	Filtered		DL
RD-64		Primary	02/28/02	Radium-226	5 U	3	5	Filtered		DL
RD-64		Primary	02/28/02	Thorium-234	5 U	5	5	Filtered		DL
RD-64	Z06	Primary	01/29/03	Actinium-228	3.38 U	---	3.38	Filtered		ES
RD-64	Z06	Primary	01/29/03	Bismuth-212	6.65 U	---	6.65	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-64	Z06	Primary	01/29/03	Bismuth-214	1.77 U	---	1.77	Filtered		ES
RD-64	Z06	Primary	01/29/03	Lead-210	79.1 U	---	79.1	Filtered		ES
RD-64	Z06	Primary	01/29/03	Lead-212	1.44 U	---	1.44	Filtered		ES
RD-64	Z06	Primary	01/29/03	Lead-214	1.83 U	---	1.83	Filtered		ES
RD-64	Z06	Primary	01/29/03	Potassium-40	9.26 U	---	9.26	Filtered		ES
RD-64	Z06	Primary	01/29/03	Radium-226	14.6 U	---	14.6	Filtered		ES
RD-64	Z06	Primary	01/29/03	Thorium-234	28.5 U	---	28.5	Filtered		ES
RD-64	Z06	Primary	01/29/03	Uranium-235	5.37 U	---	5.37	Filtered		ES
RD-64	Z06	Primary	02/14/05	Potassium-40	13.6 U	---	13.6	Filtered		ES
RD-64	Z06	Primary	02/16/06	Potassium-40	51.2 U	---	51.2	Filtered		ES
RD-64	Z06	Primary	02/08/07	Potassium-40	21.5 U	---	21.5	Filtered		ES
RD-64	Z07	Primary	02/06/08	Potassium-40	22.2 U	---	22.2	Filtered		ES
RD-64	Z08	Primary	02/23/09	Potassium-40	-50.2 U	27	46.6	Unfiltered		ES
RD-64	Z08	Reanalysis of Primary	02/23/09	Potassium-40	4.94 U	10.98	18.6	Filtered		ES
RD-64	Z08	Primary	02/23/09	Radium-228	1.42 U	6.5	11.1	Filtered		ES
RD-64	Z08	Primary	02/23/09	Radium-228	1.08 U	7.6	12.9	Unfiltered		ES
RD-64	Z04	Primary	07/16/09	Potassium-40	-376 U	200	192	Filtered		ES
RD-64	Z04	Primary	07/16/09	Potassium-40	32.4 U	200	331	Unfiltered		ES
RD-66		Primary	09/30/97	Actinium-228	-1 U	10	20	Filtered		LAS
RD-66		Primary	09/30/97	Bismuth-212	20 U	22	28	Filtered		LAS
RD-66		Primary	09/30/97	Bismuth-214	66	12	11	Filtered		LAS
RD-66		Primary	09/30/97	Lead-210	-20 U	380	520	Filtered		LAS
RD-66		Primary	09/30/97	Lead-212	3 U	6.4	9.3	Filtered		LAS
RD-66		Primary	09/30/97	Lead-214	76	11	11	Filtered		LAS
RD-66		Primary	09/30/97	Potassium-40	30 U	38	55	Filtered		LAS
RD-66		Primary	09/30/97	Radium-226	22 U	75	110	Filtered		LAS
RD-66		Primary	09/30/97	Thallium-208	1.2 U	3.6	5.3	Filtered		LAS
RD-66		Primary	09/30/97	Thorium-234	-5 U	63	100	Filtered		LAS
RD-66		Primary	09/30/97	Uranium-235	3 U	20	30	Filtered		LAS
RD-68A		Primary	07/09/97	Actinium-228	-1 U	20	37	Filtered		LAS
RD-68A		Primary	07/09/97	Bismuth-212	-10 U	51	77	Filtered		LAS
RD-68A		Primary	07/09/97	Bismuth-214	12 U	13	17	Filtered		LAS
RD-68A		Primary	07/09/97	Lead-210	-41 U	98	160	Filtered		LAS
RD-68A		Primary	07/09/97	Lead-212	-1.3 U	9.2	14	Filtered		LAS
RD-68A		Primary	07/09/97	Lead-214	14 U	11	18	Filtered		LAS
RD-68A		Primary	07/09/97	Potassium-40	0 U	68	110	Filtered		LAS
RD-68A		Primary	07/09/97	Radium-226	50 U	120	170	Filtered		LAS
RD-68A		Primary	07/09/97	Thallium-208	3.1 U	7.6	9.1	Filtered		LAS
RD-68A		Primary	07/09/97	Thorium-234	10 U	68	140	Filtered		LAS
RD-68A		Primary	07/09/97	Uranium-235	-4 U	27	42	Filtered		LAS
RD-68B		Primary	07/10/97	Actinium-228	11 U	22	38	Filtered		LAS
RD-68B		Primary	07/10/97	Bismuth-212	-25 U	23	74	Filtered		LAS
RD-68B		Primary	07/10/97	Bismuth-214	22	14	18	Filtered		LAS
RD-68B		Primary	07/10/97	Lead-210	20 U	110	170	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-68B		Primary	07/10/97	Lead-212	4.7 U	9.5	13	Filtered		LAS
RD-68B		Primary	07/10/97	Lead-214	19	12	18	Filtered		LAS
RD-68B		Primary	07/10/97	Potassium-40	35 U	80	120	Filtered		LAS
RD-68B		Primary	07/10/97	Radium-226	10 U	110	170	Filtered		LAS
RD-68B		Primary	07/10/97	Thallium-208	5 U	7.4	9.9	Filtered		LAS
RD-68B		Primary	07/10/97	Thorium-234	-10 U	70	140	Filtered		LAS
RD-68B		Primary	07/10/97	Uranium-235	1 U	27	42	Filtered		LAS
RD-69		Primary	05/28/98	Actinium-228	23.4 U	---	23.4	Filtered		TN
RD-69		Primary	05/28/98	Bismuth-212	52.3 U	---	52.3	Filtered		TN
RD-69		Primary	05/28/98	Bismuth-214	13.5 U	---	13.5	Filtered		TN
RD-69		Primary	05/28/98	Lead-210	315 U	---	315	Filtered		TN
RD-69		Primary	05/28/98	Lead-212	10.1 U	---	10.1	Filtered		TN
RD-69		Primary	05/28/98	Lead-214	18.4 U	---	18.4	Filtered		TN
RD-69		Primary	05/28/98	Potassium-40	81 U	---	81	Filtered		TN
RD-69		Primary	05/28/98	Thallium-208	7.09 U	---	7.09	Filtered		TN
RD-69		Primary	05/28/98	Thorium-234	182 U	---	182	Filtered		TN
RD-71		Primary	09/30/97	Actinium-228	9 U	10	19	Filtered		LAS
RD-71		Primary	09/30/97	Bismuth-212	-3 U	22	33	Filtered		LAS
RD-71		Primary	09/30/97	Bismuth-214	156	19	12	Filtered		LAS
RD-71		Primary	09/30/97	Lead-210	270 U	420	560	Filtered		LAS
RD-71		Primary	09/30/97	Lead-212	2.3 U	6.7	9.9	Filtered		LAS
RD-71		Primary	09/30/97	Lead-214	184 U	19	11	Filtered		LAS
RD-71		Primary	09/30/97	Potassium-40	16 U	39	60	Filtered		LAS
RD-71		Primary	09/30/97	Radium-226	-3 U	77	120	Filtered		LAS
RD-71		Primary	09/30/97	Thallium-208	-1.8 U	3.7	5.8	Filtered		LAS
RD-71		Primary	09/30/97	Thorium-234	-25 U	65	110	Filtered		LAS
RD-71		Primary	09/30/97	Uranium-235	-5 U	14	34	Filtered		LAS
RD-74		Primary	05/13/99	Actinium-228	61.4 U	---	61.4	Filtered		TN
RD-74		Primary	05/13/99	Bismuth-212	100 U	---	100	Filtered		TN
RD-74		Primary	05/13/99	Bismuth-214	27.4 U	---	27.4	Filtered		TN
RD-74		Primary	05/13/99	Lead-210	111 U	---	111	Filtered		TN
RD-74		Primary	05/13/99	Lead-212	18.4 U	---	18.4	Filtered		TN
RD-74		Primary	05/13/99	Lead-214	26.3 U	---	26.3	Filtered		TN
RD-74		Primary	05/13/99	Potassium-40	179 U	---	179	Filtered		TN
RD-74		Primary	05/13/99	Radium-226	172 U	---	172	Filtered		TN
RD-74		Primary	05/13/99	Thallium-208	12.2 U	---	12.2	Filtered		TN
RD-74		Primary	05/13/99	Thorium-234	238 U	---	238	Filtered		TN
RD-74		Primary	05/13/99	Uranium-235	51.4 U	---	51.4	Filtered		TN
RD-75		Primary	08/30/05	Potassium-40	59.1 U	---	59.1	Filtered		ES
RD-85		Primary	08/13/04	Actinium-228	44 U	---	44	Filtered		ES
RD-85		Primary	08/13/04	Bismuth-212	80.3 U	---	80.3	Filtered		ES
RD-85		Primary	08/13/04	Bismuth-214	24 U	---	24	Filtered		ES
RD-85		Primary	08/13/04	Lead-210	400 U	---	400	Filtered		ES
RD-85		Primary	08/13/04	Lead-212	14.5 U	---	14.5	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-85		Primary	08/13/04	Lead-214	20.7 U	---	20.7	Filtered		ES
RD-85		Primary	08/13/04	Potassium-40	128 U	---	128	Filtered		ES
RD-85		Primary	08/13/04	Radium-226	135 U	---	135	Filtered		ES
RD-85		Primary	08/13/04	Thallium-208	9.91 U	---	9.91	Filtered		ES
RD-85		Primary	08/13/04	Thorium-234	150 U	---	150	Filtered		ES
RD-85		Primary	08/13/04	Uranium-235	43.5 U	---	43.5	Filtered		ES
RD-85		Primary	02/23/05	Potassium-40	58.4 U	---	58.4	Filtered		ES
RD-86		Primary	08/13/04	Actinium-228	69.6 U	---	69.6	Filtered		ES
RD-86		Primary	08/13/04	Bismuth-212	115 U	---	115	Filtered		ES
RD-86		Primary	08/13/04	Bismuth-214	28.8 U	---	28.8	Filtered		ES
RD-86		Primary	08/13/04	Lead-210	2980 U	---	2980	Filtered		ES
RD-86		Primary	08/13/04	Lead-212	22.4 U	---	22.4	Filtered		ES
RD-86		Primary	08/13/04	Lead-214	27.5 U	---	27.5	Filtered		ES
RD-86		Primary	08/13/04	Potassium-40	257 U	---	257	Filtered		ES
RD-86		Primary	08/13/04	Radium-226	211 U	---	211	Filtered		ES
RD-86		Primary	08/13/04	Thallium-208	15 U	---	15	Filtered		ES
RD-86		Primary	08/13/04	Thorium-234	420 U	---	420	Filtered		ES
RD-86		Primary	08/13/04	Uranium-235	78.3 U	---	78.3	Filtered		ES
RD-86		Primary	02/23/05	Potassium-40	48.6 J	33	19.7	Filtered		ES
RD-87		Primary	08/18/04	Actinium-228	64.4 U	---	64.4	Filtered		ES
RD-87		Primary	08/18/04	Bismuth-212	110 U	---	110	Filtered		ES
RD-87		Primary	08/18/04	Bismuth-214	42.1 U	---	42.1	Filtered		ES
RD-87		Primary	08/18/04	Lead-210	959 U	---	959	Filtered		ES
RD-87		Primary	08/18/04	Lead-212	21.5 U	---	21.5	Filtered		ES
RD-87		Primary	08/18/04	Lead-214	27.6 U	---	27.6	Filtered		ES
RD-87		Primary	08/18/04	Potassium-40	222 U	---	222	Filtered		ES
RD-87		Primary	08/18/04	Radium-226	196 U	---	196	Filtered		ES
RD-87		Primary	08/18/04	Thallium-208	14.6 U	---	14.6	Filtered		ES
RD-87		Primary	08/18/04	Thorium-234	311 U	---	311	Filtered		ES
RD-87		Primary	08/18/04	Uranium-235	71.7 U	---	71.7	Filtered		ES
RD-87		Primary	08/24/05	Potassium-40	14.5 U	---	14.5	Filtered		ES
RD-88		Primary	08/20/04	Actinium-228	48.5 U	---	48.5	Filtered		ES
RD-88		Primary	08/20/04	Bismuth-212	83.3 U	---	83.3	Filtered		ES
RD-88		Primary	08/20/04	Bismuth-214	29 U	---	29	Filtered		ES
RD-88		Primary	08/20/04	Lead-210	134 U	---	134	Filtered		ES
RD-88		Primary	08/20/04	Lead-212	15.6 U	---	15.6	Filtered		ES
RD-88		Primary	08/20/04	Lead-214	26.8 U	---	26.8	Filtered		ES
RD-88		Primary	08/20/04	Potassium-40	119 U	---	119	Filtered		ES
RD-88		Primary	08/20/04	Radium-226	141 U	---	141	Filtered		ES
RD-88		Primary	08/20/04	Thallium-208	11 U	---	11	Filtered		ES
RD-88		Primary	08/20/04	Thorium-234	155 U	---	155	Filtered		ES
RD-88		Primary	08/20/04	Uranium-235	47 U	---	47	Filtered		ES
RD-88		Primary	08/25/05	Potassium-40	30.8 U	---	30.8	Filtered		ES
RD-89		Primary	05/24/05	Potassium-40	37 U	---	37	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-89		Duplicate	05/24/05	Potassium-40	21.3 U	---	21.3	Filtered		ES
RD-89		Primary	06/01/05	Potassium-40	25 U	---	25	Filtered		ES
RD-90		Primary	03/25/04	Actinium-228	45.8 U	---	45.8	Filtered		ES
RD-90		Primary	03/25/04	Bismuth-212	73.5 U	---	73.5	Filtered		ES
RD-90		Primary	03/25/04	Bismuth-214	19.3 U	---	19.3	Filtered		ES
RD-90		Primary	03/25/04	Lead-210	703 U	---	703	Filtered		ES
RD-90		Primary	03/25/04	Lead-212	14.8 U	---	14.8	Filtered		ES
RD-90		Primary	03/25/04	Lead-214	17.8 U	---	17.8	Filtered		ES
RD-90		Primary	03/25/04	Potassium-40	149	140	110	Filtered		ES
RD-90		Primary	03/25/04	Radium-226	135 U	---	135	Filtered		ES
RD-90		Primary	03/25/04	Thallium-208	16.1 U	---	16.1	Filtered		ES
RD-90		Primary	03/25/04	Thorium-234	229 U	---	229	Filtered		ES
RD-90		Primary	03/25/04	Uranium-235	49.5 U	---	49.5	Filtered		ES
RD-90		Primary	04/15/04	Actinium-228	56.6 U	---	56.6	Filtered		ES
RD-90		Primary	04/15/04	Bismuth-212	87.9 U	---	87.9	Filtered		ES
RD-90		Primary	04/15/04	Bismuth-214	25 U	---	25	Filtered		ES
RD-90		Primary	04/15/04	Lead-210	2600 U	---	2600	Filtered		ES
RD-90		Primary	04/15/04	Lead-212	17.6 U	---	17.6	Filtered		ES
RD-90		Primary	04/15/04	Lead-214	21.8 U	---	21.8	Filtered		ES
RD-90		Primary	04/15/04	Potassium-40	241 U	---	241	Filtered		ES
RD-90		Primary	04/15/04	Radium-226	174 U	---	174	Filtered		ES
RD-90		Primary	04/15/04	Thallium-208	11.8 U	---	11.8	Filtered		ES
RD-90		Primary	04/15/04	Thorium-234	357 U	---	357	Filtered		ES
RD-90		Primary	04/15/04	Uranium-235	70 U	---	70	Filtered		ES
RD-90		Primary	08/25/05	Potassium-40	8.6 U	---	8.6	Filtered		ES
RD-91		Primary	03/25/04	Actinium-228	21.1 U	---	21.1	Filtered		ES
RD-91		Primary	03/25/04	Bismuth-212	35.3 U	---	35.3	Filtered		ES
RD-91		Primary	03/25/04	Bismuth-214	10 U	---	10	Filtered		ES
RD-91		Primary	03/25/04	Lead-210	319 U	---	319	Filtered		ES
RD-91		Primary	03/25/04	Lead-212	6.83 U	---	6.83	Filtered		ES
RD-91		Primary	03/25/04	Lead-214	8.86 U	---	8.86	Filtered		ES
RD-91		Primary	03/25/04	Potassium-40	78 U	---	78	Filtered		ES
RD-91		Primary	03/25/04	Radium-226	68.6 U	---	68.6	Filtered		ES
RD-91		Primary	03/25/04	Thallium-208	4.93 U	---	4.93	Filtered		ES
RD-91		Primary	03/25/04	Thorium-234	124 U	---	124	Filtered		ES
RD-91		Primary	03/25/04	Uranium-235	21.5 U	---	21.5	Filtered		ES
RD-91		Primary	04/15/04	Actinium-228	34.1 U	---	34.1	Filtered		ES
RD-91		Primary	04/15/04	Bismuth-212	70.4 U	---	70.4	Filtered		ES
RD-91		Primary	04/15/04	Bismuth-214	18.5 U	---	18.5	Filtered		ES
RD-91		Primary	04/15/04	Lead-210	173 U	---	173	Filtered		ES
RD-91		Primary	04/15/04	Lead-212	20.4 U	---	20.4	Filtered		ES
RD-91		Primary	04/15/04	Lead-214	17.9 U	---	17.9	Filtered		ES
RD-91		Primary	04/15/04	Potassium-40	86.1 U	---	86.1	Filtered		ES
RD-91		Primary	04/15/04	Radium-226	133 U	---	133	Filtered		ES
RD-91		Primary	04/15/04	Thallium-208	9.22 U	---	9.22	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-91		Primary	04/15/04	Thorium-234	180 U	---	180	Filtered		ES
RD-91		Primary	04/15/04	Uranium-235	47.9 U	---	47.9	Filtered		ES
RD-92		Primary	03/25/04	Actinium-228	182 U	---	182	Filtered		ES
RD-92		Primary	03/25/04	Bismuth-212	364 U	---	364	Filtered		ES
RD-92		Primary	03/25/04	Bismuth-214	81.9 U	---	81.9	Filtered		ES
RD-92		Primary	03/25/04	Lead-212	66.4 U	---	66.4	Filtered		ES
RD-92		Primary	03/25/04	Lead-214	78.8 U	---	78.8	Filtered		ES
RD-92		Primary	03/25/04	Potassium-40	70.4	46	21.1	Filtered		ES
RD-92		Primary	03/25/04	Thallium-208	49.5 U	---	402	Filtered		ES
RD-92		Primary	03/25/04	Uranium-235	220 U	---	220	Filtered		ES
RD-92		Primary	04/15/04	Actinium-228	39.6 U	---	39.6	Filtered		ES
RD-92		Primary	04/15/04	Bismuth-212	75.7 U	---	75.7	Filtered		ES
RD-92		Primary	04/15/04	Bismuth-214	17 U	---	17	Filtered		ES
RD-92		Primary	04/15/04	Lead-210	637 U	---	637	Filtered		ES
RD-92		Primary	04/15/04	Lead-212	13.1 U	---	13.1	Filtered		ES
RD-92		Primary	04/15/04	Lead-214	21.5 U	---	21.5	Filtered		ES
RD-92		Primary	04/15/04	Potassium-40	169 U	---	169	Filtered		ES
RD-92		Primary	04/15/04	Radium-226	139 U	---	139	Filtered		ES
RD-92		Primary	04/15/04	Thallium-208	9.94 U	---	9.94	Filtered		ES
RD-92		Primary	04/15/04	Thorium-234	204 U	---	204	Filtered		ES
RD-92		Primary	04/15/04	Uranium-235	46.3 U	---	46.3	Filtered		ES
RD-93		Primary	05/23/05	Potassium-40	15 U	---	15	Filtered		ES
RD-93		Duplicate	05/23/05	Potassium-40	35.5 U	---	35.5	Filtered		ES
RD-93		Primary	06/01/05	Potassium-40	27.5 U	---	27.5	Filtered		ES
RD-93		Primary	08/24/05	Potassium-40	9.94 U	---	9.94	Filtered		ES
RD-94		Primary	05/23/05	Potassium-40	23.6 U	---	23.6	Filtered		ES
RD-94		Primary	06/01/05	Potassium-40	14.6 U	---	14.6	Filtered		ES
RD-94		Primary	08/25/05	Potassium-40	25.5 U	---	25.5	Filtered		ES
RD-95		Primary	05/23/05	Potassium-40	44 U	---	44	Filtered		ES
RD-95		Primary	06/01/05	Potassium-40	25 U	---	25	Filtered		ES
RD-95		Primary	08/24/05	Potassium-40	26.2 U	---	26.2	Filtered		ES
RD-96		Primary	05/09/06	Potassium-40	54.9 U	---	54.9	Filtered		ES
RD-96		Primary	05/09/06	Potassium-40	26.9 U	---	26.9	Unfiltered		ES
RD-97		Primary	05/09/06	Potassium-40	29.8 U	---	29.8	Filtered		ES
RD-97		Primary	05/09/06	Potassium-40	33.3 U	---	33.3	Unfiltered		ES
RD-98		Primary	06/26/08	Aluminum-26	0.893 U	---	0.893	Filtered		ES
RD-98		Primary	06/26/08	Potassium-40	28.6 U	---	28.6	Filtered		ES
RD-98		Primary	09/11/08	Aluminum-26	0.894 U	---	0.894	Filtered		ES
RD-98		Primary	09/11/08	Potassium-40	8.64 U	---	8.64	Filtered		ES
RD-98		Primary	11/14/08	Actinium-228	3.21 U	---	3.21	Filtered		ES
RD-98		Primary	11/14/08	Actinium-228	5.45 U	---	5.45	Unfiltered		ES
RD-98		Primary	11/14/08	Potassium-40	12.9 U	---	12.9	Filtered		ES
RD-98		Primary	11/14/08	Potassium-40	23.9 U	---	23.9	Unfiltered		ES
RD-98		Primary	11/14/08	Radium-228	3.21 U	---	3.21	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-98		Primary	11/14/08	Radium-228	5.45 U	---	5.45	Unfiltered		ES
Private Off-site Wells										
OS-01		Primary	02/23/94	Actinium-228	-20.9 U	6.8	32	Filtered		LAS
OS-01		Primary	02/23/94	Bismuth-214	19.8	6.3	15	Filtered		LAS
OS-01		Primary	02/23/94	Lead-212	2.4 U	9.1	13	Filtered		LAS
OS-01		Primary	02/23/94	Lead-214	2.6 U	4.9	14	Filtered		LAS
OS-01		Primary	02/23/94	Potassium-40	-26 U	62	110	Filtered		LAS
OS-01		Primary	02/23/94	Radium-226	0 U	97	140	Filtered		LAS
OS-01		Primary	02/23/94	Thallium-208	2.9 U	6.7	8.5	Filtered		LAS
OS-01		Primary	02/23/94	Thorium-234	13 U	28	120	Filtered		LAS
OS-01		Primary	02/23/94	Uranium-235	-9 U	12	37	Filtered		LAS
OS-01		Primary	08/15/94	Actinium-228	-20 U	110	170	Filtered		LAS
OS-01		Primary	08/15/94	Bismuth-214	-68 U	57	110	Filtered		LAS
OS-01		Primary	08/15/94	Lead-212	-24 U	55	79	Filtered		LAS
OS-01		Primary	08/15/94	Lead-214	60 U	63	94	Filtered		LAS
OS-01		Primary	08/15/94	Potassium-40	-20 U	420	680	Filtered		LAS
OS-01		Primary	08/15/94	Radium-226	-990 U	610	900	Filtered		LAS
OS-01		Primary	08/15/94	Thallium-208	-23 U	43	61	Filtered		LAS
OS-01		Primary	08/15/94	Thorium-234	-130 U	310	680	Filtered		LAS
OS-01		Primary	08/15/94	Uranium-235	30 U	140	200	Filtered		LAS
OS-02		Primary	02/23/94	Actinium-228	-1.7 U	9	32	Filtered		LAS
OS-02		Primary	02/23/94	Bismuth-214	32.6	7.2	17	Filtered		LAS
OS-02		Primary	02/23/94	Lead-212	9.2 U	9.3	12	Filtered		LAS
OS-02		Primary	02/23/94	Lead-214	12.3 U	5.2	15	Filtered		LAS
OS-02		Primary	02/23/94	Potassium-40	-15 U	58	97	Filtered		LAS
OS-02		Primary	02/23/94	Radium-226	-25 U	98	140	Filtered		LAS
OS-02		Primary	02/23/94	Thallium-208	2 U	6.9	8.9	Filtered		LAS
OS-02		Primary	02/23/94	Thorium-234	15 U	28	130	Filtered		LAS
OS-02		Primary	02/23/94	Uranium-235	-13 U	12	36	Filtered		LAS
OS-02		Primary	08/15/94	Actinium-228	52 U	80	140	Filtered		LAS
OS-02		Primary	08/15/94	Bismuth-214	24 U	55	81	Filtered		LAS
OS-02		Primary	08/15/94	Lead-212	-8 U	44	64	Filtered		LAS
OS-02		Primary	08/15/94	Lead-214	-17 U	44	74	Filtered		LAS
OS-02		Primary	08/15/94	Potassium-40	-140 U	300	500	Filtered		LAS
OS-02		Primary	08/15/94	Radium-226	-360 U	430	610	Filtered		LAS
OS-02		Primary	08/15/94	Thallium-208	-9 U	30	44	Filtered		LAS
OS-02		Primary	08/15/94	Thorium-234	120 U	270	690	Filtered		LAS
OS-02		Primary	08/15/94	Uranium-235	30 U	120	160	Filtered		LAS
OS-03		Primary	02/23/94	Actinium-228	5.3 U	9.4	29	Filtered		LAS
OS-03		Primary	02/23/94	Bismuth-214	22.9	6.2	14	Filtered		LAS
OS-03		Primary	02/23/94	Lead-212	36	11	12	Filtered		LAS
OS-03		Primary	02/23/94	Lead-214	10.3 U	4.8	12	Filtered		LAS
OS-03		Primary	02/23/94	Potassium-40	-15 U	62	97	Filtered		LAS
OS-03		Primary	02/23/94	Radium-226	-40 U	100	150	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Private Off-site Wells										
OS-03		Primary	02/23/94	Thallium-208	6.9 U	7.8	10	Filtered		LAS
OS-03		Primary	02/23/94	Thorium-234	25 U	29	130	Filtered		LAS
OS-03		Primary	02/23/94	Uranium-235	0 U	12	36	Filtered		LAS
OS-03		Primary	08/15/94	Actinium-228	36 U	83	150	Filtered		LAS
OS-03		Primary	08/15/94	Bismuth-214	5 U	55	82	Filtered		LAS
OS-03		Primary	08/15/94	Lead-212	12 U	42	60	Filtered		LAS
OS-03		Primary	08/15/94	Lead-214	0 U	44	72	Filtered		LAS
OS-03		Primary	08/15/94	Potassium-40	120 U	310	470	Filtered		LAS
OS-03		Primary	08/15/94	Radium-226	-60 U	440	610	Filtered		LAS
OS-03		Primary	08/15/94	Thallium-208	8 U	29	42	Filtered		LAS
OS-03		Primary	08/15/94	Thorium-234	-20 U	270	690	Filtered		LAS
OS-03		Primary	08/15/94	Uranium-235	0 U	110	160	Filtered		LAS
OS-04		Primary	02/23/94	Actinium-228	-3 U	9.4	33	Filtered		LAS
OS-04		Primary	02/23/94	Bismuth-214	-4 U	4.4	16	Filtered		LAS
OS-04		Primary	02/23/94	Lead-212	2.6 U	8.5	12	Filtered		LAS
OS-04		Primary	02/23/94	Lead-214	6.3 U	5.1	15	Filtered		LAS
OS-04		Primary	02/23/94	Potassium-40	-19 U	57	97	Filtered		LAS
OS-04		Primary	02/23/94	Radium-226	5 U	98	140	Filtered		LAS
OS-04		Primary	02/23/94	Thallium-208	4.8 U	6.4	7.7	Filtered		LAS
OS-04		Primary	02/23/94	Thorium-234	12 U	28	120	Filtered		LAS
OS-04		Primary	02/23/94	Uranium-235	-9 U	12	35	Filtered		LAS
OS-04		Primary	08/15/94	Actinium-228	0 U	130	220	Filtered		LAS
OS-04		Primary	08/15/94	Bismuth-214	-2 U	72	110	Filtered		LAS
OS-04		Primary	08/15/94	Lead-212	32 U	55	74	Filtered		LAS
OS-04		Primary	08/15/94	Lead-214	26 U	62	92	Filtered		LAS
OS-04		Primary	08/15/94	Potassium-40	190 U	360	520	Filtered		LAS
OS-04		Primary	08/15/94	Radium-226	300 U	630	900	Filtered		LAS
OS-04		Primary	08/15/94	Thallium-208	-30 U	20	66	Filtered		LAS
OS-04		Primary	08/15/94	Thorium-234	-180 U	310	700	Filtered		LAS
OS-04		Primary	08/15/94	Uranium-235	30 U	140	190	Filtered		LAS
OS-05		Primary	02/23/94	Actinium-228	0.4 U	9.3	30	Filtered		LAS
OS-05		Primary	02/23/94	Bismuth-214	138	12	17	Filtered		LAS
OS-05		Primary	02/23/94	Lead-212	42	12	14	Filtered		LAS
OS-05		Primary	02/23/94	Lead-214	71.5	7.4	15	Filtered		LAS
OS-05		Primary	02/23/94	Potassium-40	62 U	73	97	Filtered		LAS
OS-05		Primary	02/23/94	Radium-226	-30 U	110	160	Filtered		LAS
OS-05		Primary	02/23/94	Thallium-208	11.7	8.3	10	Filtered		LAS
OS-05		Primary	02/23/94	Thorium-234	40 U	30	130	Filtered		LAS
OS-05		Primary	02/23/94	Uranium-235	-8 U	13	40	Filtered		LAS
OS-08		Primary	08/15/94	Actinium-228	-22 U	80	150	Filtered		LAS
OS-08		Primary	08/15/94	Bismuth-214	13 U	55	83	Filtered		LAS
OS-08		Primary	08/15/94	Lead-212	18 U	42	59	Filtered		LAS
OS-08		Primary	08/15/94	Lead-214	-7 U	44	75	Filtered		LAS
OS-08		Primary	08/15/94	Potassium-40	50 U	310	480	Filtered		LAS
OS-08		Primary	08/15/94	Radium-226	-170 U	410	580	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV

RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Private Off-site Wells										
OS-08		Primary	08/15/94	Thallium-208	13 U	30	42	Filtered		LAS
OS-08		Primary	08/15/94	Thorium-234	-90 U	270	690	Filtered		LAS
OS-08		Primary	08/15/94	Uranium-235	-30 U	49	150	Filtered		LAS
OS-09R		Primary	01/26/04	Actinium-228	31.6 U	---	31.6	Filtered		ES
OS-09R		Primary	01/26/04	Bismuth-212	58.7 U	---	58.7	Filtered		ES
OS-09R		Primary	01/26/04	Bismuth-214	56.1	17	16.1	Filtered		ES
OS-09R		Primary	01/26/04	Lead-210	479 U	---	479	Filtered		ES
OS-09R		Primary	01/26/04	Lead-212	11 U	---	11	Filtered		ES
OS-09R		Primary	01/26/04	Lead-214	55.7	15	15.3	Filtered		ES
OS-09R		Primary	01/26/04	Potassium-40	91.1 U	---	91.1	Filtered		ES
OS-09R		Primary	01/26/04	Radium-226	108 U	---	108	Filtered		ES
OS-09R		Primary	01/26/04	Thallium-208	7.25 U	---	7.25	Filtered		ES
OS-09R		Primary	01/26/04	Thorium-234	207 U	---	207	Filtered		ES
OS-09R		Primary	01/26/04	Uranium-235	34.7 U	---	34.7	Filtered		ES
OS-10		Primary	08/05/94	Actinium-228	-63 U	77	200	Filtered		LAS
OS-10		Primary	08/05/94	Bismuth-214	-14 U	69	110	Filtered		LAS
OS-10		Primary	08/05/94	Lead-212	11 U	56	77	Filtered		LAS
OS-10		Primary	08/05/94	Lead-214	8 U	61	92	Filtered		LAS
OS-10		Primary	08/05/94	Potassium-40	390 U	360	460	Filtered		LAS
OS-10		Primary	08/05/94	Radium-226	-2720 U	690	900	Filtered		LAS
OS-10		Primary	08/05/94	Thallium-208	-32 U	19	66	Filtered		LAS
OS-10		Primary	08/05/94	Thorium-234	60 U	330	700	Filtered		LAS
OS-10		Primary	08/05/94	Uranium-235	80 U	140	200	Filtered		LAS
OS-27		Primary	05/15/97	Actinium-228	0 U	12	22	Filtered		LAS
OS-27		Primary	05/15/97	Bismuth-214	303	35	13	Filtered		LAS
OS-27		Primary	05/15/97	Lead-212	2.2 U	7.2	11	Filtered		LAS
OS-27		Primary	05/15/97	Lead-214	362	31	13	Filtered		LAS
OS-27		Primary	05/15/97	Potassium-40	5 U	38	62	Filtered		LAS
OS-27		Primary	05/15/97	Thallium-208	-0.4 U	3.8	5.9	Filtered		LAS
OS-27		Primary	05/15/97	Thorium-234	24 U	73	290	Filtered		LAS
OS-27		Primary	05/15/97	Uranium-235	-13 U	22	41	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-IV
RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

NOTES AND ABBREVIATIONS

DL = Davi Laboratories, Pinole, California
ES = Eberline Services, (formerly Thermo Retec), Richmond, California
GEL = General Engineering Laboratories, LLC, Charleston, South Carolina
LAS = LAS Laboratories, (formerly Lockheed Martin), Las Vegas, Nevada
STL = Severn Trent Laboratories, (formerly International Technologies, Inc.), Richland, Washington
TAD = TestAmerica, Denver, Colorado
TAI = TestAmerica, Irvine, California
TN = Thermo NUtech, (formerly Thermoanalytical Inc. (TMA/NORCAL)), Richmond, California
TR = Thermo Retec, (formerly Thermo NUtech), Richmond, California

MDA	=	Minimum detectable activity.
Z	=	Flute port number.
---	=	Analysis not performed.
J	=	Result is less than contract-required MDA and greater than or equal to the MDA.
U	=	Not detected above the MDA; numerical value is the activity for the radionuclide.
pCi/L	=	picoCuries per liter.

NOTES:
Radium-226, radium-228 and uranium-235 analyzed by EPA method 901.1 for gamma-emitting radionuclides or an equivalent or superior in-house laboratory procedure are included in this table. Results of radium-226, radium-228 and uranium-235 analyzed by EPA methods 903.1, 904.0 and 908.0 are included in Table E-V. Laboratories used the most current promulgated version of each EPA method at the time of analysis.

Naturally occurring gamma-emitting radionuclides include actinium-228, aluminum-26, bismuth-212, bismuth-214, lead-210, lead-212, lead-214, potassium-40, radium-226, radium-228, thallium-208, thorium-234, and uranium-235.

Any activity detected is reported by the laboratory, though the reported activity may be less than the overall laboratory error. Analytical results that are less than the instrument background count are shown as negative values.

As discussed in Appendix D, project specific MDAs were not always attained due in part to matrix conditions (e.g., dissolved and suspended solids) and limitations in the prescribed analytical methods (e.g., sample volumes, counting times).

Filtered samples were collected using a 0.45 micron filter in the field.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
ES-31		Primary	03/10/05	Radium-226	-0.165 U	0.24	0.503	Filtered		ES
ES-31		Primary	03/10/05	Radium-228	0.054 U	0.19	0.527	Filtered		ES
ES-31		Primary	12/07/05	Radium-226	-0.135 U	0.34	0.673	Filtered		ES
ES-31		Split	12/07/05	Radium-226	0.181 U	0.126	0.181	Filtered		STL
ES-31		Primary	12/07/05	Radium-228	0.298 U	0.19	0.5	Filtered		ES
ES-31		Split	12/07/05	Radium-228	0.428 U	0.361	0.77	Filtered		STL
ES-31		Primary	02/21/06	Radium-226	0.042 U	0.44	0.836	Filtered		ES
ES-31		Primary	02/21/06	Radium-228	0.136 U	0.17	0.475	Filtered		ES
ES-31		Primary	08/15/06	Radium-226	0.14 U	0.43	0.875	Filtered		ES
ES-31		Primary	08/15/06	Radium-228	0.115 U	0.17	0.472	Filtered		ES
ES-31		Primary	02/28/07	Radium-226	0.145 U	0.34	0.6	Filtered		ES
ES-31		Primary	02/28/07	Radium-228	0.197 U	0.16	0.407	Filtered		ES
ES-31		Primary	08/16/07	Radium-226	0.097 U	0.32	0.608	Filtered		ES
ES-31		Primary	08/16/07	Radium-228	0.047 U	0.13	0.361	Filtered		ES
ES-31		Primary	02/01/08	Radium-226	0.17 U	0.4	0.715	Filtered		ES
ES-31		Primary	02/01/08	Radium-228	-0.032 U	0.17	0.405	Filtered		ES
ES-31		Primary	02/01/08	Strontium-90	-0.011 U	0.26	0.504	Filtered		ES
ES-31		Primary	08/19/08	Radium-226	-0.02 U	0.36	0.705	Filtered		ES
ES-31		Primary	08/19/08	Radium-228	0.45 U	0.24	0.593	Filtered		ES
ES-31		Primary	03/04/09	Americium-241	-18.4 U	13	22.9	Filtered		ES
ES-31		Primary	03/04/09	Americium-241	-0.167 U	1.4	1.73	Unfiltered		ES
ES-31		Primary	03/04/09	Strontium-90	-0.024 U	0.26	0.529	Filtered		ES
ES-31		Primary	03/04/09	Strontium-90	0.156 U	0.29	0.533	Unfiltered		ES
ES-31		Primary	07/17/09	Strontium-90	-0.111 U	0.26	0.532	Filtered		ES
ES-31		Primary	07/17/09	Strontium-90	-0.099 U	0.27	0.566	Unfiltered		ES
HAR-14		Primary	03/16/93	Radium-226	0.6 U	---	0.6	Filtered		CEP
HAR-14		Primary	03/16/93	Radium-228	1 U	---	1	Filtered		CEP
HAR-14		Primary	06/08/93	Radium-226	2.7	1	0.6	Filtered		CEP
HAR-14		Primary	08/09/93	Radium-226	0.6 U	---	0.6	Filtered		CEP
HAR-14		Primary	11/04/93	Radium-226	0.16 U	0.15	0.24	Filtered		CEP
HAR-15		Primary	03/16/93	Radium-226	29.5	4.2	0.6	Filtered	Correspondence suggests that sample may be unfiltered.	CEP
HAR-15		Primary	03/16/93	Radium-226	0.6 U	---	0.6	Filtered		CEP
HAR-15		Reanalysis of Primary	03/16/93	Radium-226	0.6 U	---	0.6	Filtered		CEP
HAR-15		Primary	03/16/93	Radium-228	1 U	---	1	Filtered	Correspondence suggests that sample may be unfiltered.	CEP
HAR-15		Reanalysis of Primary	03/16/93	Radium-228	1 U	---	1	Filtered		CEP
HAR-15		Primary	03/16/93	Uranium-233/234	6.9	3	0.6	Filtered		CEP
HAR-15		Primary	03/16/93	Uranium-235	0.51 U	0.2	0.6	Filtered		CEP
HAR-15		Primary	03/16/93	Uranium-238	15.9	5.8	0.6	Filtered		CEP
HAR-15		Primary	06/08/93	Radium-226	24.9	4.3	0.6	Filtered	Correspondence suggests that sample may be unfiltered.	CEP

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
HAR-15		Primary	06/08/93	Radium-226	0.6 U	---	0.6	Filtered		CEP
HAR-15		Reanalysis of Primary	06/08/93	Radium-226	0.6 U	---	0.6	Filtered		CEP
HAR-15		Primary	06/08/93	Radium-228	2	1	1	Filtered		CEP
HAR-15		Primary	08/09/93	Radium-226	0.6 U	---	0.6	Filtered		CEP
HAR-15		Primary	11/04/93	Radium-226	1.18	0.28	0.048	Filtered		CEP
HAR-15		Primary	11/04/93	Uranium-233/234	0.841	0.39	0.2	Filtered		LAS
HAR-15		Primary	11/04/93	Uranium-235	0.08 U	0.12	0.11	Filtered		LAS
HAR-15		Primary	11/04/93	Uranium-238	0.88	0.39	0.15	Filtered		LAS
RS-05		Primary	10/31/89	Radium-226	-0.0035 U	0.046	---	Filtered		UST
RS-05		Primary	10/31/89	Radium-226	0.359	0.124	---	Unfiltered		UST
RS-05		Primary	10/31/89	Radium-228	1.16	0.487	---	Filtered		UST
RS-05		Primary	10/31/89	Radium-228	2.19	0.657	---	Unfiltered		UST
RS-05		Primary	10/31/89	Thorium-228	0.0345 U	0.035	---	Filtered		UST
RS-05		Primary	10/31/89	Thorium-228	1.2	0.463	---	Unfiltered		UST
RS-05		Primary	10/31/89	Thorium-230	0.00827 U	0.012	---	Filtered		UST
RS-05		Primary	10/31/89	Thorium-230	0.917	0.309	---	Unfiltered		UST
RS-05		Primary	10/31/89	Thorium-232	0.0393	0.020	---	Filtered		UST
RS-05		Primary	10/31/89	Thorium-232	1.68	0.44	---	Unfiltered		UST
RS-05		Primary	10/31/89	Uranium-233/234	5.81	0.83	---	Filtered		UST
RS-05		Primary	10/31/89	Uranium-233/234	5.73	0.988	---	Unfiltered		UST
RS-05		Primary	10/31/89	Uranium-235	0.0883	0.082	---	Filtered		UST
RS-05		Primary	10/31/89	Uranium-235	0.241	0.202	---	Unfiltered		UST
RS-05		Primary	10/31/89	Uranium-238	5.04	0.741	---	Filtered		UST
RS-05		Primary	10/31/89	Uranium-238	5.83	0.991	---	Unfiltered		UST
RS-08		Primary	03/18/93	Radium-226	3	2.3	0.6	Filtered		CEP
RS-08		Primary	03/18/93	Radium-228	1 U	---	1	Filtered		CEP
RS-08		Primary	06/08/93	Radium-226	2.4	1	0.6	Filtered		CEP
RS-08		Primary	08/09/93	Radium-226	0.6 U	---	0.6	Filtered		CEP
RS-08		Primary	11/08/93	Radium-226	0.09 U	0.13	0.22	Filtered		CEP
RS-08		Primary	11/08/93	Uranium-233/234	15.01	2	0.16	Filtered		LAS
RS-08		Primary	11/08/93	Uranium-235	0.62	0.32	0.11	Filtered		LAS
RS-08		Primary	11/08/93	Uranium-238	14.6	1.9	0.18	Filtered		LAS
RS-11		Primary	02/17/05	Radium-226	0.228 U	0.4	0.69	Filtered		ES
RS-11		Primary	02/17/05	Radium-228	0.165 U	0.21	0.568	Filtered		ES
RS-11		Primary	02/17/05	Uranium-233/234	20	1.2	0.083	Filtered		ES
RS-11		Primary	02/17/05	Uranium-235	0.9 J	0.13	0.027	Filtered		ES
RS-11		Primary	02/17/05	Uranium-238	17.9	1.1	0.078	Filtered		ES
RS-11		Primary	08/29/05	Radium-226	0.492 U	0.36	0.515	Filtered		ES
RS-11		Primary	08/29/05	Radium-228	0.682 J	0.25	0.611	Filtered		ES
RS-11		Primary	02/21/06	Radium-226	0.024 U	0.45	0.841	Filtered		ES
RS-11		Primary	02/21/06	Radium-228	0.33 U	0.23	0.581	Filtered		ES
RS-11		Primary	08/10/06	Radium-226	0.084 U	0.45	0.836	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-11		Primary	08/10/06	Radium-228	0.065 U	0.19	0.494	Filtered		ES
RS-11		Primary	02/28/07	Radium-226	0.344 U	0.3	0.46	Filtered		ES
RS-11		Primary	02/28/07	Radium-228	-0.104 U	0.28	0.491	Filtered		ES
RS-11		Primary	05/02/08	Americium-241	7.57 U	---	7.57	Filtered		ES
RS-11		Primary	05/02/08	Radium-226	0.129 U	0.32	0.583	Filtered		ES
RS-11		Primary	05/02/08	Radium-228	-0.004 U	0.34	0.362	Filtered		ES
RS-11		Primary	05/02/08	Strontium-90	-0.214 U	0.24	0.517	Filtered		ES
RS-11		Primary	05/02/08	Uranium-233/234	22.8	1.9	0.067	Filtered		ES
RS-11		Primary	05/02/08	Uranium-235	0.977 J	0.13	0.017	Filtered		ES
RS-11		Primary	05/02/08	Uranium-238	20.3	1.7	0.064	Filtered		ES
RS-16		Primary	02/23/05	Radium-226	0.227 U	0.41	0.696	Filtered		ES
RS-16		Primary	02/23/05	Radium-228	0.167 U	0.26	0.618	Filtered		ES
RS-16		Primary	02/01/08	Radium-226	0.486 U	0.43	0.638	Filtered		ES
RS-16		Primary	02/01/08	Radium-228	0.219 U	0.01	0.424	Filtered		ES
RS-16		Primary	02/01/08	Strontium-90	0.142 U	0.29	0.522	Filtered		ES
RS-18		Primary	03/04/92	Uranium-233/234	2.75	0.62	0.6	Unfiltered		CEP
RS-18		Primary	03/04/92	Uranium-235	0.6 U	---	0.6	Unfiltered		CEP
RS-18		Primary	03/04/92	Uranium-238	3.6	0.7	0.6	Unfiltered		CEP
RS-18		Primary	09/10/92	Radium-226	3.5	2	0.6	Filtered		CEP
RS-18		Primary	09/10/92	Radium-228	1 U	---	1	Filtered		CEP
RS-18		Primary	09/10/92	Uranium-233/234	36.6	6	0.6	Unfiltered		CEP
RS-18		Primary	09/10/92	Uranium-235	1.8	0.9	0.6	Unfiltered		CEP
RS-18		Primary	09/10/92	Uranium-238	41.9	6.6	0.6	Unfiltered		CEP
RS-18		Primary	12/15/92	Thorium-228	0.6 U	---	0.6	Filtered		CEP
RS-18		Primary	12/15/92	Thorium-230	0.6 U	---	0.6	Filtered		CEP
RS-18		Primary	12/15/92	Thorium-232	0.6 U	---	0.6	Filtered		CEP
RS-18		Primary	12/15/92	Uranium-233/234	5.17	0.69	0.6	Unfiltered		CEP
RS-18		Primary	12/15/92	Uranium-235	0.6 U	---	0.6	Unfiltered		CEP
RS-18		Primary	12/15/92	Uranium-238	5.67	0.77	0.6	Unfiltered		CEP
RS-18		Primary	06/23/93	Uranium-233/234	1.8	3	0.6	Filtered		CEP
RS-18		Primary	06/23/93	Uranium-235	0.1 U	0.1	0.6	Filtered		CEP
RS-18		Primary	06/23/93	Uranium-236	2.1	0.4	0.6	Filtered		CEP
RS-18		Primary	11/06/93	Americium-241	16.2 U	---	16.2	Filtered		LAS
RS-18		Primary	11/06/93	Radium-226	25.9 U	---	25.9	Filtered		LAS
RS-18		Primary	11/06/93	Thorium-228	0.2 U	0.27	0.29	Filtered		LAS
RS-18		Primary	11/06/93	Thorium-230	0.53	0.3	0.14	Filtered		LAS
RS-18		Primary	11/06/93	Thorium-232	0.19	0.18	0.17	Filtered		LAS
RS-18		Primary	11/06/93	Uranium-233/234	16.3	2.2	0.21	Filtered		LAS
RS-18		Primary	11/06/93	Uranium-235	0.42	0.27	0.13	Filtered		LAS
RS-18		Primary	11/06/93	Uranium-238	14.6	2	0.2	Filtered		LAS
RS-18		Primary	05/04/94	Radium-226	50 U	110	140	Filtered		LAS
RS-18		Primary	05/04/94	Thorium-228	-0.014 U	0.058	0.11	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-18		Primary	05/04/94	Thorium-230	0.103	0.058	0.086	Filtered		LAS
RS-18		Primary	05/04/94	Thorium-232	0.056	0.025	0.0075	Filtered		LAS
RS-18		Primary	05/04/94	Uranium-233/234	19.9	1.8	0.13	Filtered		LAS
RS-18		Primary	05/04/94	Uranium-235	0.9	0.33	0.084	Filtered		LAS
RS-18		Primary	05/04/94	Uranium-235	-1 U	25	31	Filtered		LAS
RS-18		Primary	05/04/94	Uranium-238	19.2	1.8	0.13	Filtered		LAS
RS-18		Primary	02/17/95	Thorium-228	-0.05 U	0.18	0.26	Filtered		LAS
RS-18		Primary	02/17/95	Thorium-230	0.24	0.16	0.12	Filtered		LAS
RS-18		Primary	02/17/95	Thorium-232	0.057 U	0.079	0.099	Filtered		LAS
RS-18		Primary	02/17/95	Uranium-233/234	8.98	0.96	0.12	Filtered		LAS
RS-18		Primary	02/17/95	Uranium-235	-17 U	29	43	Filtered		LAS
RS-18		Primary	02/17/95	Uranium-235	0.49	0.21	0.12	Filtered		LAS
RS-18		Primary	02/17/95	Uranium-238	7.67	0.87	0.11	Filtered		LAS
RS-18		Primary	08/10/95	Thorium-228	-0.05 U	0.28	0.4	Filtered		LAS
RS-18		Primary	08/10/95	Thorium-230	-0.022 U	0.076	0.16	Filtered		LAS
RS-18		Primary	08/10/95	Thorium-232	0.037 U	0.095	0.15	Filtered		LAS
RS-18		Primary	08/10/95	Uranium-233/234	15	0.92	0.071	Filtered		LAS
RS-18		Primary	08/10/95	Uranium-235	7 U	27	40	Filtered		LAS
RS-18		Primary	08/10/95	Uranium-235	0.78	0.13	0.06	Filtered		LAS
RS-18		Primary	08/10/95	Uranium-238	15.19	0.93	0.076	Filtered		LAS
RS-18		Primary	05/16/96	Thorium-228	-0.07 U	0.17	0.26	Filtered		LAS
RS-18		Primary	05/16/96	Thorium-230	-0.027 U	0.048	0.11	Filtered		LAS
RS-18		Primary	05/16/96	Thorium-232	0.013 U	0.07	0.12	Filtered		LAS
RS-18		Primary	05/16/96	Uranium-233/234	11.5	1.1	0.13	Filtered		LAS
RS-18		Primary	05/16/96	Uranium-235	0.89	0.28	0.12	Filtered		LAS
RS-18		Primary	05/16/96	Uranium-238	10.8	1.1	0.13	Filtered		LAS
RS-18		Primary	02/03/97	Thorium-228	0.1 U	0.17	0.22	Filtered		LAS
RS-18		Primary	02/03/97	Thorium-230	0.009 U	0.043	0.082	Filtered		LAS
RS-18		Primary	02/03/97	Thorium-232	-0.009 U	0.034	0.087	Filtered		LAS
RS-18		Primary	02/03/97	Uranium-233/234	14.2	1.3	0.13	Filtered		LAS
RS-18		Primary	02/03/97	Uranium-235	14 U	74	100	Filtered		LAS
RS-18		Primary	02/03/97	Uranium-235	0.53	0.21	0.056	Filtered		LAS
RS-18		Primary	02/03/97	Uranium-238	13.9	1.3	0.12	Filtered		LAS
RS-18		Primary	02/05/98	Radium-226	66.2 U	---	66.2	Filtered		TN
RS-18		Primary	02/05/98	Thorium-228	-0.009 U	0.023	0.048	Filtered		TN
RS-18		Primary	02/05/98	Thorium-230	0.138 U	---	0.138	Filtered		TN
RS-18		Primary	02/05/98	Thorium-232	0 U	0.012	0.022	Filtered		TN
RS-18		Primary	02/05/98	Uranium-233/234	14.2	0.94	0.126	Filtered		TN
RS-18		Primary	02/05/98	Uranium-235	20.7 U	---	20.7	Filtered		TN
RS-18		Primary	02/05/98	Uranium-235	0.943	0.17	0.055	Filtered		TN
RS-18		Primary	02/05/98	Uranium-238	12.9	0.88	0.122	Filtered		TN
RS-18		Primary	08/05/98	Radium-226	359 U	---	359	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-18		Primary	08/05/98	Thorium-228	0.014 U	0.019	0.036	Filtered		TN
RS-18		Primary	08/05/98	Thorium-230	0.08 U	---	0.08	Filtered		TN
RS-18		Primary	08/05/98	Thorium-232	0.005 U	0.019	0.036	Filtered		TN
RS-18		Primary	08/05/98	Uranium-233/234	13.7	0.72	0.091	Filtered		TN
RS-18		Primary	08/05/98	Uranium-235	134 U	---	134	Filtered		TN
RS-18		Primary	08/05/98	Uranium-235	0.793	0.13	0.036	Filtered		TN
RS-18		Primary	08/05/98	Uranium-238	13.3	0.71	0.087	Filtered		TN
RS-18		Primary	05/09/00	Thorium-228	0.166 U	---	0.166	Filtered		TR
RS-18		Primary	05/09/00	Thorium-230	0.219 U	---	0.219	Filtered		TR
RS-18		Primary	05/09/00	Thorium-232	0.037 U	0.05	0.095	Filtered		TR
RS-18		Primary	05/09/00	Uranium-233/234	15.1	0.97	0.168	Filtered		TR
RS-18		Primary	05/09/00	Uranium-235	0.795	0.19	0.088	Filtered		TR
RS-18		Primary	05/09/00	Uranium-238	13.2	0.89	0.154	Filtered		TR
RS-18		Primary	02/19/01	Thorium-228	0.04 U	0.081	0.157	Filtered		ES
RS-18		Primary	02/19/01	Thorium-230	0 U	0.069	0.106	Filtered		ES
RS-18		Primary	02/19/01	Thorium-232	0 U	0.035	0.071	Filtered		ES
RS-18		Primary	02/19/01	Uranium-233/234	8.4	0.38	0.052	Filtered		ES
RS-18		Primary	02/19/01	Uranium-235	0.442	0.072	0.021	Filtered		ES
RS-18		Primary	02/19/01	Uranium-238	7.89	0.36	0.048	Filtered		ES
RS-18		Primary	05/02/03	Thorium-228	-0.009 U	0.037	0.074	Filtered		ES
RS-18		Primary	05/02/03	Thorium-230	0.018 U	0.046	0.104	Filtered		ES
RS-18		Primary	05/02/03	Thorium-232	0.005 U	0.009	0.035	Filtered		ES
RS-18		Primary	05/02/03	Uranium-233/234	20.3	1.2	0.076	Filtered		ES
RS-18		Primary	05/02/03	Uranium-235	1.05	0.12	0.021	Filtered		ES
RS-18		Primary	05/02/03	Uranium-238	19.3	1.1	0.073	Filtered		ES
RS-18		Primary	02/23/05	Radium-226	0.232 U	0.2	0.296	Filtered		ES
RS-18		Primary	02/23/05	Radium-228	0.054 U	0.2	0.538	Filtered		ES
RS-18		Primary	02/23/05	Thorium-228	-0.007 U	0.022	0.04	Filtered		ES
RS-18		Primary	02/23/05	Thorium-230	0.083 U	0.065	0.096	Filtered		ES
RS-18		Primary	02/23/05	Thorium-232	0 U	0.014	0.034	Filtered		ES
RS-18		Primary	02/23/05	Uranium-233/234	9.85	0.69	0.074	Filtered		ES
RS-18		Primary	02/23/05	Uranium-235	0.467 J	0.098	0.036	Filtered		ES
RS-18		Primary	02/23/05	Uranium-238	9.43	0.67	0.069	Filtered		ES
RS-18		Primary	08/26/05	Radium-226	0.544 U	0.44	0.676	Filtered		ES
RS-18		Primary	08/26/05	Radium-228	0.278 U	0.21	0.57	Filtered		ES
RS-18		Primary	08/26/05	Thorium-228	0.012 U	0.025	0.034	Filtered		ES
RS-18		Primary	08/26/05	Thorium-230	0.028 U	0.055	0.096	Filtered		ES
RS-18		Primary	08/26/05	Thorium-232	-0.006 U	0.006	0.023	Filtered		ES
RS-18		Primary	08/26/05	Uranium-233/234	7.1	0.5	0.052	Filtered		ES
RS-18		Primary	08/26/05	Uranium-235	0.307 J	0.07	0.029	Filtered		ES
RS-18		Primary	08/26/05	Uranium-238	6.52	0.46	0.05	Filtered		ES
RS-18		Primary	02/20/06	Radium-226	0.425 U	0.42	0.662	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-18		Primary	02/20/06	Radium-228	0.585 J	0.19	0.468	Filtered		ES
RS-18		Primary	02/20/06	Thorium-228	-0.002 U	0.03	0.055	Filtered		ES
RS-18		Primary	02/20/06	Thorium-230	0.012 U	0.049	0.101	Filtered		ES
RS-18		Primary	02/20/06	Thorium-232	-0.01 U	0.015	0.036	Filtered		ES
RS-18		Primary	02/20/06	Uranium-233/234	6.32	0.46	0.052	Filtered		ES
RS-18		Primary	02/20/06	Uranium-235	0.27 J	0.068	0.028	Filtered		ES
RS-18		Primary	02/20/06	Uranium-238	6.03	0.44	0.047	Filtered		ES
RS-18		Primary	02/04/08	Radium-226	-0.075 U	0.35	0.721	Filtered		ES
RS-18		Primary	02/04/08	Radium-228	0.091 U	0.15	0.501	Filtered		ES
RS-18		Primary	02/04/08	Strontium-90	0.029 U	0.37	0.623	Filtered		ES
RS-18		Primary	02/04/08	Thorium-228	0.012 U	0.036	0.057	Filtered		ES
RS-18		Primary	02/04/08	Thorium-230	-0.033 U	0.054	0.11	Filtered		ES
RS-18		Primary	02/04/08	Thorium-232	-0.006 U	0.018	0.04	Filtered		ES
RS-18		Primary	02/04/08	Uranium-233/234	4.33	0.32	0.05	Filtered		ES
RS-18		Primary	02/04/08	Uranium-235	0.174 J	0.05	0.038	Filtered		ES
RS-18		Primary	02/04/08	Uranium-238	3.75	0.29	0.041	Filtered		ES
RS-18		Primary	03/04/09	Americium-241	0.417 U	0.64	2	Filtered		ES
RS-18		Primary	03/04/09	Americium-241	0.002 U	0.57	4.21	Unfiltered		ES
RS-18		Primary	03/04/09	Strontium-90	-0.05 U	0.28	0.57	Filtered		ES
RS-18		Primary	03/04/09	Strontium-90	0.053 U	0.29	0.558	Unfiltered		ES
RS-18		Primary	03/04/09	Uranium-233/234	4.13	0.45	0.055	Filtered		ES
RS-18		Primary	03/04/09	Uranium-233/234	4.46	0.48	0.079	Unfiltered		ES
RS-18		Primary	03/04/09	Uranium-235	0.188 J	0.067	0.041	Filtered		ES
RS-18		Primary	03/04/09	Uranium-235	0.2 J	0.067	0.052	Unfiltered		ES
RS-18		Primary	03/04/09	Uranium-238	4.06	0.44	0.064	Filtered		ES
RS-18		Primary	03/04/09	Uranium-238	4.06	0.44	0.068	Unfiltered		ES
RS-18		Primary	04/27/09	Strontium-90	-0.157 U	0.34	0.681	Filtered		ES
RS-18		Primary	04/27/09	Strontium-90	0.035 U	0.26	0.504	Unfiltered		ES
RS-18		Primary	04/27/09	Uranium-233/234	4.16	0.48	0.073	Filtered		ES
RS-18		Primary	04/27/09	Uranium-233/234	4.29	0.45	0.072	Unfiltered		ES
RS-18		Primary	04/27/09	Uranium-235	0.217 J	0.081	0.05	Filtered		ES
RS-18		Primary	04/27/09	Uranium-235	0.166 J	0.059	0.036	Unfiltered		ES
RS-18		Primary	04/27/09	Uranium-238	3.69	0.43	0.073	Filtered		ES
RS-18		Primary	04/27/09	Uranium-238	3.88	0.42	0.056	Unfiltered		ES
RS-25		Primary	02/25/03	Uranium-233/234	1.98	0.16	0.038	Filtered		ES
RS-25		Primary	02/25/03	Uranium-235	0.09	0.035	0.026	Filtered		ES
RS-25		Primary	02/25/03	Uranium-238	2.02	0.16	0.035	Filtered		ES
RS-25		Primary	02/13/08	Radium-226	0.373 U	0.44	0.717	Filtered		ES
RS-25		Primary	02/13/08	Radium-228	0.941 J	0.31	0.418	Filtered		ES
RS-25		Primary	02/13/08	Strontium-90	-0.087 U	0.2	0.359	Filtered		ES
RS-25		Primary	02/13/08	Uranium-233/234	3.04	0.39	0.074	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-25		Primary	02/13/08	Uranium-235	0.108 J	0.059	0.069	Filtered		ES
RS-25		Primary	02/13/08	Uranium-238	2.74	0.36	0.066	Filtered		ES
RS-28		Primary	11/01/89	Radium-226	0.0296 U	0.06	---	Filtered		UST
RS-28		Primary	11/01/89	Radium-226	0.105	0.085	---	Unfiltered		UST
RS-28		Primary	11/01/89	Radium-228	0.686	0.54	---	Filtered		UST
RS-28		Primary	11/01/89	Radium-228	0.726	0.669	---	Unfiltered		UST
RS-28		Primary	11/01/89	Thorium-228	0.0222 U	0.028	---	Filtered		UST
RS-28		Primary	11/01/89	Thorium-228	0.586	0.093	---	Unfiltered		UST
RS-28		Primary	11/01/89	Thorium-230	0.0058 U	0.010	---	Filtered		UST
RS-28		Primary	11/01/89	Thorium-230	0.147	0.038	---	Unfiltered		UST
RS-28		Primary	11/01/89	Thorium-232	0.00193 U	0.004	---	Filtered		UST
RS-28		Primary	11/01/89	Thorium-232	0.662	0.096	---	Unfiltered		UST
RS-28		Primary	11/01/89	Uranium-233/234	4.59	0.181	---	Filtered		UST
RS-28		Primary	11/01/89	Uranium-235	0.153	0.014	---	Filtered		UST
RS-28		Primary	11/01/89	Uranium-238	4.24	0.147	---	Filtered		UST
RS-28		Primary	11/06/93	Americium-241	10.4 U	---	10.4	Filtered		LAS
RS-28		Primary	11/06/93	Radium-226	63.7 U	---	63.7	Filtered		LAS
RS-28		Primary	05/07/94	Radium-226	-110 U	110	150	Filtered		LAS
RS-28		Primary	05/07/94	Uranium-235	3 U	26	38	Filtered		LAS
RS-28		Primary	05/17/95	Uranium-235	-6 U	32	47	Filtered		LAS
RS-28		Primary	05/08/98	Radium-226	182 U	---	182	Filtered		TN
RS-28		Primary	05/08/98	Uranium-235	77.2 U	---	77.2	Filtered		TN
RS-28		Primary	11/16/98	Radium-226	127 U	---	127	Filtered		TN
RS-28		Primary	11/16/98	Uranium-235	34.4 U	---	34.4	Filtered		TN
RS-28		Primary	05/20/05	Radium-226	0.645 U	0.44	0.67	Filtered		ES
RS-28		Primary	05/20/05	Radium-228	0.518 J	0.22	0.478	Filtered		ES
RS-28		Primary	08/30/05	Radium-226	0.29 U	0.36	0.597	Filtered		ES
RS-28		Primary	08/30/05	Radium-228	0.187 U	0.27	0.679	Filtered		ES
RS-28		Primary	02/17/06	Radium-226	-0.06 U	0.4	0.758	Filtered		ES
RS-28		Primary	02/17/06	Radium-228	-0.059 U	0.49	0.531	Filtered		ES
RS-28		Primary	08/11/06	Radium-226	0.251 U	0.4	0.695	Filtered		ES
RS-28		Primary	08/11/06	Radium-228	1.03	0.21	0.458	Filtered		ES
RS-28		Primary	02/13/07	Radium-226	0.723 J	0.47	0.707	Filtered		ES
RS-28		Primary	02/13/07	Radium-228	0.549 J	0.14	0.339	Filtered		ES
RS-28		Primary	11/05/07	Radium-226	0.479 U	0.54	0.88	Filtered		ES
RS-28		Primary	11/05/07	Radium-228	0.303 U	0.28	0.388	Filtered		ES
RS-28		Primary	02/06/08	Radium-226	0.786 J	0.54	0.76	Filtered		ES
RS-28		Primary	02/06/08	Radium-228	0.384 U	0.16	0.399	Filtered		ES
RS-28		Primary	02/06/08	Strontium-90	0.044 U	0.23	0.451	Filtered		ES
RS-28		Primary	08/19/08	Radium-226	-0.032 U	0.3	0.606	Filtered		ES
RS-28		Primary	08/19/08	Radium-228	0.425 U	0.21	0.538	Filtered		ES
RS-54		Primary	05/07/94	Radium-226	-100 U	110	160	Filtered		LAS
RS-54		Primary	05/07/94	Uranium-233/234	26.4	2.4	0.15	Filtered		LAS
RS-54		Primary	05/07/94	Uranium-235	-3 U	25	37	Filtered		LAS
RS-54		Primary	05/07/94	Uranium-235	2.15	0.59	0.17	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-54		Primary	05/07/94	Uranium-238	26.5	2.4	0.11	Filtered		LAS
RS-54		Primary	08/03/95	Uranium-235	-20 U	22	40	Filtered		LAS
RS-54		Primary	08/23/96	Uranium-235	-6 U	29	45	Filtered		LAS
RS-54		Primary	05/03/97	Uranium-235	-10 U	31	45	Filtered		LAS
RS-54		Primary	08/02/97	Radium-226	0 U	130	210	Filtered		LAS
RS-54		Primary	08/02/97	Uranium-235	24 U	32	47	Filtered		LAS
RS-54		Primary	08/03/97	Uranium-233/234	16.4	1.2	0.16	Filtered		LAS
RS-54		Primary	08/03/97	Uranium-235	0.69	0.19	0.068	Filtered		LAS
RS-54		Primary	08/03/97	Uranium-238	14.8	1.2	0.11	Filtered		LAS
RS-54		Primary	08/27/97	Radium-226	-19 U	70	110	Filtered		LAS
RS-54		Primary	08/27/97	Radium-226	-13 U	73	110	Unfiltered		LAS
RS-54		Primary	08/27/97	Uranium-233/234	15.9	1.2	0.11	Filtered		LAS
RS-54		Primary	08/27/97	Uranium-233/234	16.6	1.2	0.11	Unfiltered		LAS
RS-54		Primary	08/27/97	Uranium-235	0.84	0.19	0.031	Filtered		LAS
RS-54		Primary	08/27/97	Uranium-235	10 U	20	31	Filtered		LAS
RS-54		Primary	08/27/97	Uranium-235	9 U	20	29	Unfiltered		LAS
RS-54		Primary	08/27/97	Uranium-235	0.75	0.2	0.062	Unfiltered		LAS
RS-54		Primary	08/27/97	Uranium-238	14.5	1.1	0.088	Filtered		LAS
RS-54		Primary	08/27/97	Uranium-238	15.6	1.2	0.081	Unfiltered		LAS
RS-54		Primary	02/08/98	Radium-226	213 U	---	213	Filtered		TN
RS-54		Primary	02/08/98	Thorium-228	-0.011 U	0.028	0.058	Filtered		TN
RS-54		Primary	02/08/98	Thorium-230	0.039 U	0.044	0.075	Filtered		TN
RS-54		Primary	02/08/98	Thorium-232	0.006 U	0.011	0.021	Filtered		TN
RS-54		Primary	02/08/98	Uranium-233/234	8.75	0.39	0.054	Filtered		TN
RS-54		Primary	02/08/98	Uranium-235	73 U	---	73	Filtered		TN
RS-54		Primary	02/08/98	Uranium-235	0.478	0.072	0.021	Filtered		TN
RS-54		Primary	02/08/98	Uranium-238	7.9	0.36	0.052	Filtered		TN
RS-54		Primary	08/04/98	Radium-226	183 U	---	183	Filtered		TN
RS-54		Primary	08/04/98	Thorium-228	0.028 U	0.028	0.035	Filtered		TN
RS-54		Primary	08/04/98	Thorium-230	0.081 U	---	0.081	Filtered		TN
RS-54		Primary	08/04/98	Thorium-232	0.018 U	0.028	0.035	Filtered		TN
RS-54		Primary	08/04/98	Uranium-233/234	7.91	0.48	0.076	Filtered		TN
RS-54		Primary	08/04/98	Uranium-235	68.2 U	---	68.2	Filtered		TN
RS-54		Primary	08/04/98	Uranium-235	0.509	0.098	0.037	Filtered		TN
RS-54		Primary	08/04/98	Uranium-238	7.24	0.45	0.073	Filtered		TN
RS-54		Primary	02/02/99	Thorium-228	0.012 U	0.02	0.031	Filtered		TN
RS-54		Primary	02/02/99	Thorium-230	0.034 U	0.04	0.072	Filtered		TN
RS-54		Primary	02/02/99	Thorium-232	-0.002 U	0.008	0.015	Filtered		TN
RS-54		Primary	02/02/99	Uranium-233/234	11.7	0.75	0.109	Filtered		TN
RS-54		Primary	02/02/99	Uranium-235	0.745	0.15	0.051	Filtered		TN
RS-54		Primary	02/02/99	Uranium-238	10.7	0.7	0.101	Filtered		TN
RS-54		Primary	08/18/99	Thorium-228	0.03 U	0.12	0.213	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-54		Primary	08/18/99	Thorium-230	0.112 U	0.12	0.187	Filtered		TN
RS-54		Primary	08/18/99	Thorium-232	0 U	0.041	0.097	Filtered		TN
RS-54		Primary	08/18/99	Uranium-233/234	15.7	1.1	0.236	Filtered		TN
RS-54		Primary	08/18/99	Uranium-235	1.23	0.25	0.133	Filtered		TN
RS-54		Primary	08/18/99	Uranium-238	14	1	0.183	Filtered		TN
RS-54		Primary	03/15/00	Thorium-228	0 U	0.091	0.202	Filtered		TN
RS-54		Primary	03/15/00	Thorium-230	1.28	0.31	0.202	Filtered		TR
RS-54		Primary	03/15/00	Thorium-232	0.06 U	0.091	0.115	Filtered		TR
RS-54		Primary	03/15/00	Uranium-233/234	9.08	0.9	0.231	Filtered		TR
RS-54		Primary	03/15/00	Uranium-235	0.486	0.2	0.149	Filtered		TR
RS-54		Primary	03/15/00	Uranium-238	8.77	0.87	0.178	Filtered		TR
RS-54		Primary	11/01/01	Thorium-228	0 U	1	0.7	Filtered		TR
RS-54		Primary	11/01/01	Thorium-230	0 U	1	0.7	Filtered		DL
RS-54		Primary	11/01/01	Thorium-232	0 U	1	0.7	Filtered		DL
RS-54		Primary	11/01/01	Uranium-233/234	20.59	0.39	0.14	Filtered		DL
RS-54		Primary	11/01/01	Uranium-235	0.72	0.07	0.09	Filtered		DL
RS-54		Primary	11/01/01	Uranium-238	14.8	0.33	0.11	Filtered		DL
RS-54		Primary	03/01/02	Thorium-228	0.43 U	1	1	Filtered		DL
RS-54		Primary	03/01/02	Thorium-230	0 U	1	1	Filtered		DL
RS-54		Primary	03/01/02	Thorium-232	0 U	1	1	Filtered		DL
RS-54		Primary	03/01/02	Uranium-233/234	16.44	5	1	Filtered		DL
RS-54		Primary	03/01/02	Uranium-235	0.66 U	1	1	Filtered		DL
RS-54		Primary	03/01/02	Uranium-238	16.38	5	1	Filtered		DL
RS-54		Primary	11/07/02	Thorium-228	0.033 U	0.049	0.091	Filtered		ES
RS-54		Primary	11/07/02	Thorium-230	0.037 U	0.057	0.03	Filtered		ES
RS-54		Primary	11/07/02	Thorium-232	0 U	0.008	0.031	Filtered		ES
RS-54		Primary	11/07/02	Uranium-233/234	14.9	0.71	0.079	Filtered		ES
RS-54		Primary	11/07/02	Uranium-235	0.629	0.1	0.03	Filtered		ES
RS-54		Primary	11/07/02	Uranium-238	13.3	0.65	0.07	Filtered		ES
RS-54		Primary	02/16/05	Radium-226	-0.492 U	0.46	0.967	Filtered		ES
RS-54		Primary	02/16/05	Radium-228	0.214 U	0.22	0.572	Filtered		ES
RS-54		Primary	02/16/05	Thorium-228	0.033 U	0.029	0.045	Filtered		ES
RS-54		Primary	02/16/05	Thorium-230	0.095 U	0.066	0.096	Filtered		ES
RS-54		Primary	02/16/05	Thorium-232	-0.011 U	0.015	0.035	Filtered		ES
RS-54		Primary	02/16/05	Uranium-233/234	15.2	1	0.098	Filtered		ES
RS-54		Primary	02/16/05	Uranium-235	0.807 J	0.14	0.037	Filtered		ES
RS-54		Primary	02/16/05	Uranium-238	14.2	0.96	0.092	Filtered		ES
RS-54		Primary	09/06/05	Radium-226	0.269 U	0.43	0.734	Filtered		ES
RS-54		Primary	09/06/05	Radium-228	0.889 J	0.24	0.559	Filtered		ES
RS-54		Primary	09/06/05	Thorium-228	-0.013 U	0.035	0.067	Filtered		ES
RS-54		Primary	09/06/05	Thorium-230	-0.035 U	0.053	0.119	Filtered		ES
RS-54		Primary	09/06/05	Thorium-232	-0.009 U	0.009	0.033	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
RS-54		Primary	09/06/05	Uranium-233/234	13	0.83	0.073	Filtered		ES
RS-54		Primary	09/06/05	Uranium-235	0.665 J	0.11	0.027	Filtered		ES
RS-54		Primary	09/06/05	Uranium-238	11.5	0.75	0.068	Filtered		ES
RS-54		Primary	02/23/06	Radium-226	0.319 U	0.39	0.638	Filtered		ES
RS-54		Split	02/23/06	Radium-226	0.307 J	0.179	0.218	Filtered		STL
RS-54		Primary	02/23/06	Radium-228	0.466 U	0.21	0.488	Filtered		ES
RS-54		Split	02/23/06	Radium-228	0.588 J	0.278	0.475	Filtered		STL
RS-54		Primary	02/23/06	Thorium-228	0.01 U	0.035	0.057	Filtered		ES
RS-54		Split	02/23/06	Thorium-228	-0.035 U	0.035	0.301	Filtered		STL
RS-54		Primary	02/23/06	Thorium-230	-0.038 U	0.045	0.102	Filtered		ES
RS-54		Split	02/23/06	Thorium-230	-0.00851 U	0.017	0.204	Filtered		STL
RS-54		Primary	02/23/06	Thorium-232	-0.008 U	0.01	0.031	Filtered		ES
RS-54		Split	02/23/06	Thorium-232	0.0425 U	0.853	0.115	Filtered		STL
RS-54		Primary	02/23/06	Uranium-233/234	15.7	0.99	0.074	Filtered		ES
RS-54		Split	02/23/06	Uranium-233/234	15.6	3.63	0.0969	Filtered		STL
RS-54		Primary	02/23/06	Uranium-235	0.682 J	0.12	0.028	Filtered		ES
RS-54		Split	02/23/06	Uranium-235	0.422 J	0.264	0.171	Filtered		STL
RS-54		Primary	02/23/06	Uranium-238	14.2	0.91	0.07	Filtered		ES
RS-54		Split	02/23/06	Uranium-238	15.8	3.67	0.171	Filtered		STL
RS-54		Primary	02/15/07	Radium-226	-0.001 U	0.31	0.584	Filtered		ES
RS-54		Primary	02/15/07	Radium-228	0.063 U	0.28	0.381	Filtered		ES
RS-54		Primary	02/15/07	Thorium-228	0.016 U	0.037	0.063	Filtered		ES
RS-54		Primary	02/15/07	Thorium-230	-0.007 U	0.047	0.096	Filtered		ES
RS-54		Primary	02/15/07	Thorium-232	-0.005 U	0.014	0.031	Filtered		ES
RS-54		Primary	02/15/07	Uranium-234	12.7	1.1	0.134	Filtered		ES
RS-54		Primary	02/15/07	Uranium-235	0.641 J	0.16	0.077	Filtered		ES
RS-54		Primary	02/15/07	Uranium-238	11.6	1	0.119	Filtered		ES
RS-54		Primary	02/22/08	Radium-226	0.017 U	0.42	0.79	Filtered		ES
RS-54		Primary	02/22/08	Radium-228	0.323 U	0.43	0.353	Filtered		ES
RS-54		Primary	02/22/08	Strontium-90	-0.058 U	0.25	0.378	Filtered		ES
RS-54		Primary	02/22/08	Thorium-228	0.031 U	0.11	0.184	Filtered		ES
RS-54		Primary	02/22/08	Thorium-230	0.183	0.099	0.116	Filtered		ES
RS-54		Primary	02/22/08	Thorium-232	0.006 U	0.024	0.058	Filtered		ES
RS-54		Primary	02/22/08	Uranium-233/234	11.2	1.1	0.111	Filtered		ES
RS-54		Primary	02/22/08	Uranium-235	0.64 J	0.16	0.056	Filtered		ES
RS-54		Primary	02/22/08	Uranium-238	10.8	1.1	0.102	Filtered		ES
RS-54		Primary	09/04/08	Radium-226	0.043 U	0.39	0.734	Filtered		ES
RS-54		Primary	09/04/08	Radium-228	-0.091 U	1.5	1.38	Filtered		ES
RS-54		Primary	09/04/08	Uranium-233/234	11.8	1.1	0.079	Filtered		ES
RS-54		Primary	09/04/08	Uranium-235	0.73 J	0.12	0.029	Filtered		ES
RS-54		Primary	09/04/08	Uranium-238	10.9	1	0.077	Filtered		ES
SH-04		Primary	03/18/93	Radium-226	3.3	2.6	0.6	Filtered		CEP
SH-04		Primary	03/18/93	Radium-228	1 U	---	1	Filtered		CEP

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Shallow Wells										
SH-04		Primary	06/09/93	Radium-226	3.1	1	0.6	Filtered		CEP
SH-04		Primary	08/09/93	Radium-226	0.6 U	---	0.6	Filtered		CEP
SH-04		Primary	11/04/93	Radium-226	0.14 U	0.12	0.16	Filtered		LAS
SH-04		Primary	05/06/94	Uranium-233/234	4.54	0.79	0.17	Filtered		LAS
SH-04		Primary	05/06/94	Uranium-235	0.43	0.24	0.14	Filtered		LAS
SH-04		Primary	05/06/94	Uranium-238	3.73	0.71	0.088	Filtered		LAS
SH-11		Primary	10/31/89	Radium-226	0.254	0.098	---	Filtered		UST
SH-11		Primary	10/31/89	Radium-226	0.425	0.12	---	Unfiltered		UST
SH-11		Primary	10/31/89	Radium-228	0.842	0.405	---	Filtered		UST
SH-11		Primary	10/31/89	Radium-228	1.23	0.493	---	Unfiltered		UST
SH-11		Primary	10/31/89	Thorium-228	-0.0205 U	0.024	---	Filtered		UST
SH-11		Primary	10/31/89	Thorium-228	0.575	0.333	---	Unfiltered		UST
SH-11		Primary	10/31/89	Thorium-230	0.00785 U	0.008	---	Filtered		UST
SH-11		Primary	10/31/89	Thorium-230	0.284	0.137	---	Unfiltered		UST
SH-11		Primary	10/31/89	Thorium-232	0.00981 U	0.010	---	Filtered		UST
SH-11		Primary	10/31/89	Thorium-232	0.583	0.201	---	Unfiltered		UST
SH-11		Primary	10/31/89	Uranium-233/234	3.29	0.577	---	Filtered		UST
SH-11		Primary	10/31/89	Uranium-233/234	3.91	0.702	0.6	Unfiltered		CEP
SH-11		Primary	10/31/89	Uranium-235	0.0843 U	0.085	---	Filtered		UST
SH-11		Primary	10/31/89	Uranium-235	0.144	0.127	---	Unfiltered		UST
SH-11		Primary	10/31/89	Uranium-238	3.42	0.585	---	Filtered		UST
SH-11		Primary	10/31/89	Uranium-238	2.94	0.608	---	Unfiltered		UST
Chatsworth Formation Wells										
HAR-07		Primary	03/15/93	Radium-226	0.6 U	---	0.6	Filtered		CEP
HAR-07		Primary	03/15/93	Radium-228	1 U	---	1	Filtered		CEP
HAR-07		Primary	06/09/93	Radium-226	9	3.5	0.6	Filtered		CEP
HAR-07		Reanalysis of Primary	06/09/93	Radium-226	0.6 U	---	0.6	Filtered		CEP
HAR-07		Reanalysis of Primary	06/09/93	Radium-228	2	1	1	Filtered		CEP
HAR-07		Primary	08/09/93	Radium-226	0.6 U	---	0.6	Filtered		CEP
HAR-07		Primary	11/04/93	Radium-226	0.33	0.15	0.046	Filtered		CEP
HAR-16		Primary	03/15/93	Radium-226	0.6 U	---	0.6	Filtered		CEP
HAR-16		Primary	03/15/93	Radium-228	1 U	---	1	Filtered		CEP
HAR-16		Primary	06/09/93	Radium-226	0.6 U	---	0.6	Filtered		CEP
HAR-16		Primary	08/09/93	Radium-226	461	500	0.6	Filtered		CEP
HAR-16		Reanalysis of Primary	08/09/93	Radium-226	0.6 U	---	0.6	Filtered		CEP
HAR-16		Primary	08/09/93	Radium-228	1 U	---	1	Filtered		CEP
HAR-16		Primary	11/22/93	Radium-226	0.25	0.16	0.19	Filtered		CEP
HAR-16		Primary	02/04/94	Radium-226	0.15 U	0.17	0.27	Filtered		LAS
HAR-17		Primary	03/17/93	Radium-226	0.6 U	---	0.6	Filtered		CEP
HAR-17		Primary	03/17/93	Radium-228	1 U	---	1	Filtered		CEP
HAR-17		Primary	06/09/93	Radium-226	3.3	1.4	0.6	Filtered		CEP

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
HAR-17		Primary	08/09/93	Radium-226	0.6 U	---	0.6	Filtered		CEP
HAR-17		Primary	11/08/93	Radium-226	0 U	0.1	0.23	Filtered		CEP
HAR-18		Primary	05/08/94	Uranium-233/234	12.1	1.4	0.16	Filtered		LAS
HAR-18		Primary	05/08/94	Uranium-235	0.55	0.27	0.11	Filtered		LAS
HAR-18		Primary	05/08/94	Uranium-238	11.6	1.3	0.12	Filtered		LAS
RD-05B		Primary	03/16/93	Radium-226	0.6 U	---	0.6	Filtered		CEP
RD-05B		Primary	03/16/93	Radium-228	1 U	---	1	Filtered		CEP
RD-05B		Primary	06/07/93	Radium-226	4.9	2	0.6	Filtered		CEP
RD-05B		Primary	08/09/93	Radium-226	0.6 U	---	0.6	Filtered		CEP
RD-05B		Primary	11/22/93	Radium-226	0.77	0.27	0.17	Filtered		CEP
RD-06		Primary	10/31/89	Radium-226	0.825	0.202	---	Filtered		UST
RD-06		Primary	10/31/89	Radium-226	1.23	0.268	---	Unfiltered		UST
RD-06		Primary	10/31/89	Thorium-228	0.0428	0.036	---	Filtered		UST
RD-06		Primary	10/31/89	Thorium-228	0.0714	0.032	---	Unfiltered		UST
RD-06		Primary	10/31/89	Thorium-230	0.00196 U	0.004	---	Filtered		UST
RD-06		Primary	10/31/89	Thorium-230	0.00185 U	0.006	---	Unfiltered		UST
RD-06		Primary	10/31/89	Thorium-232	0 U	0.006	---	Filtered		UST
RD-06		Primary	10/31/89	Thorium-232	0.00185 U	0.004	---	Unfiltered		UST
RD-06		Primary	10/31/89	Uranium-233/234	0.892	0.227	---	Filtered		UST
RD-06		Primary	10/31/89	Uranium-233/234	1.2	0.302	---	Unfiltered		UST
RD-06		Primary	10/31/89	Uranium-235	0.0143 U	0.051	---	Filtered		UST
RD-06		Primary	10/31/89	Uranium-235	0.154	0.111	---	Unfiltered		UST
RD-06		Primary	10/31/89	Uranium-238	0.71	0.193	---	Filtered		UST
RD-06		Primary	10/31/89	Uranium-238	1.08	0.274	---	Unfiltered		UST
RD-06		Primary	03/16/93	Radium-226	0.6 U	---	0.6	Filtered		CEP
RD-06		Primary	03/16/93	Radium-228	1 U	---	1	Filtered		CEP
RD-06		Primary	06/07/93	Radium-226	3.5	2.7	0.6	Filtered		CEP
RD-06		Primary	08/09/93	Radium-226	0.6 U	---	0.6	Filtered		CEP
RD-06		Primary	11/22/93	Radium-226	1.32	0.34	0.22	Filtered		CEP
RD-07		Primary	08/25/97	Radium-226	-31 U	72	110	Filtered		LAS
RD-07		Primary	08/25/97	Radium-226	30 U	130	200	Unfiltered		LAS
RD-07		Primary	08/25/97	Uranium-235	8 U	20	29	Filtered		LAS
RD-07		Primary	08/25/97	Uranium-235	-21 U	26	45	Unfiltered		LAS
RD-07		Primary	02/05/98	Thorium-228	0.032 U	0.032	0.051	Filtered		TN
RD-07		Primary	02/05/98	Thorium-230	0.04 U	0.043	0.07	Filtered		TN
RD-07		Primary	02/05/98	Thorium-232	0 U	0.005	0.021	Filtered		TN
RD-07		Primary	02/05/98	Uranium-233/234	5.46	0.28	0.043	Filtered		TN
RD-07		Primary	02/05/98	Uranium-235	0.226	0.048	0.025	Filtered		TN
RD-07		Primary	02/05/98	Uranium-238	4.87	0.26	0.039	Filtered		TN
RD-07		Primary	02/06/99	Thorium-228	0.026	0.016	0.022	Filtered		TN
RD-07		Primary	02/06/99	Thorium-230	0.028 U	0.04	0.072	Filtered		TN
RD-07		Primary	02/06/99	Thorium-232	0 U	0.008	0.015	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-07		Primary	02/06/99	Uranium-233/234	7.76	0.51	0.084	Filtered		TN
RD-07		Primary	02/06/99	Uranium-235	0.414	0.1	0.042	Filtered		TN
RD-07		Primary	02/06/99	Uranium-238	6.68	0.45	0.077	Filtered		TN
RD-07		Primary	03/16/00	Thorium-228	-0.098 U	0.14	0.286	Filtered		TN
RD-07		Primary	03/16/00	Thorium-230	0.644	0.23	0.188	Filtered		TR
RD-07		Primary	03/16/00	Thorium-232	0.014 U	0.028	0.107	Filtered		TR
RD-07		Primary	03/16/00	Uranium-233/234	4.37	0.4	0.093	Filtered		TR
RD-07		Primary	03/16/00	Uranium-235	0.193	0.092	0.07	Filtered		TR
RD-07		Primary	03/16/00	Uranium-238	3.62	0.36	0.073	Filtered		TR
RD-07		Primary	02/23/01	Thorium-228	0.056 U	0.79	0.134	Filtered		TR
RD-07		Primary	02/23/01	Thorium-230	-0.028 U	0.045	0.091	Filtered		ES
RD-07		Primary	02/23/01	Thorium-232	0 U	0.023	0.043	Filtered		ES
RD-07		Primary	02/23/01	Uranium-233/234	5.26	0.39	0.071	Filtered		ES
RD-07		Primary	02/23/01	Uranium-235	0.322	0.091	0.043	Filtered		ES
RD-07		Primary	02/23/01	Uranium-238	4.22	0.34	0.067	Filtered		ES
RD-07		Primary	02/22/02	Thorium-228	0.21 U	1	1	Filtered		DL
RD-07		Primary	02/22/02	Thorium-230	0 U	1	1	Filtered		DL
RD-07		Primary	02/22/02	Thorium-232	0 U	1	1	Filtered		DL
RD-07		Primary	02/22/02	Uranium-233/234	9.22	3	3	Filtered		DL
RD-07		Primary	02/22/02	Uranium-235	0.33 U	1	3	Filtered		DL
RD-07		Primary	02/22/02	Uranium-238	8.19	3	3	Filtered		DL
RD-07	Z03	Primary	01/29/03	Thorium-228	0.058 J	0.02	0.018	Filtered		ES
RD-07	Z03	Primary	01/29/03	Thorium-230	0.029 U	0.047	0.108	Filtered		ES
RD-07	Z03	Primary	01/29/03	Thorium-232	0.004 U	0.008	0.013	Filtered		ES
RD-07	Z03	Primary	01/29/03	Uranium-233/234	14.7	0.51	0.064	Filtered		ES
RD-07	Z03	Primary	01/29/03	Uranium-235	0.551	0.084	0.024	Filtered		ES
RD-07	Z03	Primary	01/29/03	Uranium-238	11.8	0.44	0.06	Filtered		ES
RD-07	Z13	Primary	08/28/03	Radium-226	0.289 J	0.035	0.016	Filtered		ES
RD-07	Z13	Primary	08/28/03	Radium-228	1.17	0.25	0.57	Unfiltered		ES
RD-07	Z04	Primary	08/25/04	Radium-226	0.259 J	0.039	0.021	Filtered		ES
RD-07	Z04	Primary	08/25/04	Radium-228	0.539 U	0.24	0.584	Filtered		ES
RD-07	Z04	Primary	08/25/04	Thorium-228	0.021 U	0.028	0.044	Filtered		ES
RD-07	Z04	Primary	08/25/04	Thorium-230	-0.014 U	0.056	0.11	Filtered		ES
RD-07	Z04	Primary	08/25/04	Thorium-232	-0.011 U	0.014	0.034	Filtered		ES
RD-07	Z05	Primary	08/25/04	Radium-226	0.169 J	0.033	0.023	Filtered		ES
RD-07	Z05	Primary	08/25/04	Radium-228	0.493 U	0.27	0.66	Filtered		ES
RD-07	Z05	Primary	08/25/04	Thorium-228	0.008 U	0.024	0.044	Filtered		ES
RD-07	Z05	Primary	08/25/04	Thorium-230	0.083 U	0.071	0.109	Filtered		ES
RD-07	Z05	Primary	08/25/04	Thorium-232	-0.004 U	0.016	0.038	Filtered		ES
RD-07	Z06	Primary	08/25/04	Radium-226	0.729 J	0.069	0.026	Filtered		ES
RD-07	Z06	Primary	08/25/04	Radium-228	1.36	0.33	0.718	Filtered		ES
RD-07	Z06	Primary	08/25/04	Thorium-228	0 U	0.021	0.042	Filtered		ES
RD-07	Z06	Primary	08/25/04	Thorium-230	-0.014 U	0.055	0.108	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-07	Z06	Primary	08/25/04	Thorium-232	-0.01 U	0.014	0.033	Filtered		ES
RD-07	Z07	Primary	08/25/04	Radium-226	0.302 J	0.046	0.027	Filtered		ES
RD-07	Z07	Primary	08/25/04	Radium-228	0.772 J	0.35	0.629	Filtered		ES
RD-07	Z07	Primary	08/25/04	Thorium-228	0.004 U	0.03	0.05	Filtered		ES
RD-07	Z07	Primary	08/25/04	Thorium-230	0.007 U	0.052	0.103	Filtered		ES
RD-07	Z07	Primary	08/25/04	Thorium-232	-0.011 U	0.015	0.036	Filtered		ES
RD-07	Z08	Primary	08/25/04	Radium-226	0.399 J	0.051	0.025	Filtered		ES
RD-07	Z08	Primary	08/25/04	Radium-228	0.797 J	0.28	0.677	Filtered		ES
RD-07	Z08	Primary	08/25/04	Thorium-228	0.019 U	0.023	0.036	Filtered		ES
RD-07	Z08	Primary	08/25/04	Thorium-230	0.068 U	0.061	0.103	Filtered		ES
RD-07	Z08	Primary	08/25/04	Thorium-232	-0.008 U	0.015	0.036	Filtered		ES
RD-07	Z09	Primary	08/25/04	Radium-226	0.302 J	0.044	0.025	Filtered		ES
RD-07	Z09	Primary	08/25/04	Radium-228	0.949 J	0.31	0.718	Filtered		ES
RD-07	Z09	Primary	08/25/04	Thorium-228	0.048 J	0.037	0.045	Filtered		ES
RD-07	Z09	Primary	08/25/04	Thorium-230	0.029 U	0.058	0.096	Filtered		ES
RD-07	Z09	Primary	08/25/04	Thorium-232	-0.004 U	0.015	0.028	Filtered		ES
RD-07	Z10	Primary	08/25/04	Radium-226	0.297 J	0.043	0.023	Filtered		ES
RD-07	Z10	Primary	08/25/04	Radium-228	0.87 J	0.24	0.558	Filtered		ES
RD-07	Z10	Primary	08/25/04	Thorium-228	0.015 U	0.024	0.042	Filtered		ES
RD-07	Z10	Primary	08/25/04	Thorium-230	0.029 U	0.059	0.106	Filtered		ES
RD-07	Z10	Primary	08/25/04	Thorium-232	-0.006 U	0.012	0.036	Filtered		ES
RD-07	Z11	Primary	08/25/04	Radium-226	0.298 J	0.044	0.026	Filtered		ES
RD-07	Z11	Primary	08/25/04	Radium-228	0.861 J	0.29	0.686	Filtered		ES
RD-07	Z11	Primary	08/25/04	Thorium-228	0.009 U	0.023	0.04	Filtered		ES
RD-07	Z11	Primary	08/25/04	Thorium-230	-0.005 U	0.047	0.095	Filtered		ES
RD-07	Z11	Primary	08/25/04	Thorium-232	0.005 U	0.014	0.031	Filtered		ES
RD-07	Z12	Primary	08/25/04	Radium-226	0.323 J	0.045	0.024	Filtered		ES
RD-07	Z12	Primary	08/25/04	Radium-228	0.847 J	0.28	0.612	Filtered		ES
RD-07	Z12	Primary	08/25/04	Thorium-228	0.03 U	0.033	0.044	Filtered		ES
RD-07	Z12	Primary	08/25/04	Thorium-230	-0.003 U	0.053	0.103	Filtered		ES
RD-07	Z12	Primary	08/25/04	Thorium-232	-0.003 U	0.013	0.032	Filtered		ES
RD-07	Z13	Primary	08/25/04	Radium-226	0.344 J	0.047	0.024	Filtered		ES
RD-07	Z13	Primary	08/25/04	Radium-228	0.835 J	0.27	0.62	Filtered		ES
RD-07	Z13	Primary	08/25/04	Thorium-228	0.045 J	0.034	0.042	Filtered		ES
RD-07	Z13	Primary	08/25/04	Thorium-230	-0.017 U	0.055	0.107	Filtered		ES
RD-07	Z13	Primary	08/25/04	Thorium-232	0.007 U	0.021	0.033	Filtered		ES
RD-07	Z03	Primary	02/17/05	Radium-226	0.085 U	0.32	0.589	Filtered		ES
RD-07	Z03	Primary	02/17/05	Radium-228	0.36 U	0.24	0.62	Filtered		ES
RD-07	Z03	Primary	02/17/05	Thorium-228	-0.007 U	0.022	0.04	Filtered		ES
RD-07	Z03	Primary	02/17/05	Thorium-230	0.18	0.073	0.097	Filtered		ES
RD-07	Z03	Primary	02/17/05	Thorium-232	0.018 U	0.022	0.034	Filtered		ES
RD-07	Z03	Primary	02/17/05	Uranium-233/234	5.26	0.42	0.052	Filtered		ES
RD-07	Z03	Primary	02/17/05	Uranium-235	0.187 J	0.057	0.036	Filtered		ES
RD-07	Z03	Primary	02/17/05	Uranium-238	4.22	0.35	0.052	Filtered		ES
RD-07	Z03	Primary	08/31/05	Radium-226	0.205 U	0.35	0.601	Filtered		ES
RD-07	Z03	Primary	08/31/05	Radium-228	0.404 U	0.22	0.55	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-07	Z03	Primary	02/16/06	Radium-226	0.219 U	0.42	0.739	Filtered		ES
RD-07	Z03	Primary	02/16/06	Radium-228	0.088 U	0.76	0.424	Filtered		ES
RD-07	Z03	Primary	02/16/06	Thorium-228	-0.006 U	0.023	0.046	Filtered		ES
RD-07	Z03	Primary	02/16/06	Thorium-230	-0.04 U	0.046	0.103	Filtered		ES
RD-07	Z03	Primary	02/16/06	Thorium-232	-0.011 U	0.011	0.035	Filtered		ES
RD-07	Z03	Primary	02/16/06	Uranium-233/234	22.2	1.3	0.076	Filtered		ES
RD-07	Z03	Primary	02/16/06	Uranium-235	0.948 J	0.12	0.023	Filtered		ES
RD-07	Z03	Primary	02/16/06	Uranium-238	17.5	1.1	0.074	Filtered		ES
RD-07	Z03	Primary	08/16/06	Radium-226	-0.007 U	0.41	0.832	Filtered		ES
RD-07	Z03	Primary	08/16/06	Radium-228	0.218 U	0.61	0.43	Filtered		ES
RD-07	Z03	Primary	08/16/06	Uranium-233/234	27.8	1.6	0.086	Filtered		ES
RD-07	Z03	Primary	08/16/06	Uranium-235	1.77	0.16	0.021	Filtered		ES
RD-07	Z03	Primary	08/16/06	Uranium-238	22	1.3	0.081	Filtered		ES
RD-07	Z03	Primary	02/08/07	Radium-226	0.428 U	0.46	0.739	Filtered		ES
RD-07	Z03	Primary	02/08/07	Radium-228	1.35	1.2	0.475	Filtered		ES
RD-07	Z03	Primary	02/08/07	Thorium-228	0.009 U	0.036	0.062	Filtered		ES
RD-07	Z03	Primary	02/08/07	Thorium-230	-0.023 U	0.05	0.103	Filtered		ES
RD-07	Z03	Primary	02/08/07	Thorium-232	-0.005 U	0.014	0.028	Filtered		ES
RD-07	Z03	Primary	02/08/07	Uranium-234	30	1.8	0.094	Filtered		ES
RD-07	Z03	Primary	02/08/07	Uranium-235	1.22	0.15	0.027	Filtered		ES
RD-07	Z03	Primary	02/08/07	Uranium-238	24	1.5	0.091	Filtered		ES
RD-07	Z03	Primary	08/09/07	Radium-226	0.076 U	0.41	0.801	Filtered		ES
RD-07	Z03	Primary	08/09/07	Radium-228	1.2	0.22	0.472	Filtered		ES
RD-07	Z03	Primary	08/09/07	Uranium-233/234	26	1.8	0.131	Filtered		ES
RD-07	Z03	Reanalysis of Primary	08/09/07	Uranium-233/234	25	1.7	0.125	Filtered		ES
RD-07	Z03	Primary	08/09/07	Uranium-235	1.14	0.2	0.054	Filtered		ES
RD-07	Z03	Reanalysis of Primary	08/09/07	Uranium-235	0.995 J	0.18	0.054	Filtered		ES
RD-07	Z03	Primary	08/09/07	Uranium-238	20.8	1.5	0.125	Filtered		ES
RD-07	Z03	Reanalysis of Primary	08/09/07	Uranium-238	20.6	1.5	0.122	Filtered		ES
RD-07	Z03	Primary	02/05/08	Radium-226	-0.077 U	0.37	0.716	Filtered		ES
RD-07	Z03	Primary	02/05/08	Radium-228	0.081 U	0.32	0.389	Filtered		ES
RD-07	Z03	Primary	02/05/08	Strontium-90	0.05 U	0.25	0.475	Filtered		ES
RD-07	Z03	Primary	02/05/08	Thorium-228	-0.006 U	0.023	0.049	Filtered		ES
RD-07	Z03	Primary	02/05/08	Thorium-230	-0.049 U	0.051	0.107	Filtered		ES
RD-07	Z03	Primary	02/05/08	Thorium-232	-0.02 U	0.017	0.046	Filtered		ES
RD-07	Z03	Primary	02/05/08	Uranium-233/234	26.3	1.6	0.087	Filtered		ES
RD-07	Z03	Primary	02/05/08	Uranium-235	1.17	0.13	0.03	Filtered		ES
RD-07	Z03	Primary	02/05/08	Uranium-238	21.3	1.3	0.082	Filtered		ES
RD-07	Z03	Primary	08/06/08	Radium-226	0.306 U	0.42	0.71	Filtered		ES
RD-07	Z03	Primary	08/06/08	Radium-228	1.16	0.35	0.542	Filtered		ES
RD-07	Z03	Primary	08/06/08	Uranium-233/234	19.1	1.7	0.076	Unfiltered		ES

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-07	Z03	Primary	08/06/08	Uranium-235	0.45 U	0.23	0.458	Unfiltered		ES
RD-07	Z03	Primary	08/06/08	Uranium-238	15.4	1.4	0.074	Unfiltered		ES
RD-07	Z03	Primary	02/20/09	Americium-241	0.124 U	0.31	0.661	Filtered		ES
RD-07	Z03	Primary	02/20/09	Americium-241	0.401 U	0.96	2.76	Unfiltered		ES
RD-07	Z03	Primary	02/20/09	Strontium-90	0.03 U	0.32	0.601	Filtered		ES
RD-07	Z03	Primary	02/20/09	Strontium-90	0.054 U	0.24	0.46	Unfiltered		ES
RD-07	Z03	Primary	02/20/09	Uranium-233/234	17.6	1.8	0.152	Filtered		ES
RD-07	Z03	Primary	02/20/09	Uranium-233/234	18.3	1.9	0.164	Unfiltered		ES
RD-07	Z03	Primary	02/20/09	Uranium-235	0.71 J	0.21	0.092	Filtered		ES
RD-07	Z03	Primary	02/20/09	Uranium-235	0.809 J	0.19	0.086	Unfiltered		ES
RD-07	Z03	Primary	02/20/09	Uranium-238	13.4	1.5	0.143	Filtered		ES
RD-07	Z03	Primary	02/20/09	Uranium-238	14.8	1.6	0.15	Unfiltered		ES
RD-07	Z03	Primary	07/16/09	Strontium-90	-0.073 U	0.28	0.565	Filtered		ES
RD-07	Z03	Primary	07/16/09	Strontium-90	-0.176 U	0.24	0.521	Unfiltered		ES
RD-07	Z03	Primary	07/16/09	Uranium-233/234	18.6	1.8	0.159	Filtered		ES
RD-07	Z03	Primary	07/16/09	Uranium-235	0.839 J	0.2	0.072	Filtered		ES
RD-07	Z03	Primary	07/16/09	Uranium-238	14.4	1.5	0.143	Filtered		ES
RD-13		Primary	10/31/89	Plutonium-238	-0.00077 U	0.006	---	Filtered		UST
RD-13		Primary	10/31/89	Plutonium-239/240	0.00239 U	0.006	---	Filtered		ES
RD-13		Primary	08/26/97	Radium-226	20 U	130	190	Filtered		LAS
RD-13		Primary	08/26/97	Radium-226	30 U	120	190	Unfiltered		LAS
RD-13		Primary	08/26/97	Uranium-233/234	2.06	0.32	0.1	Filtered		LAS
RD-13		Primary	08/26/97	Uranium-233/234	2.22	0.33	0.078	Unfiltered		LAS
RD-13		Primary	08/26/97	Uranium-235	0.089	0.065	0.059	Filtered		LAS
RD-13		Primary	08/26/97	Uranium-235	13 U	29	41	Filtered		LAS
RD-13		Primary	08/26/97	Uranium-235	0.124	0.077	0.06	Unfiltered		LAS
RD-13		Primary	08/26/97	Uranium-238	1.29	0.24	0.081	Filtered		LAS
RD-13		Primary	08/26/97	Uranium-238	1.38	0.25	0.073	Unfiltered		LAS
RD-14		Primary	10/31/89	Radium-226	0.585	0.16	---	Filtered		UST
RD-14		Primary	10/31/89	Radium-226	0.469	0.137	---	Unfiltered		UST
RD-14		Primary	10/31/89	Radium-228	0.901	0.492	---	Filtered		UST
RD-14		Primary	10/31/89	Radium-228	0.747	0.391	---	Unfiltered		UST
RD-14		Primary	10/31/89	Thorium-228	0.0406	0.035	---	Filtered		UST
RD-14		Primary	10/31/89	Thorium-228	0.0404	0.029	---	Unfiltered		UST
RD-14		Primary	10/31/89	Thorium-230	0.0055 U	0.014	---	Filtered		UST
RD-14		Primary	10/31/89	Thorium-230	0.00388 U	0.006	---	Unfiltered		UST
RD-14		Primary	10/31/89	Thorium-232	0.0136	0.010	---	Unfiltered		UST
RD-14		Primary	10/31/89	Uranium-233/234	2.63	0.453	---	Filtered		UST
RD-14		Primary	10/31/89	Uranium-233/234	2.99	0.539	---	Unfiltered		UST
RD-14		Primary	10/31/89	Uranium-235	0.131	0.089	---	Filtered		UST

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-14		Primary	10/31/89	Uranium-235	0.0662 U	0.088	---	Unfiltered		UST
RD-14		Primary	10/31/89	Uranium-238	2.57	0.441	---	Filtered		UST
RD-14		Primary	10/31/89	Uranium-238	2.68	0.495	---	Unfiltered		UST
RD-15		Primary	05/10/01	Uranium-233/234	4.81	0.88	0.234	Filtered		UST
RD-15		Primary	05/10/01	Uranium-235	0.296	0.22	0.284	Filtered		ES
RD-15		Primary	05/10/01	Uranium-238	4.59	0.82	0.234	Filtered		ES
RD-15		Primary	03/06/02	Uranium-233/234	3.07	1	1	Filtered		DL
RD-15		Primary	03/06/02	Uranium-235	0.3 U	1	1	Filtered		DL
RD-15		Primary	03/06/02	Uranium-238	2.84	1	1	Filtered		DL
RD-15		Primary	02/26/03	Uranium-233/234	2.86	0.2	0.043	Filtered		ES
RD-15		Primary	02/26/03	Uranium-235	0.122	0.043	0.027	Filtered		ES
RD-15		Primary	02/26/03	Uranium-238	2.71	0.19	0.036	Filtered		ES
RD-15		Primary	02/24/04	Radium-226	0.624 J	0.083	0.035	Filtered		ES
RD-15		Primary	02/24/04	Radium-228	0.825 J	0.17	0.378	Filtered		ES
RD-15		Primary	02/24/04	Uranium-233/234	5.51	0.39	0.051	Filtered		ES
RD-15		Primary	02/24/04	Uranium-235	0.274 J	0.063	0.026	Filtered		ES
RD-15		Primary	02/24/04	Uranium-238	5.41	0.39	0.045	Filtered		ES
RD-15		Primary	08/09/04	Radium-226	0.962 J	0.11	0.054	Filtered		ES
RD-15		Primary	08/09/04	Radium-228	0.984 J	0.21	0.443	Filtered		ES
RD-15		Primary	02/14/05	Radium-226	0.946 J	0.34	0.394	Filtered		ES
RD-15		Primary	02/14/05	Radium-228	1.49	0.28	0.554	Filtered		ES
RD-15		Primary	02/14/05	Uranium-233/234	4.19	0.36	0.059	Filtered		ES
RD-15		Primary	02/14/05	Uranium-235	0.257 J	0.071	0.038	Filtered		ES
RD-15		Primary	02/14/05	Uranium-238	4.08	0.35	0.055	Filtered		ES
RD-15		Primary	08/24/05	Radium-226	0.061 J	0.024	0.032	Filtered		ES
RD-15		Primary	08/24/05	Radium-228	1.58	0.27	0.526	Filtered		ES
RD-15		Primary	02/16/06	Radium-226	0.747 U	0.59	0.894	Filtered		ES
RD-15		Split	02/16/06	Radium-226	0.766 J	0.233	0.144	Filtered		STL
RD-15		Primary	02/16/06	Radium-228	1.23	0.23	0.501	Filtered		ES
RD-15		Split	02/16/06	Radium-228	1.17	0.357	0.492	Filtered		STL
RD-15		Primary	02/16/06	Uranium-233/234	3.46	0.35	0.065	Filtered		ES
RD-15		Split	02/16/06	Uranium-233/234	3.49	1.11	0.13	Filtered		STL
RD-15		Primary	02/16/06	Uranium-235	0.086 J	0.057	0.055	Filtered		ES
RD-15		Split	02/16/06	Uranium-235	0.191 J	0.196	0.13	Filtered		STL
RD-15		Primary	02/16/06	Uranium-238	3.02	0.32	0.045	Filtered		ES
RD-15		Split	02/16/06	Uranium-238	2.72	0.93	0.229	Filtered		STL
RD-15		Primary	08/08/06	Radium-226	0.479 U	0.46	0.746	Filtered		ES
RD-15		Split	08/08/06	Radium-226	0.746 J	0.22	0.156	Filtered		STL
RD-15		Primary	08/08/06	Radium-228	1.59	0.28	0.562	Filtered		ES
RD-15		Split	08/08/06	Radium-228	2.4	0.44	0.446	Filtered		STL
RD-15		Primary	02/06/07	Radium-226	0.579 U	0.49	0.774	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-15		Primary	02/06/07	Radium-228	0.752 J	0.41	0.432	Filtered		ES
RD-15		Primary	02/06/07	Uranium-234	3.09	0.38	0.065	Filtered		ES
RD-15		Primary	02/06/07	Uranium-235	0.133 J	0.082	0.078	Filtered		ES
RD-15		Primary	02/06/07	Uranium-238	3.01	0.38	0.065	Filtered		ES
RD-15		Primary	08/07/07	Radium-226	1.44	0.64	0.747	Filtered		ES
RD-15		Primary	08/07/07	Radium-228	1.18	0.26	0.435	Filtered		ES
RD-15		Primary	02/20/08	Radium-226	0.682 U	0.51	0.755	Filtered		ES
RD-15		Primary	02/20/08	Radium-228	0.492 J	0.38	0.358	Filtered		ES
RD-15		Primary	02/20/08	Strontium-90	0.044 U	0.28	0.558	Filtered		ES
RD-15		Primary	02/20/08	Uranium-233/234	3.51	0.45	0.091	Filtered		ES
RD-15		Primary	02/20/08	Uranium-235	0.272 J	0.1	0.063	Filtered		ES
RD-15		Primary	02/20/08	Uranium-238	3.15	0.42	0.075	Filtered		ES
RD-15		Primary	08/06/08	Radium-226	0.666 J	0.43	0.598	Filtered		ES
RD-15		Primary	08/06/08	Radium-228	1	0.25	0.512	Filtered		ES
RD-15		Primary	02/24/09	Americium-241	1.08 U	2.3	4.02	Filtered		ES
RD-15		Primary	02/24/09	Americium-241	3.27 U	6.8	11.6	Unfiltered		ES
RD-15		Split	02/24/09	Americium-241	0 U	7.7	11.6	Filtered		GEL
RD-15		Split	02/24/09	Americium-241	-2.29 U	5.28	9.16	Unfiltered		GEL
RD-15		Primary	02/24/09	Strontium-90	0.065 U	0.32	0.592	Filtered		ES
RD-15		Primary	02/24/09	Strontium-90	0.099 U	0.3	0.566	Unfiltered		ES
RD-15		Split	02/24/09	Strontium-90	-0.167 U	0.529	1.11	Unfiltered		GEL
RD-15		Split	02/24/09	Strontium-90, Dissolved	-0.52 U	0.512	1.2	Filtered		GEL
RD-15		Primary	07/24/09	Strontium-90	-0.09 U	0.19	0.384	Filtered		ES
RD-15		Primary	07/24/09	Strontium-90	-0.063 U	0.18	0.369	Unfiltered		ES
RD-15		Duplicate	07/24/09	Strontium-90	-0.073 U	0.22	0.439	Unfiltered		ES
RD-16		Primary	05/27/98	Radium-226	188 U	---	188	Filtered		TN
RD-16		Primary	05/27/98	Uranium-235	54.3 U	---	54.3	Filtered		TN
RD-17		Primary	02/08/99	Thorium-228	0.018 U	0.048	0.093	Filtered		ES
RD-17		Primary	02/08/99	Thorium-230	0.072 U	0.06	0.074	Filtered		TN
RD-17		Primary	02/08/99	Thorium-232	0.012 U	0.024	0.046	Filtered		TN
RD-17		Primary	02/08/99	Uranium-233/234	1.56	0.16	0.039	Filtered		TN
RD-17		Primary	02/08/99	Uranium-235	0.103	0.043	0.033	Filtered		TN
RD-17		Primary	02/08/99	Uranium-238	1.19	0.14	0.034	Filtered		TN
RD-17		Primary	02/23/04	Radium-226	1.28	0.13	0.04	Filtered		ES
RD-17		Primary	02/23/04	Radium-228	1.5	0.21	0.407	Filtered		ES
RD-17		Primary	08/09/04	Radium-226	1.07	0.12	0.055	Filtered		ES
RD-17		Primary	08/09/04	Radium-228	1.44	0.24	0.475	Filtered		ES
RD-17		Primary	02/15/05	Radium-226	1.07	0.38	0.471	Filtered		ES
RD-17		Primary	02/15/05	Radium-228	1.2	0.26	0.532	Filtered		ES
RD-17		Primary	08/23/05	Radium-226	0.526 U	0.48	0.743	Filtered		ES
RD-17		Primary	08/23/05	Radium-228	1.26	0.32	0.65	Filtered		ES
RD-17		Primary	02/16/06	Radium-226	1.51	0.61	0.837	Filtered		ES
RD-17		Primary	02/16/06	Radium-228	1.75	0.28	0.506	Filtered		ES
RD-17		Primary	08/10/06	Radium-226	0.734 U	0.61	0.946	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-17		Primary	08/10/06	Radium-228	0.517 J	0.19	0.437	Filtered		ES
RD-17		Primary	02/06/07	Radium-226	1.04	0.53	0.716	Filtered		ES
RD-17		Split	02/06/07	Radium-226	1.15	0.31	0.142	Filtered		STL
RD-17		Primary	02/06/07	Radium-228	0.676 J	0.25	0.345	Filtered		ES
RD-17		Split	02/06/07	Radium-228	1.48	0.35	0.465	Filtered		STL
RD-17		Primary	08/06/07	Radium-226	0.966 J	0.59	0.845	Filtered		ES
RD-17		Primary	08/06/07	Radium-228	0.713 J	0.21	0.484	Filtered		ES
RD-17		Primary	02/22/08	Radium-226	0.893 J	0.57	0.799	Filtered		ES
RD-17		Primary	02/22/08	Radium-228	1.51	0.28	0.43	Filtered		ES
RD-17		Primary	02/22/08	Strontium-90	-0.169 U	0.22	0.463	Filtered		ES
RD-17		Primary	08/06/08	Radium-226	1.51	0.58	0.562	Filtered		ES
RD-17		Primary	08/06/08	Radium-228	0.894 J	0.25	0.516	Filtered		ES
RD-17		Primary	02/25/09	Americium-241	-0.859 U	2.3	3.9	Filtered		ES
RD-17		Primary	02/25/09	Americium-241	0.331 U	0.32	0.868	Unfiltered		ES
RD-17		Primary	02/25/09	Strontium-90	0.014 U	0.31	0.608	Filtered		ES
RD-17		Primary	02/25/09	Strontium-90	0.144 U	0.33	0.619	Unfiltered		ES
RD-17		Primary	07/27/09	Strontium-90	-0.01 U	0.32	0.601	Filtered		ES
RD-17		Primary	07/27/09	Strontium-90	-0.236 U	0.31	0.676	Unfiltered		ES
RD-18		Primary	03/17/93	Radium-226	4	2.4	0.6	Filtered		TN
RD-18		Primary	03/17/93	Radium-228	1 U	---	1	Filtered		TN
RD-18		Primary	06/08/93	Radium-226	10.8	3.8	0.6	Filtered		CEP
RD-18		Primary	06/08/93	Radium-228	1 U	---	1	Filtered		CEP
RD-18		Primary	08/09/93	Radium-226	0.6 U	---	0.6	Filtered		CEP
RD-18		Primary	11/04/93	Radium-226	0.84	0.27	0.24	Filtered		CEP
RD-18		Primary	06/08/99	Radium-228	1 U	---	1	Filtered		CEP
RD-19		Primary	03/08/93	Uranium-233/234	12.8	2.8	0.6	Filtered		CEP
RD-19		Primary	03/08/93	Uranium-235	0.51 U	0.2	0.6	Filtered		CEP
RD-19		Primary	03/08/93	Uranium-238	16.3	3.2	0.6	Filtered		CEP
RD-19		Primary	02/06/96	Uranium-233/234	3.71	0.55	0.16	Filtered		CEP
RD-19		Primary	02/06/96	Uranium-235	0.32	0.16	0.13	Filtered		LAS
RD-19		Primary	02/06/96	Uranium-238	3.22	0.5	0.13	Filtered		LAS
RD-19		Primary	02/06/98	Thorium-228	0.008 U	0.031	0.052	Filtered		TN
RD-19		Primary	02/06/98	Thorium-230	0.069 U	---	0.069	Filtered		TN
RD-19		Primary	02/06/98	Thorium-232	0.018 U	0.015	0.02	Filtered		TN
RD-19		Primary	02/06/98	Uranium-233/234	13	0.54	0.067	Filtered		TN
RD-19		Primary	02/06/98	Uranium-235	0.723	0.092	0.021	Filtered		TN
RD-19		Primary	02/06/98	Uranium-238	12.4	0.52	0.063	Filtered		TN
RD-21		Primary	11/06/93	Americium-241	12.9 U	---	12.9	Filtered		LAS
RD-21		Primary	11/06/93	Radium-226	85.3 U	---	85.3	Filtered		LAS
RD-21		Primary	02/08/95	Uranium-235	21 U	27	38	Filtered		LAS
RD-21		Primary	08/31/95	Uranium-235	-24 U	27	48	Filtered		LAS
RD-21		Primary	02/16/96	Uranium-235	21 U	28	42	Filtered		LAS
RD-21		Primary	08/18/96	Uranium-235	6 U	30	45	Filtered		LAS
RD-21		Primary	02/06/97	Uranium-235	-13 U	28	41	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-21		Primary	02/09/98	Radium-226	102 U	---	102	Filtered		TN
RD-21		Primary	02/09/98	Uranium-235	32.3 U	---	32.3	Filtered		TN
RD-21		Primary	10/24/01	Uranium-233/234	6.91	0.21	0.14	Filtered		TN
RD-21		Primary	10/24/01	Uranium-235	0.21	0.08	0.13	Filtered		DL
RD-21		Primary	10/24/01	Uranium-238	6.4	0.2	0.15	Filtered		DL
RD-21	Z02	Primary	11/04/04	Radium-226	1.33	0.41	0.408	Filtered		ES
RD-21	Z02	Primary	11/04/04	Radium-228	-0.23 U	0.33	0.679	Filtered		ES
RD-21	Z02	Primary	11/04/04	Uranium-233/234	5.6	0.4	0.049	Filtered		ES
RD-21	Z02	Primary	11/04/04	Uranium-235	0.285 J	0.065	0.027	Filtered		ES
RD-21	Z02	Primary	11/04/04	Uranium-238	4.88	0.36	0.049	Filtered		ES
RD-21	Z02	Primary	02/16/05	Radium-226	0.243 U	0.38	0.654	Filtered		ES
RD-21	Z02	Primary	02/16/05	Radium-228	0.312 U	0.21	0.539	Filtered		ES
RD-21	Z02	Primary	02/16/05	Uranium-233/234	5.78	0.42	0.051	Filtered		ES
RD-21	Z02	Primary	02/16/05	Uranium-235	0.267 J	0.062	0.029	Filtered		ES
RD-21	Z02	Primary	02/16/05	Uranium-238	4.67	0.36	0.048	Filtered		ES
RD-21	Z02	Primary	09/01/05	Radium-226	0.393 U	0.4	0.647	Filtered		ES
RD-21	Z02	Primary	09/01/05	Radium-228	0.418 U	0.23	0.597	Filtered		ES
RD-21	Z02	Primary	09/01/05	Uranium-233/234	5.7	0.43	0.055	Filtered		ES
RD-21	Z02	Primary	09/01/05	Uranium-235	0.269 J	0.068	0.032	Filtered		ES
RD-21	Z02	Primary	09/01/05	Uranium-238	4.64	0.36	0.052	Filtered		ES
RD-21	Z02	Primary	02/16/06	Radium-226	0.346 U	0.45	0.755	Filtered		ES
RD-21	Z02	Primary	02/16/06	Radium-228	-0.029 U	0.4	0.39	Filtered		ES
RD-21	Z02	Primary	02/16/06	Uranium-233/234	5.32	0.4	0.05	Filtered		ES
RD-21	Z02	Primary	02/16/06	Uranium-235	0.224 J	0.064	0.03	Filtered		ES
RD-21	Z02	Primary	02/16/06	Uranium-238	4.61	0.36	0.05	Filtered		ES
RD-21	Z02	Primary	08/16/06	Radium-226	0.092 U	0.42	0.758	Filtered		ES
RD-21	Z02	Primary	08/16/06	Radium-228	0.684 J	0.2	0.453	Filtered		ES
RD-21	Z02	Primary	08/16/06	Uranium-233/234	8.4	0.57	0.058	Filtered		ES
RD-21	Z02	Primary	08/16/06	Uranium-235	0.367 J	0.074	0.027	Filtered		ES
RD-21	Z02	Primary	08/16/06	Uranium-238	7.98	0.54	0.052	Filtered		ES
RD-21	Z02	Primary	05/21/07	Radium-226	0.332 U	0.4	0.664	Filtered		ES
RD-21	Z02	Primary	05/21/07	Radium-228	0.25 U	0.46	0.396	Filtered		ES
RD-21	Z02	Primary	05/21/07	Uranium-234	5.86	0.45	0.058	Filtered		ES
RD-21	Z02	Primary	05/21/07	Uranium-235	0.29 J	0.071	0.033	Filtered		ES
RD-21	Z02	Primary	05/21/07	Uranium-238	5.17	0.4	0.058	Filtered		ES
RD-21	Z02	Primary	08/09/07	Radium-226	0.753 U	0.6	0.926	Filtered		ES
RD-21	Z02	Primary	08/09/07	Radium-228	0.459 J	0.18	0.433	Filtered		ES
RD-21	Z02	Primary	08/09/07	Uranium-233/234	6.23	0.45	0.051	Filtered		ES
RD-21	Z02	Primary	08/09/07	Uranium-235	0.257 J	0.059	0.028	Filtered		ES
RD-21	Z02	Primary	08/09/07	Uranium-238	5.56	0.41	0.046	Filtered		ES
RD-21	Z02	Primary	02/05/08	Radium-226	0.999 J	0.57	0.747	Filtered		ES
RD-21	Z02	Primary	02/05/08	Radium-228	0.227 U	0.19	0.381	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-21	Z02	Primary	02/05/08	Strontium-90	-0.133 U	0.23	0.478	Filtered		ES
RD-21	Z02	Primary	02/05/08	Uranium-233/234	4.31	0.35	0.05	Filtered		ES
RD-21	Z02	Primary	02/05/08	Uranium-235	0.148 J	0.052	0.032	Filtered		ES
RD-21	Z02	Primary	02/05/08	Uranium-238	3.5	0.31	0.047	Filtered		ES
RD-21	Z03	Primary	08/06/08	Radium-226	0.105 U	0.29	0.516	Filtered		ES
RD-21	Z03	Primary	08/06/08	Radium-228	0.108 U	0.29	0.507	Filtered		ES
RD-21	Z03	Primary	08/06/08	Uranium-233/234	3.95	0.41	0.051	Filtered		ES
RD-21	Z03	Primary	08/06/08	Uranium-235	0.197 J	0.059	0.038	Filtered		ES
RD-21	Z03	Primary	08/06/08	Uranium-238	3.35	0.35	0.048	Filtered		ES
RD-21	Z04	Primary	02/24/09	Americium-241	-14.9 U	6.2	7.55	Filtered		ES
RD-21	Z04	Primary	02/24/09	Americium-241	-3.99 U	3	3.18	Unfiltered		ES
RD-21	Z04	Primary	02/24/09	Strontium-90	-0.109 U	0.31	0.614	Filtered		ES
RD-21	Z04	Primary	02/24/09	Strontium-90	-0.123 U	0.25	0.534	Unfiltered		ES
RD-21	Z04	Primary	02/24/09	Uranium-233/234	5.78	0.61	0.072	Filtered		ES
RD-21	Z04	Primary	02/24/09	Uranium-233/234	4.03	0.42	0.054	Unfiltered		ES
RD-21	Z04	Primary	02/24/09	Uranium-235	0.284 J	0.088	0.046	Filtered		ES
RD-21	Z04	Primary	02/24/09	Uranium-235	0.18 J	0.062	0.033	Unfiltered		ES
RD-21	Z04	Primary	02/24/09	Uranium-238	4.86	0.52	0.072	Filtered		ES
RD-21	Z04	Primary	02/24/09	Uranium-238	3.32	0.36	0.047	Unfiltered		ES
RD-21	Z02	Primary	07/16/09	Strontium-90	-0.123 U	0.25	0.514	Filtered		ES
RD-21	Z02	Primary	07/16/09	Strontium-90	-0.007 U	0.27	0.534	Unfiltered		ES
RD-21	Z02	Primary	07/16/09	Uranium-233/234	7.06	0.72	0.089	Filtered		ES
RD-21	Z02	Primary	07/16/09	Uranium-233/234	6.27	0.62	0.077	Unfiltered		ES
RD-21	Z02	Primary	07/16/09	Uranium-235	0.298 J	0.085	0.056	Filtered		ES
RD-21	Z02	Primary	07/16/09	Uranium-235	0.296 J	0.08	0.045	Unfiltered		ES
RD-21	Z02	Primary	07/16/09	Uranium-238	6.1	0.64	0.074	Filtered		ES
RD-21	Z02	Primary	07/16/09	Uranium-238	5.47	0.55	0.063	Unfiltered		ES
RD-22		Primary	11/21/93	Americium-241	14 U	---	14	Filtered		LAS
RD-22		Primary	11/21/93	Radium-226	90.8 U	---	90.8	Filtered		LAS
RD-22		Primary	02/17/95	Uranium-235	-29 U	14	45	Filtered		LAS
RD-22		Primary	08/29/95	Uranium-235	1 U	31	44	Filtered		LAS
RD-22		Primary	02/16/96	Uranium-235	-12.6 U	9.8	29	Filtered		LAS
RD-22		Primary	08/18/96	Uranium-235	-15 U	27	43	Filtered		LAS
RD-22		Primary	02/26/97	Uranium-235	-8 U	27	42	Filtered		LAS
RD-22		Primary	05/28/98	Radium-226	192 U	---	192	Filtered		TN
RD-22		Primary	05/28/98	Uranium-235	74.7 U	---	74.7	Filtered		TN
RD-22	Z02	Primary	11/12/04	Radium-226	1.81	0.44	0.382	Filtered		ES
RD-22	Z02	Primary	11/12/04	Radium-228	2.36	0.32	0.565	Filtered		ES
RD-22	Z02	Primary	02/17/05	Radium-226	1.27	0.52	0.601	Filtered		ES
RD-22	Z02	Primary	02/17/05	Radium-228	3.34	0.37	0.564	Filtered		ES
RD-22	Z02	Primary	08/31/05	Radium-226	1.15	0.46	0.662	Filtered		ES
RD-22	Z02	Primary	08/31/05	Radium-228	2.87	0.35	0.582	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-22	Z02	Primary	02/15/06	Radium-226	1.52	0.48	0.45	Filtered		ES
RD-22	Z02	Primary	02/15/06	Radium-228	2.86	0.41	0.586	Filtered		ES
RD-22	Z02	Primary	08/16/06	Radium-226	1.11	0.57	0.753	Filtered		ES
RD-22	Z02	Primary	08/16/06	Radium-228	2.7	0.3	0.503	Filtered		ES
RD-22	Z02	Primary	02/07/07	Radium-226	1.31	0.62	0.819	Filtered		ES
RD-22	Z02	Primary	02/07/07	Radium-228	2.07	0.77	0.334	Filtered		ES
RD-22	Z02	Primary	08/09/07	Radium-226	1.49	0.62	0.766	Filtered		ES
RD-22	Z02	Primary	08/09/07	Radium-228	2.38	0.28	0.483	Filtered		ES
RD-22	Z02	Primary	02/05/08	Radium-226	1.13	0.54	0.722	Filtered		ES
RD-22	Z02	Primary	02/05/08	Radium-228	2.88	0.32	0.38	Filtered		ES
RD-22	Z02	Primary	02/05/08	Strontium-90	-0.129 U	0.23	0.474	Filtered		ES
RD-22	Z02	Primary	08/06/08	Radium-226	1.52	0.62	0.669	Filtered		ES
RD-22	Z02	Primary	08/06/08	Radium-228	2.62	0.49	0.553	Filtered		ES
RD-22	Z02	Primary	02/23/09	Americium-241	0.583 U	3	3.79	Filtered		ES
RD-22	Z02	Primary	02/23/09	Americium-241	-2.64 U	2.4	4.05	Unfiltered		ES
RD-22	Z02	Primary	02/23/09	Strontium-90	0.066 U	0.26	0.514	Filtered		ES
RD-22	Z02	Primary	02/23/09	Strontium-90	-0.073 U	0.27	0.554	Unfiltered		ES
RD-22	Z02	Primary	07/16/09	Strontium-90	0.082 U	0.3	0.556	Filtered		ES
RD-22	Z02	Primary	07/16/09	Strontium-90	0.013 U	0.32	0.626	Unfiltered		ES
RD-23		Primary	11/06/93	Americium-241	16.4 U	---	16.4	Filtered		LAS
RD-23		Primary	11/06/93	Radium-226	38.6 U	---	38.6	Filtered		LAS
RD-23		Primary	02/05/95	Uranium-235	4 U	27	40	Filtered		LAS
RD-23		Primary	08/03/95	Uranium-235	-2 U	28	44	Filtered		LAS
RD-23		Primary	02/16/96	Uranium-235	-9 U	15	28	Filtered		LAS
RD-23		Primary	08/18/96	Uranium-235	6 U	28	42	Filtered		LAS
RD-23		Primary	02/27/97	Uranium-235	-24 U	22	43	Filtered		LAS
RD-23		Primary	02/07/98	Radium-226	108 U	---	108	Filtered		TN
RD-23		Primary	02/07/98	Uranium-235	35.2 U	---	35.2	Filtered		TN
RD-23		Primary	02/08/99	Thorium-228	0.073	0.04	0.048	Filtered		TN
RD-23		Primary	02/08/99	Thorium-230	0.016 U	0.046	0.073	Filtered		TN
RD-23		Primary	02/08/99	Thorium-232	0.003 U	0.013	0.025	Filtered		TN
RD-23		Primary	02/08/99	Uranium-233/234	1.16	0.15	0.06	Filtered		TN
RD-23		Primary	02/08/99	Uranium-235	0.097	0.041	0.039	Filtered		TN
RD-23		Primary	02/08/99	Uranium-238	1.08	0.14	0.04	Filtered		TN
RD-23	Z02	Primary	11/03/04	Radium-226	1.23	0.4	0.415	Filtered		ES
RD-23	Z02	Primary	11/03/04	Radium-228	0.824 J	0.26	0.612	Filtered		ES
RD-23	Z02	Primary	02/14/05	Radium-226	0.512 J	0.35	0.479	Filtered		ES
RD-23	Z02	Primary	02/14/05	Radium-228	1.04	0.29	0.648	Filtered		ES
RD-23	Z03	Primary	09/12/05	Radium-226	0.759 J	0.47	0.675	Filtered		ES
RD-23	Z03	Primary	09/12/05	Radium-228	0.68 J	0.37	0.568	Filtered		ES
RD-23	Z03	Primary	02/17/06	Radium-226	1.24	0.55	0.709	Filtered		ES
RD-23	Z03	Primary	02/17/06	Radium-228	0.857 J	0.17	0.384	Filtered		ES
RD-23	Z03	Primary	08/17/06	Radium-226	0.687 J	0.46	0.62	Filtered		ES
RD-23	Z03	Primary	08/17/06	Radium-228	0.662 J	0.21	0.477	Filtered		ES
RD-23	Z03	Primary	02/07/07	Radium-226	1.06	0.57	0.757	Filtered		ES
RD-23	Z03	Primary	02/07/07	Radium-228	0.624 J	0.16	0.363	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-23	Z03	Primary	02/07/07	Uranium-234	0.677 J	0.1	0.032	Filtered		ES
RD-23	Z03	Primary	02/07/07	Uranium-235	0.02 U	0.016	0.031	Filtered		ES
RD-23	Z03	Primary	02/07/07	Uranium-238	0.525 J	0.093	0.032	Filtered		ES
RD-23	Z03	Primary	08/09/07	Radium-226	1.16	0.61	0.707	Filtered		ES
RD-23	Z03	Primary	08/09/07	Radium-228	0.844 J	0.23	0.503	Filtered		ES
RD-23	Z03	Primary	02/06/08	Radium-226	1.8	0.68	0.873	Filtered		ES
RD-23	Z03	Primary	02/06/08	Radium-228	-0.091 U	0.13	0.381	Filtered		ES
RD-23	Z03	Primary	02/06/08	Strontium-90	0.107 U	0.29	0.53	Filtered		ES
RD-23	Z02	Primary	08/07/08	Radium-226	0.899 J	0.5	0.664	Filtered		ES
RD-23	Z02	Primary	08/07/08	Radium-228	0.669 J	0.24	0.546	Filtered		ES
RD-23	Z02	Primary	02/24/09	Americium-241	0.178 U	0.18	0.98	Filtered		ES
RD-23	Z02	Primary	02/24/09	Americium-241	-10.3 U	5.9	7.5	Unfiltered		ES
RD-23	Z02	Primary	02/24/09	Strontium-90	0.153 U	0.37	0.702	Filtered		ES
RD-23	Z02	Primary	02/24/09	Strontium-90	0.206 U	0.31	0.575	Unfiltered		ES
RD-23	Z03	Primary	07/16/09	Strontium-90	-0.176 U	0.29	0.58	Filtered		ES
RD-23	Z03	Primary	07/16/09	Strontium-90	-0.001 U	0.25	0.506	Unfiltered		ES
RD-24		Primary	02/16/95	Uranium-235	-11 U	23	44	Filtered		LAS
RD-24		Primary	02/07/96	Uranium-235	-8 U	22	41	Filtered		LAS
RD-24		Primary	02/07/97	Uranium-235	8 U	30	46	Filtered		LAS
RD-24		Primary	02/18/98	Radium-226	107 U	---	107	Filtered		TN
RD-24		Primary	02/18/98	Uranium-235	34.6 U	---	34.6	Filtered		TN
RD-24		Primary	05/05/98	Radium-226	182 U	---	182	Filtered		TN
RD-24		Primary	05/05/98	Uranium-235	56.9 U	---	56.9	Filtered		TN
RD-24		Primary	10/25/01	Uranium-235	0.2 U	0.1	5	Filtered		DL
RD-24		Primary	11/14/03	Radium-226	0.654 J	0.075	0.029	Filtered		ES
RD-24		Split	11/14/03	Radium-226	1.15	0.338	0.255	Filtered		STL
RD-24		Primary	11/14/03	Radium-228	1.61	0.27	0.522	Filtered		ES
RD-24		Split	11/14/03	Radium-228	2.93 J	0.884	0.778	Filtered		STL
RD-24		Split	11/14/03	Uranium-235	11.3 U	7.28	12.5	Filtered		STL
RD-24		Primary	02/23/04	Radium-226	0.423 J	0.065	0.034	Filtered		ES
RD-24		Primary	02/23/04	Radium-228	1.02	0.19	0.395	Filtered		ES
RD-24		Primary	08/26/04	Radium-226	0.686 J	0.067	0.024	Filtered		ES
RD-24		Primary	08/26/04	Radium-228	1.85	0.32	0.628	Filtered		ES
RD-24		Primary	02/24/05	Radium-226	0.802 J	0.37	0.49	Filtered		ES
RD-24		Primary	02/24/05	Radium-228	1.82	0.26	0.484	Filtered		ES
RD-24		Primary	09/06/05	Radium-226	0.893 J	0.48	0.67	Filtered		ES
RD-24		Primary	09/06/05	Radium-228	1.63	0.25	0.504	Filtered		ES
RD-24		Primary	02/15/06	Radium-226	0.453 U	0.49	0.784	Filtered		ES
RD-24		Primary	02/15/06	Radium-228	2.63	0.33	0.521	Filtered		ES
RD-24		Primary	08/10/06	Radium-226	0.315 U	0.53	0.912	Filtered		ES
RD-24		Primary	08/10/06	Radium-228	1.78	0.31	0.434	Filtered		ES
RD-24		Primary	05/24/07	Radium-226	0.667 U	0.48	0.725	Filtered		ES
RD-24		Primary	05/24/07	Radium-228	1.97	0.25	0.45	Filtered		ES
RD-24		Primary	08/08/07	Radium-226	1.3	0.58	0.696	Filtered		ES
RD-24		Primary	08/08/07	Radium-228	1.63	0.24	0.485	Filtered		ES
RD-24		Primary	02/13/08	Radium-226	0.565 U	0.51	0.771	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-24		Primary	02/13/08	Radium-228	0.77 J	0.23	0.422	Filtered		ES
RD-24		Primary	02/13/08	Strontium-90	-0.173 U	0.24	0.543	Filtered		ES
RD-24		Primary	10/27/09	Strontium-90	-0.162 U	0.27	0.539	Filtered		TAD
RD-24		Primary	10/27/09	Strontium-90	-0.068 U	0.43	0.711	Unfiltered		TAD
RD-24		Split	10/27/09	Strontium-90	0.13 U	0.23	0.39	Filtered		TAI
RD-24		Split	10/27/09	Strontium-90	-0.16 U	0.24	0.45	Unfiltered		TAI
RD-25		Primary	02/09/95	Uranium-233/234	7	0.69	0.1	Filtered		LAS
RD-25		Primary	02/09/95	Uranium-233/234	7	0.69	0.1	Unfiltered		LAS
RD-25		Primary	02/09/95	Uranium-235	-6 U	28	44	Filtered		LAS
RD-25		Primary	02/09/95	Uranium-235	0.43	0.15	0.058	Filtered		LAS
RD-25		Primary	02/09/95	Uranium-235	0.43	0.15	0.058	Unfiltered		LAS
RD-25		Primary	02/09/95	Uranium-238	6.35	0.65	0.087	Filtered		LAS
RD-25		Primary	02/09/95	Uranium-238	6.35	0.65	0.087	Unfiltered		LAS
RD-25		Primary	08/18/95	Uranium-235	-26 U	14	43	Filtered		LAS
RD-25		Primary	02/06/96	Uranium-235	-18 U	22	41	Filtered		LAS
RD-25		Primary	08/20/96	Uranium-235	1 U	27	42	Filtered		LAS
RD-25		Primary	02/07/97	Uranium-235	-21 U	28	51	Filtered		LAS
RD-25		Primary	08/21/97	Radium-226	40 U	130	200	Filtered		LAS
RD-25		Primary	08/21/97	Uranium-235	6 U	27	41	Filtered		LAS
RD-25		Primary	02/05/98	Radium-226	115 U	---	115	Filtered		TN
RD-25		Primary	02/05/98	Uranium-235	38.6 U	---	38.6	Filtered		TN
RD-25		Primary	08/18/98	Radium-226	283 U	---	283	Filtered		TN
RD-25		Primary	08/18/98	Uranium-235	72.8 U	---	72.8	Filtered		TN
RD-25		Primary	11/13/03	Radium-226	0.63 J	0.073	0.029	Filtered		ES
RD-25		Primary	11/13/03	Radium-228	0.971 J	0.21	0.44	Filtered		ES
RD-25		Primary	02/23/04	Radium-226	0.443 J	0.064	0.034	Filtered		ES
RD-25		Split	02/23/04	Radium-226	0.575 J	0.222	0.181	Filtered		STL
RD-25		Primary	02/23/04	Radium-228	1.4	0.19	0.356	Filtered		ES
RD-25		Split	02/23/04	Radium-228	1.03 J	0.503	0.759	Filtered		STL
RD-27		Primary	02/05/96	Uranium-235	4 U	30	42	Filtered		LAS
RD-27		Primary	08/27/97	Radium-226	-70 U	130	210	Filtered		LAS
RD-27		Primary	08/27/97	Radium-226	-40 U	130	210	Unfiltered		LAS
RD-27		Primary	08/27/97	Uranium-235	5 U	27	41	Filtered		LAS
RD-27		Primary	08/27/97	Uranium-235	1 U	28	43	Unfiltered		LAS
RD-27		Split	11/14/03	Uranium-235	5.76 U	7	11.7	Filtered		STL
RD-27		Primary	02/23/04	Radium-226	0.904 J	0.1	0.038	Filtered		ES
RD-27		Primary	02/23/04	Radium-228	2.06	0.22	0.338	Filtered		ES
RD-27		Primary	08/10/04	Radium-226	1.36	0.15	0.055	Filtered		ES
RD-27		Primary	08/10/04	Radium-228	2.18	0.28	0.497	Filtered		ES
RD-27		Primary	02/17/05	Radium-226	1.27	0.41	0.481	Filtered		ES
RD-27		Primary	02/17/05	Radium-228	2.44	0.3	0.51	Filtered		ES
RD-27		Primary	02/17/05	Thorium-228	0.052 J	0.037	0.046	Filtered		ES
RD-27		Primary	02/17/05	Thorium-230	0.104	0.067	0.099	Filtered		ES
RD-27		Primary	02/17/05	Thorium-232	-0.004 U	0.015	0.028	Filtered		ES
RD-27		Primary	08/24/05	Radium-226	0.057 J	0.027	0.039	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-27		Primary	08/24/05	Radium-228	2.9	0.37	0.61	Filtered		ES
RD-27		Primary	02/20/06	Radium-226	0.999 J	0.47	0.561	Filtered		ES
RD-27		Primary	02/20/06	Radium-228	2.83	0.29	0.49	Filtered		ES
RD-27		Primary	08/25/06	Radium-226	0.974 J	0.63	0.896	Filtered		ES
RD-27		Primary	08/25/06	Radium-228	2.29	0.33	0.482	Filtered		ES
RD-27		Primary	02/14/07	Radium-226	1.96	0.6	0.631	Filtered		ES
RD-27		Split	02/14/07	Radium-226	1.27	0.32	0.113	Filtered		STL
RD-27		Primary	02/14/07	Radium-228	2.4	0.54	0.367	Filtered		ES
RD-27		Split	02/14/07	Radium-228	2.89	0.52	0.532	Filtered		STL
RD-27		Primary	08/09/07	Radium-226	1.62	0.69	0.814	Filtered		ES
RD-27		Reanalysis of Primary	08/09/07	Radium-226	1.34	0.59	0.721	Filtered		ES
RD-27		Primary	08/09/07	Radium-228	2.52	0.34	0.6	Filtered		ES
RD-27		Reanalysis of Primary	08/09/07	Radium-228	2.62	0.39	0.679	Filtered		ES
RD-27		Primary	03/05/08	Radium-226	1.52	0.69	0.817	Filtered		ES
RD-27		Primary	03/05/08	Radium-228	2.5	0.33	0.35	Filtered		ES
RD-27		Primary	03/05/08	Strontium-90	0.007 U	0.24	0.473	Filtered		ES
RD-27		Primary	09/04/08	Americium-241	0.889 U	---	0.889	Filtered		ES
RD-27		Primary	09/04/08	Radium-226	2.11	0.73	0.665	Filtered		ES
RD-27		Primary	09/04/08	Radium-228	3.01	0.39	0.392	Filtered		ES
RD-27		Primary	03/06/09	Americium-241	-1.17 U	3	3.3	Filtered		ES
RD-27		Primary	03/06/09	Americium-241	-0.255 U	1.1	2.55	Unfiltered		ES
RD-27		Primary	03/06/09	Strontium-90	-0.079 U	0.25	0.493	Filtered		ES
RD-27		Primary	03/06/09	Strontium-90	-0.029 U	0.28	0.564	Unfiltered		ES
RD-27		Primary	07/30/09	Strontium-90	-0.147 U	0.31	0.631	Filtered		ES
RD-27		Primary	07/30/09	Strontium-90	0.265 U	0.35	0.638	Unfiltered		ES
RD-27		Duplicate	07/30/09	Strontium-90	0.026 U	0.24	0.474	Unfiltered		ES
RD-28		Primary	02/09/95	Uranium-233/234	8.08	0.73	0.096	Filtered		LAS
RD-28		Primary	02/09/95	Uranium-233/234	8.08	0.73	0.096	Unfiltered		LAS
RD-28		Primary	02/09/95	Uranium-235	7 U	32	48	Filtered		LAS
RD-28		Primary	02/09/95	Uranium-235	0.57	0.16	0.06	Filtered		LAS
RD-28		Primary	02/09/95	Uranium-235	0.57	0.16	0.06	Unfiltered		LAS
RD-28		Primary	02/09/95	Uranium-238	7.29	0.68	0.072	Filtered		LAS
RD-28		Primary	02/09/95	Uranium-238	7.29	0.68	0.072	Unfiltered		LAS
RD-28		Primary	08/18/95	Uranium-235	4 U	26	40	Filtered		LAS
RD-28		Primary	02/06/96	Uranium-235	0 U	19	30	Filtered		LAS
RD-28		Primary	08/20/96	Uranium-235	-23 U	22	40	Filtered		LAS
RD-28		Primary	02/06/97	Uranium-235	-11 U	30	43	Filtered		LAS
RD-28		Primary	08/28/97	Radium-226	10 U	130	210	Filtered		LAS
RD-28		Primary	08/28/97	Radium-226	50 U	140	210	Unfiltered		LAS
RD-28		Primary	08/28/97	Uranium-233/234	15.5	1.1	0.095	Filtered		LAS
RD-28		Primary	08/28/97	Uranium-235	15 U	27	40	Filtered		LAS
RD-28		Primary	08/28/97	Uranium-235	0.86	0.2	0.063	Filtered		LAS
RD-28		Primary	08/28/97	Uranium-235	6 U	29	43	Unfiltered		LAS

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-28		Primary	08/28/97	Uranium-238	14.7	1.1	0.063	Filtered		LAS
RD-28		Primary	02/05/98	Radium-226	161 U	---	161	Filtered		TN
RD-28		Primary	02/05/98	Thorium-228	0.009 U	0.036	0.065	Filtered		TN
RD-28		Primary	02/05/98	Thorium-230	0.158 U	---	0.158	Filtered		TN
RD-28		Primary	02/05/98	Thorium-232	0.009 U	0.018	0.35	Filtered		TN
RD-28		Primary	02/05/98	Uranium-233/234	12.9	0.76	0.104	Filtered		TN
RD-28		Primary	02/05/98	Uranium-235	0.848	0.15	0.042	Filtered		TN
RD-28		Primary	02/05/98	Uranium-235	46.2 U	---	46.2	Filtered		TN
RD-28		Primary	02/05/98	Uranium-238	12	0.71	0.097	Filtered		TN
RD-28		Primary	08/18/98	Radium-226	184 U	---	184	Filtered		TN
RD-28		Primary	08/18/98	Uranium-235	66.9 U	---	66.9	Filtered		TN
RD-28		Primary	02/16/99	Thorium-228	0.014 U	0.017	0.03	Filtered		TN
RD-28		Primary	02/16/99	Thorium-230	0.061 U	0.041	0.069	Filtered		TN
RD-28		Primary	02/16/99	Thorium-232	0.013 U	---	0.013	Filtered		TN
RD-28		Primary	02/16/99	Uranium-233/234	12.1	0.83	0.119	Filtered		TN
RD-28		Primary	02/16/99	Uranium-235	0.741	0.16	0.058	Filtered		TN
RD-28		Primary	02/16/99	Uranium-238	11.6	0.8	0.11	Filtered		TN
RD-28		Primary	02/16/00	Thorium-228	0.039 U	0.11	0.212	Filtered		TN
RD-28		Primary	02/16/00	Thorium-230	0.421 B	0.21	0.233	Filtered		TR
RD-28		Primary	02/16/00	Thorium-232	0.066 U	0.079	0.101	Filtered		TR
RD-28		Primary	02/16/00	Uranium-233/234	8.9	0.81	0.191	Filtered		TR
RD-28		Primary	02/16/00	Uranium-235	0.562	0.19	0.123	Filtered		TR
RD-28		Primary	02/16/00	Uranium-238	8.7	0.8	0.163	Filtered		TR
RD-28		Primary	02/07/01	Thorium-228	0.027 U	0.08	0.14	Filtered		TR
RD-28		Primary	02/07/01	Thorium-230	0.053 U	0.066	0.081	Filtered		ES
RD-28		Primary	02/07/01	Thorium-232	0.007 U	0.013	0.051	Filtered		ES
RD-28		Primary	02/07/01	Uranium-233/234	9	0.4	0.056	Filtered		ES
RD-28		Primary	02/07/01	Uranium-235	0.485	0.073	0.021	Filtered		ES
RD-28		Primary	02/07/01	Uranium-238	8.2	0.37	0.053	Filtered		ES
RD-28		Primary	02/25/02	Thorium-228	0 U	1	1	Filtered		DL
RD-28		Primary	02/25/02	Thorium-230	0 U	1	1	Filtered		DL
RD-28		Primary	02/25/02	Thorium-232	0 U	1	1	Filtered		DL
RD-28		Primary	02/25/02	Uranium-233/234	4.5	0.5	0.5	Filtered		DL
RD-28		Primary	02/25/02	Uranium-235	0.2 U	0.5	0.5	Filtered		DL
RD-28		Primary	02/25/02	Uranium-238	4.5	0.5	0.5	Filtered		DL
RD-28		Primary	02/24/03	Thorium-228	0.044 J	0.031	0.042	Filtered		ES
RD-28		Primary	02/24/03	Thorium-230	0.037 U	0.05	0.112	Filtered		ES
RD-28		Primary	02/24/03	Thorium-232	0.016 U	0.012	0.024	Filtered		ES
RD-28		Primary	02/24/03	Uranium-233/234	9.37	0.4	0.061	Filtered		ES
RD-28		Primary	02/24/03	Uranium-235	0.409	0.078	0.027	Filtered		ES
RD-28		Primary	02/24/03	Uranium-238	9.31	0.4	0.056	Filtered		ES
RD-28		Primary	11/14/03	Radium-226	0.659 J	0.076	0.029	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-28		Primary	11/14/03	Radium-228	1.32	0.27	0.56	Filtered		ES
RD-28		Primary	02/23/04	Radium-226	0.485 J	0.08	0.044	Filtered		ES
RD-28		Split	02/23/04	Radium-226	0.6 J	0.265	0.254	Filtered		STL
RD-28		Primary	02/23/04	Radium-228	0.83 J	0.18	0.411	Filtered		ES
RD-28		Split	02/23/04	Radium-228	0.985 J	0.507	0.764	Filtered		STL
RD-28		Primary	02/23/04	Thorium-228	0.012 U	0.017	0.032	Filtered		ES
RD-28		Split	02/23/04	Thorium-228	0.109 U	0.328	0.846	Filtered		STL
RD-28		Primary	02/23/04	Thorium-230	0.025 U	0.033	0.051	Filtered		ES
RD-28		Split	02/23/04	Thorium-230	0.185 U	0.315	0.589	Filtered		STL
RD-28		Primary	02/23/04	Thorium-232	0 U	0.008	0.032	Filtered		ES
RD-28		Split	02/23/04	Thorium-232	-0.0441 U	0.04	0.623	Filtered		STL
RD-28		Primary	02/23/04	Uranium-233/234	11.1	0.72	0.069	Filtered		ES
RD-28		Split	02/23/04	Uranium-233/234	13.9	2.71	0.189	Filtered		STL
RD-28		Primary	02/23/04	Uranium-235	0.64 J	0.1	0.026	Filtered		ES
RD-28		Split	02/23/04	Uranium-235	0.534 J	0.282	0.0904	Filtered		STL
RD-28		Primary	02/23/04	Uranium-238	11.2	0.73	0.068	Filtered		ES
RD-28		Split	02/23/04	Uranium-238	11.2	2.25	0.16	Filtered		STL
RD-29		Primary	12/08/89	Radium-226	0.832	0.188	---	Filtered		UST
RD-29		Primary	12/08/89	Radium-226	0.844	0.205	---	Unfiltered		UST
RD-29		Primary	12/08/89	Radium-228	1.17	0.474	---	Filtered		UST
RD-29		Primary	12/08/89	Radium-228	1.61	0.592	---	Unfiltered		UST
RD-29		Primary	12/08/89	Total uranium alpha radioactivity	30.8	8.58	---	Filtered		UST
RD-29		Primary	12/08/89	Total uranium alpha radioactivity	22.2	6.2	---	Unfiltered		UST
RD-29		Primary	12/08/89	Uranium-233/234	15.6	1.61	---	Unfiltered		UST
RD-29		Primary	12/08/89	Uranium-235	0.626	0.142	---	Unfiltered		UST
RD-29		Primary	12/08/89	Uranium-238	14.1	1.46	---	Unfiltered		UST
RD-29		Primary	03/27/90	Radium-226	0.636	0.171	---	Unfiltered		UST
RD-29		Primary	03/27/90	Radium-228	0.816	0.414	---	Unfiltered		UST
RD-29		Primary	03/27/90	Uranium-233/234	15.7	2.49	---	Unfiltered		UST
RD-29		Primary	03/27/90	Uranium-235	1.39	0.36	---	Unfiltered		UST
RD-29		Primary	03/27/90	Uranium-238	16.8	2.67	---	Unfiltered		UST
RD-29		Primary	03/05/91	Uranium-233/234	9.54	0.971	0.1	Filtered		UST
RD-29		Primary	03/05/91	Uranium-235	0.324	0.075	0.1	Filtered		IT
RD-29		Primary	03/05/91	Uranium-238	9.21	0.94	0.1	Filtered		IT
RD-29		Primary	03/03/92	Uranium-233/234	1.32	0.57	0.6	Unfiltered		IT
RD-29		Primary	03/03/92	Uranium-235	0.6 U	---	0.6	Unfiltered		CEP
RD-29		Primary	03/03/92	Uranium-238	1.44	0.58	0.6	Unfiltered		CEP
RD-29		Primary	05/09/01	Uranium-233/234	3.19	0.28	0.061	Filtered		CEP

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-29		Primary	05/09/01	Uranium-235	0.18	0.072	0.046	Filtered		ES
RD-29		Primary	05/09/01	Uranium-238	3.14	0.27	0.061	Filtered		ES
RD-29		Primary	05/03/02	Uranium-233/234	9.74	0.3	0.2	Filtered		DL
RD-29		Primary	05/03/02	Uranium-235	0.51	0.11	0.16	Filtered		DL
RD-29		Primary	05/03/02	Uranium-238	9.23	0.31	0.26	Filtered		DL
RD-29		Primary	05/13/03	Uranium-233/234	8.74	0.55	0.049	Filtered		ES
RD-29		Primary	05/13/03	Uranium-235	0.366	0.069	0.021	Filtered		ES
RD-29		Primary	05/13/03	Uranium-238	8.21	0.52	0.047	Filtered		ES
RD-29		Primary	02/24/04	Radium-226	0.397 J	0.067	0.039	Filtered		ES
RD-29		Primary	02/24/04	Radium-228	0.445 J	0.16	0.381	Filtered		ES
RD-29		Primary	02/24/04	Uranium-233/234	9.44	0.62	0.064	Filtered		ES
RD-29		Primary	02/24/04	Uranium-235	0.518 J	0.085	0.026	Filtered		ES
RD-29		Primary	02/24/04	Uranium-238	9.18	0.6	0.061	Filtered		ES
RD-29		Primary	08/09/04	Radium-226	0.541 J	0.091	0.056	Filtered		ES
RD-29		Primary	08/09/04	Radium-228	0.591 J	0.18	0.435	Filtered		ES
RD-29		Primary	08/09/04	Uranium-233/234	9.7	0.78	0.097	Filtered		ES
RD-29		Primary	08/09/04	Uranium-235	0.429 J	0.12	0.059	Filtered		ES
RD-29		Primary	08/09/04	Uranium-238	9.11	0.75	0.091	Filtered		ES
RD-29		Primary	02/24/05	Radium-226	0.47 J	0.27	0.365	Filtered		ES
RD-29		Primary	02/24/05	Radium-228	0.158 U	0.2	0.528	Filtered		ES
RD-29		Primary	02/24/05	Uranium-233/234	3.16	0.26	0.038	Filtered		ES
RD-29		Primary	02/24/05	Uranium-235	0.134 J	0.042	0.026	Filtered		ES
RD-29		Primary	02/24/05	Uranium-238	2.9	0.25	0.035	Filtered		ES
RD-29		Primary	08/25/05	Radium-226	0.273 U	0.41	0.701	Filtered		ES
RD-29		Primary	08/25/05	Radium-228	0.728 J	0.24	0.58	Filtered		ES
RD-29		Primary	02/16/06	Radium-226	-0.014 U	0.35	0.704	Filtered		ES
RD-29		Primary	02/16/06	Radium-228	0.771 J	0.24	0.512	Filtered		ES
RD-29		Primary	02/16/06	Uranium-233/234	6.92	0.49	0.056	Filtered		ES
RD-29		Primary	02/16/06	Uranium-235	0.318 J	0.074	0.027	Filtered		ES
RD-29		Primary	02/16/06	Uranium-238	6.5	0.46	0.054	Filtered		ES
RD-29		Primary	08/11/06	Radium-226	0.263 U	0.44	0.774	Filtered		ES
RD-29		Primary	08/11/06	Radium-228	0.078 U	0.36	0.51	Filtered		ES
RD-29		Primary	08/11/06	Uranium-233/234	8.26	0.59	0.064	Filtered		ES
RD-29		Primary	08/11/06	Uranium-235	0.393 J	0.087	0.032	Filtered		ES
RD-29		Primary	08/11/06	Uranium-238	7.86	0.57	0.059	Filtered		ES
RD-29		Primary	02/07/07	Radium-226	0.487 U	0.45	0.717	Filtered		ES
RD-29		Primary	02/07/07	Radium-228	0.6 J	0.28	0.353	Filtered		ES
RD-29		Primary	02/07/07	Uranium-234	8.96	1	0.204	Filtered		ES
RD-29		Primary	02/07/07	Uranium-235	0.48 J	0.17	0.131	Filtered		ES
RD-29		Primary	02/07/07	Uranium-238	8.94	1	0.174	Filtered		ES
RD-29		Primary	08/08/07	Radium-226	0.307 U	0.44	0.752	Filtered		ES
RD-29		Primary	08/08/07	Radium-228	1.07	0.22	0.478	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-29		Primary	08/08/07	Uranium-233/234	10.8	0.69	0.058	Filtered		ES
RD-29		Reanalysis of Primary	08/08/07	Uranium-233/234	10.4	0.68	0.055	Filtered		ES
RD-29		Primary	08/08/07	Uranium-235	0.45 J	0.074	0.022	Filtered		ES
RD-29		Reanalysis of Primary	08/08/07	Uranium-235	0.418 J	0.076	0.025	Filtered		ES
RD-29		Primary	08/08/07	Uranium-238	9.82	0.63	0.054	Filtered		ES
RD-29		Reanalysis of Primary	08/08/07	Uranium-238	9.38	0.62	0.054	Filtered		ES
RD-29		Primary	02/05/08	Radium-226	0.039 U	0.4	0.792	Filtered		ES
RD-29		Primary	02/05/08	Radium-228	0.556 J	0.14	0.379	Filtered		ES
RD-29		Primary	02/05/08	Strontium-90	-0.187 U	0.22	0.485	Filtered		ES
RD-29		Primary	02/05/08	Uranium-233/234	10.9	0.73	0.072	Filtered		ES
RD-29		Primary	02/05/08	Uranium-235	0.528 J	0.1	0.03	Filtered		ES
RD-29		Primary	02/05/08	Uranium-238	10.6	0.72	0.066	Filtered		ES
RD-29		Primary	08/11/08	Radium-226	-0.023 U	0.37	0.728	Filtered		ES
RD-29		Primary	08/11/08	Radium-228	0.69 J	0.63	0.52	Filtered		ES
RD-29		Primary	08/11/08	Uranium-233/234	8.05	0.92	0.123	Filtered		ES
RD-29		Primary	08/11/08	Uranium-235	0.435 J	0.15	0.099	Filtered		ES
RD-29		Primary	08/11/08	Uranium-238	7.87	0.9	0.114	Filtered		ES
RD-29		Primary	03/05/09	Americium-241	0.037 U	0.33	0.91	Filtered		ES
RD-29		Primary	03/05/09	Americium-241	0.09 U	0.33	4.75	Unfiltered		ES
RD-29		Duplicate	03/05/09	Americium-241	0.081 U	0.23	0.929	Unfiltered		ES
RD-29		Primary	03/05/09	Strontium-90	-0.132 U	0.28	0.604	Filtered		ES
RD-29		Primary	03/05/09	Strontium-90	-0.075 U	0.26	0.562	Unfiltered		ES
RD-29		Duplicate	03/05/09	Strontium-90	0.062 U	0.27	0.555	Unfiltered		ES
RD-29		Primary	03/05/09	Uranium-233/234	9.98	1.1	0.134	Unfiltered		ES
RD-29		Duplicate	03/05/09	Uranium-233/234	9.71	1.1	0.128	Unfiltered		ES
RD-29		Primary	03/05/09	Uranium-235	0.518 J	0.17	0.086	Unfiltered		ES
RD-29		Duplicate	03/05/09	Uranium-235	0.53 J	0.16	0.083	Unfiltered		ES
RD-29		Primary	03/05/09	Uranium-238	9.27	1	0.125	Unfiltered		ES
RD-29		Duplicate	03/05/09	Uranium-238	9.56	1.1	0.12	Unfiltered		ES
RD-29		Primary	07/24/09	Strontium-90	-0.054 U	0.2	0.407	Filtered		ES
RD-29		Primary	07/24/09	Strontium-90	-0.049 U	0.23	0.439	Unfiltered		ES
RD-30		Primary	02/08/95	Uranium-235	10 U	36	54	Filtered		LAS
RD-30		Primary	08/19/95	Uranium-235	-5 U	31	52	Filtered		LAS
RD-30		Primary	02/28/96	Uranium-235	-5 U	28	43	Filtered		LAS
RD-30		Primary	08/20/96	Uranium-233/234	5.63	0.61	0.11	Filtered		ES
RD-30		Primary	08/20/96	Uranium-235	0.49	0.16	0.078	Filtered		LAS
RD-30		Primary	08/20/96	Uranium-235	-2 U	27	47	Filtered		LAS
RD-30		Primary	08/20/96	Uranium-238	5.54	0.6	0.11	Filtered		LAS
RD-30		Primary	02/25/97	Uranium-235	-46 U	24	60	Filtered		LAS
RD-30		Primary	08/27/97	Radium-226	-10 U	130	210	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-30		Primary	08/27/97	Radium-226	-3 U	75	110	Unfiltered		LAS
RD-30		Primary	08/27/97	Uranium-235	7 U	29	44	Filtered		LAS
RD-30		Primary	08/27/97	Uranium-235	7 U	20	30	Unfiltered		LAS
RD-30		Primary	05/28/98	Radium-226	111 U	---	111	Filtered		TN
RD-30		Primary	05/28/98	Uranium-235	34.2 U	---	34.2	Filtered		TN
RD-30		Primary	08/05/98	Radium-226	170 U	---	170	Filtered		TN
RD-30		Primary	08/05/98	Uranium-235	52.8 U	---	52.8	Filtered		TN
RD-30		Primary	11/14/03	Radium-226	0.235 J	0.045	0.025	Filtered		ES
RD-30		Primary	11/14/03	Radium-228	0.261 U	0.2	0.515	Filtered		ES
RD-30		Primary	02/24/04	Radium-226	0.424 J	0.072	0.037	Filtered		ES
RD-30		Primary	02/24/04	Radium-228	0.35 U	0.14	0.358	Filtered		ES
RD-30		Primary	08/10/04	Radium-226	0.429 J	0.081	0.058	Filtered		ES
RD-30		Primary	08/10/04	Radium-228	0.368 U	0.19	0.497	Filtered		ES
RD-30		Primary	08/29/05	Radium-226	0.728 J	0.42	0.624	Filtered		ES
RD-30		Split	08/29/05	Radium-226	0.401 J	0.16	0.145	Filtered		STL
RD-30		Primary	08/29/05	Radium-228	0.363 U	0.26	0.677	Filtered		ES
RD-30		Split	08/29/05	Radium-228	1.09	0.34	0.34	Filtered		STL
RD-30		Primary	02/17/06	Radium-226	0.474 U	0.42	0.677	Filtered		ES
RD-30		Primary	02/17/06	Radium-228	0.228 U	0.81	0.396	Filtered		ES
RD-30		Primary	08/09/06	Radium-226	0.318 U	0.46	0.778	Filtered		ES
RD-30		Split	08/09/06	Radium-226	0.333 J	0.17	0.216	Filtered		STL
RD-30		Primary	08/09/06	Radium-228	0.568 J	0.17	0.408	Filtered		ES
RD-30		Split	08/09/06	Radium-228	0.7 J	0.35	0.673	Filtered		STL
RD-30		Primary	05/24/07	Radium-226	0.129 U	0.32	0.582	Filtered		ES
RD-30		Primary	05/24/07	Radium-228	0.684 J	0.15	0.396	Filtered		ES
RD-30		Primary	08/21/07	Radium-226	0.788 J	0.46	0.579	Filtered		ES
RD-30		Primary	08/21/07	Radium-228	0.248 U	0.22	0.378	Filtered		ES
RD-30		Primary	02/06/08	Radium-226	0.314 U	0.5	0.859	Filtered		ES
RD-30		Primary	02/06/08	Radium-228	-0.116 U	0.13	0.375	Filtered		ES
RD-30		Primary	02/06/08	Strontium-90	-0.088 U	0.27	0.562	Filtered		ES
RD-30		Primary	08/13/08	Americium-241	0.966 U	---	0.966	Filtered		ES
RD-30		Primary	08/13/08	Radium-226	0.161 U	0.43	0.78	Filtered		ES
RD-30		Primary	08/13/08	Radium-228	0.817 J	0.43	0.531	Filtered		ES
RD-33A		Primary	05/10/94	Radium-226	-7 U	60	81	Filtered		LAS
RD-33A		Primary	05/10/94	Radium-226	-230 U	100	150	Unfiltered		LAS
RD-33A		Primary	05/10/94	Strontium-90	-0.07 U	0.64	0.8	Filtered		LAS
RD-33A		Primary	05/10/94	Uranium-235	0 U	18	26	Filtered		LAS
RD-33A		Primary	05/10/94	Uranium-235	17 U	25	35	Unfiltered		LAS
RD-33A		Primary	02/07/95	Uranium-235	-5 U	28	44	Filtered		LAS
RD-33A		Primary	08/09/95	Uranium-235	-21.9 U	7.3	43	Filtered		LAS
RD-33A		Primary	02/19/96	Uranium-235	3 U	28	42	Filtered		LAS
RD-33A		Primary	08/23/96	Uranium-235	-21 U	25	47	Filtered		LAS
RD-33A		Primary	02/25/97	Uranium-235	-14 U	24	43	Filtered		LAS
RD-33A		Primary	08/27/97	Radium-226	-30 U	120	190	Filtered		LAS
RD-33A		Primary	08/27/97	Radium-226	60 U	120	180	Unfiltered		LAS
RD-33A		Primary	08/27/97	Uranium-235	24 U	28	39	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33A		Primary	08/27/97	Uranium-235	20 U	30	44	Unfiltered		LAS
RD-33A		Primary	05/27/98	Radium-226	218 U	---	218	Filtered		TN
RD-33A		Primary	05/27/98	Uranium-235	80.6 U	---	80.6	Filtered		TN
RD-33A		Primary	08/17/98	Radium-226	171 U	---	171	Filtered		TN
RD-33A		Primary	08/17/98	Uranium-235	63 U	---	63	Filtered		TN
RD-33A	Z02	Primary	11/15/04	Radium-226	0.247 U	0.26	0.41	Filtered		ES
RD-33A	Z02	Primary	11/15/04	Radium-228	1.65	0.29	0.54	Filtered		ES
RD-33A	Z03	Primary	02/17/05	Radium-226	0.78 J	0.47	0.657	Filtered		ES
RD-33A	Z03	Primary	02/17/05	Radium-228	2.19	0.32	0.584	Filtered		ES
RD-33A	Z03	Primary	09/01/05	Radium-226	0.604 J	0.3	0.373	Filtered		ES
RD-33A	Z03	Primary	09/01/05	Radium-228	2.69	0.42	0.8	Filtered		ES
RD-33A	Z02	Primary	02/17/06	Radium-226	1.29	0.55	0.649	Filtered		ES
RD-33A	Z02	Primary	02/17/06	Radium-228	1.89	0.25	0.447	Filtered		ES
RD-33A	Z03	Primary	08/18/06	Radium-226	0.549 U	0.51	0.803	Filtered		ES
RD-33A	Z03	Primary	08/18/06	Radium-228	2.16	0.26	0.461	Filtered		ES
RD-33A	Z02	Primary	02/08/07	Radium-226	0.539 U	0.46	0.719	Filtered		ES
RD-33A	Z02	Primary	02/08/07	Radium-228	1.14	0.48	0.39	Filtered		ES
RD-33A	Z02	Primary	08/13/07	Radium-226	0.262 U	0.34	0.568	Filtered		ES
RD-33A	Z02	Primary	08/13/07	Radium-228	1.93	0.24	0.43	Filtered		ES
RD-33A	Z02	Primary	02/07/08	Radium-226	0.837 J	0.5	0.716	Filtered		ES
RD-33A	Z02	Primary	02/07/08	Radium-228	5.98	0.43	0.392	Filtered		ES
RD-33A	Z02	Primary	02/07/08	Strontium-90	0.043 U	0.24	0.439	Filtered		ES
RD-33A	Z02	Primary	08/08/08	Radium-226	0.963 J	0.51	0.64	Filtered		ES
RD-33A	Z02	Primary	08/08/08	Radium-228	1.95	0.34	0.55	Filtered		ES
RD-33A	Z02	Primary	02/25/09	Americium-241	-1.72 U	5	8.59	Filtered		ES
RD-33A	Z02	Primary	02/25/09	Americium-241	0.306 U	0.28	0.864	Unfiltered		ES
RD-33A	Z02	Primary	02/25/09	Strontium-90	-0.148 U	0.31	0.627	Filtered		ES
RD-33A	Z02	Primary	02/25/09	Strontium-90	-0.165 U	0.25	0.536	Unfiltered		ES
RD-33A	Z02	Primary	07/17/09	Strontium-90	-0.039 U	0.26	0.516	Filtered		ES
RD-33A	Z02	Primary	07/17/09	Strontium-90	0.088 U	0.28	0.532	Unfiltered		ES
RD-33B		Primary	05/10/94	Radium-226	-30 U	100	150	Filtered		LAS
RD-33B		Primary	05/10/94	Radium-226	0 U	110	150	Unfiltered		LAS
RD-33B		Primary	05/10/94	Strontium-90	0.06 U	0.69	0.84	Filtered		LAS
RD-33B		Primary	05/10/94	Uranium-235	-7 U	23	33	Filtered		LAS
RD-33B		Primary	05/10/94	Uranium-235	-11 U	19	34	Unfiltered		LAS
RD-33B		Primary	02/07/95	Uranium-235	-8 U	28	44	Filtered		LAS
RD-33B		Primary	08/09/95	Uranium-235	13 U	26	38	Filtered		LAS
RD-33B		Primary	02/19/96	Uranium-235	-2 U	27	42	Filtered		LAS
RD-33B		Primary	08/23/96	Uranium-235	-5 U	24	42	Filtered		LAS
RD-33B		Primary	02/25/97	Uranium-235	-2 U	26	40	Filtered		LAS
RD-33B		Primary	08/22/97	Radium-226	-40 U	110	170	Filtered		LAS
RD-33B		Primary	08/22/97	Uranium-235	0 U	26	40	Filtered		LAS
RD-33B		Primary	05/27/98	Radium-226	92.8 U	---	92.8	Filtered		TN
RD-33B		Primary	05/27/98	Uranium-235	28 U	---	28	Filtered		TN
RD-33B		Primary	08/17/98	Radium-226	205 U	---	205	Filtered		TN
RD-33B		Primary	08/17/98	Uranium-235	72.2 U	---	72.2	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33B		Primary	11/04/04	Radium-226	1.38	0.41	0.403	Filtered		ES
RD-33B		Primary	11/04/04	Radium-228	1.13	0.29	0.638	Filtered		ES
RD-33B		Primary	02/17/05	Radium-226	1.05	0.32	0.255	Filtered		ES
RD-33B		Split	02/17/05	Radium-226	1.34	0.31	0.0766	Filtered		STL
RD-33B		Primary	02/17/05	Radium-228	1.38	0.32	0.606	Filtered		ES
RD-33B		Split	02/17/05	Radium-228	2.47	0.6	0.385	Filtered		STL
RD-33B		Primary	08/22/05	Radium-226	0.041 J	0.026	0.039	Filtered		ES
RD-33B		Split	08/22/05	Radium-226	0.949 J	0.26	0.155	Filtered		STL
RD-33B		Primary	08/22/05	Radium-228	1.26	0.25	0.527	Filtered		ES
RD-33B		Split	08/22/05	Radium-228	1.89	0.5	0.383	Filtered		STL
RD-33B		Primary	02/16/06	Radium-226	0.805 J	0.53	0.78	Filtered		ES
RD-33B		Primary	02/16/06	Radium-228	1.41	0.24	0.503	Filtered		ES
RD-33B		Primary	08/09/06	Radium-226	1.18	0.57	0.723	Filtered		ES
RD-33B		Split	08/09/06	Radium-226	0.876 J	0.25	0.181	Filtered		STL
RD-33B		Primary	08/09/06	Radium-228	1.4	0.22	0.444	Filtered		ES
RD-33B		Split	08/09/06	Radium-228	2.18	0.43	0.464	Filtered		STL
RD-33B		Primary	02/07/07	Radium-226	1.37	0.62	0.789	Filtered		ES
RD-33B		Primary	02/07/07	Radium-228	1.32	0.43	0.34	Filtered		ES
RD-33B		Primary	08/14/07	Radium-226	0.772 J	0.47	0.658	Filtered		ES
RD-33B		Reanalysis of Primary	08/14/07	Radium-226	0.744 J	0.48	0.672	Filtered		ES
RD-33B		Primary	08/14/07	Radium-228	0.978 J	0.23	0.494	Filtered		ES
RD-33B		Reanalysis of Primary	08/14/07	Radium-228	1.09	0.25	0.517	Filtered		ES
RD-33B		Primary	02/13/08	Radium-226	0.056 U	0.46	0.872	Filtered		ES
RD-33B		Primary	02/13/08	Radium-228	1.18	0.25	0.394	Filtered		ES
RD-33B		Primary	02/13/08	Strontium-90	0.014 U	0.3	0.599	Filtered		ES
RD-33B		Primary	08/07/08	Radium-226	0.575 J	0.33	0.419	Filtered		ES
RD-33B		Primary	08/07/08	Radium-228	0.844 J	0.24	0.51	Filtered		ES
RD-33B		Primary	03/05/09	Americium-241	-2.83 U	2.6	4.33	Unfiltered		ES
RD-33B		Reanalysis of Primary	03/05/09	Americium-241	-9.17 U	4.13	4.3	Filtered		ES
RD-33B		Reanalysis of Primary	03/05/09	Americium-241	-0.34 U	0.9	1	Filtered		ES
RD-33B		Duplicate	03/05/09	Americium-241	-0.389 U	0.94	1.05	Unfiltered		ES
RD-33B		Primary	03/05/09	Strontium-90	0.049 U	0.29	0.58	Filtered		ES
RD-33B		Primary	03/05/09	Strontium-90	0.045 U	0.27	0.555	Unfiltered		ES
RD-33B		Duplicate	03/05/09	Strontium-90	-0.051 U	0.29	0.594	Unfiltered		ES
RD-33B		Primary	08/04/09	Strontium-90	0.217 U	0.35	0.652	Filtered		ES
RD-33B		Primary	08/04/09	Strontium-90	-0.004 U	0.35	0.679	Unfiltered		ES
RD-33C		Primary	05/09/94	Radium-226	-60 U	100	140	Filtered		LAS
RD-33C		Primary	05/09/94	Radium-226	10 U	110	140	Unfiltered		LAS
RD-33C		Primary	05/09/94	Strontium-90	-0.04 U	0.8	0.99	Filtered		LAS
RD-33C		Primary	05/09/94	Uranium-235	-2 U	24	35	Filtered		LAS
RD-33C		Primary	05/09/94	Uranium-235	-18 U	15	34	Unfiltered		LAS
RD-33C		Primary	02/07/95	Uranium-235	-17 U	28	53	Filtered		LAS
RD-33C		Primary	08/09/95	Uranium-235	-3 U	26	40	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-33C		Primary	02/19/96	Uranium-235	-11 U	16	28	Filtered		LAS
RD-33C		Primary	08/22/96	Uranium-235	-2 U	29	46	Filtered		LAS
RD-33C		Primary	02/25/97	Uranium-235	-24 U	16	45	Filtered		LAS
RD-33C		Primary	08/21/97	Radium-226	40 U	130	200	Filtered		LAS
RD-33C		Primary	08/21/97	Uranium-235	-7 U	27	41	Filtered		LAS
RD-33C		Primary	05/27/98	Radium-226	193 U	---	193	Filtered		TN
RD-33C		Primary	05/27/98	Uranium-235	60.4 U	---	60.4	Filtered		TN
RD-33C		Primary	08/17/98	Radium-226	332 U	---	332	Filtered		TN
RD-33C		Primary	08/17/98	Uranium-235	116 U	---	116	Filtered		TN
RD-33C		Primary	11/04/04	Radium-226	1.04	0.37	0.411	Filtered		ES
RD-33C		Split	11/04/04	Radium-226	1.63	0.36	0.0752	Filtered		STL
RD-33C		Primary	11/04/04	Radium-228	2.08	0.31	0.578	Filtered		ES
RD-33C		Split	11/04/04	Radium-228	2.57	0.62	0.359	Filtered		STL
RD-33C		Primary	02/16/05	Radium-226	1.57	0.43	0.453	Filtered		ES
RD-33C		Primary	02/16/05	Radium-228	2.09	0.3	0.56	Filtered		ES
RD-33C		Primary	08/22/05	Radium-226	0.036 J	0.021	0.028	Filtered		ES
RD-33C		Primary	08/22/05	Radium-228	2.87	0.31	0.493	Filtered		ES
RD-33C		Primary	02/16/06	Radium-226	1.43	0.66	0.828	Filtered		ES
RD-33C		Primary	02/16/06	Radium-228	2.06	0.28	0.518	Filtered		ES
RD-33C		Primary	08/08/06	Radium-226	1.49	0.57	0.72	Filtered		ES
RD-33C		Primary	08/08/06	Radium-228	2.02	0.25	0.445	Filtered		ES
RD-33C		Primary	02/06/07	Radium-226	1.67	0.55	0.575	Filtered		ES
RD-33C		Primary	02/06/07	Radium-228	1.61	0.88	0.387	Filtered		ES
RD-33C		Primary	08/07/07	Radium-226	1.93	0.66	0.614	Filtered		ES
RD-33C		Primary	08/07/07	Radium-228	2.13	0.25	0.431	Filtered		ES
RD-33C		Primary	02/12/08	Radium-226	1.33	0.65	0.802	Filtered		ES
RD-33C		Primary	02/12/08	Radium-228	1.66	0.26	0.39	Filtered		ES
RD-33C		Primary	02/12/08	Strontium-90	-0.065 U	0.3	0.6	Filtered		ES
RD-33C		Primary	08/07/08	Radium-226	1.6	0.61	0.616	Filtered		ES
RD-33C		Primary	08/07/08	Radium-228	2.31	0.34	0.426	Filtered		ES
RD-33C		Primary	02/24/09	Americium-241	-1.04 U	0.94	0.996	Filtered		ES
RD-33C		Primary	02/24/09	Americium-241	-1.58 U	11	19	Unfiltered		ES
RD-33C		Split	02/24/09	Americium-241	9.5 U	6.99	10.8	Filtered		GEL
RD-33C		Split	02/24/09	Americium-241	-1.55 U	5.96	8.67	Unfiltered		GEL
RD-33C		Primary	02/24/09	Strontium-90	0.092 U	0.29	0.544	Filtered		ES
RD-33C		Primary	02/24/09	Strontium-90	0.178 U	0.28	0.525	Unfiltered		ES
RD-33C		Split	02/24/09	Strontium-90	-0.944 U	0.653	1.37	Unfiltered		GEL
RD-33C		Split	02/24/09	Strontium-90, Dissolved	0.102 U	0.732	1.37	Filtered		GEL
RD-33C		Primary	07/24/09	Strontium-90	-0.082 U	0.33	0.551	Filtered		ES
RD-33C		Primary	07/24/09	Strontium-90	0.027 U	0.22	0.424	Unfiltered		ES
RD-33C		Split	07/24/09	Strontium-90	0.617 U	0.685	1.14	Unfiltered		GEL
RD-34A		Primary	09/13/92	Radium-226	1.6	0.3	0.6	Filtered		CEP
RD-34A		Primary	09/13/92	Radium-228	1 U	---	1	Filtered		CEP
RD-34A		Primary	09/13/92	Uranium-233/234	15.4	4.4	0.6	Unfiltered		CEP
RD-34A		Primary	09/13/92	Uranium-235	0.9	0.5	0.6	Unfiltered		CEP

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34A		Primary	09/13/92	Uranium-238	19.3	4.9	0.6	Unfiltered		CEP
RD-34A		Primary	12/05/92	Thorium-228	0.6 U	---	0.6	Filtered		CEP
RD-34A		Primary	12/05/92	Thorium-230	0.6 U	---	0.6	Filtered		CEP
RD-34A		Primary	12/05/92	Thorium-232	0.6 U	---	0.6	Filtered		CEP
RD-34A		Primary	12/05/92	Uranium-233/234	1.22	0.92	0.6	Unfiltered		CEP
RD-34A		Primary	12/05/92	Uranium-235	0.6 U	---	0.6	Unfiltered		CEP
RD-34A		Primary	12/05/92	Uranium-238	1.42	0.44	0.6	Unfiltered		CEP
RD-34A		Primary	03/09/93	Thorium-228	0.6 U	---	0.6	Filtered		CEP
RD-34A		Primary	03/09/93	Thorium-230	0.6 U	---	0.6	Filtered		CEP
RD-34A		Primary	03/09/93	Thorium-232	0.6 U	---	0.6	Filtered		CEP
RD-34A		Primary	03/09/93	Uranium-233/234	12.1	4.9	0.6	Filtered		CEP
RD-34A		Primary	03/09/93	Uranium-235	0.6 U	---	0.6	Filtered		CEP
RD-34A		Primary	03/09/93	Uranium-238	10.8	5.4	0.6	Filtered		CEP
RD-34A		Primary	06/22/93	Uranium-233/234	0.9	0.2	0.6	Filtered		CEP
RD-34A		Primary	06/22/93	Uranium-235	0.3 U	0.3	0.6	Filtered		CEP
RD-34A		Primary	06/22/93	Uranium-238	1.3	0.2	0.6	Filtered		CEP
RD-34A		Primary	08/24/93	Uranium-233/234	10.3	1.6	0.6	Filtered		LAS
RD-34A		Primary	08/24/93	Uranium-233/234	4.6	0.6	0.6	Filtered		CEP
RD-34A		Primary	08/24/93	Uranium-235	0.78	0.39	0.13	Filtered		LAS
RD-34A		Primary	08/24/93	Uranium-235	0.2 U	0.1	0.6	Filtered		CEP
RD-34A		Primary	08/24/93	Uranium-238	11.7	1.8	0.2	Filtered		LAS
RD-34A		Primary	08/24/93	Uranium-238	4.9	0.7	0.6	Filtered		CEP
RD-34A		Primary	11/18/93	Americium-241	15.7 U	---	15.7	Filtered		CEP
RD-34A		Primary	11/18/93	Radium-226	79.731	57.96	---	Filtered		LAS
RD-34A		Primary	11/18/93	Thorium-228	-0.12 U	0.22	---	Filtered		LAS
RD-34A		Primary	11/18/93	Thorium-230	0.76	0.37	0.21	Filtered		LAS
RD-34A		Primary	11/18/93	Thorium-232	0.33	0.25	0.19	Filtered		LAS
RD-34A		Primary	11/18/93	Uranium-233/234	10.3	1.6	0.2	Filtered		CEP
RD-34A		Primary	11/18/93	Uranium-235	0.78	0.39	---	Filtered		LAS
RD-34A		Primary	11/18/93	Uranium-238	11.7	1.8	---	Filtered		LAS
RD-34A		Primary	05/09/94	Radium-226	40 U	120	170	Filtered		LAS
RD-34A		Primary	05/09/94	Radium-226	100 U	130	180	Unfiltered		LAS
RD-34A		Primary	05/09/94	Strontium-90	-0.28 U	0.63	0.8	Filtered		LAS
RD-34A		Primary	05/09/94	Uranium-235	-23 U	25	46	Filtered		LAS
RD-34A		Primary	05/09/94	Uranium-235	-12 U	15	51	Unfiltered		LAS
RD-34A		Primary	11/09/94	Technetium-99	1.3 U	1.1	1.8	Unfiltered		LAS
RD-34A		Primary	02/07/95	Uranium-235	2 U	26	46	Filtered		LAS
RD-34A		Primary	08/09/95	Uranium-235	10 U	26	39	Filtered		LAS
RD-34A		Primary	02/19/96	Uranium-235	-14.9 U	7.2	45	Filtered		LAS
RD-34A		Primary	08/18/96	Uranium-235	9 U	31	48	Filtered		LAS
RD-34A		Primary	02/07/97	Uranium-235	29 U	29	45	Filtered		LAS
RD-34A		Primary	05/27/98	Radium-226	209 U	---	209	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34A		Primary	05/27/98	Thorium-228	0.04 U	---	0.04	Filtered		TN
RD-34A		Primary	05/27/98	Thorium-230	0.08 U	---	0.08	Filtered		TN
RD-34A		Primary	05/27/98	Thorium-232	0.01 U	0.02	0.04	Filtered		TN
RD-34A		Primary	05/27/98	Uranium-233/234	9.6	0.89	0.15	Filtered		TN
RD-34A		Primary	05/27/98	Uranium-235	82.7 U	---	82.7	Filtered		TN
RD-34A		Primary	05/27/98	Uranium-235	0.57	0.18	0.1	Filtered		TN
RD-34A		Primary	05/27/98	Uranium-238	10.5	0.95	0.14	Filtered		TN
RD-34A		Primary	08/18/98	Radium-226	221 U	---	221	Filtered		TN
RD-34A		Primary	08/18/98	Uranium-235	69 U	---	69	Filtered		TN
RD-34A		Primary	05/09/01	Thorium-228	0.05 U	0.17	0.32	Filtered		TN
RD-34A		Primary	05/09/01	Thorium-230	0.05 U	0.13	0.185	Filtered		ES
RD-34A		Primary	05/09/01	Thorium-232	0.034 U	0.034	0.128	Filtered		ES
RD-34A		Primary	05/09/01	Uranium-233/234	10	0.54	0.091	Filtered		ES
RD-34A		Primary	05/09/01	Uranium-235	0.523	0.096	0.041	Filtered		ES
RD-34A		Primary	05/09/01	Uranium-238	10.6	0.56	0.072	Filtered		ES
RD-34A		Primary	05/16/03	Thorium-228	0.017 U	0.058	0.111	Filtered		ES
RD-34A		Primary	05/16/03	Thorium-230	0.058 U	0.058	0.126	Filtered		ES
RD-34A		Primary	05/16/03	Thorium-232	0.006 U	0.023	0.045	Filtered		ES
RD-34A		Primary	05/16/03	Uranium-233/234	8.23	0.62	0.09	Filtered		ES
RD-34A		Primary	05/16/03	Uranium-235	0.362	0.098	0.057	Filtered		ES
RD-34A		Primary	05/16/03	Uranium-238	8.52	0.64	0.079	Filtered		ES
RD-34A		Primary	05/17/04	Radium-226	0.397 J	0.06	0.035	Filtered		ES
RD-34A		Primary	05/17/04	Radium-228	0.891 J	0.2	0.463	Filtered		ES
RD-34A		Primary	05/17/04	Thorium-228	0.02 U	0.026	0.04	Filtered		ES
RD-34A		Primary	05/17/04	Thorium-230	-0.02 U	0.046	0.102	Filtered		ES
RD-34A		Primary	05/17/04	Thorium-232	-0.013 U	0.007	0.031	Filtered		ES
RD-34A		Primary	05/17/04	Uranium-233/234	7.82	0.55	0.067	Filtered		ES
RD-34A		Primary	05/17/04	Uranium-235	0.433 J	0.086	0.031	Filtered		ES
RD-34A		Primary	05/17/04	Uranium-238	7.79	0.55	0.062	Filtered		ES
RD-34A		Primary	08/09/04	Radium-226	0.284 J	0.068	0.058	Filtered		ES
RD-34A		Primary	08/09/04	Radium-228	0.726 J	0.18	0.421	Filtered		ES
RD-34A		Primary	08/09/04	Uranium-233/234	7.16	0.64	0.101	Filtered		ES
RD-34A		Primary	08/09/04	Uranium-235	0.366 J	0.12	0.065	Filtered		ES
RD-34A		Primary	08/09/04	Uranium-238	7.84	0.69	0.086	Filtered		ES
RD-34A		Primary	02/17/05	Radium-226	0.231 U	0.32	0.535	Filtered		ES
RD-34A		Primary	02/17/05	Radium-228	0.24 U	0.2	0.547	Filtered		ES
RD-34A		Primary	02/17/05	Thorium-228	0.011 U	0.021	0.034	Filtered		ES
RD-34A		Primary	02/17/05	Thorium-230	0.214	0.08	0.097	Filtered		ES
RD-34A		Primary	02/17/05	Thorium-232	0.018 U	0.021	0.034	Filtered		ES
RD-34A		Primary	02/17/05	Uranium-233/234	8.18	0.58	0.068	Filtered		ES
RD-34A		Primary	02/17/05	Uranium-235	0.401 J	0.086	0.032	Filtered		ES
RD-34A		Primary	02/17/05	Uranium-238	8.47	0.6	0.064	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34A		Primary	08/25/05	Radium-226	0.096 U	0.43	0.794	Filtered		ES
RD-34A		Primary	08/25/05	Radium-228	1.34	0.27	0.571	Filtered		ES
RD-34A		Primary	08/25/05	Uranium-233/234	9.06	0.61	0.069	Filtered		ES
RD-34A		Primary	08/25/05	Uranium-235	0.519 J	0.096	0.029	Filtered		ES
RD-34A		Primary	08/25/05	Uranium-238	9.34	0.63	0.064	Filtered		ES
RD-34A		Primary	02/21/06	Radium-226	0.277 U	0.39	0.666	Filtered		ES
RD-34A		Primary	02/21/06	Radium-228	-0.103 U	0.53	0.422	Filtered		ES
RD-34A		Primary	02/21/06	Thorium-228	0.01 U	0.026	0.046	Filtered		ES
RD-34A		Primary	02/21/06	Thorium-230	0.003 U	0.051	0.1	Filtered		ES
RD-34A		Primary	02/21/06	Thorium-232	0.003 U	0.019	0.031	Filtered		ES
RD-34A		Primary	02/21/06	Uranium-233/234	8.82	0.57	0.054	Filtered		ES
RD-34A		Primary	02/21/06	Uranium-235	0.418 J	0.074	0.023	Filtered		ES
RD-34A		Primary	02/21/06	Uranium-238	9	0.58	0.05	Filtered		ES
RD-34A		Primary	11/16/06	Radium-226	0.801 J	0.52	0.75	Filtered		ES
RD-34A		Primary	11/16/06	Radium-228	0.859 J	0.22	0.499	Filtered		ES
RD-34A		Primary	11/16/06	Uranium-233/234	11	0.73	0.074	Filtered		ES
RD-34A		Primary	11/16/06	Uranium-235	0.628 JB	0.1	0.029	Filtered		ES
RD-34A		Primary	11/16/06	Uranium-238	11.2	0.75	0.071	Filtered		ES
RD-34A		Primary	02/15/07	Radium-226	0.194 U	0.32	0.545	Filtered		ES
RD-34A		Primary	02/15/07	Radium-228	0.079 U	0.16	0.372	Filtered		ES
RD-34A		Primary	02/15/07	Thorium-228	0.007 U	0.043	0.073	Filtered		ES
RD-34A		Primary	02/15/07	Thorium-230	0.002 U	0.047	0.098	Filtered		ES
RD-34A		Primary	02/15/07	Thorium-232	-0.014 U	0.01	0.034	Filtered		ES
RD-34A		Primary	02/15/07	Uranium-234	9.94	0.84	0.114	Filtered		ES
RD-34A		Primary	02/15/07	Uranium-235	0.547 J	0.14	0.065	Filtered		ES
RD-34A		Primary	02/15/07	Uranium-238	10.1	0.85	0.102	Filtered		ES
RD-34A		Primary	08/15/07	Radium-226	0.602 U	0.45	0.665	Filtered		ES
RD-34A		Primary	08/15/07	Radium-228	1.14	0.2	0.418	Filtered		ES
RD-34A		Primary	08/15/07	Uranium-233/234	9.89	0.64	0.064	Filtered		ES
RD-34A		Primary	08/15/07	Uranium-235	0.534 J	0.088	0.024	Filtered		ES
RD-34A		Primary	08/15/07	Uranium-238	10.7	0.69	0.058	Filtered		ES
RD-34A		Primary	02/06/08	Radium-226	0.5 U	0.5	0.803	Filtered		ES
RD-34A		Primary	02/06/08	Radium-228	-0.059 U	0.13	0.374	Filtered		ES
RD-34A		Primary	02/06/08	Strontium-90	-0.044 U	0.25	0.487	Filtered		ES
RD-34A		Primary	02/06/08	Thorium-228	0.016 U	0.065	0.112	Filtered		ES
RD-34A		Primary	02/06/08	Thorium-230	0.024 U	0.065	0.112	Filtered		ES
RD-34A		Primary	02/06/08	Thorium-232	0 U	0.016	0.039	Filtered		ES
RD-34A		Primary	02/06/08	Uranium-233/234	9.56	0.64	0.069	Filtered		ES
RD-34A		Primary	02/06/08	Uranium-235	0.554 J	0.099	0.034	Filtered		ES
RD-34A		Primary	02/06/08	Uranium-238	10.3	0.69	0.064	Filtered		ES
RD-34A		Primary	08/07/08	Radium-226	0.618 J	0.43	0.616	Filtered		ES
RD-34A		Primary	08/07/08	Radium-228	0.162 U	0.12	0.403	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34A		Primary	08/07/08	Uranium-233/234	9.22	0.86	0.069	Filtered		ES
RD-34A		Primary	08/07/08	Uranium-235	0.485 J	0.097	0.03	Filtered		ES
RD-34A		Primary	08/07/08	Uranium-238	9.85	0.91	0.063	Filtered		ES
RD-34A		Primary	03/05/09	Americium-241	-4.13 U	6	10.2	Filtered		ES
RD-34A		Primary	03/05/09	Americium-241	2.27 U	5.1	8.52	Unfiltered		ES
RD-34A		Primary	03/05/09	Strontium-90	0.084 U	0.28	0.557	Filtered		ES
RD-34A		Primary	03/05/09	Strontium-90	-0.161 U	0.29	0.618	Unfiltered		ES
RD-34A		Primary	07/28/09	Strontium-90	0.022 U	0.22	0.421	Filtered		ES
RD-34A		Primary	07/28/09	Strontium-90	-0.065 U	0.2	0.415	Unfiltered		ES
RD-34B		Primary	05/10/94	Radium-226	-42 U	62	85	Filtered		LAS
RD-34B		Primary	05/10/94	Radium-226	-70 U	100	150	Unfiltered		LAS
RD-34B		Primary	05/10/94	Strontium-90	-0.09 U	0.66	0.82	Filtered		ES
RD-34B		Primary	05/10/94	Uranium-235	0 U	18	25	Filtered		LAS
RD-34B		Primary	05/10/94	Uranium-235	-15 U	14	40	Unfiltered		LAS
RD-34B		Primary	02/07/95	Uranium-235	-9 U	27	54	Filtered		LAS
RD-34B		Primary	08/10/95	Uranium-235	-19 U	16	44	Filtered		LAS
RD-34B		Primary	02/19/96	Uranium-235	3 U	27	42	Filtered		LAS
RD-34B		Primary	08/18/96	Uranium-235	-4 U	28	42	Filtered		LAS
RD-34B		Primary	02/07/97	Uranium-235	-25 U	20	53	Filtered		LAS
RD-34B		Primary	08/21/97	Radium-226	30 U	120	180	Filtered		LAS
RD-34B		Primary	08/21/97	Uranium-235	-5 U	28	43	Filtered		LAS
RD-34B		Primary	05/27/98	Uranium-235	49.6 U	---	49.6	Filtered		TN
RD-34B		Primary	08/18/98	Radium-226	349 U	---	349	Filtered		TN
RD-34B		Primary	08/18/98	Uranium-235	76.9 U	---	76.9	Filtered		TN
RD-34B		Primary	02/05/00	Radium-226	165 U	---	165	Filtered		TR
RD-34B		Primary	02/24/04	Radium-226	0.899 J	0.1	0.039	Filtered		ES
RD-34B		Primary	02/24/04	Radium-228	1.52	0.2	0.363	Filtered		ES
RD-34B		Primary	02/24/04	Uranium-233/234	0.443 J	0.076	0.026	Filtered		ES
RD-34B		Primary	02/24/04	Uranium-235	0.01 U	0.02	0.032	Filtered		ES
RD-34B		Primary	02/24/04	Uranium-238	0.246 J	0.057	0.021	Filtered		ES
RD-34B		Primary	08/09/04	Radium-226	1.14	0.12	0.058	Filtered		ES
RD-34B		Primary	08/09/04	Radium-228	1.39	0.22	0.449	Filtered		ES
RD-34B		Primary	02/15/05	Radium-226	1.39	0.41	0.431	Filtered		ES
RD-34B		Primary	02/15/05	Radium-228	2.47	0.37	0.524	Filtered		ES
RD-34B		Primary	02/15/05	Uranium-233/234	1.39	0.17	0.029	Filtered		ES
RD-34B		Primary	02/15/05	Uranium-235	0.051 J	0.037	0.036	Filtered		ES
RD-34B		Primary	02/15/05	Uranium-238	1.2	0.15	0.029	Filtered		ES
RD-34B		Primary	08/23/05	Radium-226	1.26	0.57	0.723	Filtered		ES
RD-34B		Primary	08/23/05	Radium-228	2.45	0.3	0.494	Filtered		ES
RD-34B		Primary	02/17/06	Radium-226	1.52	0.55	0.672	Filtered		ES
RD-34B		Primary	02/17/06	Radium-228	0.044 U	0.35	0.626	Filtered		ES
RD-34B		Primary	02/17/06	Uranium-233/234	0.474 J	0.083	0.031	Filtered		ES
RD-34B		Primary	02/17/06	Uranium-235	0.024 U	0.024	0.03	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34B		Primary	02/17/06	Uranium-238	0.484 J	0.084	0.036	Filtered		ES
RD-34B		Primary	08/09/06	Radium-226	1.9	0.7	0.807	Filtered		ES
RD-34B		Primary	08/09/06	Radium-228	1.94	0.42	0.418	Filtered		ES
RD-34B		Primary	08/14/07	Radium-226	0.949 J	0.49	0.644	Filtered		ES
RD-34B		Primary	08/14/07	Radium-228	1.24	0.24	0.394	Filtered		ES
RD-34B		Primary	08/14/07	Uranium-233/234	0.592 J	0.089	0.028	Filtered		ES
RD-34B		Reanalysis of Primary	08/14/07	Uranium-233/234	0.631 J	0.098	0.031	Filtered		ES
RD-34B		Primary	08/14/07	Uranium-235	0.029 J	0.022	0.027	Filtered		ES
RD-34B		Reanalysis of Primary	08/14/07	Uranium-235	0.02 U	0.024	0.03	Filtered		ES
RD-34B		Primary	08/14/07	Uranium-238	0.51 J	0.082	0.028	Filtered		ES
RD-34B		Reanalysis of Primary	08/14/07	Uranium-238	0.432 J	0.082	0.031	Filtered		ES
RD-34B		Primary	02/06/08	Radium-226	1.36	0.59	0.72	Filtered		ES
RD-34B		Primary	02/06/08	Radium-228	0.01 U	0.008	0.012	Filtered		ES
RD-34B		Primary	02/06/08	Strontium-90	0.084 U	0.27	0.513	Filtered		ES
RD-34B		Primary	02/06/08	Uranium-233/234	1.34	0.16	0.041	Filtered		ES
RD-34B		Primary	02/06/08	Uranium-235	0.04 J	0.032	0.031	Filtered		ES
RD-34B		Primary	02/06/08	Uranium-238	1.18	0.14	0.032	Filtered		ES
RD-34B		Primary	08/07/08	Radium-226	0.468 J	0.33	0.455	Filtered		ES
RD-34B		Primary	08/07/08	Radium-228	1.39	0.25	0.4	Filtered		ES
RD-34B		Primary	02/20/09	Americium-241	-0.433 U	1.4	1.76	Filtered		ES
RD-34B		Primary	02/20/09	Americium-241	0.125 U	0.28	0.897	Unfiltered		ES
RD-34B		Primary	02/20/09	Strontium-90	-0.068 U	0.27	0.547	Filtered		ES
RD-34B		Primary	02/20/09	Strontium-90	0.057 U	0.27	0.522	Unfiltered		ES
RD-34B		Primary	07/28/09	Strontium-90	-0.068 U	0.2	0.411	Filtered		ES
RD-34B		Primary	07/28/09	Strontium-90	-0.048 U	0.2	0.417	Unfiltered		ES
RD-34C		Primary	05/09/94	Radium-226	-210 U	100	150	Filtered		LAS
RD-34C		Primary	05/09/94	Radium-226	0 U	110	160	Unfiltered		LAS
RD-34C		Primary	05/09/94	Strontium-90	-0.47 U	0.6	0.78	Filtered		LAS
RD-34C		Primary	05/09/94	Uranium-235	15 U	24	32	Filtered		LAS
RD-34C		Primary	05/09/94	Uranium-235	0 U	26	37	Unfiltered		LAS
RD-34C		Primary	02/07/95	Uranium-235	-2 U	25	44	Filtered		LAS
RD-34C		Primary	08/10/95	Uranium-235	11 U	26	38	Filtered		LAS
RD-34C		Primary	02/19/96	Uranium-235	-7 U	16	28	Filtered		LAS
RD-34C		Primary	08/19/96	Uranium-235	-11 U	28	45	Filtered		LAS
RD-34C		Primary	02/07/97	Uranium-235	4 U	16	28	Filtered		LAS
RD-34C		Primary	08/21/97	Radium-226	20 U	120	190	Filtered		LAS
RD-34C		Primary	08/21/97	Uranium-235	0 U	29	45	Filtered		LAS
RD-34C		Primary	05/27/98	Radium-226	125 U	---	125	Filtered		TN
RD-34C		Primary	05/27/98	Uranium-235	49.7 U	---	49.7	Filtered		TN
RD-34C		Primary	08/17/98	Radium-226	199 U	---	199	Filtered		TN
RD-34C		Primary	08/17/98	Uranium-235	72.2 U	---	72.2	Filtered		TN
RD-34C		Primary	02/24/04	Radium-226	0.789 J	0.097	0.034	Filtered		ES
RD-34C		Primary	02/24/04	Radium-228	1.35	0.19	0.36	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-34C		Primary	08/09/04	Radium-226	0.439 J	0.08	0.051	Filtered		ES
RD-34C		Split	08/09/04	Radium-226	0.892 J	0.347	0.0671	Filtered		STL
RD-34C		Primary	08/09/04	Radium-228	1.34	0.22	0.424	Filtered		ES
RD-34C		Split	08/09/04	Radium-228	3.18	0.936	0.995	Filtered		STL
RD-34C		Primary	02/15/05	Radium-226	0.458 U	0.34	0.522	Filtered		ES
RD-34C		Primary	02/15/05	Radium-228	1.8	0.28	0.549	Filtered		ES
RD-34C		Primary	08/23/05	Radium-226	0.433 U	0.49	0.794	Filtered		ES
RD-34C		Primary	08/23/05	Radium-228	1.78	0.28	0.543	Filtered		ES
RD-34C		Primary	02/21/06	Radium-226	0.55 U	0.44	0.682	Filtered		ES
RD-34C		Split	02/21/06	Radium-226	0.546 J	0.23	0.249	Filtered		STL
RD-34C		Primary	02/21/06	Radium-228	1.64	0.27	0.509	Filtered		ES
RD-34C		Split	02/21/06	Radium-228	1.64	0.426	0.53	Filtered		STL
RD-34C		Primary	08/09/06	Radium-226	0.981 J	0.54	0.743	Filtered		ES
RD-34C		Primary	08/09/06	Radium-228	1.68	0.24	0.445	Filtered		ES
RD-34C		Primary	02/07/07	Radium-226	1.19	0.61	0.78	Filtered		ES
RD-34C		Primary	02/07/07	Radium-228	1.1	0.26	0.354	Filtered		ES
RD-34C		Primary	08/08/07	Radium-226	1.07	0.61	0.827	Filtered		ES
RD-34C		Primary	08/08/07	Radium-228	1.41	0.21	0.427	Filtered		ES
RD-34C		Primary	02/12/08	Radium-226	1.31	0.67	0.791	Filtered		ES
RD-34C		Primary	02/12/08	Radium-228	1.41	0.24	0.389	Filtered		ES
RD-34C		Primary	02/12/08	Strontium-90	-0.106 U	0.39	0.675	Filtered		ES
RD-34C		Primary	08/07/08	Radium-226	0.827 J	0.48	0.651	Filtered		ES
RD-34C		Primary	08/07/08	Radium-228	0.907 J	0.9	0.403	Filtered		ES
RD-34C		Primary	02/19/09	Americium-241	0.288 U	0.96	6.34	Filtered		ES
RD-34C		Primary	02/19/09	Americium-241	-0.341 U	0.65	0.814	Unfiltered		ES
RD-34C		Primary	02/19/09	Strontium-90	-0.079 U	0.24	0.492	Filtered		ES
RD-34C		Primary	02/19/09	Strontium-90	-0.062 U	0.24	0.498	Unfiltered		ES
RD-34C		Primary	07/23/09	Strontium-90	-0.227 U	0.18	0.42	Filtered		ES
RD-34C		Primary	07/23/09	Strontium-90	0.088 U	0.26	0.479	Unfiltered		ES
RD-34C		Duplicate	07/23/09	Strontium-90	0.051 U	0.22	0.424	Filtered		ES
RD-34C		Duplicate	07/23/09	Strontium-90	-0.018 U	0.21	0.415	Unfiltered		ES
RD-34C		Reanalysis of Split	07/23/09	Strontium-90	1.02 U	0.888	1.42	Unfiltered		GEL
RD-34C		Split	07/23/09	Strontium-90, Dissolved	0.335 U	0.619	1.11	Filtered		GEL
RD-35B		Primary	08/18/99	Thorium-228	0 U	0.18	0.376	Filtered		TN
RD-35B		Primary	08/18/99	Thorium-230	-0.044 U	0.13	0.212	Filtered		TN
RD-35B		Primary	08/18/99	Thorium-232	0.022 U	0.044	0.17	Filtered		TN
RD-35B		Primary	08/18/99	Uranium-233/234	0.713	0.19	0.099	Filtered		TN
RD-35B		Primary	08/18/99	Uranium-235	0.05 U	0.05	0.096	Filtered		TN
RD-35B		Primary	08/18/99	Uranium-238	0.362	0.13	0.079	Filtered		TN
RD-44		Primary	08/24/97	Radium-226	0 U	120	180	Filtered		TN
RD-44		Primary	08/24/97	Radon-222	358	31	---	Unfiltered		TN
RD-44		Primary	08/24/97	Uranium-235	7 U	27	39	Filtered		TN
RD-47		Primary	08/24/97	Radium-226	-50 U	120	190	Filtered		LAS
RD-47		Primary	08/24/97	Radon-222	698	47	---	Unfiltered		LAS

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-47		Primary	08/24/97	Uranium-235	-14 U	28	45	Filtered		LAS
RD-50		Primary	05/05/94	Radium-226	0 U	110	150	Filtered		LAS
RD-50		Primary	05/05/94	Uranium-233/234	5.85	0.89	0.15	Filtered		LAS
RD-50		Primary	05/05/94	Uranium-235	1.22	0.39	0.12	Filtered		LAS
RD-50		Primary	05/05/94	Uranium-235	-4 U	20	34	Filtered		LAS
RD-50		Primary	05/05/94	Uranium-238	3.24	0.65	0.17	Filtered		LAS
RD-50		Primary	05/19/95	Uranium-235	-2 U	19	30	Filtered		LAS
RD-50		Primary	05/05/97	Uranium-235	0 U	29	41	Filtered		LAS
RD-50		Primary	05/28/98	Radium-226	193 U	---	193	Filtered		TN
RD-50		Primary	05/28/98	Uranium-235	71 U	---	71	Filtered		TN
RD-54A		Primary	05/08/94	Radium-226	-84 U	96	150	Filtered		LAS
RD-54A		Primary	05/08/94	Uranium-235	4 U	23	32	Filtered		LAS
RD-54A		Primary	08/03/95	Uranium-235	0 U	33	52	Filtered		LAS
RD-54A		Primary	08/23/96	Uranium-235	-9 U	28	44	Filtered		LAS
RD-54A		Primary	05/05/97	Uranium-235	-8 U	18	29	Filtered		LAS
RD-54A		Primary	08/22/97	Radium-226	0 U	120	180	Filtered		LAS
RD-54A		Primary	08/22/97	Uranium-235	-5 U	27	42	Filtered		LAS
RD-54A		Primary	02/08/98	Radium-226	185 U	---	185	Filtered		TN
RD-54A		Primary	02/08/98	Thorium-228	0.011 U	0.034	0.057	Filtered		TN
RD-54A		Primary	02/08/98	Thorium-230	0.077 U	---	0.077	Filtered		TN
RD-54A		Primary	02/08/98	Thorium-232	0.025	0.017	0.022	Filtered		TN
RD-54A		Primary	02/08/98	Uranium-233/234	0.65	0.079	0.023	Filtered		TN
RD-54A		Primary	02/08/98	Uranium-235	59.4 U	---	59.4	Filtered		TN
RD-54A		Primary	02/08/98	Uranium-235	0.015 U	0.015	0.02	Filtered		TN
RD-54A		Primary	02/08/98	Uranium-238	0.496	0.065	0.016	Filtered		TN
RD-54A		Primary	08/07/98	Radium-226	301 U	---	301	Filtered		TN
RD-54A		Primary	08/07/98	Uranium-235	134 U	---	134	Filtered		TN
RD-54A		Primary	02/08/99	Thorium-228	0.007 U	0.07	0.124	Filtered		TN
RD-54A		Primary	02/08/99	Thorium-230	0.028 U	0.07	0.094	Filtered		TN
RD-54A		Primary	02/08/99	Thorium-232	0 U	0.014	0.054	Filtered		TN
RD-54A		Primary	02/08/99	Uranium-233/234	6.58	0.42	0.074	Filtered		TN
RD-54A		Primary	02/08/99	Uranium-235	0.307	0.079	0.037	Filtered		TN
RD-54A		Primary	02/08/99	Uranium-238	5.79	0.39	0.058	Filtered		TN
RD-54A		Primary	03/15/00	Thorium-228	0.09 U	0.13	0.208	Filtered		TN
RD-54A		Primary	03/15/00	Thorium-230	0.822	0.26	0.237	Filtered		TR
RD-54A		Primary	03/15/00	Thorium-232	0.026 U	0.051	0.098	Filtered		TR
RD-54A		Primary	03/15/00	Uranium-233/234	1.55	0.34	0.126	Filtered		TR
RD-54A		Primary	03/15/00	Uranium-235	0.08 U	0.08	0.152	Filtered		TR
RD-54A		Primary	03/15/00	Uranium-238	1.53	0.34	0.126	Filtered		TR
RD-54A		Primary	10/26/01	Thorium-228	0.36	0.2	0.25	Filtered		TR
RD-54A		Primary	10/26/01	Thorium-230	0.44	0.61	0.11	Filtered		DL
RD-54A		Primary	10/26/01	Thorium-232	0.55	0.05	0.09	Filtered		DL

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54A		Primary	10/26/01	Uranium-233/234	8.82	0.23	0.06	Filtered		DL
RD-54A		Primary	10/26/01	Uranium-235	0.22	0.04	0.04	Filtered		DL
RD-54A		Primary	10/26/01	Uranium-238	7.34	0.21	0.05	Filtered		DL
RD-54A		Primary	02/27/02	Thorium-228	0 U	1	1	Filtered		DL
RD-54A		Primary	02/27/02	Thorium-230	0 U	1	1	Filtered		DL
RD-54A		Primary	02/27/02	Thorium-232	0 U	1	1	Filtered		DL
RD-54A		Primary	02/27/02	Uranium-233/234	4.1	0.19	1	Filtered		DL
RD-54A		Primary	02/27/02	Uranium-235	0.1 U	0.1	1	Filtered		DL
RD-54A		Primary	02/27/02	Uranium-238	4	0.17	1	Filtered		DL
RD-54A	Z02	Primary	02/18/03	Thorium-228	0.052 U	0.048	0.067	Filtered		ES
RD-54A	Z02	Primary	02/18/03	Thorium-230	0.091 U	0.1	0.235	Filtered		ES
RD-54A	Z02	Primary	02/18/03	Thorium-232	-0.004 U	0.016	0.038	Filtered		ES
RD-54A	Z02	Primary	02/18/03	Uranium-233/234	7.13	0.5	0.105	Filtered		ES
RD-54A	Z02	Primary	02/18/03	Uranium-235	0.389	0.12	0.068	Filtered		ES
RD-54A	Z02	Primary	02/18/03	Uranium-238	6.18	0.45	0.098	Filtered		ES
RD-54A	Z02	Primary	11/03/04	Radium-226	0.687 J	0.32	0.395	Filtered		ES
RD-54A	Z02	Primary	11/03/04	Radium-228	1.62	0.29	0.597	Filtered		ES
RD-54A	Z02	Primary	11/03/04	Thorium-228	0.016 U	0.026	0.04	Filtered		ES
RD-54A	Z02	Primary	11/03/04	Thorium-230	-0.003 U	0.052	0.1	Filtered		ES
RD-54A	Z02	Primary	11/03/04	Thorium-232	-0.003 U	0.013	0.025	Filtered		ES
RD-54A	Z02	Primary	02/16/05	Radium-226	1.27	0.55	0.689	Filtered		ES
RD-54A	Z02	Primary	02/16/05	Radium-228	1.96	0.33	0.602	Filtered		ES
RD-54A	Z02	Primary	02/16/05	Thorium-228	0.01 U	0.02	0.033	Filtered		ES
RD-54A	Z02	Primary	02/16/05	Thorium-230	0.129	0.068	0.107	Filtered		ES
RD-54A	Z02	Primary	02/16/05	Thorium-232	0.034 J	0.027	0.026	Filtered		ES
RD-54A	Z02	Primary	02/16/05	Uranium-233/234	5.06	0.38	0.046	Filtered		ES
RD-54A	Z02	Primary	02/16/05	Uranium-235	0.172 J	0.053	0.028	Filtered		ES
RD-54A	Z02	Primary	02/16/05	Uranium-238	4.12	0.32	0.044	Filtered		ES
RD-54A	Z02	Primary	08/31/05	Radium-226	0.636 J	0.41	0.581	Filtered		ES
RD-54A	Z02	Primary	08/31/05	Radium-228	2.52	0.35	0.646	Filtered		ES
RD-54A	Z02	Primary	08/31/05	Uranium-233/234	10.5	0.7	0.065	Filtered		ES
RD-54A	Z02	Primary	08/31/05	Uranium-235	0.454 J	0.089	0.03	Filtered		ES
RD-54A	Z02	Primary	08/31/05	Uranium-238	9.3	0.63	0.061	Filtered		ES
RD-54A	Z02	Primary	02/16/06	Radium-226	1.84	0.61	0.632	Filtered		ES
RD-54A	Z02	Primary	02/16/06	Radium-228	0.178 U	0.8	0.385	Filtered		ES
RD-54A	Z02	Primary	02/16/06	Thorium-228	0.061 U	0.051	0.068	Filtered		ES
RD-54A	Z02	Primary	02/16/06	Thorium-230	0.036 U	0.061	0.11	Filtered		ES
RD-54A	Z02	Primary	02/16/06	Thorium-232	-0.01 U	0.01	0.039	Filtered		ES
RD-54A	Z02	Primary	02/16/06	Uranium-233/234	10.6	0.72	0.071	Filtered		ES
RD-54A	Z02	Primary	02/16/06	Uranium-235	0.455 J	0.091	0.033	Filtered		ES
RD-54A	Z02	Primary	02/16/06	Uranium-238	9.47	0.66	0.066	Filtered		ES
RD-54A	Z02	Primary	08/17/06	Radium-226	1.01	0.61	0.872	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54A	Z02	Primary	08/17/06	Radium-228	1.16	0.2	0.424	Filtered		ES
RD-54A	Z02	Primary	02/07/07	Radium-226	1.29	0.63	0.825	Filtered		ES
RD-54A	Z02	Primary	02/07/07	Radium-228	1.07	0.27	0.328	Filtered		ES
RD-54A	Z02	Primary	02/07/07	Thorium-228	0.038 U	0.038	0.058	Filtered		ES
RD-54A	Z02	Primary	02/07/07	Thorium-230	-0.034 U	0.053	0.103	Filtered		ES
RD-54A	Z02	Primary	02/07/07	Thorium-232	0 U	0.015	0.029	Filtered		ES
RD-54A	Z02	Primary	08/10/07	Radium-226	1.46	0.6	0.701	Filtered		ES
RD-54A	Z02	Primary	08/10/07	Radium-228	1.39	0.23	0.462	Filtered		ES
RD-54A	Z02	Primary	08/10/07	Uranium-233/234	8	0.68	0.084	Filtered		ES
RD-54A	Z02	Primary	08/10/07	Uranium-235	0.312 J	0.093	0.058	Filtered		ES
RD-54A	Z02	Primary	08/10/07	Uranium-238	6.9	0.61	0.077	Filtered		ES
RD-54A	Z02	Primary	02/06/08	Radium-226	1.56	0.61	0.746	Filtered		ES
RD-54A	Z02	Primary	02/06/08	Radium-228	1.12	0.067	0.41	Filtered		ES
RD-54A	Z02	Primary	02/06/08	Strontium-90	-0.115 U	0.24	0.498	Filtered		ES
RD-54A	Z02	Primary	02/06/08	Thorium-228	0.051 U	0.065	0.105	Filtered		ES
RD-54A	Z02	Primary	02/06/08	Thorium-230	0.018 U	0.064	0.109	Filtered		ES
RD-54A	Z02	Primary	02/06/08	Thorium-232	-0.009 U	0.018	0.044	Filtered		ES
RD-54A	Z02	Primary	02/06/08	Uranium-233/234	7.18	0.51	0.056	Filtered		ES
RD-54A	Z02	Primary	02/06/08	Uranium-235	0.279 J	0.07	0.029	Filtered		ES
RD-54A	Z02	Primary	02/06/08	Uranium-238	5.82	0.43	0.048	Filtered		ES
RD-54A	Z02	Primary	08/07/08	Radium-226	0.609 J	0.41	0.583	Filtered		ES
RD-54A	Z02	Primary	08/07/08	Radium-228	0.937 J	0.44	0.483	Filtered		ES
RD-54A	Z02	Primary	02/24/09	Americium-241	0.689 U	0.95	2.73	Filtered		ES
RD-54A	Z02	Primary	02/24/09	Americium-241	-0.103 U	0.9	1	Unfiltered		ES
RD-54A	Z02	Primary	02/24/09	Strontium-90	-0.071 U	0.22	0.439	Filtered		ES
RD-54A	Z02	Primary	02/24/09	Strontium-90	-0.172 U	0.25	0.52	Unfiltered		ES
RD-54A	Z02	Primary	07/16/09	Strontium-90	-0.043 U	0.24	0.485	Filtered		ES
RD-54A	Z02	Primary	07/16/09	Strontium-90	0.106 U	0.29	0.549	Unfiltered		ES
RD-54B		Primary	05/08/94	Radium-226	20 U	110	150	Filtered		LAS
RD-54B		Primary	05/08/94	Uranium-235	-9 U	25	37	Filtered		LAS
RD-54B		Primary	08/30/95	Uranium-235	19 U	28	41	Filtered		LAS
RD-54B		Primary	08/23/96	Uranium-235	17 U	31	45	Filtered		LAS
RD-54B		Primary	08/22/97	Radium-226	35 U	70	100	Filtered		LAS
RD-54B		Primary	08/22/97	Uranium-235	-10.4 U	9.6	28	Filtered		LAS
RD-54B		Primary	02/08/98	Radium-226	85.7 U	---	85.7	Filtered		TN
RD-54B		Primary	02/08/98	Uranium-235	27.3 U	---	27.3	Filtered		TN
RD-54B		Primary	08/07/98	Radium-226	161 U	---	161	Filtered		TN
RD-54B		Primary	08/07/98	Uranium-235	56 U	---	56	Filtered		TN
RD-54B		Primary	02/08/99	Thorium-228	0.084 U	---	0.084	Filtered		TR
RD-54B		Primary	02/08/99	Thorium-230	-0.013 U	0.05	0.077	Filtered		TN
RD-54B		Primary	02/08/99	Thorium-232	-0.006 U	0.013	0.048	Filtered		TN
RD-54B		Primary	02/08/99	Uranium-233/234	0.062 U	0.048	0.064	Filtered		TN
RD-54B		Primary	02/08/99	Uranium-235	0.012 U	0.012	0.044	Filtered		TN
RD-54B		Primary	02/08/99	Uranium-238	0.048	0.029	0.036	Filtered		TN

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54B		Primary	02/16/05	Radium-226	1.11	0.36	0.422	Filtered		ES
RD-54B		Primary	02/16/05	Radium-228	2.86	0.31	0.492	Filtered		ES
RD-54B		Primary	08/22/05	Radium-226	0.079 J	0.028	0.033	Filtered		ES
RD-54B		Primary	08/22/05	Radium-228	4.01	0.39	0.54	Filtered		ES
RD-54B		Primary	02/20/06	Radium-226	1.71	0.56	0.676	Filtered		ES
RD-54B		Primary	02/20/06	Radium-228	3.05	0.31	0.518	Filtered		ES
RD-54B		Primary	08/23/06	Radium-226	2.21	0.71	0.728	Filtered		ES
RD-54B		Primary	08/23/06	Radium-228	2.91	0.27	0.412	Filtered		ES
RD-54B		Primary	02/12/07	Radium-226	1.24	0.51	0.654	Filtered		ES
RD-54B		Primary	02/12/07	Radium-228	1.99	1.3	0.374	Filtered		ES
RD-54B		Primary	08/14/07	Radium-226	2.51	0.65	0.621	Filtered		ES
RD-54B		Primary	08/14/07	Radium-228	2.66	0.25	0.413	Filtered		ES
RD-54B		Primary	02/14/08	Radium-226	0.983 J	0.58	0.733	Filtered		ES
RD-54B		Primary	02/14/08	Radium-228	2.26	0.34	0.43	Filtered		ES
RD-54B		Primary	02/14/08	Strontium-90	-0.005 U	0.26	0.502	Filtered		ES
RD-54B		Primary	11/07/08	Strontium-90	0.01 U	0.22	0.44	Filtered		ES
RD-54B		Primary	11/07/08	Strontium-90	-0.142 U	0.26	0.484	Unfiltered		ES
RD-54B		Primary	02/23/09	Americium-241	0.767 U	1.8	6.82	Filtered		ES
RD-54B		Primary	02/23/09	Americium-241	-2.8 U	2.4	4.07	Unfiltered		ES
RD-54B		Primary	02/23/09	Strontium-90	-0.082 U	0.18	0.389	Filtered		ES
RD-54B		Primary	02/23/09	Strontium-90	-0.082 U	0.22	0.454	Unfiltered		ES
RD-54B		Primary	10/30/09	Strontium-90	0.036 U	0.29	0.54	Filtered		TAD
RD-54B		Primary	10/30/09	Strontium-90	-0.108 U	0.23	0.477	Unfiltered		TAD
RD-54B		Duplicate	10/30/09	Strontium-90	-0.009 U	0.31	0.597	Filtered		TAD
RD-54B		Duplicate	10/30/09	Strontium-90	-0.105 U	0.26	0.547	Unfiltered		TAD
RD-54C		Primary	05/08/94	Radium-226	-20 U	30	200	Filtered		LAS
RD-54C		Primary	05/08/94	Uranium-235	0 U	0	32	Filtered		LAS
RD-54C		Primary	08/30/95	Uranium-235	-20 U	16	45	Filtered		LAS
RD-54C		Primary	08/23/96	Uranium-235	-8 U	26	41	Filtered		LAS
RD-54C		Primary	05/05/97	Uranium-235	-2 U	15	29	Filtered		LAS
RD-54C		Primary	08/24/97	Radium-226	-20 U	100	130	Filtered		LAS
RD-54C		Primary	08/24/97	Uranium-235	-4 U	28	45	Filtered		LAS
RD-54C		Primary	02/08/98	Radium-226	166 U	---	166	Filtered		TN
RD-54C		Primary	02/08/98	Uranium-235	58.3 U	---	58.3	Filtered		TN
RD-54C		Primary	08/07/98	Radium-226	312 U	---	312	Filtered		TN
RD-54C		Primary	08/07/98	Uranium-235	112 U	---	112	Filtered		TN
RD-54C		Primary	02/09/99	Thorium-228	0.013 U	0.038	0.071	Filtered		TN
RD-54C		Primary	02/09/99	Thorium-230	0.064 U	0.064	0.086	Filtered		TN
RD-54C		Primary	02/09/99	Thorium-232	0.006 U	0.013	0.049	Filtered		TN
RD-54C		Primary	02/09/99	Uranium-233/234	0 U	0.036	0.065	Filtered		TN
RD-54C		Primary	02/09/99	Uranium-235	0.011 U	0.022	0.042	Filtered		TN
RD-54C		Primary	02/09/99	Uranium-238	0.018 U	0.018	0.034	Filtered		TN
RD-54C		Primary	11/05/04	Radium-226	0.986 J	0.37	0.419	Filtered		ES
RD-54C		Primary	11/05/04	Radium-228	1.57	0.28	0.577	Filtered		ES
RD-54C		Primary	02/17/05	Radium-226	0.398 U	0.29	0.431	Filtered		ES
RD-54C		Split	02/17/05	Radium-226	0.0999 J	0.059	0.0633	Filtered		STL

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-54C		Primary	02/17/05	Radium-228	0.303 U	0.25	0.579	Filtered		ES
RD-54C		Split	02/17/05	Radium-228	2.18	0.55	0.397	Filtered		STL
RD-54C		Primary	08/22/05	Radium-226	0.013 U	0.018	0.031	Filtered		ES
RD-54C		Primary	08/22/05	Radium-228	1.3	0.24	0.49	Filtered		ES
RD-54C		Primary	02/23/06	Radium-226	0.67 U	0.46	0.69	Filtered		ES
RD-54C		Primary	02/23/06	Radium-228	1.03	0.24	0.522	Filtered		ES
RD-54C		Primary	08/10/06	Radium-226	0.585 U	0.49	0.762	Filtered		ES
RD-54C		Primary	08/10/06	Radium-228	0.959 J	0.29	0.614	Filtered		ES
RD-54C		Primary	02/12/07	Radium-226	0.46 U	0.49	0.794	Filtered		ES
RD-54C		Primary	02/12/07	Radium-228	1.1	0.81	0.346	Filtered		ES
RD-54C		Primary	08/07/07	Radium-226	0.218 U	0.5	0.886	Filtered		ES
RD-54C		Primary	08/07/07	Radium-228	0.628 J	0.19	0.444	Filtered		ES
RD-54C		Primary	02/14/08	Radium-226	0.528 U	0.54	0.84	Filtered		ES
RD-54C		Primary	02/14/08	Radium-228	0.402 U	0.23	0.516	Filtered		ES
RD-54C		Primary	02/14/08	Strontium-90	0.002 U	0.24	0.401	Filtered		ES
RD-54C		Primary	08/07/08	Radium-226	0.3 U	0.34	0.556	Filtered		ES
RD-54C		Primary	08/07/08	Radium-228	0.411 U	0.18	0.489	Filtered		ES
RD-54C		Primary	02/24/09	Americium-241	0.168 U	0.93	1.06	Filtered		ES
RD-54C		Primary	02/24/09	Americium-241	3.13 U	4.1	5.97	Unfiltered		ES
RD-54C		Primary	02/24/09	Strontium-90	0.041 U	0.22	0.413	Filtered		ES
RD-54C		Primary	02/24/09	Strontium-90	-0.064 U	0.25	0.486	Unfiltered		ES
RD-54C		Primary	08/04/09	Strontium-90	-0.133 U	0.26	0.552	Filtered		ES
RD-54C		Primary	08/04/09	Strontium-90	0.167 U	0.33	0.623	Unfiltered		ES
RD-56A		Primary	05/10/94	Strontium-90	-0.08 U	0.62	0.77	Filtered		LAS
RD-56A		Primary	05/10/94	Thorium-228	0.035 U	0.059	0.1	Filtered		LAS
RD-56A		Primary	05/10/94	Thorium-230	0.005 U	0.037	0.068	Filtered		LAS
RD-56A		Primary	05/10/94	Thorium-232	0.024 U	0.022	0.033	Filtered		LAS
RD-56A		Primary	05/10/94	Uranium-233/234	2.61	0.59	0.16	Filtered		TN
RD-56A		Primary	05/10/94	Uranium-235	0.34	0.21	0.13	Filtered		LAS
RD-56A		Primary	05/10/94	Uranium-238	2.08	0.53	0.17	Filtered		LAS
RD-56A		Primary	05/28/98	Radium-226	99.5 U	---	99.5	Filtered		TN
RD-56A		Primary	05/28/98	Uranium-235	34.3 U	---	34.3	Filtered		TN
RD-56B		Primary	05/28/98	Radium-226	205 U	---	205	Filtered		TN
RD-56B		Primary	05/28/98	Uranium-235	72.6 U	---	72.6	Filtered		TN
RD-57		Primary	05/10/94	Radium-226	-5 U	60	83	Filtered		LAS
RD-57		Primary	05/10/94	Strontium-90	-0.03 U	0.7	0.87	Filtered		LAS
RD-57		Primary	05/10/94	Thorium-228	0.014 U	0.062	0.11	Filtered		LAS
RD-57		Primary	05/10/94	Thorium-230	0.019 U	0.04	0.071	Filtered		LAS
RD-57		Primary	05/10/94	Thorium-232	0.008 U	0.016	0.029	Filtered		LAS
RD-57		Primary	05/10/94	Uranium-233/234	1.2	0.33	0.11	Filtered		LAS
RD-57		Primary	05/10/94	Uranium-235	0.3	0.16	0.084	Filtered		LAS
RD-57		Primary	05/10/94	Uranium-235	-4 U	17	25	Filtered		LAS
RD-57		Primary	05/10/94	Uranium-238	0.93	0.29	0.094	Filtered		LAS
RD-57		Primary	02/07/95	Uranium-235	-4 U	26	40	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-57		Primary	08/09/95	Uranium-235	22 U	28	41	Filtered		LAS
RD-57		Primary	02/19/96	Uranium-235	-28 U	13	42	Filtered		LAS
RD-57		Primary	08/22/96	Uranium-235	-23 U	21	42	Filtered		LAS
RD-57		Primary	02/25/97	Uranium-235	-5 U	27	43	Filtered		LAS
RD-57		Primary	08/27/97	Radium-226	-40 U	120	190	Filtered		LAS
RD-57		Primary	08/27/97	Radium-226	-30 U	130	200	Unfiltered		LAS
RD-57		Primary	08/27/97	Uranium-235	-9 U	28	43	Filtered		LAS
RD-57		Primary	08/27/97	Uranium-235	-19 U	15	45	Unfiltered		LAS
RD-57		Primary	05/26/98	Radium-226	104 U	---	104	Filtered		TN
RD-57		Primary	05/26/98	Uranium-235	32 U	---	32	Filtered		TN
RD-57		Primary	08/17/98	Radium-226	207 U	---	207	Filtered		TN
RD-57		Primary	08/17/98	Uranium-235	75.9 U	---	75.9	Filtered		TN
RD-57	Z07	Primary	03/08/05	Radium-226	-0.083 U	0.34	0.64	Filtered		ES
RD-57	Z07	Primary	03/08/05	Radium-228	1.05	0.21	0.433	Filtered		ES
RD-57	Z07	Primary	09/01/05	Radium-226	0.836 J	0.4	0.563	Filtered		ES
RD-57	Z07	Primary	09/01/05	Radium-228	1.11	0.23	0.496	Filtered		ES
RD-57	Z07	Primary	02/20/06	Radium-226	0.803 U	0.57	0.833	Filtered		ES
RD-57	Z07	Primary	02/20/06	Radium-228	1.75	0.28	0.522	Filtered		ES
RD-57	Z07	Primary	08/18/06	Radium-226	0.71 U	0.59	0.911	Filtered		ES
RD-57	Z07	Primary	08/18/06	Radium-228	1.04	0.22	0.461	Filtered		ES
RD-57	Z07	Primary	02/08/07	Radium-226	1.01	0.52	0.714	Filtered		ES
RD-57	Z07	Primary	02/08/07	Radium-228	1.08	0.19	0.397	Filtered		ES
RD-57	Z08	Primary	02/07/08	Strontium-90	-0.029 U	0.23	0.432	Filtered		ES
RD-57	Z05	Primary	08/08/08	Radium-226	-0.066 U	0.31	0.625	Filtered		ES
RD-57	Z07	Primary	02/25/09	Strontium-90	-0.094 U	0.24	0.507	Filtered		ES
RD-57	Z07	Primary	02/25/09	Strontium-90	0.484 U	0.32	0.526	Unfiltered		ES
RD-57	Z07	Primary	07/17/09	Strontium-90	-0.046 U	0.27	0.517	Unfiltered		ES
RD-59A		Primary	08/16/94	Radium-226	-1370 U	520	780	Filtered		LAS
RD-59A		Primary	08/16/94	Strontium-90	0.56 U	0.68	1.1	Filtered		LAS
RD-59A		Primary	02/06/95	Uranium-235	16 U	21	30	Filtered		LAS
RD-59A		Duplicate	02/06/95	Uranium-235	8 U	29	44	Filtered		LAS
RD-59A		Primary	08/08/95	Uranium-235	-25 U	16	47	Filtered		LAS
RD-59A		Primary	03/12/96	Uranium-235	12 U	33	47	Filtered		LAS
RD-59A		Primary	08/21/96	Uranium-235	-21 U	14	50	Filtered		LAS
RD-59A		Primary	02/16/97	Uranium-235	-4 U	31	45	Filtered		LAS
RD-59A		Primary	08/22/97	Radium-226	31 U	72	110	Filtered		LAS
RD-59A		Primary	08/22/97	Uranium-235	16 U	33	49	Filtered		LAS
RD-59A		Primary	08/19/98	Radium-226	400 U	---	400	Filtered		TN
RD-59A		Primary	08/19/98	Uranium-235	145 U	---	145	Filtered		TN
RD-59A		Primary	11/16/04	Radium-226	0.288 U	0.23	0.349	Filtered		ES
RD-59A		Primary	11/16/04	Radium-228	0.211 U	0.19	0.5	Filtered		ES
RD-59A		Primary	09/07/05	Radium-226	-0.025 U	0.37	0.696	Filtered		ES
RD-59A		Primary	09/07/05	Radium-228	0.443 U	0.22	0.545	Filtered		ES
RD-59A		Primary	08/23/06	Radium-226	0.349 U	0.52	0.875	Filtered		ES
RD-59A		Primary	08/23/06	Radium-228	0.235 U	0.18	0.441	Filtered		ES
RD-59A		Primary	02/28/07	Radium-226	0.6 U	0.48	0.717	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-59A		Primary	02/28/07	Radium-228	0.35 U	0.16	0.39	Filtered		ES
RD-59A		Primary	08/16/07	Radium-226	0.514 U	0.47	0.724	Filtered		ES
RD-59A		Primary	08/16/07	Radium-228	0.297 U	0.15	0.372	Filtered		ES
RD-59A		Primary	05/20/08	Americium-241	6.33 U	---	6.33	Filtered		ES
RD-59A		Primary	05/20/08	Radium-226	0.335 U	0.41	0.672	Filtered		ES
RD-59A		Primary	05/20/08	Radium-228	0.754 J	0.2	0.405	Filtered		ES
RD-59A		Primary	05/20/08	Strontium-90	-0.207 U	0.21	0.459	Filtered		ES
RD-59A		Primary	08/14/08	Radium-226	1.07	0.63	0.834	Filtered		ES
RD-59A		Primary	08/14/08	Radium-228	0.336 U	0.2	0.51	Filtered		ES
RD-59A		Primary	03/03/09	Americium-241	0.192 U	0.42	2.66	Filtered		ES
RD-59A		Primary	03/03/09	Americium-241	-0.48 U	4.2	4.68	Unfiltered		ES
RD-59A		Primary	03/03/09	Strontium-90	0.057 U	0.41	0.693	Filtered		ES
RD-59A		Primary	03/03/09	Strontium-90	-0.029 U	0.27	0.528	Unfiltered		ES
RD-59A		Primary	08/04/09	Strontium-90	-0.243 U	0.28	0.602	Filtered		ES
RD-59A		Primary	08/04/09	Strontium-90	0.108 U	0.39	0.758	Unfiltered		ES
RD-59B		Primary	08/16/94	Radium-226	-730 U	640	930	Filtered		LAS
RD-59B		Primary	08/16/94	Strontium-90	0.07 U	0.7	1.2	Filtered		LAS
RD-59B		Primary	02/06/95	Uranium-235	-3 U	29	45	Filtered		LAS
RD-59B		Primary	08/08/95	Uranium-235	1 U	29	45	Filtered		LAS
RD-59B		Primary	03/12/96	Uranium-235	10 U	19	28	Filtered		LAS
RD-59B		Primary	08/21/96	Uranium-235	12 U	28	40	Filtered		LAS
RD-59B		Primary	02/16/97	Uranium-235	-29 U	24	43	Filtered		LAS
RD-59B		Primary	08/22/97	Radium-226	17 U	70	100	Filtered		LAS
RD-59B		Primary	08/22/97	Uranium-235	-2 U	19	30	Filtered		LAS
RD-59B		Primary	08/19/98	Radium-226	246 U	---	246	Filtered		TN
RD-59B		Primary	08/19/98	Uranium-235	66.9 U	---	66.9	Filtered		TN
RD-59B		Primary	11/05/04	Radium-226	0.97 J	0.36	0.403	Filtered		ES
RD-59B		Primary	11/05/04	Radium-228	1.3	0.29	0.624	Filtered		ES
RD-59B		Primary	09/07/05	Radium-226	0.611 U	0.43	0.666	Filtered		ES
RD-59B		Primary	09/07/05	Radium-228	1.32	0.26	0.501	Filtered		ES
RD-59B		Primary	02/22/06	Radium-226	0.76 J	0.46	0.596	Filtered		ES
RD-59B		Primary	02/22/06	Radium-228	1.35	0.22	0.454	Filtered		ES
RD-59B		Primary	08/23/06	Radium-226	0.753 U	0.56	0.849	Filtered		ES
RD-59B		Primary	08/23/06	Radium-228	1.77	0.28	0.441	Filtered		ES
RD-59B		Primary	02/28/07	Radium-226	0.58 U	0.48	0.718	Filtered		ES
RD-59B		Split	02/28/07	Radium-226	0.532 J	0.19	0.157	Filtered		STL
RD-59B		Primary	02/28/07	Radium-228	1.2	0.32	0.407	Filtered		ES
RD-59B		Split	02/28/07	Radium-228	1.18	0.32	0.414	Filtered		STL
RD-59B		Primary	08/16/07	Radium-226	0.234 U	0.47	0.829	Filtered		ES
RD-59B		Primary	08/16/07	Radium-228	1.5	0.2	0.392	Filtered		ES
RD-59B		Primary	05/20/08	Americium-241	5.94 U	---	5.94	Filtered		ES
RD-59B		Primary	05/20/08	Radium-226	1.03	0.48	0.546	Filtered		ES
RD-59B		Primary	05/20/08	Radium-228	1.33	0.23	0.362	Filtered		ES
RD-59B		Primary	05/20/08	Strontium-90	-0.068 U	0.24	0.483	Filtered		ES
RD-59B		Primary	08/14/08	Radium-226	0.452 U	0.42	0.639	Filtered		ES
RD-59B		Primary	08/14/08	Radium-228	1.02	0.25	0.519	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-59B		Primary	03/03/09	Americium-241	-9.18 U	6.7	11.4	Filtered		ES
RD-59B		Primary	03/03/09	Americium-241	-0.277 U	0.94	1.04	Unfiltered		ES
RD-59B		Primary	03/03/09	Strontium-90	-0.051 U	0.23	0.455	Filtered		ES
RD-59B		Primary	03/03/09	Strontium-90	-0.08 U	0.25	0.511	Unfiltered		ES
RD-59B		Primary	08/04/09	Strontium-90	-0.091 U	0.26	0.541	Filtered		ES
RD-59B		Primary	08/04/09	Strontium-90	-0.06 U	0.26	0.534	Unfiltered		ES
RD-59C		Primary	08/16/94	Radium-226	-990 U	640	900	Filtered		LAS
RD-59C		Primary	08/16/94	Strontium-90	-0.33 U	0.74	1.3	Filtered		LAS
RD-59C		Primary	02/06/95	Uranium-235	5 U	30	45	Filtered		LAS
RD-59C		Primary	08/08/95	Uranium-235	-5 U	28	44	Filtered		LAS
RD-59C		Primary	08/21/96	Uranium-235	-20 U	14	42	Filtered		LAS
RD-59C		Primary	02/16/97	Uranium-235	27 U	28	38	Filtered		LAS
RD-59C		Primary	08/22/97	Radium-226	-33 U	66	100	Filtered		LAS
RD-59C		Primary	08/22/97	Uranium-235	-1 U	18	27	Filtered		LAS
RD-59C		Primary	08/19/98	Radium-226	206 U	---	206	Filtered		TN
RD-59C		Primary	08/19/98	Uranium-235	72.9 U	---	72.9	Filtered		TN
RD-59C		Primary	11/05/04	Radium-226	0.279 U	0.27	0.419	Filtered		ES
RD-59C		Primary	11/05/04	Radium-228	1.18	0.27	0.579	Filtered		ES
RD-59C		Primary	09/07/05	Radium-226	0.412 U	0.36	0.56	Filtered		ES
RD-59C		Primary	09/07/05	Radium-228	1.17	0.23	0.478	Filtered		ES
RD-59C		Primary	02/22/06	Radium-226	0.196 U	0.4	0.699	Filtered		ES
RD-59C		Split	02/22/06	Radium-226	0.619 J	0.234	0.197	Filtered		STL
RD-59C		Primary	02/22/06	Radium-228	1.17	0.22	0.467	Filtered		ES
RD-59C		Split	02/22/06	Radium-228	1.35	0.382	0.517	Filtered		STL
RD-59C		Primary	08/23/06	Radium-226	0.103 U	0.46	0.862	Filtered		ES
RD-59C		Primary	08/23/06	Radium-228	1.27	0.21	0.432	Filtered		ES
RD-59C		Primary	02/28/07	Radium-226	0.706 J	0.38	0.532	Filtered		ES
RD-59C		Primary	02/28/07	Radium-228	0.479 J	0.17	0.423	Filtered		ES
RD-59C		Primary	08/16/07	Radium-226	0.375 U	0.4	0.65	Filtered		ES
RD-59C		Primary	08/16/07	Radium-228	1.36	0.24	0.397	Filtered		ES
RD-59C		Primary	05/20/08	Americium-241	1.54 U	---	1.54	Filtered		ES
RD-59C		Primary	05/20/08	Radium-226	0.756 J	0.46	0.638	Filtered		ES
RD-59C		Primary	05/20/08	Radium-228	1.14	0.24	0.357	Filtered		ES
RD-59C		Primary	05/20/08	Strontium-90	0.033 U	0.3	0.568	Filtered		ES
RD-59C		Primary	08/14/08	Radium-226	0.388 U	0.43	0.702	Filtered		ES
RD-59C		Primary	08/14/08	Radium-228	1.09	0.25	0.496	Filtered		ES
RD-59C		Primary	03/03/09	Americium-241	0.029 U	0.037	0.663	Filtered		ES
RD-59C		Primary	03/03/09	Americium-241	1.24 U	1	2.89	Unfiltered		ES
RD-59C		Primary	03/03/09	Strontium-90	-0.27 U	0.2	0.477	Filtered		ES
RD-59C		Primary	03/03/09	Strontium-90	-0.179 U	0.25	0.519	Unfiltered		ES
RD-59C		Primary	08/04/09	Strontium-90	-0.168 U	0.27	0.58	Filtered		ES
RD-59C		Primary	08/04/09	Strontium-90	-0.113 U	0.24	0.512	Unfiltered		ES
RD-61		Primary	05/28/98	Radium-226	107 U	---	107	Filtered		TN
RD-61		Primary	05/28/98	Uranium-235	33.4 U	---	33.4	Filtered		TN
RD-63		Primary	11/06/96	Uranium-233/234	3.66	0.4	---	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-63		Primary	11/06/96	Uranium-235	0.207	0.085	---	Filtered		LAS
RD-63		Primary	11/06/96	Uranium-238	2.92	0.35	---	Filtered		LAS
RD-63		Primary	02/24/04	Radium-226	1.59	0.14	0.037	Filtered		ES
RD-63		Primary	02/24/04	Radium-228	2.34	0.24	0.347	Filtered		ES
RD-63		Primary	08/25/05	Radium-226	0.089 U	0.42	0.78	Filtered		ES
RD-63		Primary	08/25/05	Radium-228	3.66	0.36	0.513	Filtered		ES
RD-63		Primary	02/16/06	Radium-226	3.22	0.79	0.634	Filtered		ES
RD-63		Primary	02/16/06	Radium-228	2.8	0.28	0.452	Filtered		ES
RD-63		Primary	08/09/06	Radium-226	1.79	0.64	0.691	Filtered		ES
RD-63		Split	08/09/06	Radium-226	2.1	0.48	0.167	Filtered		STL
RD-63		Primary	08/09/06	Radium-228	2.37	0.29	0.463	Filtered		ES
RD-63		Split	08/09/06	Radium-228	3.78	0.61	0.479	Filtered		STL
RD-63		Primary	05/24/07	Radium-226	1.87	0.62	0.702	Filtered		ES
RD-63		Split	05/24/07	Radium-226	1.72	0.46	0.205	Filtered		STL
RD-63		Primary	05/24/07	Radium-228	1.3	0.39	0.415	Filtered		ES
RD-63		Split	05/24/07	Radium-228	1.72	0.44	0.563	Filtered		STL
RD-63		Primary	08/21/07	Radium-226	1.03	0.57	0.757	Filtered		ES
RD-63		Primary	08/21/07	Radium-228	1.94	0.36	0.423	Filtered		ES
RD-63		Primary	02/06/08	Radium-226	1.1	0.62	0.837	Filtered		ES
RD-63		Primary	02/06/08	Radium-228	1.35	0.081	0.494	Filtered		ES
RD-63		Primary	02/06/08	Strontium-90	0.022 U	0.24	0.472	Filtered		ES
RD-63		Primary	08/12/08	Radium-226	1.69	0.62	0.644	Filtered		ES
RD-63		Primary	08/12/08	Radium-228	1.51	0.82	0.511	Filtered		ES
RD-63		Primary	02/20/09	Americium-241	-0.003 U	0.31	1.77	Filtered		ES
RD-63		Primary	02/20/09	Americium-241	-0.001 U	0.16	2.76	Unfiltered		ES
RD-63		Split	02/20/09	Americium-241	0 U	7.38	11.3	Filtered		GEL
RD-63		Split	02/20/09	Americium-241	9.73 U	8.25	12.3	Unfiltered		GEL
RD-63		Primary	02/20/09	Strontium-90	-0.029 U	0.31	0.609	Filtered		ES
RD-63		Primary	02/20/09	Strontium-90	-0.037 U	0.26	0.499	Unfiltered		ES
RD-63		Split	02/20/09	Strontium-90	-0.791 U	0.898	1.89	Unfiltered		GEL
RD-63		Split	02/20/09	Strontium-90, Dissolved	0.19 U	0.875	1.62	Filtered		GEL
RD-63		Primary	07/31/09	Strontium-90	0.041 U	0.22	0.426	Filtered		ES
RD-63		Primary	07/31/09	Strontium-90	-0.14 U	0.17	0.376	Unfiltered		ES
RD-64		Primary	05/10/01	Uranium-233/234	2.21	0.2	0.065	Filtered		ES
RD-64		Primary	05/10/01	Uranium-235	0.116	0.054	0.049	Filtered		ES
RD-64		Primary	05/10/01	Uranium-238	1.67	0.17	0.05	Filtered		ES
RD-64		Primary	02/28/02	Uranium-233/234	2.87	0.15	1	Filtered		DL
RD-64		Primary	02/28/02	Uranium-238	1.7	0.14	1	Filtered		DL
RD-64	Z06	Primary	01/29/03	Uranium-233/234	2.43	0.2	0.044	Filtered		ES
RD-64	Z06	Primary	01/29/03	Uranium-235	0.096	0.044	0.033	Filtered		ES
RD-64	Z06	Primary	01/29/03	Uranium-238	2.04	0.18	0.04	Filtered		ES
RD-64	Z06	Primary	11/12/04	Radium-226	0.347 U	0.26	0.384	Filtered		ES
RD-64	Z06	Primary	11/12/04	Radium-228	1.68	0.29	0.564	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-V

RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-64	Z06	Primary	11/12/04	Uranium-233/234	2.46	0.23	0.042	Filtered		ES
RD-64	Z06	Primary	11/12/04	Uranium-235	0.087 J	0.038	0.029	Filtered		ES
RD-64	Z06	Primary	11/12/04	Uranium-238	1.86	0.19	0.034	Filtered		ES
RD-64	Z06	Primary	02/14/05	Radium-226	1.5	0.57	0.671	Filtered		ES
RD-64	Z06	Primary	02/14/05	Radium-228	1.85	0.3	0.601	Filtered		ES
RD-64	Z06	Primary	02/14/05	Uranium-233/234	2.7	0.24	0.044	Filtered		ES
RD-64	Z06	Primary	02/14/05	Uranium-235	0.09 J	0.037	0.029	Filtered		ES
RD-64	Z06	Primary	02/14/05	Uranium-238	1.8	0.18	0.038	Filtered		ES
RD-64	Z06	Primary	08/31/05	Radium-226	1.32	0.52	0.633	Filtered		ES
RD-64	Z06	Primary	08/31/05	Radium-228	1.84	0.31	0.615	Filtered		ES
RD-64	Z06	Primary	08/31/05	Uranium-233/234	3.39	0.26	0.04	Filtered		ES
RD-64	Z06	Primary	08/31/05	Uranium-235	0.121 J	0.04	0.022	Filtered		ES
RD-64	Z06	Primary	08/31/05	Uranium-238	2.59	0.21	0.032	Filtered		ES
RD-64	Z06	Primary	02/16/06	Radium-226	1.54	0.6	0.757	Filtered		ES
RD-64	Z06	Primary	02/16/06	Radium-228	1.5	0.2	0.379	Filtered		ES
RD-64	Z06	Primary	02/16/06	Uranium-233/234	3.01	0.26	0.046	Filtered		ES
RD-64	Z06	Primary	02/16/06	Uranium-235	0.124 J	0.046	0.03	Filtered		ES
RD-64	Z06	Primary	02/16/06	Uranium-238	2.31	0.21	0.035	Filtered		ES
RD-64	Z06	Primary	08/17/06	Radium-226	1.42	0.65	0.791	Filtered		ES
RD-64	Z06	Primary	08/17/06	Radium-228	1.46	0.24	0.488	Filtered		ES
RD-64	Z06	Primary	08/17/06	Uranium-233/234	3.57	0.29	0.042	Filtered		ES
RD-64	Z06	Primary	08/17/06	Uranium-235	0.149 J	0.051	0.027	Filtered		ES
RD-64	Z06	Primary	08/17/06	Uranium-238	2.79	0.24	0.036	Filtered		ES
RD-64	Z06	Primary	02/08/07	Radium-226	1.62	0.66	0.815	Filtered		ES
RD-64	Z06	Primary	02/08/07	Radium-228	1.2	0.35	0.381	Filtered		ES
RD-64	Z06	Primary	02/08/07	Uranium-234	3.45	0.3	0.047	Filtered		ES
RD-64	Z06	Primary	02/08/07	Uranium-235	0.154 J	0.049	0.03	Filtered		ES
RD-64	Z06	Primary	02/08/07	Uranium-238	2.62	0.24	0.044	Filtered		ES
RD-64	Z02	Primary	08/10/07	Radium-226	1.24	0.56	0.654	Filtered		ES
RD-64	Z02	Primary	08/10/07	Radium-228	1.33	0.26	0.547	Filtered		ES
RD-64	Z02	Primary	08/10/07	Uranium-233/234	3.11	0.26	0.033	Filtered		ES
RD-64	Z02	Primary	08/10/07	Uranium-235	0.075 J	0.036	0.027	Filtered		ES
RD-64	Z02	Primary	08/10/07	Uranium-238	2.45	0.22	0.028	Filtered		ES
RD-64	Z07	Primary	02/06/08	Radium-226	1.12	0.58	0.752	Filtered		ES
RD-64	Z07	Primary	02/06/08	Radium-228	1.44	0.19	0.373	Filtered		ES
RD-64	Z07	Primary	02/06/08	Strontium-90	0.062 U	0.26	0.486	Filtered		ES
RD-64	Z07	Primary	02/06/08	Uranium-233/234	2.96	0.27	0.055	Filtered		ES
RD-64	Z07	Primary	02/06/08	Uranium-235	0.161 J	0.056	0.035	Filtered		ES
RD-64	Z07	Primary	02/06/08	Uranium-238	2.18	0.22	0.047	Filtered		ES
RD-64	Z07	Primary	08/07/08	Radium-226	1.61	0.61	0.656	Filtered		ES
RD-64	Z07	Primary	08/07/08	Radium-228	0.843 J	0.76	0.448	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-64	Z07	Primary	08/07/08	Uranium-233/234	2.88	0.32	0.048	Filtered		ES
RD-64	Z07	Primary	08/07/08	Uranium-235	0.112 J	0.044	0.033	Filtered		ES
RD-64	Z07	Primary	08/07/08	Uranium-238	2.35	0.27	0.044	Filtered		ES
RD-64	Z08	Primary	02/23/09	Americium-241	0.023 U	0.88	3.65	Filtered		ES
RD-64	Z08	Primary	02/23/09	Americium-241	0.73 U	1.3	1.68	Unfiltered		ES
RD-64	Z08	Primary	02/23/09	Strontium-90	-0.117 U	0.24	0.493	Filtered		ES
RD-64	Z08	Primary	02/23/09	Strontium-90	0.012 U	0.27	0.516	Unfiltered		ES
RD-64	Z04	Primary	07/16/09	Strontium-90	-0.1 U	0.24	0.497	Filtered		ES
RD-64	Z04	Primary	07/16/09	Strontium-90	-0.029 U	0.27	0.538	Unfiltered		ES
RD-69		Primary	05/28/98	Radium-226	106 U	---	106	Filtered		TN
RD-69		Primary	05/28/98	Uranium-235	33 U	---	33	Filtered		TN
RD-75		Primary	08/30/05	Radium-226	0.789 J	0.37	0.492	Filtered		ES
RD-75		Primary	08/30/05	Radium-228	2.69	0.42	0.602	Filtered		ES
RD-88		Primary	08/25/05	Radium-226	0.314 U	0.4	0.673	Filtered		ES
RD-88		Primary	08/25/05	Radium-228	0.067 U	0.048	0.621	Filtered		ES
RD-90		Primary	08/25/05	Radium-226	0.148 U	0.41	0.732	Filtered		ES
RD-90		Primary	08/25/05	Radium-228	0.242 U	0.13	0.67	Filtered		ES
RD-90		Primary	08/25/05	Uranium-233/234	13.9	0.93	0.095	Filtered		ES
RD-90		Primary	08/25/05	Uranium-235	0.649 J	0.12	0.042	Filtered		ES
RD-90		Primary	08/25/05	Uranium-238	12.3	0.83	0.09	Filtered		ES
RD-94		Primary	08/25/05	Radium-226	0.71 J	0.45	0.605	Filtered		ES
RD-94		Primary	08/25/05	Radium-228	0.025 U	0.069	0.49	Filtered		ES
RD-96		Primary	05/09/06	Radium-226	1.46	0.7	0.821	Unfiltered		ES
RD-96		Primary	05/09/06	Radium-228	1.56	0.28	0.512	Unfiltered		ES
RD-96		Primary	05/09/06	Uranium-233/234	6.24	0.45	0.058	Unfiltered		ES
RD-96		Primary	05/09/06	Uranium-235	0.356 J	0.074	0.027	Unfiltered		ES
RD-96		Primary	05/09/06	Uranium-238	6.07	0.44	0.052	Unfiltered		ES
RD-97		Primary	05/09/06	Radium-226	1.11	0.64	0.813	Filtered		ES
RD-97		Primary	05/09/06	Radium-226	3.46	0.89	0.812	Unfiltered		ES
RD-97		Primary	05/09/06	Radium-228	2.55	0.4	0.476	Filtered		ES
RD-97		Primary	05/09/06	Radium-228	5.16	0.36	0.468	Unfiltered		ES
RD-97		Primary	05/09/06	Uranium-233/234	7.16	0.5	0.06	Unfiltered		ES
RD-97		Primary	05/09/06	Uranium-235	0.429 J	0.082	0.027	Unfiltered		ES
RD-97		Primary	05/09/06	Uranium-238	6.35	0.46	0.056	Unfiltered		ES
RD-98		Primary	06/26/08	Americium-241	0.075 U	0.084	0.103	Filtered		ES
RD-98		Primary	06/26/08	Americium-241	5.44 U	---	5.44	Filtered		ES
RD-98		Primary	06/26/08	Plutonium-238	0.12 U	0.12	0.191	Filtered		ES
RD-98		Primary	06/26/08	Plutonium-239	0.04 U	0.04	0.152	Filtered		ES
RD-98		Primary	06/26/08	Strontium-90	2.35	0.52	0.522	Filtered		ES
RD-98		Primary	06/26/08	Thorium-228	0.046 U	0.04	0.065	Filtered		ES
RD-98		Primary	06/26/08	Thorium-230	-0.003 U	0.034	0.052	Filtered		ES
RD-98		Primary	06/26/08	Thorium-232	0.003 U	0.017	0.027	Filtered		ES

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Chatsworth Formation Wells										
RD-98		Primary	06/26/08	Uranium-233/234	2.8	0.32	0.045	Filtered		ES
RD-98		Primary	06/26/08	Uranium-235	0.11 J	0.051	0.038	Filtered		ES
RD-98		Primary	06/26/08	Uranium-238	2.14	0.26	0.039	Filtered		ES
RD-98		Primary	09/11/08	Americium-241	0.831 U	---	0.831	Filtered		ES
RD-98		Primary	09/11/08	Plutonium-238	-0.027 U	0.055	0.139	Filtered		ES
RD-98		Primary	09/11/08	Plutonium-239	-0.018 U	0.018	0.087	Filtered		ES
RD-98		Primary	09/11/08	Radium-226	0.43 U	0.51	0.841	Filtered		ES
RD-98		Primary	09/11/08	Radium-228	0.673 J	0.47	0.37	Filtered		ES
RD-98		Primary	09/11/08	Strontium-90	2.18	0.45	0.423	Filtered		ES
RD-98		Primary	09/11/08	Thorium-228	0.028 U	0.056	0.096	Filtered		ES
RD-98		Primary	09/11/08	Thorium-230	0.035 U	0.042	0.043	Filtered		ES
RD-98		Primary	09/11/08	Thorium-232	0.011 U	0.014	0.027	Filtered		ES
RD-98		Primary	09/11/08	Uranium-233/234	2.4	0.28	0.037	Filtered		ES
RD-98		Primary	09/11/08	Uranium-235	0.09 J	0.042	0.031	Filtered		ES
RD-98		Primary	09/11/08	Uranium-238	1.85	0.23	0.032	Filtered		ES
RD-98		Primary	11/14/08	Strontium-90	2.63	0.51	0.46	Filtered		ES
RD-98		Primary	11/14/08	Strontium-90	2.3	0.46	0.422	Unfiltered		ES
WS-04A		Primary	03/18/93	Radium-226	0.6 U	---	0.6	Filtered		CEP
WS-04A		Primary	03/18/93	Radium-228	1 U	---	1	Filtered		CEP
WS-04A		Primary	06/10/93	Radium-226	2.3	1	0.6	Filtered		CEP
WS-04A		Primary	08/23/93	Radium-226	0.6 U	---	0.6	Filtered		CEP
WS-04A		Primary	11/04/93	Radium-226	0.79	0.25	0.14	Filtered		CEP
WS-09		Primary	10/20/09	Strontium-90	0.11 U	0.39	0.71	Filtered		TAD
WS-09		Primary	10/20/09	Strontium-90	4.59	0.77	0.599	Unfiltered		TAD
WS-13		Duplicate	11/01/89	Polonium-210	0.0103 U	0.014	---	Filtered		UST
WS-13		Duplicate	11/01/89	Polonium-210	0.0533	0.025	---	Unfiltered		UST
WS-13		Duplicate	11/01/89	Radium-226	0.484	0.152	---	Filtered		UST
WS-13		Duplicate	11/01/89	Radium-226	0.487	0.143	---	Unfiltered		UST
WS-13		Duplicate	11/01/89	Radium-228	0.859	0.531	---	Filtered		UST
WS-13		Duplicate	11/01/89	Radium-228	0.879	0.479	---	Unfiltered		UST
WS-13		Duplicate	11/01/89	Thorium-228	0.0906	0.039	---	Filtered		UST
WS-13		Duplicate	11/01/89	Thorium-228	0.039	0.032	---	Unfiltered		UST
WS-13		Duplicate	11/01/89	Thorium-230	0.0163	0.011	---	Filtered		UST
WS-13		Duplicate	11/01/89	Thorium-230	0.00562 U	0.008	---	Unfiltered		UST
WS-13		Duplicate	11/01/89	Thorium-232	0.0507	0.020	---	Filtered		UST
WS-13		Duplicate	11/01/89	Thorium-232	0.0262	0.015	---	Unfiltered		UST
WS-13		Primary	11/01/89	Uranium-233/234	2.01	0.226	---	Filtered		UST
WS-13		Duplicate	11/01/89	Uranium-233/234	2.01	0.226	---	Filtered		UST
WS-13		Duplicate	11/01/89	Uranium-235	0.0697	0.024	---	Filtered		UST
WS-13		Duplicate	11/01/89	Uranium-238	1.31	0.159	---	Filtered		UST
Private Off-site Wells										
OS-01		Primary	08/15/94	Strontium-90	-0.33 U	0.75	1.3	Filtered		LAS

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Private Off-site Wells										
OS-02		Primary	08/15/94	Strontium-90	-0.13 U	0.59	1	Filtered		LAS
OS-03		Primary	08/15/94	Strontium-90	-0.17 U	0.63	1.1	Filtered		LAS
OS-04		Primary	08/15/94	Strontium-90	0.18 U	0.74	1.3	Filtered		LAS
OS-08		Primary	08/15/94	Strontium-90	0.39 U	0.67	1.1	Filtered		LAS
OS-09R		Primary	01/26/04	Thorium-228	-0.004 U	0.008	0.029	Filtered		ES
OS-09R		Primary	01/26/04	Thorium-230	-0.012 U	0.054	0.103	Filtered		ES
OS-09R		Primary	01/26/04	Thorium-232	-0.008 U	0.015	0.037	Filtered		ES
OS-10		Primary	08/05/94	Strontium-90	-0.48 U	0.65	1.2	Filtered		LAS
OS-16		Primary	11/01/89	Polonium-210	0.0265	0.022	---	Filtered		UST
OS-16		Primary	11/01/89	Polonium-210	0.0357	0.021	---	Unfiltered		UST
OS-16		Primary	11/01/89	Radium-226	0.968	0.227	---	Filtered		UST
OS-16		Primary	11/01/89	Radium-226	1.94	0.767	---	Unfiltered		UST
OS-16		Primary	11/01/89	Radium-226	1.07	0.239	---	Unfiltered		UST
OS-16		Duplicate	11/01/89	Radium-226	1.09	0.23	---	Filtered		UST
OS-16		Duplicate	11/01/89	Radium-226	0.993	0.223	---	Unfiltered		UST
OS-16		Primary	11/01/89	Radium-228	1.5	0.723	---	Filtered		UST
OS-16		Primary	11/01/89	Radium-228	0.0357	0.021	---	Unfiltered		UST
OS-16		Duplicate	11/01/89	Radium-228	1.62	0.587	---	Filtered		UST
OS-16		Duplicate	11/01/89	Radium-228	1.84	0.644	---	Unfiltered		UST
OS-16		Primary	11/01/89	Thorium-228	0.0319 U	0.035	---	Filtered		UST
OS-16		Primary	11/01/89	Thorium-228	0.109	0.041	---	Unfiltered		UST
OS-16		Duplicate	11/01/89	Thorium-228	0.025 U	0.03	---	Filtered		UST
OS-16		Duplicate	11/01/89	Thorium-228	0.0456	0.027	---	Unfiltered		UST
OS-16		Primary	11/01/89	Thorium-230	0.00942 U	0.009	---	Filtered		UST
OS-16		Primary	11/01/89	Thorium-230	0.00534 U	0.006	---	Unfiltered		UST
OS-16		Duplicate	11/01/89	Thorium-230	0.00369 U	0.007	---	Filtered		UST
OS-16		Duplicate	11/01/89	Thorium-230	0.00175 U	0.004	---	Unfiltered		UST
OS-16		Primary	11/01/89	Thorium-232	0 U	0.007	---	Filtered		UST
OS-16		Primary	11/01/89	Thorium-232	0.0889	0.027	---	Unfiltered		UST
OS-16		Duplicate	11/01/89	Thorium-232	0 U	0.006	---	Filtered		UST
OS-16		Duplicate	11/01/89	Thorium-232	0 U	0.005	---	Unfiltered		UST
OS-16		Primary	11/01/89	Uranium-233/234	2.42	0.275	---	Filtered		UST
OS-16		Duplicate	11/01/89	Uranium-233/234	2.48	0.277	---	Filtered		UST
OS-16		Primary	11/01/89	Uranium-235	0.0541	0.023	---	Filtered		UST
OS-16		Primary	11/01/89	Uranium-235	0.084	0.029	---	Filtered		UST
OS-16		Duplicate	11/01/89	Uranium-235	0.0541	0.023	---	Filtered		UST
OS-16		Primary	11/01/89	Uranium-238	2.03	0.237	---	Filtered		UST
OS-16		Primary	11/01/89	Uranium-238	1.99	0.25	---	Filtered		UST
OS-16		Primary	11/01/89	Uranium-238	1.07	0.239	---	Unfiltered		UST
OS-16		Duplicate	11/01/89	Uranium-238	1.99	0.25	---	Filtered		UST
OS-21		Primary	11/01/89	Radium-226	0.756	0.189	---	Filtered		UST
OS-21		Primary	11/01/89	Radium-226	0.778	0.196	---	Unfiltered		UST
OS-21		Primary	11/01/89	Radium-228	1.95	0.704	---	Filtered		UST

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Port	Sample Type	Date Sampled	Radionuclide	Result (pCi/L) Activity	Error	MDA	Sample Handling	Sample Comments	Lab
Private Off-site Wells										
OS-21		Primary	11/01/89	Radium-228	1.46	0.597	---	Unfiltered		UST
OS-21		Primary	11/01/89	Thorium-228	0.149	0.047	---	Filtered		UST
OS-21		Primary	11/01/89	Thorium-228	0 U	0.036	---	Unfiltered		UST
OS-21		Primary	11/01/89	Thorium-230	0.0795	0.027	---	Filtered		UST
OS-21		Primary	11/01/89	Thorium-230	0.00359 U	0.005	---	Unfiltered		UST
OS-21		Primary	11/01/89	Thorium-232	0.0659	0.025	---	Filtered		UST
OS-21		Primary	11/01/89	Thorium-232	0 U	0.005	---	Unfiltered		UST
OS-21		Primary	11/01/89	Uranium-233/234	1.54	0.185	---	Filtered		UST
OS-21		Primary	11/01/89	Uranium-235	0.0306	0.016	---	Filtered		UST
OS-21		Primary	11/01/89	Uranium-238	1.06	0.137	---	Filtered		UST

See last page of table for notes and abbreviations.

TABLE E-V
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

NOTES AND ABBREVIATIONS

CEP = Controls for Environmental Pollution, Santa Fe, New Mexico
DL = Davi Laboratories, Pinole, California
ES = Eberline Services, (formerly Thermo Retec), Richmond, California
GEL = General Engineering Laboratories, LLC, Charleston, South Carolina
IT = International Technologies, Inc., (formerly United States Testing), Richland, Washington
LAS = LAS Laboratories, (formerly Lockheed Martin), Las Vegas, Nevada
STL = Severn Trent Laboratories, (formerly International Technologies, Inc.), Richland, Washington
TAD = TestAmerica, Denver, Colorado
TAI = TestAmerica, Irvine, California
TN = Thermo NUtech, (formerly Thermoanalytical Inc. (TMA/NORCAL)), Richmond, California
TR = Thermo Retec, (formerly Thermo NUtech), Richmond, California
UST = United States Testing, Richland, Washington

MDA	=	Minimum Detectable Activity.
Z	=	FLUTe port number.
---	=	Analysis not performed.
B	=	Radionuclide detected in associated method blank.
J	=	Result is less than contract-required MDA and greater than or equal to the MDA.
U	=	Not detected above the MDA; numerical value is the activity for the radionuclide.
pCi/L	=	picoCuries per liter.
Radon-222	=	EPA method 903.1.
Radium-226	=	EPA method 903.1.
Radium-228	=	EPA method 904.0.

NOTES:
Isotopic thorium was analyzed according to EPA method 907.0 or LAL-0108, LAS in-house procedure.

Isotopic uranium analyzed according to EPA method 908.0, ASTM method D3972-82, EPA method 907.0 or LAL-0108, LAS in-house procedure.

Radium-226, radium-228 and uranium-235 analyzed by EPA methods 903.1, 904.0 and 908.0 or equivalent or superior in-house laboratory procedures are included in this table. Results of radium-226, radium-228 and uranium-235 analyzed by EPA method 901.1 are included in Table E-IV. Laboratories used the most current promulgated version of each EPA method at the time of analysis.

Specific isotopes also include americium-241, plutonium-238, plutonium-239, plutonium-239/240, polonium-210, strontium-90, technetium-99, thorium-228, thorium-230, thorium-232, total uranium, uranium-233/234, uranium-235 and uranium-238.

Any activity detected is reported by the laboratory, though the reported activity may be less than the overall laboratory error. Analytical results that are less than the instrument background count are shown as negative values.

As discussed in Appendix D, project specific MDAs were not always attained due in part to matrix conditions (e.g., dissolved and suspended solids) and limitations in the prescribed analytical methods (e.g., sample volumes, counting times).

Filtered samples were collected using a 0.45 micron filter in the field.

APPENDIX F

Constituents of Concern and Perchlorate Concentration versus Time Plots

APPENDIX F

CONSTITUENTS OF CONCERN AND PERCHLORATE CONCENTRATION VERSUS TIME PLOTS

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APPENDIX F

CONSTITUENTS OF CONCERN AND PERCHLORATE CONCENTRATION VERSUS TIME PLOTS

Concentration versus time plots presented in this Appendix include results from 2000 to present for the principal constituents of concern and perchlorate at permitted wells. Plots for 1,3-dinitrobenzene, methyl ethyl ketone (synonym 2-butanone), acetone, ammonia, formaldehyde, trichlorofluoromethane, 1,1,2-trichloro-1,2,2-trifluoroethane (synonym trichlorotrifluoroethane), m- and p-xylenes, and o-xylene are not presented. Tabulated summaries of constituent of concern analytical results are presented for 2009 in this report, and for 2000 through and 2008 in Haley & Aldrich reports (2001, 2002a, 2002b, 2003a, 2003b, 2004, 2005, 2006, 2007, 2008, 2009a). Laboratory, field, or equipment contaminants were not included in the plots. Only primary sample results are presented in the plots.

FIGURE F-1. 1,1,1-TCA in STL-IV AREA SHALLOW WELLS

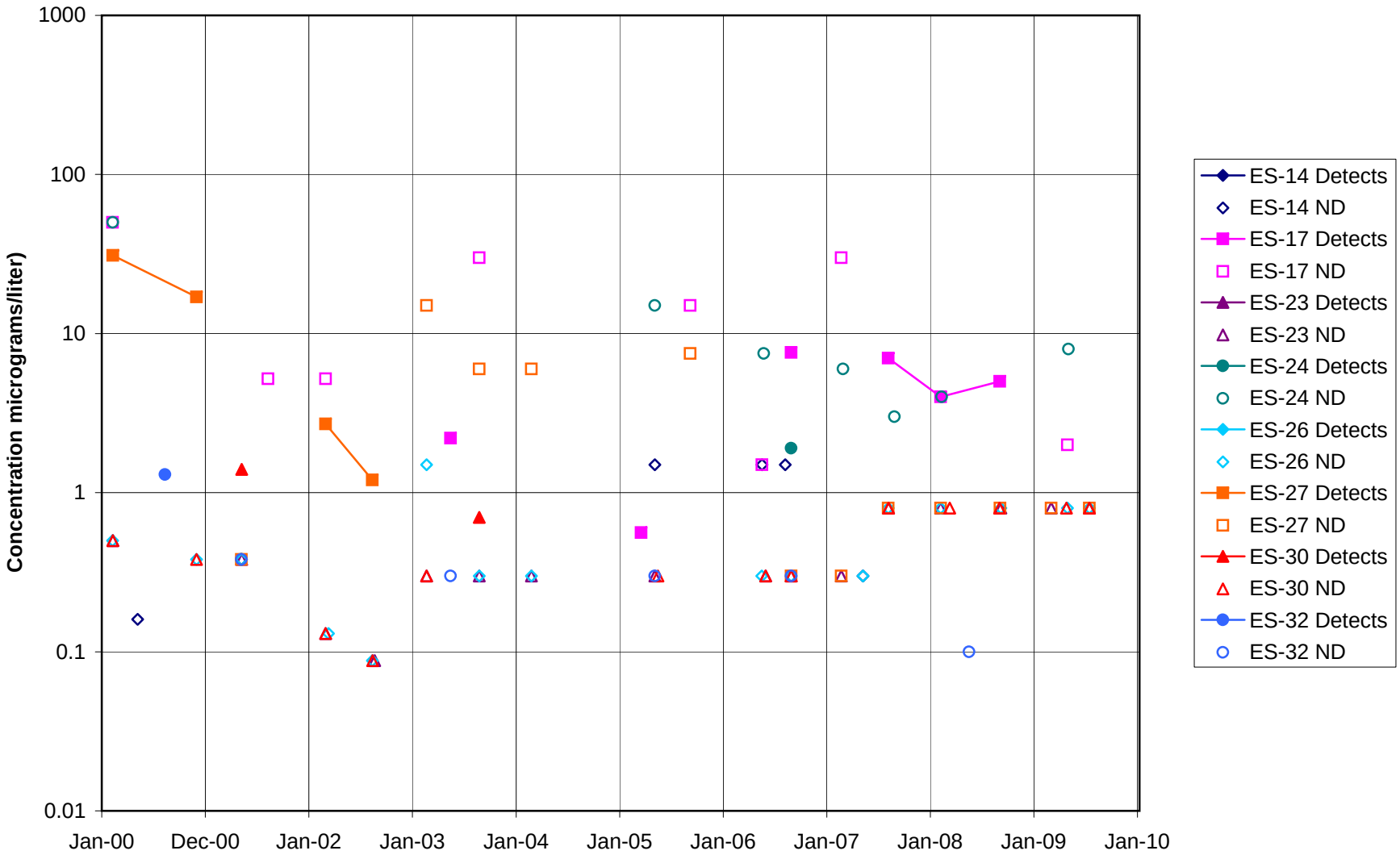


FIGURE F-2. 1,1,1-TCA in STL-IV AREA CHATSWORTH FORMATION WELLS

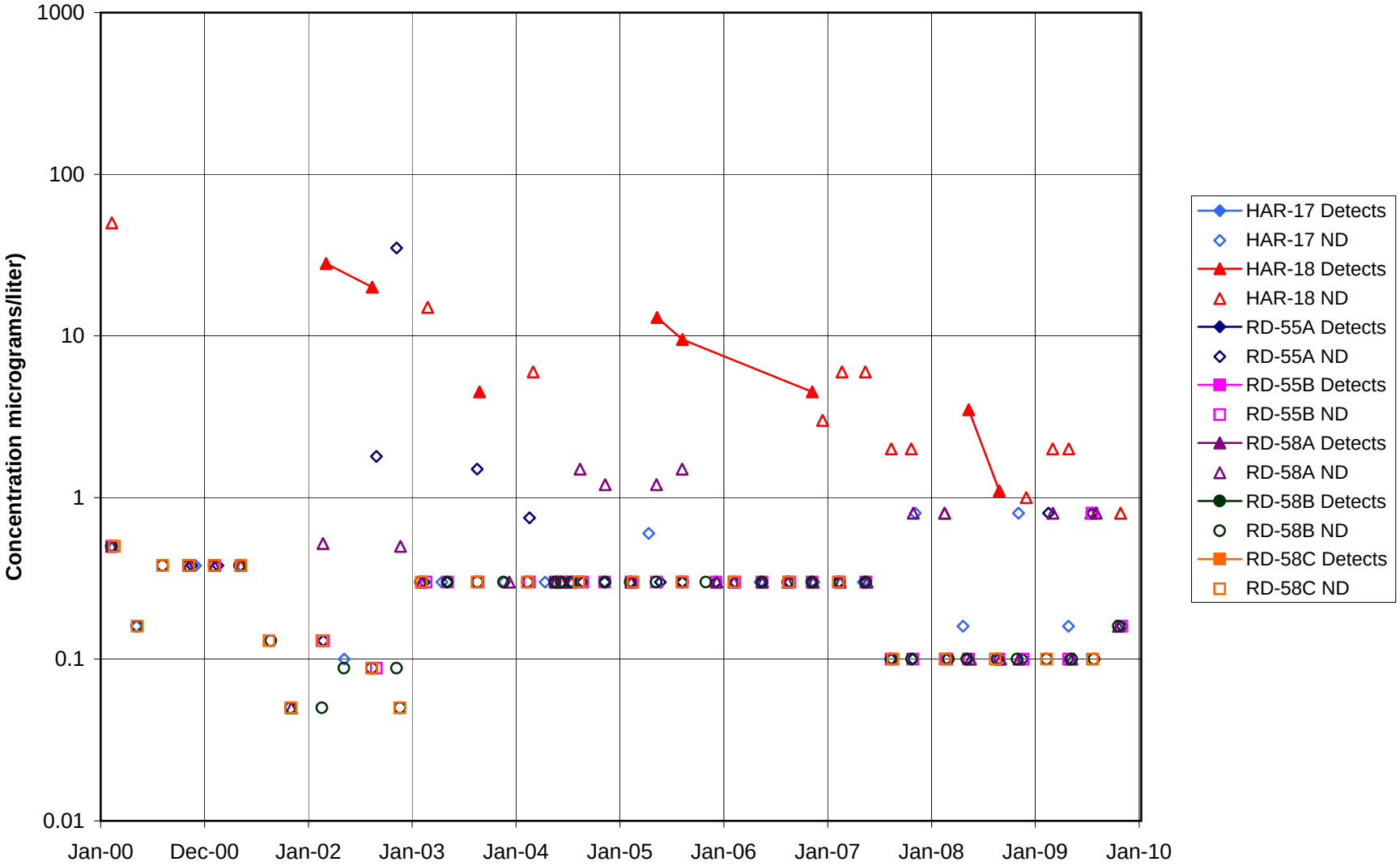


FIGURE F-3. 1,1,1-TCA in MAIN GATE AREA WELLS - 1

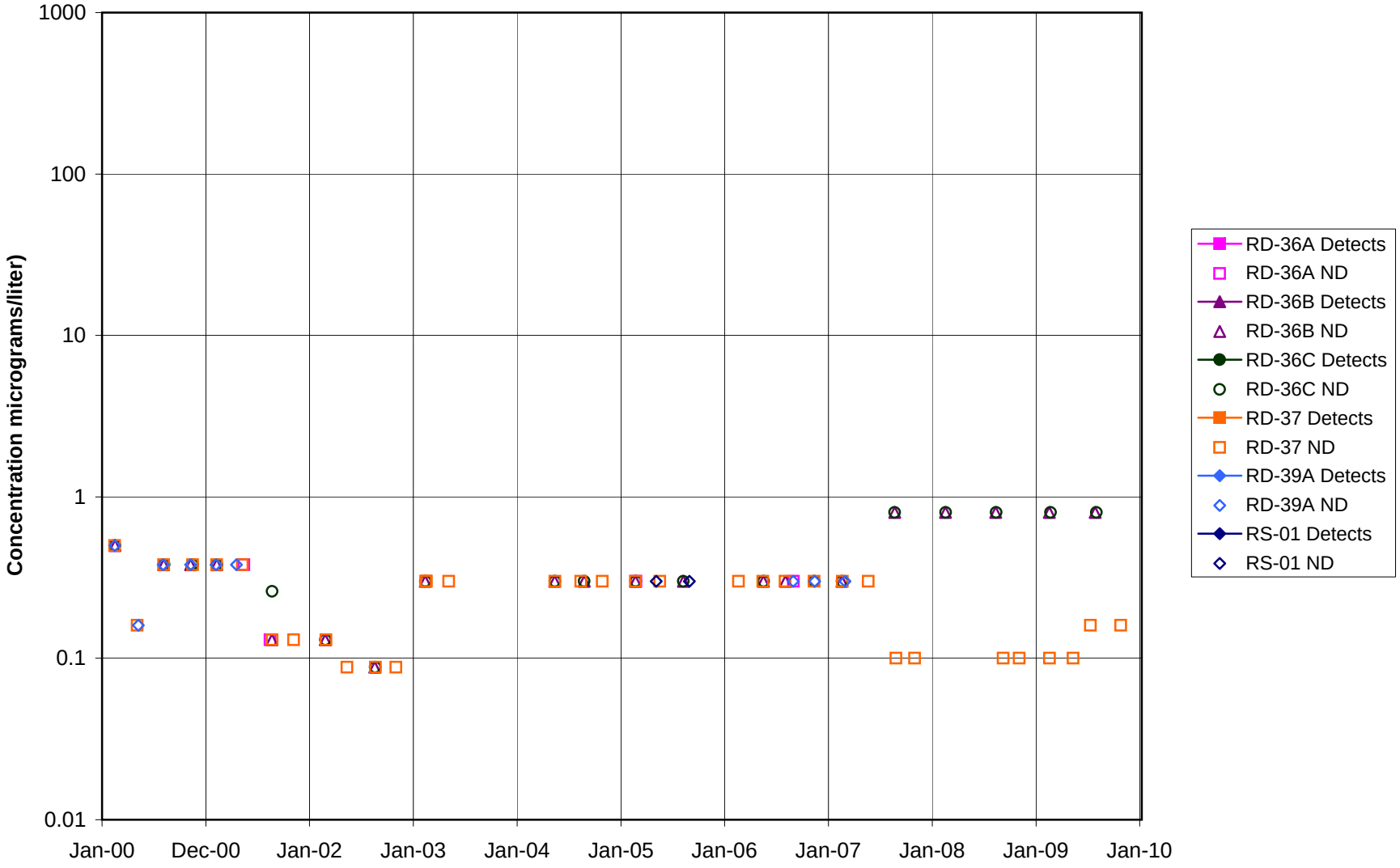


FIGURE F-4. 1,1,1-TCA in MAIN GATE AREA WELLS - 2

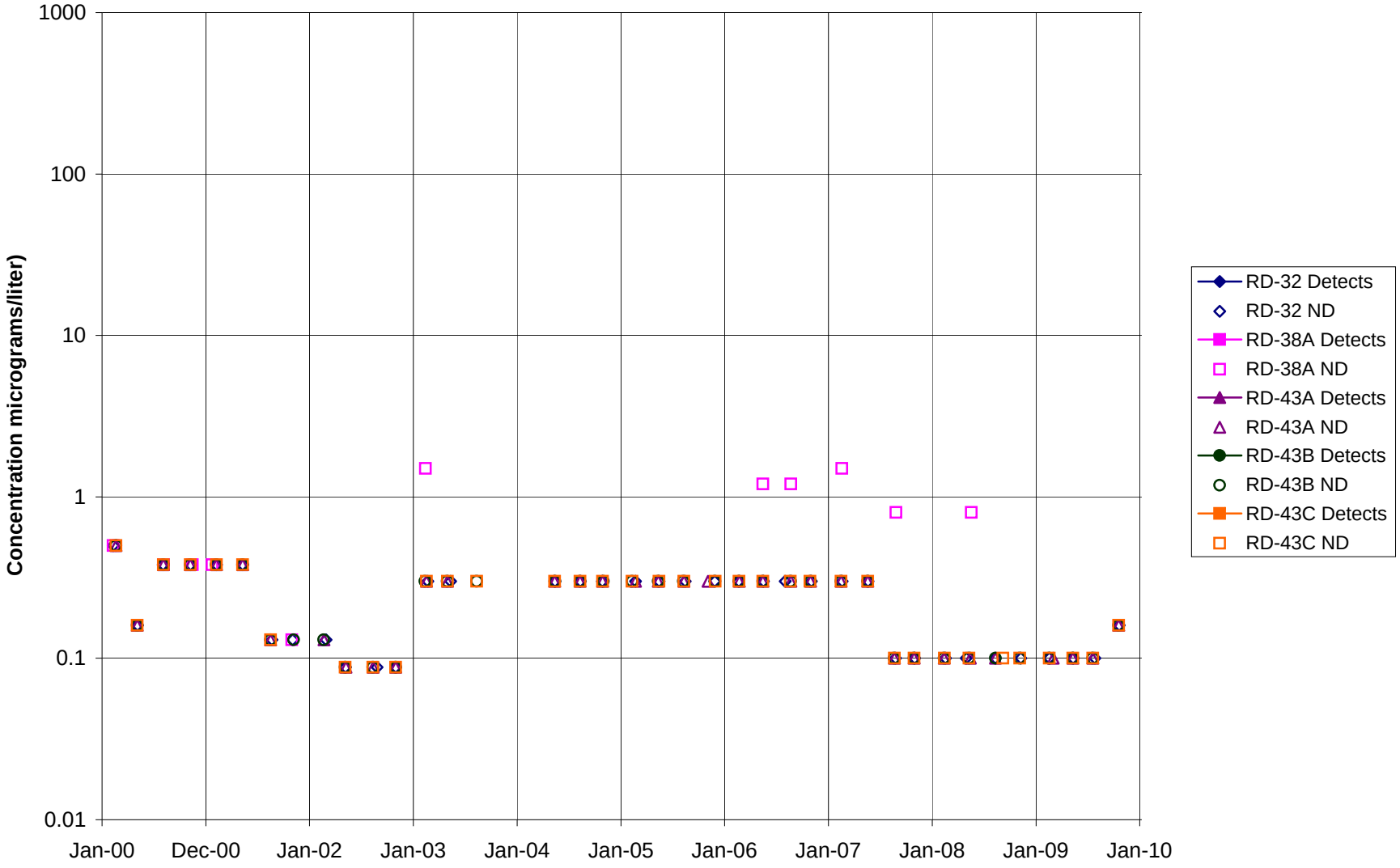


FIGURE F-5. 1,1,1-TCA in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1

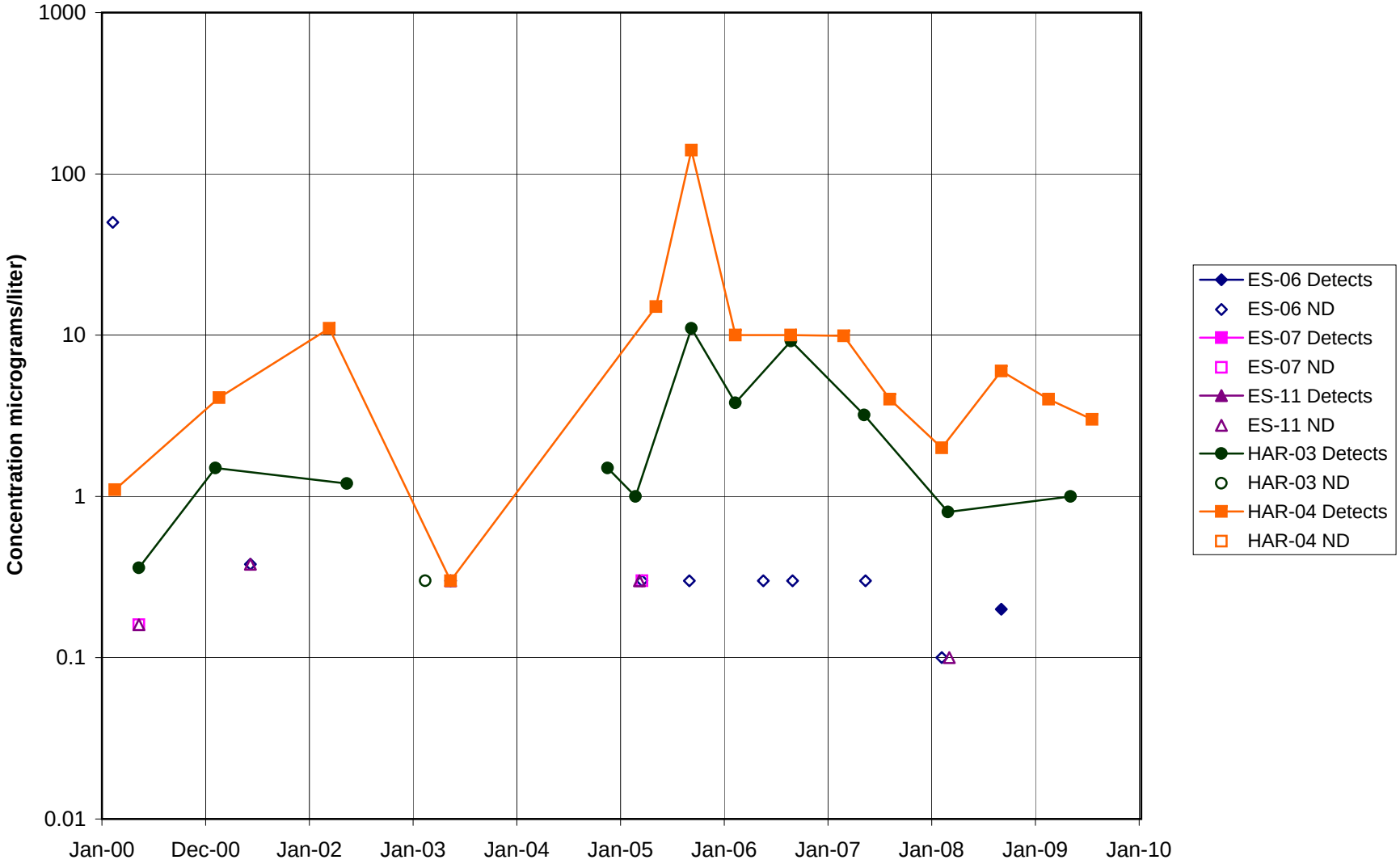


FIGURE F-6. 1,1,1-TCA in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 2

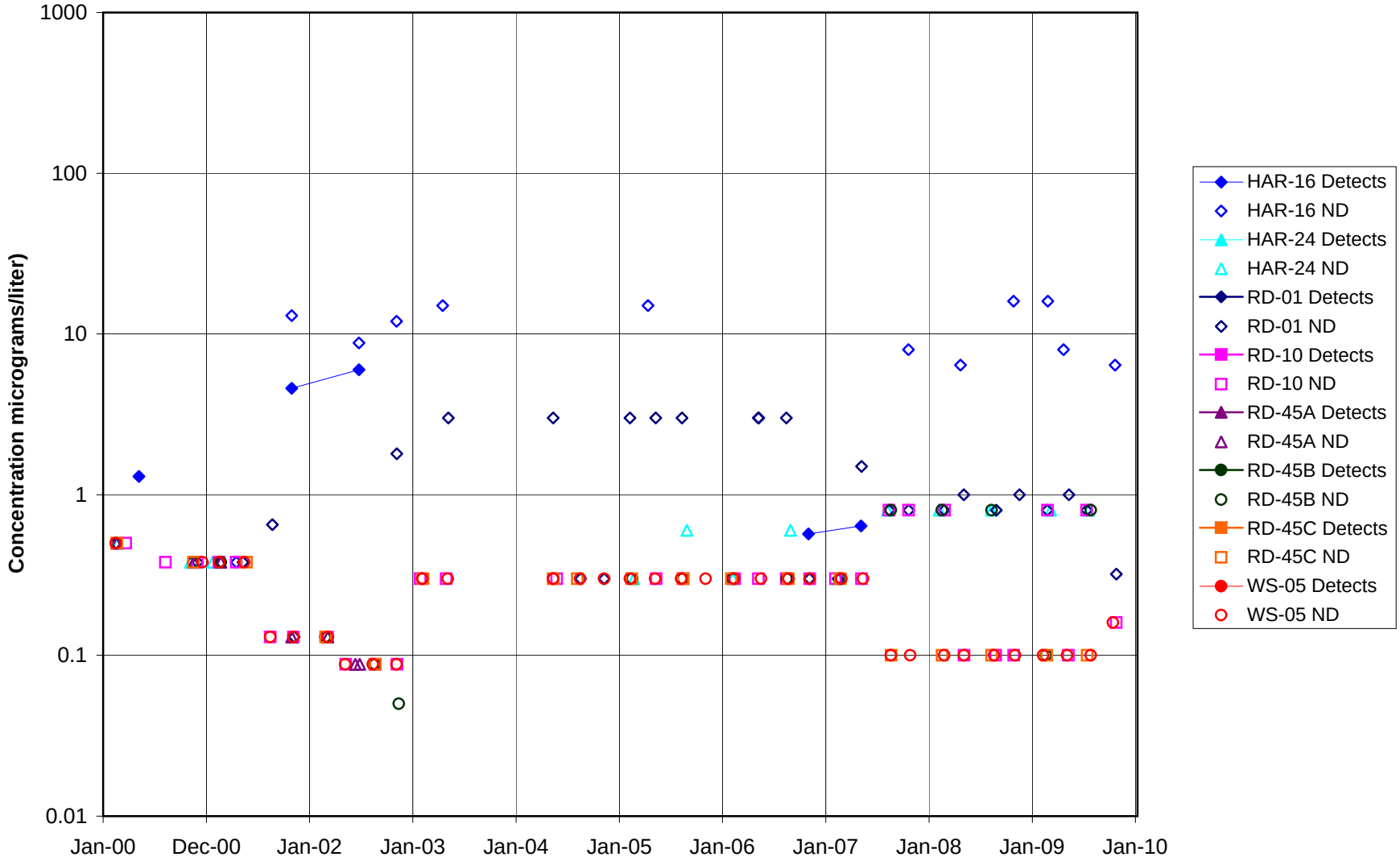


FIGURE F-7. 1,1,1-TCA in CTL-III / PERIMETER POND AREA WELLS

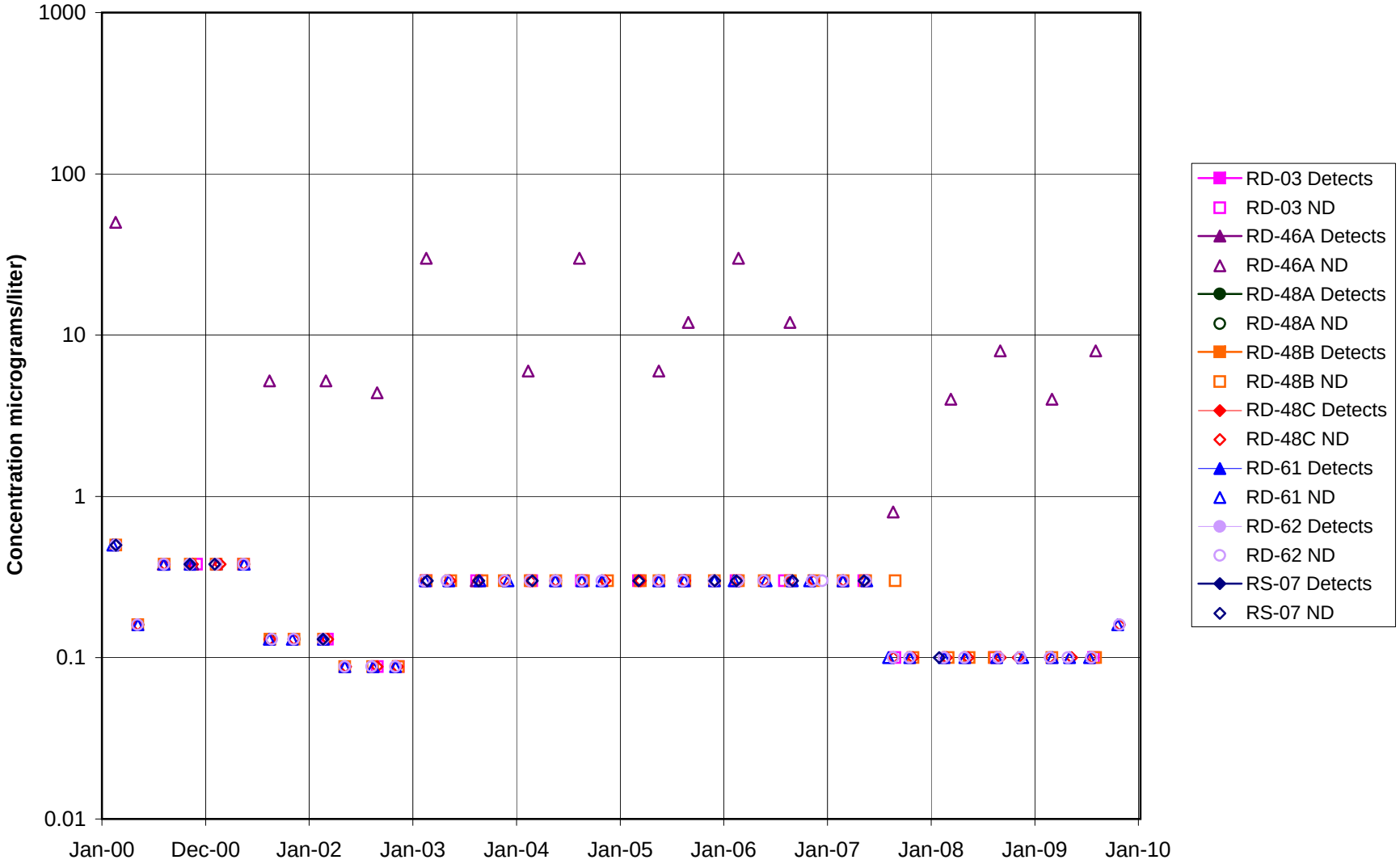


FIGURE F-8. 1,1,1-TCA in BOWL AREA WELLS

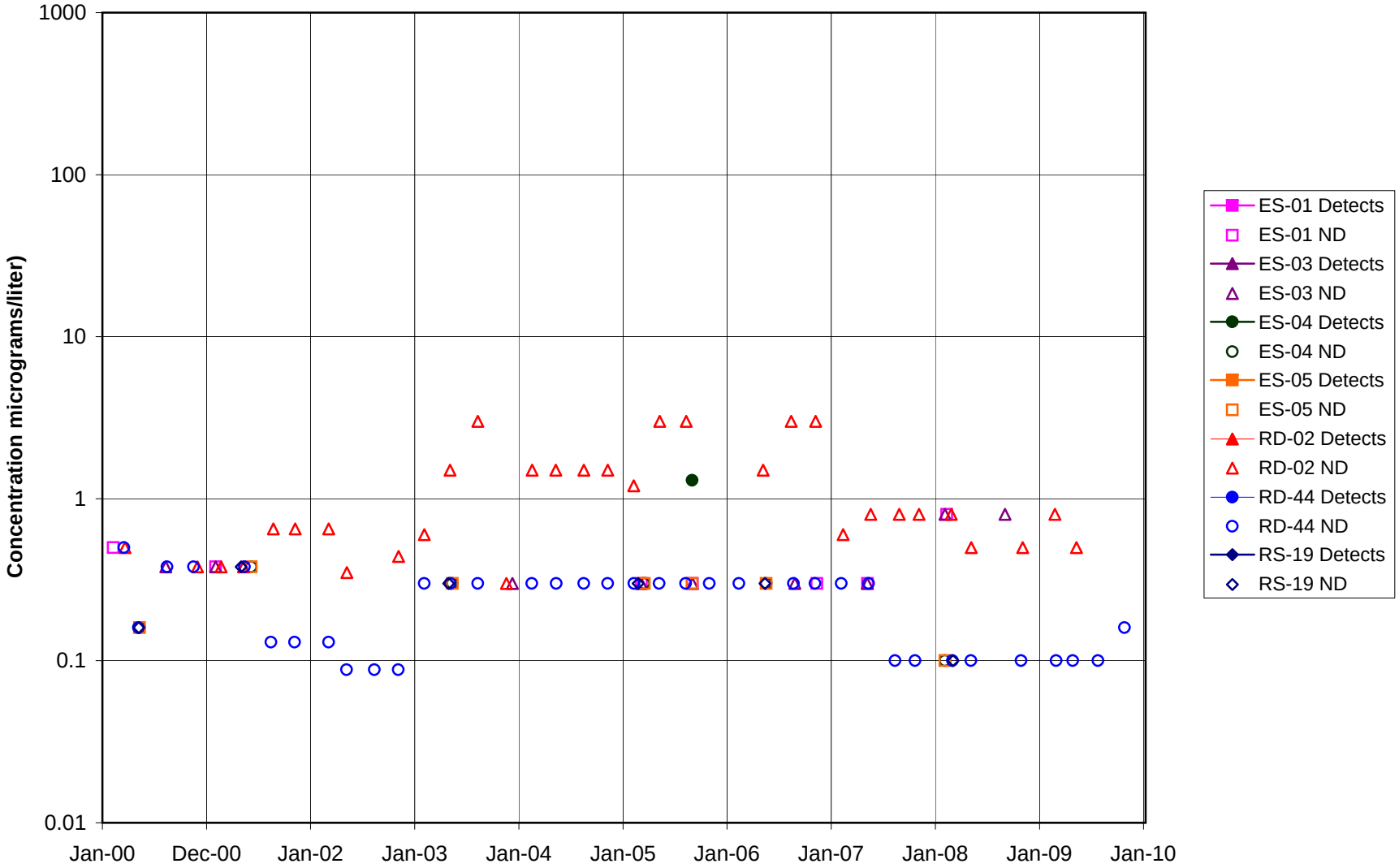


FIGURE F-9. 1,1,1-TCA in ECL AREA WELLS

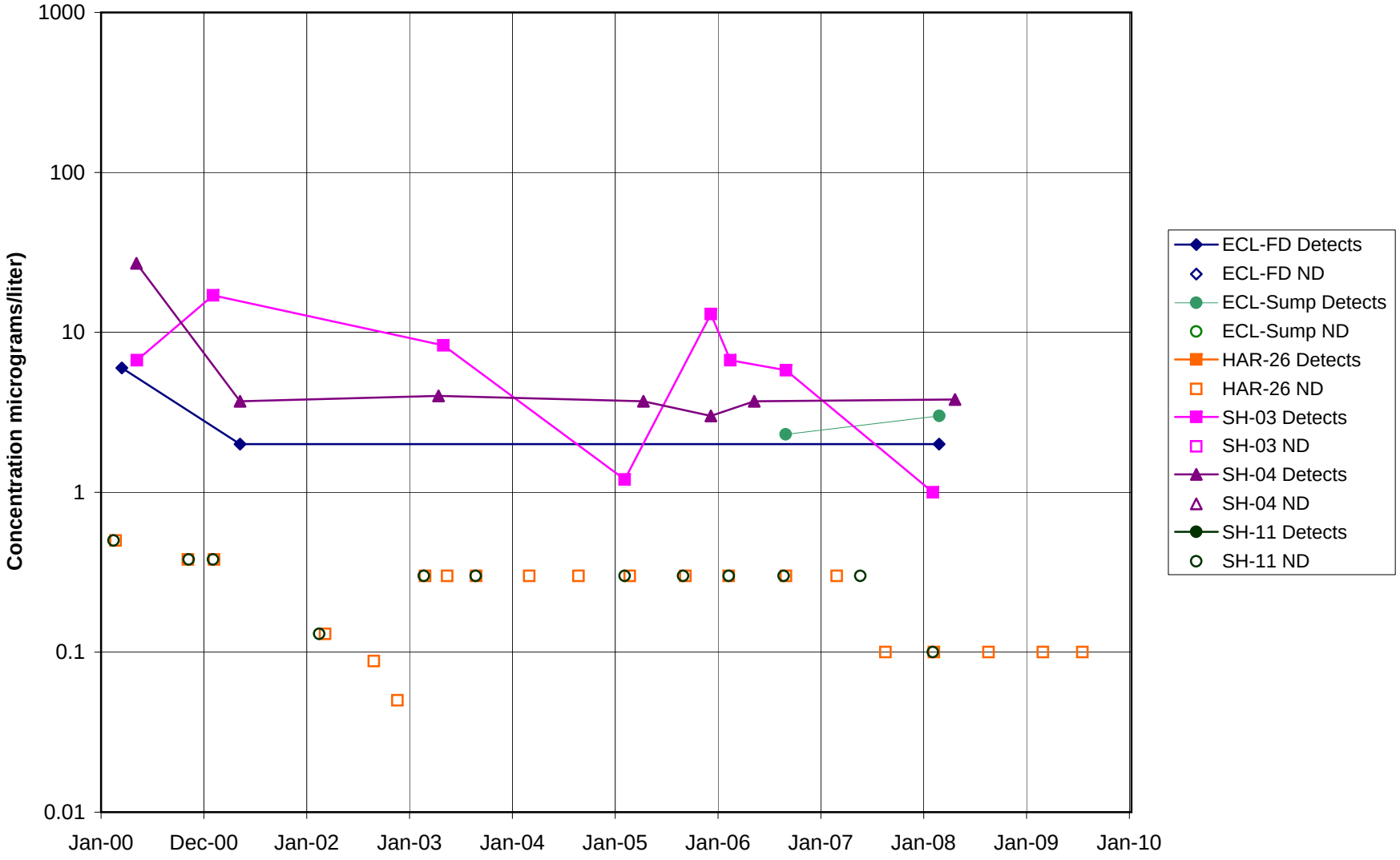


FIGURE F-10. 1,1,1-TCA in FORMER LOX PLANT AREA WELLS

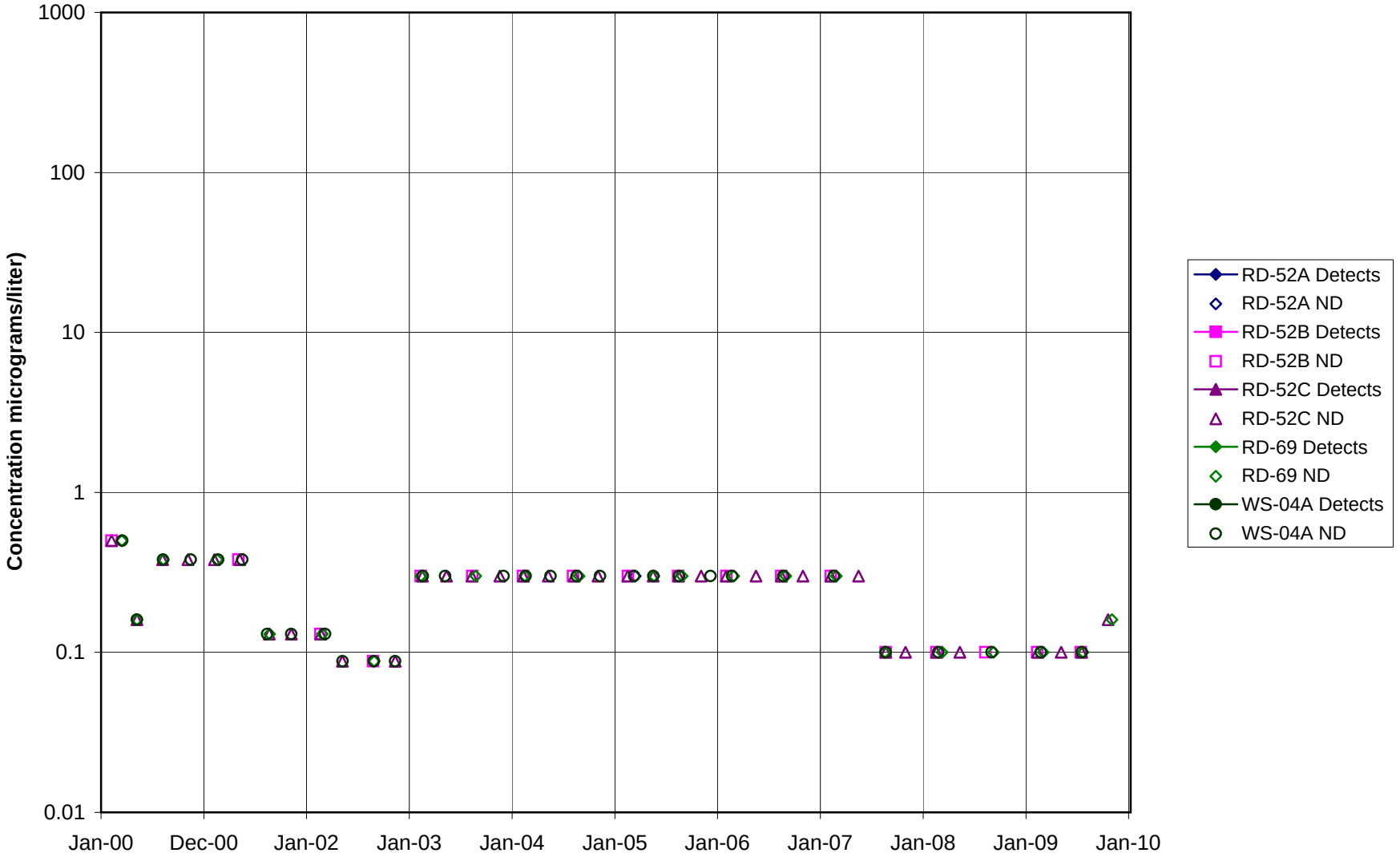


FIGURE F-11. 1,1,1-TCA in RD-09 AREA WELLS

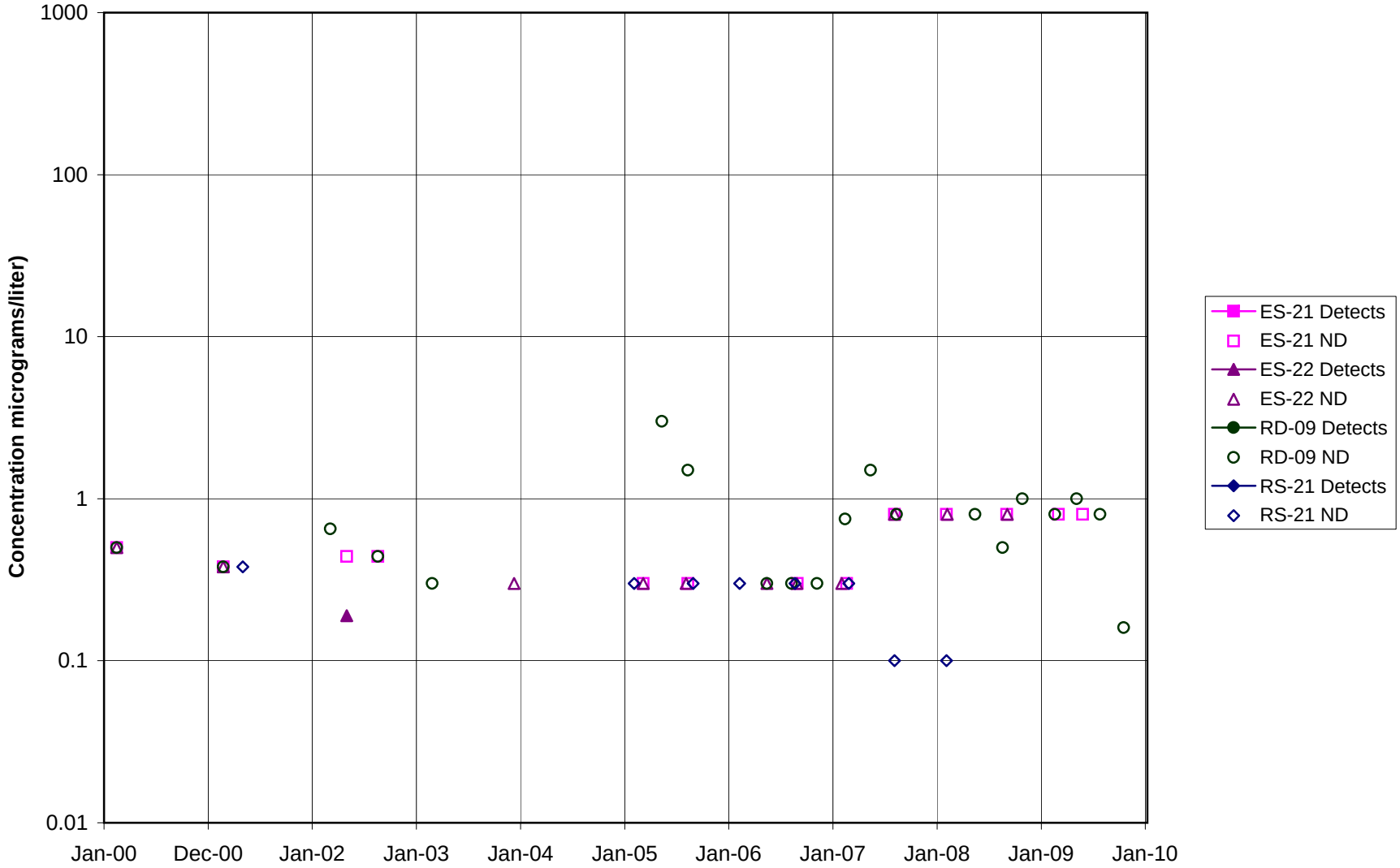


FIGURE F-12. 1,1,1-TCA in HELIPORT, B/204 AREA WELLS

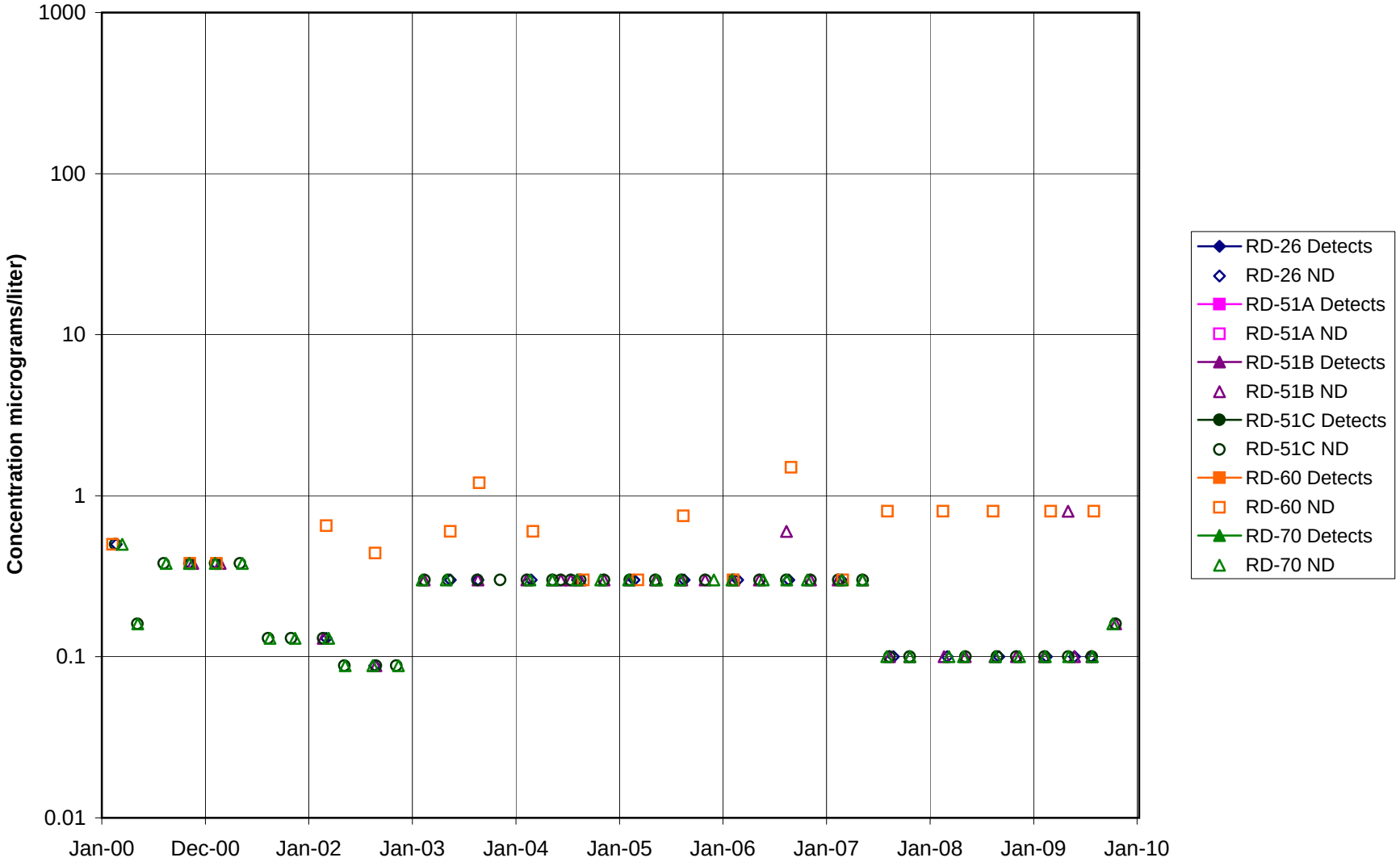


FIGURE F-13. 1,1,1-TCA in ALFA / BRAVO AREA WELLS

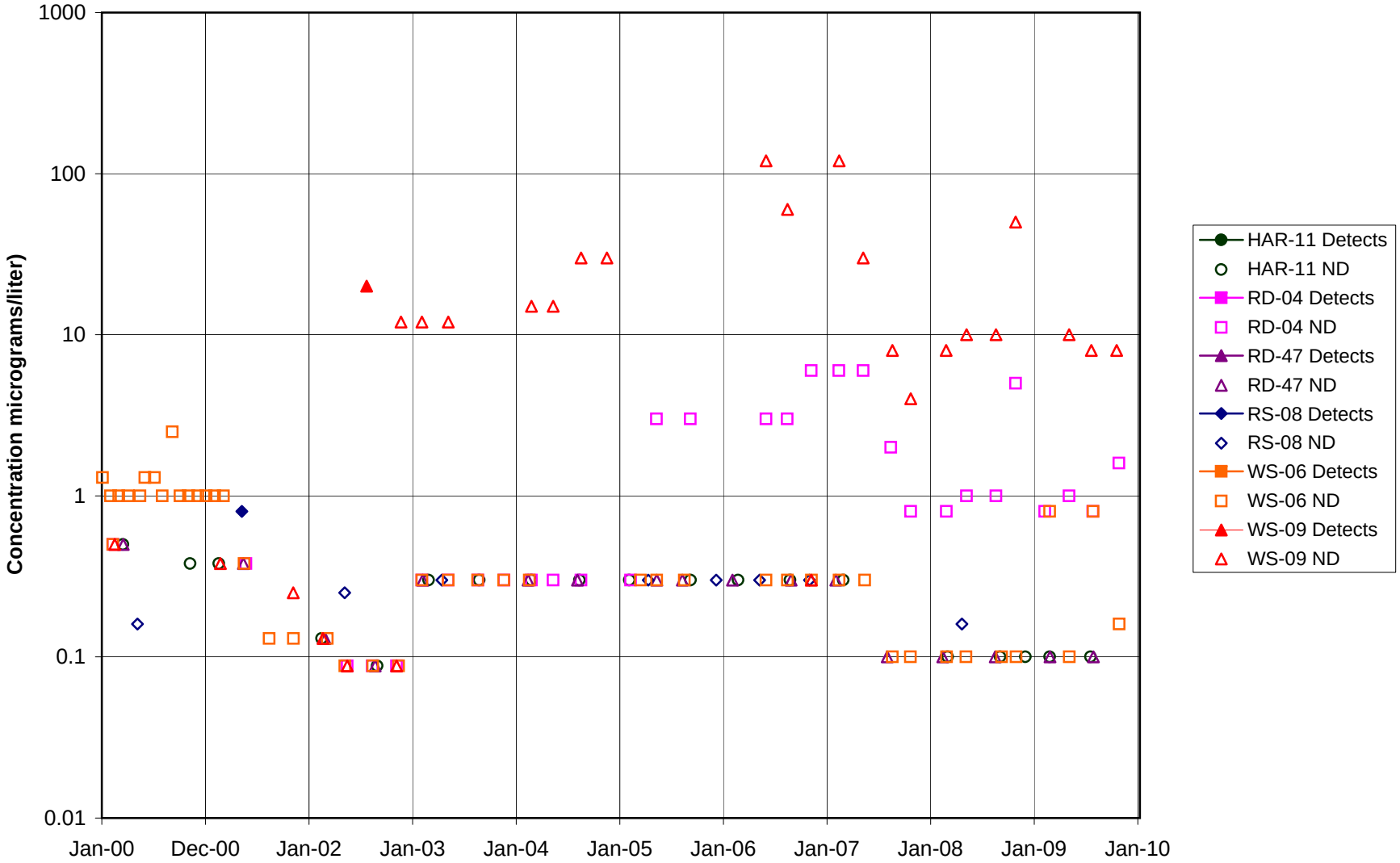


FIGURE F-14. 1,1,1-TCA in SPA AREA WELLS

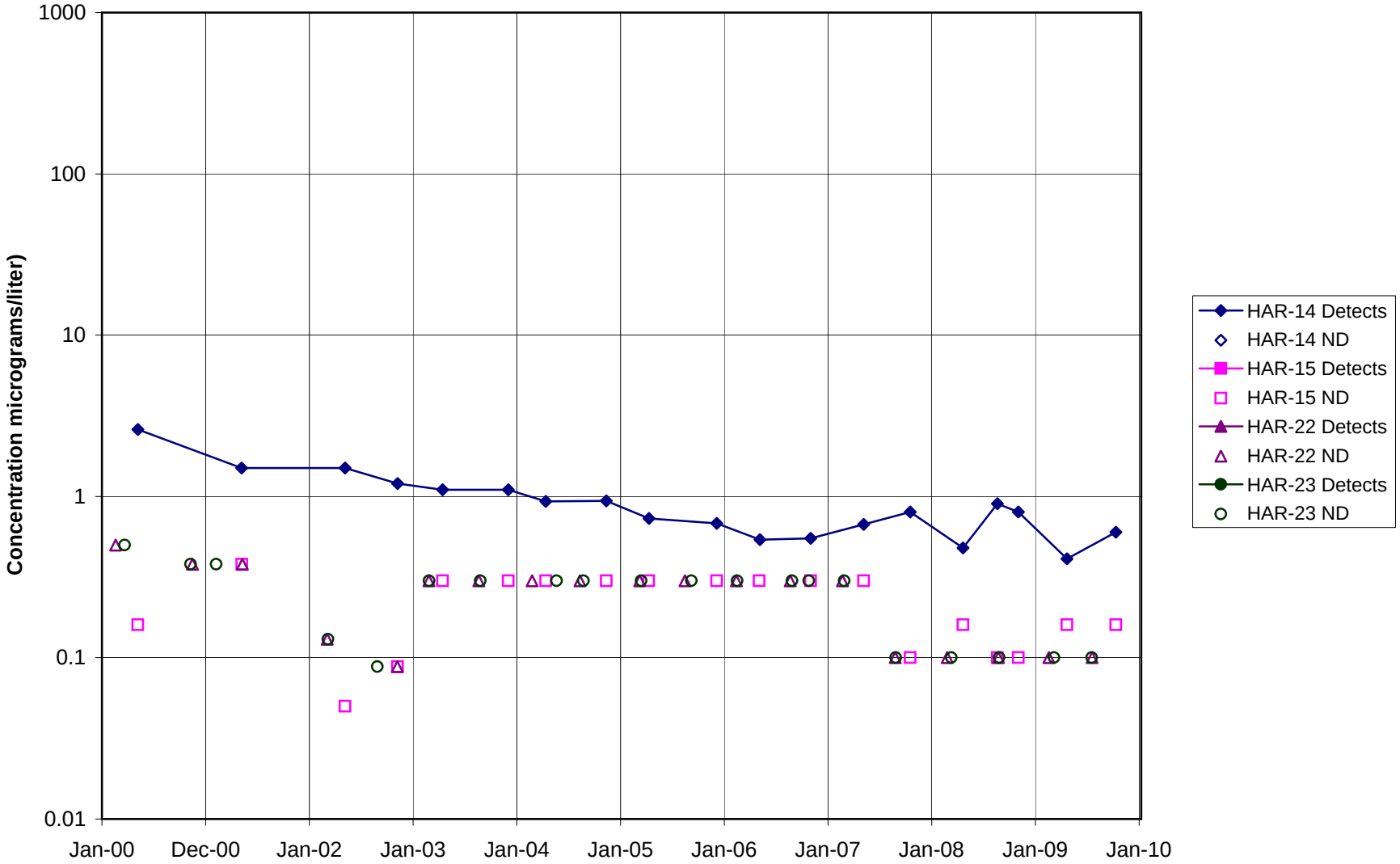


FIGURE F-15. 1,1,1-TCA in COCA / PLF AREA WELLS

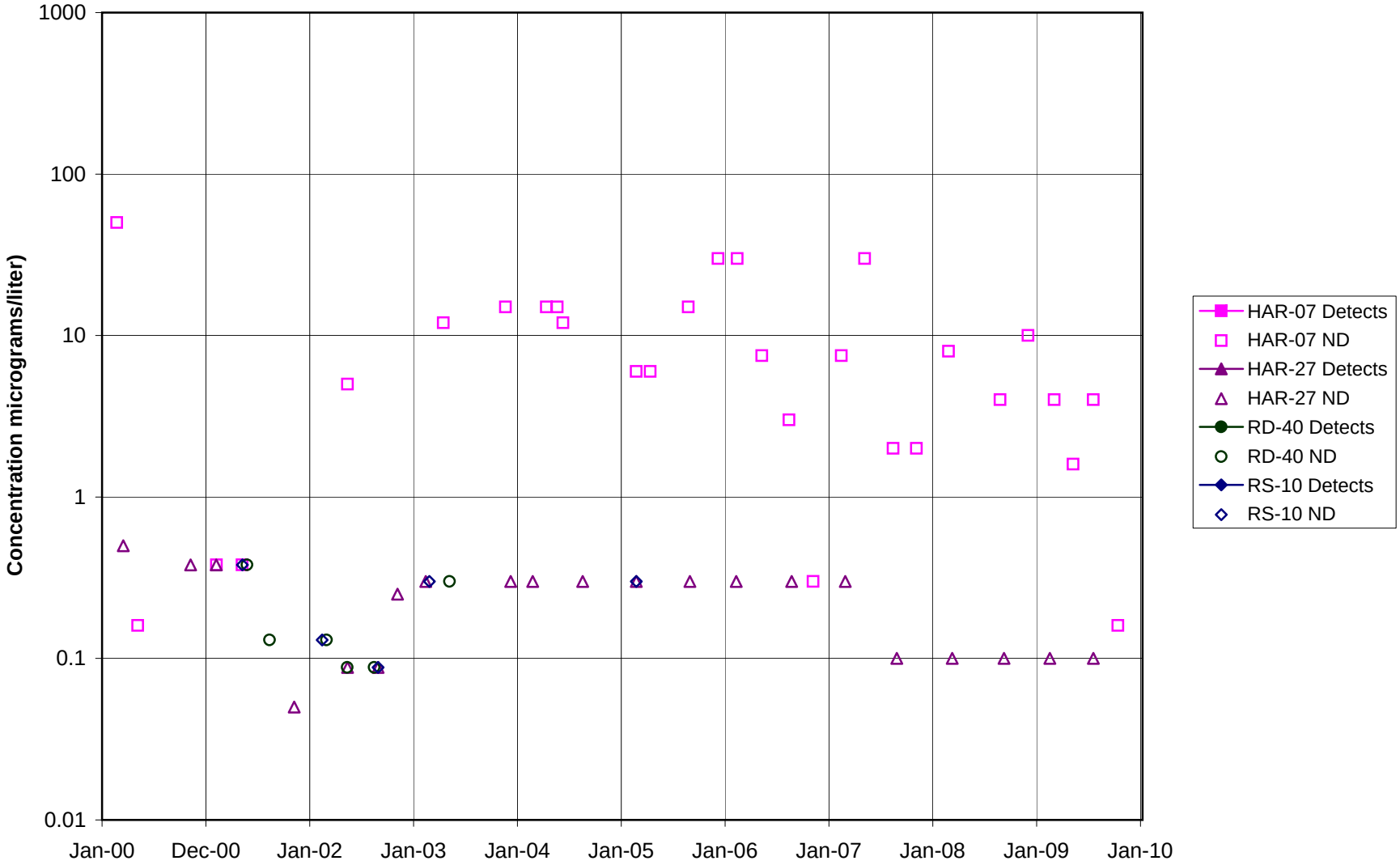


FIGURE F-16. 1,1,1-TCA in DELTA / BUFFER ZONE AREA WELLS

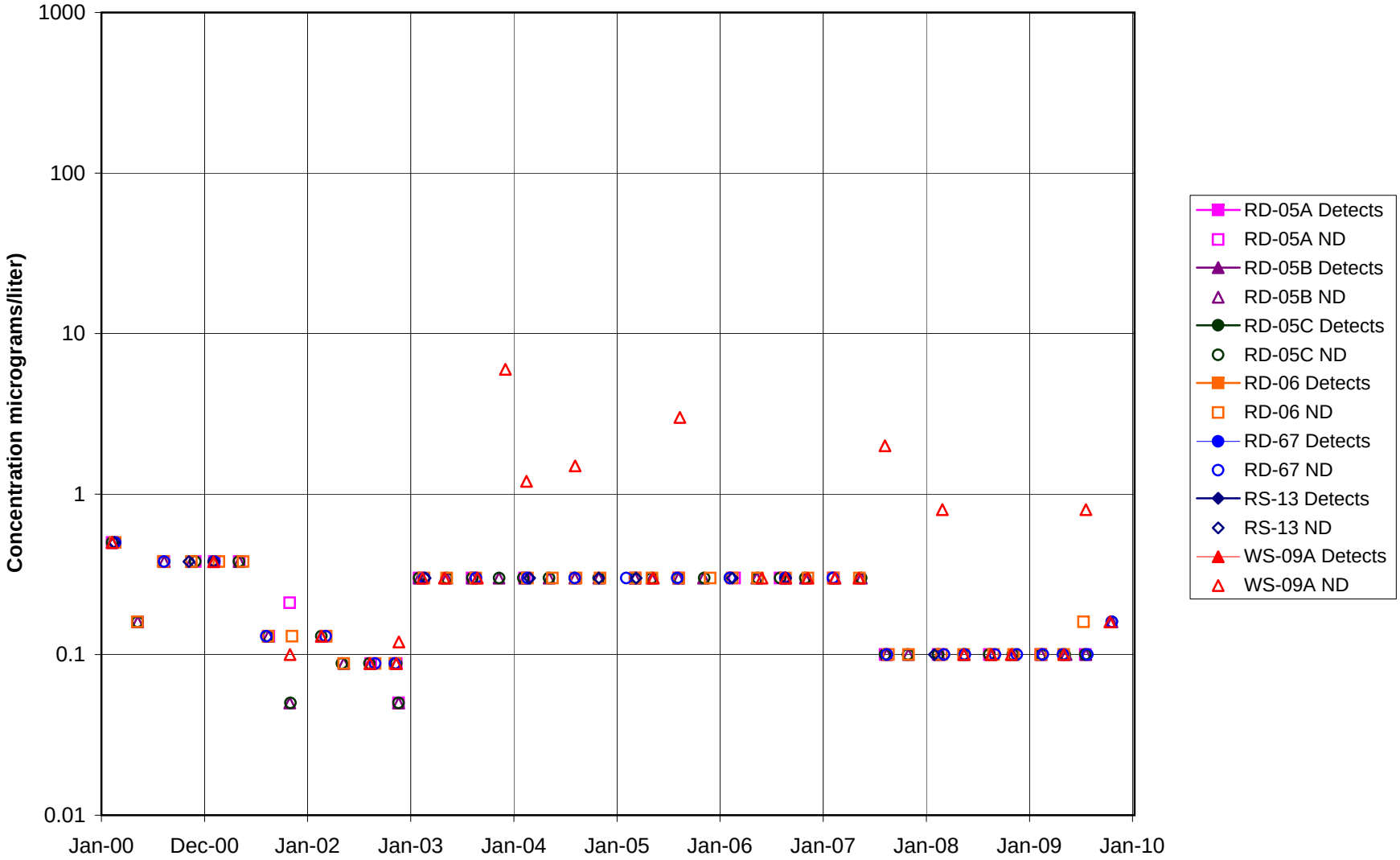


FIGURE F-17. 1,1,1-TCA in AREA IV WELLS

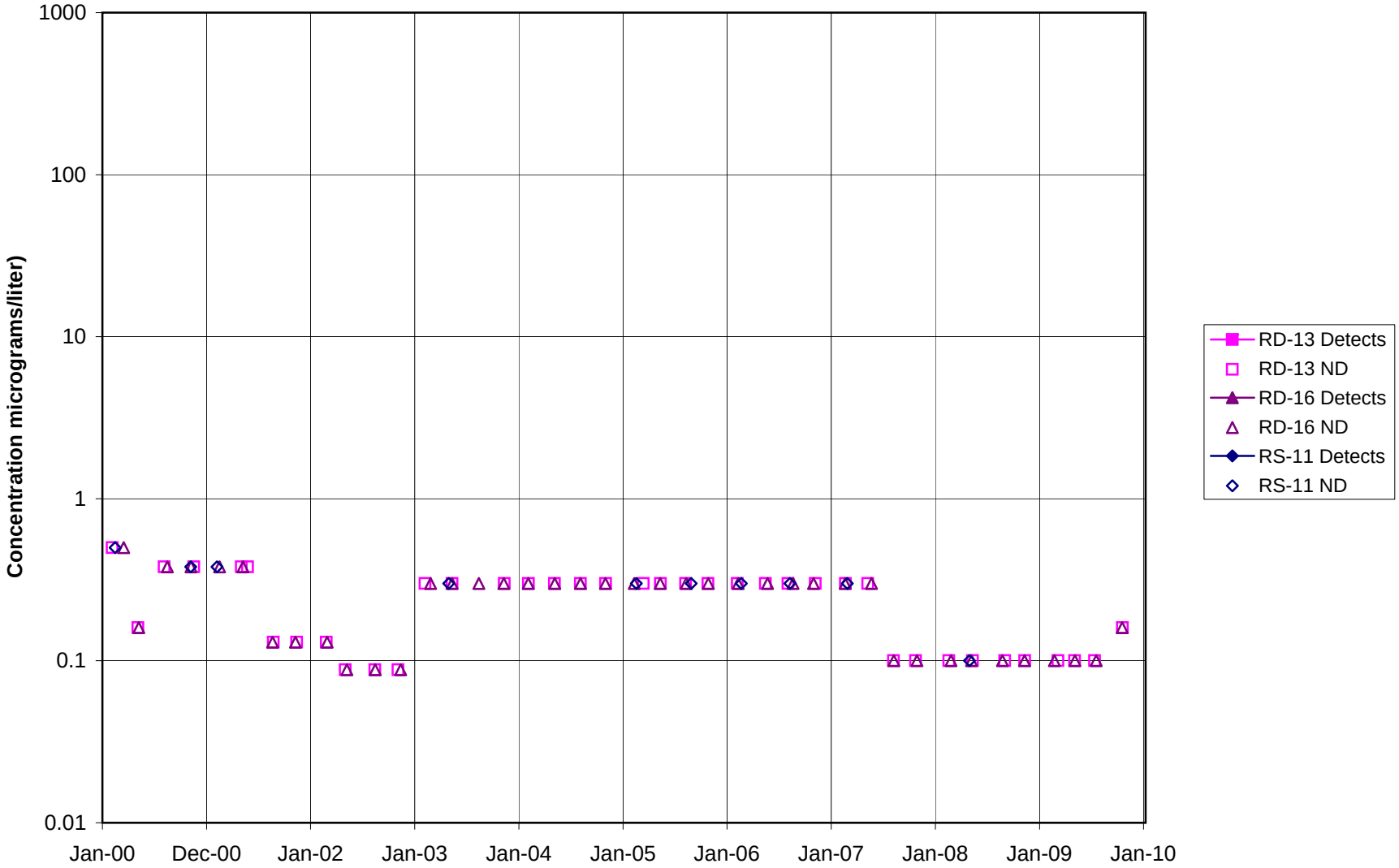


FIGURE F-18. 1,1,2-TCA in STL-IV AREA SHALLOW WELLS

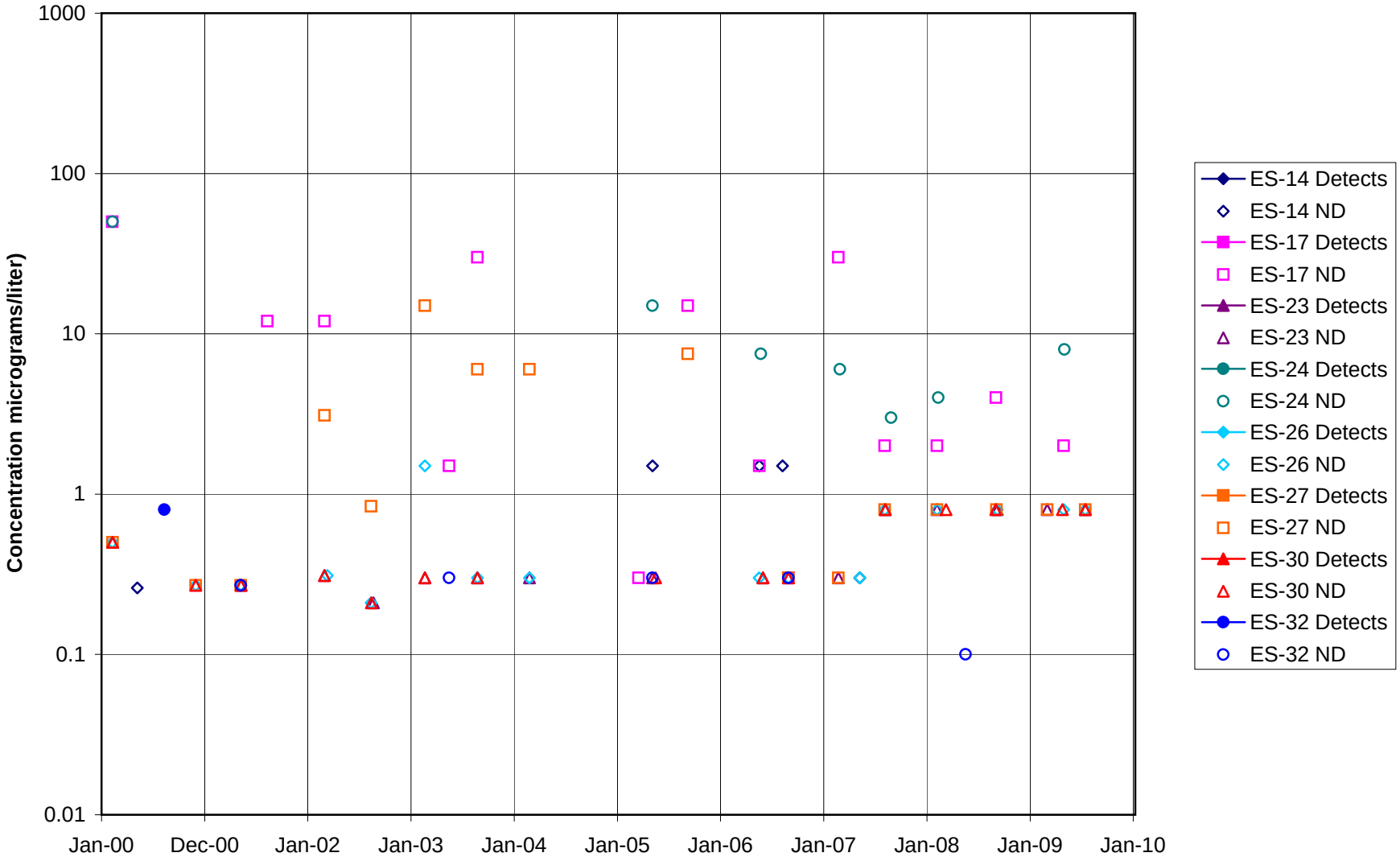


FIGURE F-19. 1,1,2-TCA in STL-IV AREA CHATSWORTH FORMATION WELLS

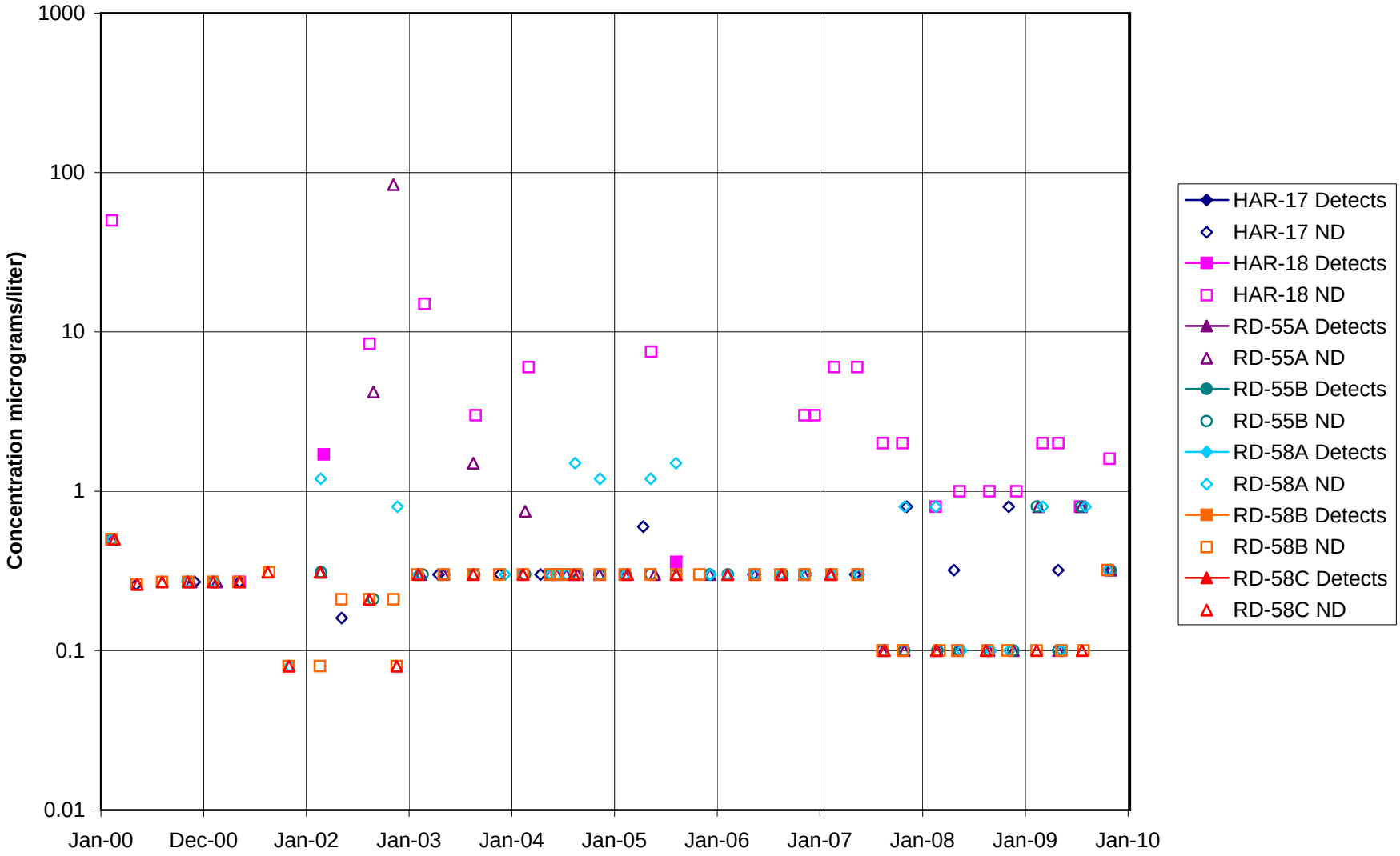


FIGURE F-20. 1,1,2-TCA in MAIN GATE AREA WELLS - 1

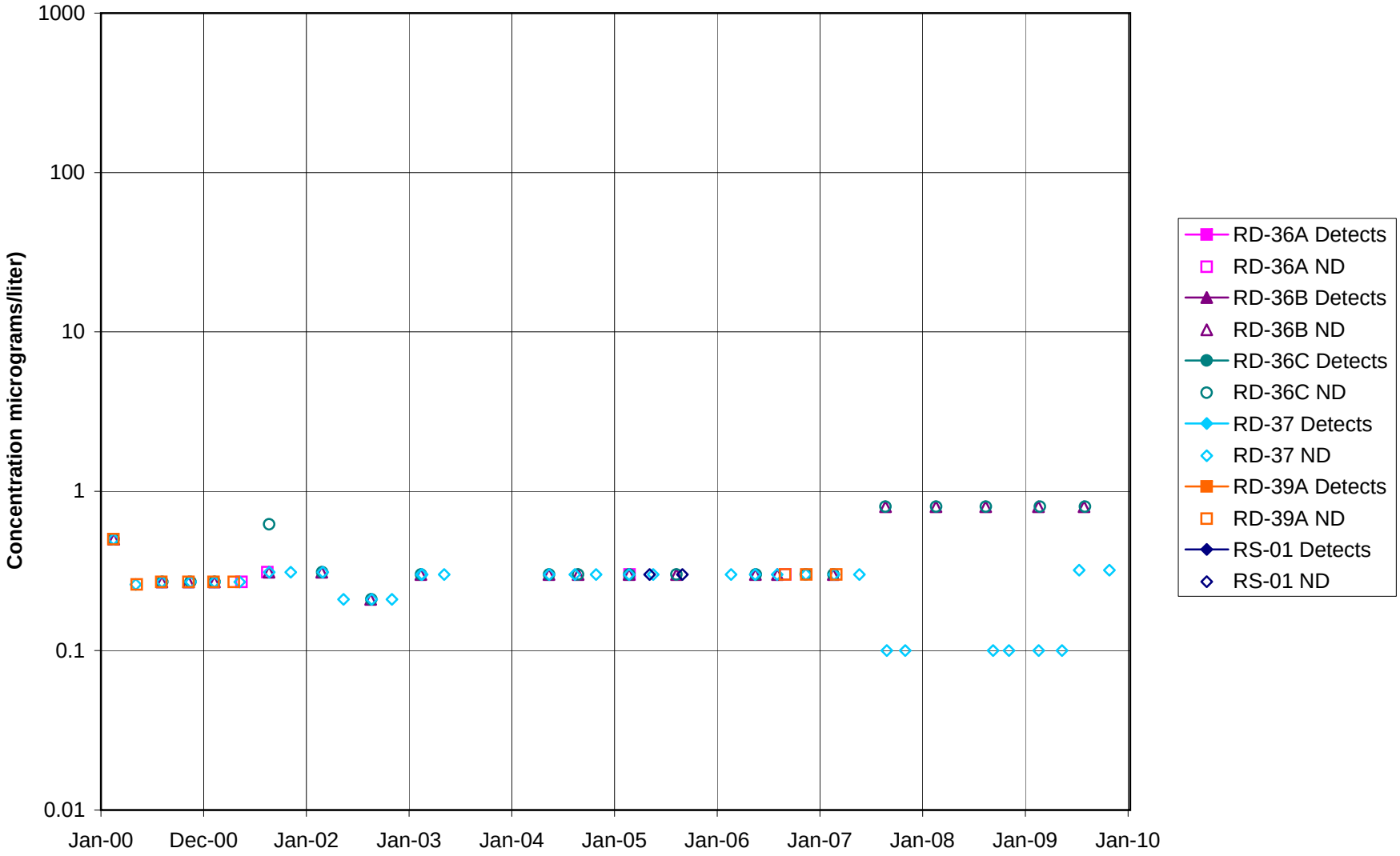


FIGURE F-21. 1,1,2-TCA in MAIN GATE AREA WELLS - 2

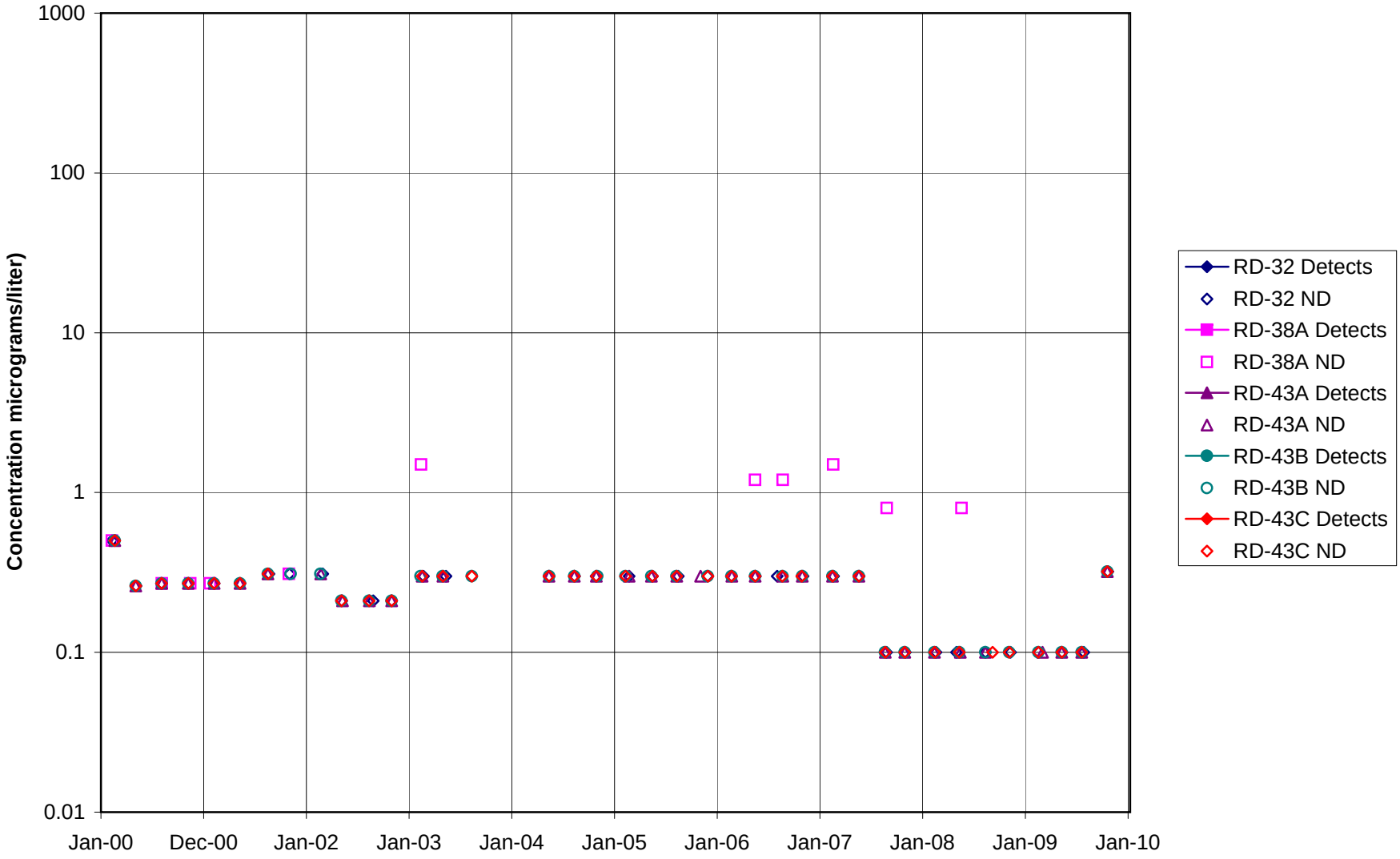


FIGURE F-22. 1,1,2-TCA in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1

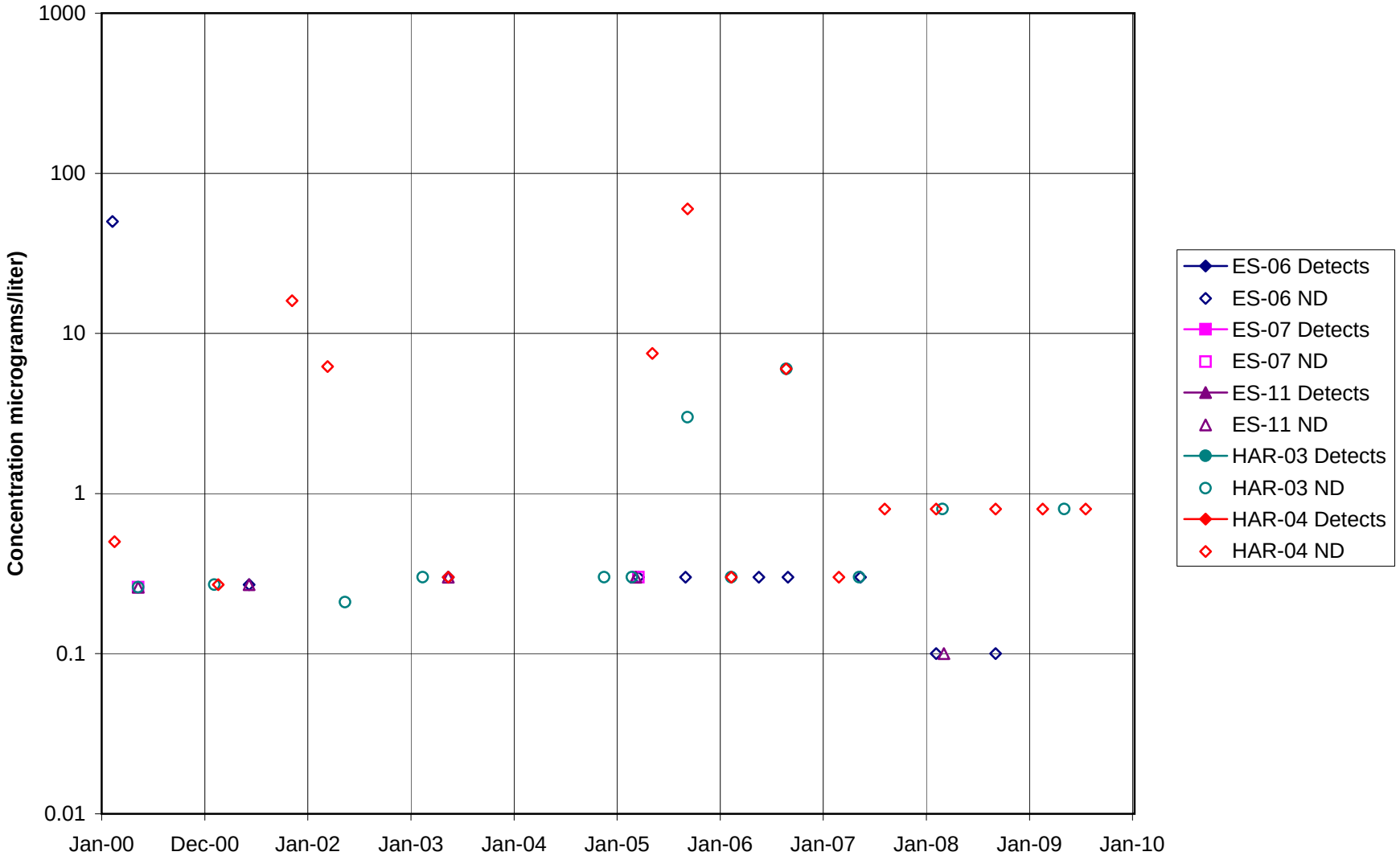


FIGURE F-23. 1,1,2-TCA in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 2

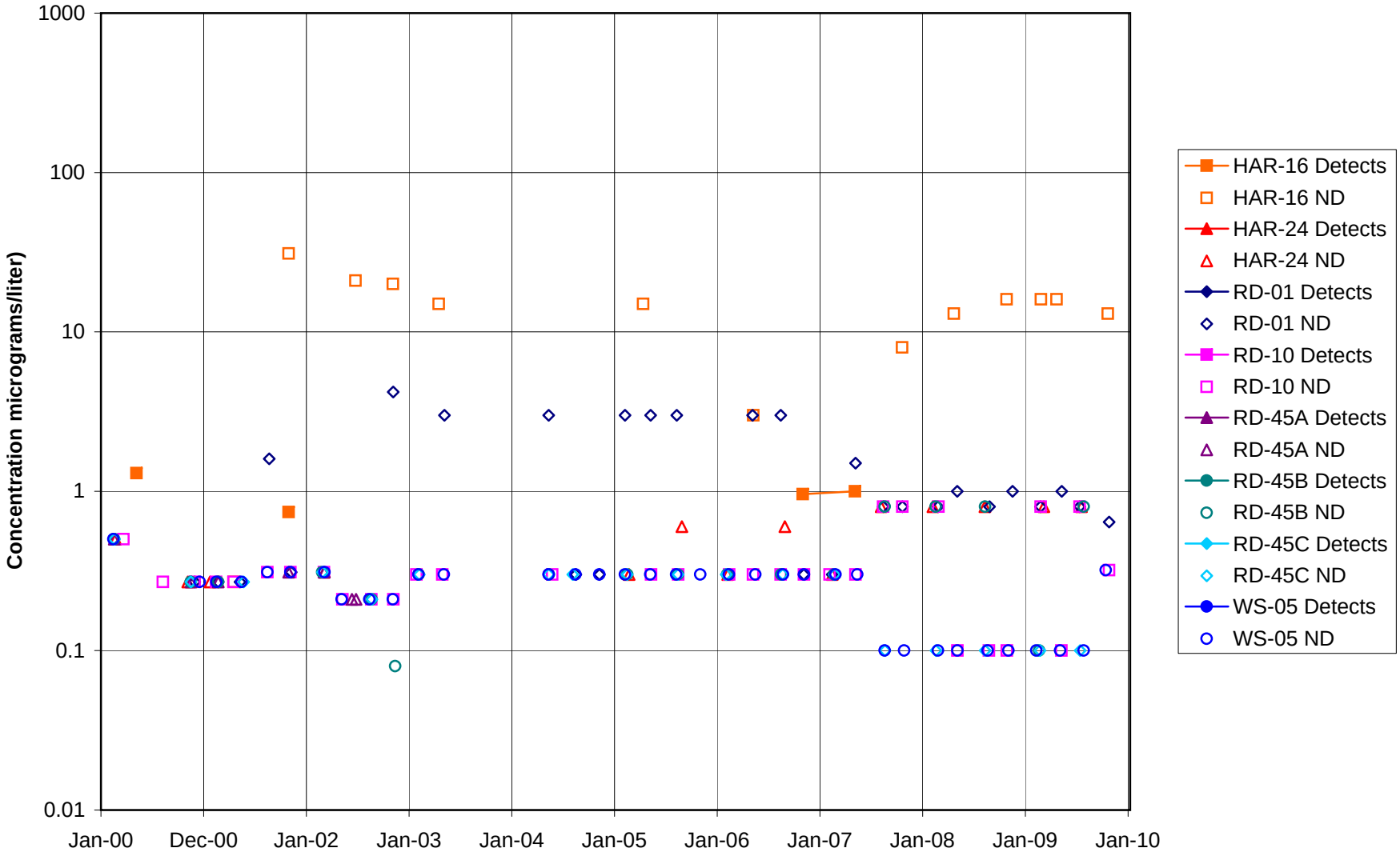


FIGURE F-24. 1,1,2-TCA in CTL-III / PERIMETER POND AREA WELLS

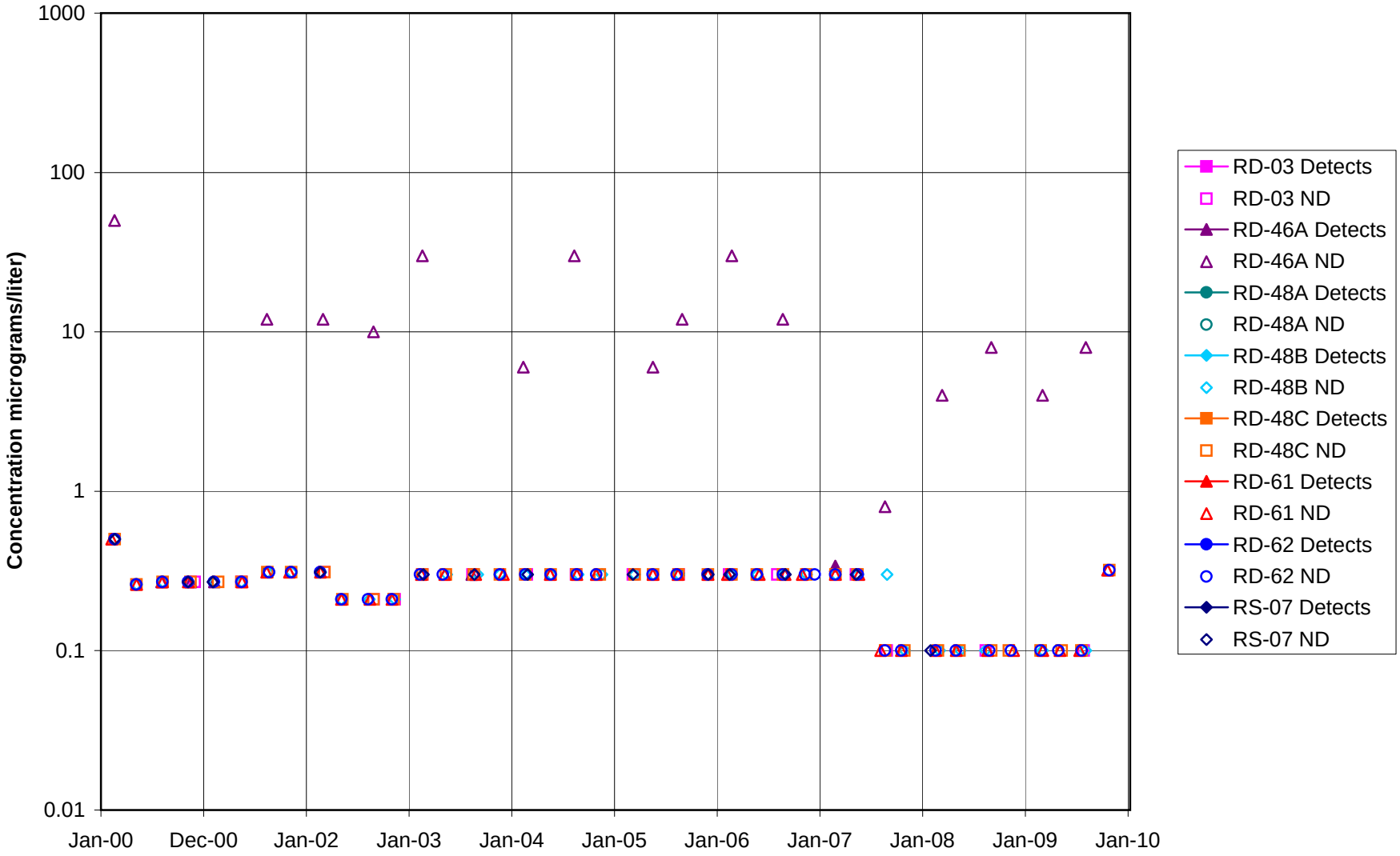


FIGURE F-25. 1,1,2-TCA in BOWL AREA WELLS

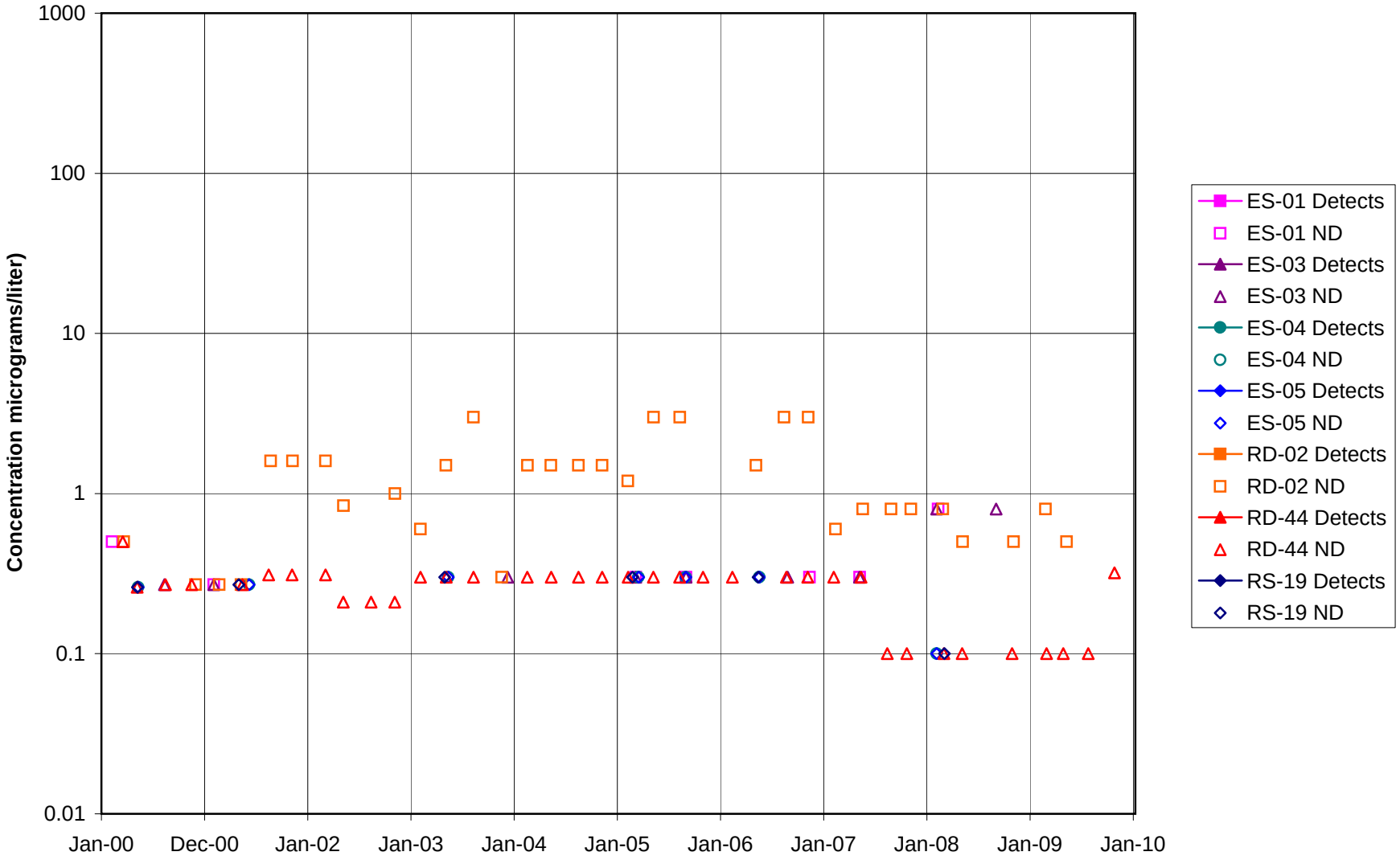


FIGURE F-26. 1,1,2-TCA in ECL AREA WELLS

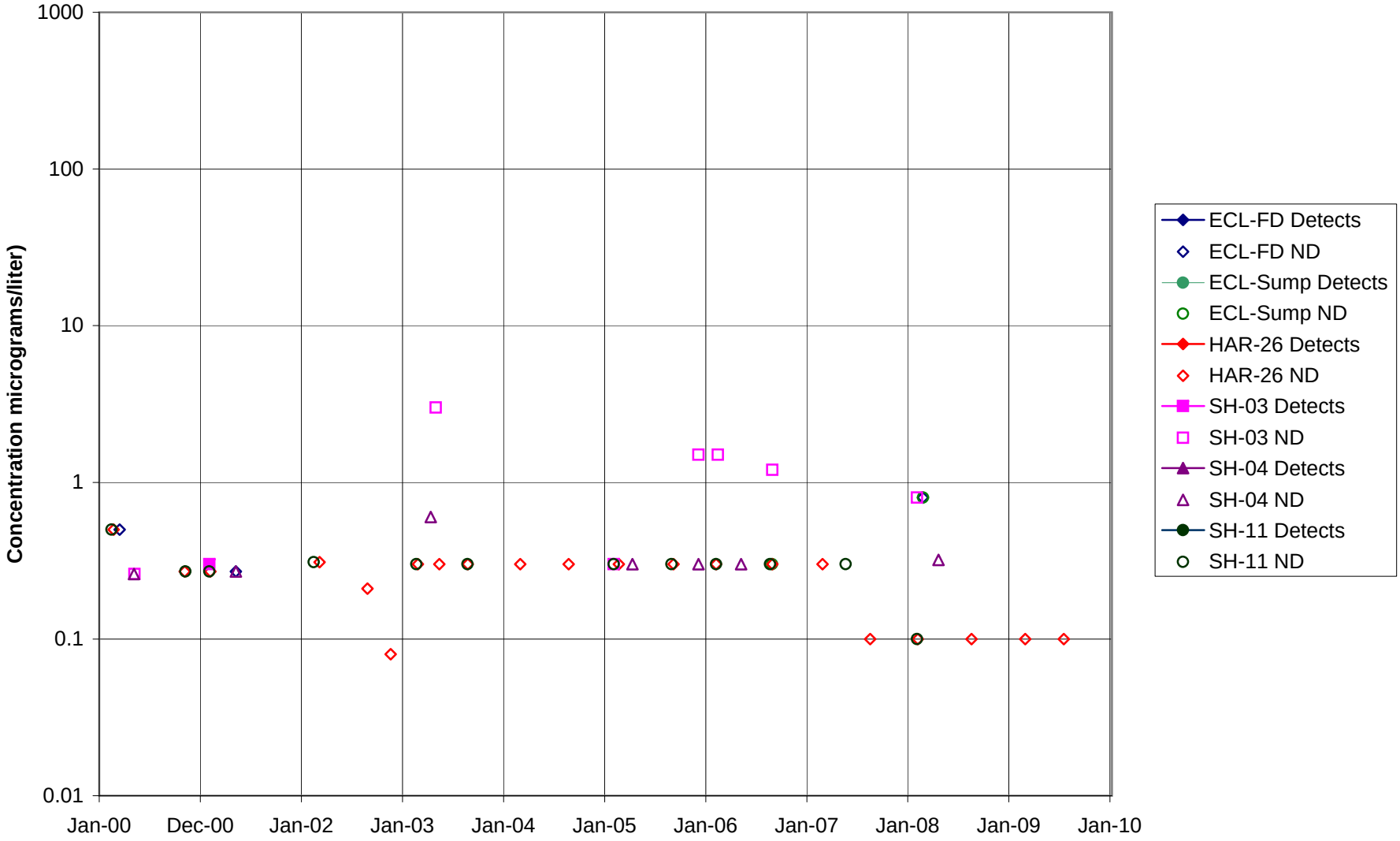


FIGURE F-27. 1,1,2-TCA in FORMER LOX PLANT AREA WELLS

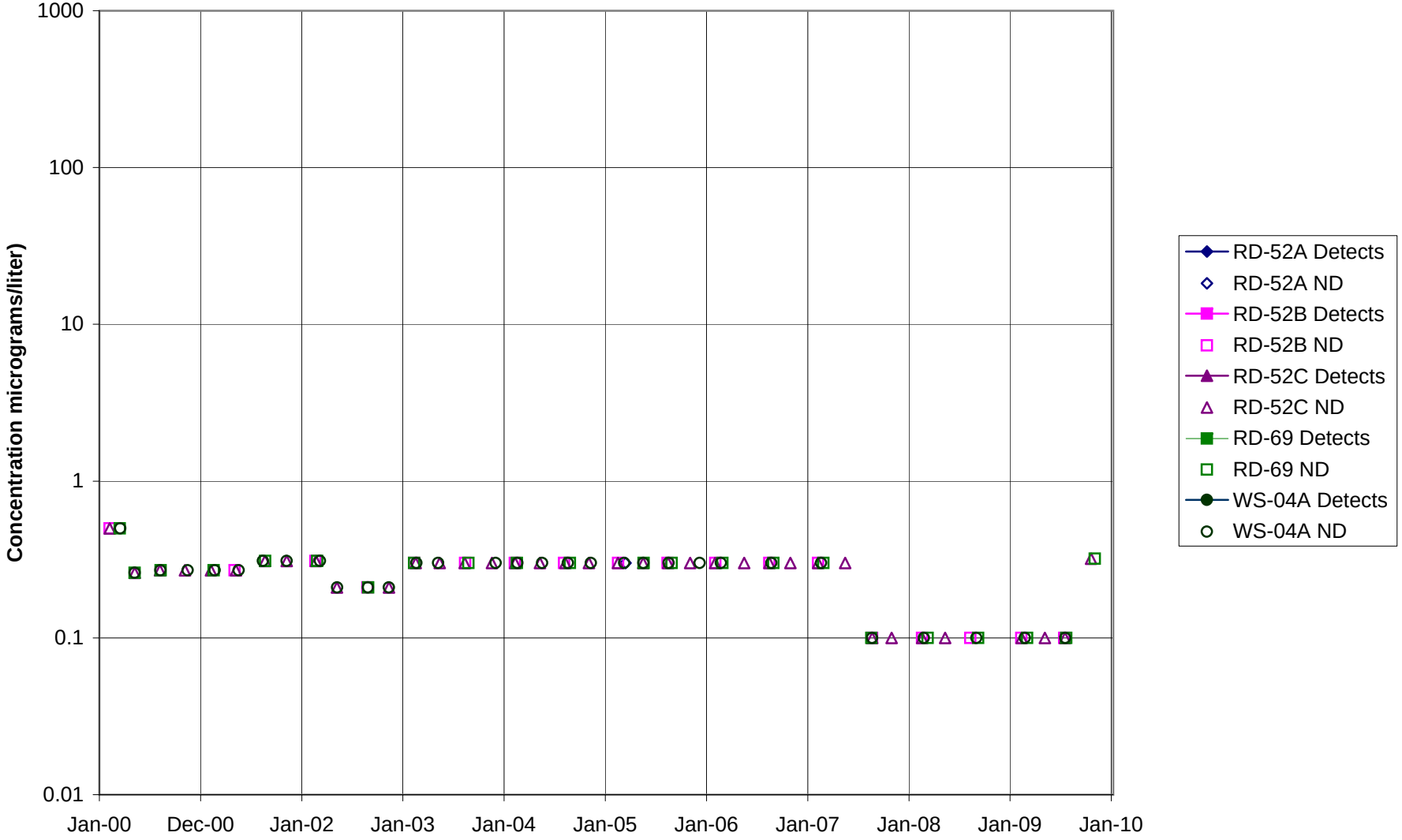


FIGURE F-28. 1,1,2-TCA in RD-09 AREA WELLS

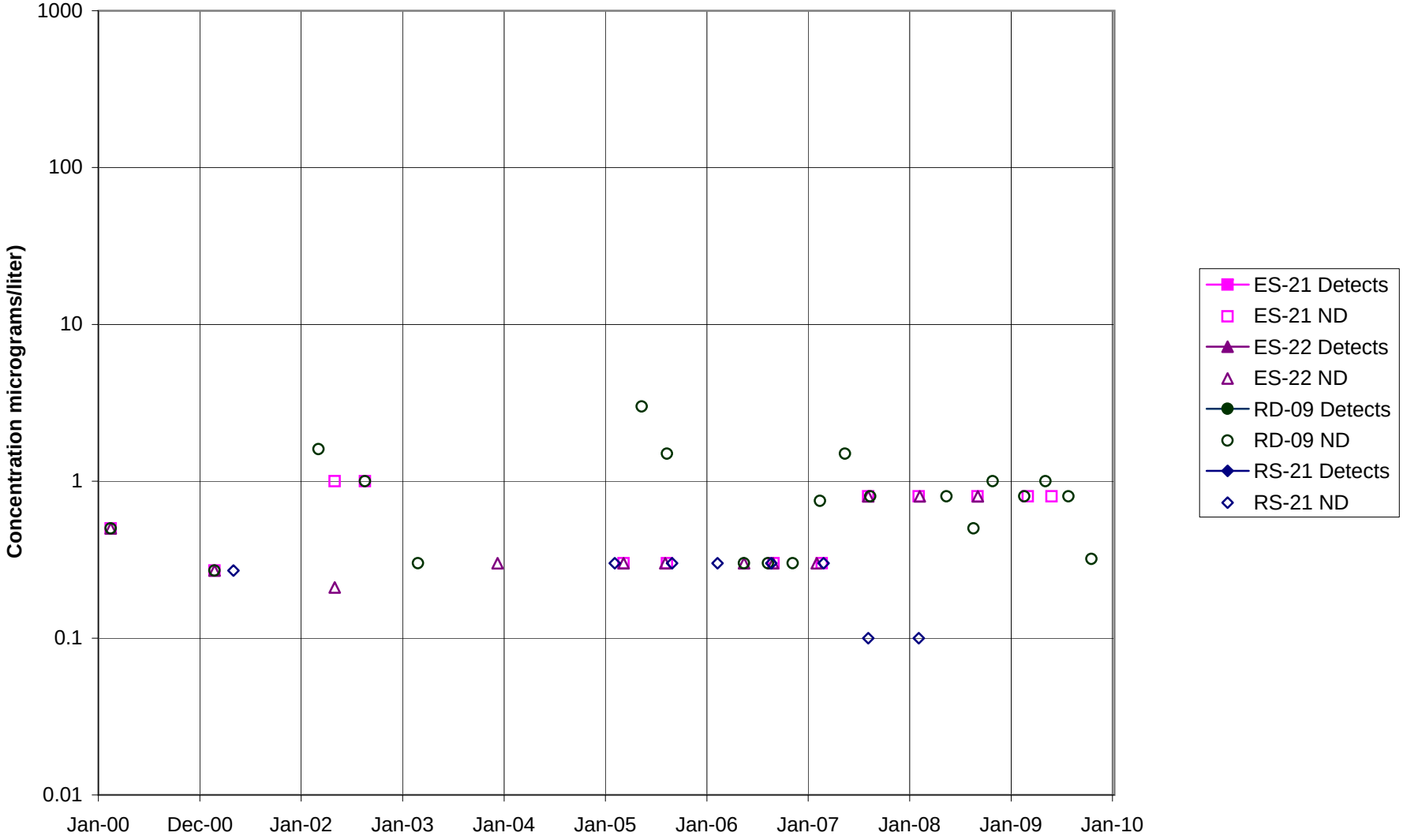


FIGURE F-29. 1,1,2-TCA in HELIPORT, B/204 AREA WELLS

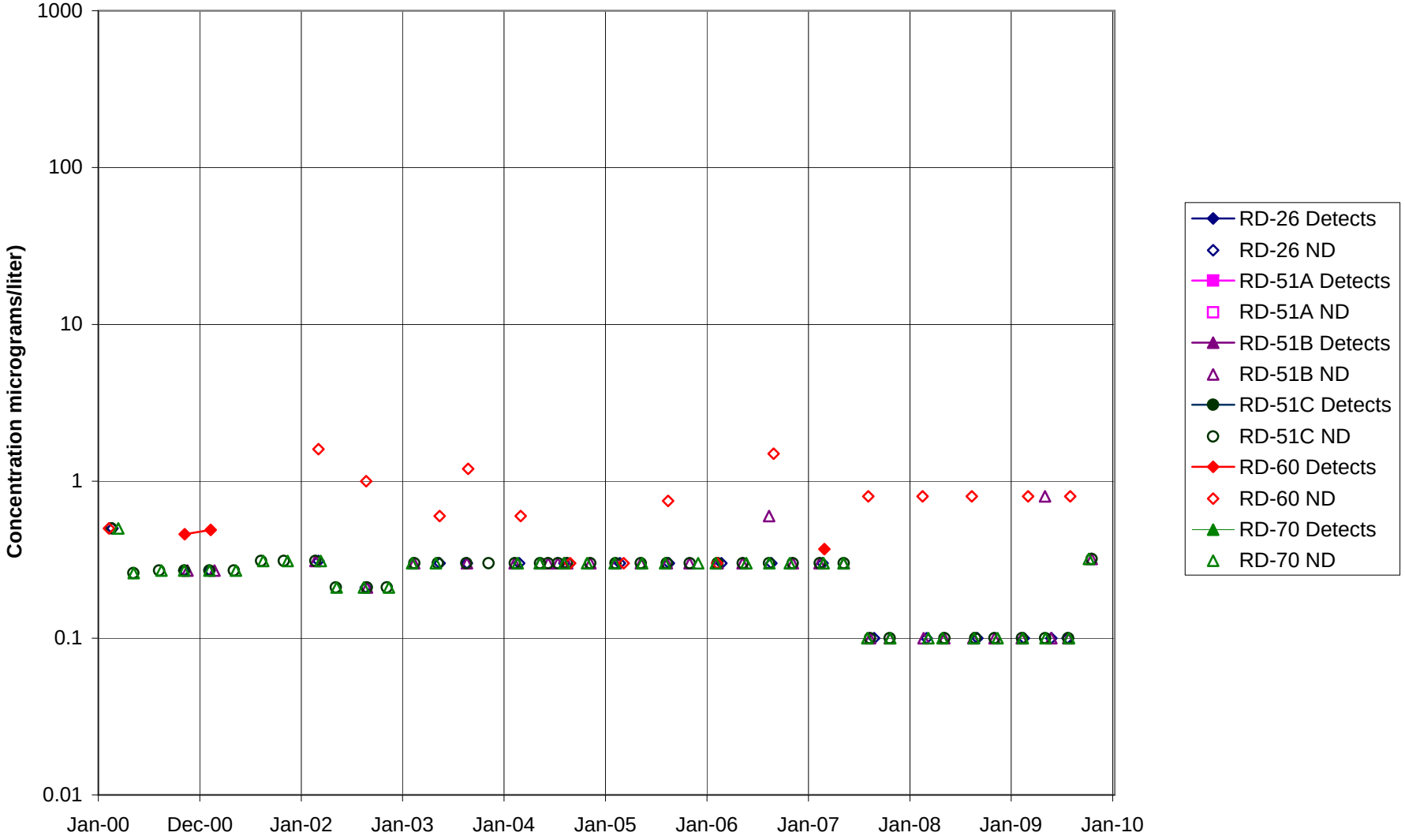


FIGURE F-30. 1,1,2-TCA in ALFA / BRAVO AREA WELLS

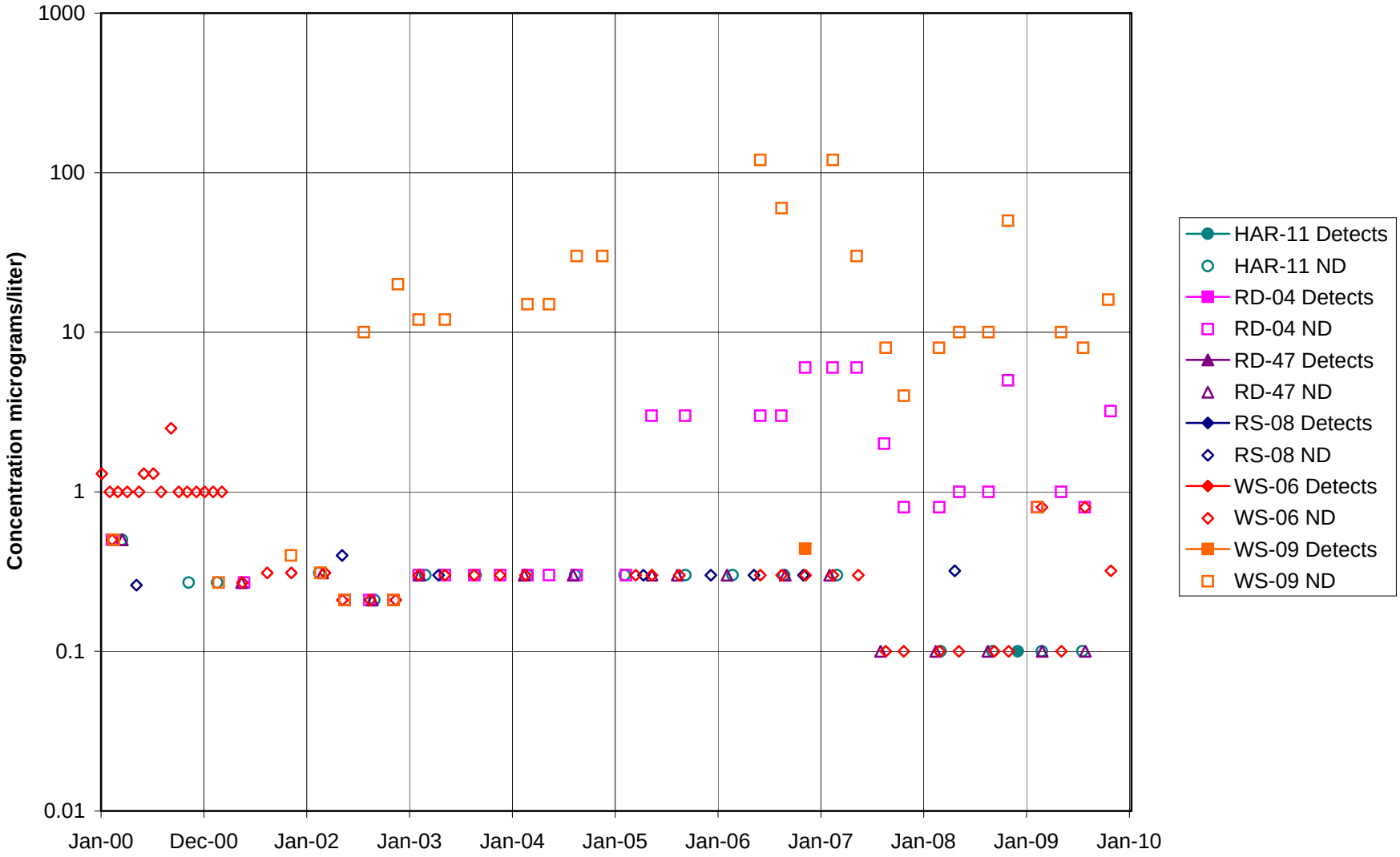


FIGURE F-31. 1,1,2-TCA in SPA AREA WELLS

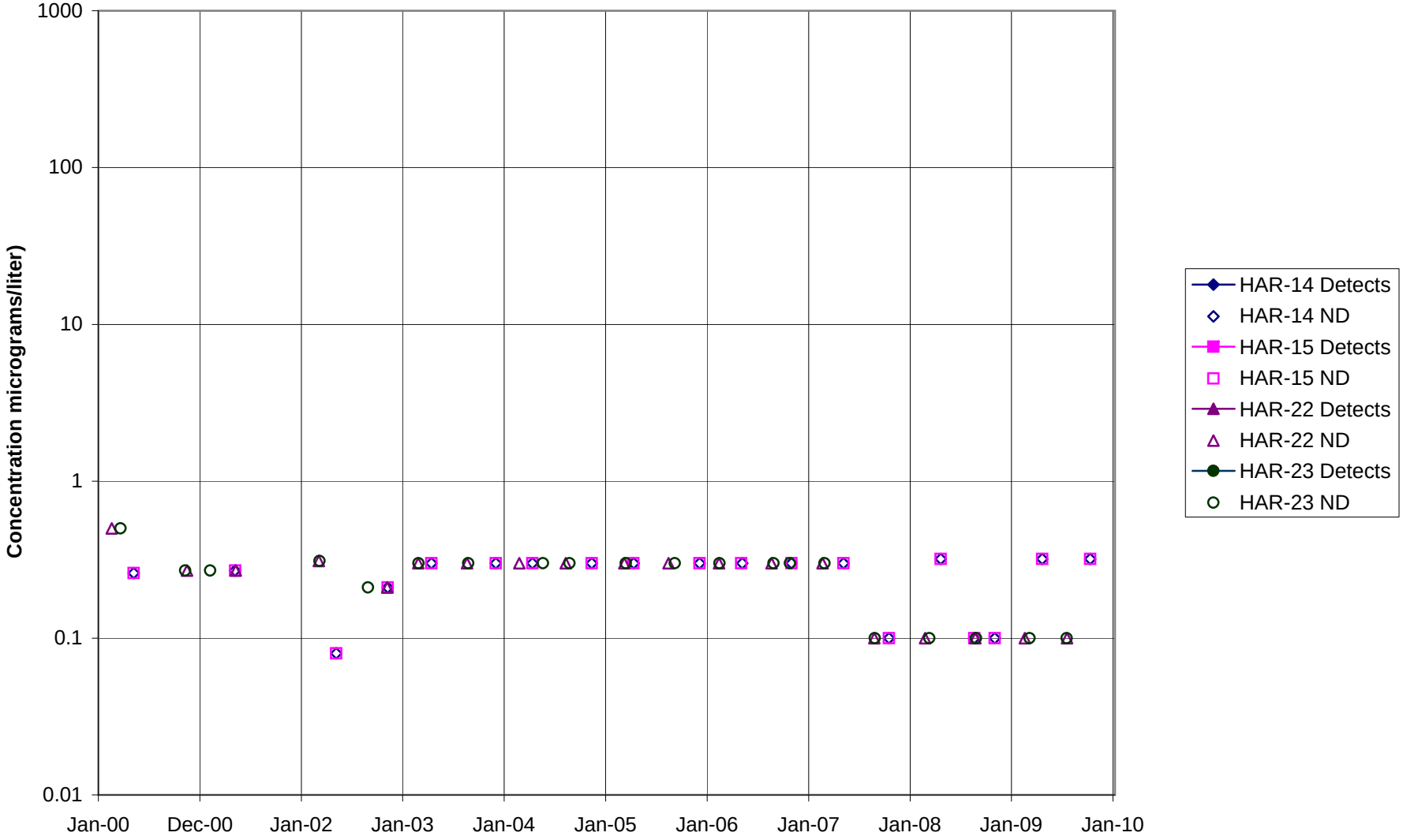


FIGURE F-32. 1,1,2-TCA in COCA / PLF AREA WELLS

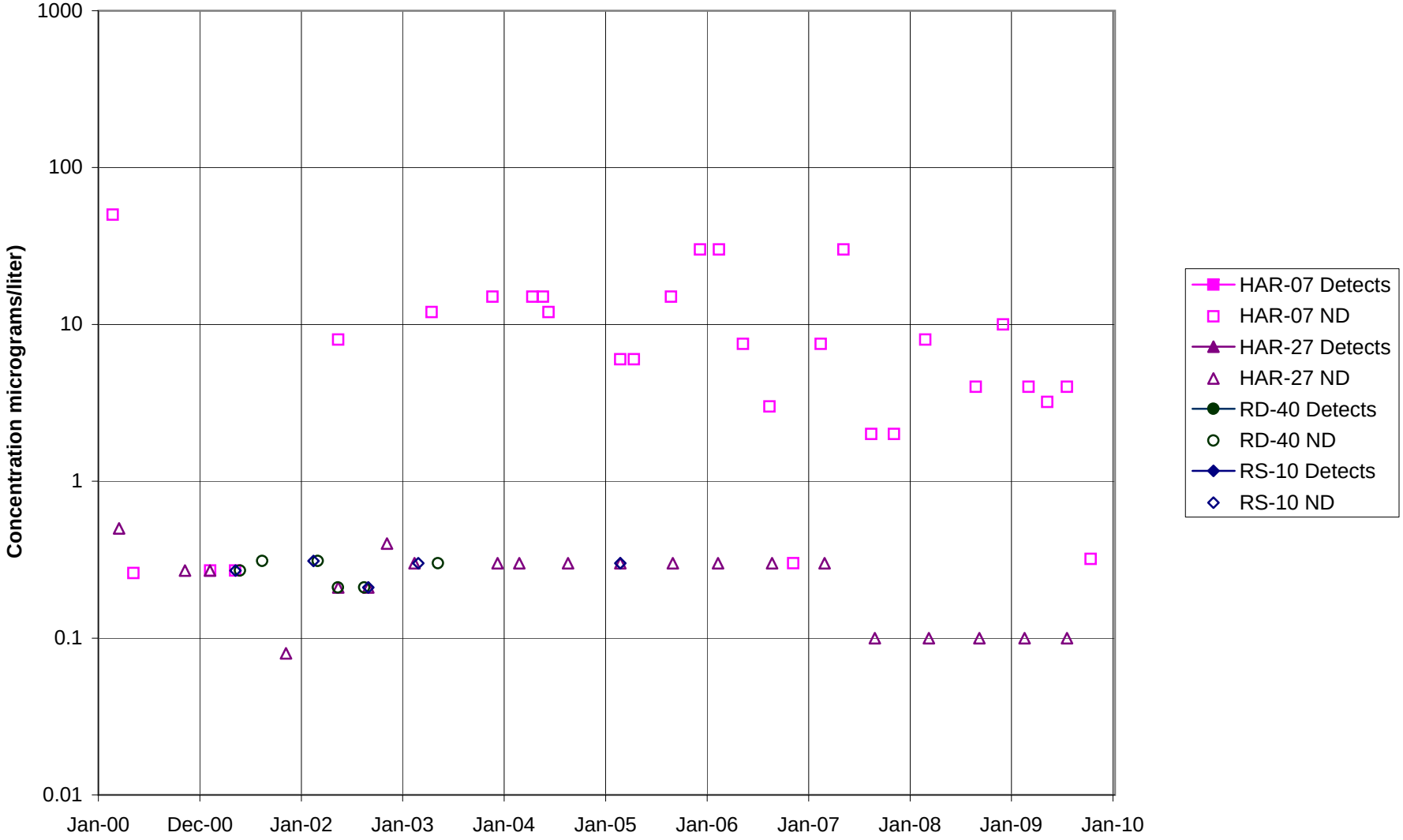


FIGURE F-33. 1,1,2-TCA in DELTA / BUFFER ZONE AREA WELLS

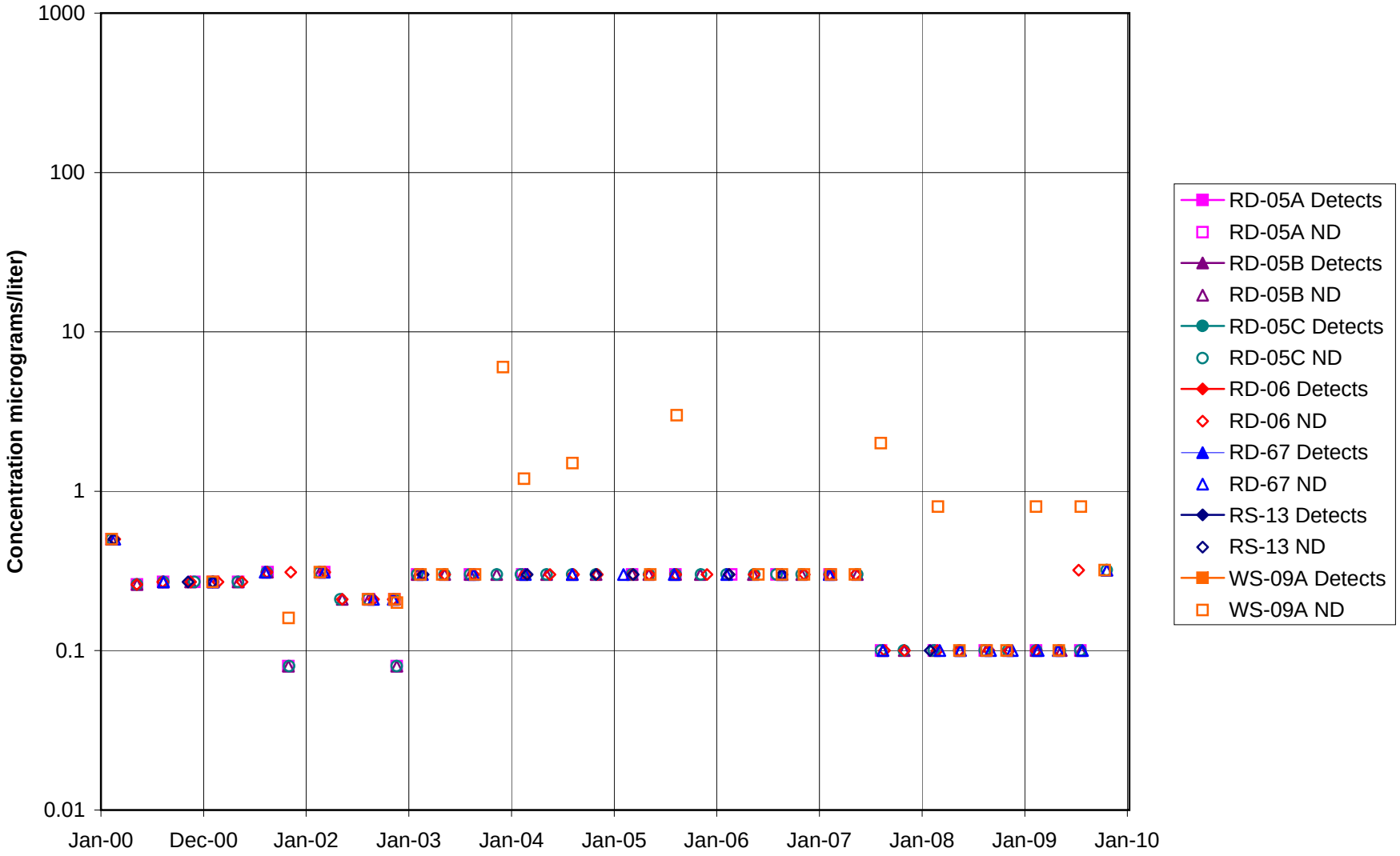


FIGURE F-34. 1,1,2-TCA in AREA IV WELLS

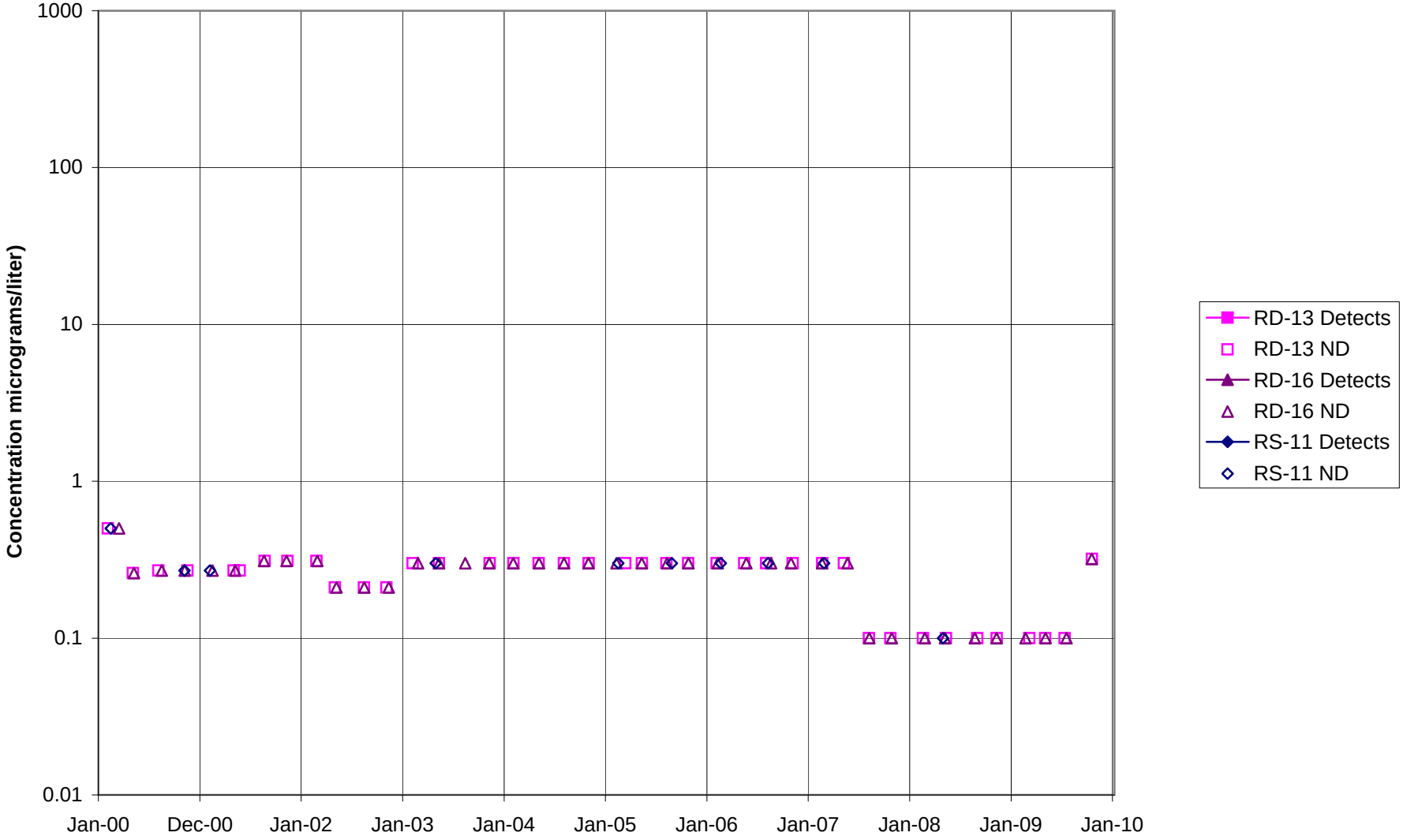


FIGURE F-35. 1,1-DCE in STL-IV AREA SHALLOW WELLS

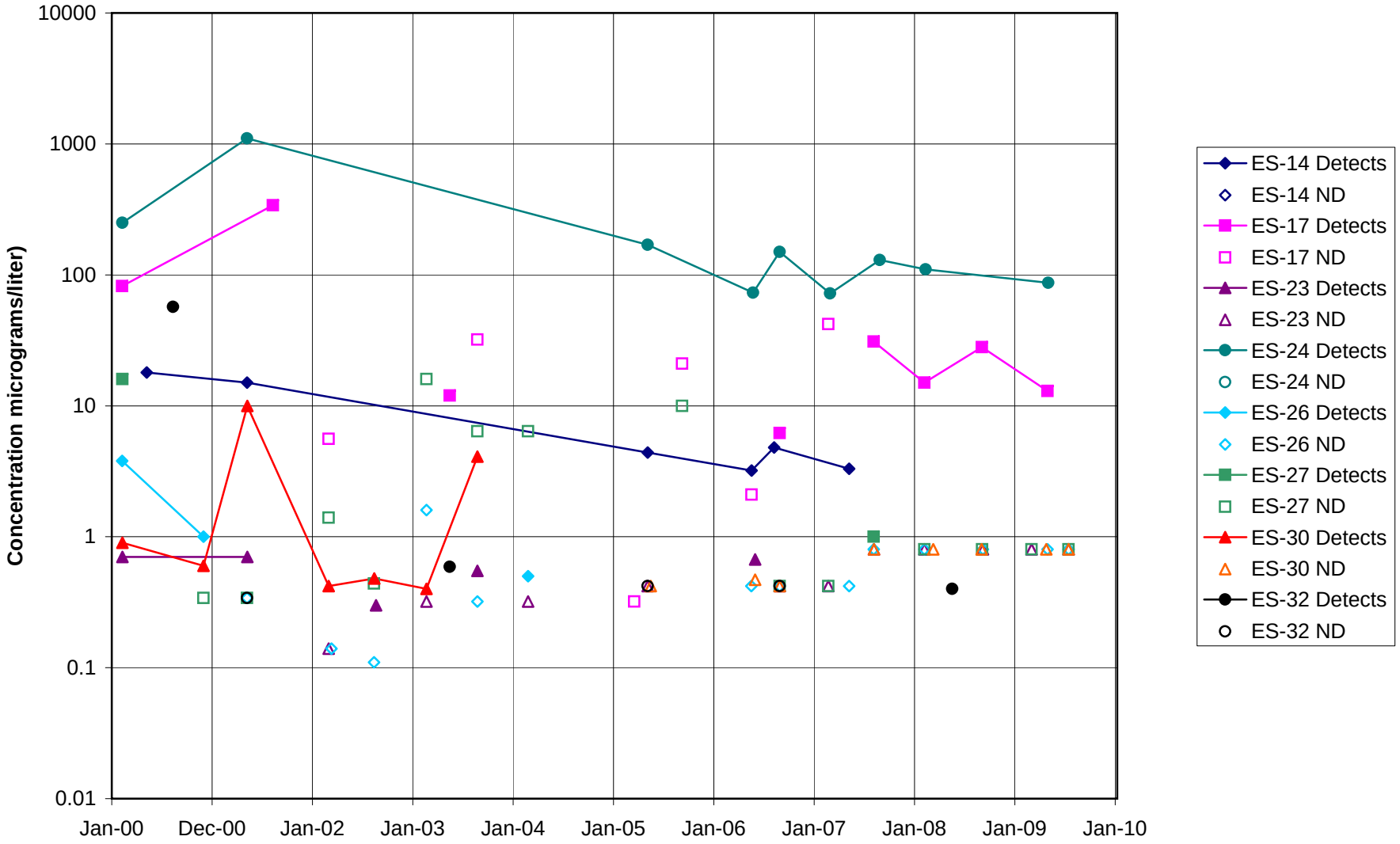


FIGURE F-36. 1,1-DCE in STL-IV AREA CHATSWORTH FORMATION WELLS

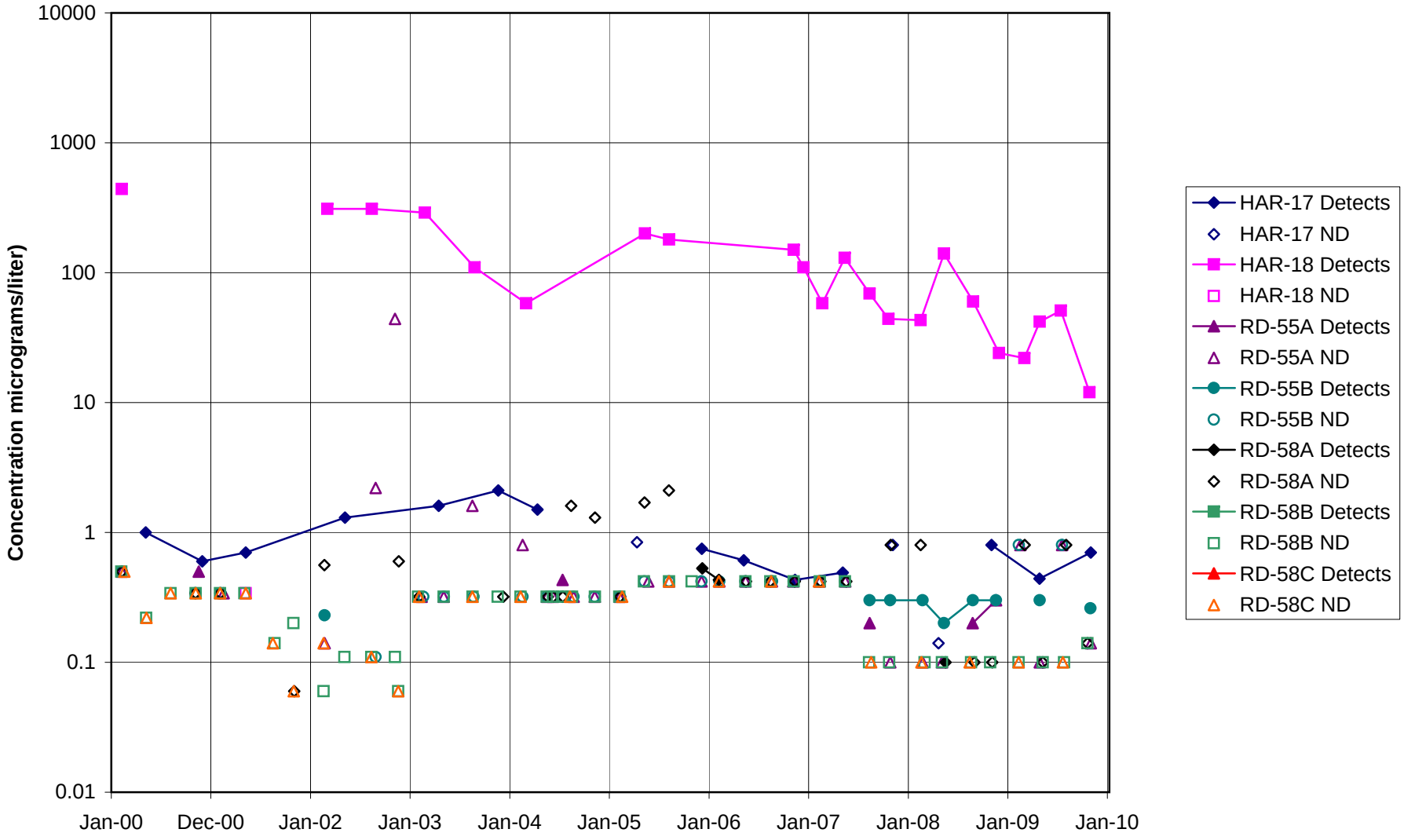


FIGURE F-37. 1,1-DCE in MAIN GATE AREA WELLS - 1

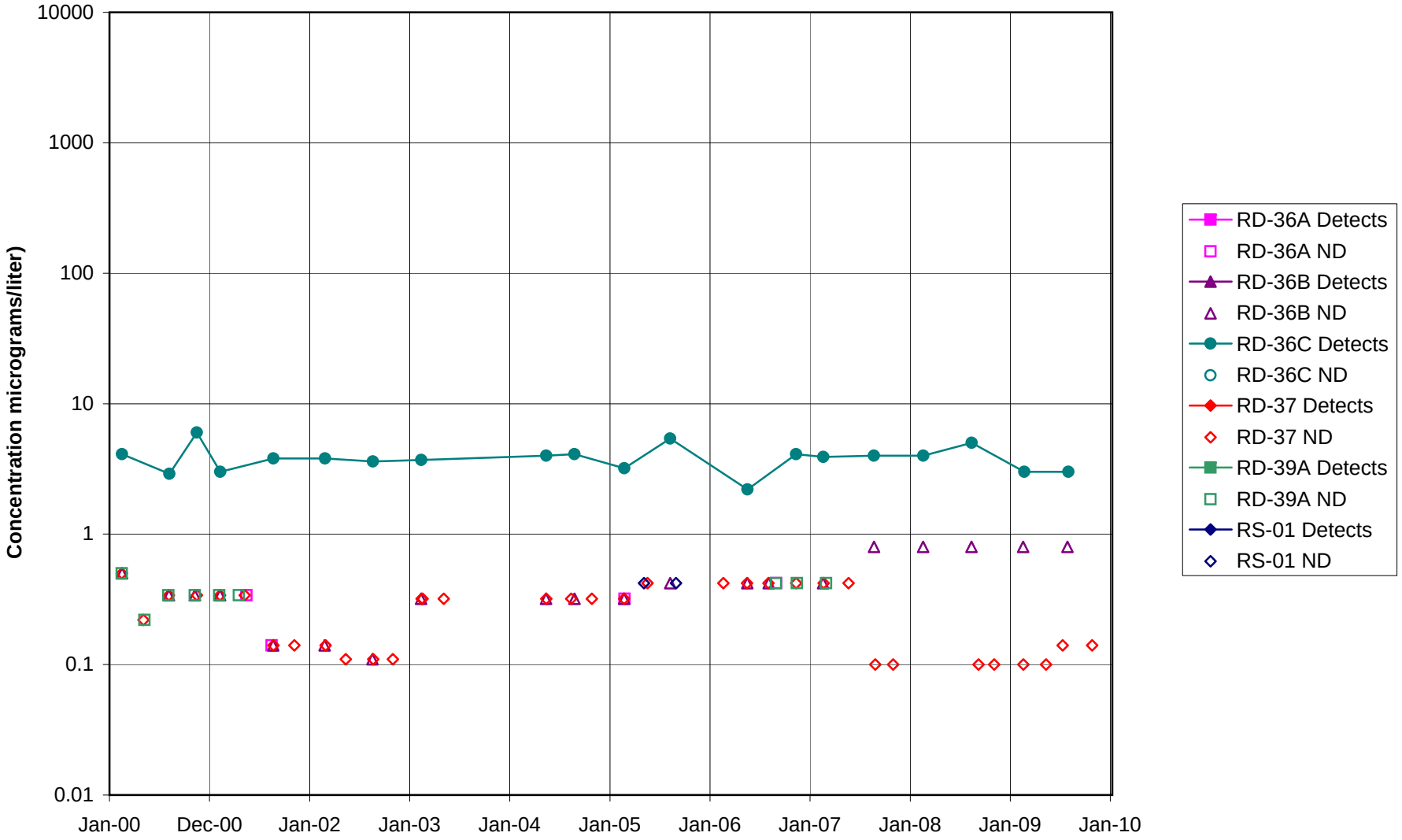


FIGURE F-38. 1,1-DCE in MAIN GATE AREA WELLS - 2

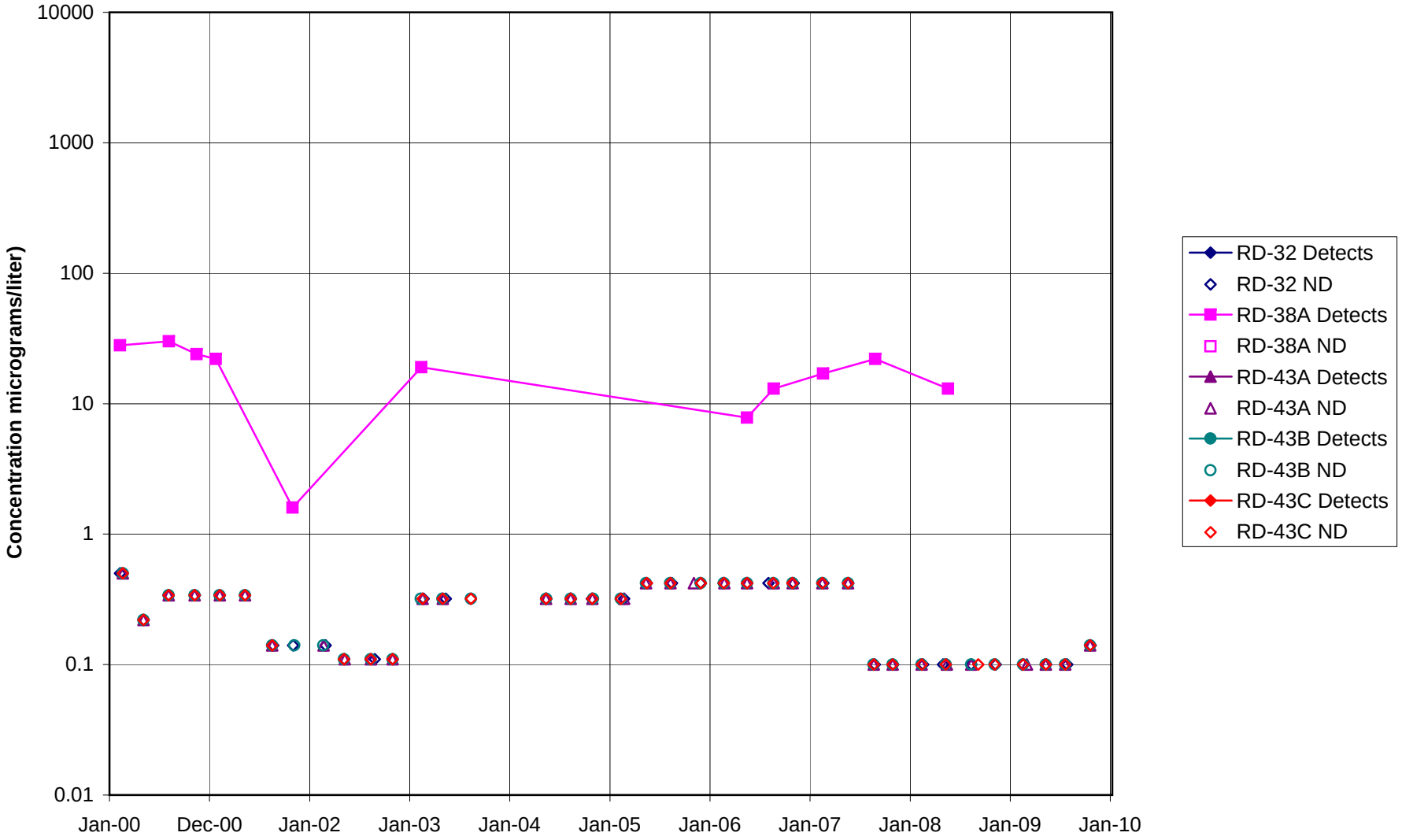


FIGURE F-39. 1,1-DCE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1

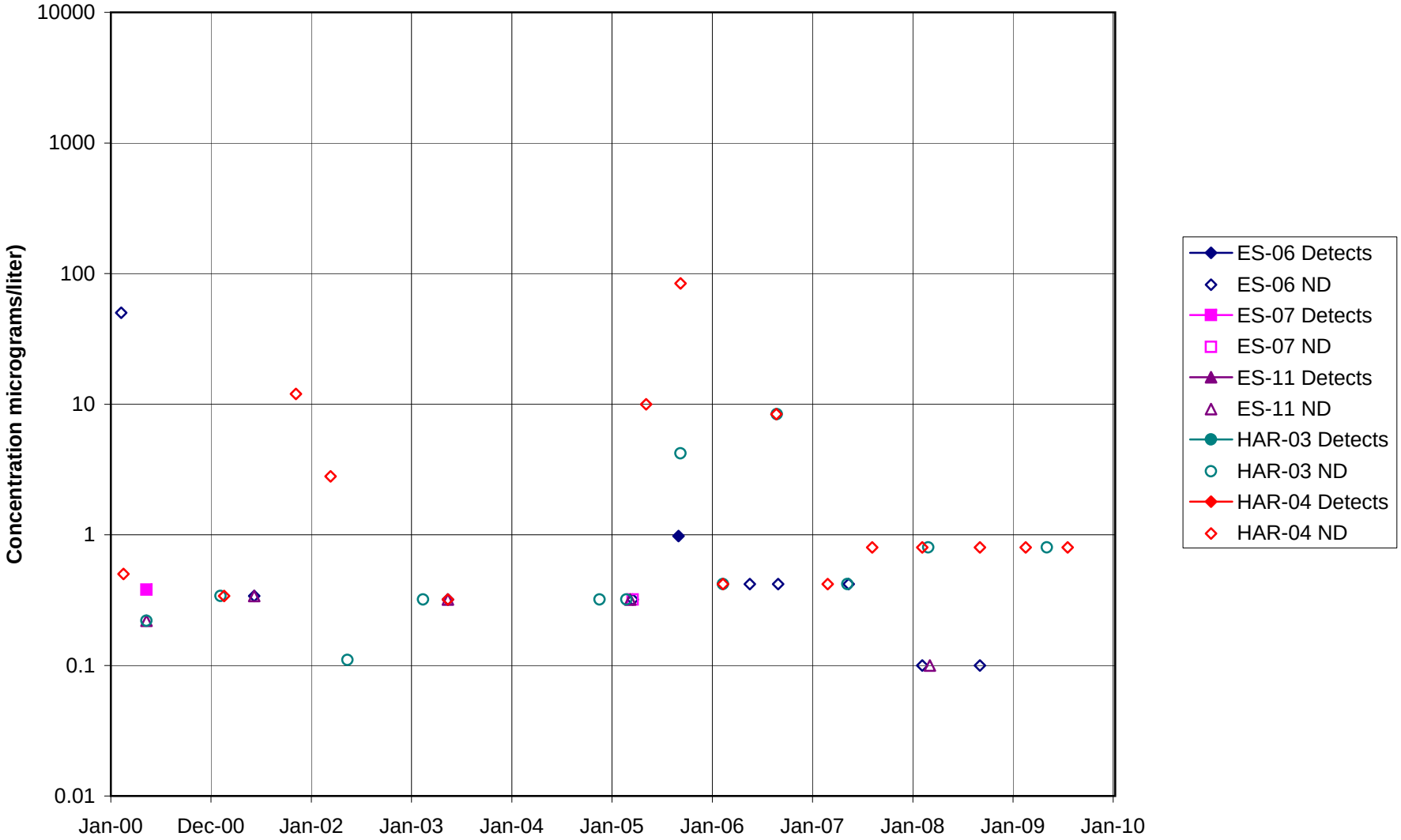


FIGURE F-40. 1,1-DCE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 2

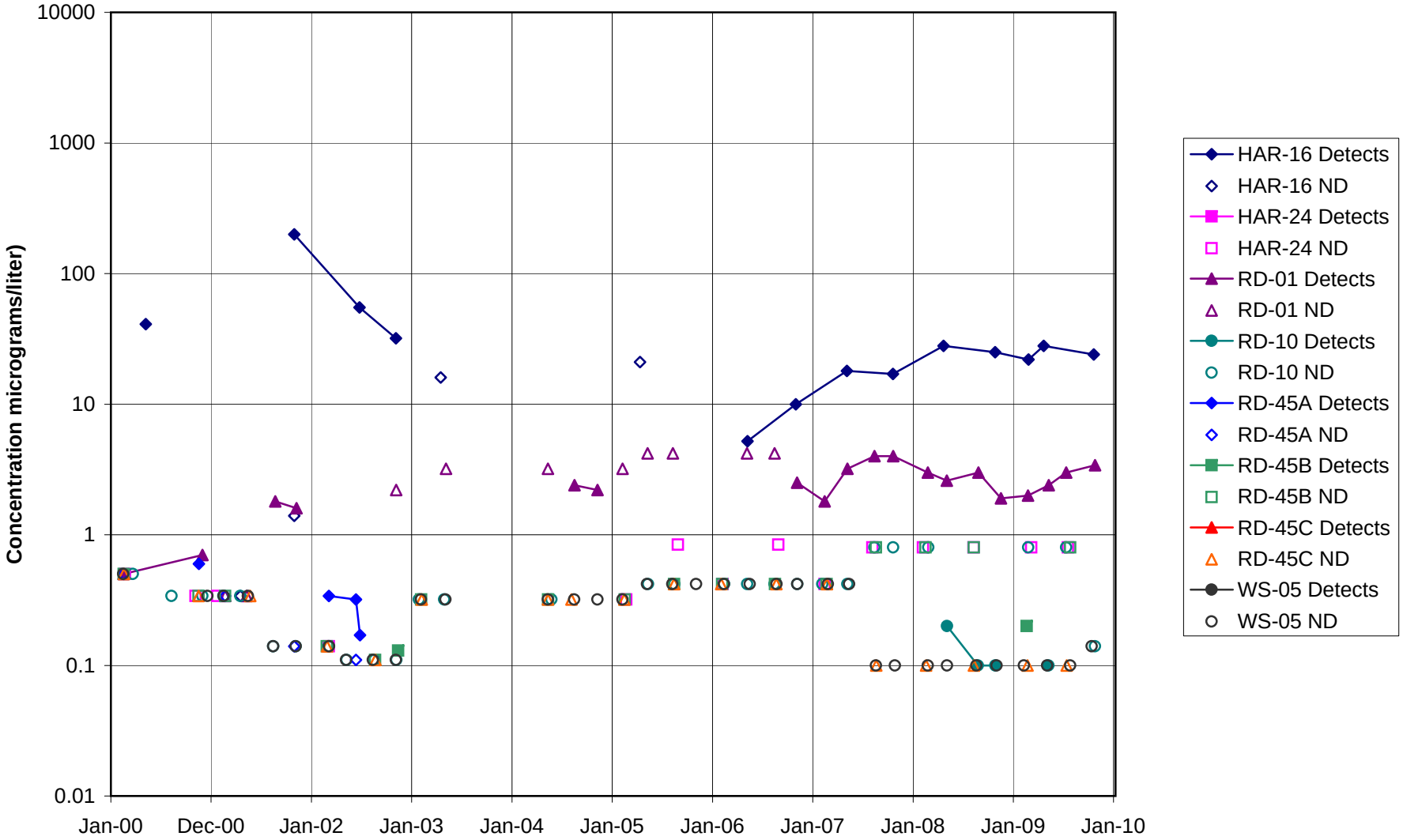


FIGURE F-41. 1,1-DCE in CTL-III / PERIMETER POND AREA WELLS

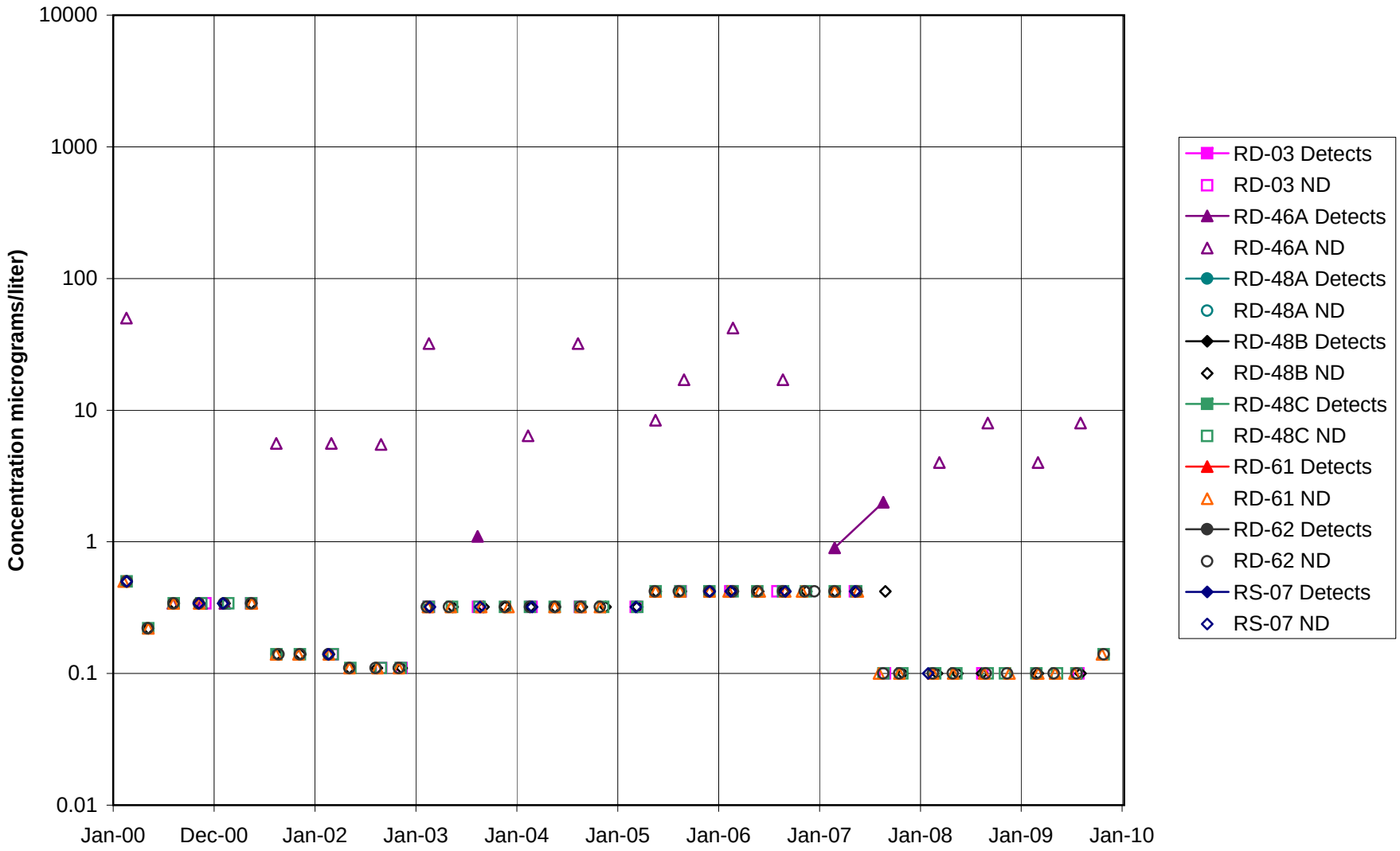


FIGURE F-42. 1,1-DCE in BOWL AREA WELLS

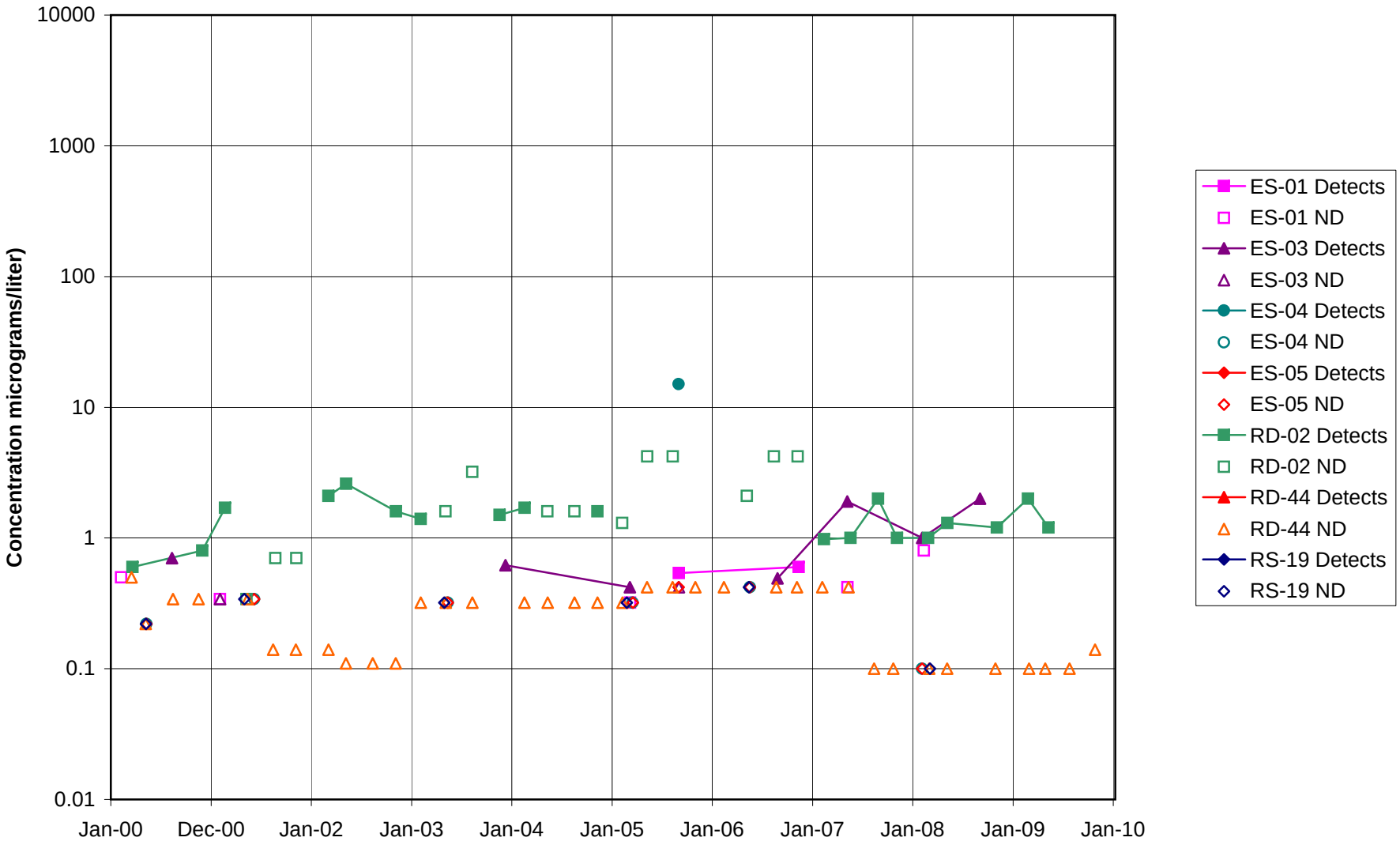


FIGURE F-43. 1,1-DCE in ECL AREA WELLS

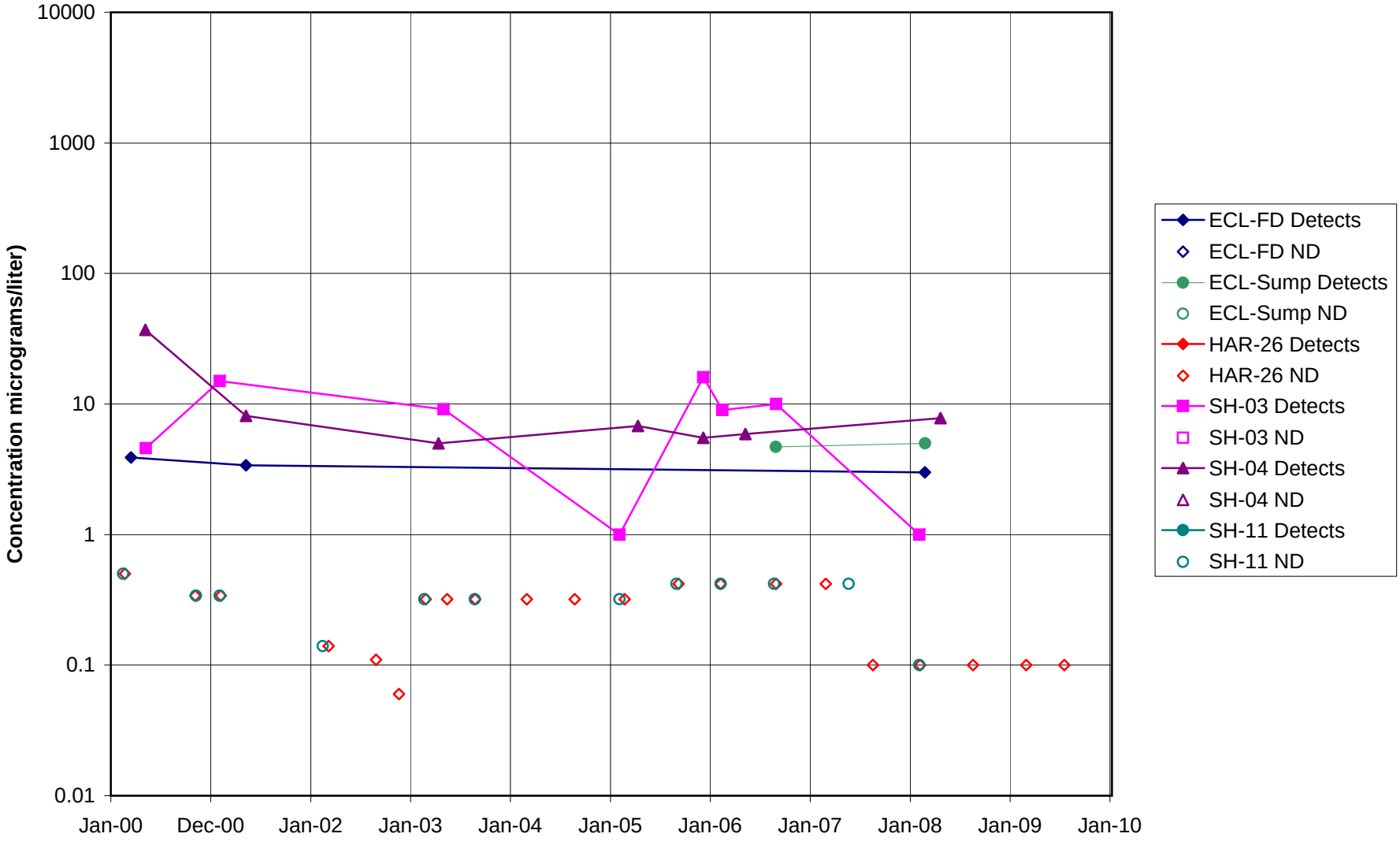


FIGURE F-44. 1,1-DCE in FORMER LOX PLANT AREA WELLS

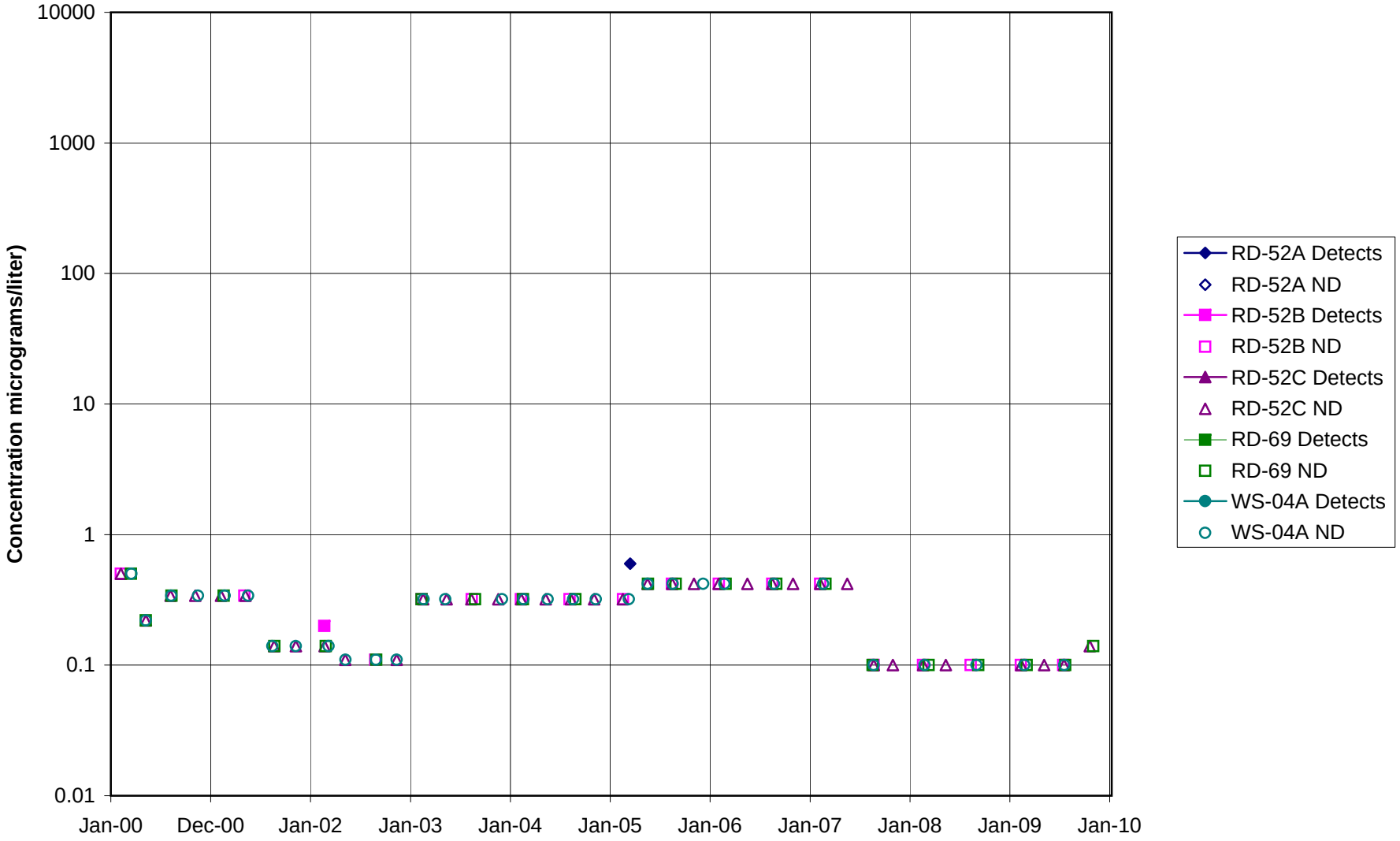


FIGURE F-45. 1,1-DCE in RD-09 AREA WELLS

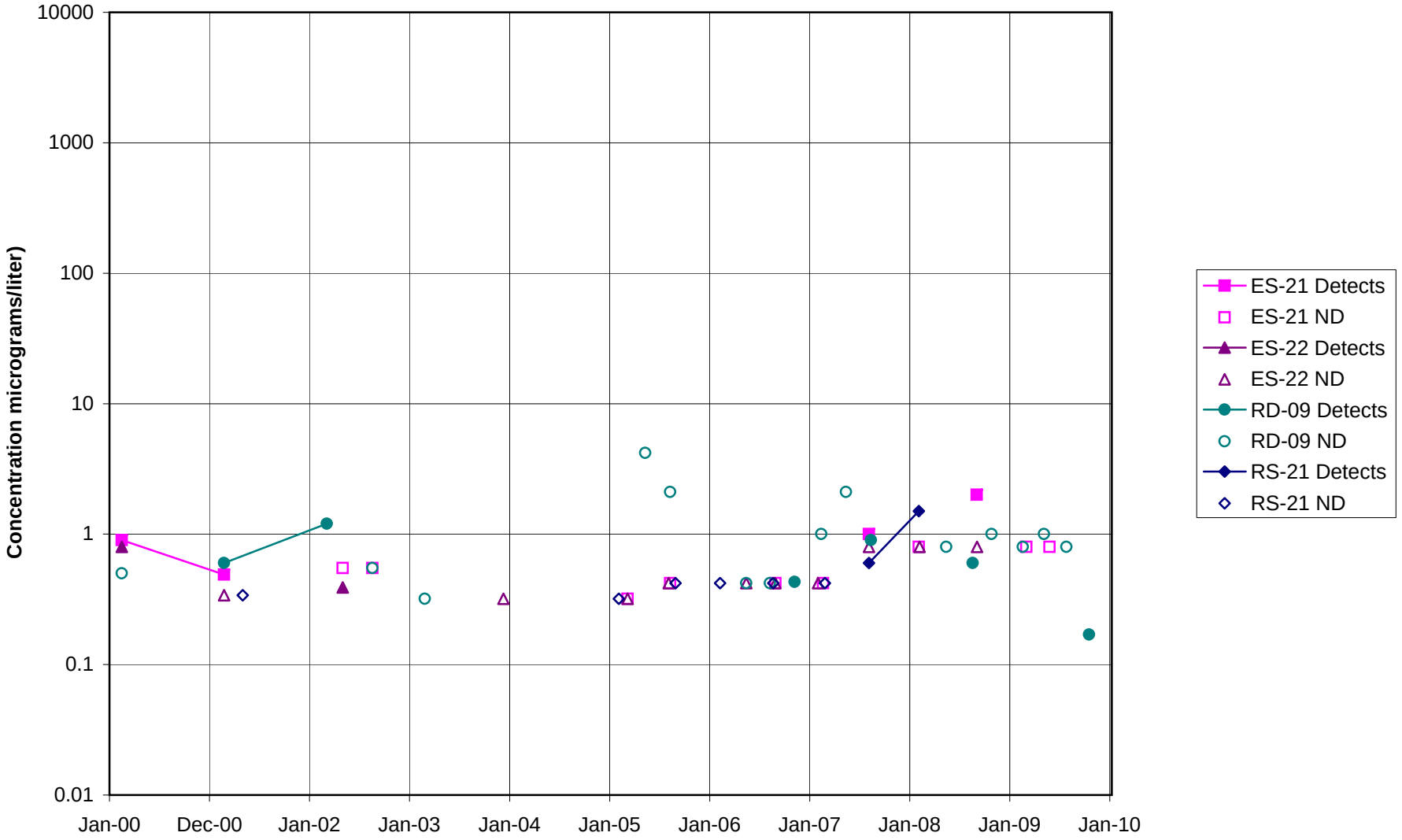


FIGURE F-46. 1,1-DCE in HELIPORT, B/204 AREA WELLS

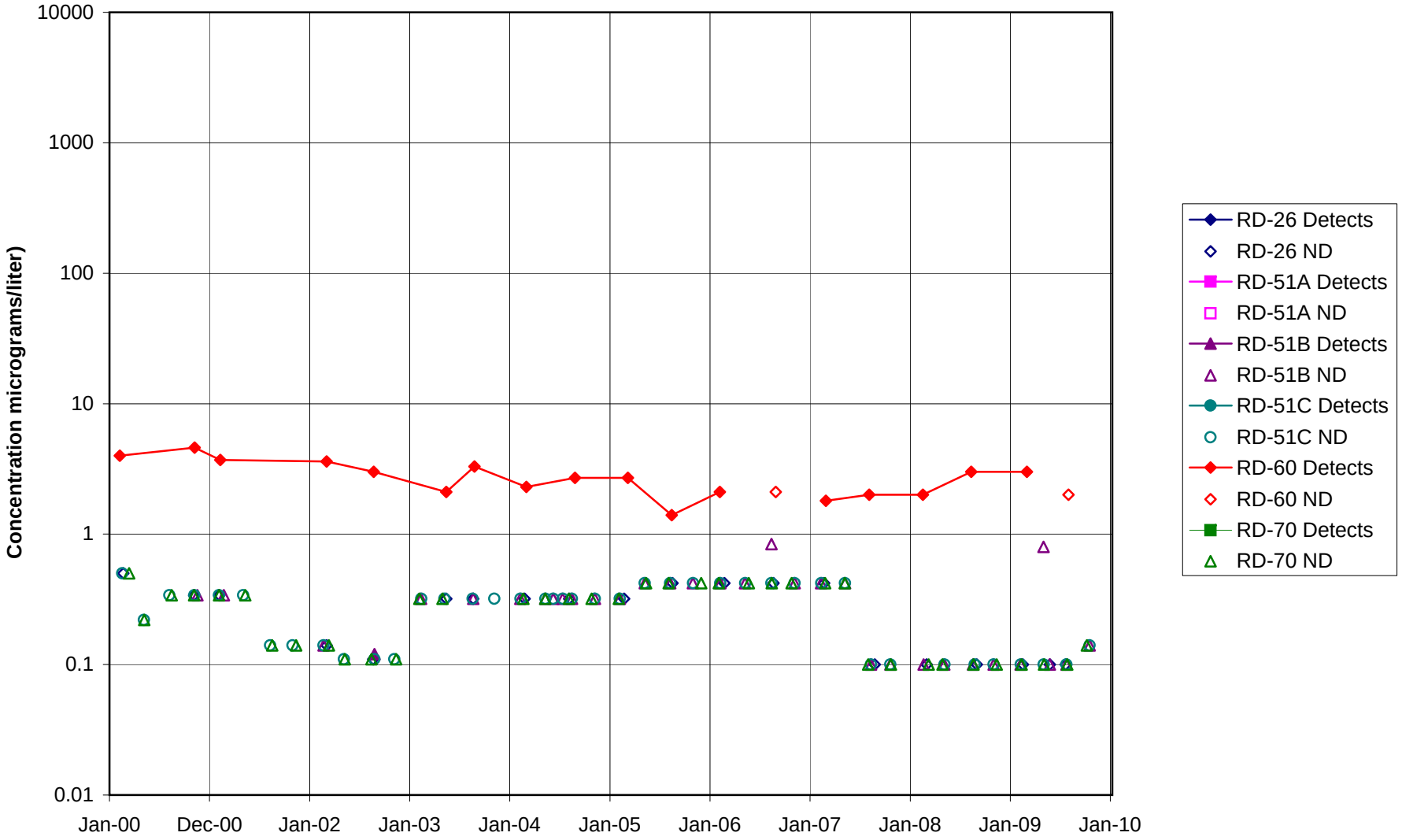


FIGURE F-47. 1,1-DCE in ALFA / BRAVO AREA WELLS

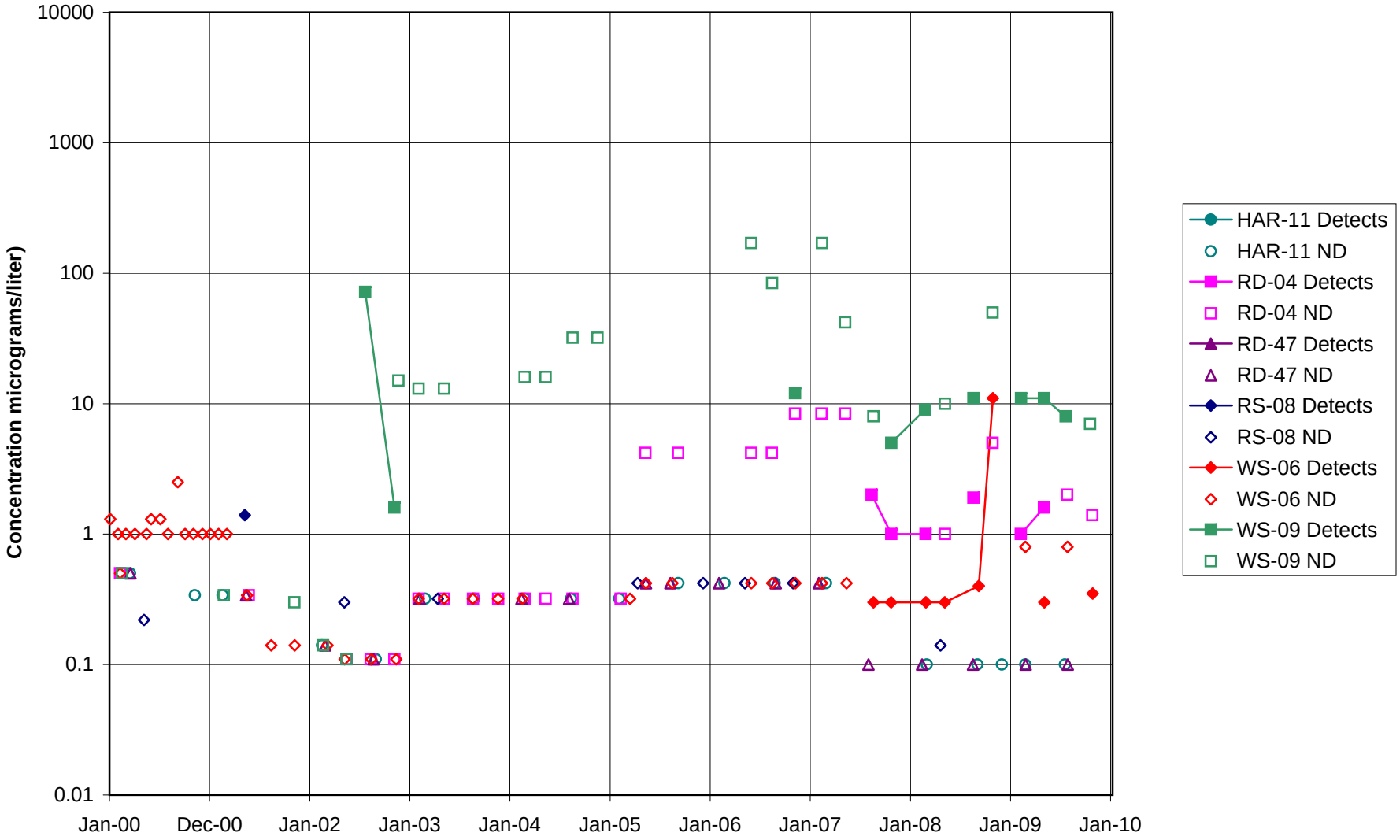


FIGURE F-48. 1,1-DCE in SPA AREA WELLS

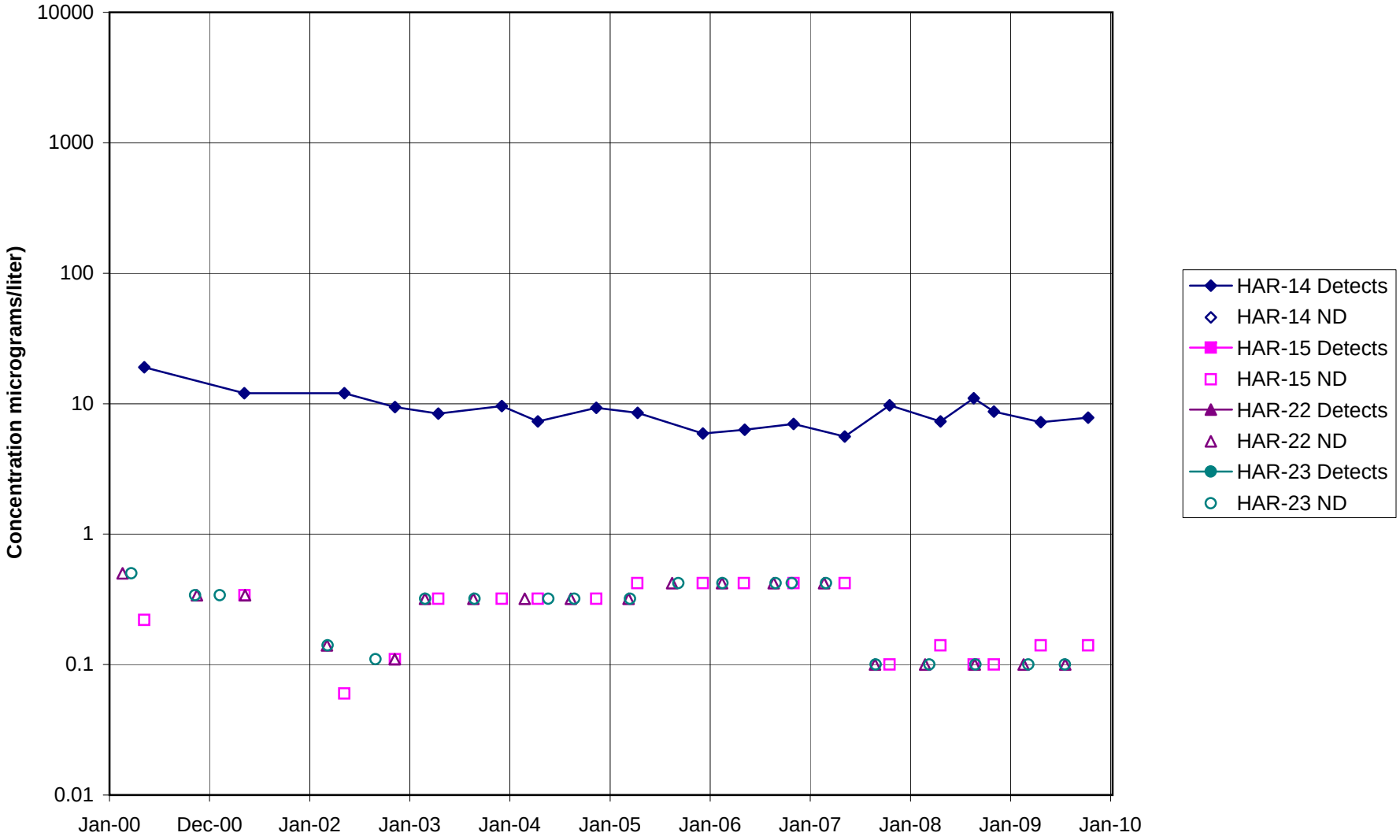


FIGURE F-49. 1,1-DCE in COCA / PLF AREA WELLS

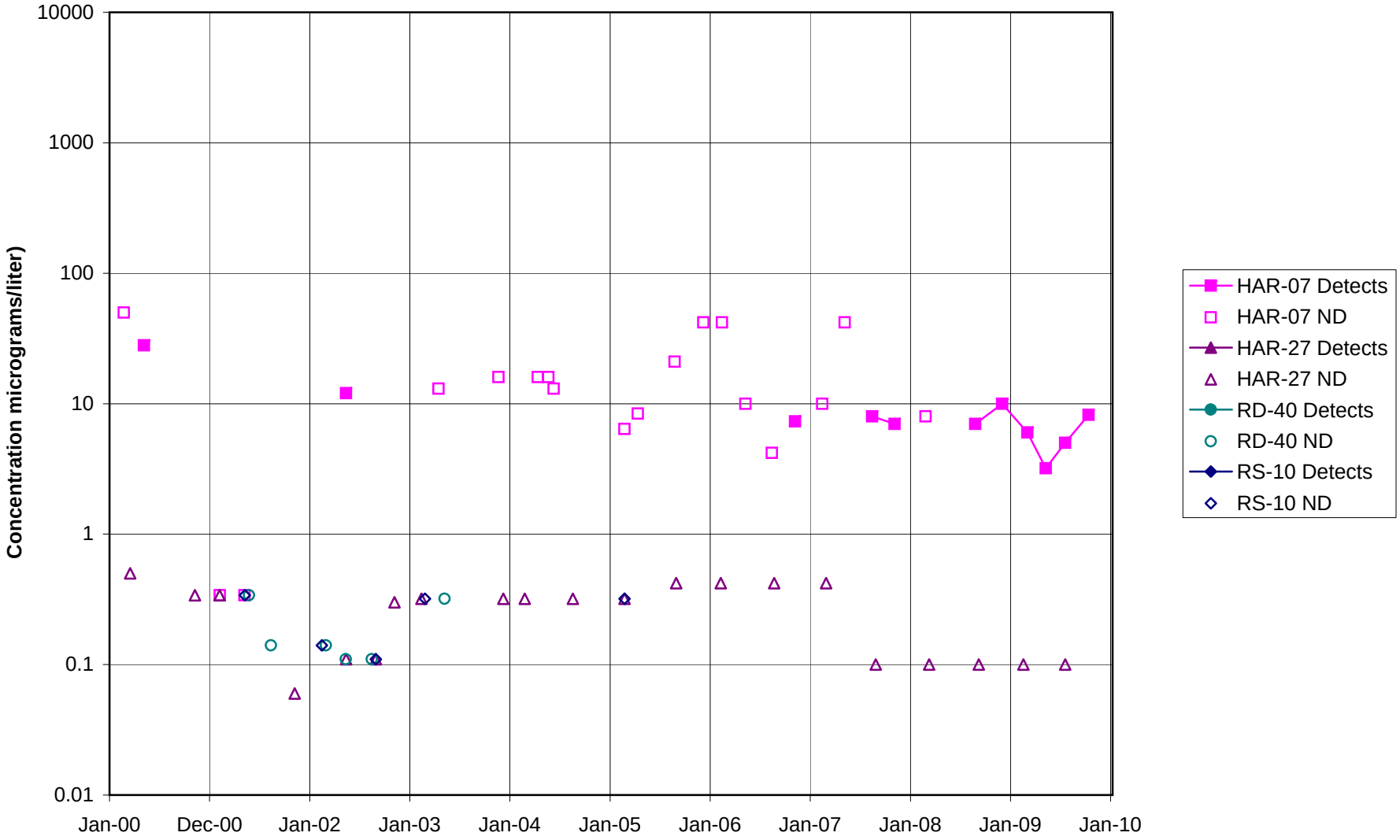


FIGURE F-50. 1,1-DCE in DELTA / BUFFER ZONE AREA WELLS

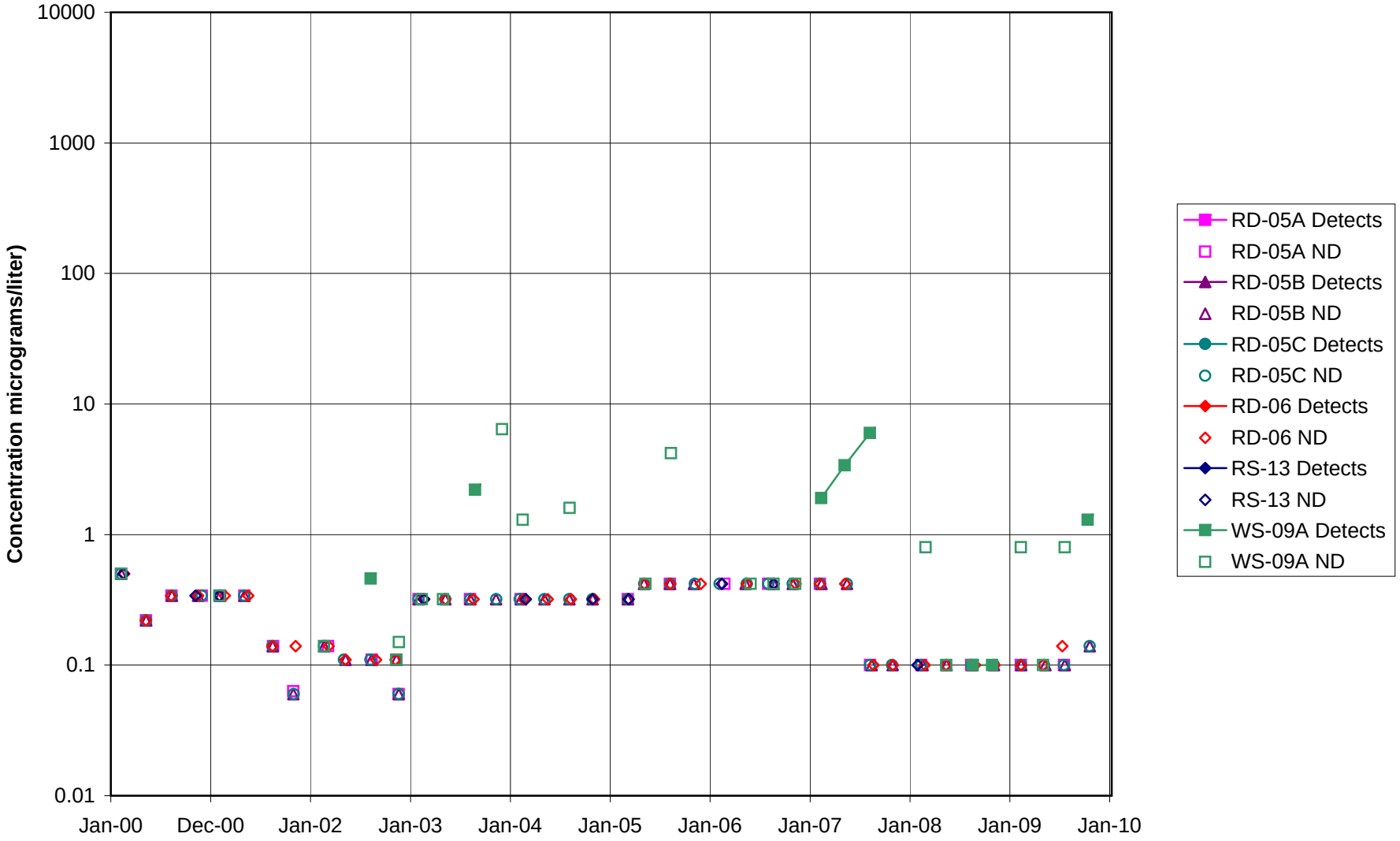


FIGURE F-51. 1,1-DCE in AREA IV WELLS

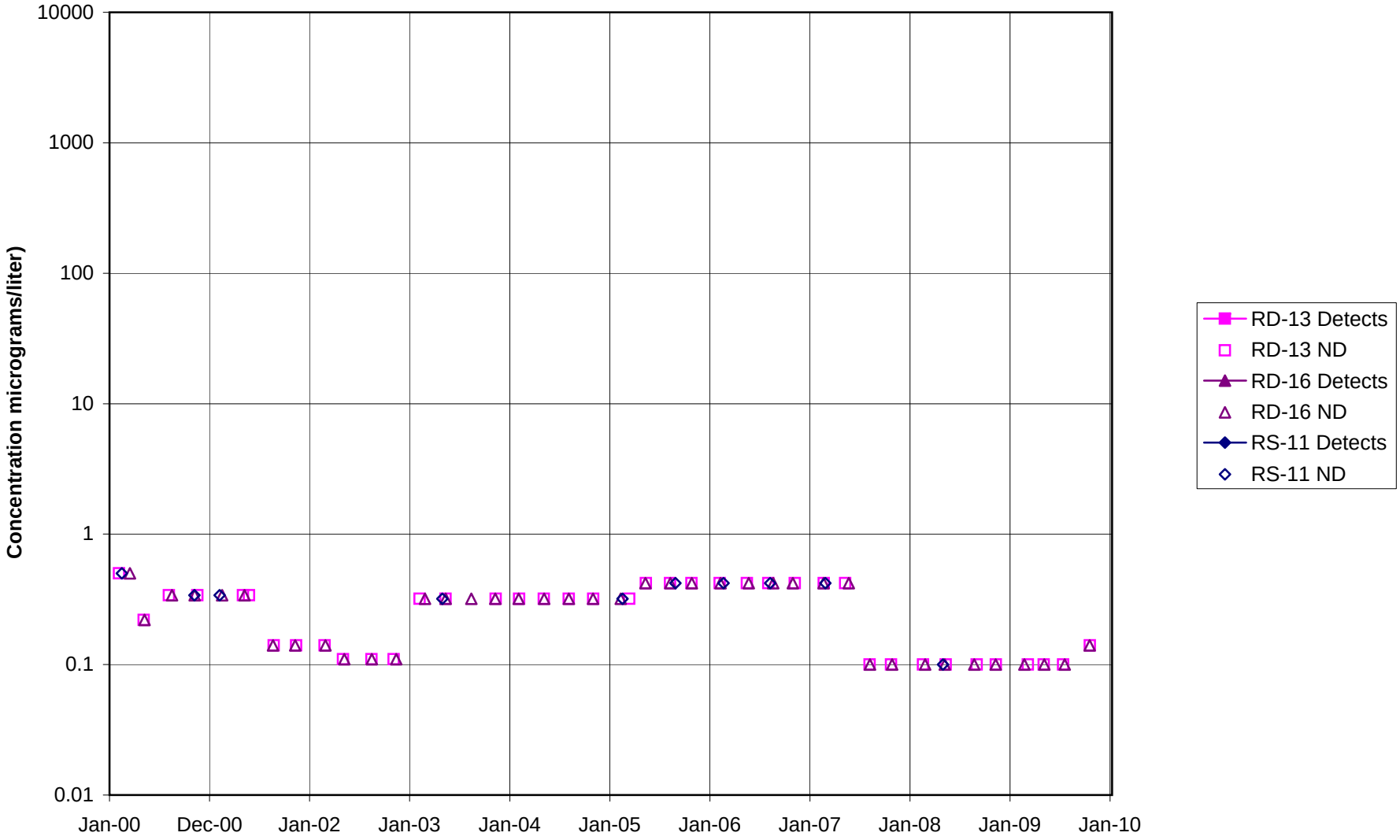


FIGURE F-52. 1,1-DCA IN STL-IV AREA SHALLOW WELLS

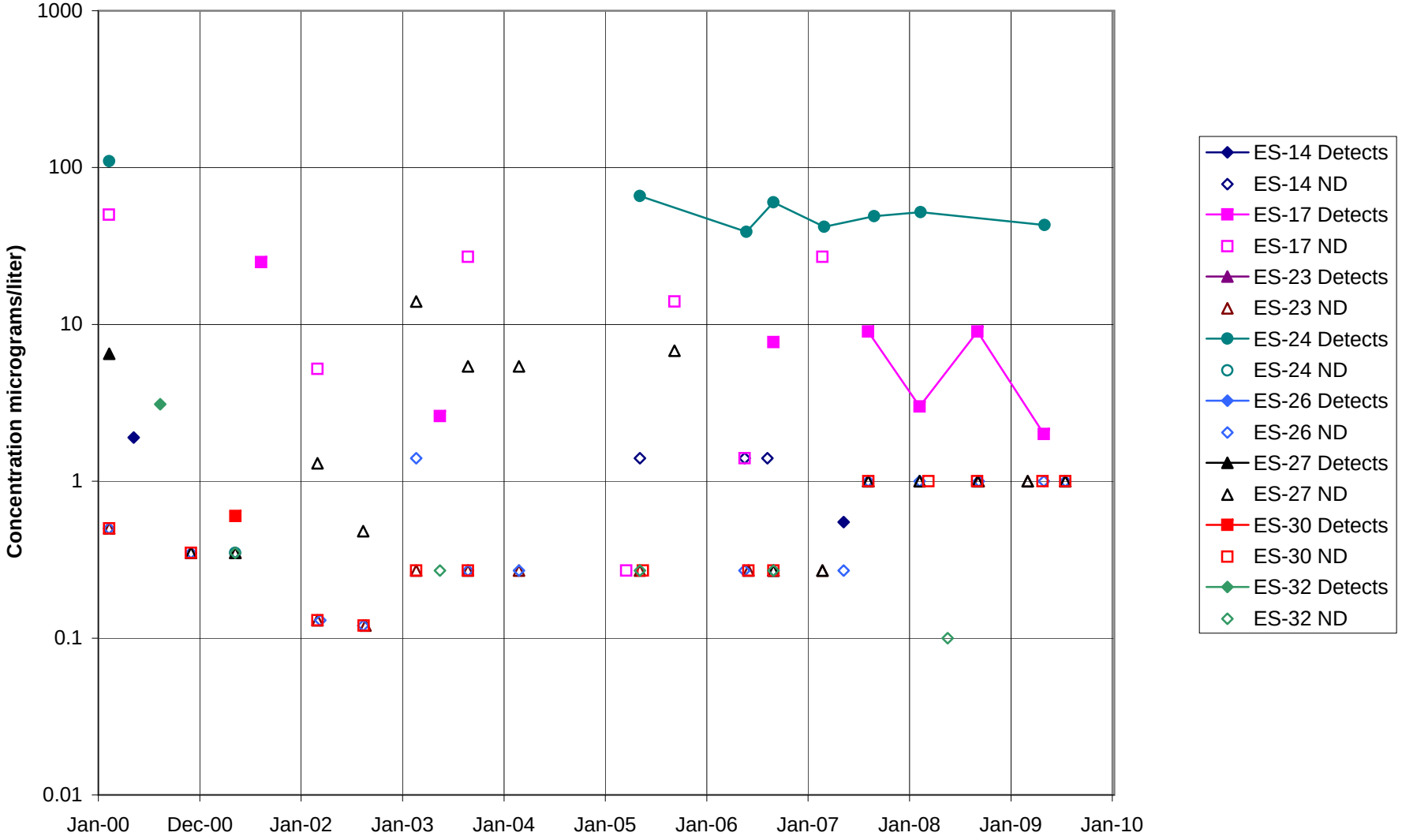


FIGURE F-53. 1,1-DCA IN STL-IV AREA CHATSWORTH FORMATION WELLS

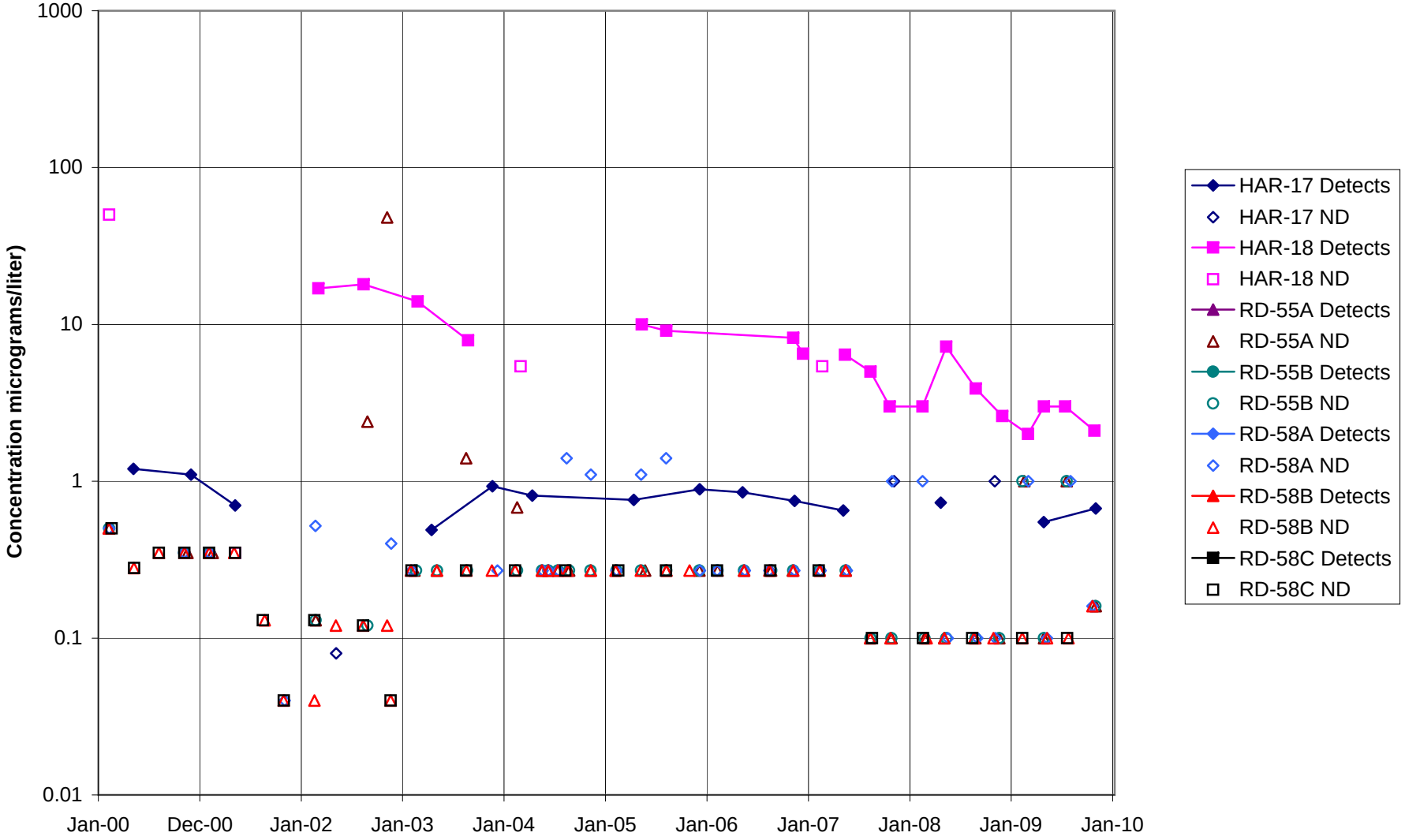


FIGURE F-54. 1,1-DCA IN MAIN GATE AREA WELLS - 1

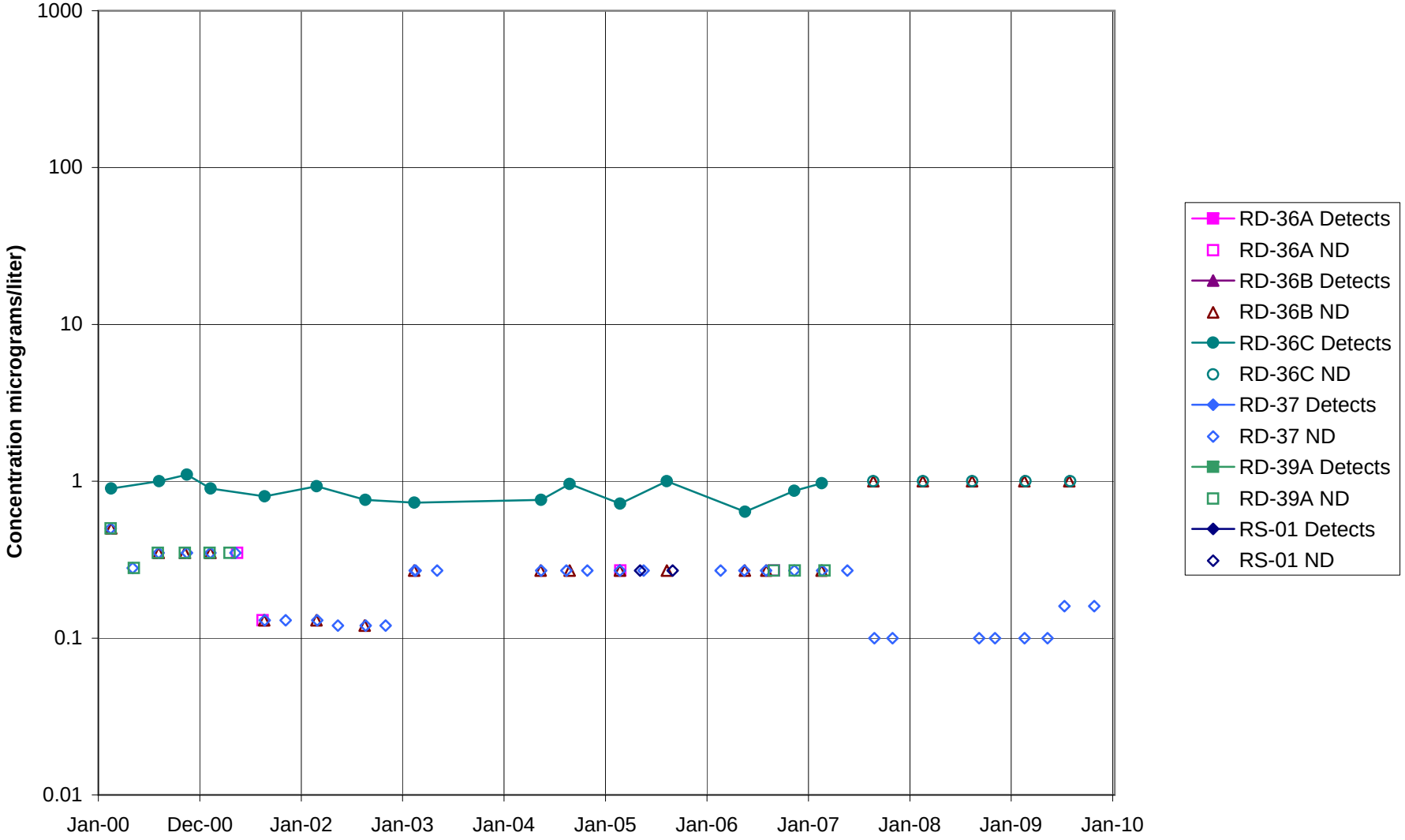


FIGURE F-55. 1,1-DCA IN MAIN GATE AREA WELLS - 2

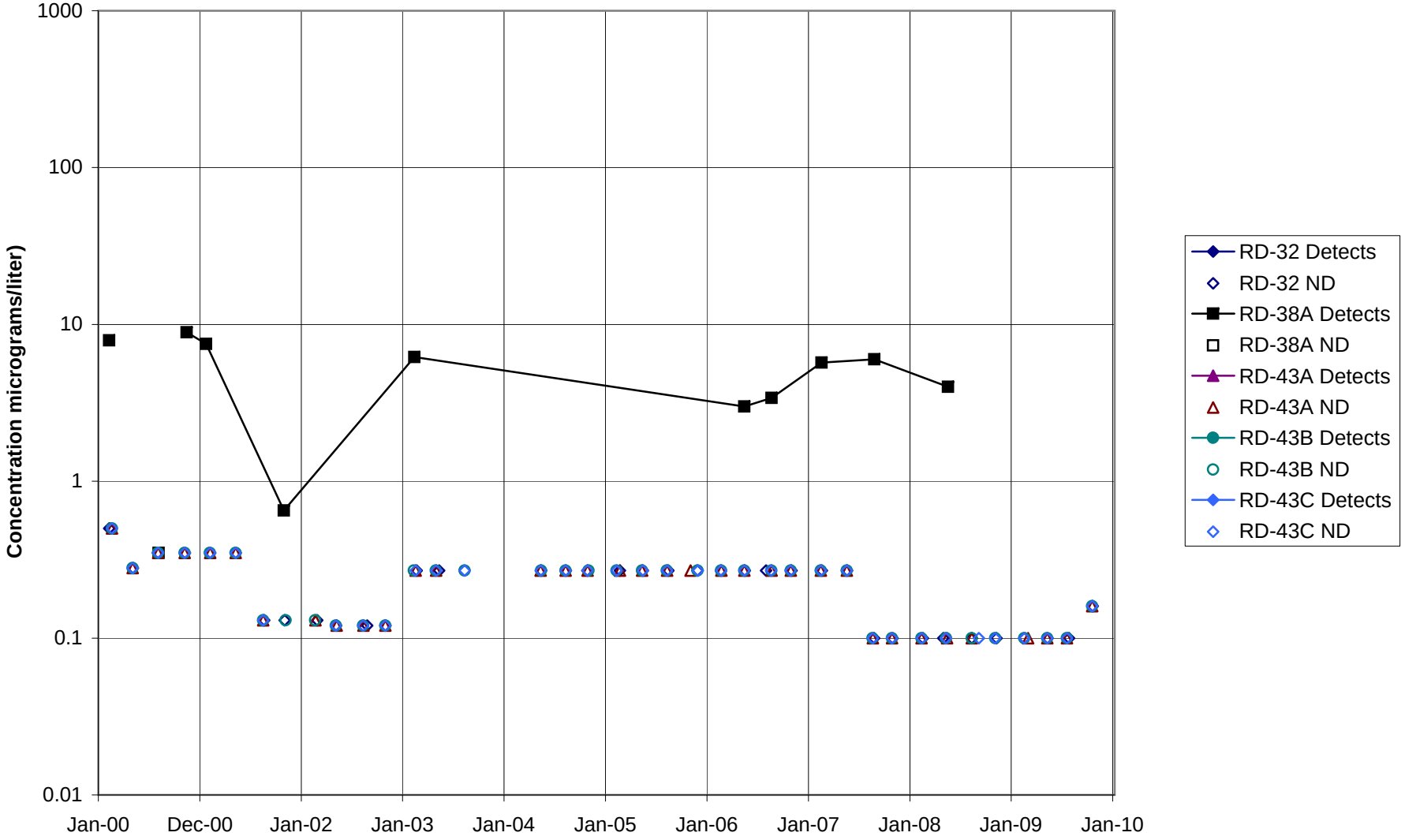


FIGURE F-56. 1,1-DCA IN APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1

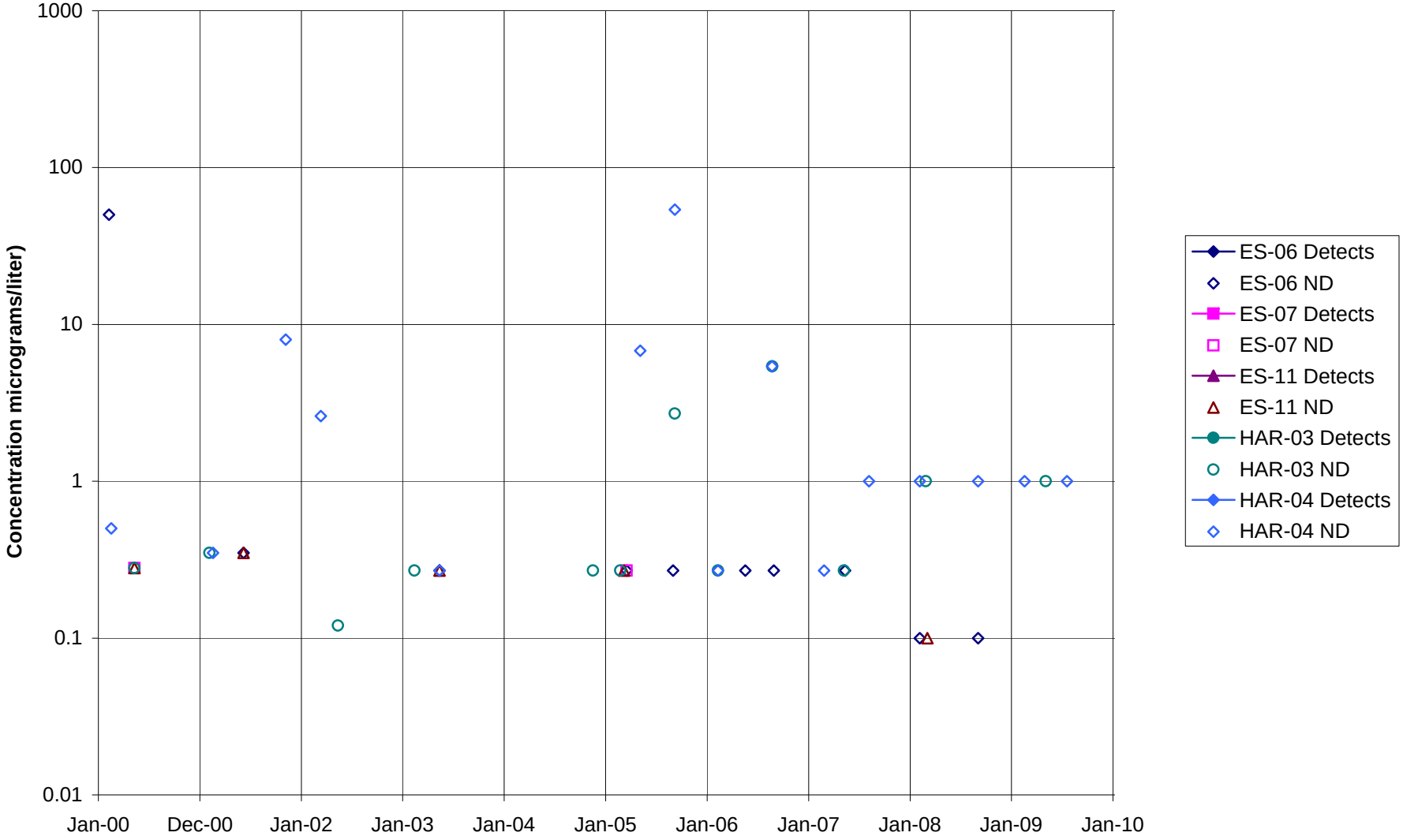


FIGURE F-57. 1,1-DCA IN APTF, CANYON, & HAPPY VALLEY AREA WELLS - 2

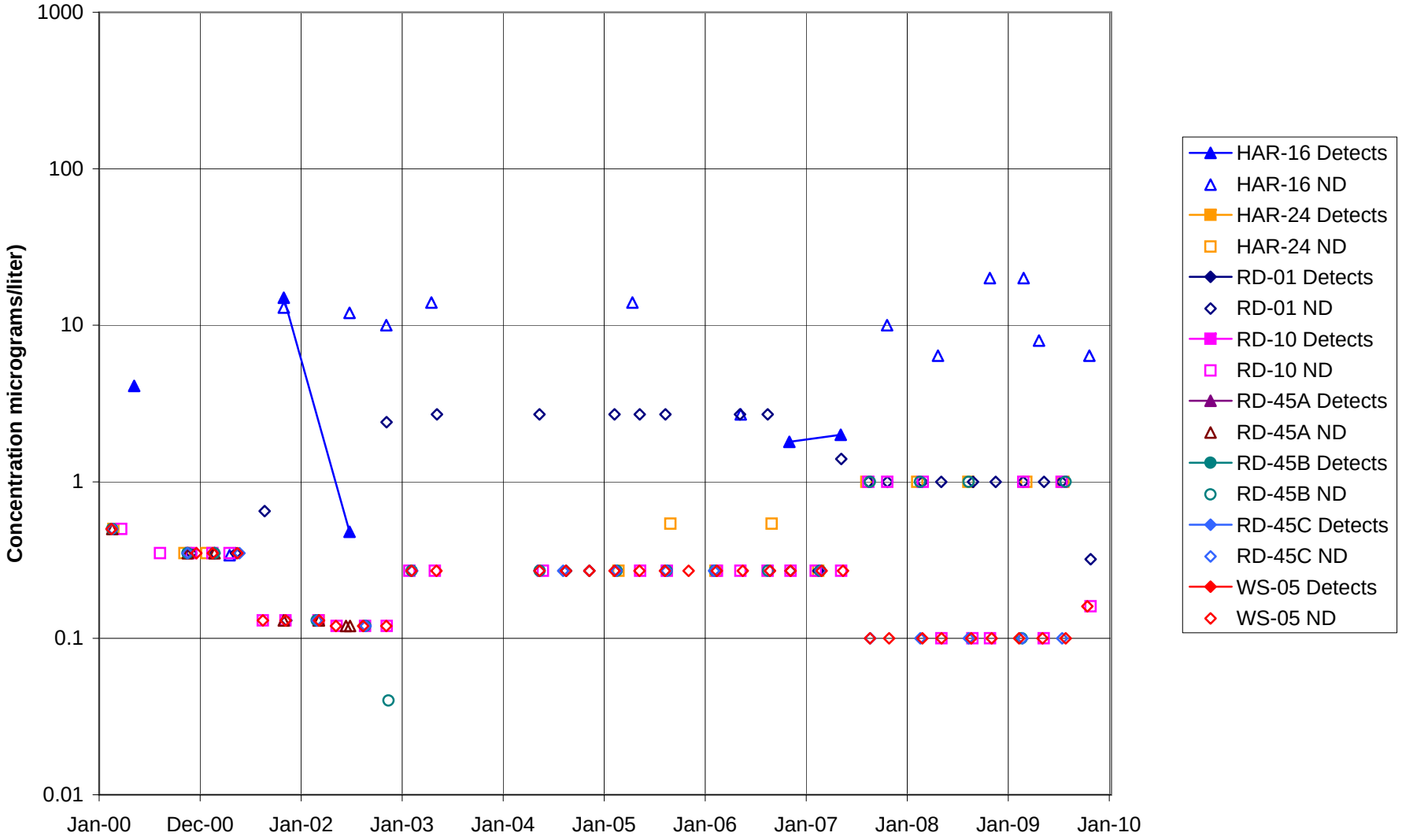


FIGURE F-58. 1,1-DCA IN CTL-III / PERIMETER POND AREA WELLS

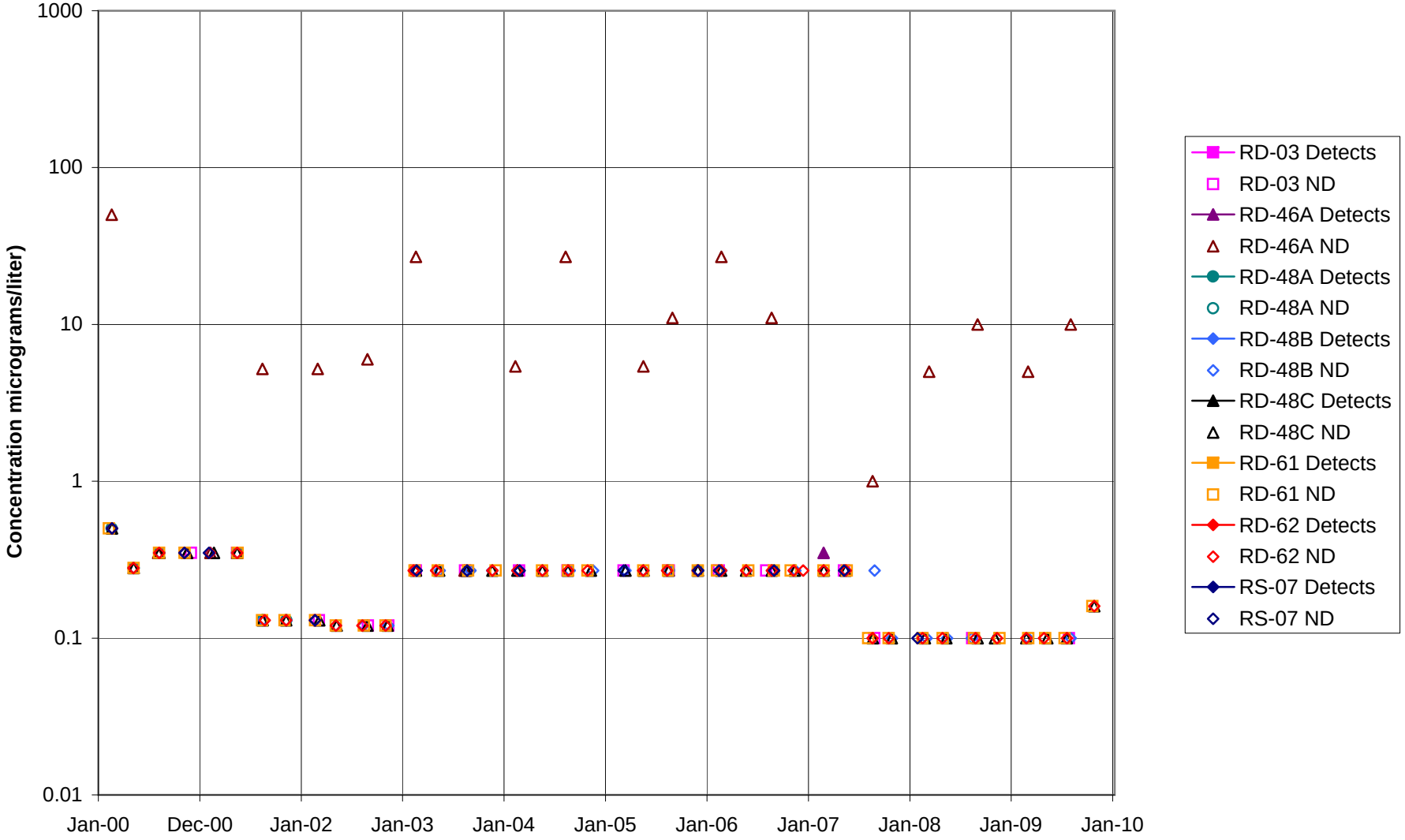


FIGURE F-59. 1,1-DCA IN BOWL AREA WELLS

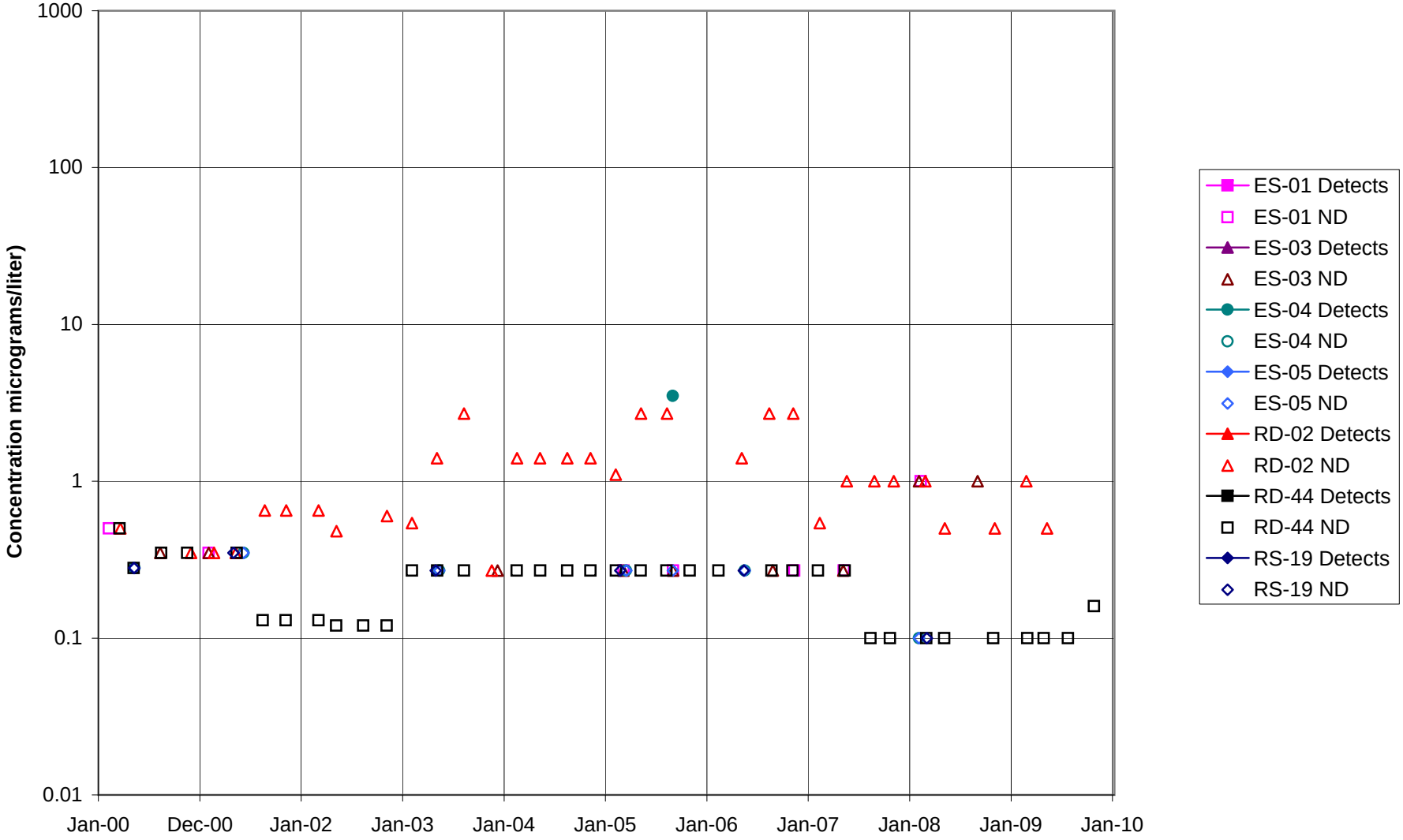


FIGURE F-60. 1,1-DCA IN ECL AREA WELLS

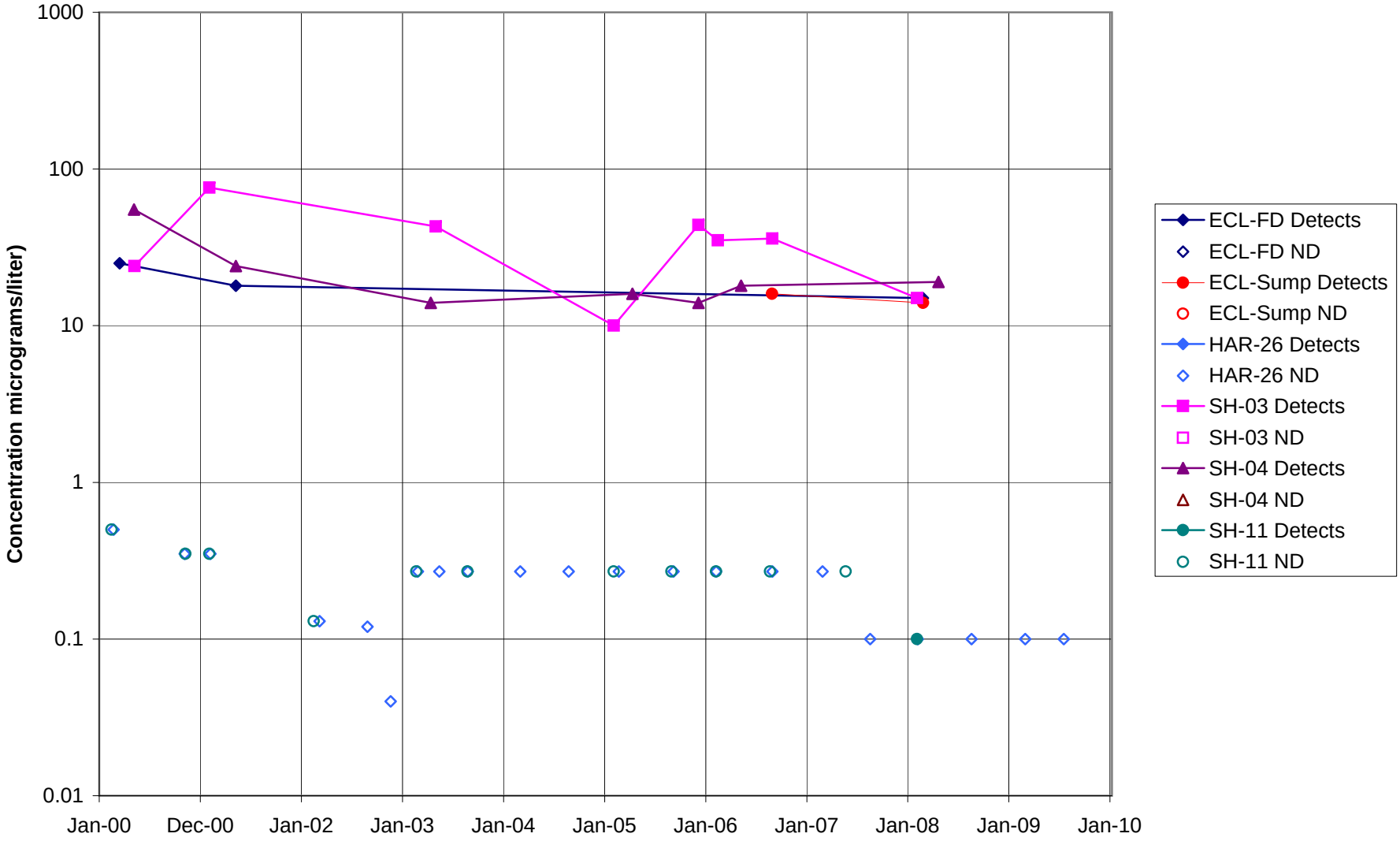


FIGURE F-61. 1,1-DCA IN FORMER LOX PLANT AREA WELLS

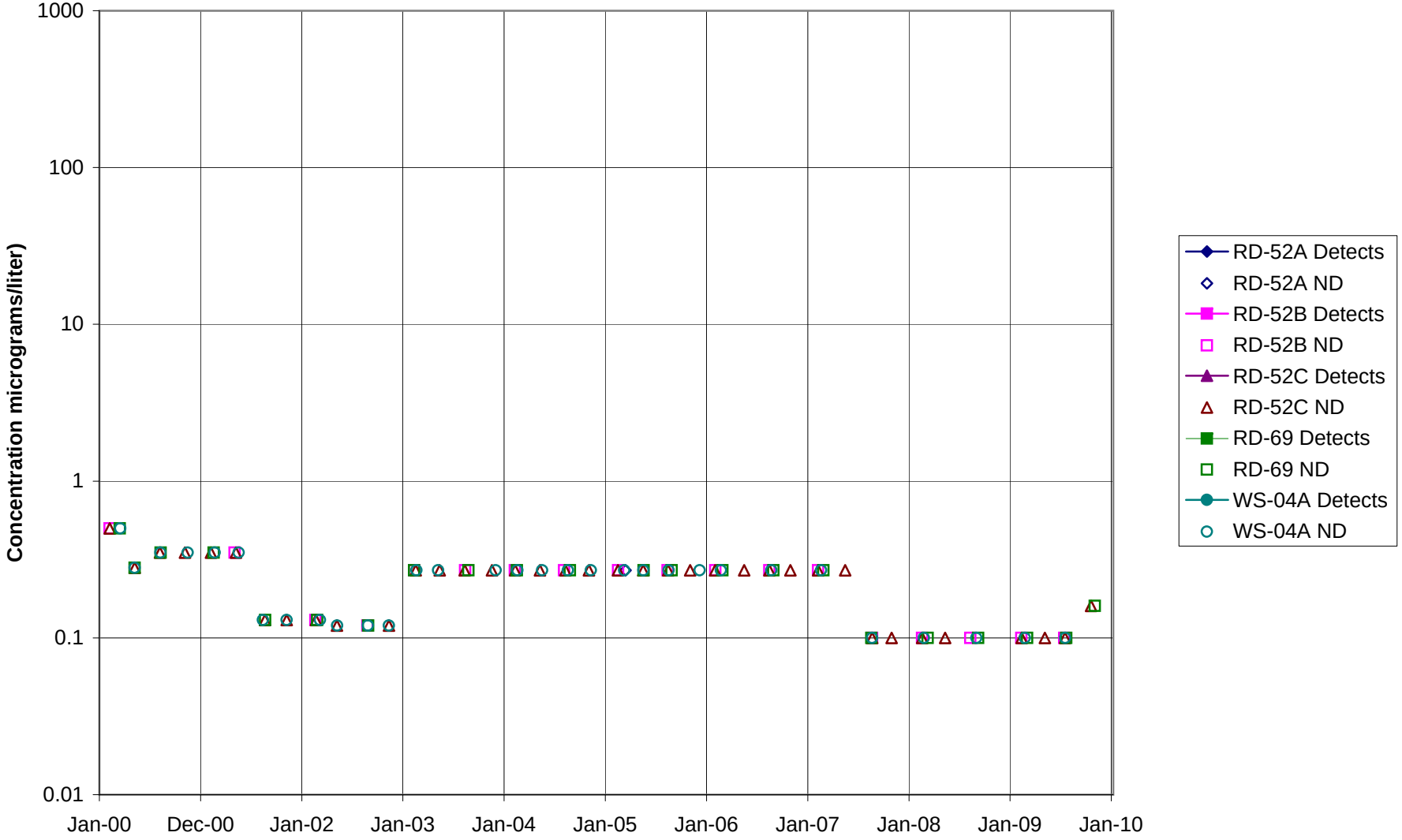


FIGURE F-62. 1,1-DCA IN RD-09 AREA WELLS

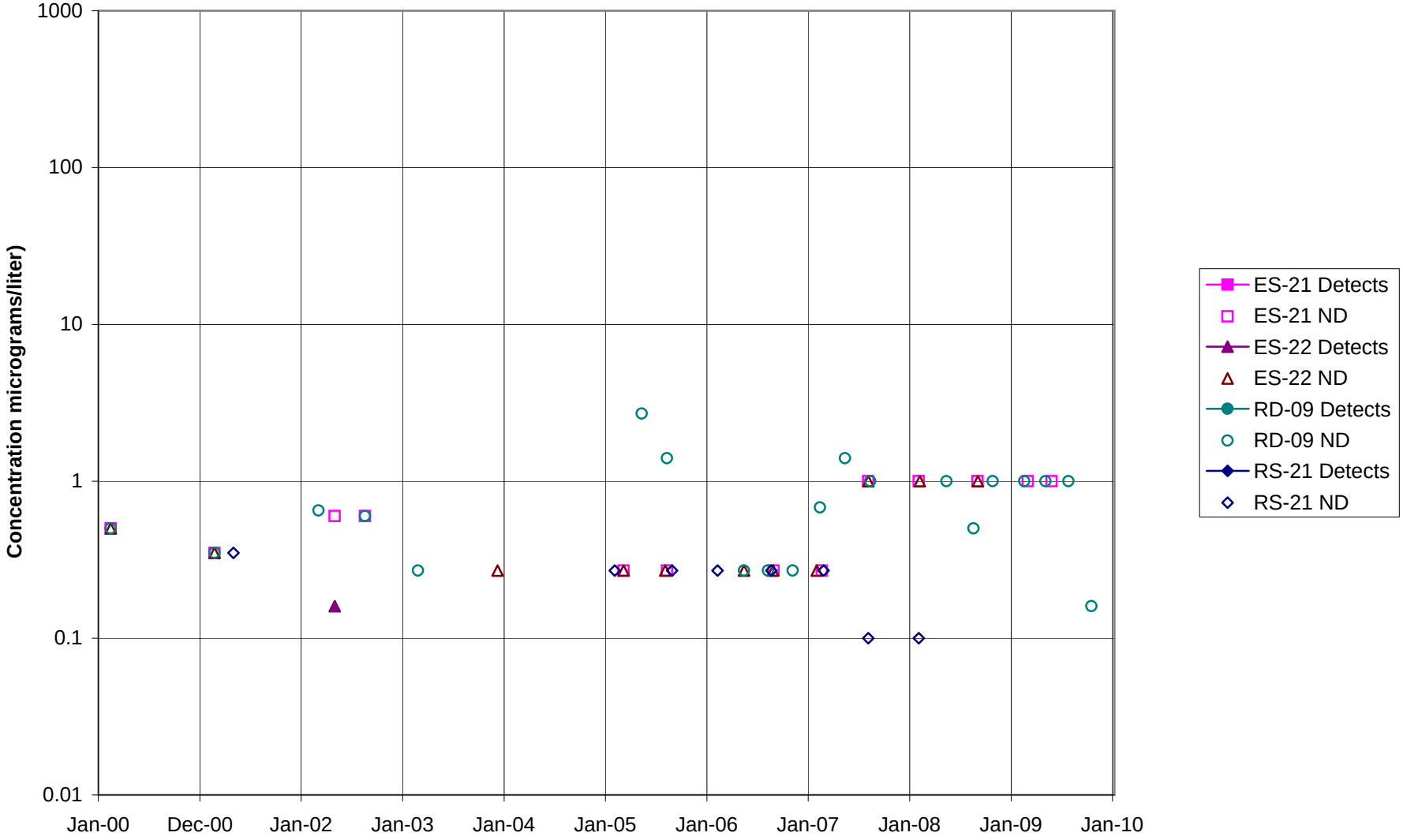


FIGURE F-63. 1,1-DCA IN HELIPORT, B/204 AREA WELLS

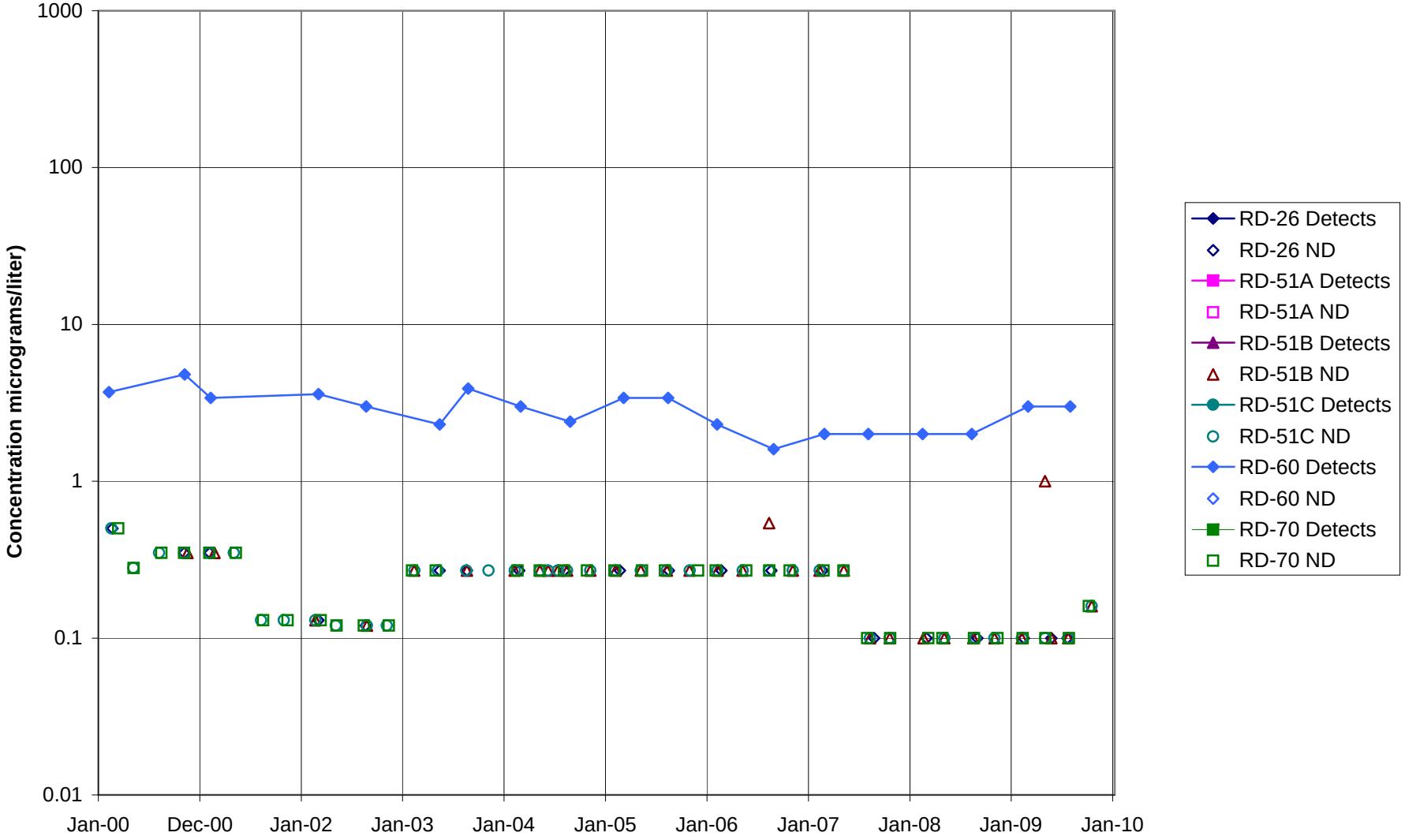


FIGURE F-64. 1,1-DCA IN ALFA / BRAVO AREA WELLS

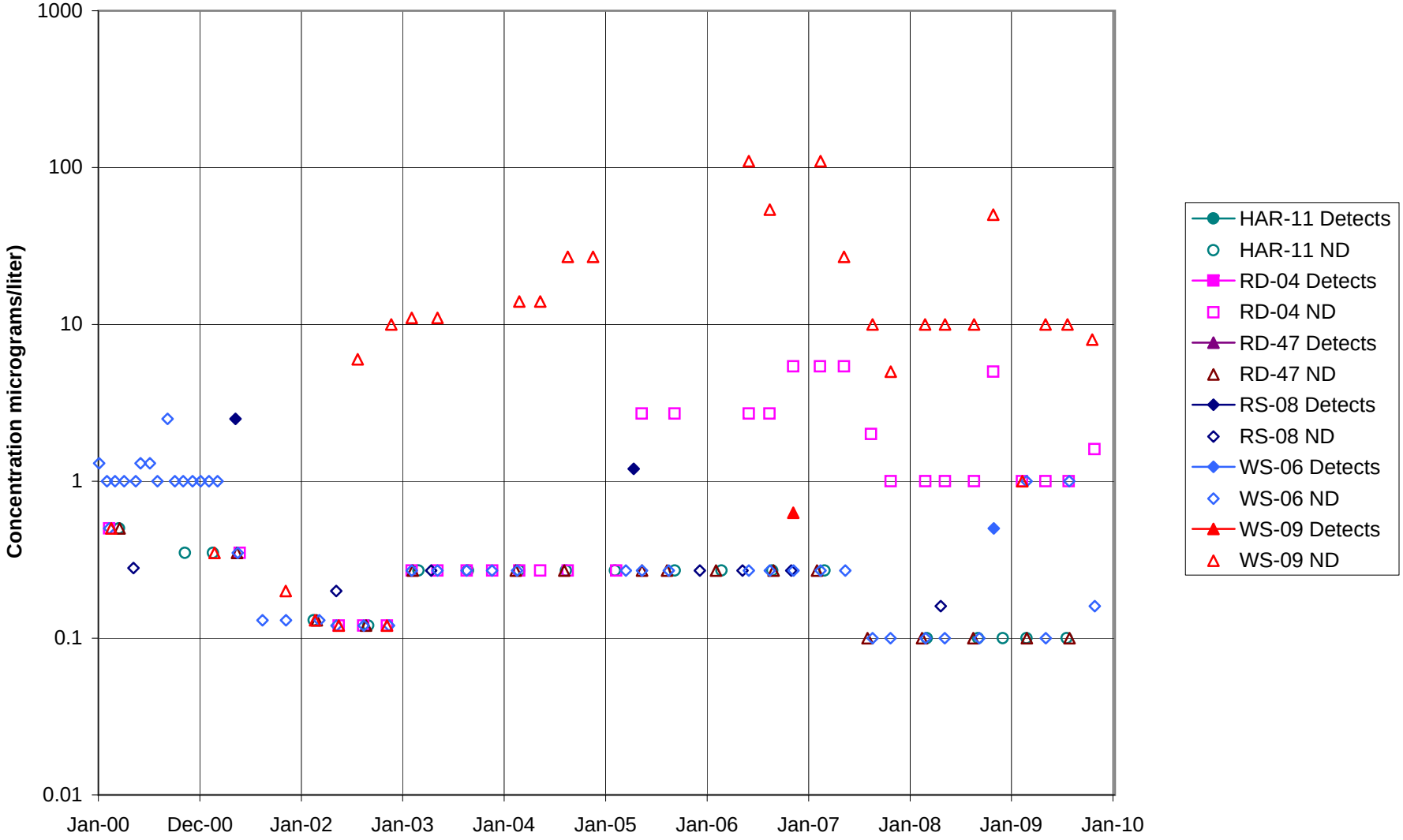


FIGURE F-65. 1,1-DCA IN SPA AREA WELLS

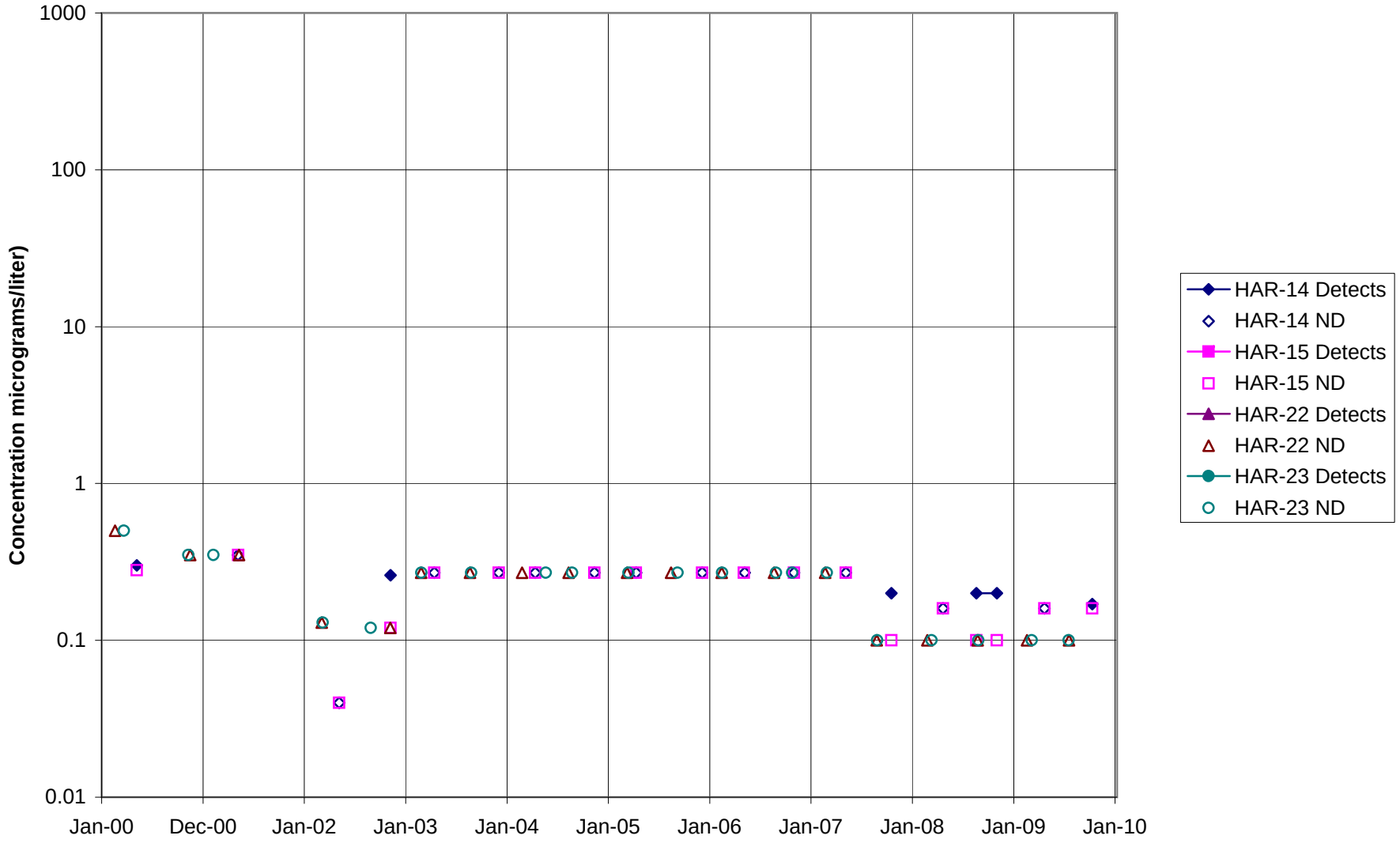


FIGURE F-66. 1,1-DCA IN COCA / PLF AREA WELLS

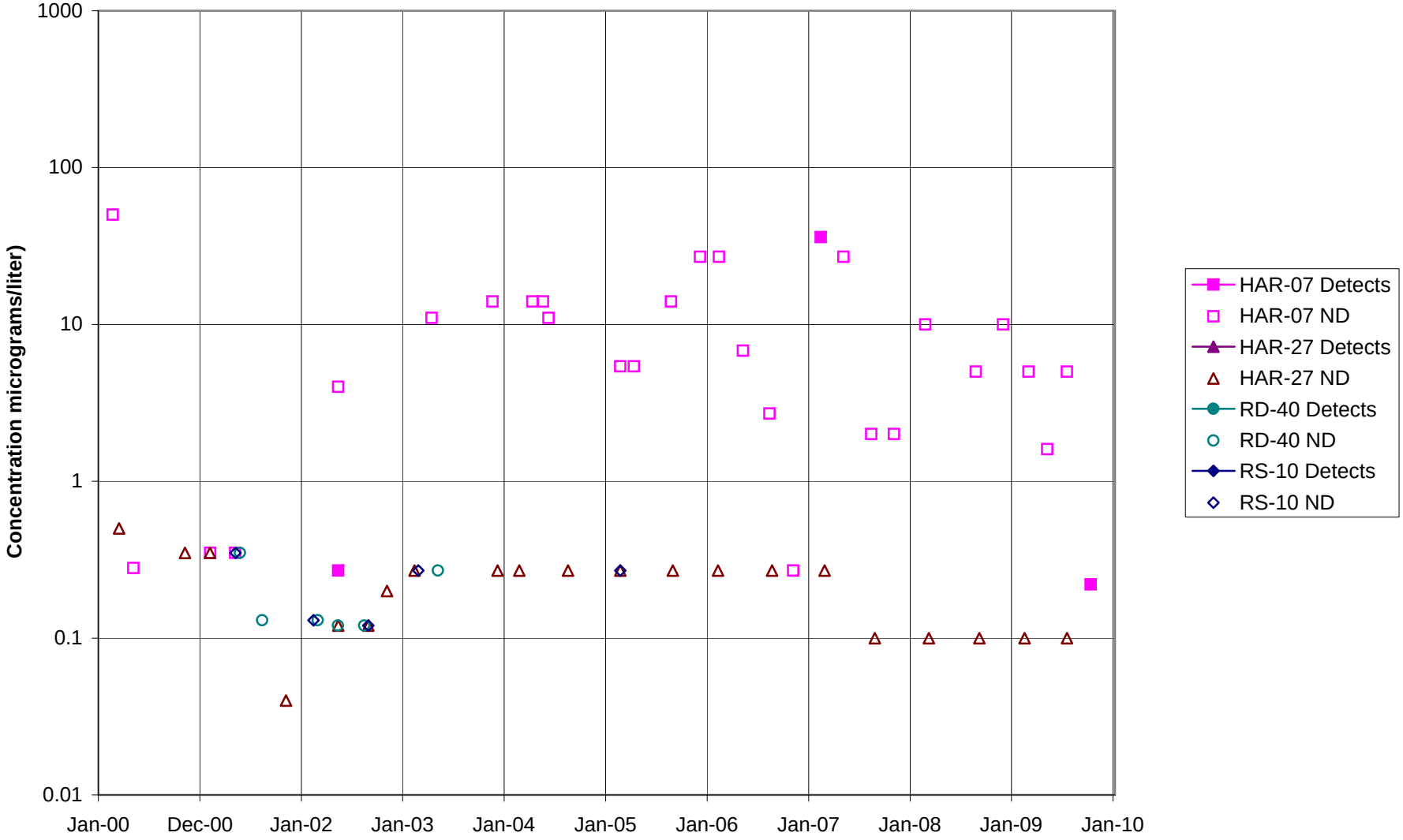


FIGURE F-67. 1,1-DCA IN DELTA / BUFFER ZONE AREA WELLS

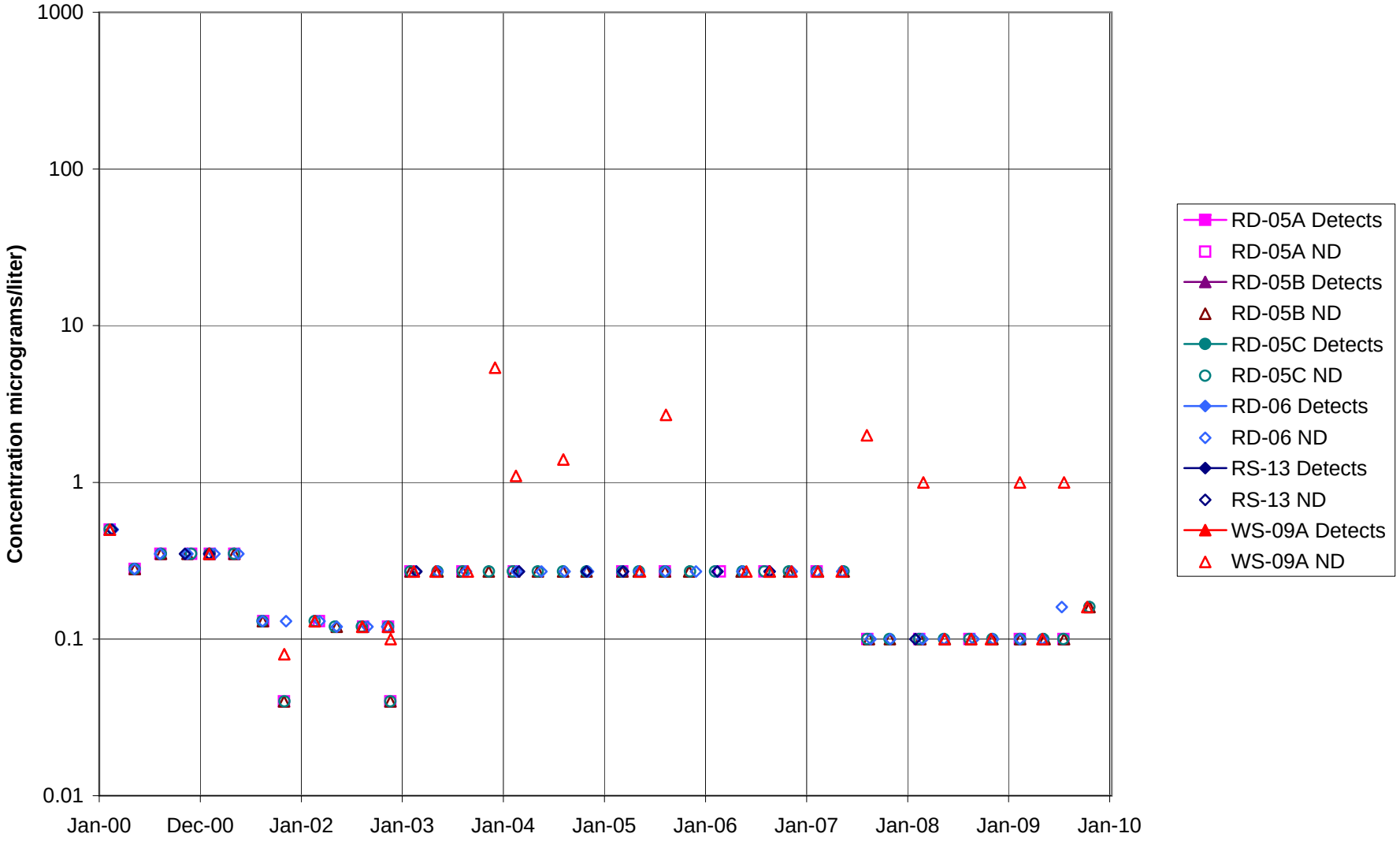


FIGURE F-68. 1,1-DCA IN AREA IV WELLS

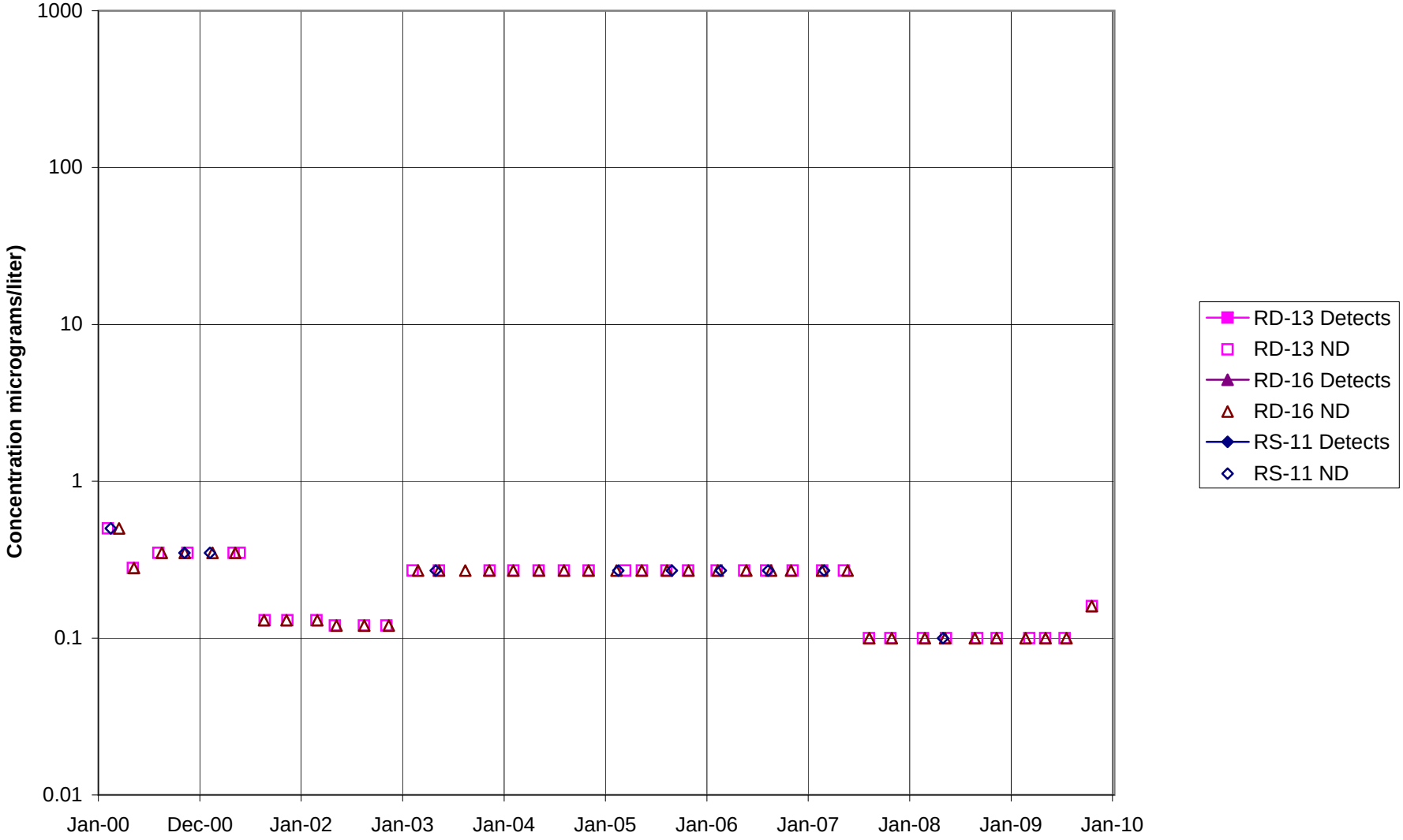


FIGURE F-69. 1,2-DCA in STL-IV AREA SHALLOW WELLS

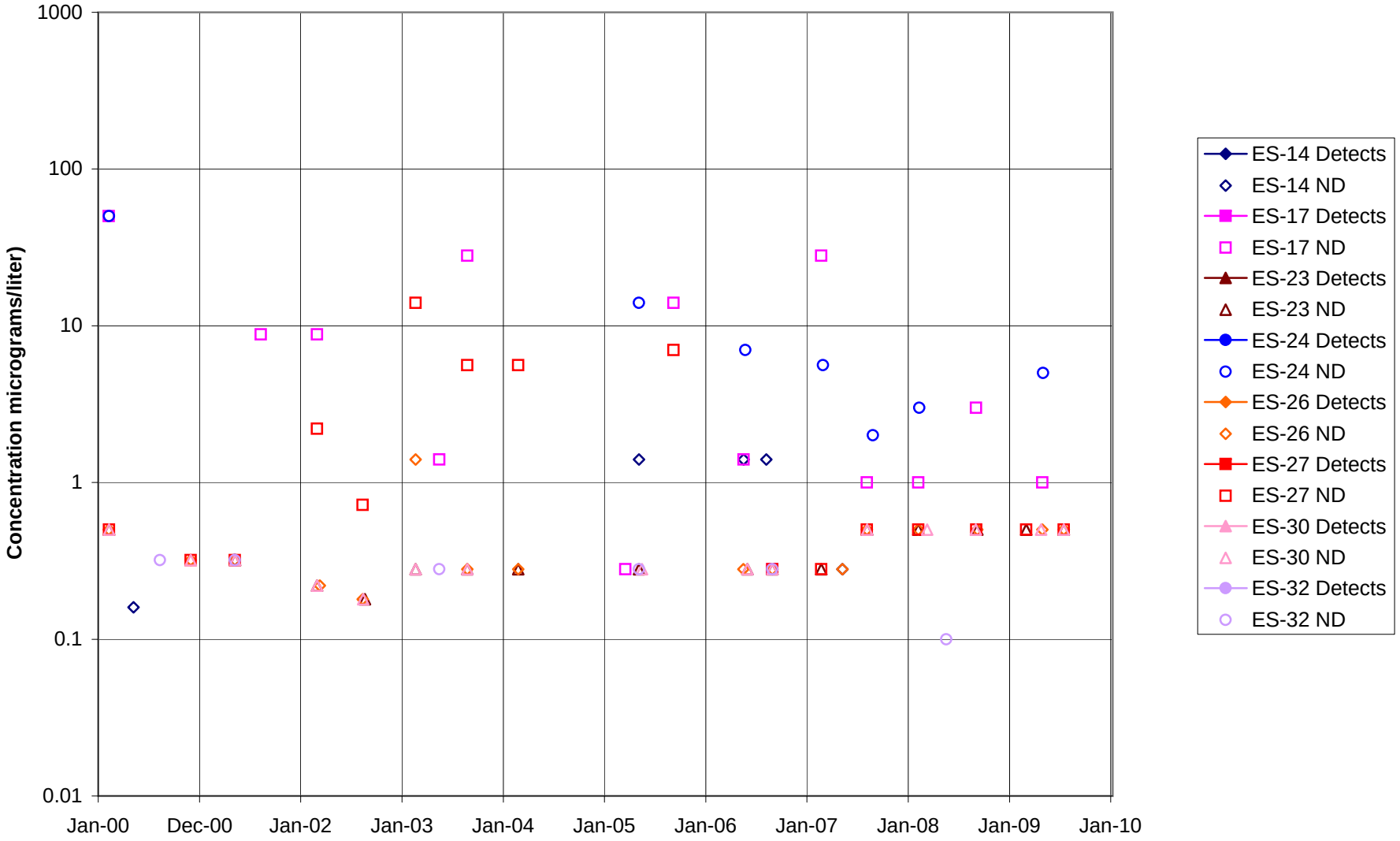


FIGURE F-70. 1,2-DCA in STL-IV AREA CHATSWORTH FORMATION WELLS

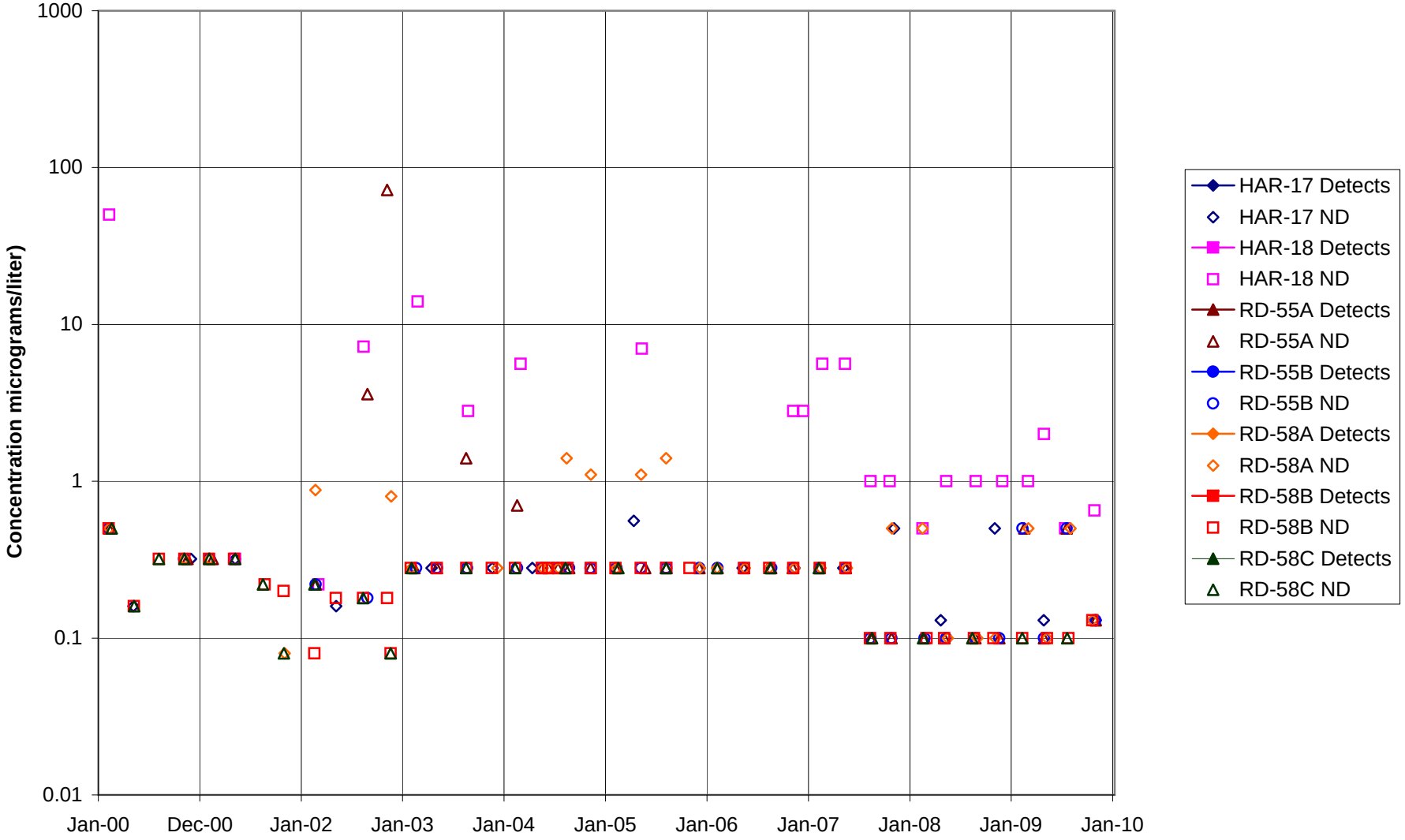


FIGURE F-71. 1,2-DCA in MAIN GATE AREA WELLS - 1

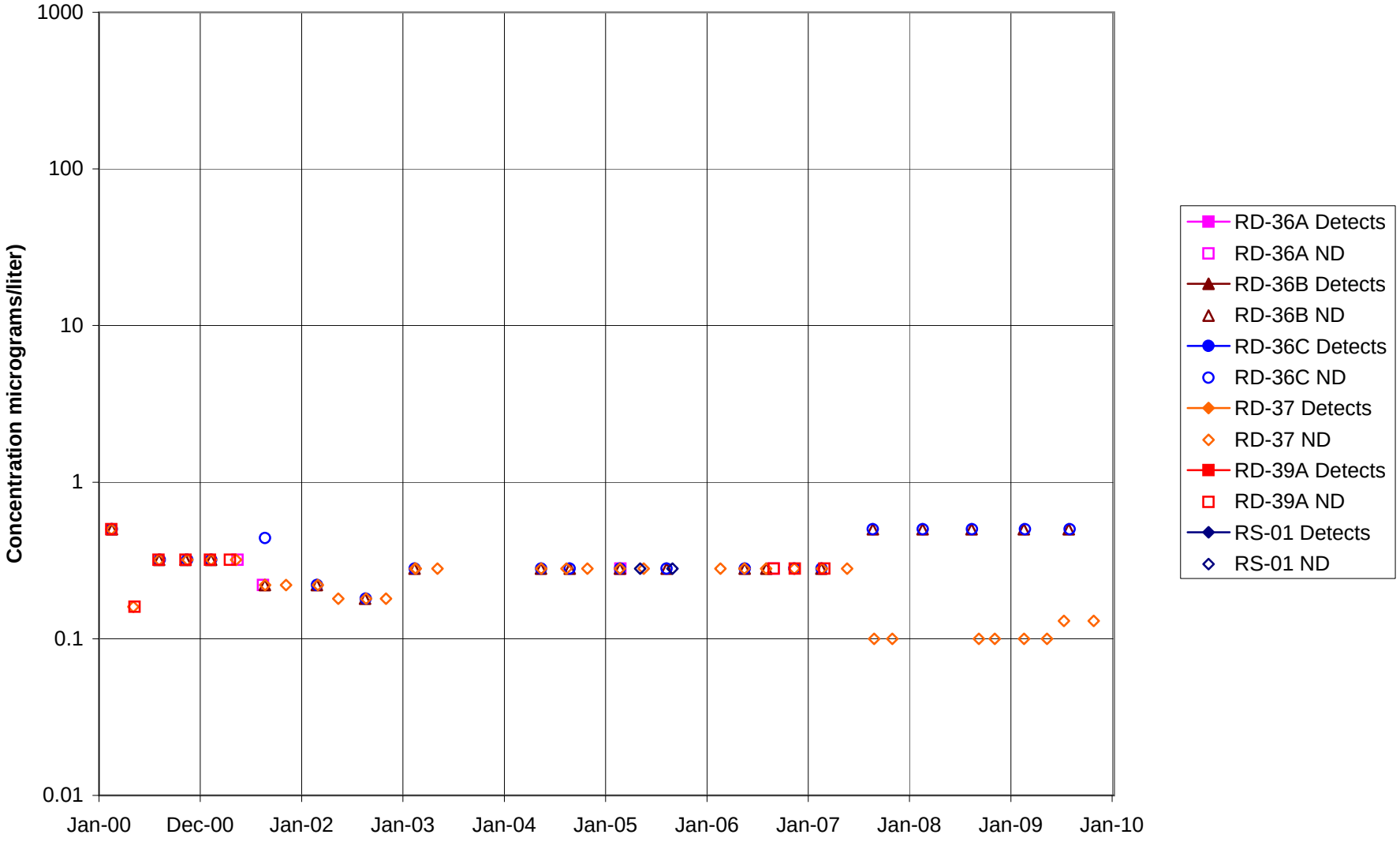


FIGURE F-72. 1,2-DCA in MAIN GATE AREA WELLS - 2

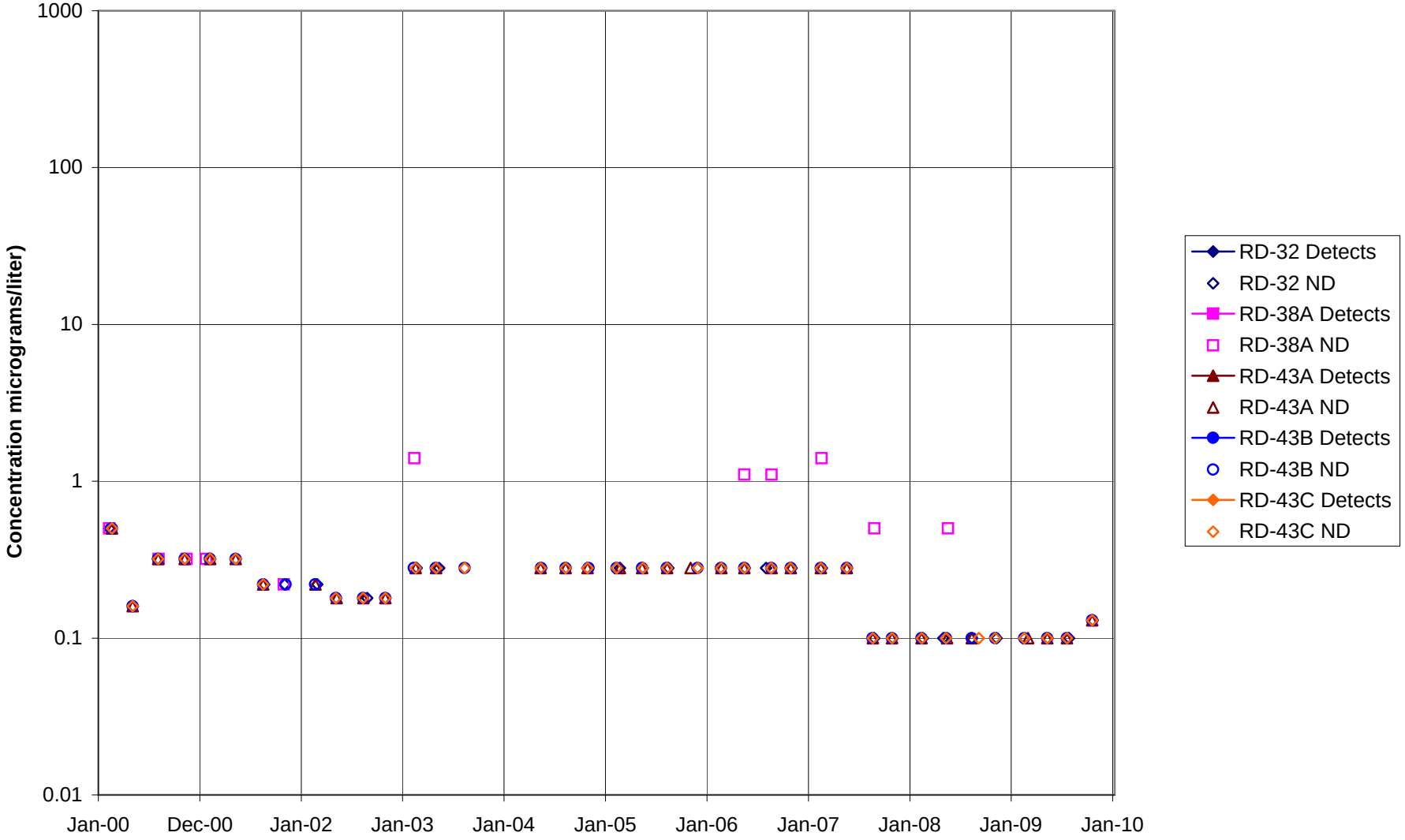


FIGURE F-73. 1,2-DCA in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1

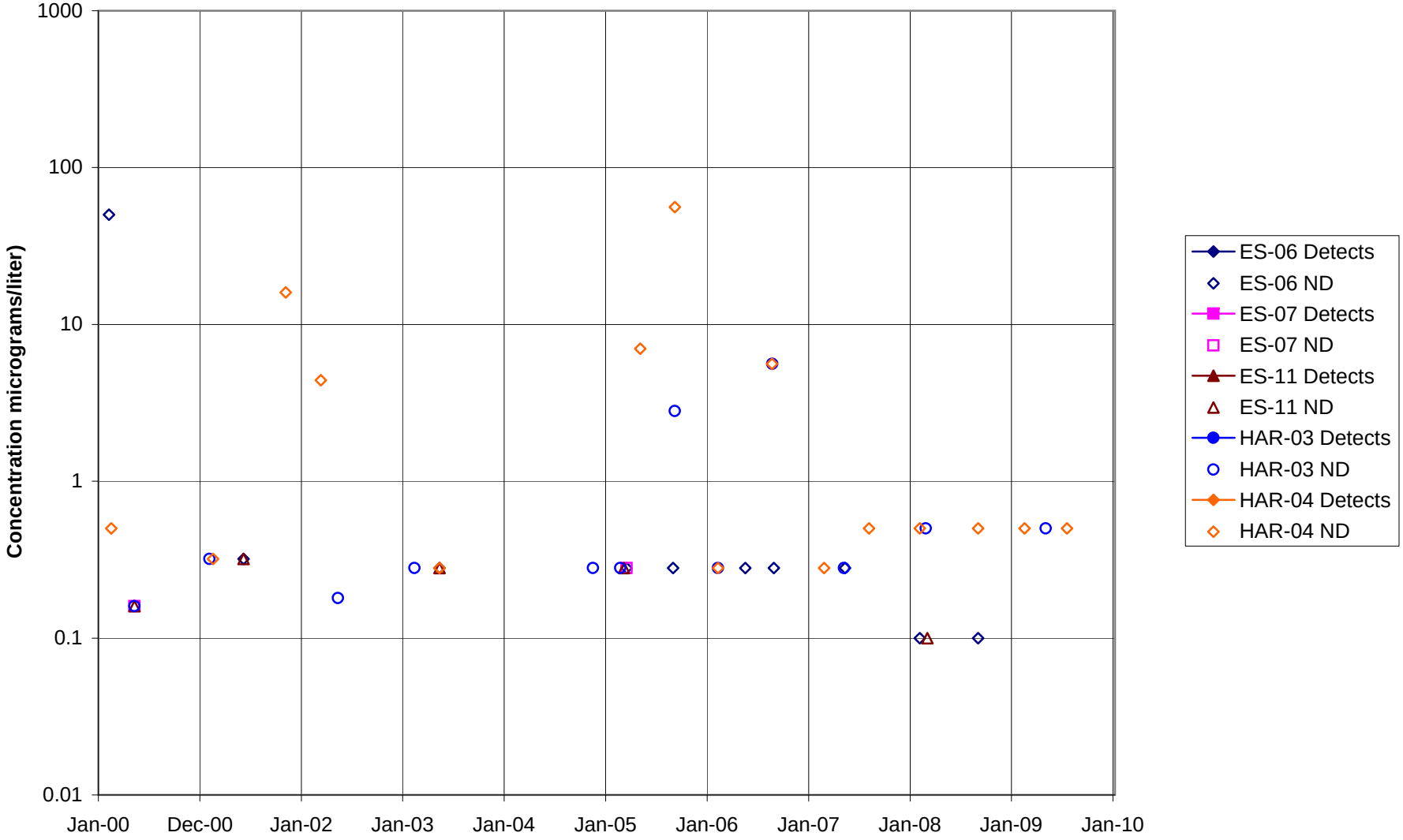


FIGURE F-74. 1,2-DCA in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 2

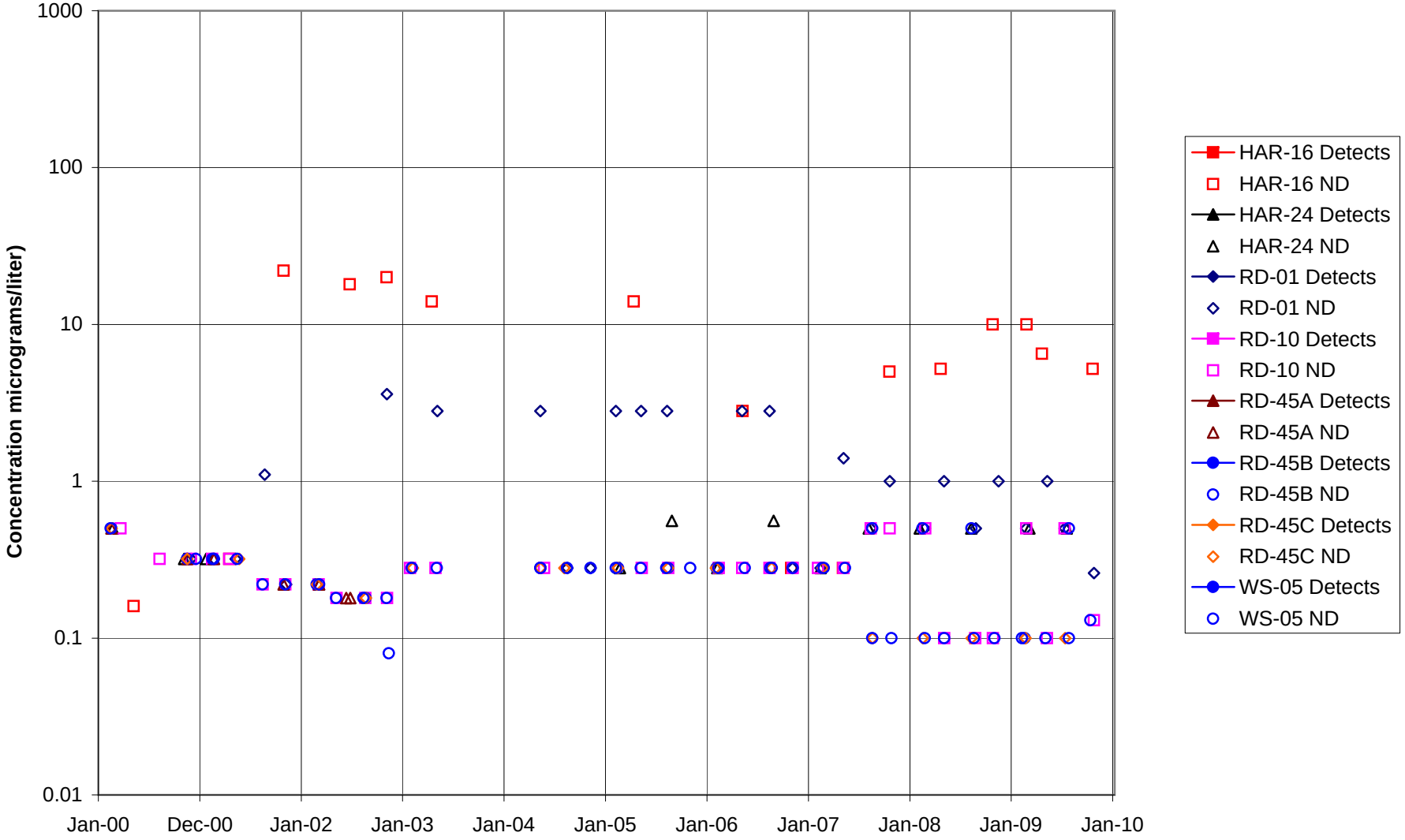


FIGURE F-75. 1,2-DCA in CTL-III / PERIMETER POND AREA WELLS

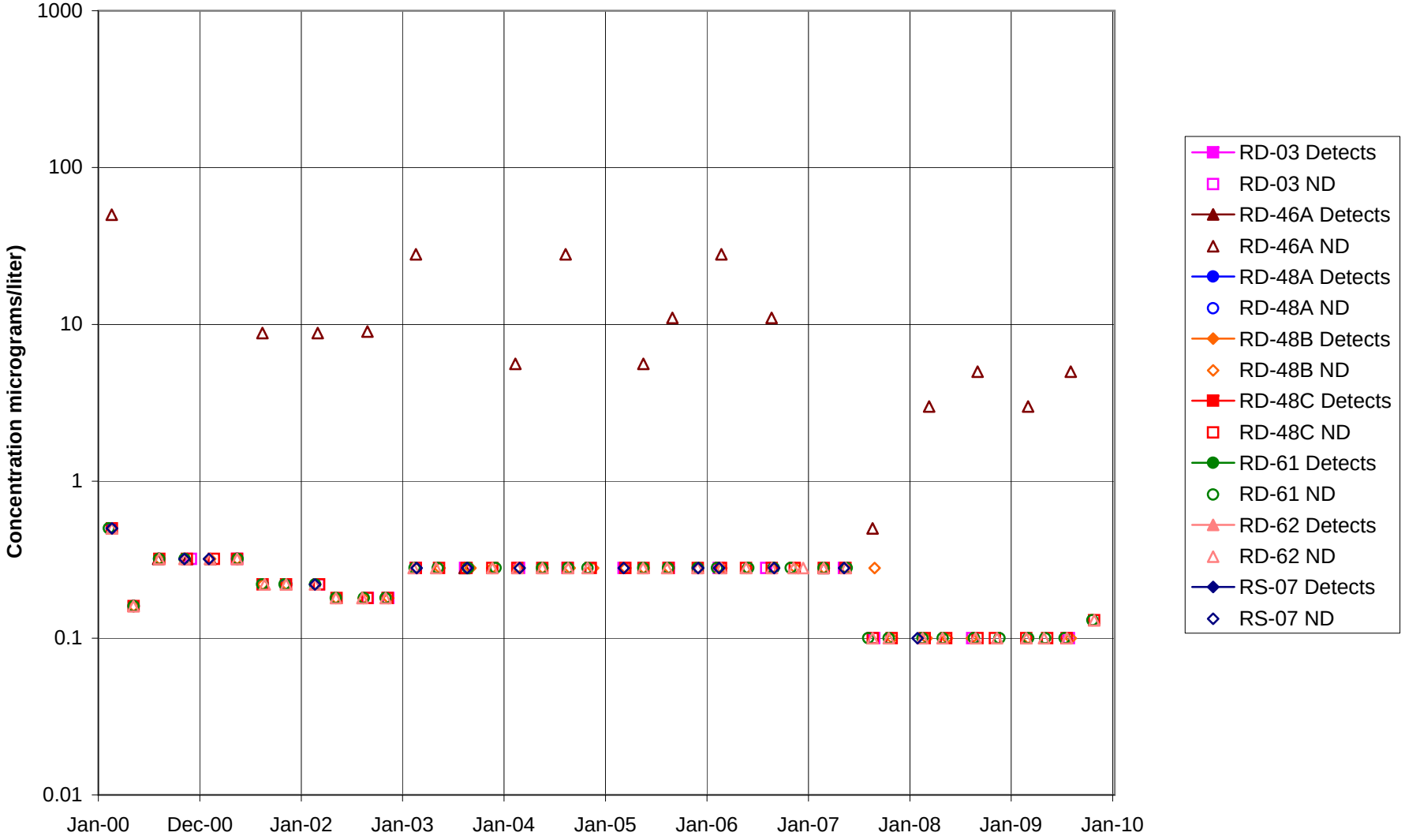


FIGURE F-76. 1,2-DCA in BOWL AREA WELLS

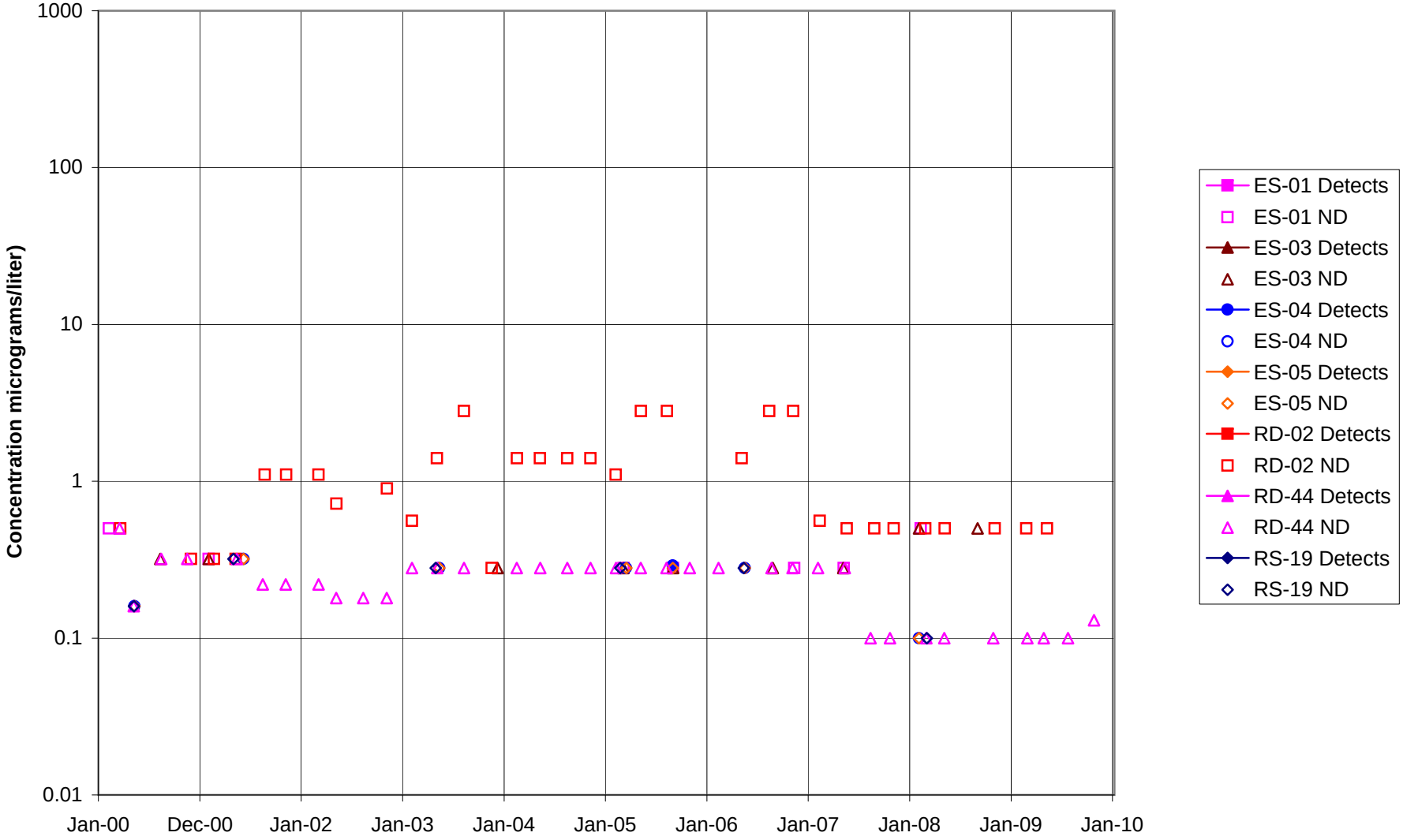


FIGURE F-77. 1,2-DCA in ECL AREA WELLS

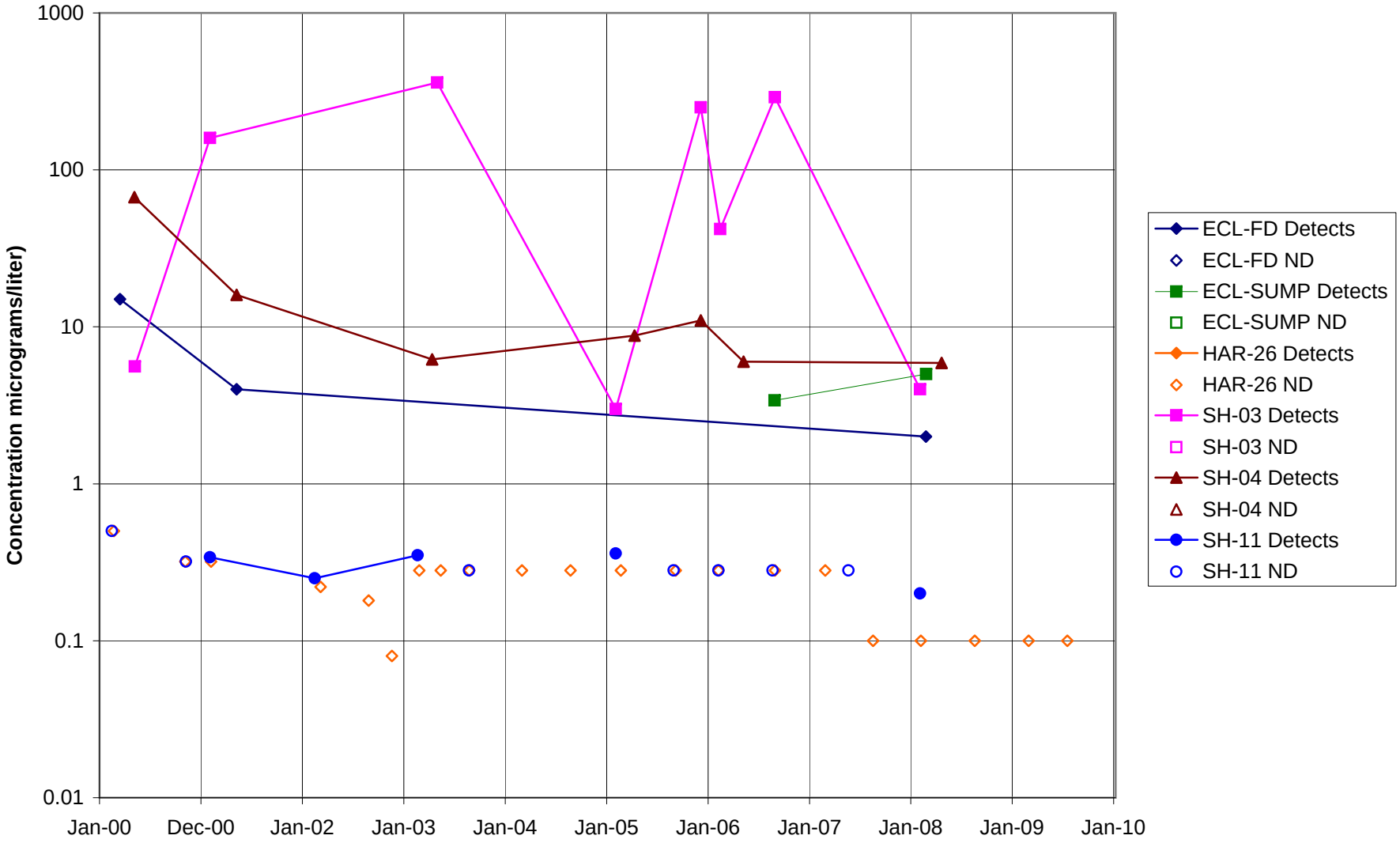


FIGURE F-78. 1,2-DCA in FORMER LOX PLANT AREA WELLS

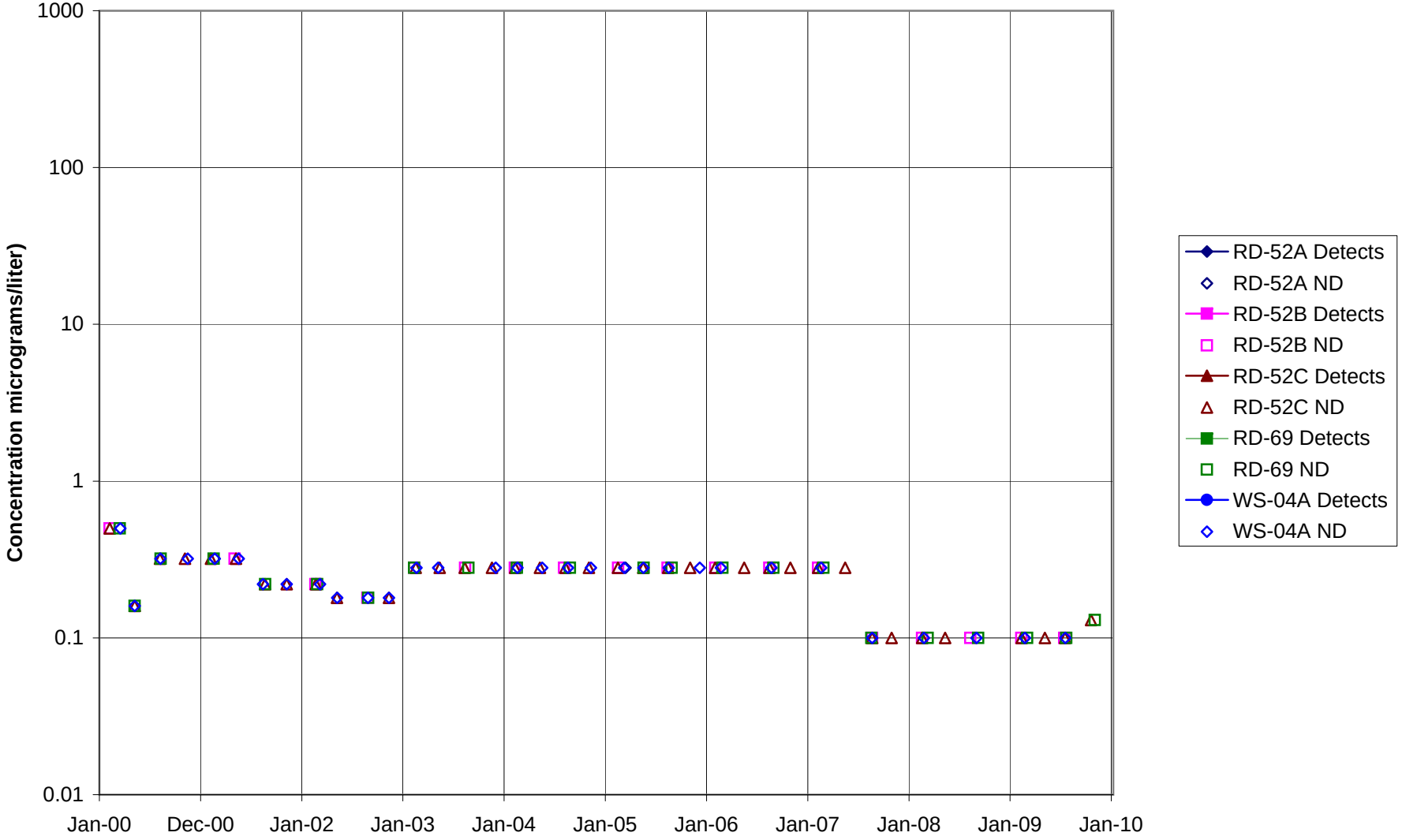


FIGURE F-79. 1,2-DCA in RD-09 AREA WELLS

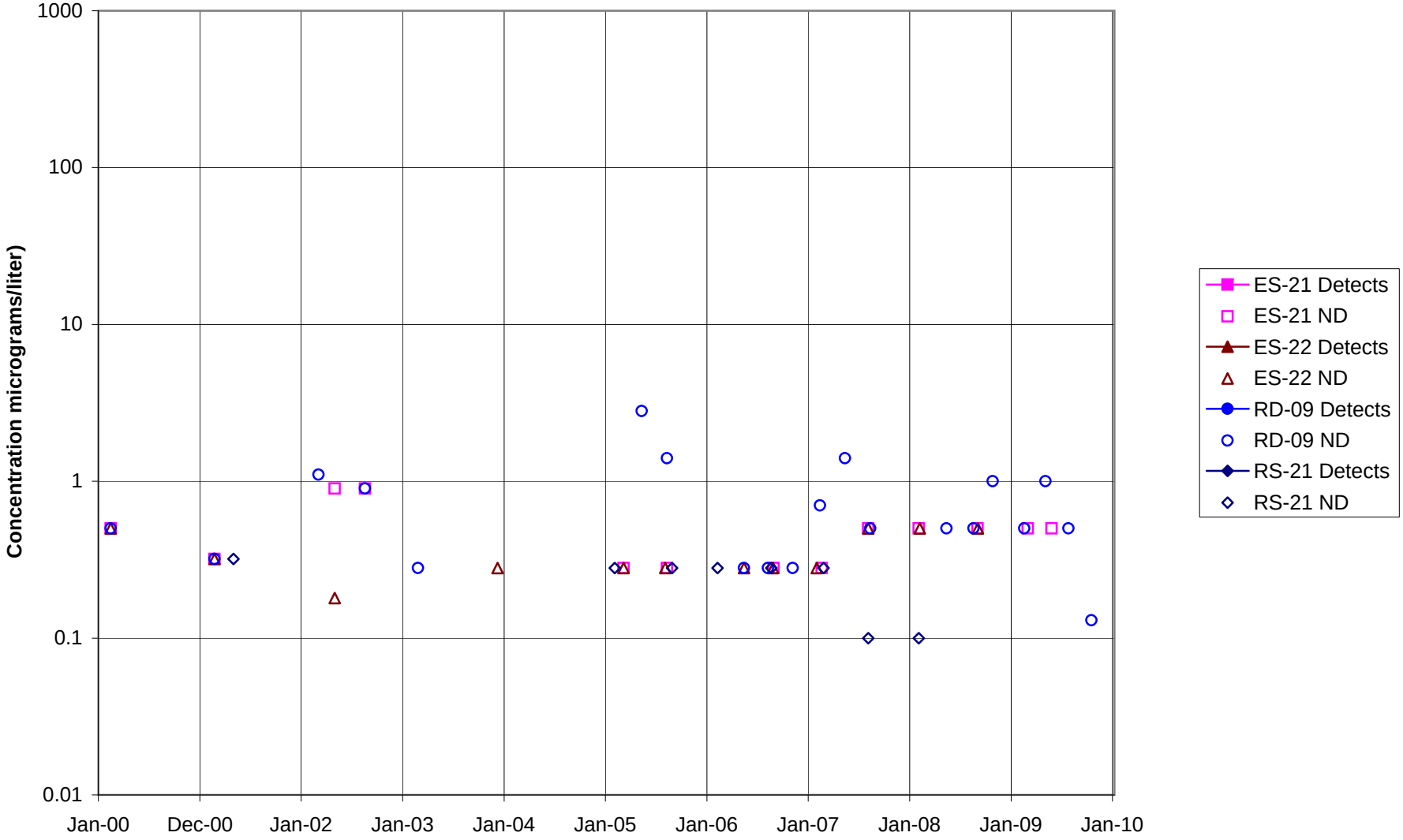


FIGURE F-80. 1,2-DCA in HELIPORT, B/204 AREA WELLS

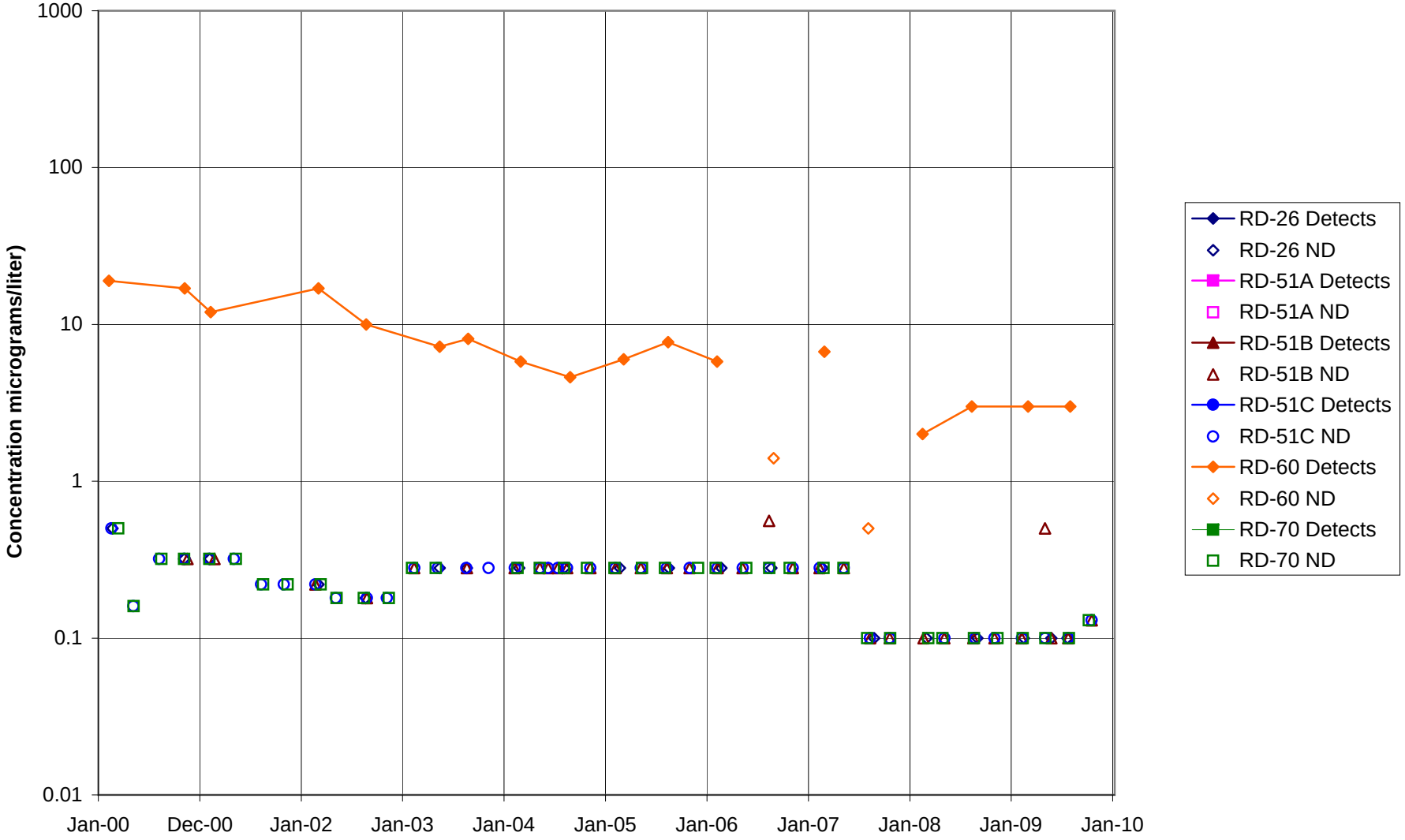


FIGURE F-81. 1,2-DCA in ALFA / BRAVO AREA WELLS

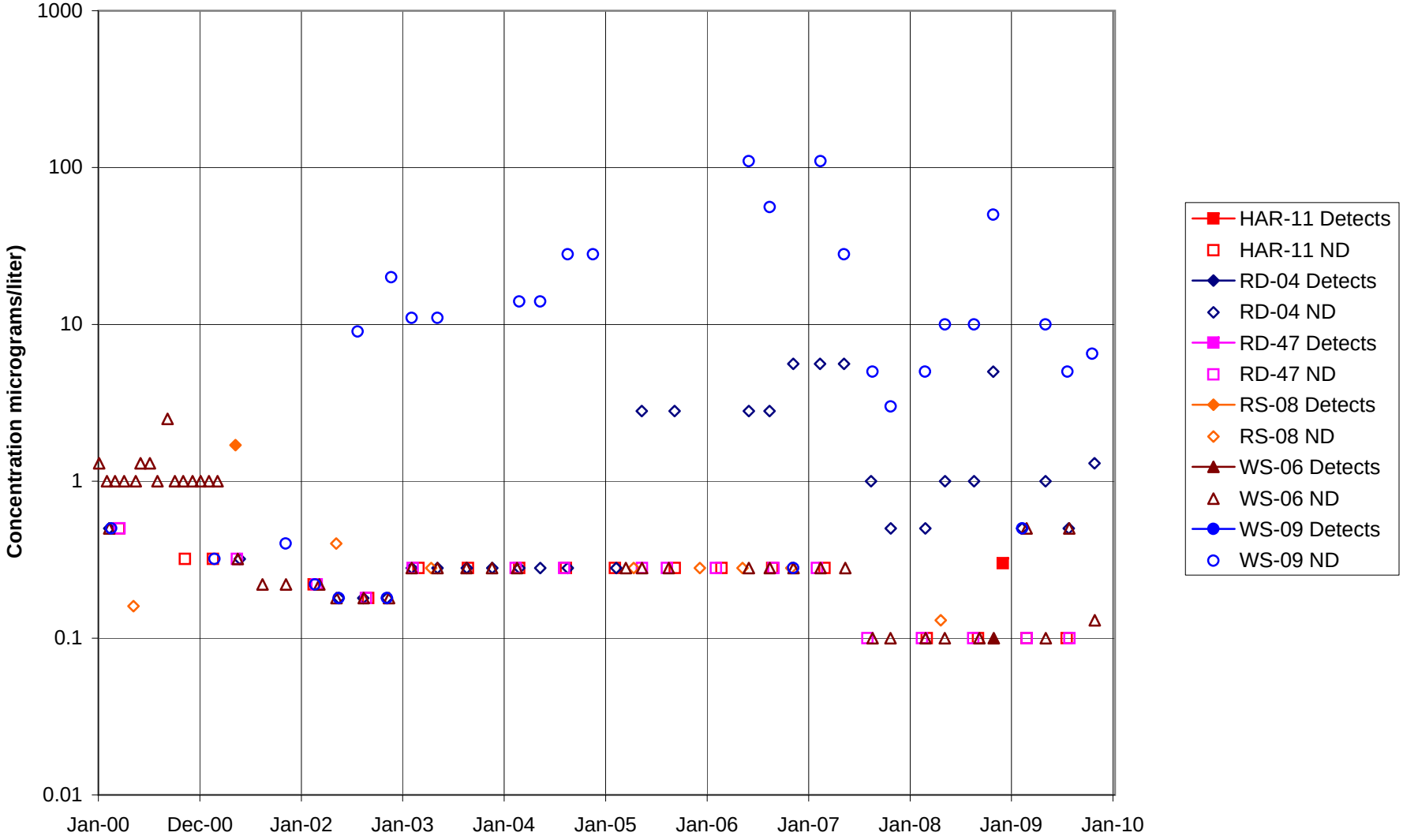


FIGURE F-82. 1,2-DCA in SPA AREA WELLS

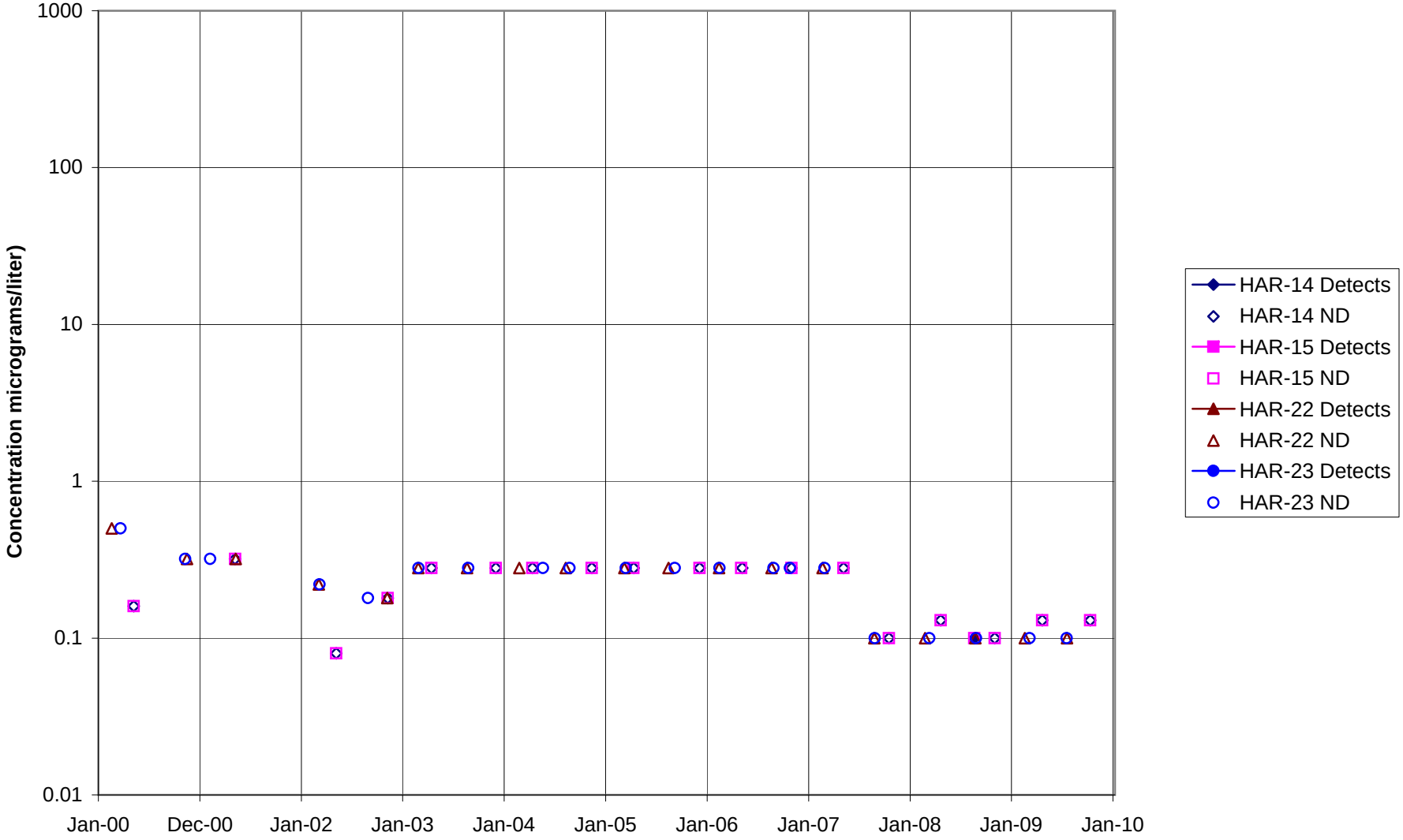


FIGURE F-83. 1,2-DCA in COCA / PLF AREA WELLS

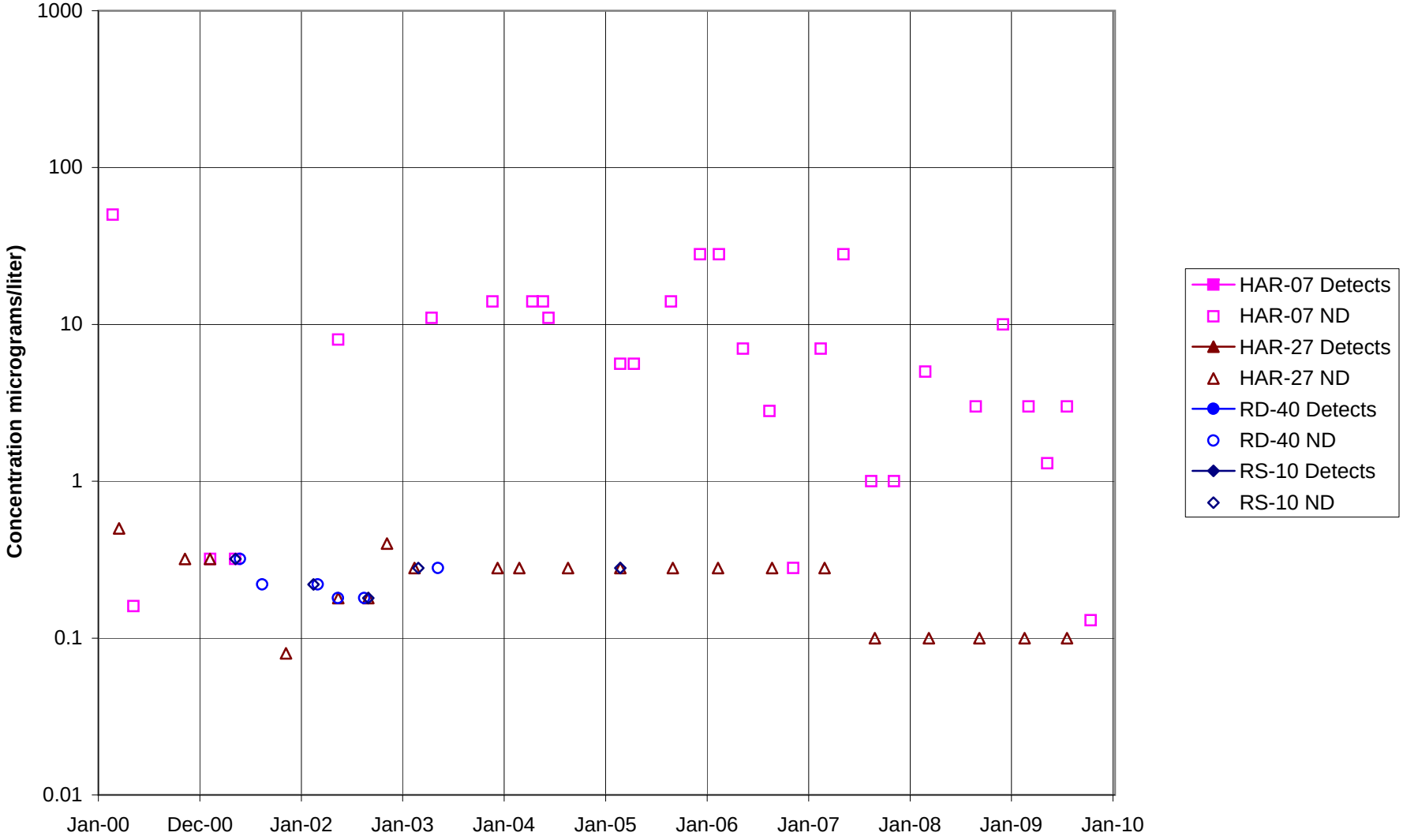


FIGURE F-84. 1,2-DCA in DELTA / BUFFER ZONE AREA WELLS

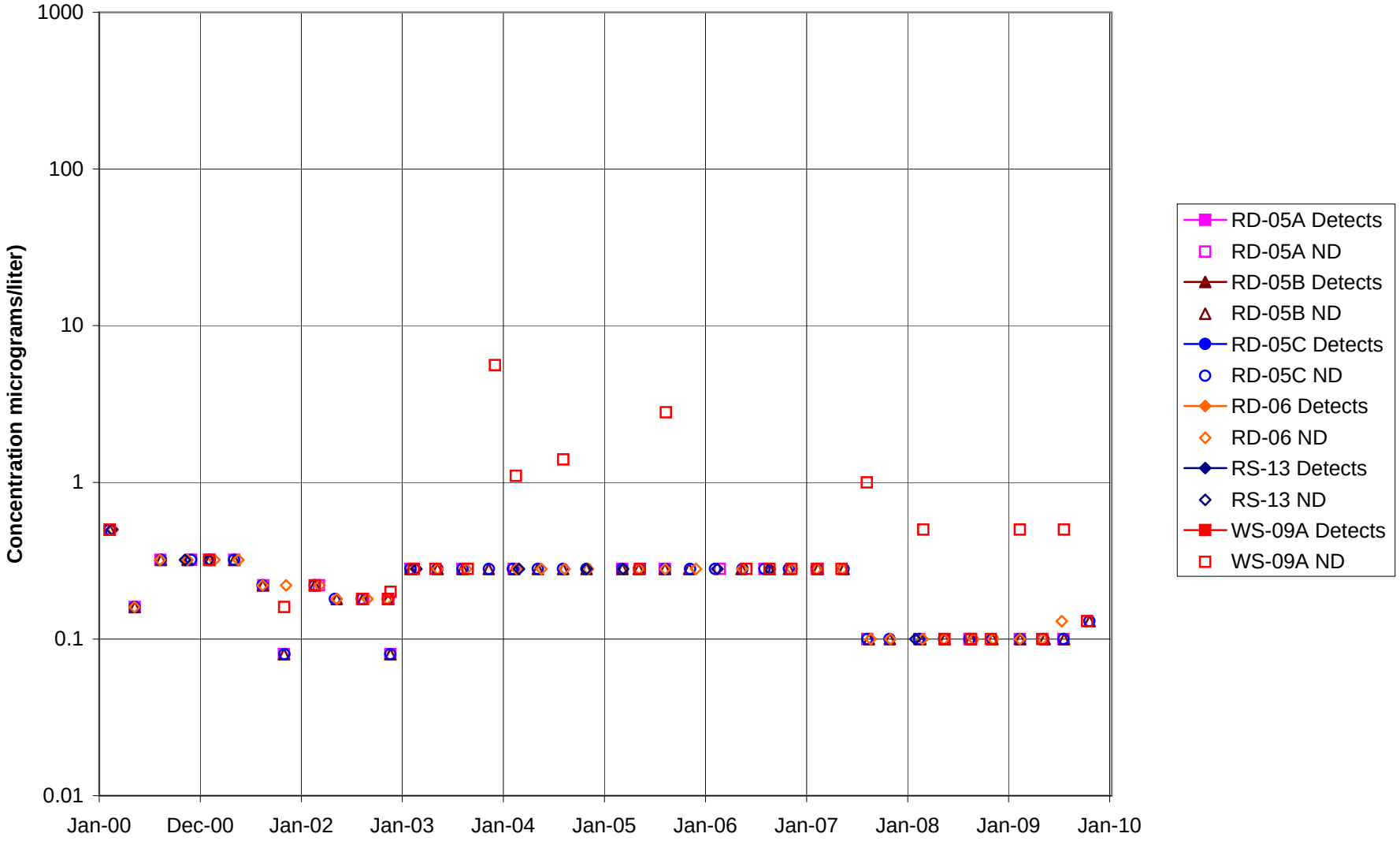


FIGURE F-85. 1,2-DCA in AREA IV WELLS

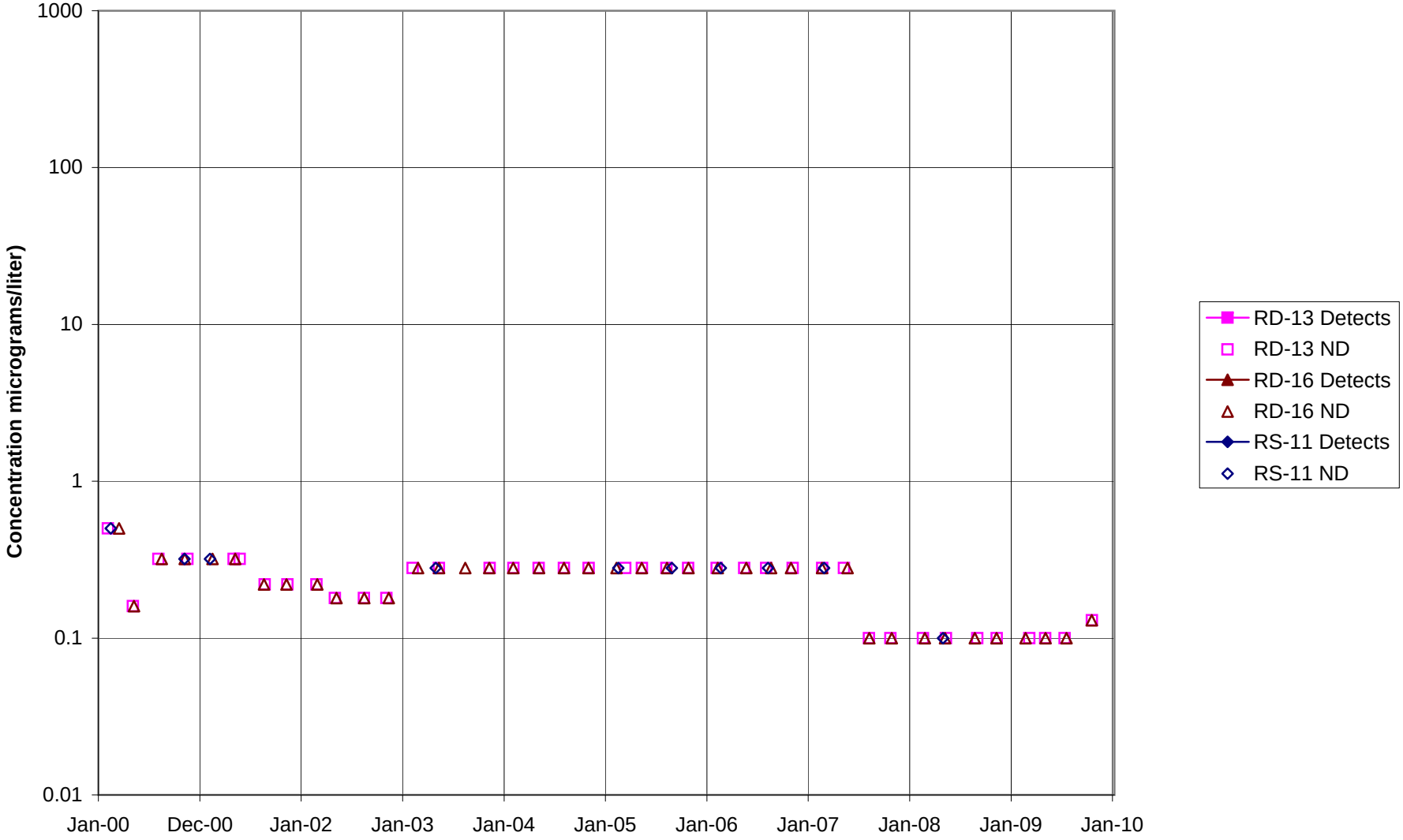


FIGURE F-86. 1,4-DIOXANE in STL-IV AREA SHALLOW WELLS

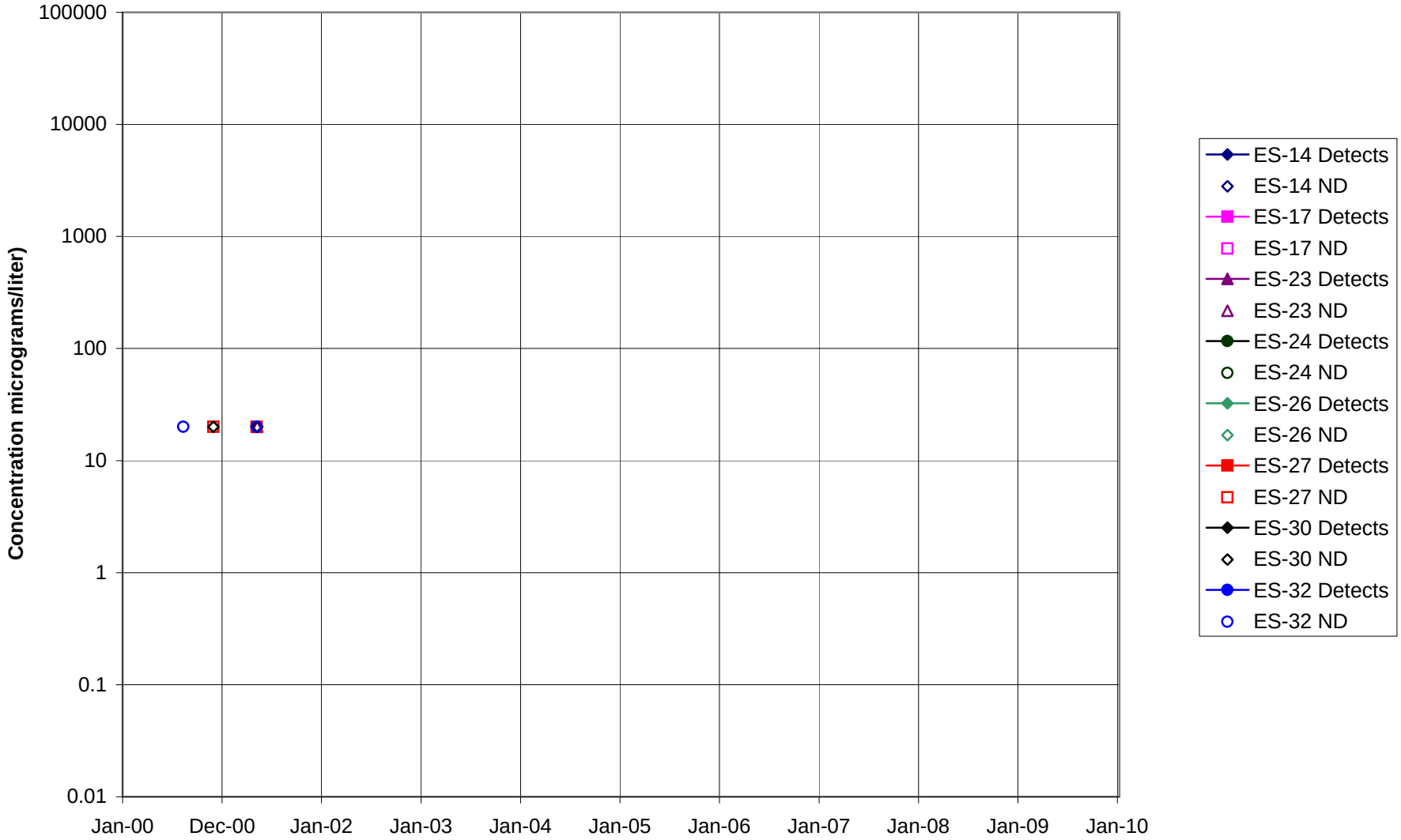


FIGURE F-87. 1,4-DIOXANE in STL-IV AREA CHATSWORTH FORMATION WELLS

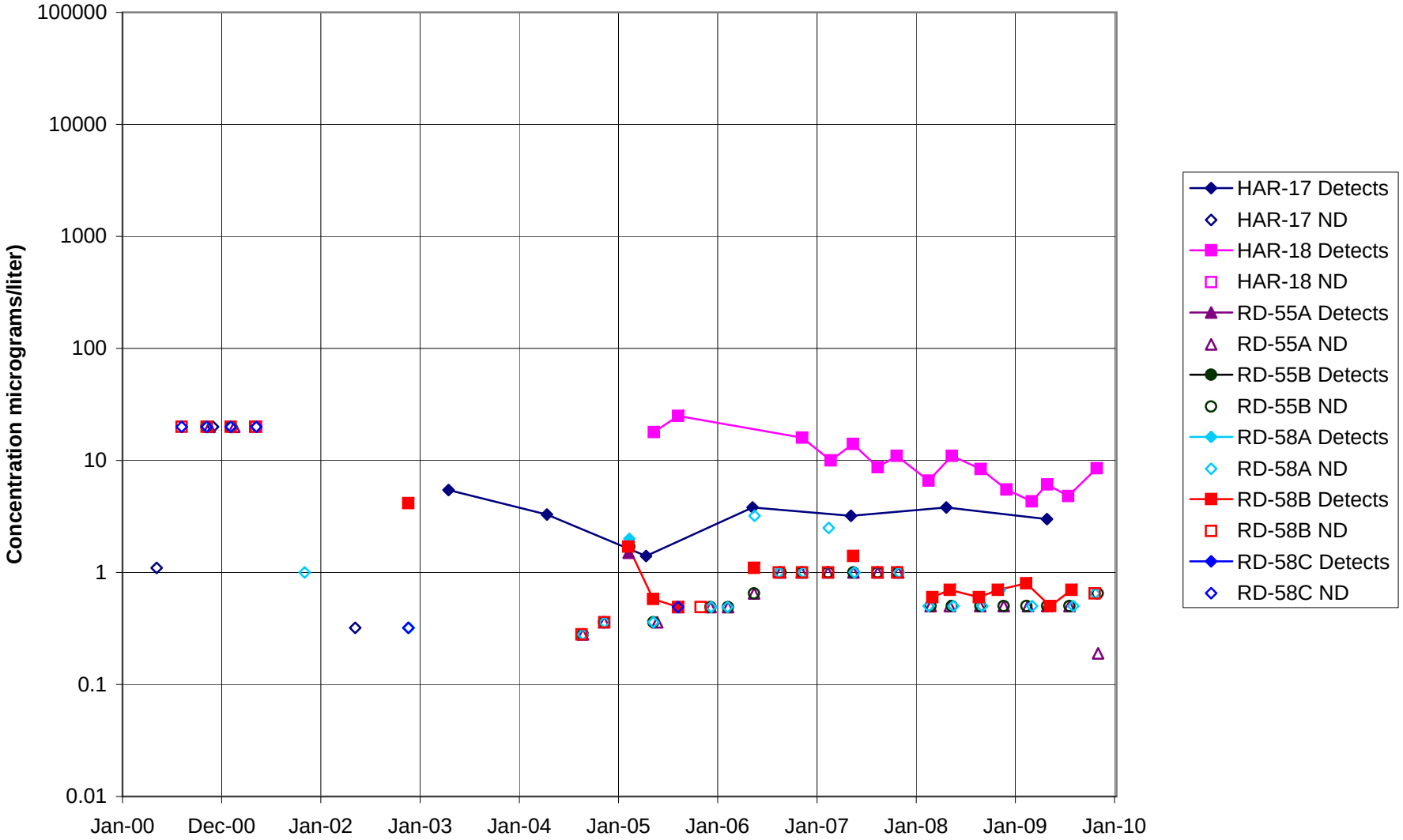


FIGURE F-88. 1,4-DIOXANE in MAIN GATE AREA WELLS - 1

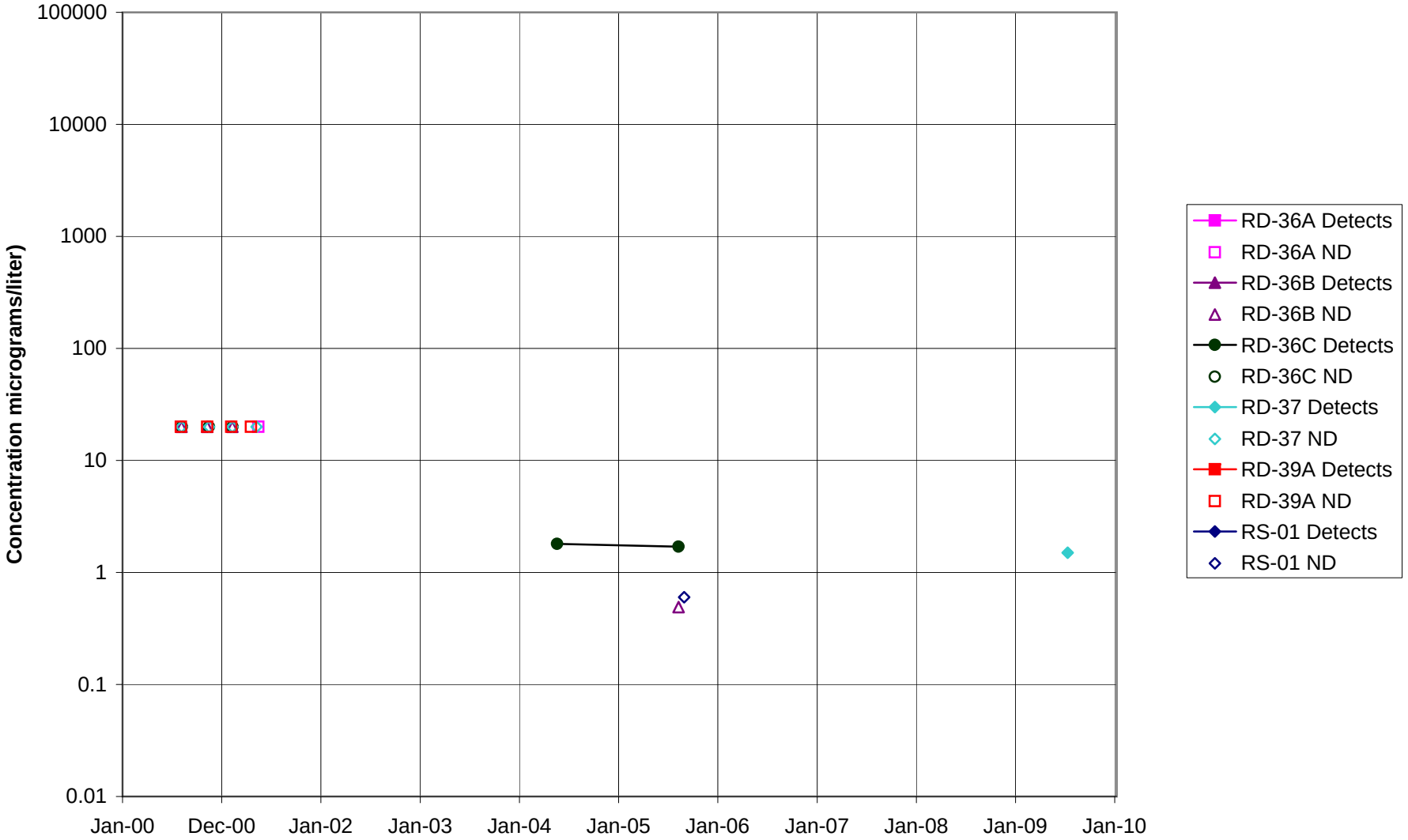


FIGURE F-89. 1,4-DIOXANE in MAIN GATE AREA WELLS - 2

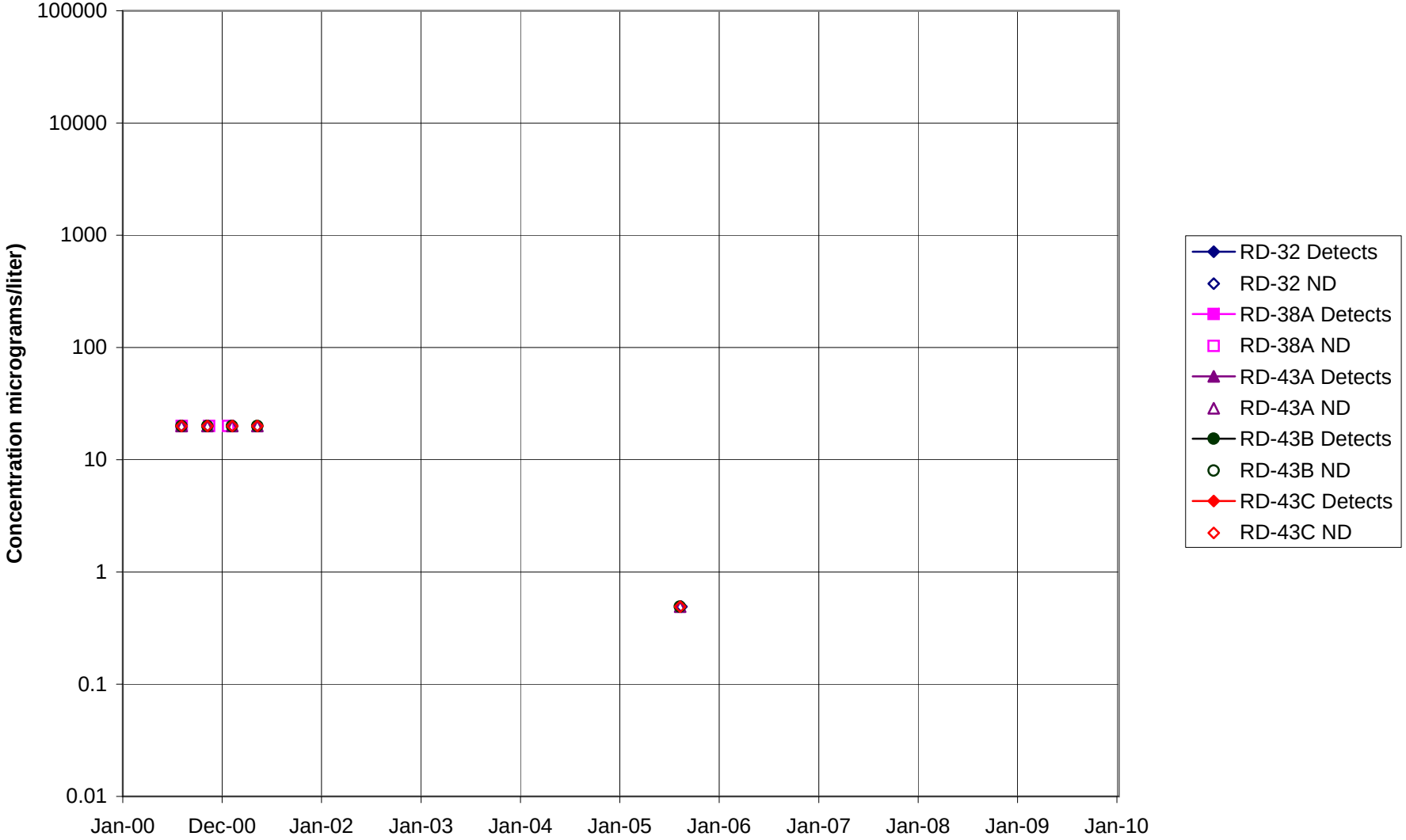


FIGURE F-90. 1,4-DIOXANE in APTF, CANYON & HAPPY VALLEY AREA WELLS - 1

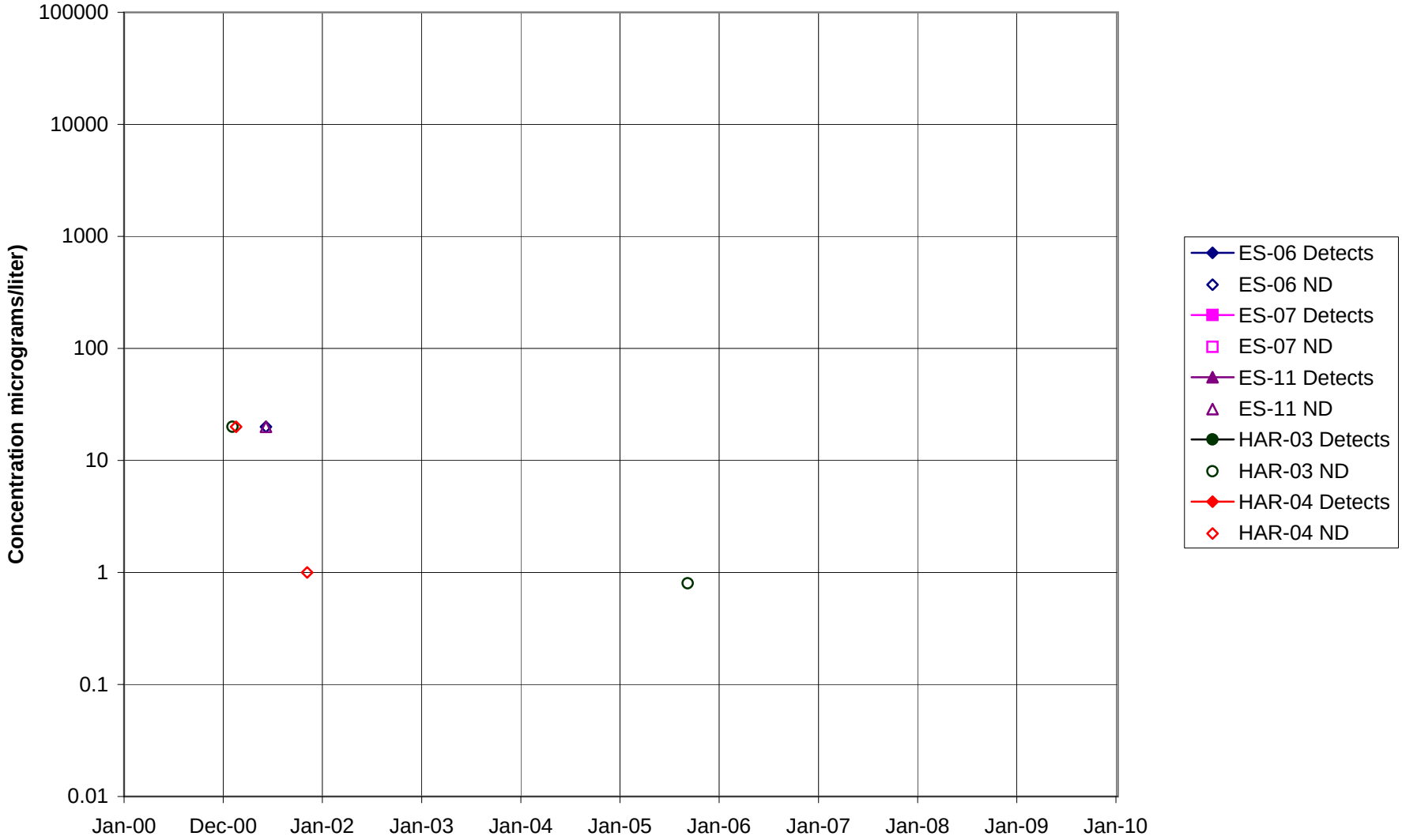


FIGURE F-91. 1,4-DIOXANE in APTF, CANYON & HAPPY VALLEY AREA WELLS - 2

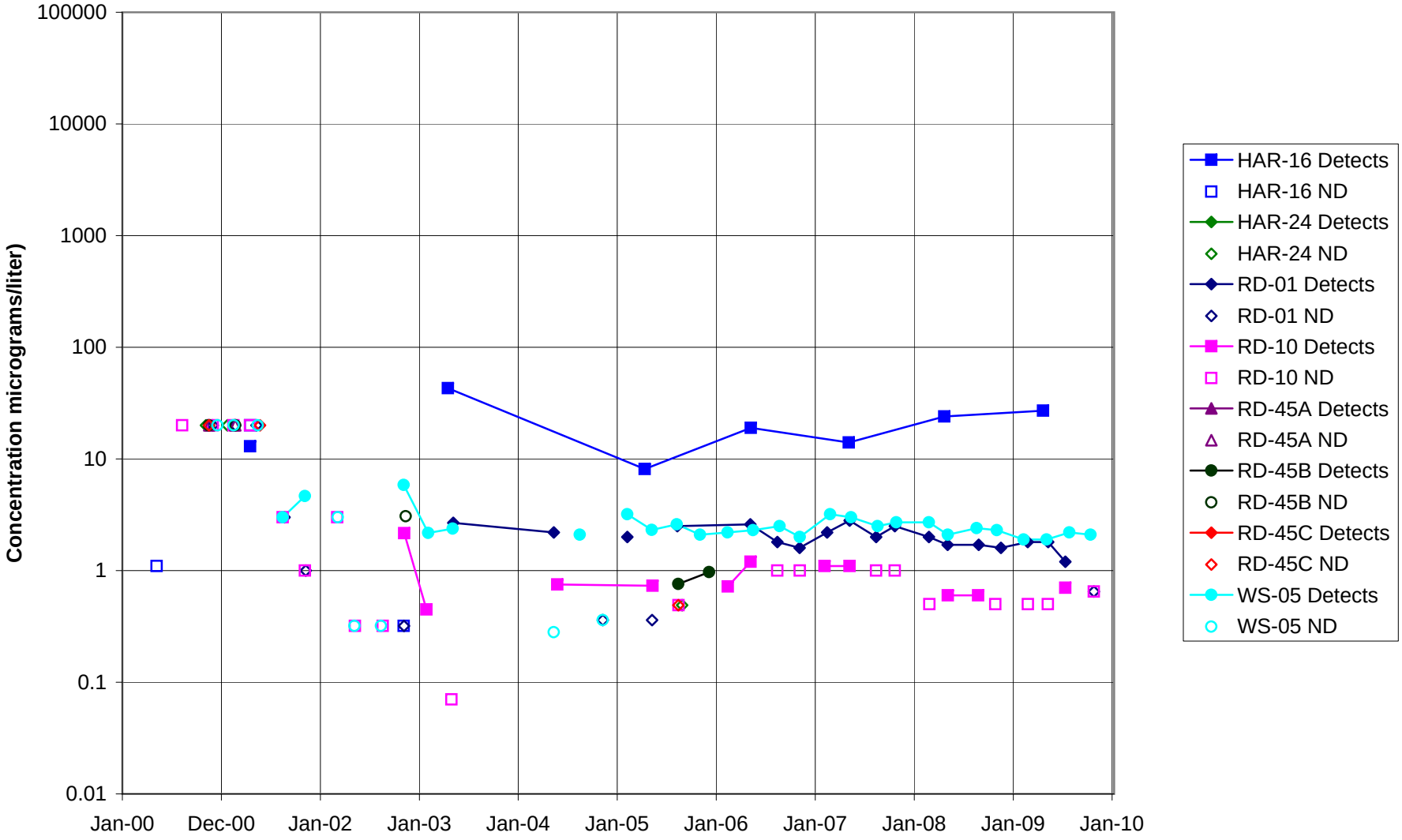


FIGURE F-92. 1,4-DIOXANE in CTL-III / PERIMETER POND AREA WELLS

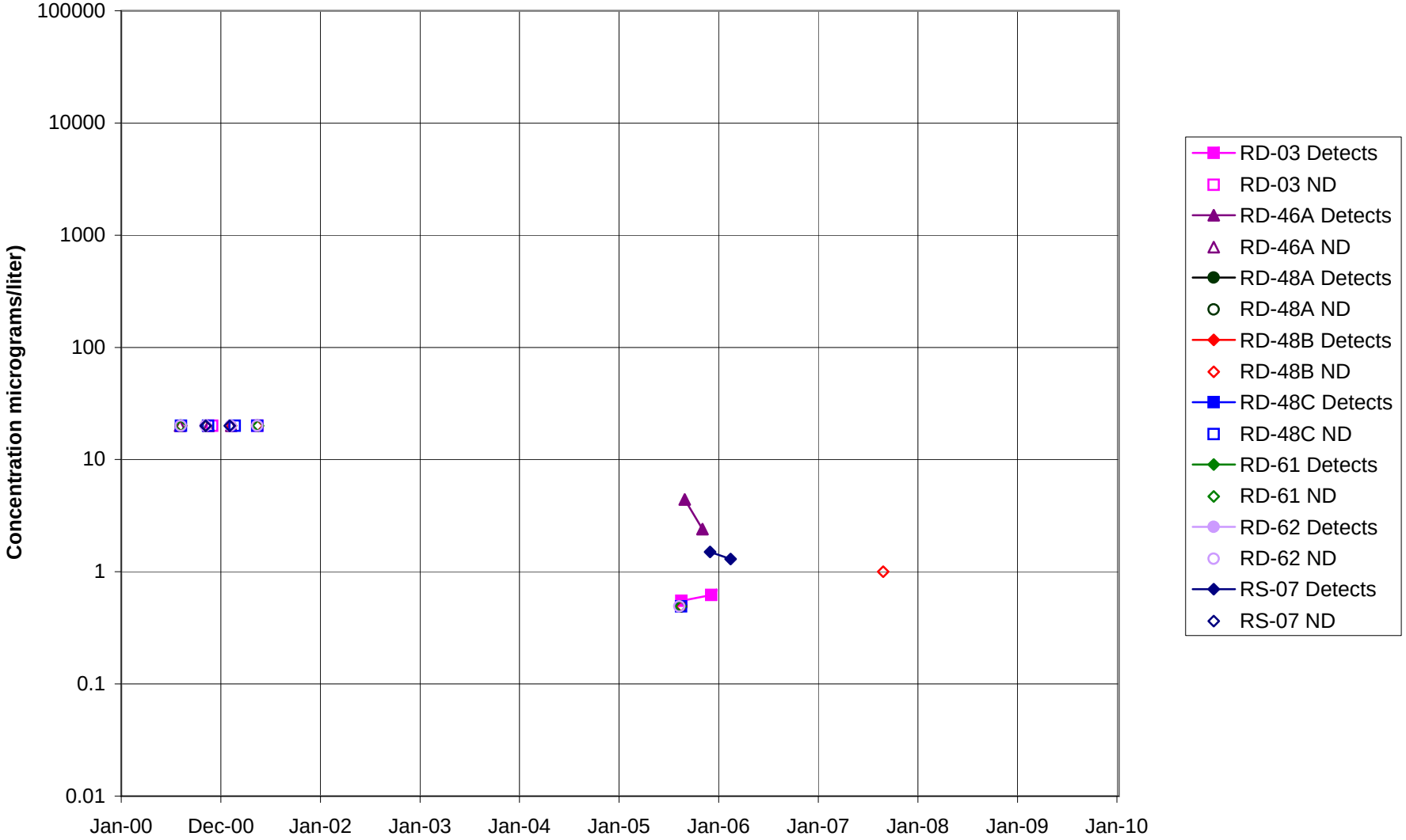


FIGURE F-93. 1,4-DIOXANE in BOWL AREA WELLS

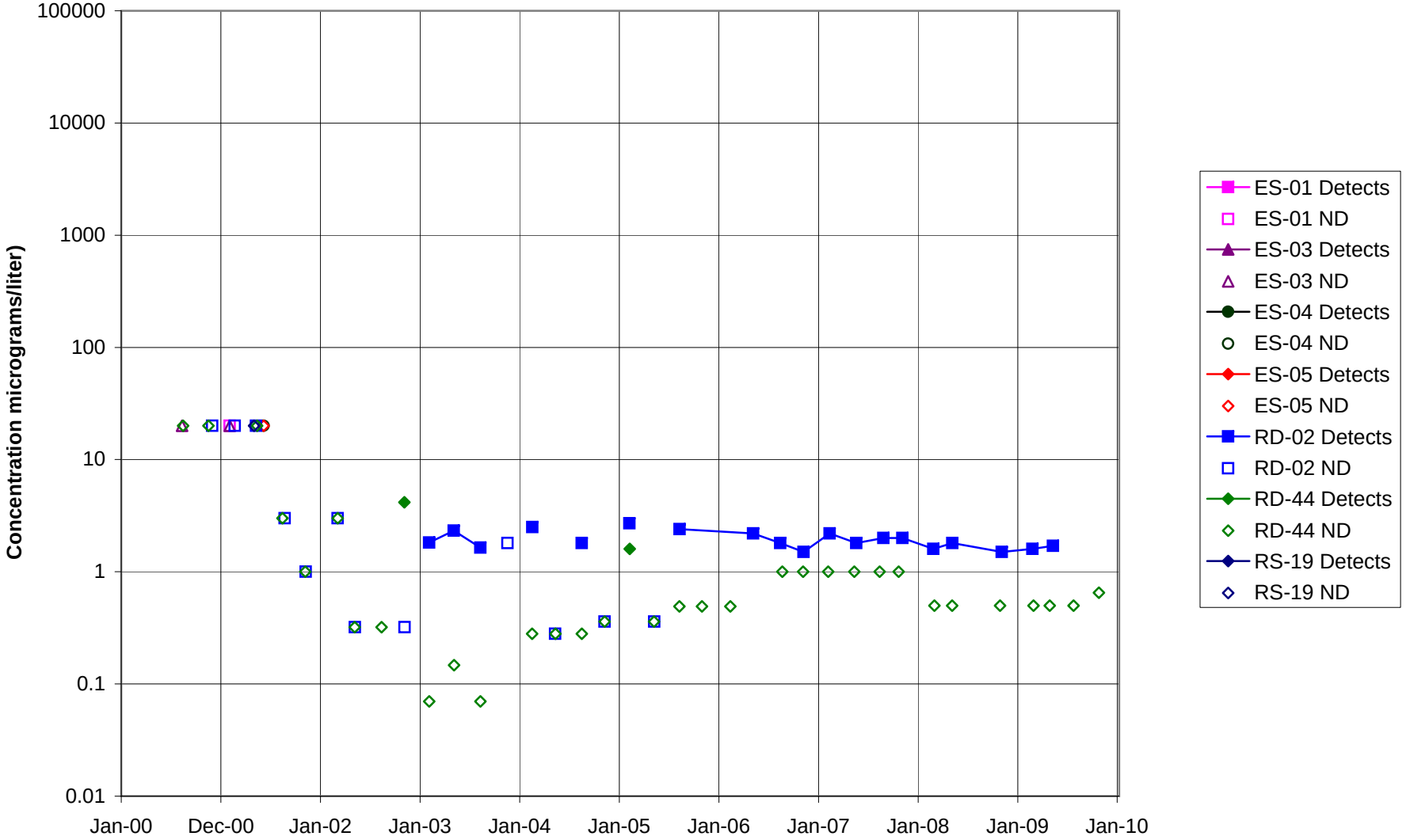


FIGURE F-94. 1,4-DIOXANE in ECL AREA WELLS

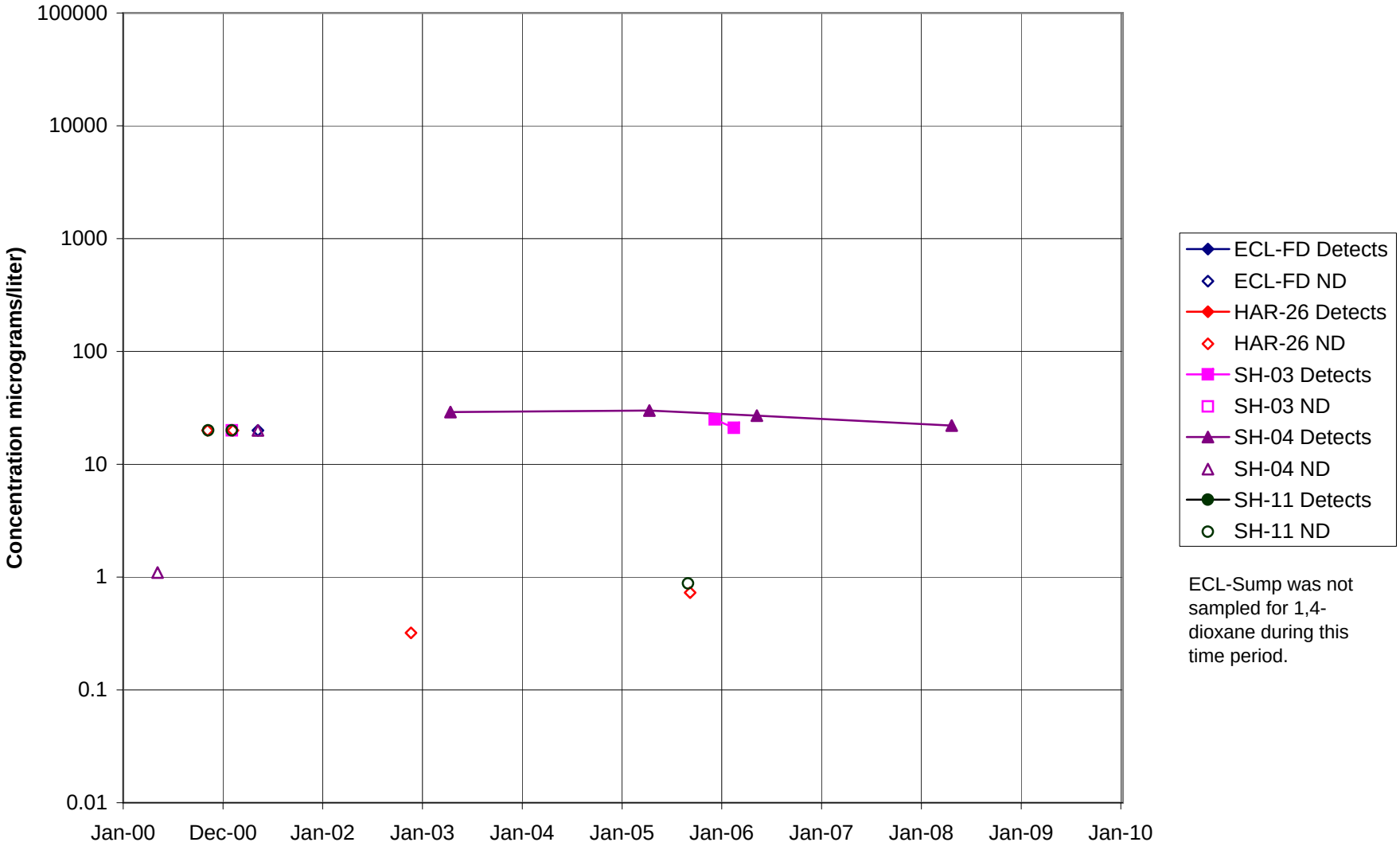


FIGURE F-95. 1,4-DIOXANE IN FORMER LOX PLANT AREA WELLS

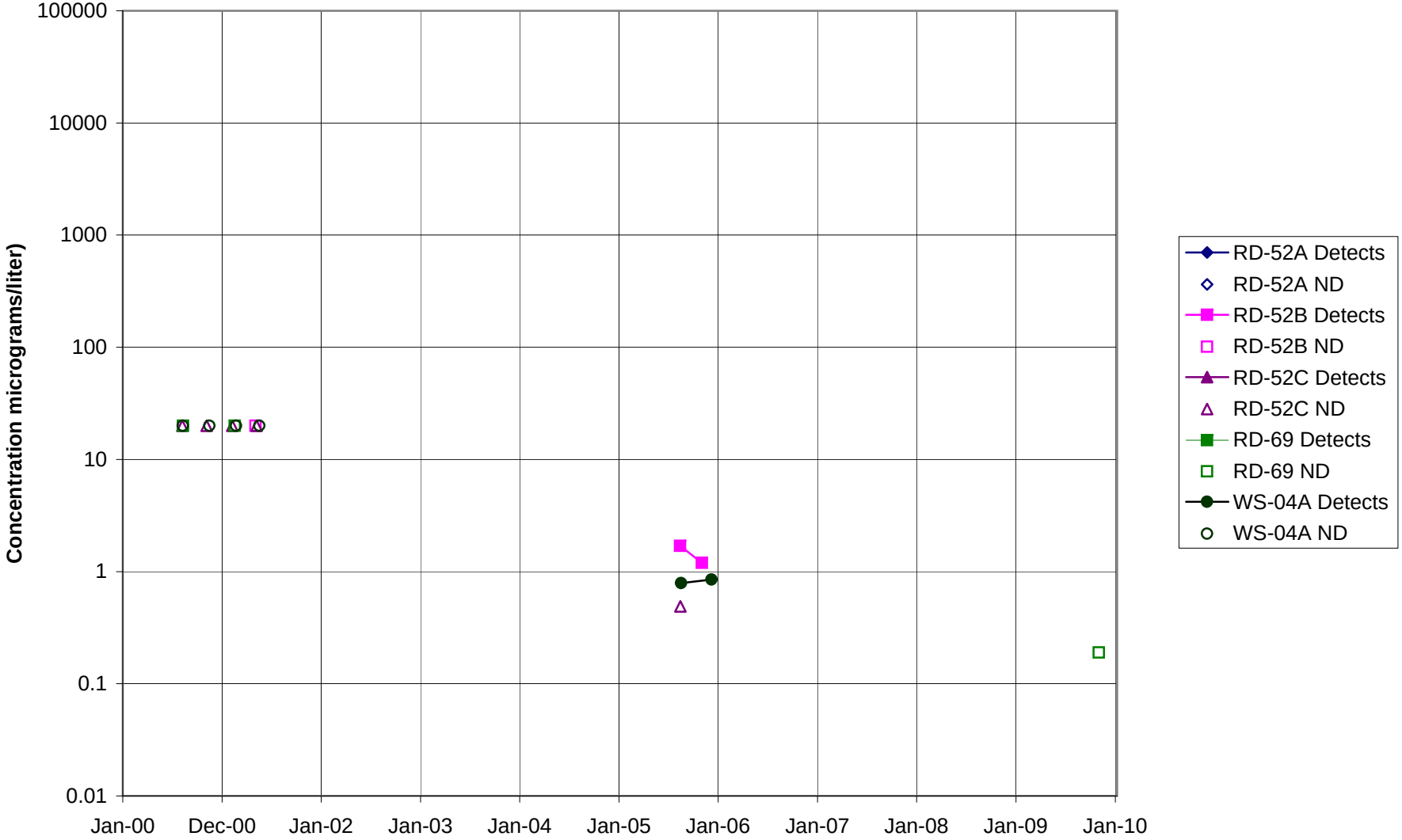


FIGURE F-96. 1,4-DIOXANE in RD-09 AREA WELLS

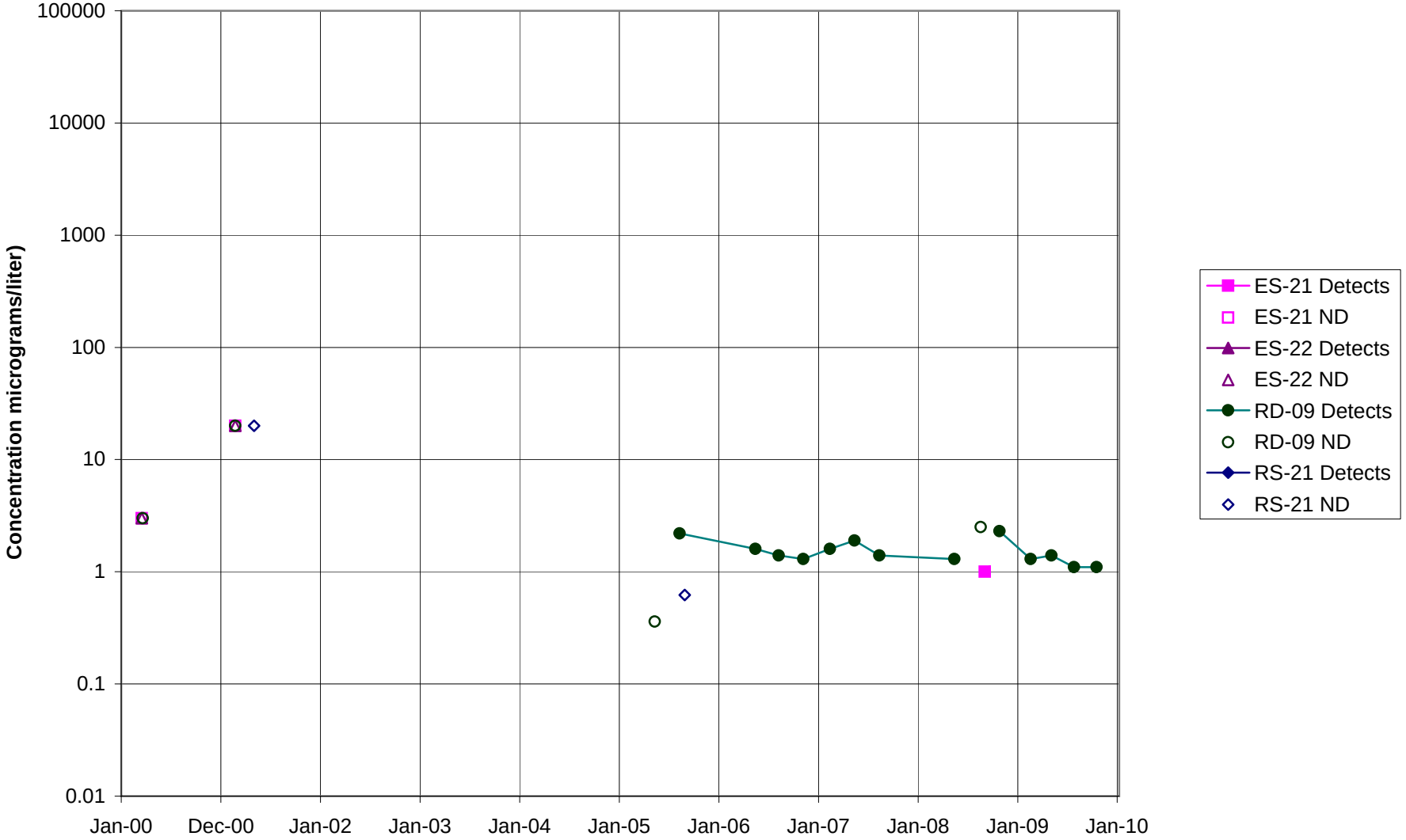
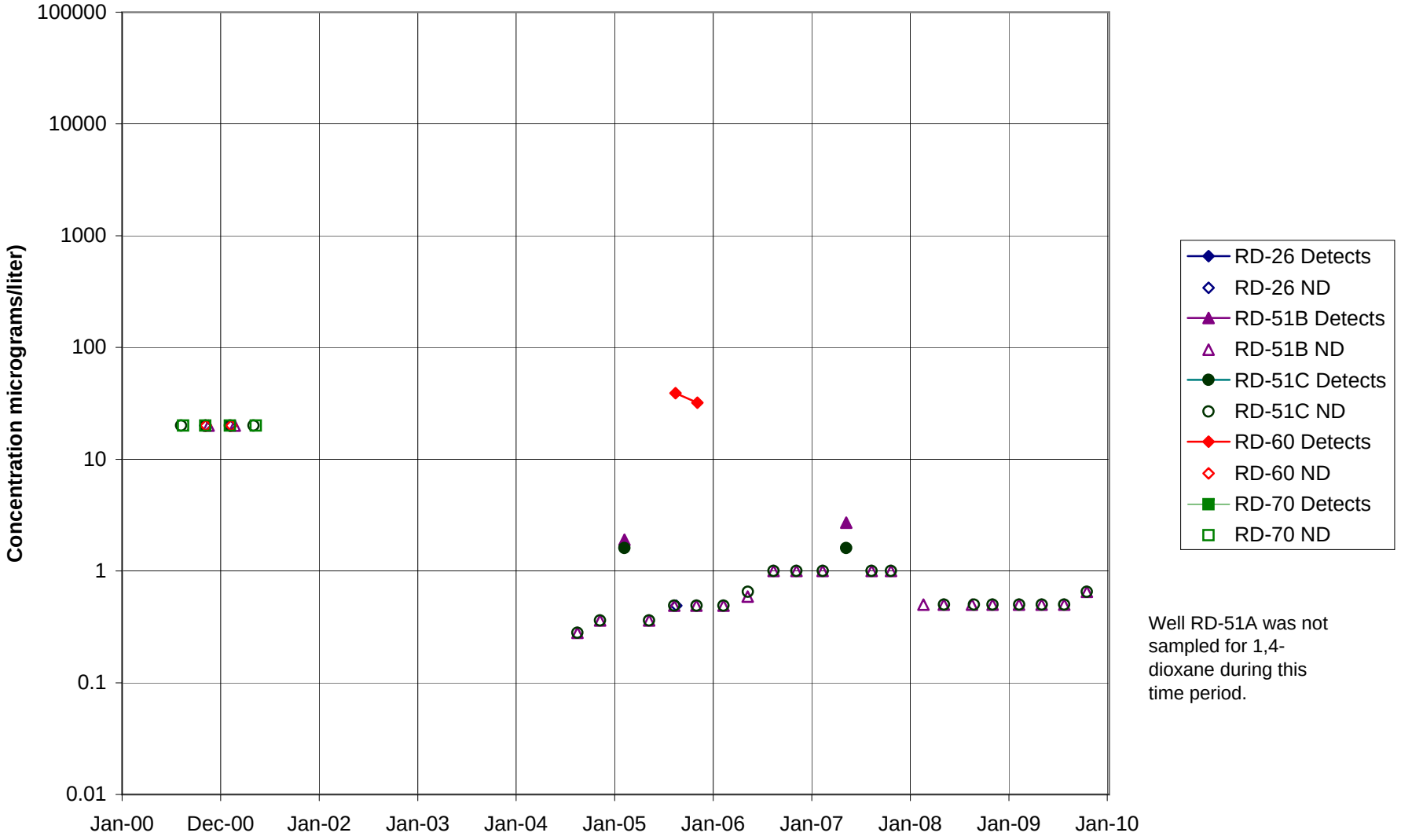


FIGURE F-97. 1,4-DIOXANE IN THE HELIPORT, B/204 AREA WELLS



Well RD-51A was not sampled for 1,4-dioxane during this time period.

FIGURE F-98. 1,4-DIOXANE in ALFA / BRAVO AREA WELLS

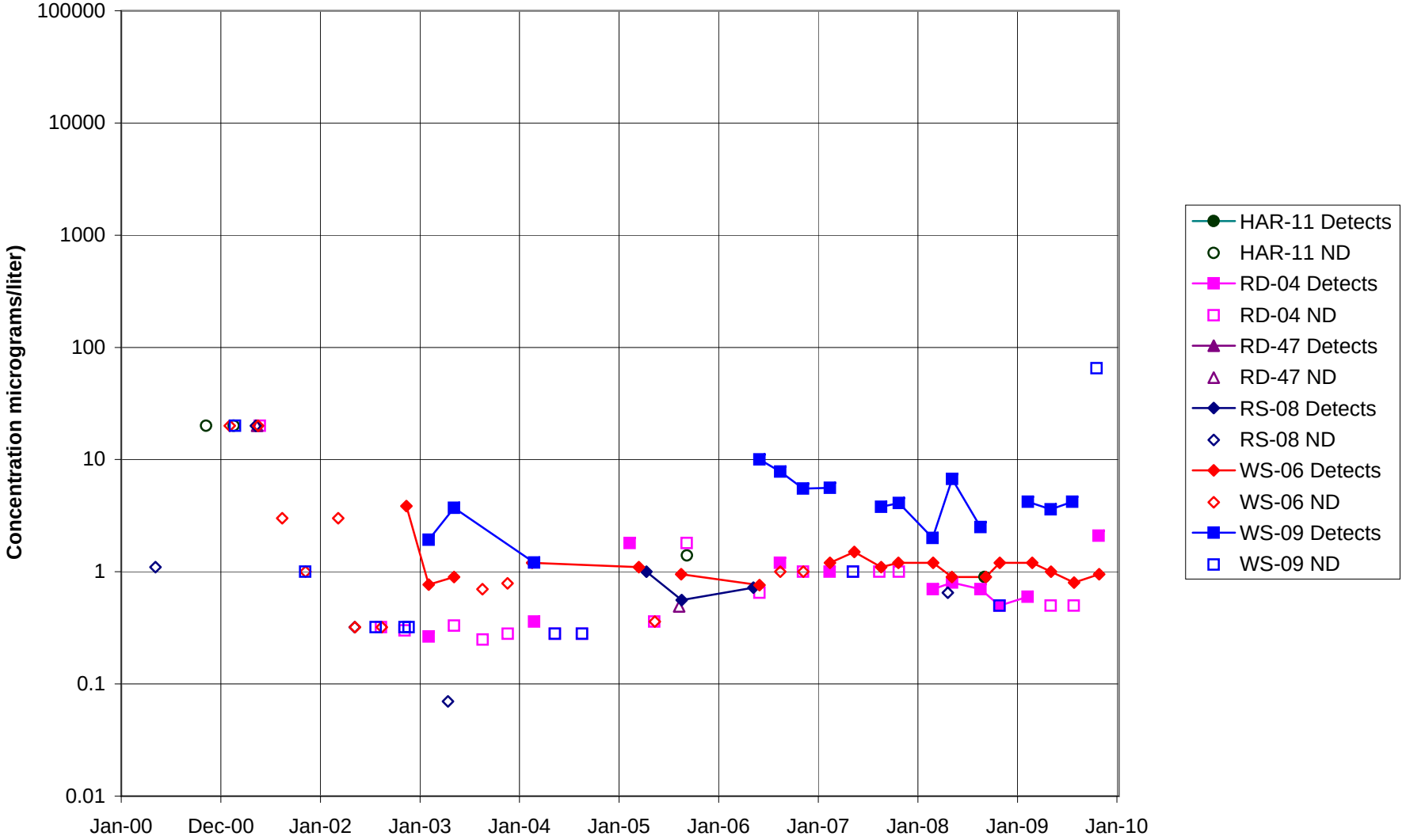


FIGURE F-99. 1,4-DIOXANE in SPA AREA WELLS

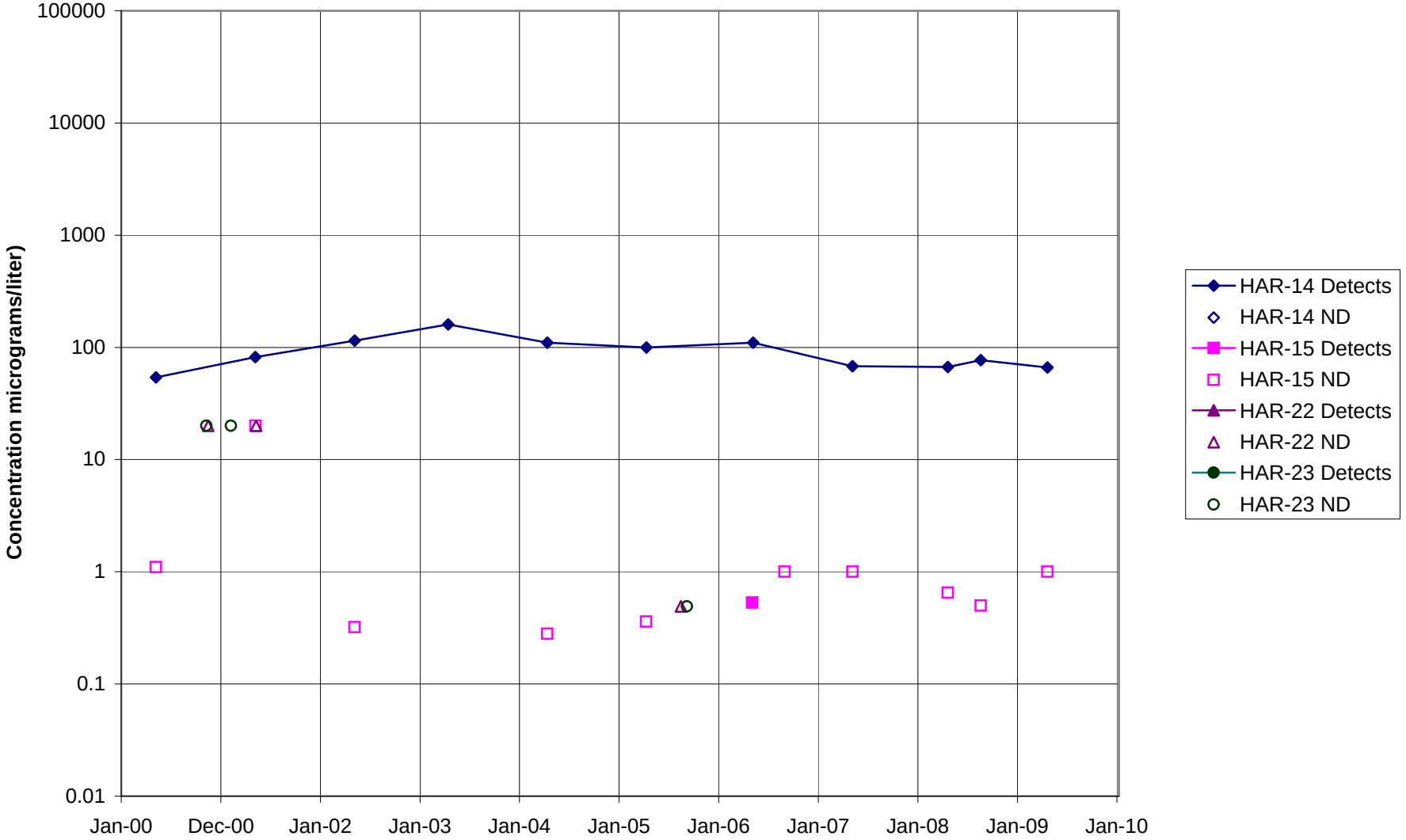


FIGURE F-100. 1,4-DIOXANE IN COCA / PLF AREA WELLS

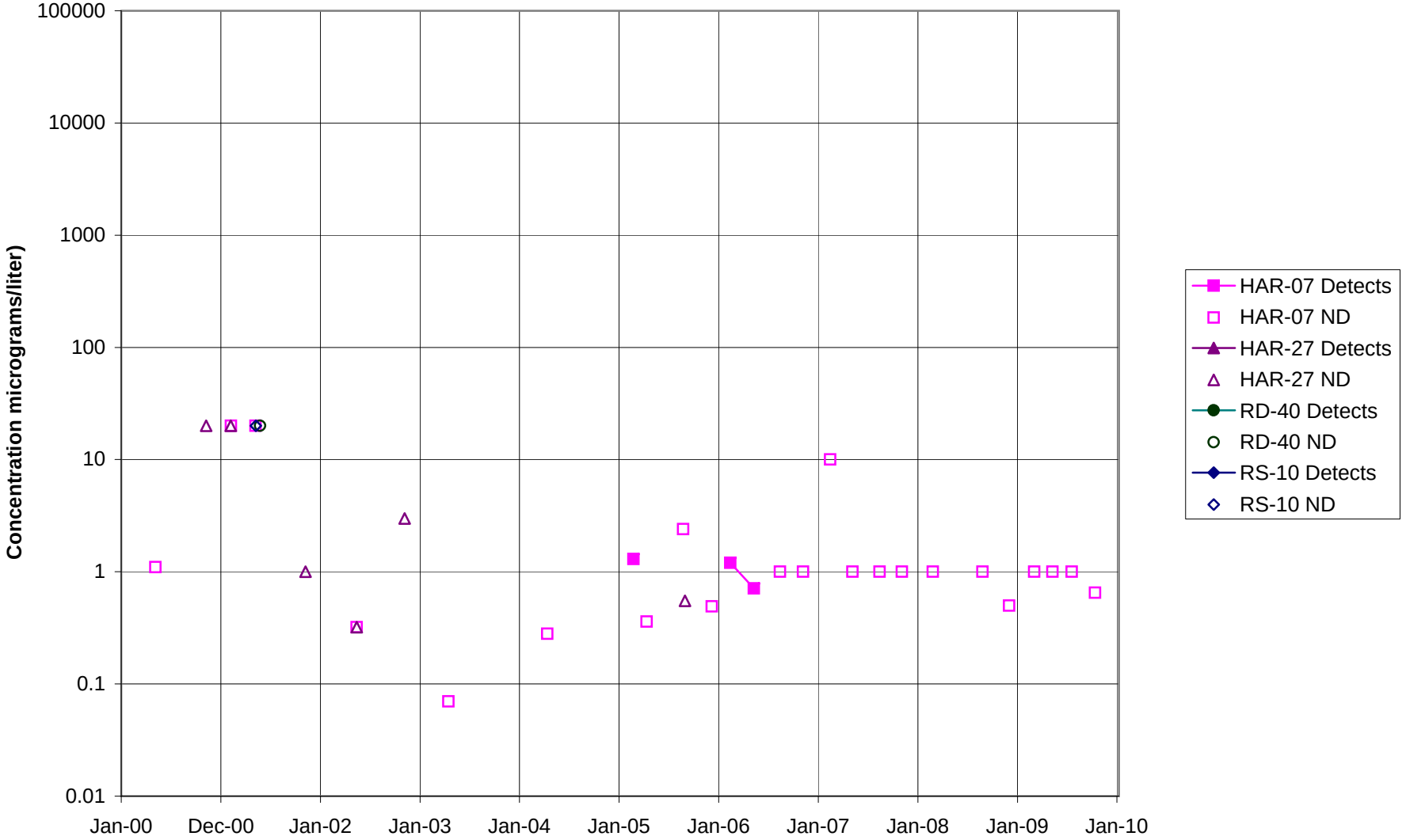


FIGURE F-101. 1,4-DIOXANE in DELTA / BUFFER ZONE AREA WELLS

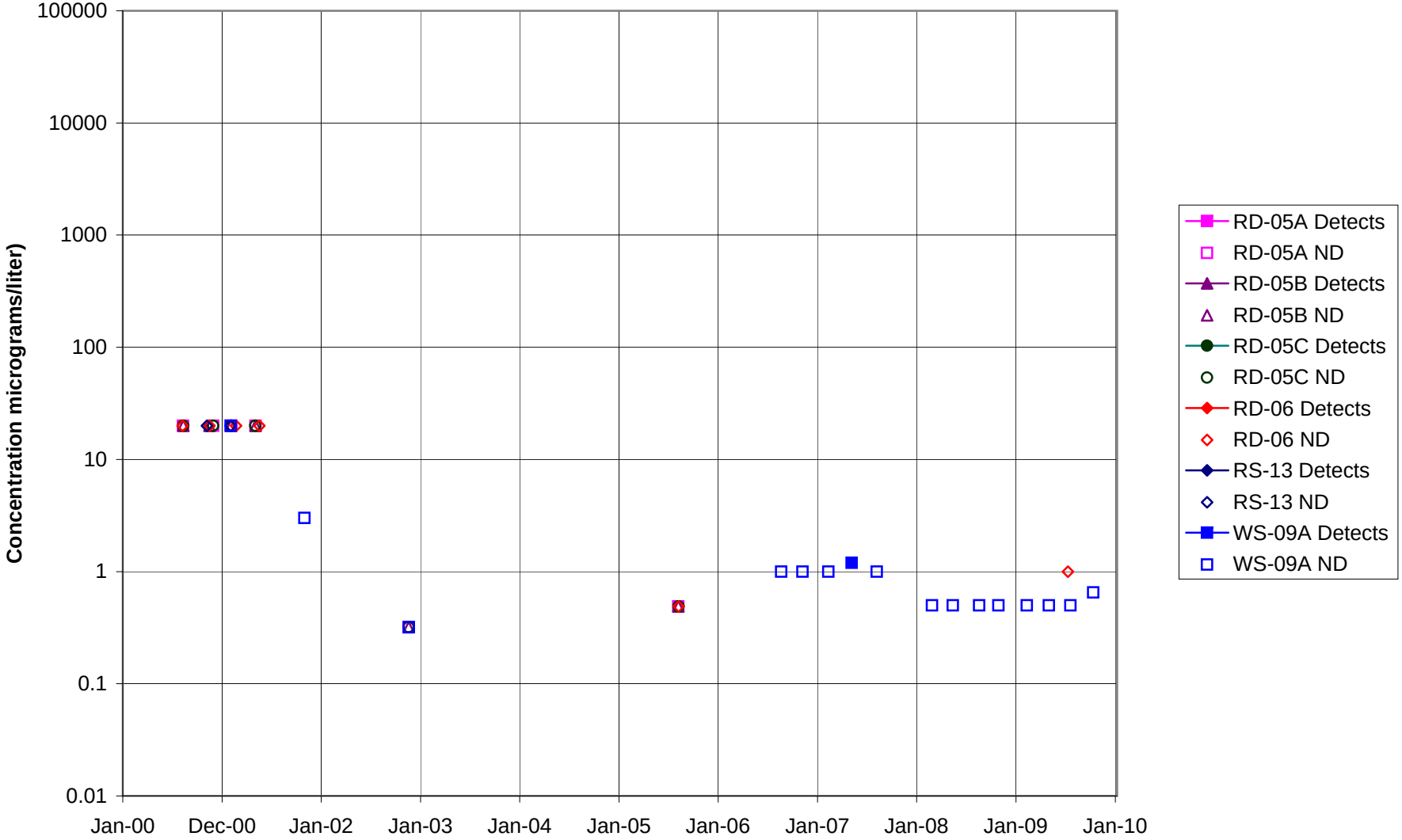


FIGURE F-102. 1,4-DIOXANE IN AREA IV WELLS

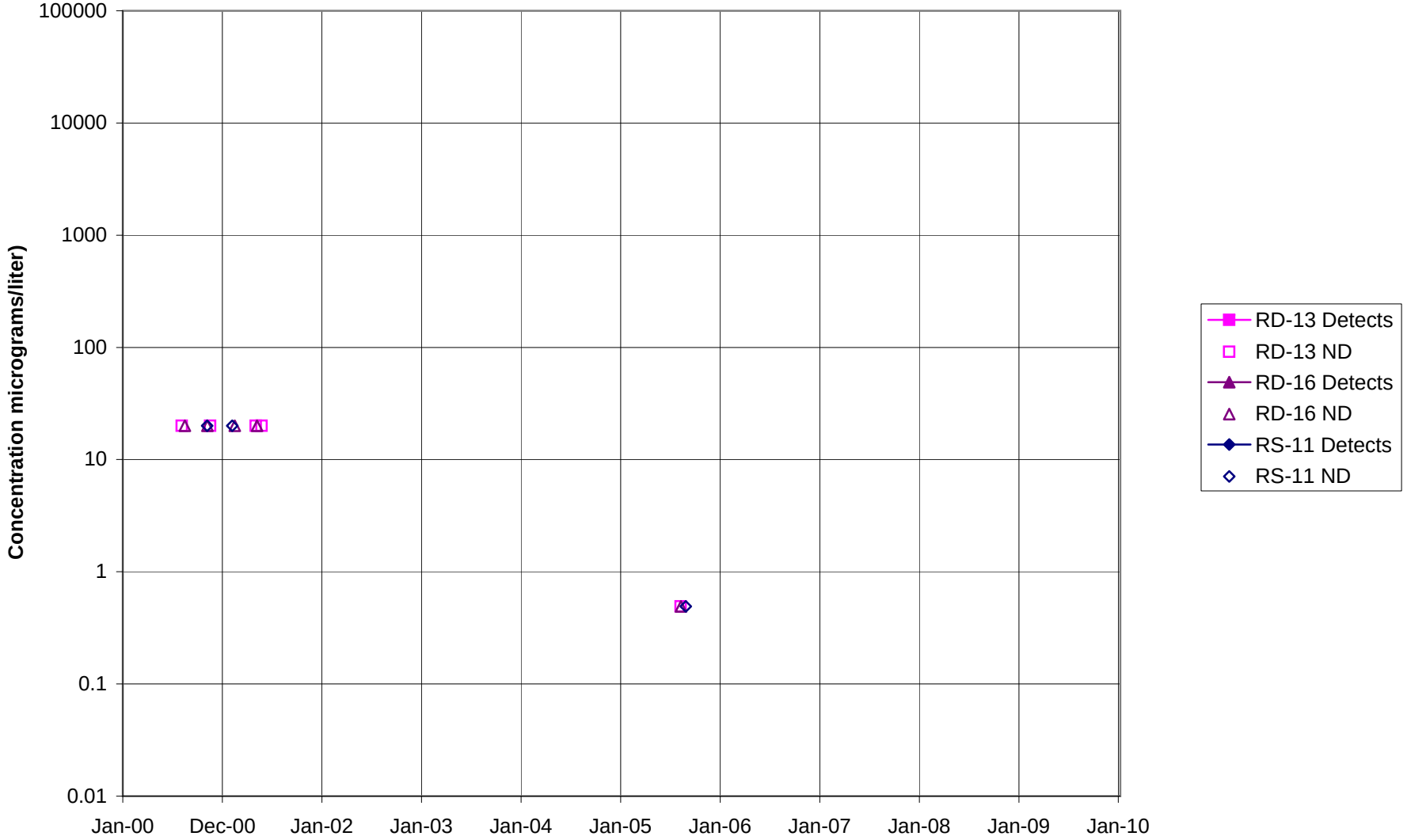


FIGURE F-103. BENZENE in STL-IV AREA SHALLOW WELLS

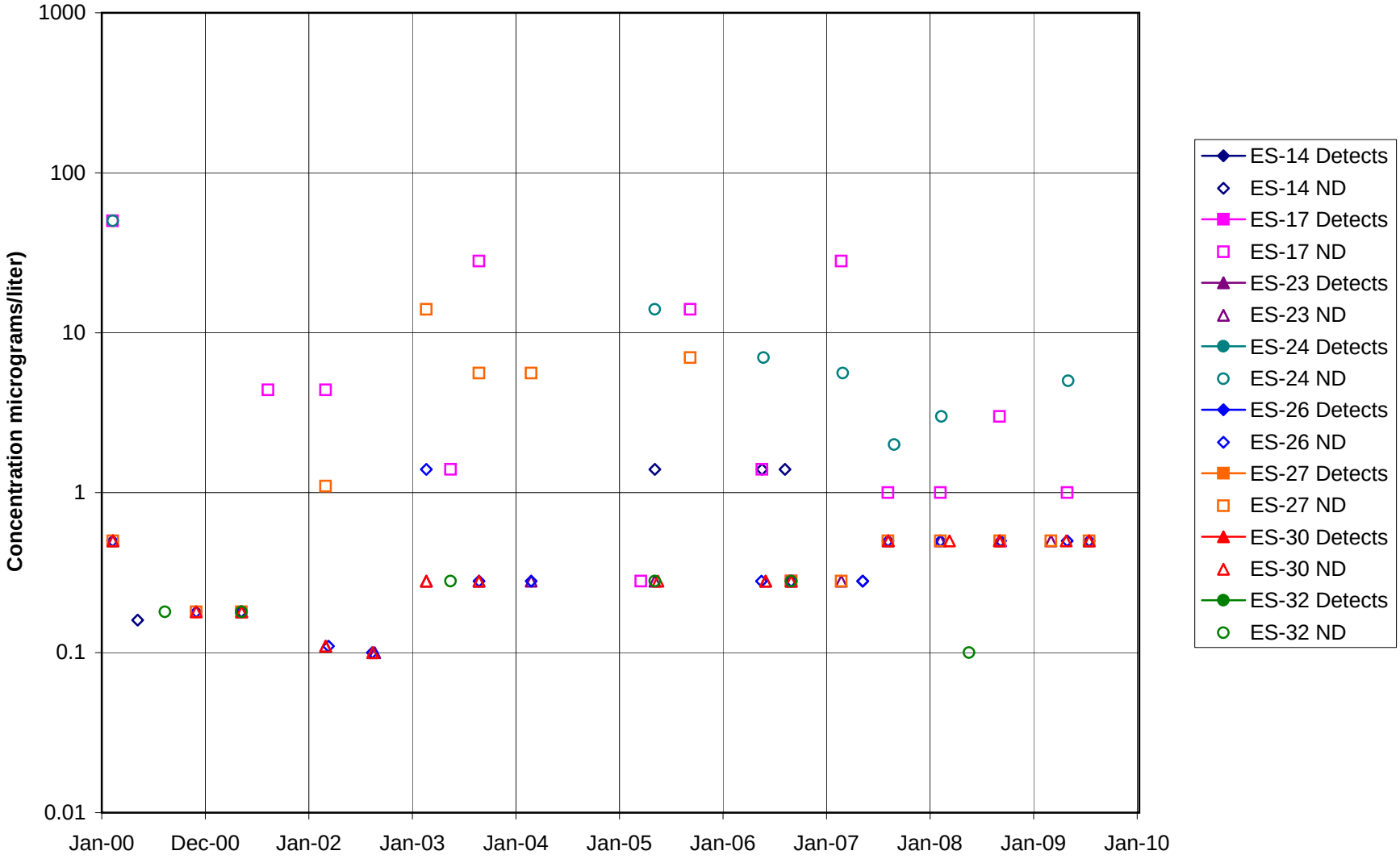


FIGURE F-104. BENZENE in STL-IV AREA CHATSWORTH FORMATION WELLS

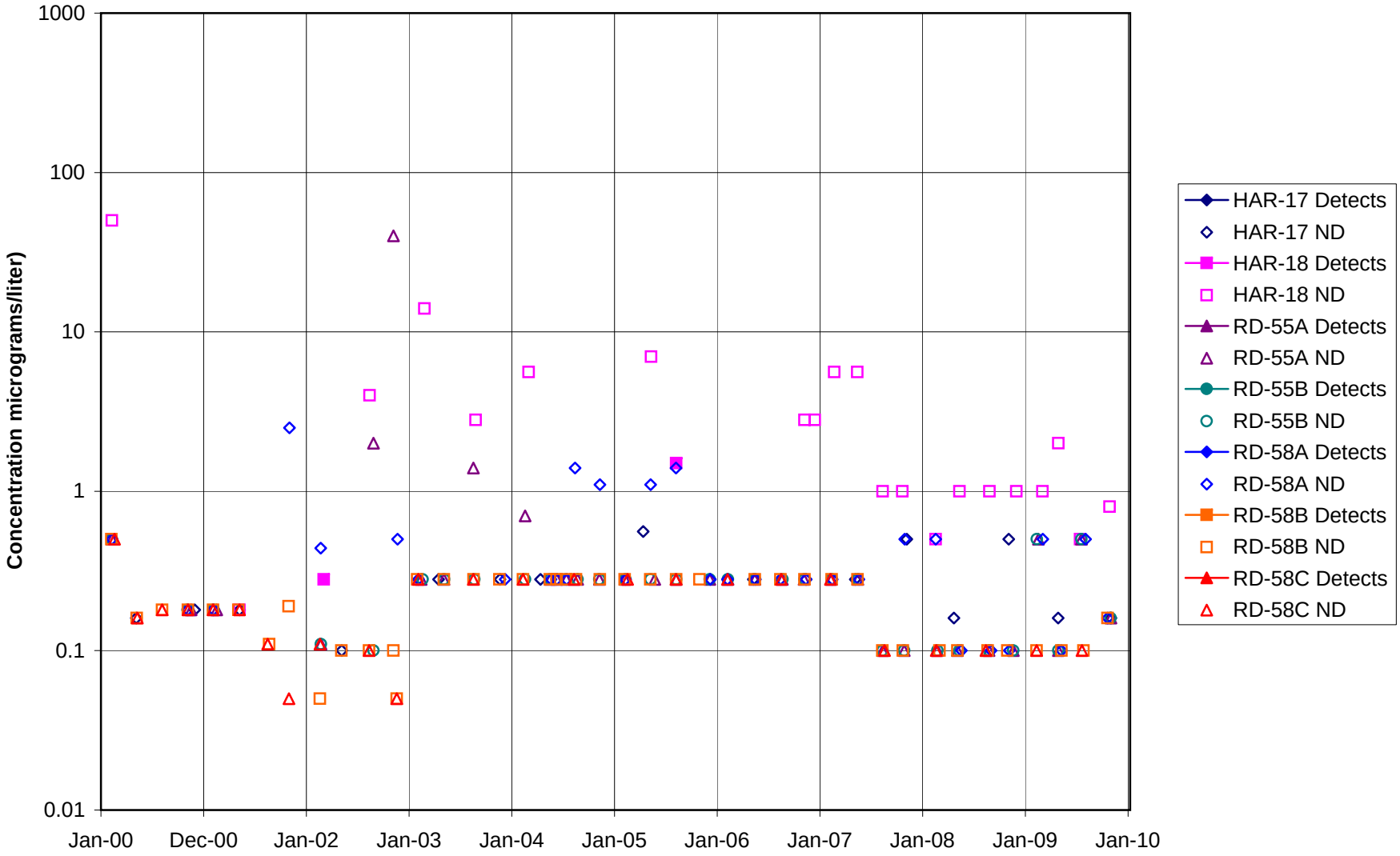


FIGURE F-105. BENZENE in MAIN GATE AREA WELLS - 1

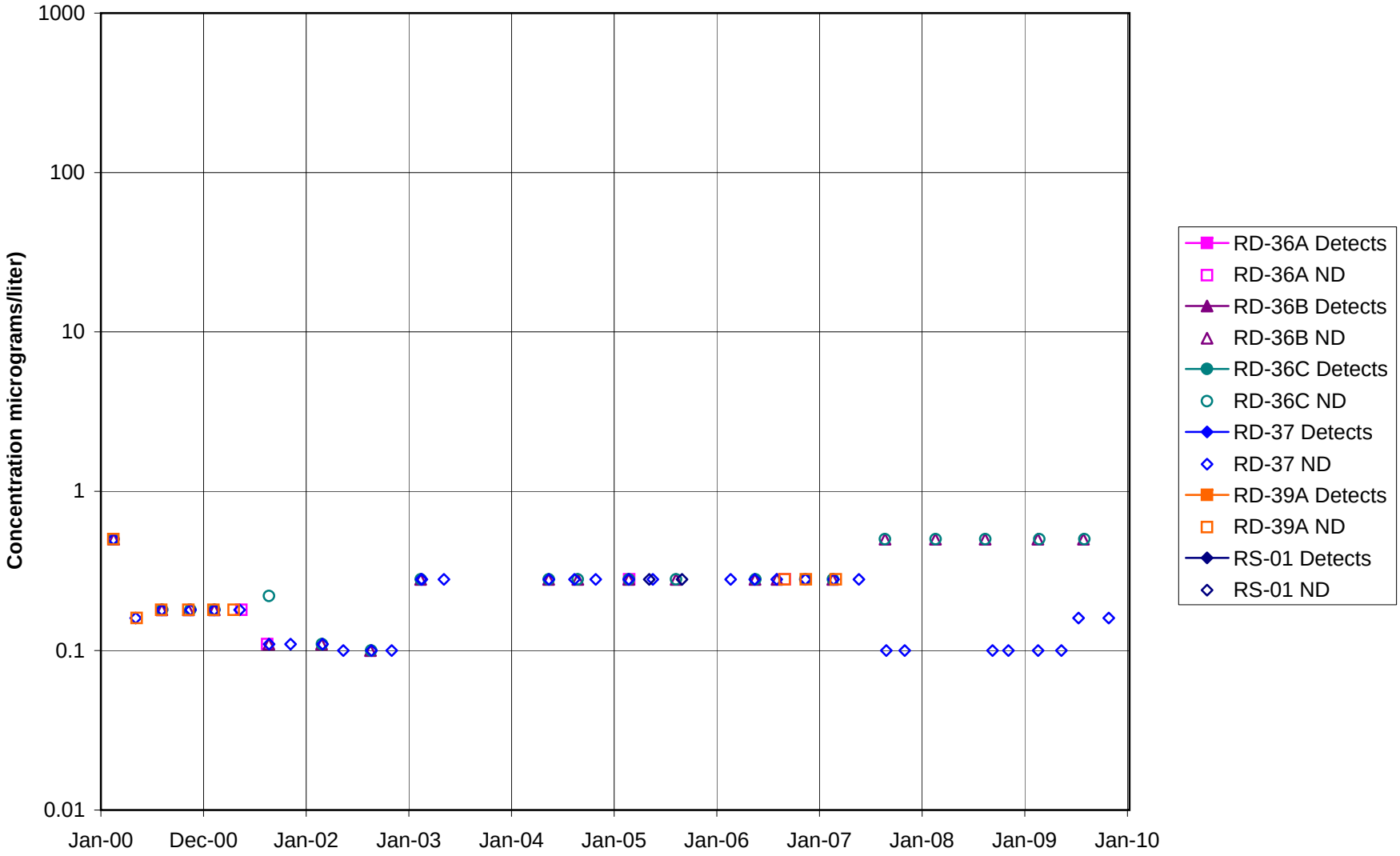


FIGURE F-106. BENZENE in MAIN GATE AREA WELLS - 2

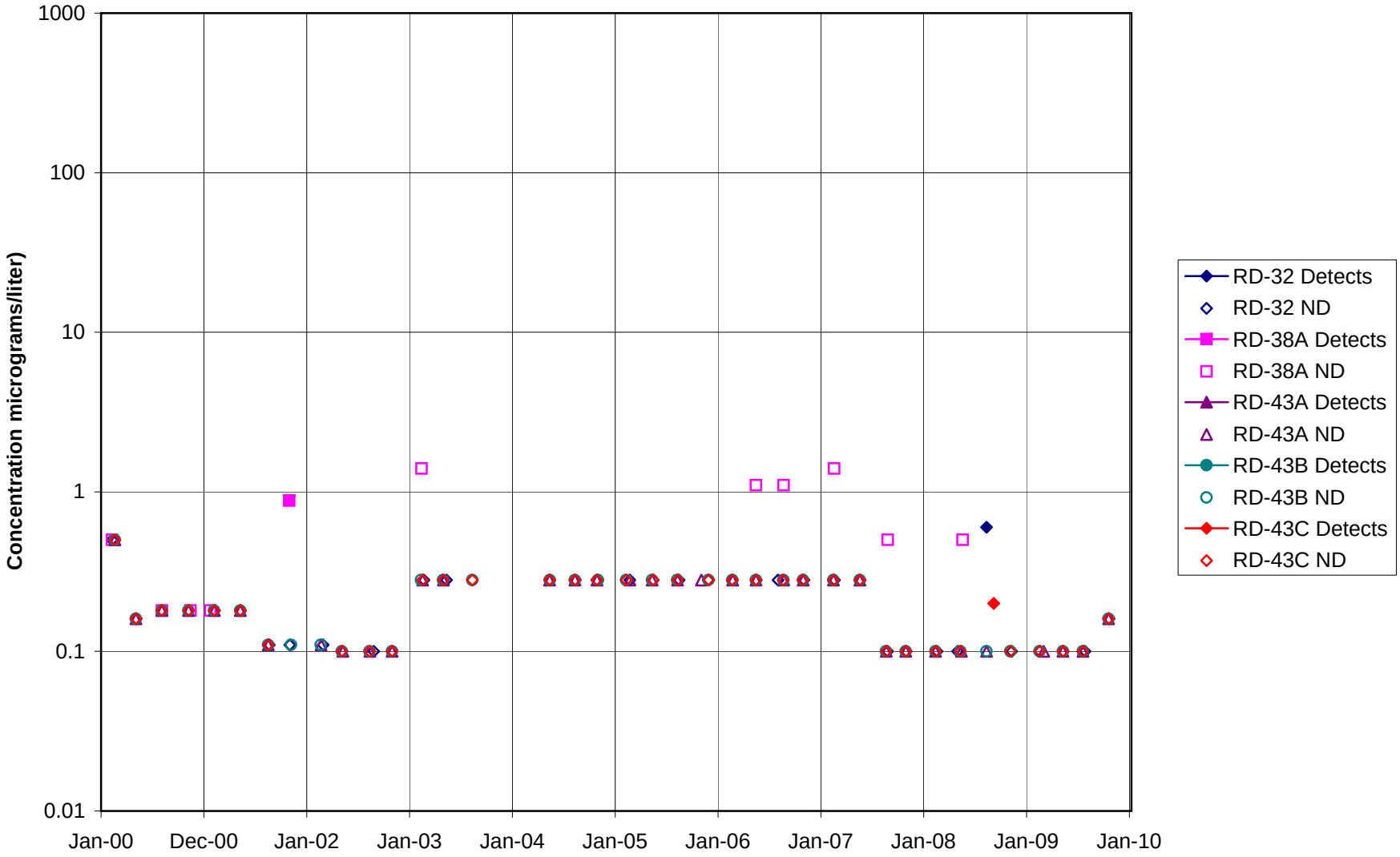


FIGURE F-107. BENZENE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1

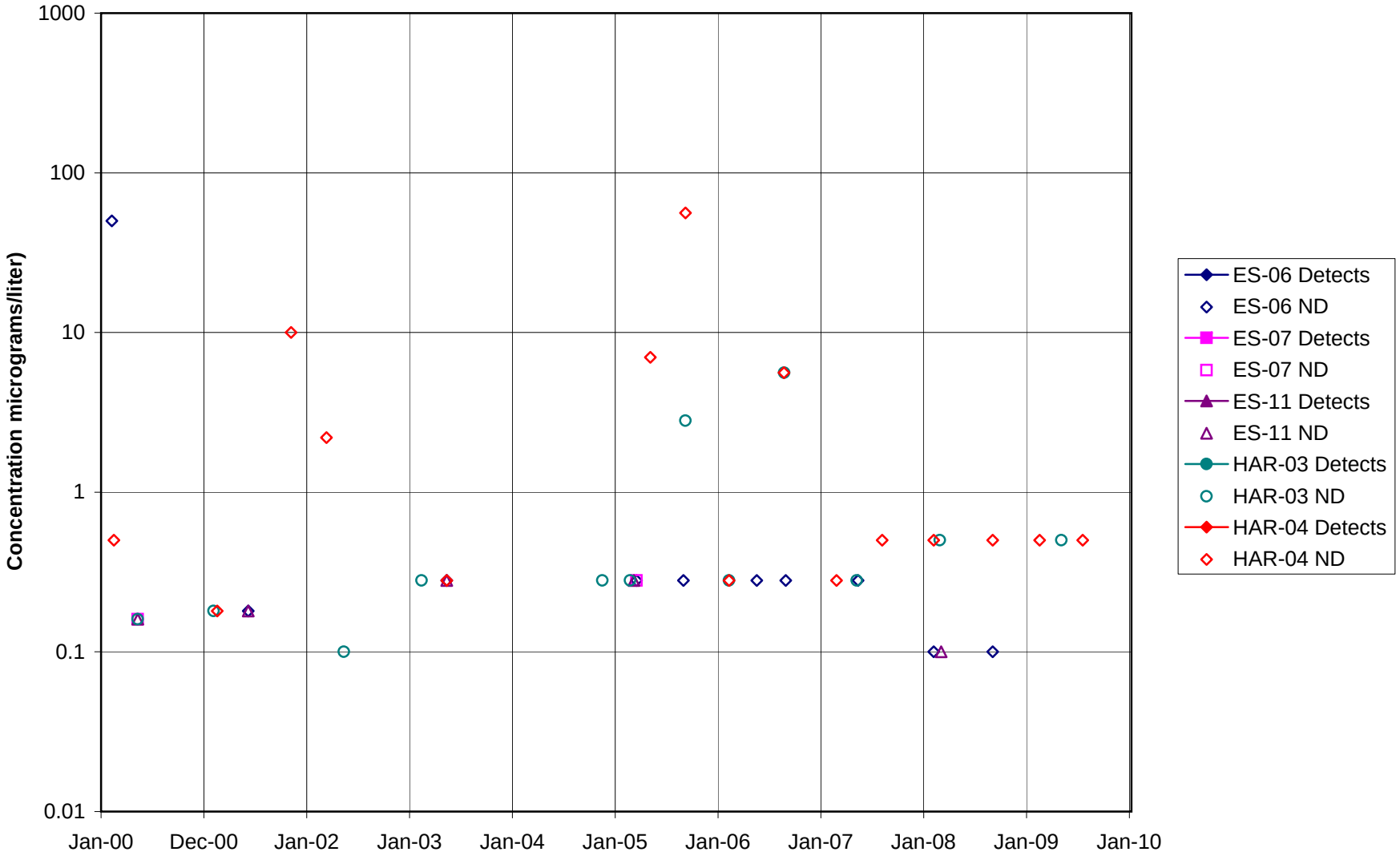


FIGURE F-108. BENZENE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 2

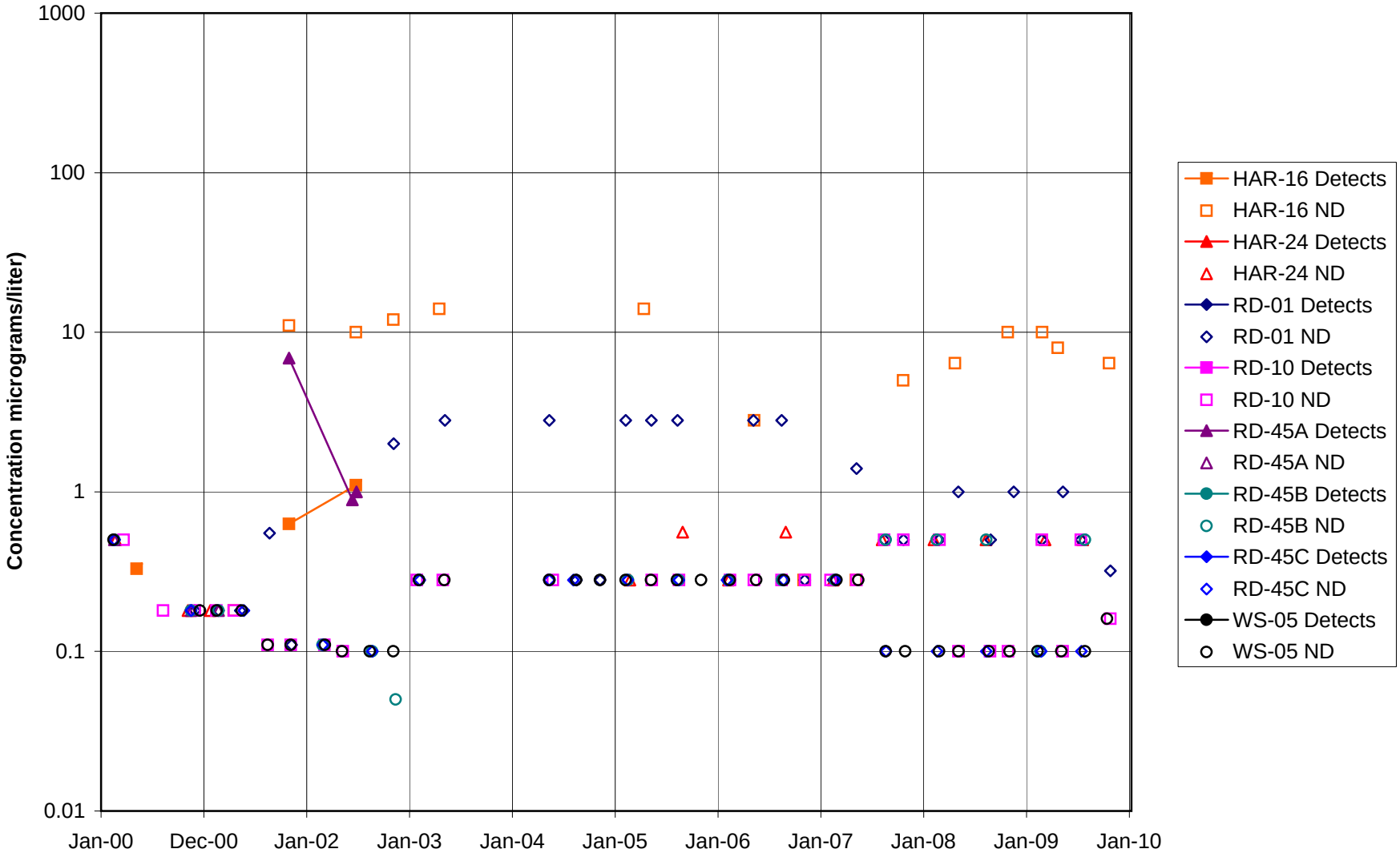


FIGURE F-109. BENZENE in CTL-III / PERIMETER POND AREA WELLS

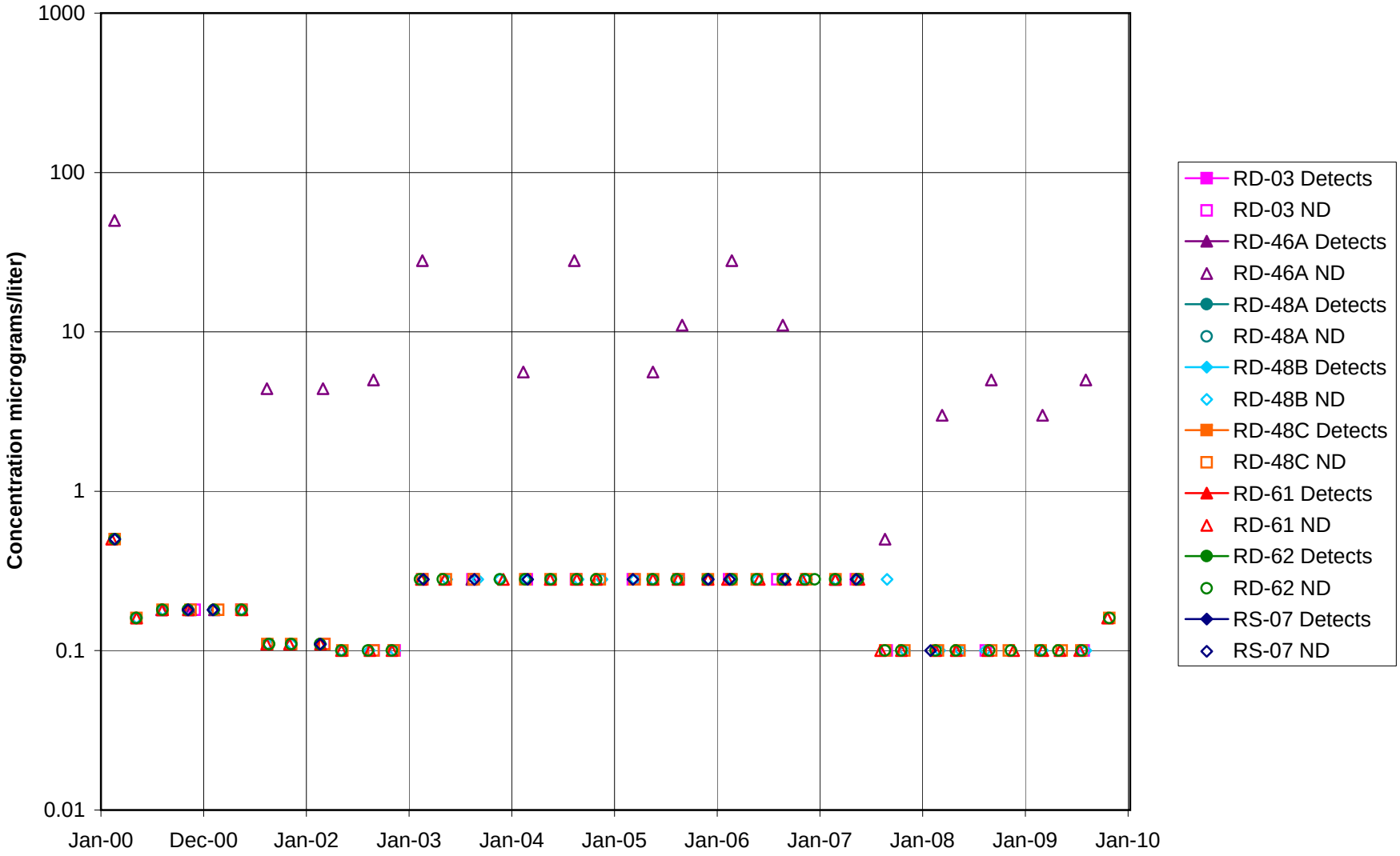


FIGURE F-110. BENZENE in BOWL AREA WELLS

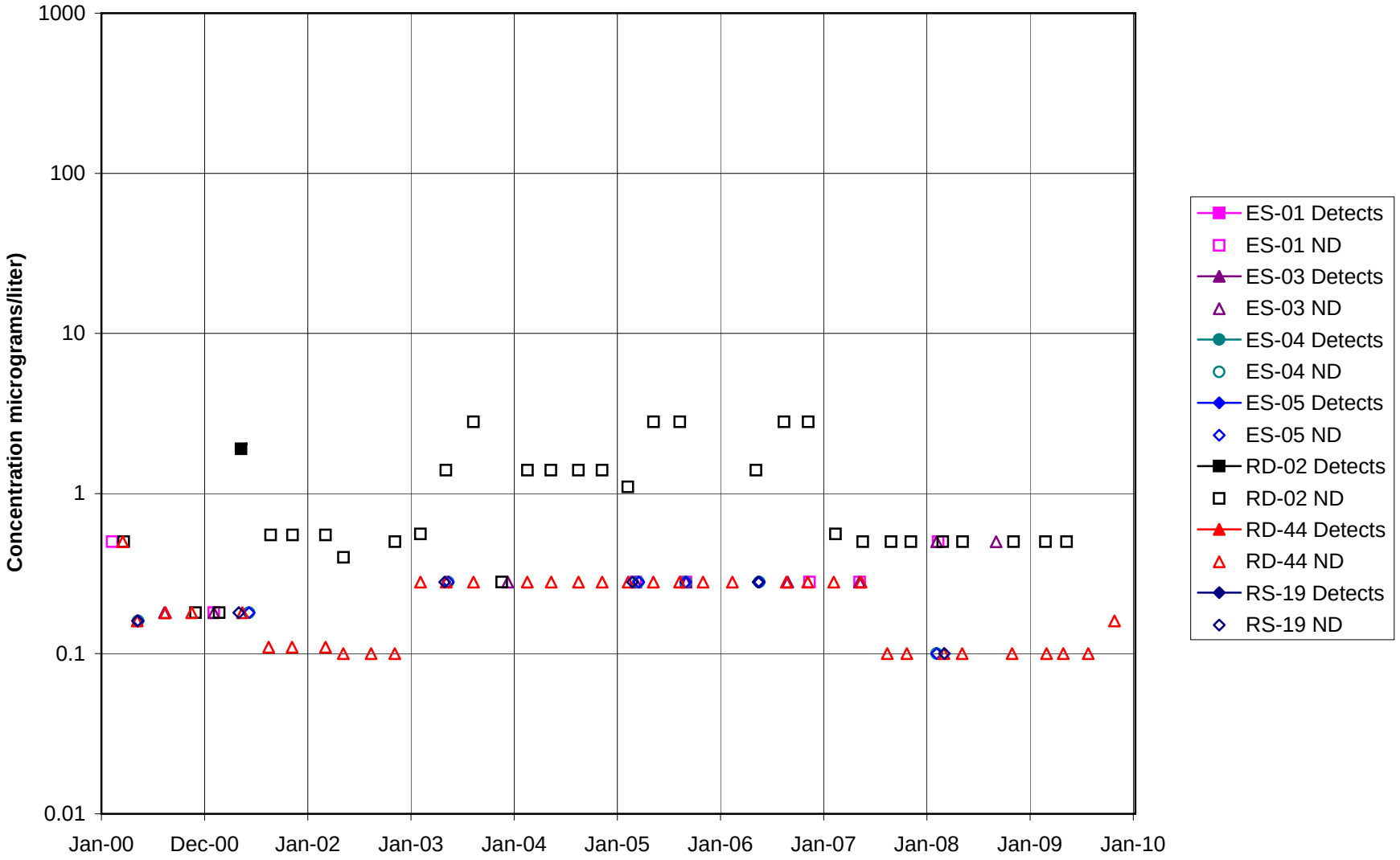


FIGURE F-111. BENZENE in ECL AREA WELLS

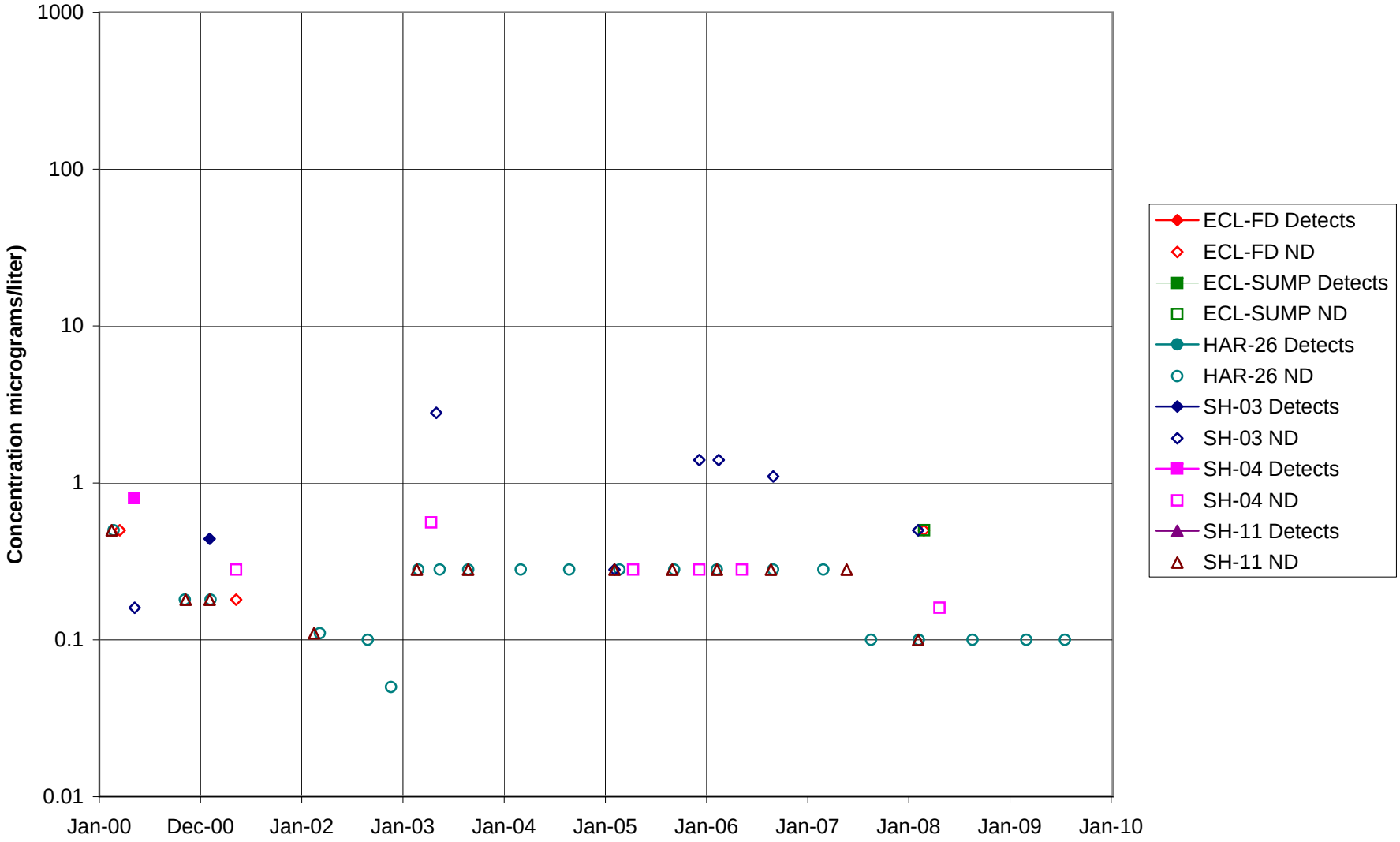


FIGURE F-112. BENZENE in FORMER LOX PLANT AREA WELLS

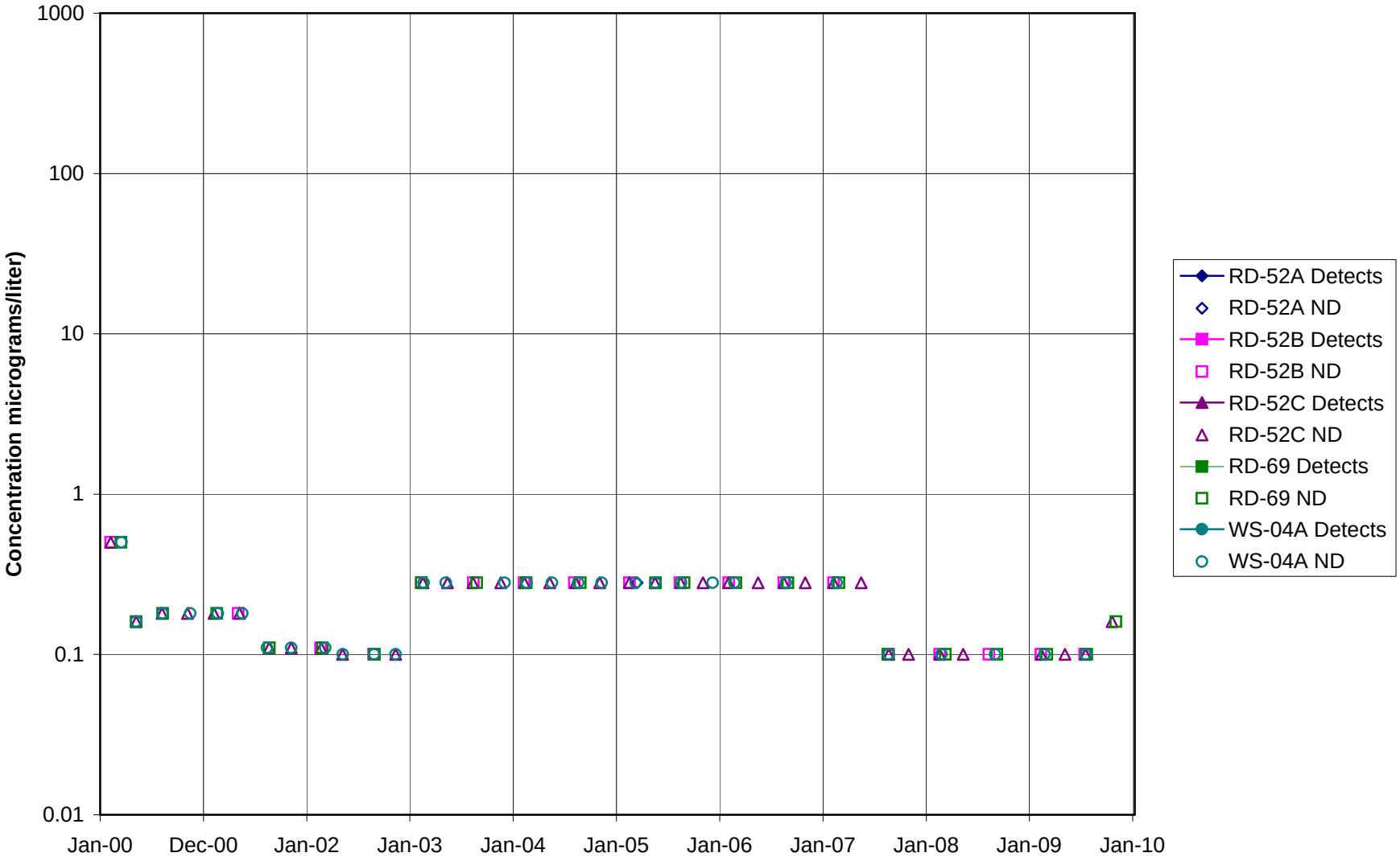


FIGURE F-113. BENZENE in RD- 09 AREA WELLS

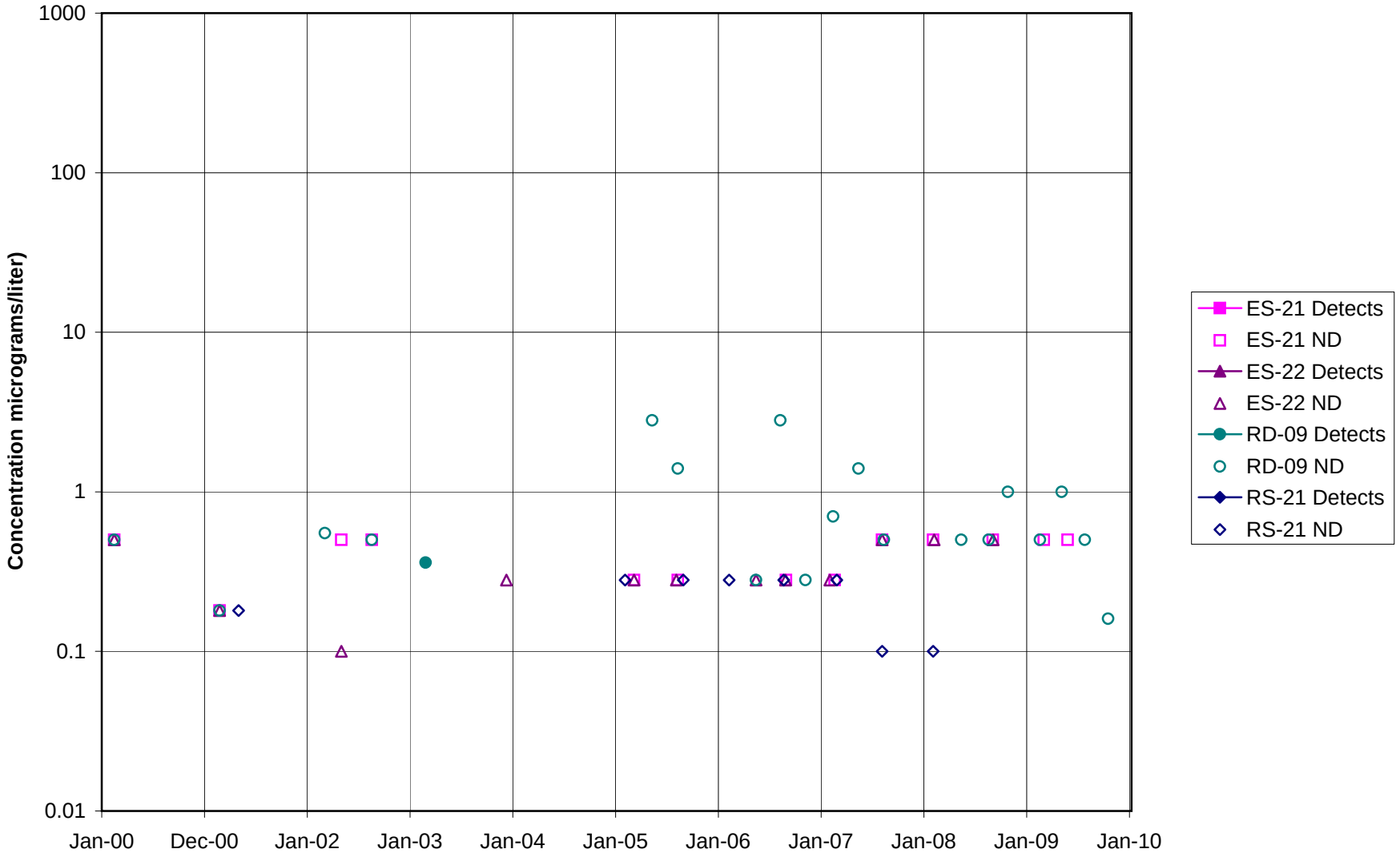


FIGURE F-114. BENZENE in HELIPORT, B/204 AREA WELLS

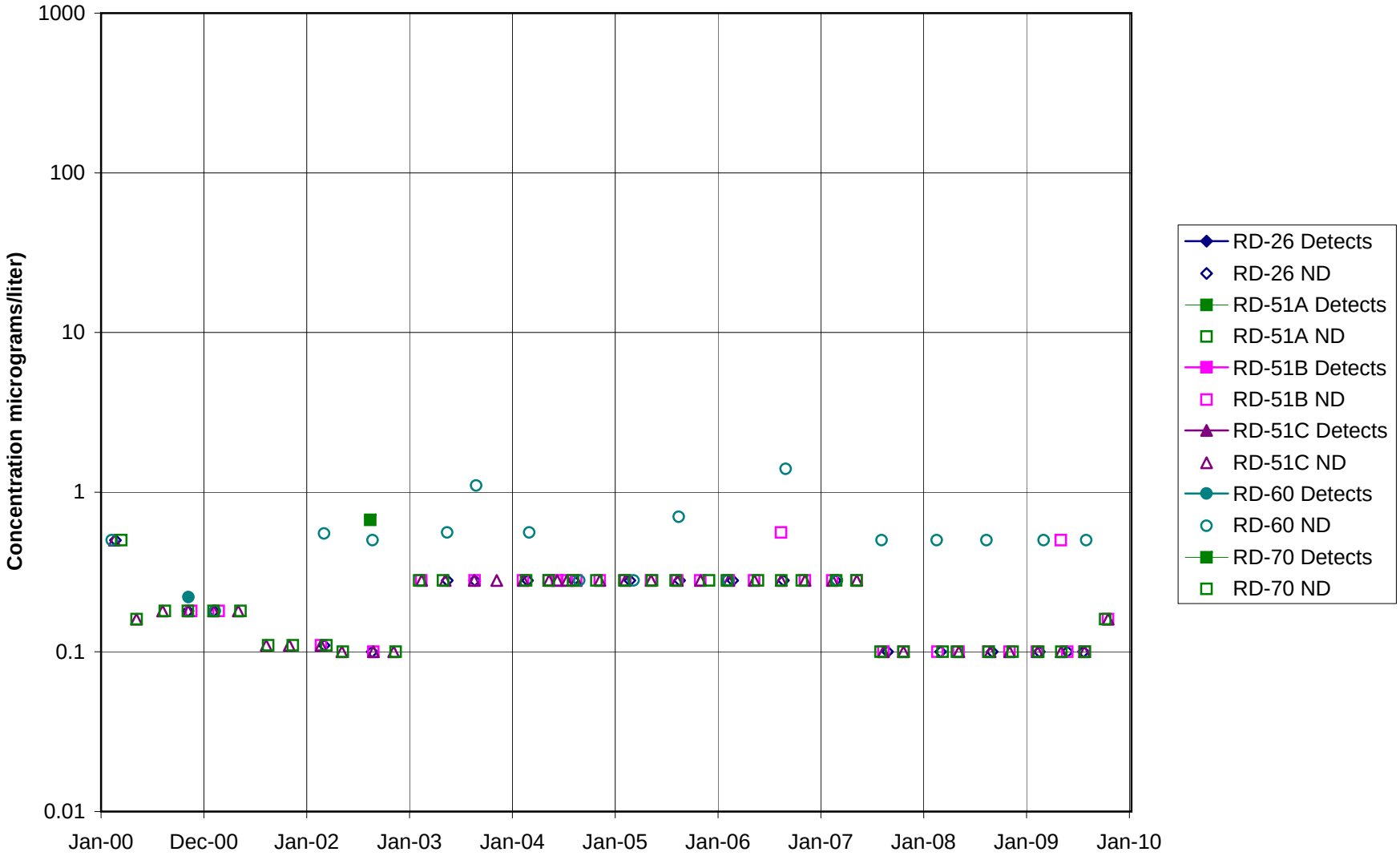


FIGURE F-115. BENZENE in ALFA / BRAVO AREA WELLS

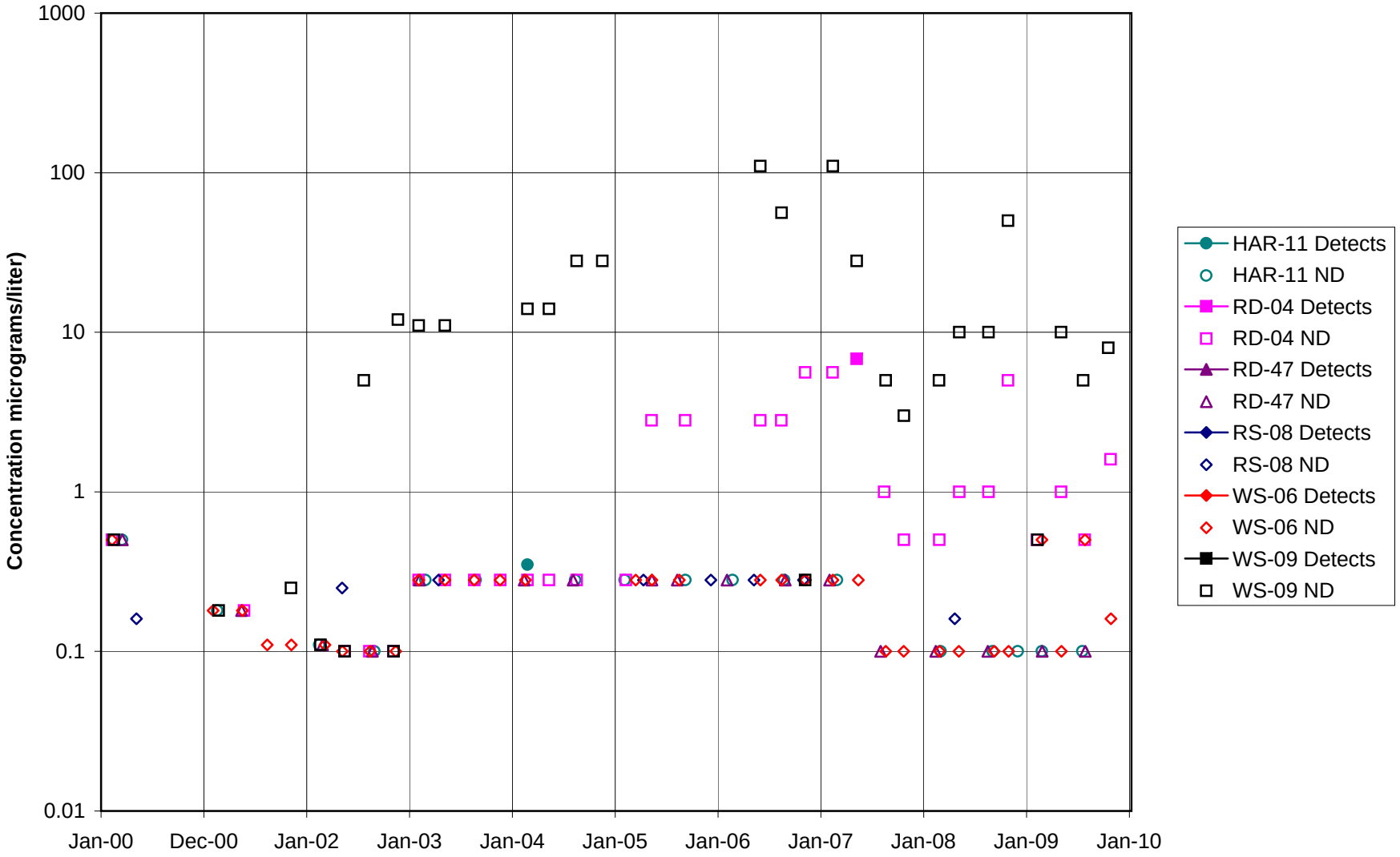


FIGURE F-116. BENZENE in SPA AREA WELLS

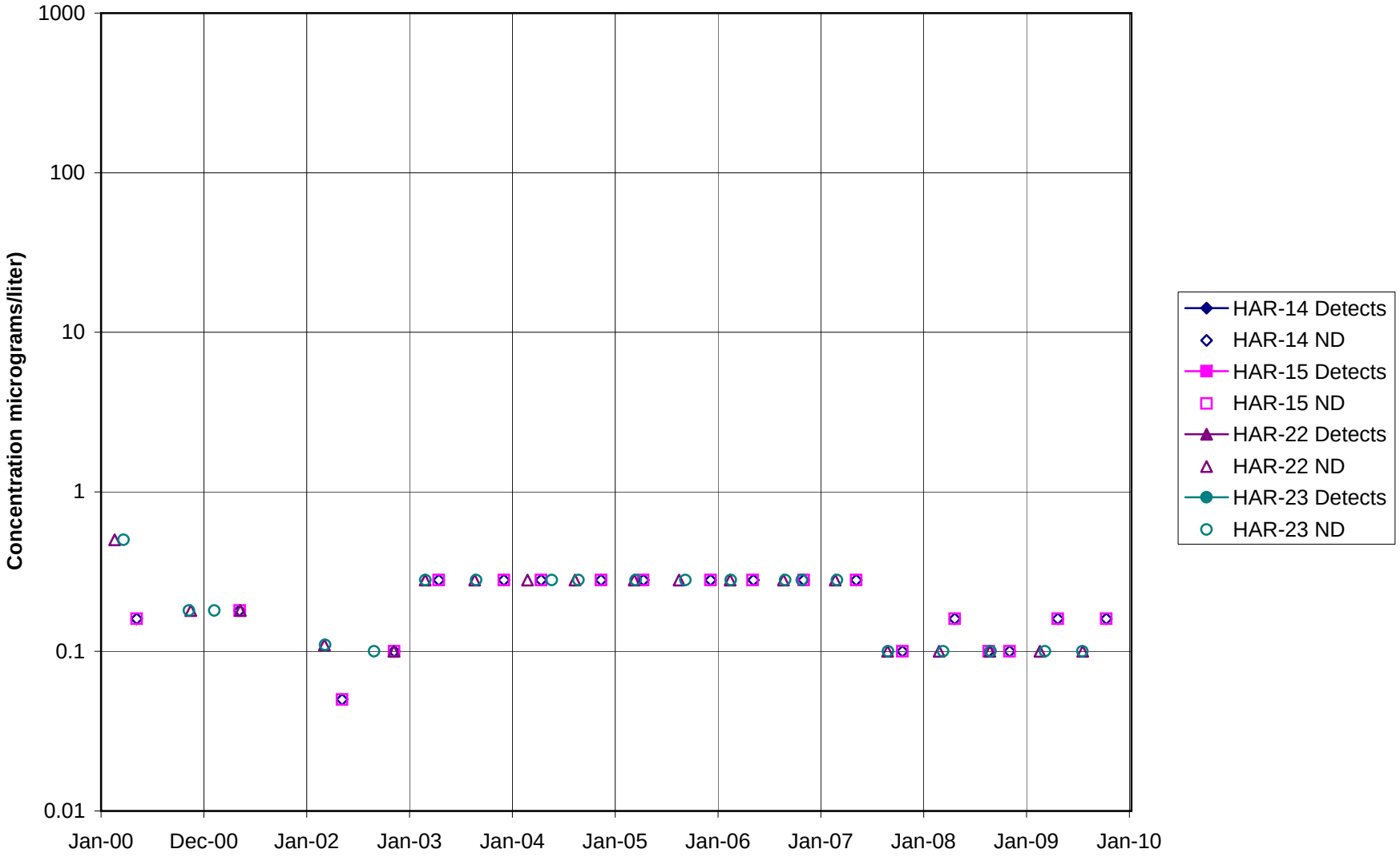


FIGURE F-117. BENZENE in COCA / PLF AREA WELLS

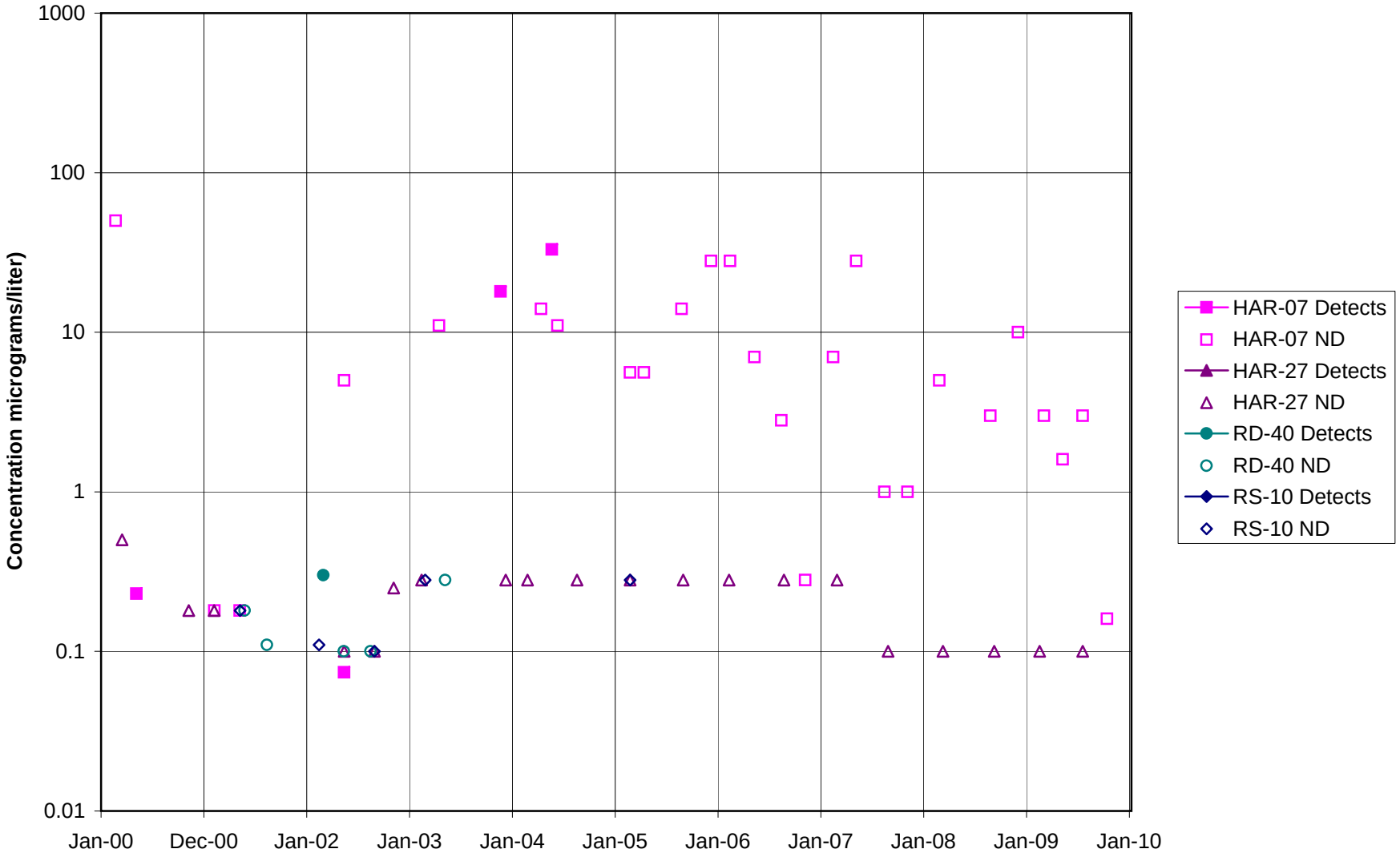


FIGURE F-118. BENZENE in DELTA / BUFFER ZONE AREA WELLS

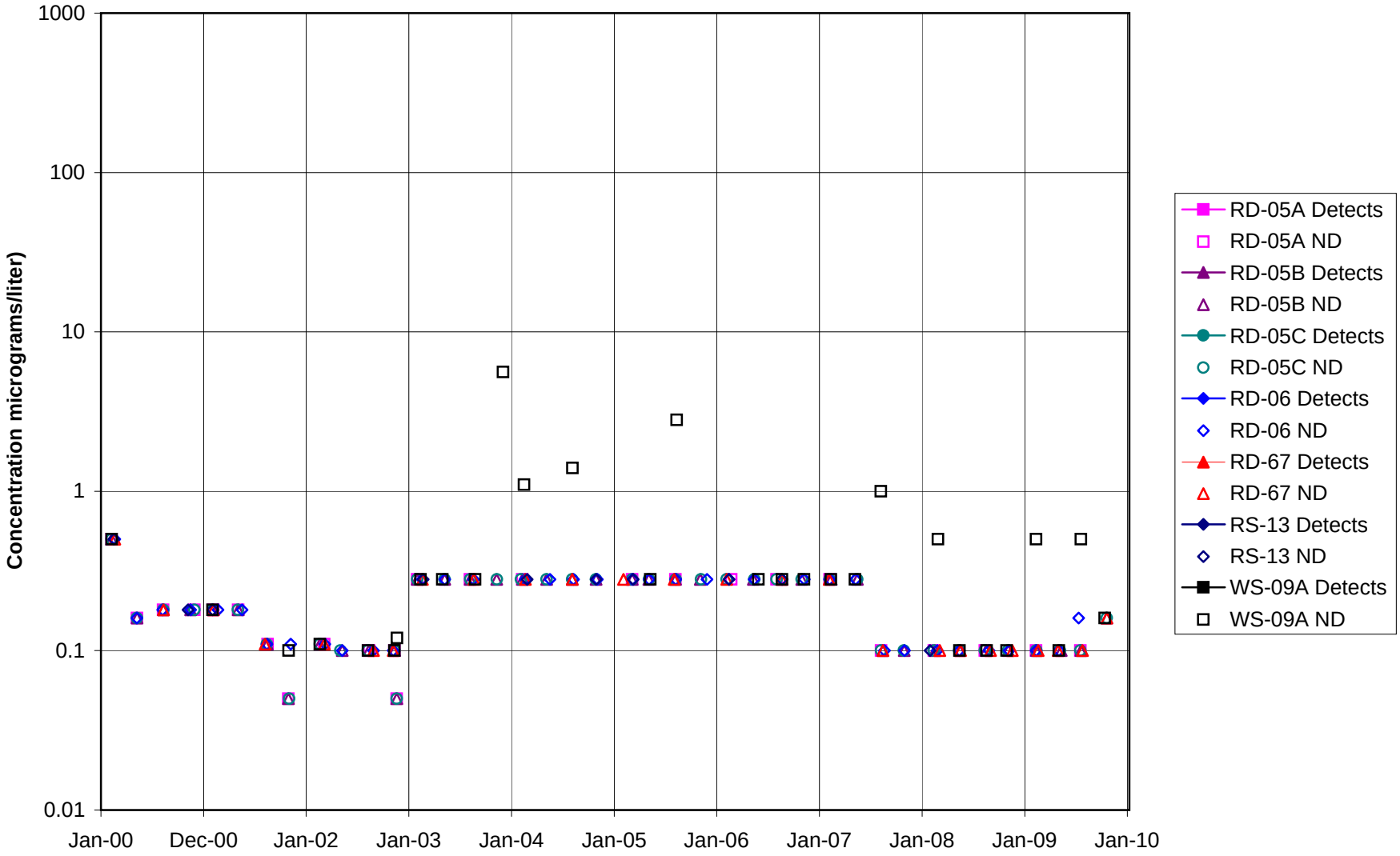


FIGURE F-119. BENZENE in AREA IV AREA WELLS

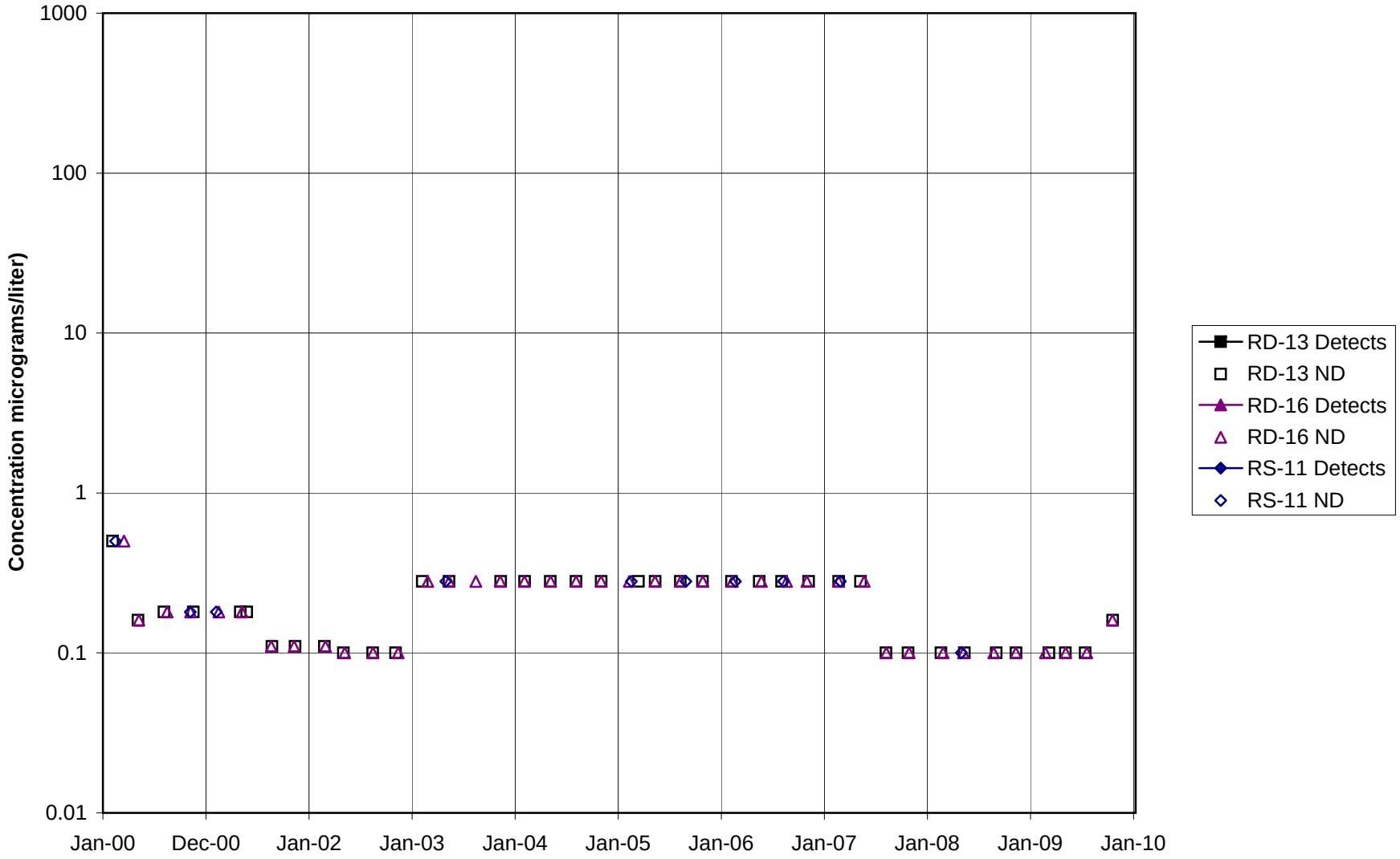


FIGURE F-120. CARBON TETRACHLORIDE in STL-IV AREA SHALLOW WELLS

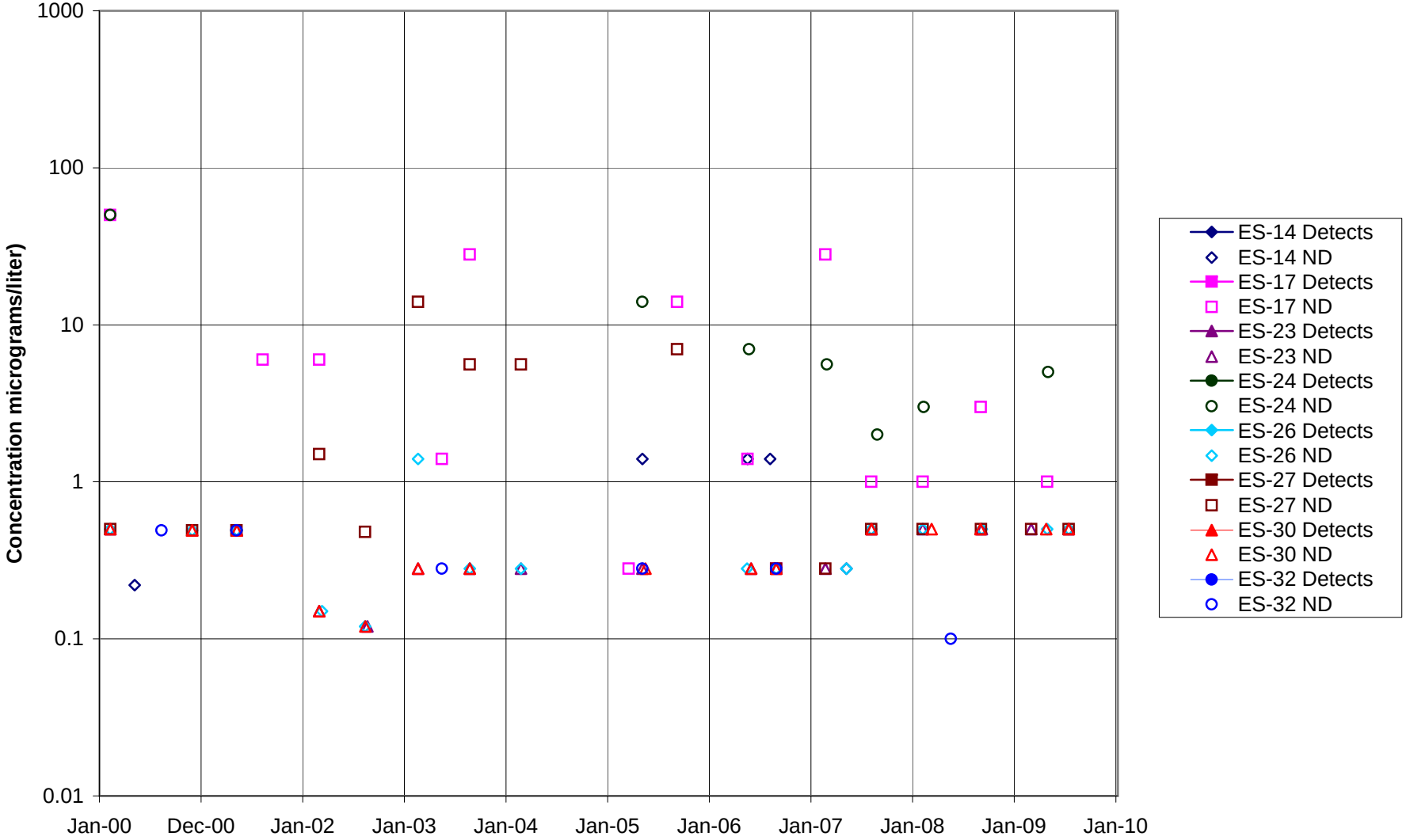


FIGURE F-121. CARBON TETRACHLORIDE in STL-IV AREA CHATSWORTH FORMATION WELLS

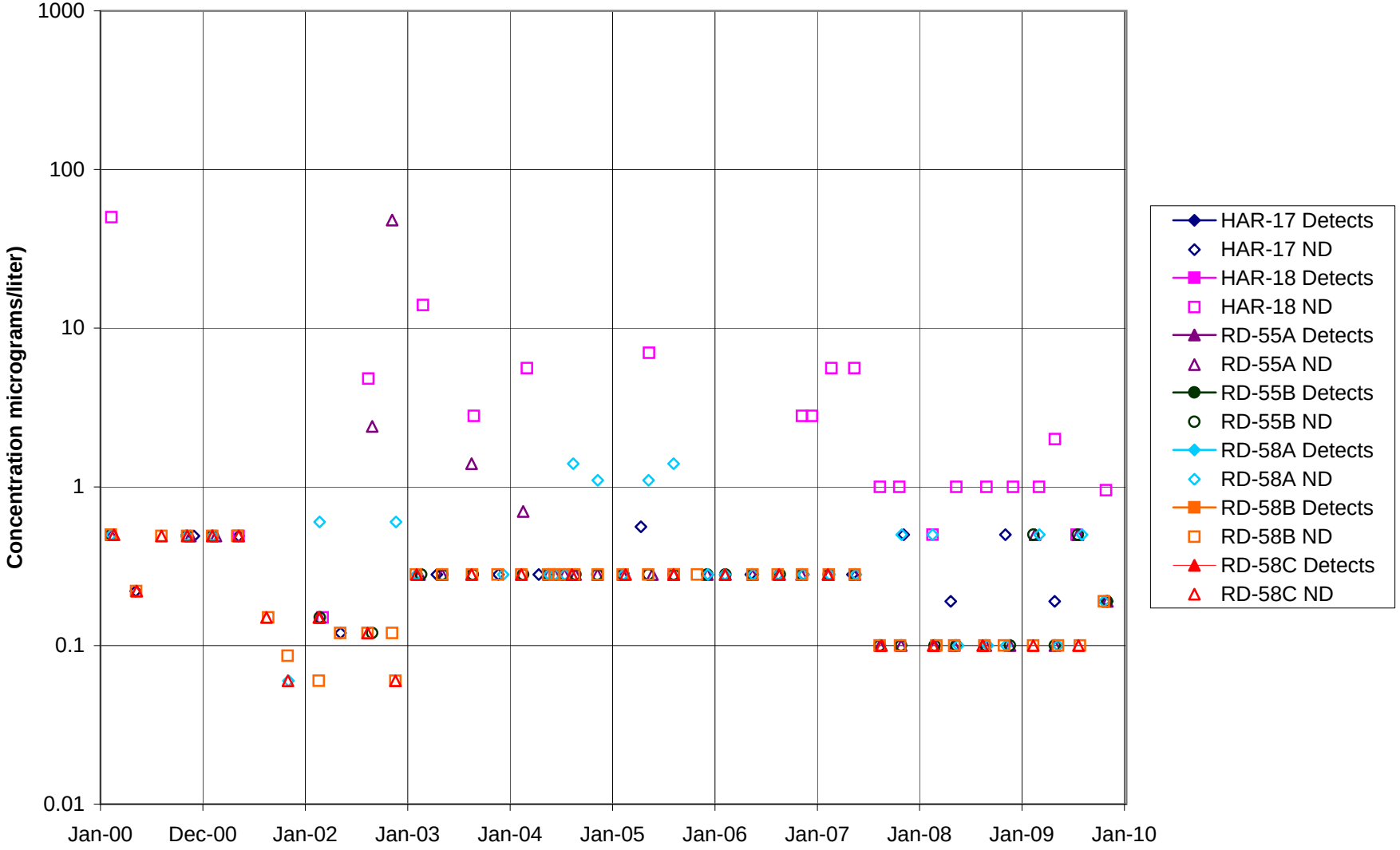


FIGURE F-122. CARBON TETRACHLORIDE in MAIN GATE AREA WELLS - 1

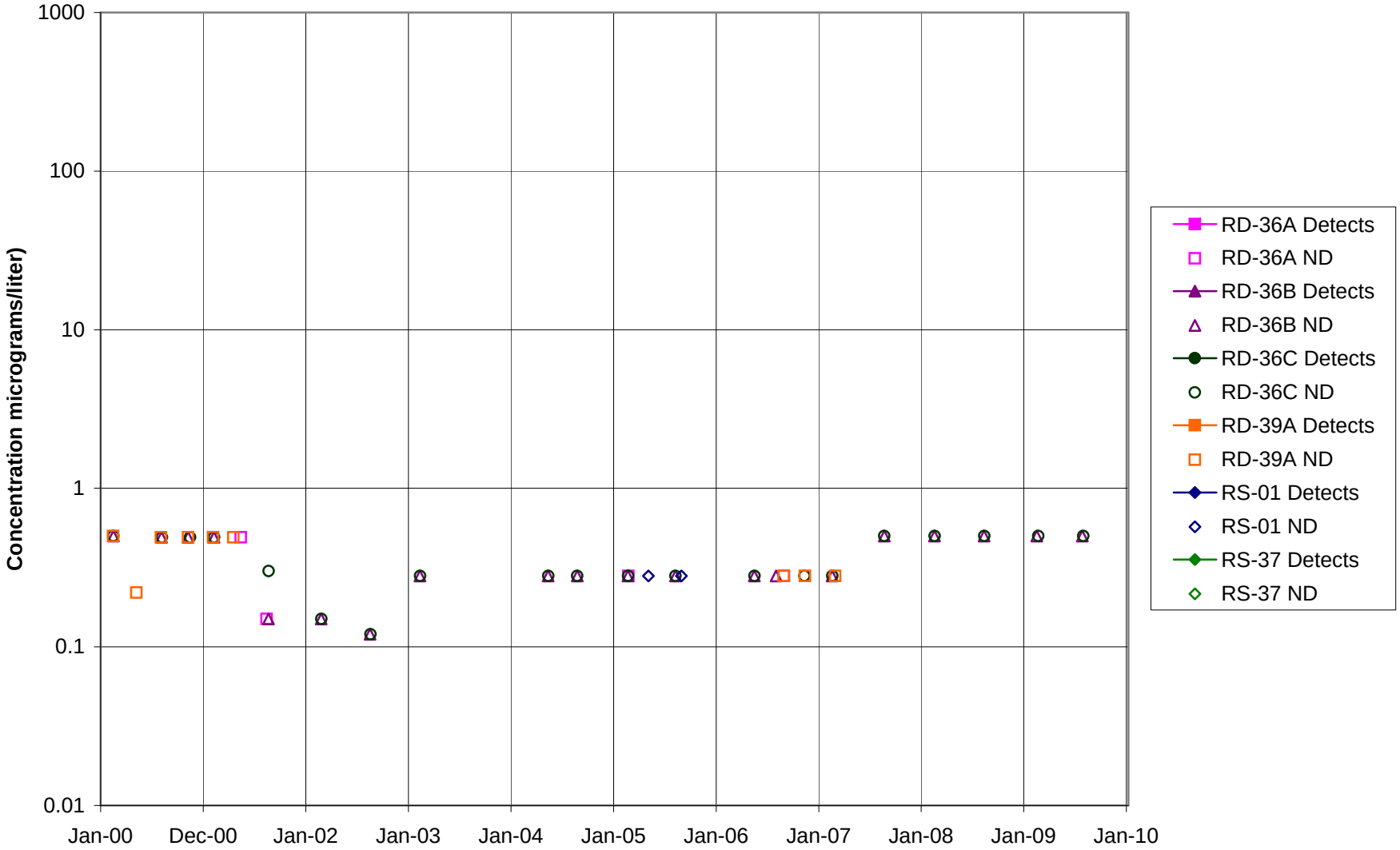


FIGURE F-123. CARBON TETRACHLORIDE in MAIN GATE AREA WELLS - 2

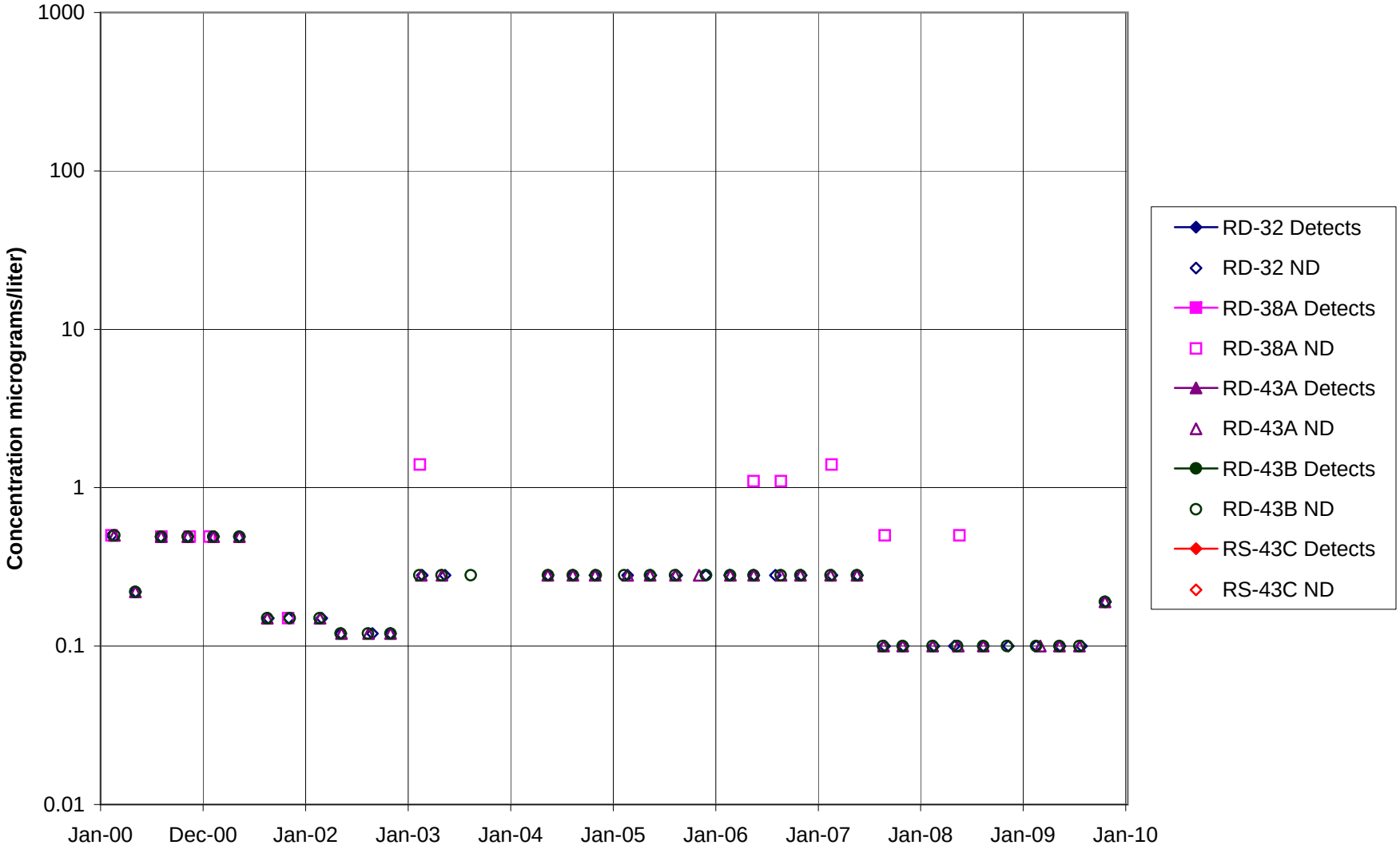


FIGURE F-124. CARBON TETRACHLORIDE in APTF, CANYON, & HAPPY VALLEY WELLS - 1

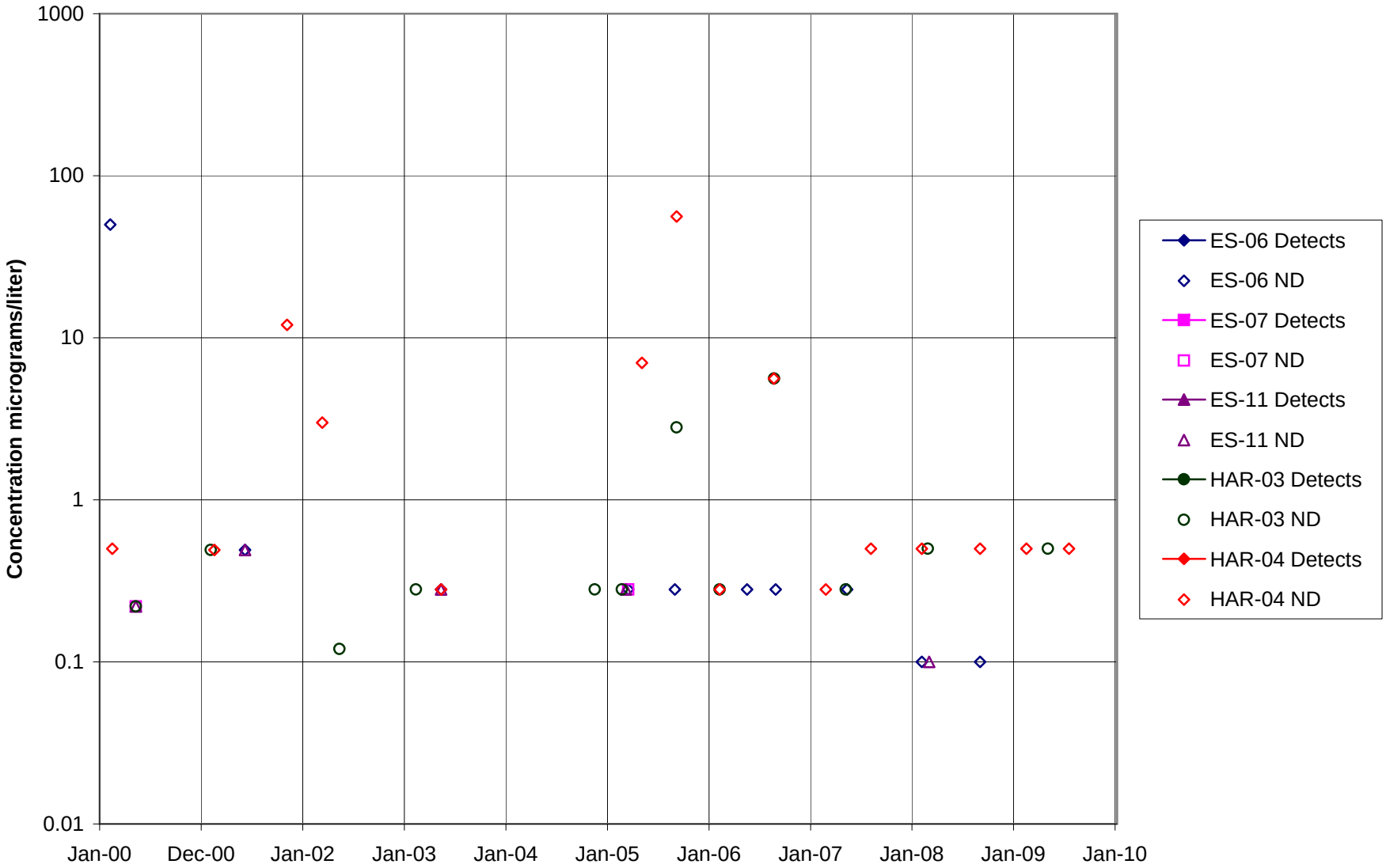


FIGURE F-125. CARBON TETRACHLORIDE in APTF, CANYON, & HAPPY VALLEY WELLS - 2

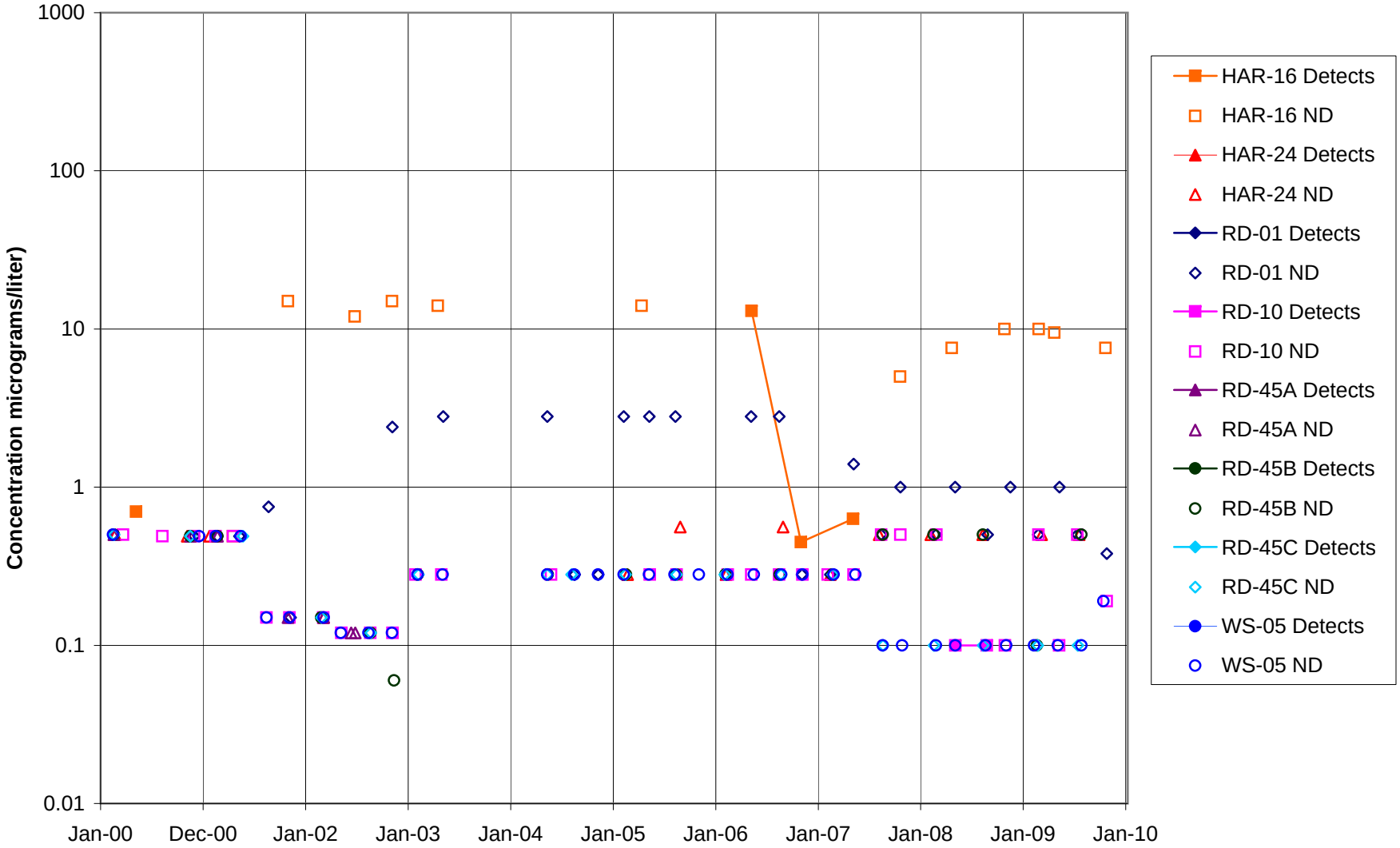


FIGURE F-126. CARBON TETRACHLORIDE in CTL-III / PERIMETER POND AREA WELLS

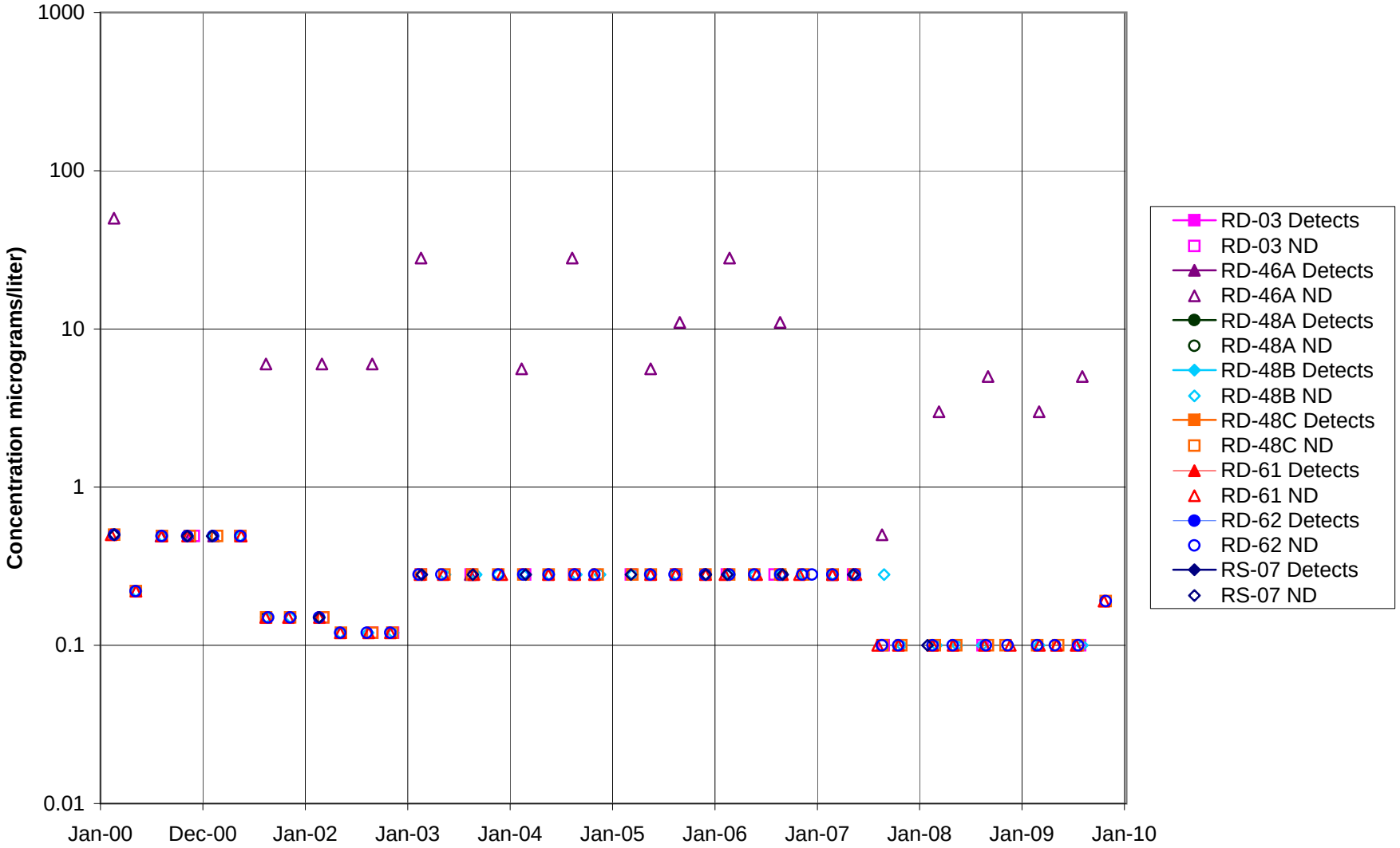


FIGURE F-127. CARBON TETRACHLORIDE in BOWL AREA WELLS

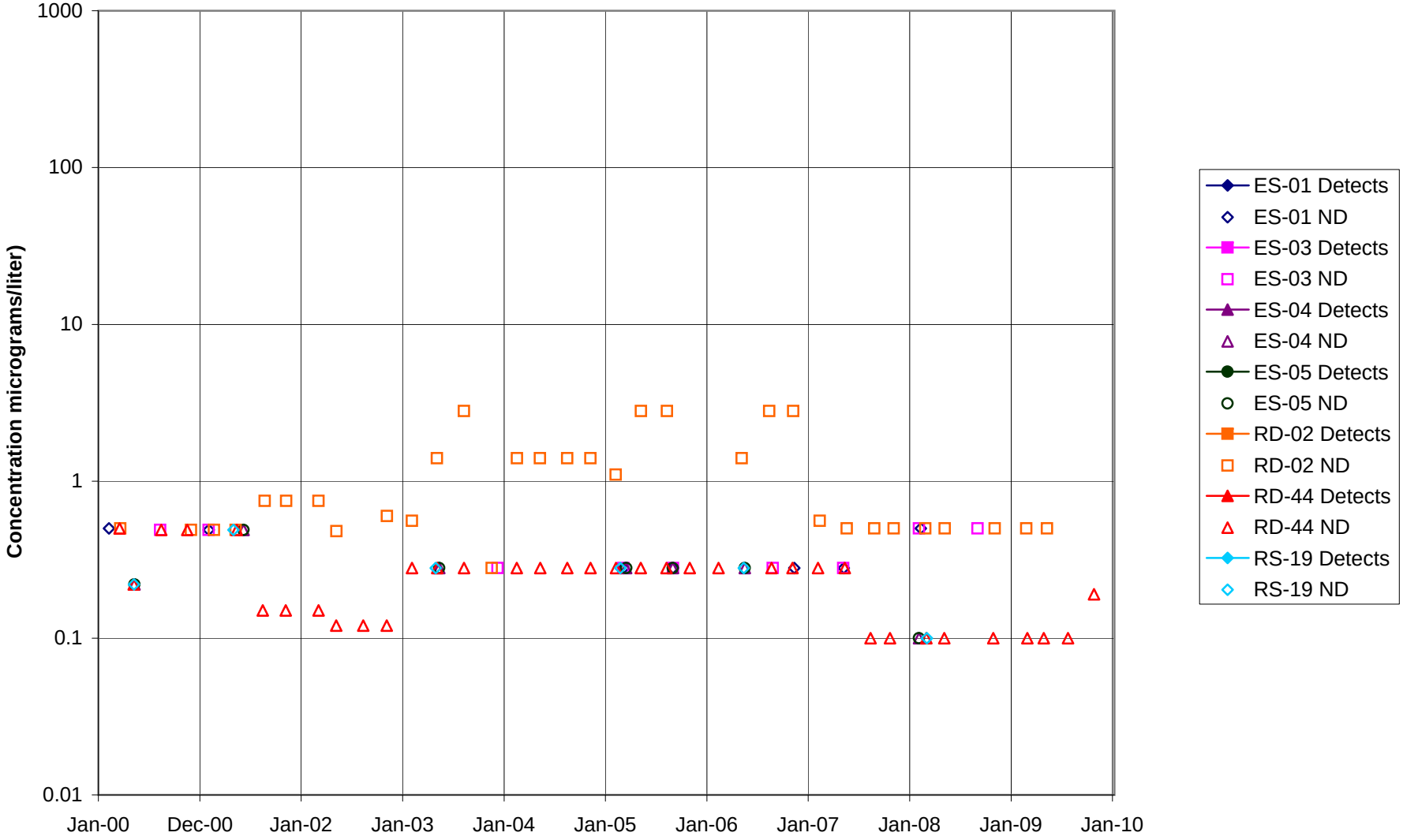


FIGURE F-128. CARBON TETRACHLORIDE in ECL AREA WELLS

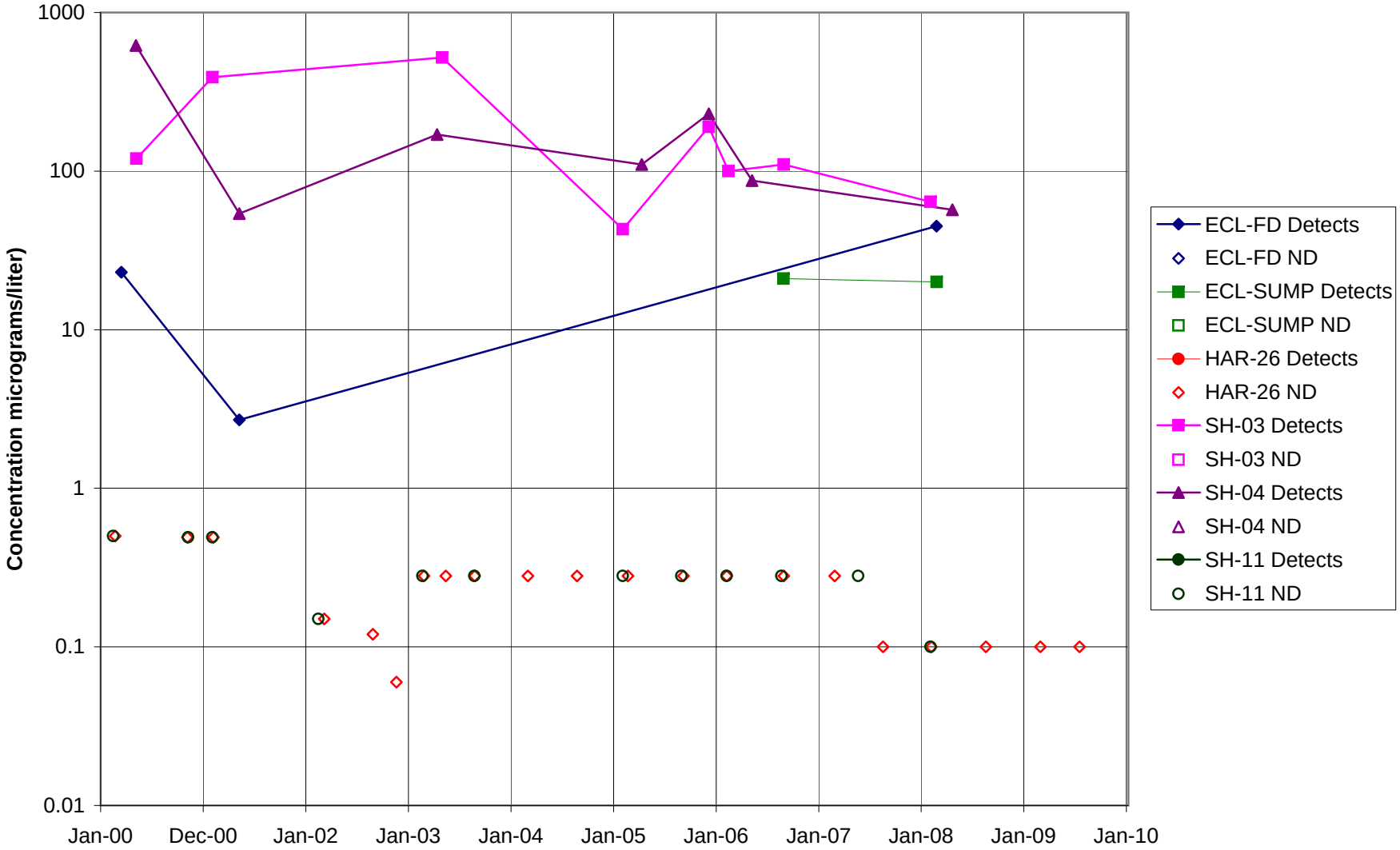


FIGURE F-129. CARBON TETRACHLORIDE in FORMER LOX PLANT AREA WELLS

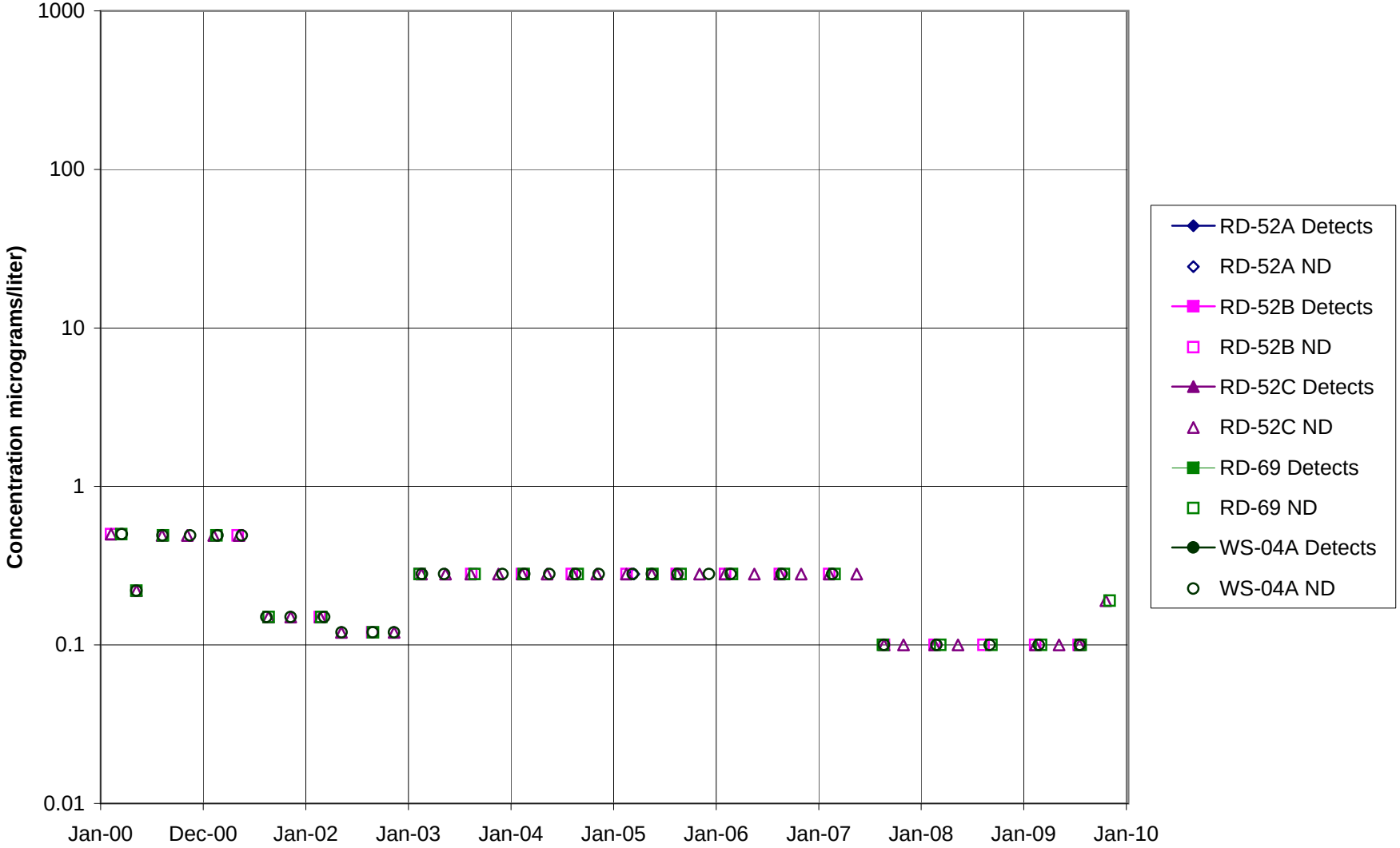


FIGURE F-130. CARBON TETRACHLORIDE in RD-09 AREA WELLS

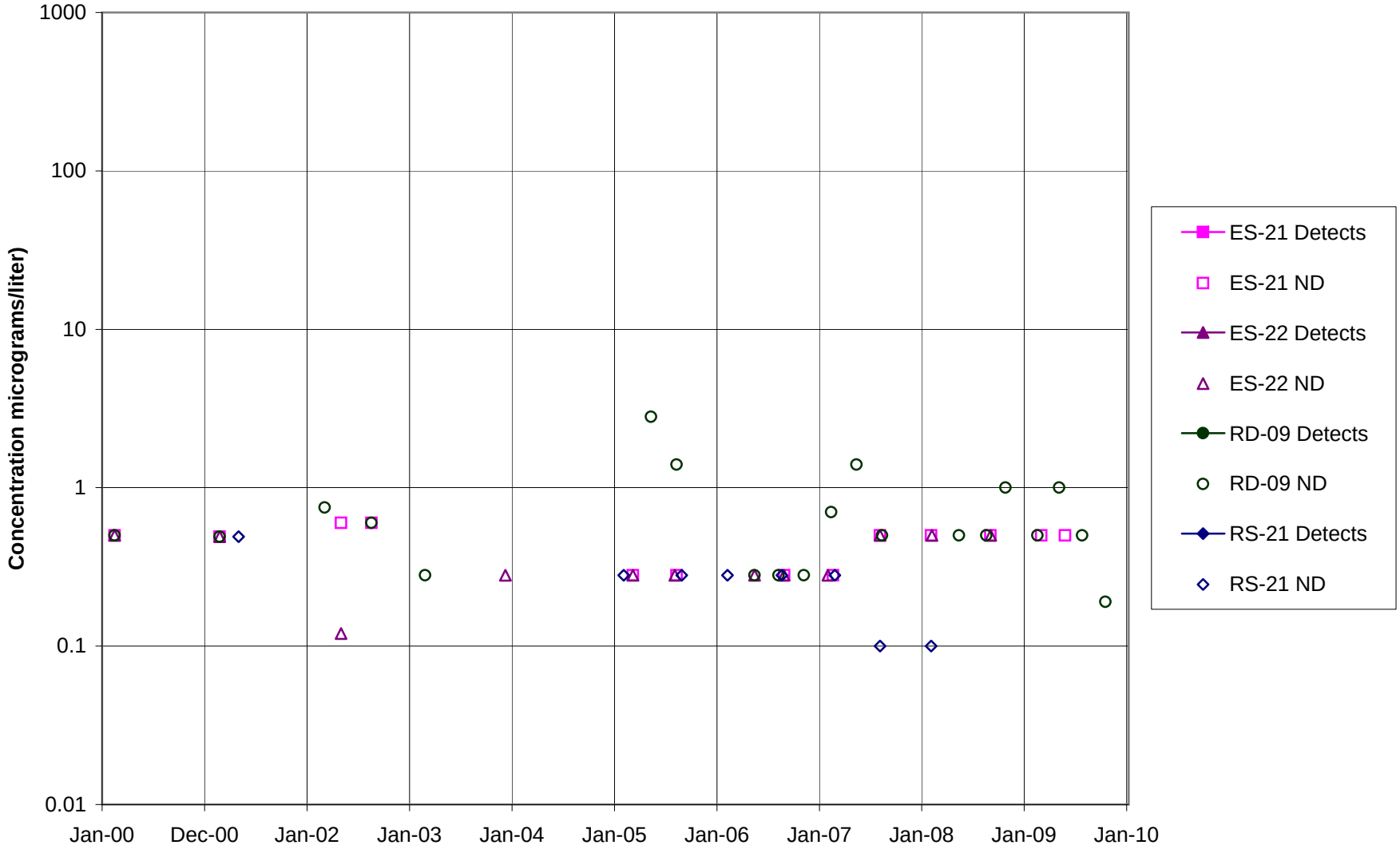


FIGURE F-131. CARBON TETRACHLORIDE in HELIPORT, B/204 WELLS

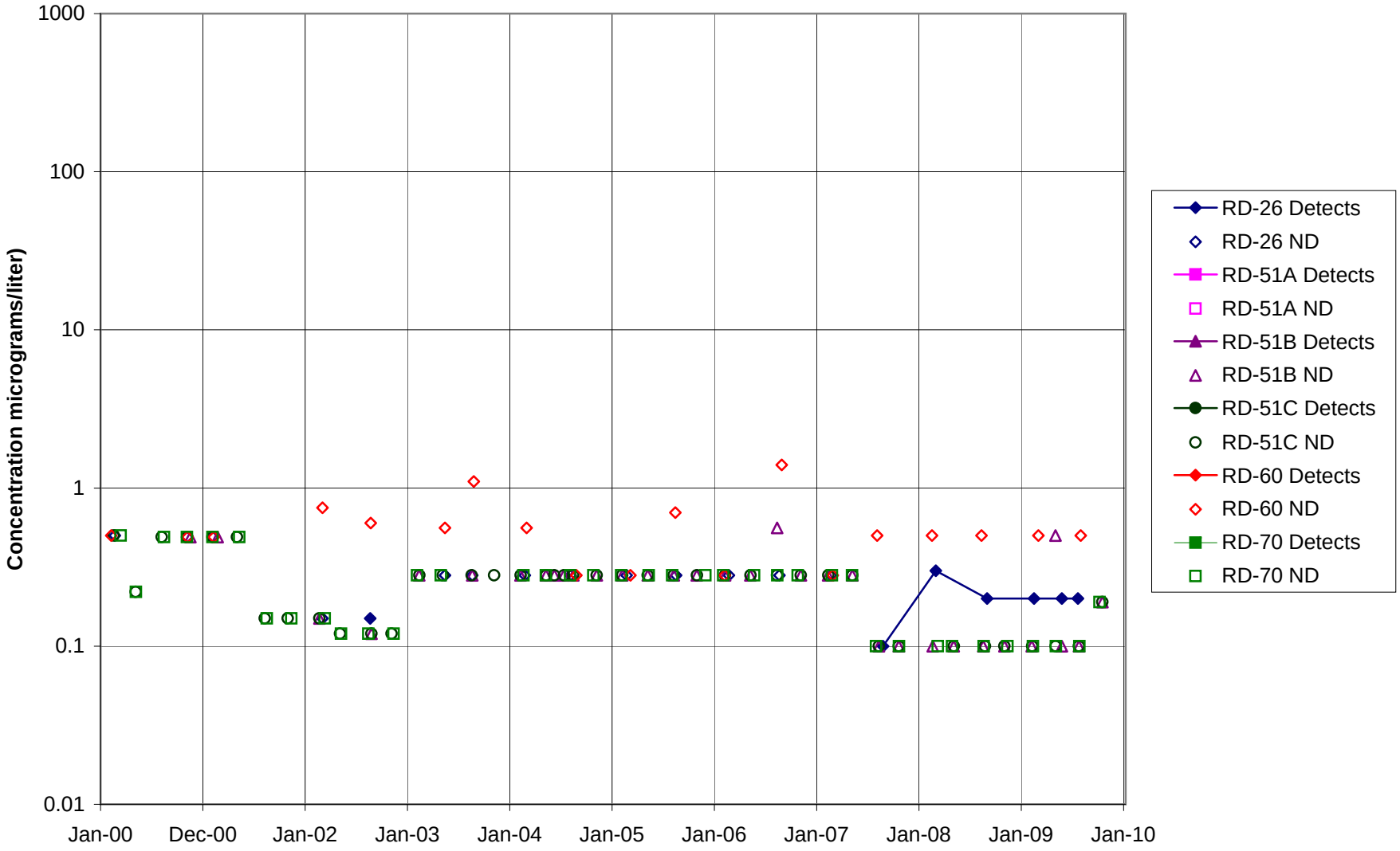


FIGURE F-132. CARBON TETRACHLORIDE in ALFA / BRAVO AREA WELLS

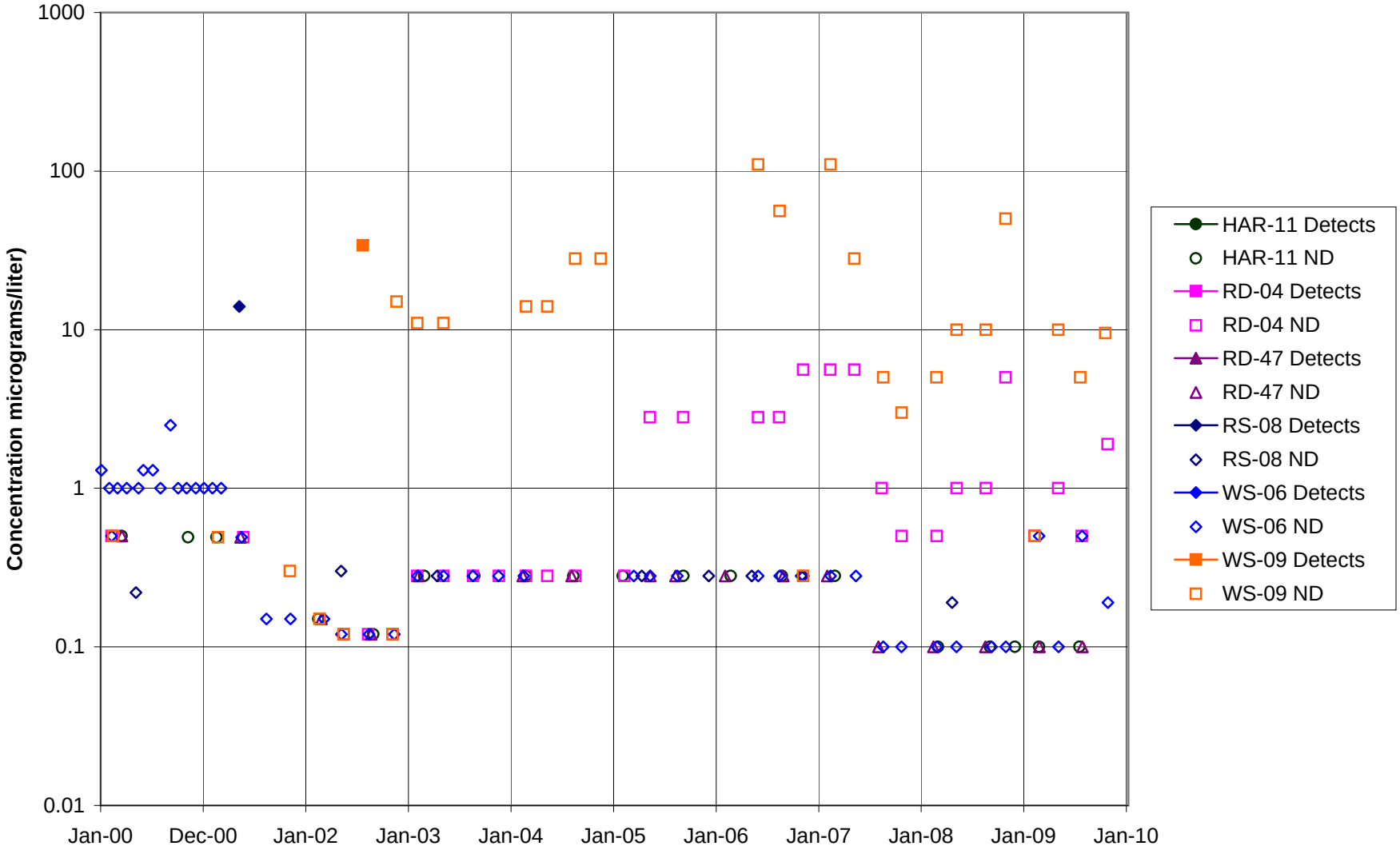


FIGURE F-133. CARBON TETRACHLORIDE in SPA AREA WELLS

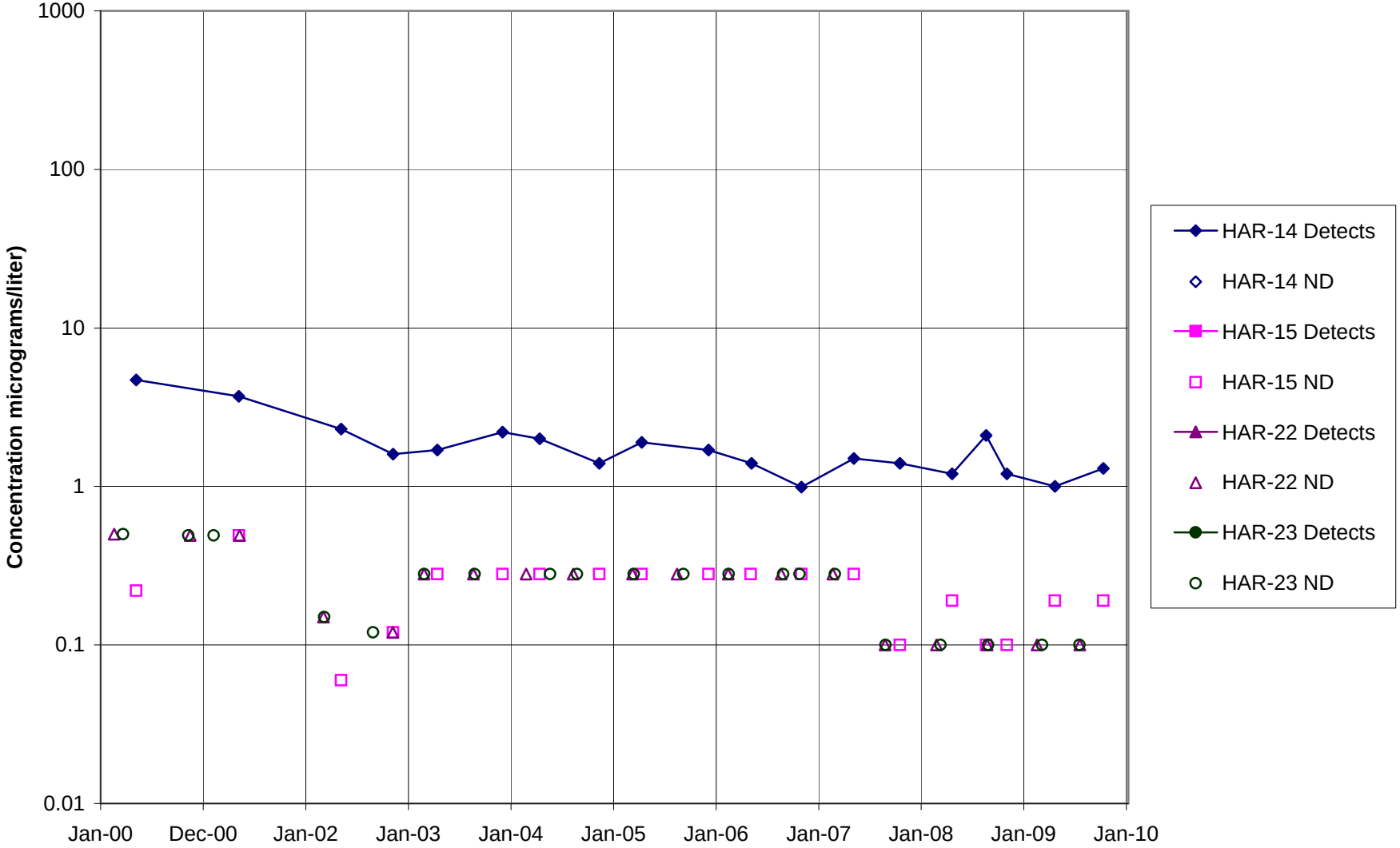


FIGURE F-134. CARBON TETRACHLORIDE in COCA / PLF AREA WELLS

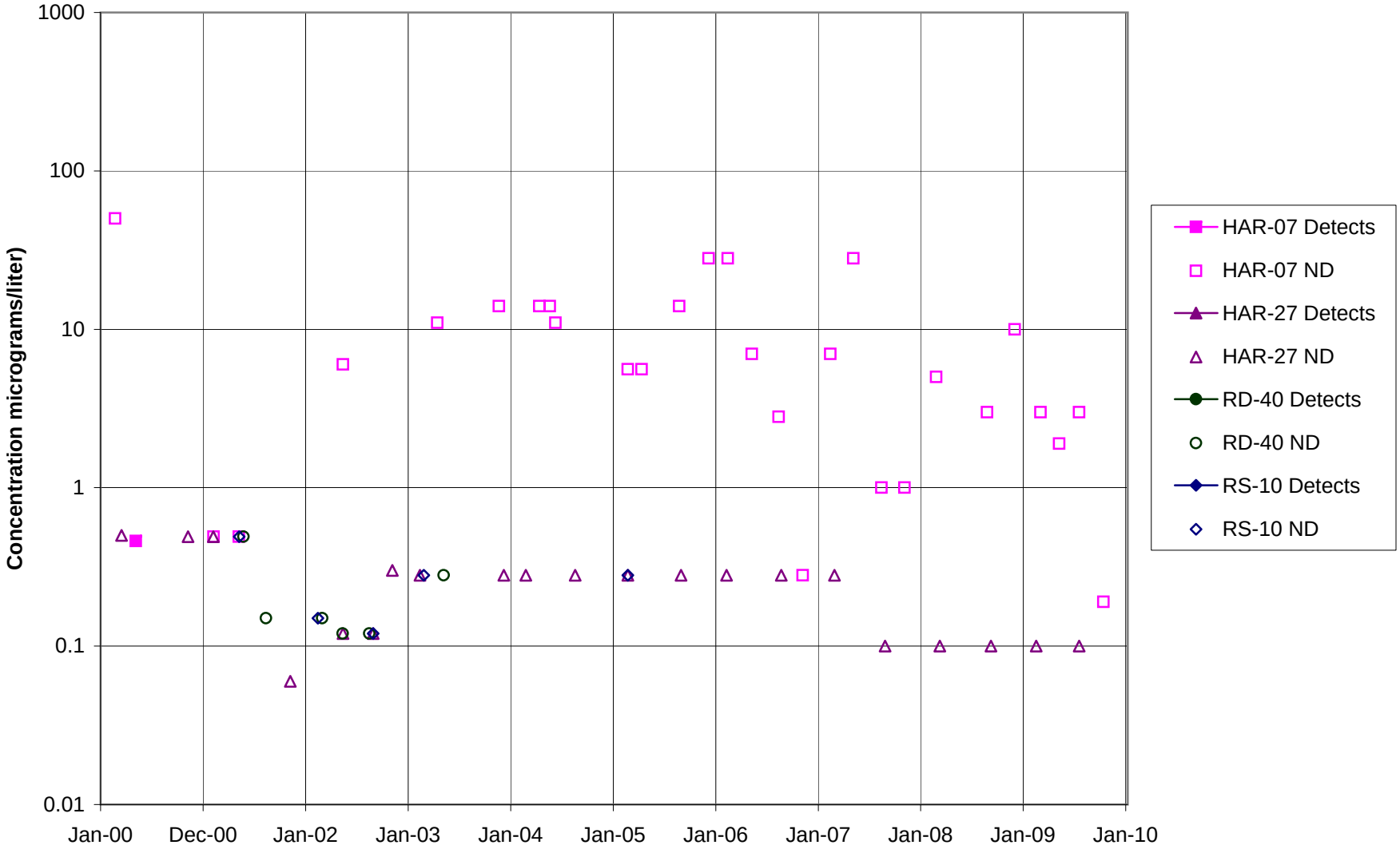


FIGURE F-135. CARBON TETRACHLORIDE in DELTA / BUFFER ZONE AREA WELLS

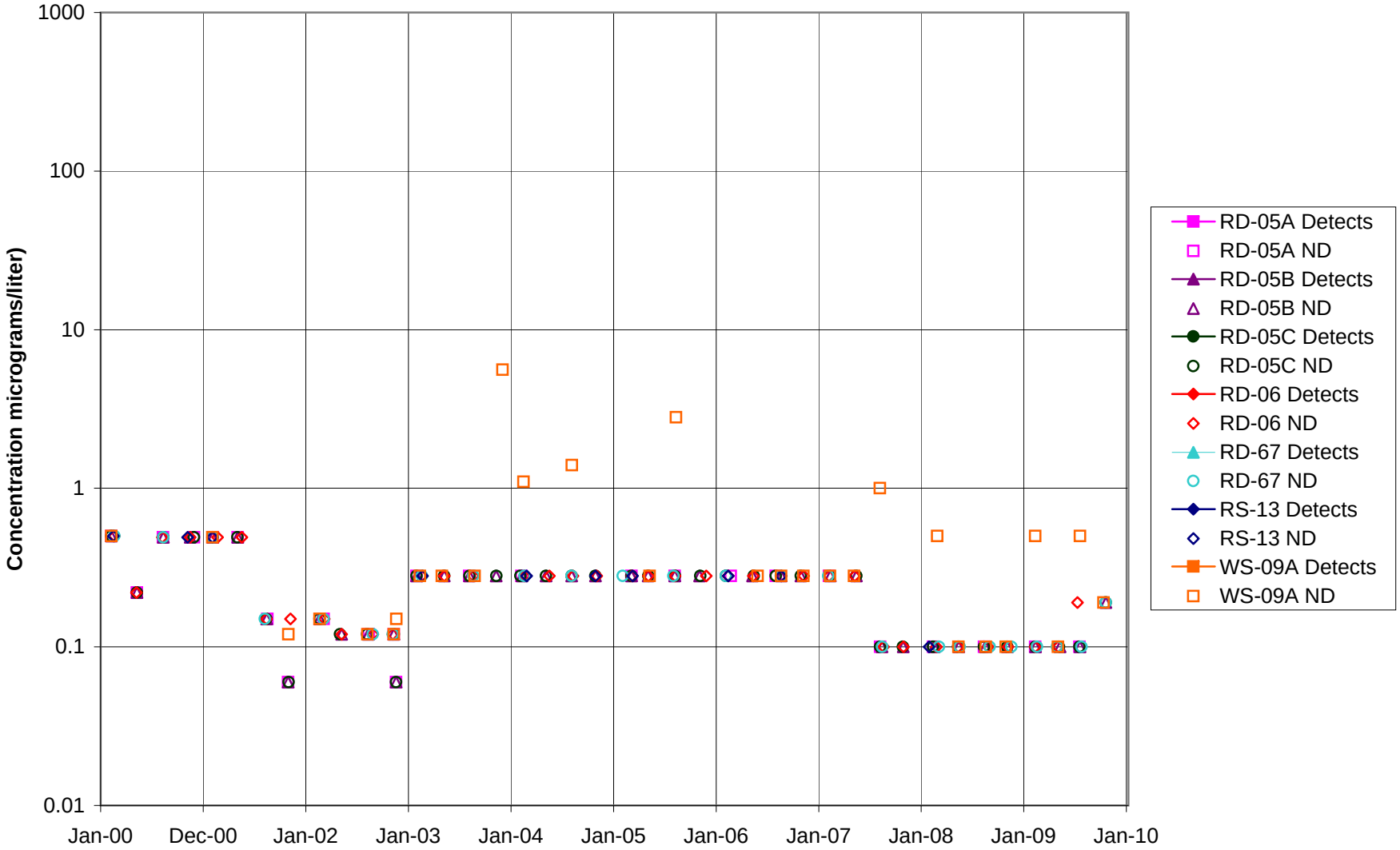


FIGURE F-136. CARBON TETRACHLORIDE in AREA-IV WELLS

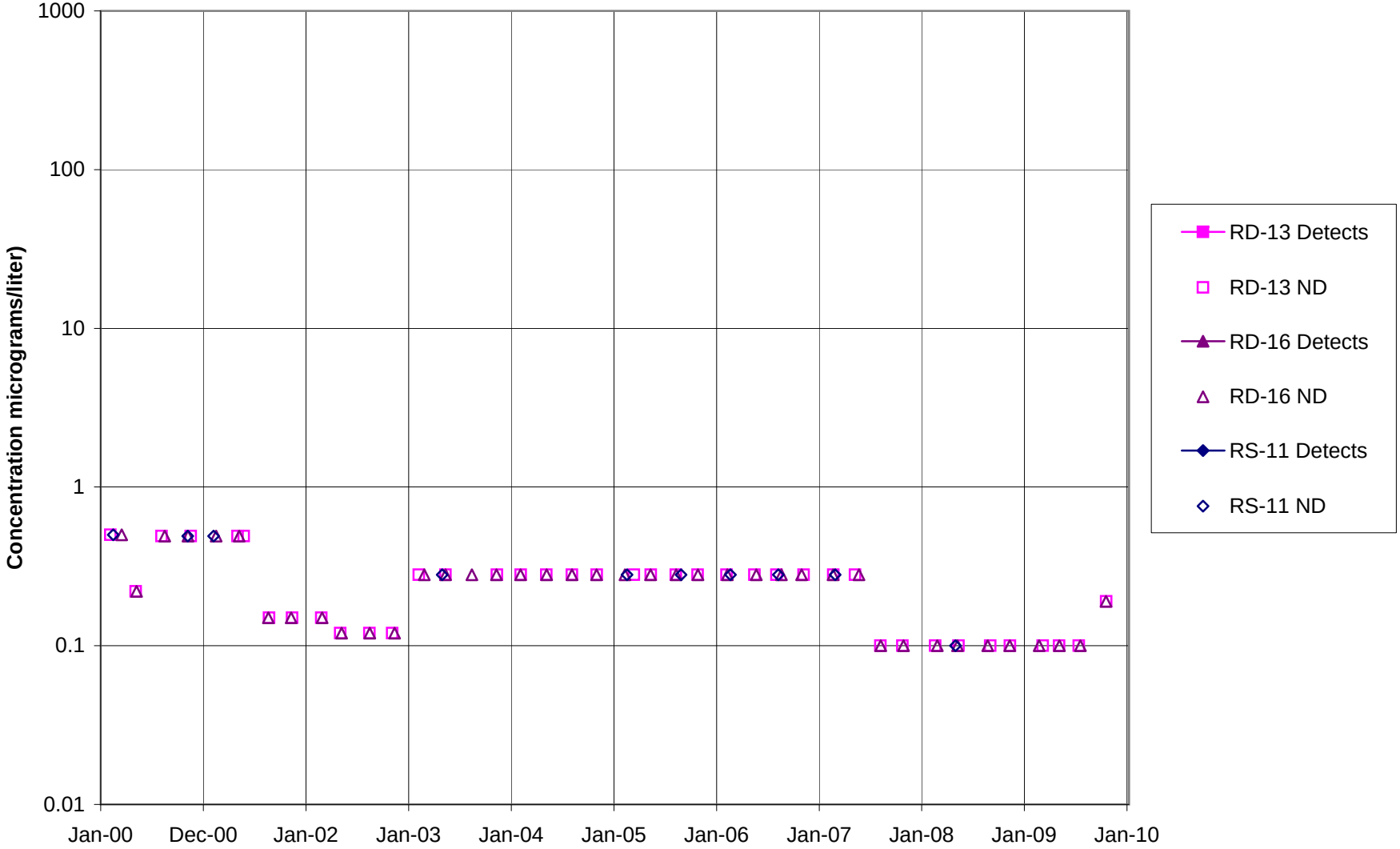


FIGURE F-137. CHLOROFORM in STL-IV AREA SHALLOW WELLS

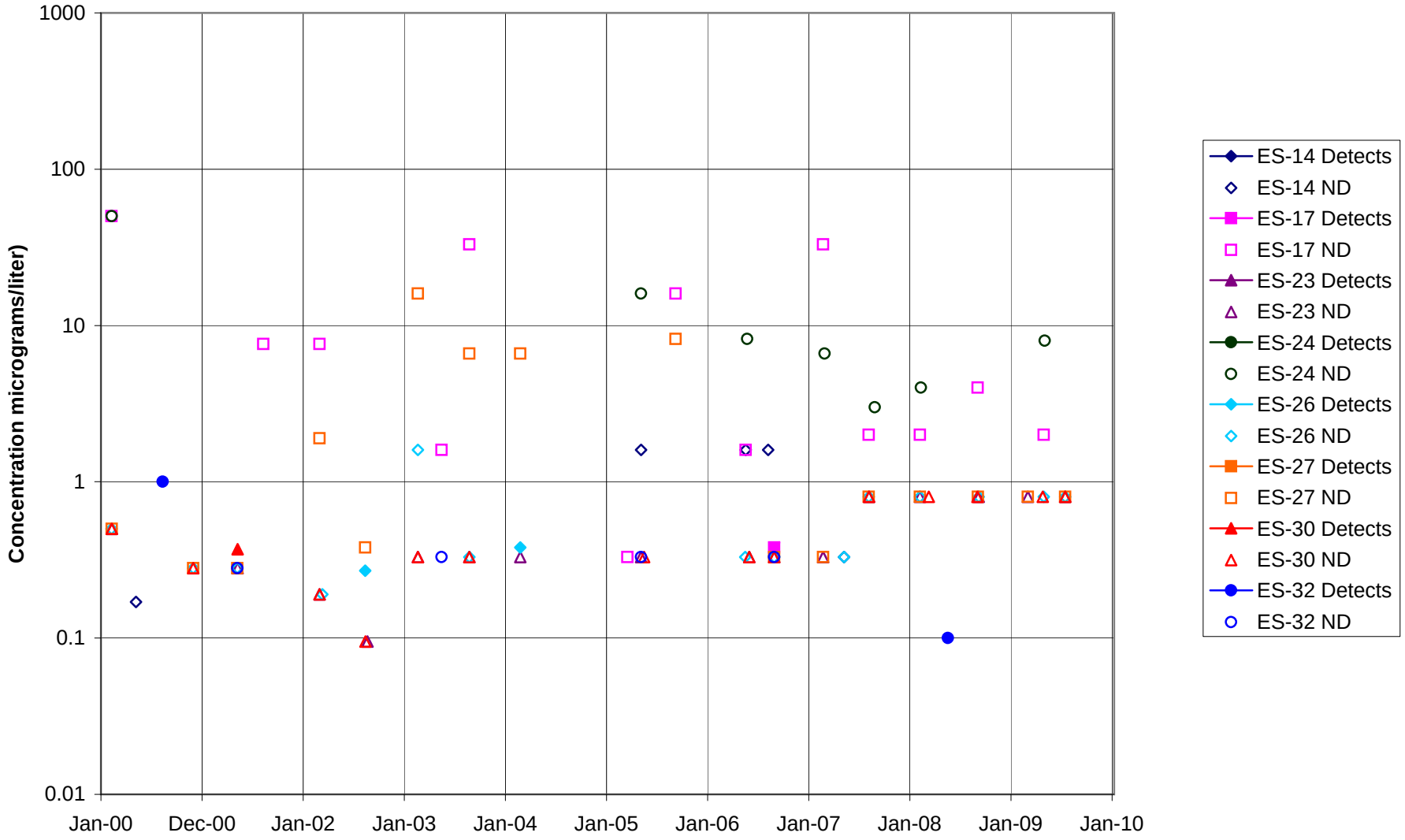


FIGURE F-138. CHLOROFORM in STL-IV AREA CHATSWORTH FORMATION WELLS

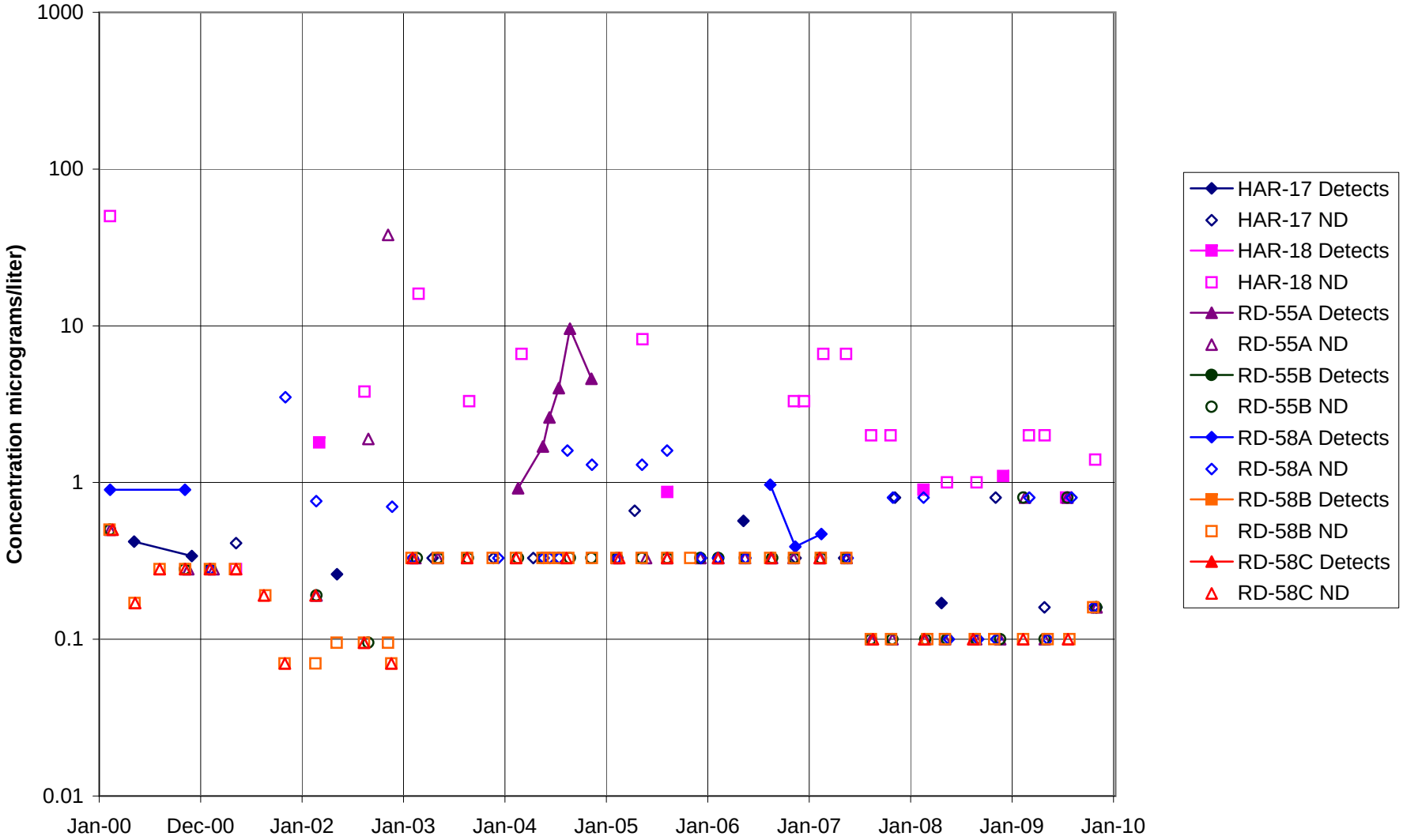


FIGURE F-139. CHLOROFORM in MAIN GATE AREA WELLS - 1

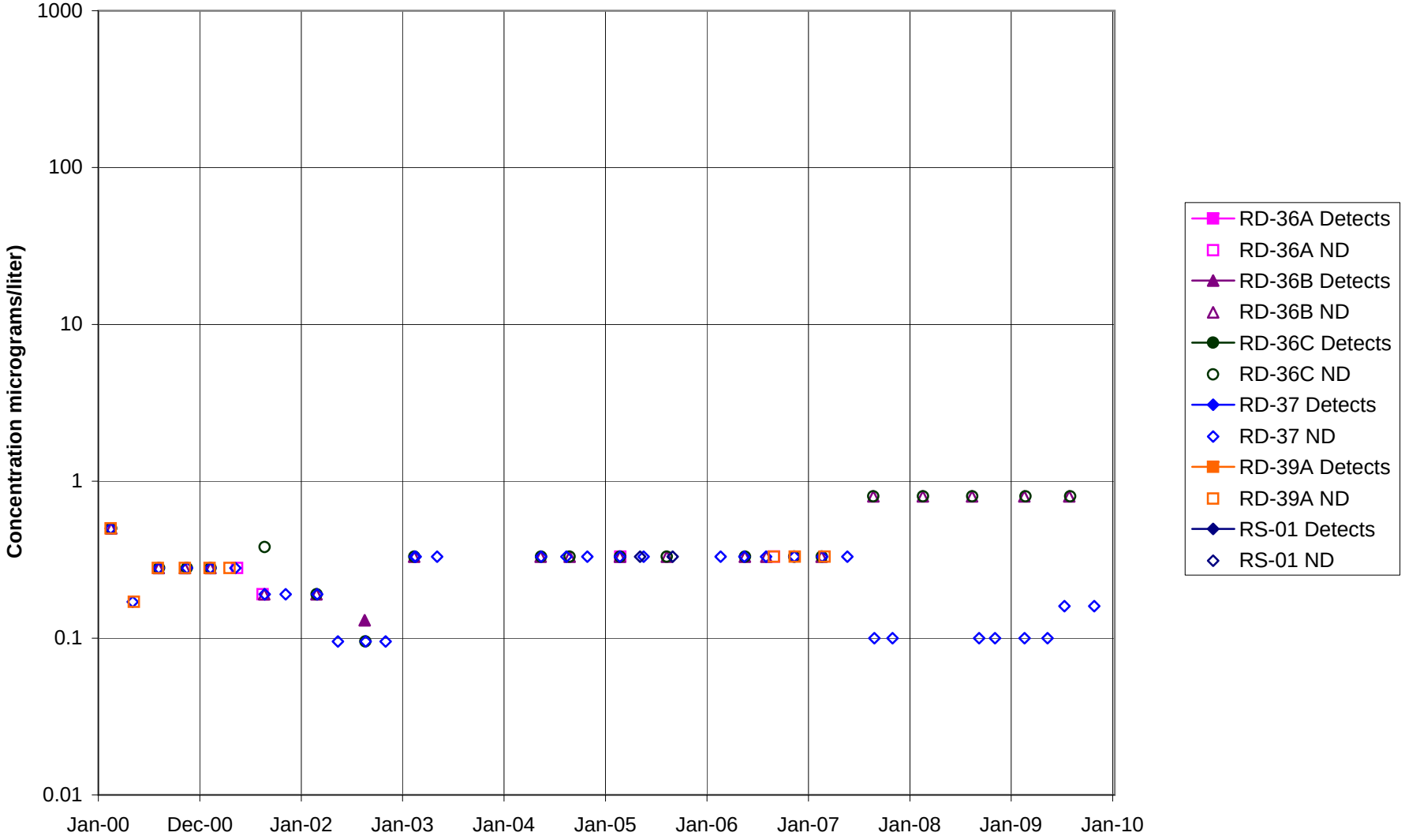


FIGURE F-140. CHLOROFORM in MAIN GATE AREA WELLS - 2

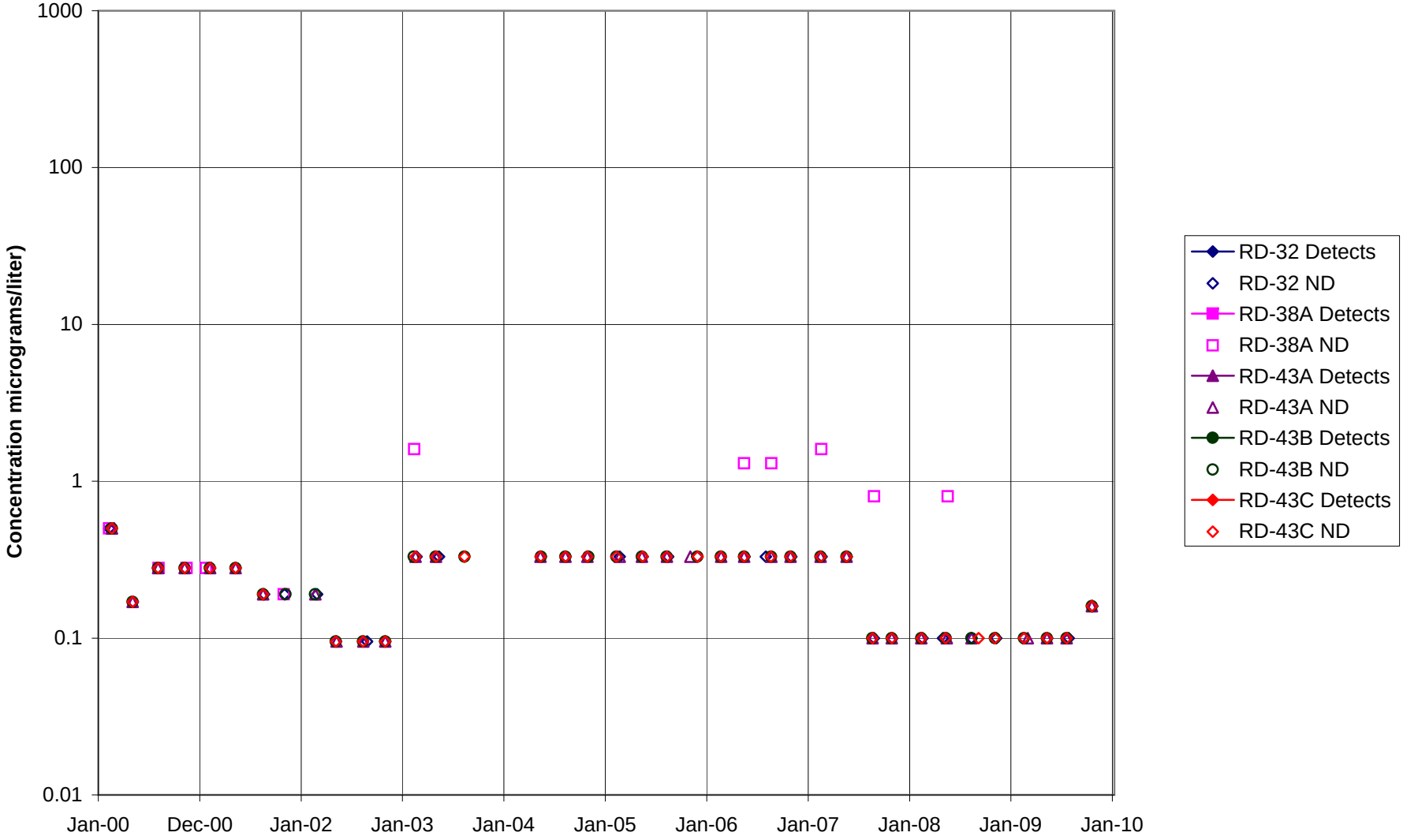


FIGURE F-141. CHLOROFORM in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1

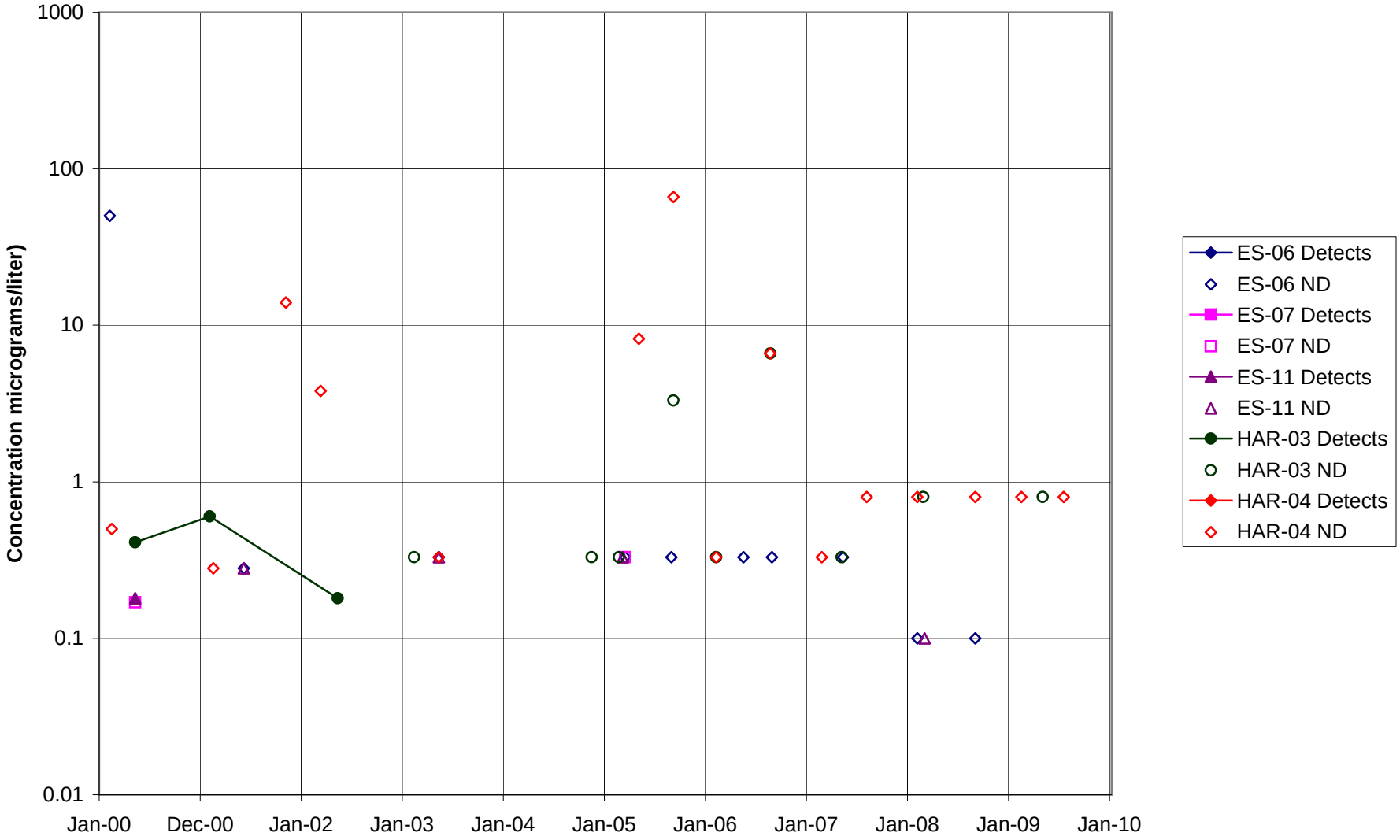


FIGURE F-142. CHLOROFORM in APTF,CANYON, & HAPPY VALLEY AREA WELLS - 2

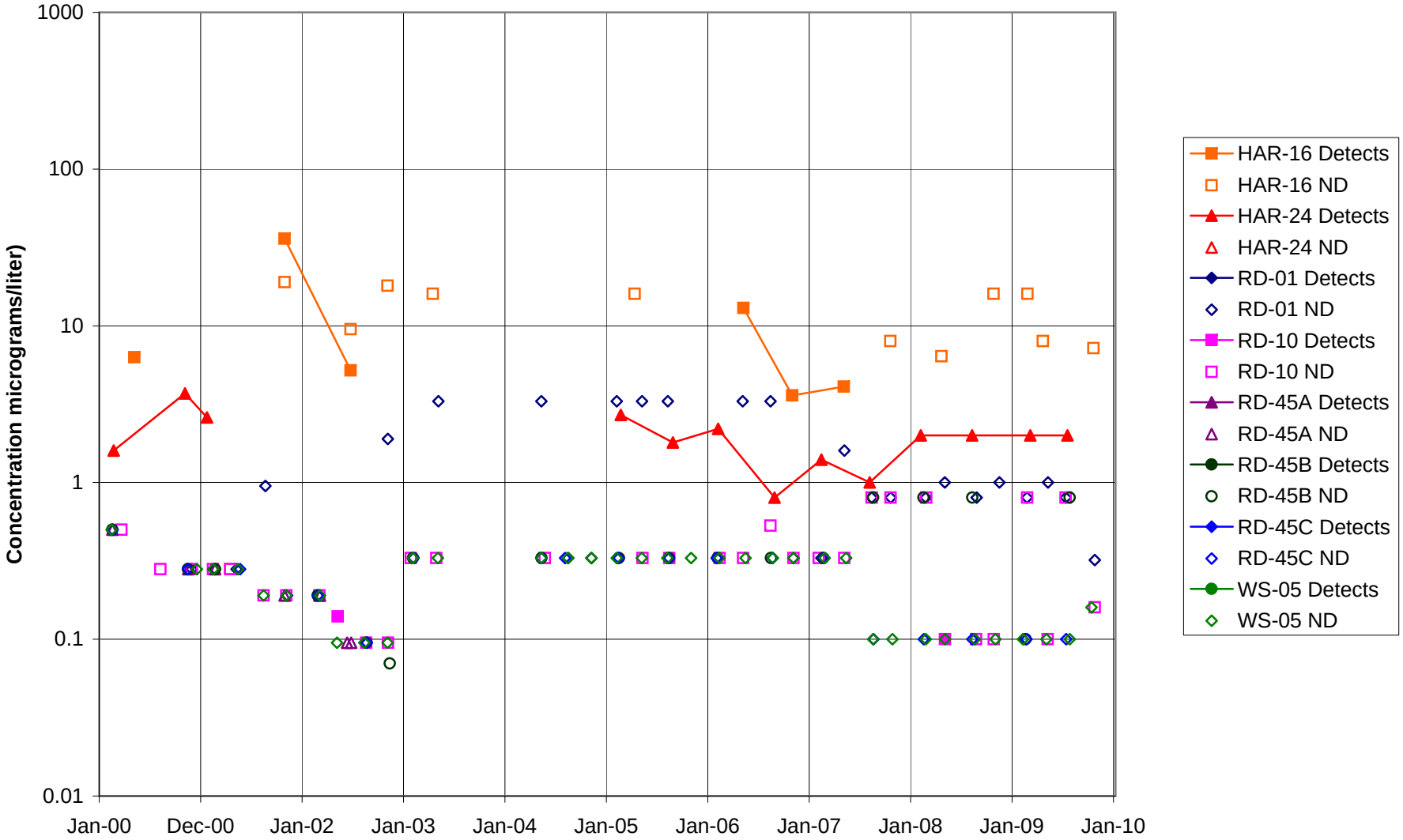


FIGURE F-143. CHLOROFORM in CTL-III / PERIMETER POND AREA WELLS

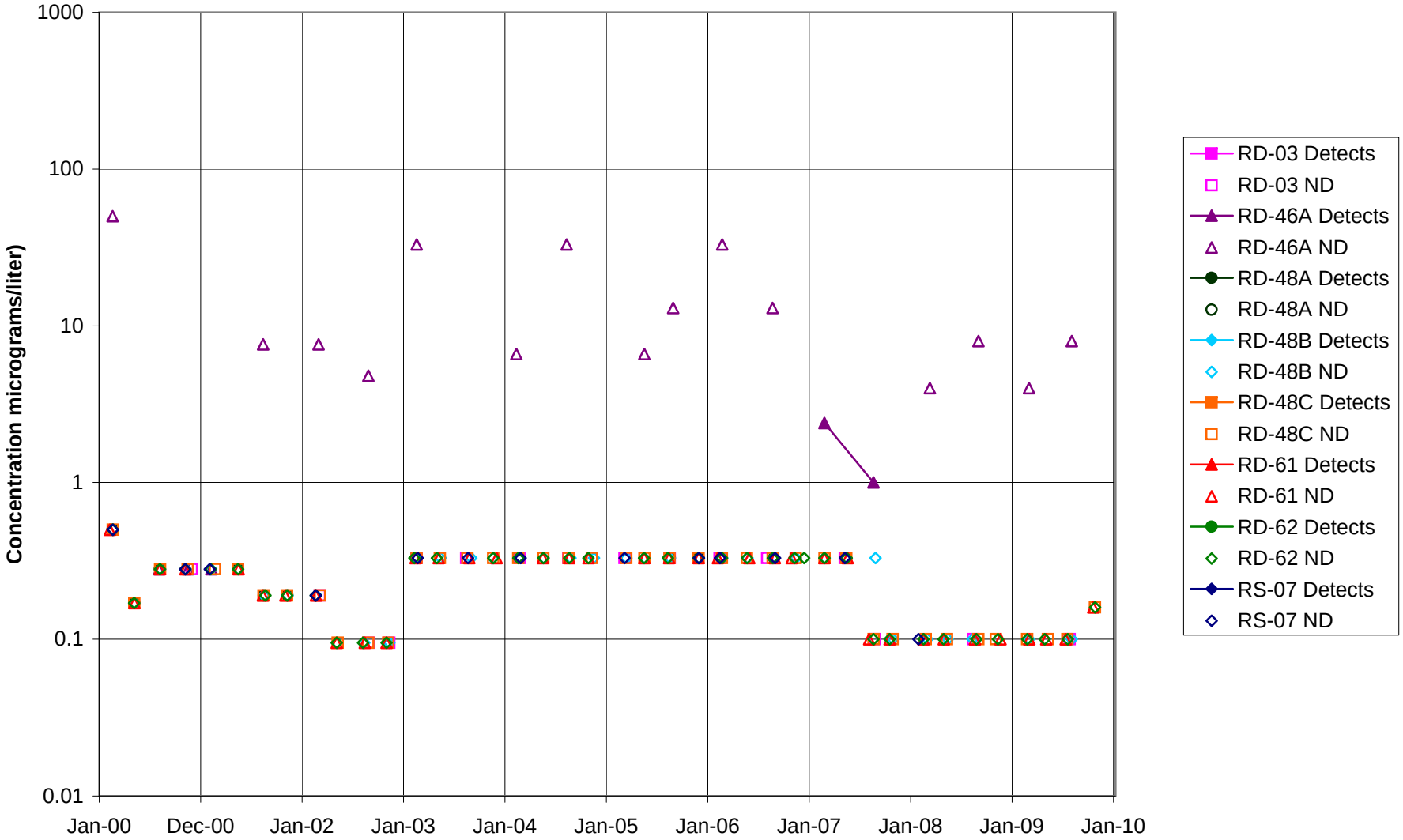


FIGURE F-144. CHLOROFORM in BOWL AREA WELLS

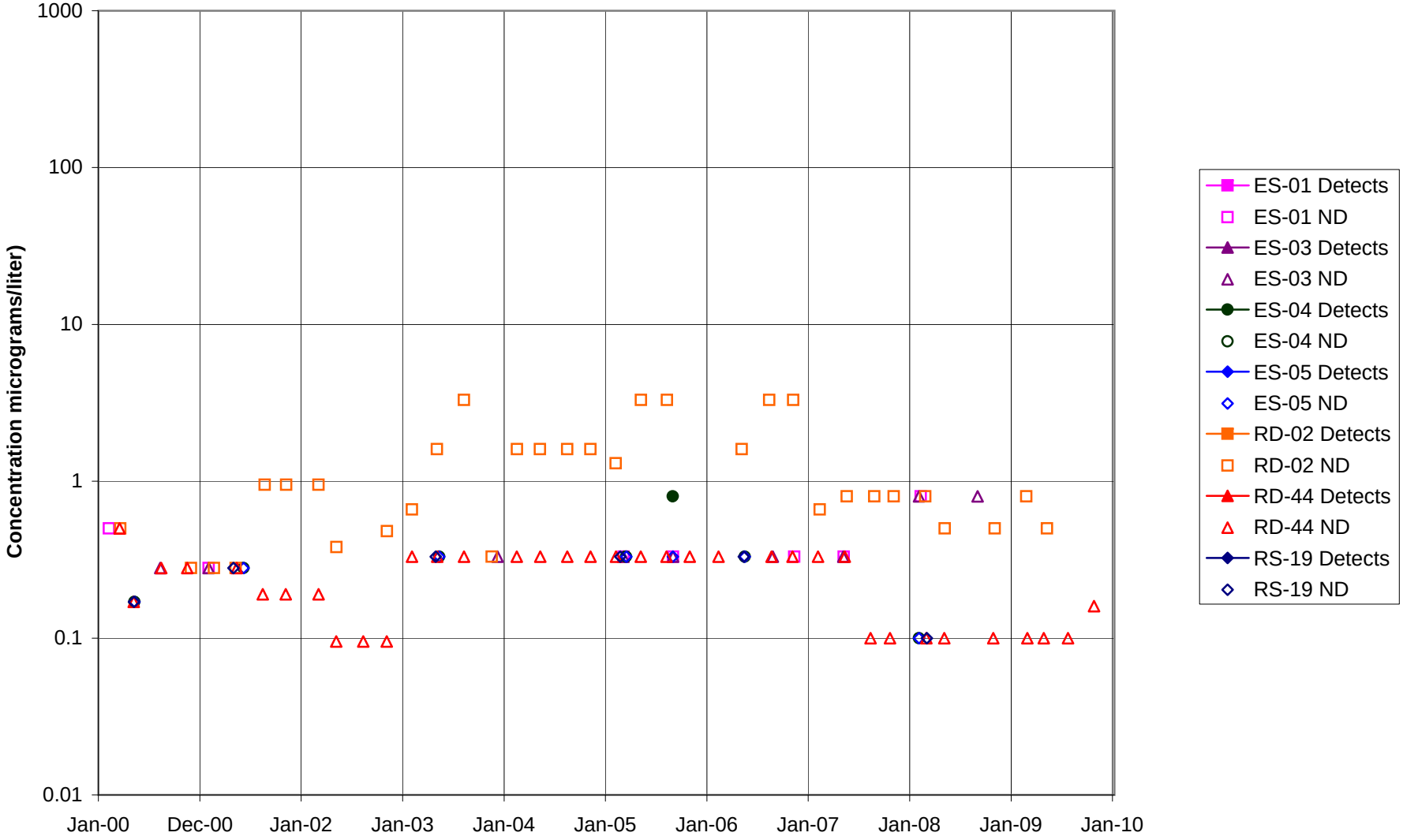


FIGURE F-145. CHLOROFORM in ECL AREA WELLS

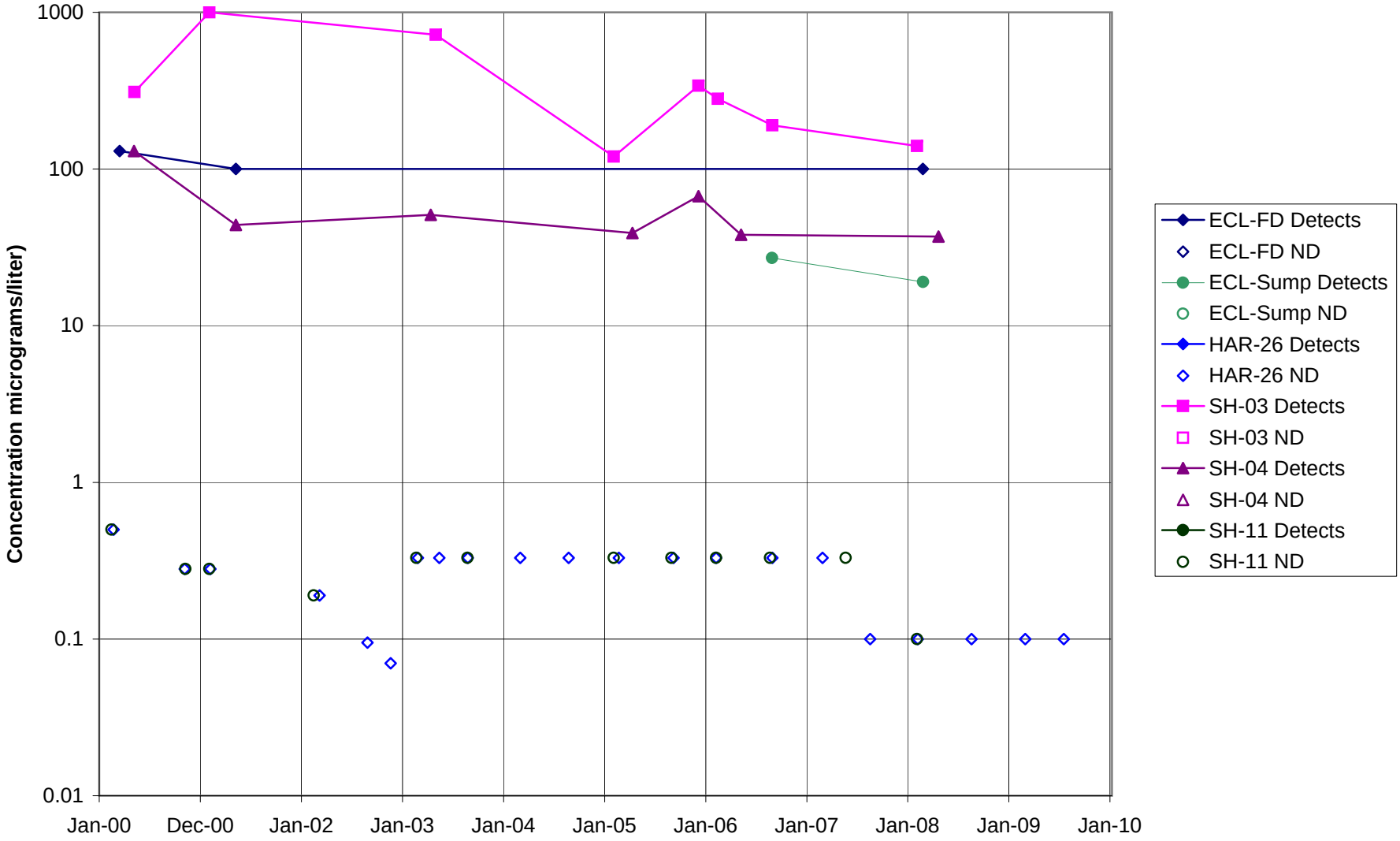


FIGURE F-146. CHLOROFORM in FORMER LOX PLANT AREA WELLS

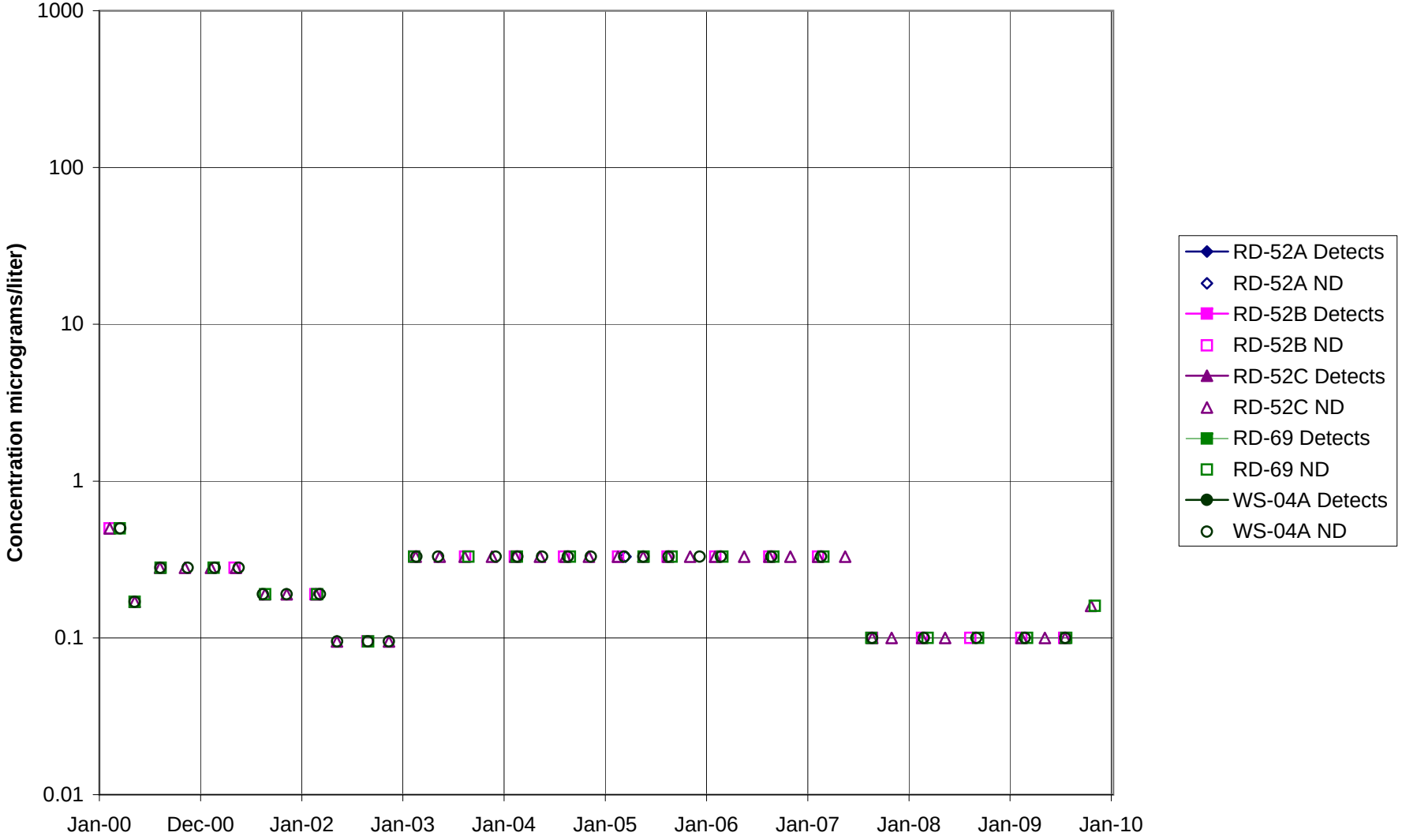


FIGURE F-147. CHLOROFORM in RD-09 AREA WELLS

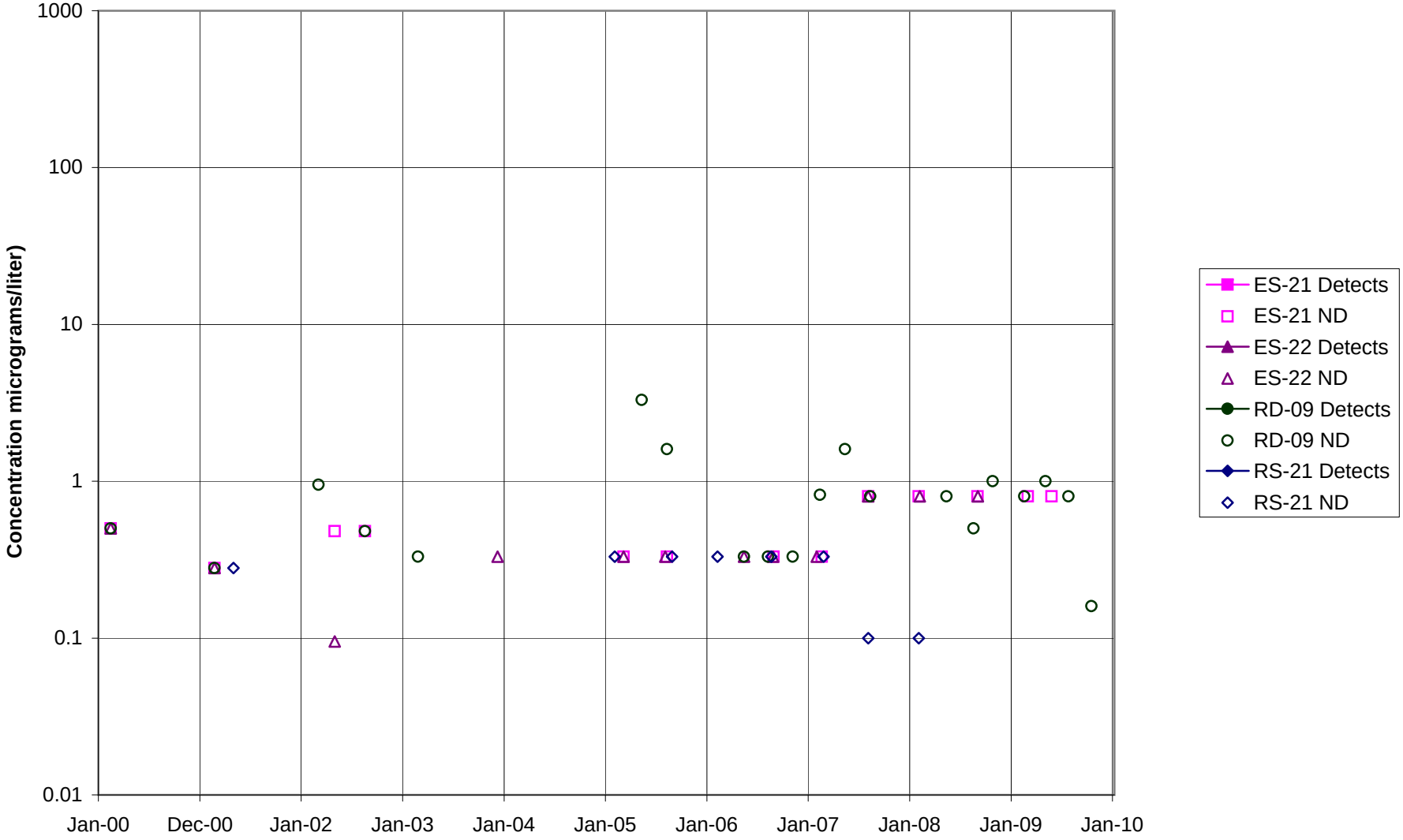


FIGURE F-148. CHLOROFORM in HELIPORT, B/204 AREA WELLS

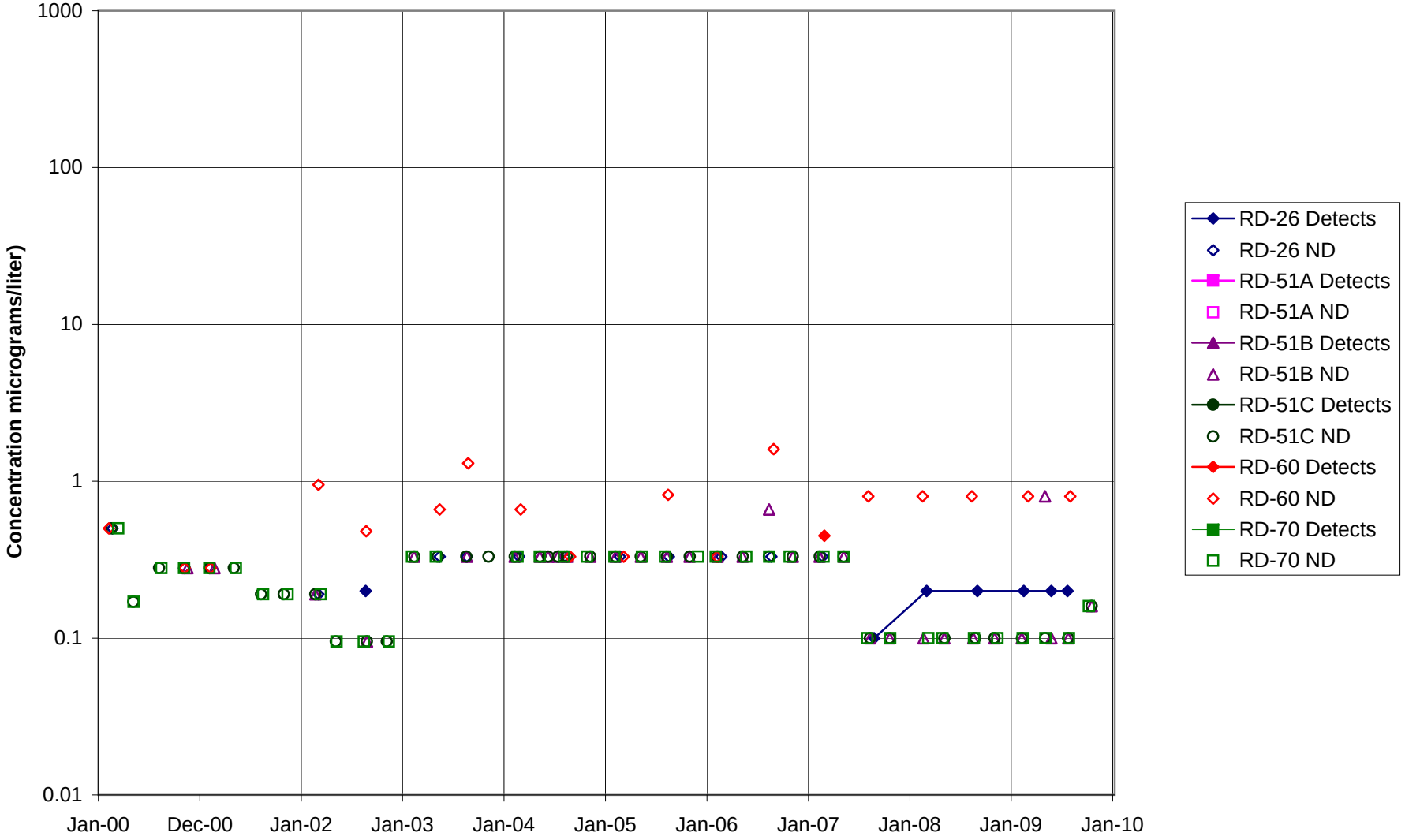


FIGURE F-149. CHLOROFORM in ALFA / BRAVO AREA WELLS

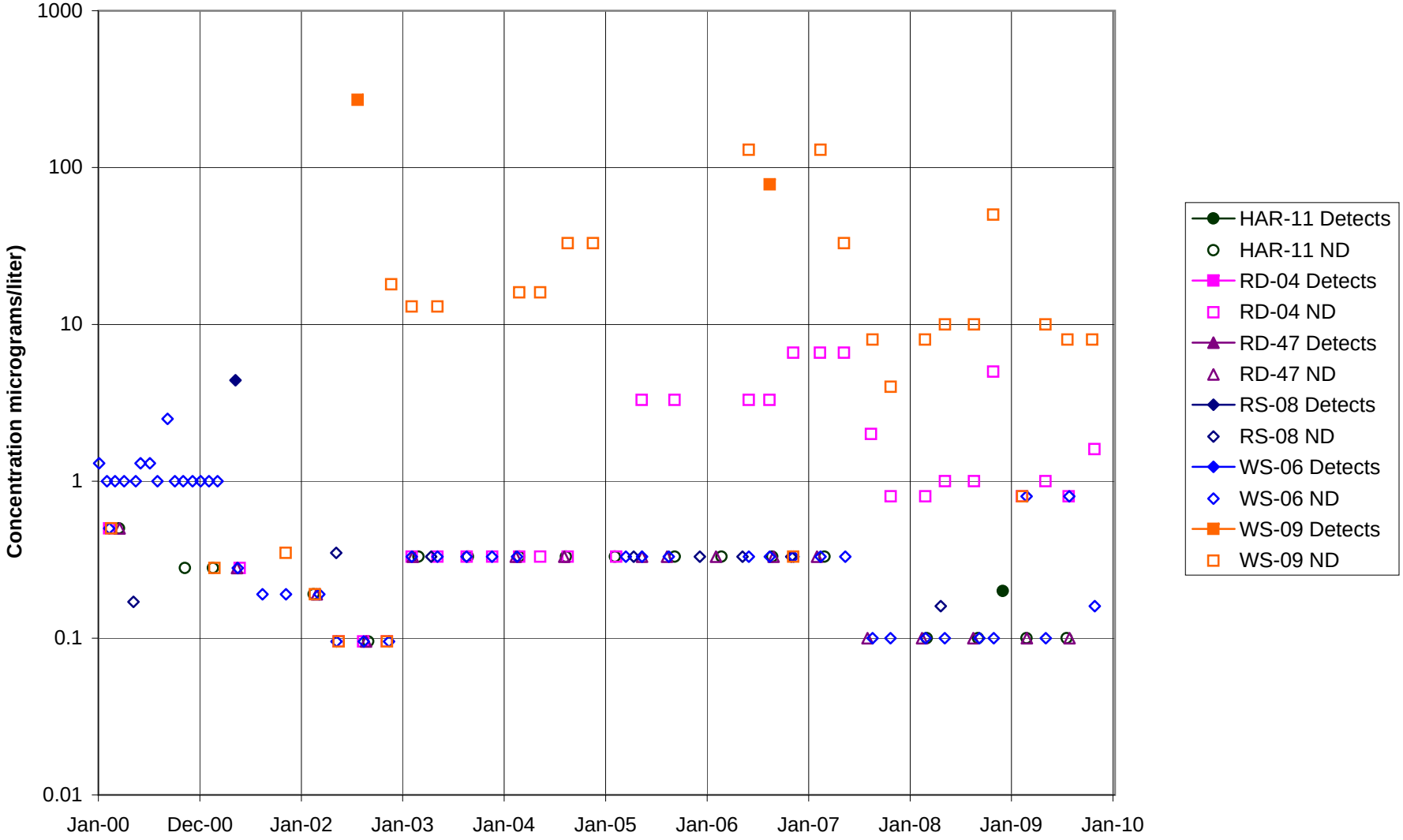


FIGURE F-150. CHLOROFORM in SPA AREA WELLS

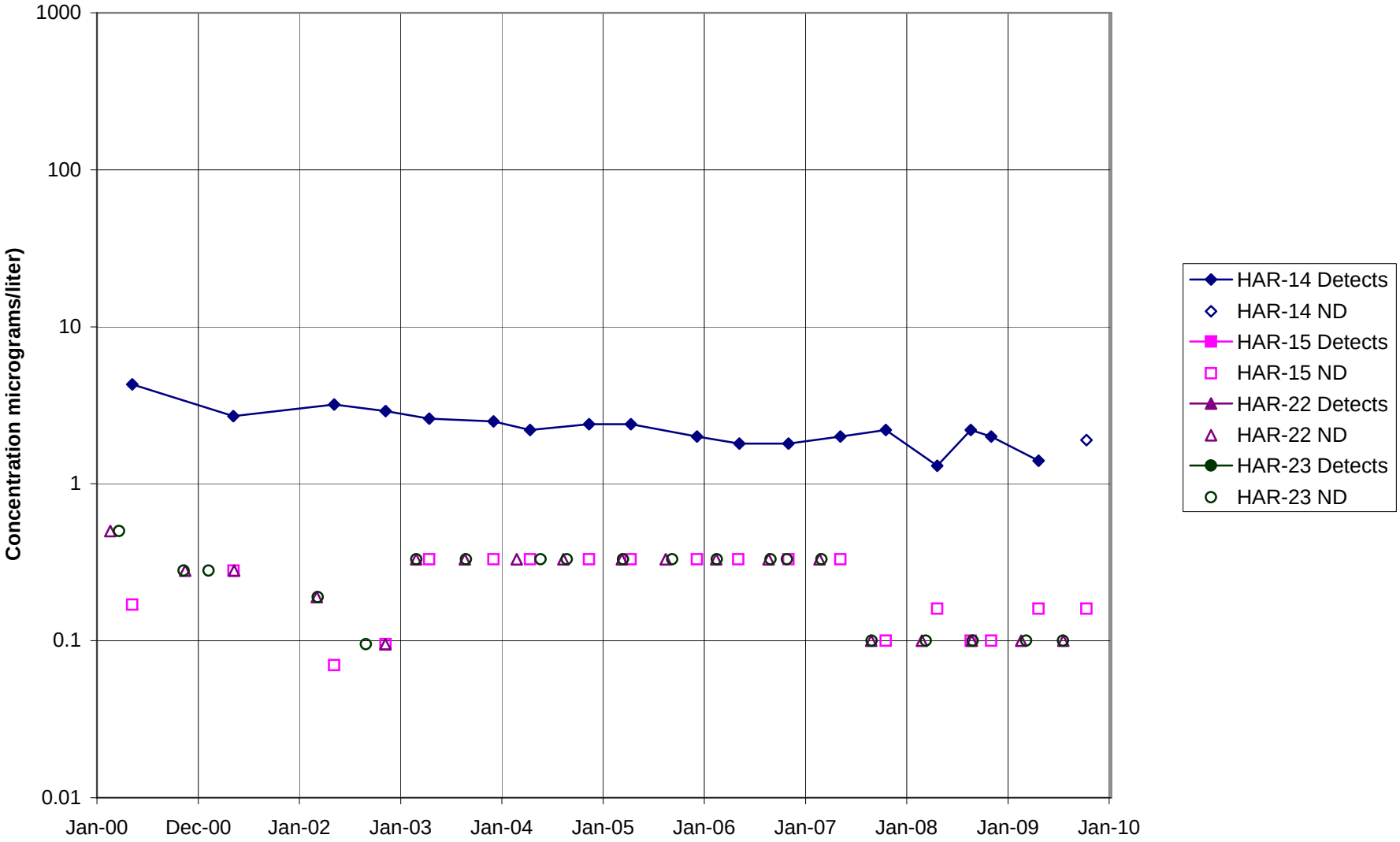


FIGURE F-151. CHLOROFORM in COCA / PLF AREA WELLS

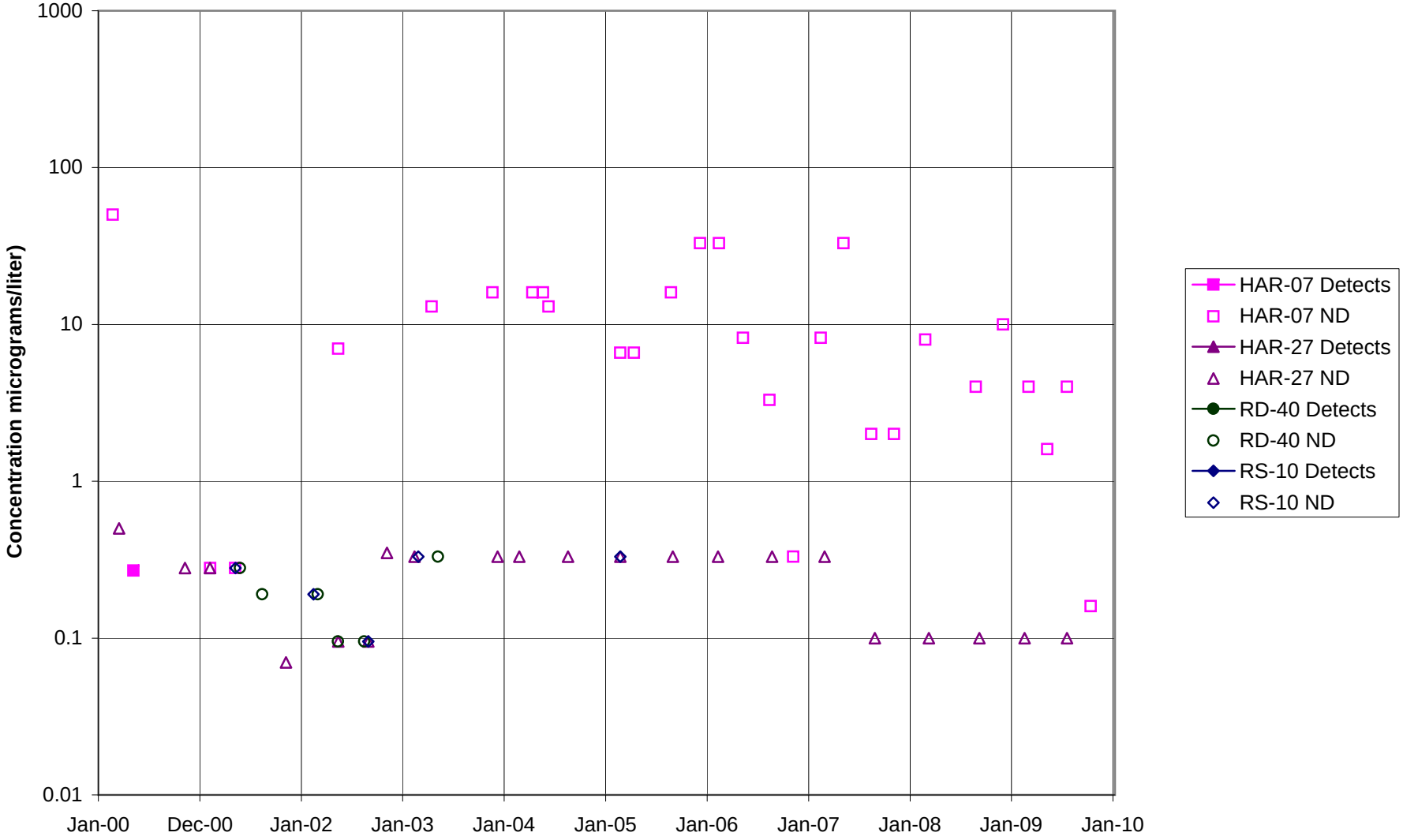


FIGURE F-152. CHLOROFORM in DELTA / BUFFER ZONE AREA WELLS

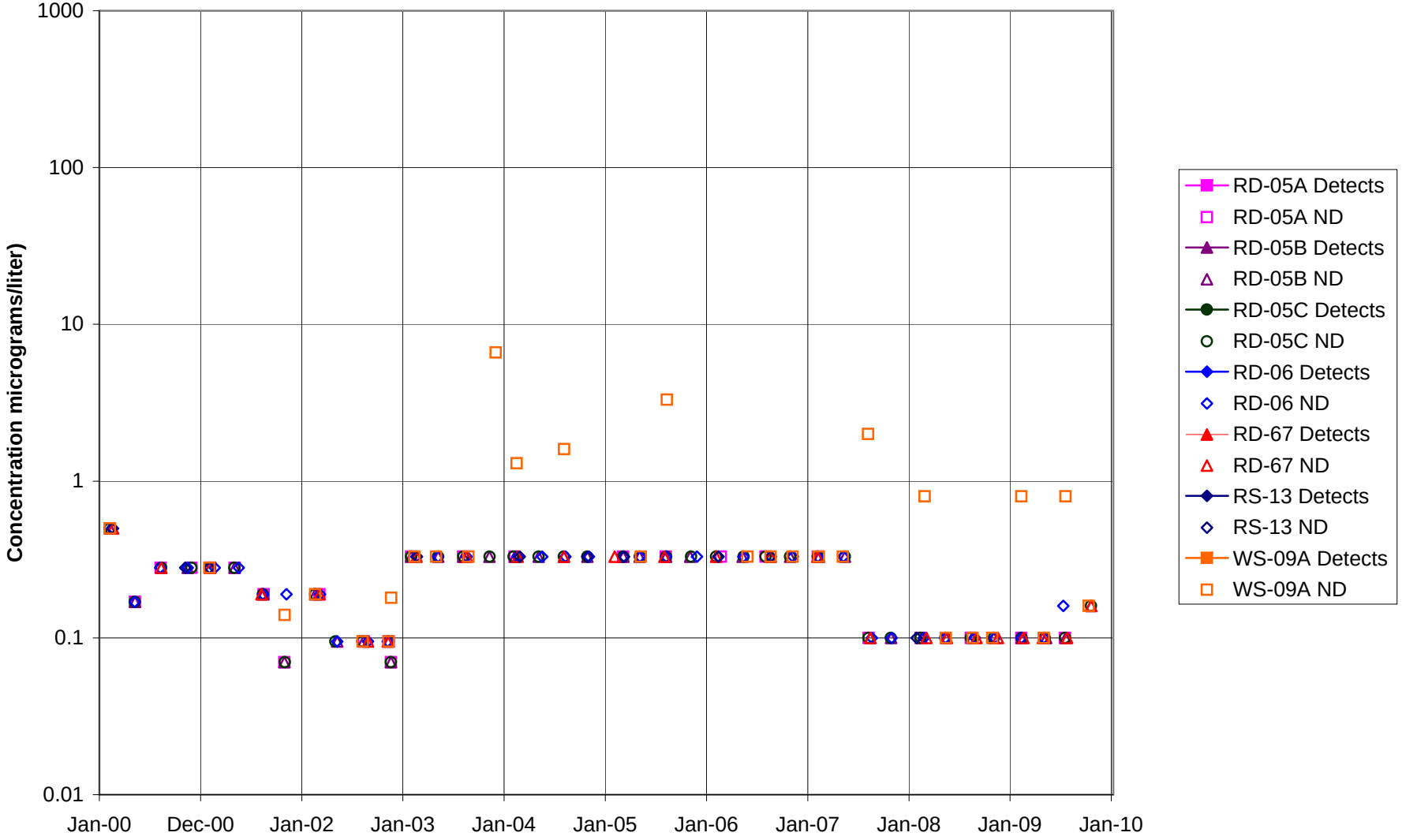


FIGURE F-153. CHLOROFORM in AREA IV WELLS

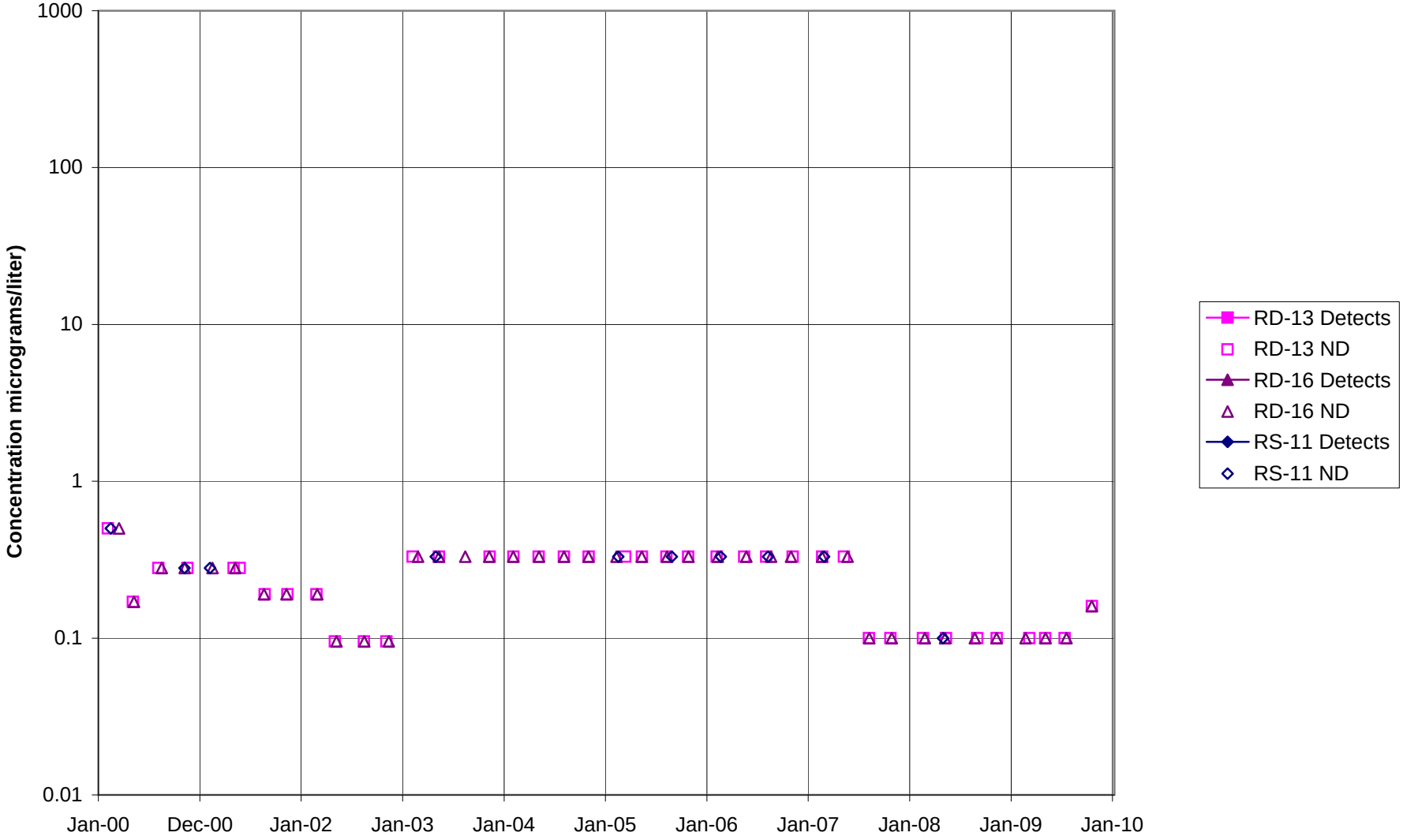


FIGURE F-154. CIS-1,2-DCE in STL-IV AREA SHALLOW WELLS

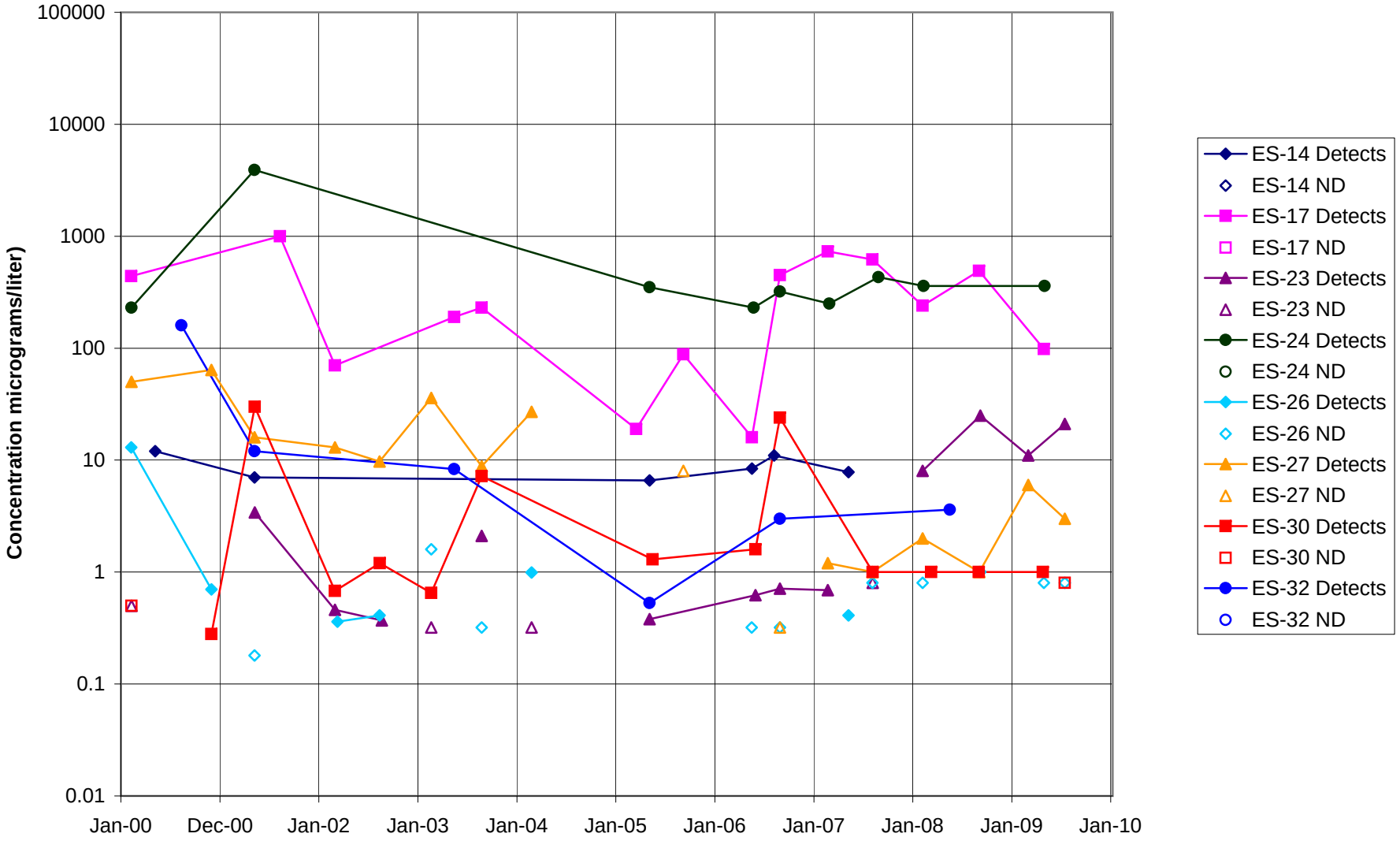


FIGURE F-155. CIS-1,2-DCE in STL-IV AREA CHATSWORTH FORMATION WELLS

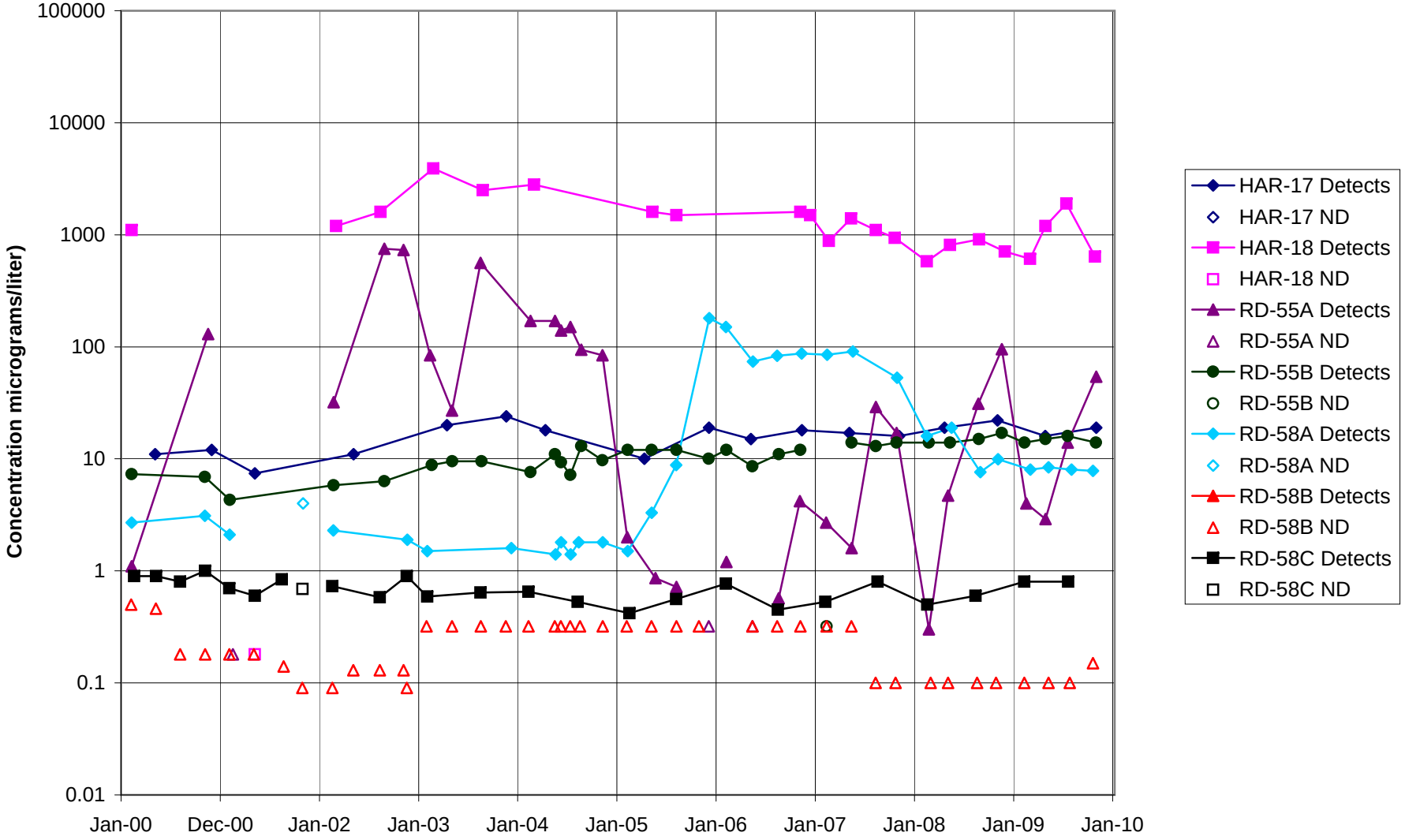


FIGURE F-156. CIS-1,2-DCE in MAIN GATE AREA WELLS - 1

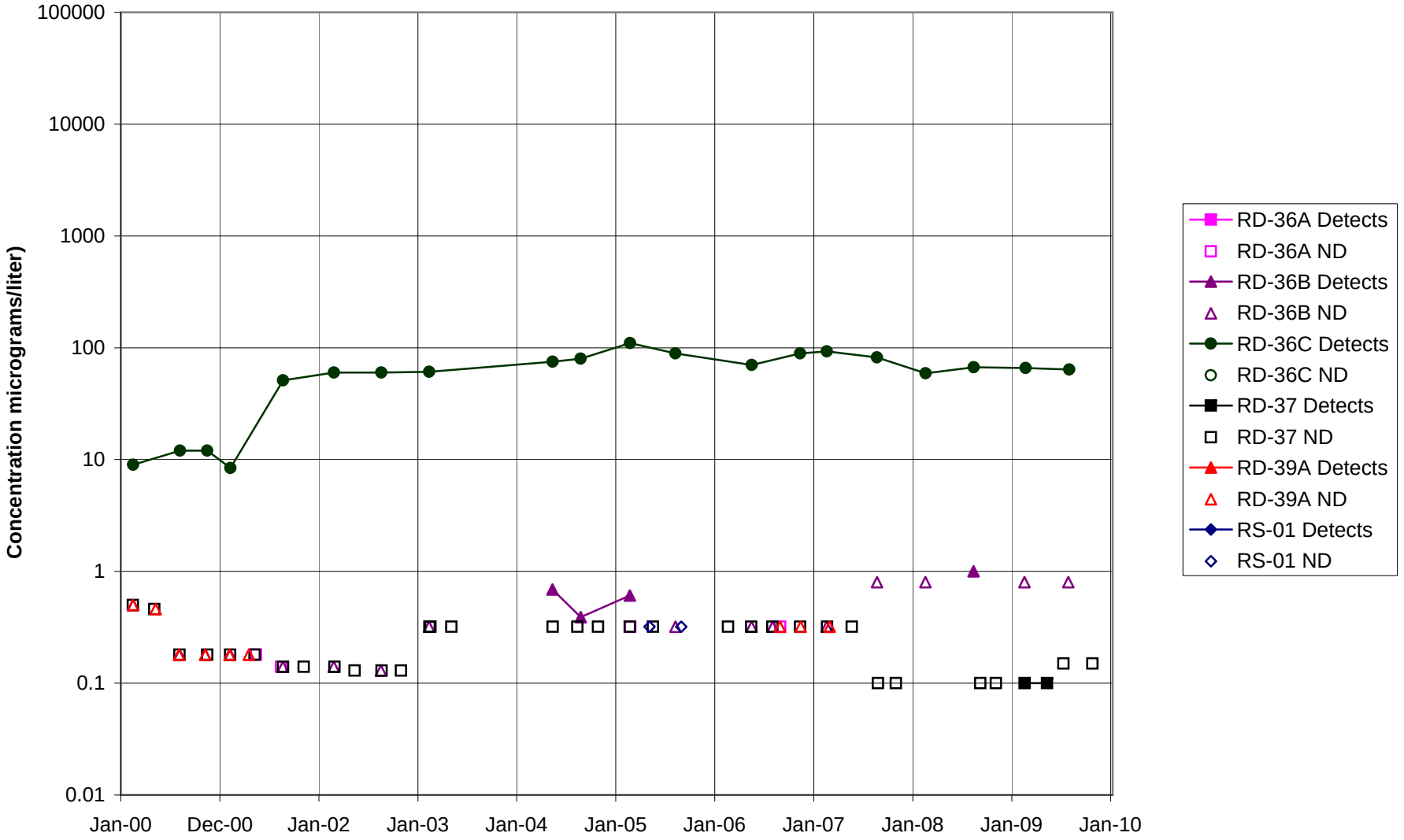


FIGURE F-157. CIS-1,2-DCE in MAIN GATE AREA WELLS - 2

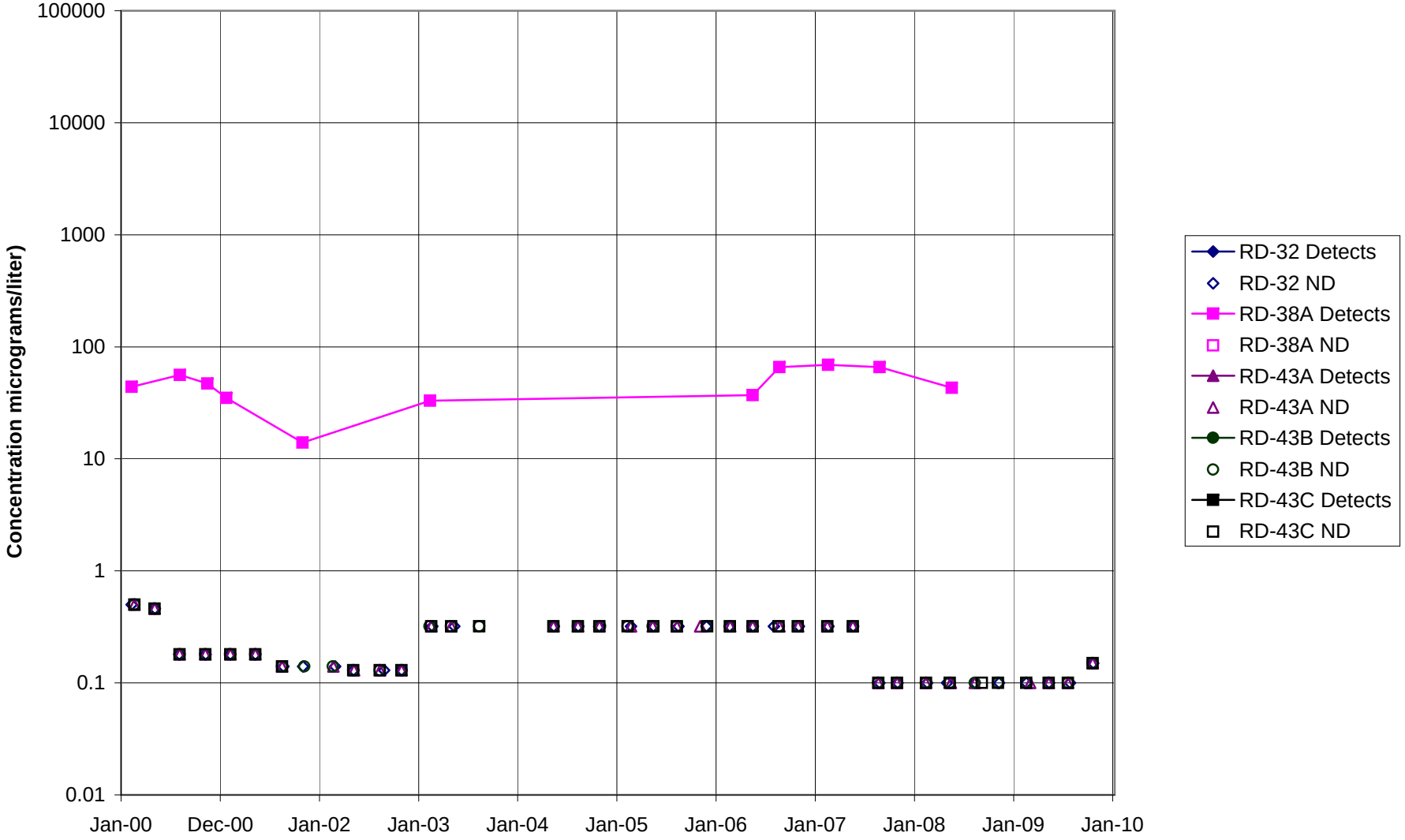


FIGURE F-158. CIS-1,2-DCE in APTF, CANYON & HAPPY VALLEY AREA WELLS -1

FIGURE F-159. CIS-1,2-DCE in APTF, CANYON & HAPPY VALLEY AREA WELLS - 2

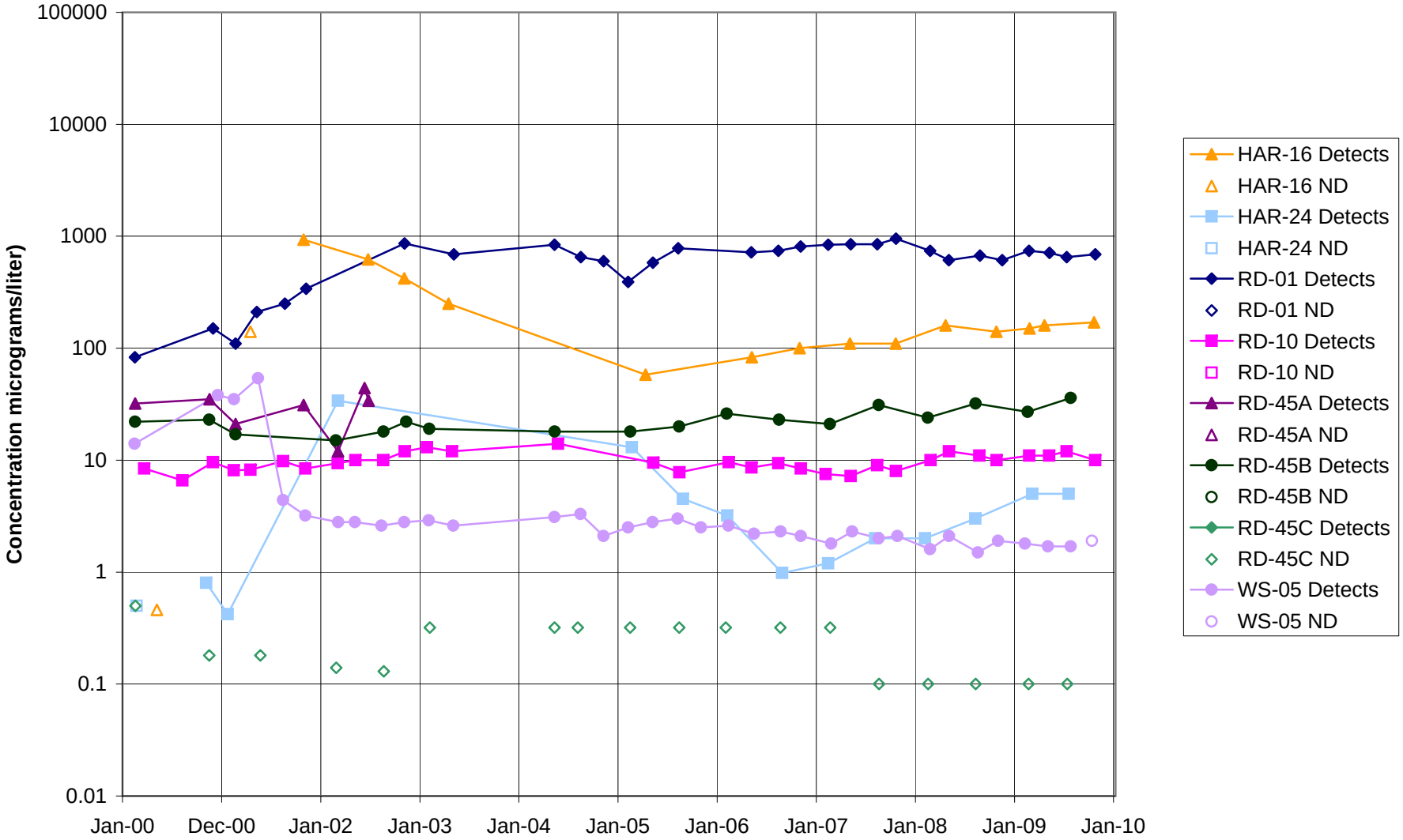


FIGURE F-160. CIS-1,2-DCE in CTL-III / PERIMETER POND AREA WELLS

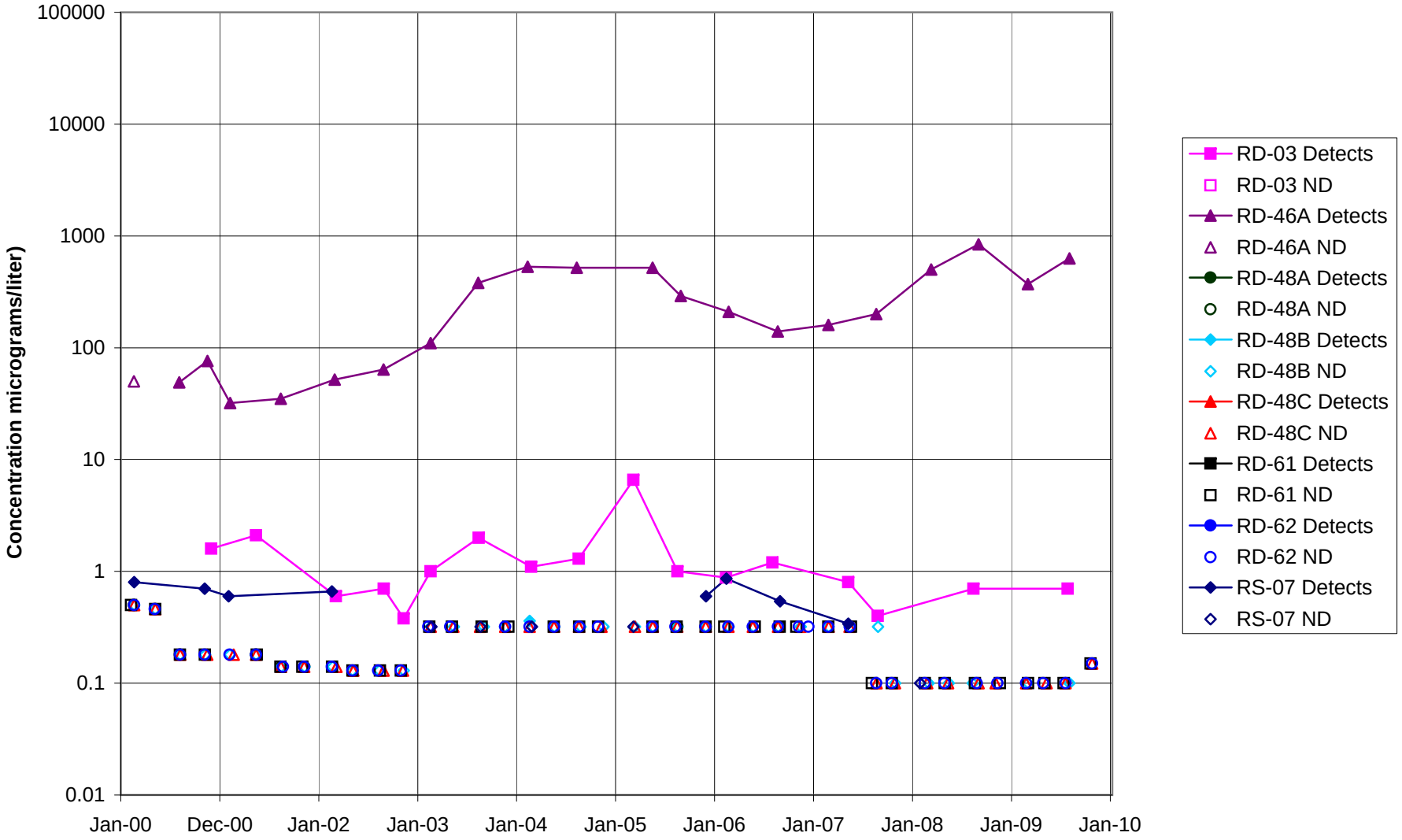


FIGURE F-161. CIS-1,2-DCE in BOWL AREA WELLS

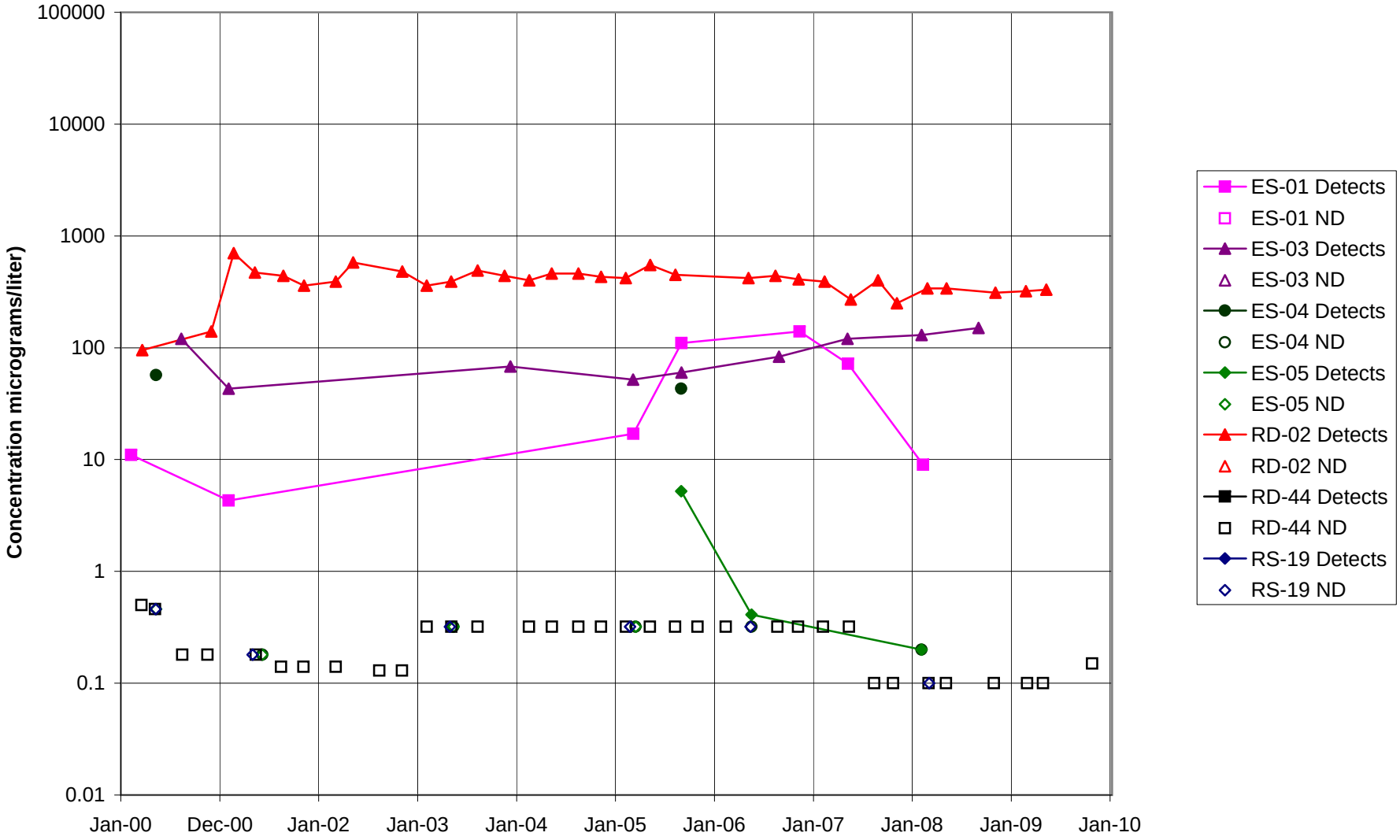


FIGURE F-162. CIS-1,2-DCE in ECL AREA WELLS

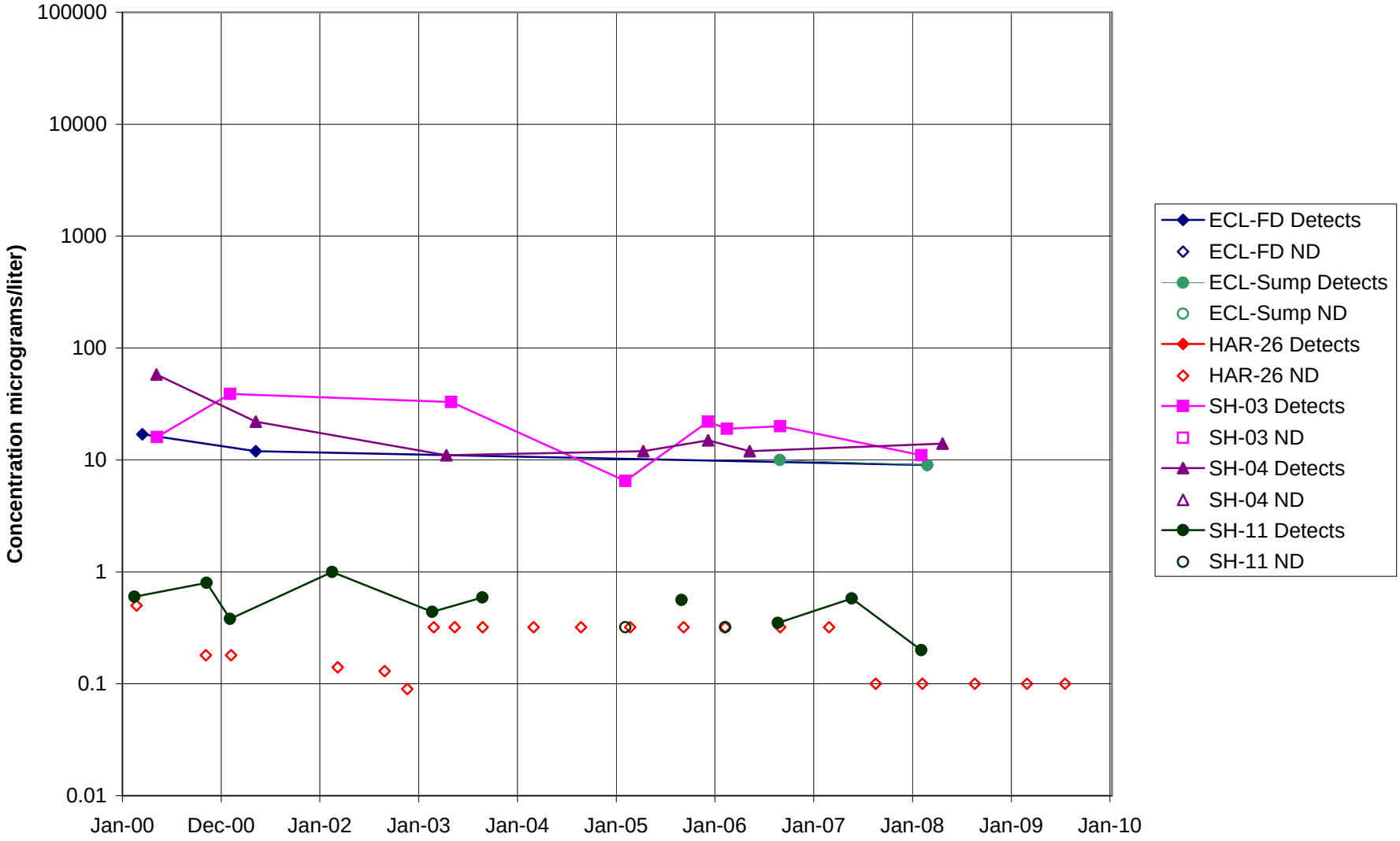


FIGURE F-163. CIS-1,2-DCE in FORMER LOX PLANT AREA WELLS

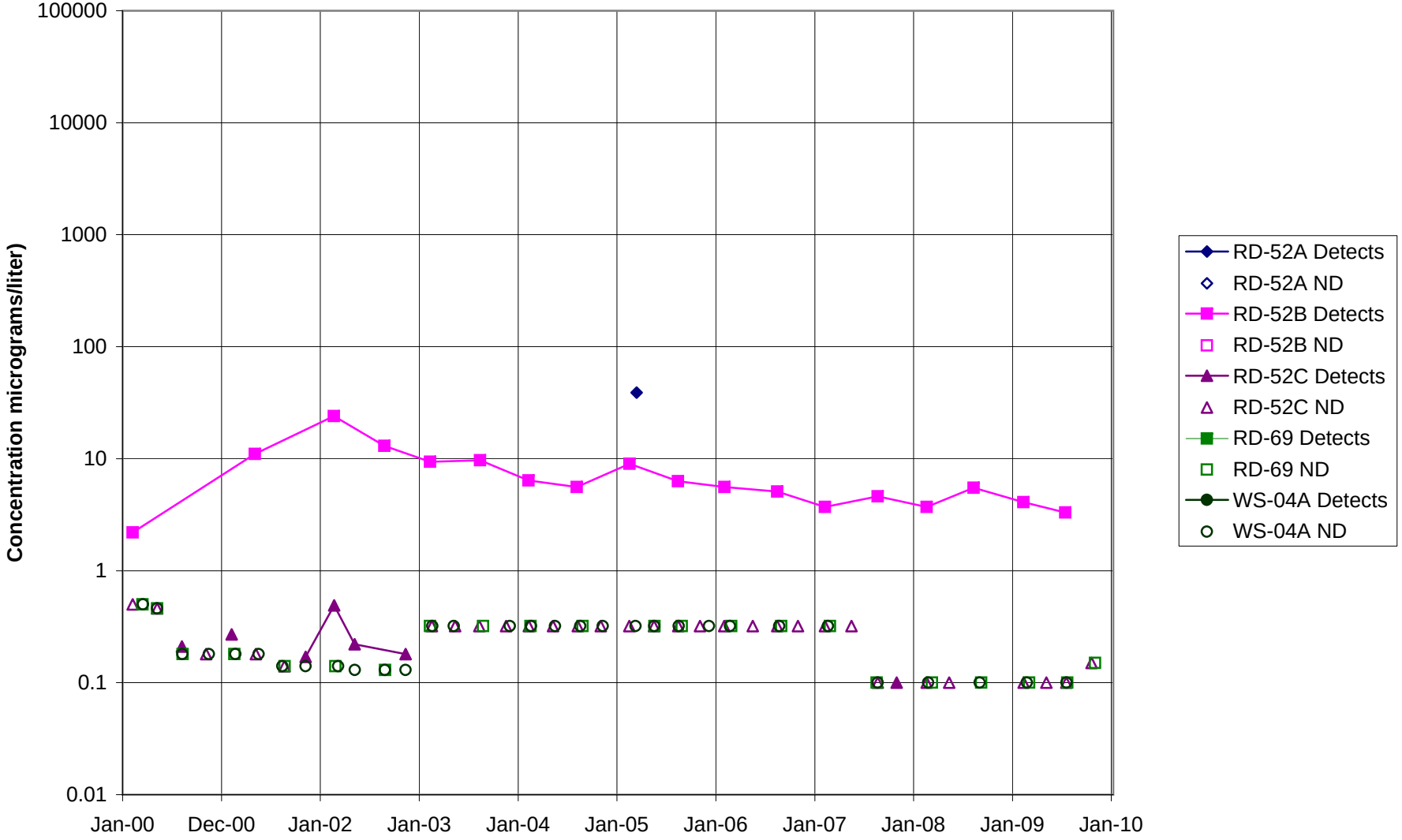


FIGURE F-164. CIS-1,2-DCE in RD-09 AREA WELLS

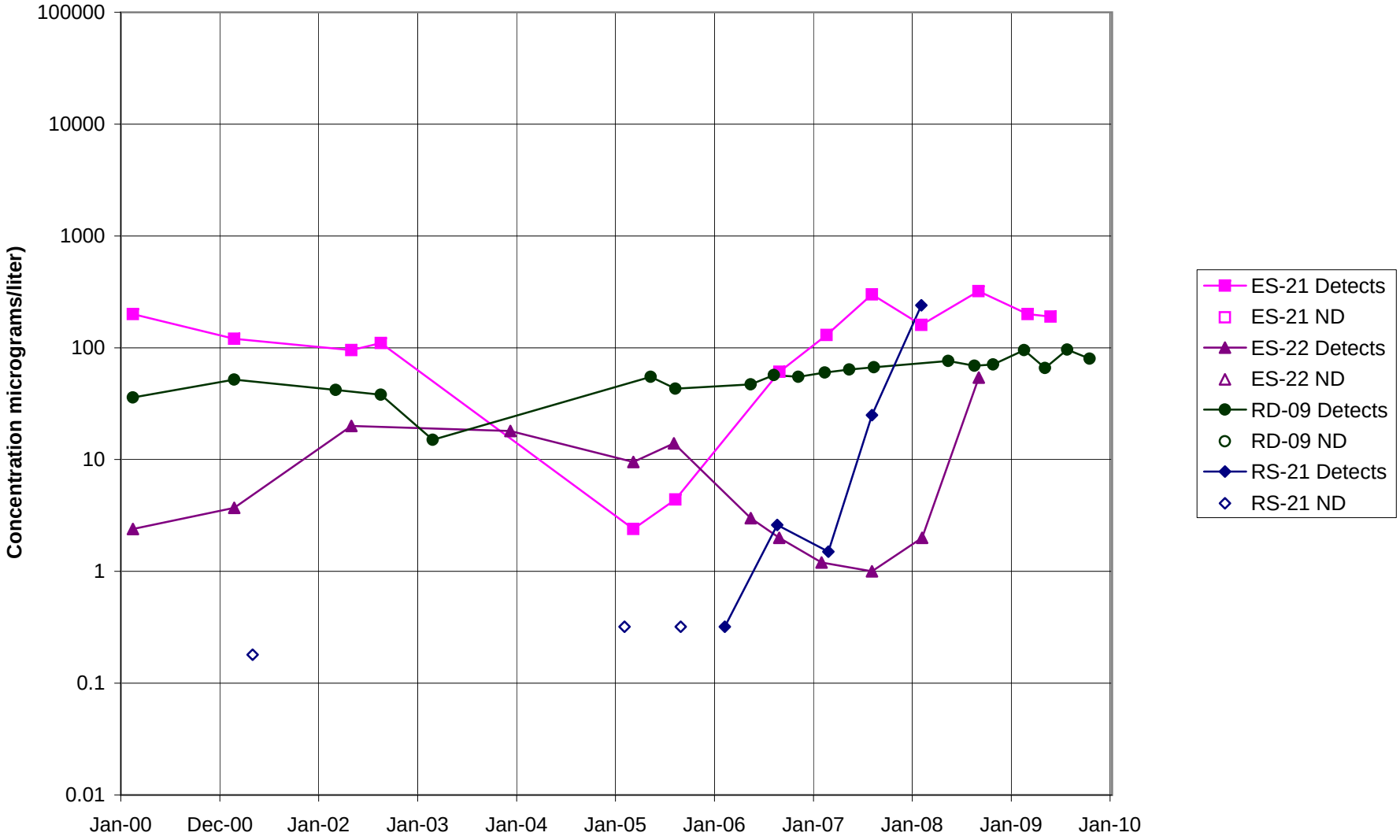


FIGURE F-165. CIS-1,2-DCE in HELIPORT, B/204 AREA WELLS

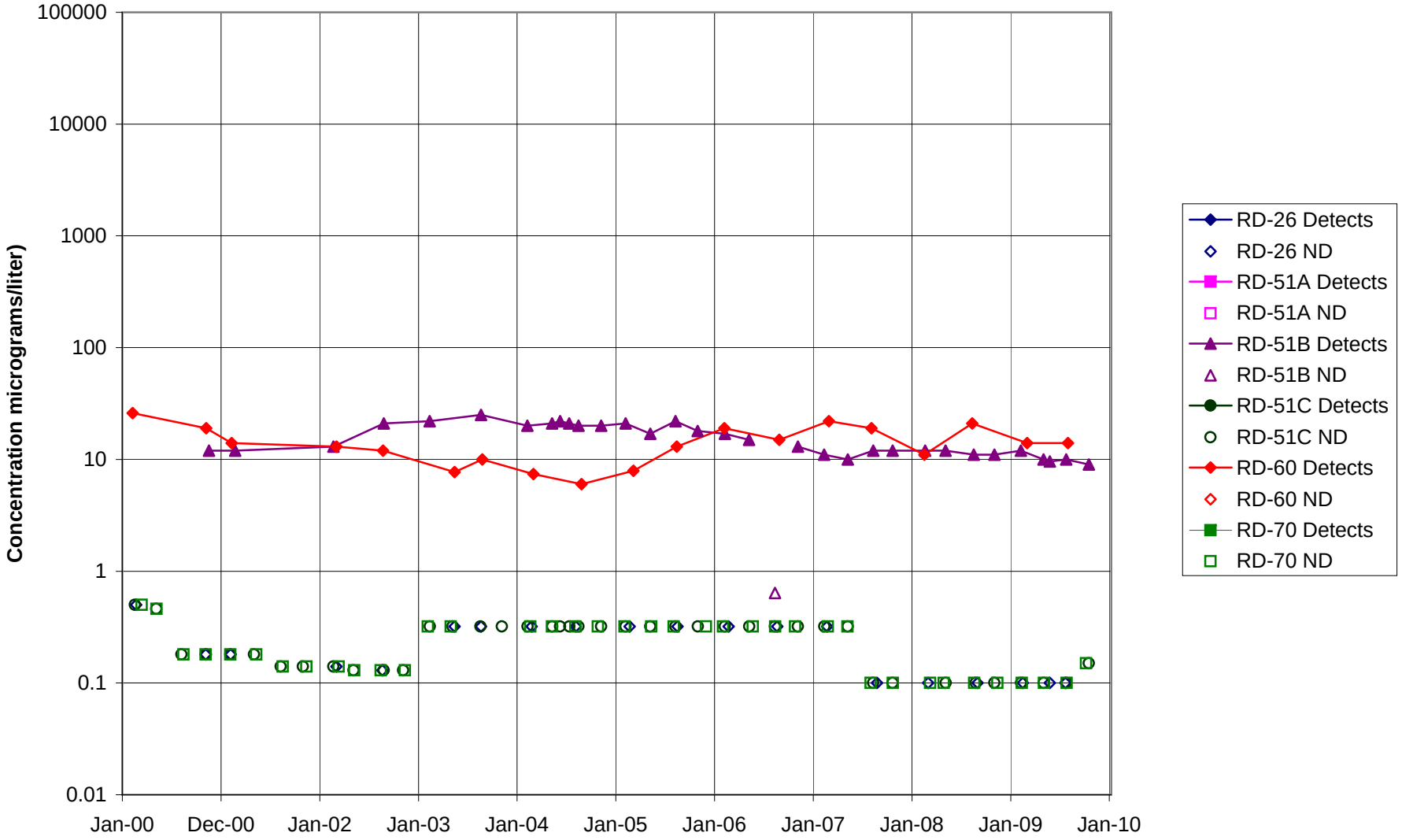


FIGURE F-166. CIS-1,2-DCE in ALFA / BRAVO AREA WELLS

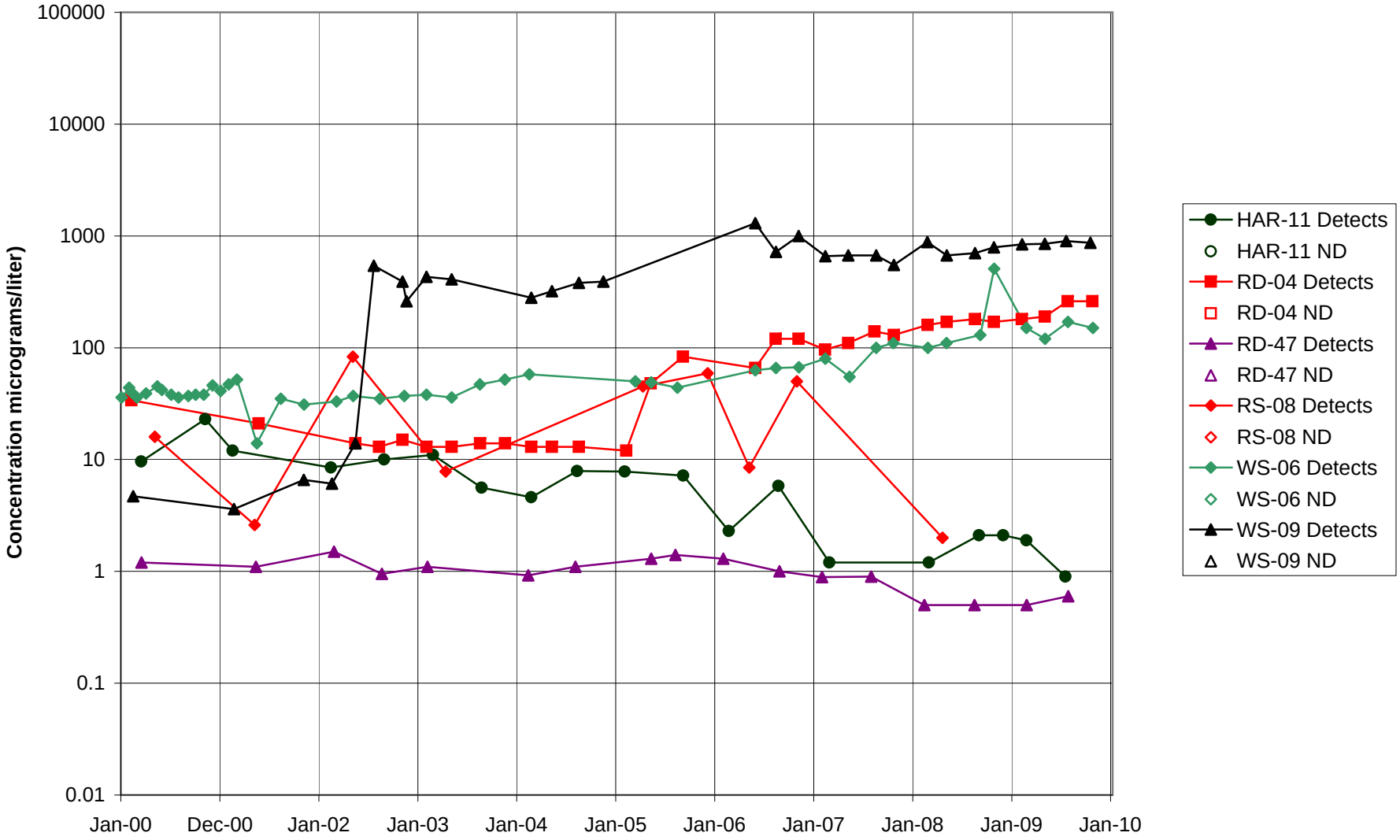


FIGURE F-167. CIS-1,2-DCE in SPA AREA WELLS

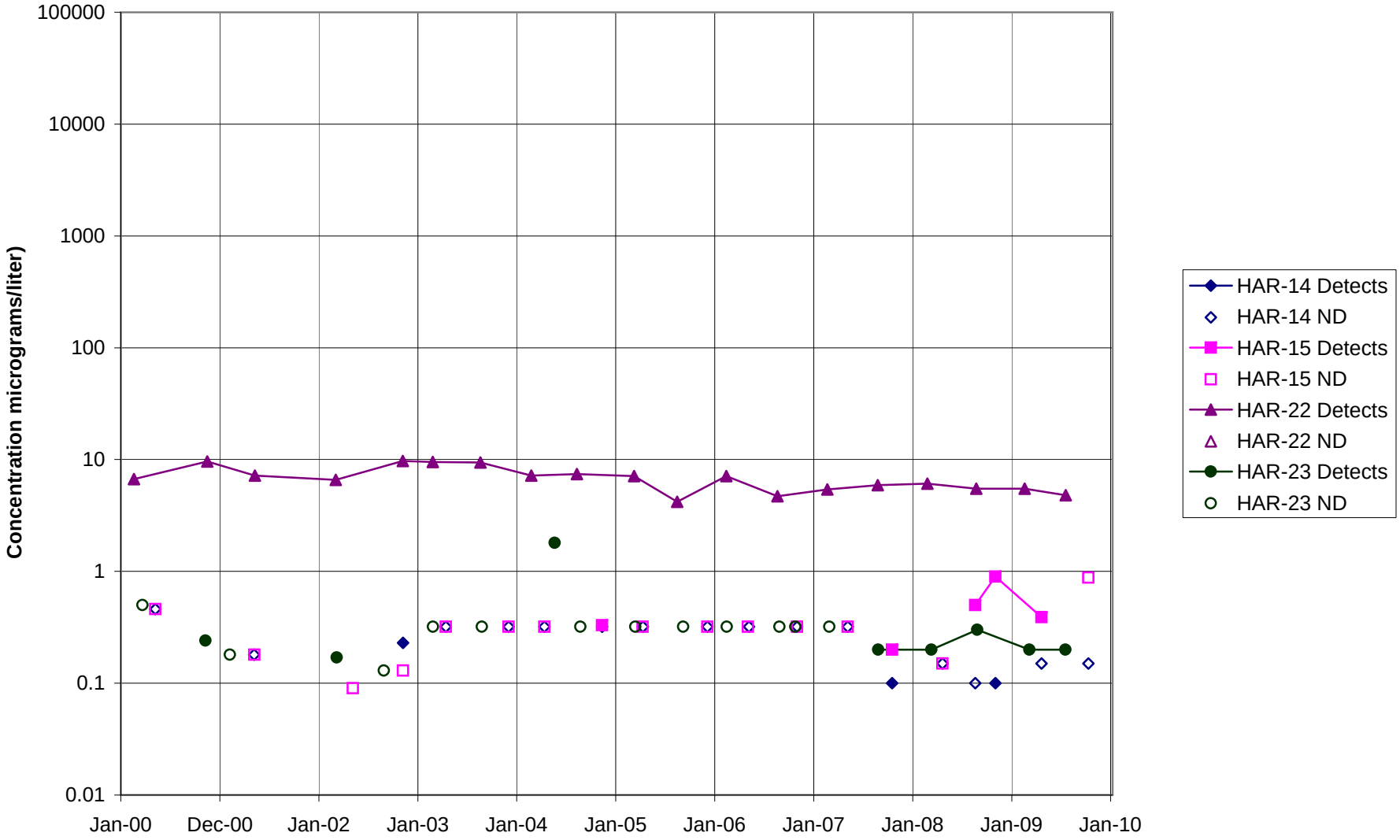


FIGURE F-168. CIS-1,2-DCE in COCA / PLF AREA WELLS

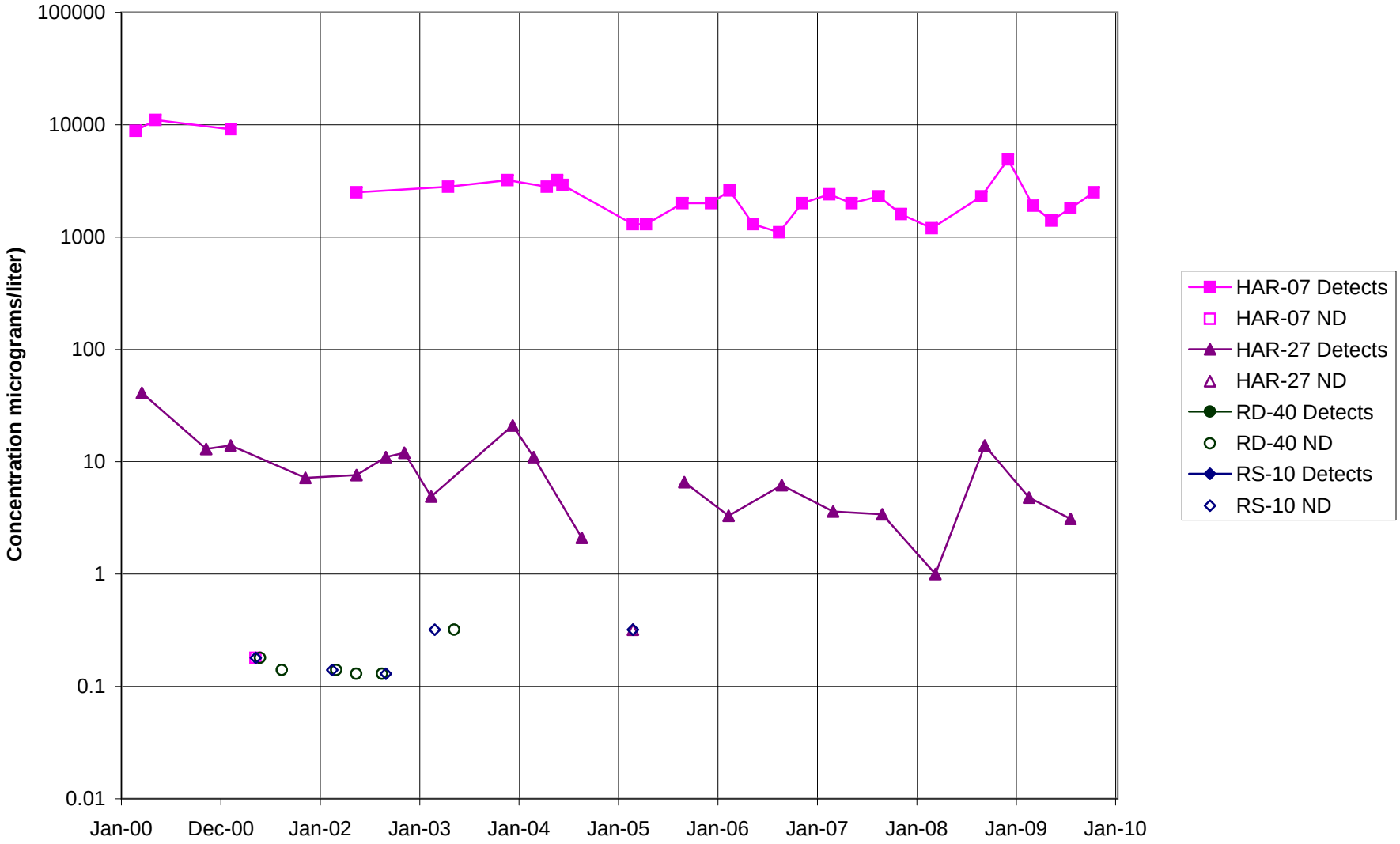


FIGURE F-169. CIS-1,2-DCE in DELTA / BUFFER ZONE AREA WELLS

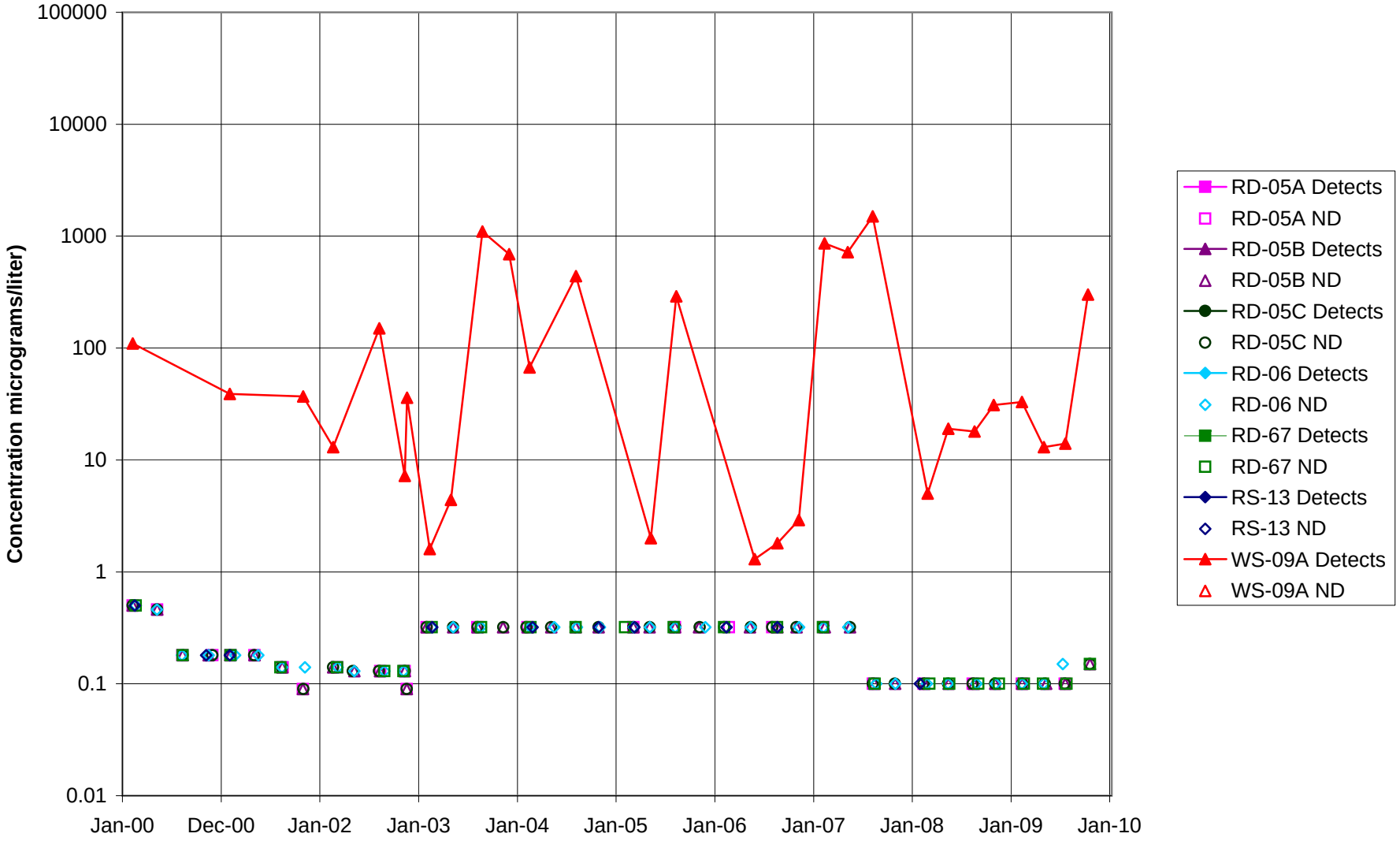


FIGURE F-170. CIS-1,2-DCE in AREA IV WELLS

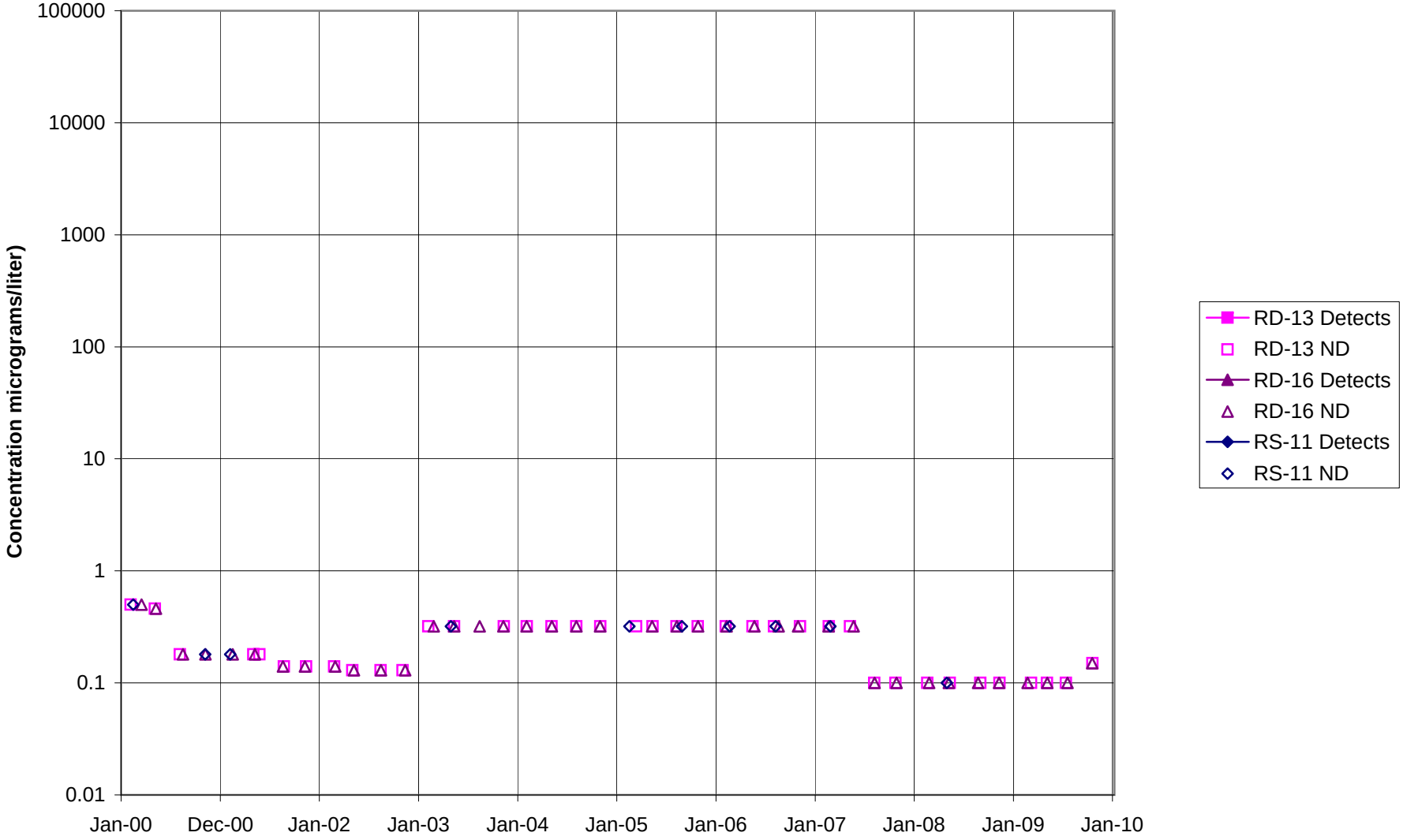


FIGURE F-171. ETHYLBENZENE IN STL-IV AREA SHALLOW WELLS

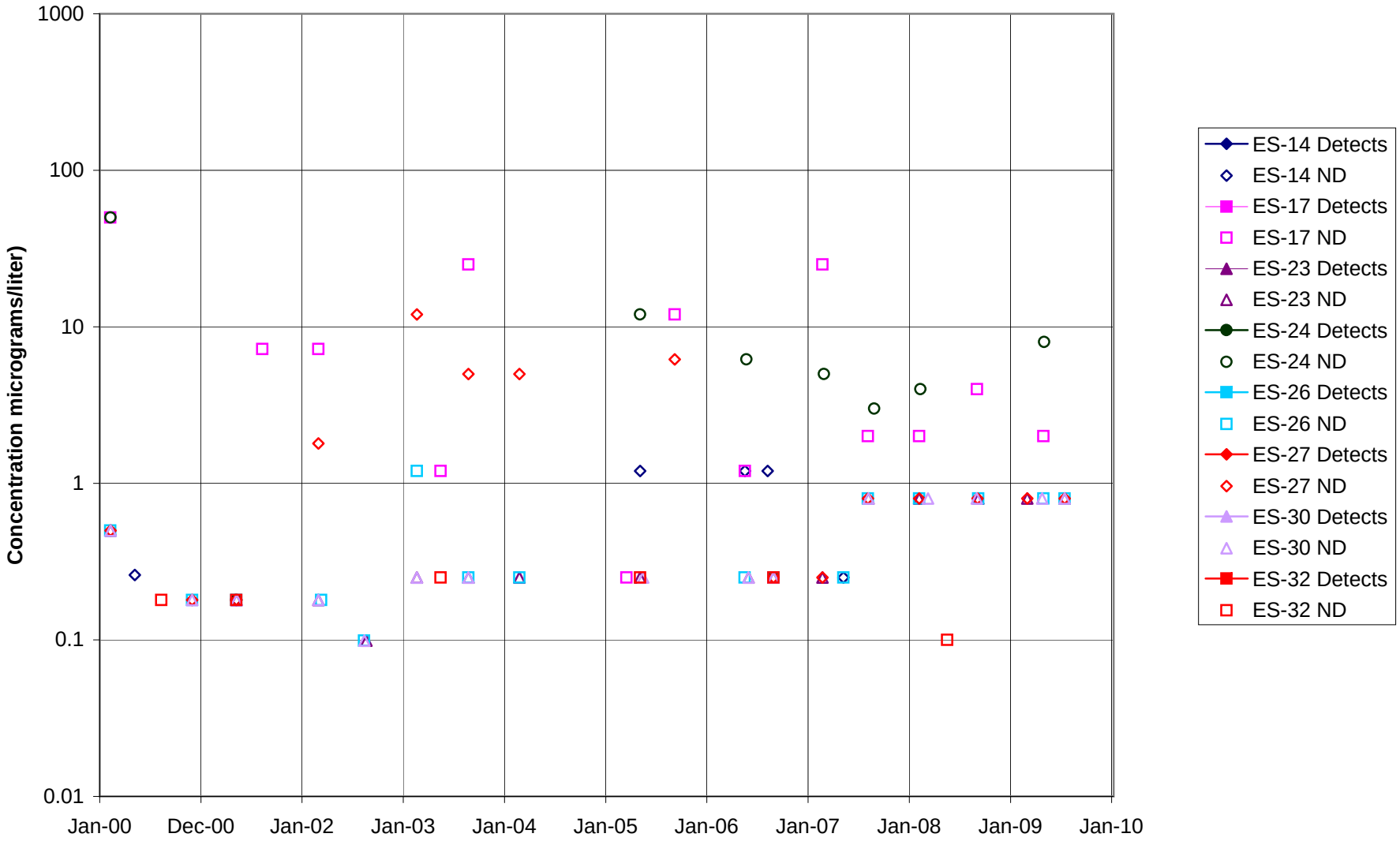


FIGURE F-172. ETHYLBENZENE IN STL-IV AREA CHATSWORTH FORMATION WELLS

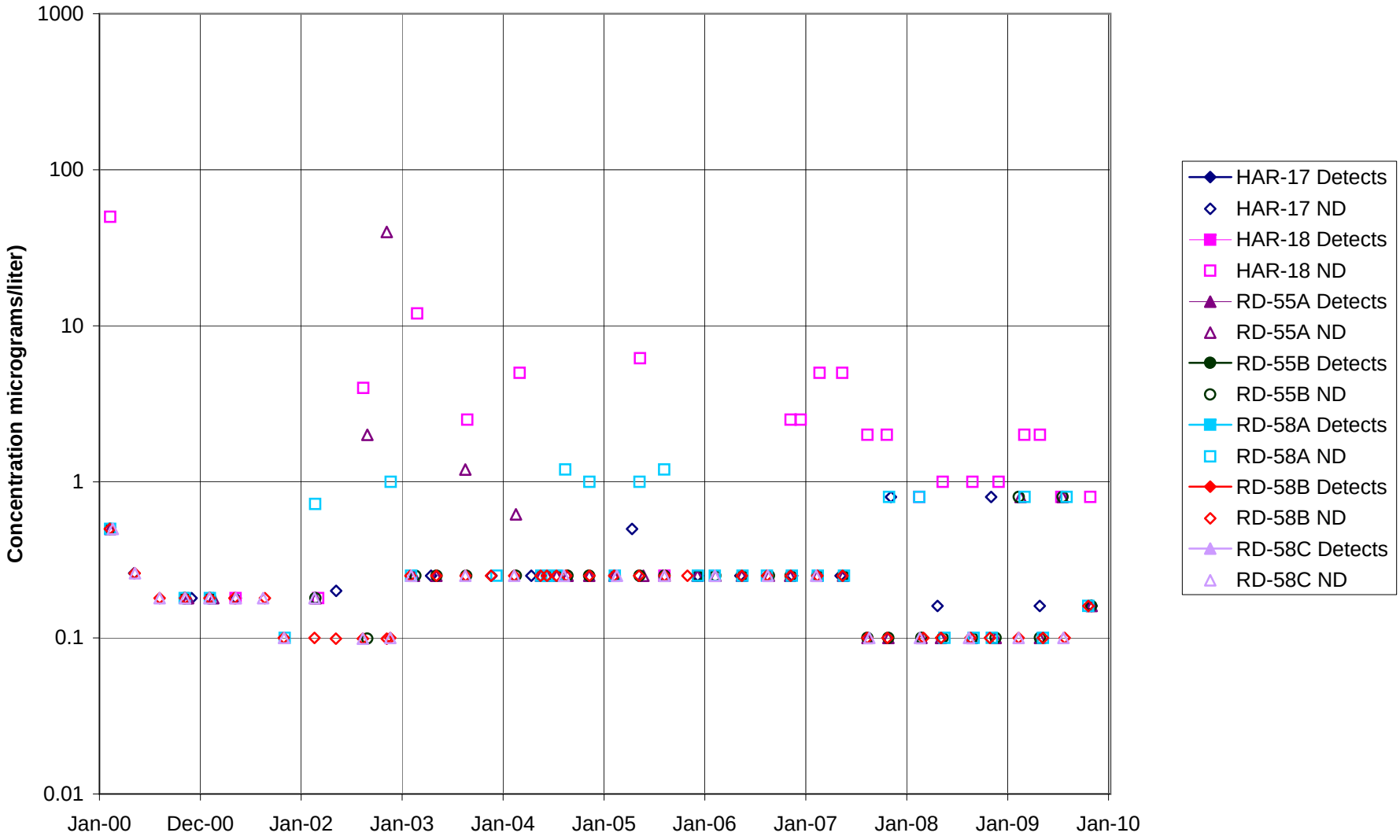


FIGURE F-173. ETHYLBENZENE IN MAIN GATE AREA WELLS - 1

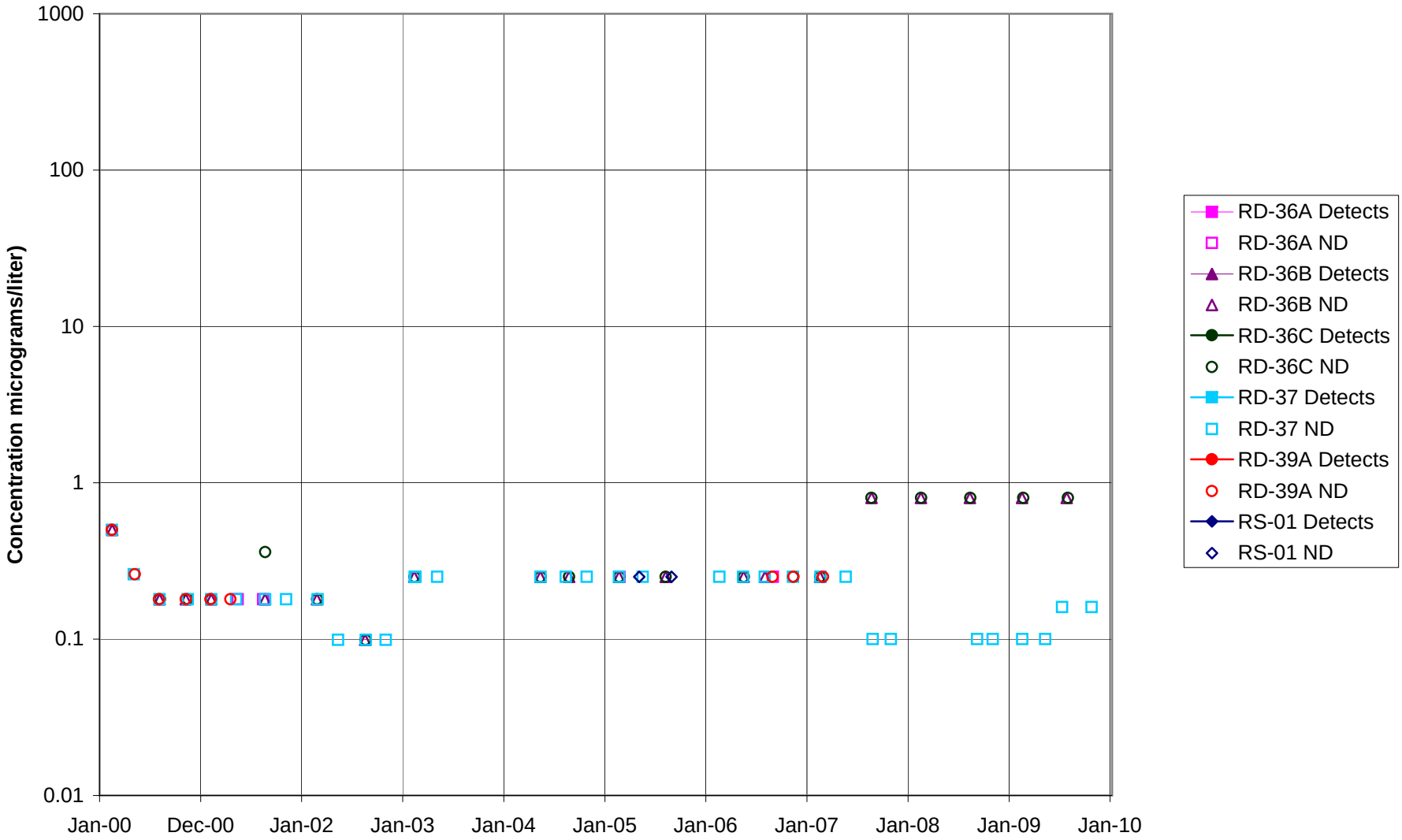


FIGURE F-174. ETHYLBENZENE IN MAIN GATE AREA WELLS - 2

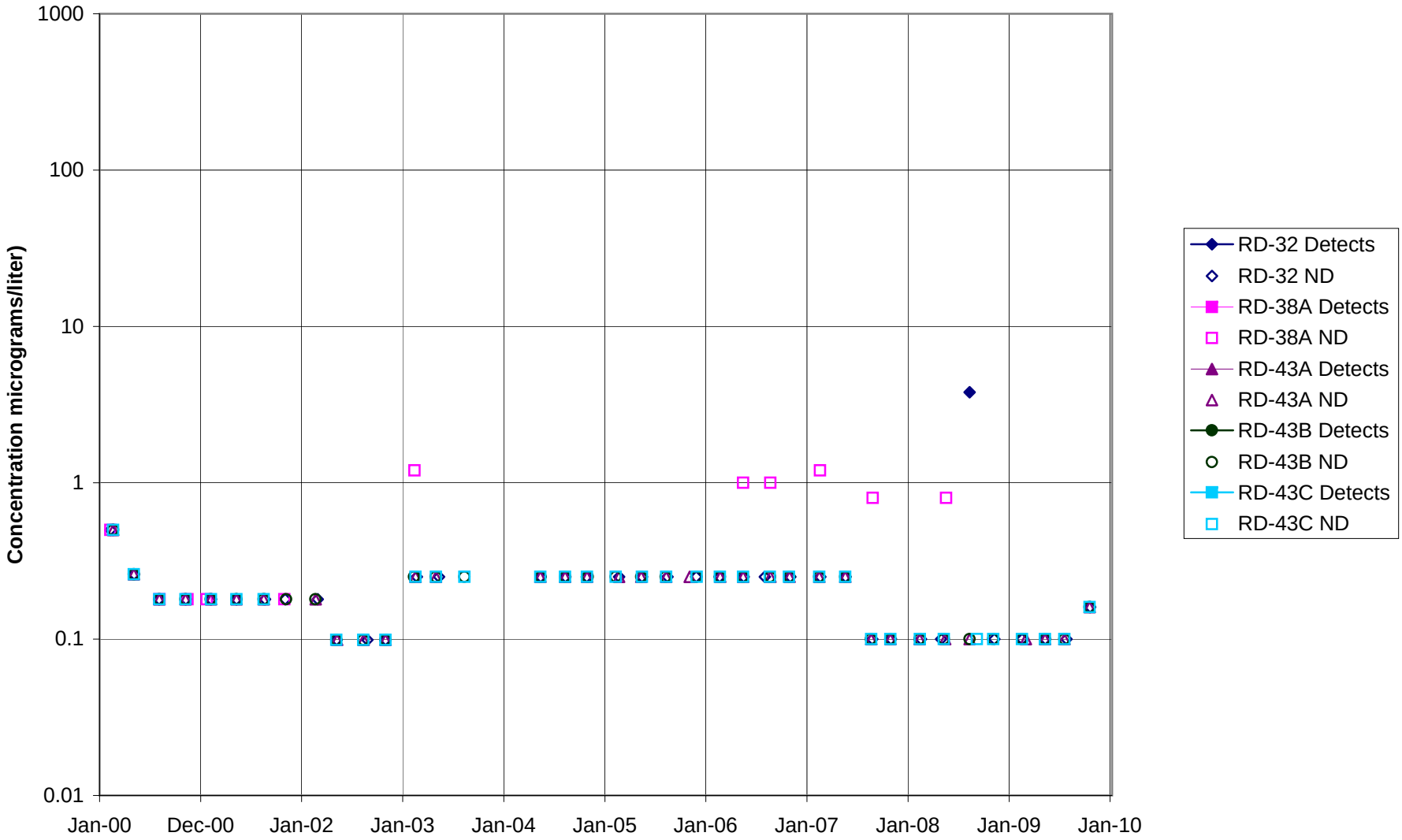


FIGURE F-175. ETHYLBENZENE IN APTF, CANYON & HAPPY VALLEY AREA WELLS - 1

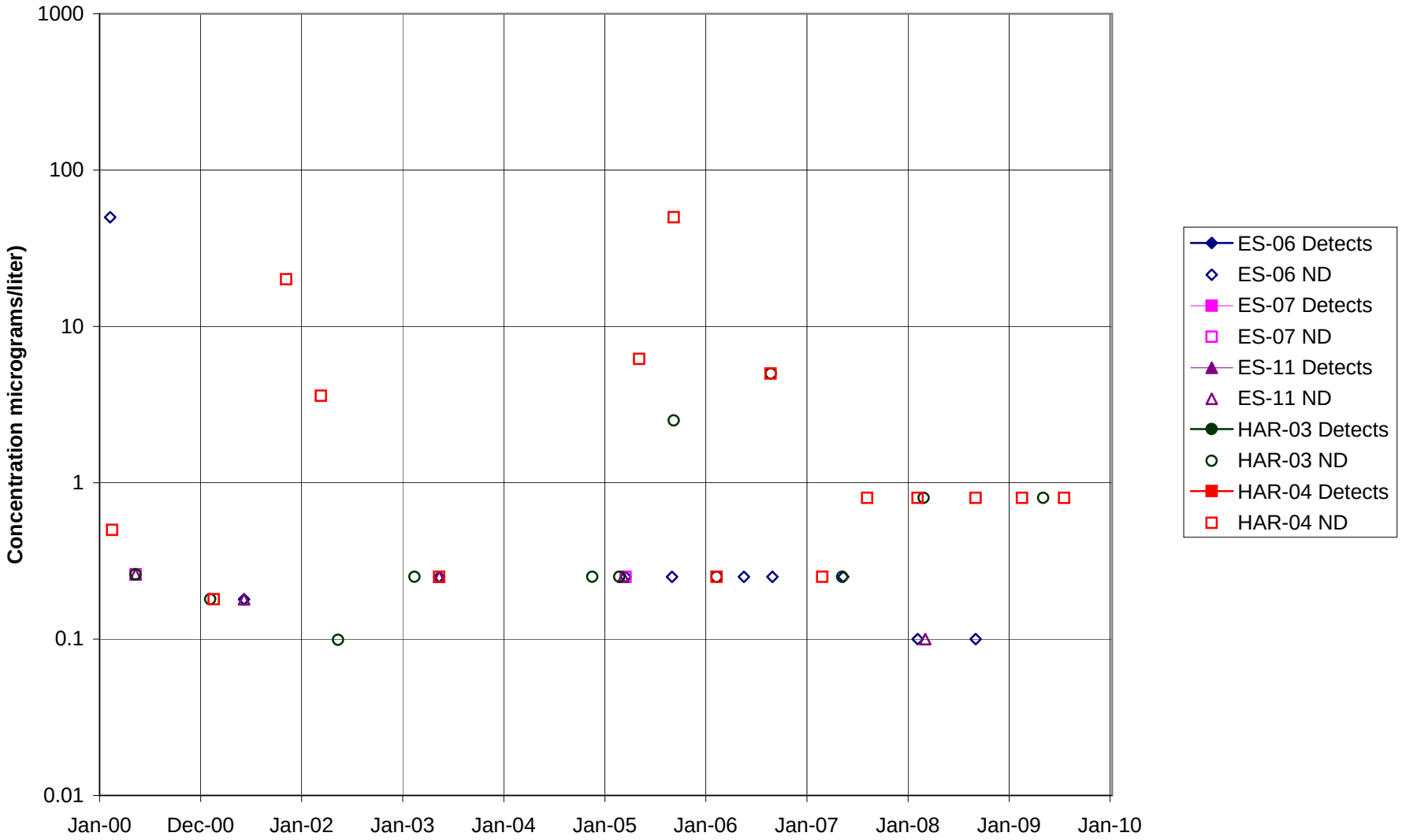


FIGURE F-176. ETHYLBENZENE IN APTF, CANYON & HAPPY VALLEY AREA WELLS - 2

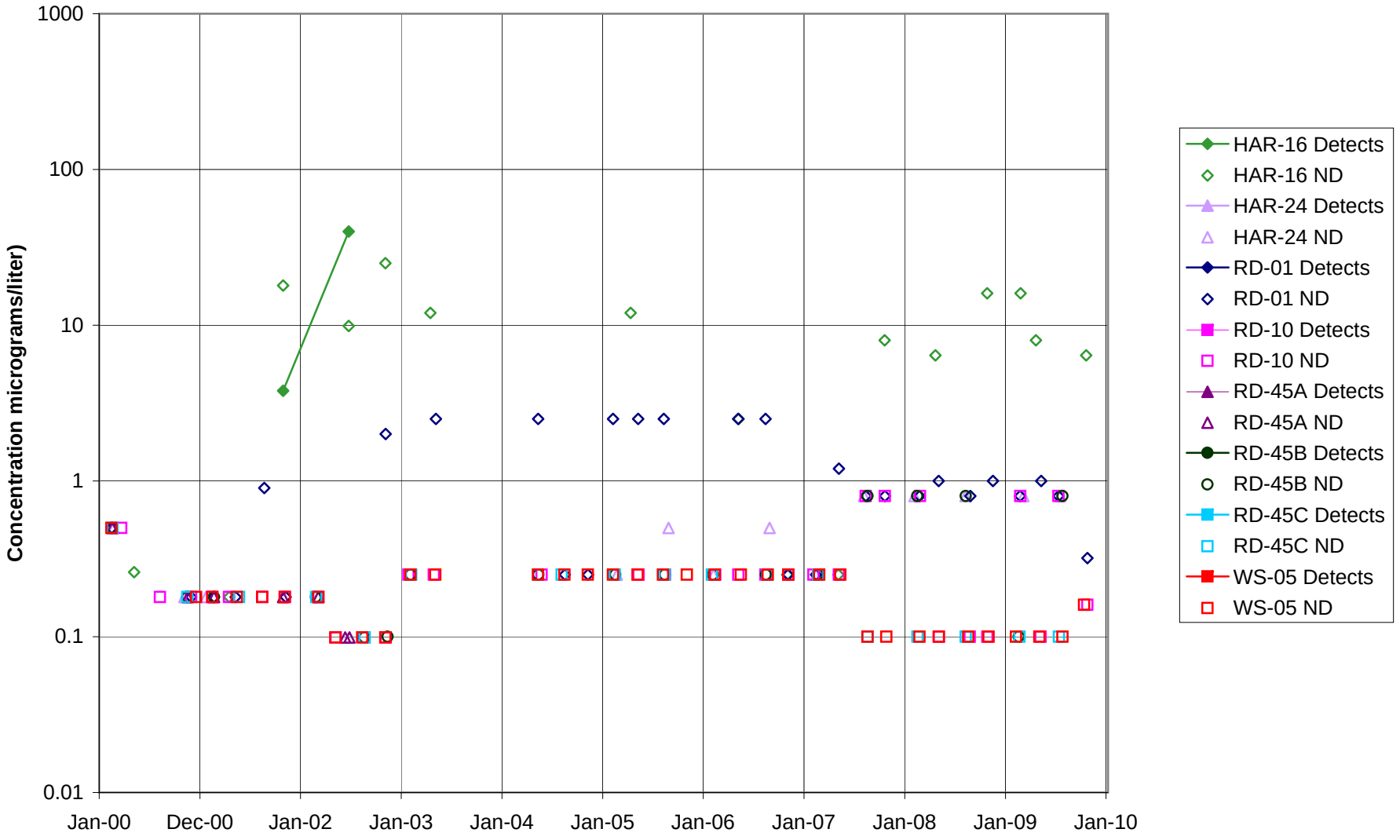


FIGURE F-177. ETHYLBENZENE IN CTL-III / PERIMETER POND AREA WELLS

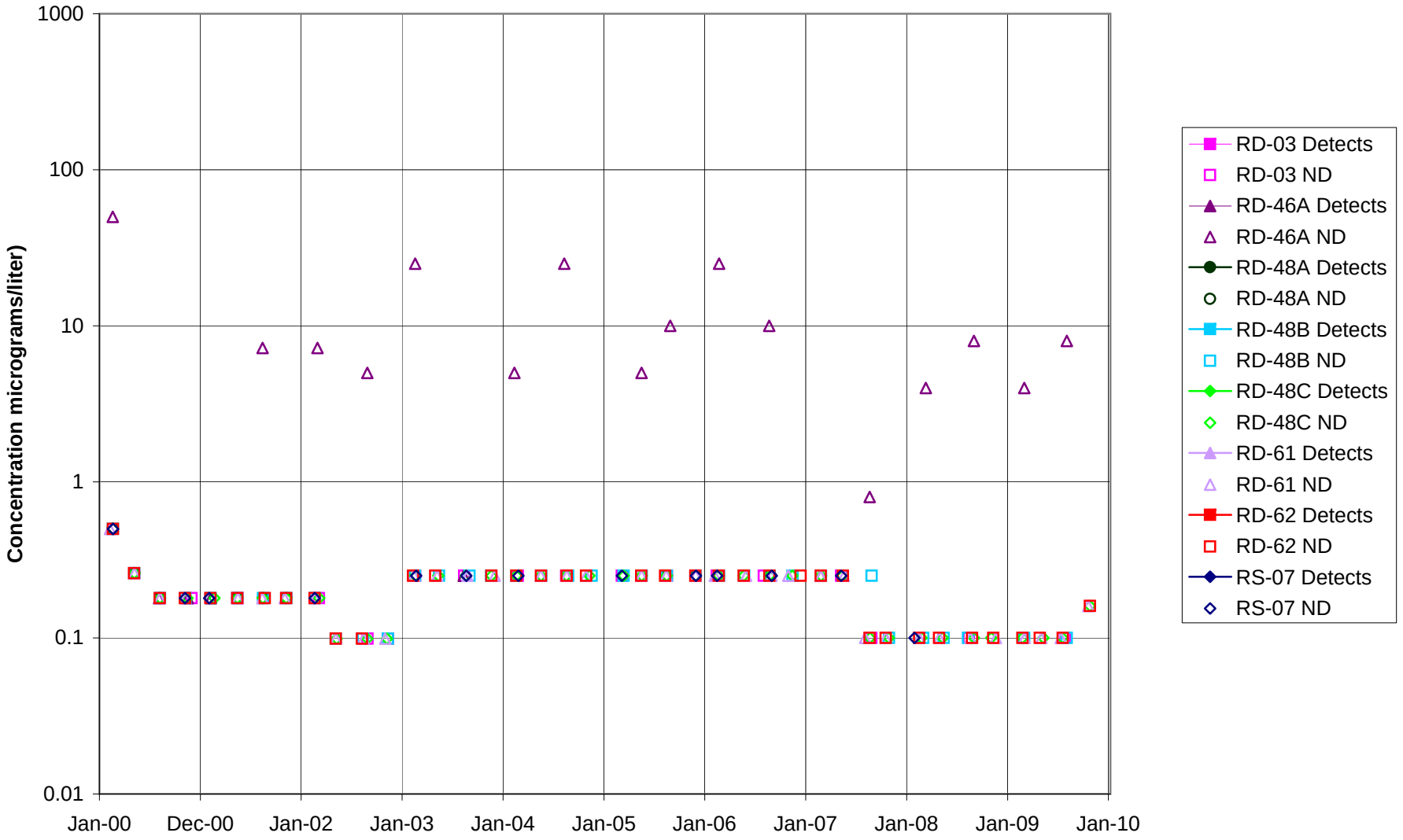


FIGURE F-178. ETHYLBENZENE IN BOWL AREA WELLS

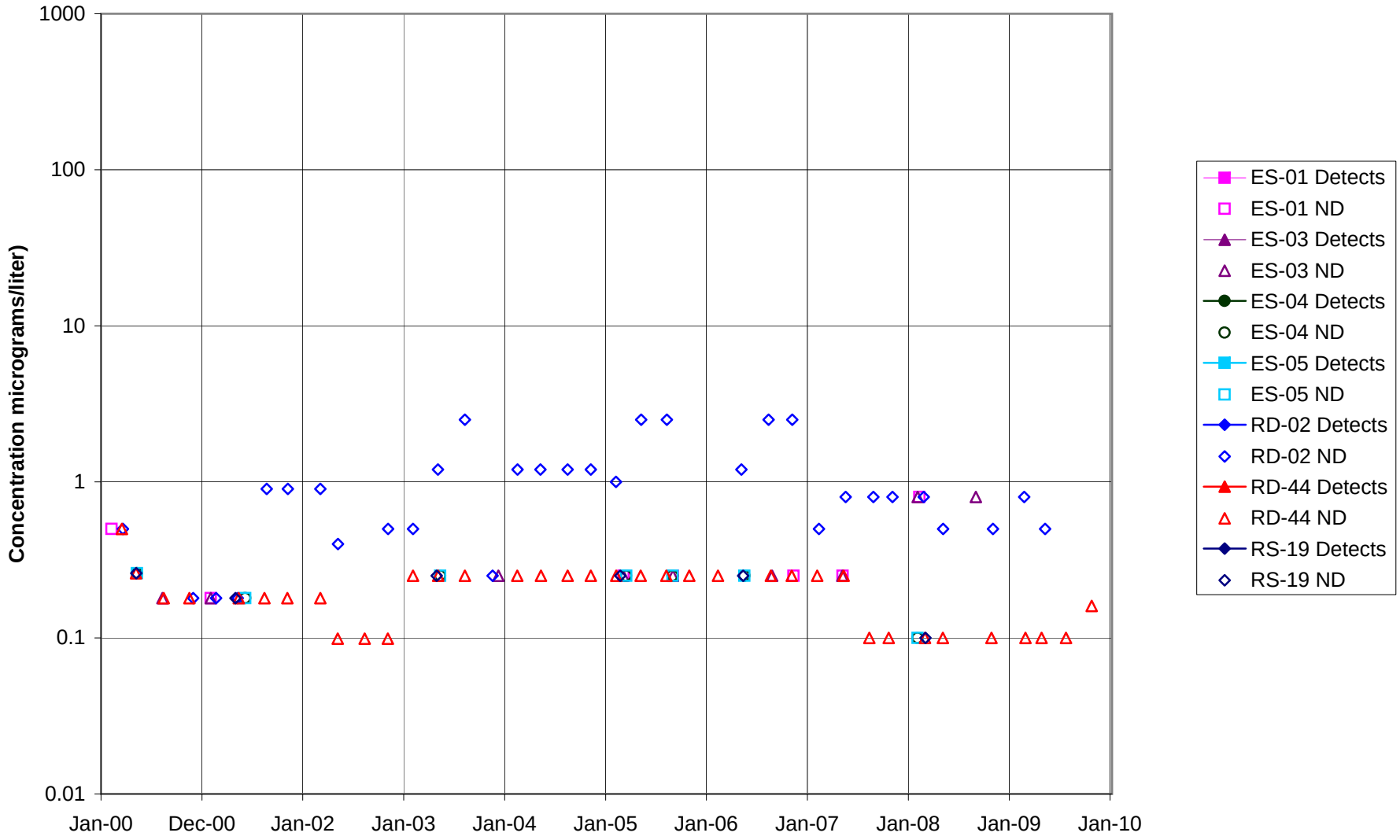


FIGURE F-179. ETHYLBENZENE IN ECL AREA WELLS

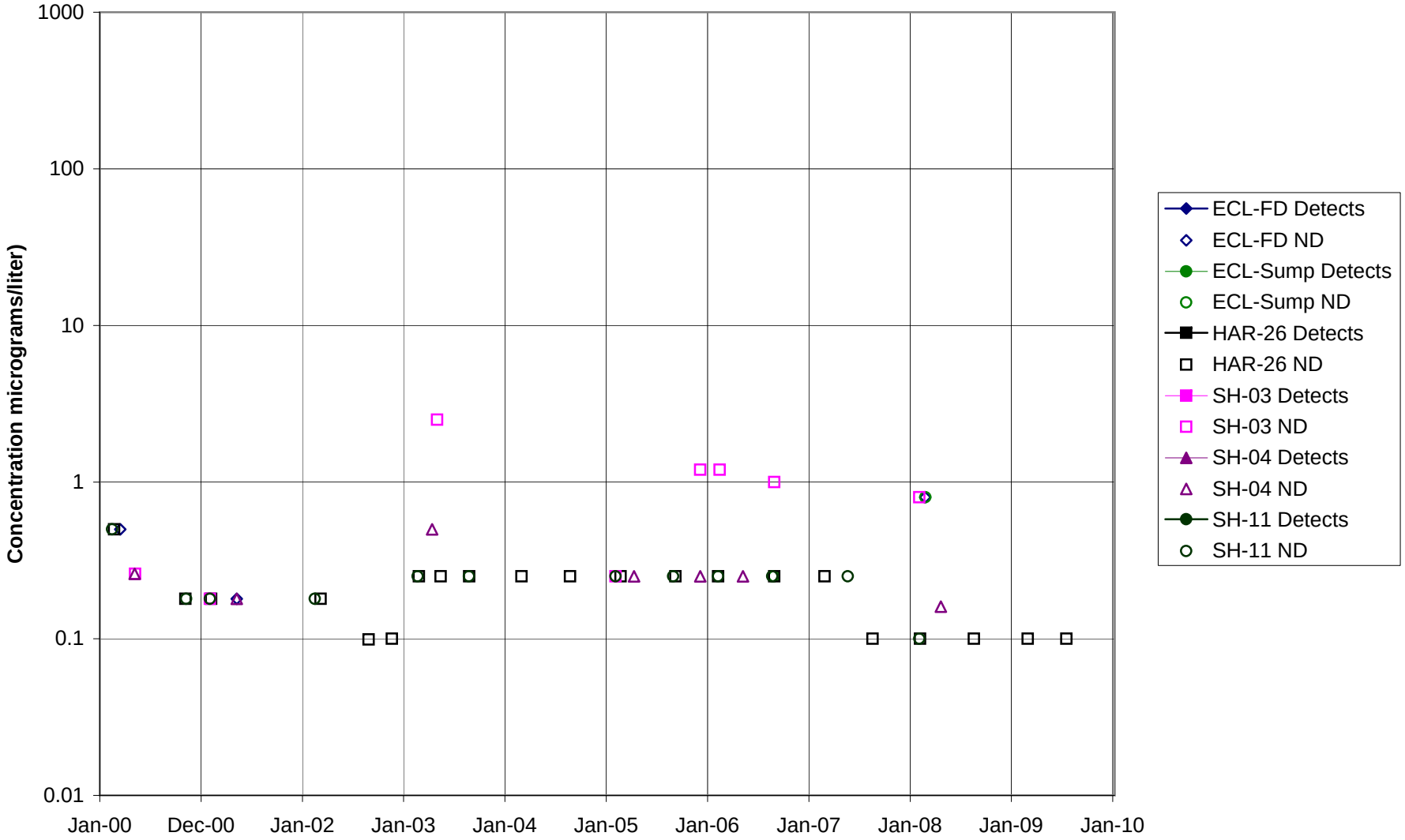


FIGURE F-180. ETHYLBENZENE IN FORMER LOX PLANT AREA WELLS

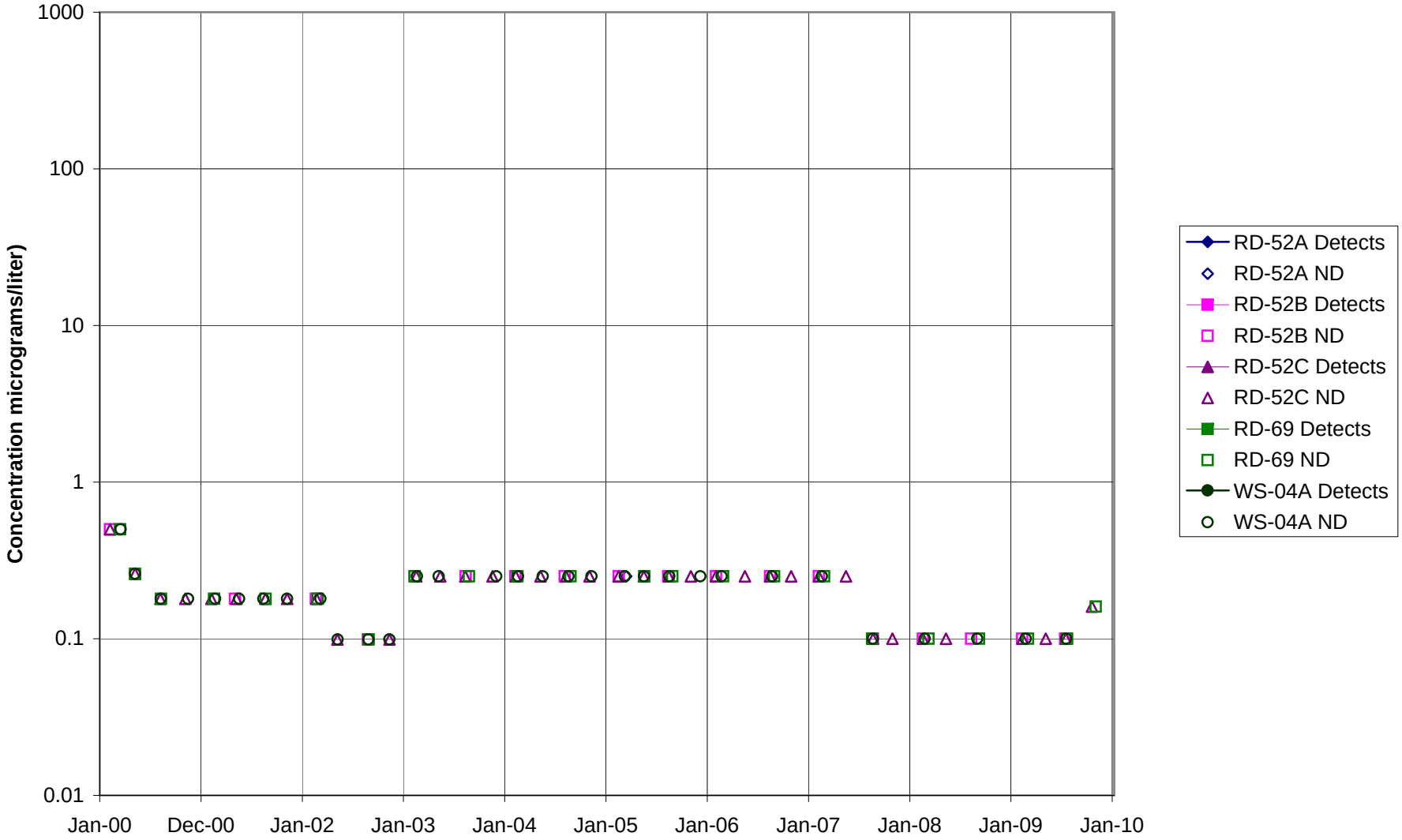


FIGURE F-181. ETHYLBENZENE IN RD-09 AREA WELLS

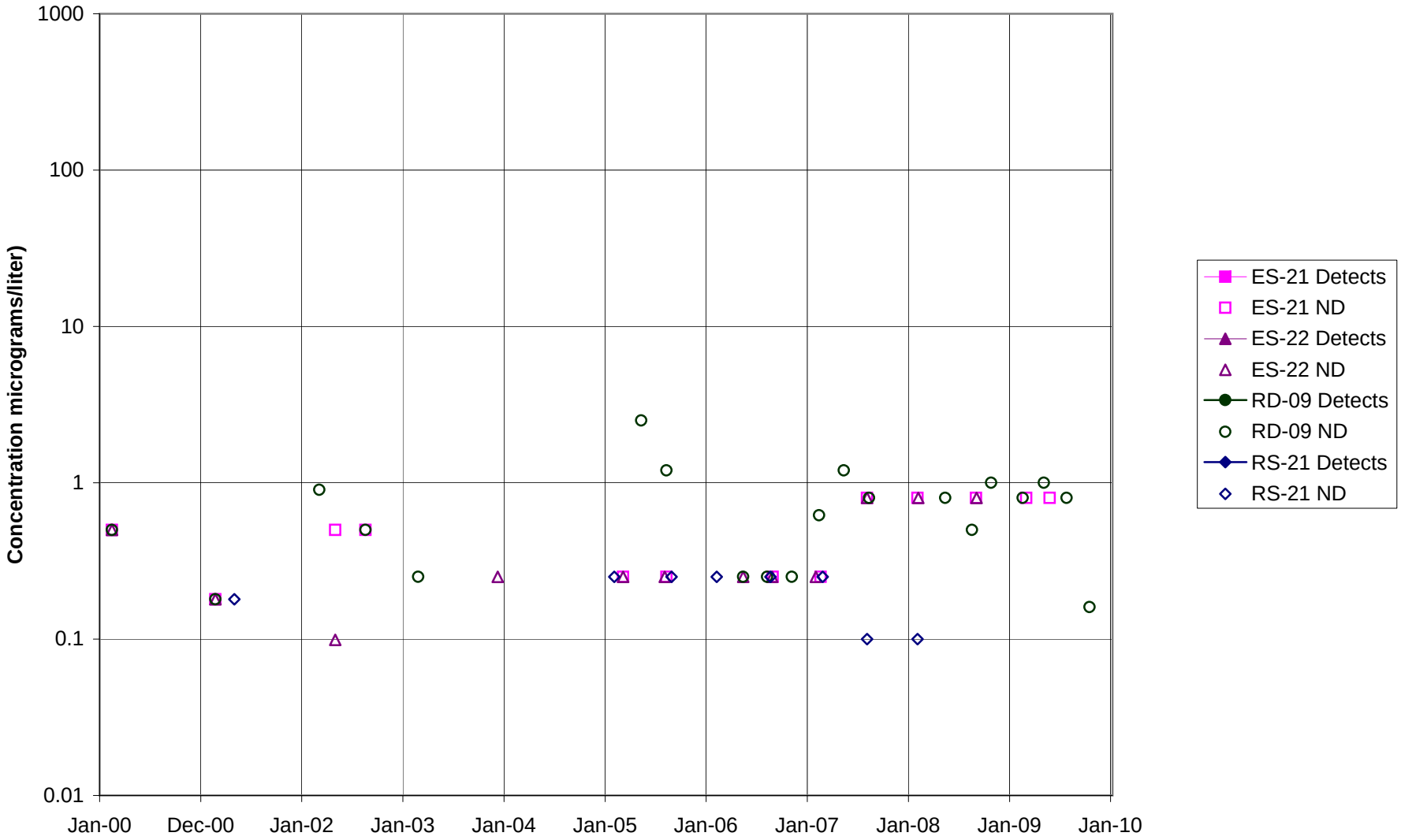


FIGURE F-182. ETHYLBENZENE IN HELIPORT, B/204 AREA WELLS

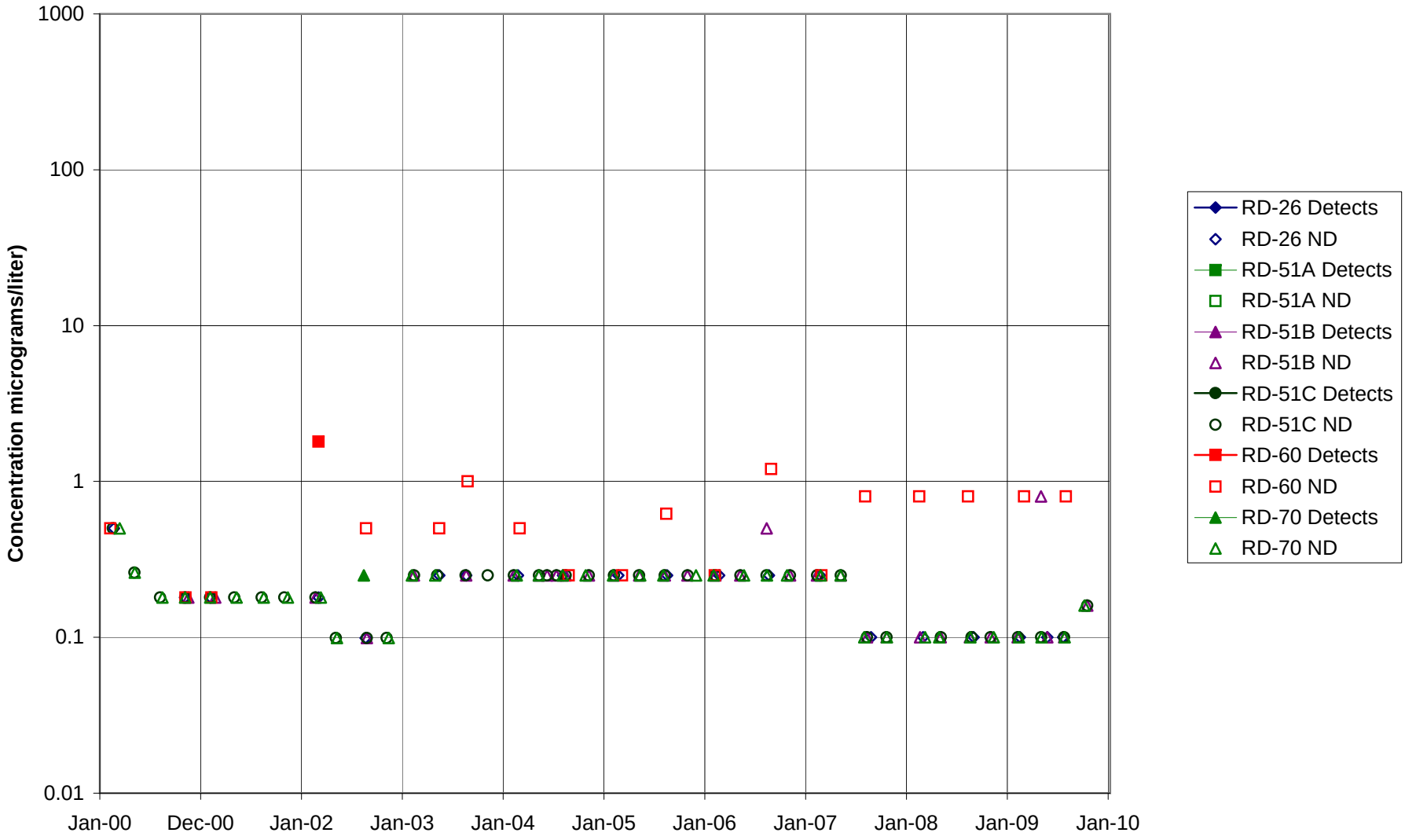


FIGURE F-183. ETHYLBENZENE IN ALFA / BRAVO AREA WELLS

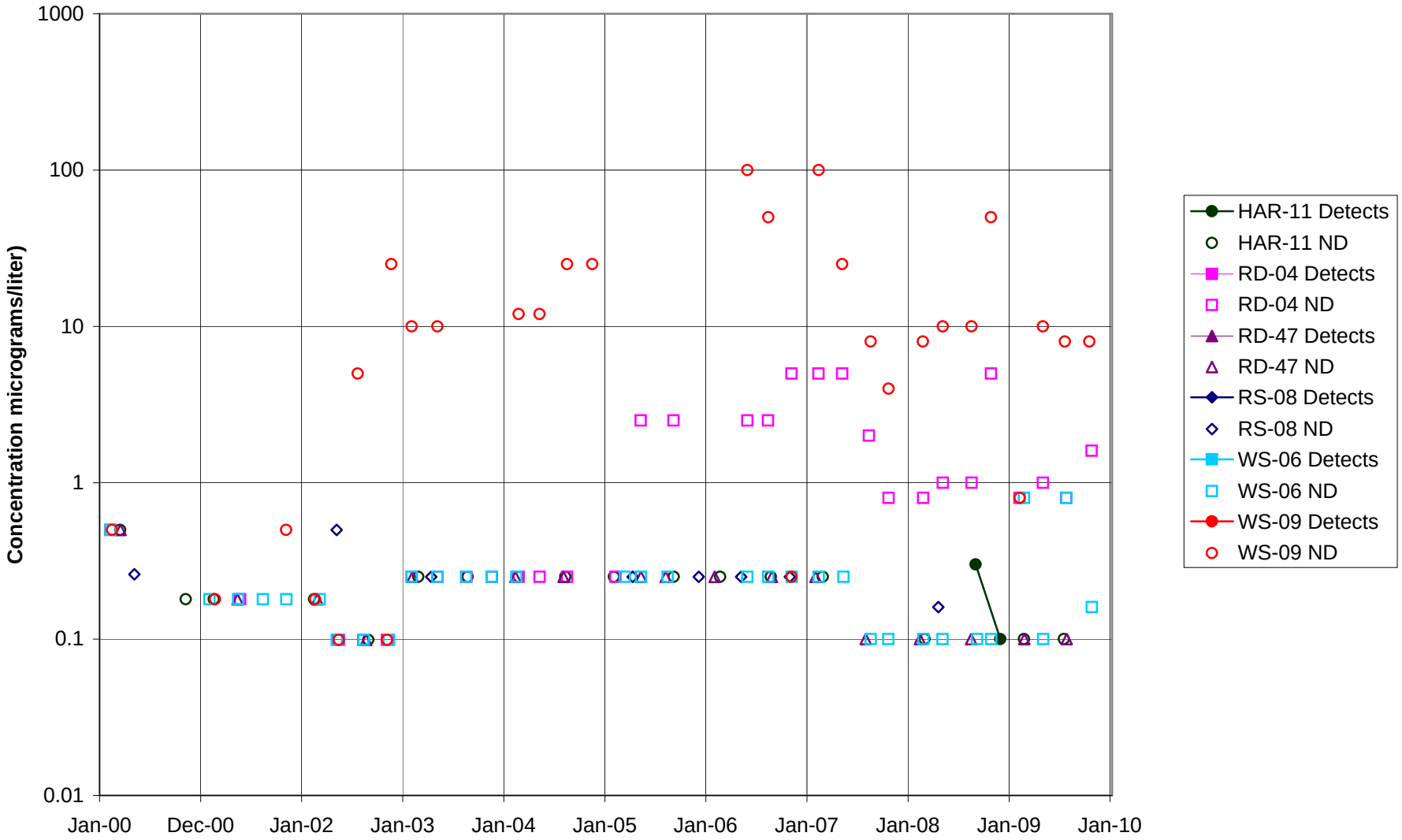


FIGURE F-184. ETHYLBENZENE IN SPA AREA WELLS

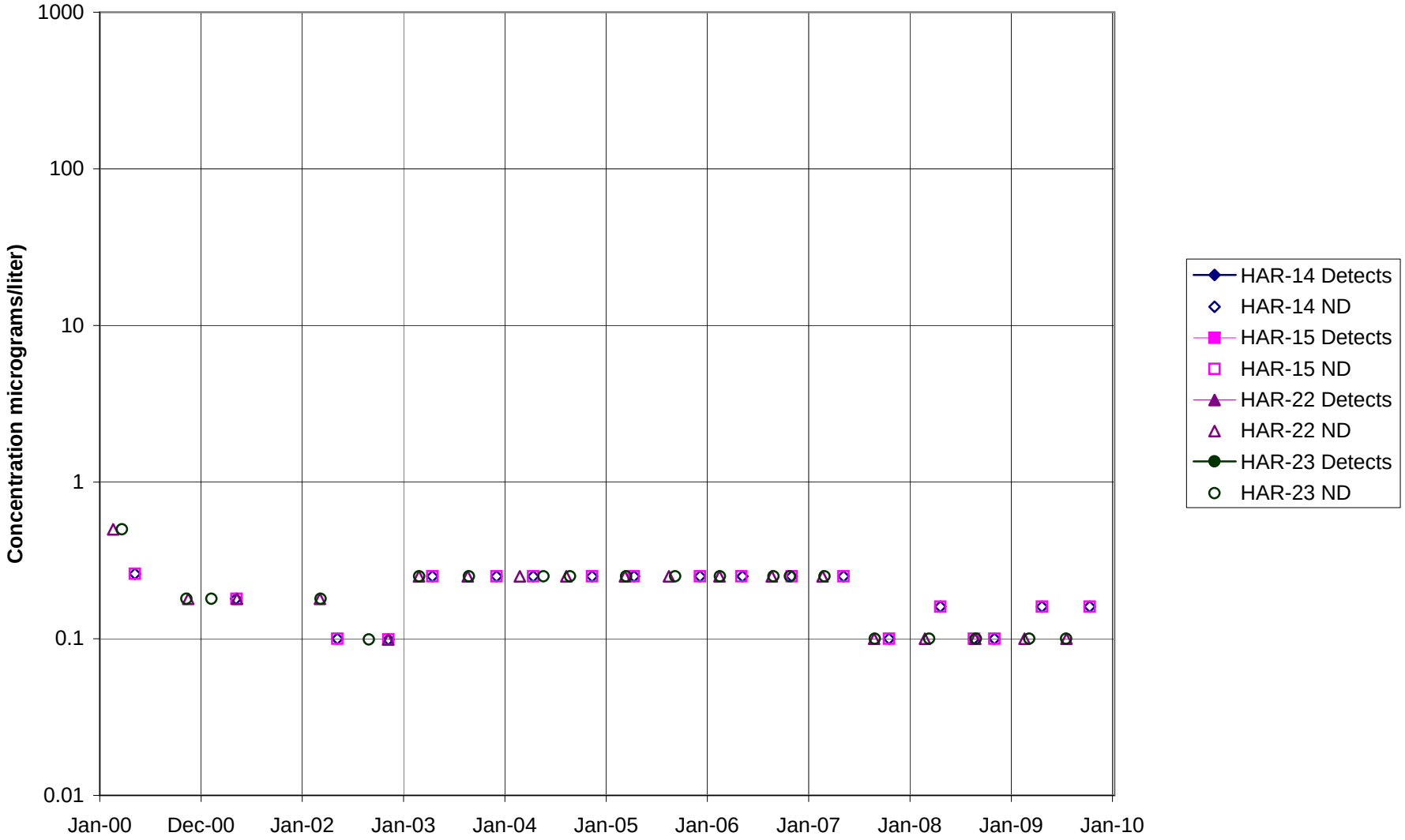


FIGURE F-185. ETHYLBENZENE in COCA / PLF AREA WELLS

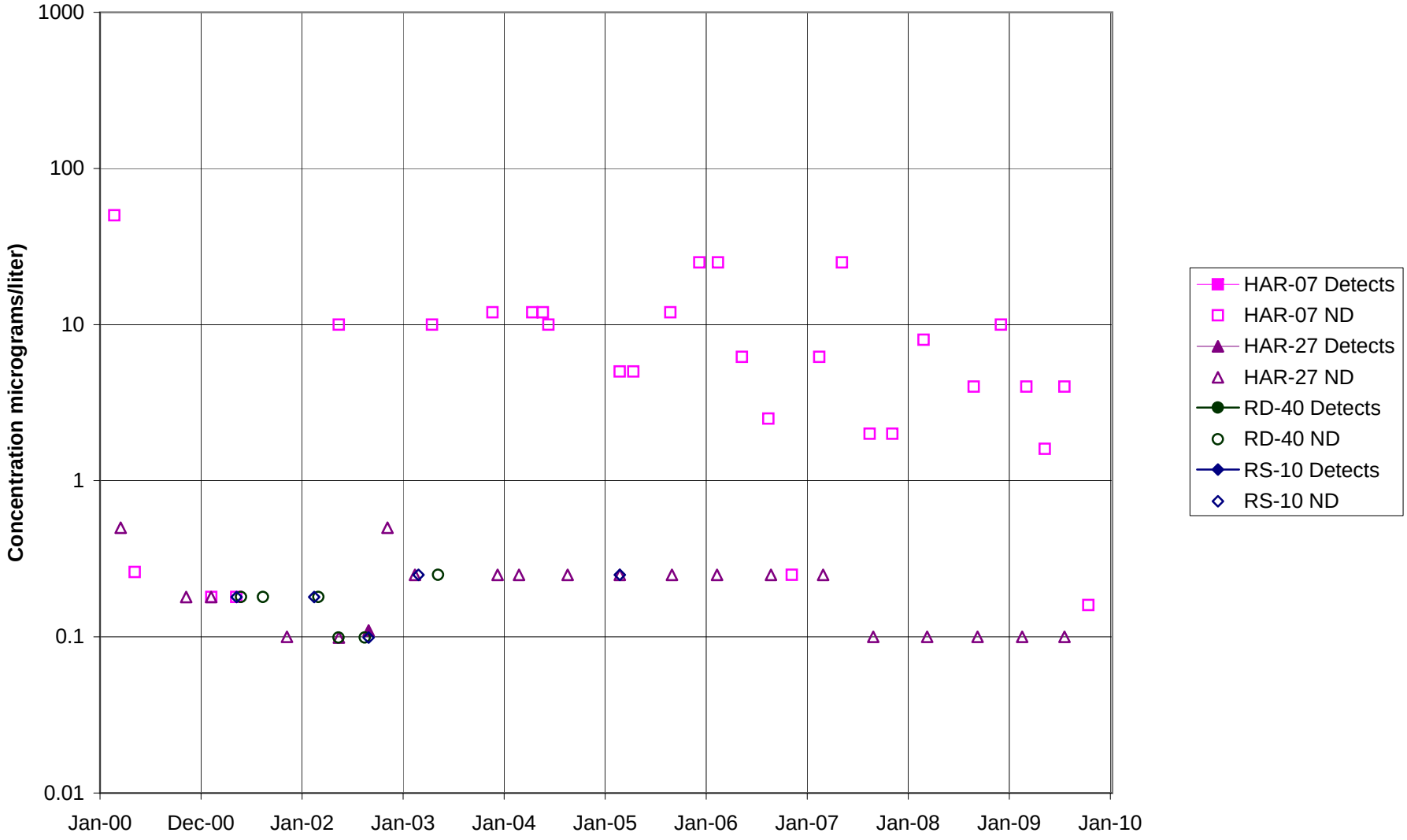


FIGURE F-186. ETHYLBENZENE IN DELTA / BUFFER ZONE AREA WELLS

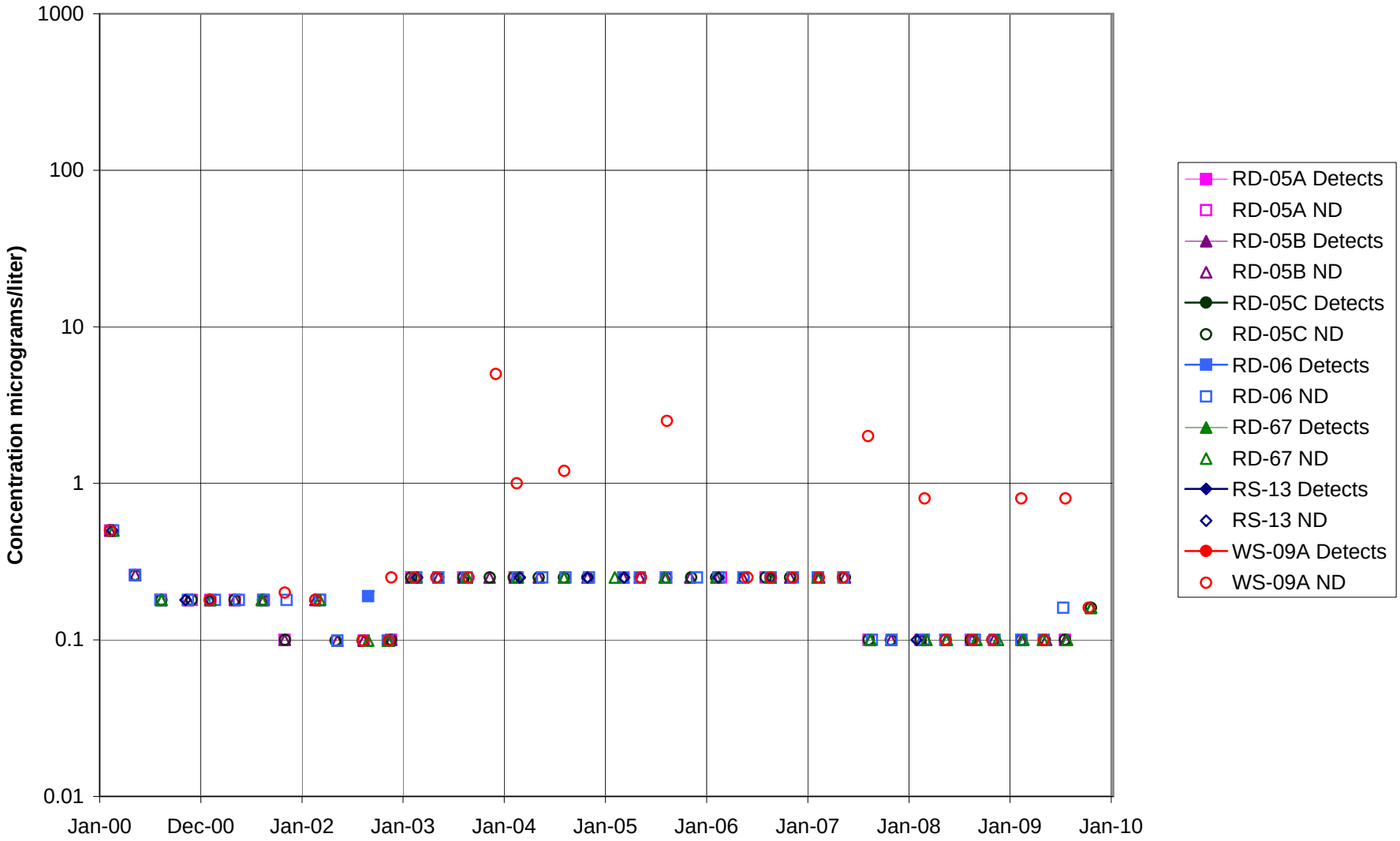


FIGURE F-187. ETHYLBENZENE IN AREA IV WELLS

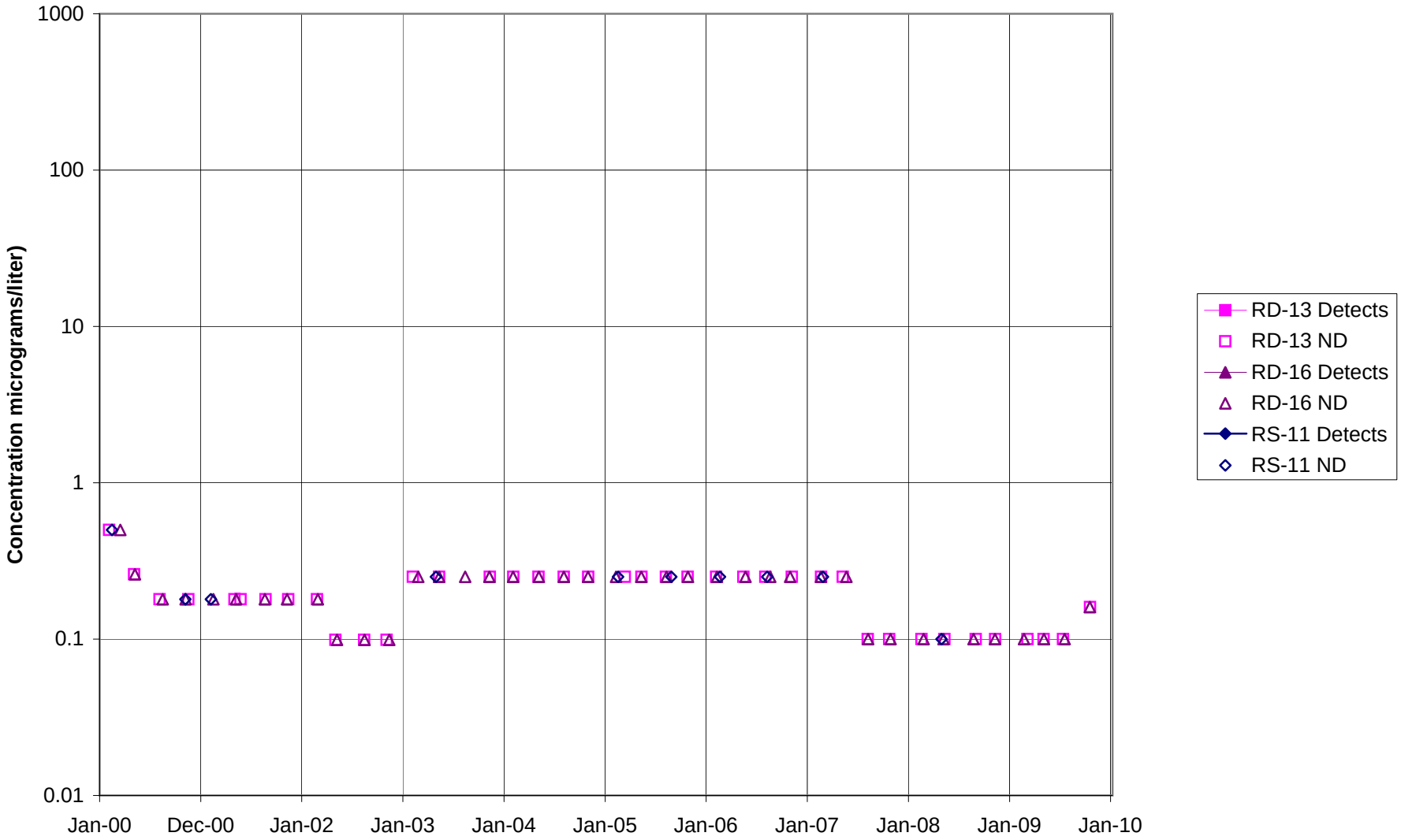


FIGURE F-188. FLUORIDE in STL-IV AREA CHATSWORTH FORMATION WELLS

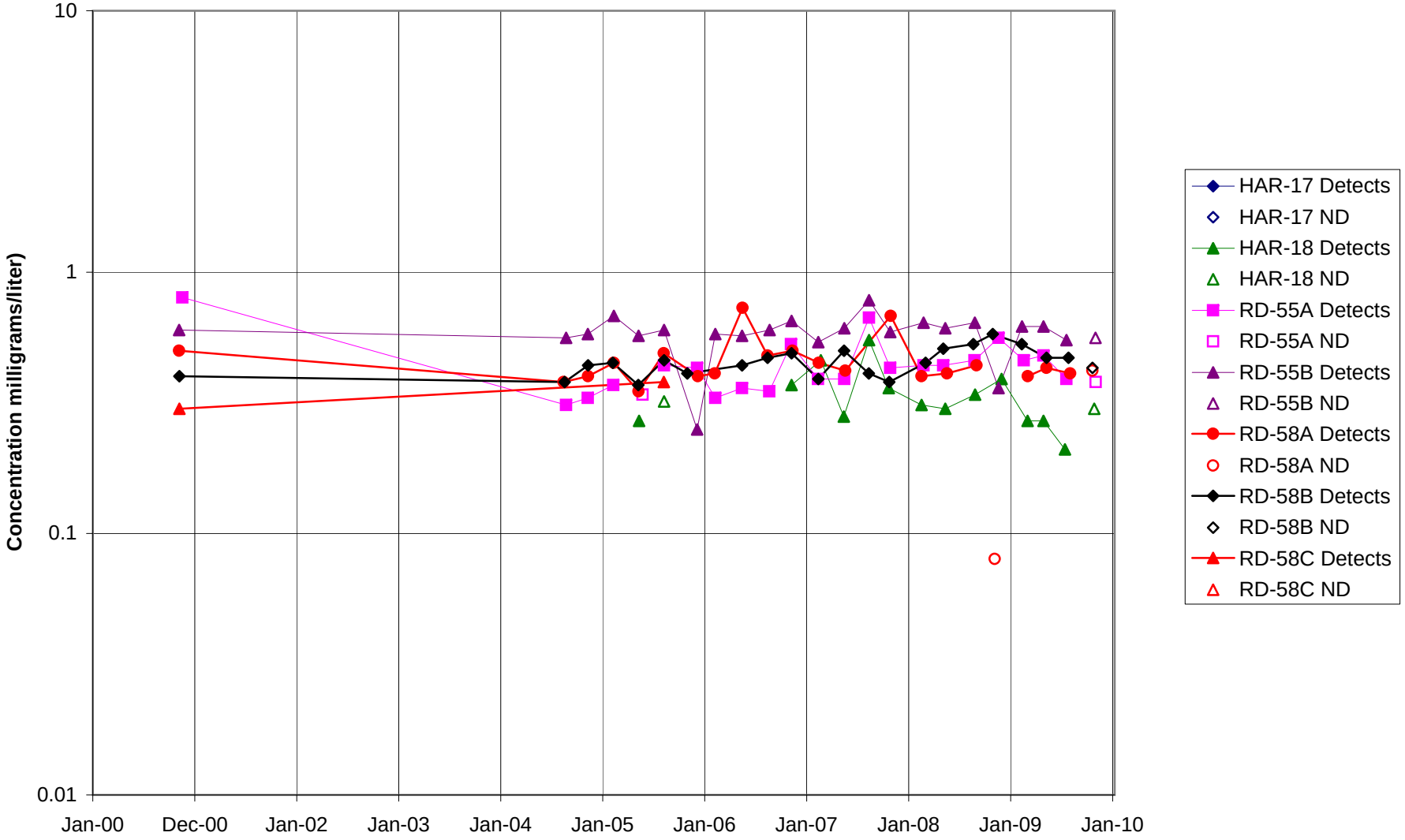
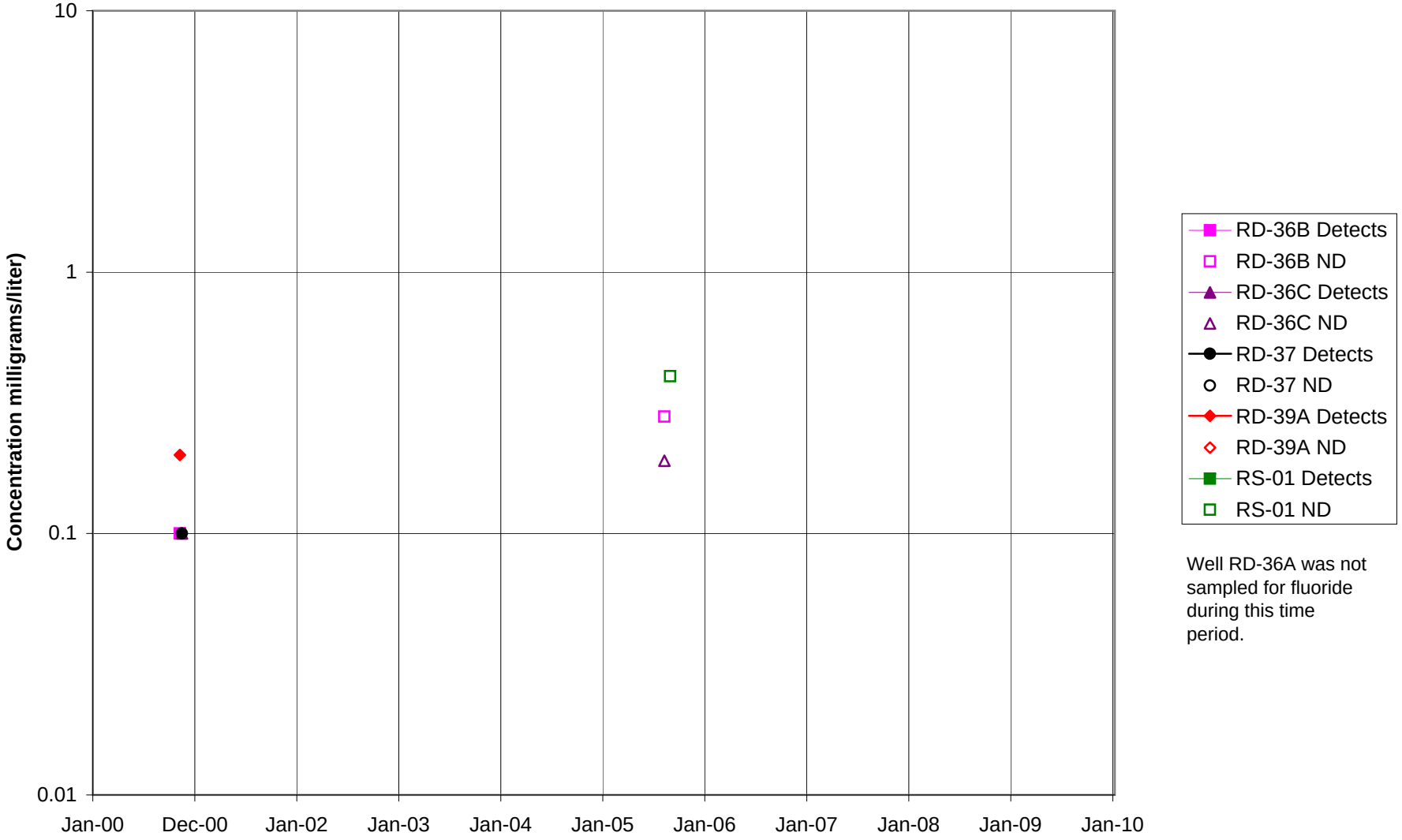


FIGURE F-189. FLUORIDE in MAIN GATE AREA WELLS - 1



Well RD-36A was not sampled for fluoride during this time period.

FIGURE F-190. FLUORIDE in MAIN GATE AREA WELLS - 2

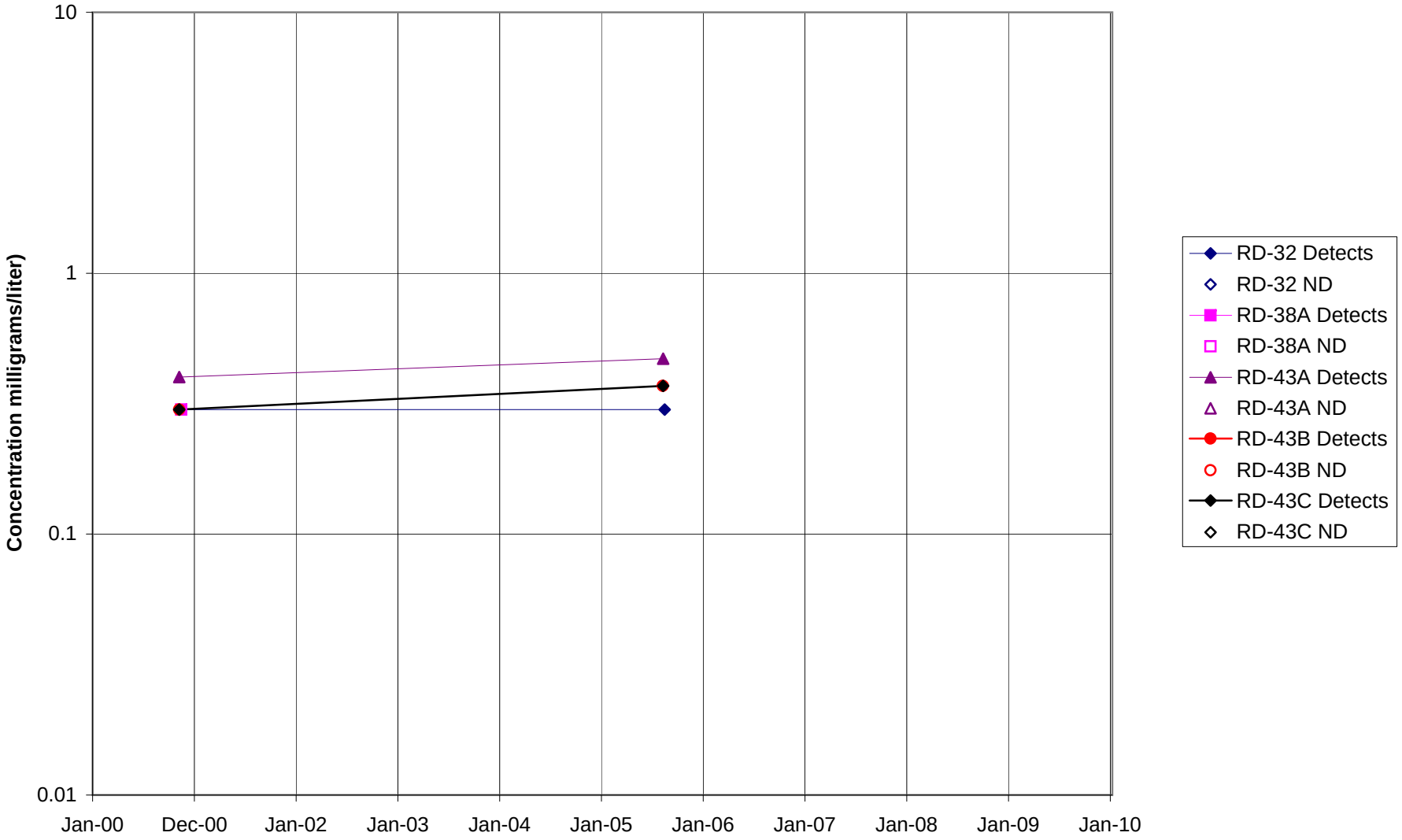


FIGURE F-191. FLUORIDE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1

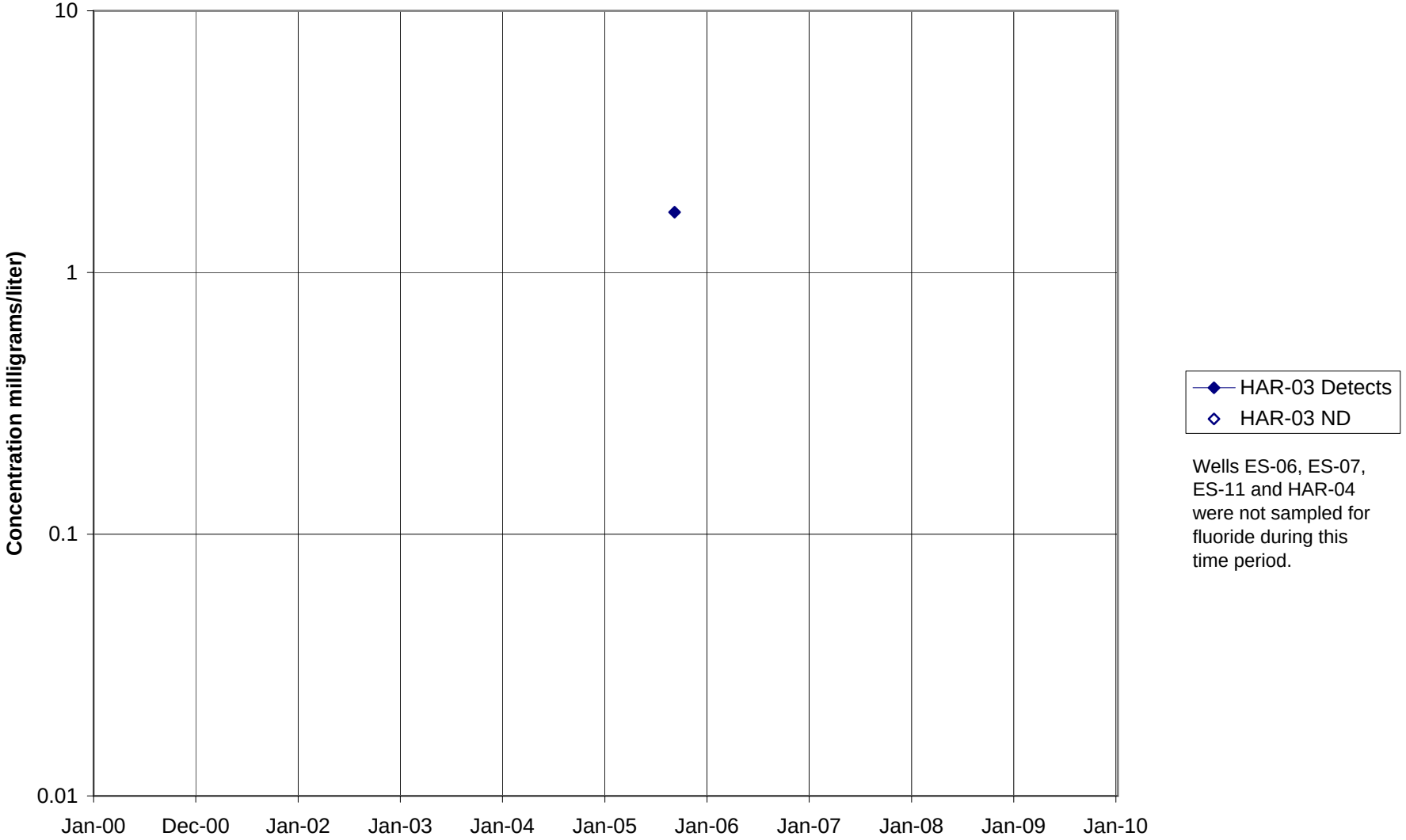


FIGURE F-192. FLUORIDE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 2

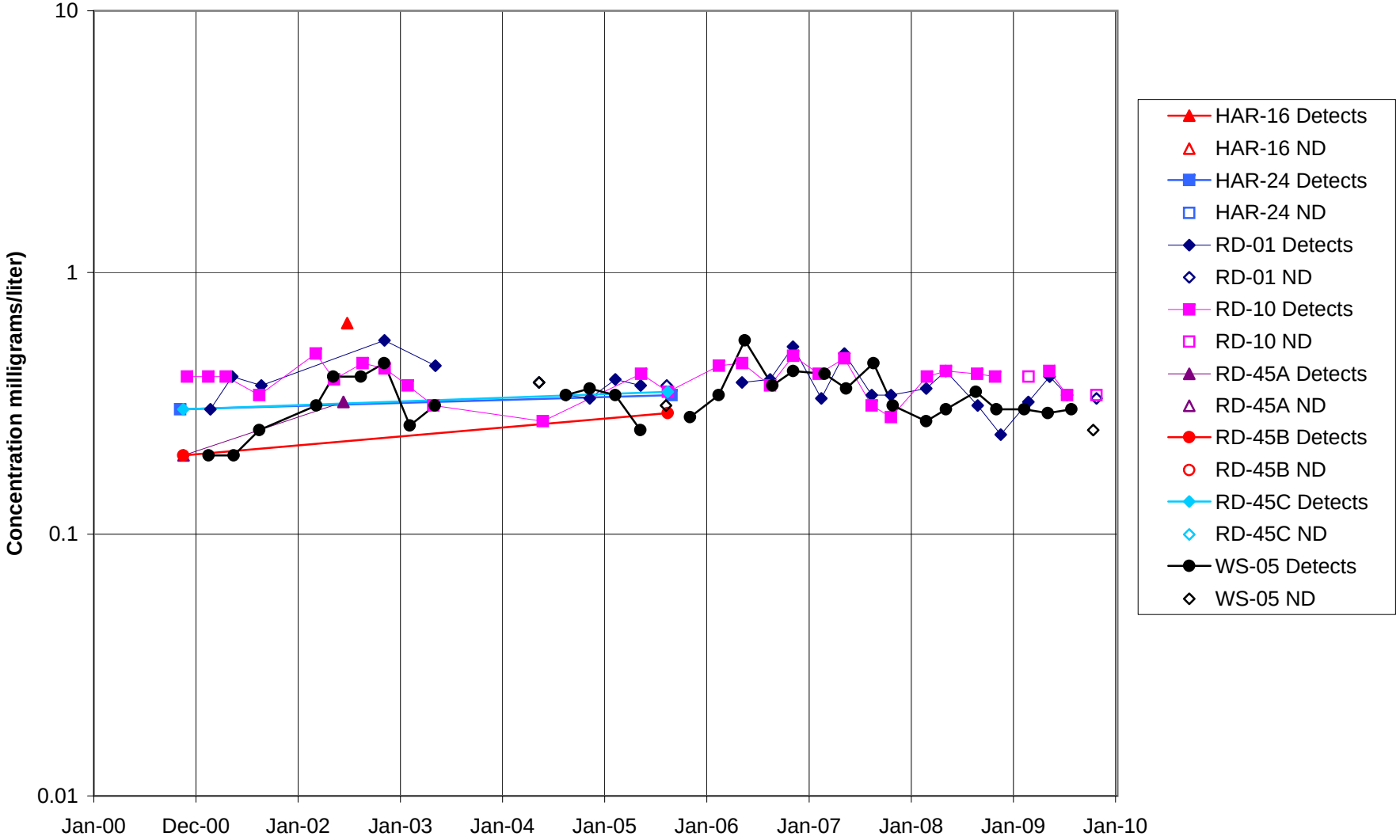


FIGURE F-193. FLUORIDE in CTL-III / PERIMETER POND AREA WELLS

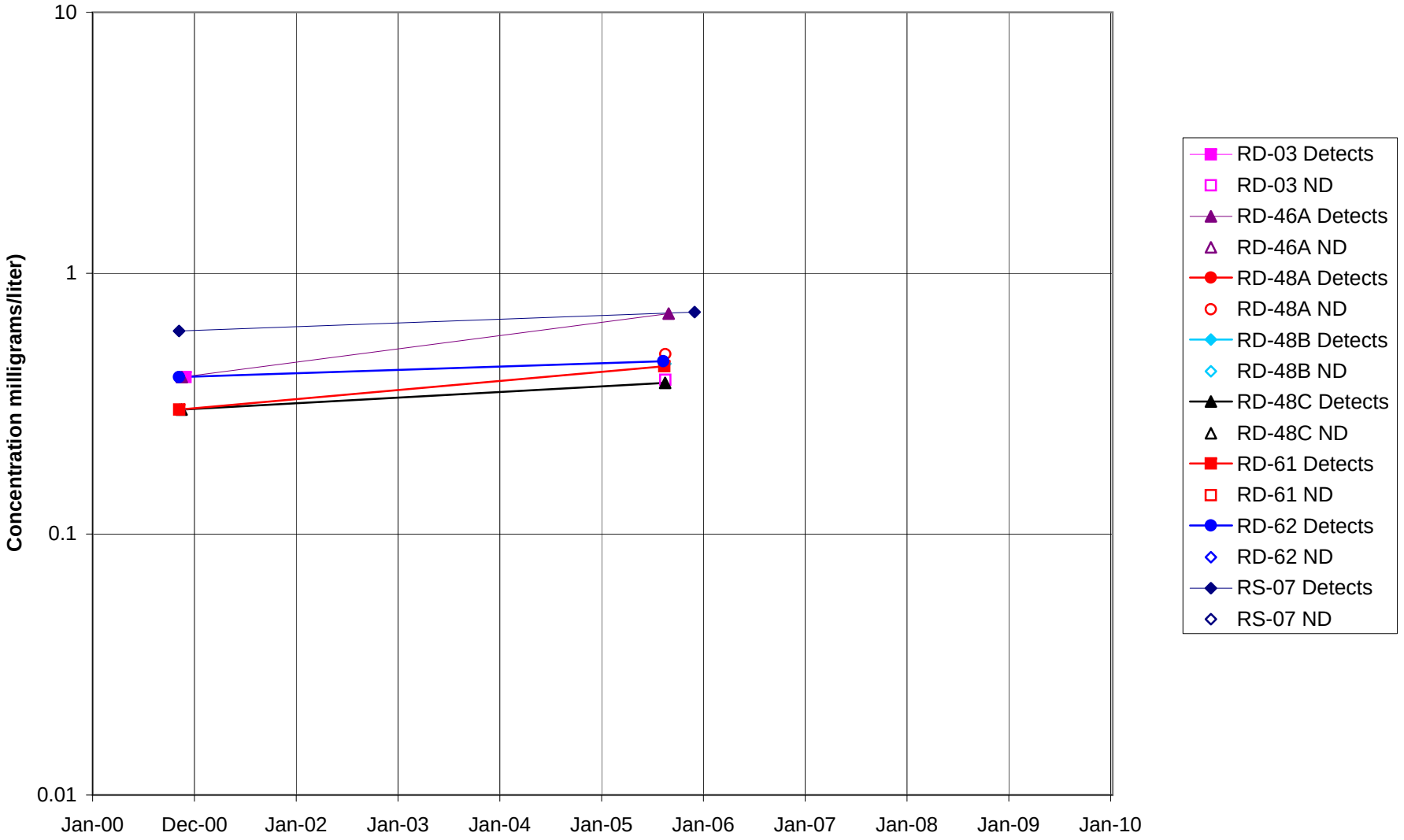
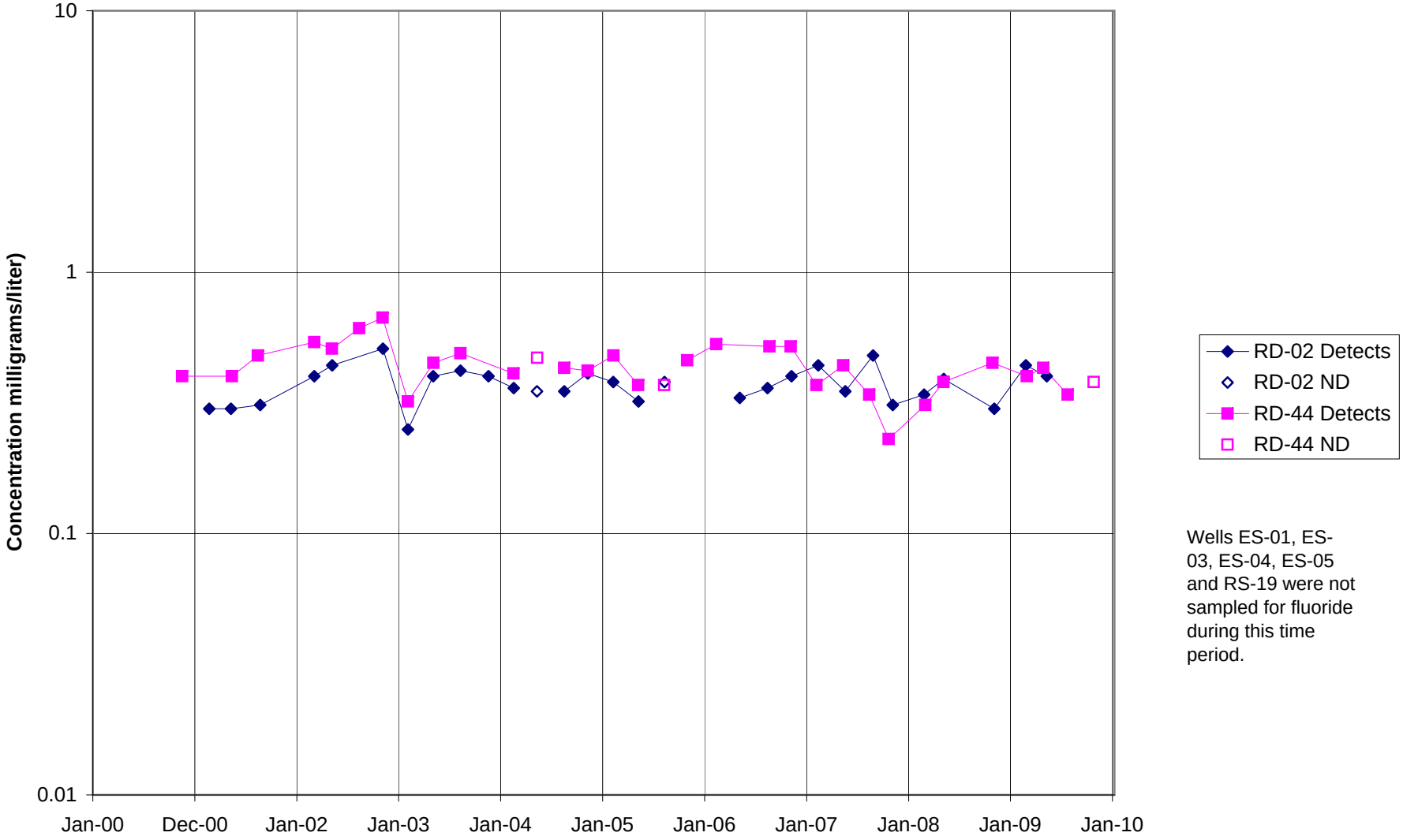
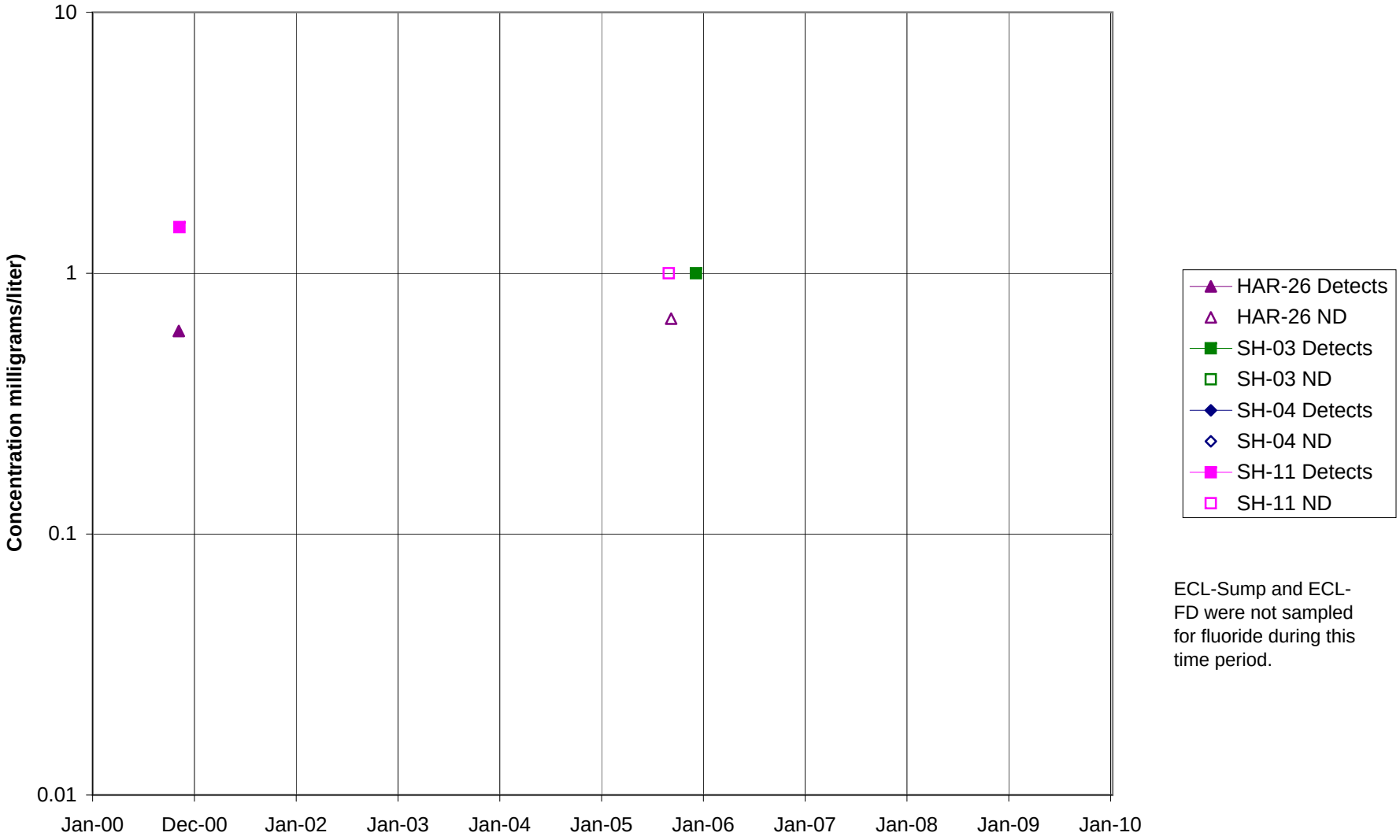


FIGURE F-194. FLUORIDE in BOWL AREA WELLS



Wells ES-01, ES-03, ES-04, ES-05 and RS-19 were not sampled for fluoride during this time period.

FIGURE F-195. FLUORIDE in ECL AREA WELLS



ECL-Sump and ECL-FD were not sampled for fluoride during this time period.

FIGURE F-196. FLUORIDE in FORMER LOX PLANT AREA WELLS

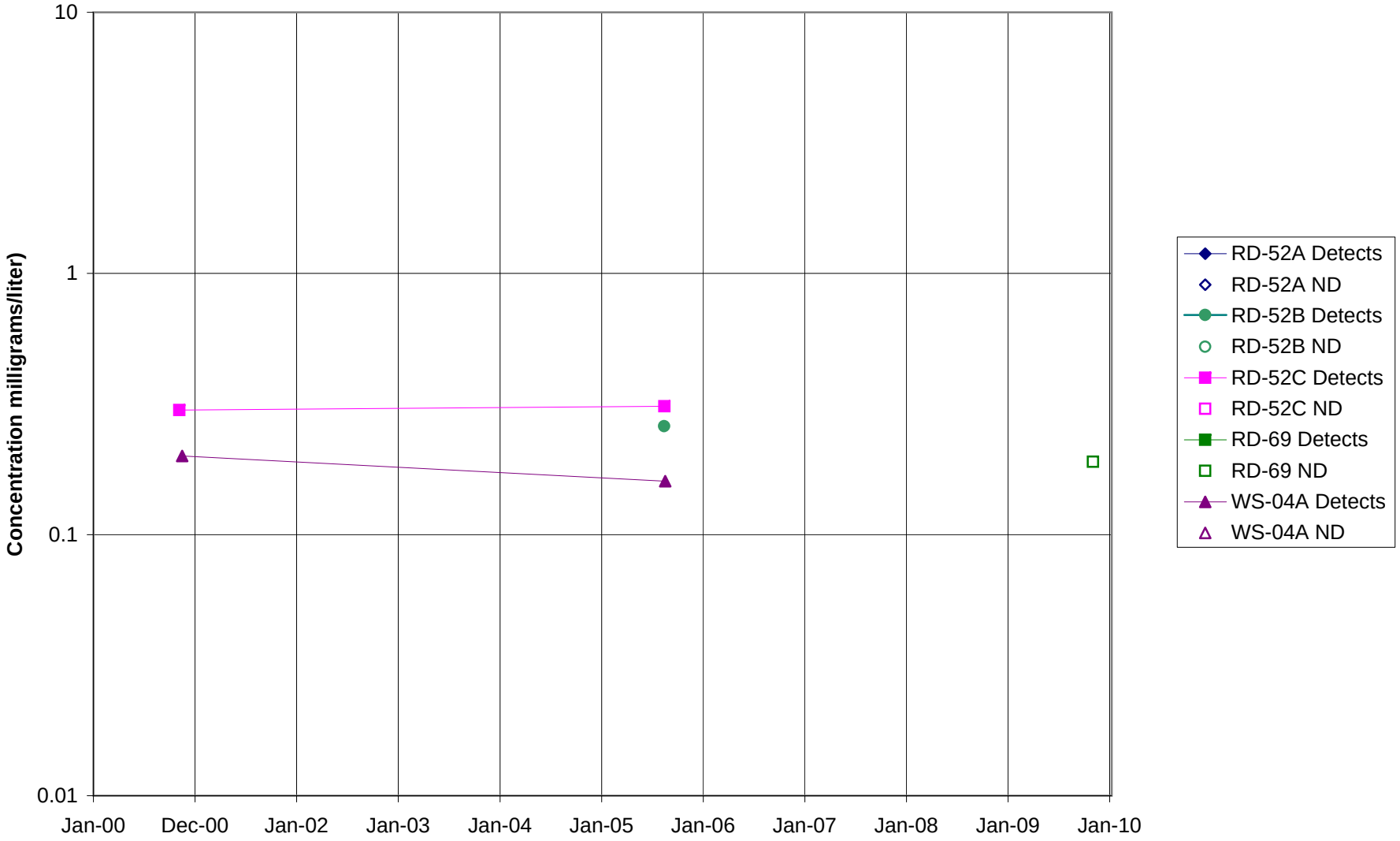
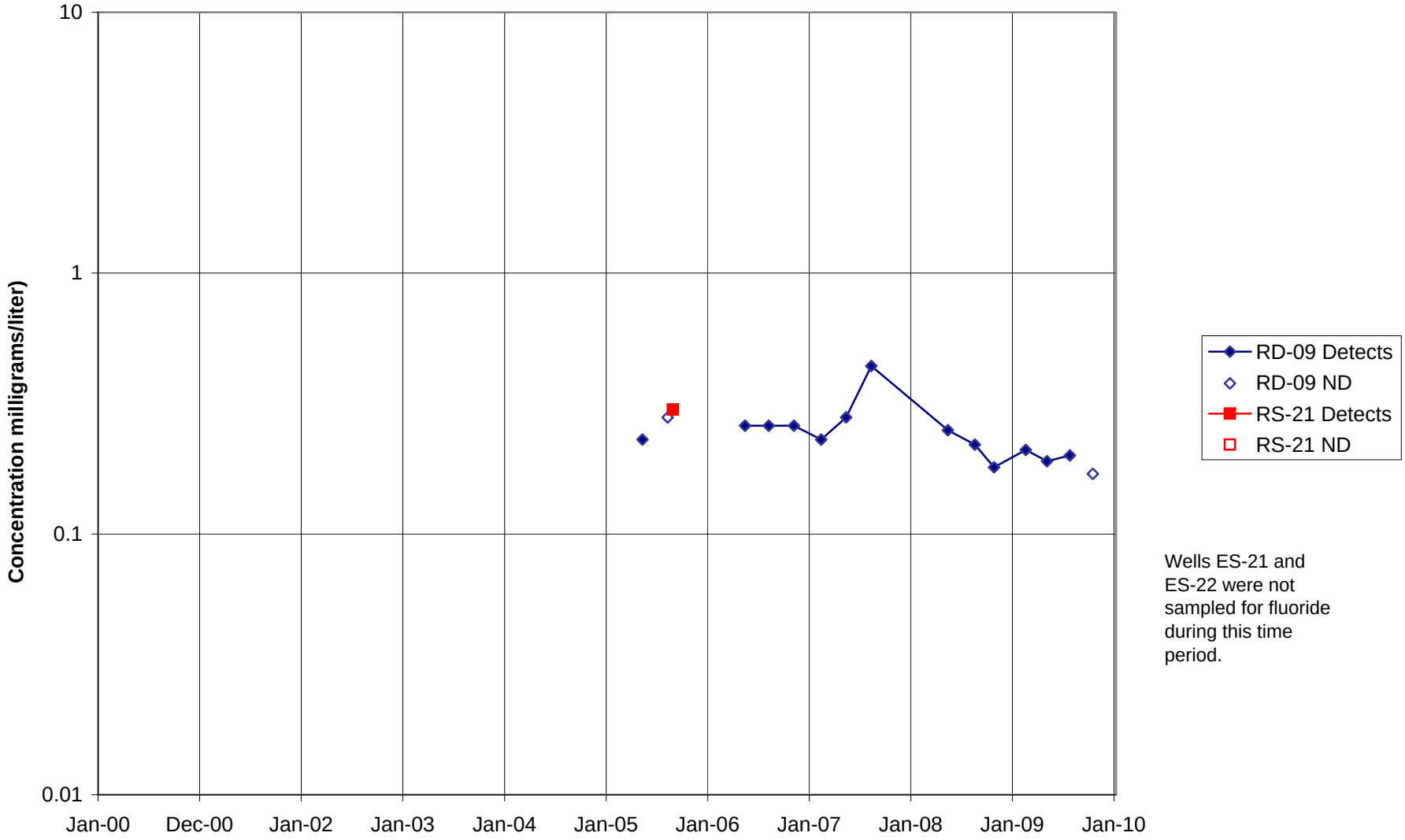
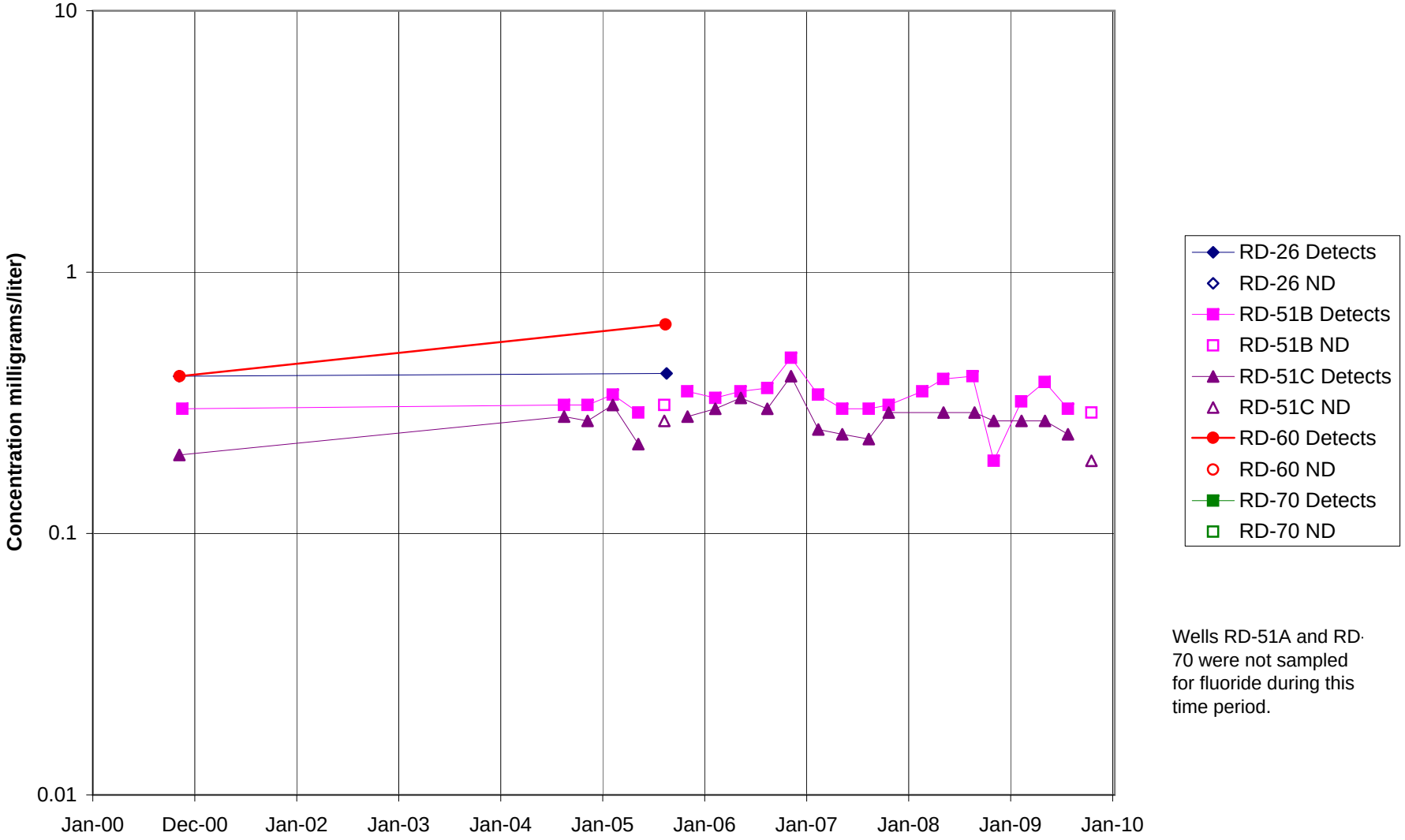


FIGURE F-197. FLUORIDE in RD-09 AREA WELLS



Wells ES-21 and ES-22 were not sampled for fluoride during this time period.

FIGURE F-198. FLUORIDE in HELIPORT, B/204 AREA WELLS



Wells RD-51A and RD-70 were not sampled for fluoride during this time period.

FIGURE F-199. FLUORIDE in ALFA / BRAVO AREA WELLS

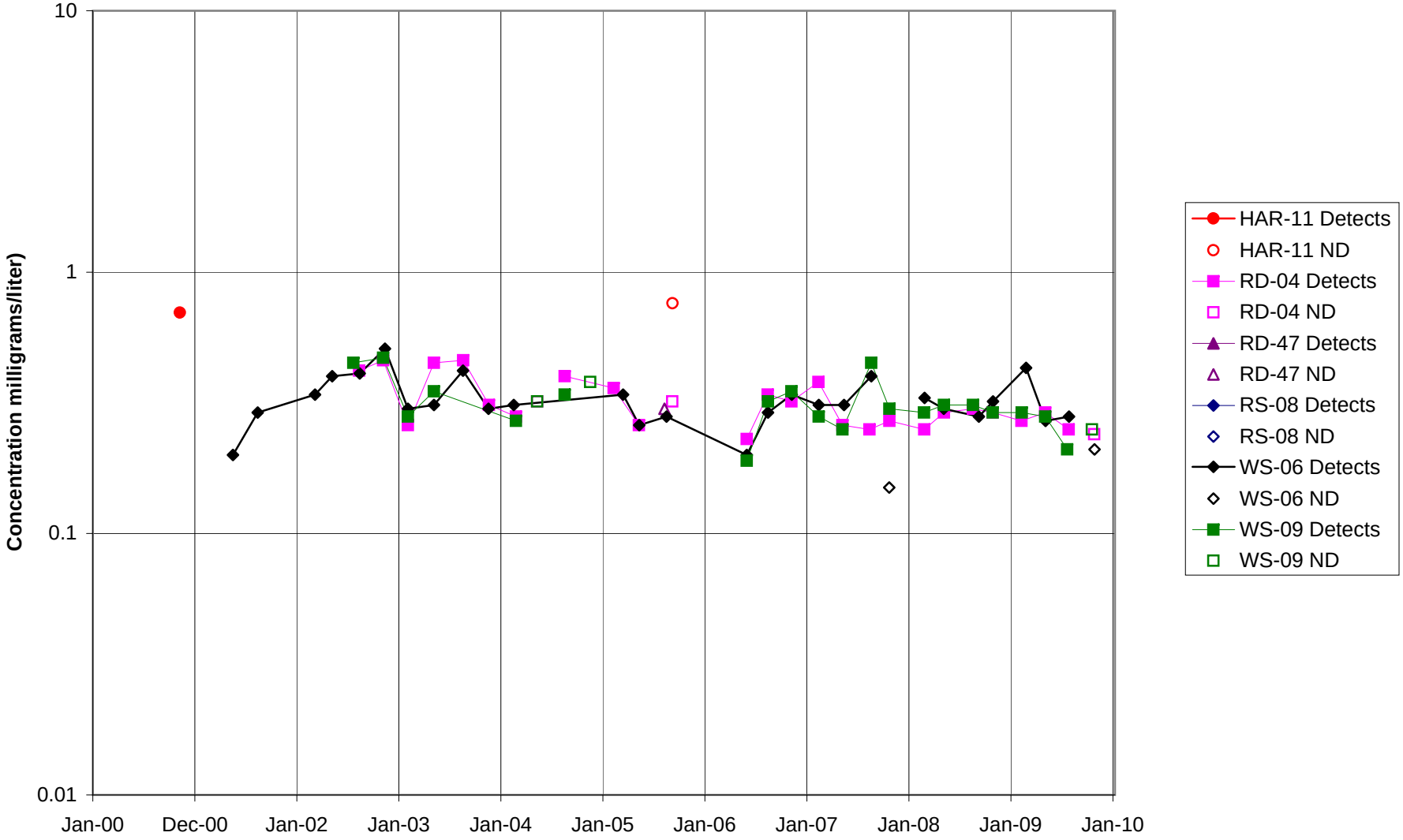
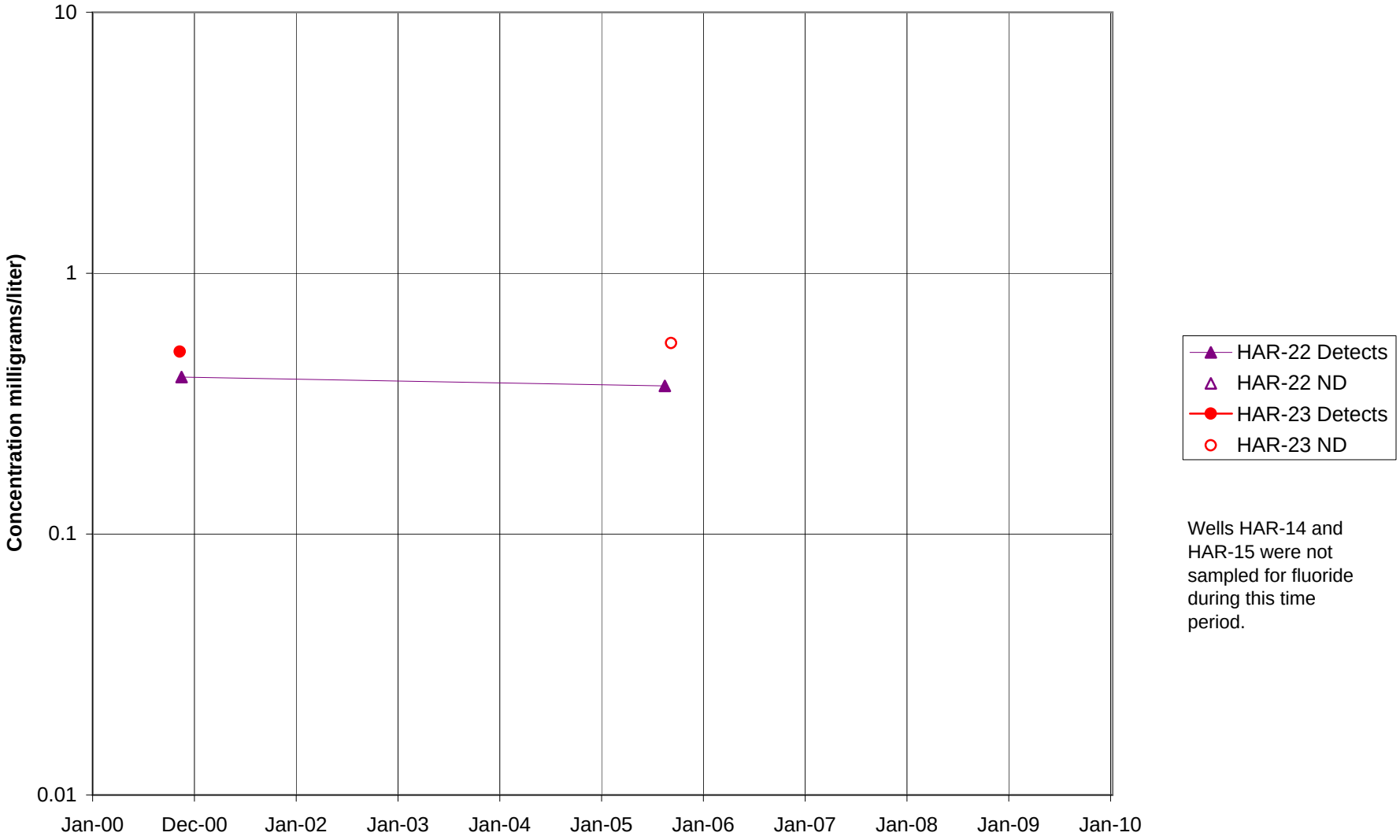
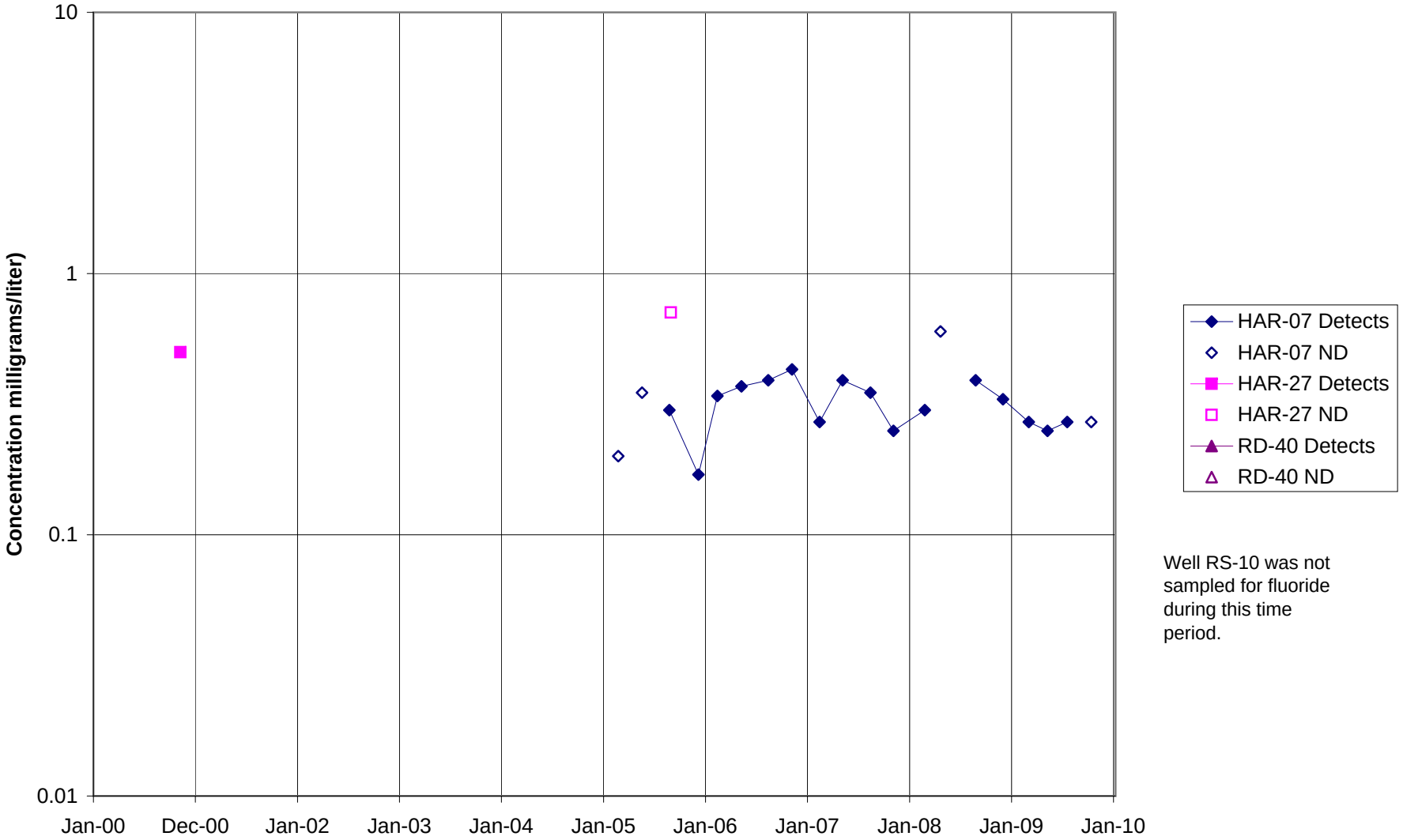


FIGURE F-200. FLUORIDE in SPA AREA WELLS



Wells HAR-14 and HAR-15 were not sampled for fluoride during this time period.

FIGURE F-201. FLUORIDE in COCA / PLF AREA WELLS



Well RS-10 was not sampled for fluoride during this time period.

FIGURE F-202. FLUORIDE in DELTA / BUFFER ZONE AREA WELLS

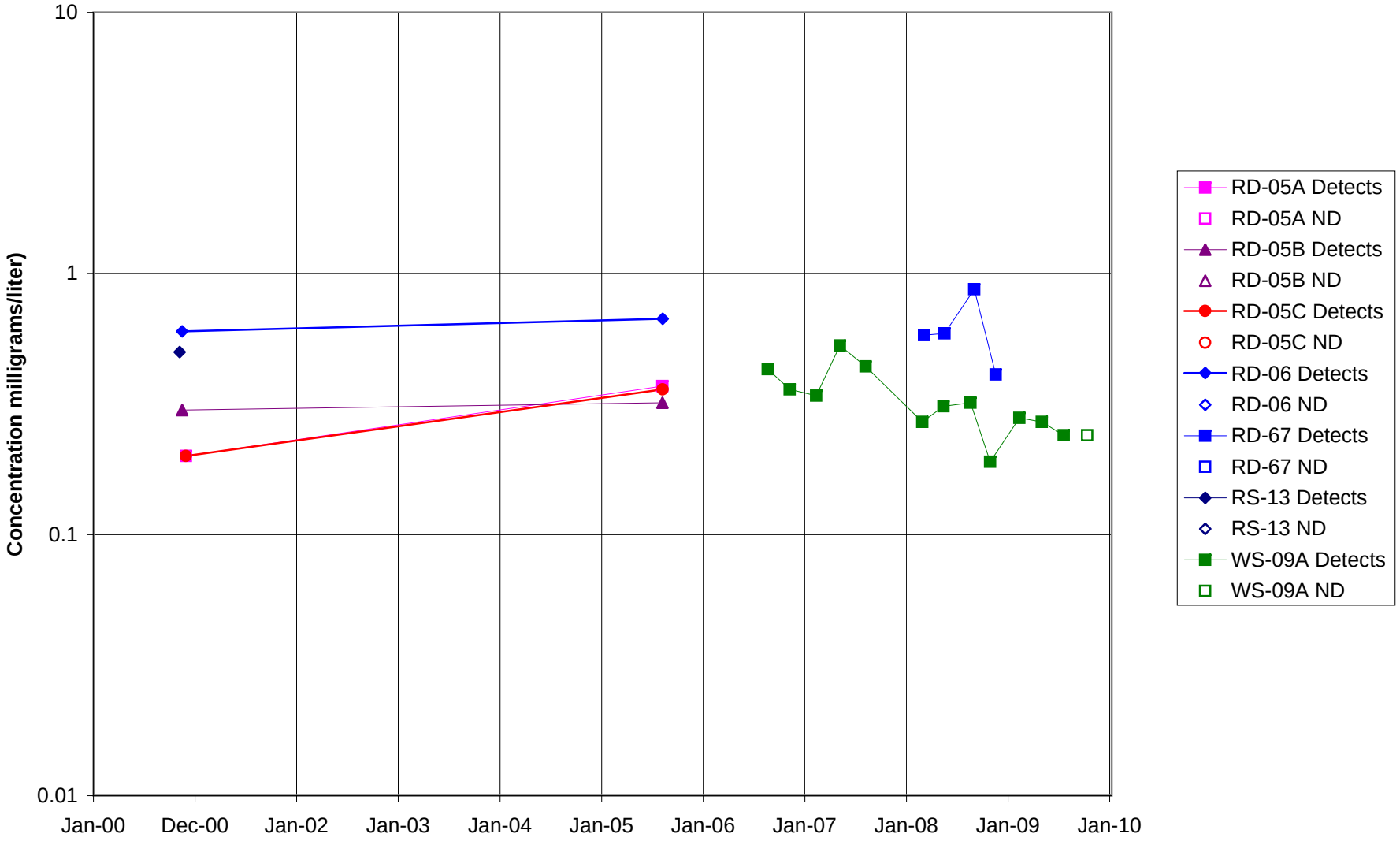


FIGURE F-203. FLUORIDE in AREA IV WELLS

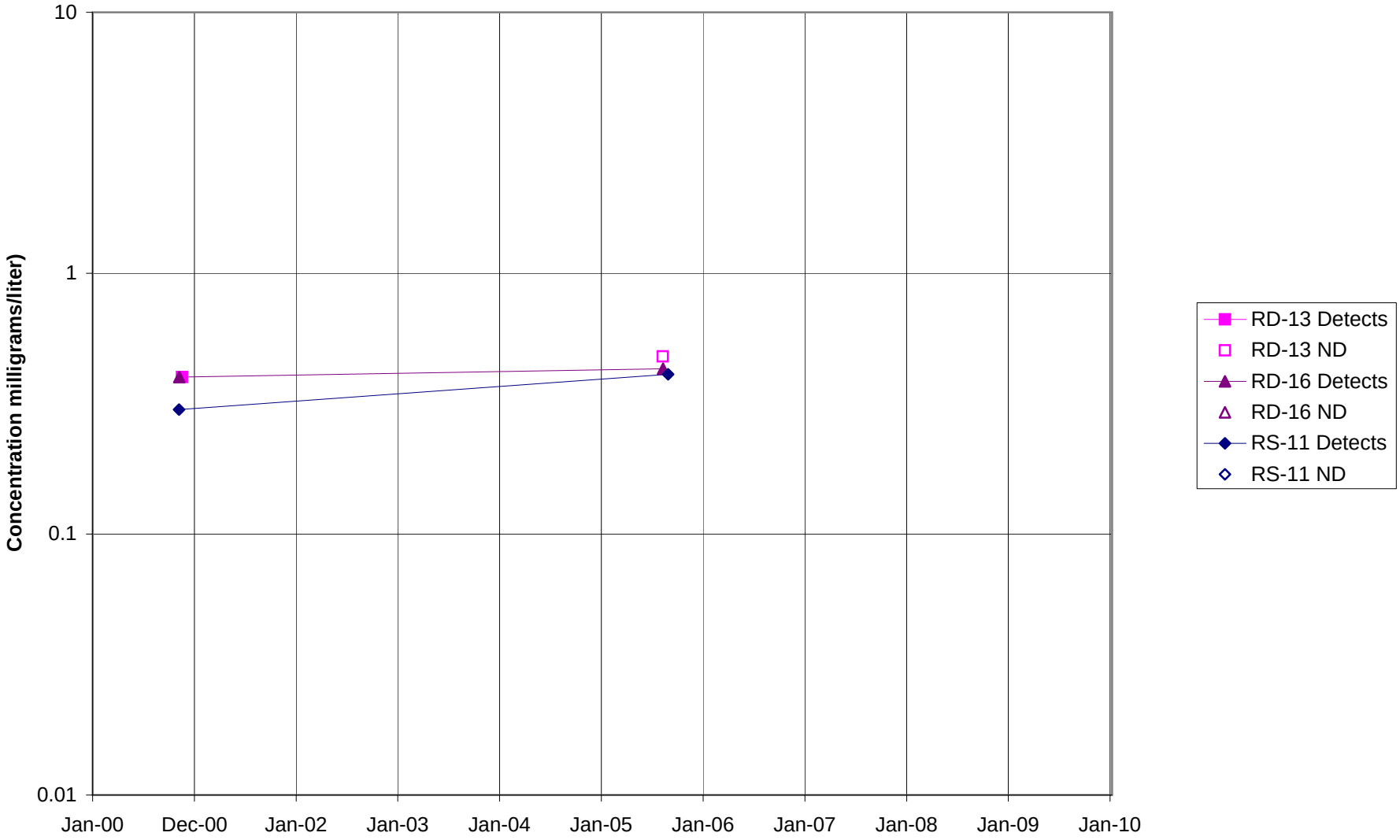


FIGURE F-204. METHYLENE CHLORIDE in STL-IV AREA SHALLOW WELLS

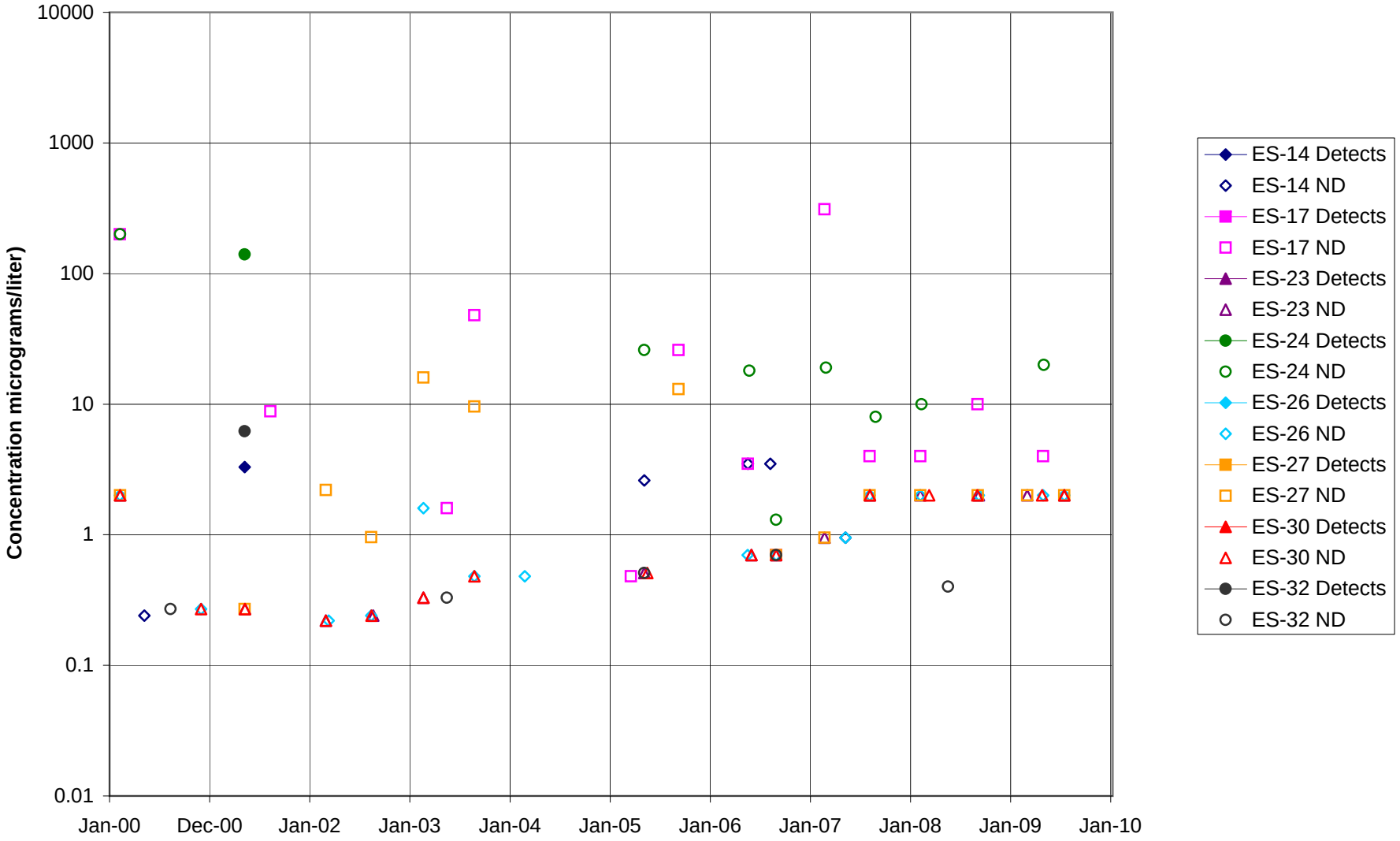


FIGURE F-205. METHYLENE CHLORIDE in STL-IV AREA CHATSWORTH FORMATION WELLS

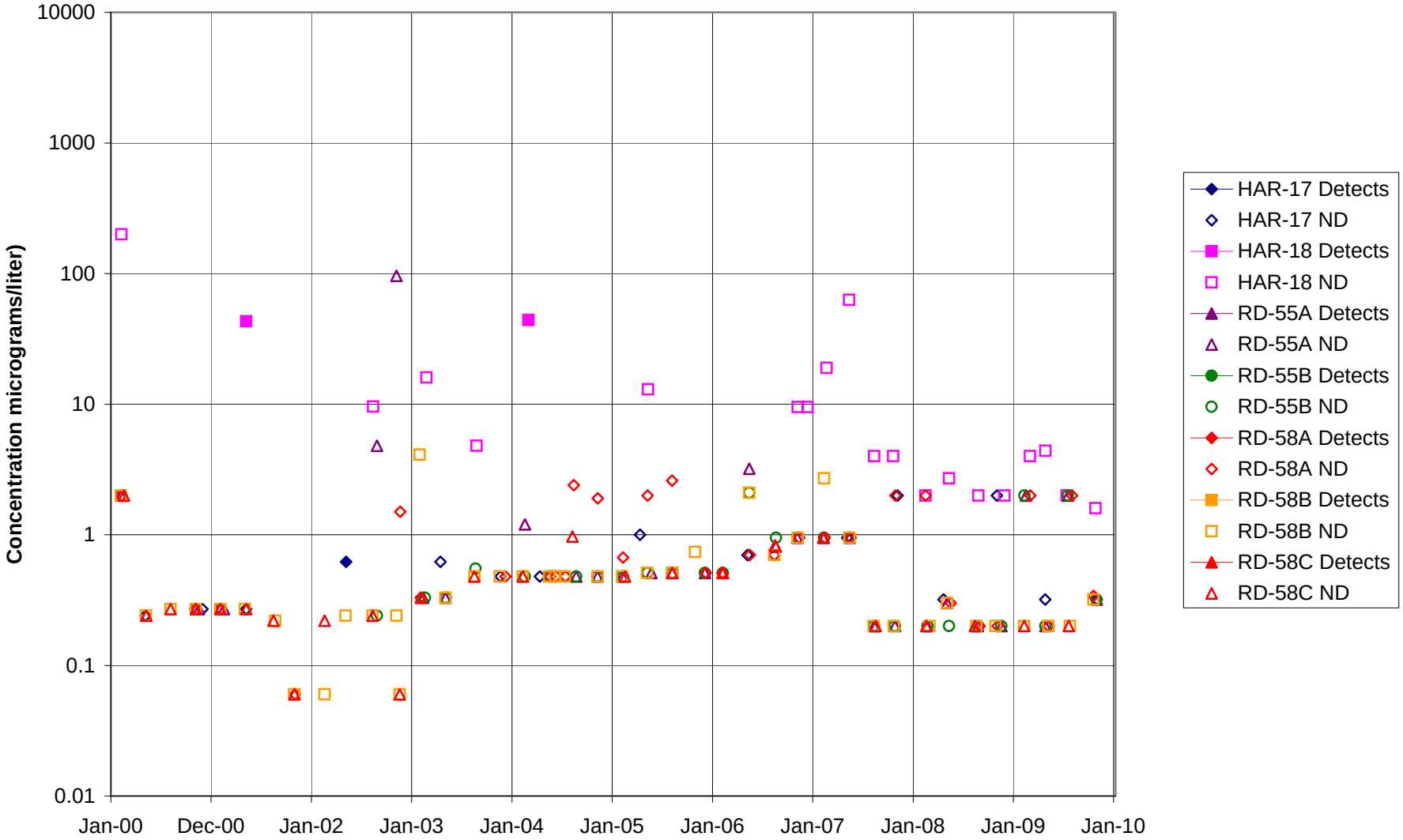


FIGURE F-206. METHYLENE CHLORIDE in MAIN GATE AREA WELLS - 1

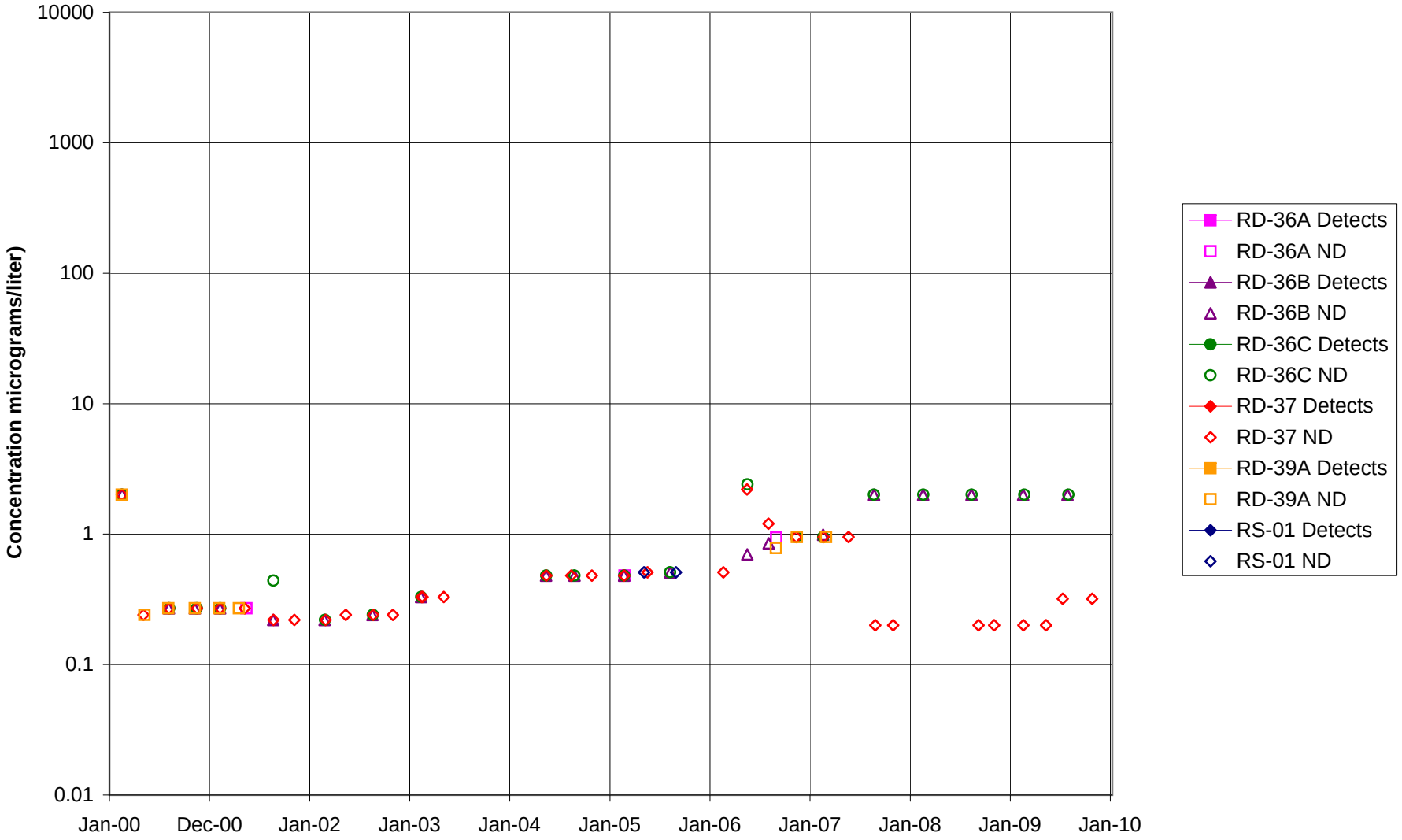


FIGURE F-207. METHYLENE CHLORIDE in MAIN GATE AREA WELLS - 2

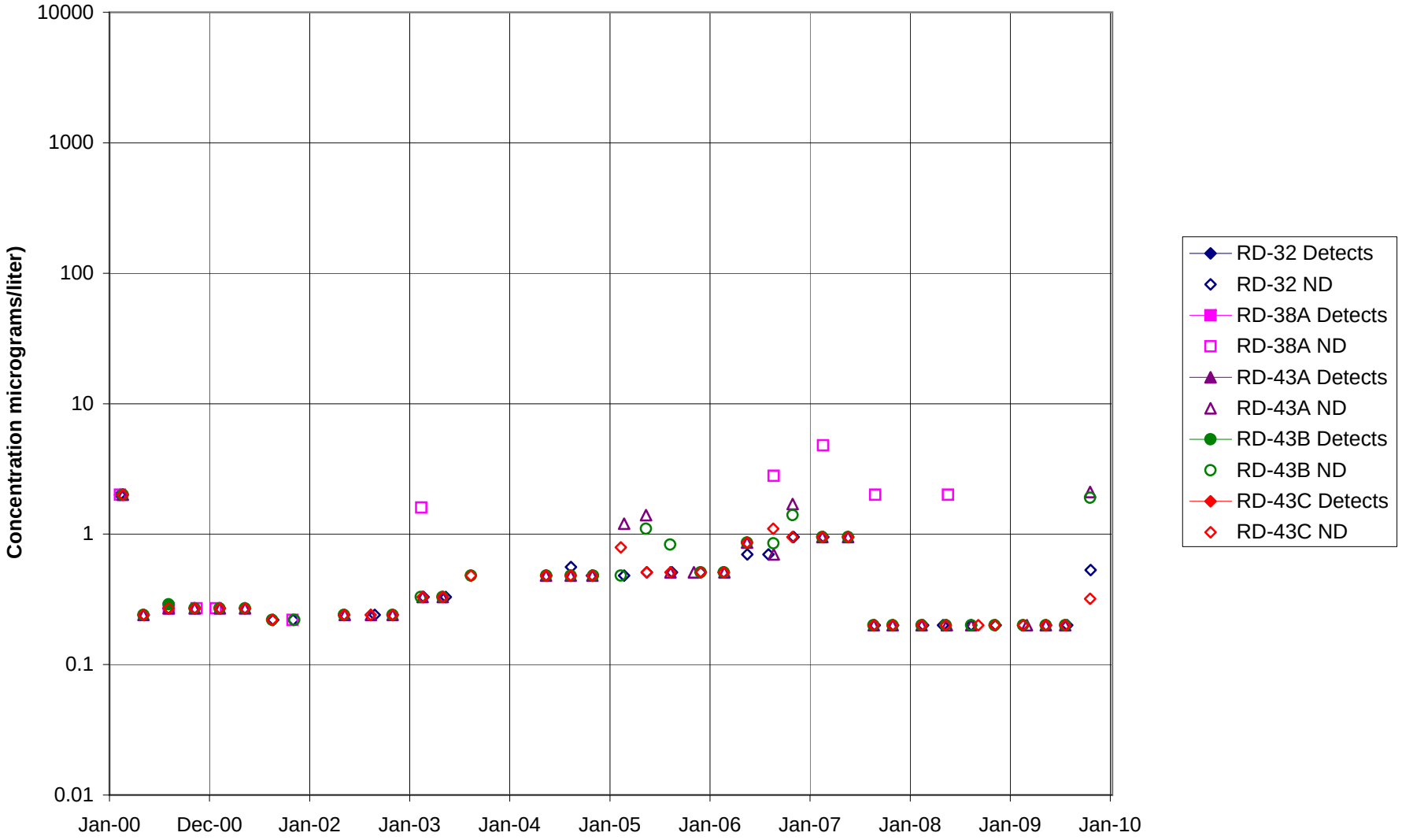


FIGURE F-208. METHYLENE CHLORIDE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1

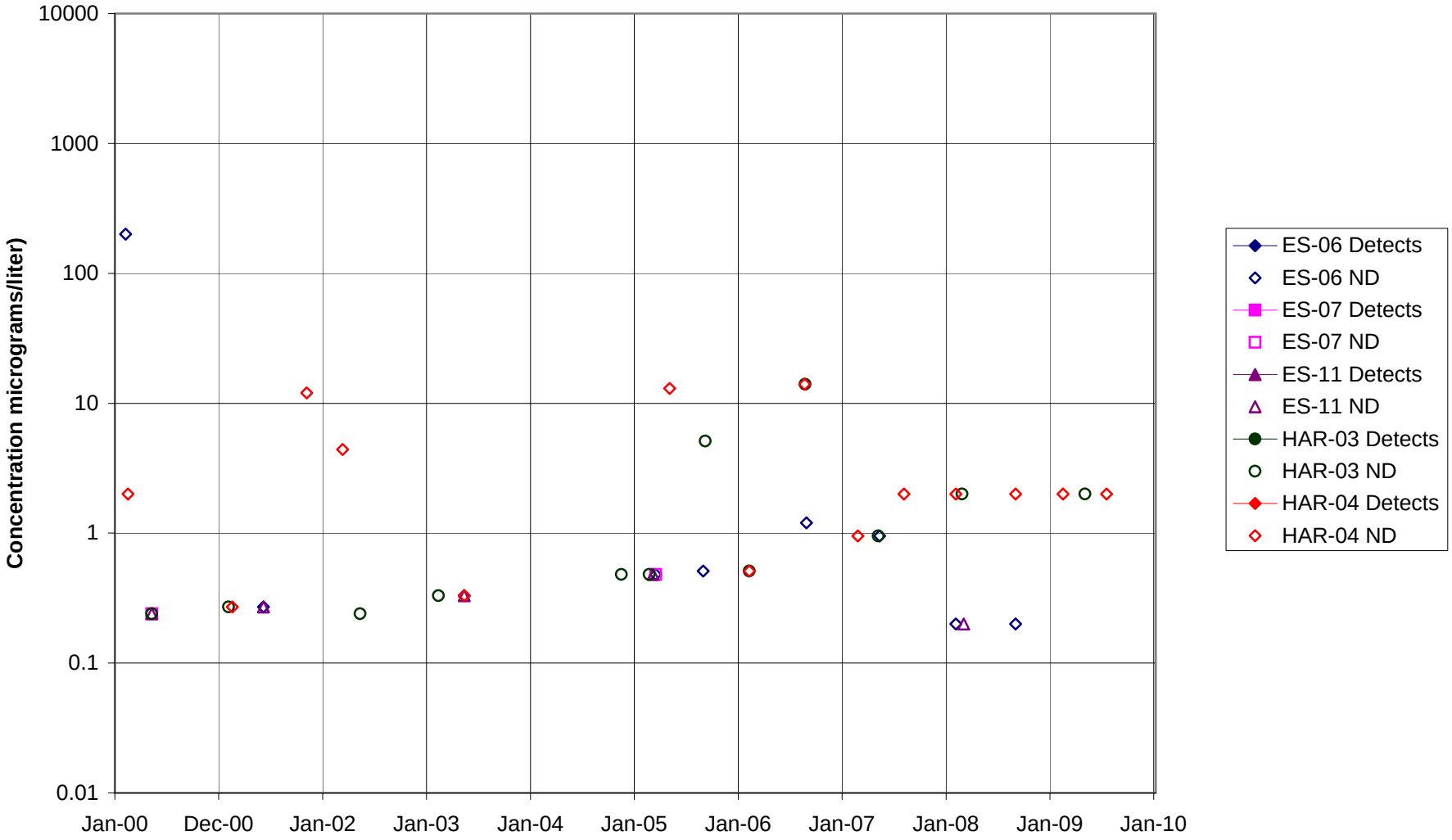


FIGURE F-209. METHYLENE CHLORIDE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 2

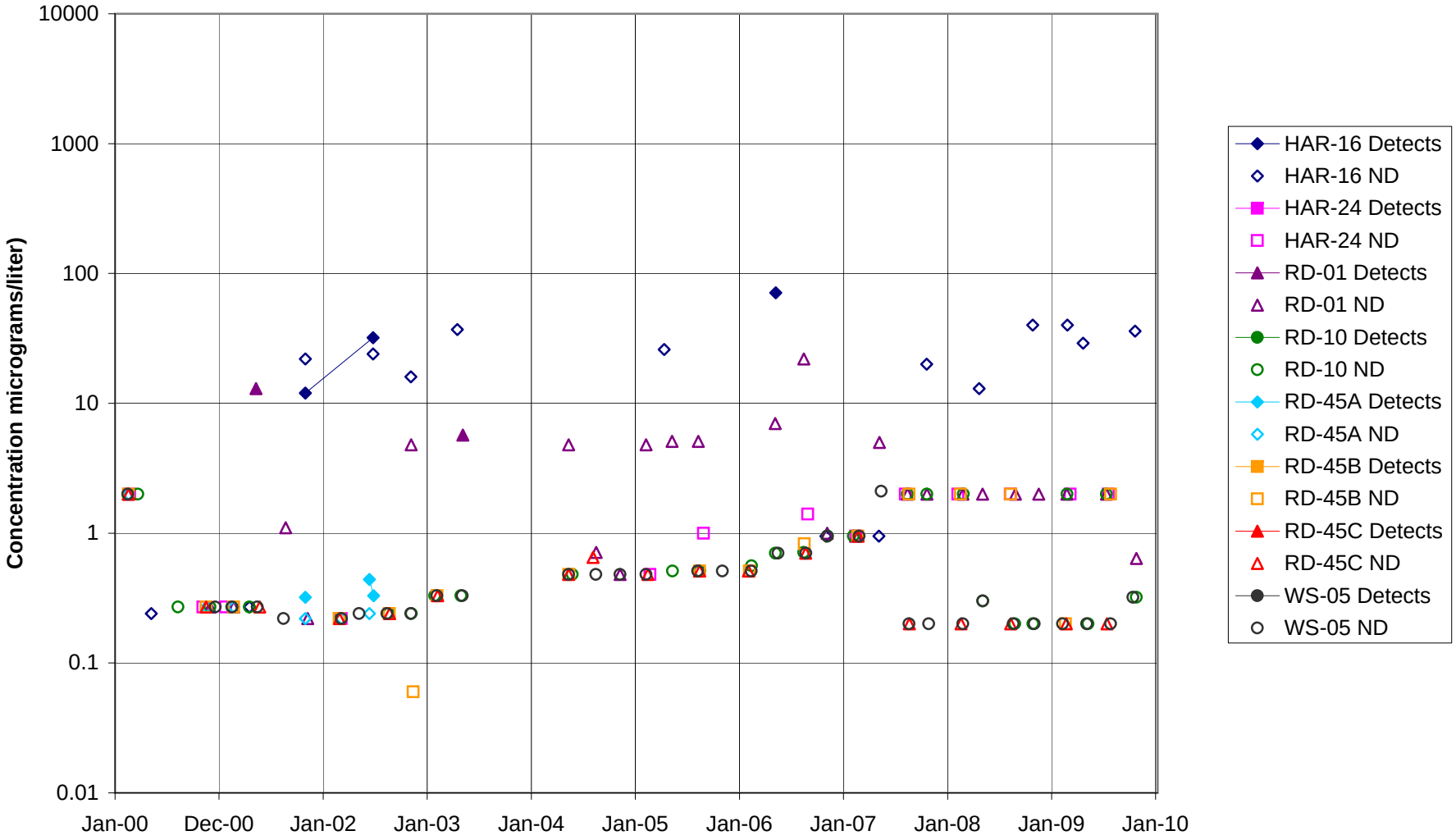


FIGURE F-210. METHYLENE CHLORIDE in CTL-III / PERIMETER POND AREA WELLS

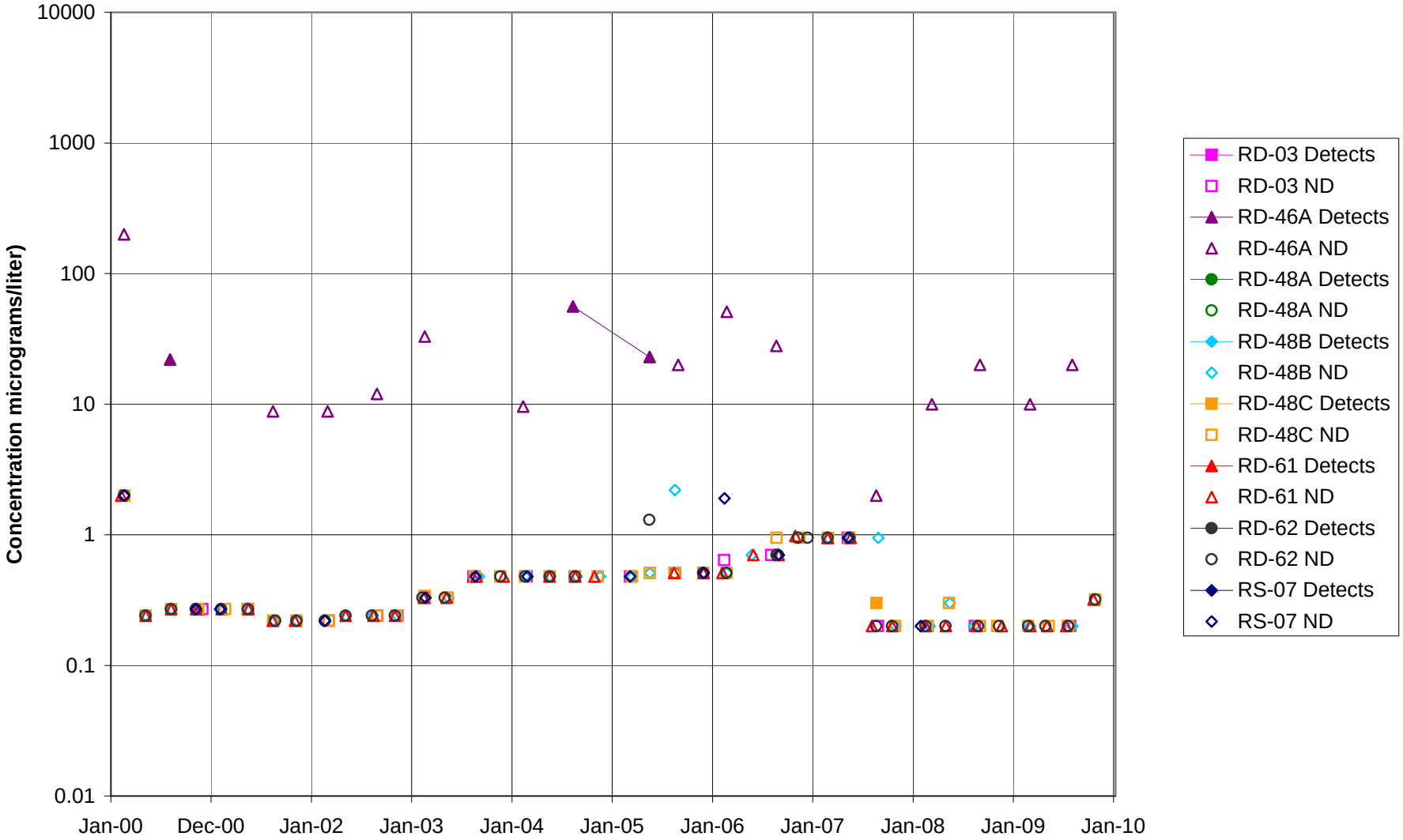


FIGURE F-211. METHYLENE CHLORIDE in BOWL AREA WELLS

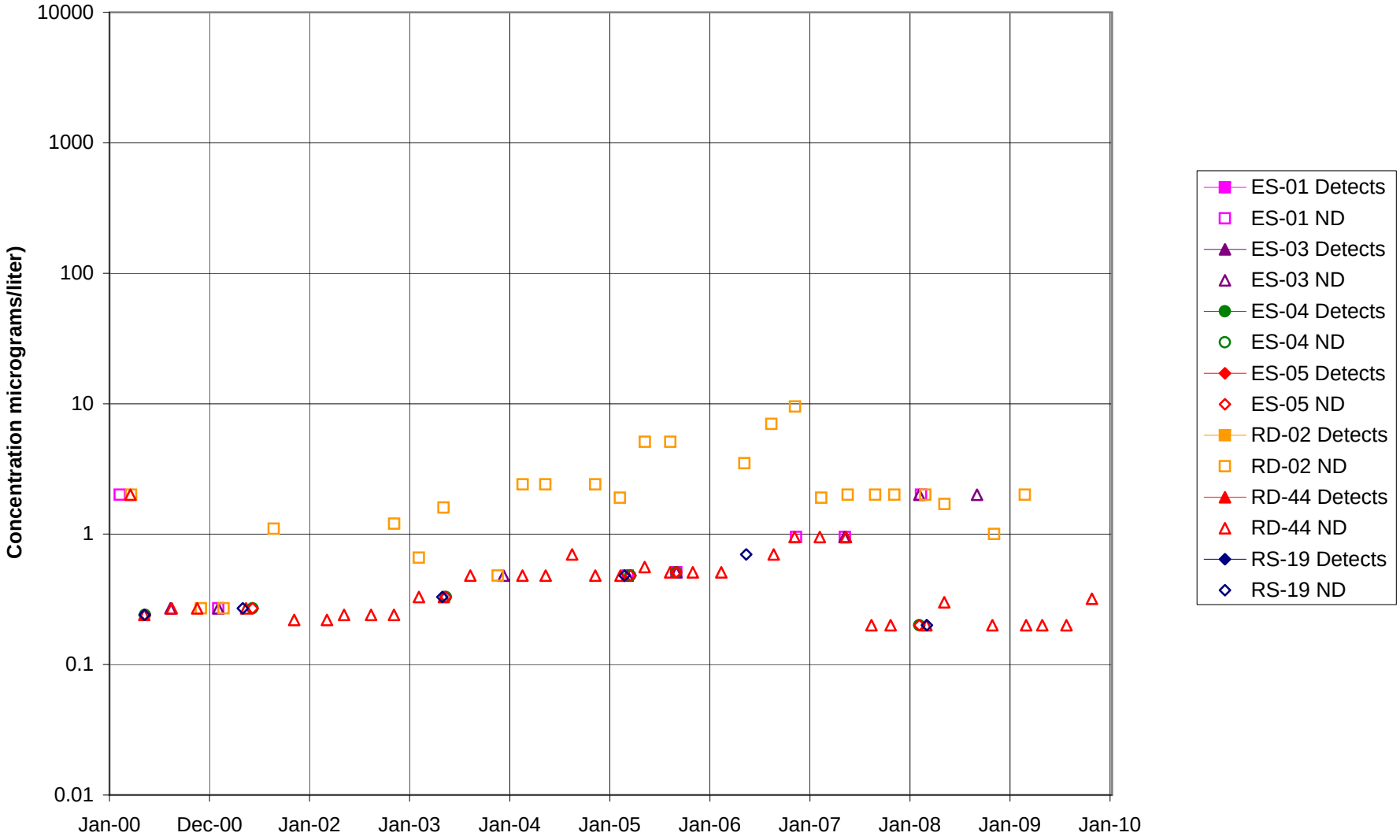


FIGURE F-212. METHYLENE CHLORIDE in ECL AREA WELLS

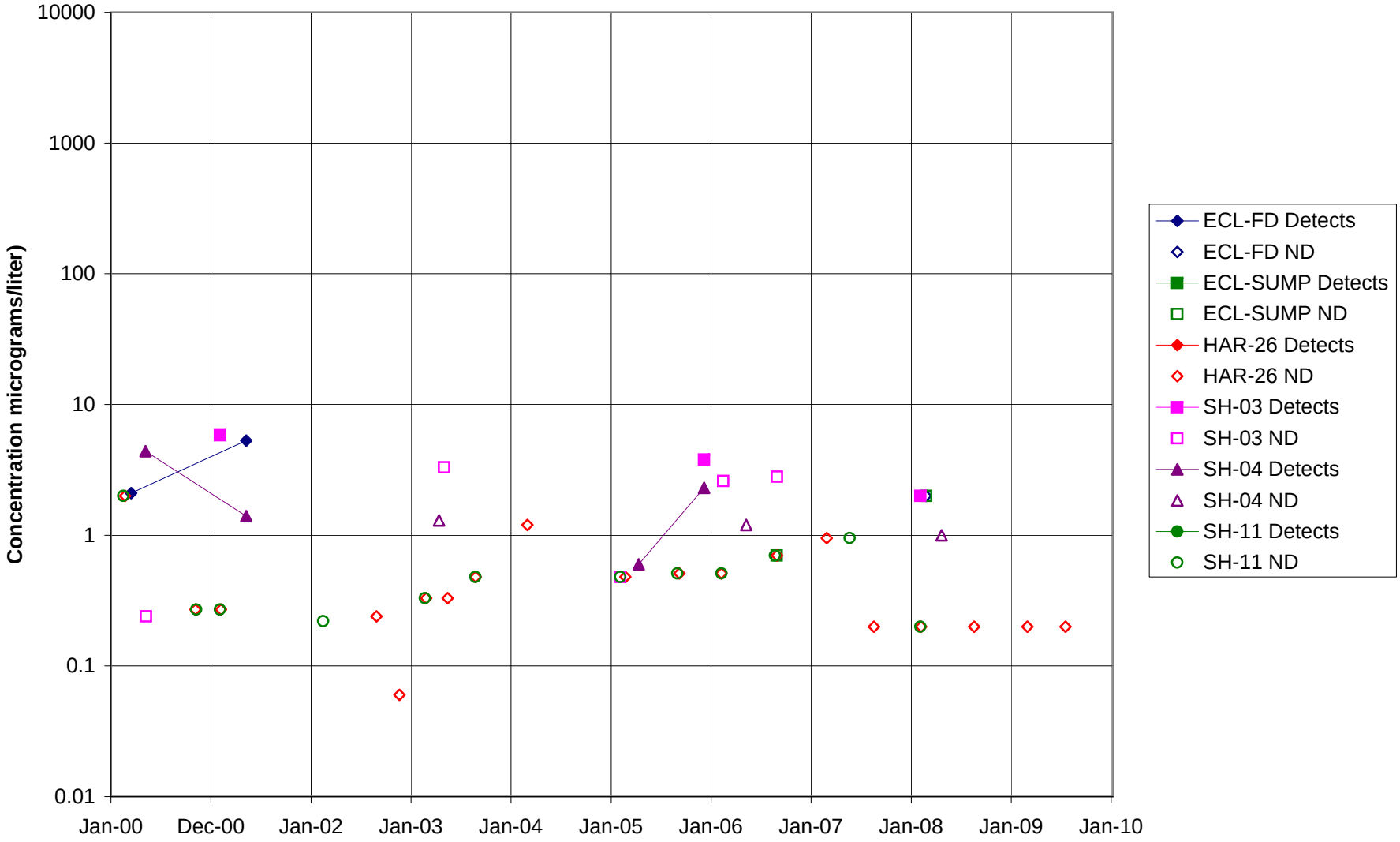


FIGURE F-213. METHYLENE CHLORIDE in FORMER LOX PLANT AREA WELLS

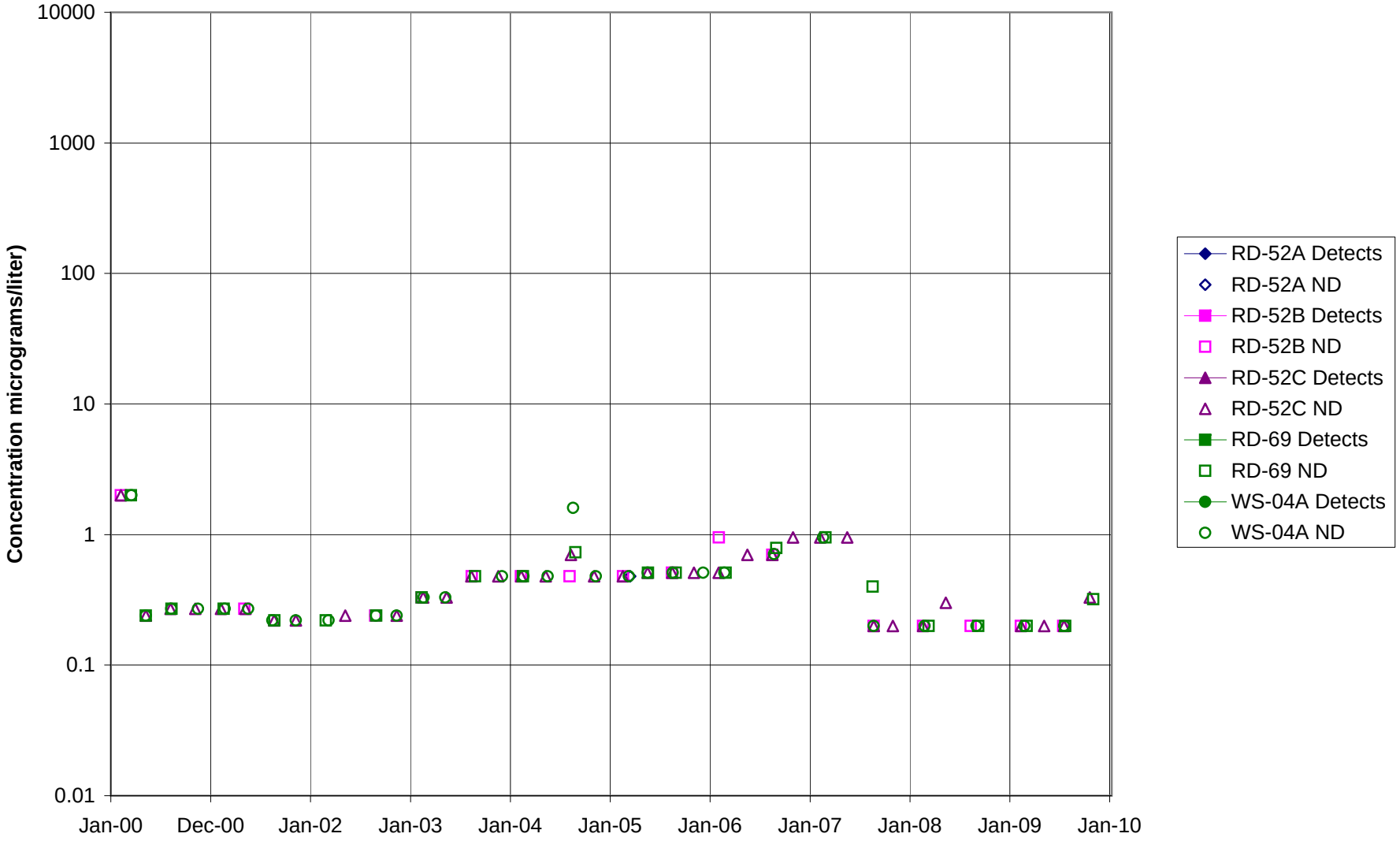


FIGURE F-214. METHYLENE CHLORIDE in RD-09 AREA WELLS

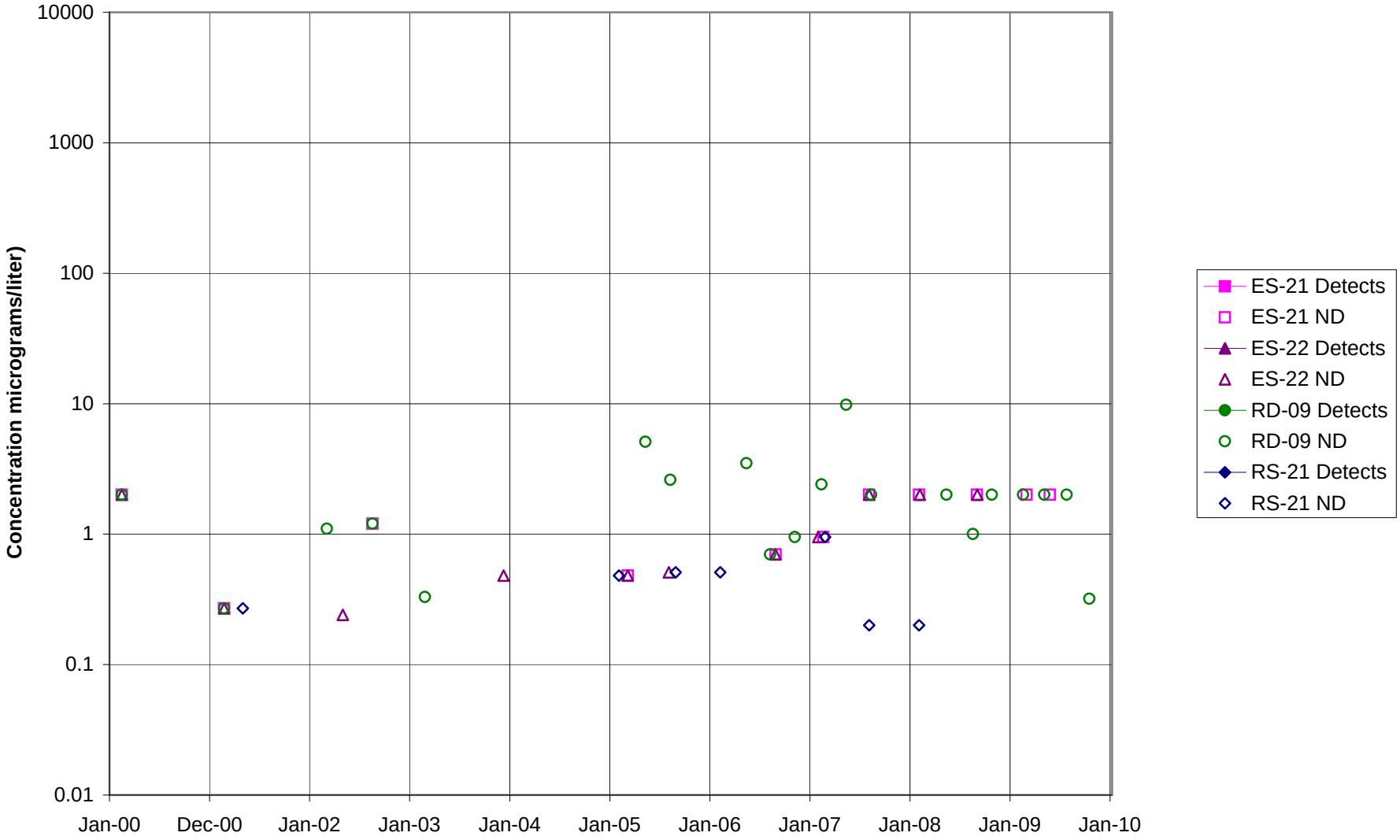


FIGURE F-215. METHYLENE CHLORIDE in HELIPORT, B/204 AREA WELLS

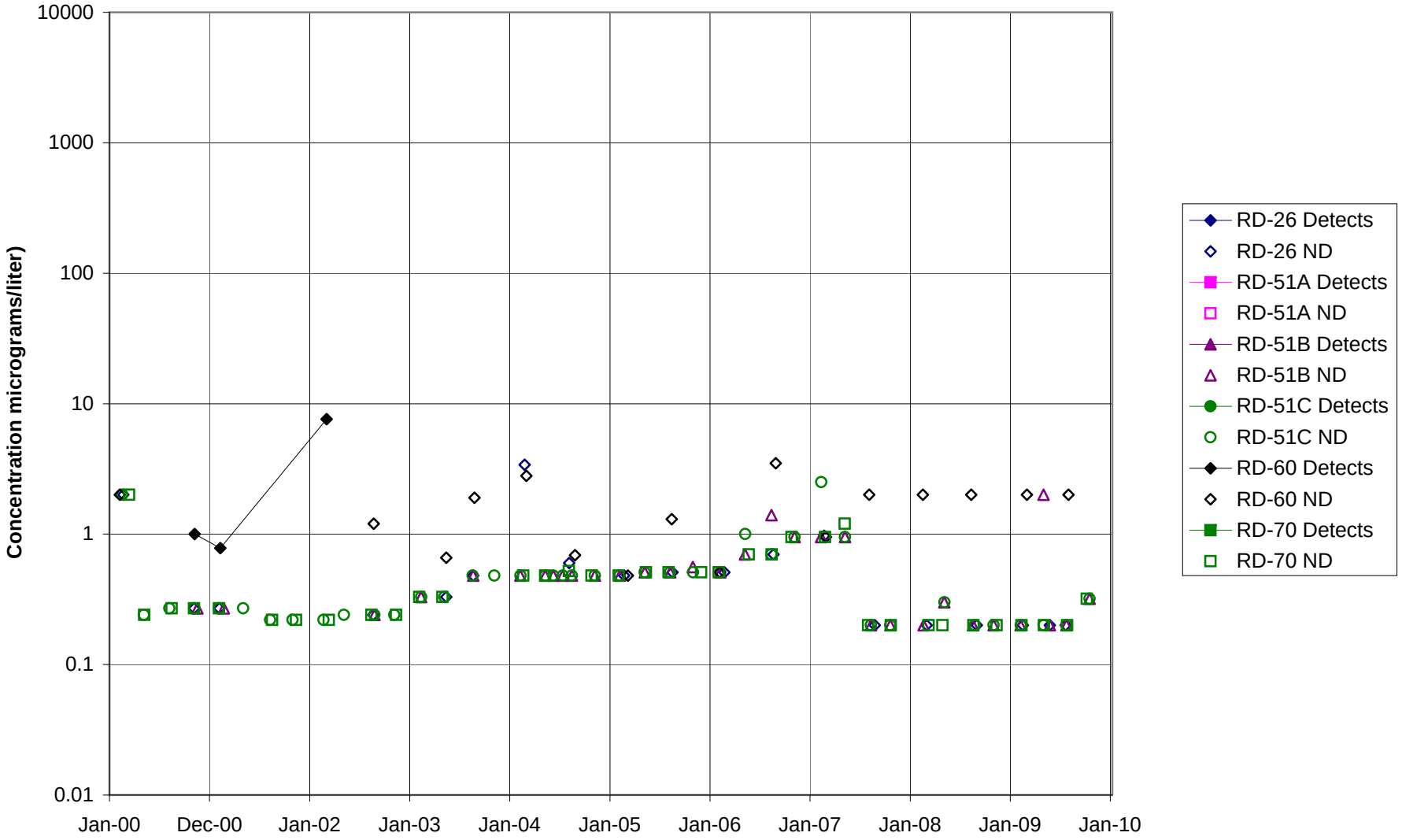


FIGURE F-216. METHYLENE CHLORIDE in ALFA / BRAVO AREA WELLS

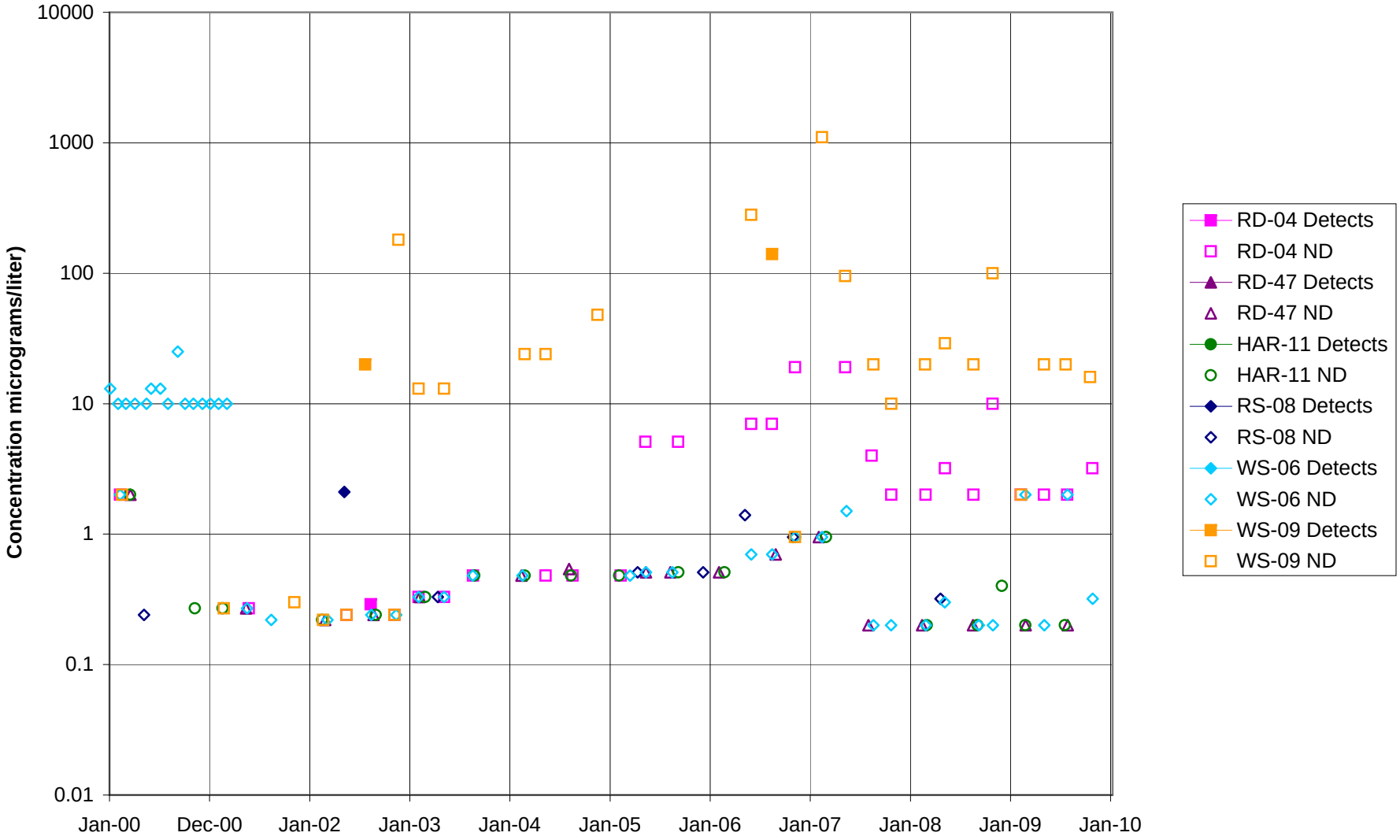


FIGURE F-217. METHYLENE CHLORIDE in SPA AREA WELLS

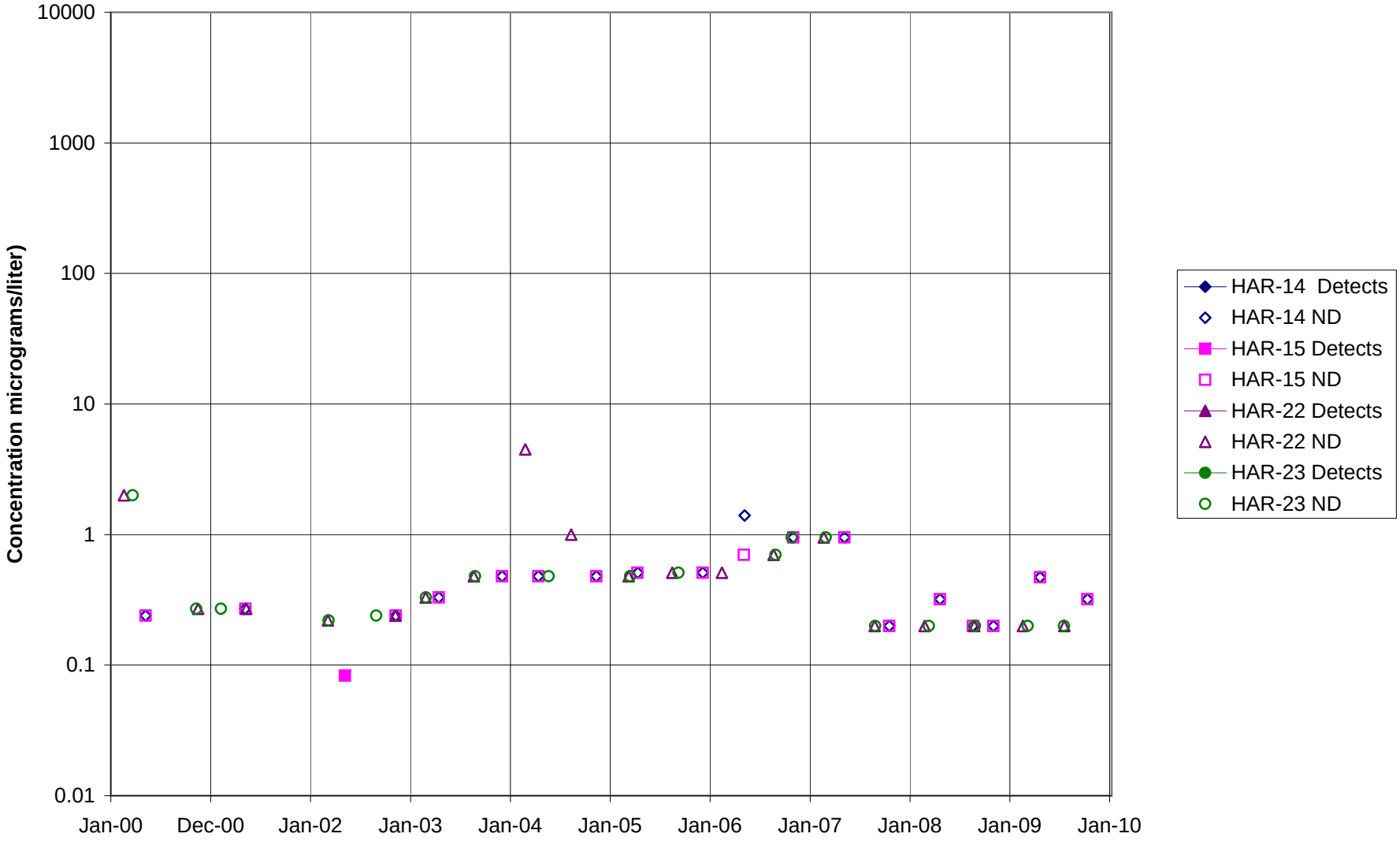


FIGURE F-218. METHYLENE CHLORIDE in COCA / PLF AREA WELLS

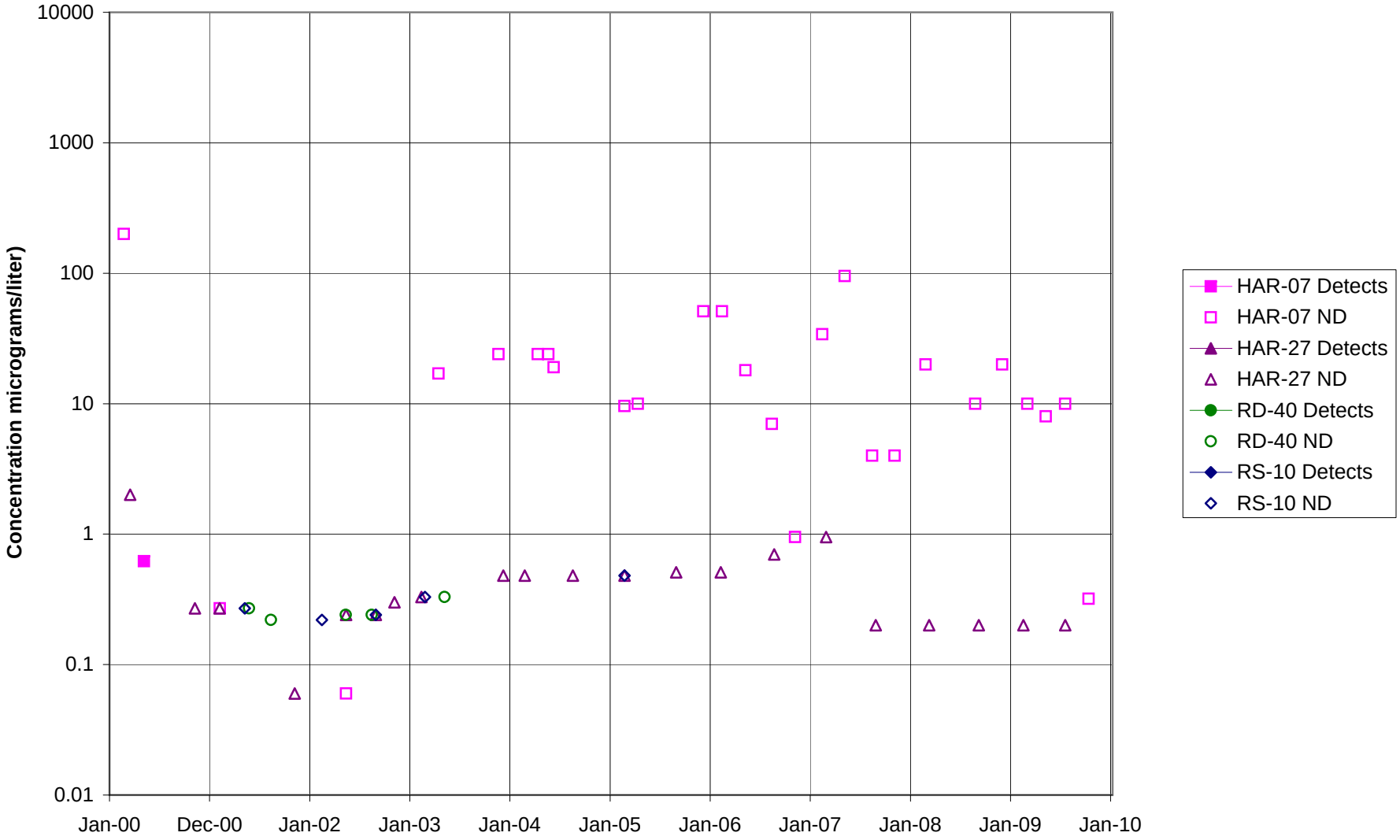


FIGURE F-219. METHYLENE CHLORIDE in DELTA / BUFFER ZONE AREA WELLS

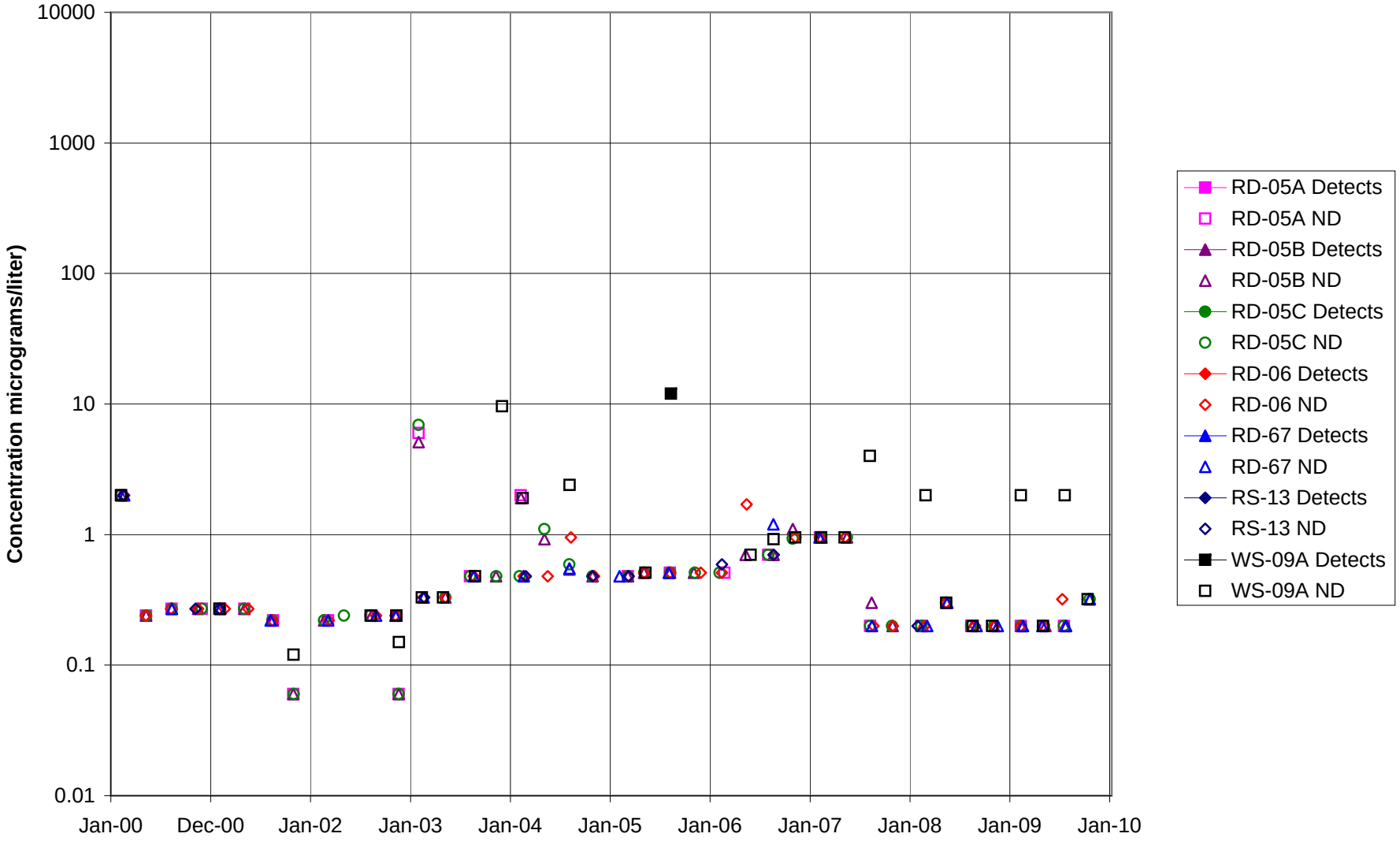


FIGURE F-220. METHYLENE CHLORIDE in AREA IV WELLS

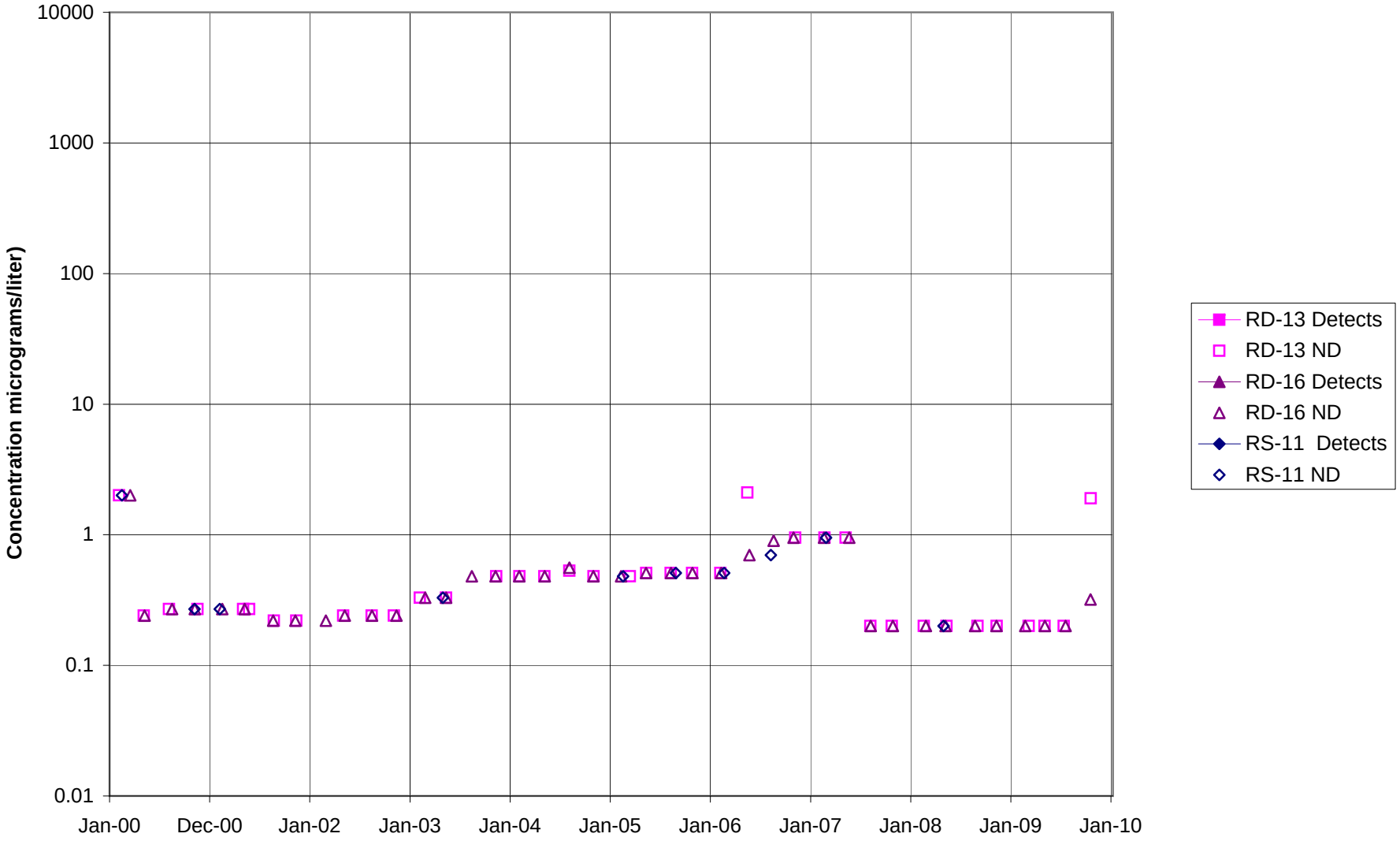


FIGURE F-221. NITRATE (as NO_3) in STL-IV AREA CHATSWORTH FORMATION WELLS

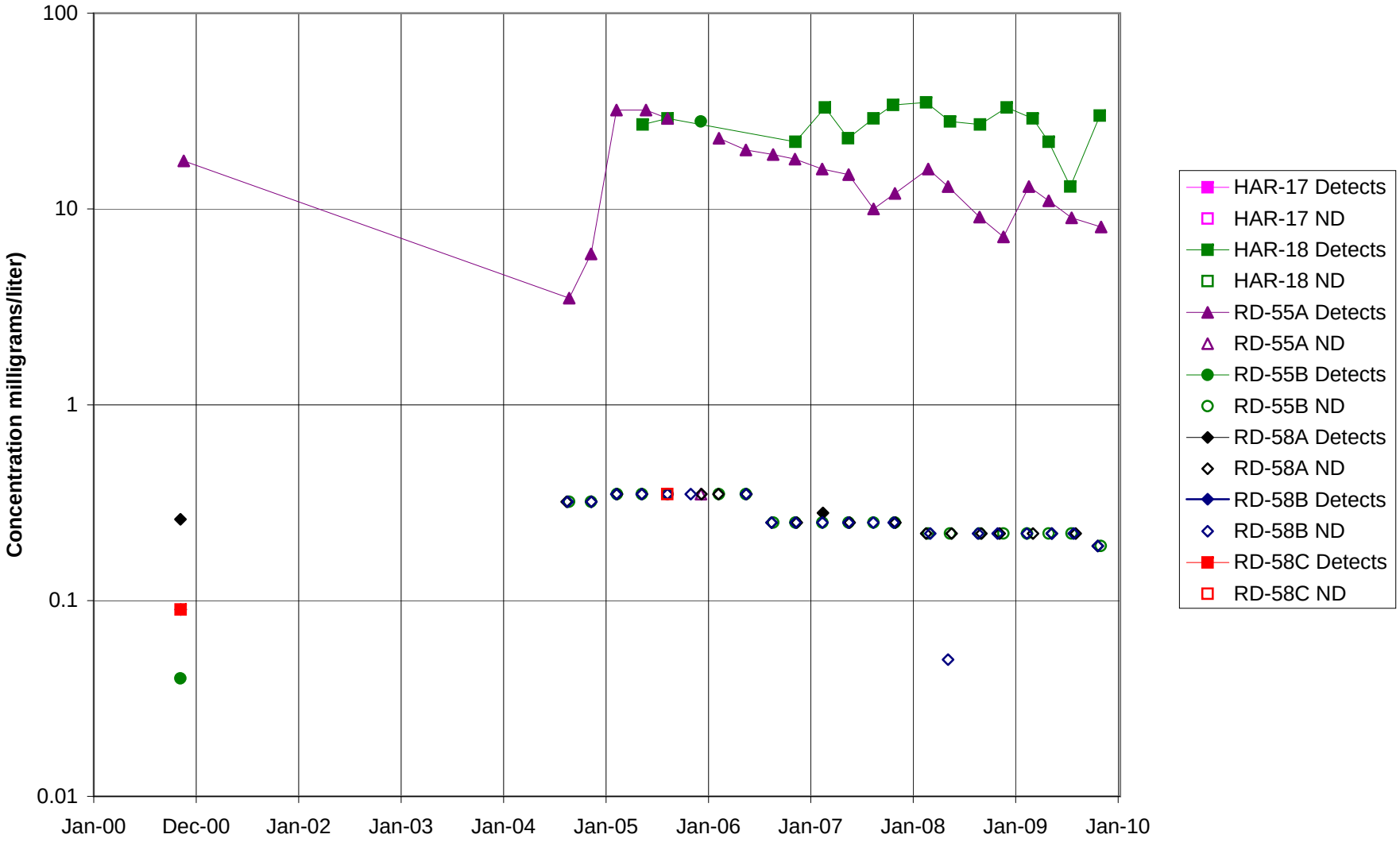


FIGURE F-222. NITRATE (as NO_3) in MAIN GATE AREA WELLS - 1

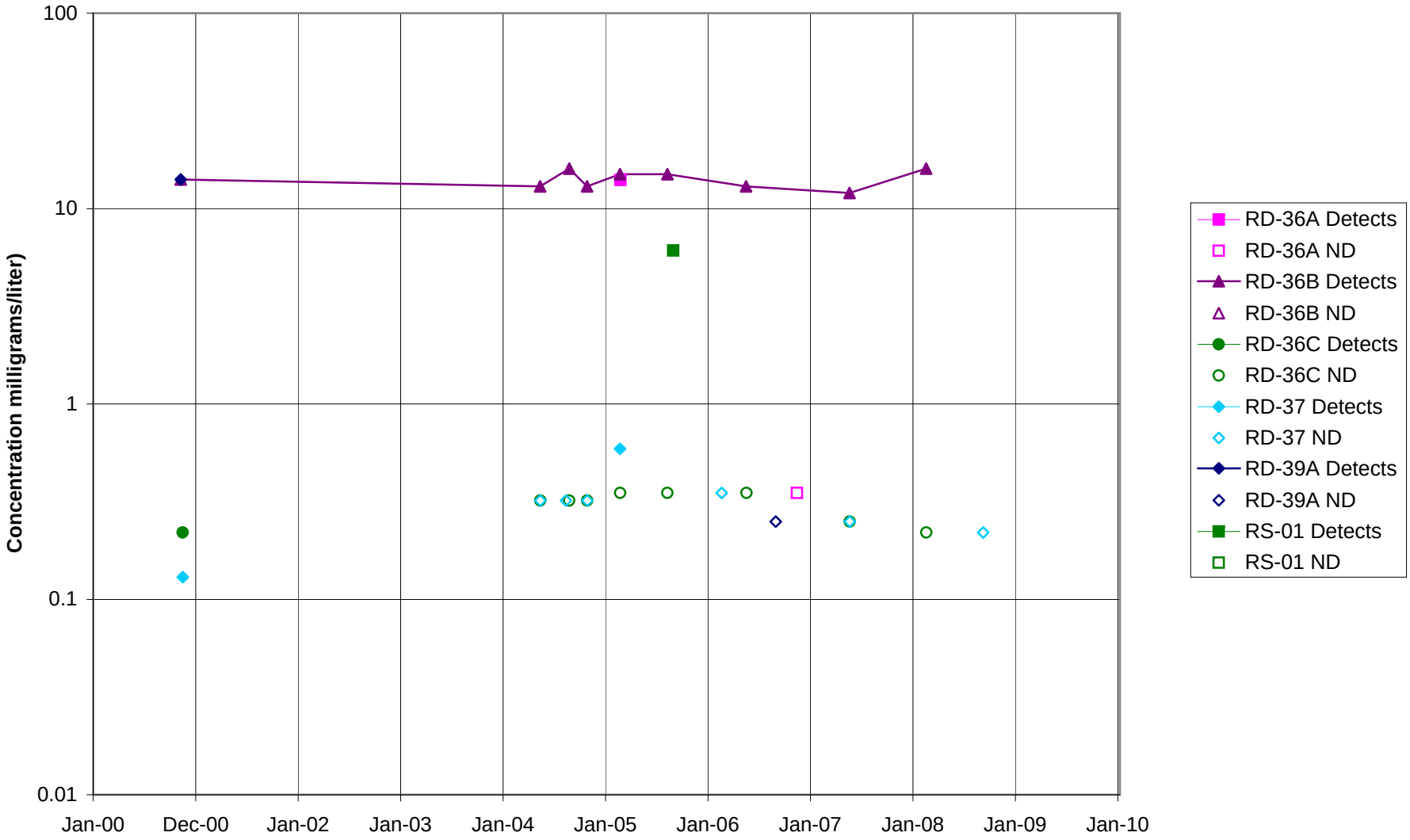


FIGURE F-223. NITRATE (as NO_3) in MAIN GATE AREA WELLS - 2

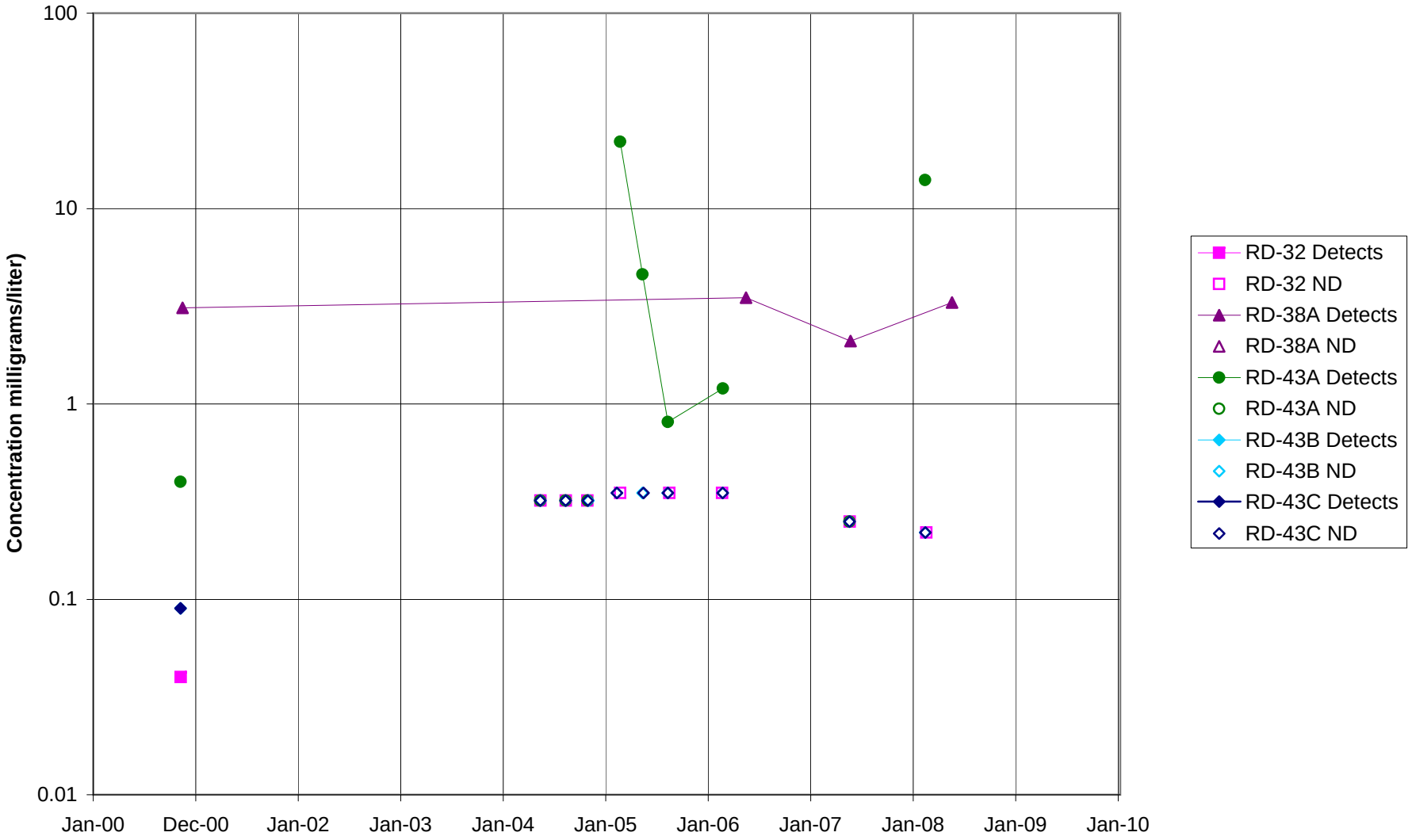


FIGURE F-224. NITRATE (as NO3) in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1

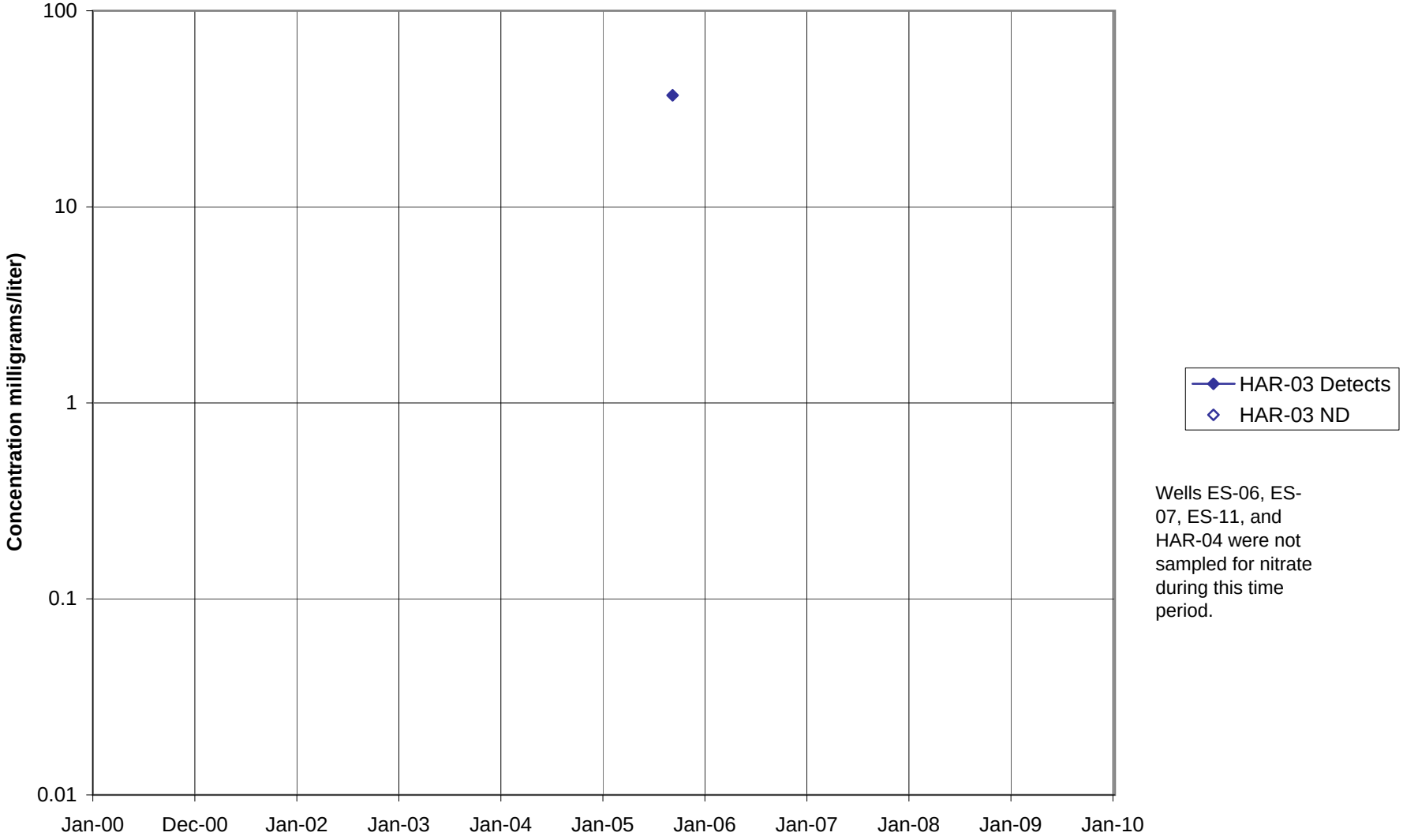


FIGURE F-225. NITRATE (as NO_3) in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 2

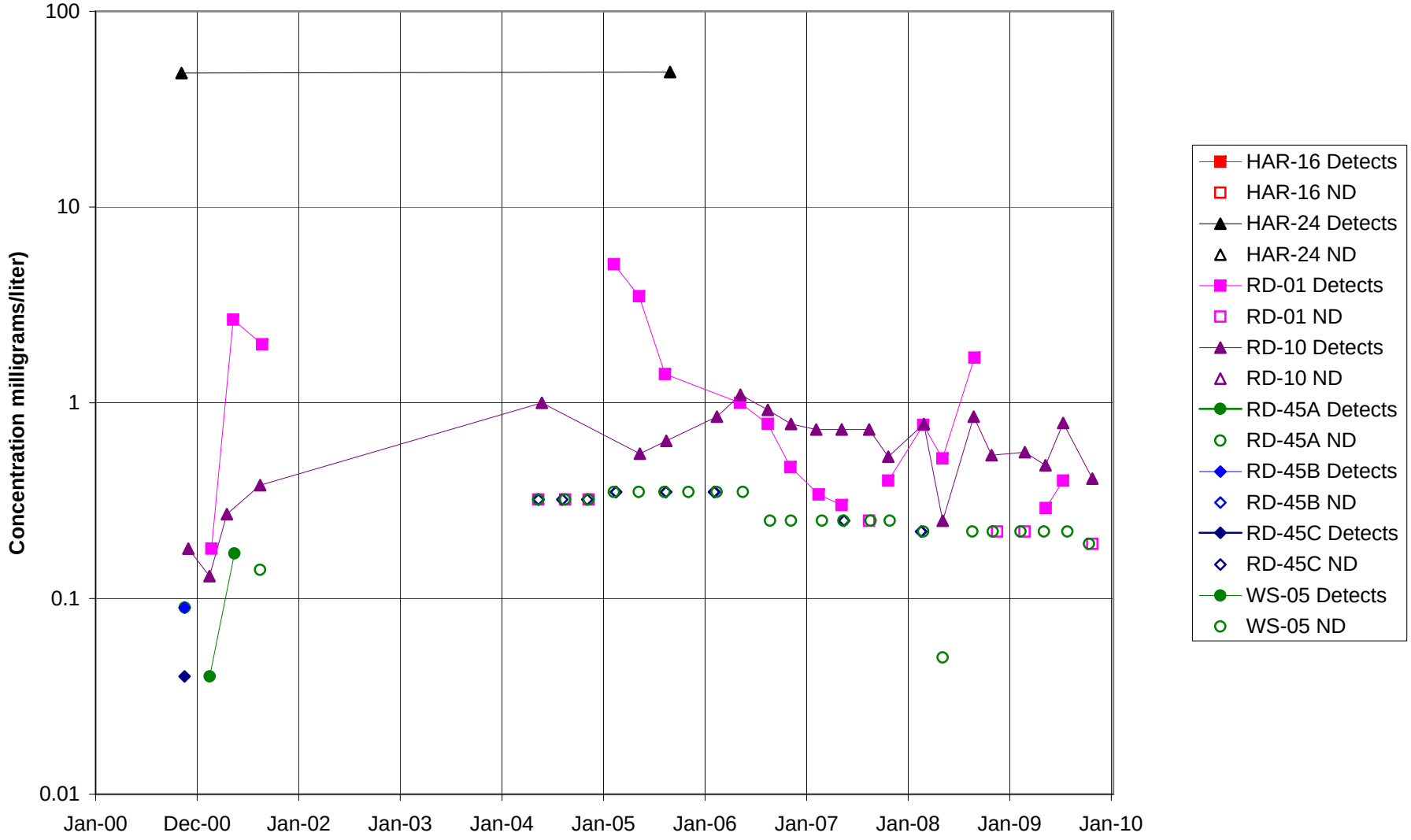


FIGURE F-226. NITRATE (as NO_3) in CTL-III / PERIMETER POND AREA WELLS

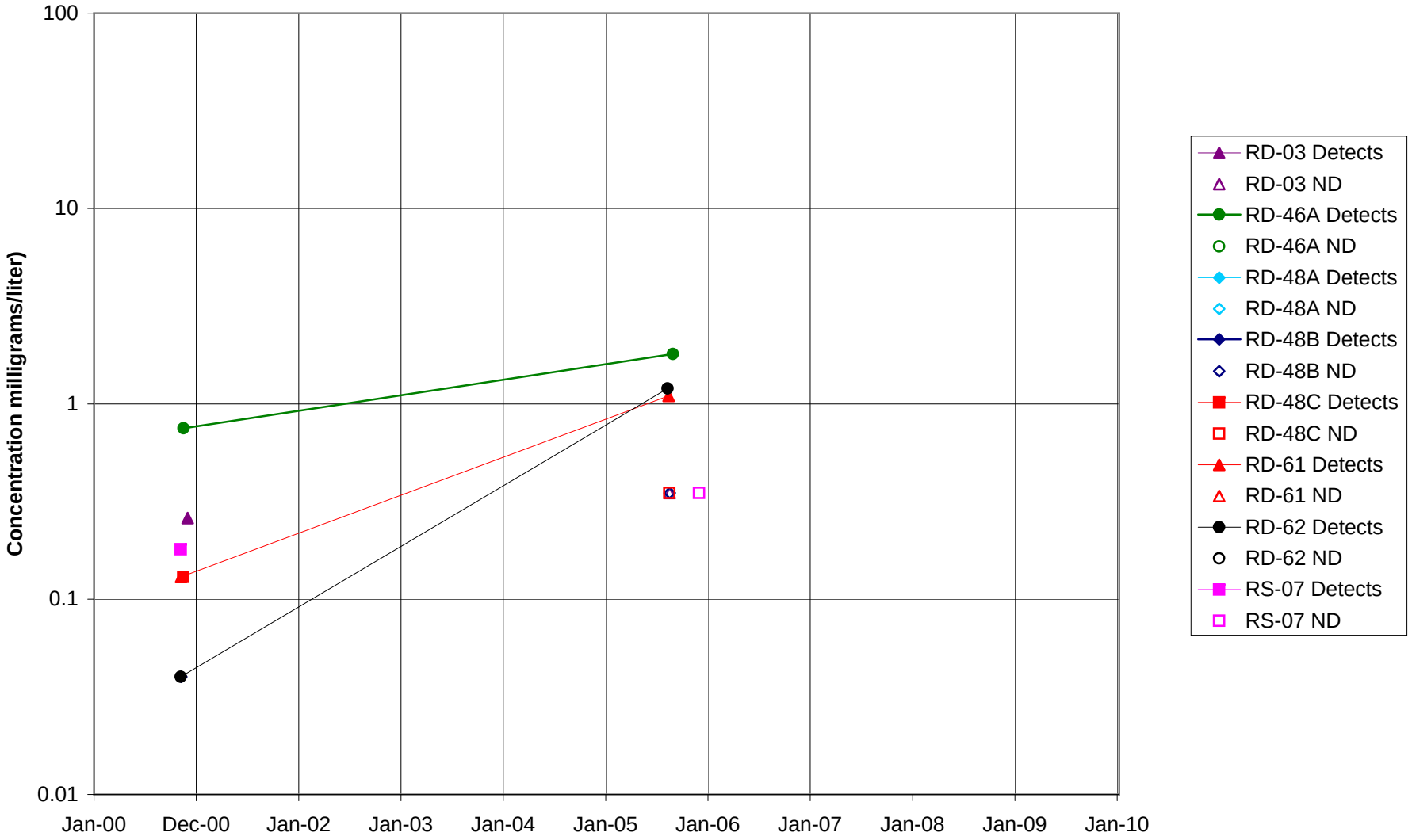
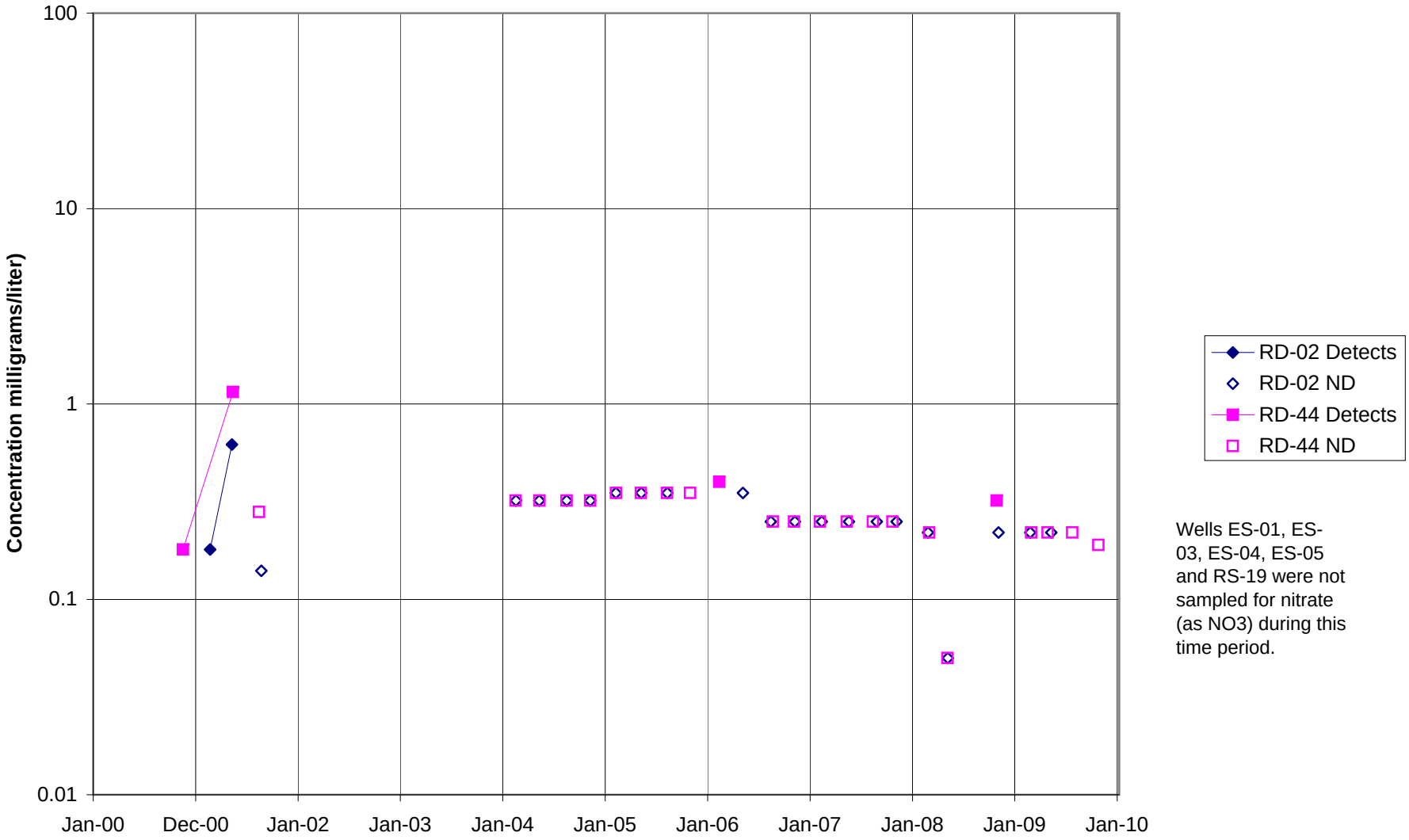
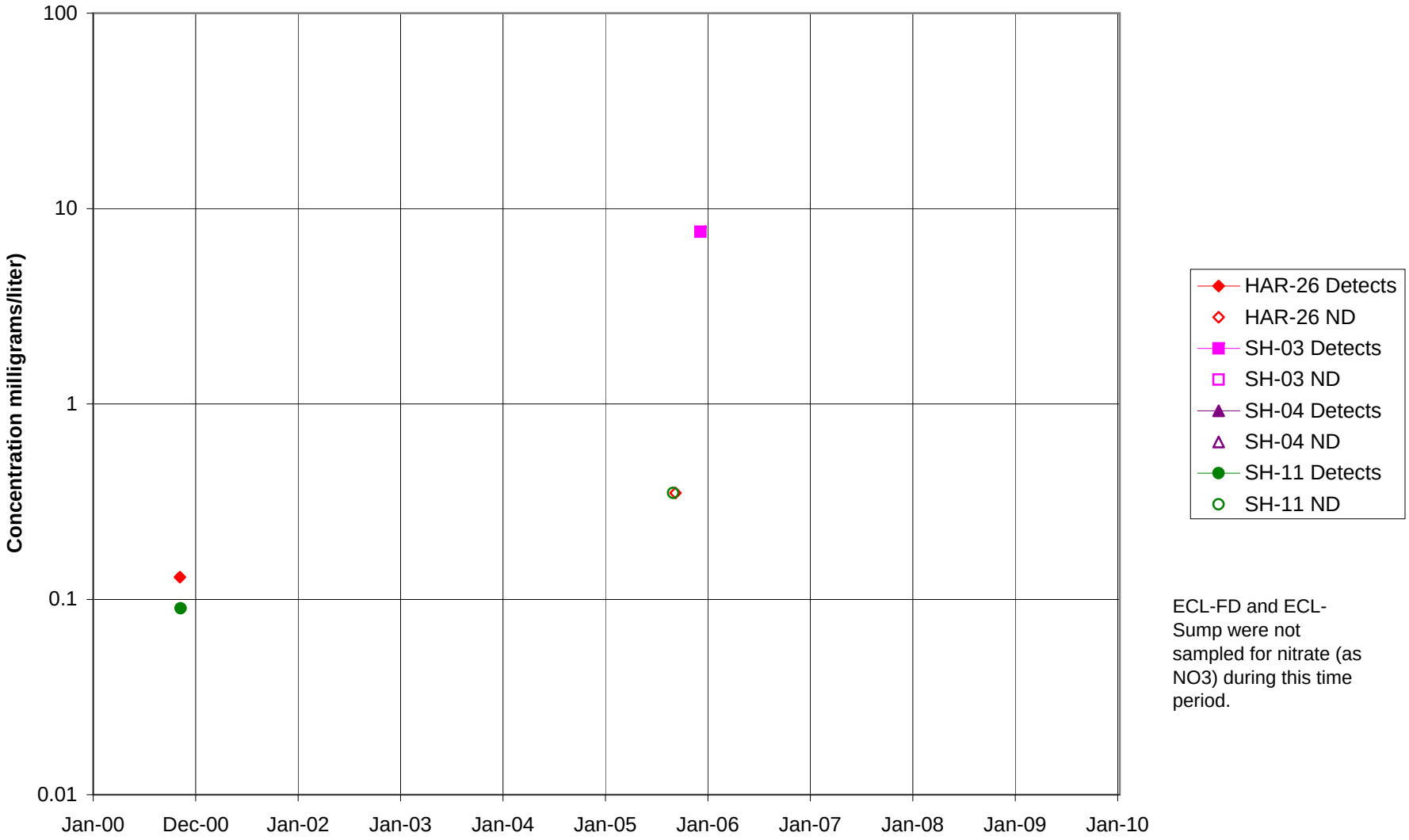


FIGURE F-227. NITRATE (as NO_3) in BOWL AREA WELLS



Wells ES-01, ES-03, ES-04, ES-05 and RS-19 were not sampled for nitrate (as NO3) during this time period.

FIGURE F-228. NITRATE (as NO_3) in ECL AREA WELLS



ECL-FD and ECL-Sump were not sampled for nitrate (as NO3) during this time period.

FIGURE F-229. NITRATE (as NO_3) in FORMER LOX PLANT AREA WELLS

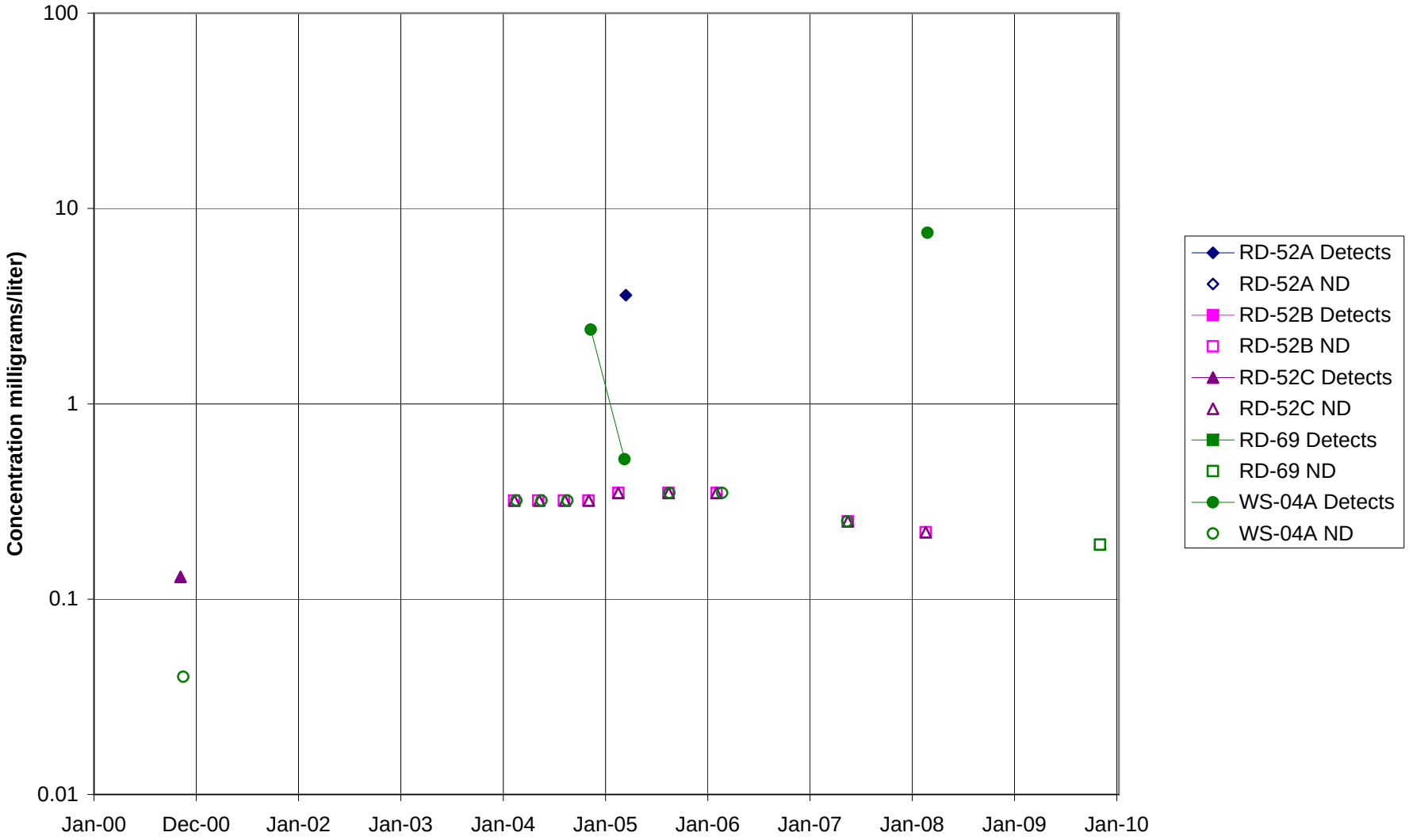
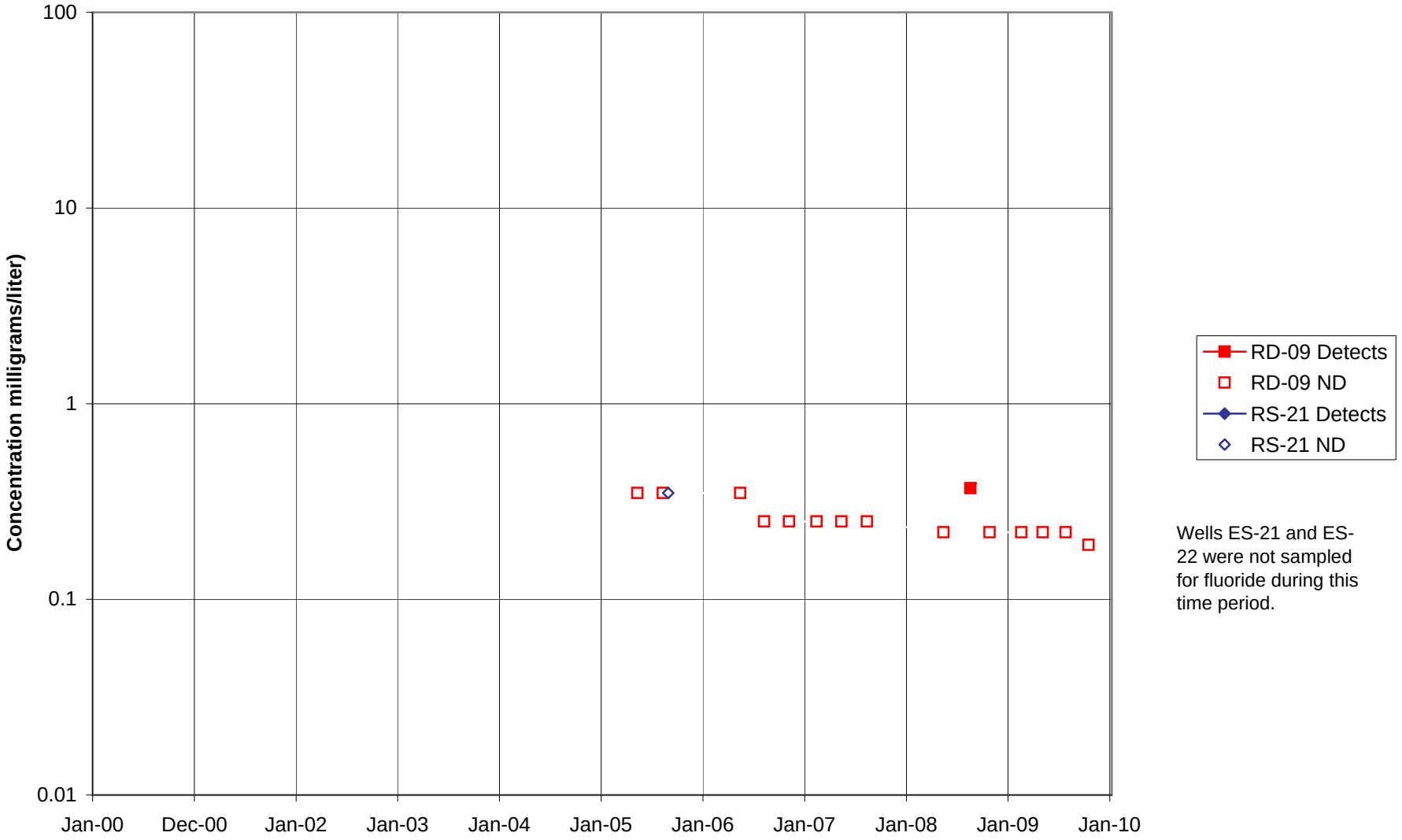
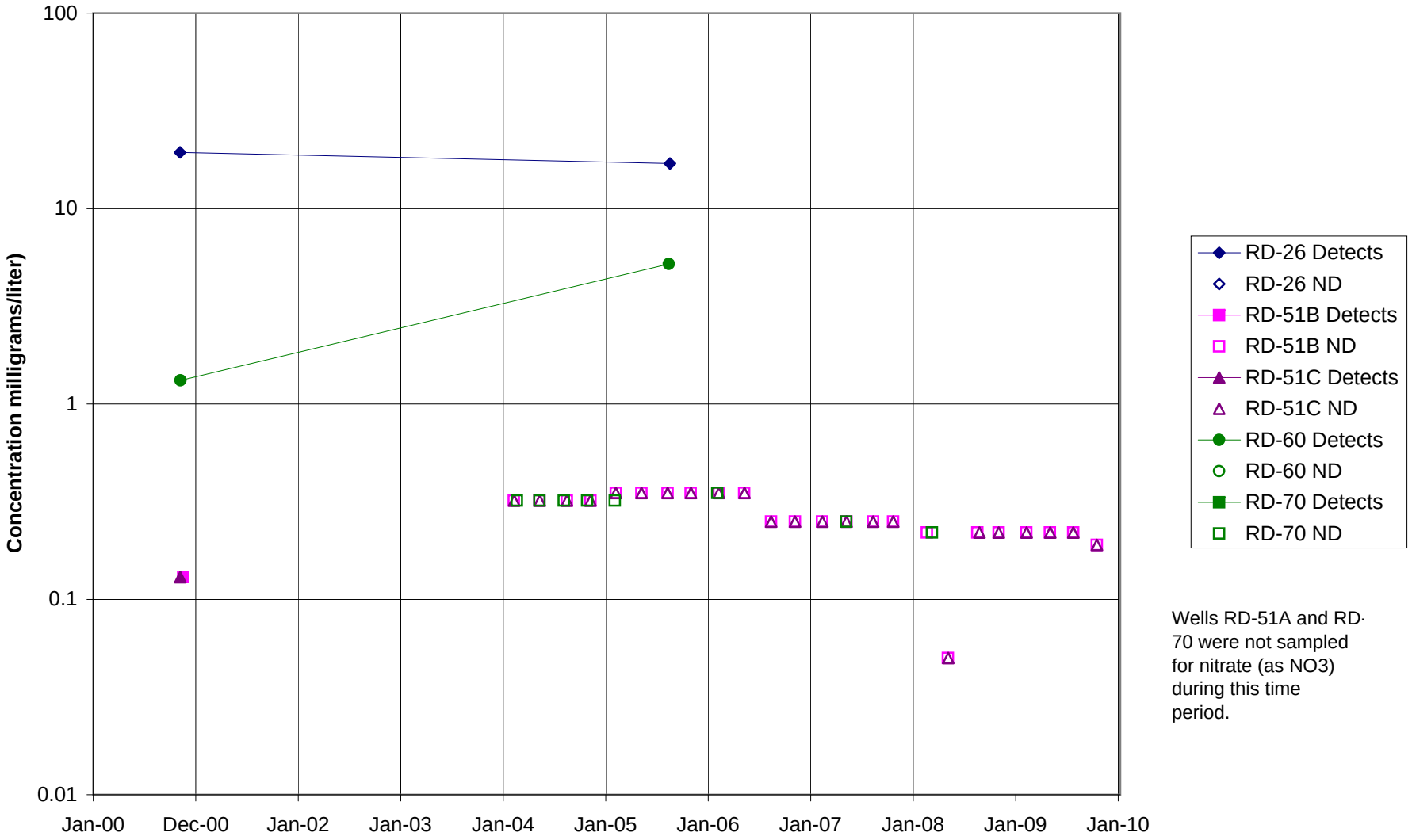


FIGURE F-230. NITRATE (as NO3) in RD-09 AREA WELLS



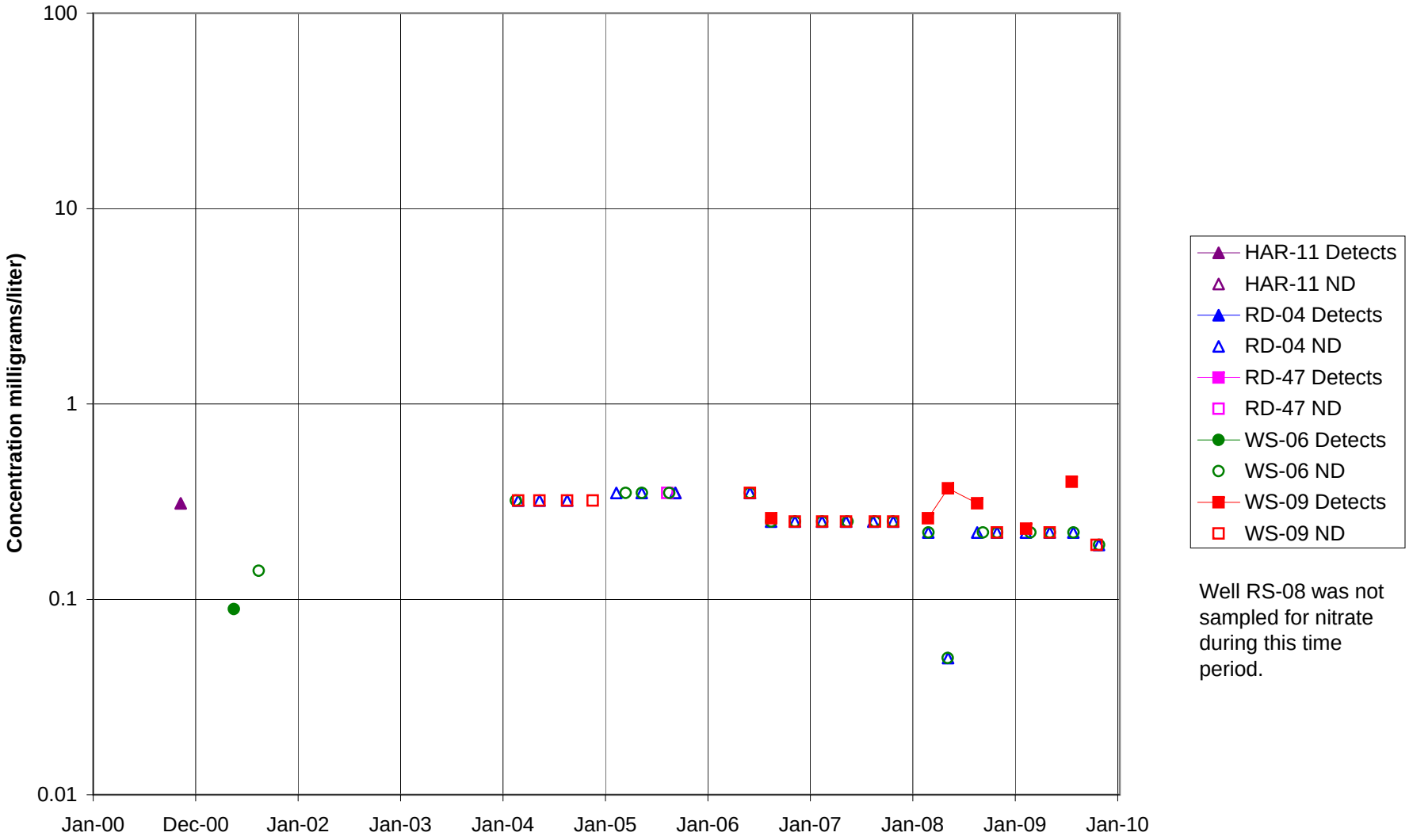
Wells ES-21 and ES-22 were not sampled for fluoride during this time period.

FIGURE F-231. NITRATE (as NO_3) in HELIPORT, B/204 AREA WELLS



Wells RD-51A and RD-70 were not sampled for nitrate (as NO3) during this time period.

FIGURE F-232. NITRATE (as NO_3) in ALFA / BRAVO AREA WELLS



Well RS-08 was not sampled for nitrate during this time period.

FIGURE F-233. NITRATE (as NO_3) in SPA AREA WELLS

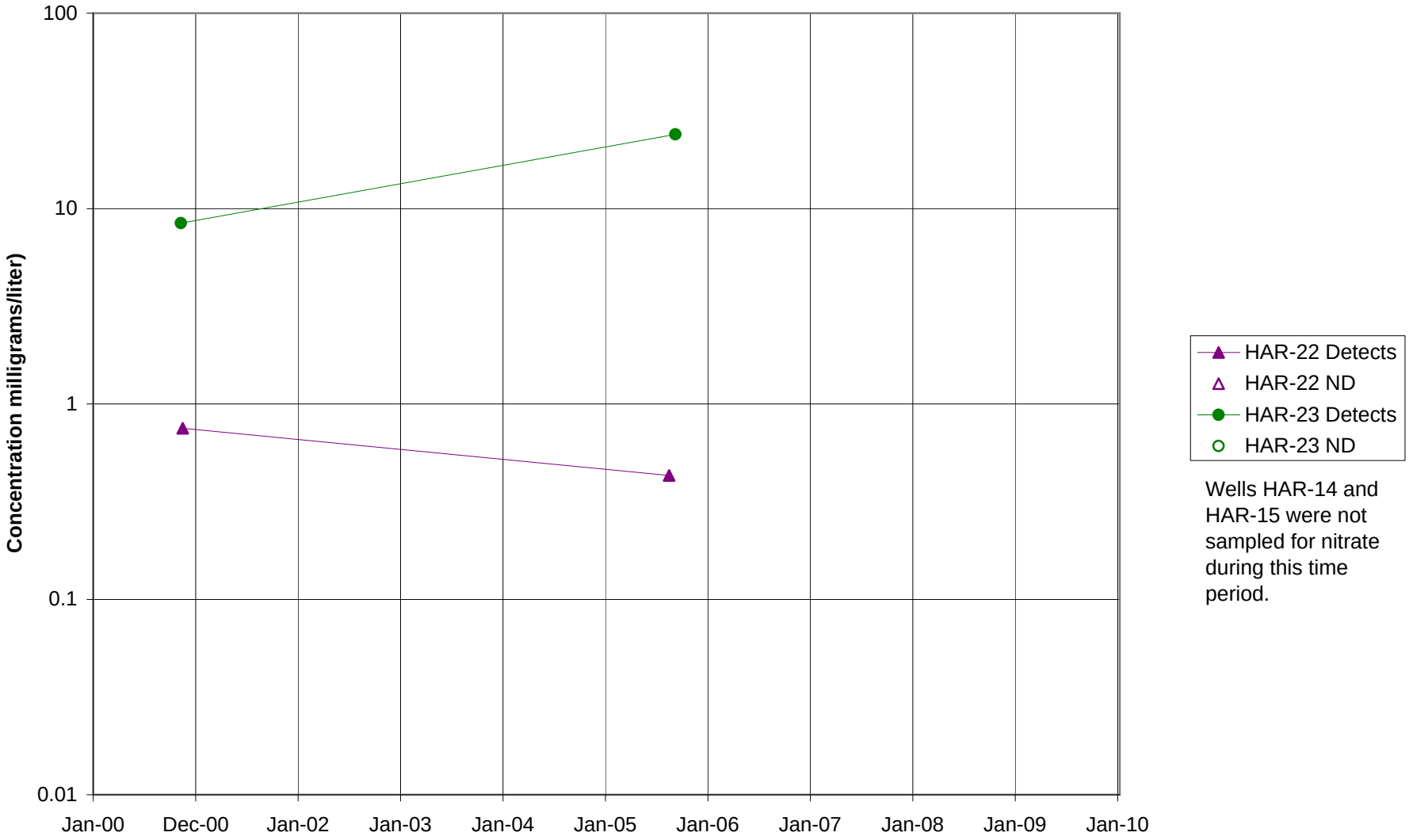
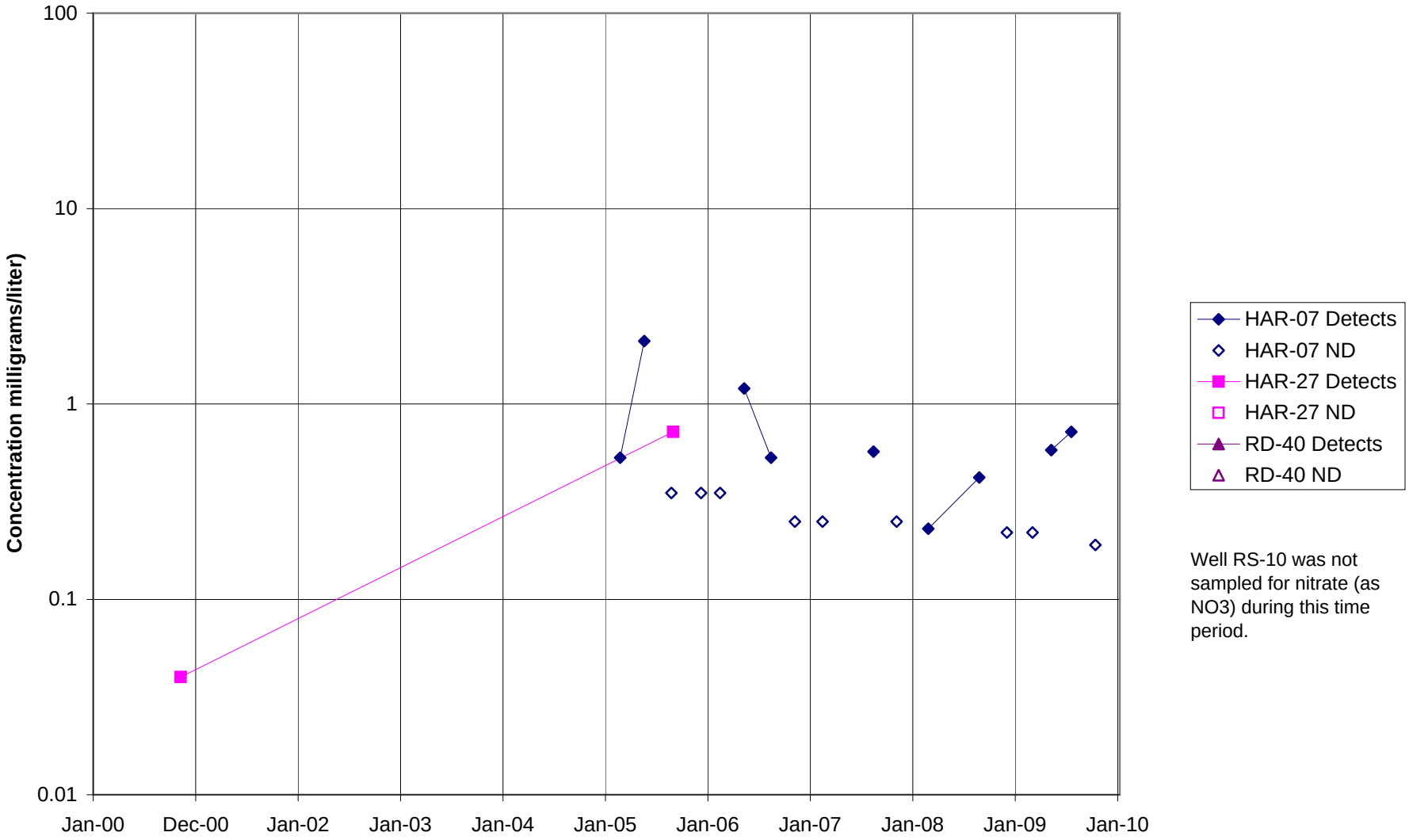


FIGURE F-234. NITRATE (as NO_3) in COCA / PLF AREA WELLS



Well RS-10 was not sampled for nitrate (as NO3) during this time period.

FIGURE F-235. NITRATE (as NO_3) in DELTA / BUFFER ZONE WELLS

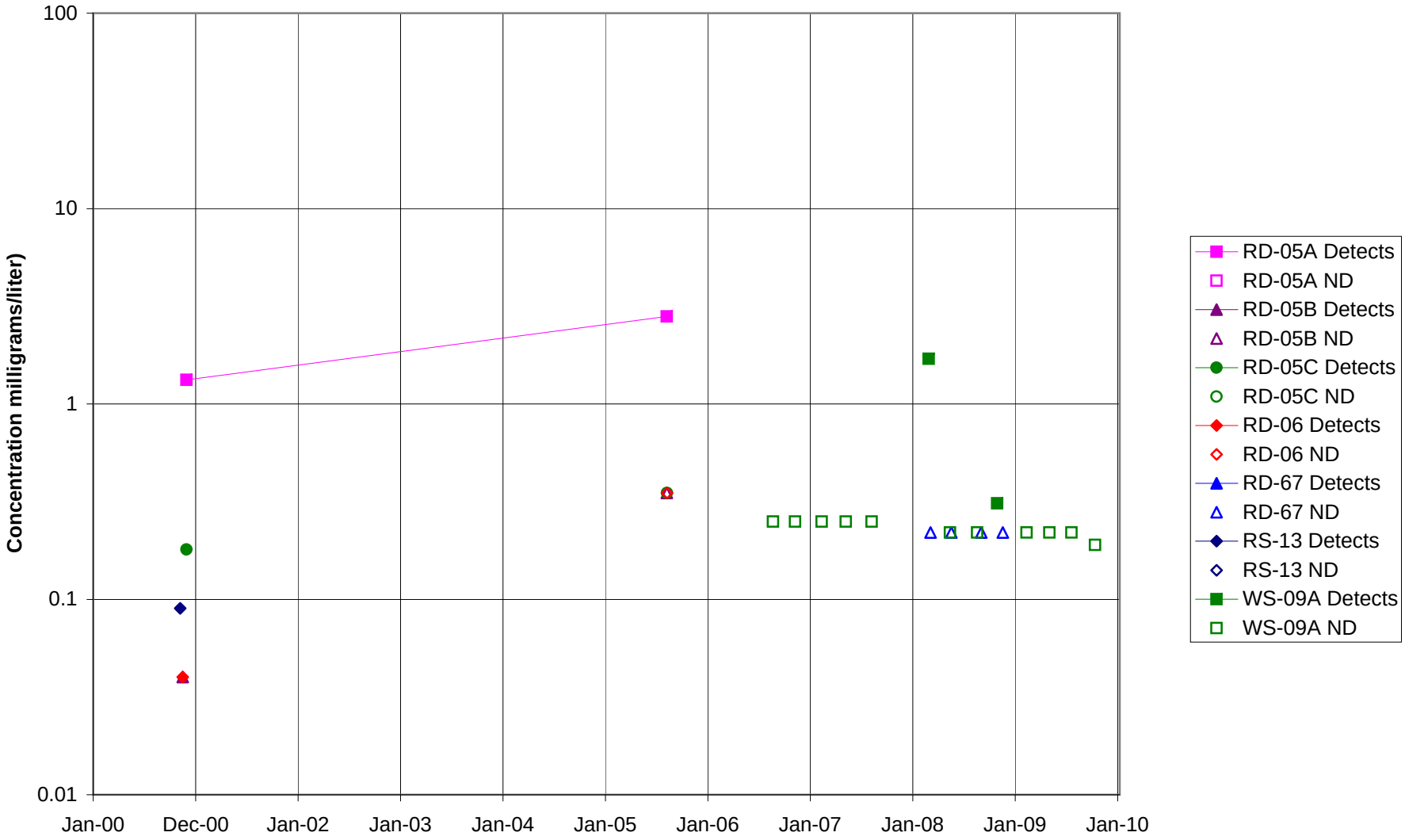


FIGURE F-236. NITRATE (as NO_3) AREA IV WELLS

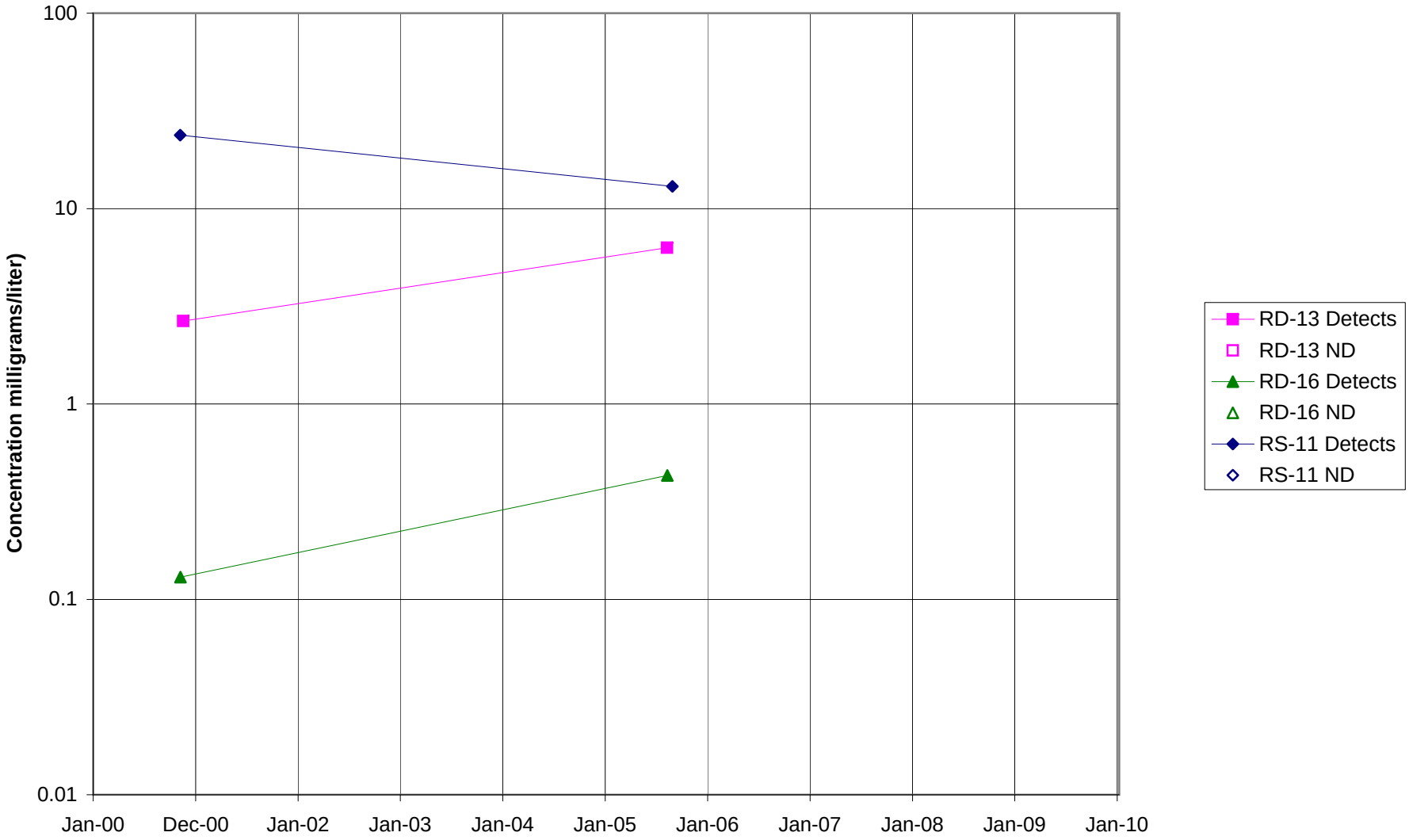


FIGURE F-237. NITROBENZENE in STL-IV AREA CHATSWORTH FORMATION WELLS

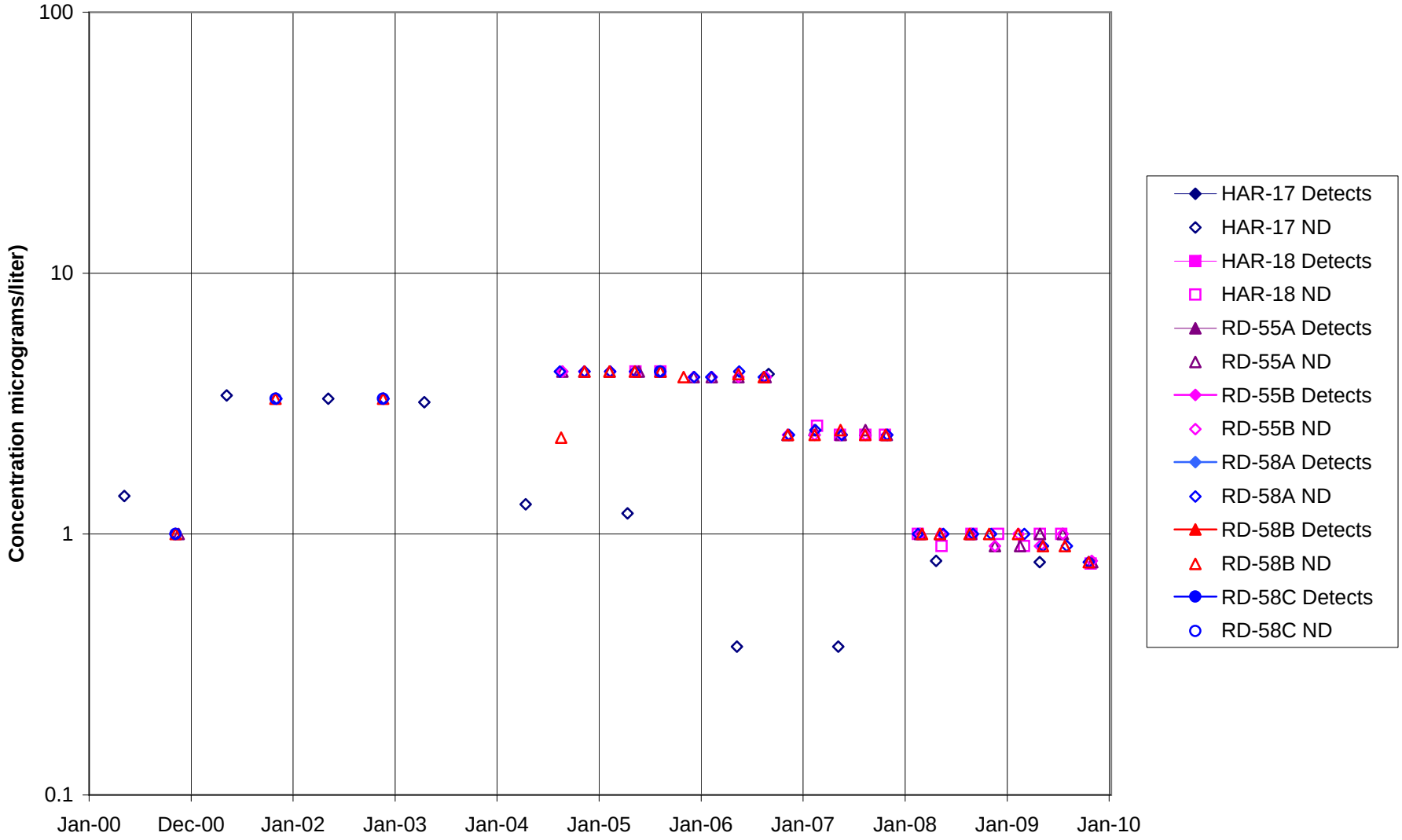
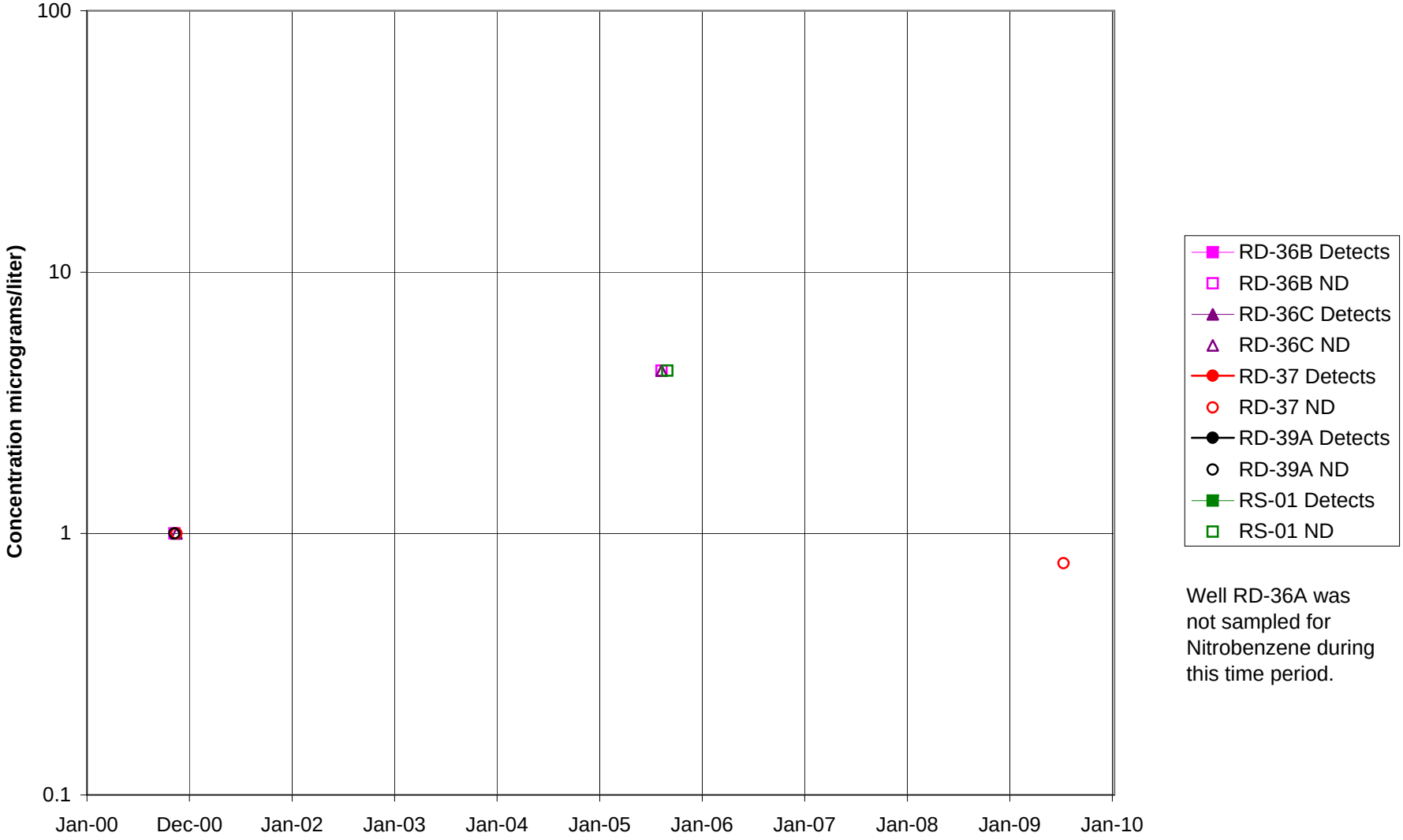


FIGURE F-238. NITROBENZENE in MAIN GATE AREA WELLS - 1



Well RD-36A was not sampled for Nitrobenzene during this time period.

FIGURE F-239. NITROBENZENE in MAIN GATE AREA WELLS - 2

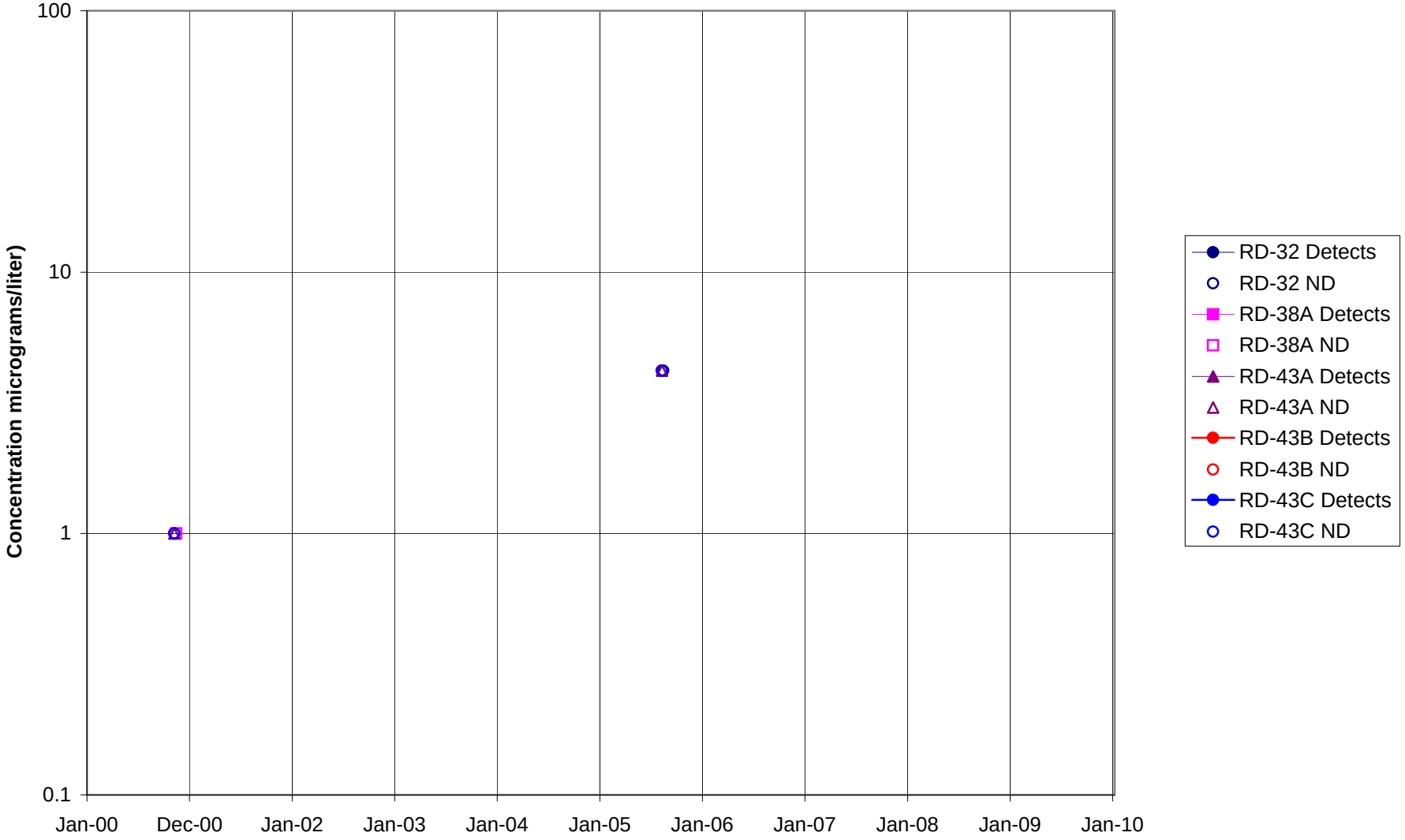
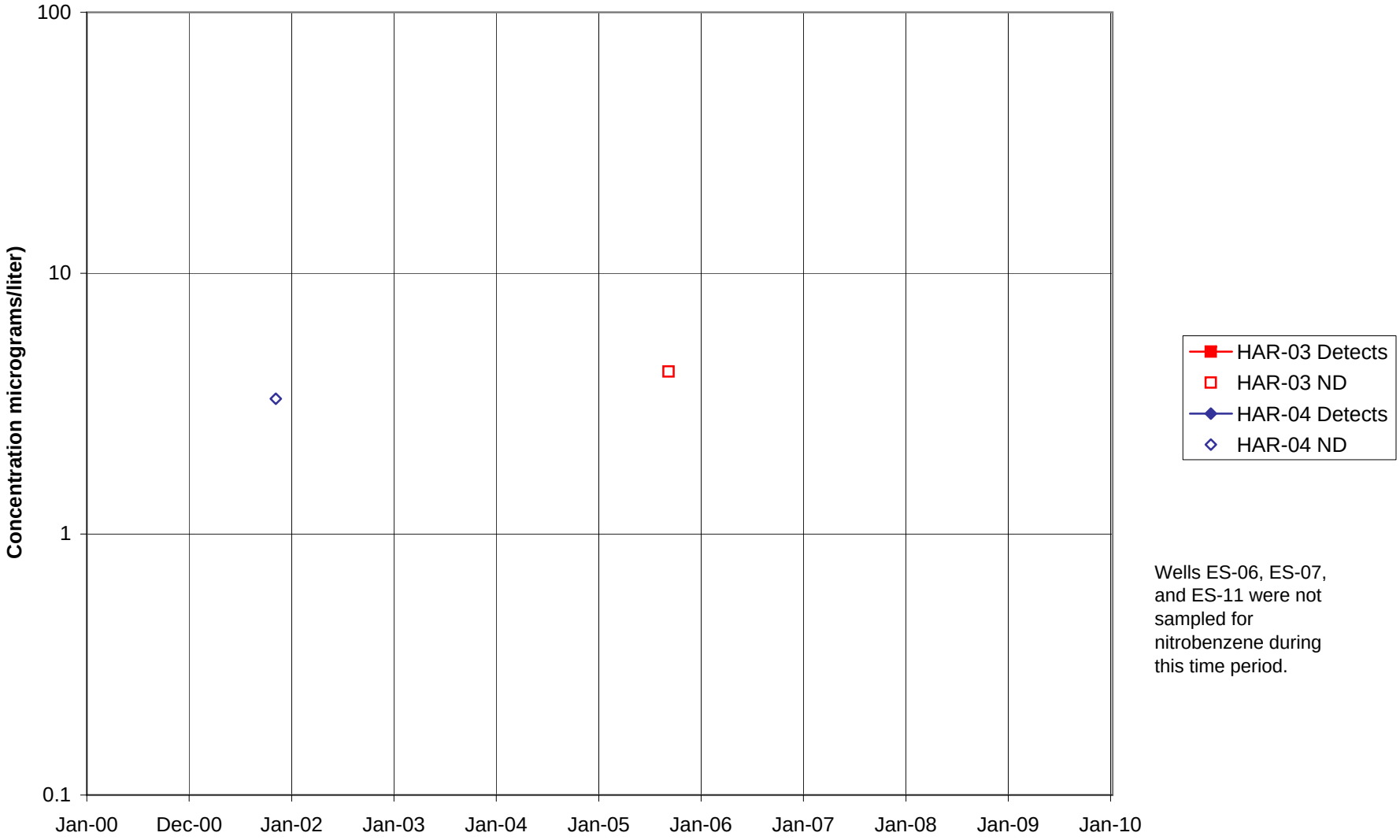


FIGURE F-240. NITROBENZENE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1



Wells ES-06, ES-07, and ES-11 were not sampled for nitrobenzene during this time period.

FIGURE F-241. NITROBENZENE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 2

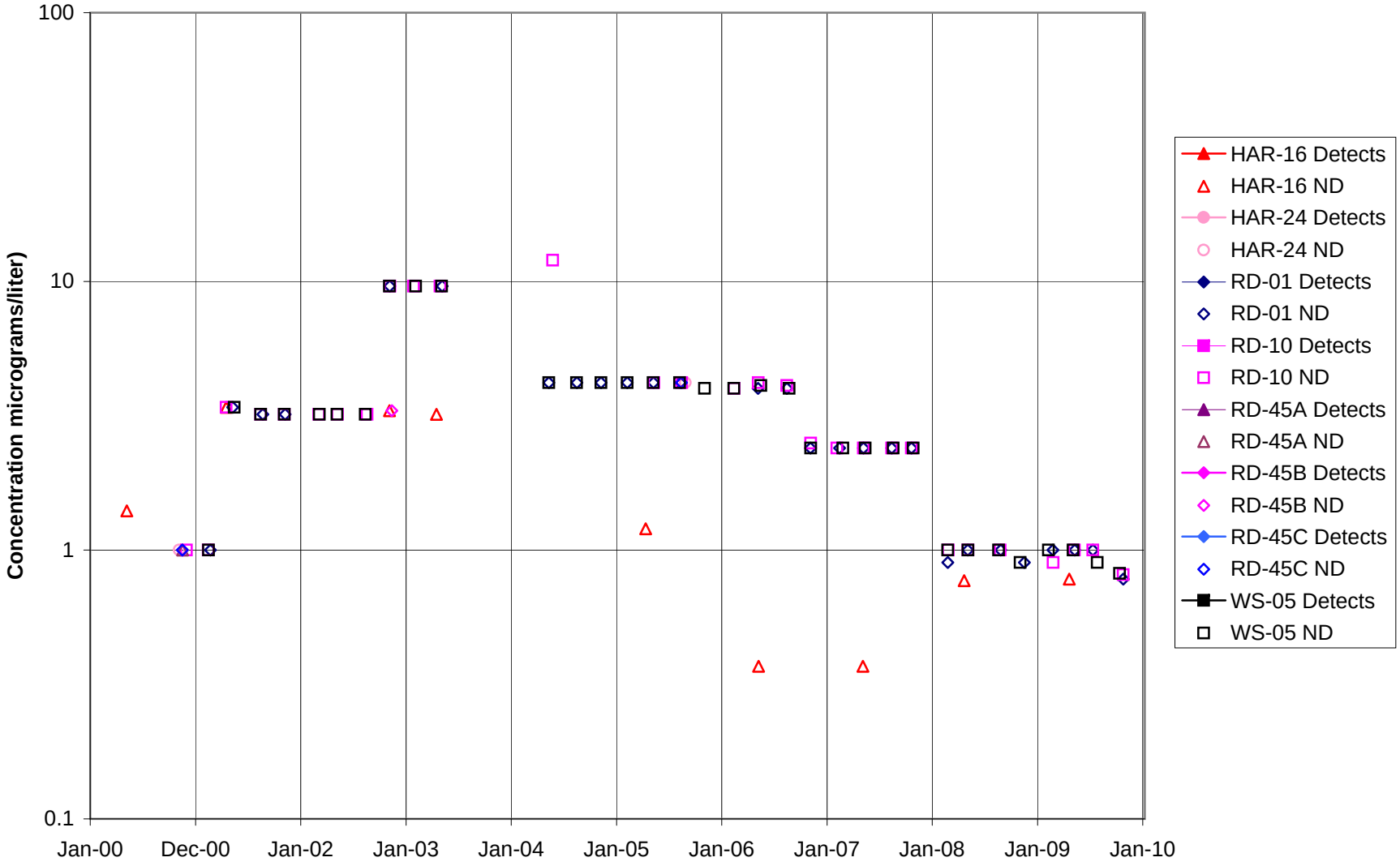


FIGURE F-242. NITROBENZENE in CTL-III / PERIMETER POND AREA WELLS

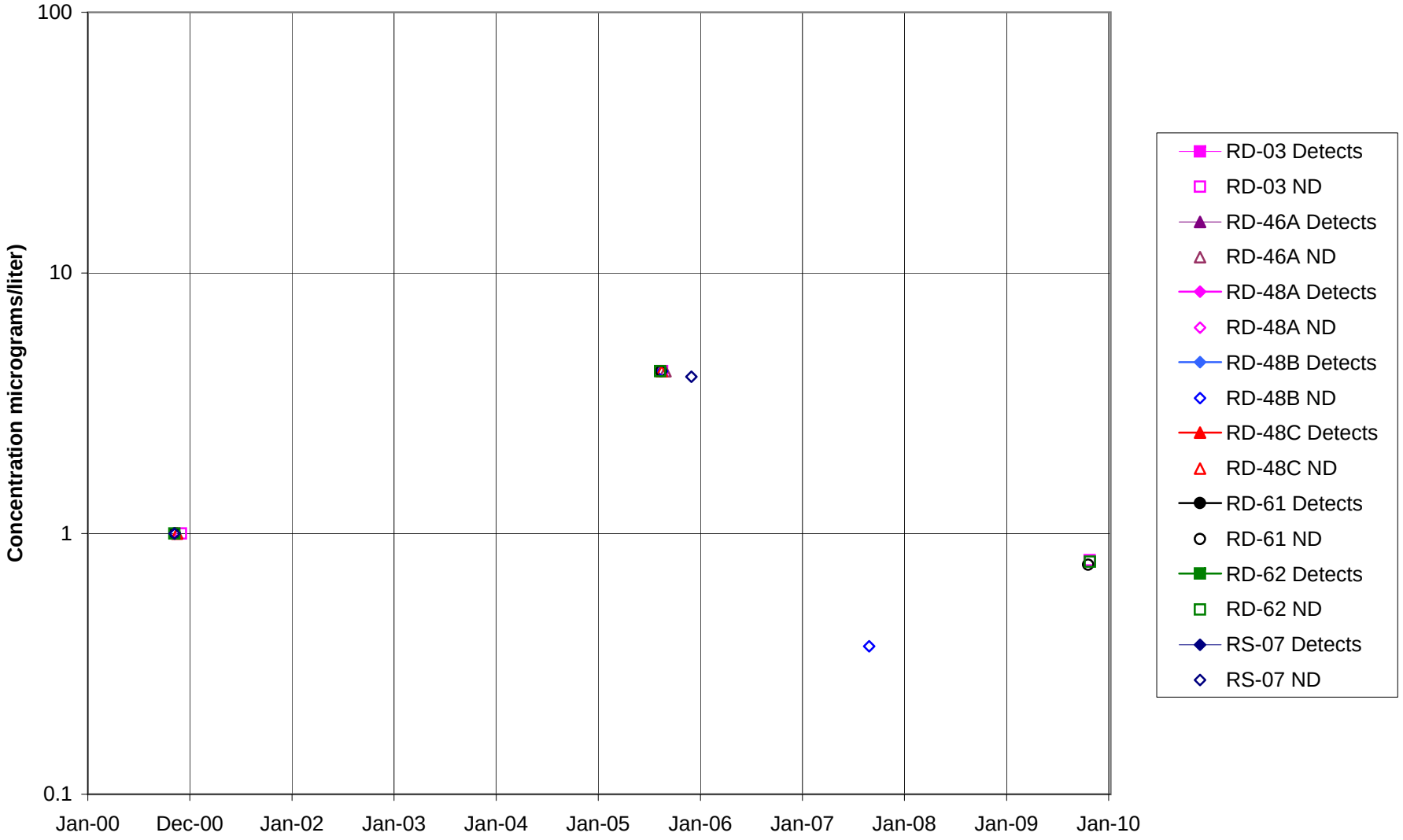
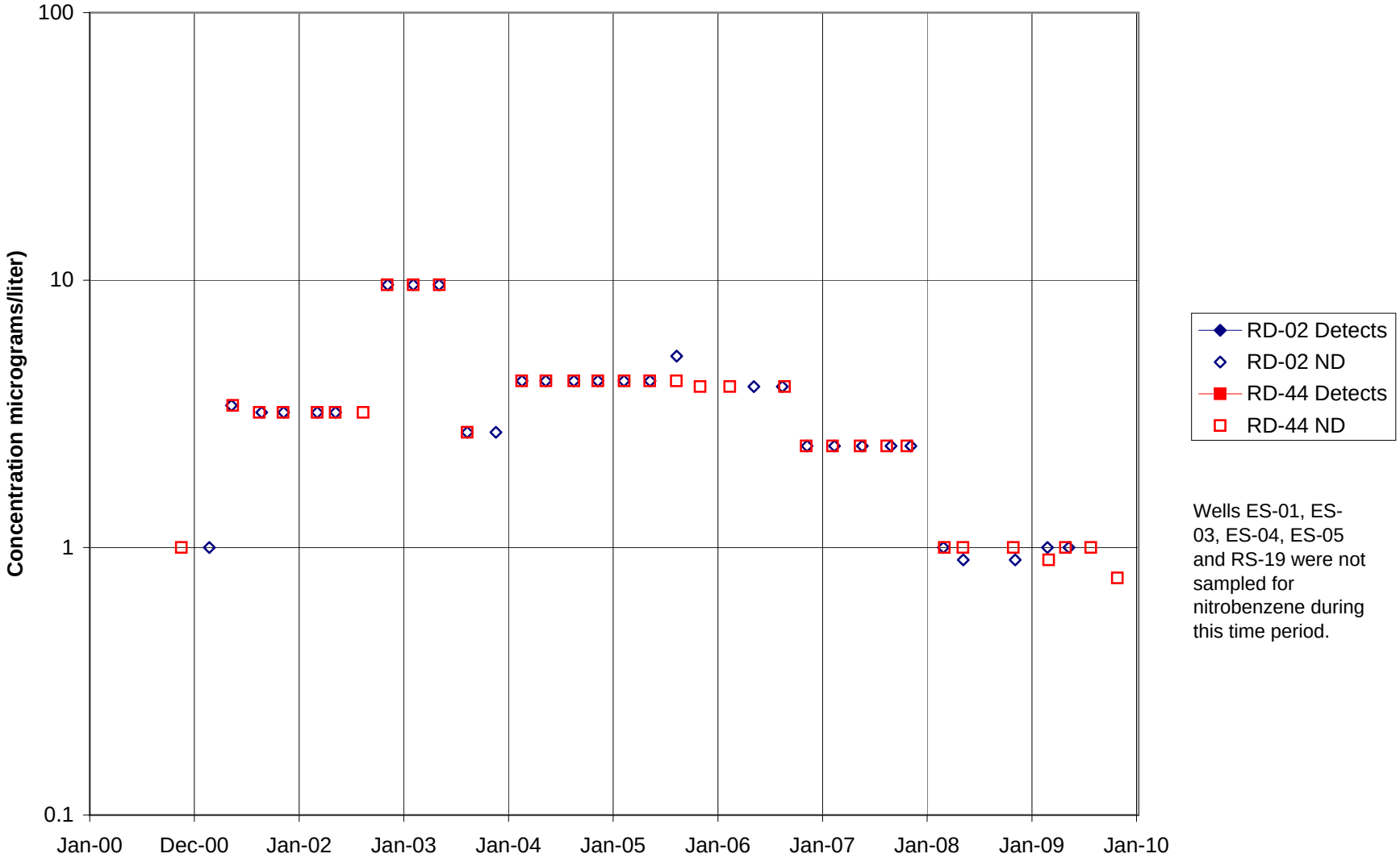


FIGURE F-243. NITROBENZENE in BOWL AREA WELLS



Wells ES-01, ES-03, ES-04, ES-05 and RS-19 were not sampled for nitrobenzene during this time period.

FIGURE F-244. NITROBENZENE in ECL AREA WELLS

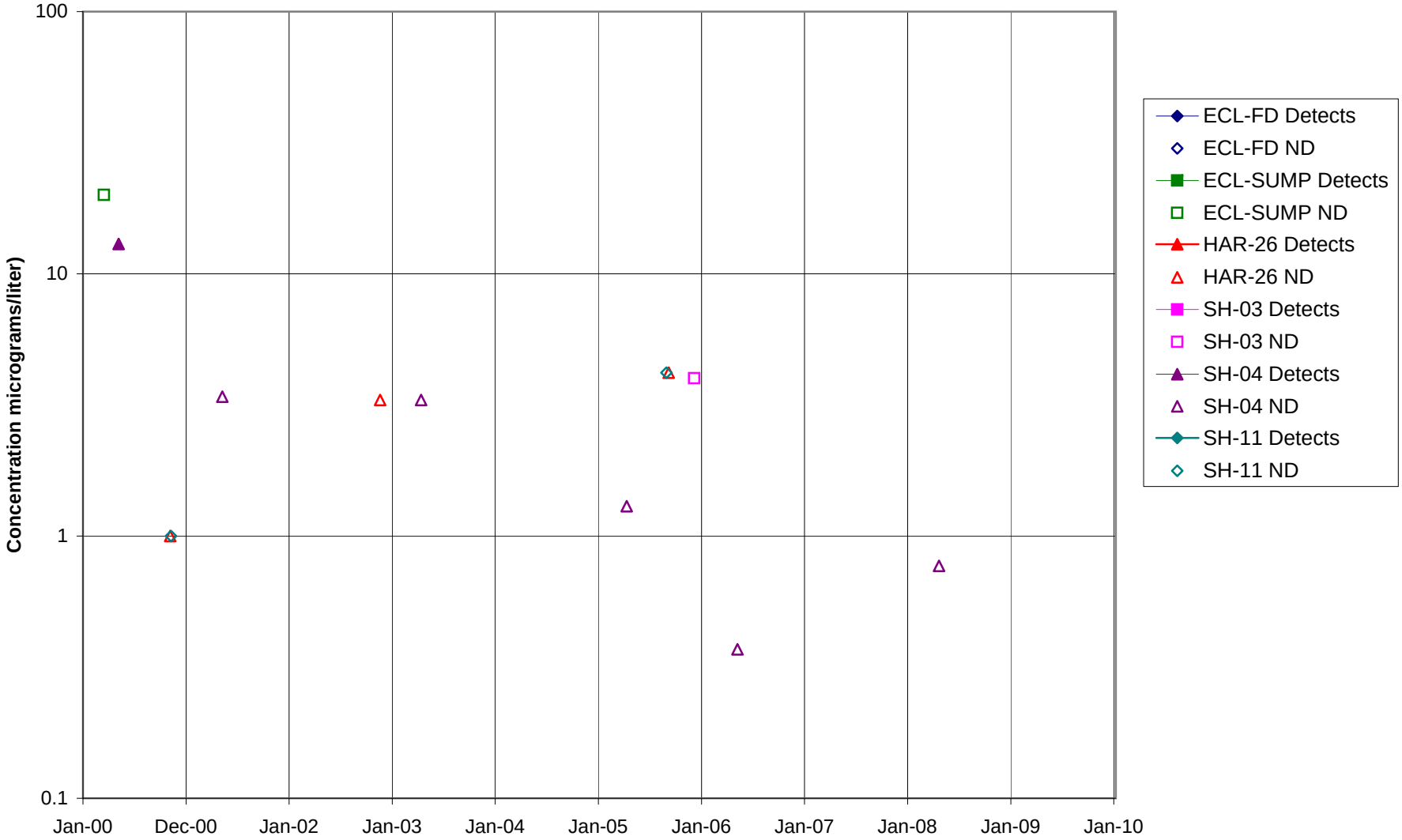


FIGURE F-245. NITROBENZENE in FORMER LOX PLANT AREA WELLS

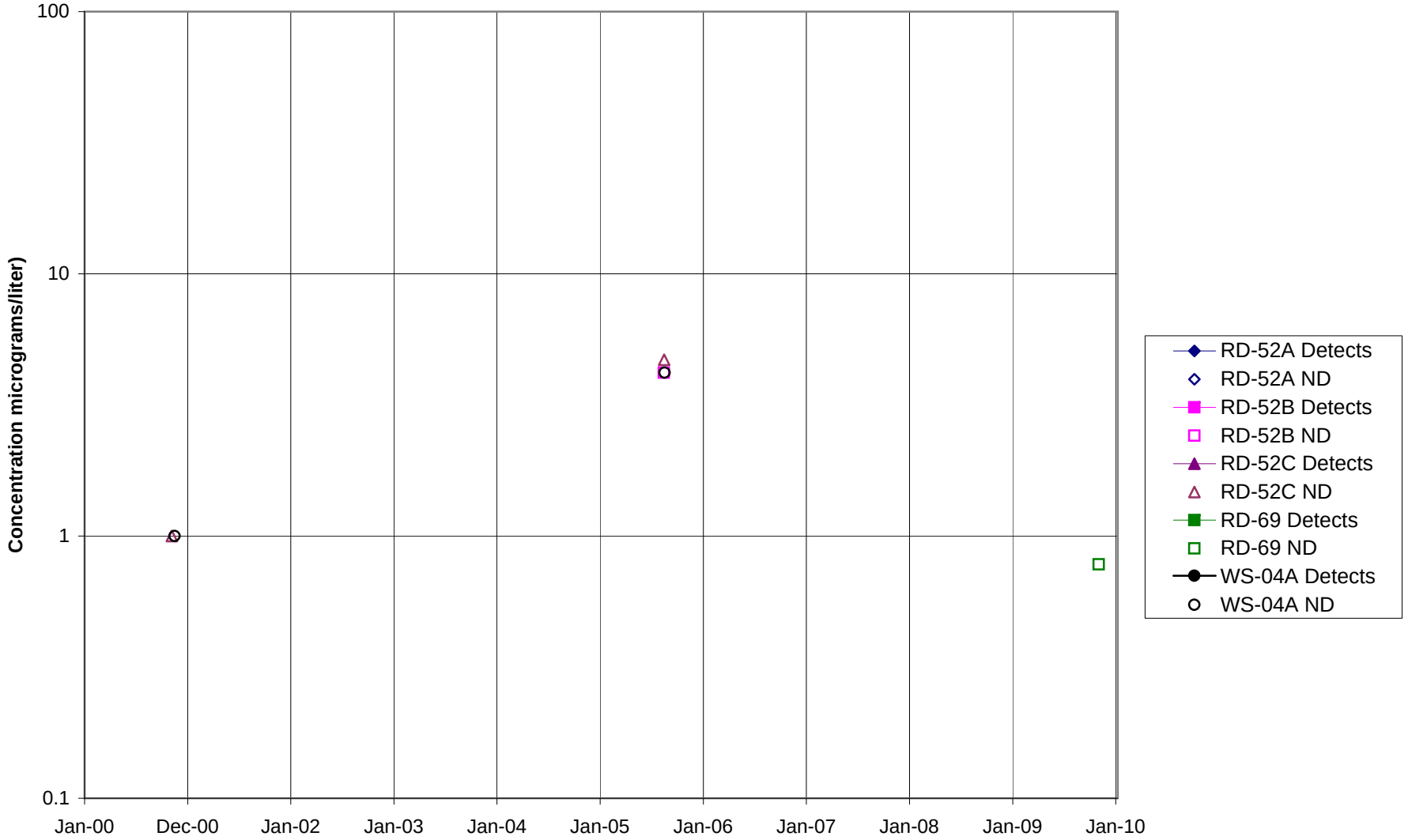


FIGURE F-246. NITROBENZENE in RD-09 AREA WELLS

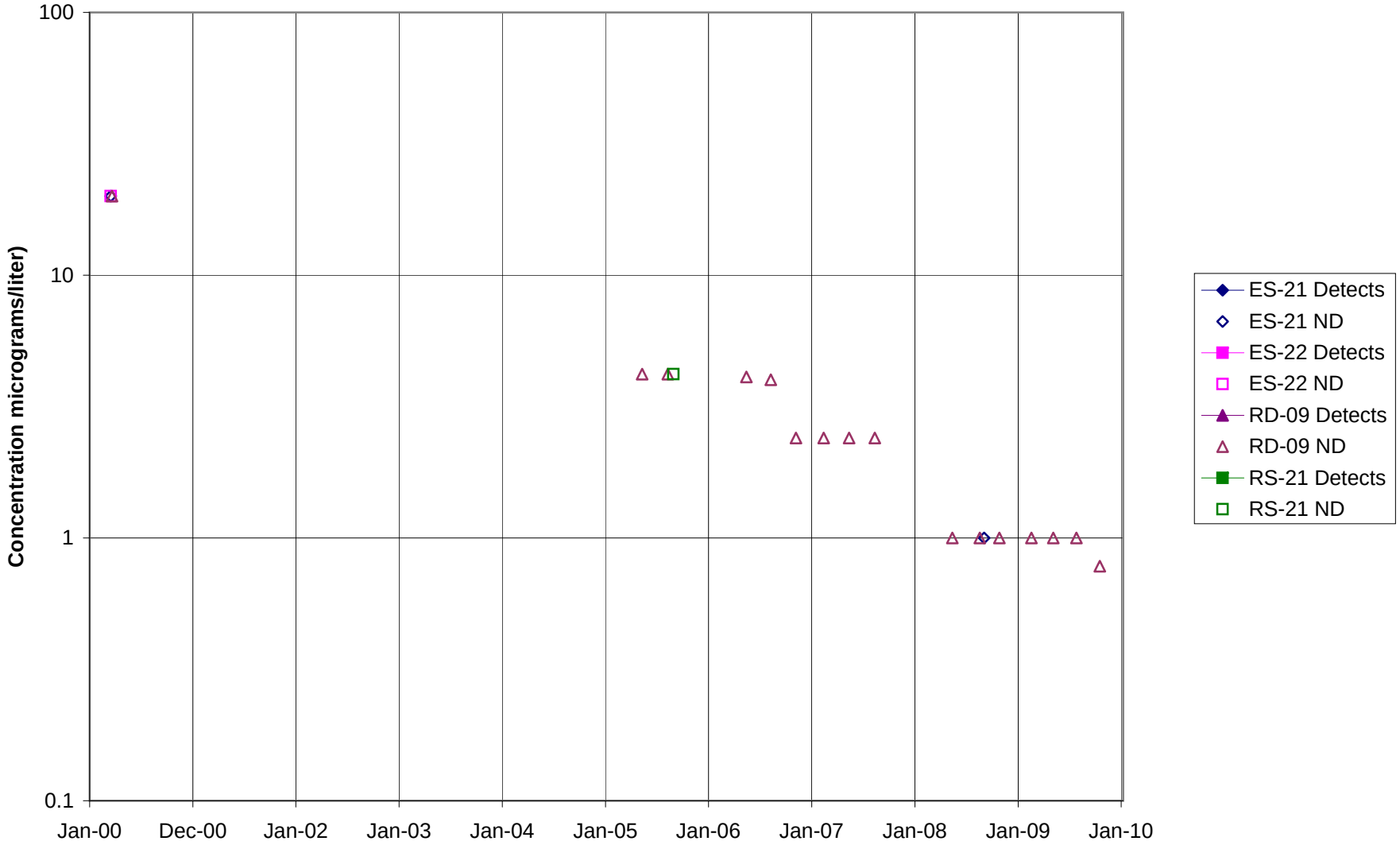
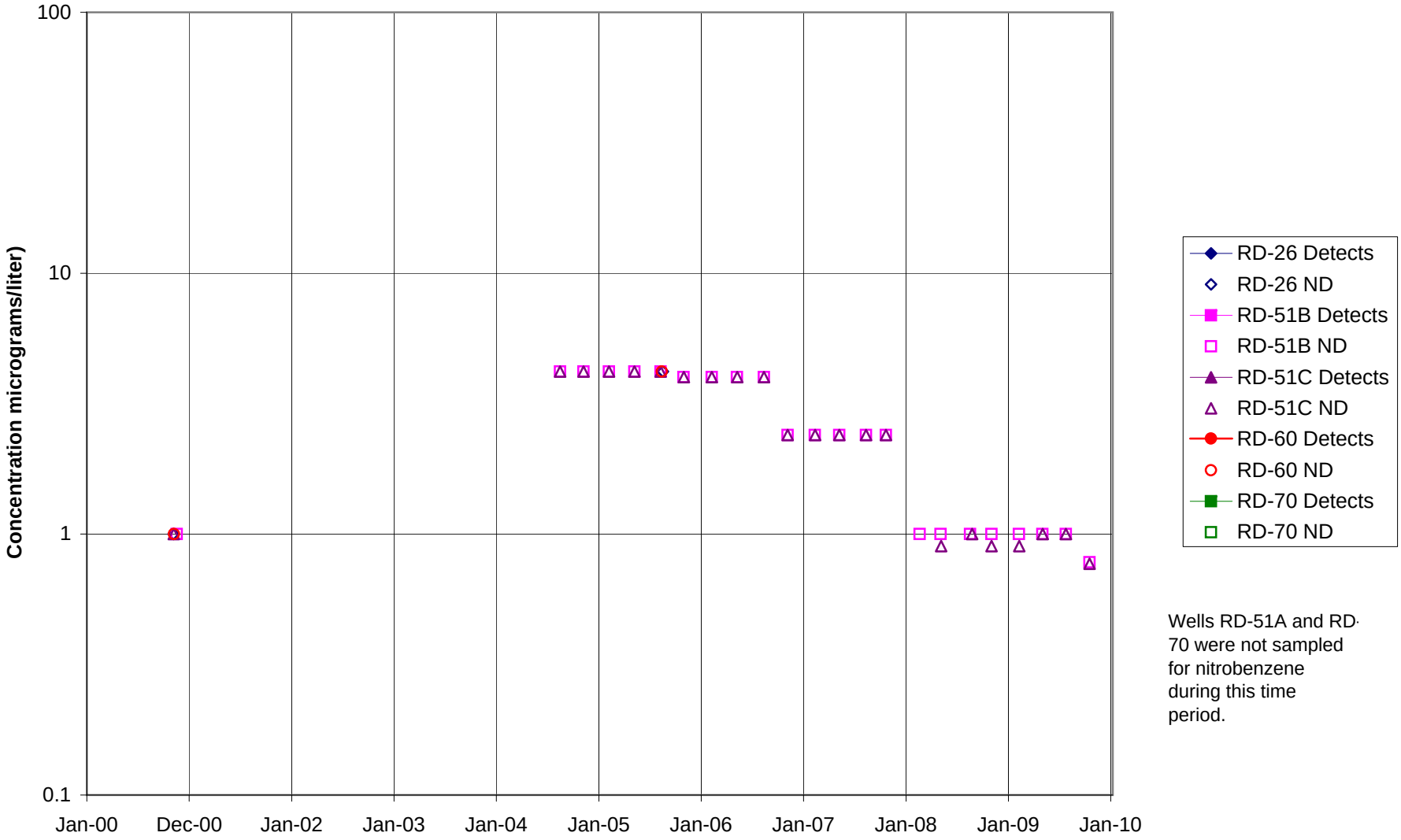


FIGURE F-247. NITROBENZENE in HELIPORT, B/204 AREA WELLS



Wells RD-51A and RD-70 were not sampled for nitrobenzene during this time period.

FIGURE F-248. NITROBENZENE in ALFA / BRAVO AREA WELLS

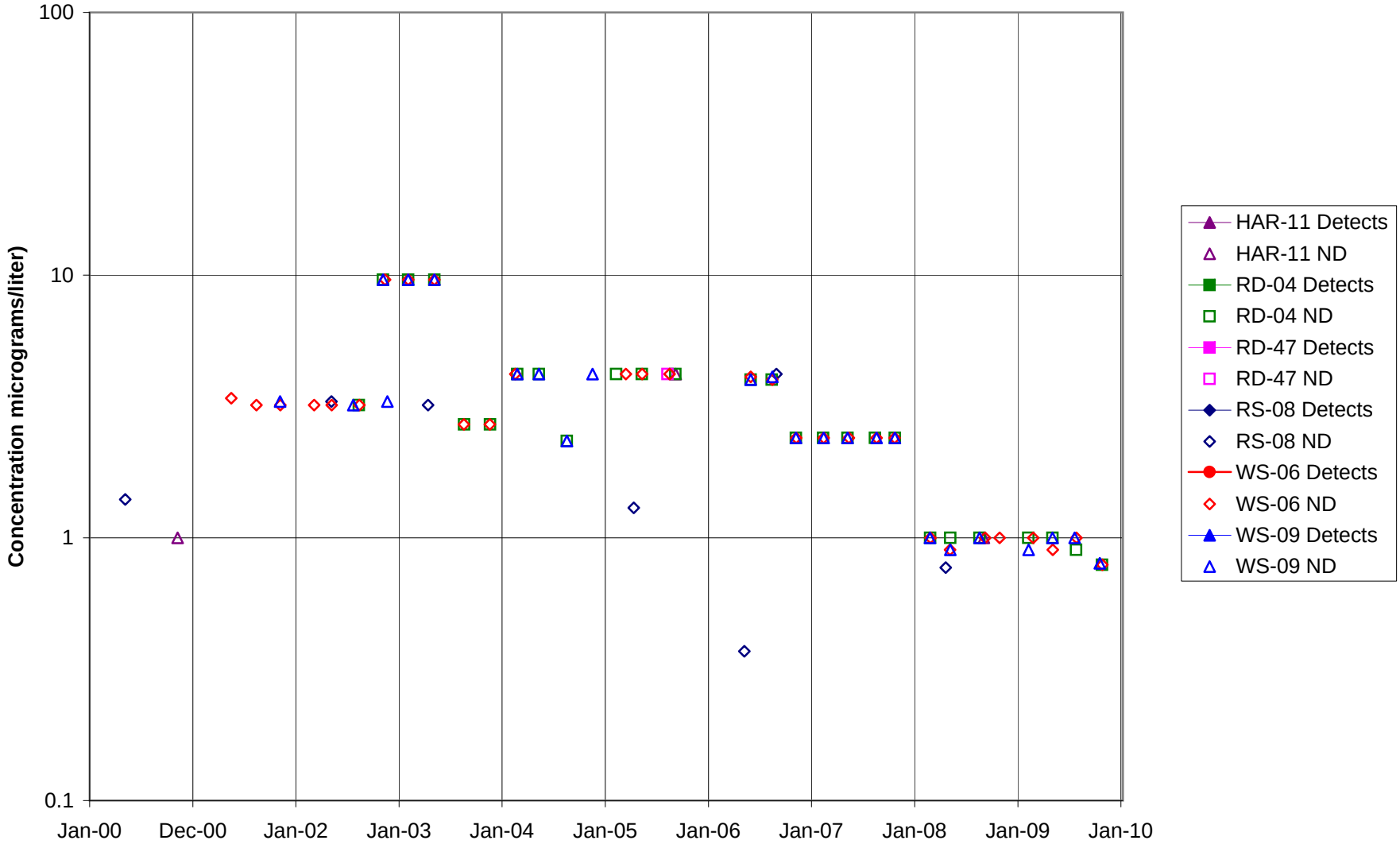


FIGURE F-249. NITROBENZENE in SPA AREA WELLS

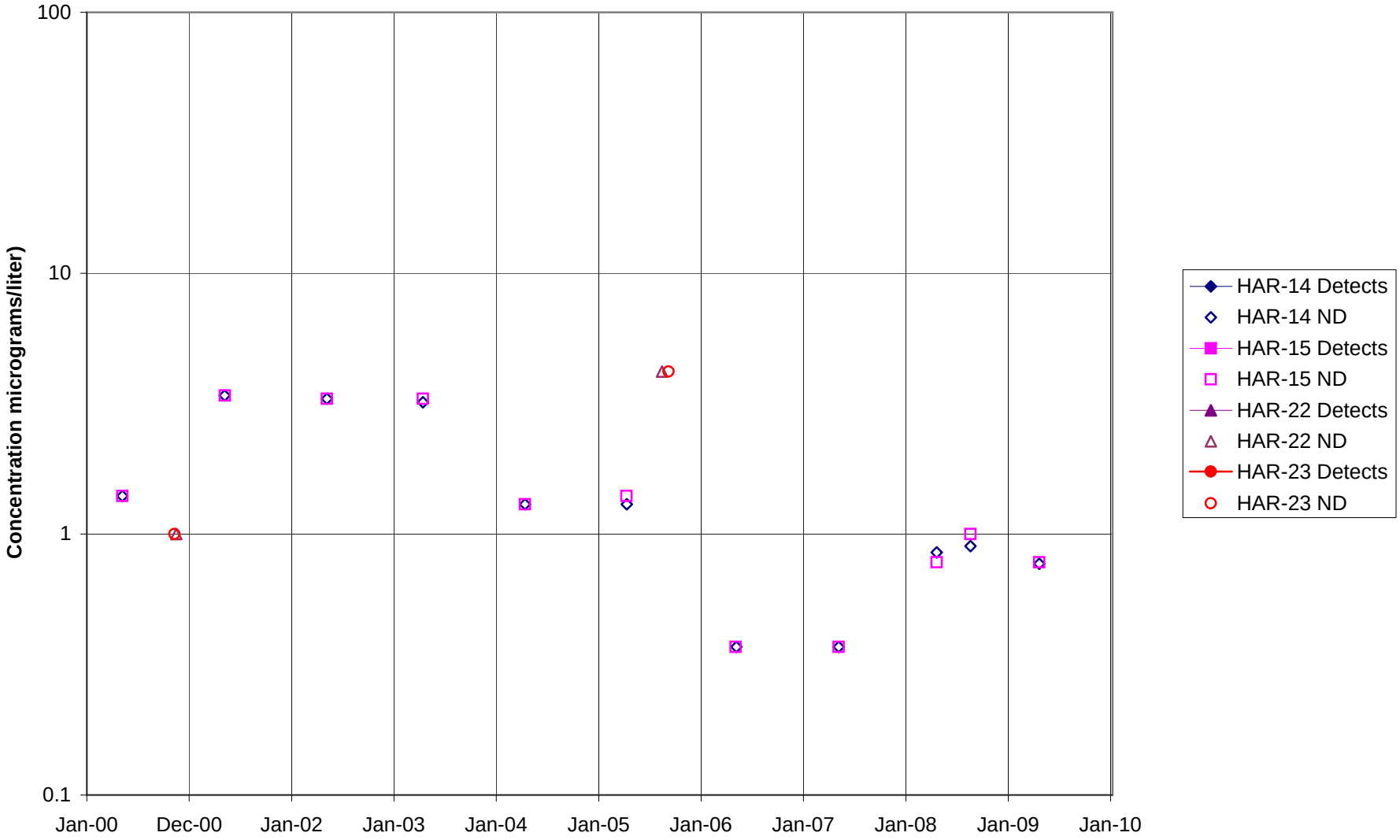
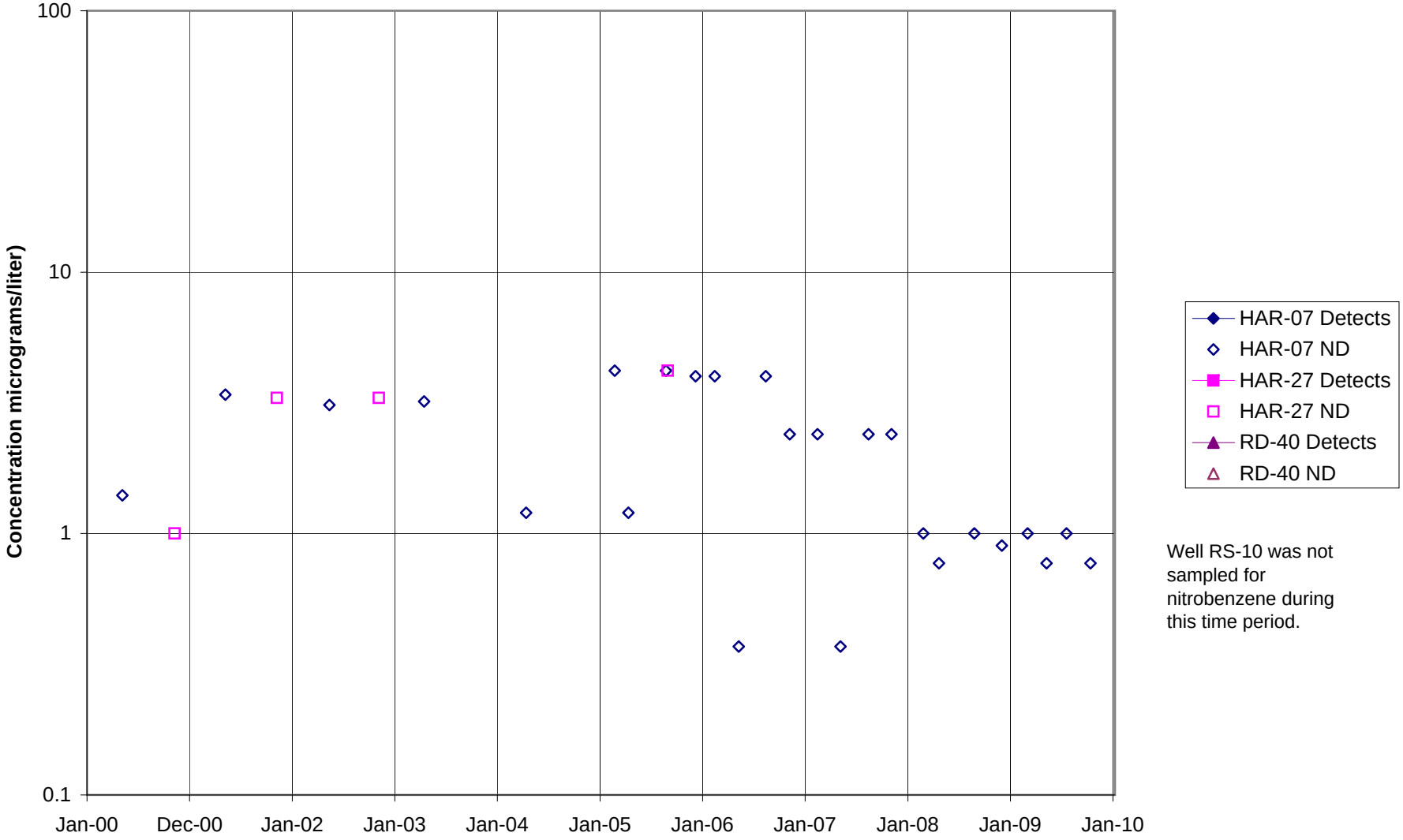


FIGURE F-250. NITROBENZENE in COCA / PLF AREA WELLS



Well RS-10 was not sampled for nitrobenzene during this time period.

FIGURE F-251. NITROBENZENE in DELTA / BUFFER ZONE AREA WELLS

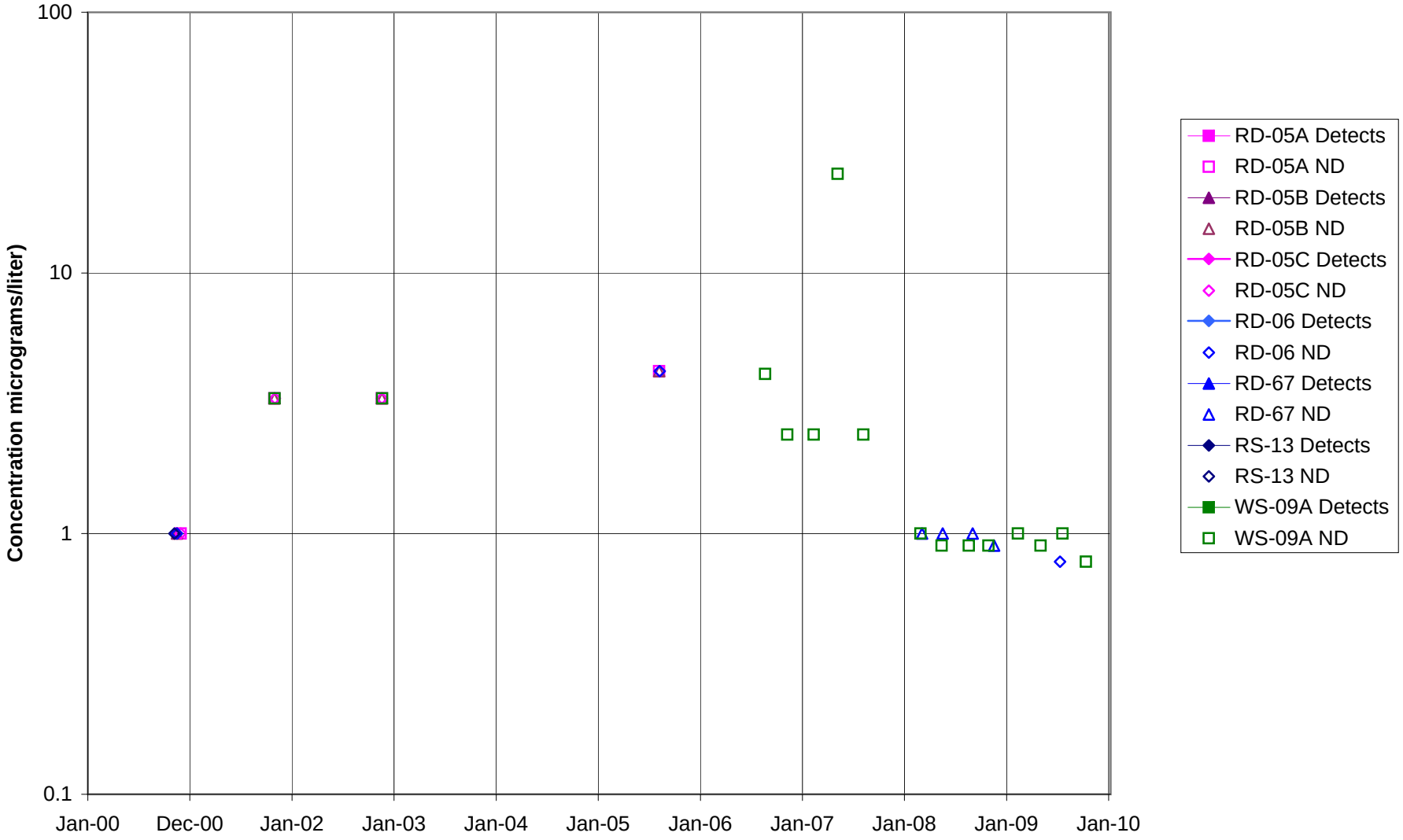


FIGURE F-252. NITROBENZENE in AREA IV WELLS

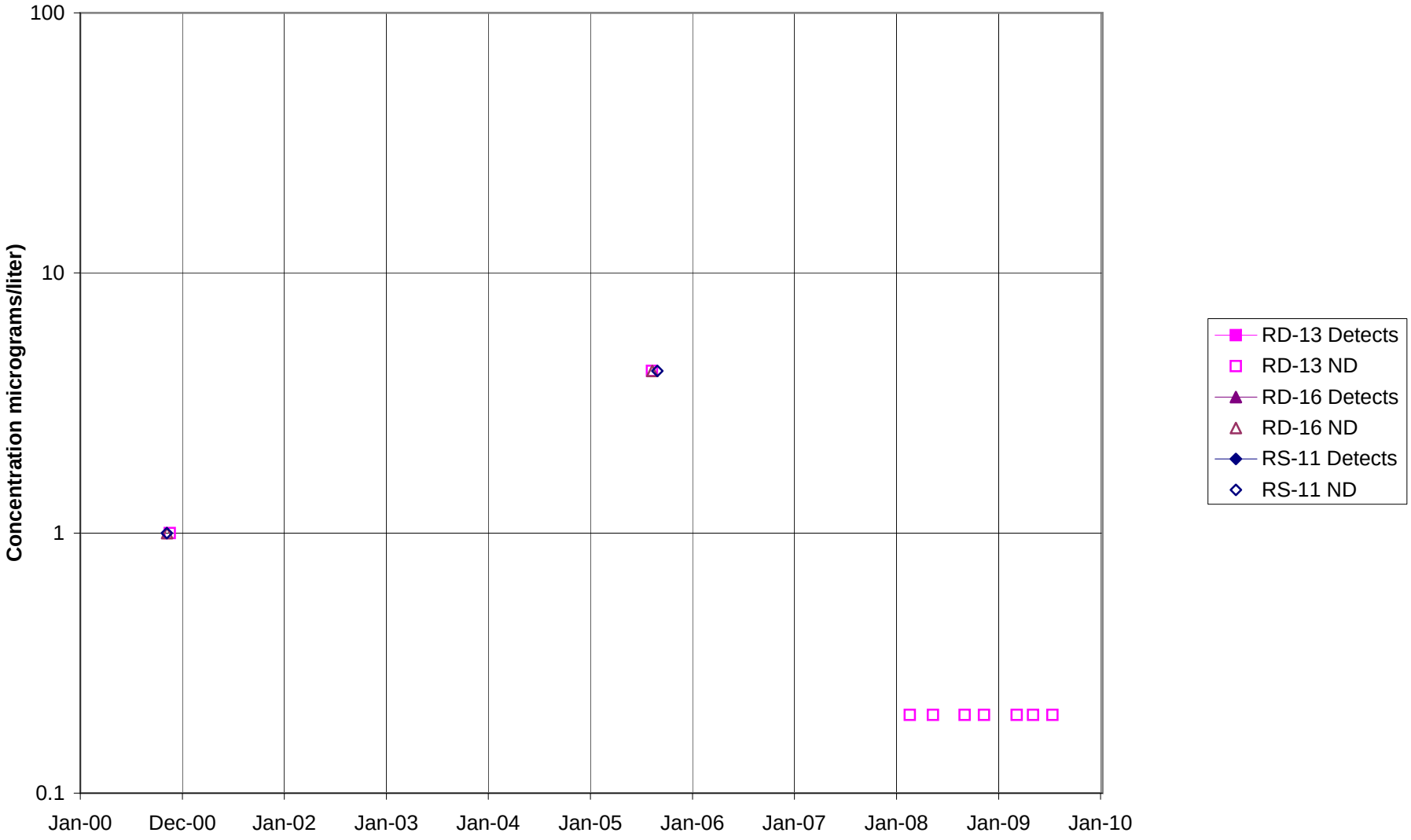


FIGURE F-253. NDMA in STL-IV AREA CHATSWORTH FORMATION WELLS

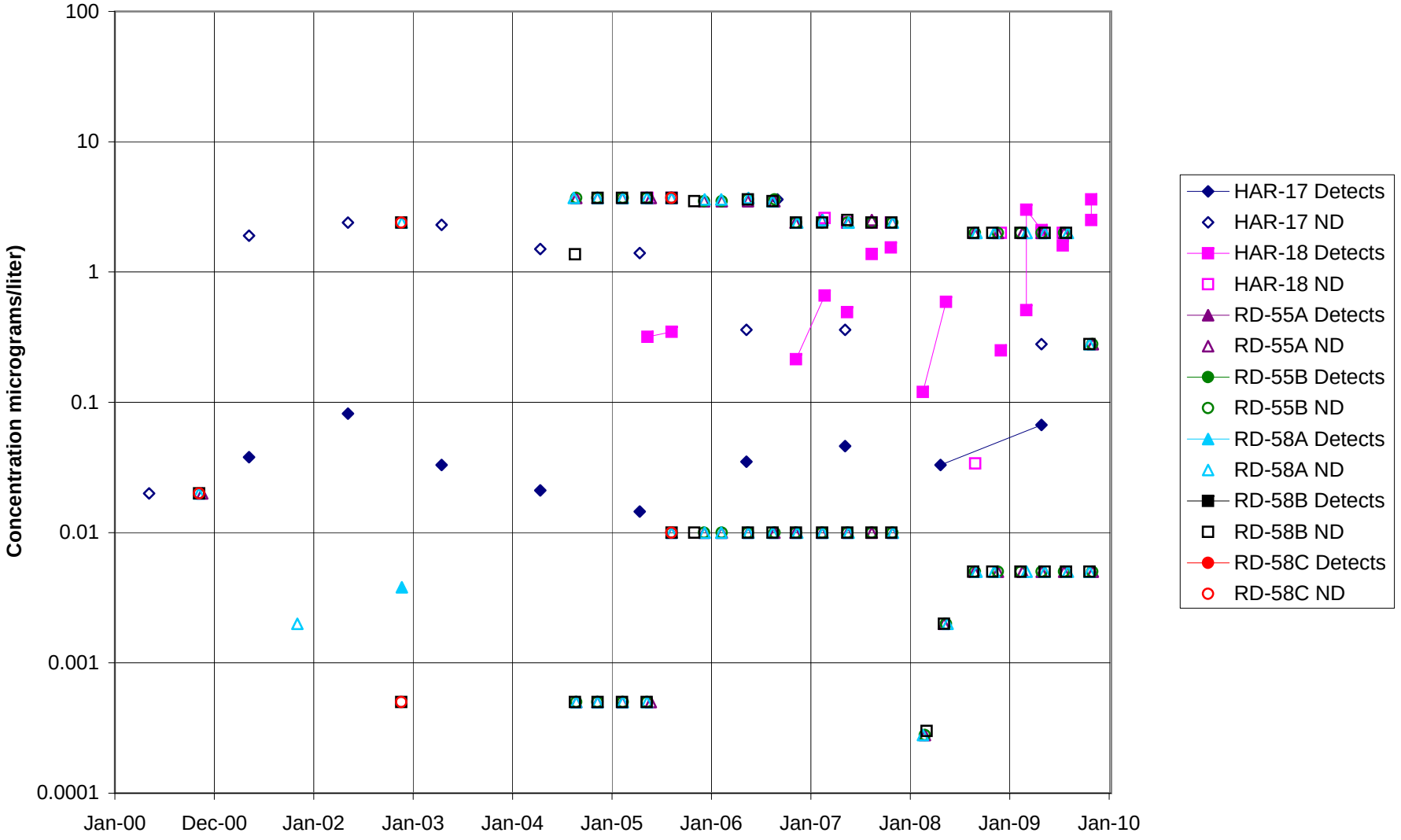


FIGURE F-254. NDMA in MAIN GATE AREA WELLS - 1

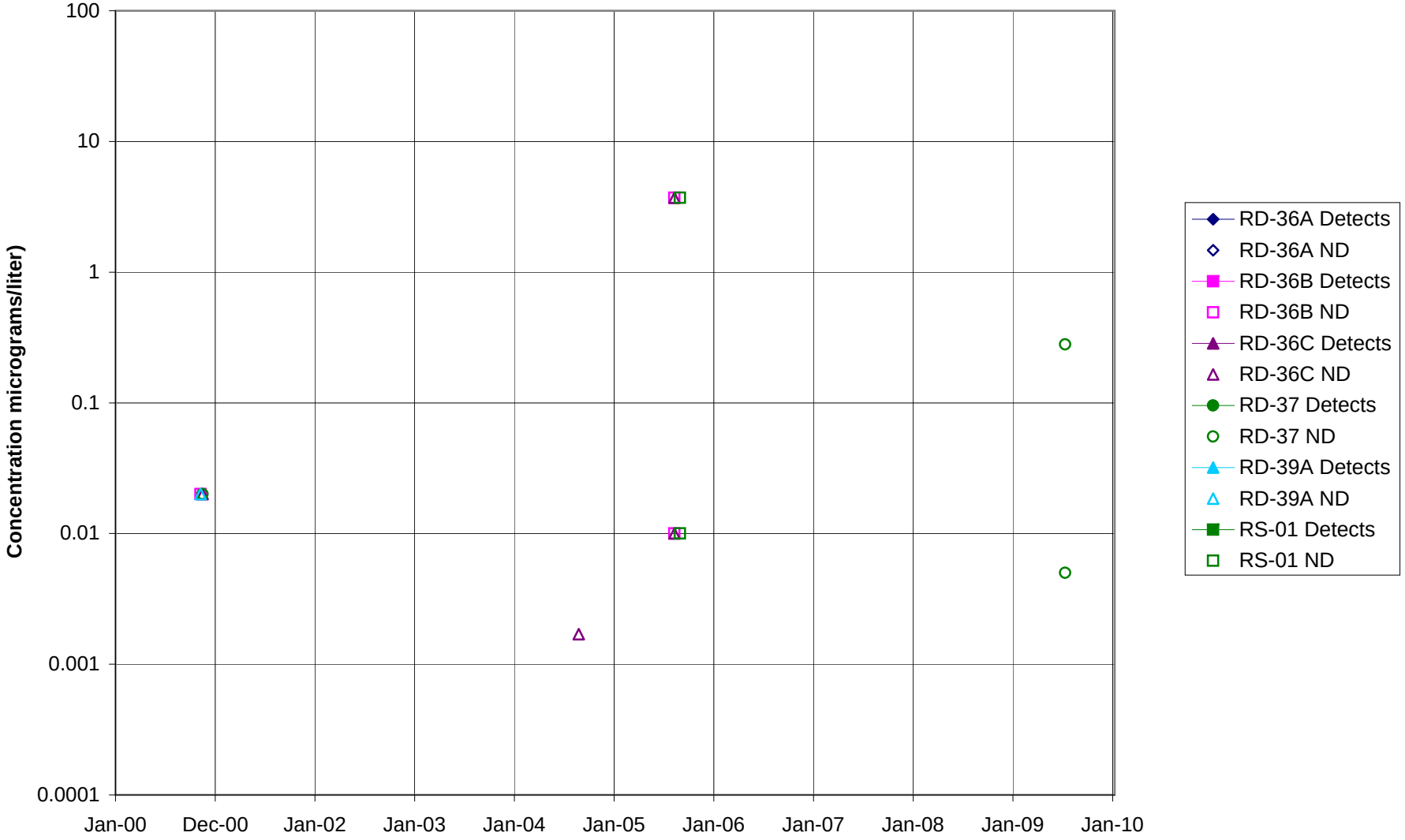


FIGURE F-255. NDMA in MAIN GATE AREA WELLS - 2

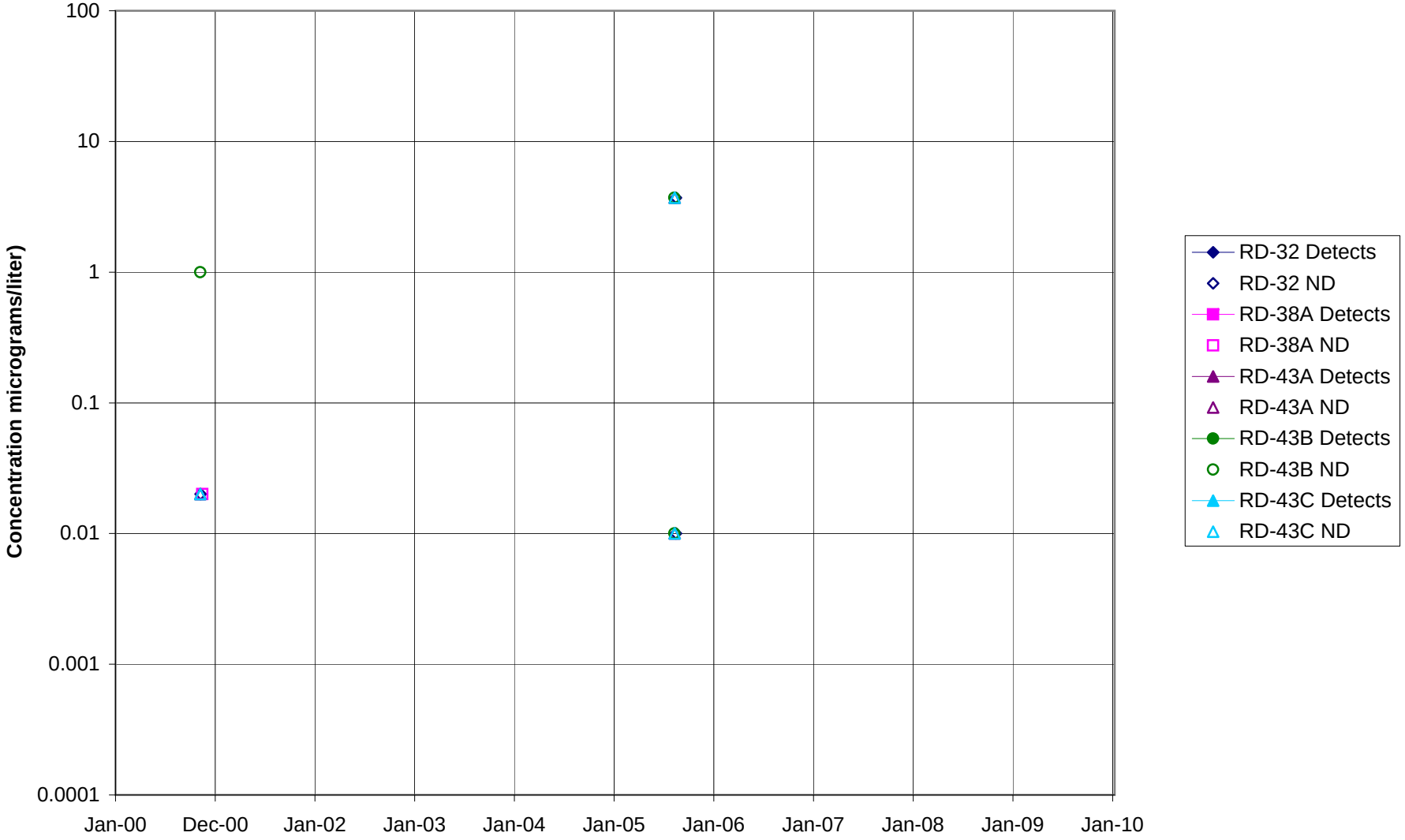
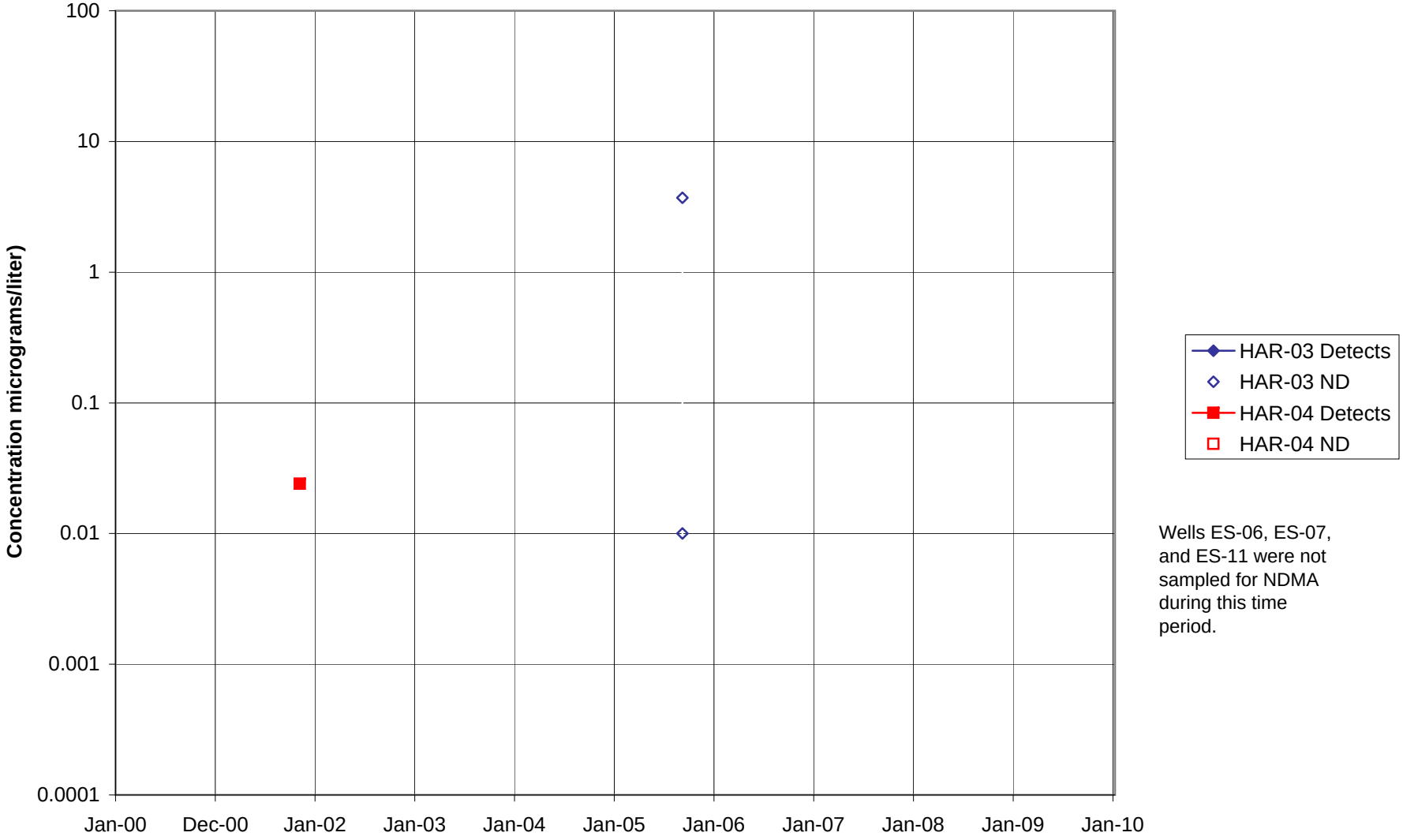


FIGURE F-256. NDMA in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1



Wells ES-06, ES-07, and ES-11 were not sampled for NDMA during this time period.

FIGURE F-257. NDMA in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 2

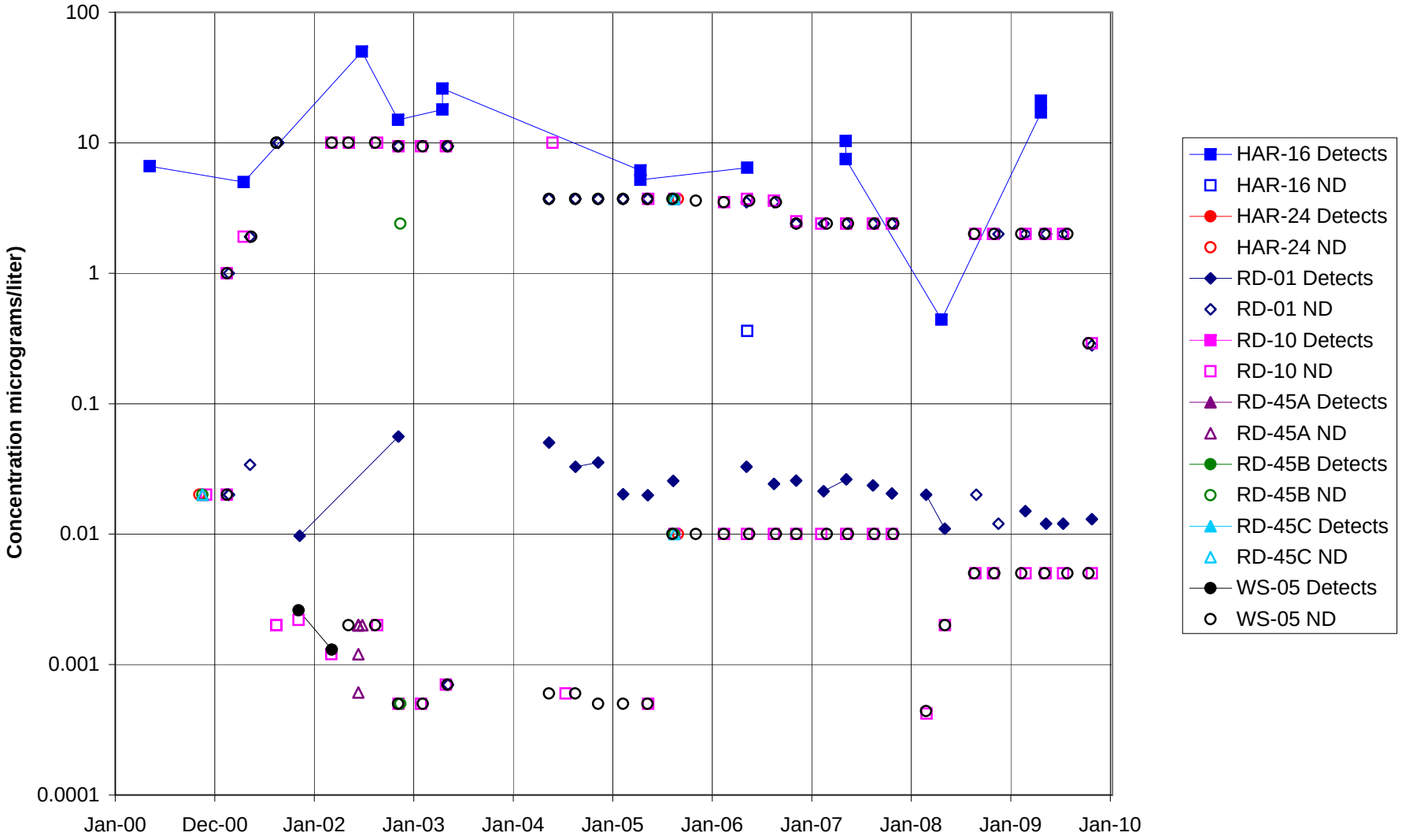


FIGURE F-258. NDMA in CTL-III / PERIMETER POND AREA WELLS

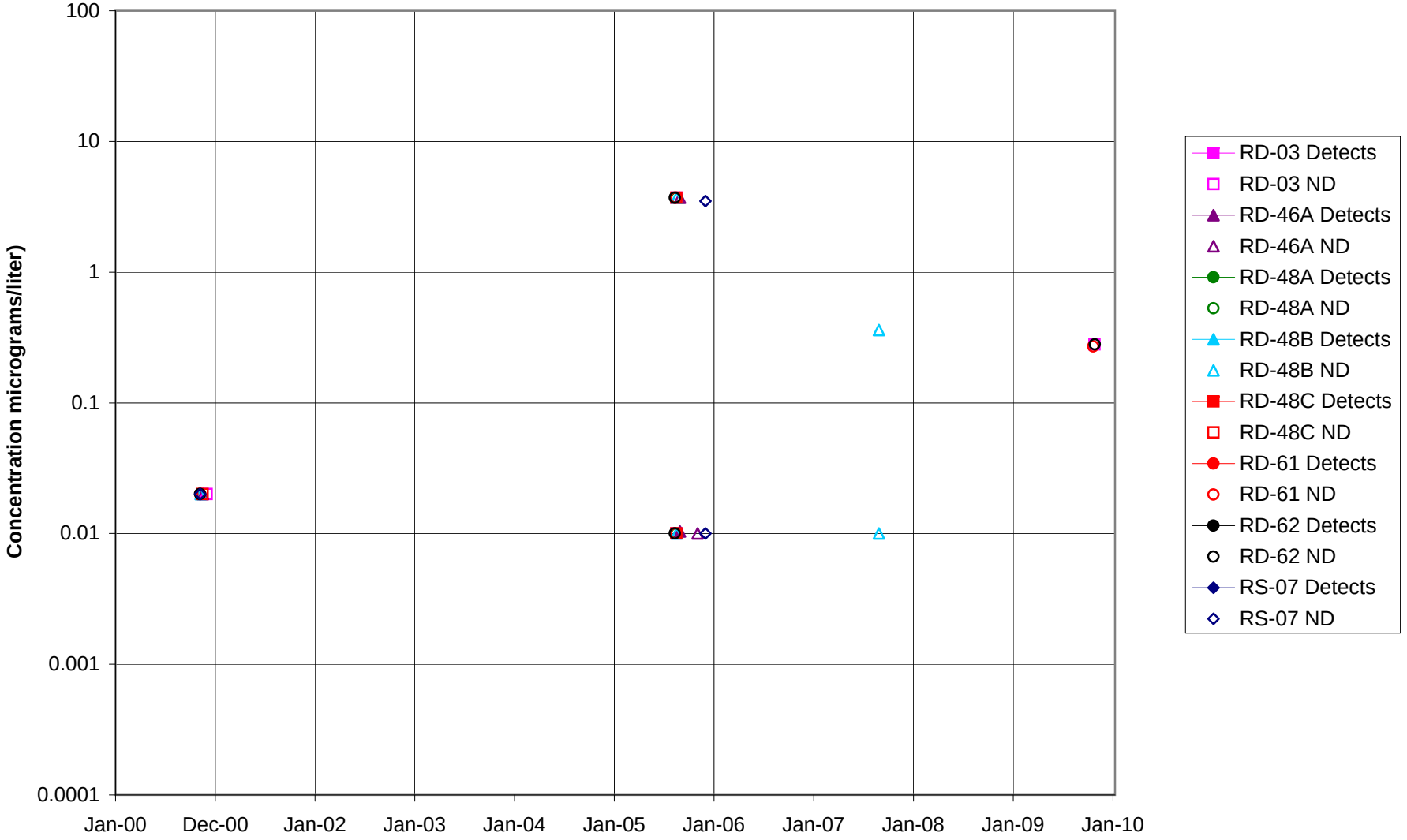
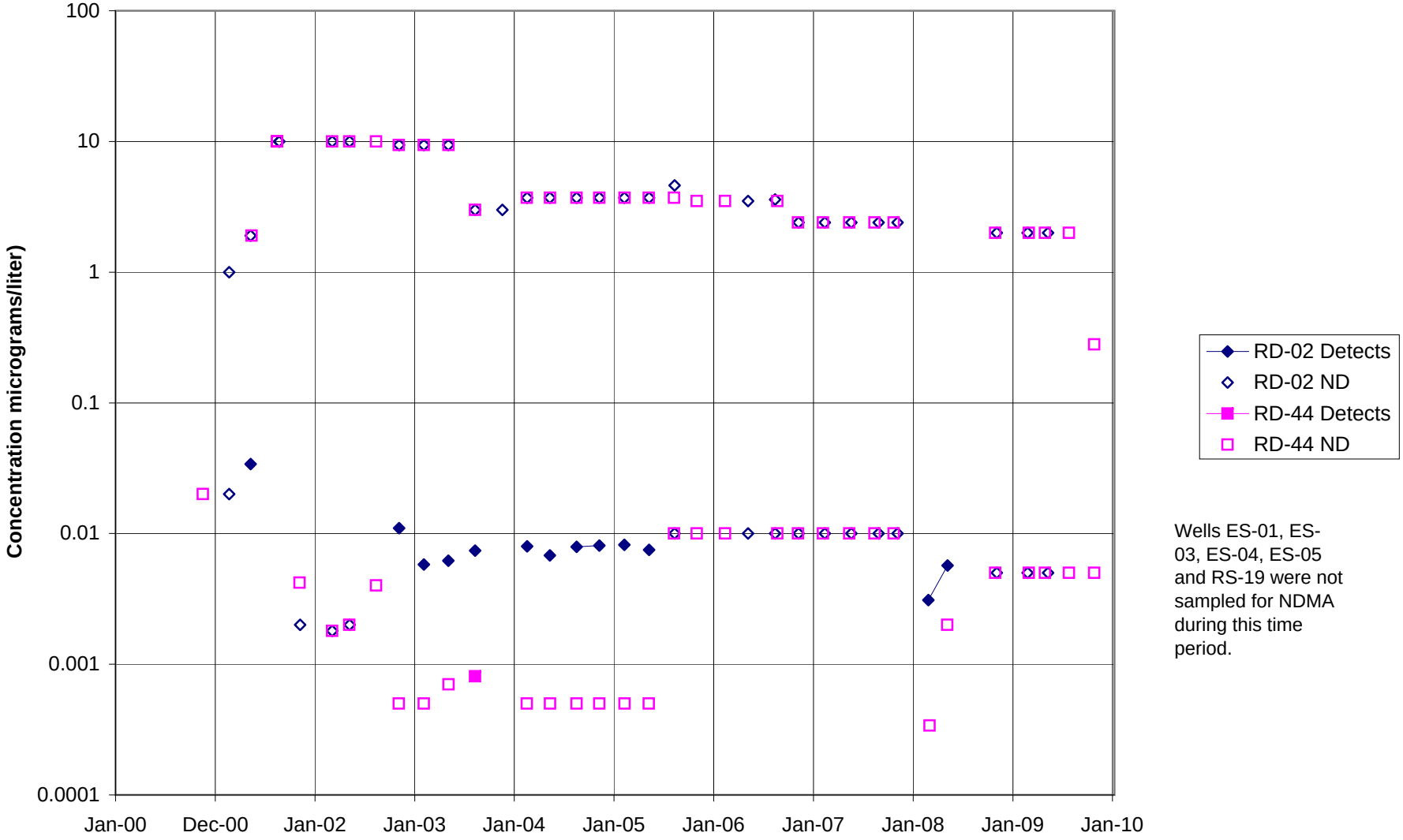


FIGURE F-259. NDMA in BOWL AREA WELLS



Wells ES-01, ES-03, ES-04, ES-05 and RS-19 were not sampled for NDMA during this time period.

FIGURE F-260. NDMA in ECL AREA WELLS

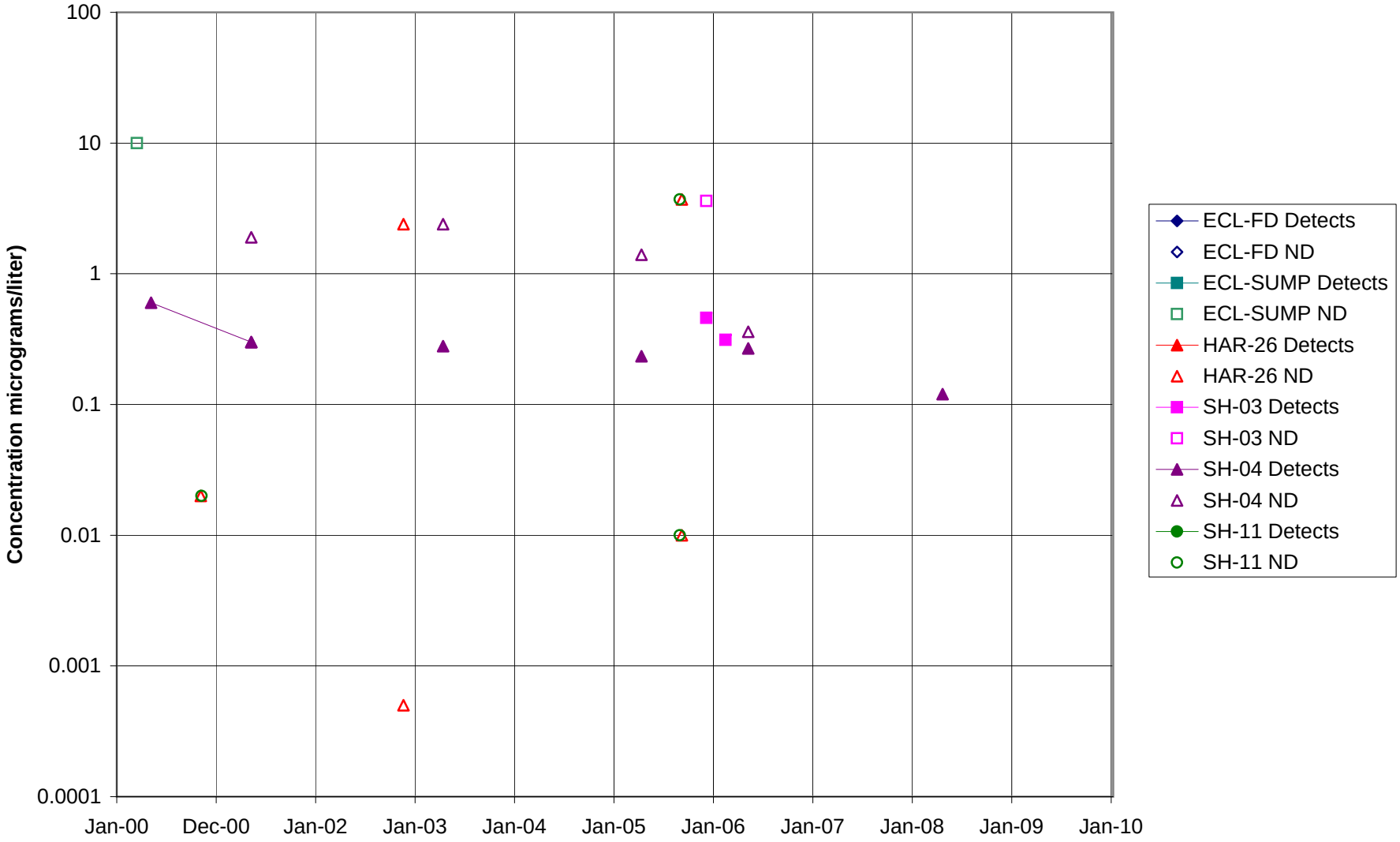


FIGURE F-261. NDMA in FORMER LOX PLANT AREA WELLS

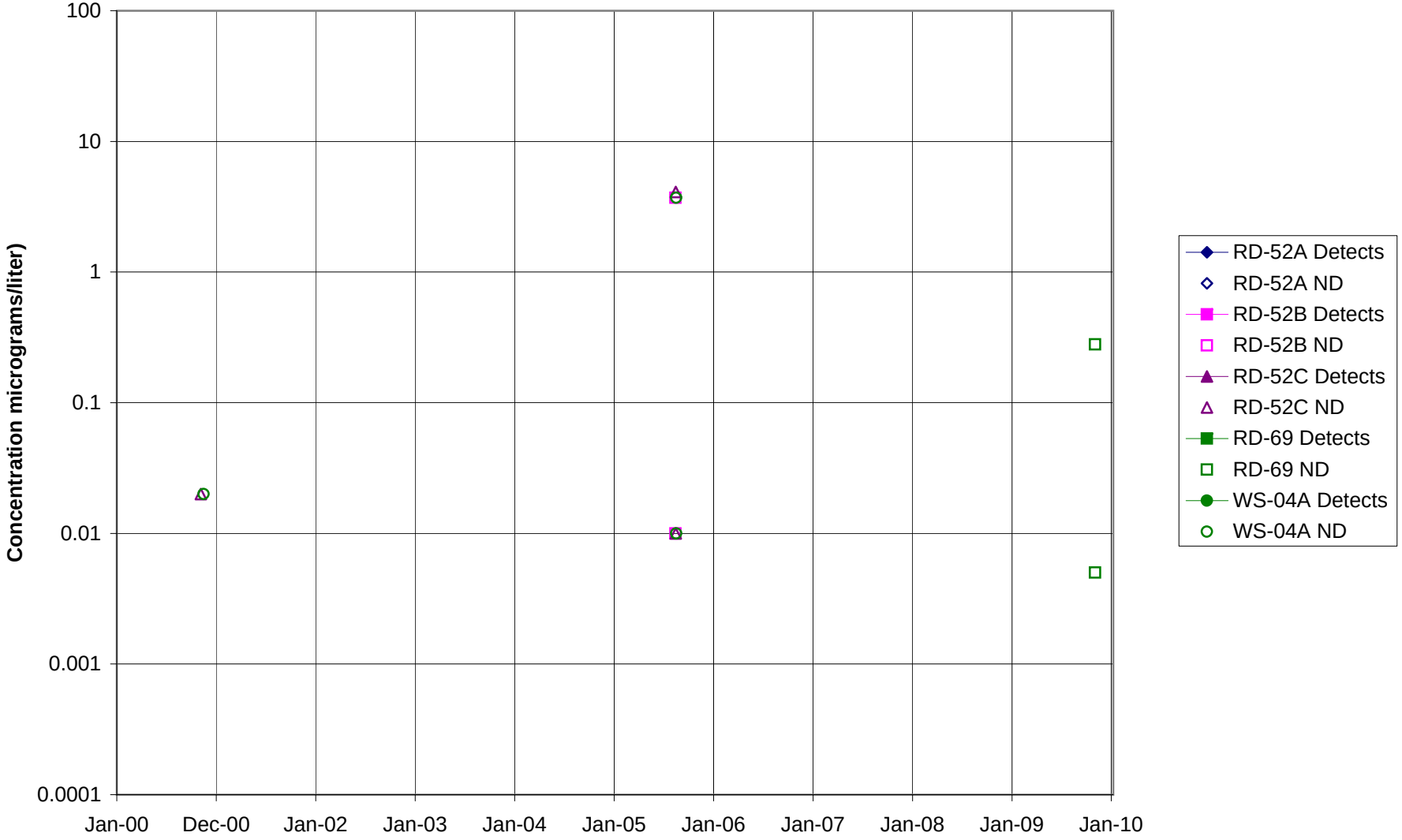


FIGURE F-262. NDMA in RD-09 AREA WELLS

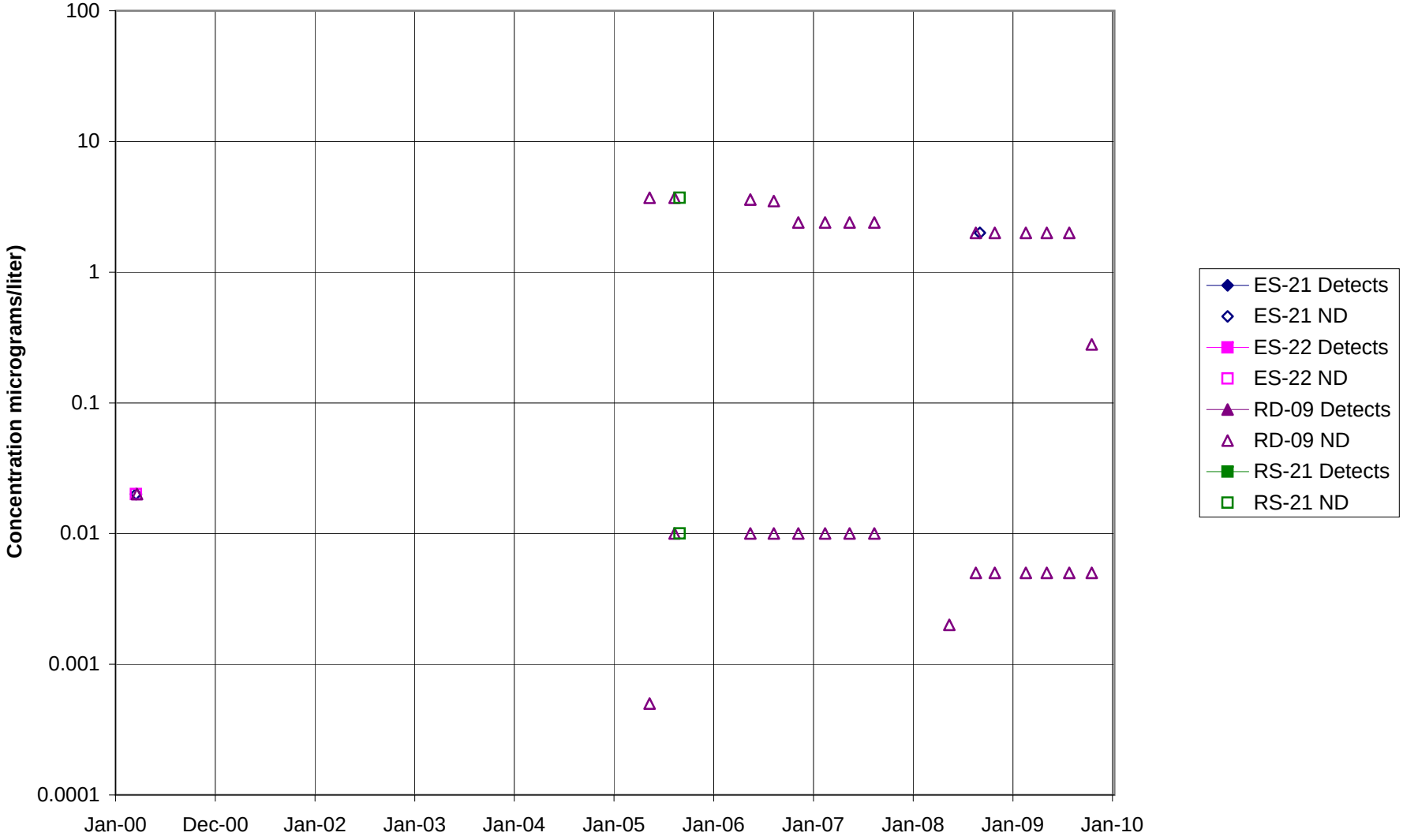
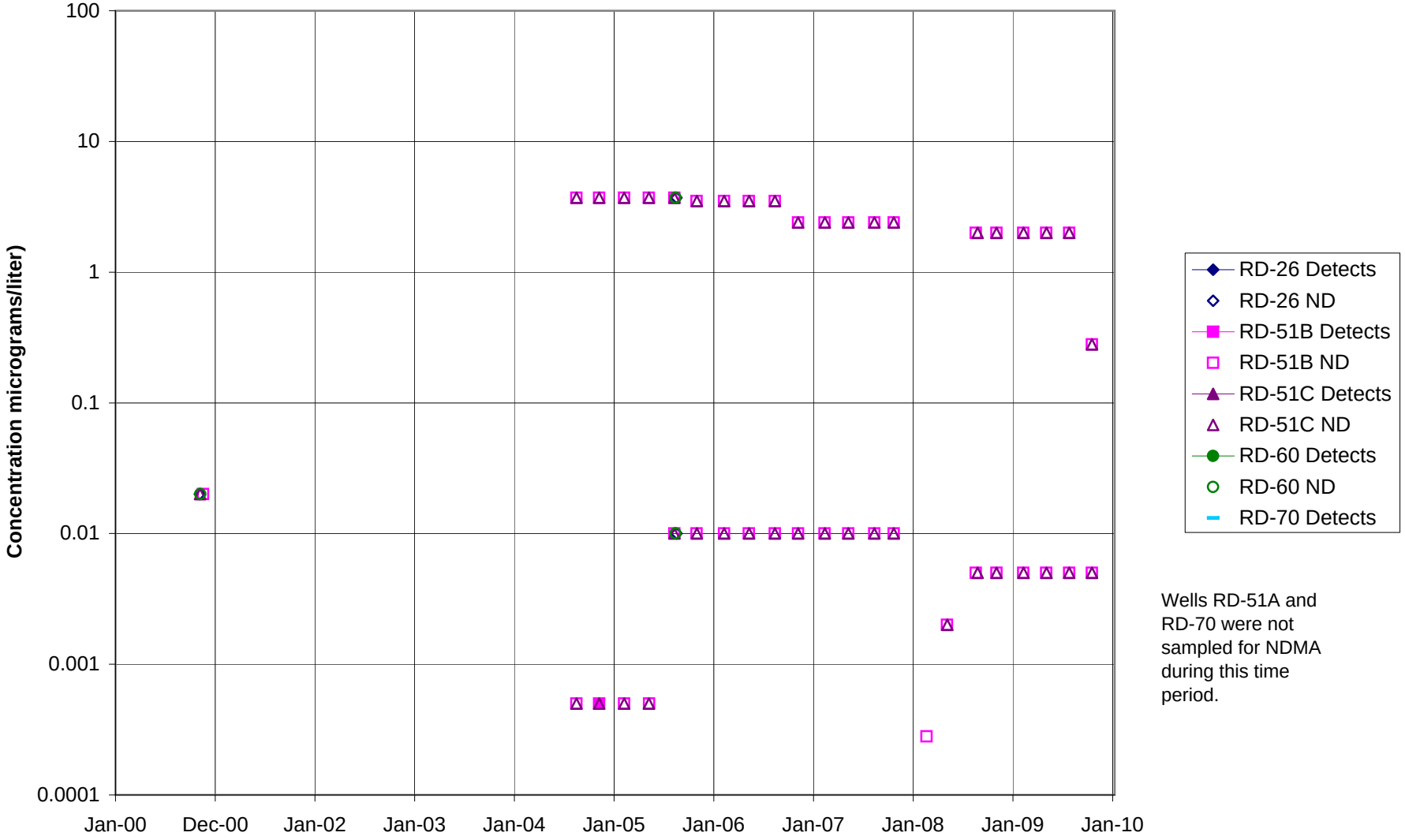


FIGURE F-263. NDMA in HELIPORT, B/204 AREA WELLS



Wells RD-51A and RD-70 were not sampled for NDMA during this time period.

FIGURE F-264. NDMA in ALFA / BRAVO AREA WELLS

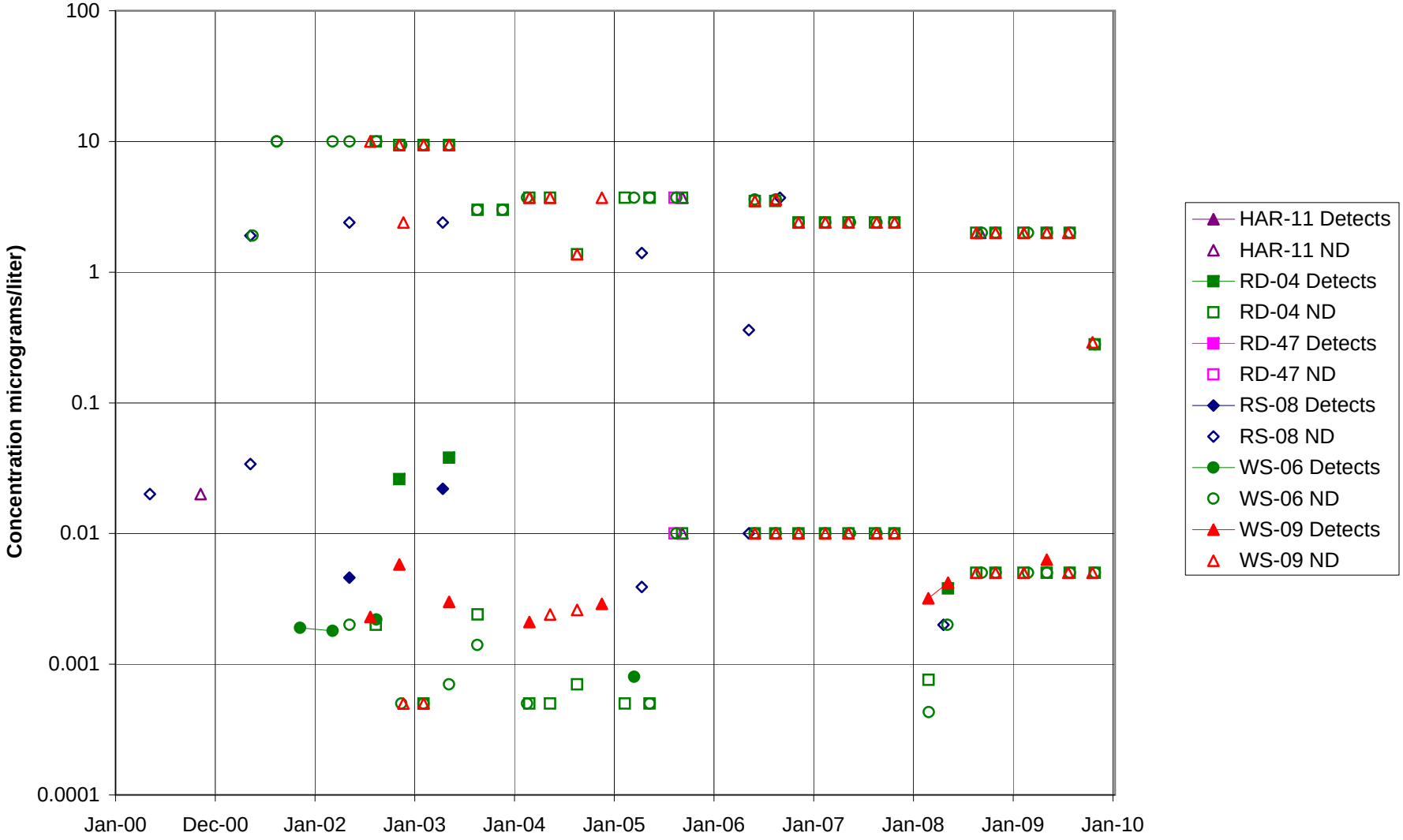


FIGURE F-265. NDMA in SPA AREA WELLS

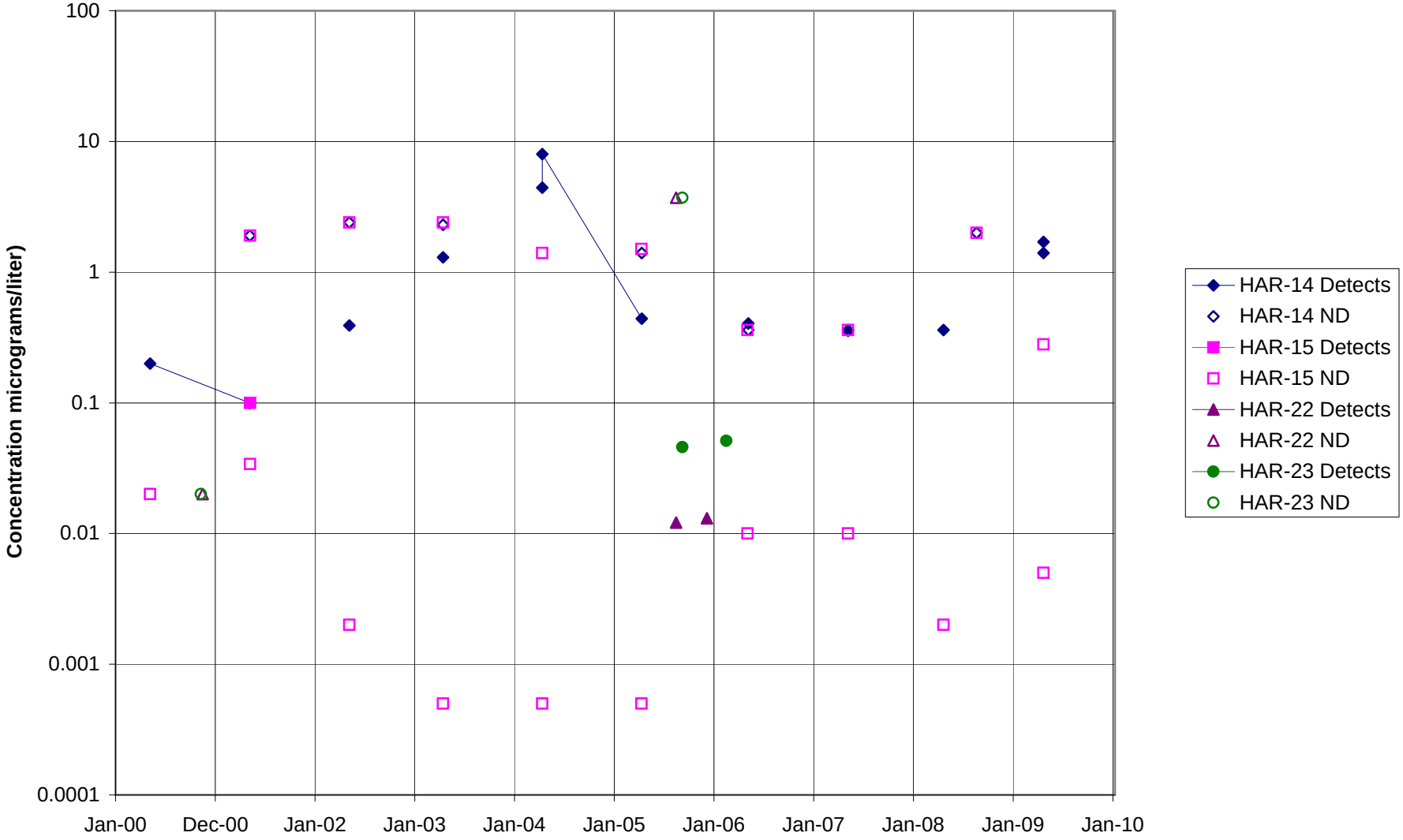
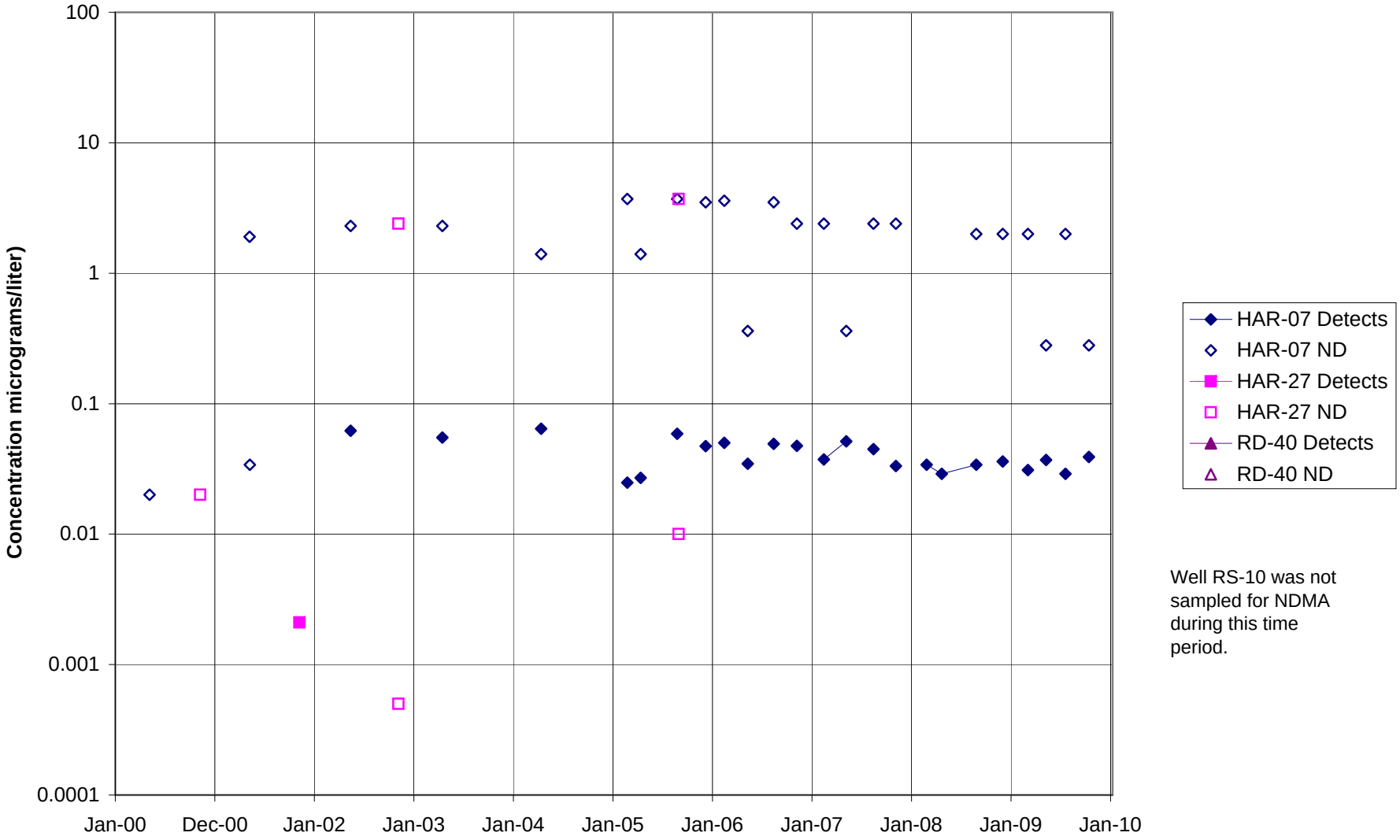


FIGURE F-266. NDMA in COCA / PLF AREA WELLS



Well RS-10 was not sampled for NDMA during this time period.

FIGURE F-267. NDMA in DELTA / BUFFER ZONE AREA WELLS

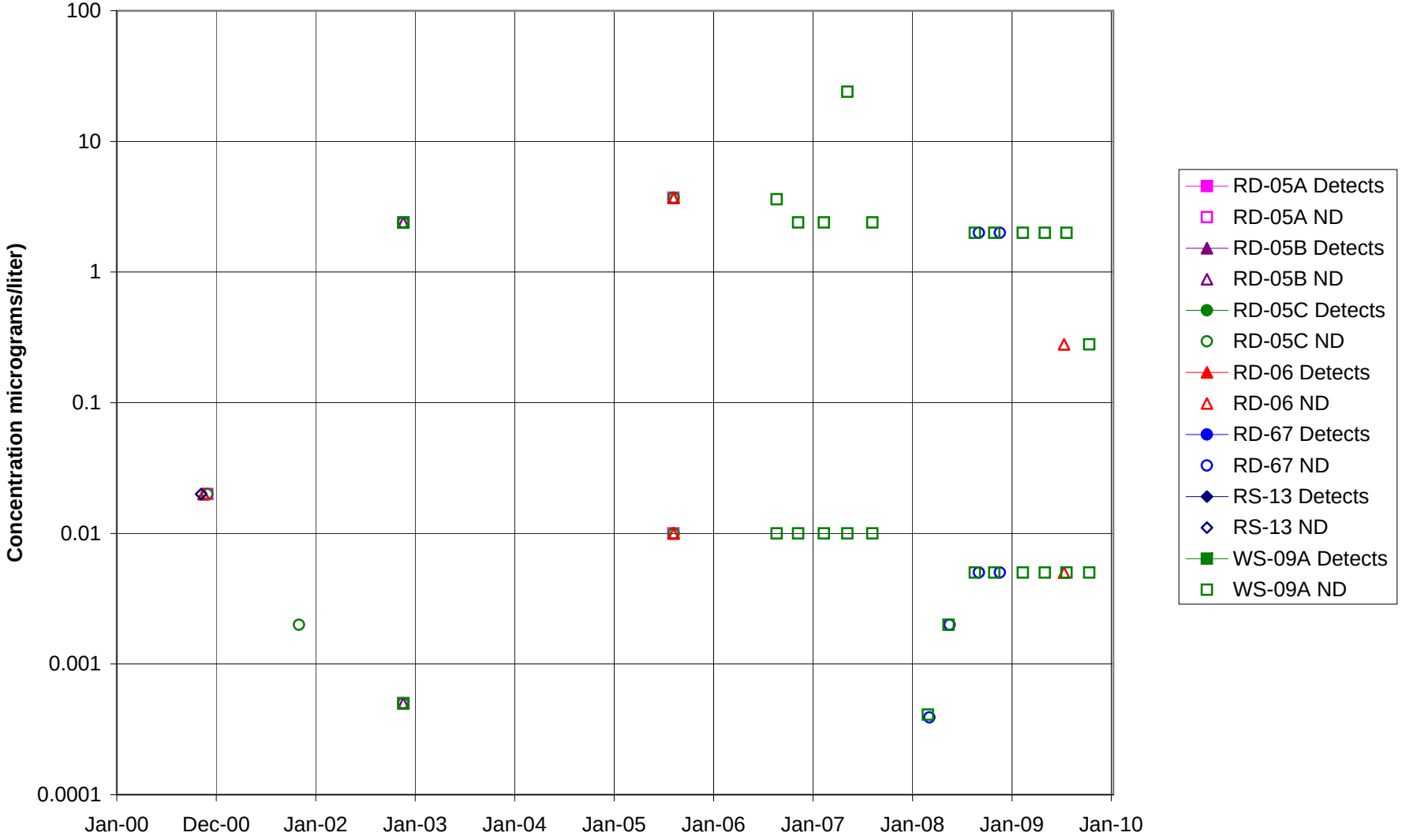


FIGURE F-268. NDMA in AREA IV WELLS

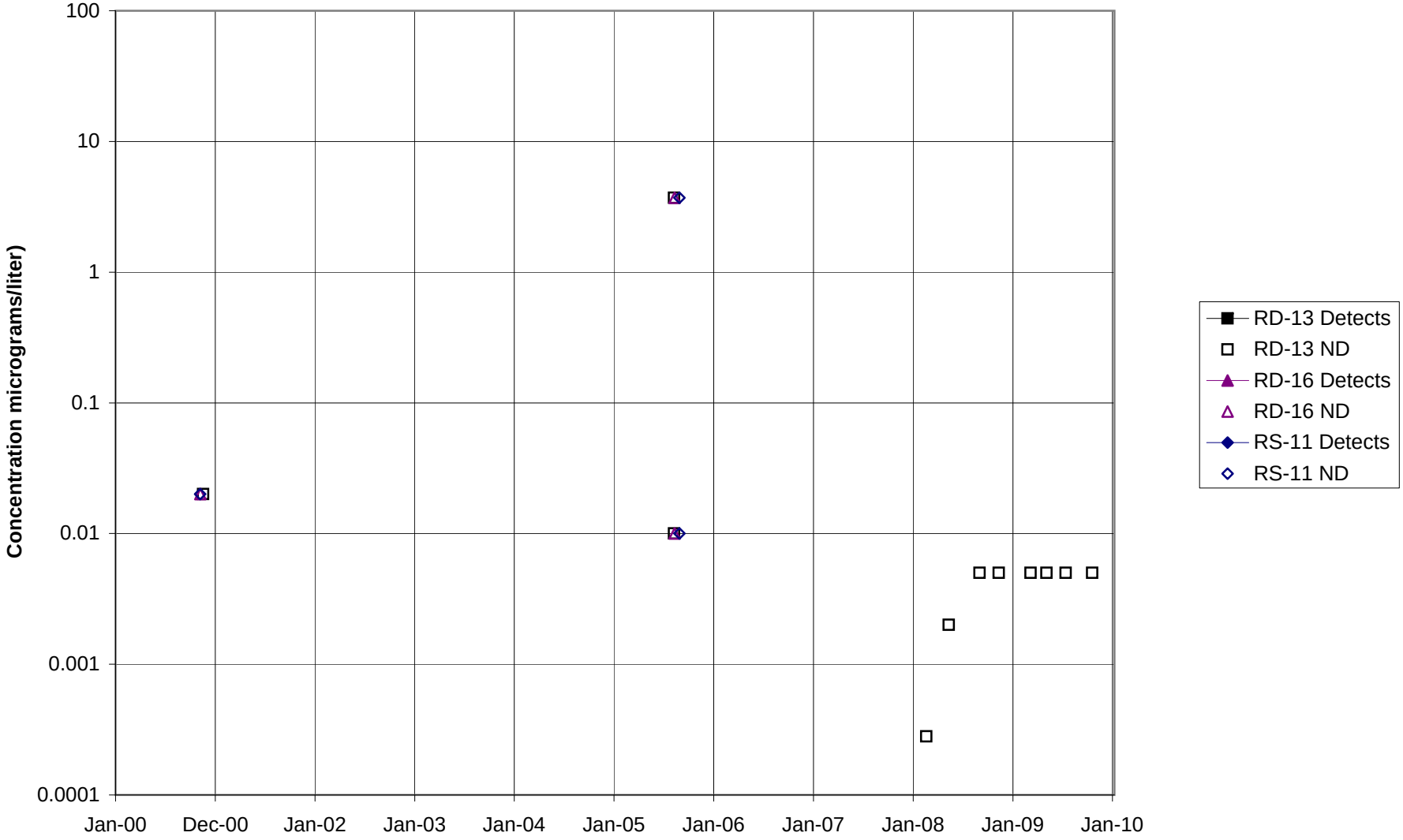


FIGURE F-269. PERCHLORATE in STL-IV AREA SHALLOW WELLS

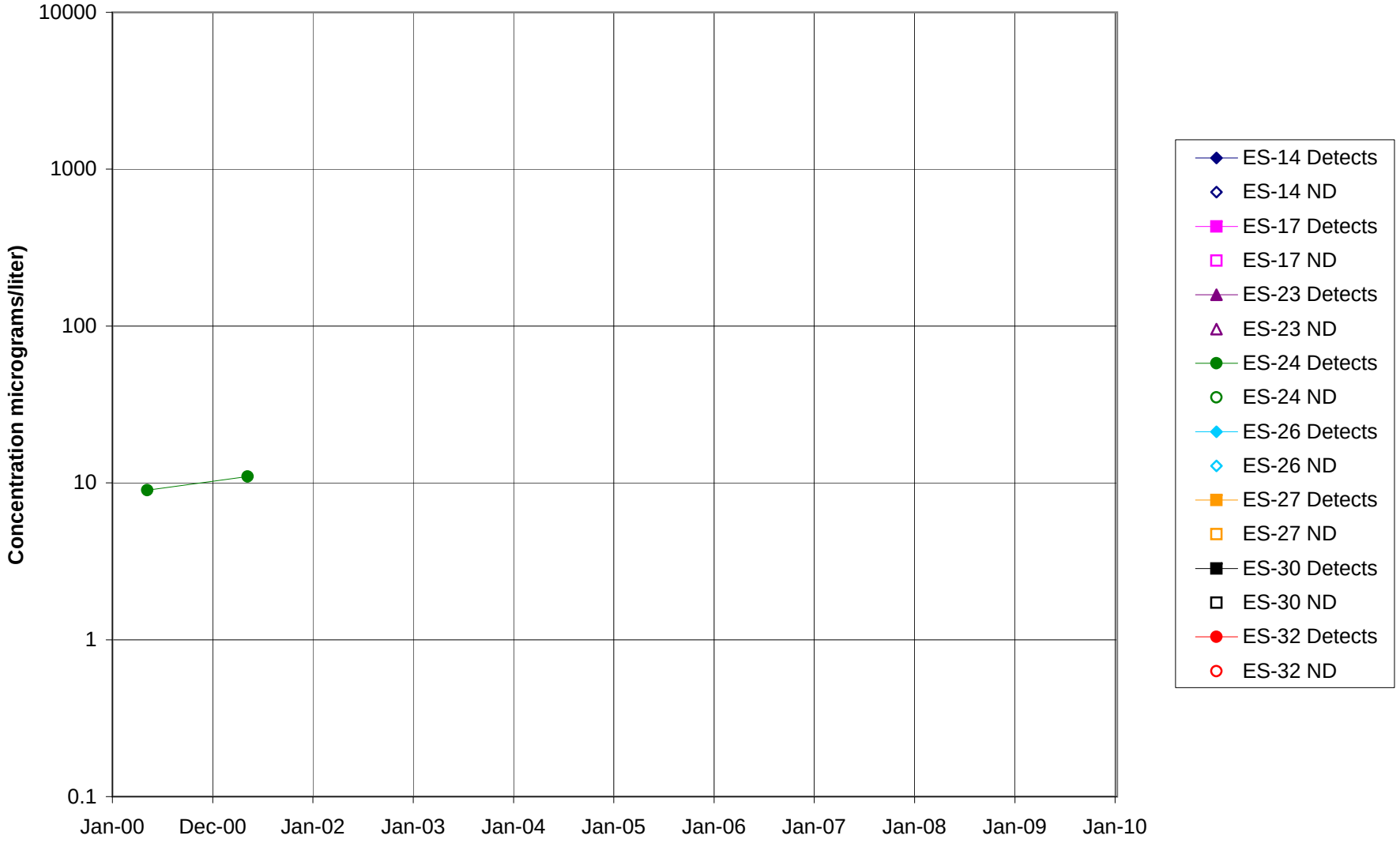


FIGURE F-270. PERCHLORATE in STL-IV AREA CHATSWORTH FORMATION WELLS

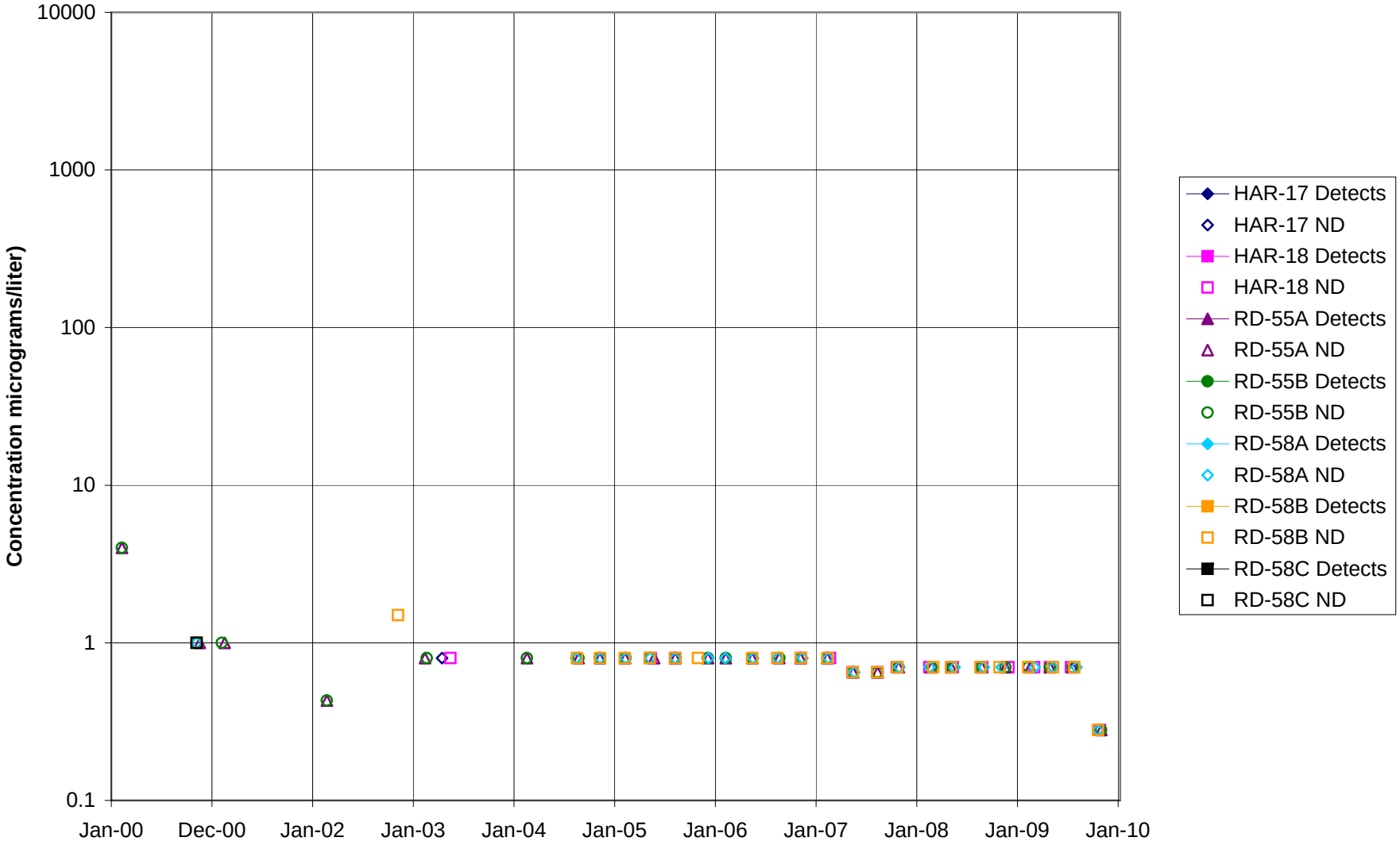


FIGURE F-271. PERCHLORATE in MAIN GATE AREA WELLS - 1

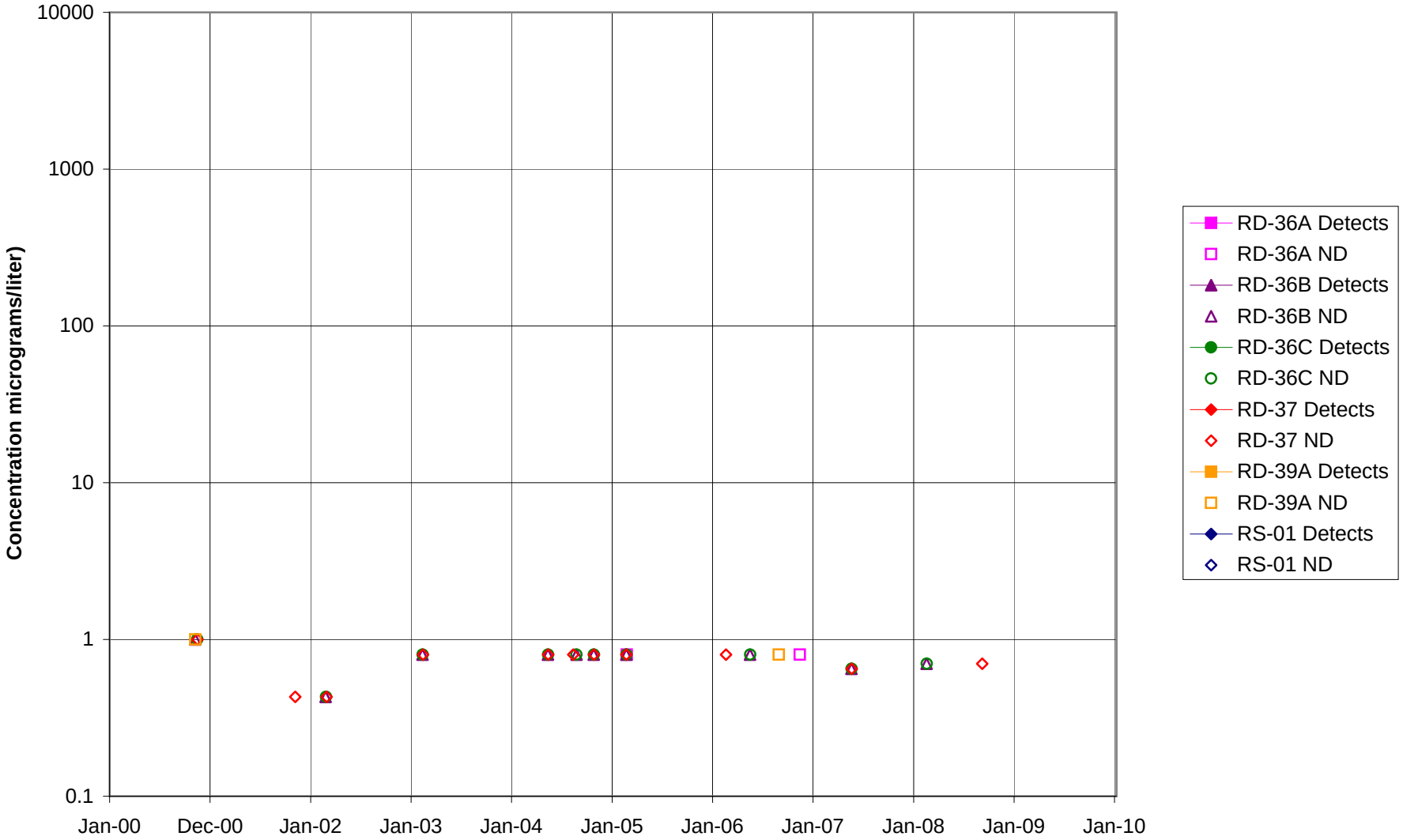


FIGURE F-272. PERCHLORATE in MAIN GATE AREA WELLS - 2

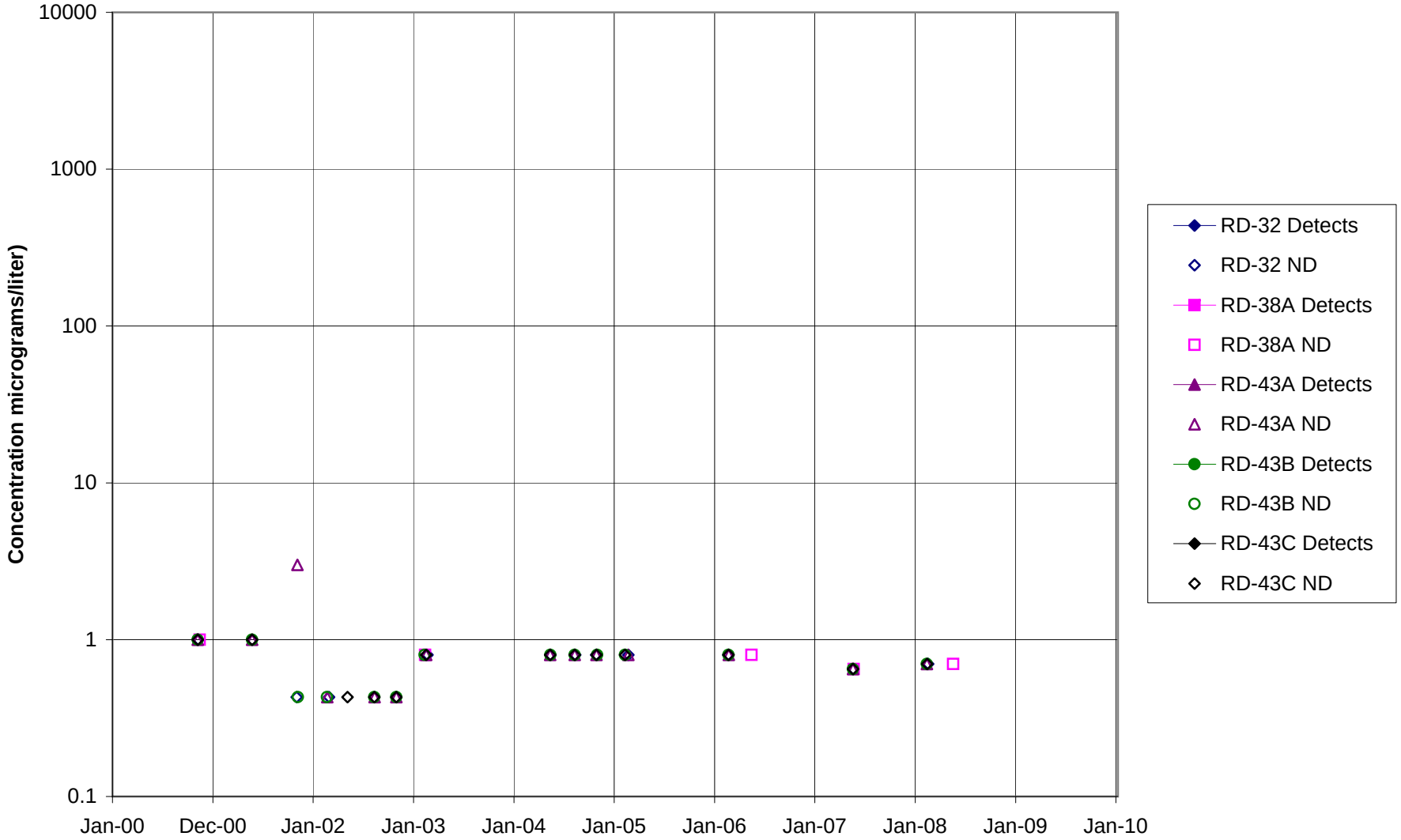


FIGURE F-273. PERCHLORATE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1

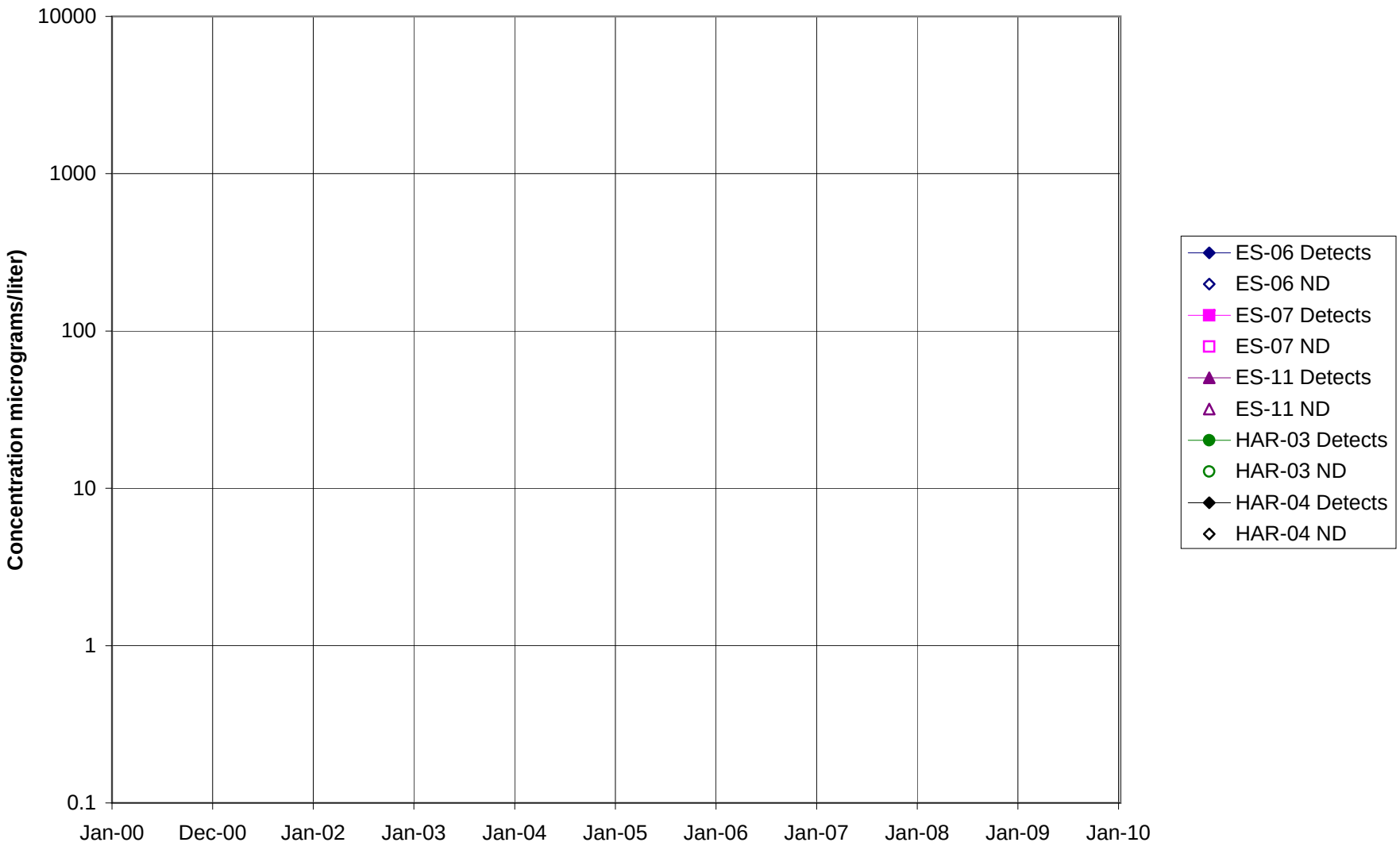


FIGURE F-274. PERCHLORATE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 2

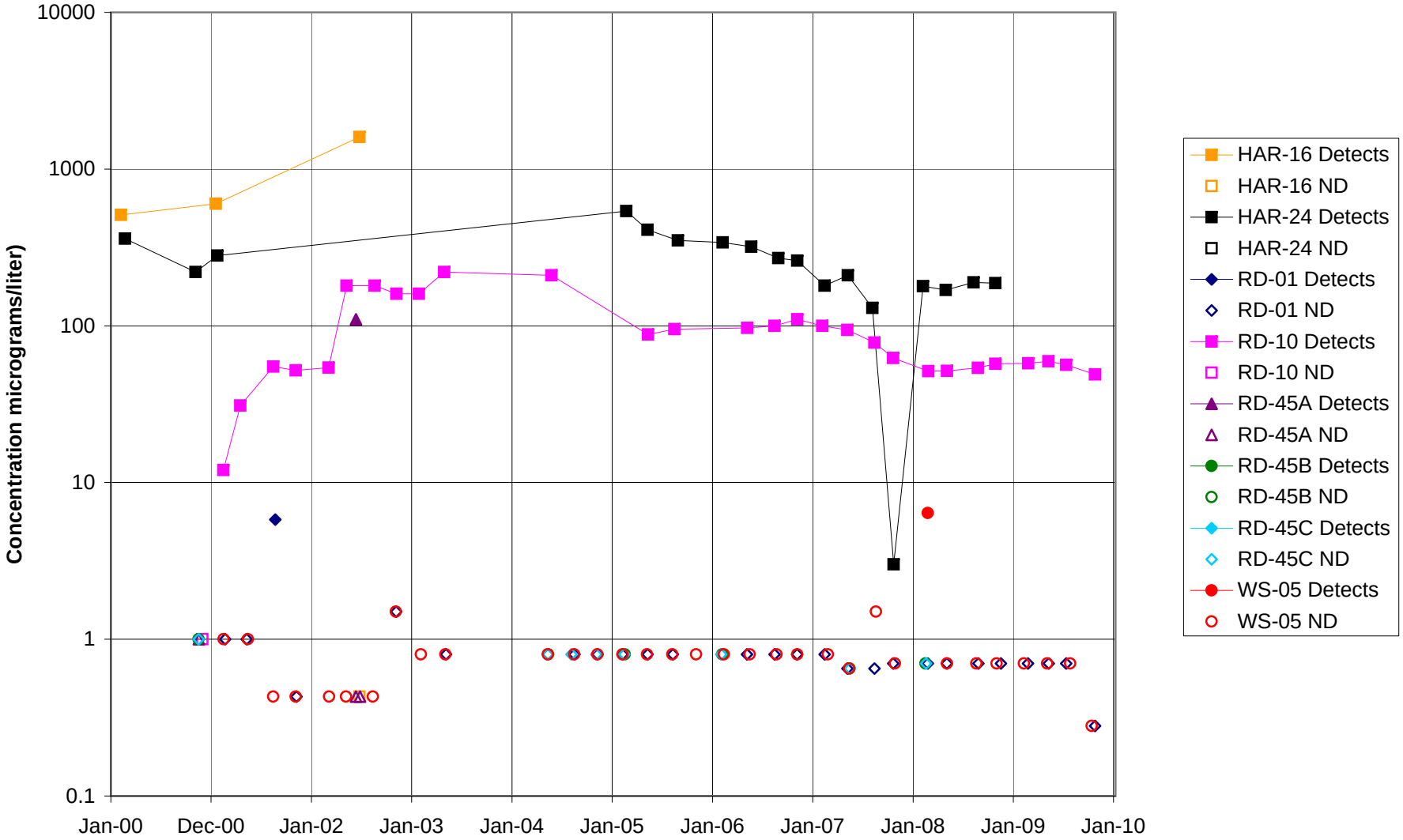


FIGURE F-275. PERCHLORATE in CTL-III / PERIMETER POND AREA WELLS

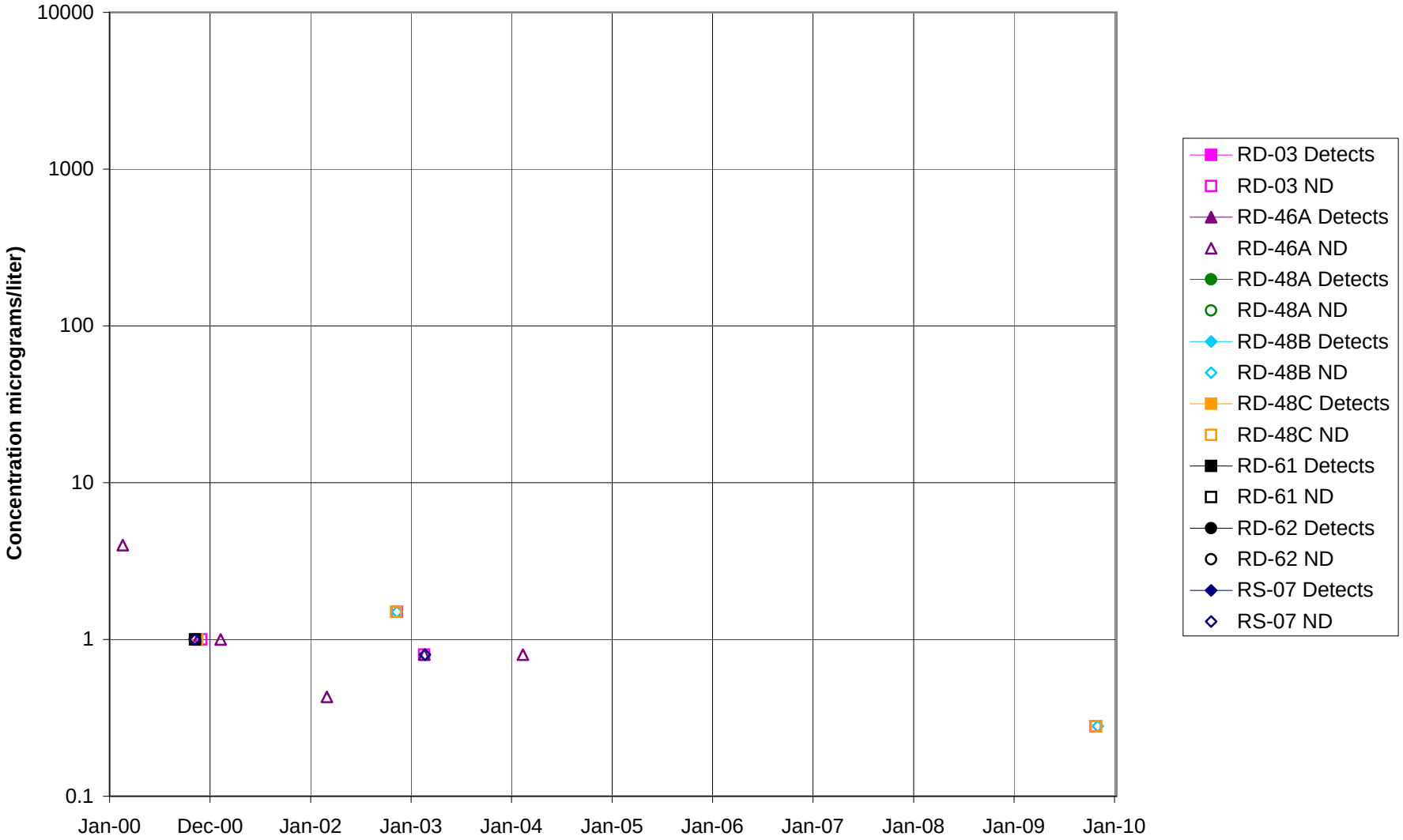


FIGURE F-276. PERCHLORATE in BOWL AREA WELLS

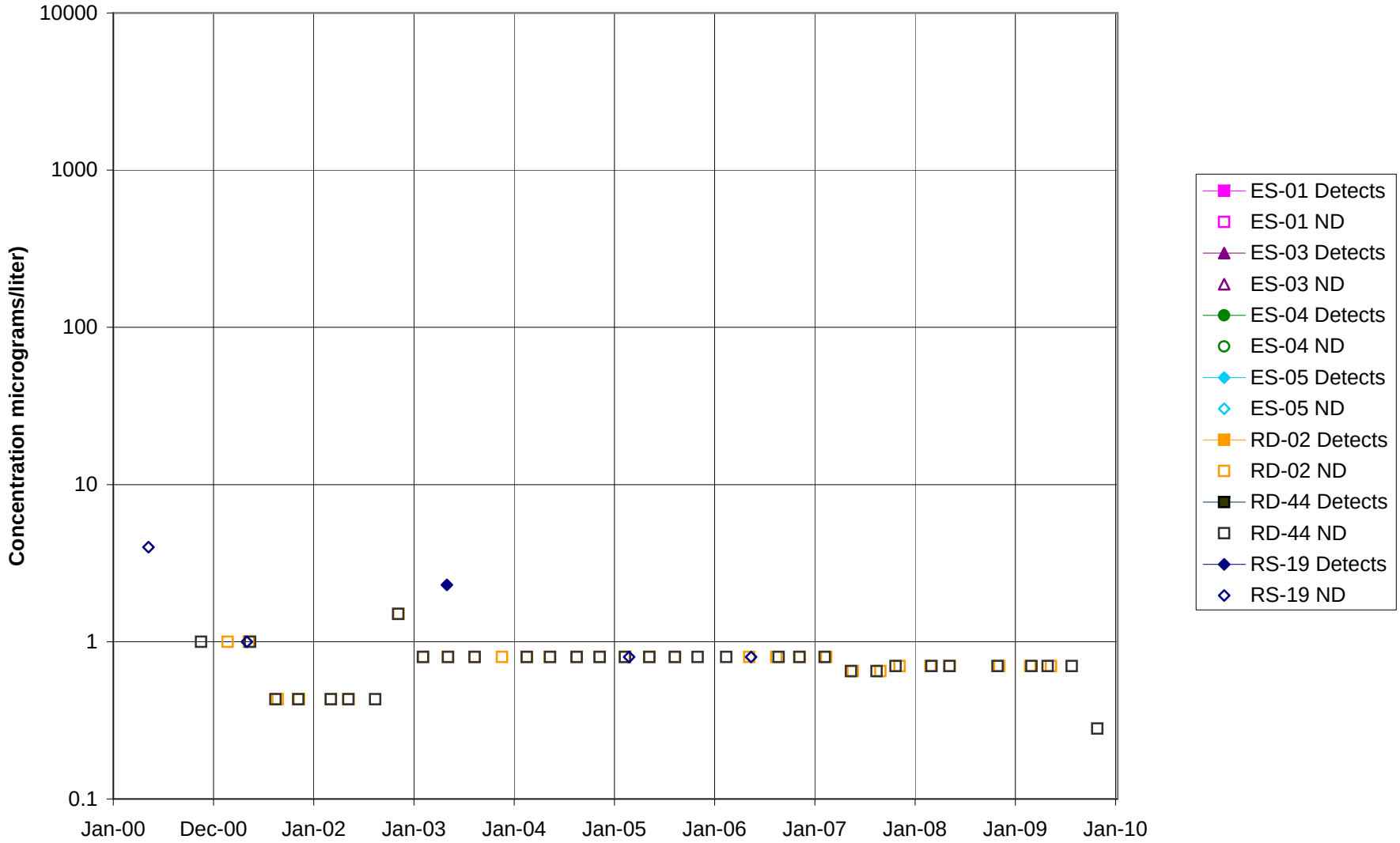
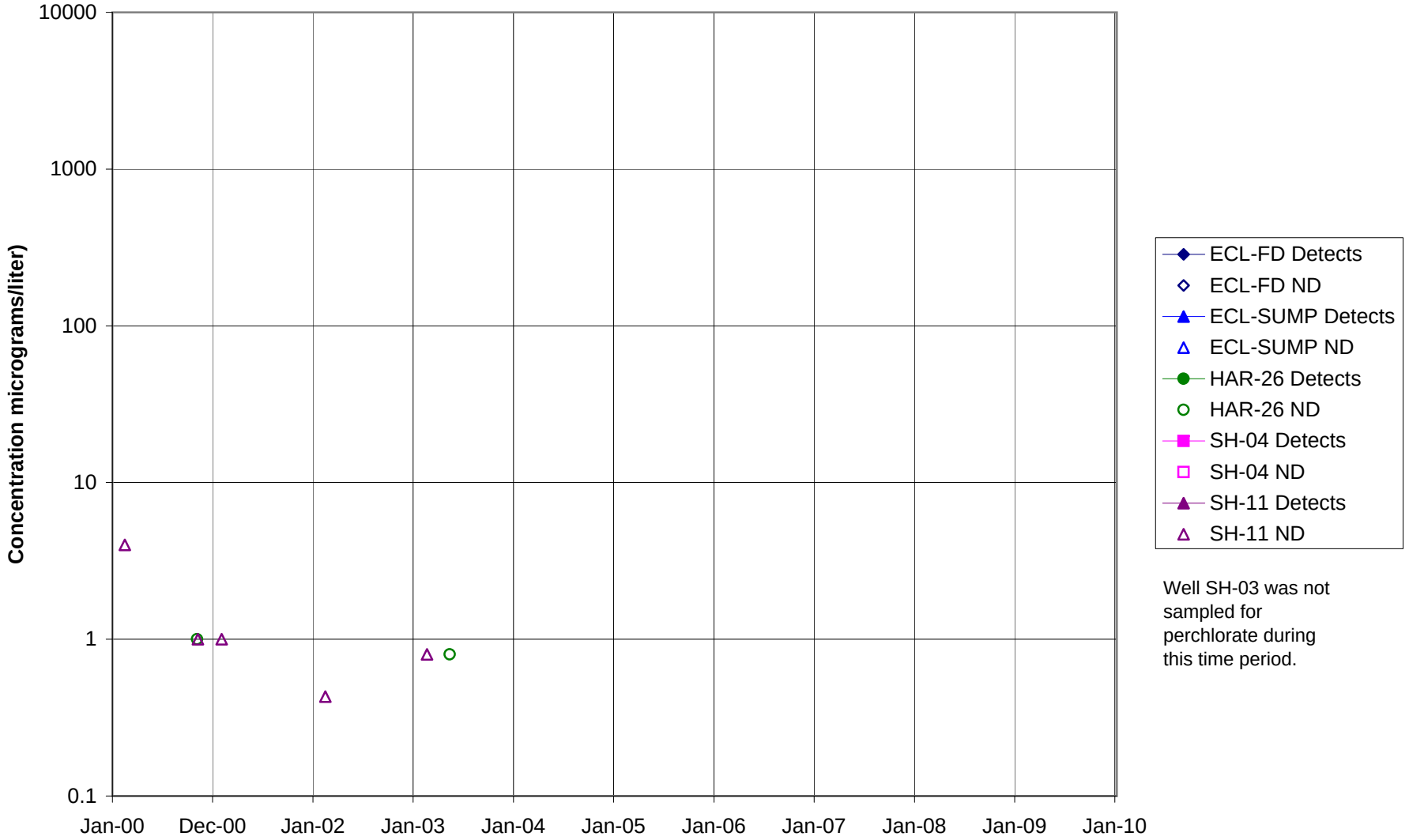
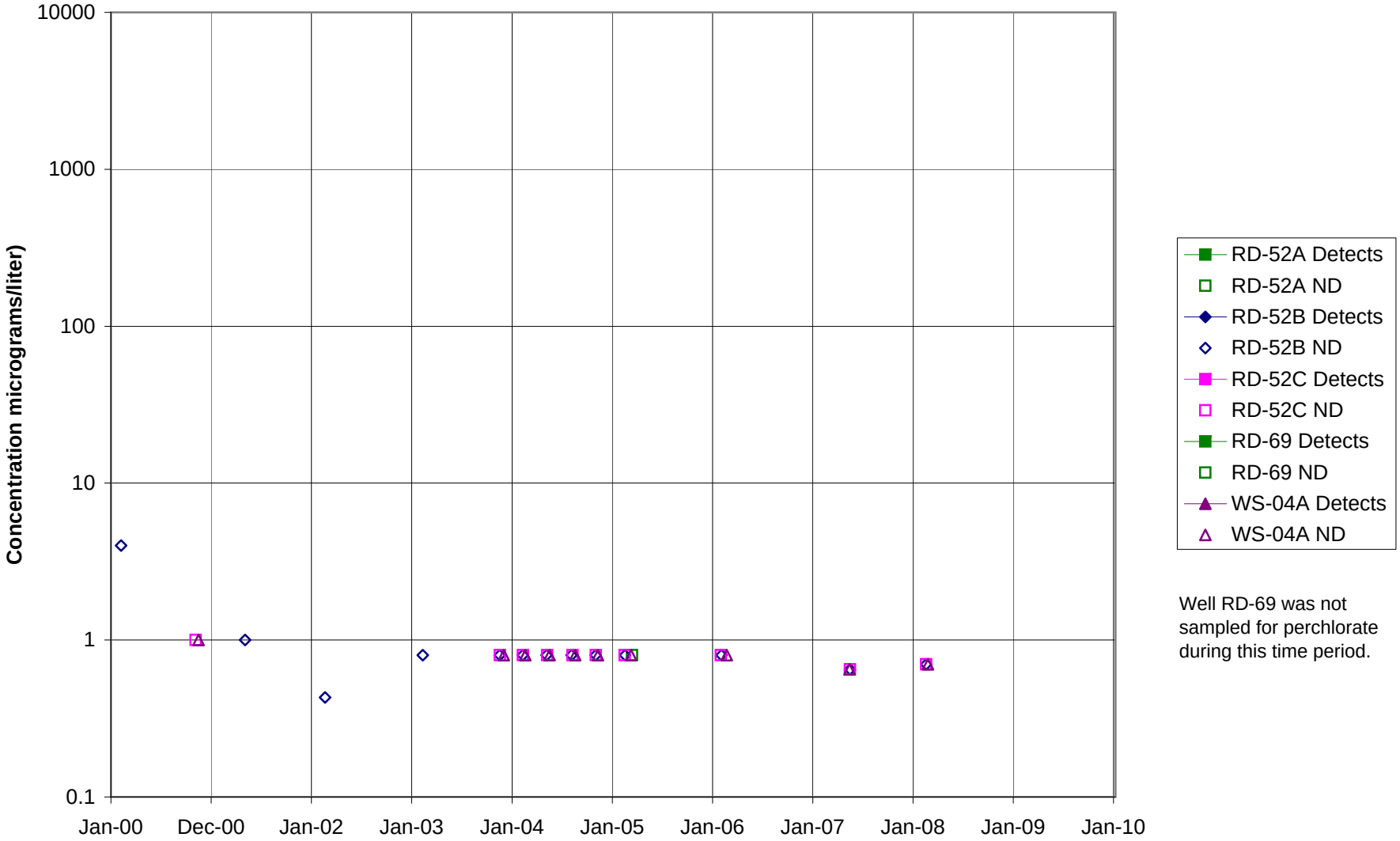


FIGURE F-277. PERCHLORATE in ECL AREA WELLS



Well SH-03 was not sampled for perchlorate during this time period.

FIGURE F-278. PERCHLORATE in FORMER LOX PLANT AREA WELLS



Well RD-69 was not sampled for perchlorate during this time period.

FIGURE F-279. PERCHLORATE in RD-09 AREA WELLS

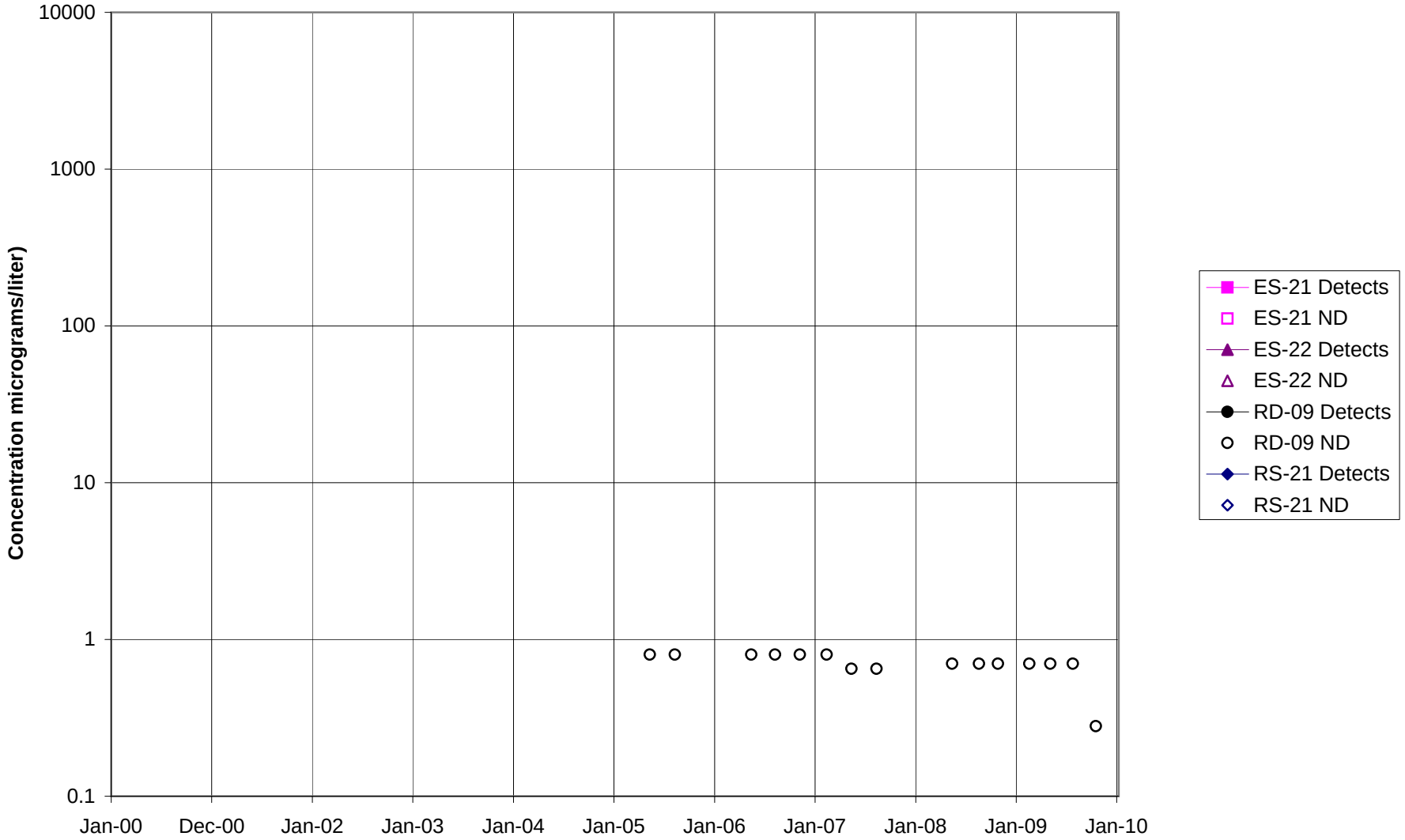
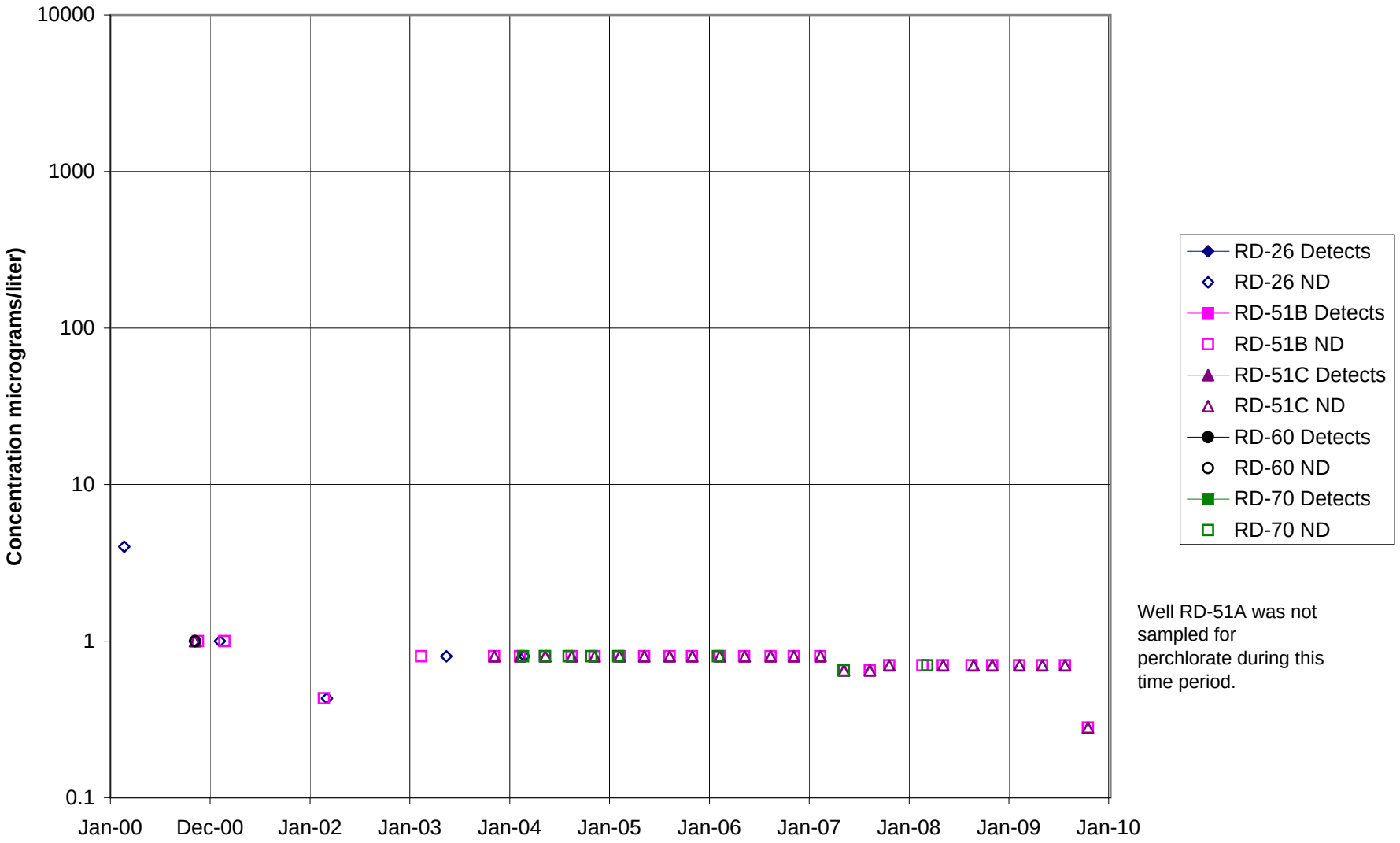


FIGURE F-280. PERCHLORATE in HELIPORT, B/204 AREA WELLS



Well RD-51A was not sampled for perchlorate during this time period.

FIGURE F-281. PERCHLORATE in ALFA / BRAVO AREA WELLS

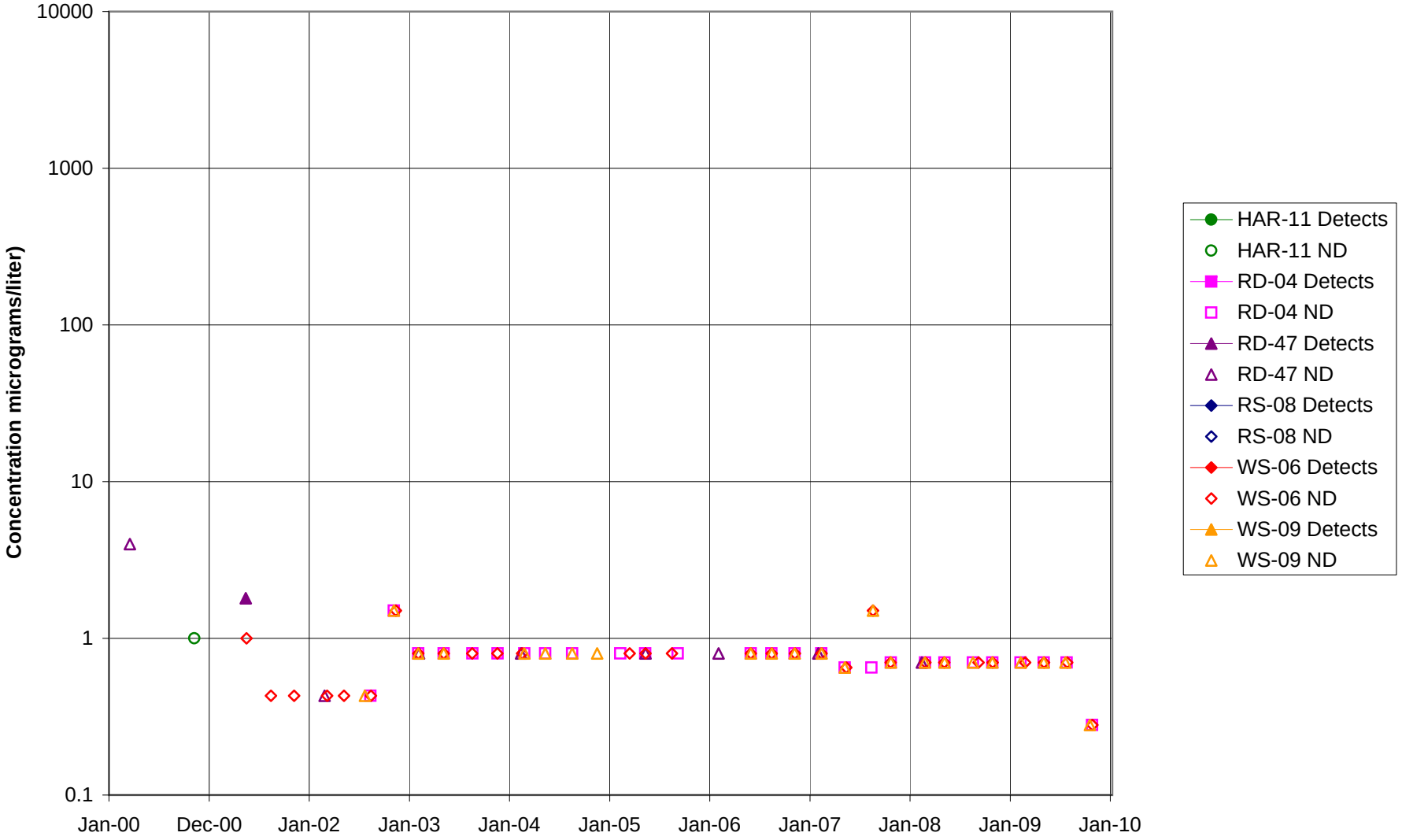


FIGURE F-282. PERCHLORATE in SPA AREA WELLS

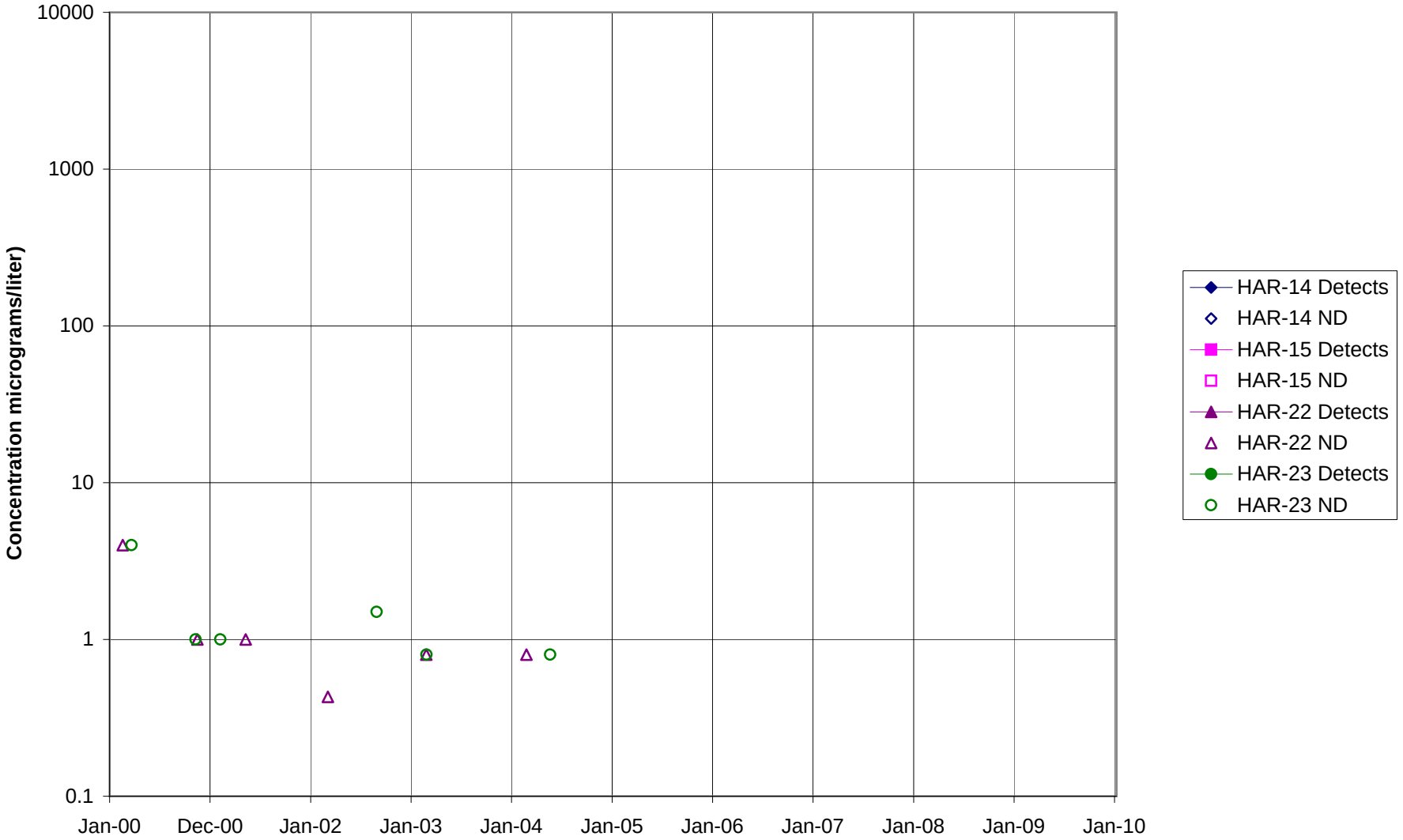


FIGURE F-283. PERCHLORATE in COCA / PLF AREA WELLS

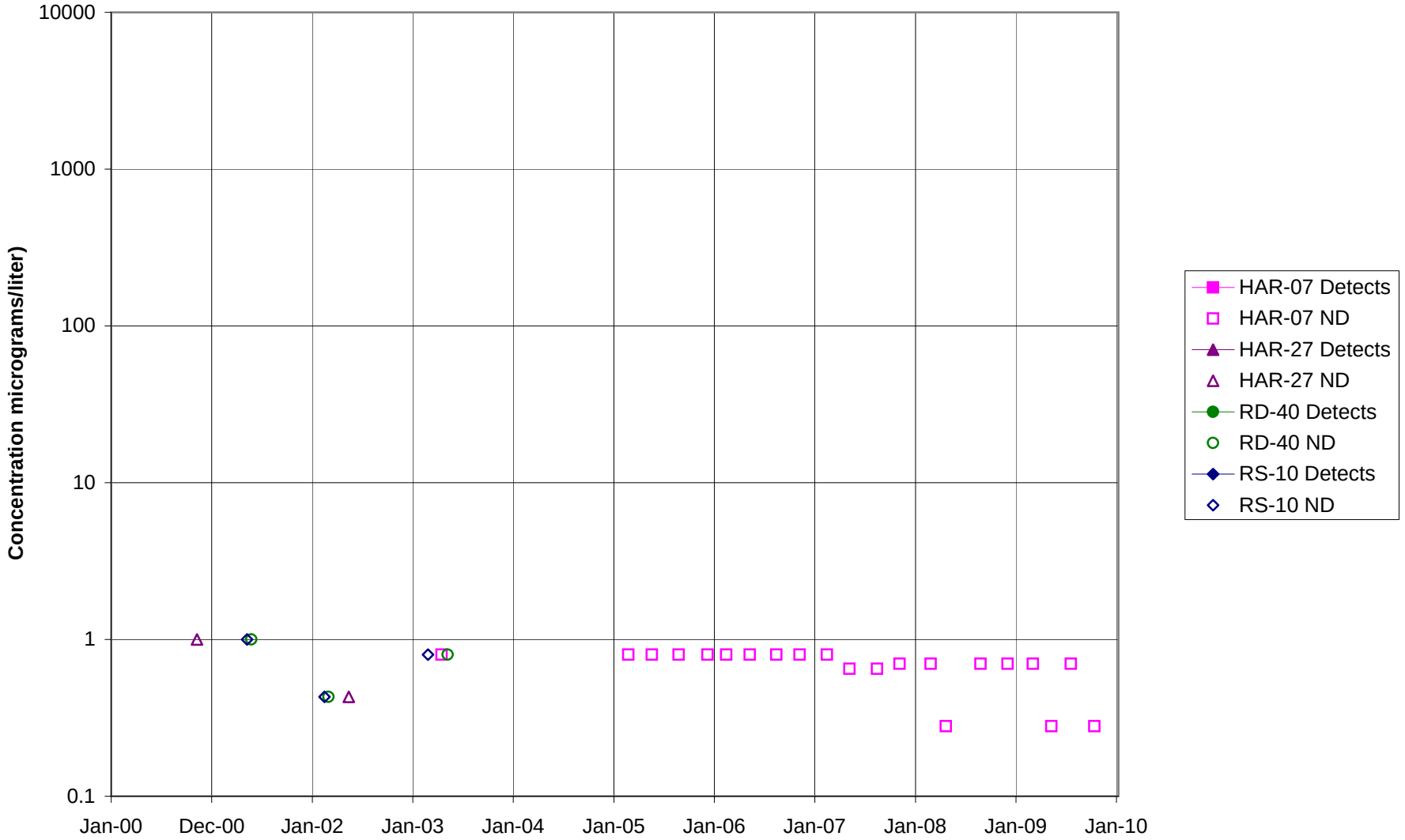


FIGURE F-284. PERCHLORATE in DELTA / BUFFER ZONE AREA WELLS

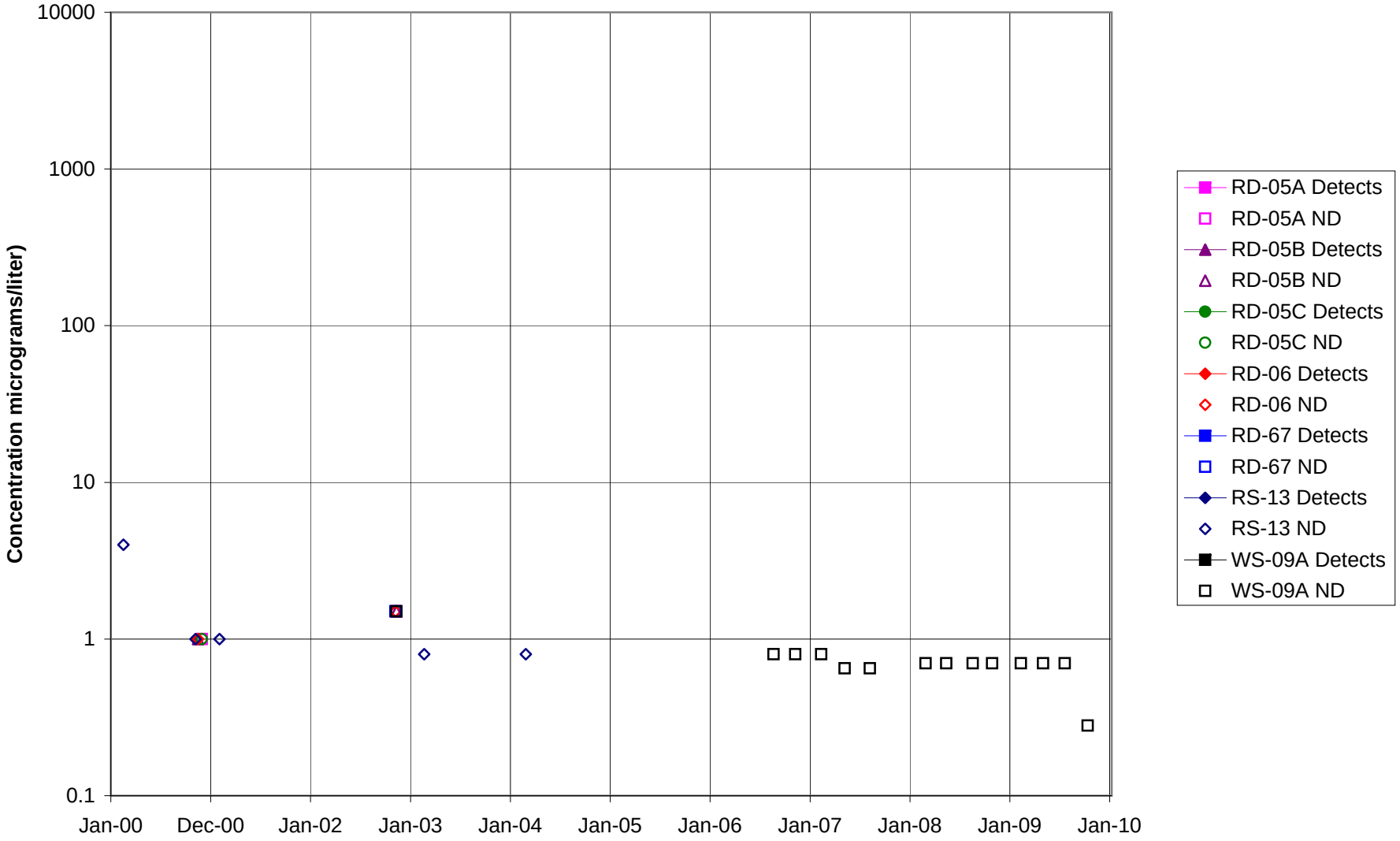


FIGURE F-285. PERCHLORATE in AREA IV WELLS

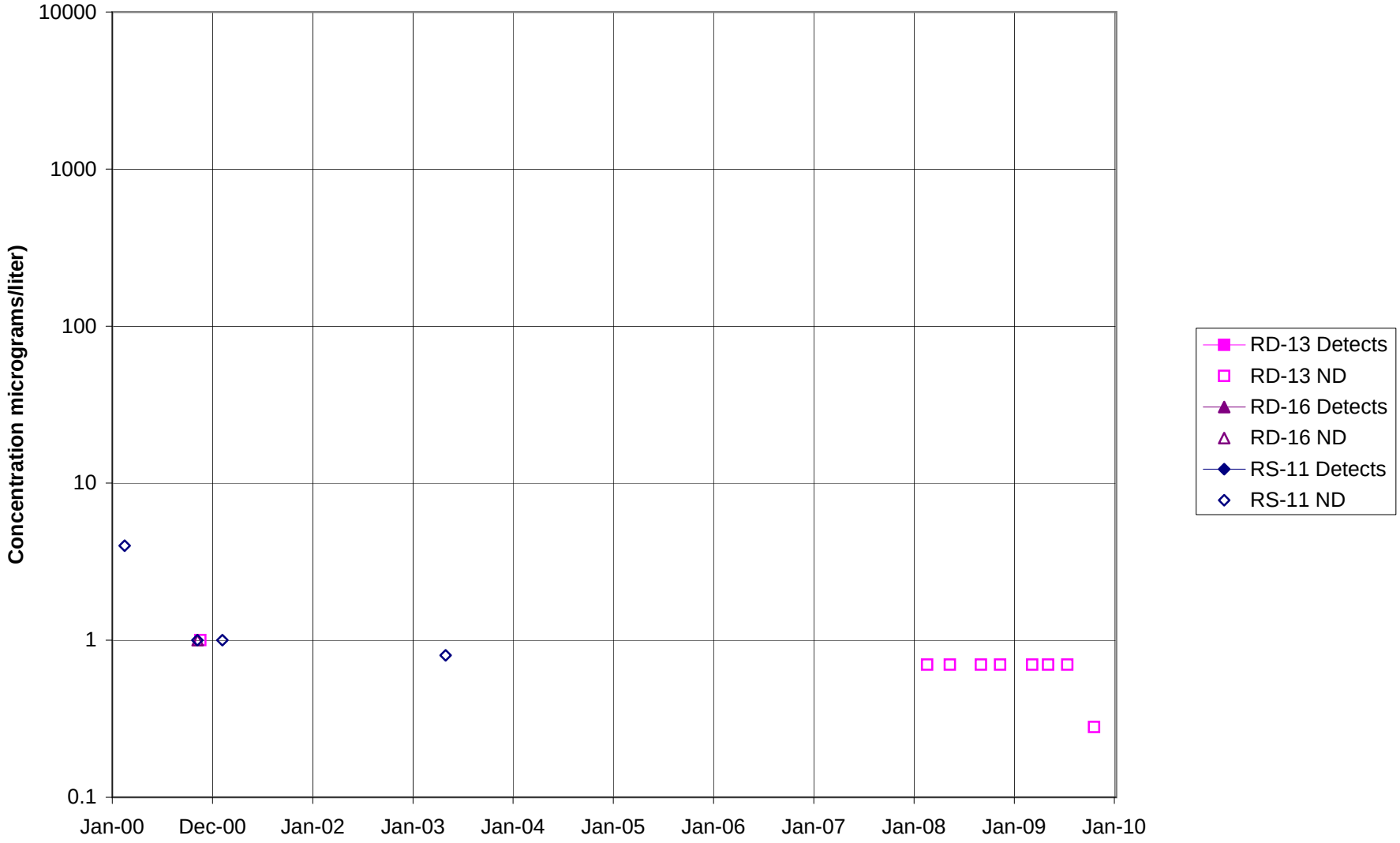


FIGURE F-286. PCE in STL-IV AREA SHALLOW WELLS

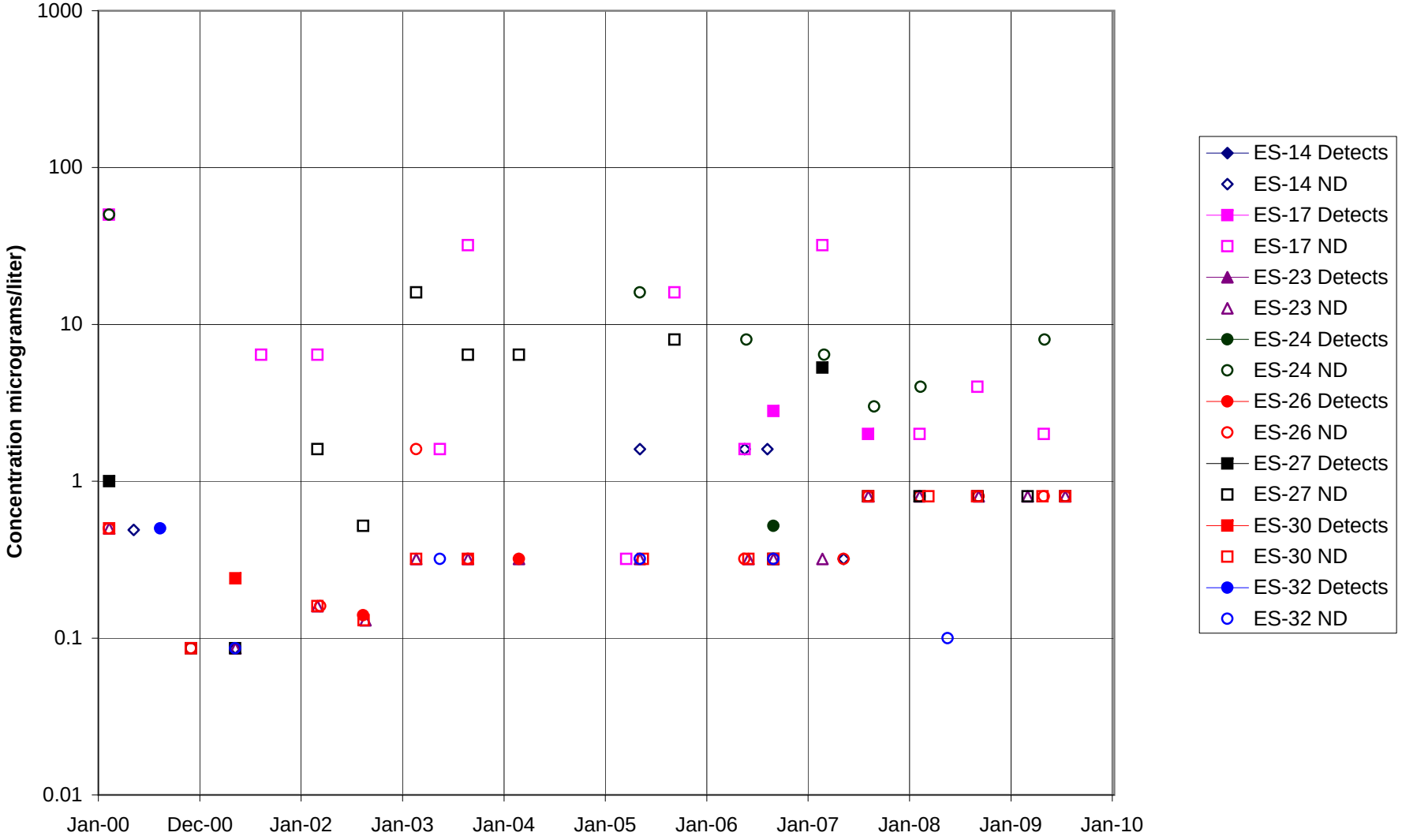


FIGURE F-287. PCE in STL-IV AREA CHATSWORTH FORMATION WELLS

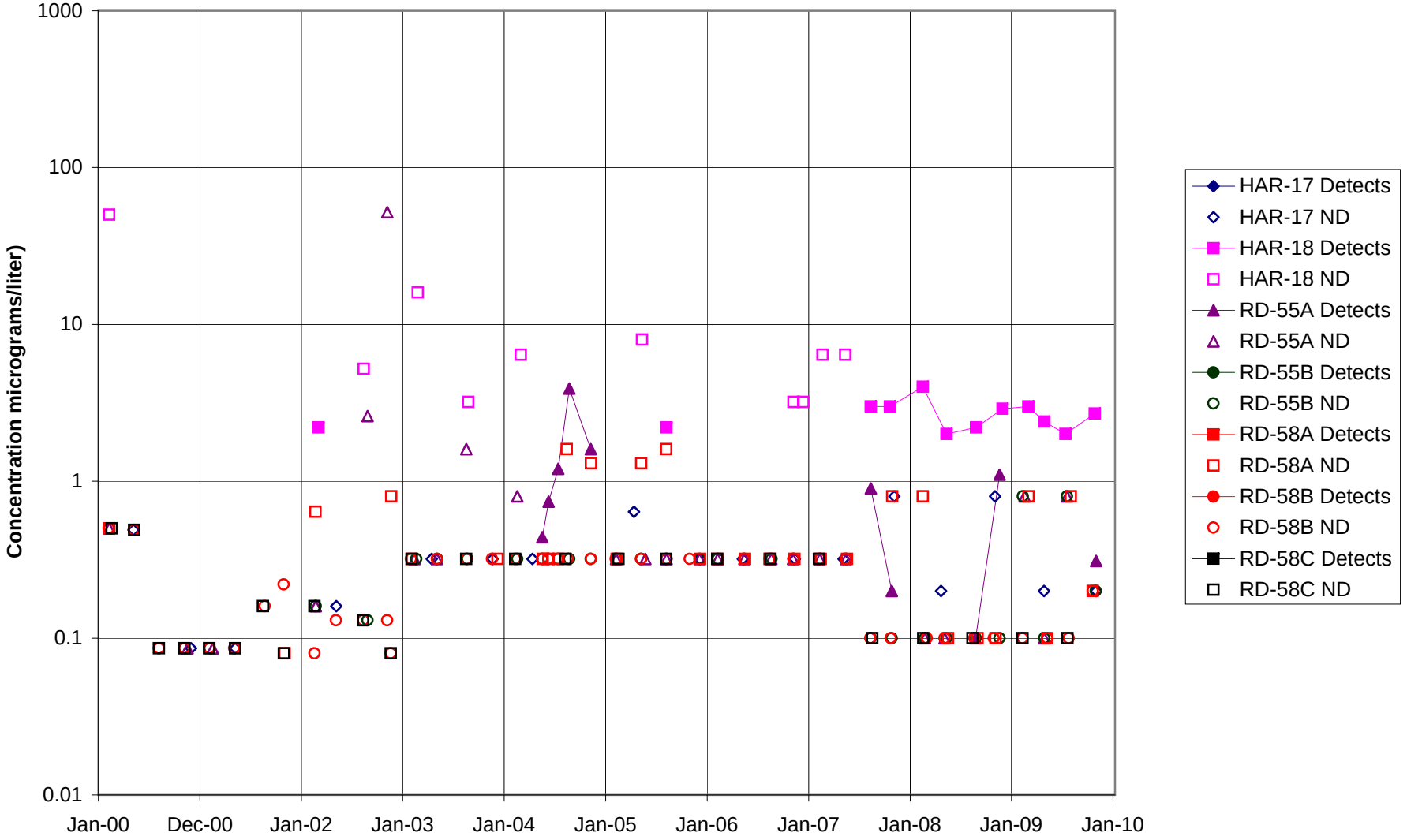


FIGURE F-288. PCE in MAIN GATE AREA WELLS - 1

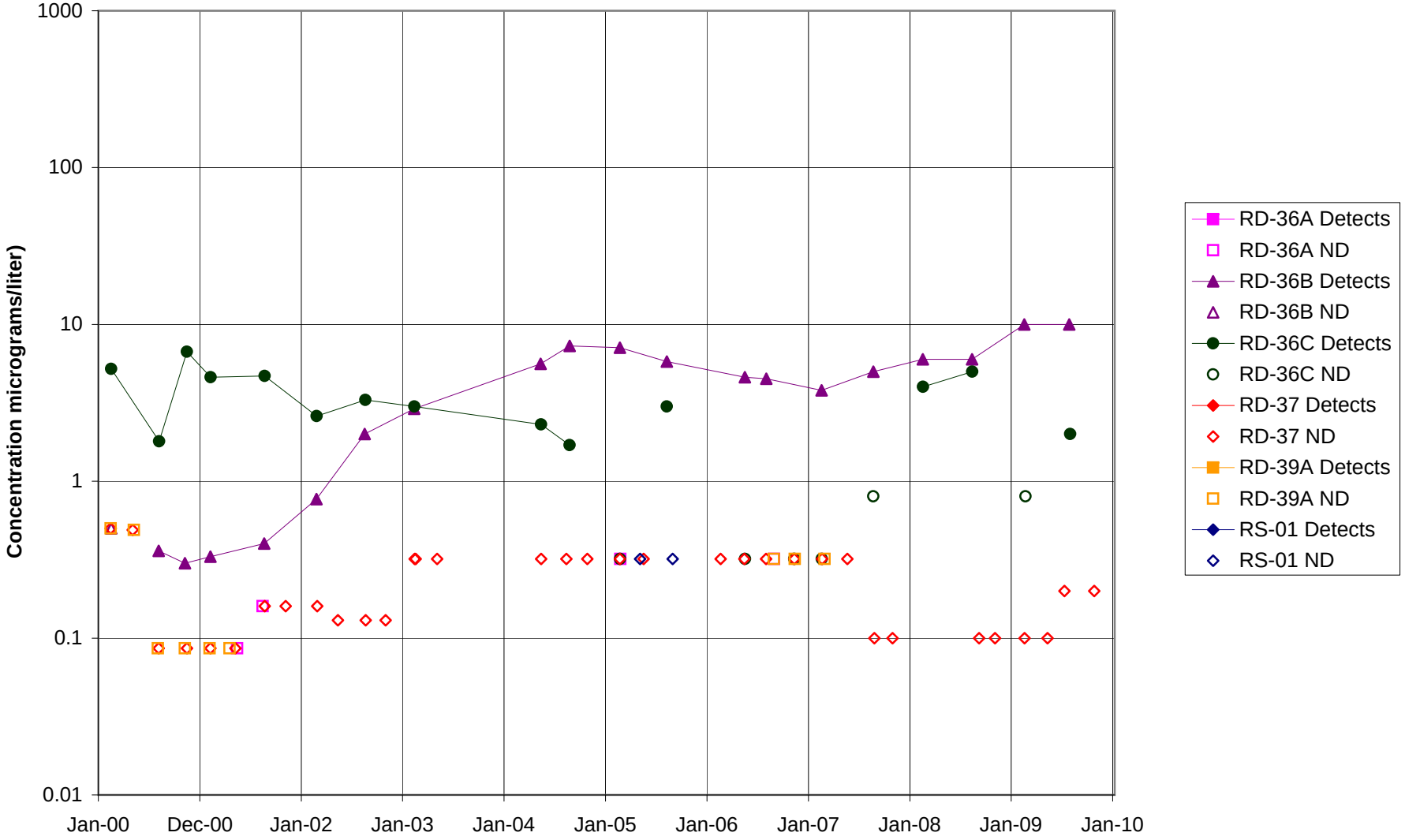


FIGURE F-289. PCE in MAIN GATE AREA WELLS - 2

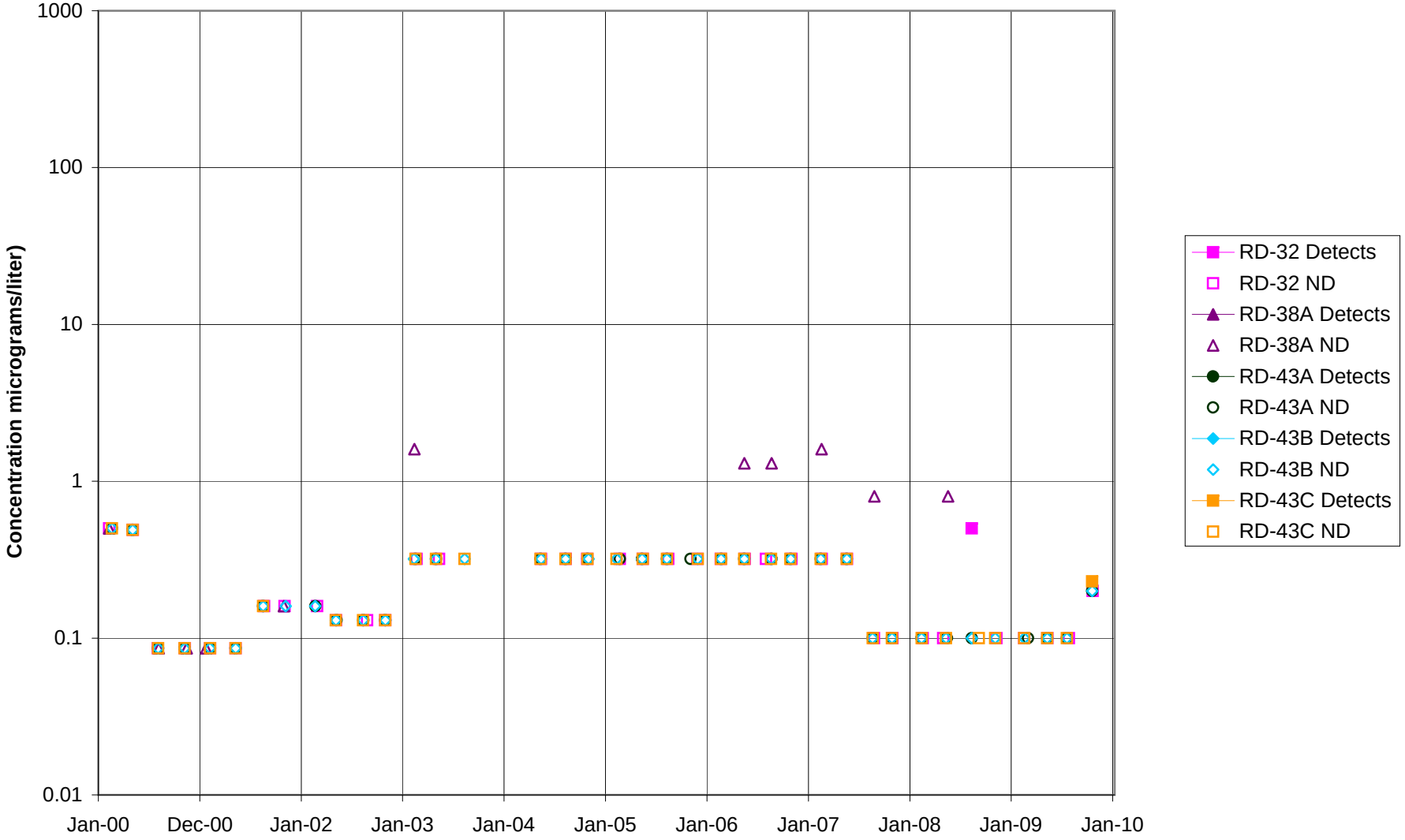


FIGURE F-290. PCE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1

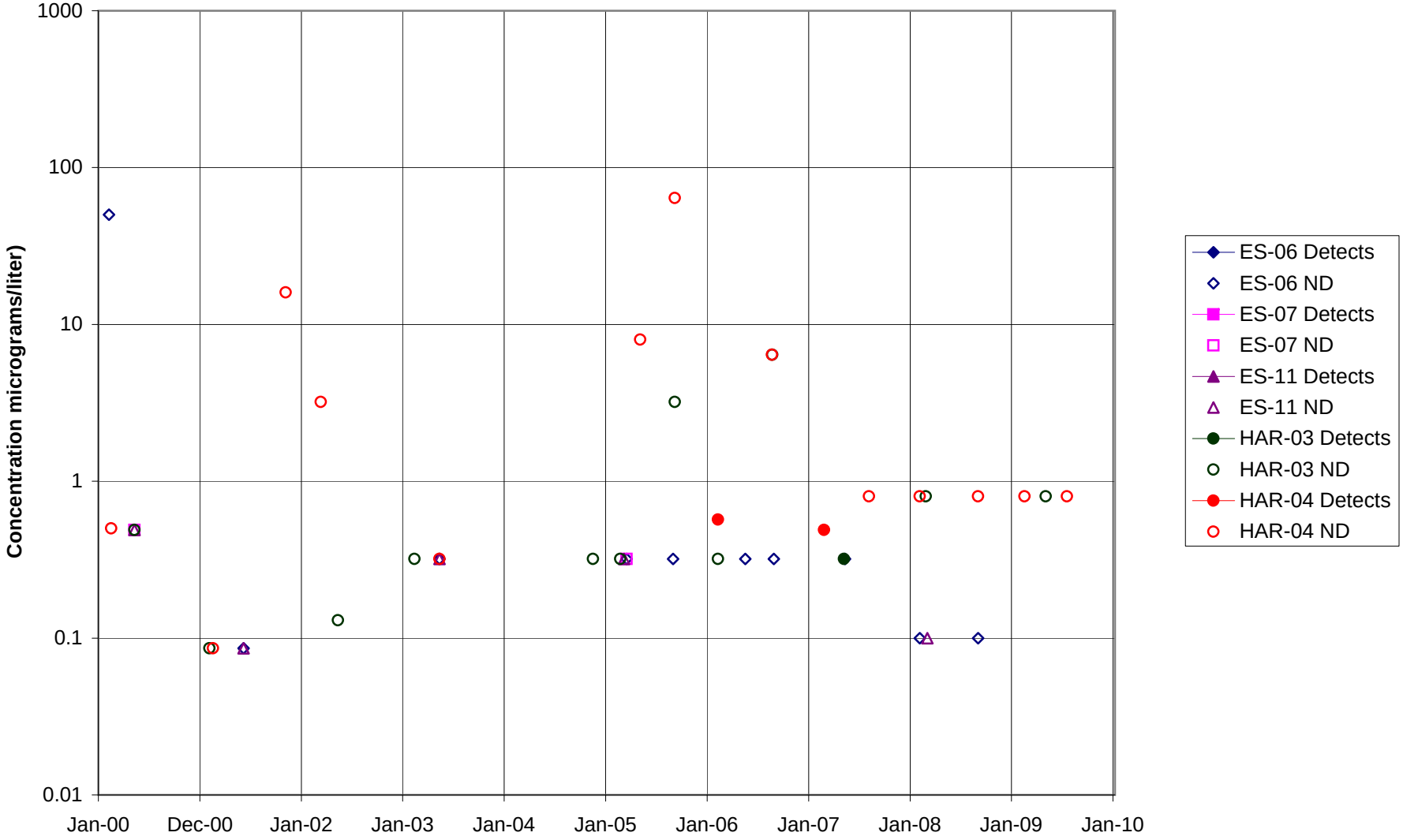


FIGURE F-291. PCE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 2

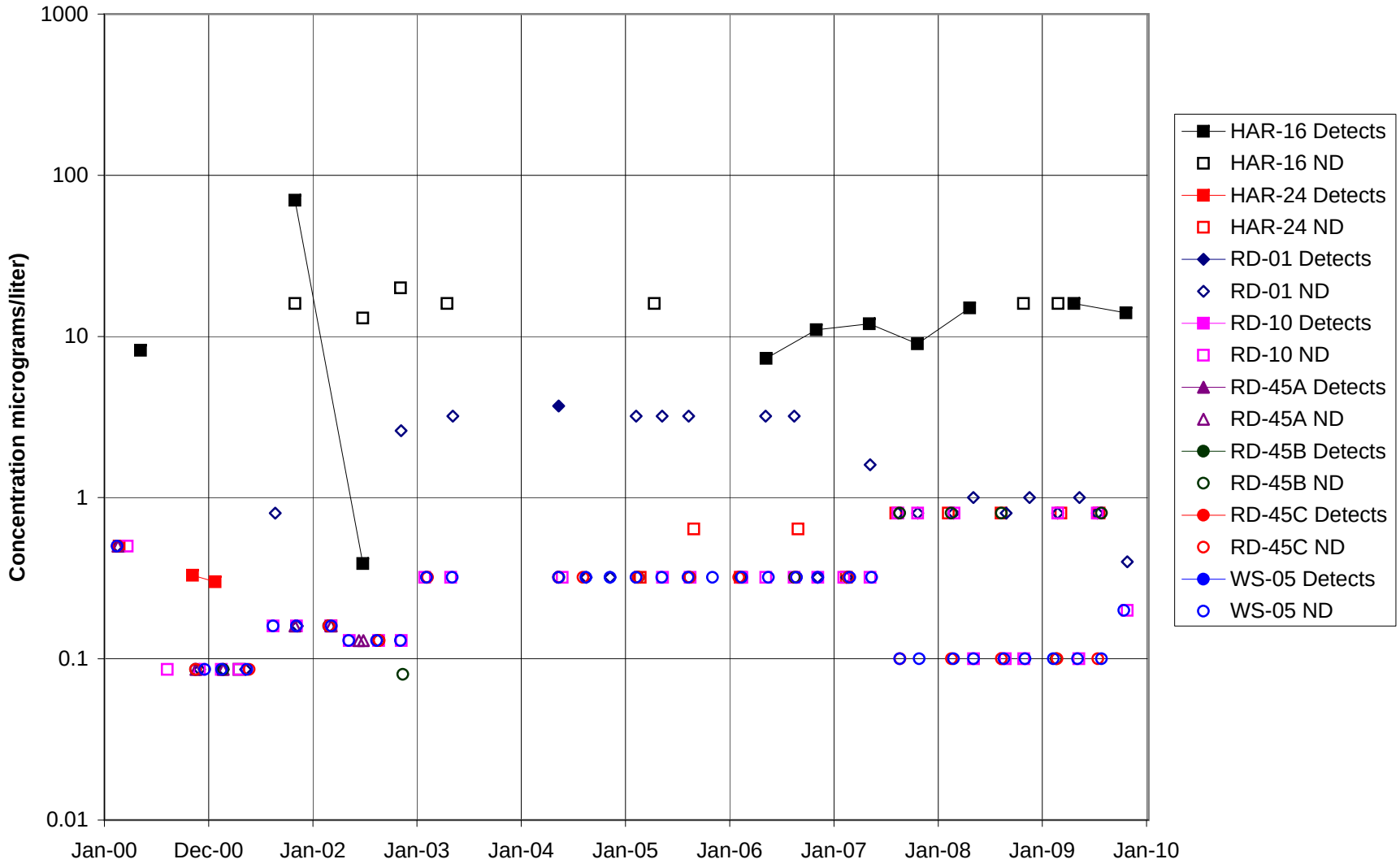


FIGURE F-292. PCE in CTL-III / PERIMETER POND AREA WELLS

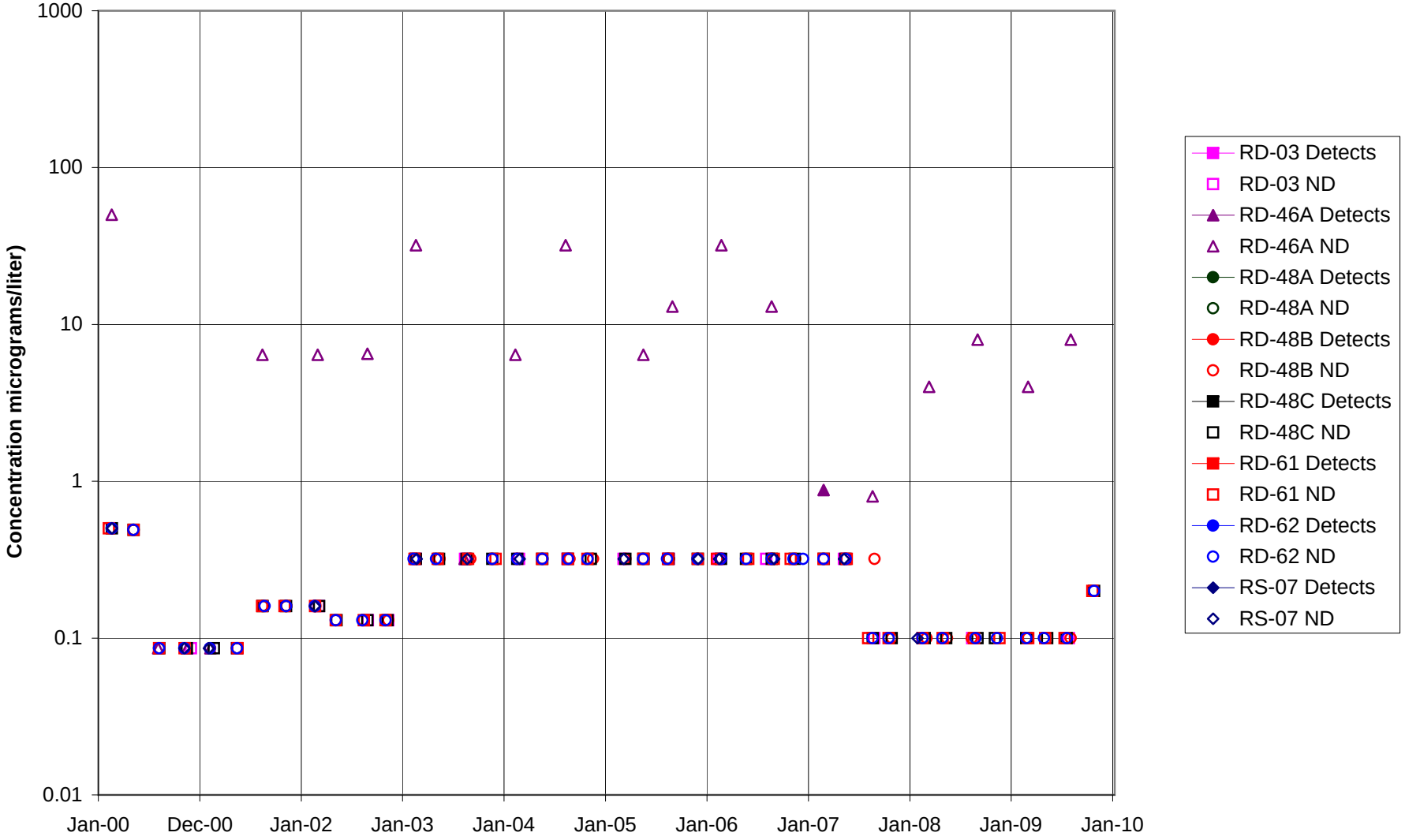


FIGURE F-293. PCE in BOWL AREA WELLS

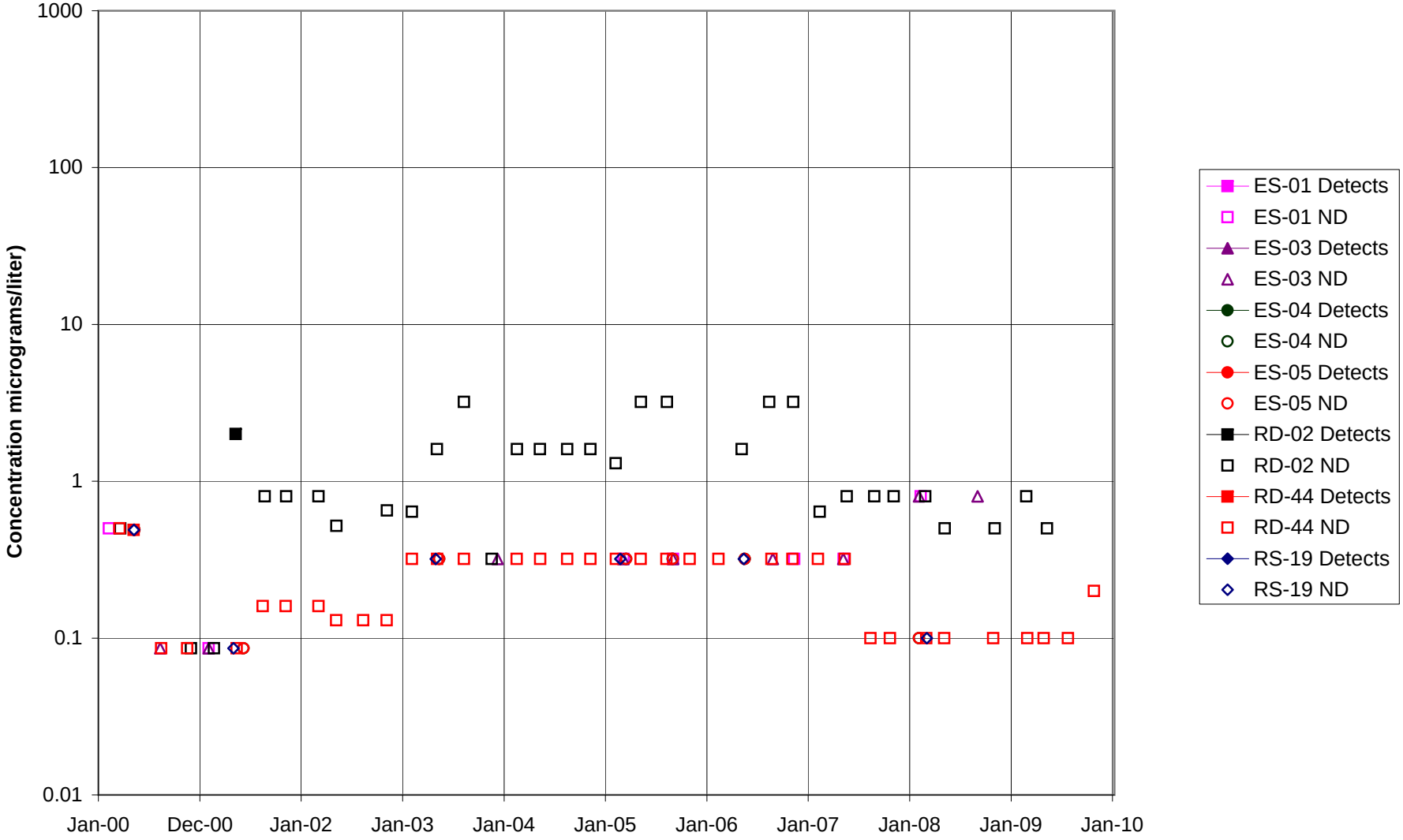


FIGURE F-294. PCE in ECL AREA WELLS

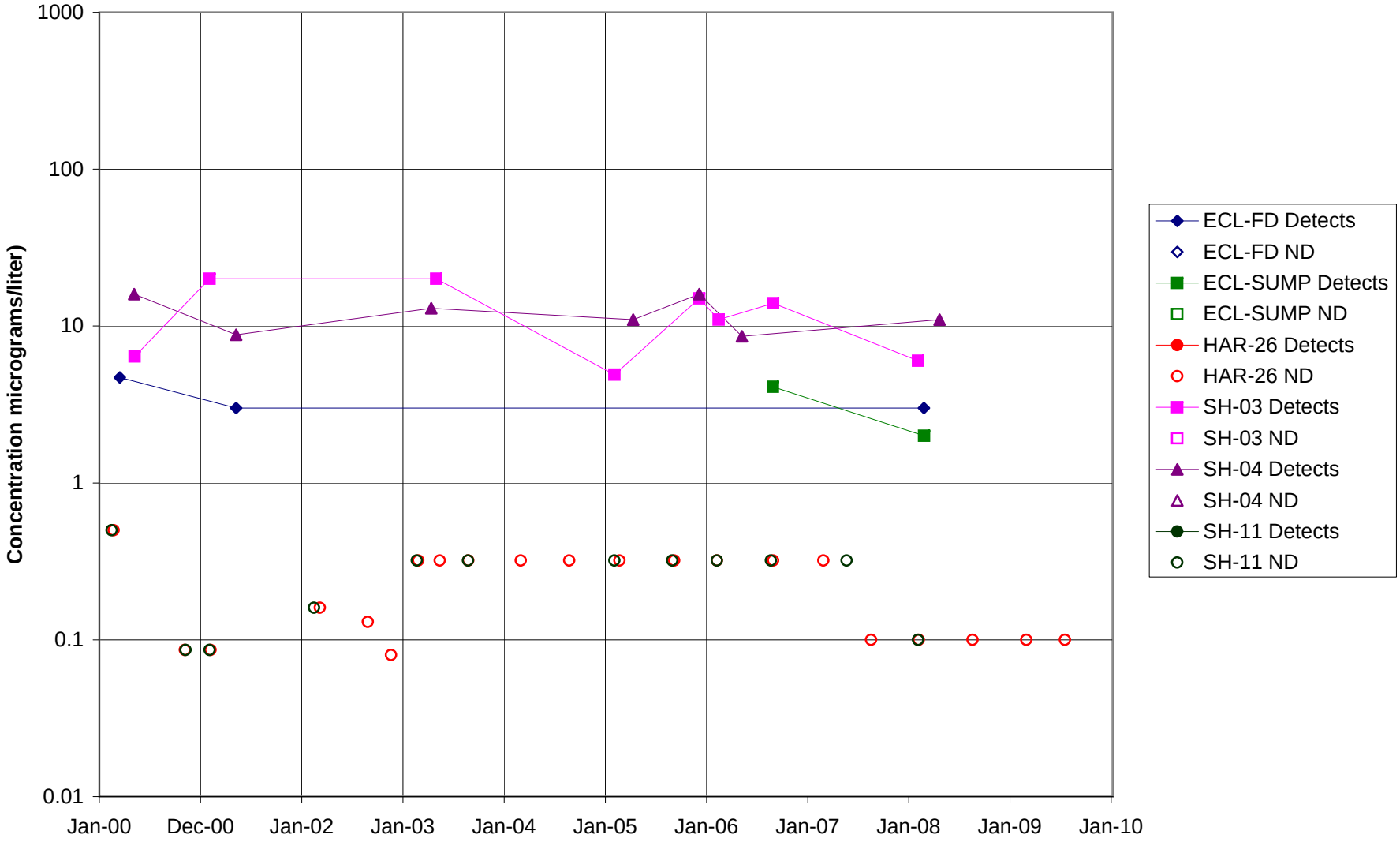


FIGURE F-295. PCE in FORMER LOX PLANT AREA WELLS

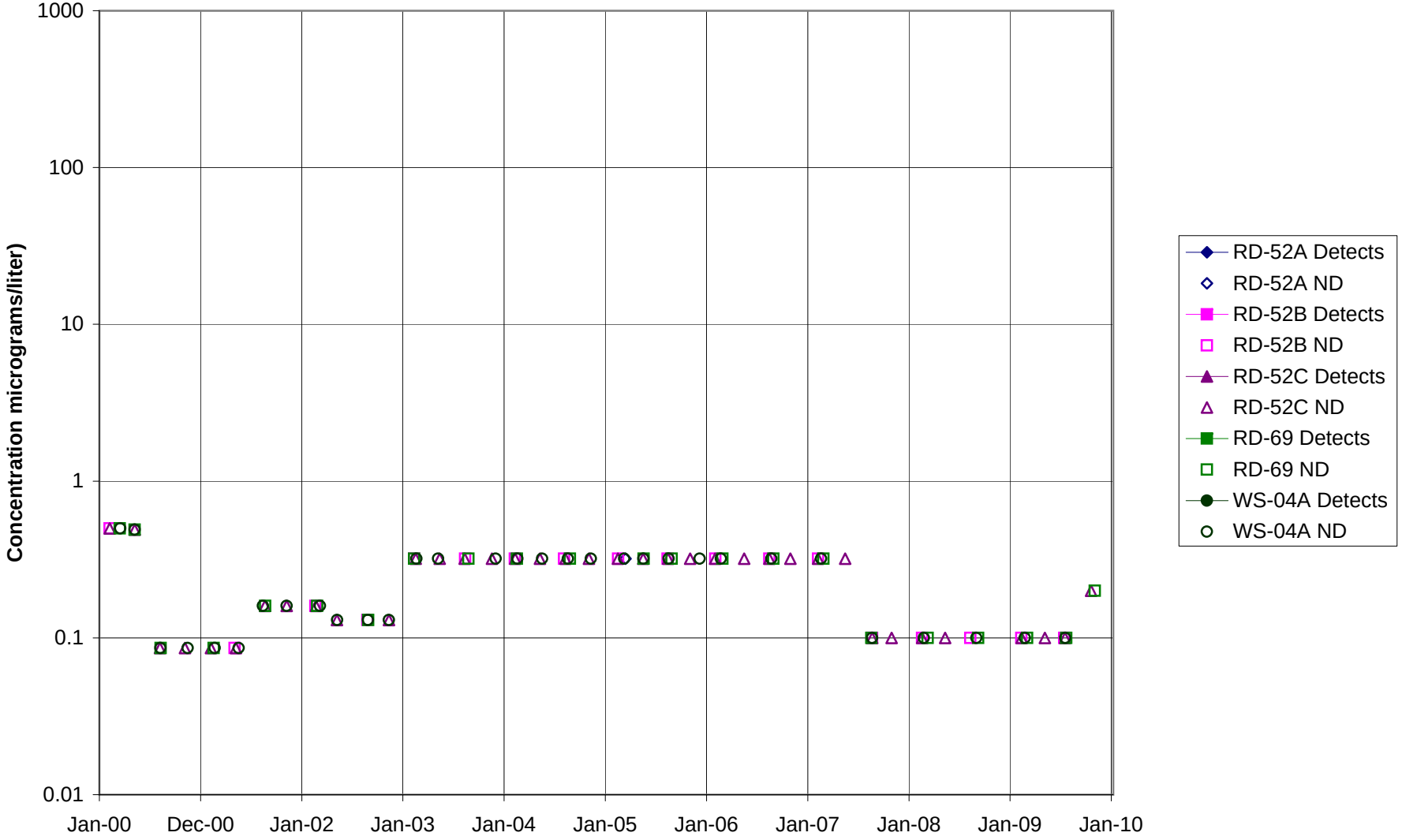


FIGURE F-296. PCE in RD-09 AREA WELLS

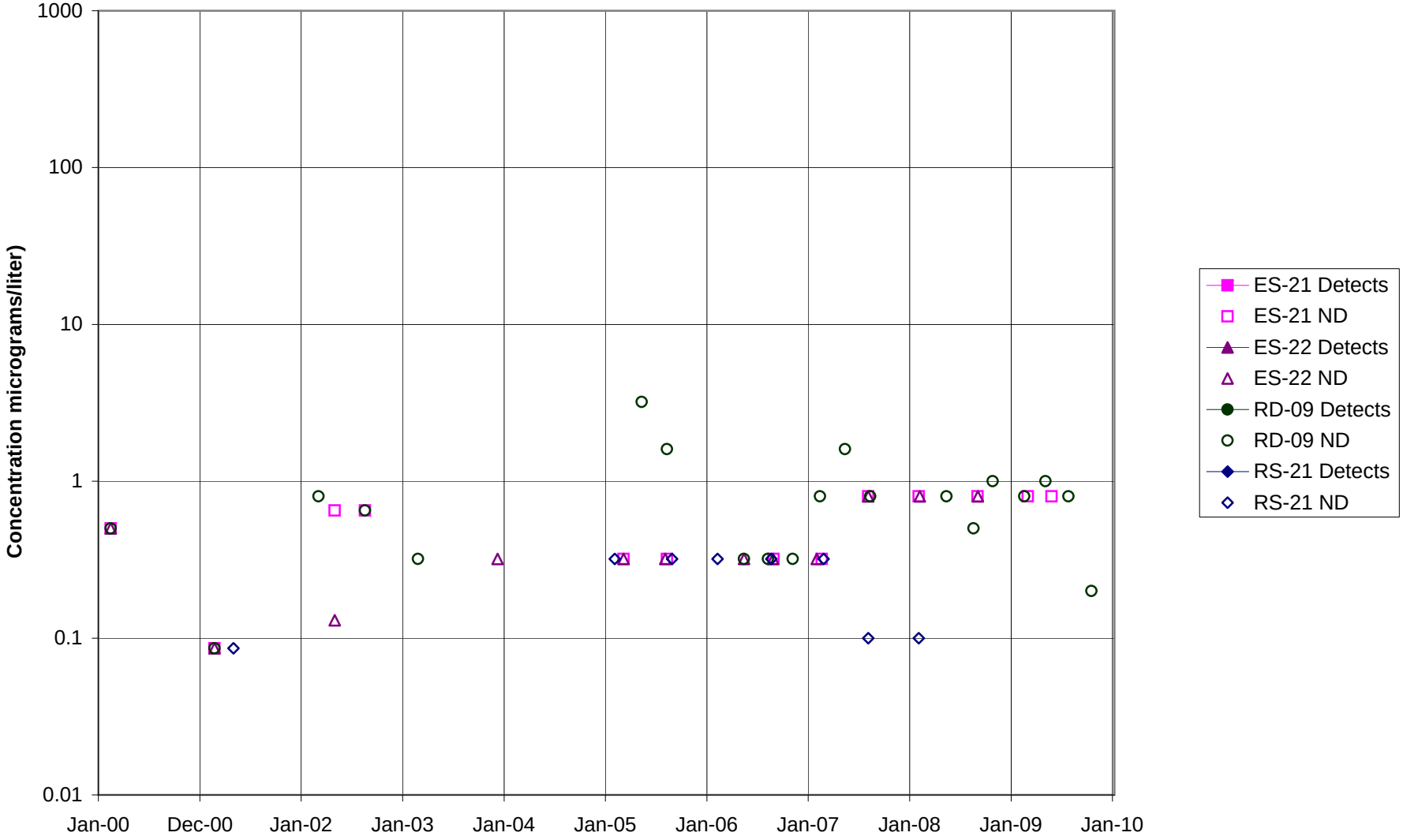


FIGURE F-297. PCE in HELIPORT, B/204 AREA WELLS

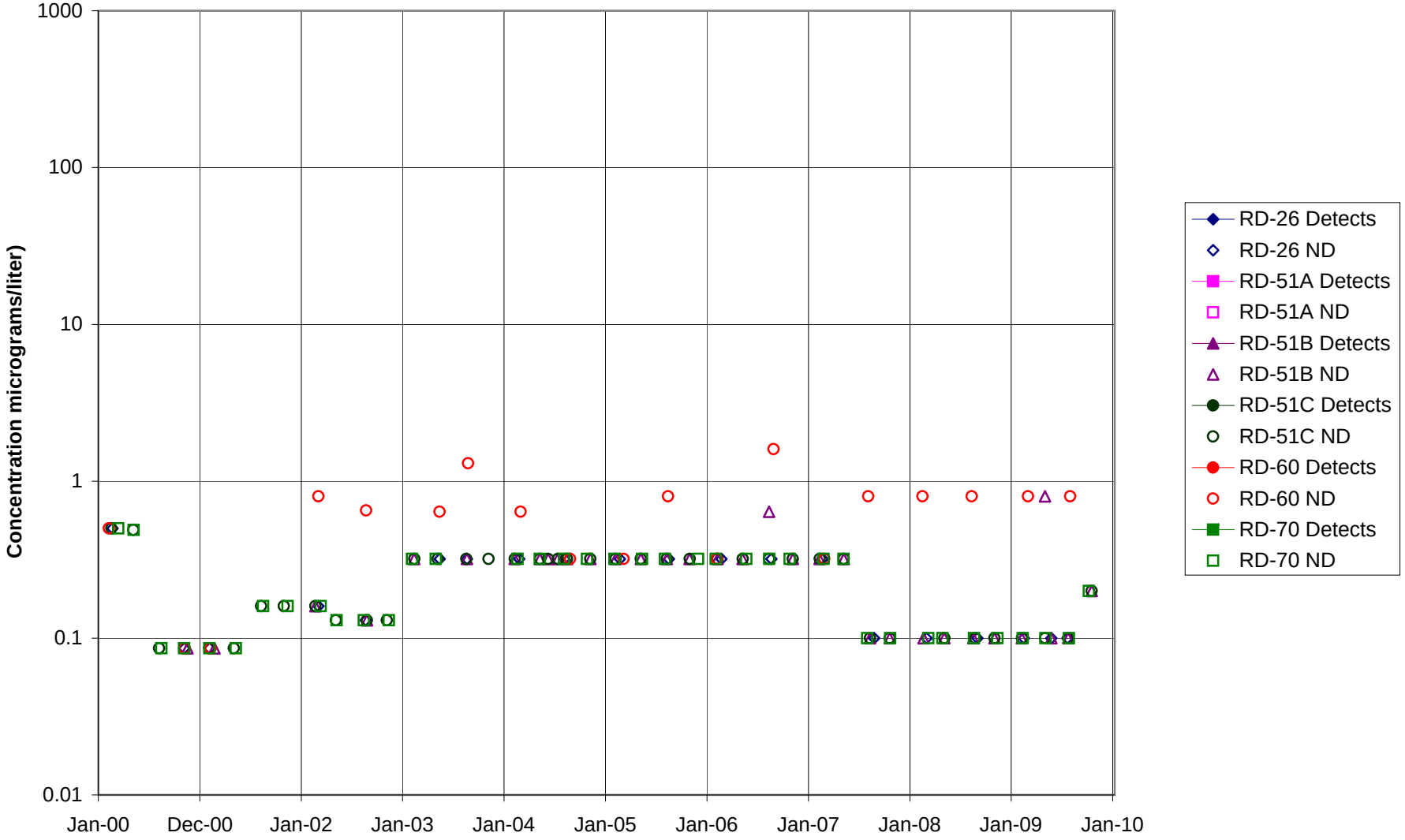


FIGURE F-298. PCE in ALFA / BRAVO AREA WELLS

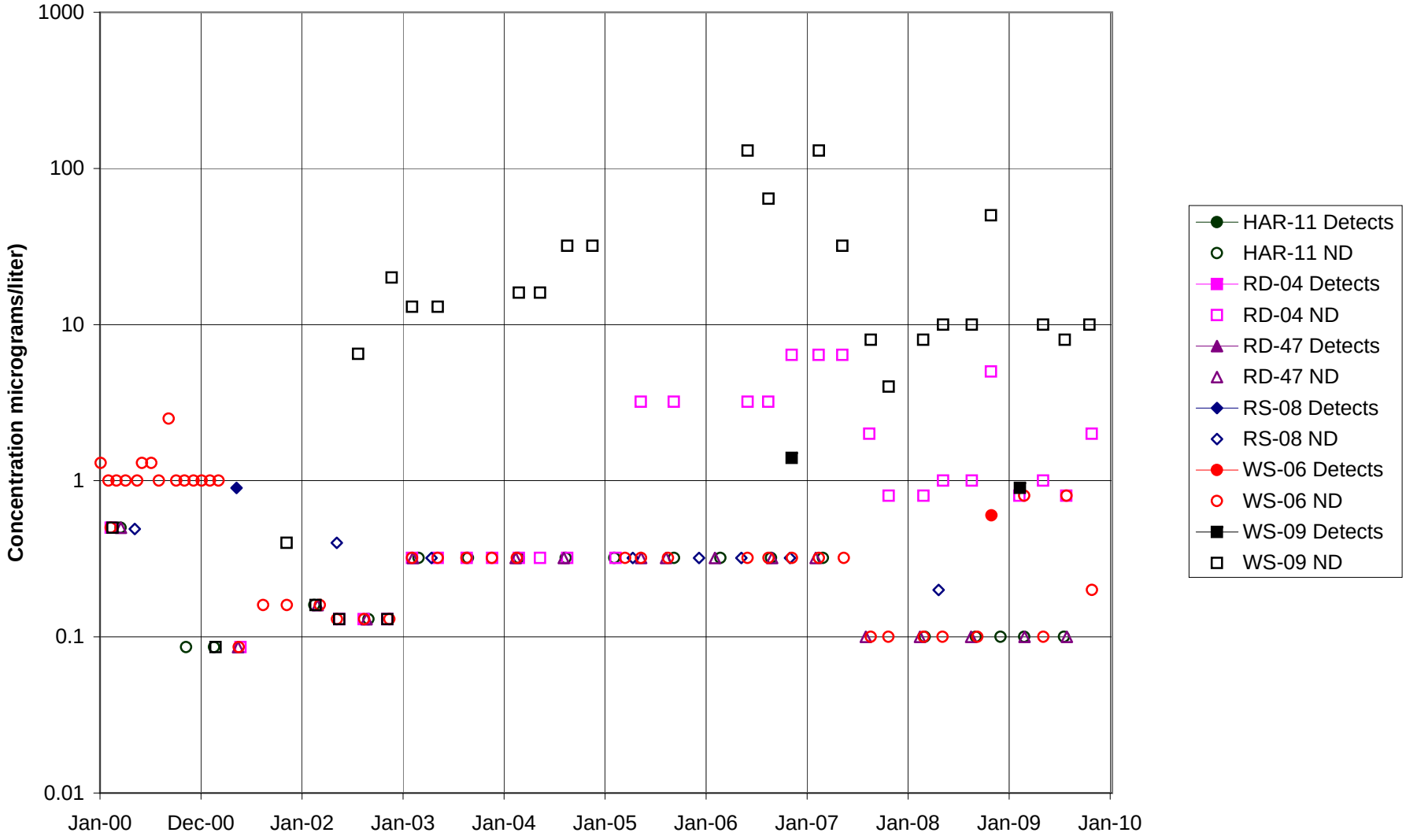


FIGURE F-299. PCE in SPA AREA WELLS

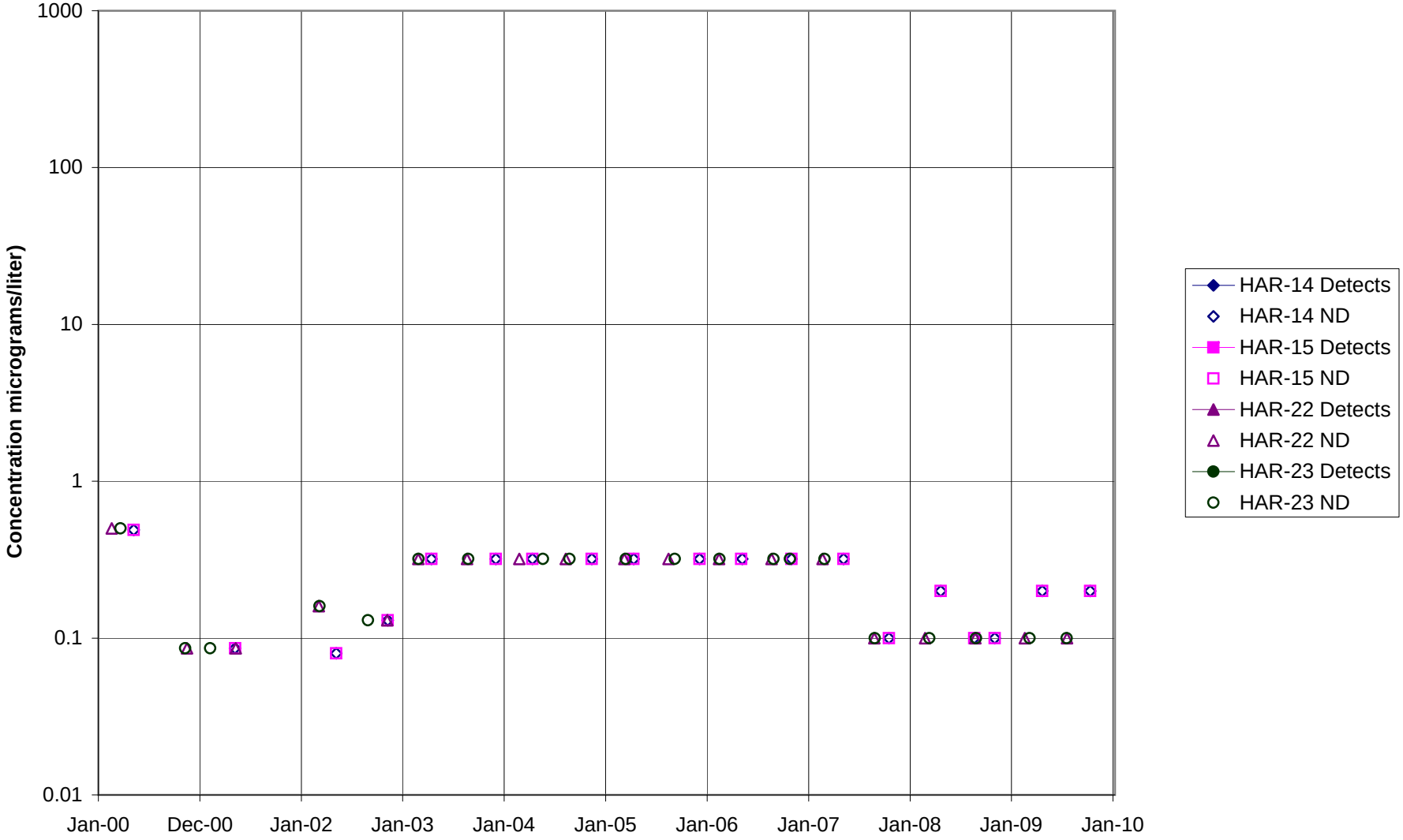


FIGURE F-300. PCE in COCA / PLF AREA WELLS

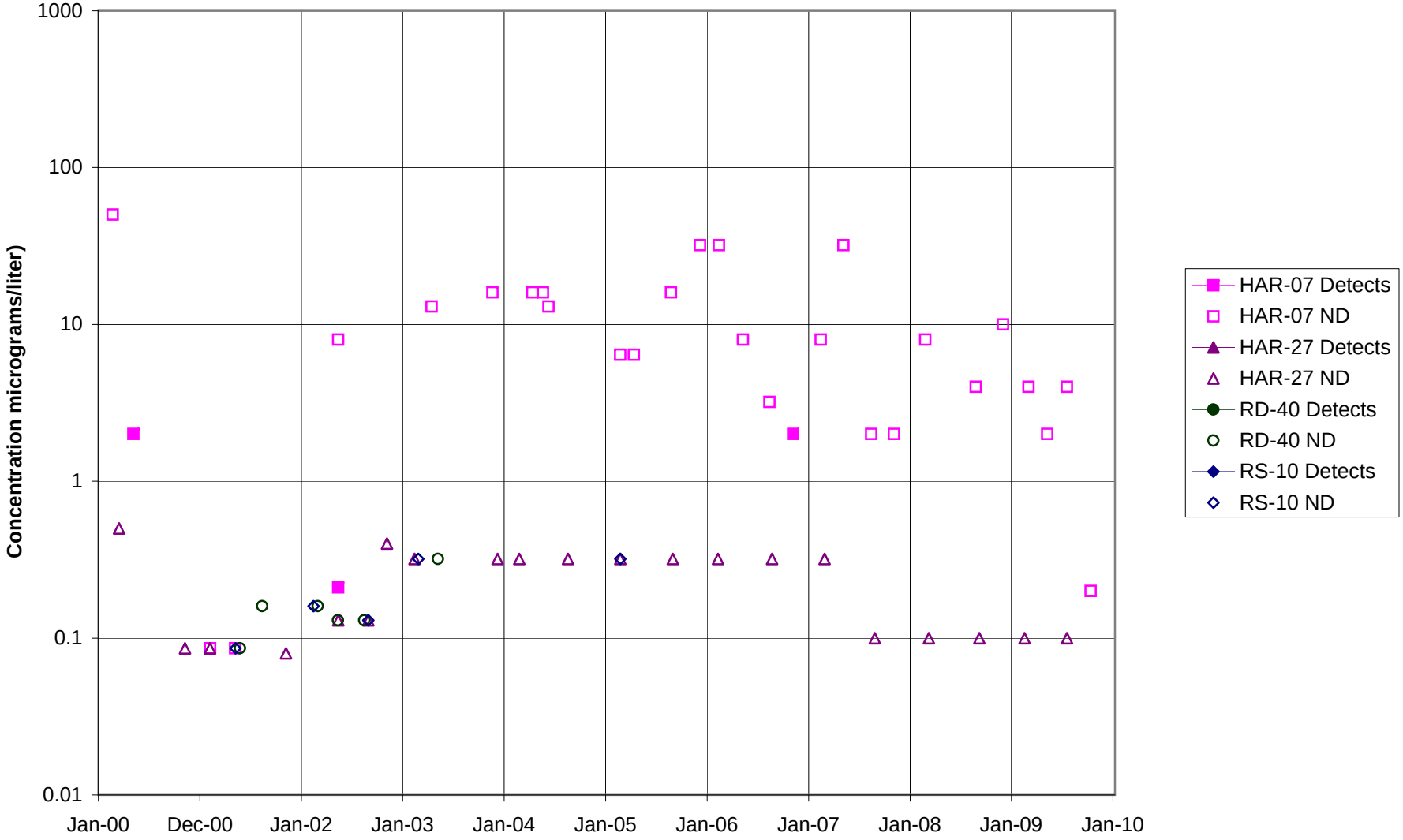


FIGURE F-301. PCE in DELTA / BUFFER ZONE AREA WELLS

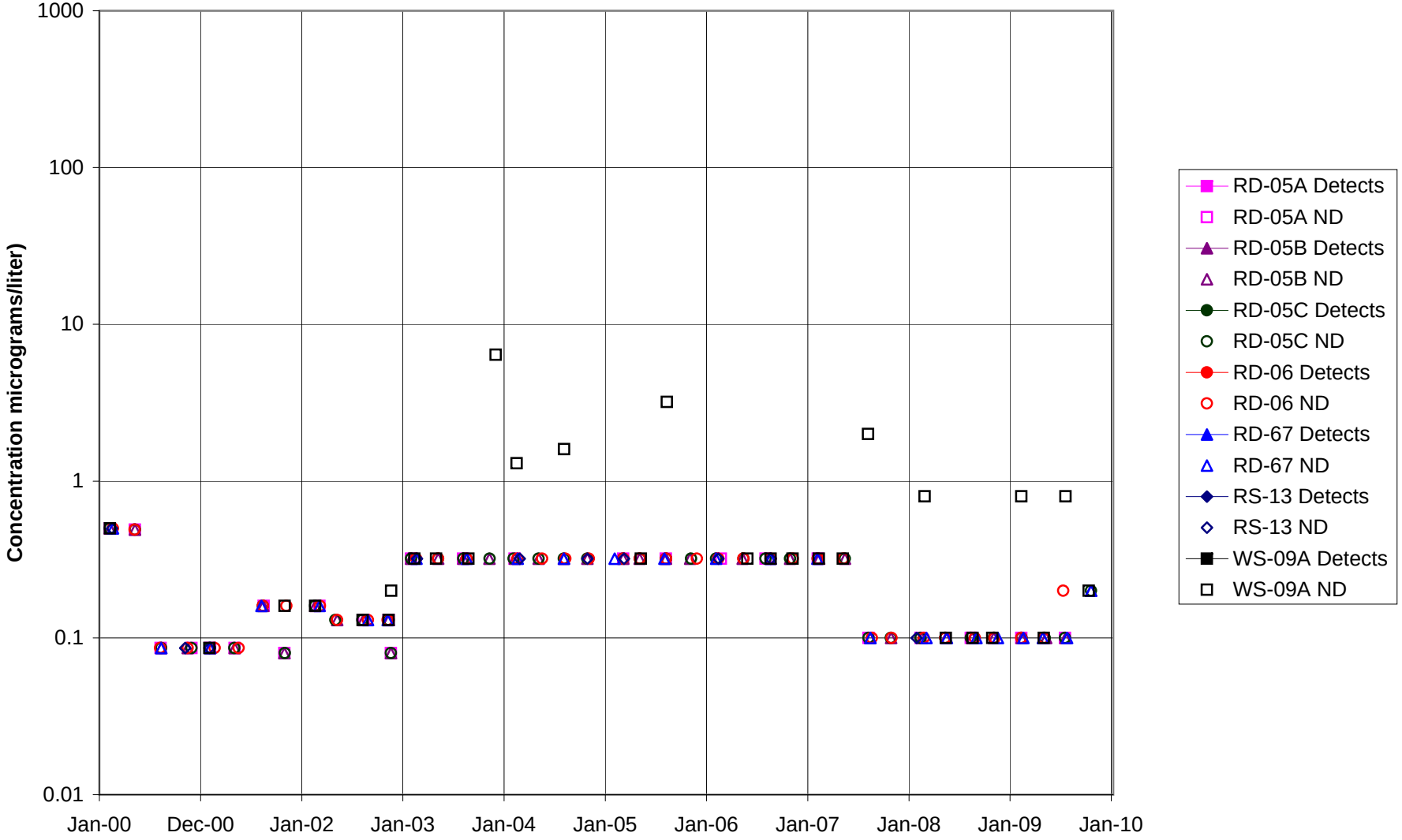


FIGURE F-302. PCE in AREA IV WELLS

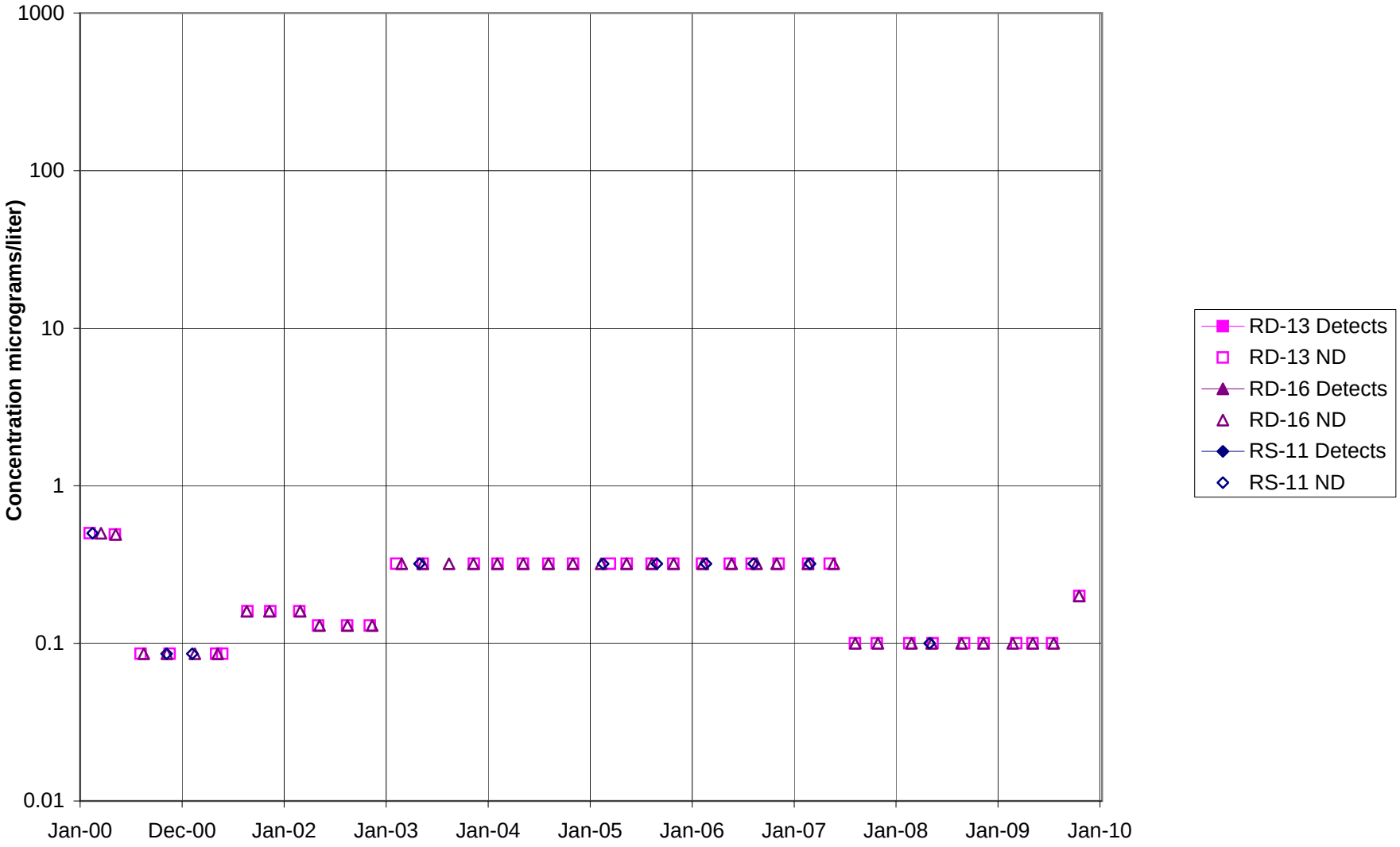


FIGURE F-303. TOLUENE in STL-IV AREA SHALLOW WELLS

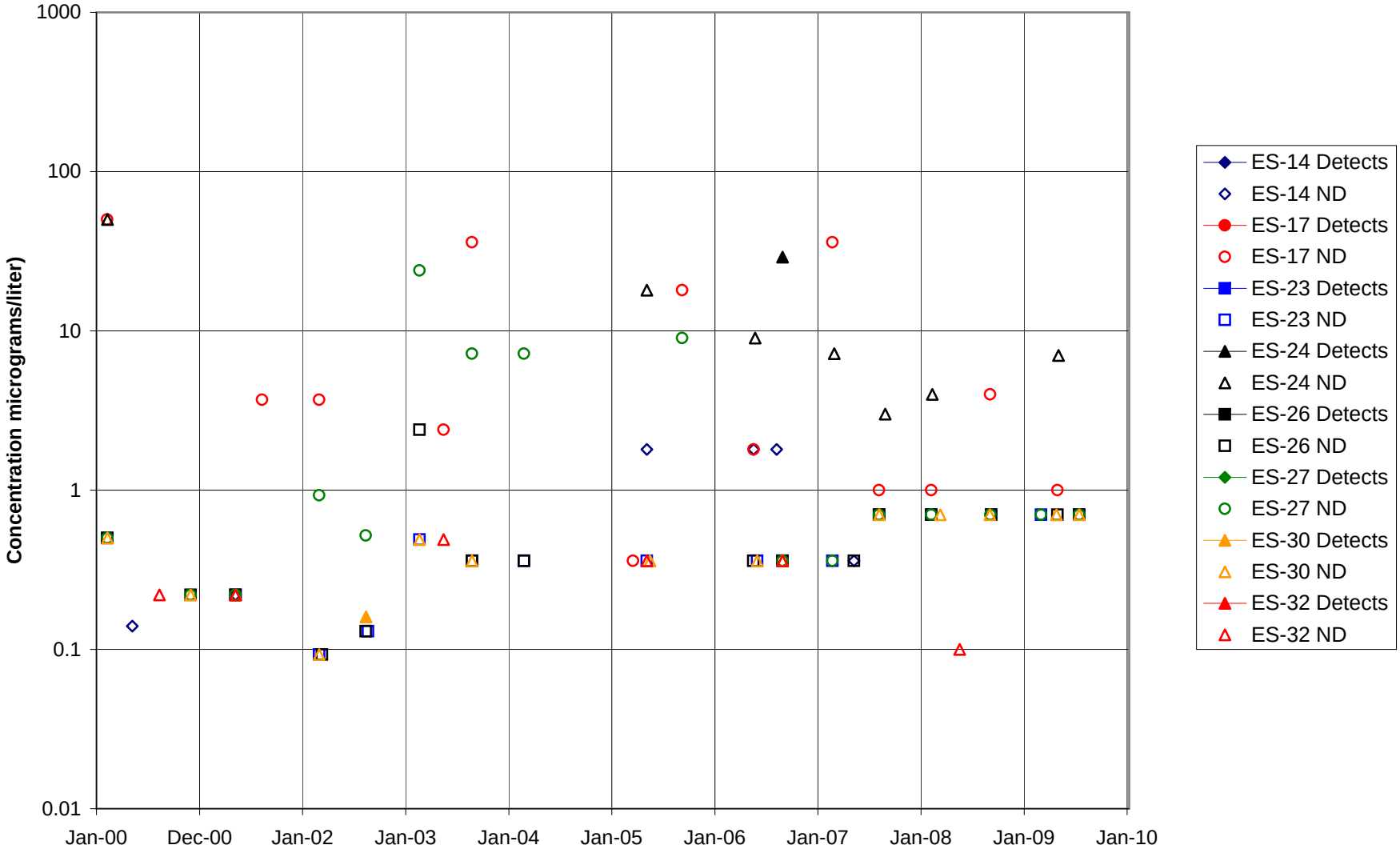


FIGURE F-304. TOLUENE in STL-IV AREA CHATSWORTH FORMATION WELLS

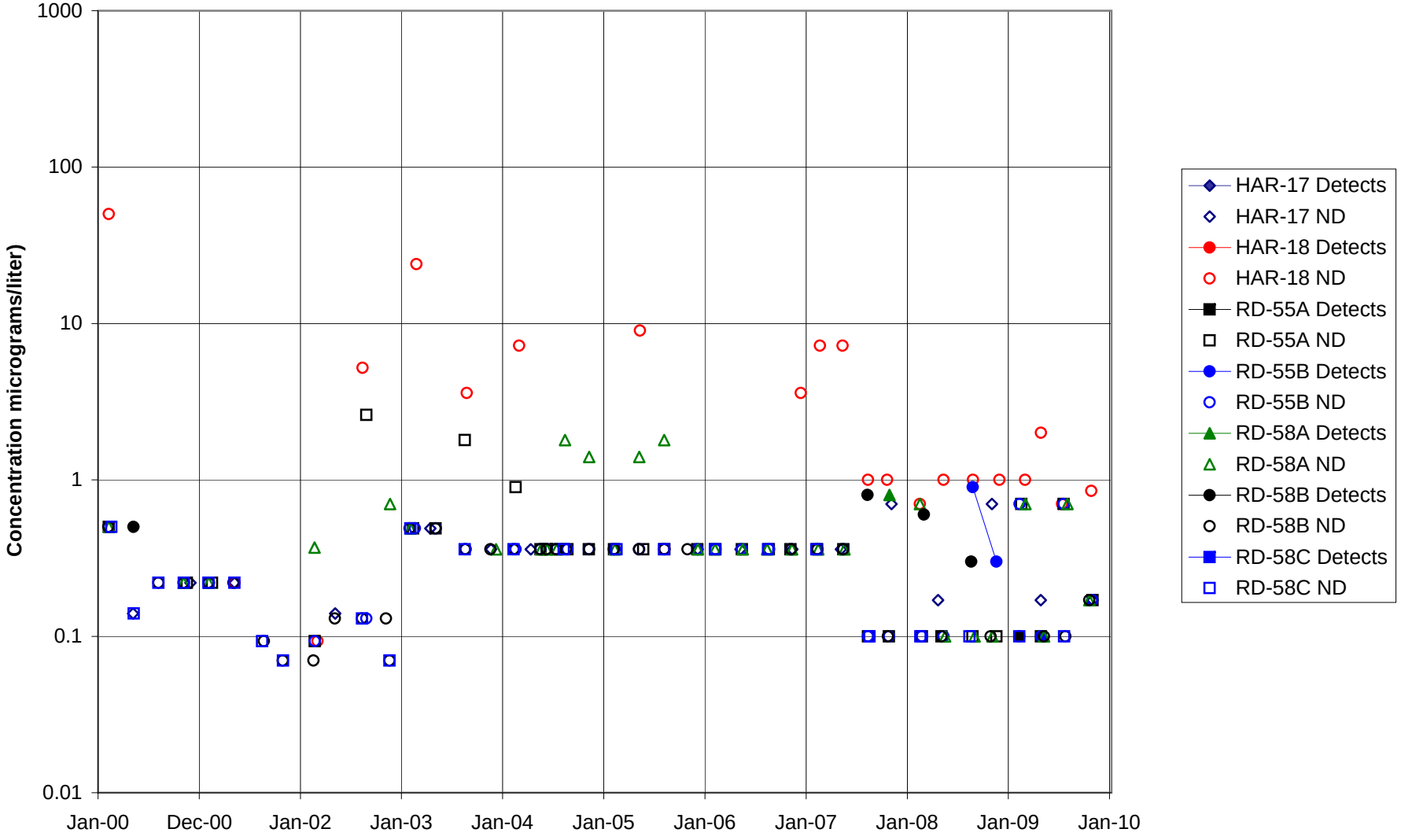


FIGURE F-305. TOLUENE in MAIN GATE AREA WELLS - 1

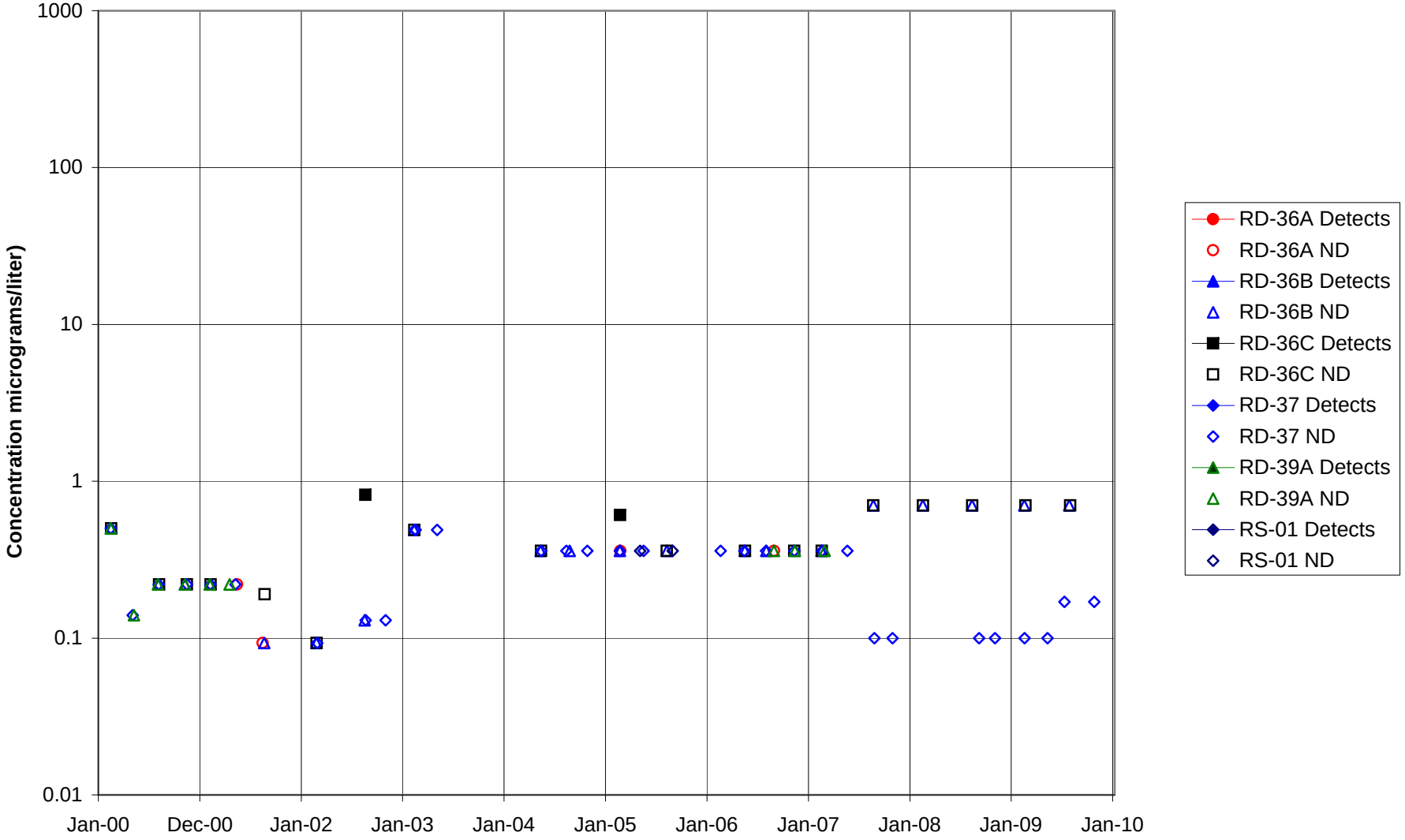


FIGURE F-306. TOLUENE in MAIN GATE AREA WELLS - 2

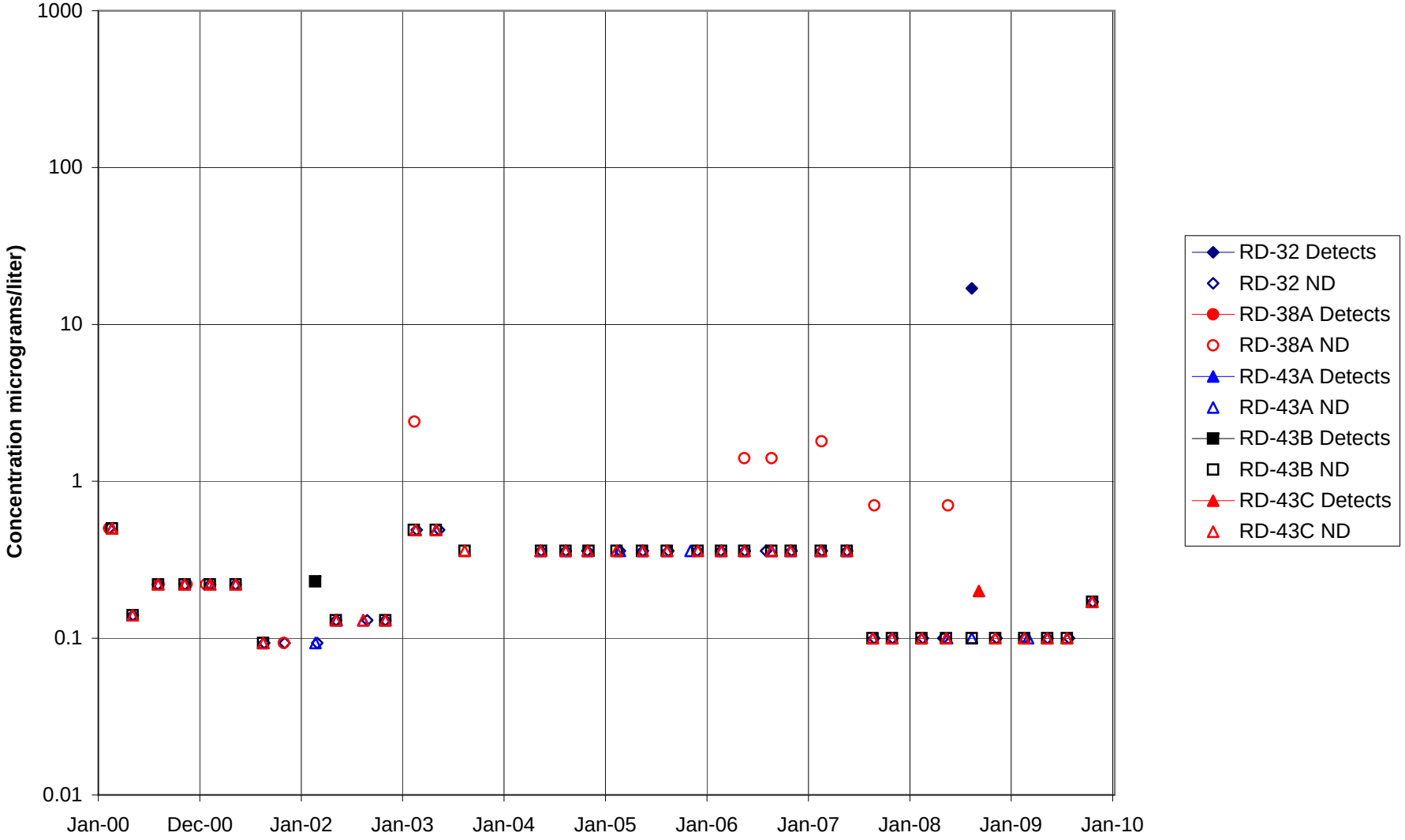


FIGURE F-307. TOLUENE in APTF, CANYON, & HAPPY VALLEY WELLS - 1

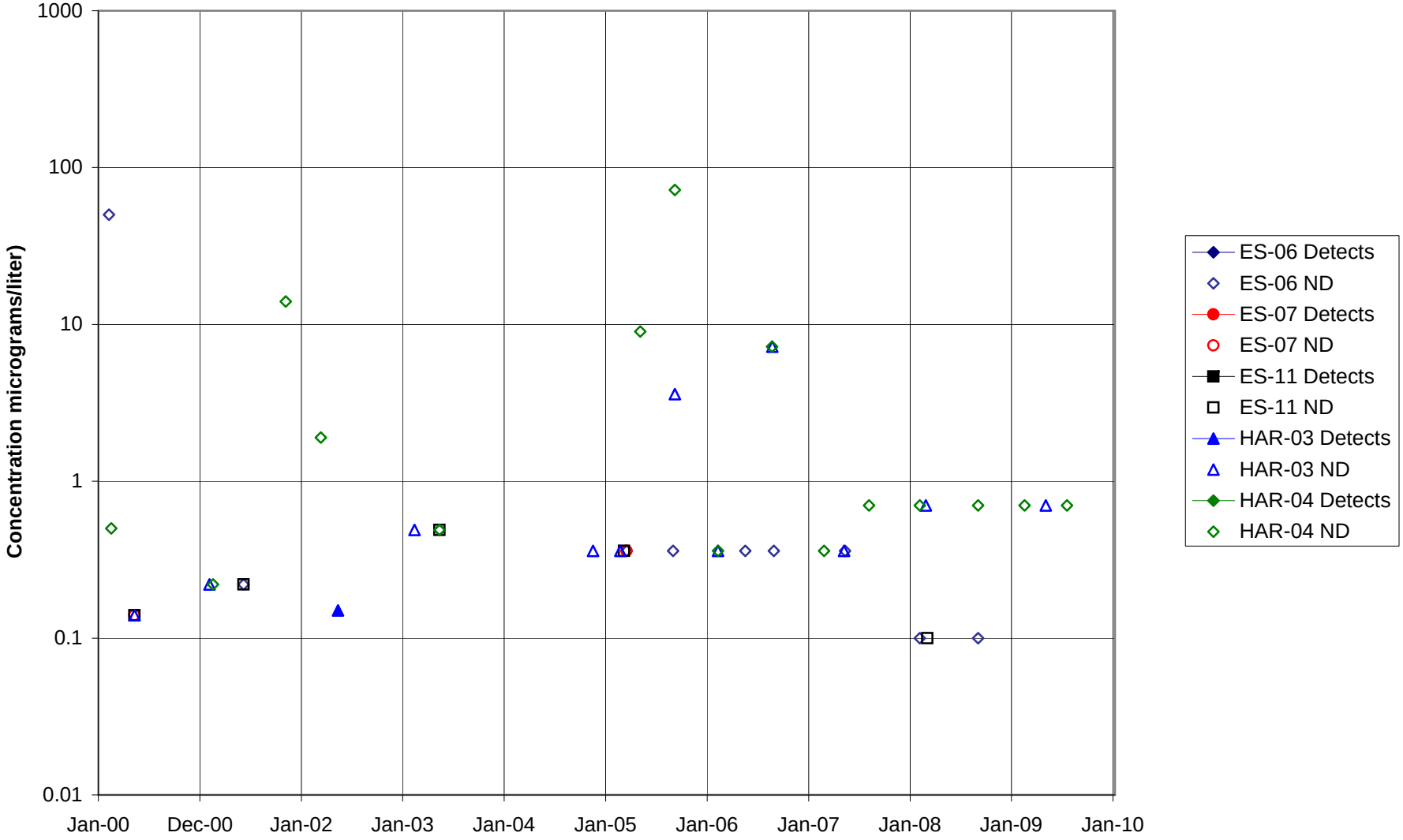


FIGURE F-308. TOLUENE in APTF, CANYON, & HAPPY VALLEY WELLS - 2

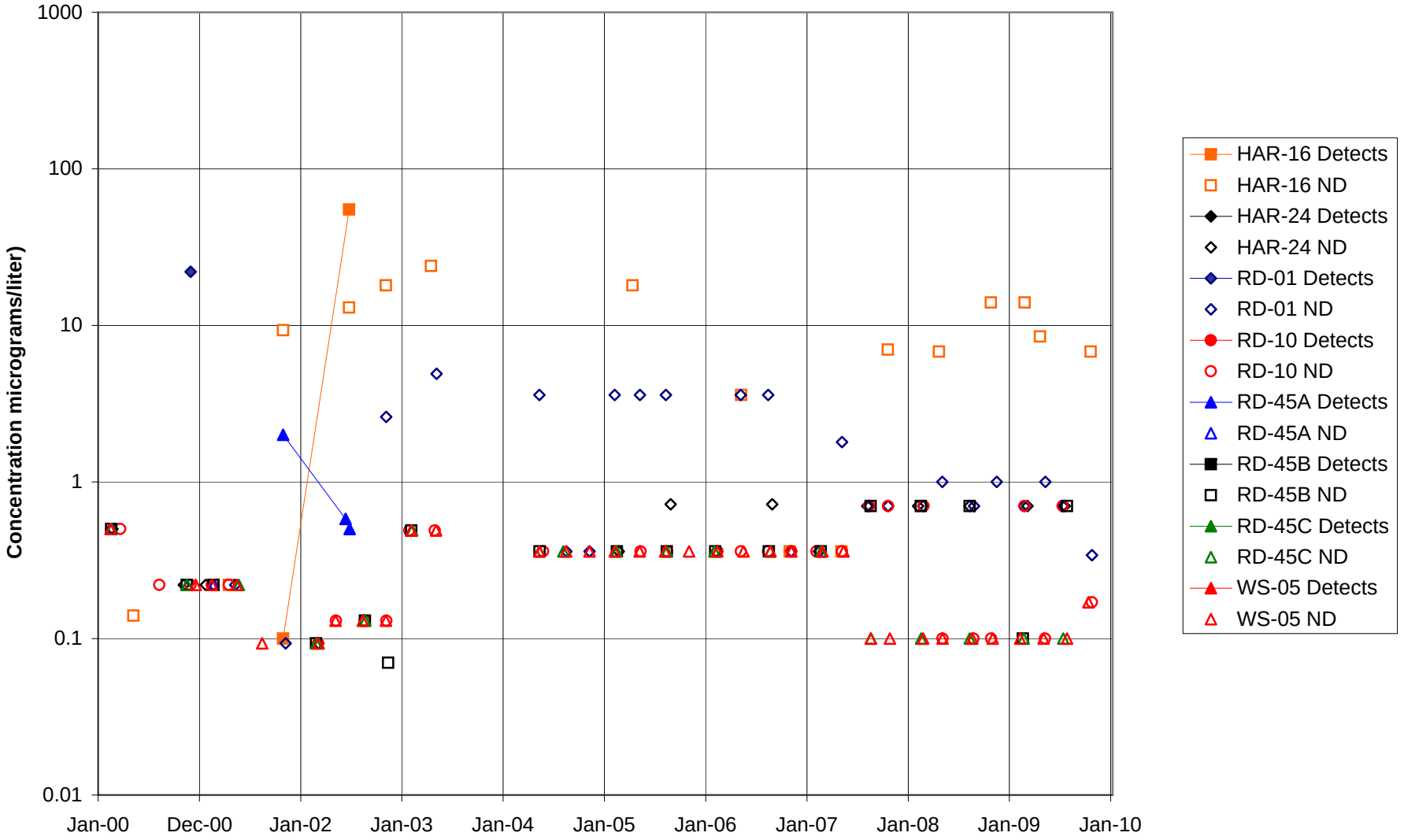


FIGURE F-309. TOLUENE in CTL-III / PERIMETER POND AREA WELLS

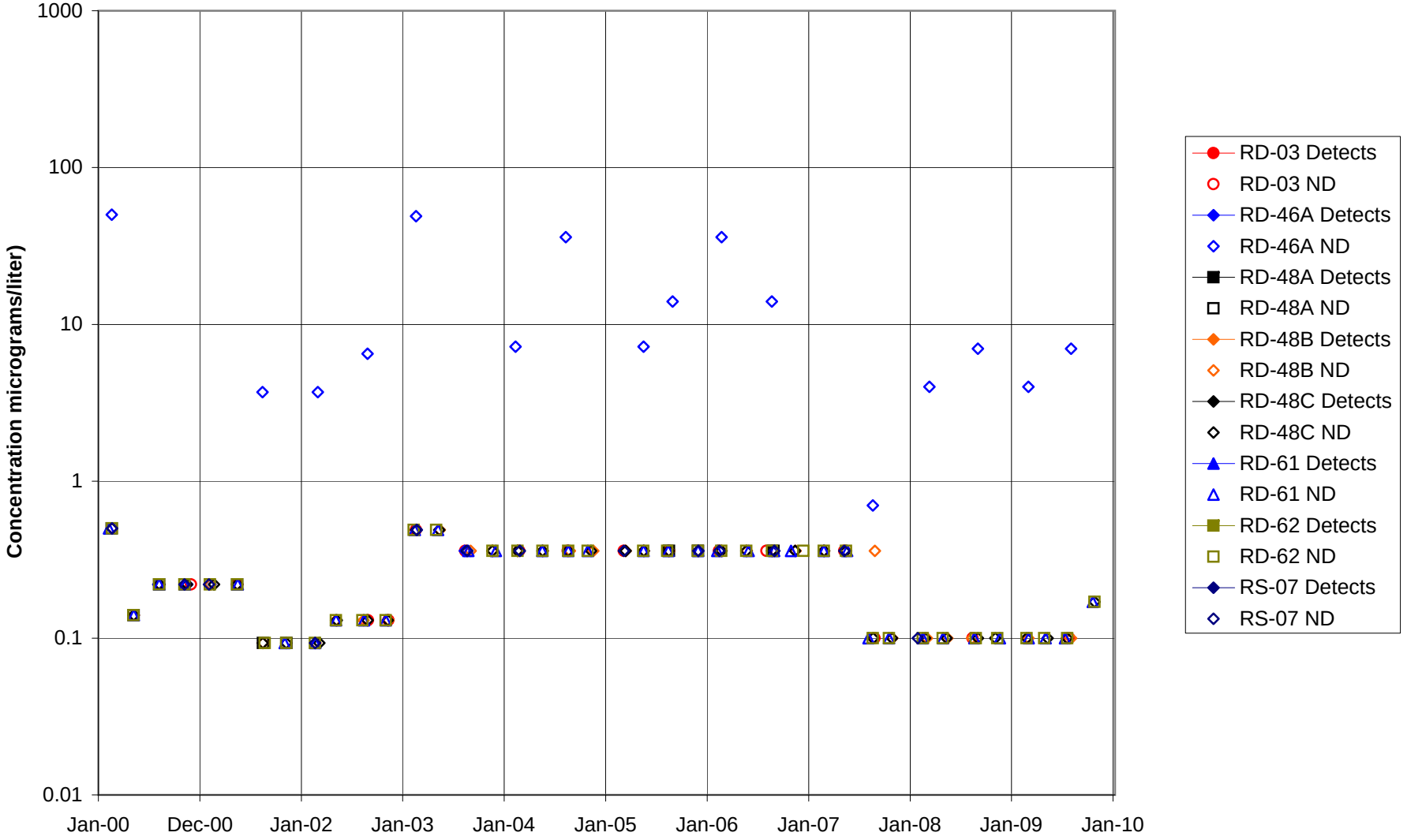


FIGURE F-310. TOLUENE in BOWL AREA WELLS

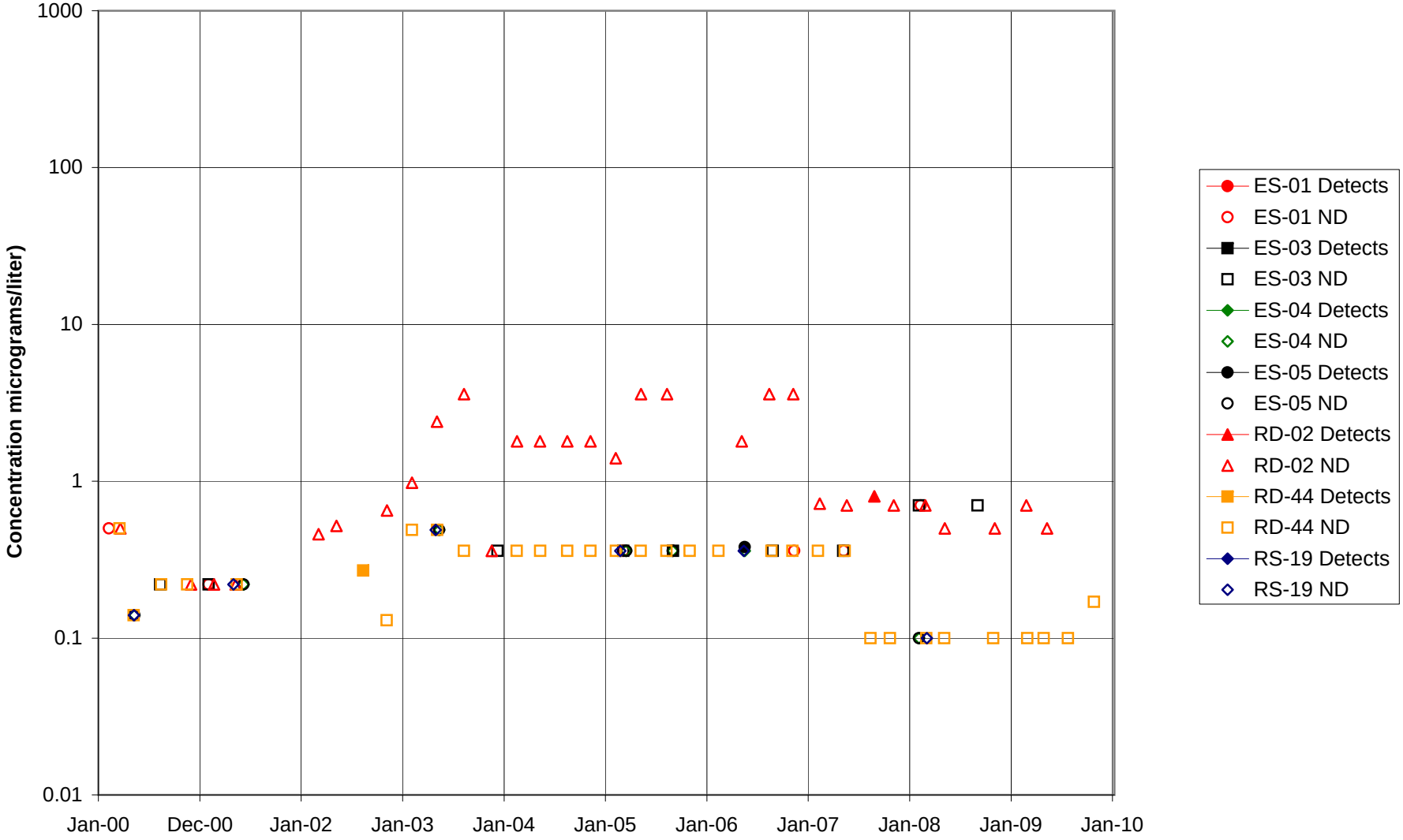


FIGURE F-311. TOLUENE in ECL AREA WELLS

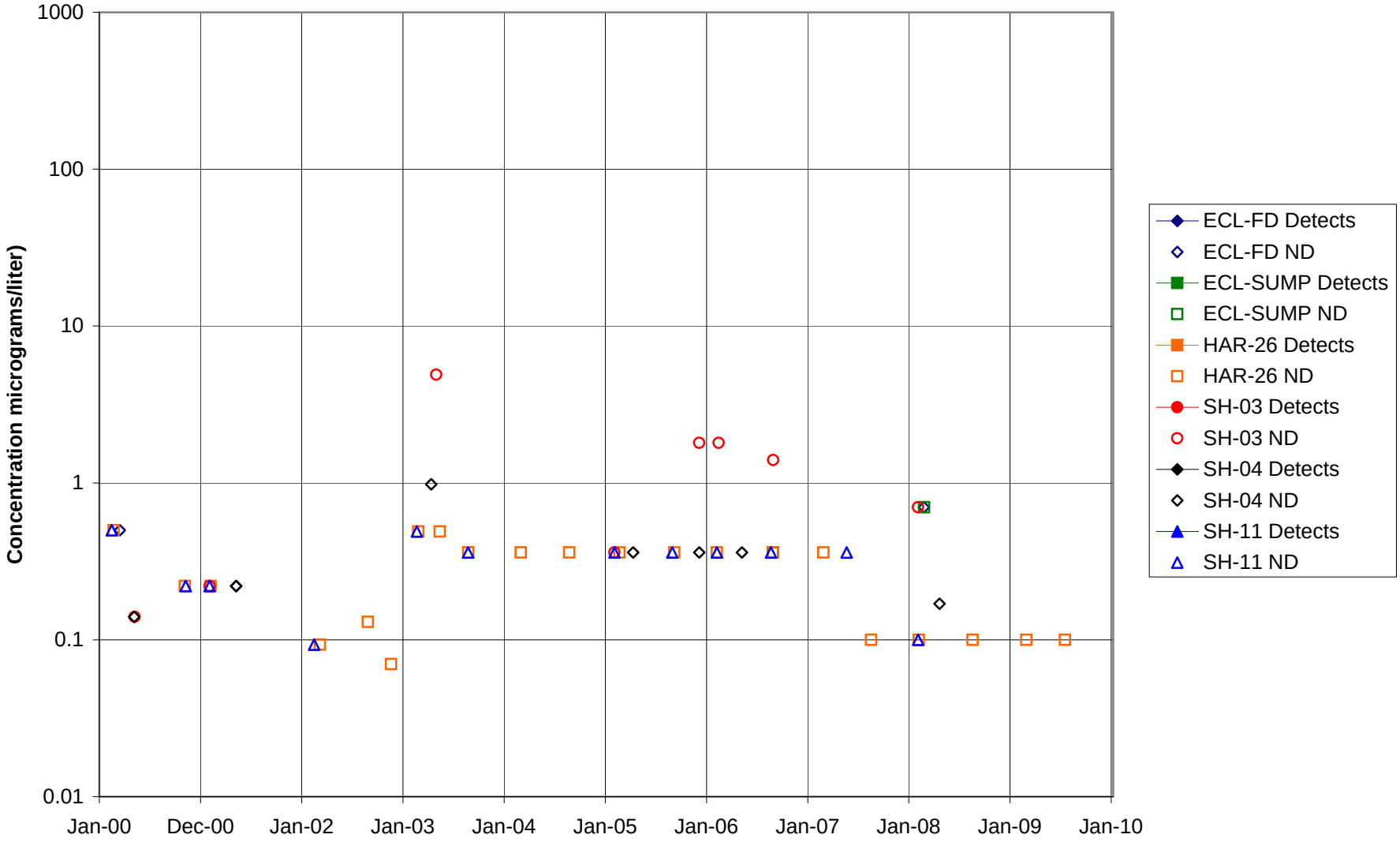


FIGURE F-312. TOLUENE in RD-09 AREA WELLS

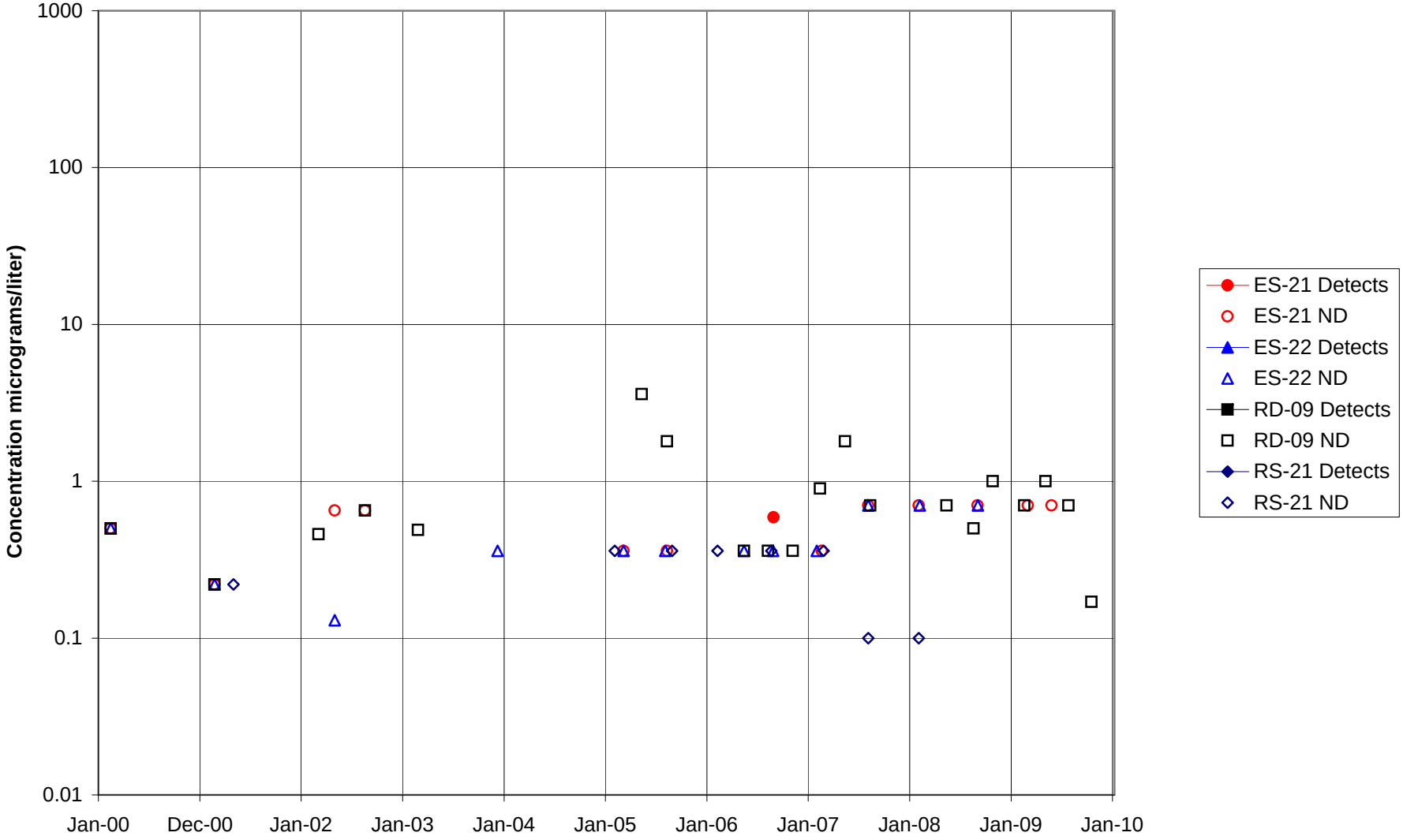


FIGURE F-313. TOLUENE in FORMER LOX PLANT AREA WELLS

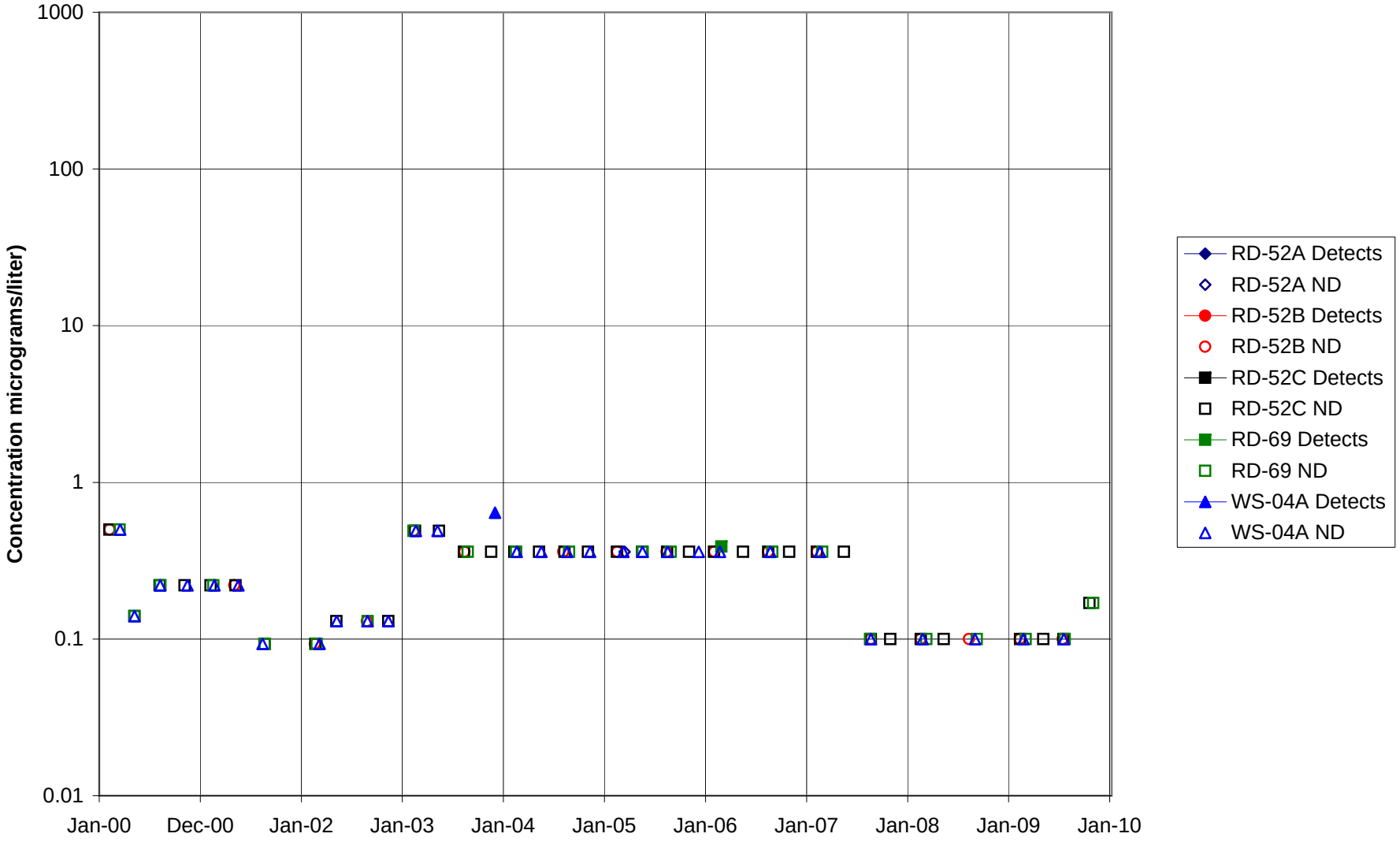


FIGURE F-314. TOLUENE in HELIPORT, B/204 AREA WELLS

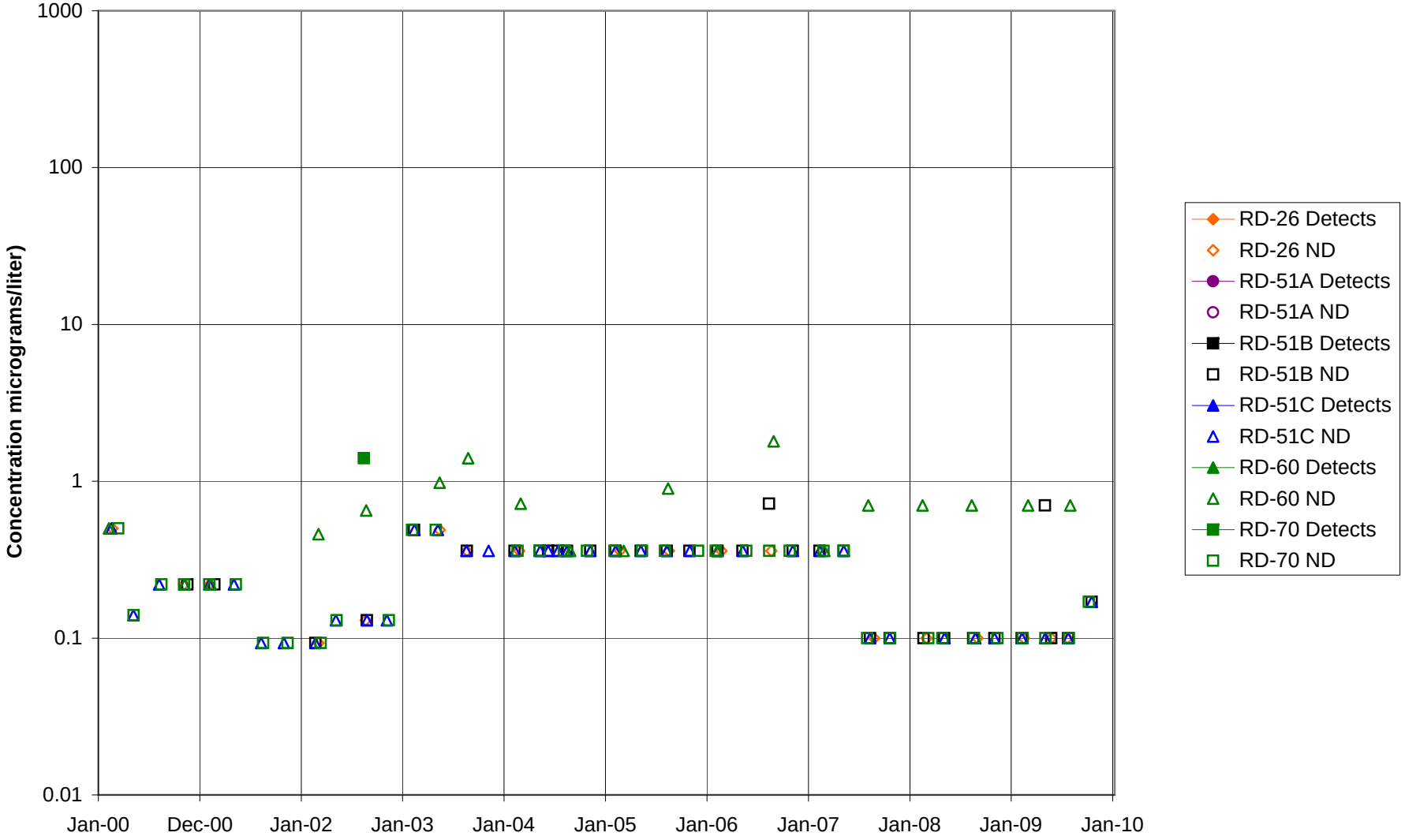


FIGURE F-315. TOLUENE in ALFA / BRAVO AREA WELLS

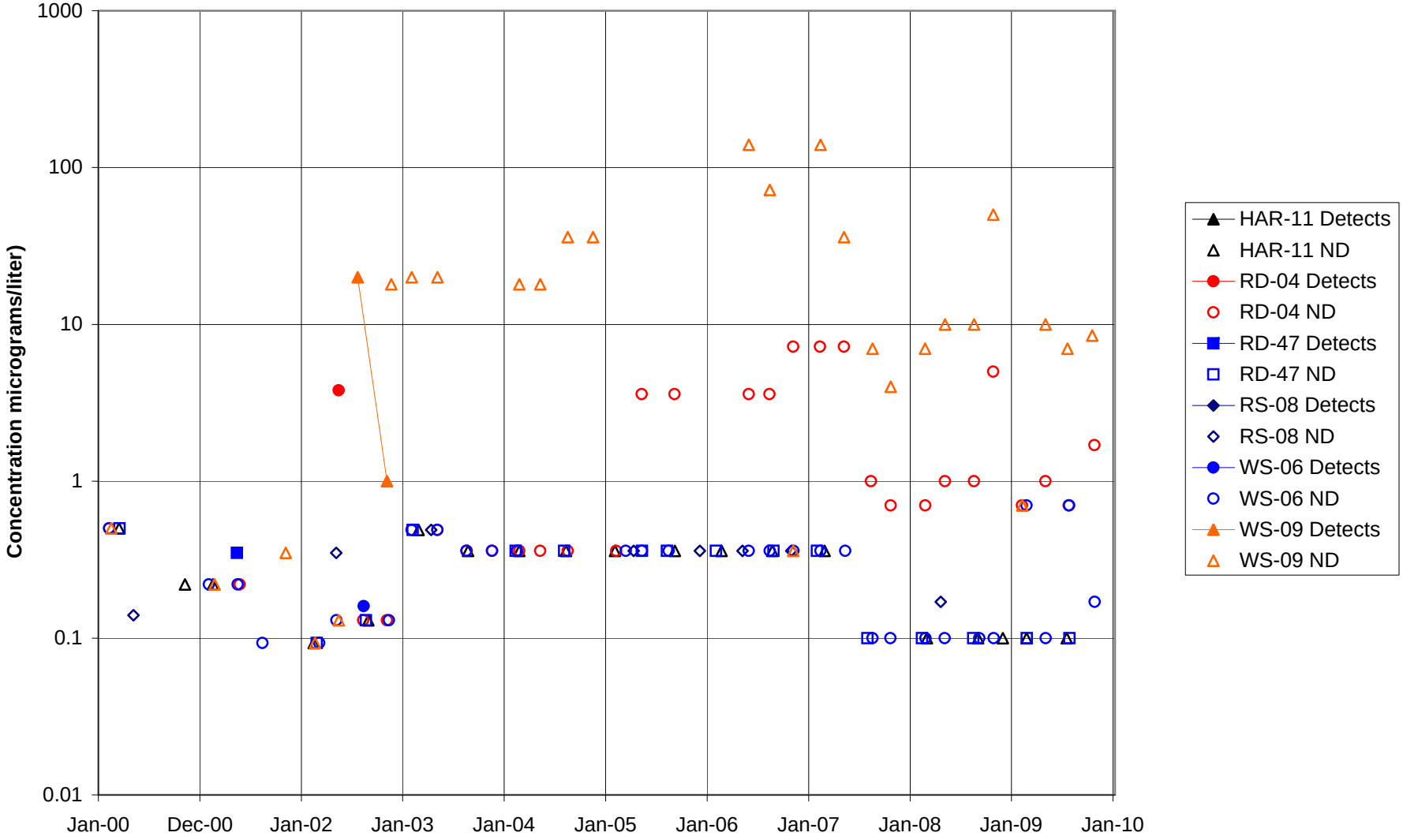


FIGURE F-316. TOLUENE in SPA AREA WELLS

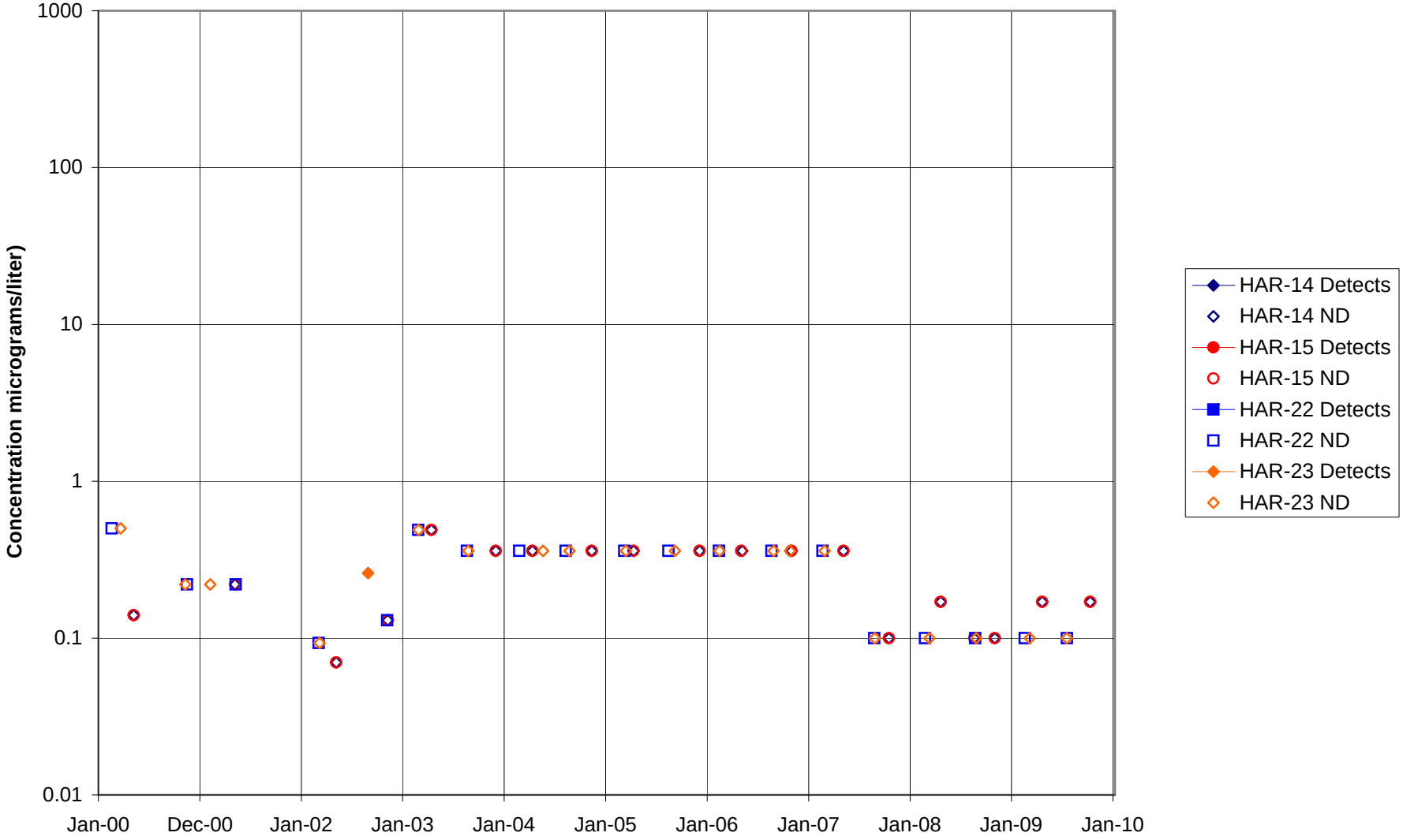


FIGURE F-317. TOLUENE in COCA / PLF AREA WELLS

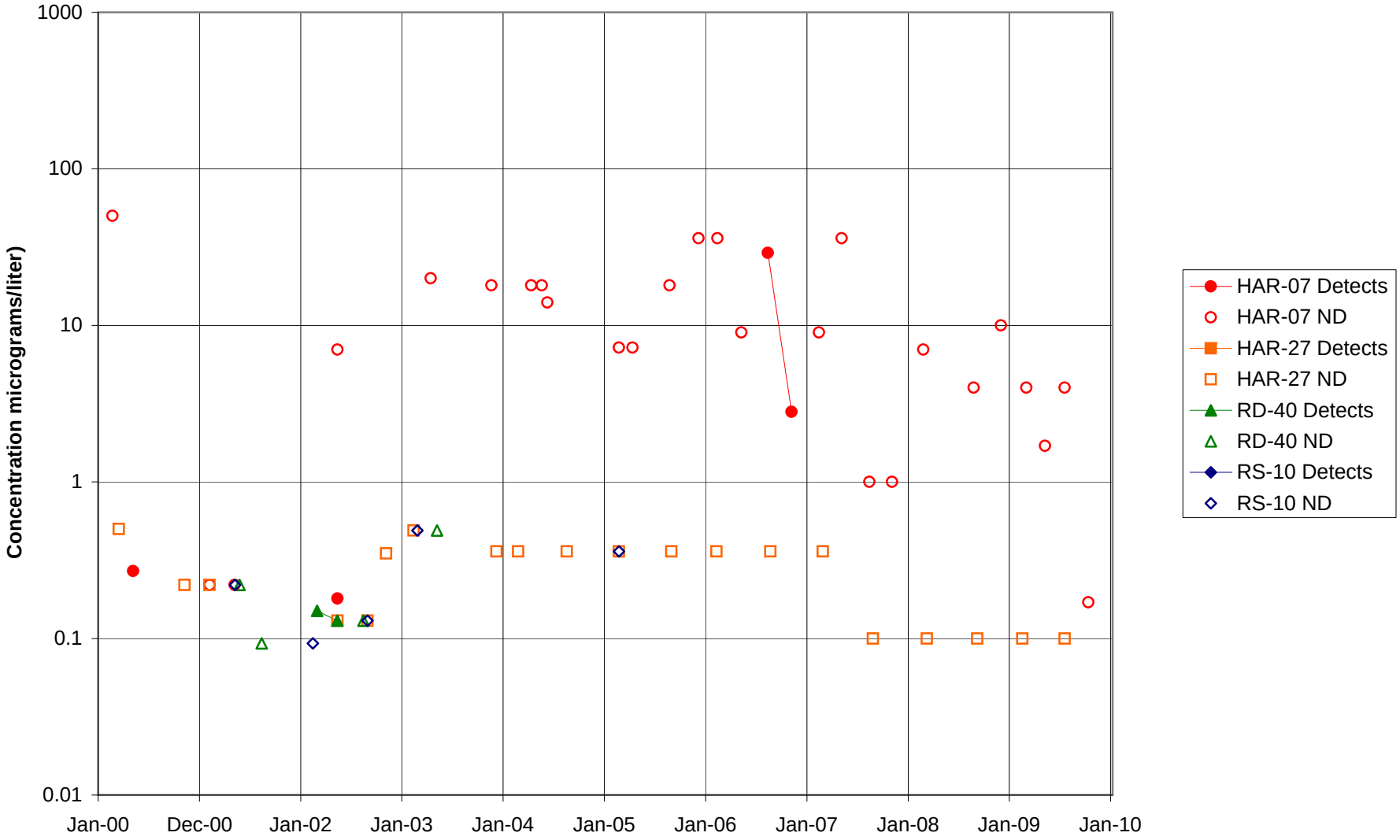


FIGURE F-318. TOLUENE in DELTA / BUFFER ZONE AREA WELLS

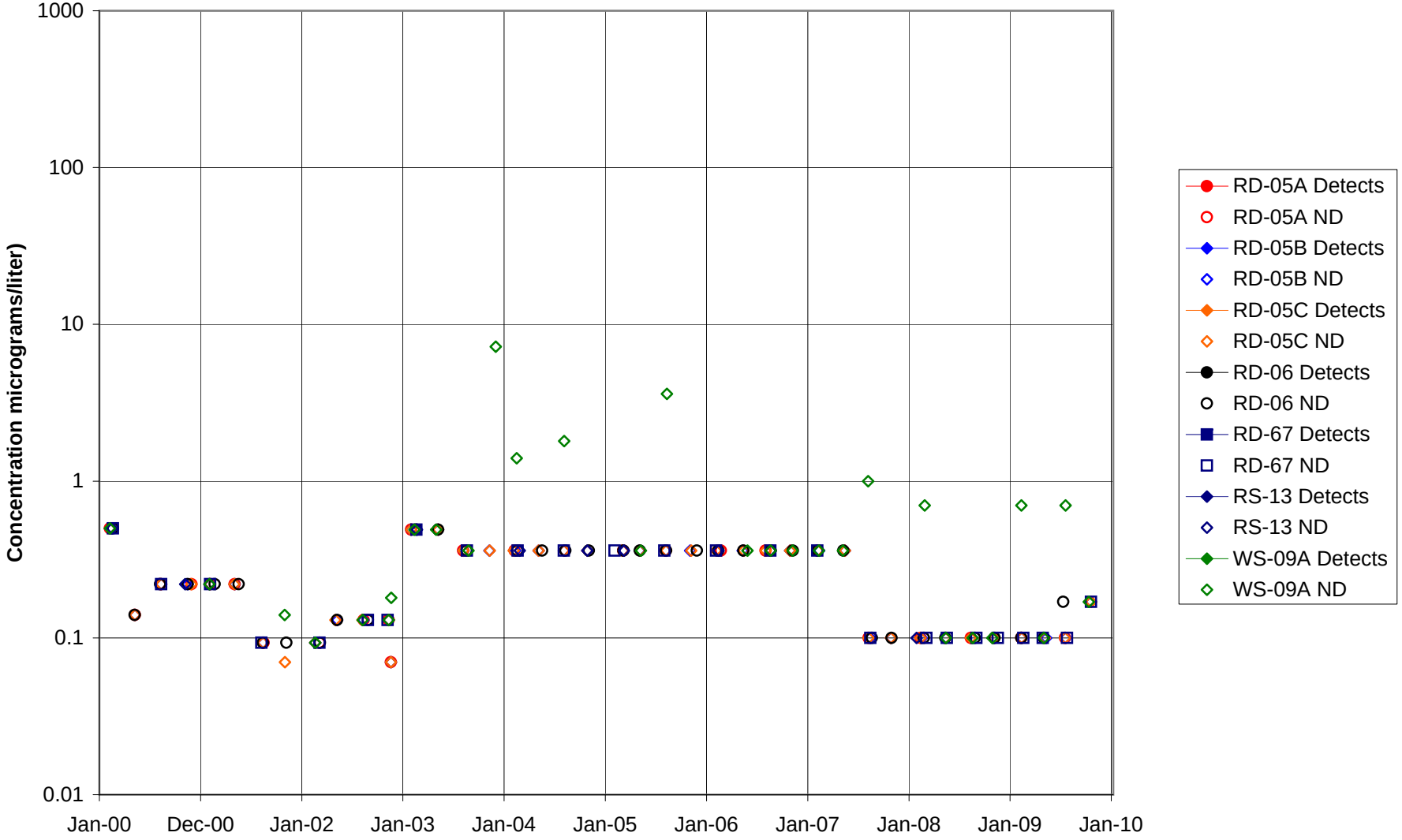


FIGURE F-319. TOLUENE in AREA IV WELLS

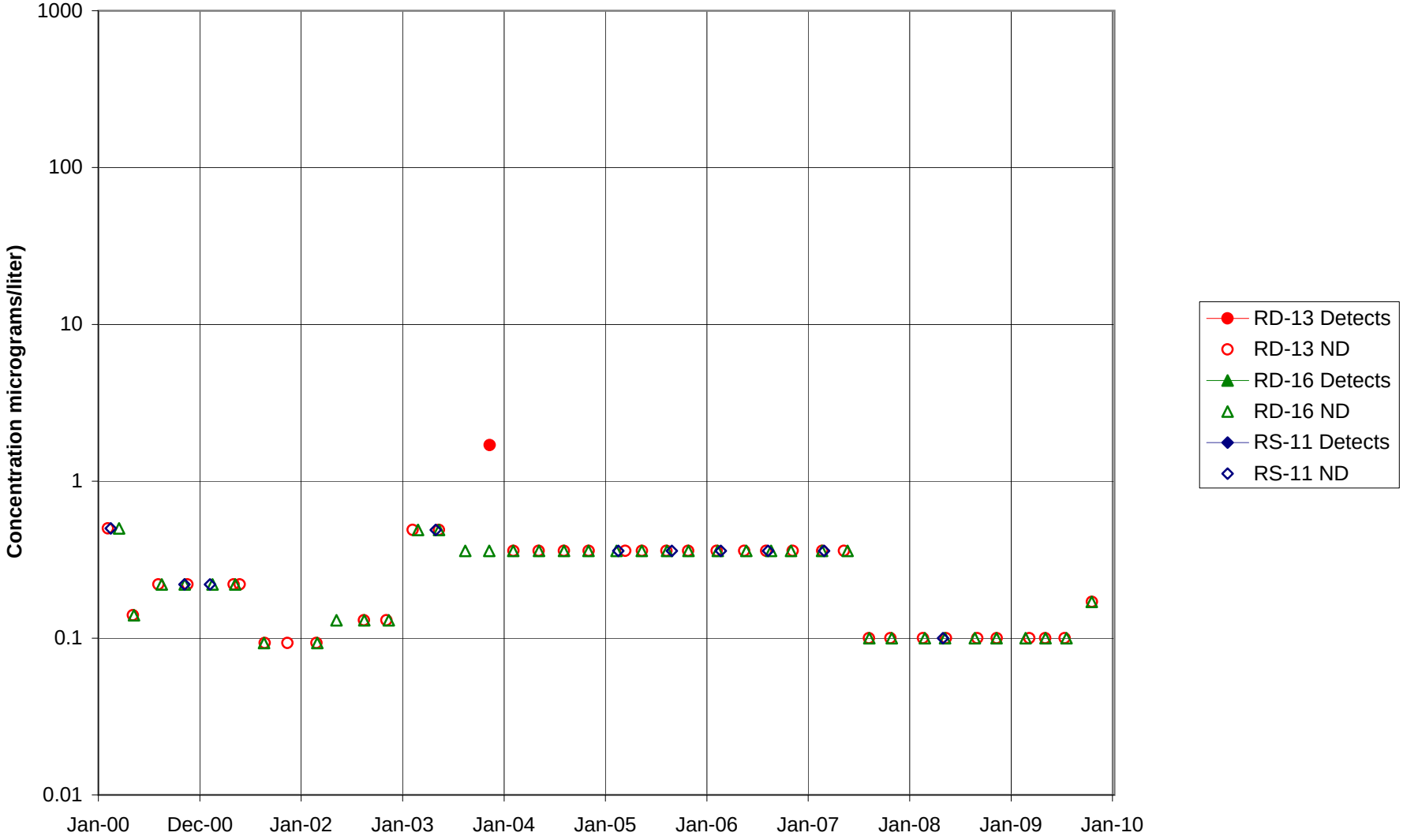


FIGURE F-320. TRANS-1,2-DCE in STL-IV AREA SHALLOW WELLS

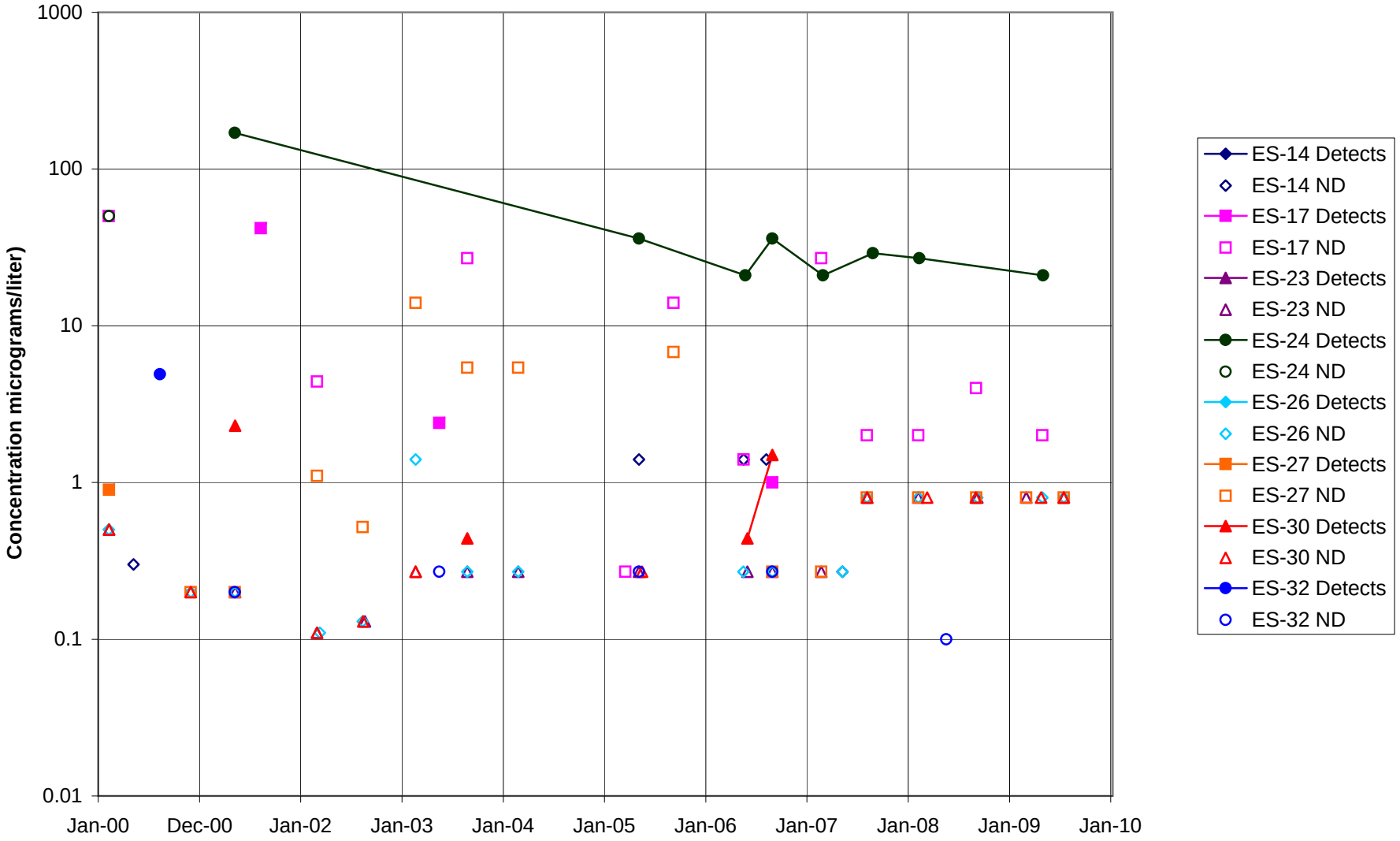


FIGURE F-321. TRANS-1,2-DCE in STL-IV AREA CHATSWORTH FORMATION WELLS

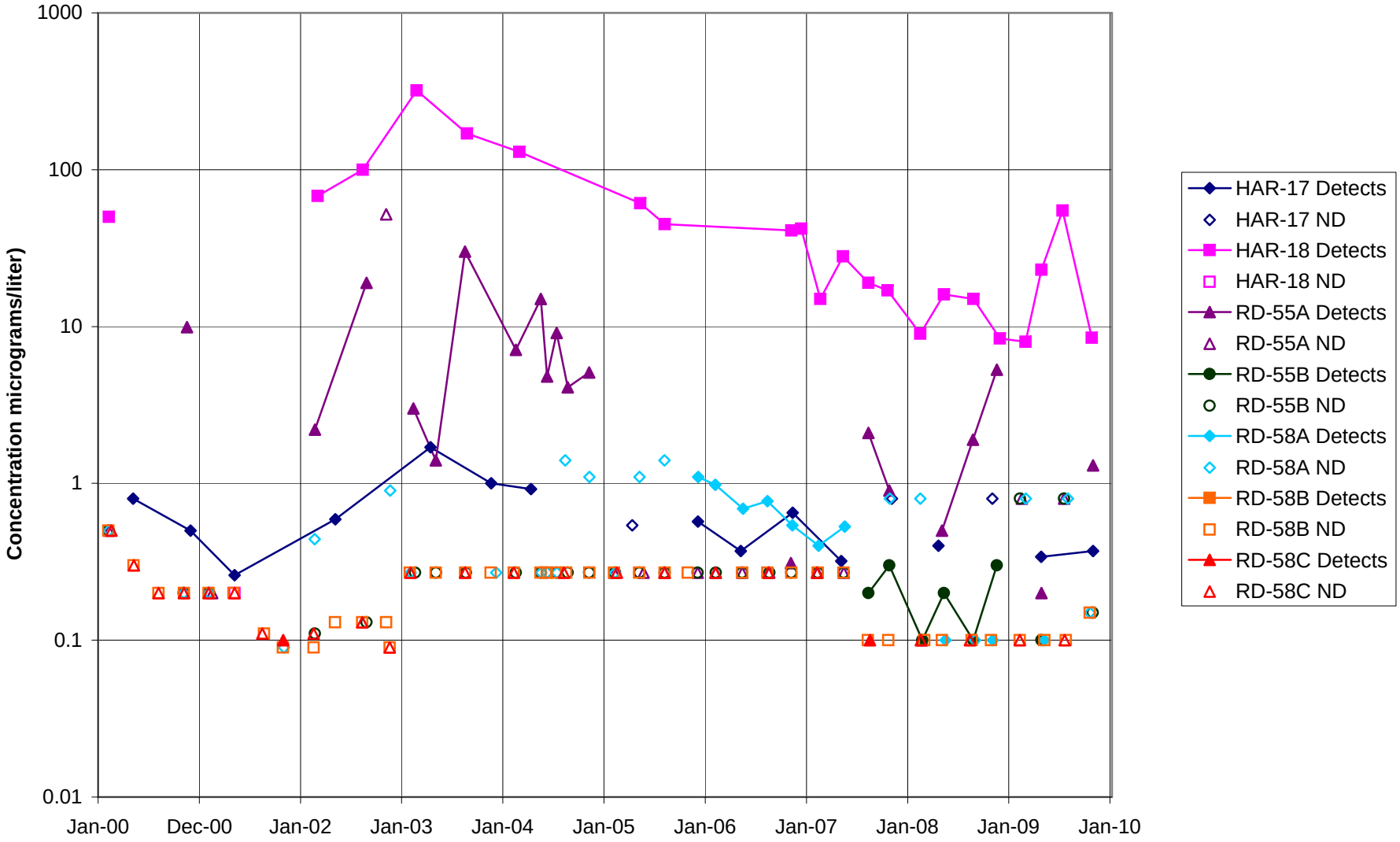


FIGURE F-322. TRANS-1,2-DCE in MAIN GATE AREA WELLS - 1

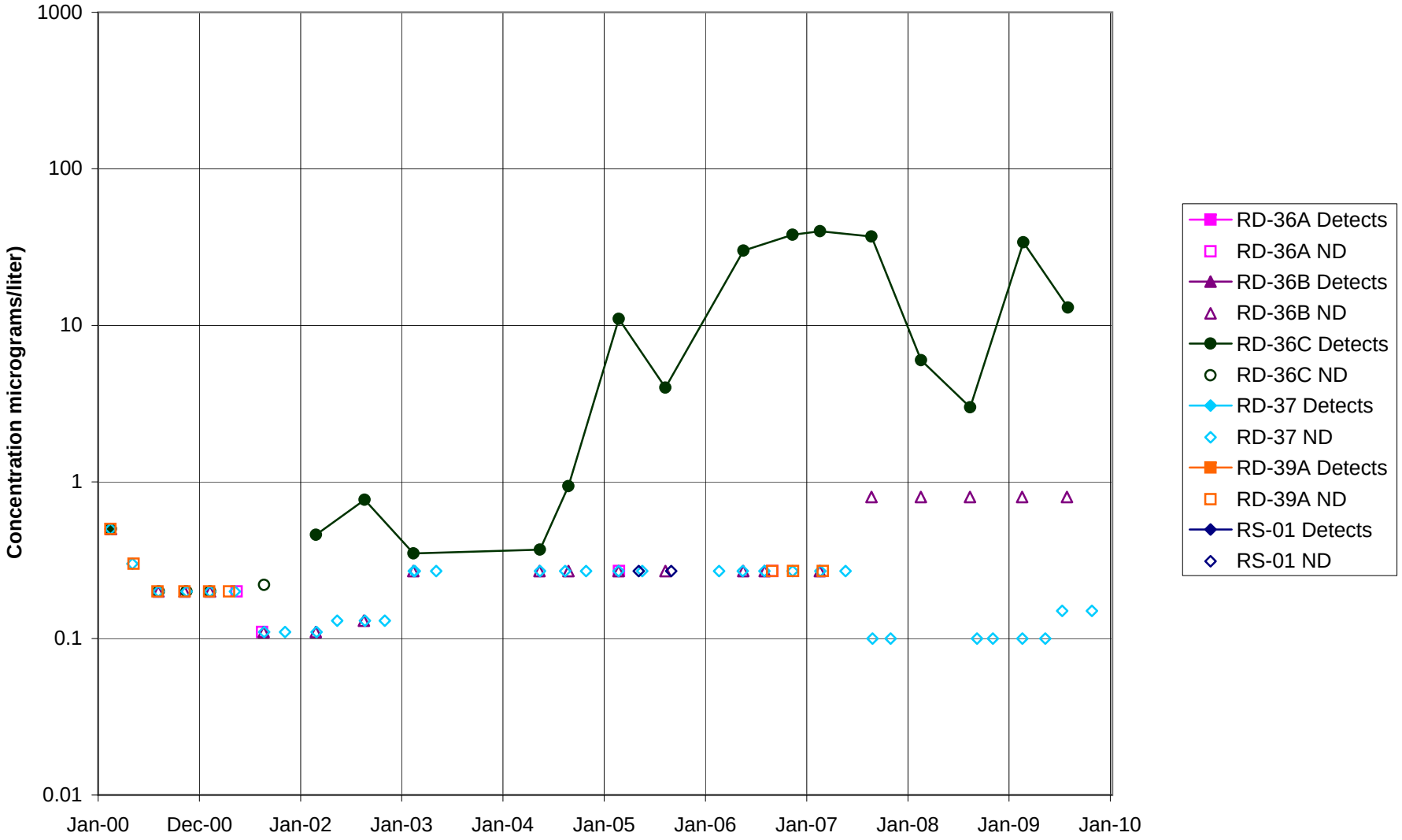


FIGURE F-323. TRANS-1,2-DCE in MAIN GATE AREA WELLS - 2

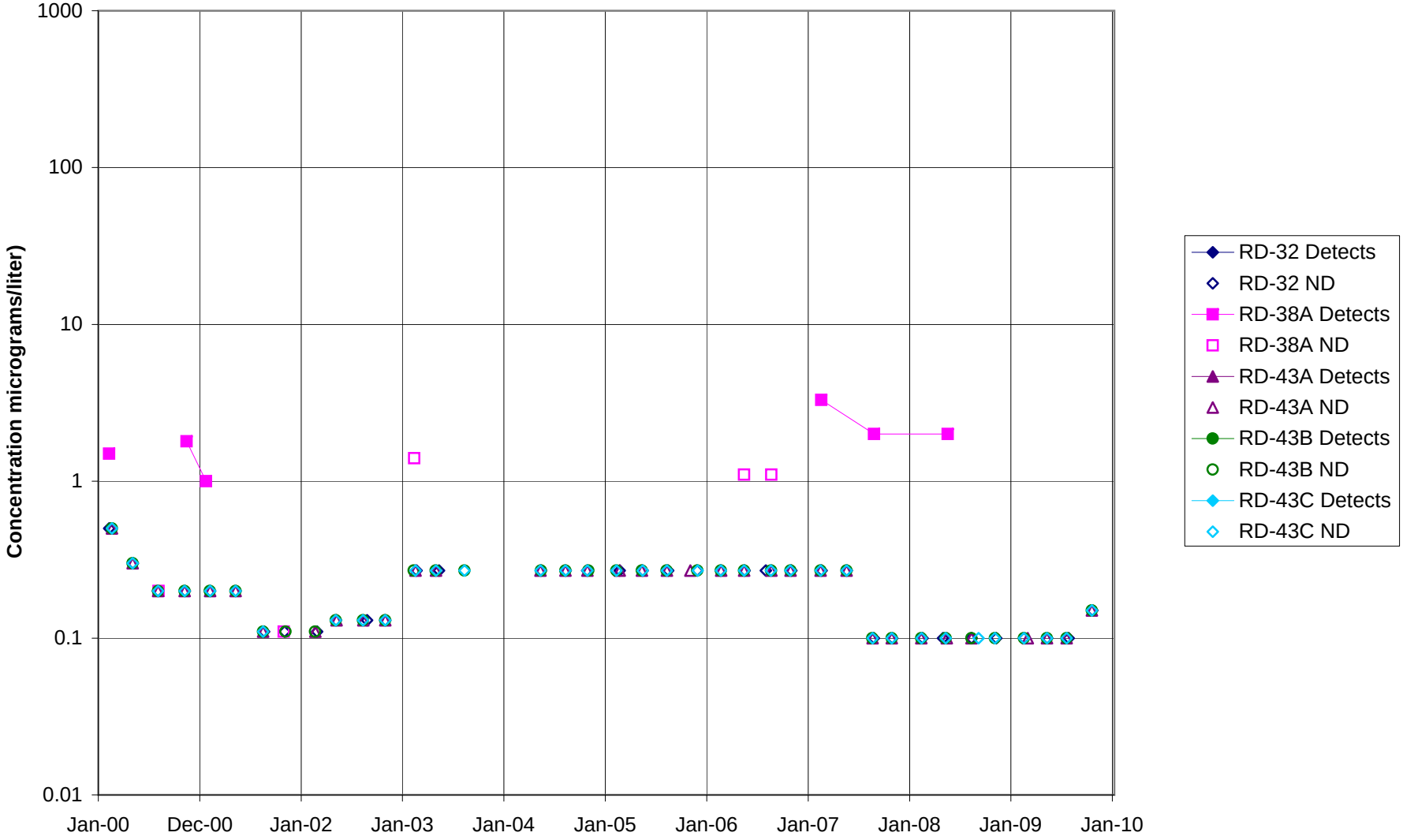


FIGURE F-324. TRANS-1,2-DCE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1

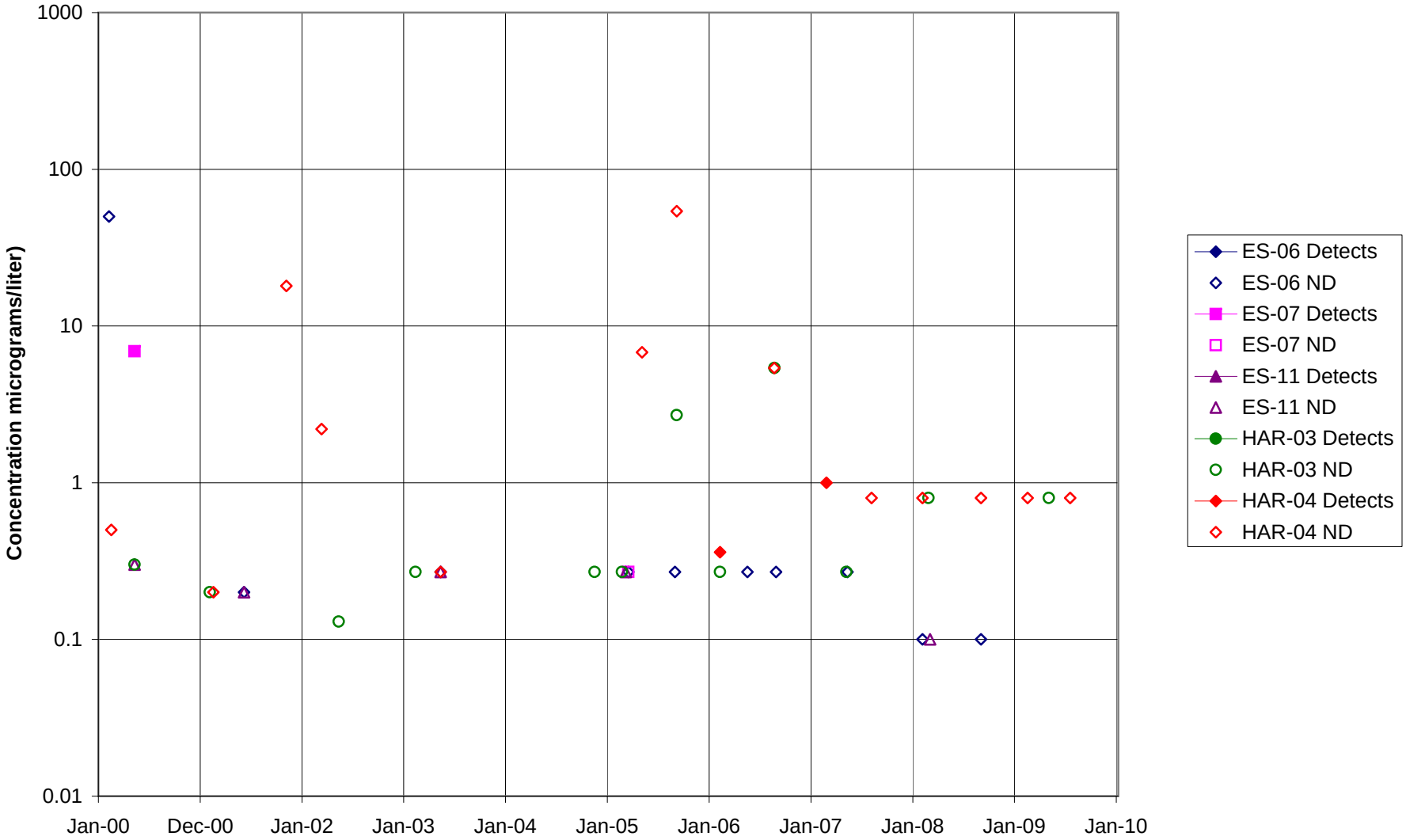


FIGURE F-325. TRANS-1,2-DCE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 2

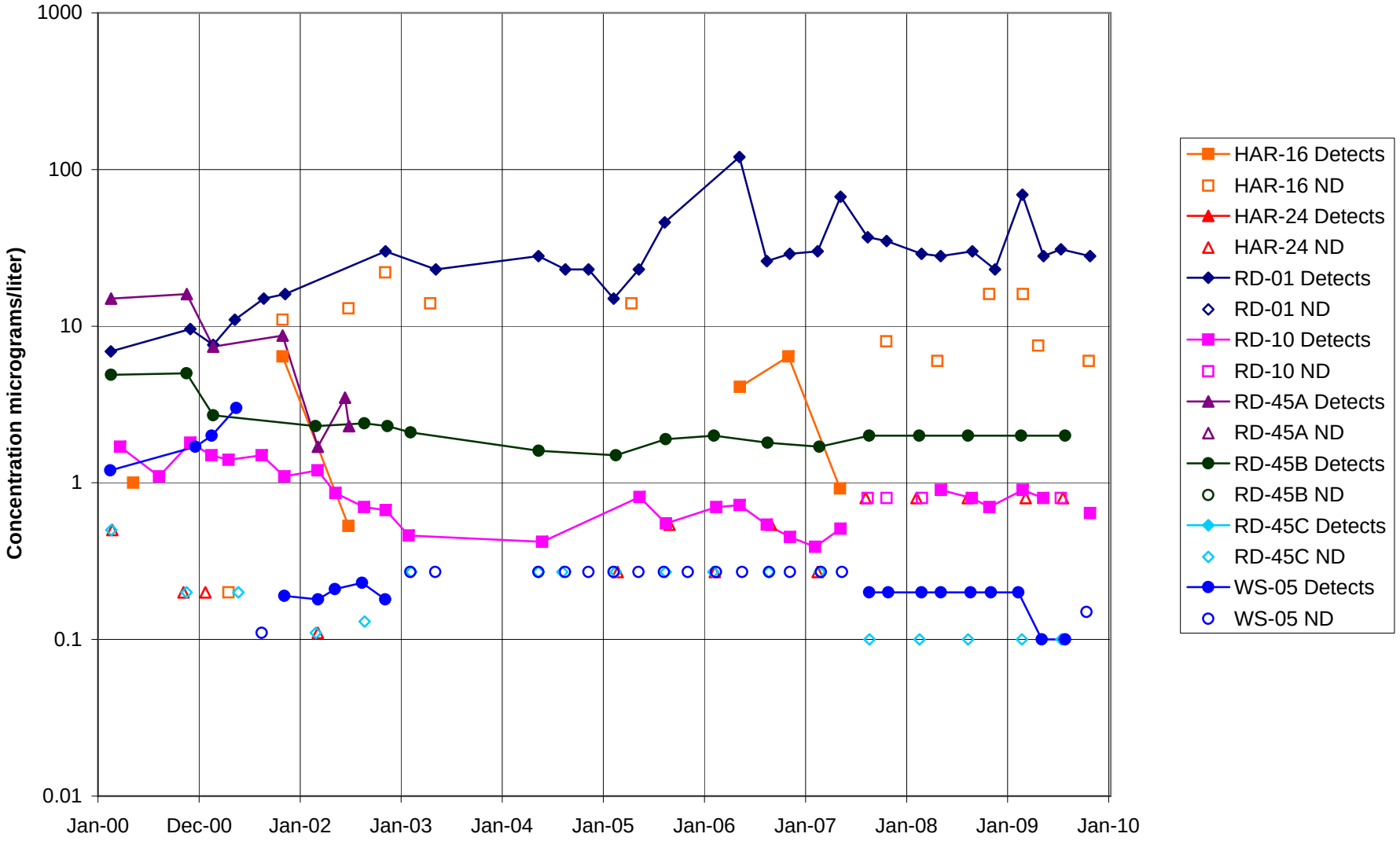


FIGURE F-326. TRANS-1,2-DCE in CTL-III / PERIMETER POND AREA WELLS

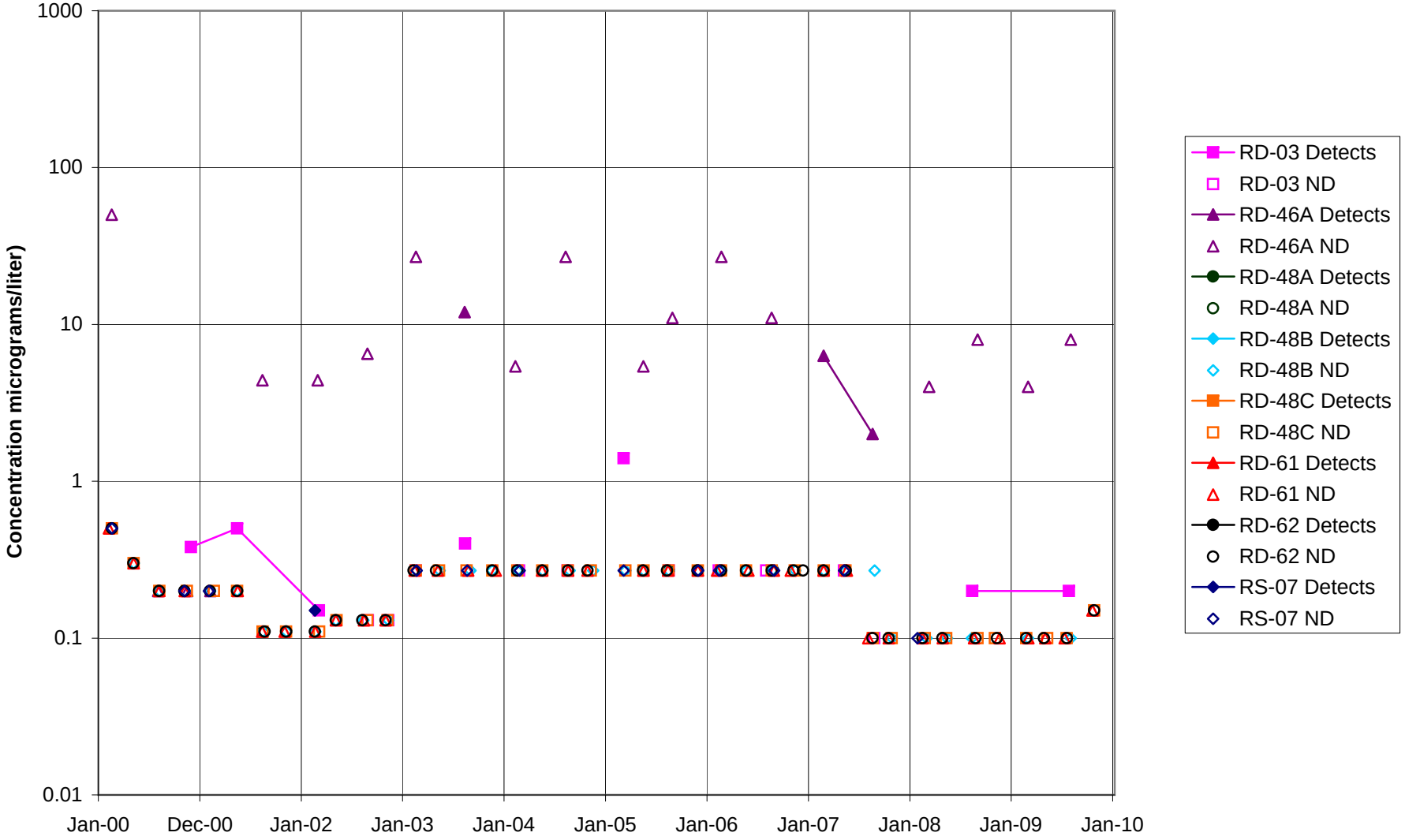


FIGURE F-327. TRANS-1,2-DCE in BOWL AREA WELLS

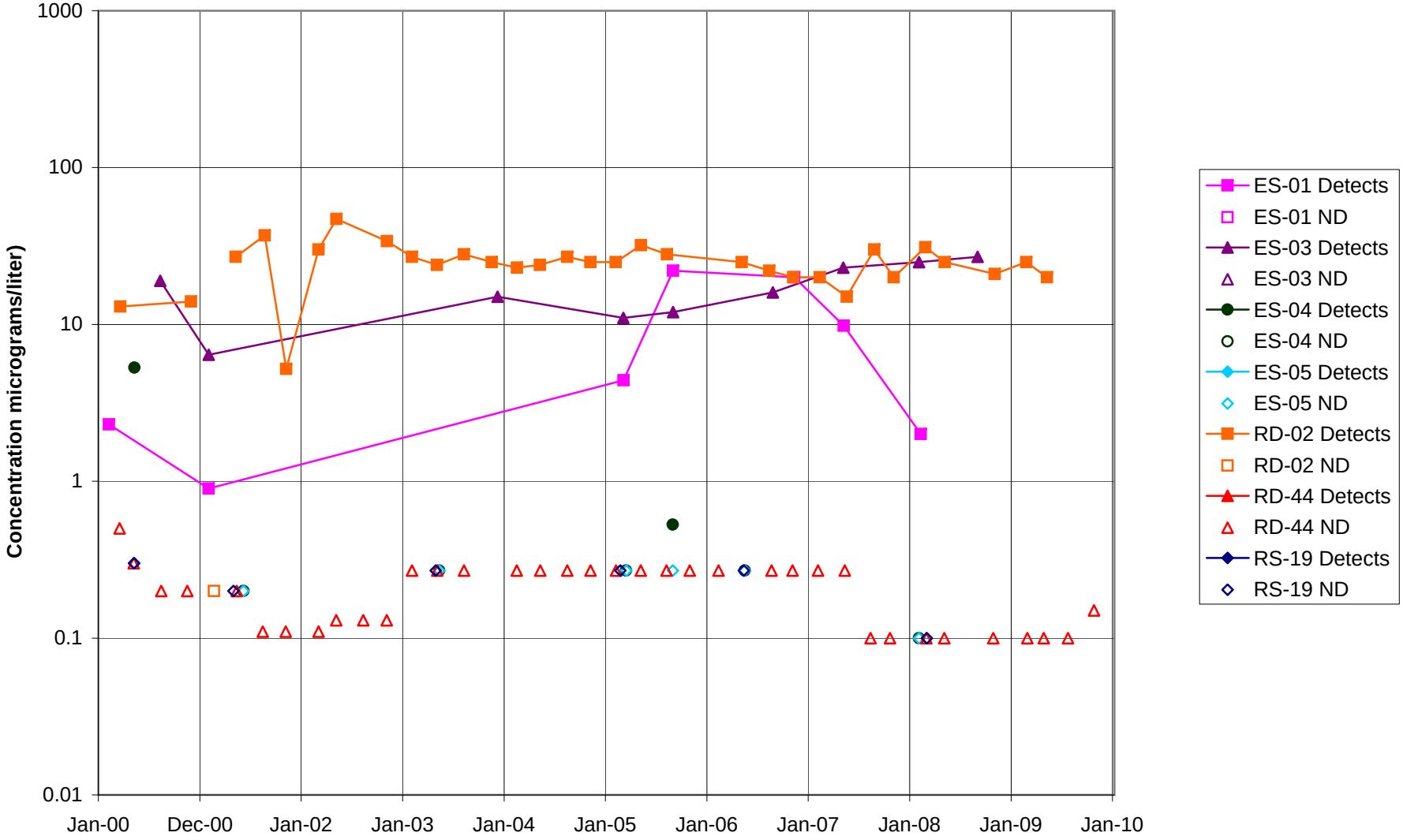


FIGURE F-328. TRANS-1,2-DCE in ECL AREA WELLS

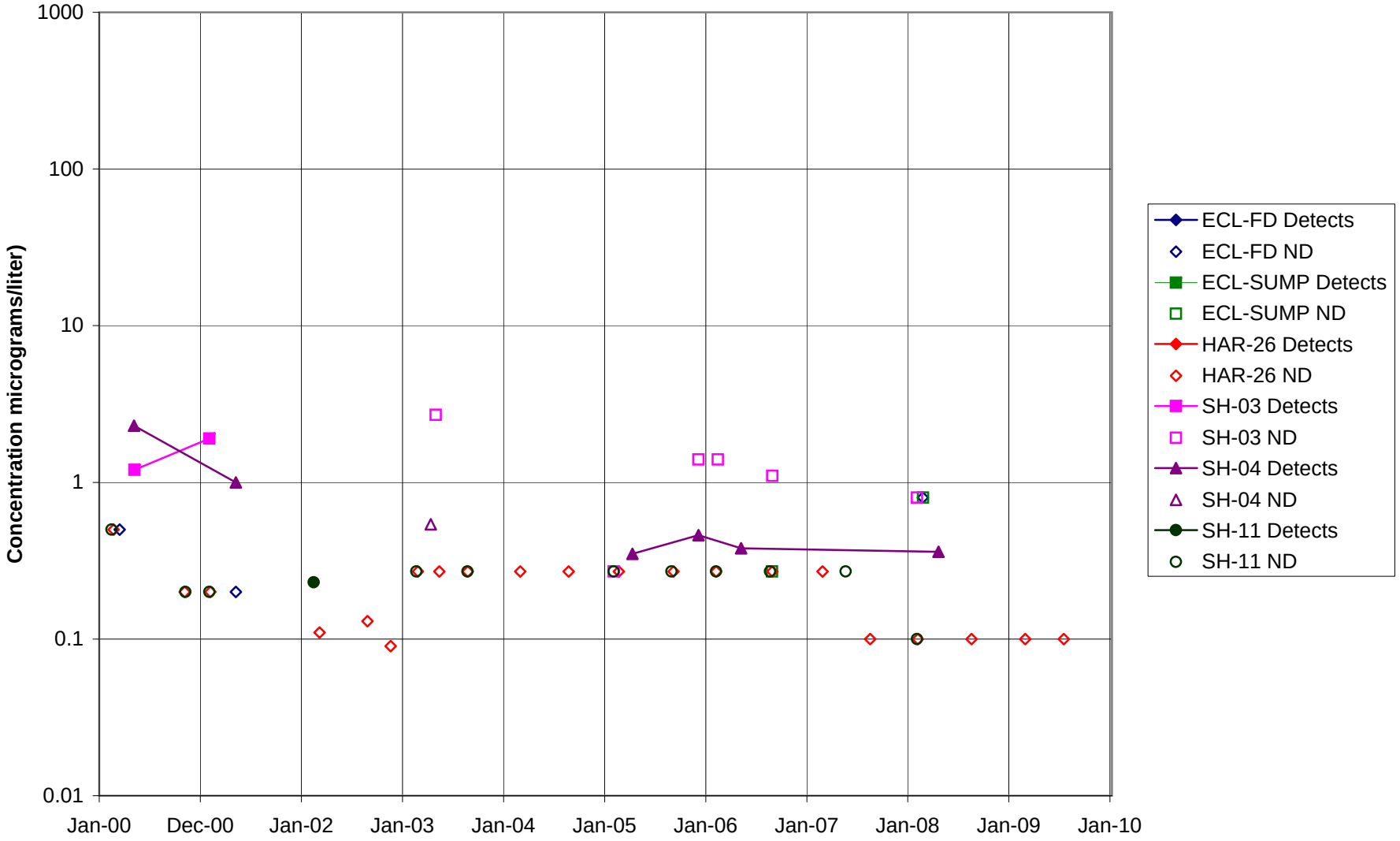


FIGURE F-329. TRANS-1,2-DCE in FORMER LOX PLANT AREA WELLS

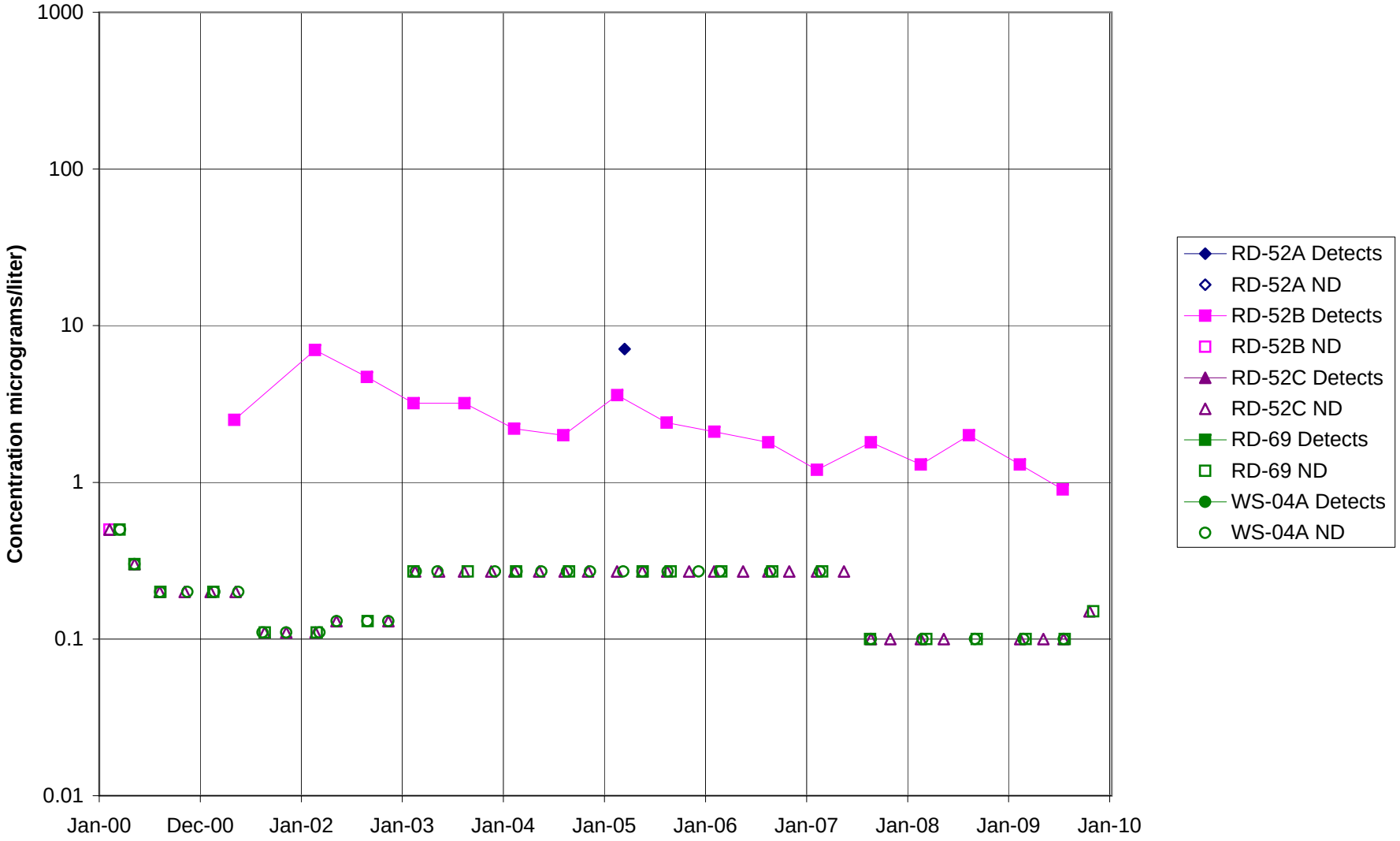


FIGURE F-330. TRANS-1,2-DCE in RD-09 AREA WELLS

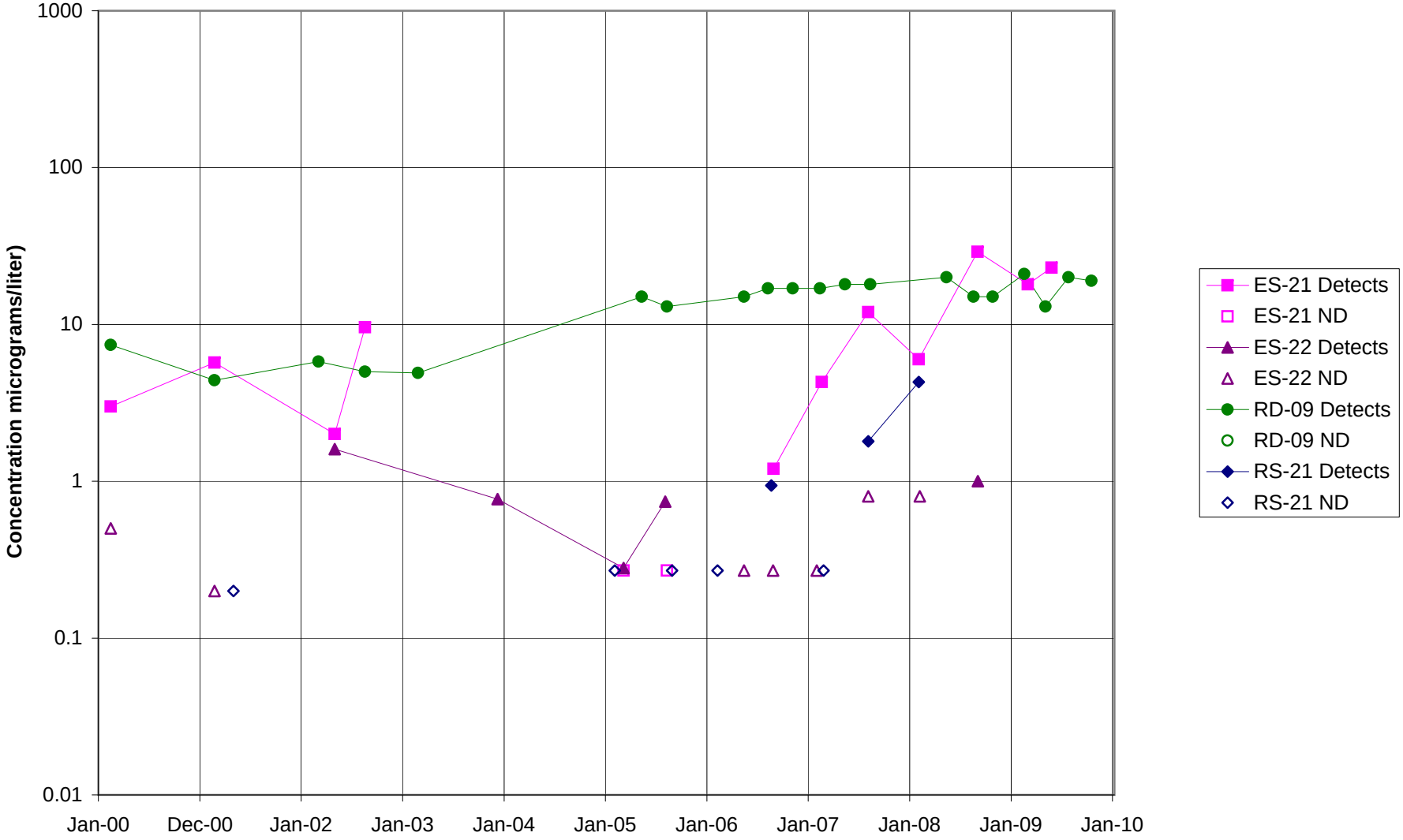


FIGURE F-331. TRANS-1,2-DCE in HELIPORT, B/204 AREA WELLS

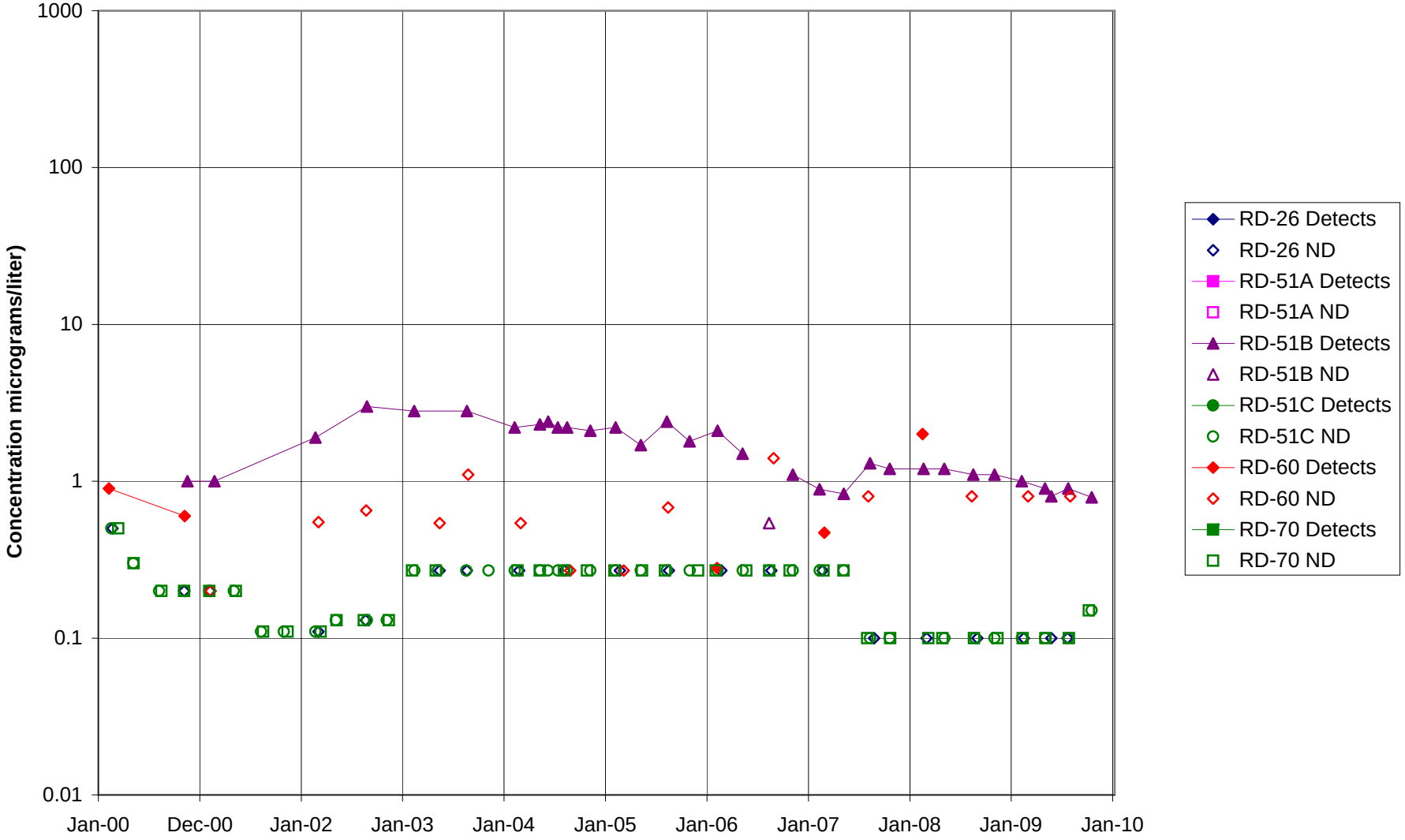


FIGURE F-332. TRANS-1,2-DCE in ALFA / BRAVO AREA WELLS

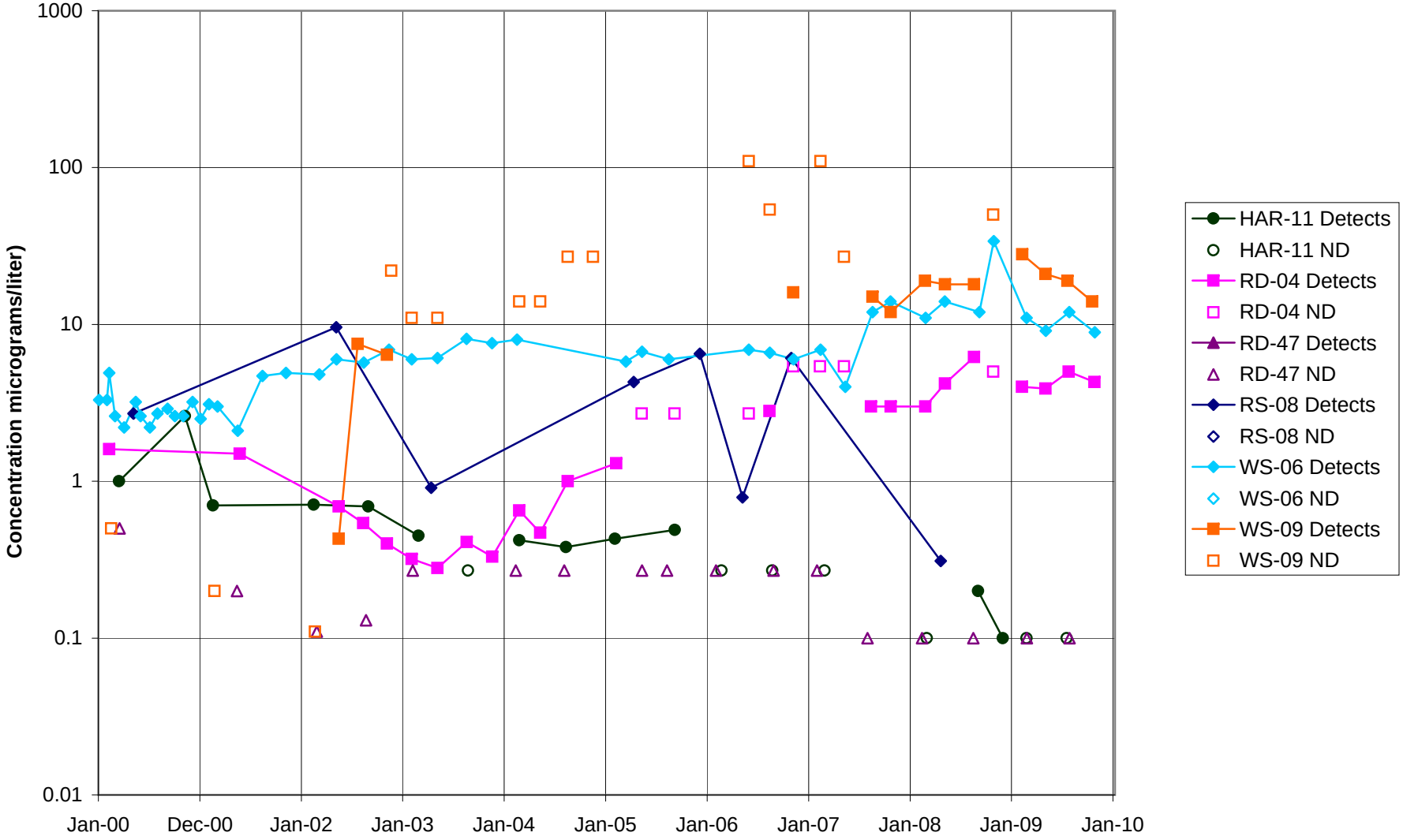


FIGURE F-333. TRANS-1,2-DCE in SPA AREA WELLS

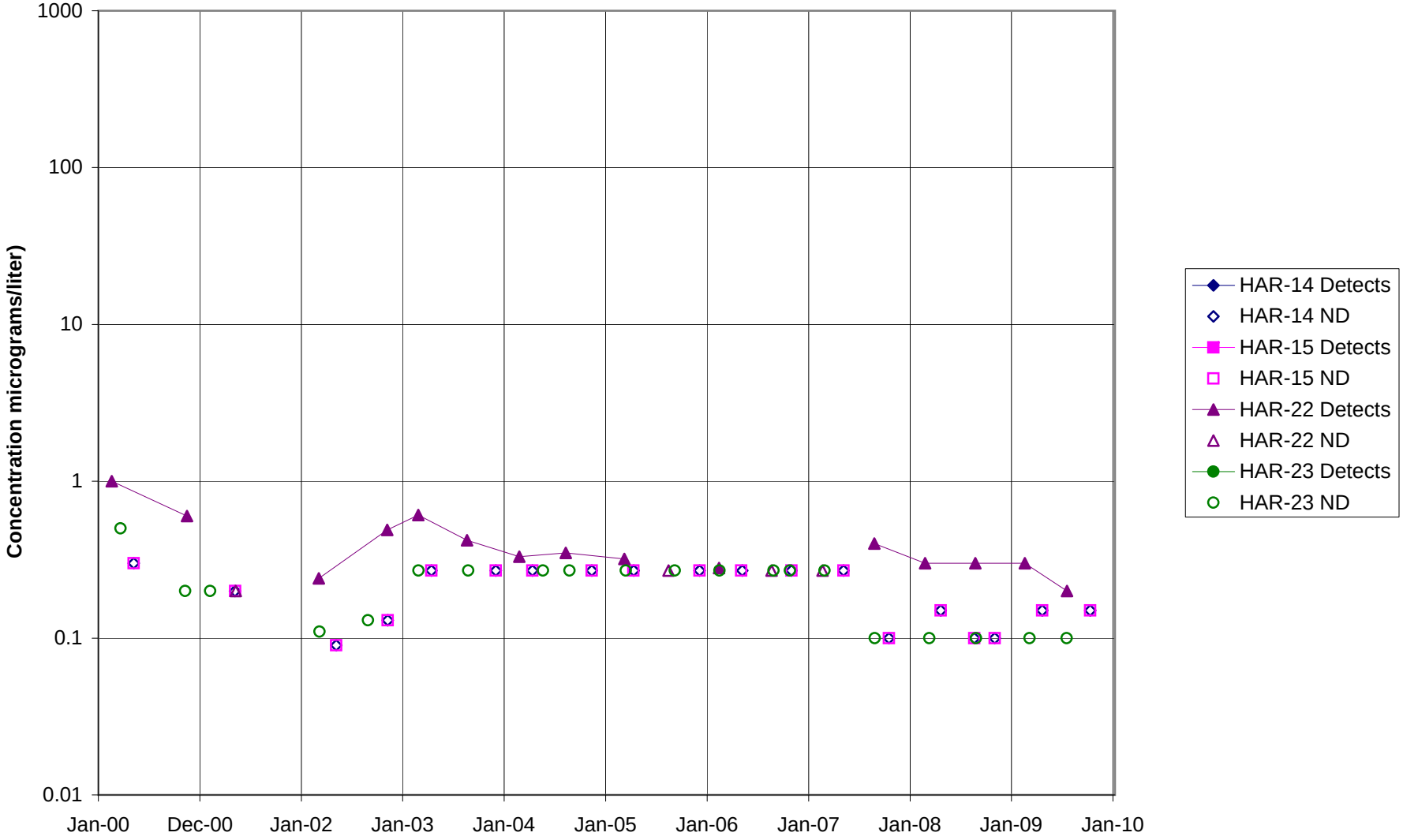


FIGURE F-334. TRANS-1,2-DCE in COCA / PLF AREA WELLS

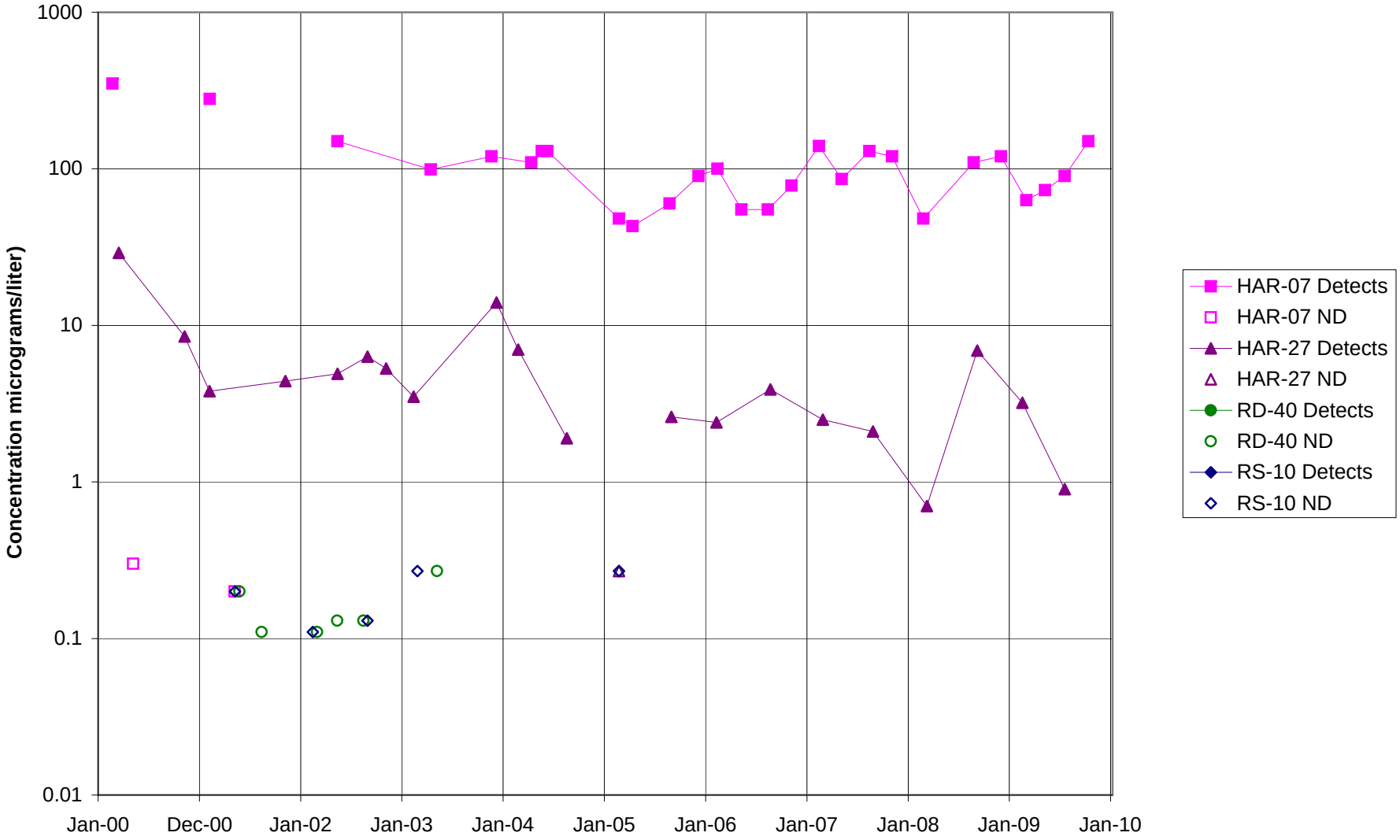


FIGURE F-335. TRANS-1,2-DCE in DELTA / BUFFER ZONE AREA WELLS

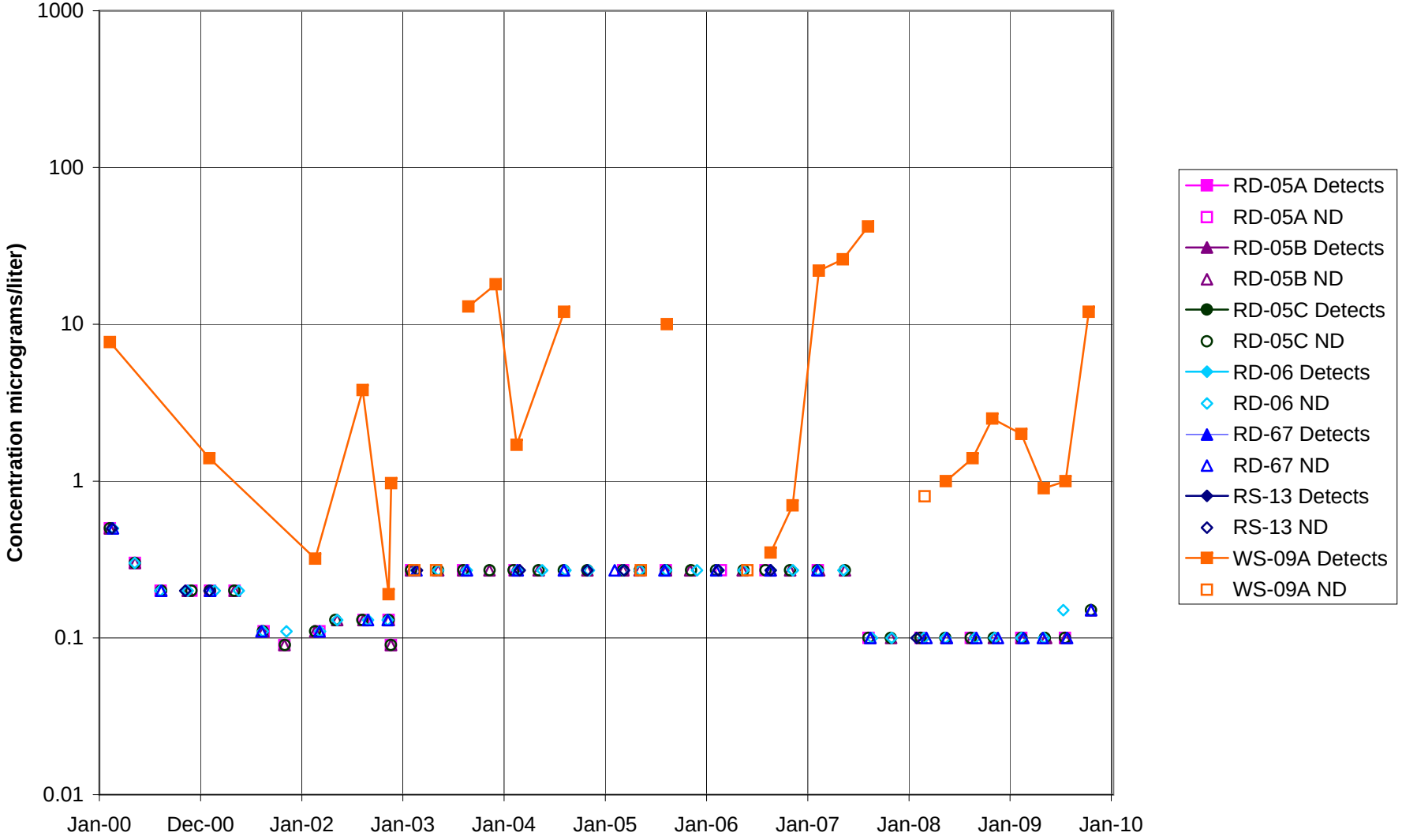


FIGURE F-336. TRANS-1,2-DCE in AREA IV WELLS

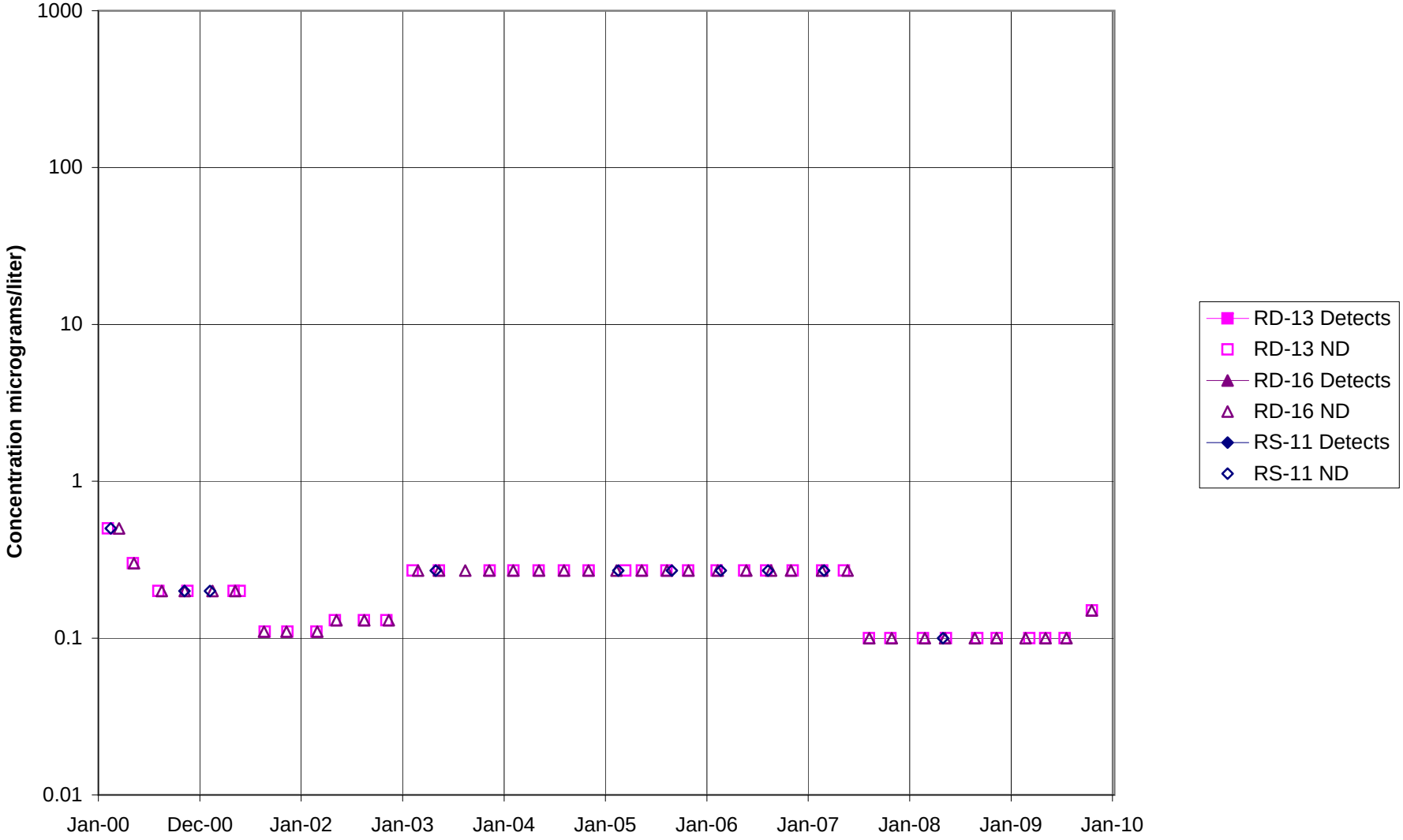


FIGURE F-337. TCE in STL-IV AREA SHALLOW WELLS

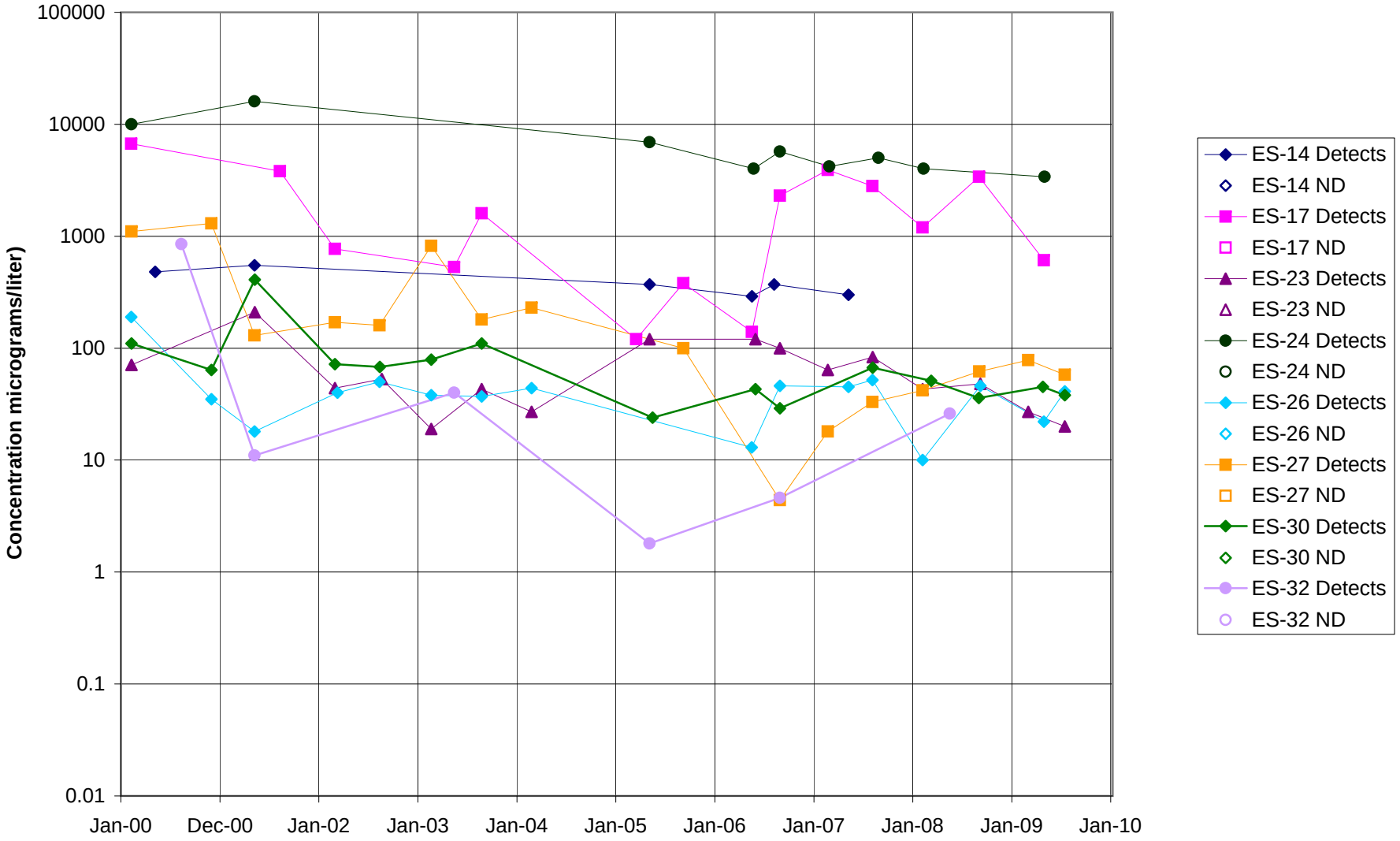


FIGURE F-338. TCE in STL-IV AREA CHATSWORTH FORMATION WELLS

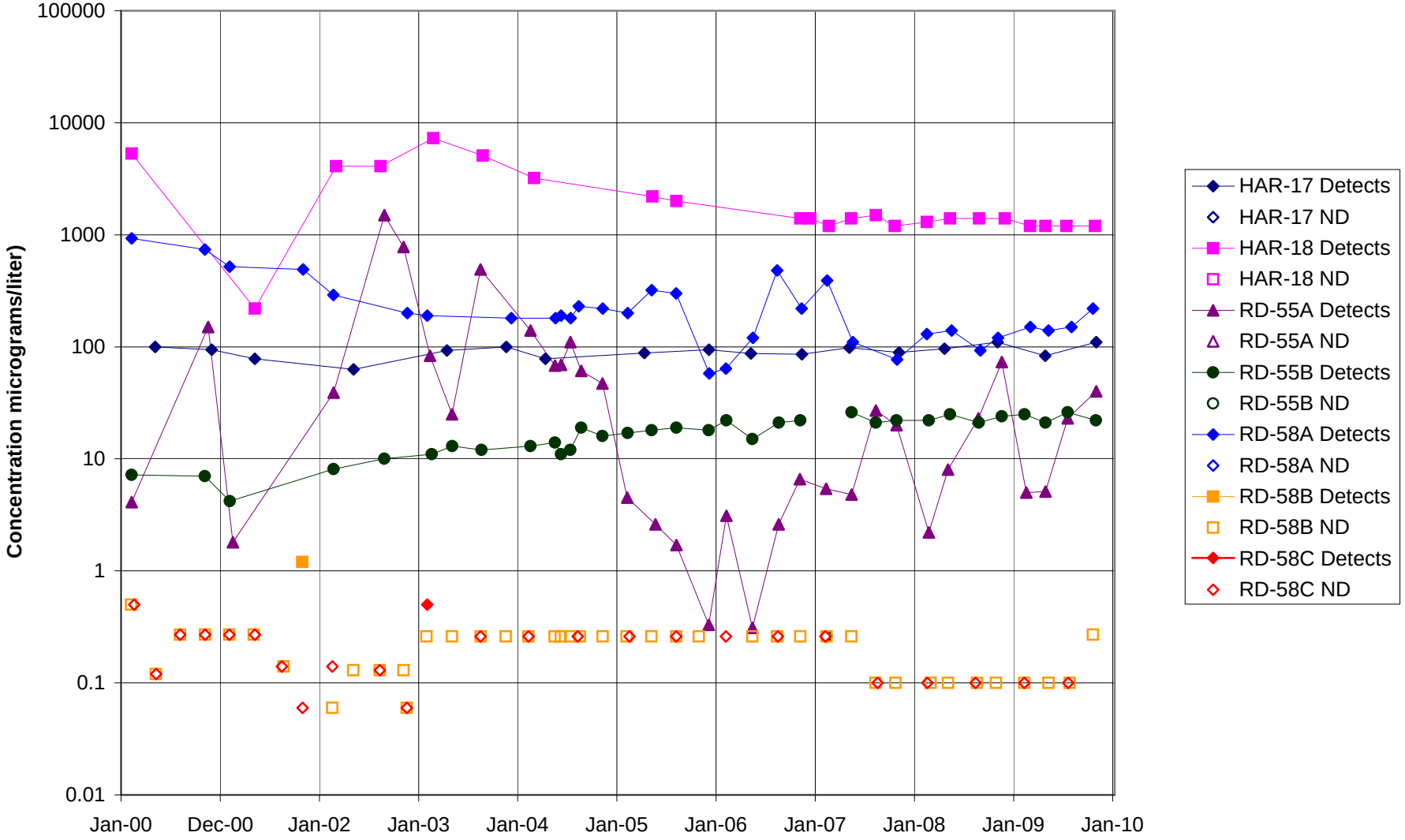


FIGURE F-339. TCE in MAIN GATE AREA WELLS - 1

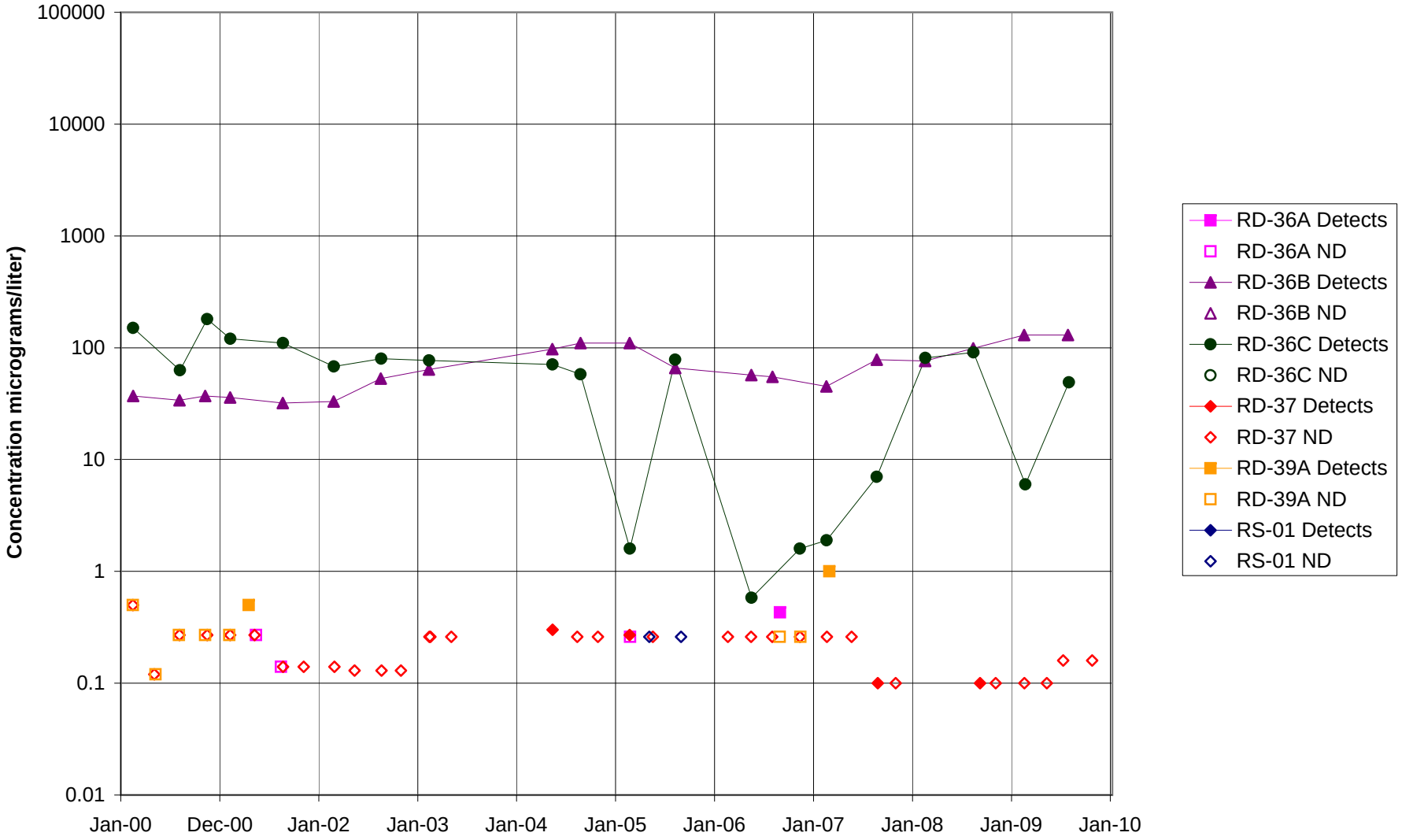


FIGURE F-340. TCE in MAIN GATE AREA WELLS - 2

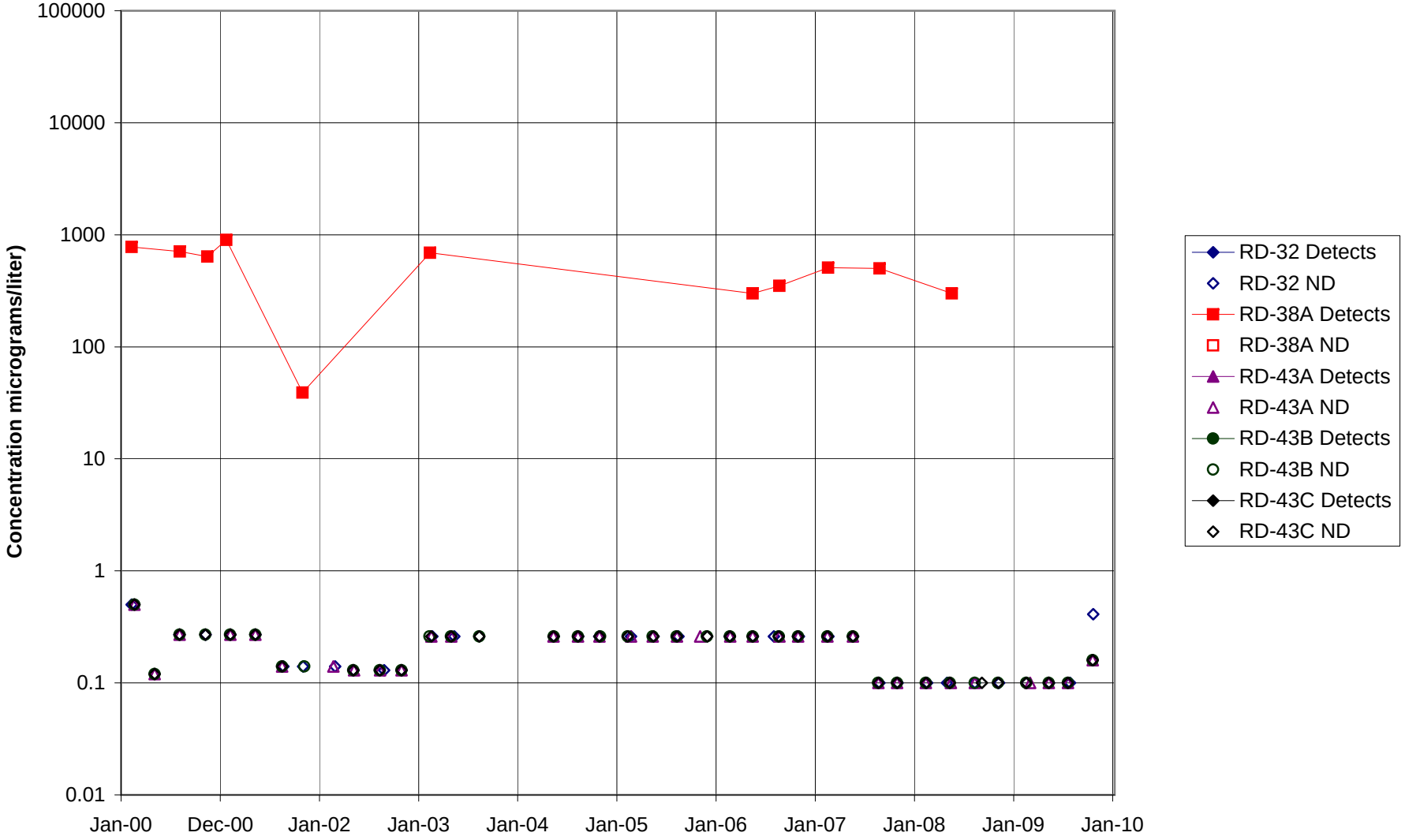


FIGURE F-341. TCE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1

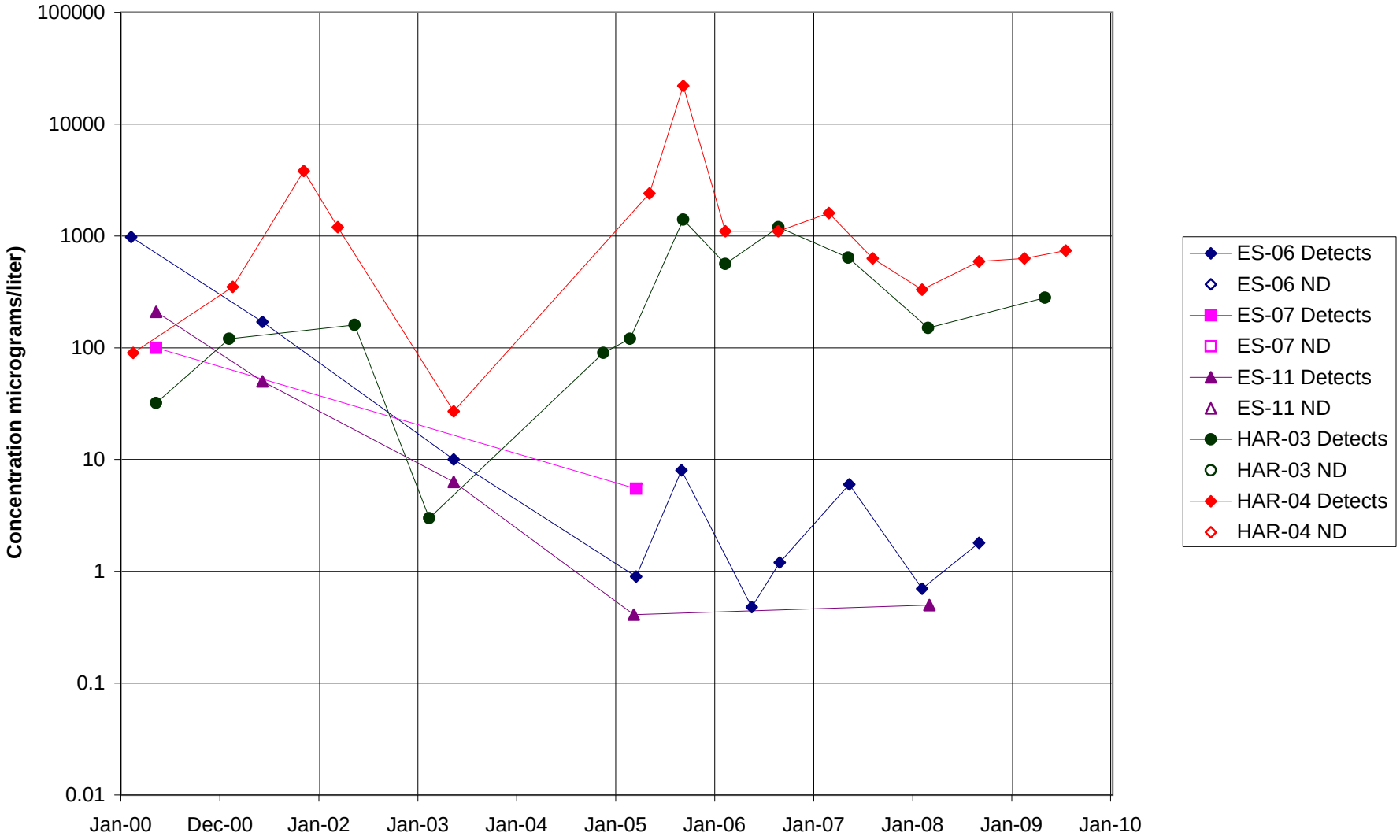


FIGURE F-342. TCE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 2

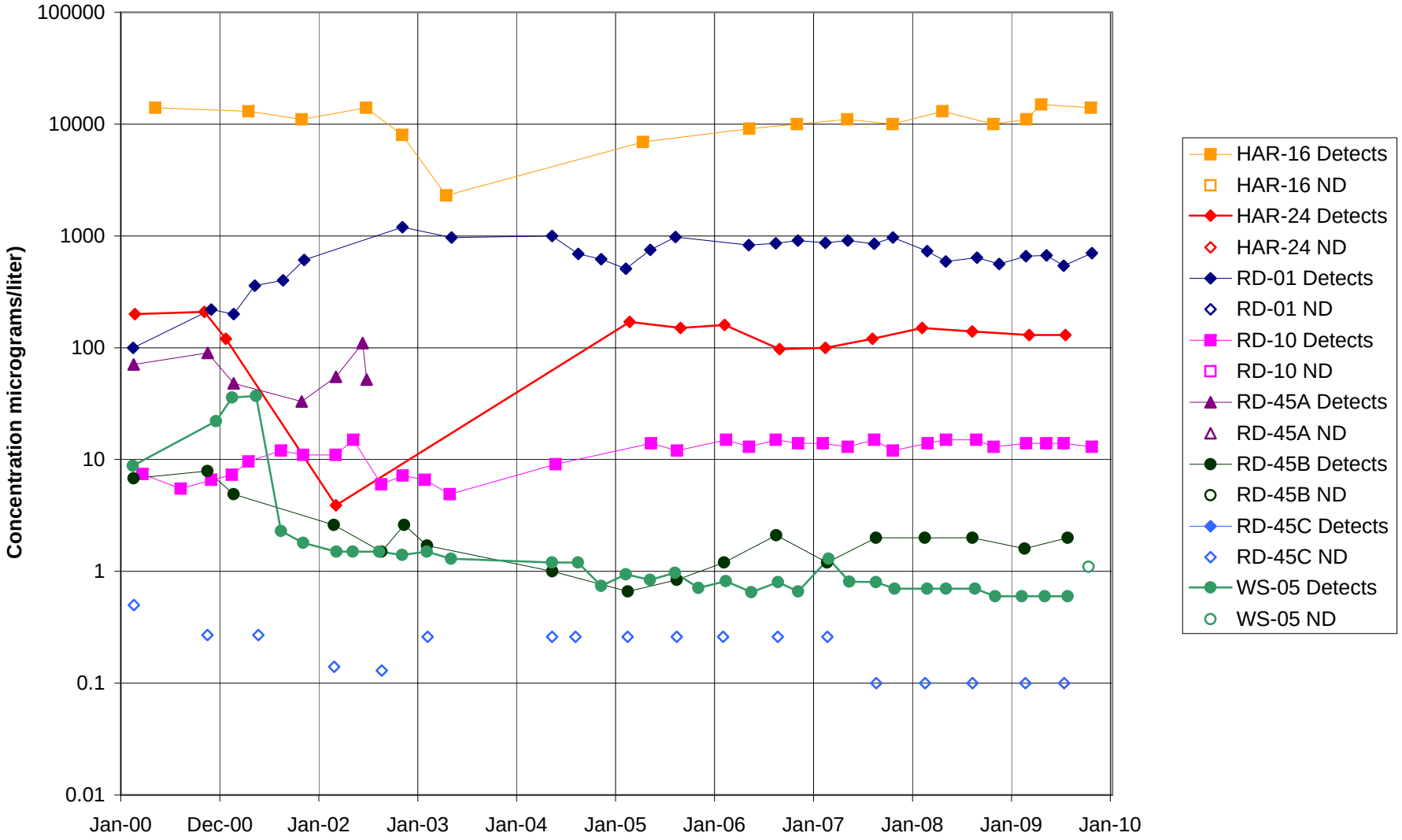


FIGURE F-343. TCE in CTL-III / PERIMETER POND AREA WELLS

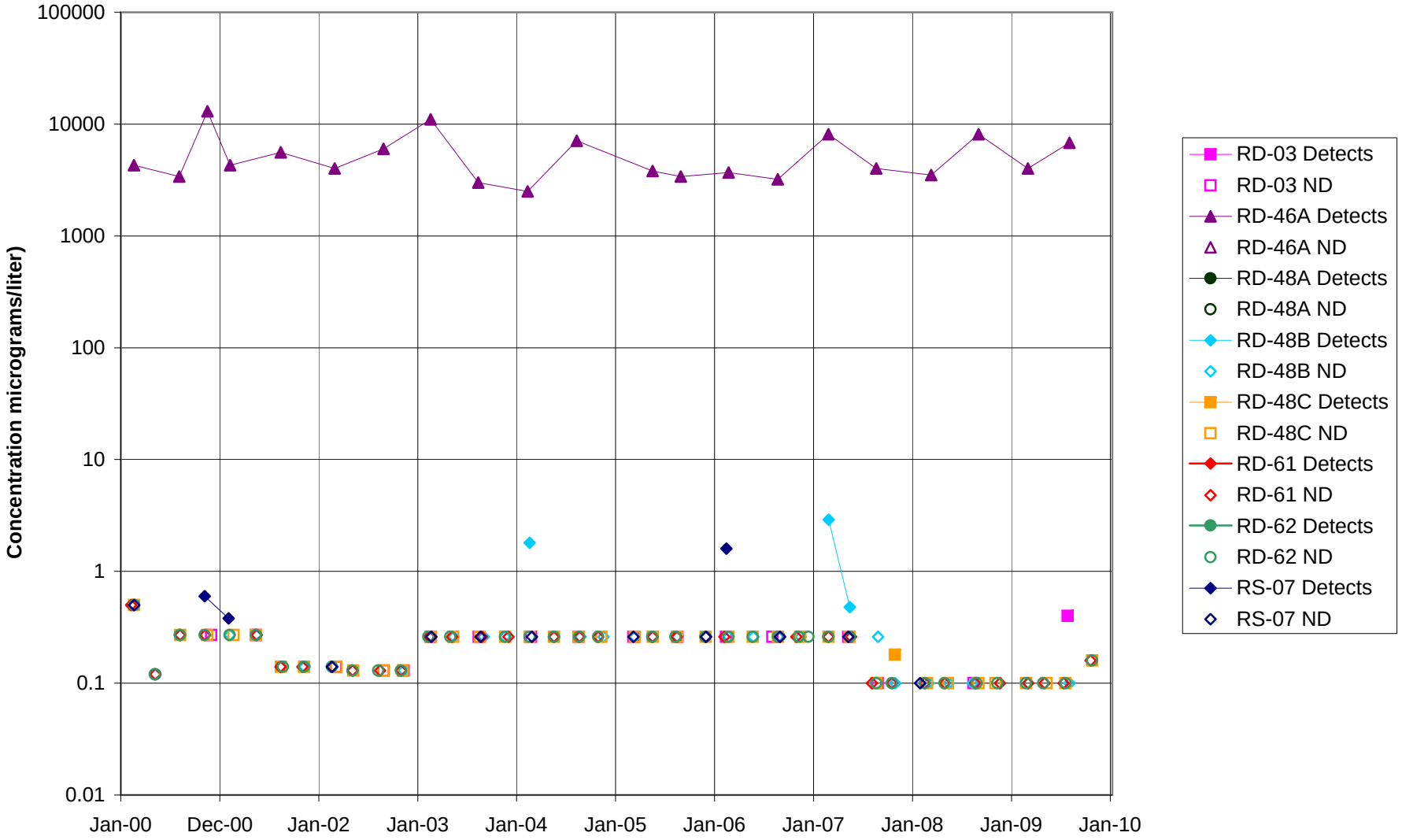


FIGURE F-344. TCE in BOWL AREA WELLS

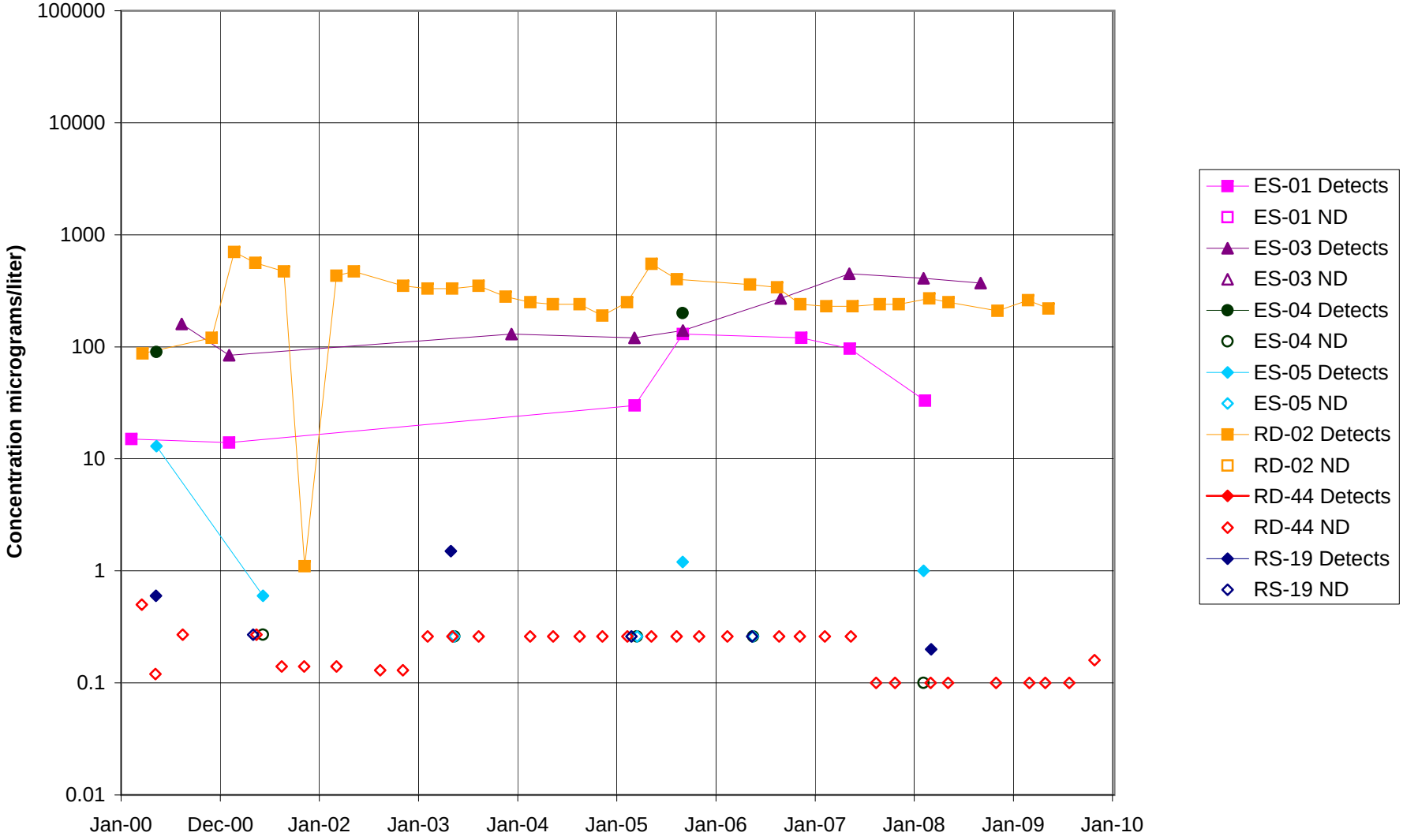


FIGURE F-345. TCE in ECL AREA WELLS

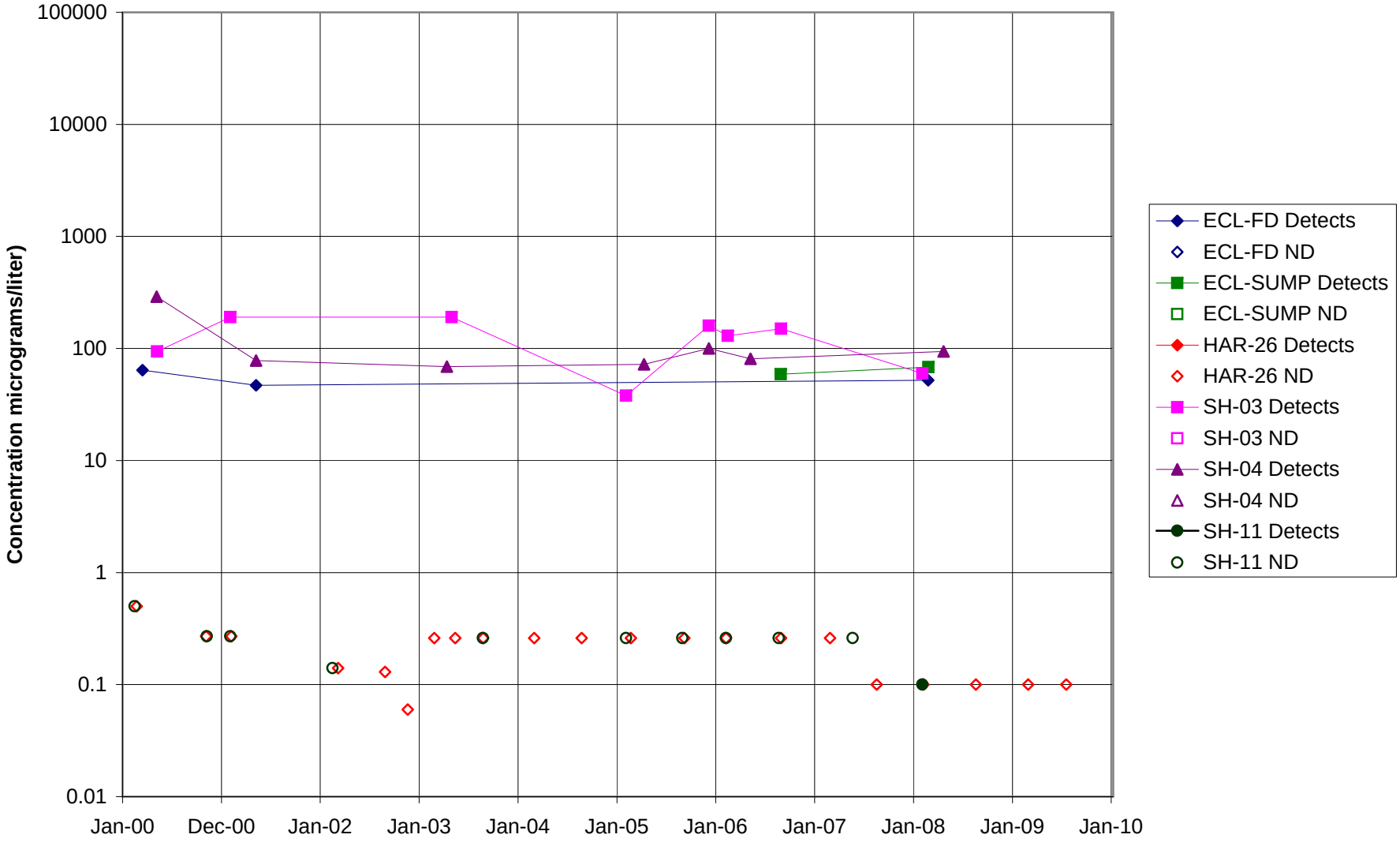


FIGURE F-346. TCE in FORMER LOX PLANT AREA WELLS

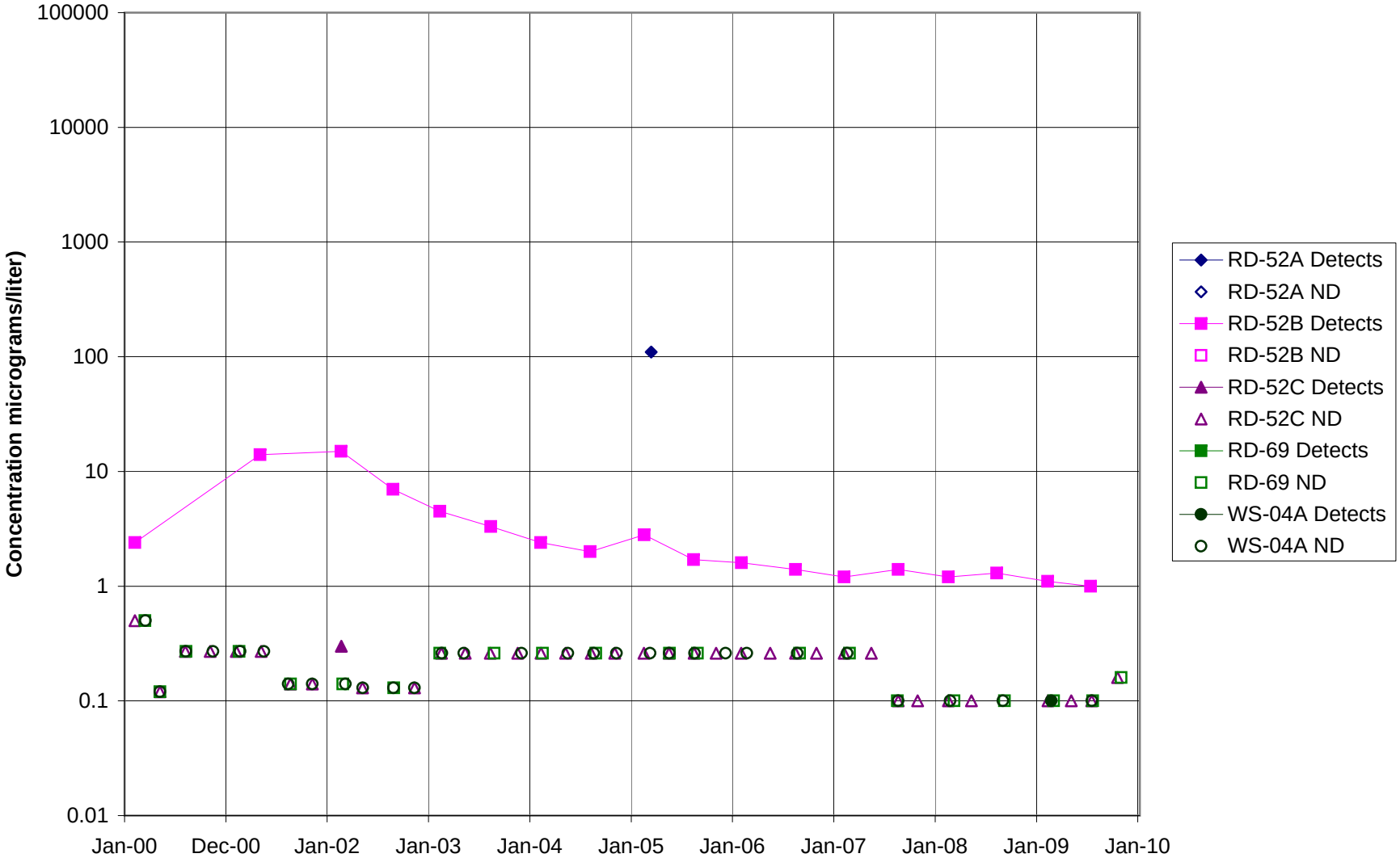


FIGURE F-347. TCE in RD-09 AREA WELLS

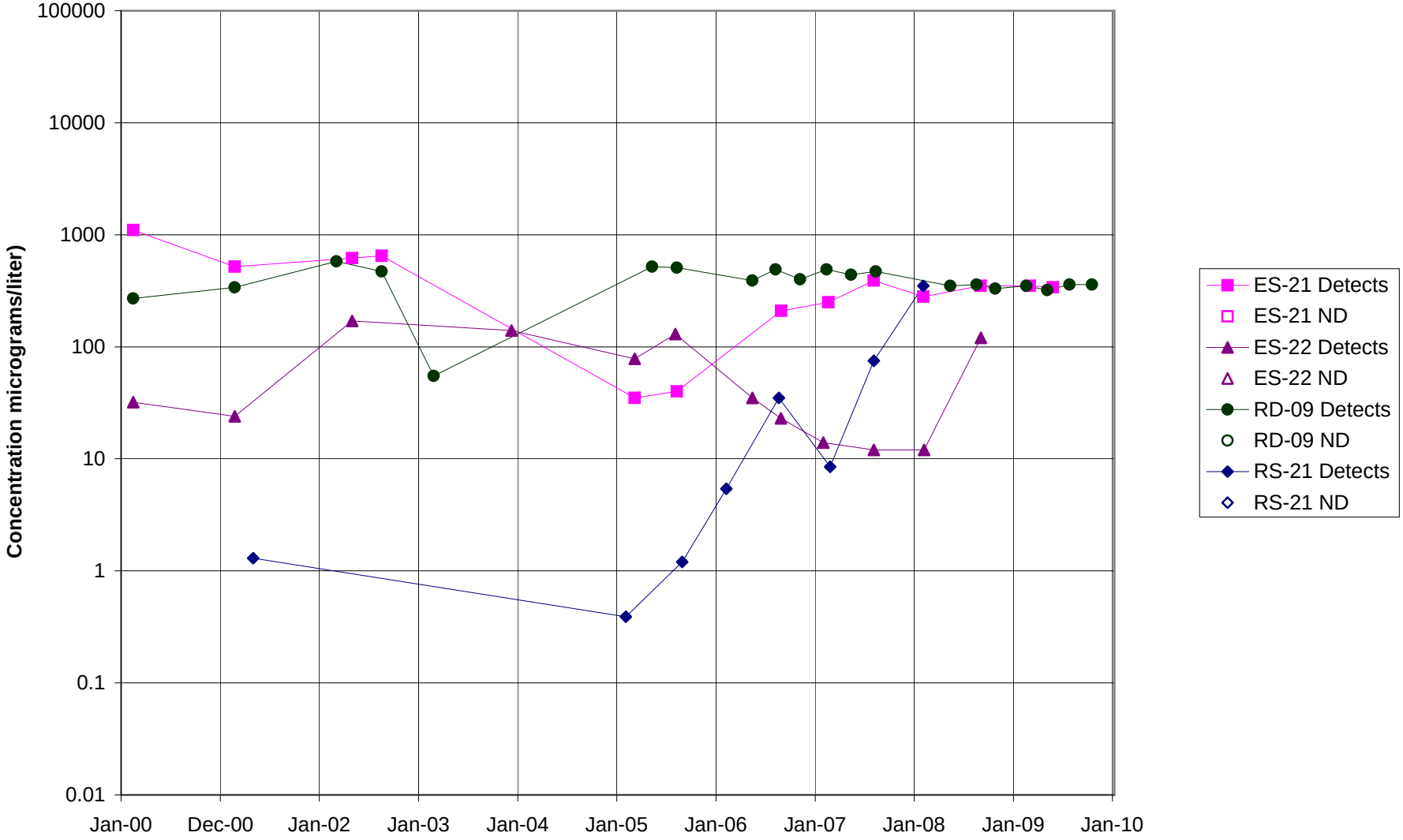


FIGURE F-348. TCE in HELIPORT, B/204 AREA WELLS

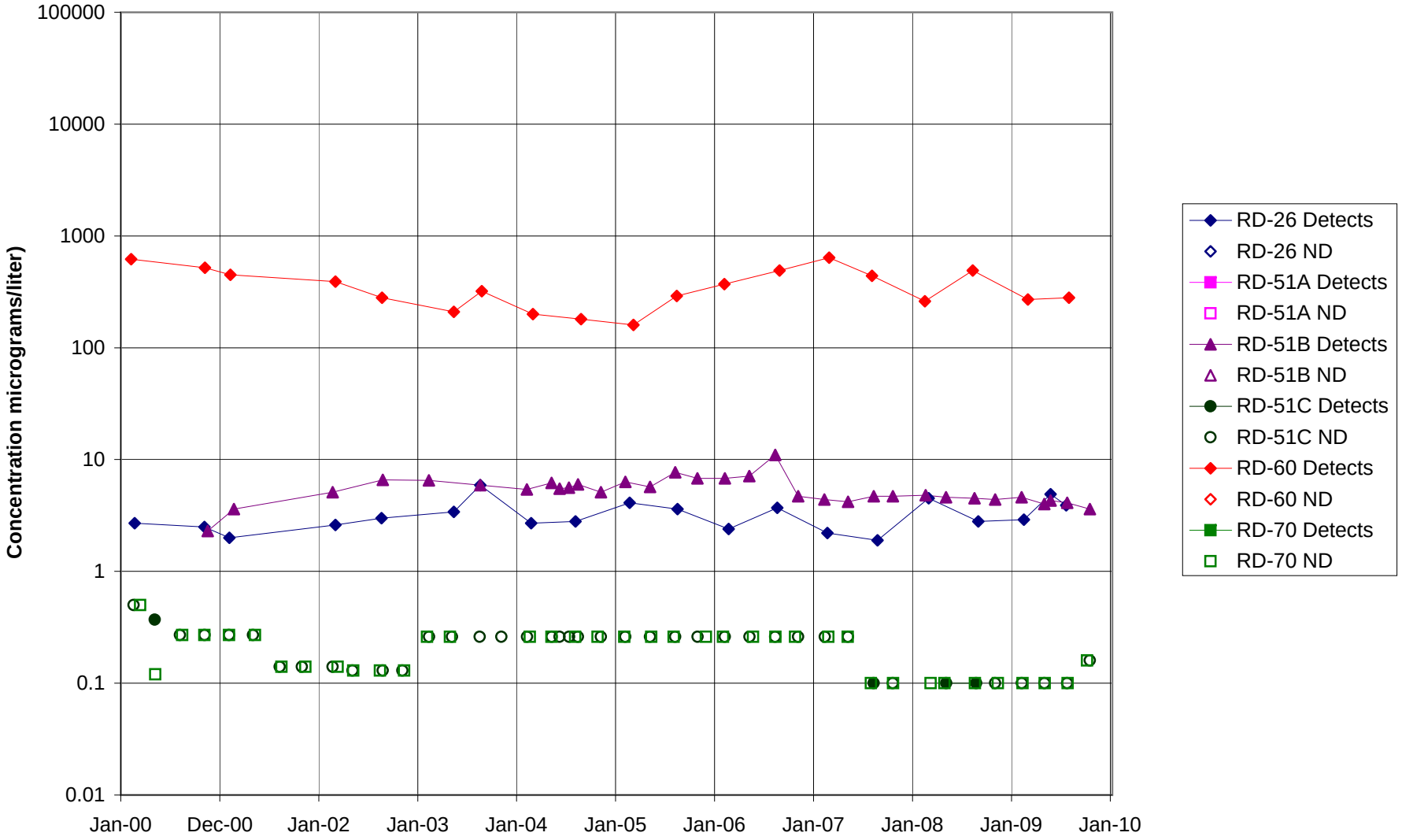


FIGURE F-349. TCE in ALFA / BRAVO AREA WELLS

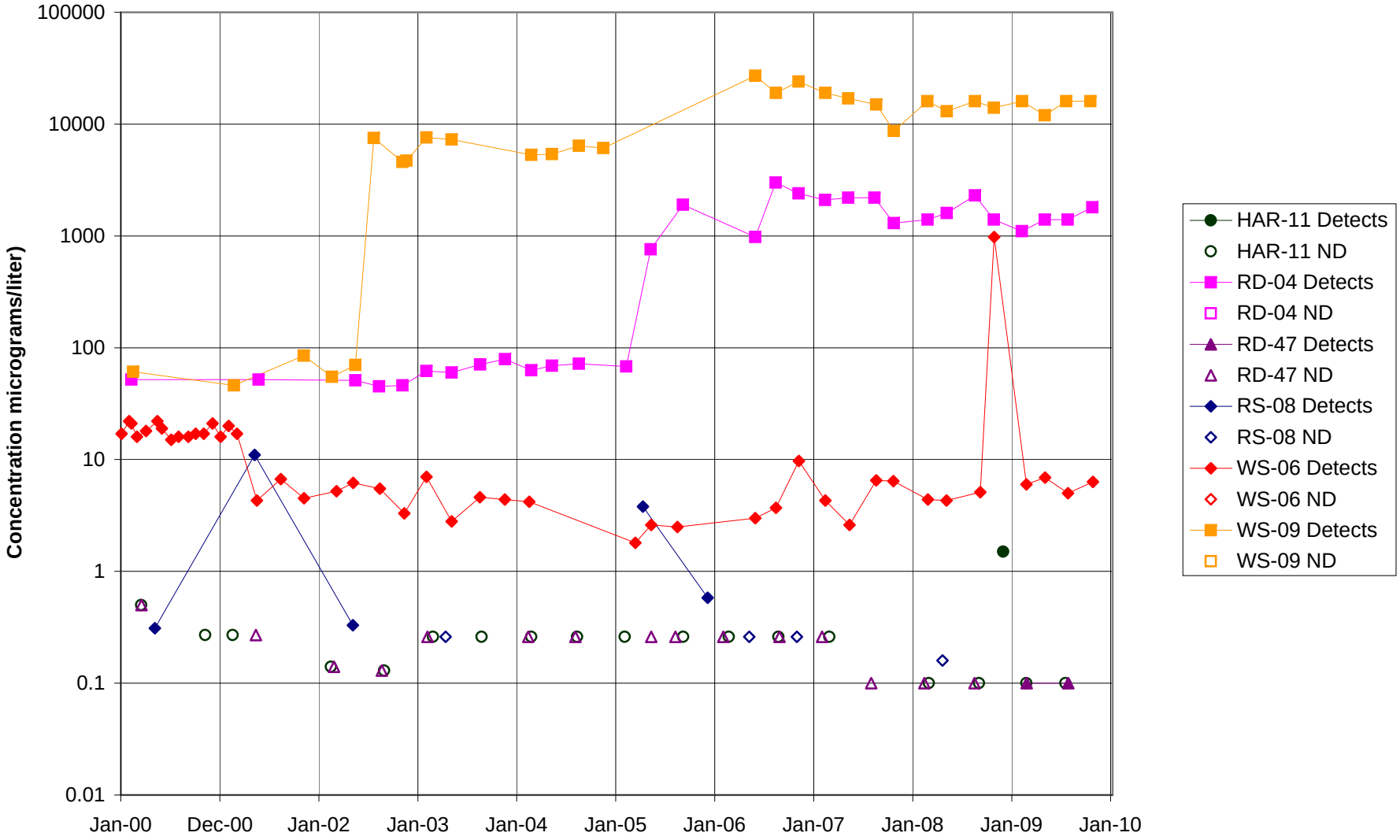


FIGURE F-350. TCE in SPA AREA WELLS

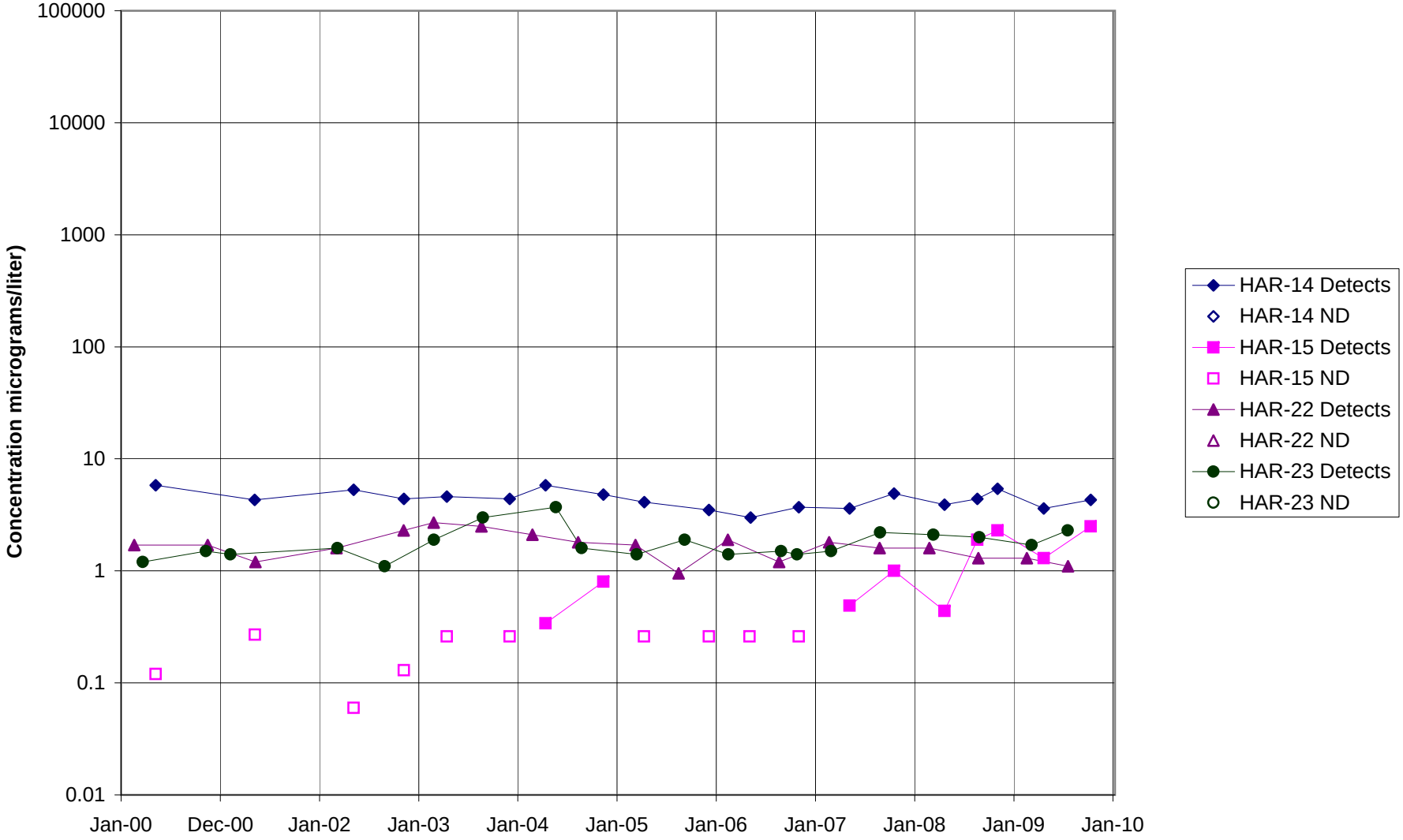


FIGURE F-351. TCE in COCA / PLF AREA WELLS

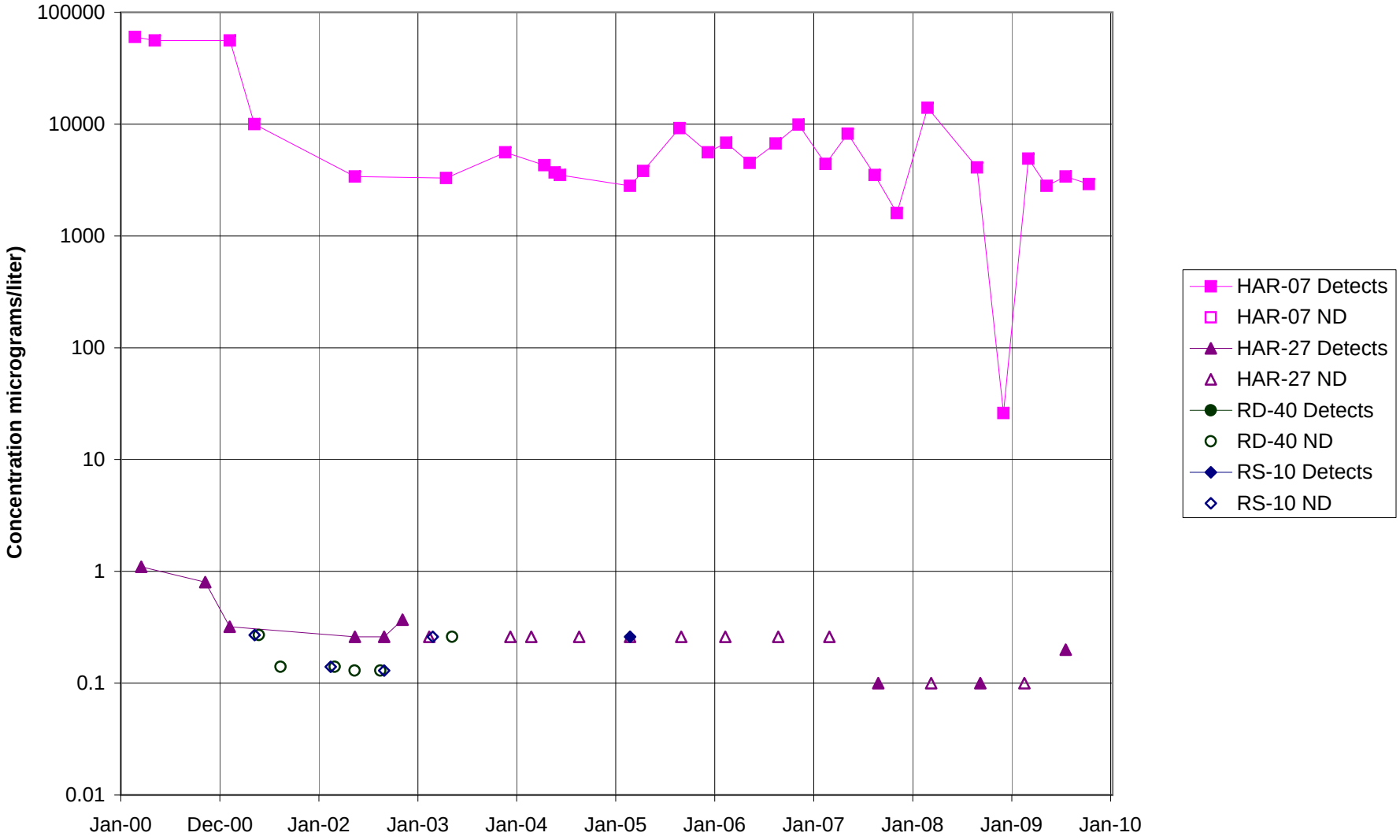
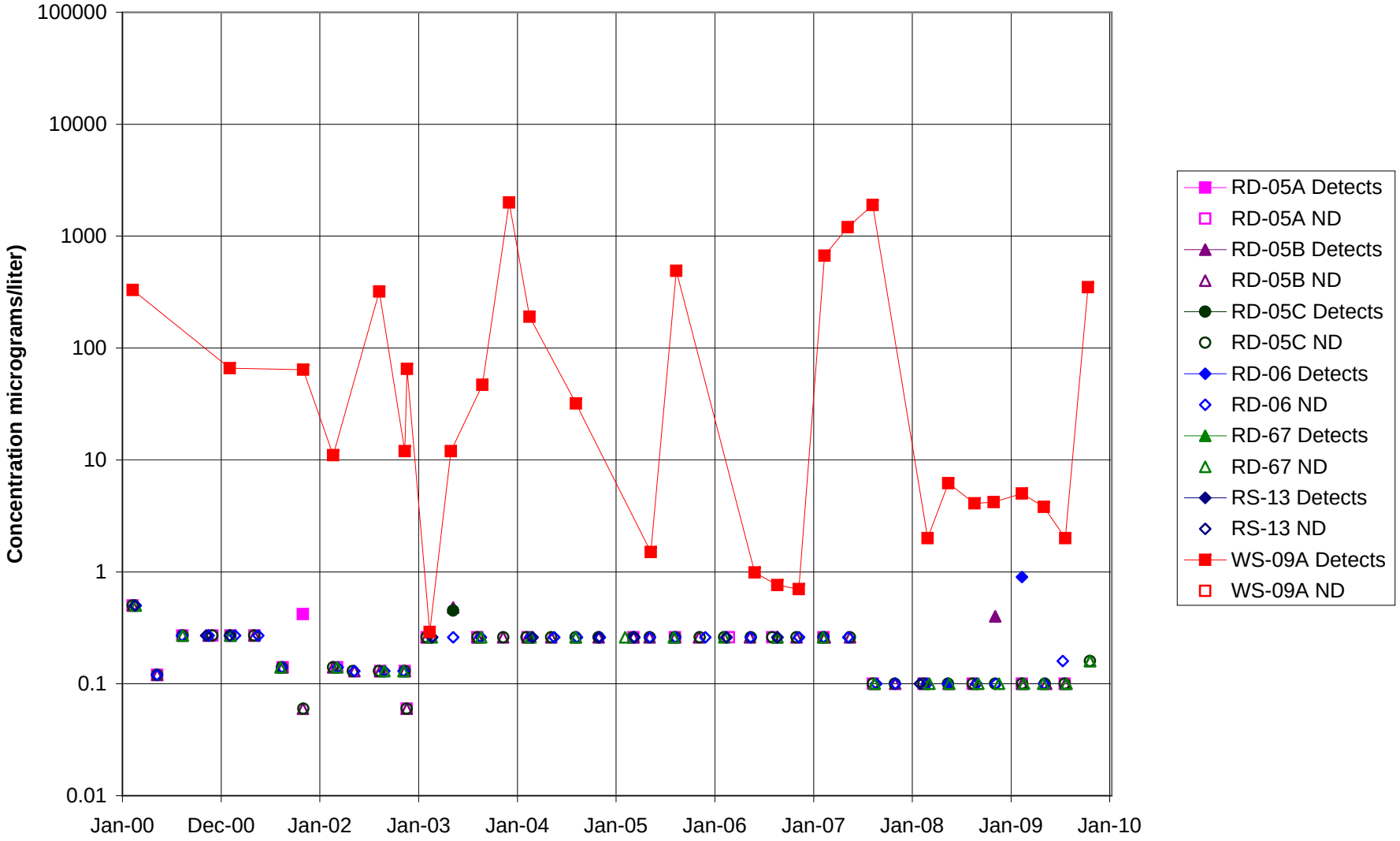


FIGURE F-352. TCE in DELTA / BUFFER ZONE AREA WELLS



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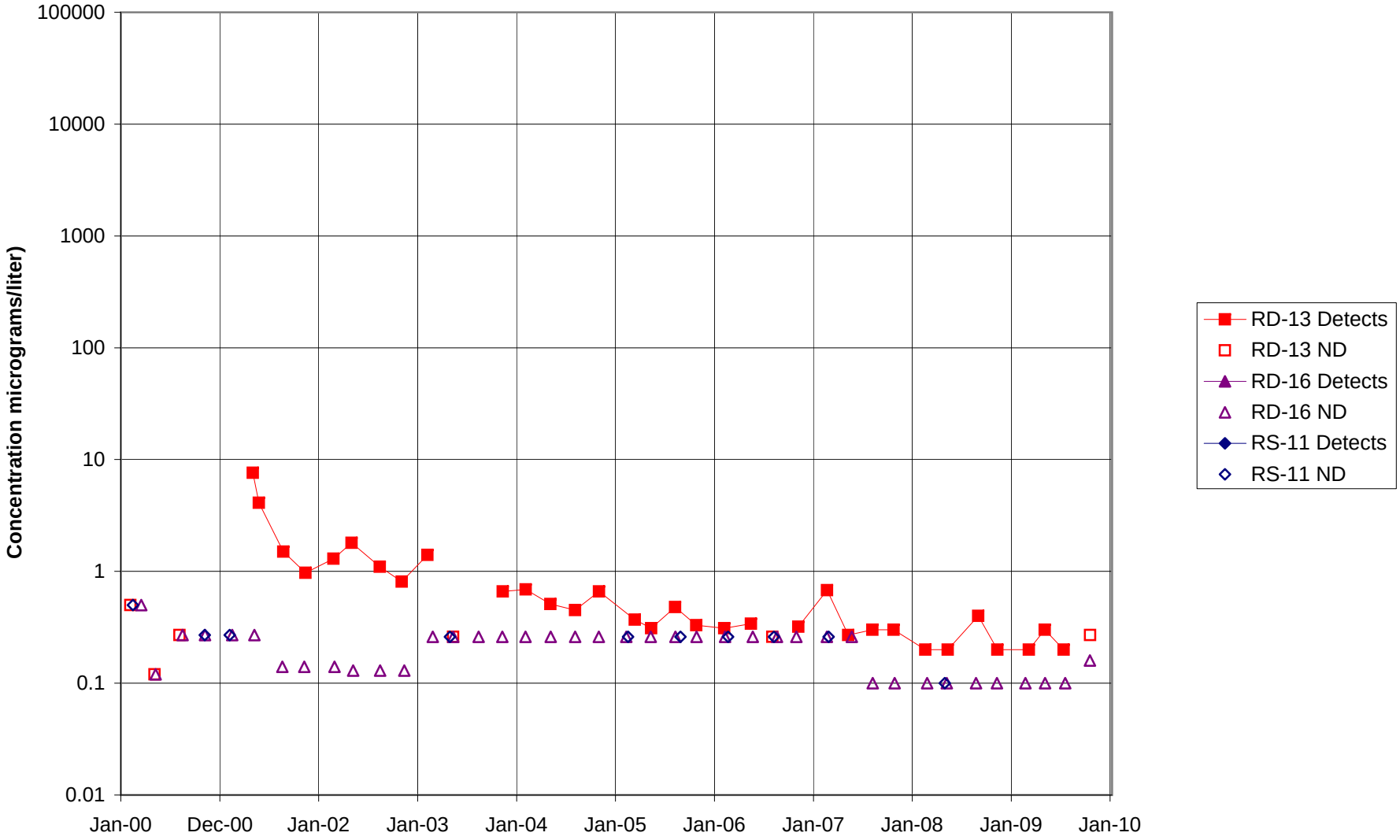


FIGURE F-354. VINYL CHLORIDE in STL-IV AREA SHALLOW WELLS

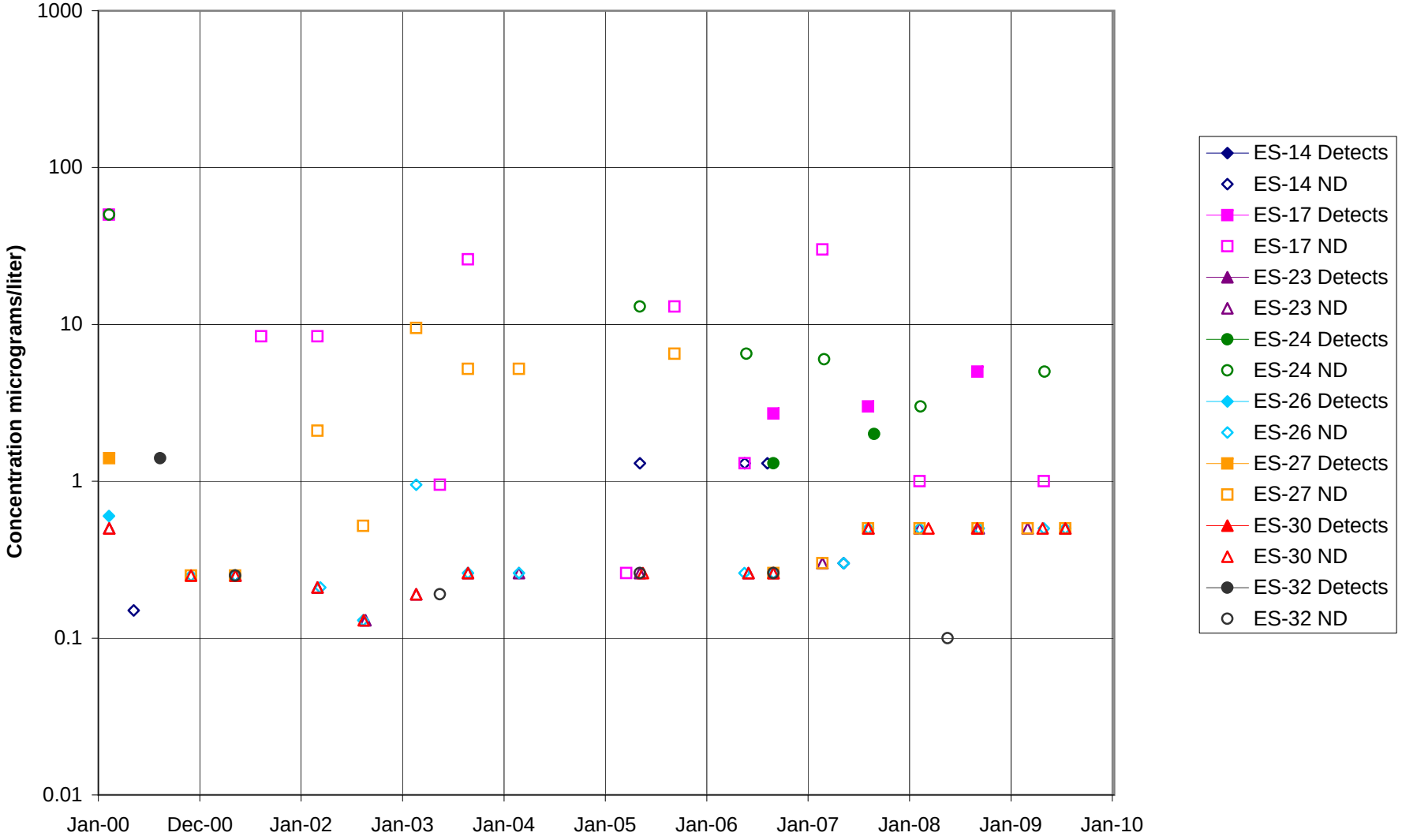


FIGURE F-355. VINYL CHLORIDE in STL-IV AREA CHATSWORTH FORMATION WELLS

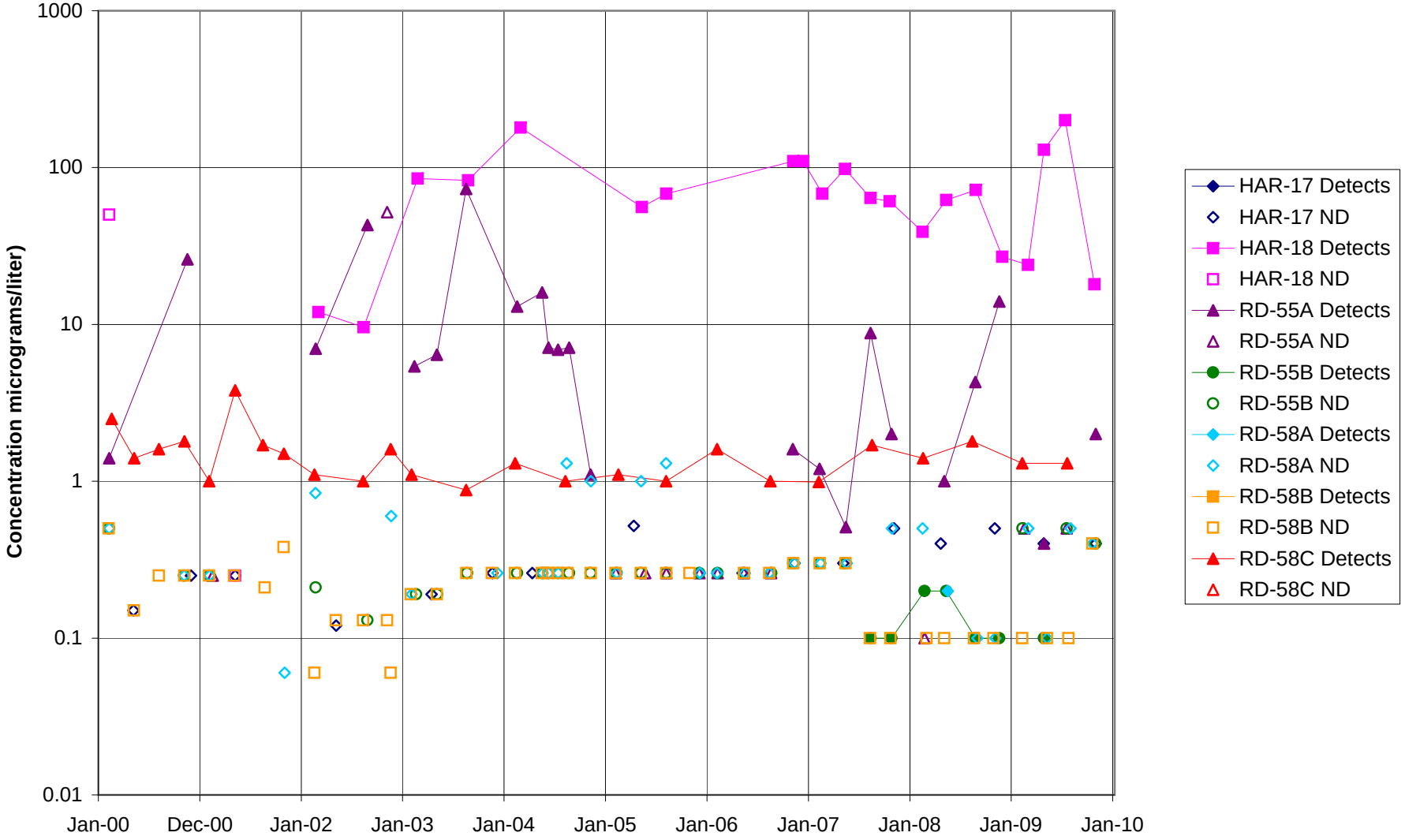


FIGURE F-356. VINYL CHLORIDE in MAIN GATE AREA WELLS - 1

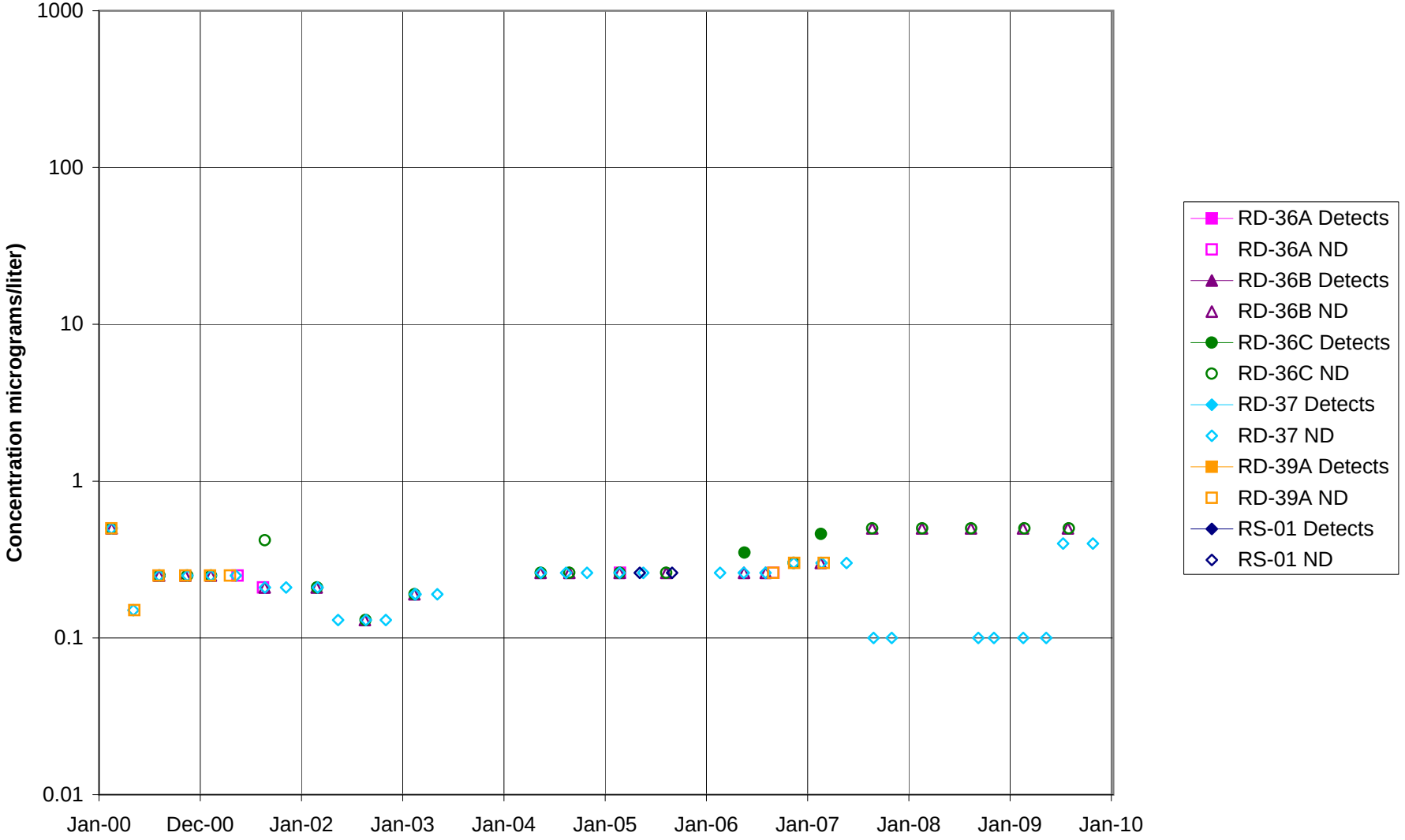


FIGURE F-357. VINYL CHLORIDE in MAIN GATE AREA WELLS - 2

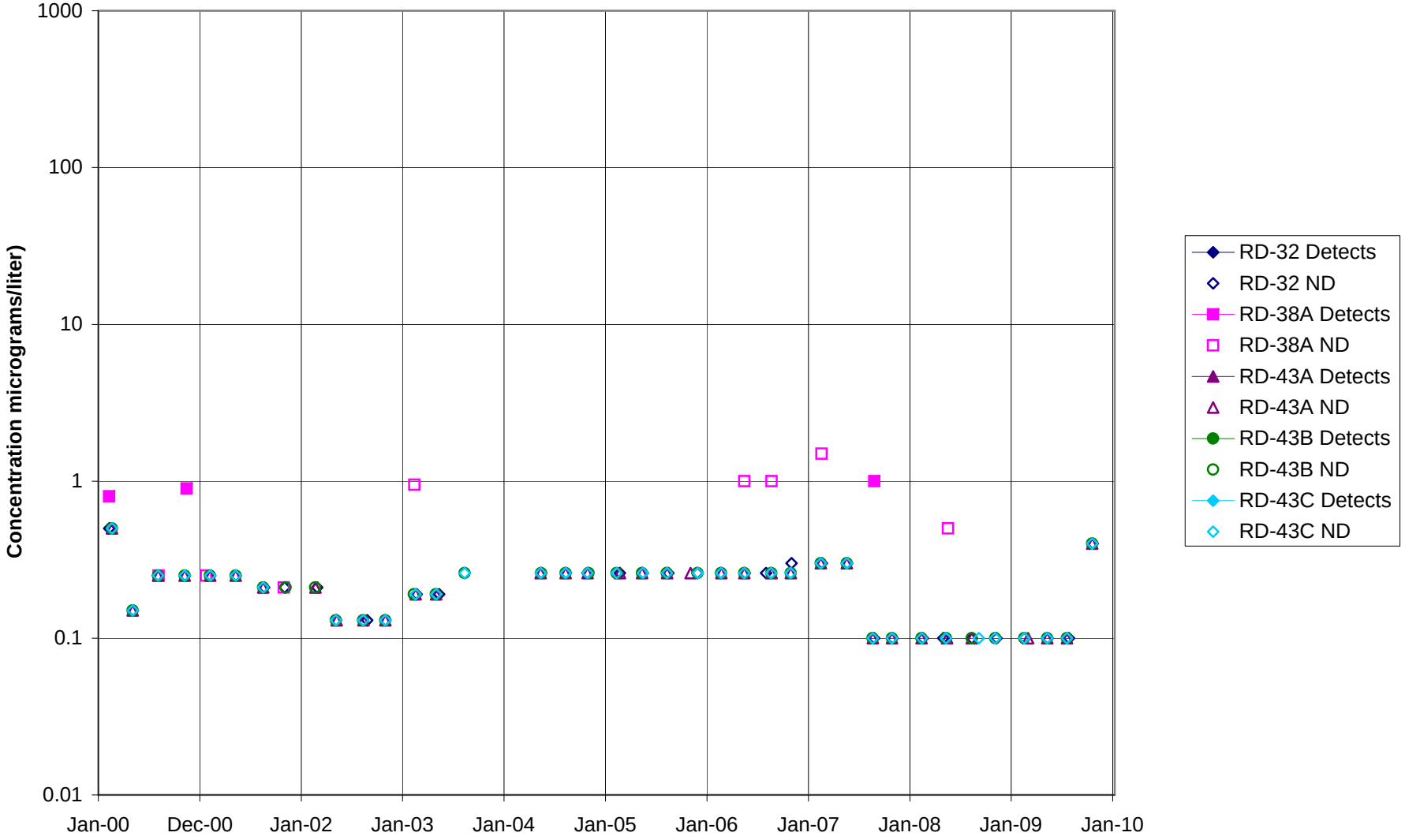


FIGURE F-358. VINYL CHLORIDE in APTF, CANYON, & HAPPY VALLEY WELLS - 1

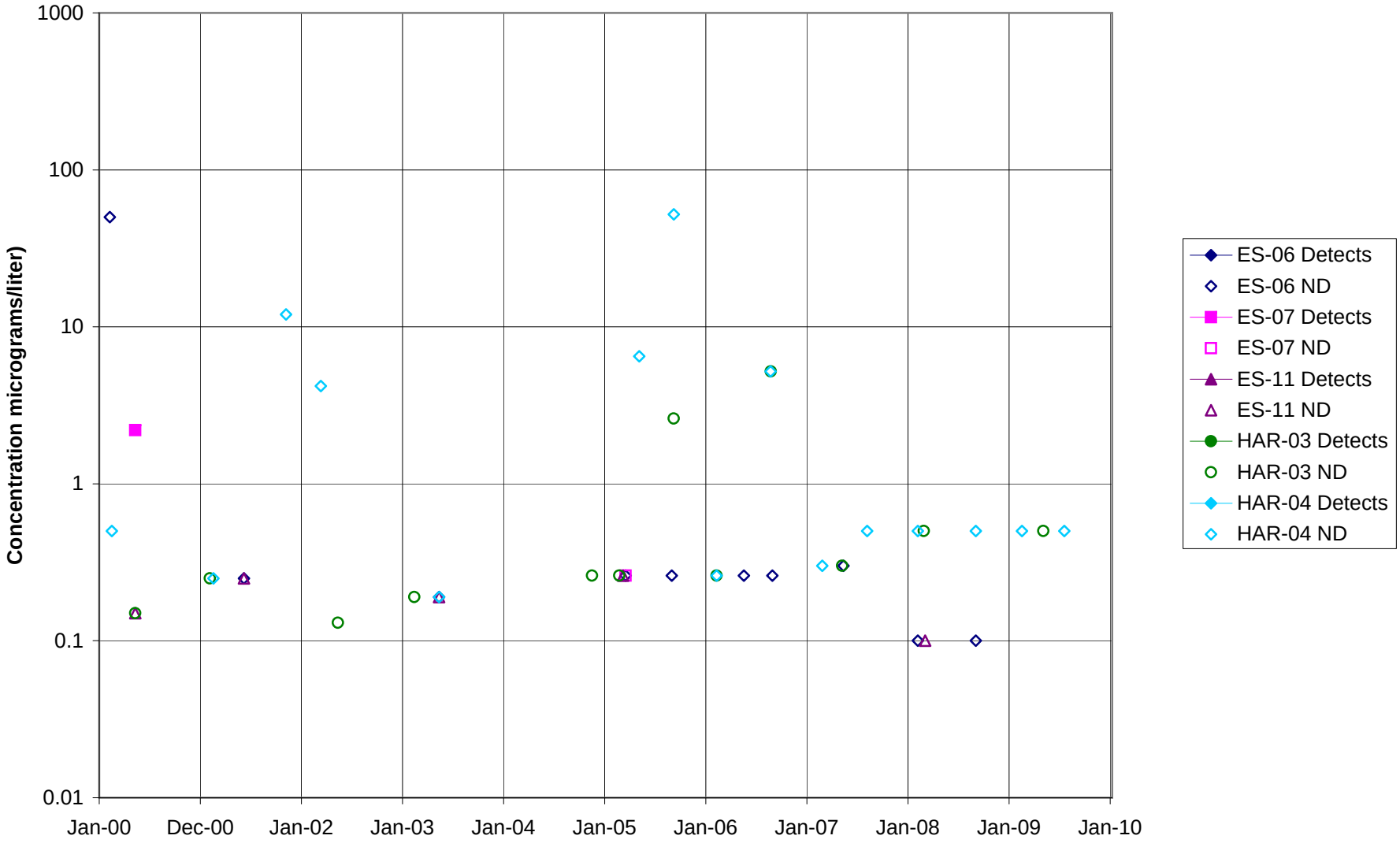


FIGURE F-359. VINYL CHLORIDE in APTF, CANYON, & HAPPY VALLEY WELLS - 2

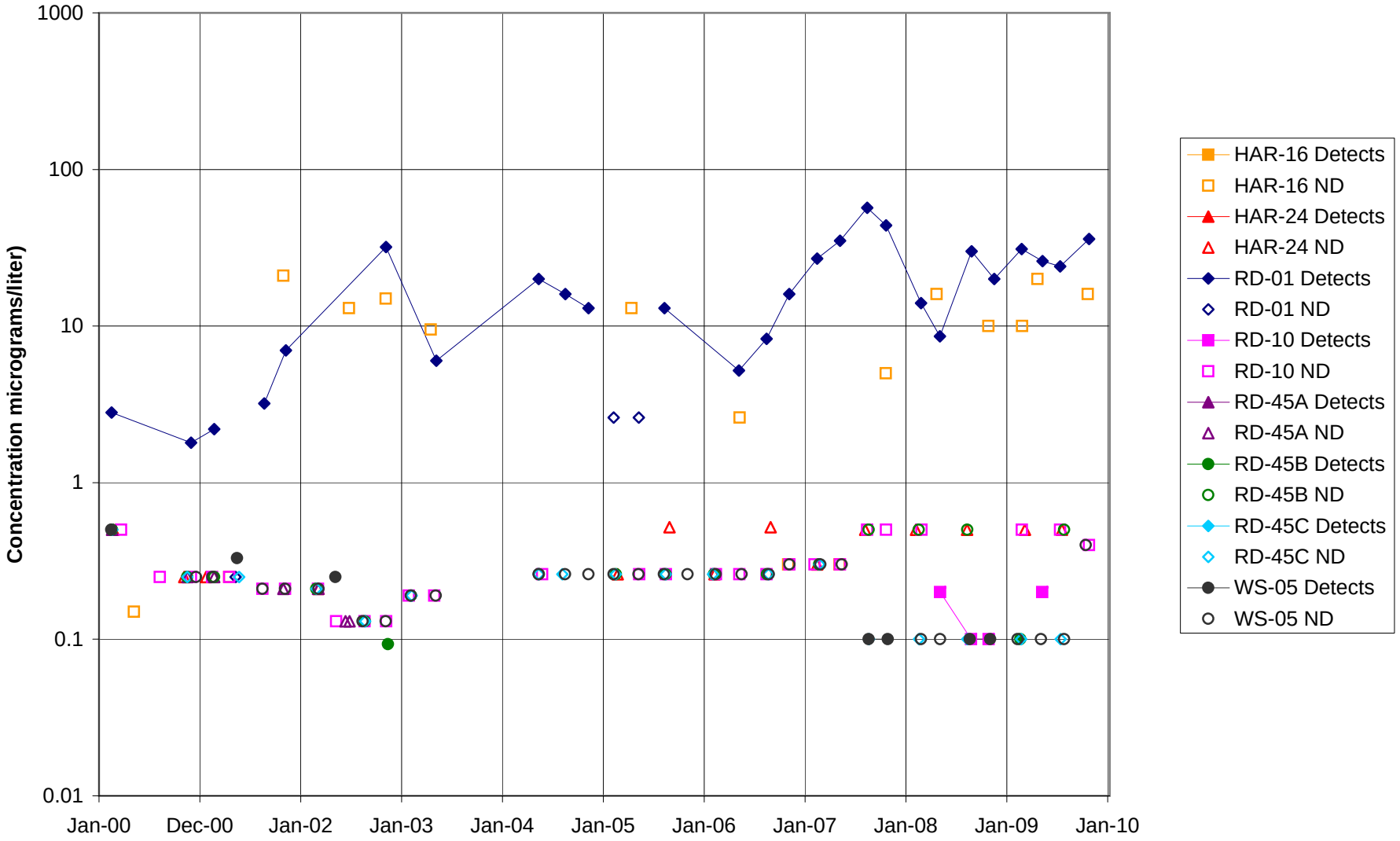


FIGURE F-360. VINYL CHLORIDE in CTL-III / PERIMETER POND AREA WELLS

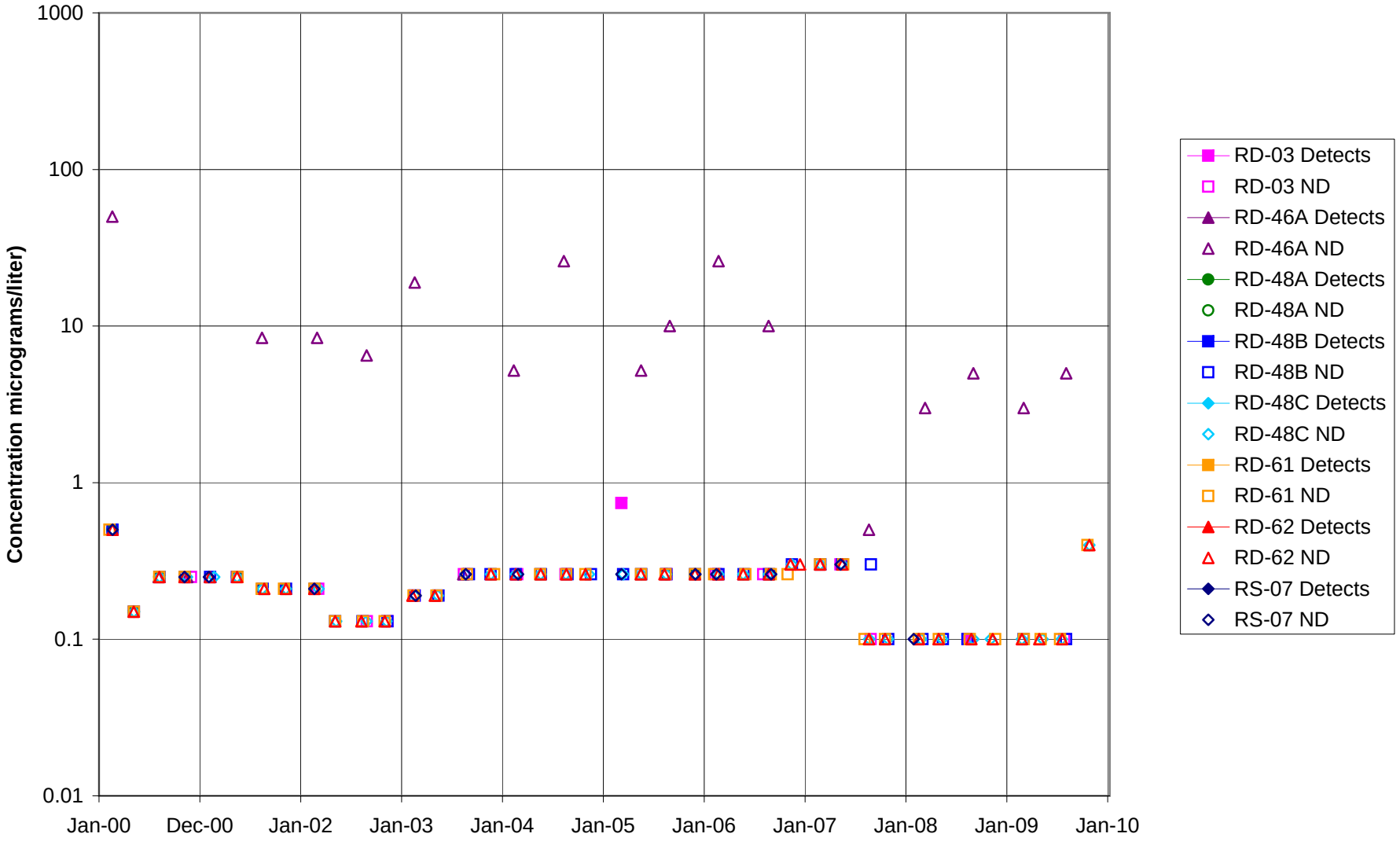


FIGURE F-361. VINYL CHLORIDE in BOWL AREA WELLS

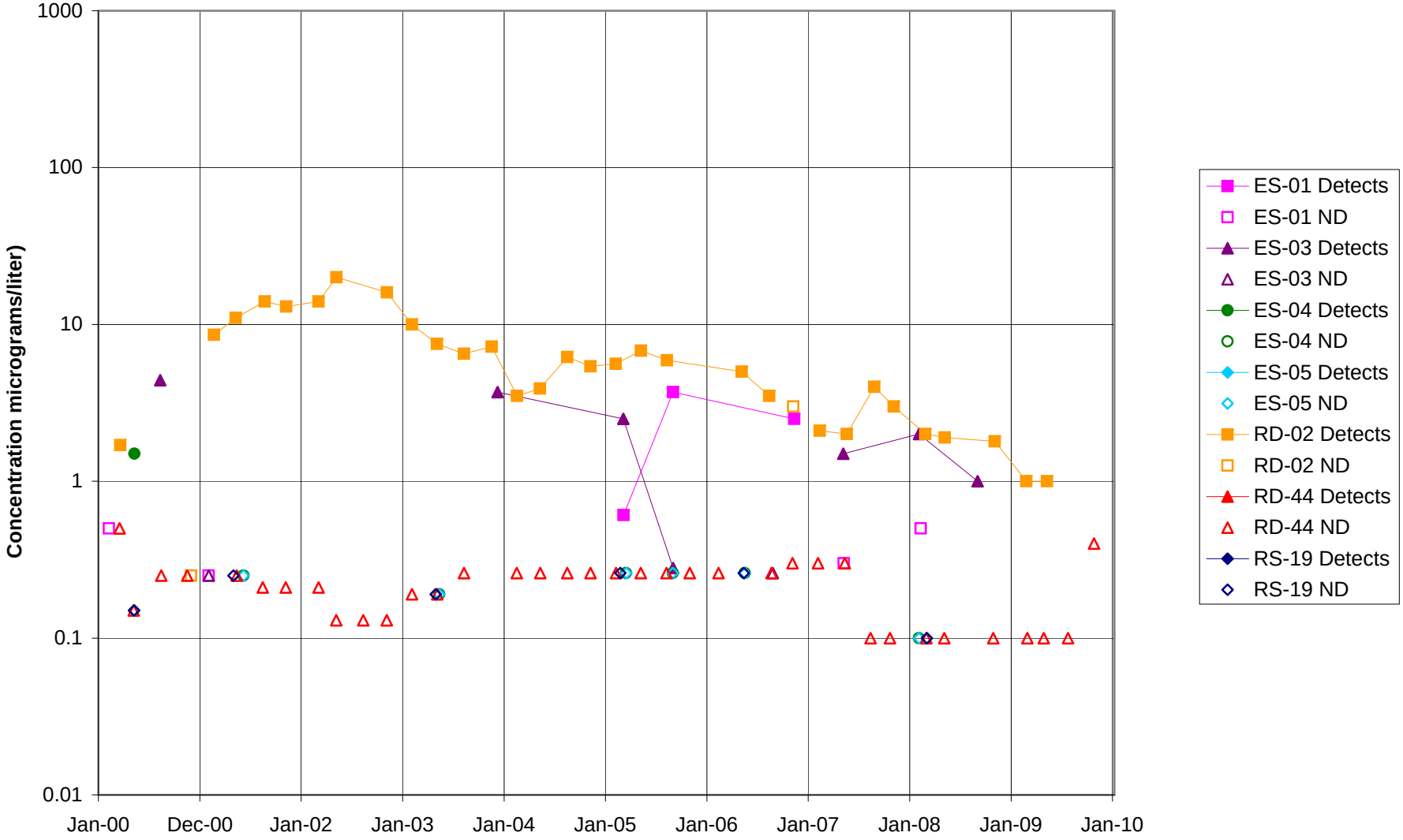


FIGURE F-362. VINYL CHLORIDE in ECL AREA WELLS

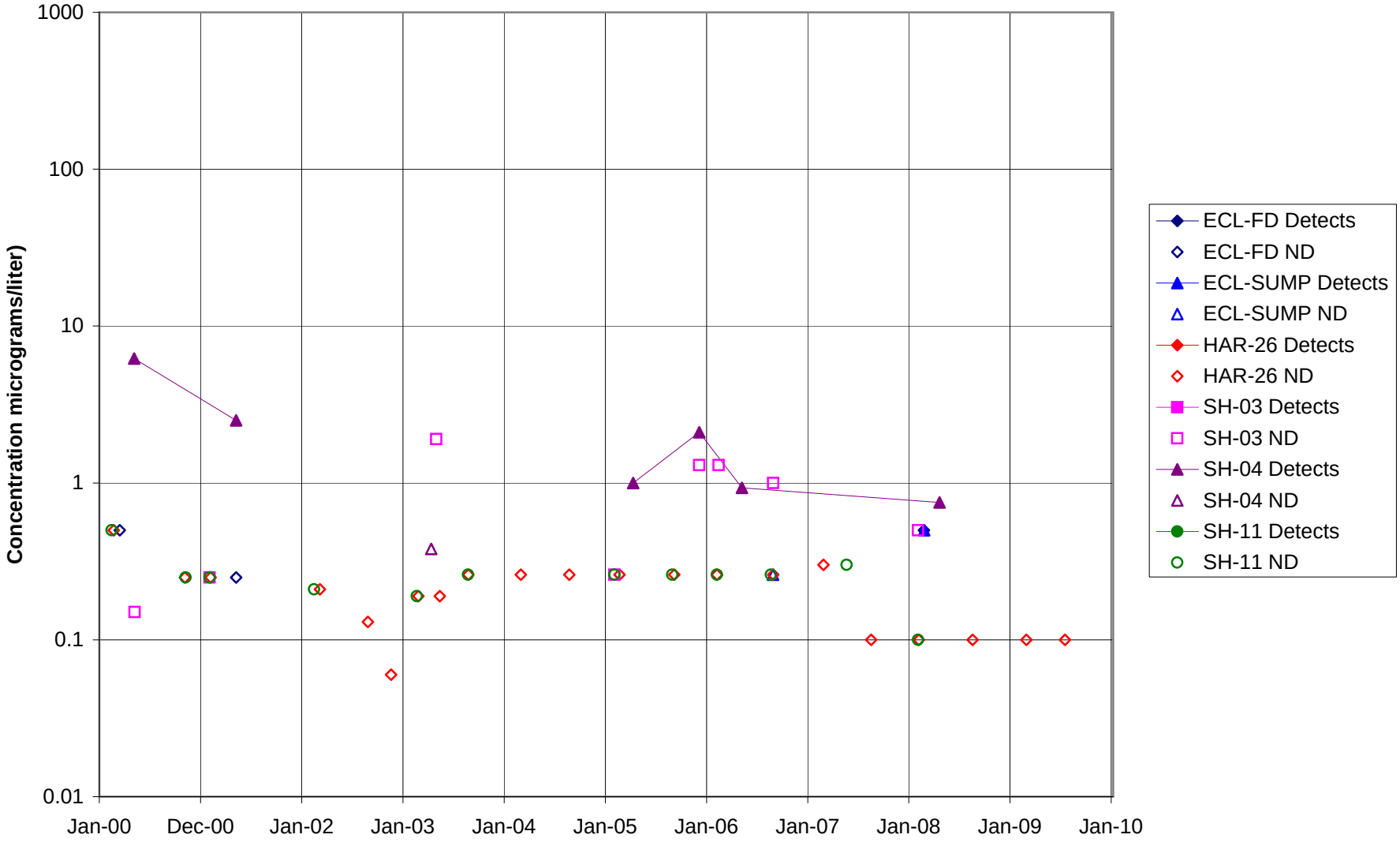


FIGURE F-363. VINYL CHLORIDE in FORMER LOX PLANT AREA WELLS

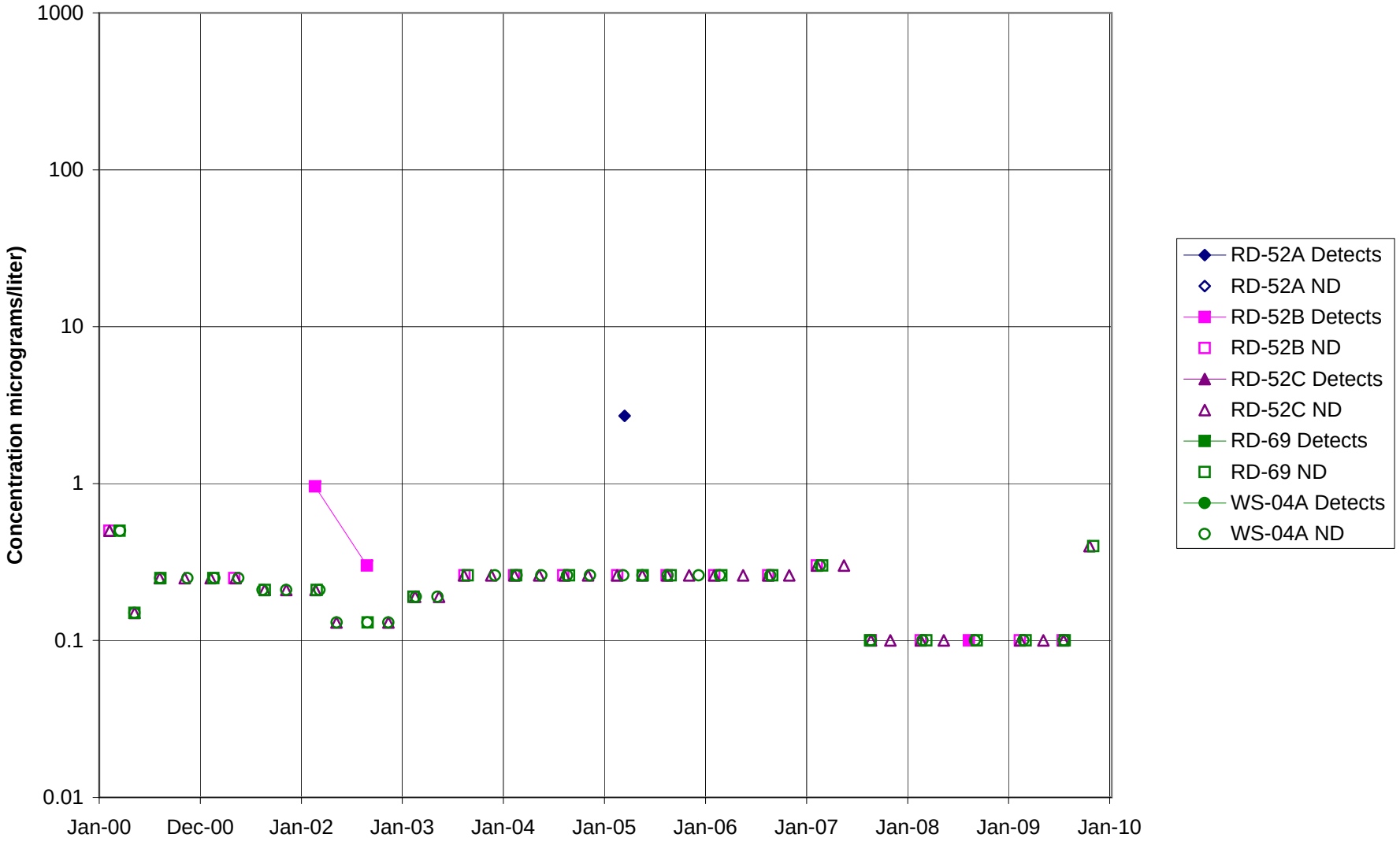


FIGURE F-364. VINYL CHLORIDE in RD-09 AREA WELLS

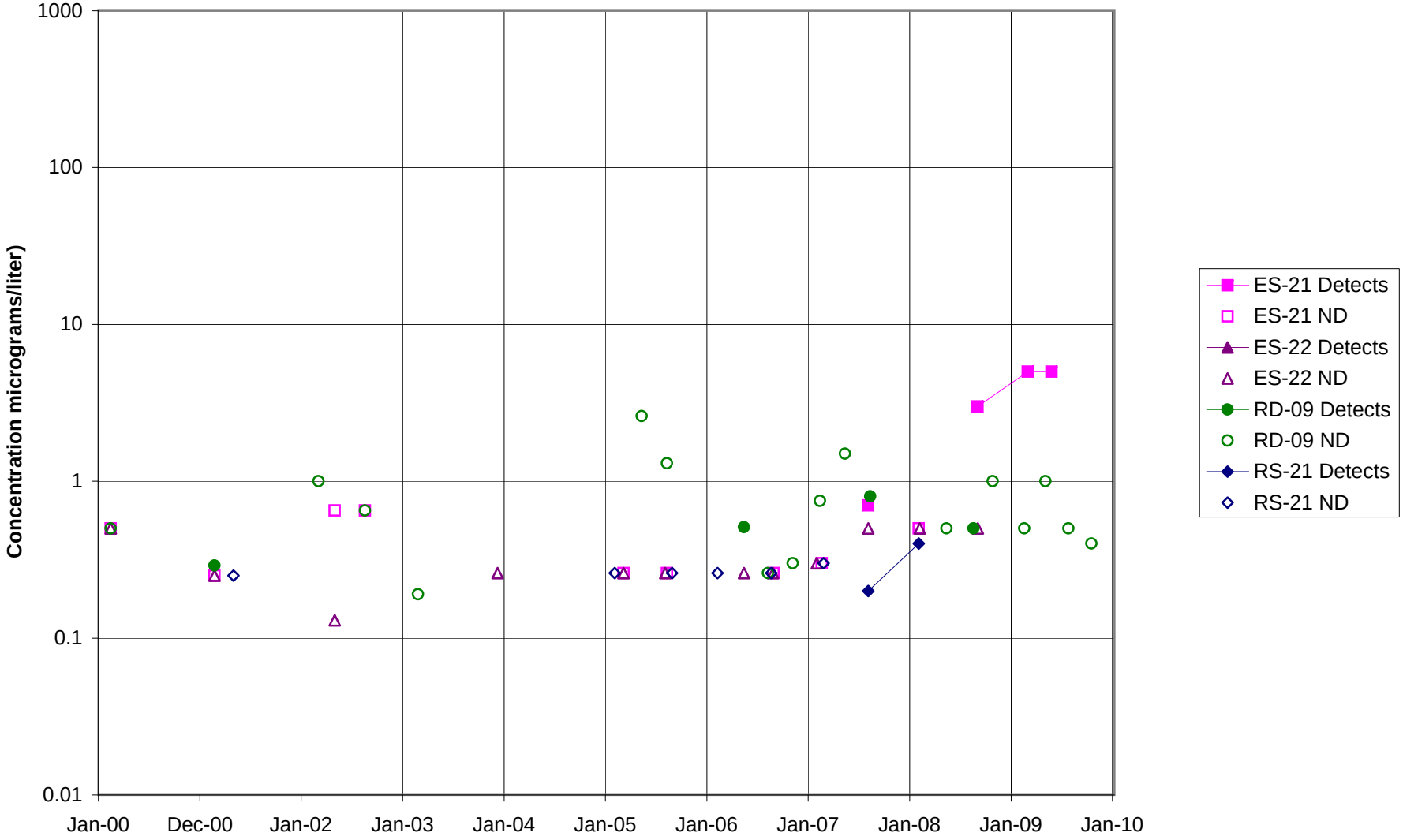


FIGURE F-365. VINYL CHLORIDE in HELIPORT, B/204 AREA WELLS

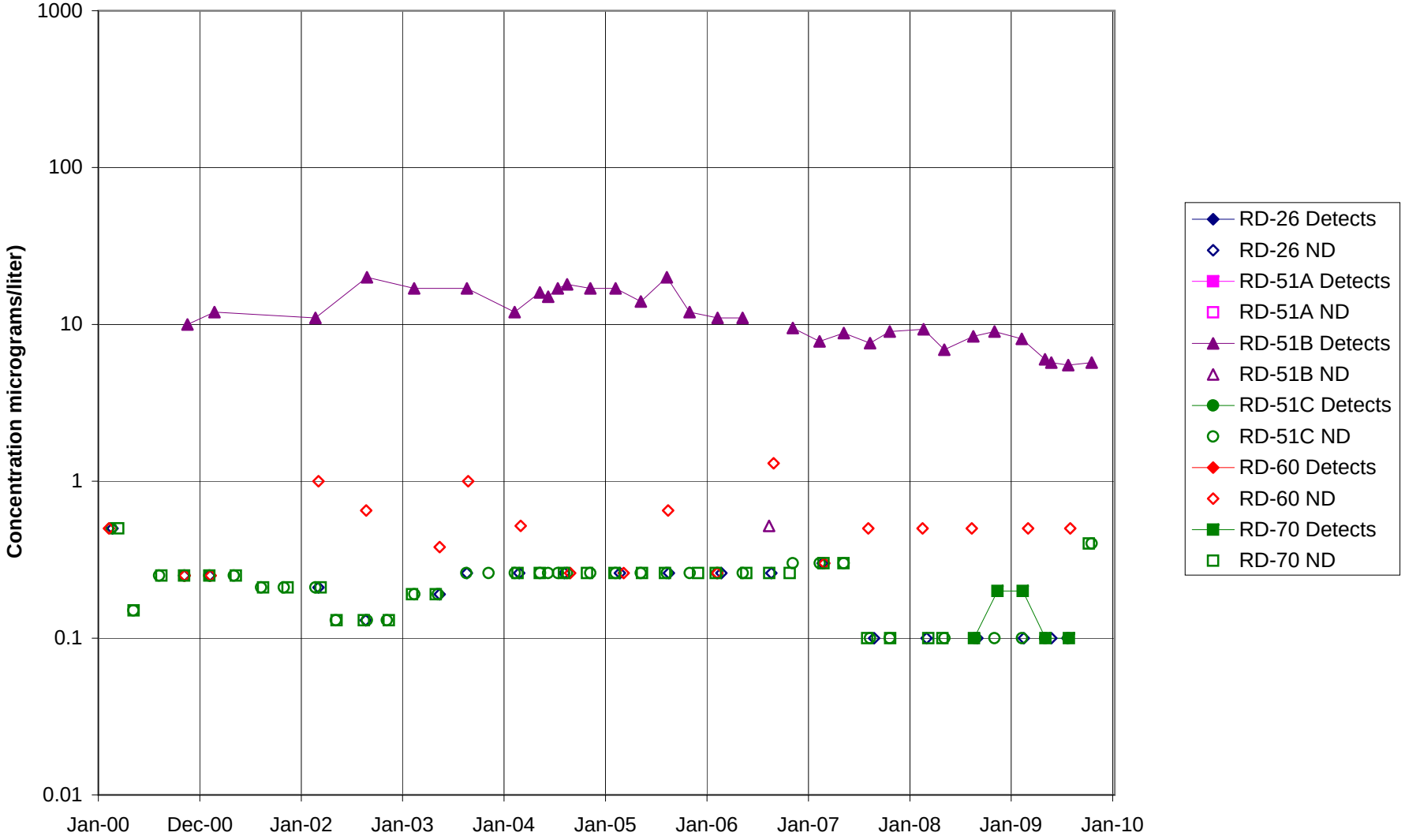


FIGURE F-366. VINYL CHLORIDE in ALFA / BRAVO AREA WELLS

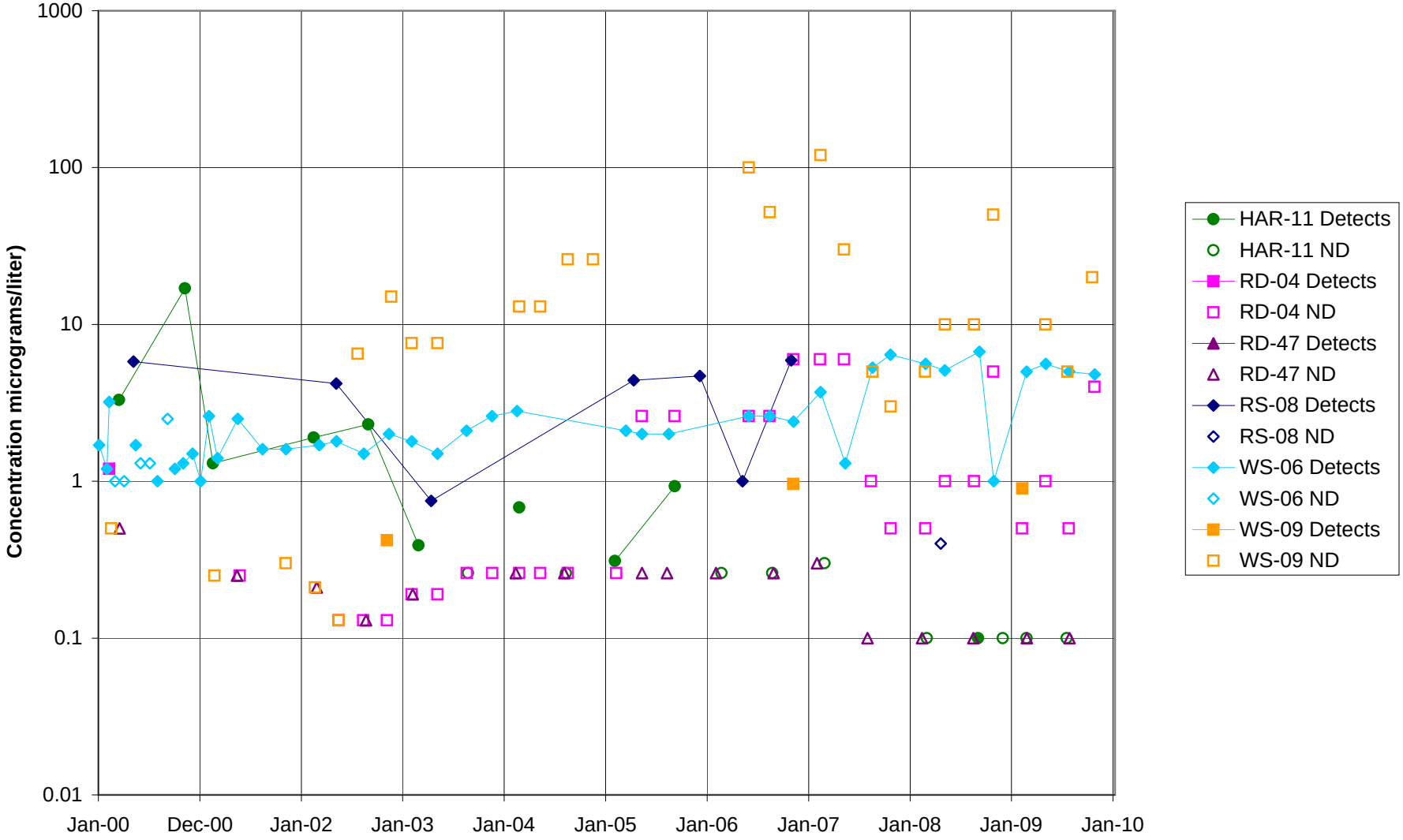


FIGURE F-367. VINYL CHLORIDE in SPA AREA WELLS

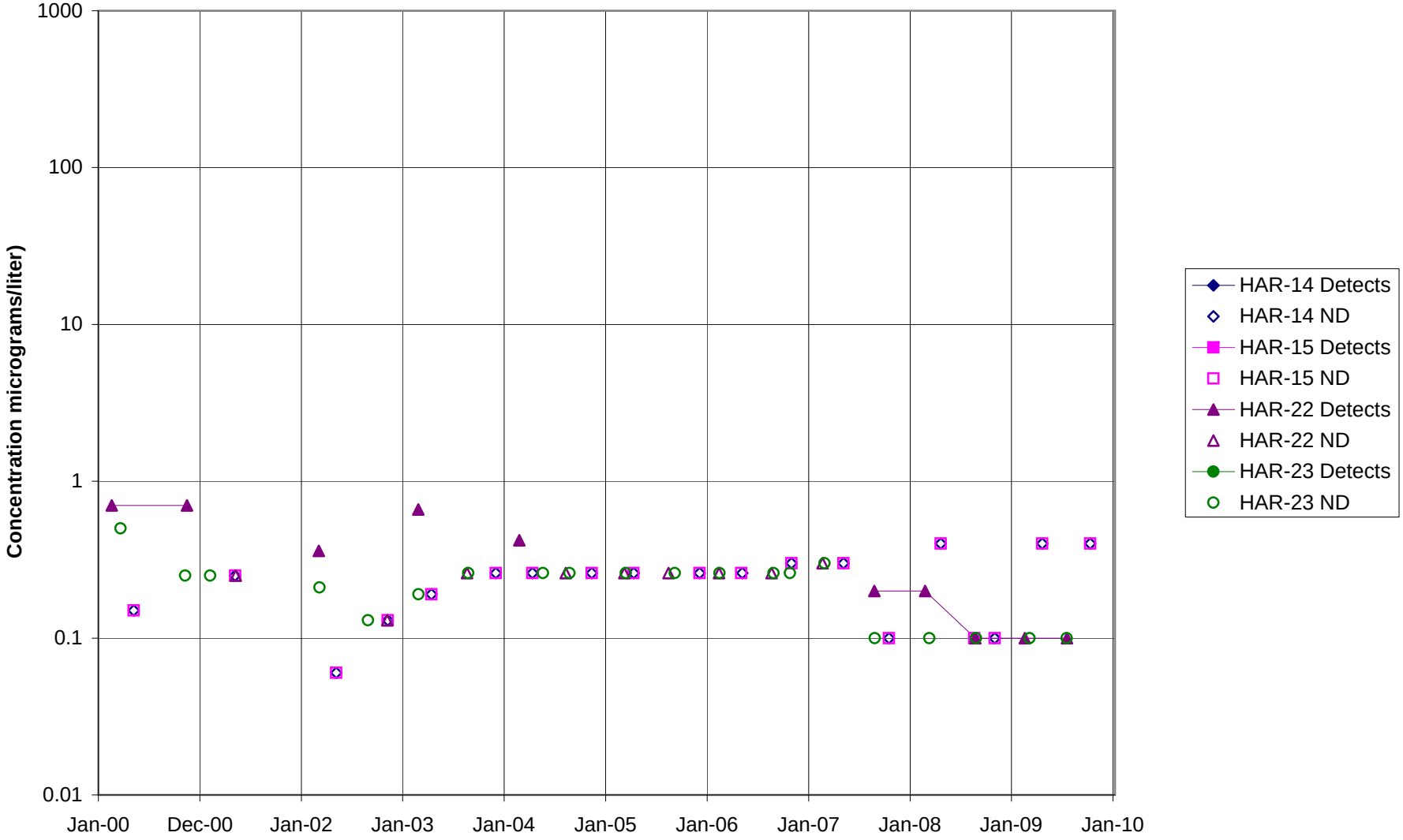


FIGURE F-368. VINYL CHLORIDE in COCA / PLF AREA WELLS

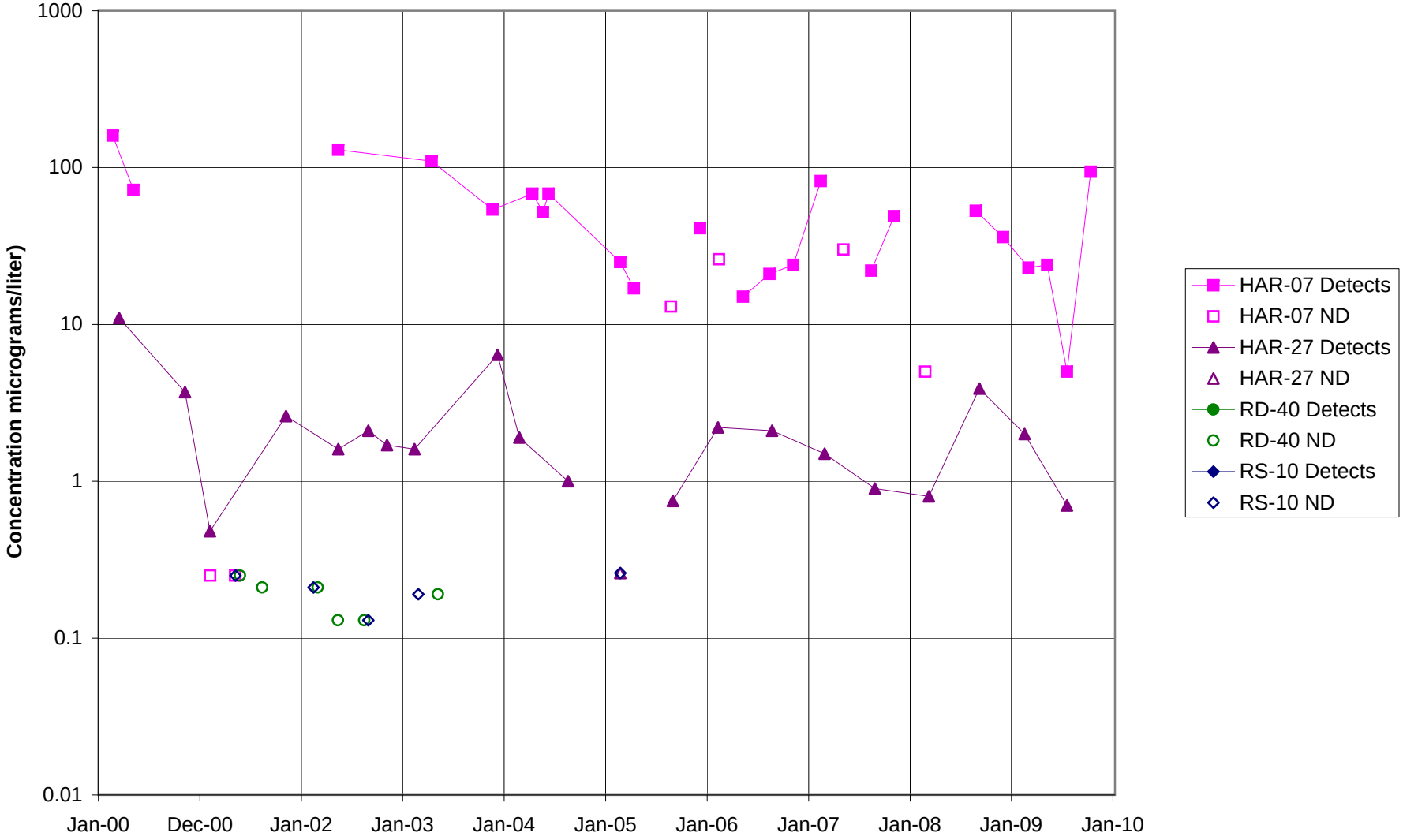


FIGURE F-369. VINYL CHLORIDE in DELTA / BUFFER ZONE AREA WELLS

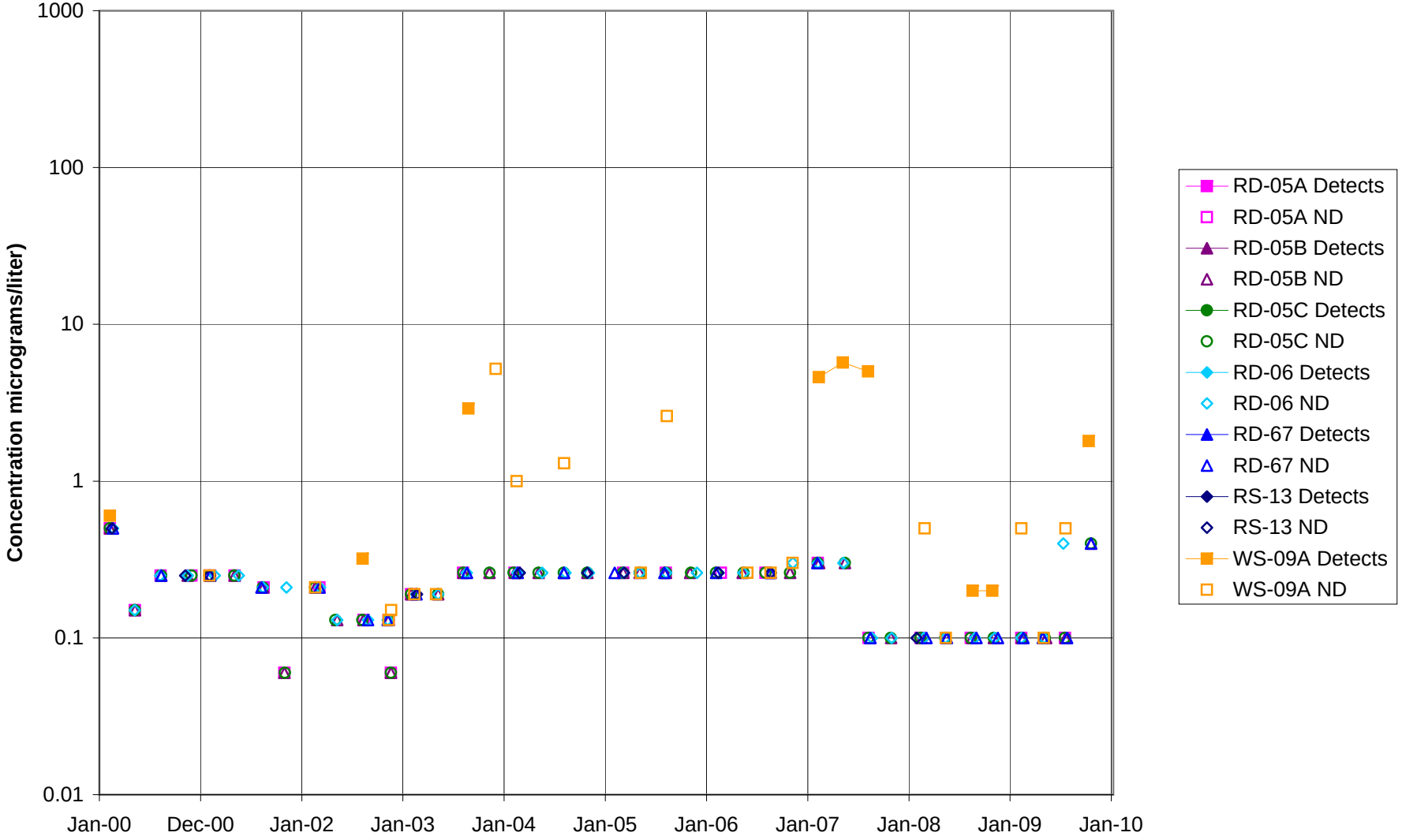
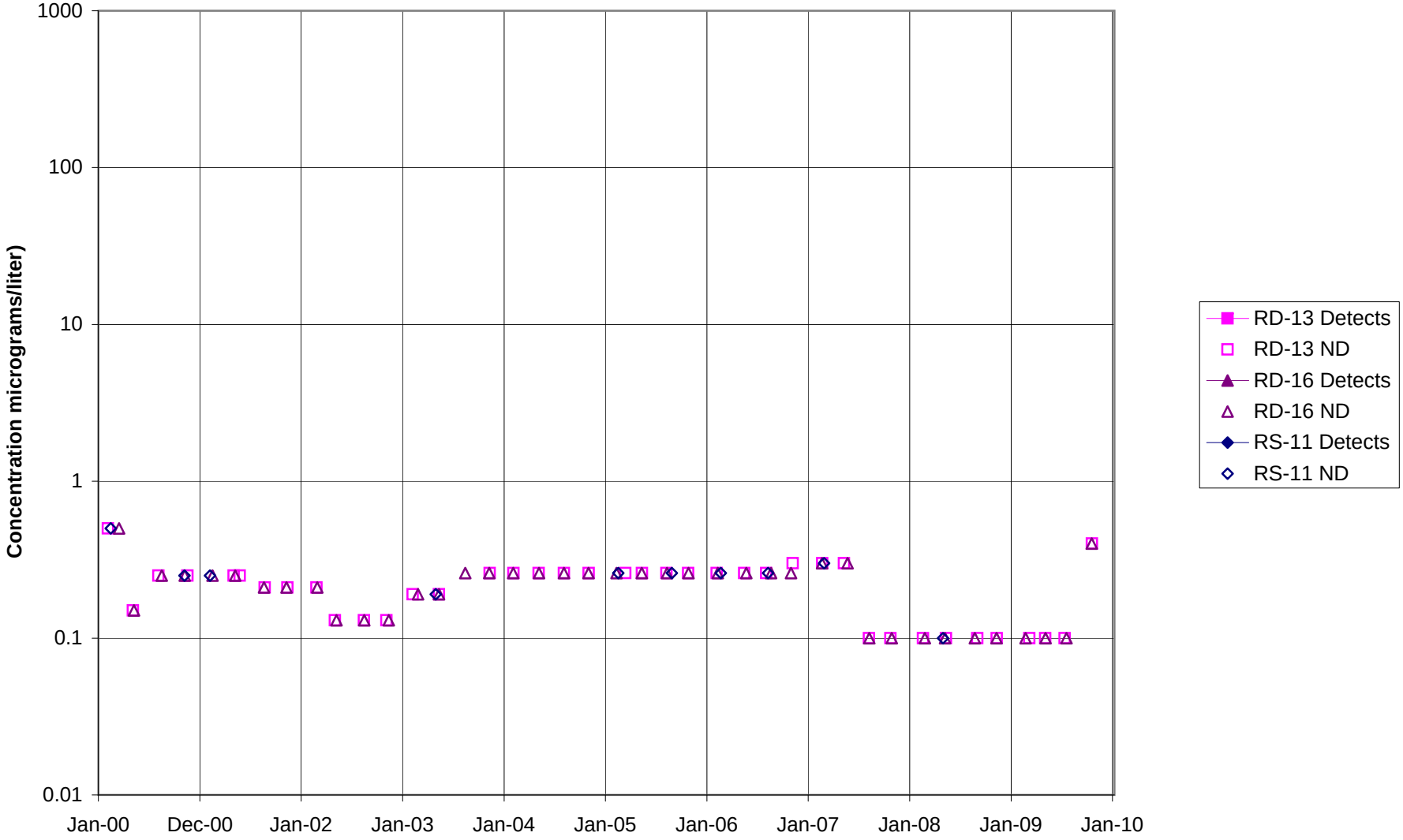


FIGURE F-370. VINYL CHLORIDE in AREA IV WELLS



APPENDIX G

Surface Water Discharge and Permitted Groundwater Remediation Systems

APPENDIX G
SURFACE WATER DISCHARGE and PERMITTED GROUNDWATER REMEDIATION SYSTEMS

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APPENDIX G

SURFACE WATER DISCHARGE and PERMITTED GROUNDWATER REMEDIATION SYSTEMS

Surface water discharge is regulated by NPDES permit No. CA-0001309. This appendix summarizes discharge limits and results of water quality analyses of surface water samples collected at Outfalls 001 and 002 during the year. Discharge limits and results of water quality analyses of surface water samples collected at Outfalls 001 and 002 during 2009 are presented in Tables G-I through G-VI. Discharge Monitoring Reports (DMR) for the SSFL NPDES outfalls are available at www.boeing.com\aboutus\environment\santa_susana\water_quality.html.

Cumulative extraction volume and VOC mass removal at each permitted groundwater remediation system are presented in Figures G-1 to G-6. These figures were prepared using data summarized in monthly remediation system reports provided by EnviroSolve Corporation (2009a through 2009j, 2010a, 2010b).

TABLE G-I
NPDES PERMIT CA0001309, OUTFALL-001
2009 REPORTING SUMMARY
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

			02/16/2009	
ANALYTE	**UNITS**	**Benchmark Limit Daily Max/Monthly Avg**	**LAB RESULT (ug/L)**	**VALIDATION QUALIFIER**
Ammonia as Nitrogen (N)	mg/L	10.1/1.96	0.56	*
Biochemical Oxygen Demand (BOD 5 day)	mg/L	30/20	2.4	*
Chloride	mg/L	150/-	10	*
Specific Conductivity (Lab)	umhos/cm	-/-	120	--
Surfactants (MBAS)	mg/L	0.5/-	0.097	J* (DNQ)
Fluoride	mg/L	1.6/-	0.12	B*
Nitrate + Nitrite as Nitrogen (N)	mg/L	8.0/-	1.4	*
Nitrate as Nitrogen (N)	mg/L	8.0/-	1.4	*
Nitrite-N	mg/L	1.0/-	ND < 0.090	*
Oil & Grease	mg/L	15/10	1.9	J* (DNQ)
Perchlorate	ug/L	6.0/-	ND < 0.90	*
pH (Field)	pH units	6.5-8.5/-	7.1	*
Total Settleable Solids	ml/L	0.3/0.1	0.20	pH*
Sulfate	mg/L	300/-	9.7	*
Temperature	deg. F	86/-	48	*
Total Cyanide	ug/L	8.5/4.3	ND < 2.2	*
Total Dissolved Solids	mg/L	950/-	120	*
Hardness	mg/L	-/-	46	--
Hardness, dissolved	mg/L	-/-	37	--
Total Organic Carbon	mg/L	-/-	10	--
Total Residual Chlorine	mg/L	0.1/-	ND < 0.10	HFT*
Total Suspended Solids	mg/L	45/15	92	--
Turbidity	NTU	-/-	140	--
Volume Discharged	MGD	160/-	0.197025	*
METALS				
Antimony	ug/L	6.0/-	ND < 2.0	U (B)
Antimony, dissolved	ug/L	-/-	ND < 2.0	U (B)
Arsenic	ug/L	10/-	ND < 7.0	U
Arsenic, dissolved	ug/L	-/-	ND < 7.0	U
Barium	mg/L	1.0/-	0.073	--
Barium, dissolved	mg/L	-/-	0.013	--
Beryllium	ug/L	4.0/-	ND < 0.90	U
Beryllium, dissolved	ug/L	-/-	ND < 0.90	U
Boron	mg/L	-/-	0.043	J (DNQ)
Boron, dissolved	mg/L	-/-	ND < 0.050	U (B)
Cadmium	ug/L	3.1/2.0	0.14	J (DNQ)
Cadmium, dissolved	ug/L	-/-	0.14	J (DNQ)
Calcium	mg/L	-/-	11	--
Calcium, Dissolved	mg/L	-/-	9.8	--
Chromium	ug/L	16.3/8.1	ND < 10	U (B)
Chromium, dissolved	ug/L	-/-	ND < 2.0	U
Chromium VI	ug/L	16.3/8.1	ND < 0.25	*
Cobalt	ug/L	-/-	2.5	J (DNQ)
Cobalt, dissolved	ug/L	-/-	ND < 2.0	U
Copper	ug/L	14.0/7.1	6.6	J (*III)
Copper, dissolved	ug/L	-/-	2.3	--
Iron	mg/L	0.3/-	8.1	--
Iron, dissolved	mg/L	-/-	0.45	--
Lead	ug/L	5.2/2.6	6.6	--
Lead, dissolved	ug/L	-/-	0.31	J (DNQ)
Magnesium	mg/L	-/-	4.6	--
Magnesium, Dissolved	mg/L	-/-	3.0	--

See Table G-VI for abbreviations, definitions, and other explanations.
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TABLE G-I
NPDES PERMIT CA0001309, OUTFALL-001
2009 REPORTING SUMMARY
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

			02/16/2009	
ANALYTE	**UNITS**	**Benchmark Limit Daily Max/Monthly Avg**	**LAB RESULT (ug/L)**	**VALIDATION QUALIFIER**
Manganese	ug/L	50/-	110	--
Manganese, dissolved	ug/L	-/-	12	J (DNQ)
Mercury	ug/L	0.10/0.05	ND < 0.027	U
Mercury, dissolved	ug/L	-/-	ND < 0.027	U
Nickel	ug/L	96/35	ND < 10	U (B)
Nickel, dissolved	ug/L	-/-	ND < 2.0	U
Selenium	ug/L	8.2/4.1	0.52	J (*III,DNQ)
Selenium, dissolved	ug/L	-/-	ND < 2.0	U (B)
Silver	ug/L	4.1/2.0	ND < 0.30	U
Silver, dissolved	ug/L	-/-	ND < 0.30	U
Thallium	ug/L	2.0/-	ND < 0.20	U
Thallium, dissolved	ug/L	-/-	ND < 0.20	U
Vanadium	ug/L	-/-	19	--
Vanadium, dissolved	ug/L	-/-	ND < 3.0	U
Zinc	ug/L	119/54	37	--
Zinc, dissolved	ug/L	-/-	15	J (*III,B,DNQ)
ORGANICS				
Benzene	ug/L	-/-	ND < 0.28	*
Carbon Tetrachloride	ug/L	-/-	ND < 0.28	*
Chloroform	ug/L	-/-	ND < 0.33	*
1,1-Dichloroethane	ug/L	-/-	ND < 0.40	*
1,2-Dichloroethane	ug/L	-/-	ND < 0.28	*
1,1-Dichloroethene	ug/L	6.0/3.2	ND < 0.42	*
1,4-Dioxane	ug/L	-/-	ND < 1.0	*
Ethylbenzene	ug/L	-/-	ND < 0.25	*
Tetrachloroethene	ug/L	-/-	ND < 0.32	*
Toluene	ug/L	-/-	ND < 0.36	*
Xylenes (Total)	ug/L	-/-	ND < 0.90	*
1,1,1-Trichloroethane	ug/L	-/-	ND < 0.30	*
1,1,2-Trichloroethane	ug/L	-/-	ND < 0.30	*
Trichloroethene	ug/L	5.0/-	ND < 0.26	*
Trichlorofluoromethane	ug/L	-/-	ND < 0.34	*
Trichlorotrifluoroethane (Freon 113)	ug/L	-/-	ND < 0.50	*
Vinyl Chloride	ug/L	-/-	ND < 0.40	*
TPH				
DRO (C13 - C28)	mg/L	-/-	ND < 0.047	*
GRO (C4 - C12)	ug/L	-/-	ND < 0.025	*
ADDITIONAL ANALYTES				
1,2-Dichloro-1,1,2-trifluoroethane	ug/L	-/-	ND < 2.5	*
2,4,5-Trichlorophenol	ug/L	-/-	ND < 0.19	U
1,1,2,2-Tetrachloroethane	ug/L	-/-	ND < 0.30	*
1,2,4-Trichlorobenzene	ug/L	-/-	ND < 0.094	U
1,2-Dichlorobenzene (EPA 624)	ug/L	-/-	ND < 0.32	*
1,2-Dichlorobenzene (EPA 625)	ug/L	-/-	ND < 0.094	U
1,2-Dichloropropane	ug/L	-/-	ND < 0.35	*
1,2-Diphenylhydrazine/Azobenzene	ug/L	-/-	ND < 0.094	U
1,3-Dichlorobenzene (EPA 625)	ug/L	-/-	ND < 0.094	U
1,3-Dichlorobenzene (EPA 624)	ug/L	-/-	ND < 0.35	*
1,4-Dichlorobenzene (EPA 625)	ug/L	-/-	ND < 0.19	U
1,4-Dichlorobenzene (EPA 624)	ug/L	-/-	ND < 0.37	*
2,4,6-Trichlorophenol	ug/L	13.0/6.5	ND < 0.094	U
2,4-Dichlorophenol	ug/L	-/-	ND < 0.19	U

See Table G-VI for abbreviations, definitions, and other explanations.
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TABLE G-I
NPDES PERMIT CA0001309, OUTFALL-001
2009 REPORTING SUMMARY
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

			02/16/2009	
ANALYTE	**UNITS**	**Benchmark Limit Daily Max/Monthly Avg**	**LAB RESULT (ug/L)**	**VALIDATION QUALIFIER**
2,4-Dimethylphenol	ug/L	-/-	ND < 0.28	U
2,4-Dinitrophenol	ug/L	-/-	ND < 0.85	U
2,4-Dinitrotoluene	ug/L	18.3/9.1	ND < 0.19	U
2,6-Dinitrotoluene	ug/L	-/-	ND < 0.094	UJ (*III)
2-Chloroethylvinylether	ug/L	-/-	ND < 1.8	*
2-Chloronaphthalene	ug/L	-/-	ND < 0.094	U
2-Chlorophenol	ug/L	-/-	ND < 0.19	U
2-Methyl-4,6-dinitrophenol	ug/L	-/-	ND < 0.19	U
2-Methylnaphthalene	ug/L	-/-	ND < 0.094	U
2-Methylphenol	ug/L	-/-	ND < 0.094	UJ (*III)
2-Nitrophenol	ug/L	-/-	ND < 0.094	U
3,3'-Dichlorobenzidine	ug/L	-/-	ND < 4.7	U
4,4'-DDD	ug/L	-/-	ND < 0.0019	UJ (C)
4,4'-DDE	ug/L	-/-	ND < 0.0028	UJ (C)
4,4'-DDT	ug/L	-/-	ND < 0.0038	UJ (C)
4-Bromophenylphenylether	ug/L	-/-	ND < 0.094	U
4-Chloro-3-methylphenol	ug/L	-/-	ND < 0.19	U
4-Chloroaniline	ug/L	-/-	ND < 0.094	UJ (*III)
4-Chlorophenylphenylether	ug/L	-/-	ND < 0.094	U
4-Nitrophenol	ug/L	-/-	ND < 2.4	U
Acenaphthene	ug/L	-/-	ND < 0.094	U
Acenaphthylene	ug/L	-/-	ND < 0.094	U
Acrolein	ug/L	-/-	ND < 4.0	C*
Acrylonitrile	ug/L	-/-	ND < 0.70	C*
Acute Toxicity	% SURVIVAL	70-100/-	100	*
Aldrin	ug/L	-/-	ND < 0.0014	UJ (C)
alpha-BHC	ug/L	0.03/0.01	ND < 0.0053	UJ (H)
Aniline	ug/L	-/-	ND < 0.28	U
Anthracene	ug/L	-/-	ND < 0.094	U
Aroclor-1016	ug/L	-/-	ND < 0.24	*
Aroclor-1221	ug/L	-/-	ND < 0.24	*
Aroclor-1232	ug/L	-/-	ND < 0.24	*
Aroclor-1242	ug/L	-/-	ND < 0.24	*
Aroclor-1248	ug/L	-/-	ND < 0.24	*
Aroclor-1254	ug/L	-/-	ND < 0.24	*
Aroclor-1260	ug/L	-/-	ND < 0.24	*
Benzidine	ug/L	-/-	ND < 4.7	U
Benzo(a)anthracene	ug/L	-/-	ND < 0.094	U
Benzo(a)pyrene	ug/L	-/-	ND < 0.094	U
Benzo(b)fluoranthene	ug/L	-/-	ND < 0.094	U
Benzo(g,h,I)perylene	ug/L	-/-	ND < 0.094	U
Benzo(k)fluoranthene	ug/L	-/-	ND < 0.094	U
Benzoic acid	ug/L	-/-	ND < 2.8	U
Benzyl alcohol	ug/L	-/-	ND < 0.094	UJ (*III)
beta-BHC	ug/L	-/-	ND < 0.0038	U
bis (2-Chloroethyl) ether	ug/L	-/-	ND < 0.094	U
bis (2-ethylhexyl) Phthalate	ug/L	4.0/-	ND < 1.6	U
bis(2-Chloroethoxy) methane	ug/L	-/-	ND < 0.094	UJ (*III)
bis(2-Chloroisopropyl) ether	ug/L	-/-	ND < 0.094	U
Bromodichloromethane	ug/L	-/-	ND < 0.30	*
Bromoform	ug/L	-/-	ND < 0.40	*
Bromomethane	ug/L	-/-	ND < 0.42	*

See Table G-VI for abbreviations, definitions, and other explanations.
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TABLE G-I
NPDES PERMIT CA0001309, OUTFALL-001
2009 REPORTING SUMMARY
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

			02/16/2009	
ANALYTE	**UNITS**	**Benchmark Limit Daily Max/Monthly Avg**	**LAB RESULT (ug/L)**	**VALIDATION QUALIFIER**
Butylbenzylphthalate	ug/L	-/-	ND < 4.7	U (B)
Chlordane	ug/L	-/-	ND < 0.038	U
Chlorobenzene	ug/L	-/-	ND < 0.36	*
Chloroethane	ug/L	-/-	ND < 0.40	*
Chloromethane	ug/L	-/-	ND < 0.40	*
Chronic Toxicity	TUC	1.0/-	1.0	*
Chrysene	ug/L	-/-	ND < 0.094	U
cis-1,3-Dichloropropene	ug/L	-/-	ND < 0.22	L*
Cyclohexane	ug/L	-/-	ND < 2.5	*
delta-BHC	ug/L	-/-	ND < 0.0033	UJ (C)
Dibenzo(a,h)anthracene	ug/L	-/-	ND < 0.094	U
Dibenzofuran	ug/L	-/-	ND < 0.094	U
Dibromochloromethane	ug/L	-/-	ND < 0.40	*
Dieldrin	ug/L	-/-	ND < 0.0019	UJ (C)
Diethylphthalate	ug/L	-/-	0.11	J (DNQ)
Dimethylphthalate	ug/L	-/-	ND < 0.094	U
Di-n-butylphthalate	ug/L	-/-	ND < 0.19	U
Di-n-octylphthalate	ug/L	-/-	ND < 0.094	U
Endosulfan I	ug/L	-/-	ND < 0.0019	UJ (C)
Endosulfan II	ug/L	-/-	ND < 0.0028	UJ (C)
Endosulfan sulfate	ug/L	-/-	ND < 0.0028	UJ (C)
Endrin	ug/L	-/-	ND < 0.0019	UJ (C)
Endrin aldehyde	ug/L	-/-	ND < 0.0019	UJ (C)
Endrin ketone	ug/L	-/-	ND < 0.0028	UJ (C)
Fluoranthene	ug/L	-/-	ND < 0.094	U
Fluorene	ug/L	-/-	ND < 0.094	U
Heptachlor	ug/L	-/-	ND < 0.0028	UJ (C)
Heptachlor epoxide	ug/L	-/-	ND < 0.0024	UJ (C)
Hexachlorobenzene	ug/L	-/-	ND < 0.094	U
Hexachlorobutadiene	ug/L	-/-	ND < 0.19	U
Hexachlorocyclopentadiene	ug/L	-/-	ND < 0.094	U
Hexachloroethane	ug/L	-/-	ND < 0.19	U
Hydrazine	ug/L	-/-	ND < 0.60	UJ (C)
Unsymmetrical Dimethyl Hydrazine	ug/L	-/-	ND < 1.42	U
Indeno(1,2,3-cd)pyrene	ug/L	-/-	ND < 0.094	U
Isophorone	ug/L	-/-	ND < 0.094	UJ (*III)
Lindane (gamma-BHC)	ug/L	-/-	ND < 0.0028	UJ (C)
Methoxychlor	ug/L	-/-	ND < 0.0033	UJ (C)
Methylene Chloride	ug/L	-/-	ND < 0.95	*
m-Nitroaniline	ug/L	-/-	ND < 0.19	U
Monomethyl Hydrazine	ug/L	-/-	ND < 1.70	U
Naphthalene	ug/L	-/-	ND < 0.094	U
Nitrobenzene	ug/L	-/-	ND < 0.094	U
n-Nitrosodimethylamine	ug/L	16.3/8.1	ND < 0.094	U
n-Nitroso-di-n-propylamine	ug/L	-/-	ND < 0.094	UJ (*III)
n-Nitrosodiphenylamine	ug/L	-/-	ND < 0.094	U
o-Nitroaniline	ug/L	-/-	ND < 0.094	U
p-Cresol	ug/L	-/-	ND < 0.19	U
Pentachlorophenol	ug/L	16.5/8.2	1.5	J (DNQ)
Phenanthrene	ug/L	-/-	ND < 0.094	U
Phenol	ug/L	-/-	ND < 0.28	U
p-Nitroaniline	ug/L	-/-	ND < 0.47	UJ (*III)

See Table G-VI for abbreviations, definitions, and other explanations.
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TABLE G-I
NPDES PERMIT CA0001309, OUTFALL-001
2009 REPORTING SUMMARY
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

			02/16/2009	
ANALYTE	**UNITS**	**Benchmark Limit Daily Max/Monthly Avg**	**LAB RESULT (ug/L)**	**VALIDATION QUALIFIER**
Pyrene	ug/L	-/-	ND < 0.094	U
Toxaphene	ug/L	-/-	ND < 0.24	U
trans-1,2-Dichloroethene	ug/L	-/-	ND < 0.30	*
trans-1,3-Dichloropropene	ug/L	-/-	ND < 0.32	*

See Table G-VI for abbreviations, definitions, and other explanations.
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TABLE G-I
NPDES PERMIT CA0001309, OUTFALL-001
2009 REPORTING SUMMARY
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Sample Date: 2/16/2009

ANALYTE	LAB LOD (ug/L)	LAB RL (ug/L)	LAB RESULT (ug/L)	VALIDATION QUALIFIER	1998 WHO TEF	TCDD Equivalent (w/DNQ Values) (ug/L)	TCDD Equivalent (w/out DNQ Values) (ug/L)
1,2,3,4,6,7,8-HpCDD	0.00E+00	2.50E-05	6.67E-05	--	0.01	**6.7E-07**	**6.7E-07**
1,2,3,4,6,7,8-HpCDF	0.00E+00	2.50E-05	1.19E-05	J (DNQ)	0.01	**1.2E-07**	**ND**
1,2,3,4,7,8,9-HpCDF	3.05E-06	2.50E-05	ND	U	0.01	**ND**	**ND**
1,2,3,4,7,8-HxCDD	3.12E-06	2.50E-05	ND	U	0.1	**ND**	**ND**
1,2,3,4,7,8-HxCDF	1.57E-06	2.50E-05	ND	U	0.1	**ND**	**ND**
1,2,3,6,7,8-HxCDD	3.28E-06	2.50E-05	ND	U	0.1	**ND**	**ND**
1,2,3,6,7,8-HxCDF	1.67E-06	2.50E-05	ND	U	0.1	**ND**	**ND**
1,2,3,7,8,9-HxCDD	3.09E-06	2.50E-05	ND	U	0.1	**ND**	**ND**
1,2,3,7,8,9-HxCDF	2.63E-06	2.50E-05	ND	U	0.1	**ND**	**ND**
1,2,3,7,8-PeCDD	1.47E-06	2.50E-05	ND	U	1	**ND**	**ND**
1,2,3,7,8-PeCDF	8.41E-07	2.50E-05	ND	U	0.05	**ND**	**ND**
2,3,4,6,7,8-HxCDF	1.80E-06	2.50E-05	ND	U	0.1	**ND**	**ND**
2,3,4,7,8-PeCDF	9.08E-07	2.50E-05	ND	U	0.5	**ND**	**ND**
2,3,7,8-TCDD	6.71E-07	5.00E-06	ND	U	1	**ND**	**ND**
2,3,7,8-TCDF	6.76E-07	5.00E-06	ND	U	0.1	**ND**	**ND**
OCDD	0.00E+00	5.00E-05	6.43E-04	--	0.0001	**6.4E-08**	**6.4E-08**
OCDF	0.00E+00	5.00E-05	4.12E-05	J (DNQ)	0.0001	**4.1E-09**	**ND**

TCDD TEQ w/ DNQ Values	**8.5E-07**	
TCDD TEQ w/out DNQ Values		**7.3E-07**

Dioxin TCDD TEQ compliance limit established for this outfall? Yes **TCDD TEQ BENCHMARK LIMIT = 2.8E-08**

See attached notes for abbreviations, definitions, and other explanations for the data presented in this table.

TABLE G-II
NPDES PERMIT CA0001309, OUTFALL-001
2009 MASS BASED RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

			2/16/2009	
ANALYTE	**UNITS**	**Benchmark Limit Daily Max/Monthly Avg**	**Result**	**CONCENTRATION RESULT VALIDATION QUALIFIER**
Ammonia as Nitrogen (N)	LBS/DAY	13,500/2615	0.92	*
Biochemical Oxygen Demand (BOD 5 day)	LBS/DAY	40,032/26,700	3.94	*
Chloride	LBS/DAY	200,160/-	16.43	*
Surfactants (MBAS)	LBS/DAY	667/-	0.16	J* (DNQ)
Fluoride	LBS/DAY	2,135/-	0.20	B*
Nitrate + Nitrite as Nitrogen (N)	LBS/DAY	10,700/-	2.30	*
Nitrate as Nitrogen (N)	LBS/DAY	10,700/-	2.30	*
Nitrite-N	LBS/DAY	1,334/-	ND	*
Oil and Grease	LBS/DAY	20,016/13,344	3.12	J* (DNQ)
Perchlorate	LBS/DAY	8/-	ND	*
Sulfate	LBS/DAY	400,320/-	15.94	*
Total Cyanide	LBS/DAY	11.3/5.7	ND	*
Total Dissolved Solids	LBS/DAY	1,270,000/-	197.18	*
Total Residual Chlorine	LBS/DAY	133/-	ND	HFT*
Total Suspended Solids	LBS/DAY	60,048/20,016	151.17	--
Antimony	LBS/DAY	8.01/-	ND	U (B)
Arsenic	LBS/DAY	66.7/-	ND	U
Barium	LBS/DAY	1,330/-	0.12	--
Beryllium	LBS/DAY	5.34/-	ND	U
Cadmium	LBS/DAY	4.14/2.7	0.0002	J (DNQ)
Chromium IV	LBS/DAY	21.8/10.8	ND	*
Copper	LBS/DAY	18.7/9.5	0.01	J (*III)
Iron	LBS/DAY	400/-	13.31	--
Lead	LBS/DAY	6.94/3.5	0.01	--
Manganese	LBS/DAY	66.7/-	0.18	--
Mercury	LBS/DAY	0.13/0.07	ND	U
Nickel	LBS/DAY	128/47	ND	U (B)
Selenium	LBS/DAY	10.9/5.5	0.001	J (*III,DNQ)
Silver	LBS/DAY	5.5/2.7	ND	U
Thallium	LBS/DAY	2.7/-	ND	U
Zinc	LBS/DAY	159/72	0.06	--
1,1-Dichloroethene	LBS/DAY	8/4.3	ND	*
Trichloroethene	LBS/DAY	6.7/-	ND	*
2,4,6-Trichlorophenol	LBS/DAY	17/8.7	ND	U
2,4-Dinitrotoluene	LBS/DAY	24/12	ND	U
alpha-BHC	LBS/DAY	0.04/0.013	ND	UJ (H)
bis (2-ethylhexyl) Phthalate	LBS/DAY	5.3/-	ND	U
n-Nitrosodimethylamine	LBS/DAY	21.8/10.8	ND	U
Pentachlorophenol	LBS/DAY	22/10.9	0.002	J (DNQ)
TCDD TEQ_NoDNQ	LBS/DAY	3.7E-08/1.9E-08	1.2E-09	--

See Table G-VI for abbreviations, definitions, and other explanations.
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TABLE G-III
NPDES PERMIT CA0001309, OUTFALL-002
2009 REPORTING SUMMARY
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

			02/16/2009	
ANALYTE	**UNITS**	**Benchmark Limit Daily Max/Monthly Avg**	**LAB RESULT (ug/L)**	**VALIDATION QUALIFIER**
Ammonia as Nitrogen (N)	mg/L	10.1/-	0.56	*
Biochemical Oxygen Demand (BOD 5 day)	mg/L	30/-	3.4	*
Chloride	mg/L	150/-	9.5	*
Specific Conductivity (Lab)	umhos/cm	-/-	250	--
Surfactants (MBAS)	mg/L	0.5/-	0.029	Ja* (DNQ)
Fluoride	mg/L	1.6/-	0.20	B*
Nitrate + Nitrite as Nitrogen (N)	mg/L	8.0/-	2.7	*
Nitrate as Nitrogen (N)	mg/L	8.0/-	2.7	*
Nitrite-N	mg/L	1.0/-	ND < 0.090	*
Oil & Grease	mg/L	15/-	1.8	Ja* (DNQ)
Perchlorate	ug/L	6.0/-	ND < 0.90	*
pH (Field)	pH units	6.5-8.5/-	7.3	*
Total Settleable Solids	ml/L	0.3/-	0.15	*
Sulfate	mg/L	300/-	39	*
Temperature	deg. F	86/-	46	*
Total Cyanide	ug/L	8.5/-	ND < 2.2	*
Total Dissolved Solids	mg/L	950/-	190	*
Hardness	mg/L	-/-	100	--
Hardness, dissolved	mg/L	-/-	68	--
Total Organic Carbon	mg/L	-/-	17	--
Total Residual Chlorine	mg/L	0.1/-	ND < 0.20	HFT, RL1*
Total Suspended Solids	mg/L	45/-	220	--
Turbidity	NTU	-/-	310	--
Volume Discharged	MGD	160/-	1.342755	*
METALS				
Antimony	ug/L	6.0/-	ND < 2.0	U (B)
Antimony, dissolved	ug/L	-/-	ND < 2.0	U (B)
Arsenic	ug/L	10/-	ND < 7.0	U
Arsenic, dissolved	ug/L	-/-	ND < 7.0	U
Barium	mg/L	1.0/-	0.13	--
Barium, dissolved	mg/L	-/-	0.020	--
Beryllium	ug/L	4.0/-	ND < 0.90	U
Beryllium, dissolved	ug/L	-/-	ND < 0.90	U
Boron	mg/L	-/-	0.052	--
Boron, dissolved	mg/L	-/-	0.046	J (DNQ)
Cadmium	ug/L	3.1/-	0.14	J (DNQ)
Cadmium, dissolved	ug/L	-/-	ND < 0.11	U
Calcium	mg/L	-/-	25	--
Calcium, Dissolved	mg/L	-/-	18	--
Chromium	ug/L	16.3/-	ND < 20	U (B)
Chromium, dissolved	ug/L	-/-	ND < 2.0	U
Chromium VI	ug/L	16.3/-	ND < 0.25	M1*
Cobalt	ug/L	-/-	4.8	J (DNQ)
Cobalt, dissolved	ug/L	-/-	ND < 2.0	U
Copper	ug/L	14.0/-	10	--
Copper, dissolved	ug/L	-/-	3.6	--
Iron	mg/L	0.3/-	17	--
Iron, dissolved	mg/L	-/-	0.45	--
Lead	ug/L	5.2/-	11	--
Lead, dissolved	ug/L	-/-	ND < 0.30	U
Magnesium	mg/L	-/-	9.9	--

See Table G-VI for abbreviations, definitions, and other explanations.
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TABLE G-III
NPDES PERMIT CA0001309, OUTFALL-002
2009 REPORTING SUMMARY
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

			02/16/2009	
ANALYTE	**UNITS**	**Benchmark Limit Daily Max/Monthly Avg**	**LAB RESULT (ug/L)**	**VALIDATION QUALIFIER**
Magnesium, Dissolved	mg/L	-/-	5.3	--
Manganese	ug/L	50/-	240	--
Manganese, dissolved	ug/L	-/-	15	J (DNQ)
Mercury	ug/L	0.10/-	0.032	J (Q,DNQ)
Mercury, dissolved	ug/L	-/-	0.03	J (DNQ)
Nickel	ug/L	96/-	ND < 13	U (B)
Nickel, dissolved	ug/L	-/-	ND < 2.0	U
Selenium	ug/L	8.2/-	ND < 0.30	R (*III)
Selenium, dissolved	ug/L	-/-	ND < 2.0	U (B)
Silver	ug/L	4.1/-	ND < 0.30	U
Silver, dissolved	ug/L	-/-	ND < 0.30	U
Thallium	ug/L	2.0/-	ND < 0.20	U
Thallium, dissolved	ug/L	-/-	ND < 0.20	U
Vanadium	ug/L	-/-	36	--
Vanadium, dissolved	ug/L	-/-	ND < 3.0	U
Zinc	ug/L	119/-	56	--
Zinc, dissolved	ug/L	-/-	ND < 20	UJ (*III,B)
ORGANICS				
Benzene	ug/L	-/-	ND < 0.28	*
Carbon Tetrachloride	ug/L	-/-	ND < 0.28	*
Chloroform	ug/L	-/-	ND < 0.33	*
1,1-Dichloroethane	ug/L	-/-	ND < 0.40	*
1,2-Dichloroethane	ug/L	-/-	ND < 0.28	*
1,1-Dichloroethene	ug/L	6.0/-	ND < 0.42	*
1,4-Dioxane	ug/L	-/-	ND < 1.0	*
Ethylbenzene	ug/L	-/-	ND < 0.25	*
Tetrachloroethene	ug/L	-/-	ND < 0.32	*
Toluene	ug/L	-/-	ND < 0.36	*
Xylenes (Total)	ug/L	-/-	ND < 0.90	*
1,1,1-Trichloroethane	ug/L	-/-	ND < 0.30	*
1,1,2-Trichloroethane	ug/L	-/-	ND < 0.30	*
Trichloroethene	ug/L	5.0/-	ND < 0.26	*
Trichlorofluoromethane	ug/L	-/-	ND < 0.34	*
Trichlorotrifluoroethane (Freon 113)	ug/L	-/-	ND < 0.50	*
Vinyl Chloride	ug/L	-/-	ND < 0.40	*
TPH				
DRO (C13 - C28)	mg/L	-/-	ND < 0.047	*
GRO (C4 - C12)	ug/L	-/-	ND < 0.025	*
ADDITIONAL ANALYTES				
1,2-Dichloro-1,1,2-trifluoroethane	ug/L	-/-	ND < 2.5	*
2,4,5-Trichlorophenol	ug/L	-/-	ND < 0.20	U
1,1,2,2-Tetrachloroethane	ug/L	-/-	ND < 0.30	*
1,2,4-Trichlorobenzene	ug/L	-/-	ND < 0.099	U
1,2-Dichlorobenzene (EPA 625)	ug/L	-/-	ND < 0.32	*
1,2-Dichlorobenzene (EPA 624)	ug/L	-/-	ND < 0.099	U
1,2-Dichloropropane	ug/L	-/-	ND < 0.35	*
1,2-Diphenylhydrazine/Azobenzene	ug/L	-/-	ND < 0.099	U
1,3-Dichlorobenzene (EPA 624)	ug/L	-/-	ND < 0.099	U
1,3-Dichlorobenzene (EPA 625)	ug/L	-/-	ND < 0.35	*
1,4-Dichlorobenzene (EPA 624)	ug/L	-/-	ND < 0.20	U
1,4-Dichlorobenzene (EPA 625)	ug/L	-/-	ND < 0.37	*
2,4,6-Trichlorophenol	ug/L	13.0/-	ND < 0.099	U

See Table G-VI for abbreviations, definitions, and other explanations.
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TABLE G-III
NPDES PERMIT CA0001309, OUTFALL-002
2009 REPORTING SUMMARY
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

			02/16/2009	
ANALYTE	**UNITS**	**Benchmark Limit Daily Max/Monthly Avg**	**LAB RESULT (ug/L)**	**VALIDATION QUALIFIER**
2,4-Dichlorophenol	ug/L	-/-	ND < 0.20	U
2,4-Dimethylphenol	ug/L	-/-	ND < 0.30	U
2,4-Dinitrophenol	ug/L	-/-	ND < 0.89	U
2,4-Dinitrotoluene	ug/L	18.3/-	ND < 0.20	U
2,6-Dinitrotoluene	ug/L	-/-	ND < 0.099	UJ (*III)
2-Chloroethylvinylether	ug/L	-/-	ND < 1.8	*
2-Chloronaphthalene	ug/L	-/-	ND < 0.099	U
2-Chlorophenol	ug/L	-/-	ND < 0.20	U
2-Methyl-4,6-dinitrophenol	ug/L	-/-	ND < 0.20	U
2-Methylnaphthalene	ug/L	-/-	ND < 0.099	U
2-Methylphenol	ug/L	-/-	ND < 0.099	UJ (*III)
2-Nitrophenol	ug/L	-/-	ND < 0.099	U
3,3'-Dichlorobenzidine	ug/L	-/-	ND < 5.0	U
4,4'-DDD	ug/L	-/-	ND < 0.0019	UJ (C)
4,4'-DDE	ug/L	-/-	ND < 0.0029	U
4,4'-DDT	ug/L	-/-	ND < 0.0038	UJ (C)
4-Bromophenylphenylether	ug/L	-/-	ND < 0.099	U
4-Chloro-3-methylphenol	ug/L	-/-	ND < 0.20	U
4-Chloroaniline	ug/L	-/-	ND < 0.099	UJ (*III)
4-Chlorophenylphenylether	ug/L	-/-	ND < 0.099	U
4-Nitrophenol	ug/L	-/-	ND < 2.5	U
Acenaphthene	ug/L	-/-	ND < 0.099	U
Acenaphthylene	ug/L	-/-	ND < 0.099	U
Acrolein	ug/L	-/-	ND < 4.0	C*
Acrylonitrile	ug/L	-/-	ND < 0.70	C*
Acute Toxicity	% SURVIVAL	70-100/-	100	*
Aldrin	ug/L	-/-	ND < 0.0014	U
alpha-BHC	ug/L	0.03/-	ND < 0.0053	UJ (H)
Aniline	ug/L	-/-	ND < 0.30	U
Anthracene	ug/L	-/-	ND < 0.099	U
Aroclor-1016	ug/L	-/-	ND < 0.24	*
Aroclor-1221	ug/L	-/-	ND < 0.24	*
Aroclor-1232	ug/L	-/-	ND < 0.24	*
Aroclor-1242	ug/L	-/-	ND < 0.24	*
Aroclor-1248	ug/L	-/-	ND < 0.24	*
Aroclor-1254	ug/L	-/-	ND < 0.24	*
Aroclor-1260	ug/L	-/-	ND < 0.24	*
Benzidine	ug/L	-/-	ND < 5.0	U
Benzo(a)anthracene	ug/L	-/-	ND < 0.099	U
Benzo(a)pyrene	ug/L	-/-	ND < 0.099	U
Benzo(b)fluoranthene	ug/L	-/-	ND < 0.099	U
Benzo(g,h,I)perylene	ug/L	-/-	ND < 0.099	U
Benzo(k)fluoranthene	ug/L	-/-	ND < 0.099	U
Benzoic acid	ug/L	-/-	ND < 3.0	U
Benzyl alcohol	ug/L	-/-	ND < 0.099	UJ (*III)
beta-BHC	ug/L	-/-	ND < 0.0038	UJ (C)
bis (2-Chloroethyl) ether	ug/L	-/-	ND < 0.099	U
bis (2-ethylhexyl) Phthalate	ug/L	4.0/-	ND < 1.7	U
bis(2-Chloroethoxy) methane	ug/L	-/-	ND < 0.099	UJ (*III)
bis(2-Chloroisopropyl) ether	ug/L	-/-	ND < 0.099	U
Bromodichloromethane	ug/L	-/-	ND < 0.30	*
Bromoform	ug/L	-/-	ND < 0.40	*

See Table G-VI for abbreviations, definitions, and other explanations.
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TABLE G-III
NPDES PERMIT CA0001309, OUTFALL-002
2009 REPORTING SUMMARY
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

			02/16/2009	
ANALYTE	**UNITS**	**Benchmark Limit Daily Max/Monthly Avg**	**LAB RESULT (ug/L)**	**VALIDATION QUALIFIER**
Bromomethane	ug/L	-/-	ND < 0.42	*
Butylbenzylphthalate	ug/L	-/-	ND < 5.0	U (B)
Chlordane	ug/L	-/-	ND < 0.038	U
Chlorobenzene	ug/L	-/-	ND < 0.36	*
Chloroethane	ug/L	-/-	ND < 0.40	*
Chloromethane	ug/L	-/-	ND < 0.40	*
Chronic Toxicity	TUC	1.0/-	1.0	*
Chrysene	ug/L	-/-	ND < 0.099	U
cis-1,3-Dichloropropene	ug/L	-/-	ND < 0.22	L*
Cyclohexane	ug/L	-/-	ND < 2.5	*
delta-BHC	ug/L	-/-	ND < 0.0033	U
Dibenzo(a,h)anthracene	ug/L	-/-	ND < 0.099	U
Dibenzofuran	ug/L	-/-	ND < 0.099	U
Dibromochloromethane	ug/L	-/-	ND < 0.40	*
Dieldrin	ug/L	-/-	ND < 0.0019	U
Diethylphthalate	ug/L	-/-	0.12	J (DNQ)
Dimethylphthalate	ug/L	-/-	ND < 0.099	U
Di-n-butylphthalate	ug/L	-/-	ND < 0.20	U
Di-n-octylphthalate	ug/L	-/-	ND < 0.099	U
Endosulfan I	ug/L	-/-	ND < 0.0019	UJ (C)
Endosulfan II	ug/L	-/-	ND < 0.0029	UJ (C)
Endosulfan sulfate	ug/L	-/-	ND < 0.0029	UJ (C)
Endrin	ug/L	-/-	ND < 0.0019	UJ (C)
Endrin aldehyde	ug/L	-/-	ND < 0.0019	UJ (C)
Endrin ketone	ug/L	-/-	ND < 0.0029	UJ (C)
Fluoranthene	ug/L	-/-	ND < 0.099	U
Fluorene	ug/L	-/-	ND < 0.099	U
Heptachlor	ug/L	-/-	ND < 0.0029	UJ (C)
Heptachlor epoxide	ug/L	-/-	ND < 0.0024	UJ (C)
Hexachlorobenzene	ug/L	-/-	ND < 0.099	U
Hexachlorobutadiene	ug/L	-/-	ND < 0.20	U
Hexachlorocyclopentadiene	ug/L	-/-	ND < 0.099	U
Hexachloroethane	ug/L	-/-	ND < 0.20	U
Hydrazine	ug/L	-/-	ND < 0.60	UJ (C)
Unsymmetrical Dimethyl Hydrazine	ug/L	-/-	ND < 1.42	U
Indeno(1,2,3-cd)pyrene	ug/L	-/-	ND < 0.099	U
Isophorone	ug/L	-/-	0.12	J (*III,DNQ)
Lindane (gamma-BHC)	ug/L	-/-	ND < 0.0029	U
Methoxychlor	ug/L	-/-	ND < 0.0033	U
Methylene Chloride	ug/L	-/-	ND < 0.95	*
m-Nitroaniline	ug/L	-/-	ND < 0.20	U
Monomethyl Hydrazine	ug/L	-/-	ND < 1.70	U
Naphthalene	ug/L	-/-	ND < 0.099	U
Nitrobenzene	ug/L	-/-	ND < 0.099	U
n-Nitrosodimethylamine	ug/L	16.3/-	ND < 0.099	U
n-Nitroso-di-n-propylamine	ug/L	-/-	ND < 0.099	UJ (*III)
n-Nitrosodiphenylamine	ug/L	-/-	ND < 0.099	U
o-Nitroaniline	ug/L	-/-	ND < 0.099	U
p-Cresol	ug/L	-/-	ND < 0.20	U
Pentachlorophenol	ug/L	16.5/-	ND < 0.099	U
Phenanthrene	ug/L	-/-	ND < 0.099	U
Phenol	ug/L	-/-	ND < 0.30	U

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TABLE G-III
NPDES PERMIT CA0001309, OUTFALL-002
2009 REPORTING SUMMARY
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

			02/16/2009	
ANALYTE	**UNITS**	**Benchmark Limit Daily Max/Monthly Avg**	**LAB RESULT (ug/L)**	**VALIDATION QUALIFIER**
p-Nitroaniline	ug/L	-/-	ND < 0.50	UJ (*III)
Pyrene	ug/L	-/-	ND < 0.099	U
Toxaphene	ug/L	-/-	ND < 0.24	U
trans-1,2-Dichloroethene	ug/L	-/-	ND < 0.30	*
trans-1,3-Dichloropropene	ug/L	-/-	ND < 0.32	*

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TABLE G-III
NPDES PERMIT CA0001309, OUTFALL-002
2009 REPORTING SUMMARY
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Sample Date: 2/16/2009

ANALYTE	LAB LOD (ug/L)	LAB RL (ug/L)	LAB RESULT (ug/L)	VALIDATION QUALIFIER	1998 WHO TEF	TCDD Equivalent (w/DNQ Values) (ug/L)	TCDD Equivalent (w/out DNQ Values) (ug/L)
1,2,3,4,6,7,8-HpCDD	0.00E+00	2.50E-05	4.35E-05	--	0.01	**4.4E-07**	**4.4E-07**
1,2,3,4,6,7,8-HpCDF	0.00E+00	2.50E-05	1.96E-05	J (DNQ)	0.01	**2.0E-07**	**ND**
1,2,3,4,7,8,9-HpCDF	2.20E-06	2.50E-05	ND	U	0.01	**ND**	**ND**
1,2,3,4,7,8-HxCDD	2.06E-06	2.50E-05	ND	U	0.1	**ND**	**ND**
1,2,3,4,7,8-HxCDF	1.12E-06	2.50E-05	ND	U	0.1	**ND**	**ND**
1,2,3,6,7,8-HxCDD	0.00E+00	2.50E-05	2.40E-06	J (DNQ)	0.1	**2.4E-07**	**ND**
1,2,3,6,7,8-HxCDF	1.15E-06	2.50E-05	ND	U	0.1	**ND**	**ND**
1,2,3,7,8,9-HxCDD	1.95E-06	2.50E-05	ND	U	0.1	**ND**	**ND**
1,2,3,7,8,9-HxCDF	1.71E-06	2.50E-05	ND	U	0.1	**ND**	**ND**
1,2,3,7,8-PeCDD	1.04E-06	2.50E-05	ND	U	1	**ND**	**ND**
1,2,3,7,8-PeCDF	8.30E-07	2.50E-05	ND	U	0.05	**ND**	**ND**
2,3,4,6,7,8-HxCDF	1.21E-06	2.50E-05	ND	U	0.1	**ND**	**ND**
2,3,4,7,8-PeCDF	7.82E-07	2.50E-05	ND	U	0.5	**ND**	**ND**
2,3,7,8-TCDD	6.53E-07	5.00E-06	ND	U	1	**ND**	**ND**
2,3,7,8-TCDF	5.25E-07	5.00E-06	ND	U	0.1	**ND**	**ND**
OCDD	0.00E+00	5.00E-05	3.80E-04	--	0.0001	**3.8E-08**	**3.8E-08**
OCDF	0.00E+00	5.00E-05	6.41E-05	--	0.0001	**6.4E-09**	**6.4E-09**

TCDD TEQ w/ DNQ Values	**9.2E-07**	
TCDD TEQ w/out DNQ Values		**4.8E-07**

Dioxin TCDD TEQ benchmark limit established for this outfall? Yes **TCDD TEQ BENCHMARK LIMIT = 2.8E-08**

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TABLE G-IV
NPDES PERMIT CA0001309, OUTFALL-002
2009 MASS BASED RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

			2/16/2009	
ANALYTE	**UNITS**	**Benchmark Limit Daily Max/Monthly Avg**	**Result**	**CONCENTRATION RESULT VALIDATION QUALIFIER**
Ammonia as Nitrogen (N)	LBS/DAY	13,500/-	6.27	*
Biochemical Oxygen Demand (BOD 5 day)	LBS/DAY	40,032/-	38.08	*
Chloride	LBS/DAY	200,160/-	106.39	*
Surfactants (MBAS)	LBS/DAY	667/-	0.32	Ja* (DNQ)
Fluoride	LBS/DAY	2,135/-	2.24	B*
Nitrate + Nitrite as Nitrogen (N)	LBS/DAY	10,700/-	30.24	*
Nitrate as Nitrogen (N)	LBS/DAY	10,700/-	30.24	*
Nitrite-N	LBS/DAY	1,334/-	ND	*
Oil and Grease	LBS/DAY	20,016/-	20.16	Ja* (DNQ)
Perchlorate	LBS/DAY	8/-	ND	*
Sulfate	LBS/DAY	400,320/-	436.74	*
Total Cyanide	LBS/DAY	11.3/-	ND	*
Total Dissolved Solids	LBS/DAY	1,270,000/-	2127.73	*
Total Residual Chlorine	LBS/DAY	133/-	ND	HFT, RL1*
Total Suspended Solids	LBS/DAY	60,048/-	2463.69	--
Antimony	LBS/DAY	8.01/-	ND	U (B)
Arsenic	LBS/DAY	66.7/-	ND	U
Barium	LBS/DAY	1,330/-	1.46	--
Beryllium	LBS/DAY	5.34/-	ND	U
Cadmium	LBS/DAY	4.14/-	0.002	J (DNQ)
Chromium IV	LBS/DAY	21.8/-	ND	M1*
Copper	LBS/DAY	18.7/-	0.11	--
Iron	LBS/DAY	400/-	190.38	--
Lead	LBS/DAY	6.94/-	0.12	--
Manganese	LBS/DAY	66.7/-	2.69	--
Mercury	LBS/DAY	0.13/-	0.0004	J (Q,DNQ)
Nickel	LBS/DAY	128/-	ND	U (B)
Silver	LBS/DAY	5.5/-	ND	U
Thallium	LBS/DAY	2.7/-	ND	U
Zinc	LBS/DAY	159/-	0.63	--
1,1-Dichloroethene	LBS/DAY	8/-	ND	*
Trichloroethene	LBS/DAY	6.7/-	ND	*
2,4,6-Trichlorophenol	LBS/DAY	17/-	ND	U
2,4-Dinitrotoluene	LBS/DAY	24/-	ND	U
alpha-BHC	LBS/DAY	0.04/-	ND	UJ (H)
bis (2-ethylhexyl) Phthalate	LBS/DAY	5.3/-	ND	U
n-Nitrosodimethylamine	LBS/DAY	21.8/-	ND	U
Pentachlorophenol	LBS/DAY	22/-	ND	U
TCDD TEQ_NoDNQ	LBS/DAY	3.7E-08/-	5.4E-09	--

See Table G-VI for abbreviations, definitions, and other explanations.
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TABLE G-V
NPDES PERMIT CA0001309
2009 BENCHMARK LIMIT EXCEEDANCES
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

DAILY MAX BENCHMARK LIMIT EXCEEDANCES

OUTFALL	LOCATIONS	SAMPLE DATE	ANALYTE	BENCHMARK LIMIT DAILY MAX	DAILY MAX RESULT	UNITS	VALIDATION QUALIFIER
Outfall 001	South Slope below Perimeter Pond	02/16/09	Iron	0.3	8.1	mg/L	--
Outfall 001	South Slope below Perimeter Pond	02/16/09	Lead	5.2	6.6	ug/L	--
Outfall 001	South Slope below Perimeter Pond	02/16/09	Manganese	50	110	ug/L	--
Outfall 001	South Slope below Perimeter Pond	02/16/09	TCDD TEQ_NoDNQ	2.8E-08	7.3E-07	ug/L	--
Outfall 002	South Slope below R-2 Pond	02/16/09	Iron	0.3	17	mg/L	--
Outfall 002	South Slope below R-2 Pond	02/16/09	Lead	5.2	11	ug/L	--
Outfall 002	South Slope below R-2 Pond	02/16/09	Manganese	50	240	ug/L	--
Outfall 002	South Slope below R-2 Pond	02/16/09	TCDD TEQ_NoDNQ	2.8E-08	4.8E-07	ug/L	--

MONTHLY AVERAGE BENCHMARK LIMIT EXCEEDANCES

OUTFALL	LOCATIONS	SAMPLE DATE	ANALYTE	BENCHMARK LIMIT MONTHLY AVERAGE	MONTHLY AVERAGE RESULT	UNITS	VALIDATION QUALIFIER
Outfall 001	South Slope below Perimeter Pond	Feb-09	Lead	2.6	6.6	ug/L	--
Outfall 001	South Slope below Perimeter Pond	Feb-09	TCDD TEQ_NoDNQ	1.4E-08	7.3E-07	ug/L	--

See Table G-V for abbreviations, definitions, and other explanations.
Table provided by MWH.
Haley & Aldrich, Inc.
G:\Projects\26472\Reports\M-513 2009 Annual\App G\Tables\M513_G-V_Benchmark-F.xls

TABLE G-VI
NPDES PERMIT CA0001309
2009 REPORTING SUMMARY NOTES
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

1. For Dioxins and Furans, laboratory results may have been reported in picograms/liter (pg/L). However, the permit limit is stated in micrograms/liter (µg/L). To evaluate permit compliance, the laboratory results have been converted to µg/L, as necessary, to calculate the TCDD TEQ.

2. TCDD TEQs for the purpose of determining permit compliance are the sum of the products of the detected dioxin congener concentration multiplied by that congener's TEF. The resulting compliance TCDD TEQ does not include those congener concentrations that are reported as DNQ, as specified on Page 40 of the NPDES permit.

3. For some sample dates, pH was determined with a field instrument and was noted as such. These results were not validated. Since pH does not have an RL, the possible pH range is shown in the RL column.

4. The NPDES permit limit or benchmark limit for mercury of 0.10 µg/L (Outfalls 001, 002, 011, 018 and 019) and 0.13 µg/L (Outfalls 003-010) are not achievable by the laboratory; therefore, the laboratory reporting limit of 0.20 µg/L was used to determine compliance.

5. All of the following abbreviations and/or notes may not occur on every table.

-92.9 +/-200	A negative radiochemical analytical result indicates the count rate of the sample was less than the background condition
$	reported result or other information was incorrectly reported by the laboratory; result was corrected by the data validator
--	based on validation of the data, a qualifier was not required
-/-	no permit limit established for daily maximum or monthly average
<(value)	analyte not detected at a concentration greater than or equal to the DL, MDL, or RL (see laboratory report for specific detail)
*	result not validated
*1	improper preservation of sample
*2	the ICP/MS ppb check standard was recovered above the control limit; therefore, the constituent detected was qualified as estimated (J)
*3	initial and or continuing calibration recoveries were outside acceptable control limits
*5	blank spike/blank spike duplicate relative percent difference was outside the control limit
*10	value was estimated detect or estimated non detect (J,UJ) due to deficiencies in quantitation of the constituent including constituents reported by the laboratory as Estimated Maximum Possible Concentration (EMPC) values
*11	no calibration was performed for this compound; result is reported as a tentatively identified compound (TIC)
*II, *III	unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analysis." The number following the asterisk (*) will indicate the report section where a description of the problem can be found
ANR	analysis not required; e.g., constituent or outfall was not required by the permit to be sampled and analyzed (annual, semi-annual, etc.)
B	laboratory method blank contamination
C	calibration %RSD or %D were noncompliant
C5	Calibration verification %R was outside method control limits
%D	percent difference between the initial and continuing calibration relative response factors
deg F	degrees Fahrenheit

TABLE G-VI
NPDES PERMIT CA0001309
2009 REPORTING SUMMARY NOTES
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

DL	detection limit
DNQ	detected but not quantified (constituent value greater than or equal to the laboratory method detection limit and less then the laboratory reporting limit)
E	duplicates show poor agreement
H	holding time was exceeded
I	ICP interference check solution results were unsatisfactory
J	estimated value
K	The sample dilution's set-up did not meet the oxygen depletion criteria of at least 2 mg/l. Therefore, the reported result is an estimated value only.
L2	the laboratory control sample %R was below the method control limits
L	laboratory control sample %R was outside control limits
LOD	limit of detection
M1	matrix spike (MS) and/or MS duplicate were above the acceptance limits due to sample matrix interference
M2	the MS and/or MS duplicate were below the acceptance limits due to sample matrix interference
MDL	method detection limit
MGD	million gallons per day
MHA*	Due to high level of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information.
mg/L	milligrams per liter
ml/L/hr	milliliters per liter per hour
NA	not applicable; no permit limit established for the constituent and/or outfall
ND	analyte value less than the LOD or MDL
NM	not measured or determined
NTU	nephelometric turbidity unit
p	relative percent difference (RPD) is outside control limits
pCi/L	picocurries per liter
pg/L	picograms per liter
Q	matrix spike recovery outside of control limits
R	as a validation qualifier, results are rejected; the presence or absence of analyte cannot be verified
R	(reason code in parentheses) %R for calibration not within control limits
RL	laboratory reporting limit
RL-1	reporting limit raised due to sample matrix effects
%RSD	percent relative standard deviation
S	surrogate recovery was outside control limits
TEQ	toxic equivalent
T	presumed contamination, as indicated by a detect in the trip blank
TU_c	toxicity units (chronic)
U	result not detected
µg/L	micrograms per liter
UJ	result not detected at the estimated reporting limit
umhos/cm	micromhos per centimeter
WHO TEF	World Health Organization toxic equivalency factor
^	analysis not completed due to hold time exceedence or insufficient sample volume

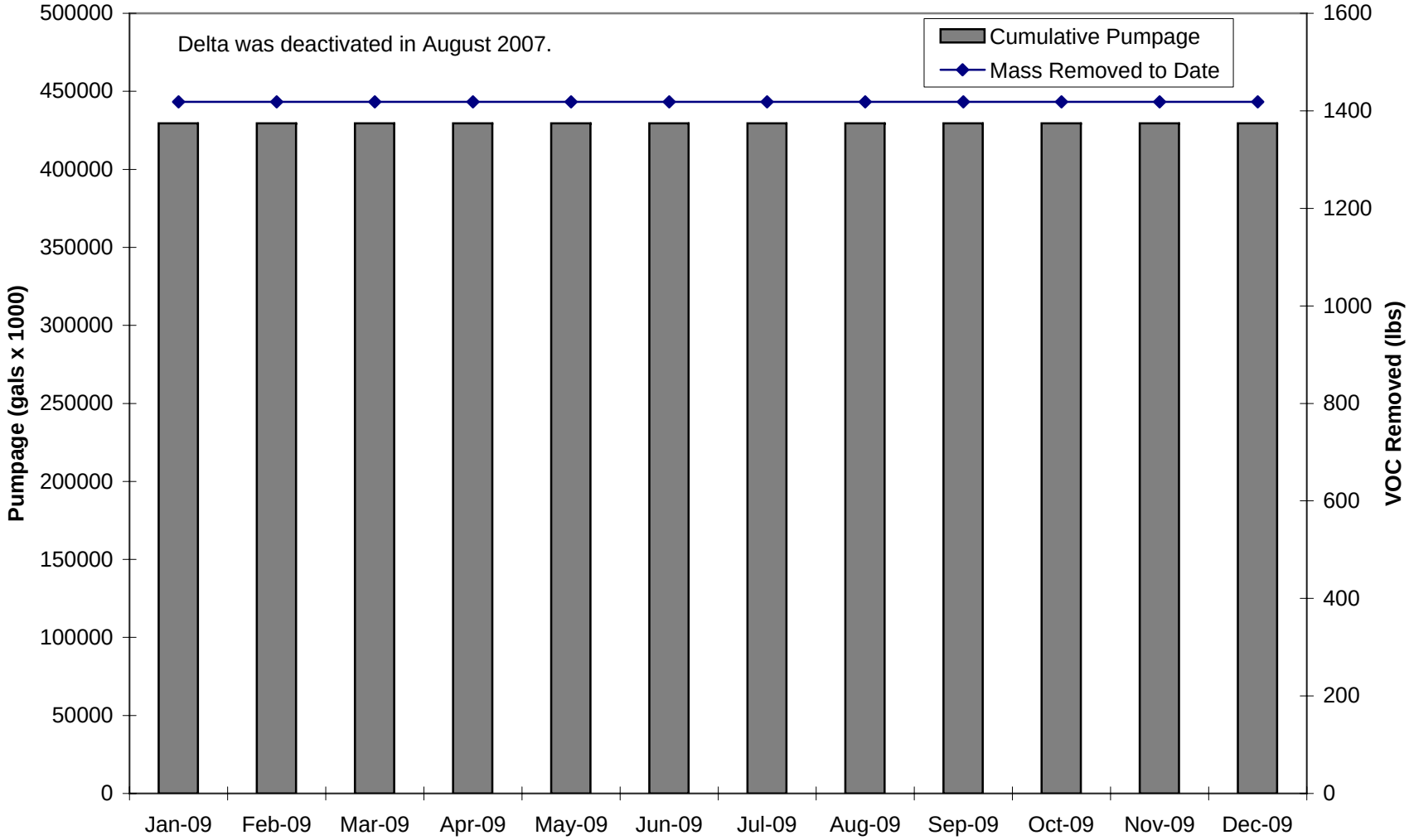

Figure G-1. Cumulative Pumpage & VOC Mass Removed to Date-Delta ASU-2009

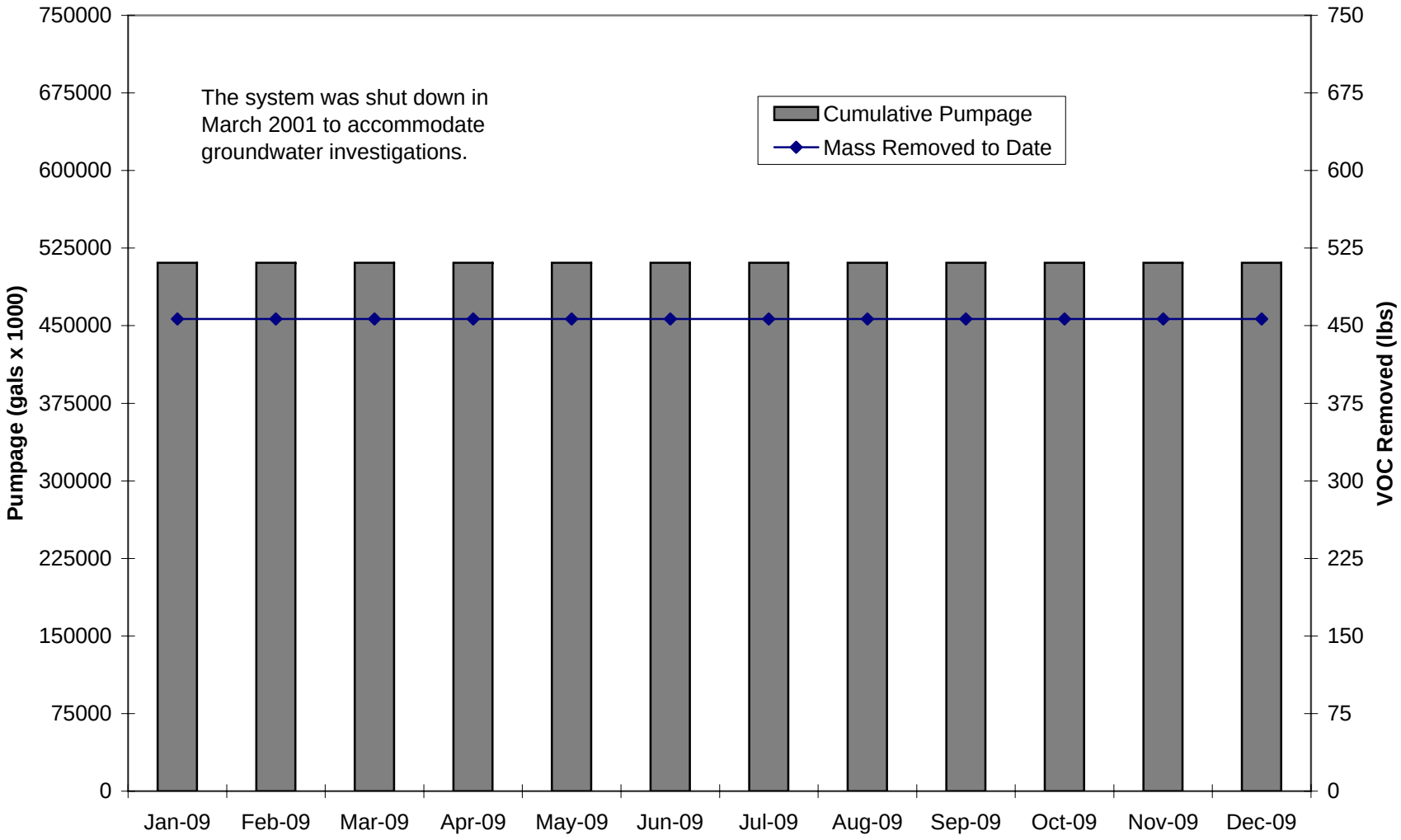

Figure G-2. Cumulative Pumpage & VOC Mass Removed to Date-Alfa ASU-2009

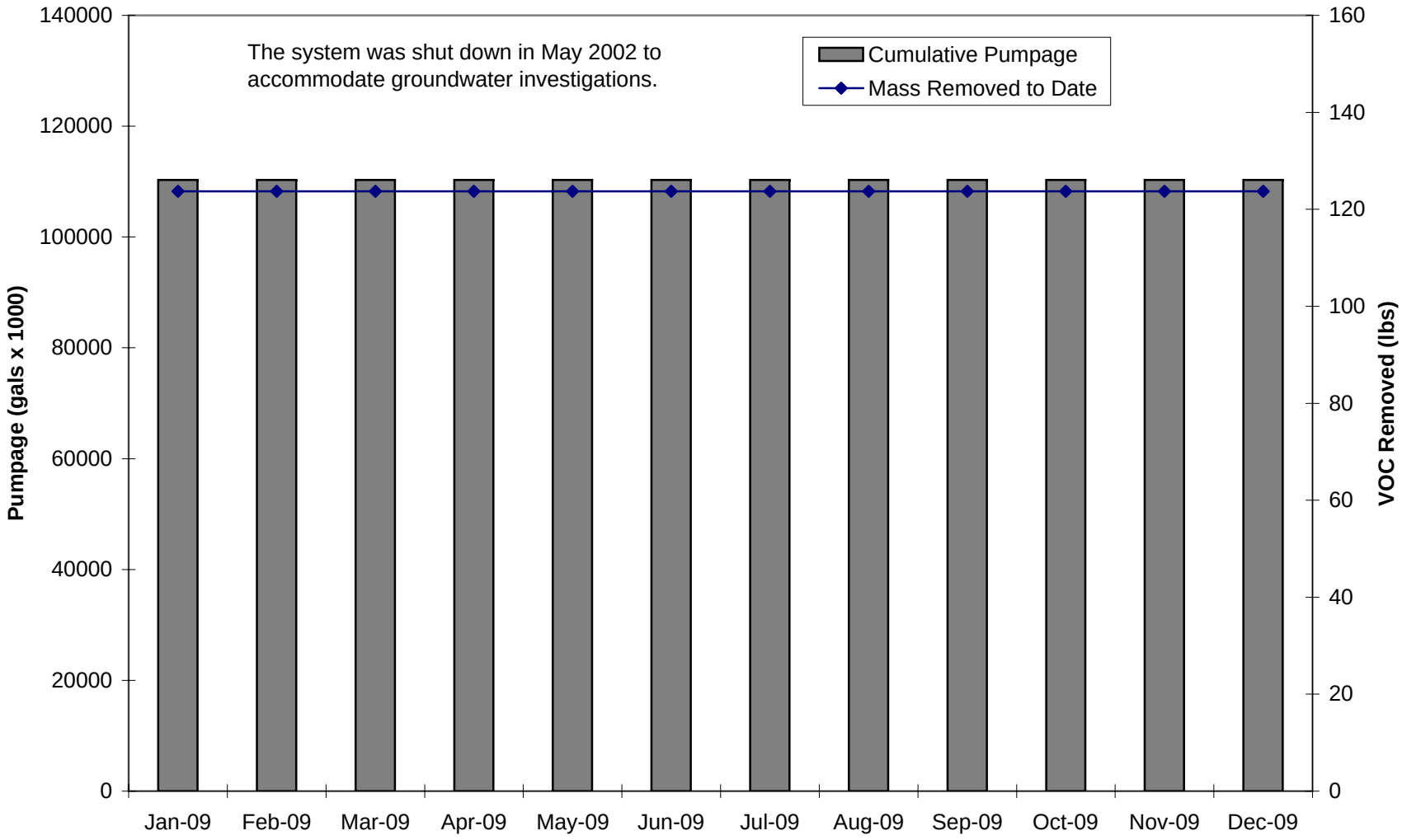

Figure G-3. Cumulative Pumpage & VOC Mass Removed to Date-Bravo ASU-2009

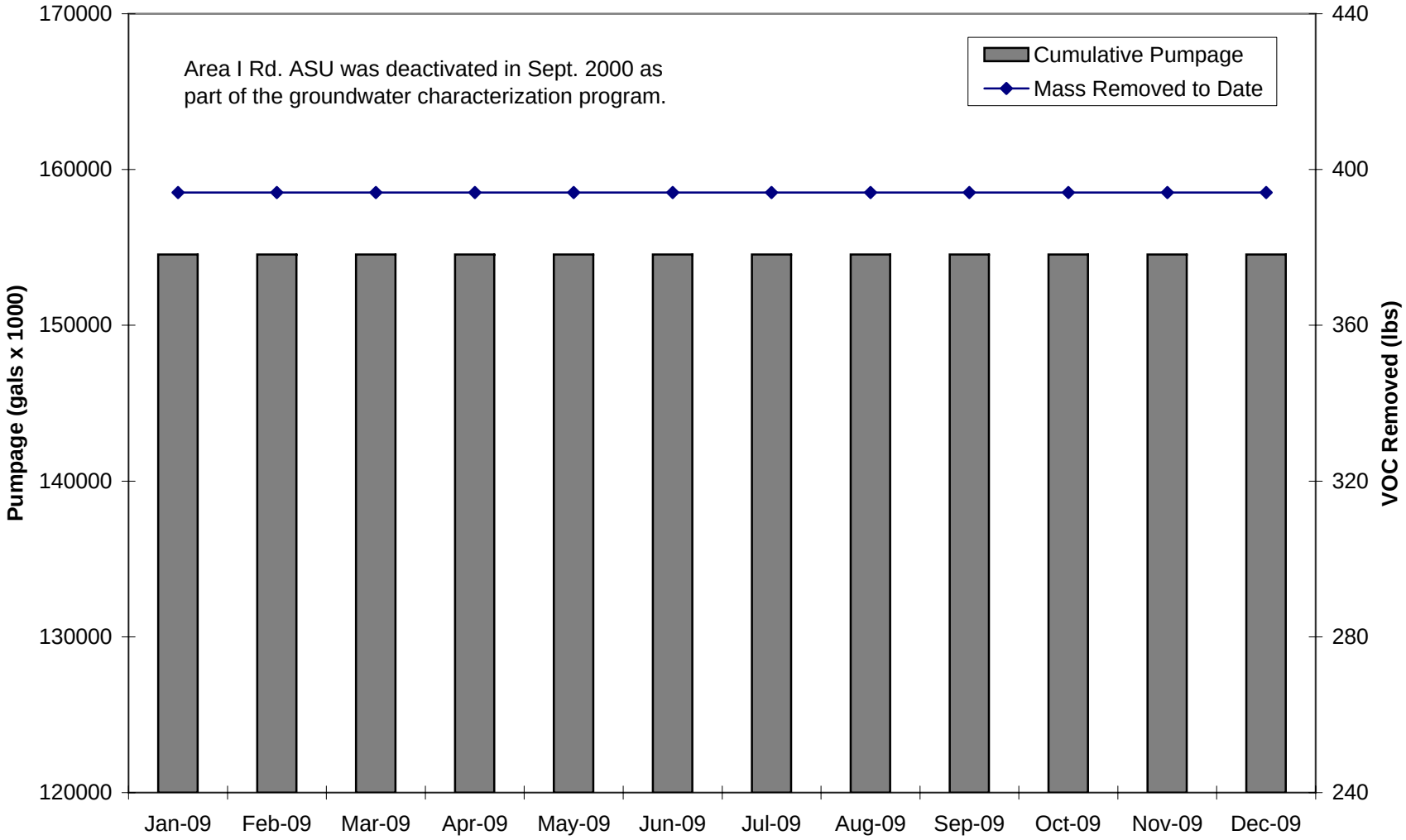

Figure G-4. Cumulative Pumpage & VOC Mass Removed to Date-Area I Rd ASU-2009

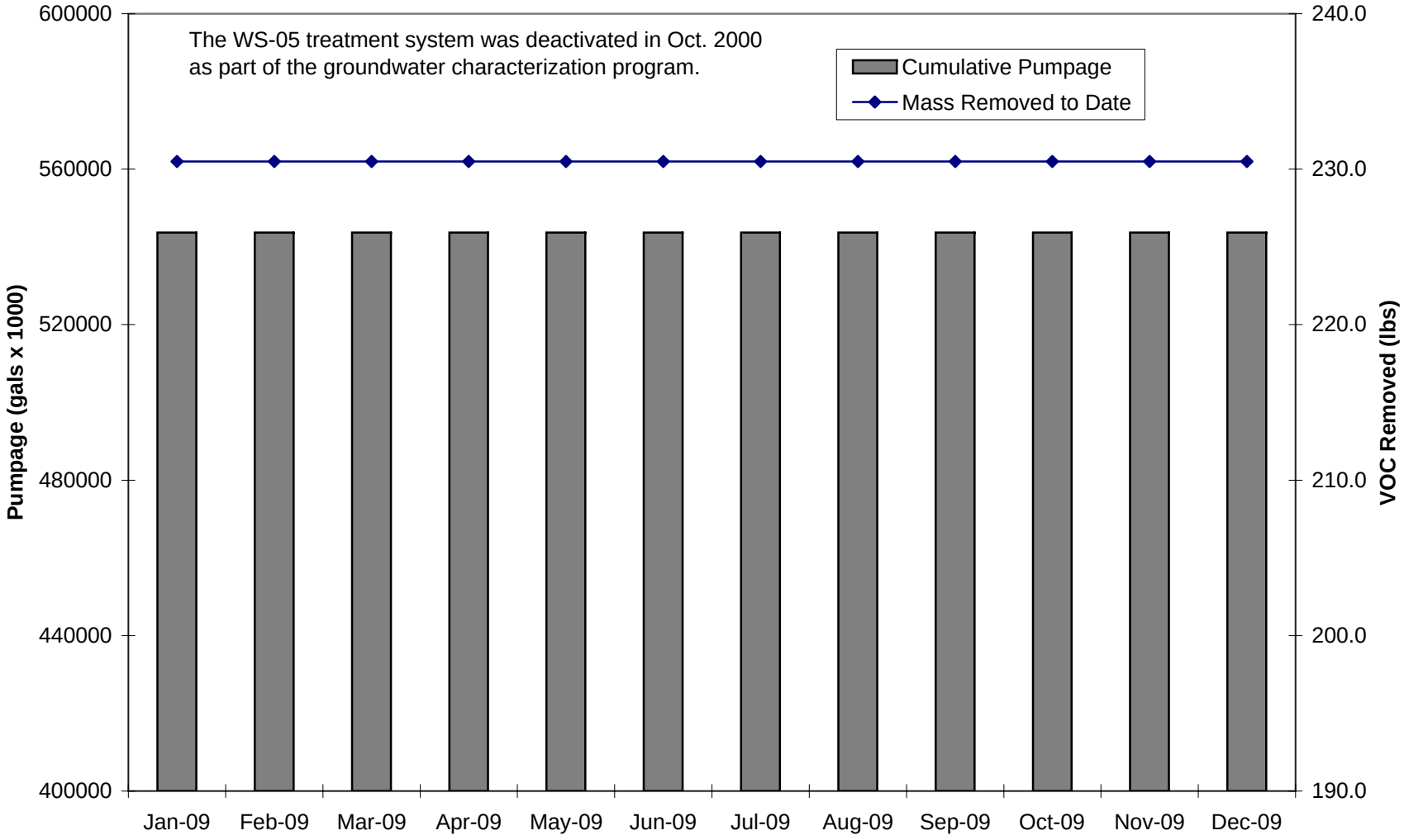

Figure G-5. Cumulative Pumpage & VOC Mass Removed to Date-WS-05 UV/H2O2-2009

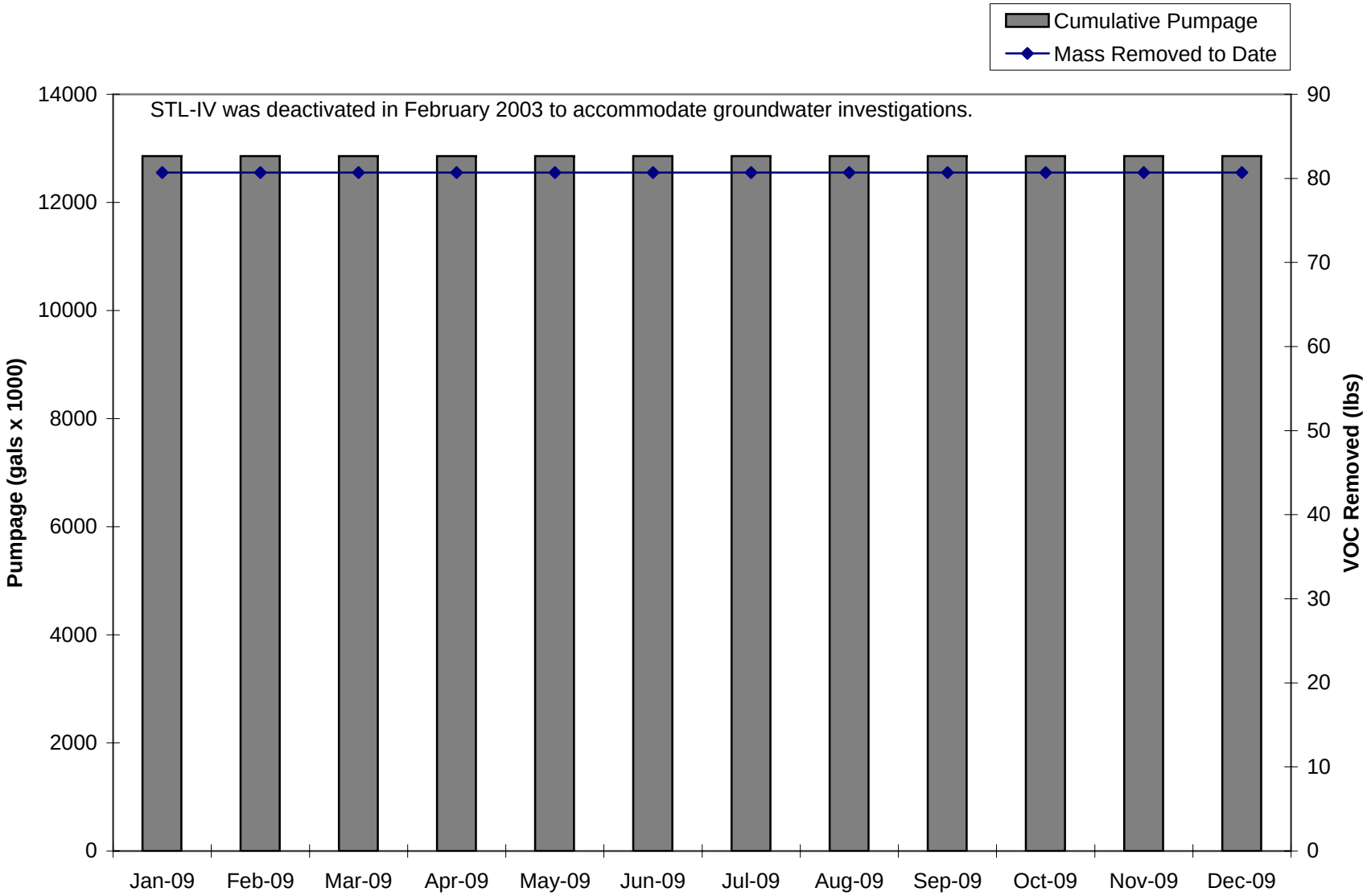

Figure G-6. Cumulative Pumpage & VOC Mass Removed to Date-STL-IV ASU-2009