

**REPORT ON  
ANNUAL GROUNDWATER MONITORING, 2007  
SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA**

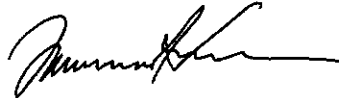
**VOLUME I OF II**

for

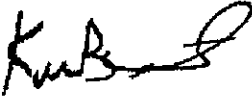
**The Boeing Company,  
National Aeronautics and Space Administration (NASA),  
and  
U.S. Department of Energy (DOE)  
Canoga Park, California**

by

**Haley & Aldrich, Inc.  
Tucson, Arizona**



**Lawrence P. Smith, P.G.  
Executive Vice President/COO  
California Professional Geologist No. 3944**



**Kurt J. Blust, P.G.  
Vice President  
California Professional Geologist No. 4828**



**Laura A. Davis, P.G.  
Senior Hydrogeologist  
California Professional Geologist No. 8334**

**File No. 32600/05/10/M490  
28 February 2008**

## TABLE OF CONTENTS

	Page
<b>LIST OF TABLES</b>	<b>ii</b>
<b>LIST OF FIGURES</b>	<b>iii</b>
<b>1. INTRODUCTION</b>	<b>1</b>
1.1 Report Organization	2
<b>2. GROUNDWATER MONITORING</b>	<b>3</b>
2.1 Groundwater Elevations and Flow Conditions	3
2.1.1 Near-Surface Groundwater	4
2.1.2 Chatsworth Formation	4
2.1.2.1 Groundwater Elevations and Flow Conditions	4
2.2 Groundwater Quality Results	6
2.2.1 Near-Surface Groundwater	9
2.2.1.1 LUFT Program	9
2.2.1.2 Evaluation Monitoring Program/Interim Corrective Action Program	9
2.2.1.3 Point of Compliance Program	10
2.2.1.4 Near-Surface Groundwater Radiochemistry Analyses	10
2.2.1.5 Other Monitoring	12
2.2.2 Chatsworth Formation	13
2.2.2.1 LUFT Program	14
2.2.2.2 Detection Monitoring Program	14
2.2.2.3 Evaluation Monitoring Program/Interim Corrective Action Program	16
2.2.2.4 Chatsworth Formation Operable Unit Constituents of Concern Analyses	18
2.2.2.5 Monitoring of Perimeter Wells and Private Off-Site Wells and Springs	21
2.2.2.6 Point of Compliance Program	23
2.2.2.7 Chatsworth Formation Radiochemistry Analyses	23
2.2.2.8 Other Monitoring	26
2.2.3 Appendix IX Sampling	30
2.2.3.1 Data Validation	30
2.2.3.2 Analytical Results	30
2.2.4 Perchlorate Characterization Sampling	33
2.2.4.1 Monitoring	33
2.2.4.2 Perchlorate Results	34
2.2.4.3 Bromide Results	35
2.2.4.4 General Mineral Results	35
2.2.4.5 Stable Isotope Results	35
2.2.5 Results of Third Quarter 2007 Verification Sampling	35
2.2.6 Proposed First Quarter 2008 Groundwater Monitoring Schedule	36
<b>3. REMEDIAL SYSTEMS</b>	<b>37</b>
3.1 Remedial Systems Activities	37
3.1.1 Treated Groundwater Volumes and Analytical Results	37
<b>4. SURFACE WATER DISCHARGE</b>	<b>39</b>
<b>REFERENCES</b>	<b>40</b>

**TABLE OF CONTENTS  
(Continued)**

**TABLES  
FIGURES**

**VOLUME II OF II**

- APPENDIX A** - Water Level Hydrographs
- APPENDIX B** - Groundwater Monitoring Schedule
- APPENDIX C** - Monitor Well Construction Data
- APPENDIX D** - Quality Assurance Assessment
- APPENDIX E** - Results of Radiological Analyses
- APPENDIX F** - Constituents of Concern and Perchlorate Concentration versus Time Plots
- APPENDIX G** - Surface Water Discharge and Permitted Groundwater Remediation Systems
- APPENDIX H** - Corrected Chemical Results

**LIST OF TABLES**

<b>Table No.</b>	<b>Title</b>
I.	Summary of Annual Rainfall Measured at the Santa Susana Field Laboratory, 1960-2007
II.	Summary of Water Level Data, 2007
III.	Summary of Results for Volatile Organic Compounds in Shallow Wells, 2007
IV.	Summary of Results for Volatile Organic Compounds in Chatsworth Formation Wells, 2007
V.	Summary of Analyses for Fuel Hydrocarbons, 2007
VI.	Summary of Analyses for Metal Constituents and Cyanide, 2007
VII.	Summary of Analyses for Semi-Volatile Organic Constituents, 2007
VIII.	Summary of Analyses for Perchlorate, 2007
IX.	Summary of Analyses for Gross Alpha, Gross Beta, Radium Isotopes, and Tritium Activities, 2007
X.	Summary of Analyses for Gamma-Emitting Radionuclides, 2007
XI.	Summary of Analyses for Appendix IX Constituents, 2007
XII.	Summary of Analyses for Constituents of Concern and Perchlorate, 2007
XIII.	Summary of Analyses for Inorganic Constituents, 2007

- XIV. Summary of Analyses for Polychlorinated Biphenyls, Dioxins, and Alcohols, RCRA Facility Investigations, 2007
- XV. Summary of Extraction Well Water Levels and Flow Rates, 2007
- XVI. Summary of Groundwater Extractions, Permitted Groundwater Remediation Facilities, 2007
- XVII. Summary of Water Quality Results for Permitted Groundwater Remediation Facilities, 2007

#### LIST OF FIGURES

Figure No.	Title
1.	Facility Location Map
2.	Locations of Wells, Springs, and Groundwater Reclamation Components
3.	Locations of Piezometers
4.	Chatsworth Formation Water Level Elevation Contour Map – October 2007
5.	Geologic Map
6.	Maximum Concentration of Trichloroethene in Near-Surface Groundwater, 2007
7.	Maximum Concentration of cis-1,2-Dichloroethene in Near-Surface Groundwater, 2007
8.	Maximum Concentration of Trichloroethene in Chatsworth Formation Groundwater, 2007
9.	Maximum Concentration of cis-1,2-Dichloroethene in Chatsworth Formation Groundwater, 2007
10.	Maximum Concentration of 1,1-Dichloroethene in Groundwater, 2007
11.	Maximum Concentration of trans-1,2-Dichloroethene in Groundwater, 2007
12.	Maximum Concentration of Tetrachloroethene in Groundwater, 2007
13.	Maximum Concentration of 1,4-Dioxane in Groundwater, 2007
14.	Maximum Concentration of Perchlorate in Groundwater, 2007
15.	Maximum Concentration of N-Nitrosodimethylamine (NDMA) in Groundwater, 2007

16. Maximum Concentration of Chloroform in Groundwater, 2007
17. Maximum Concentration of Carbon Tetrachloride in Groundwater, 2007
18. Maximum Concentration of Benzene in Groundwater, 2007
19. Maximum Concentration of Toluene in Groundwater, 2007
20. Maximum Concentration of Ethylbenzene in Groundwater, 2007
21. Maximum Concentration of m- & p-Xylenes in Groundwater, 2007
22. Maximum Concentration of o-Xylene in Groundwater, 2007
23. Maximum Concentration of 1,1-Dichloroethane in Groundwater, 2007
24. Maximum Concentration of 1,2-Dichloroethane in Groundwater, 2007
25. Maximum Concentration of Methylene Chloride in Groundwater, 2007
26. Maximum Concentration of 1,1,1-Trichloroethane in Groundwater, 2007
27. Maximum Concentration of 1,1,2-Trichloroethane in Groundwater, 2007
28. Maximum Concentration of Vinyl Chloride in Groundwater, 2007
29. Maximum Concentration of Methyl Ethyl Ketone in Groundwater, 2007
30. Maximum Concentration of Acetone in Groundwater, 2007
31. Maximum Concentration of Trichlorofluoromethane in Groundwater, 2007
32. Maximum Concentration of 1,1,2-Trichloro-1,2,2-Trifluoroethane in Groundwater, 2007
33. Maximum Concentration of Ammonia as Nitrogen in Groundwater, 2007
34. Maximum Concentration of Fluoride in Groundwater, 2007
35. Maximum Concentration of Formaldehyde in Groundwater, 2007
36. Maximum Concentration of Nitrate as NO<sub>3</sub> in Groundwater, 2007
37. Location of Wells Sampled for Appendix IX Constituents during 2007
38. Detected Inorganic Results for Appendix IX Samples, 2007
39. Detected Organic Results for Appendix IX Samples, 2007
40. Location of Referenced Site Features

## LIST OF ACRONYMS AND ABBREVIATIONS

ASU	air stripping unit
CCR	California Code of Regulations
CFOU	Chatsworth Formation Operable Unit
1,1-DCA	1,1-dichloroethane
1,1-DCE	1,1-dichloroethene
cis-1,2-DCE	cis-1,2-dichloroethene
COC	constituent of concern
DBCP	1,2-dibromo-3-chloropropane
DMR	Discharge Monitoring Reports
DPH	(California) Department of Public Health
DTSC	(California) Department of Toxic Substances Control
EFH	extractable fuel hydrocarbons
EPA	(United States) Environmental Protection Agency
FLUTE	Flexible Liner Underground Technologies, LLC
FSDF	Former Sodium Disposal Facility
GWRC	Groundwater Resources Consultants, Inc.
HpCDD	1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin
HpCDF	1,2,3,4,6,7,8-heptachlorodibenzofuran
HxCDF	1,2,3,4,7,8-hexachlorodibenzofuran
K-40	potassium-40
LC	liquid chromatography
LCS/LCSD	laboratory control sample/laboratory control sample duplicate
LUFT	leaking underground fuel tank
MCL	maximum contaminant level
MDA	minimum detectable activity
MDL	method detection limit
mg/L	milligrams per liter
MS	mass spectrometry
MS/MSD	matrix spike/matrix spike duplicate
MSL	mean sea level
NDMA	n-nitrosodimethylamine
NL	notification level
NPDES	National Pollutant Discharge Elimination System
OCDD	octachlorodibenzo-p-dioxin
PCB	polychlorinated biphenyl
PCE	tetrachloroethene
pCi/L	picoCuries per liter
2,3,4,7,8- PeCDF	2,3,4,7,8-pentachlorodibenzofuran
per mil	parts per thousand
pg/L	picograms per liter
QAPP	Quality Assurance Project Plan
QA/QC	quality assurance and quality control
Ra-226	radium-226
Ra-228	radium-228
RAL	regulatory action level
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
RPD	replicate percent difference
SAP	Sampling and Analysis Plan

## LIST OF ACRONYMS AND ABBREVIATIONS

(continued)

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
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
trans-1,2-DCE	trans-1,2-dichloroethene
TEQ	toxic equivalency
$\mu\text{g/L}$	micrograms per liter
U-234	uranium-234
U-235	uranium-235
U-238	uranium-238
UV	ultra-violet
VOC	volatile organic compound
V-SMOW	Vienna Standard Mean Ocean Water

## 1. INTRODUCTION

This report summarizes the groundwater monitoring and groundwater extraction/treatment activities conducted during 2007 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.

Monitoring activities conducted during the year included:

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

Historical data were summarized in previous reports by Groundwater Resources Consultants (GWRC, 2000) and Haley & Aldrich (2001 through 2007d).

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 2007
- contaminant concentration posting maps for the year 2007
- contaminant concentration versus time plots for 1998 through 2007

Haley & Aldrich collected additional groundwater data in 2007 as part of the Surficial Media Operable Unit Resource Conservation and Recovery Act (RCRA) Facility Investigation (SMOU RFI), the Chatsworth Formation Operable Unit (CFOU) RFI (Montgomery Watson, 2000b), and the Perchlorate Characterization Work Plan (MWH, 2003e).

For a subset of data previously reported in 2006 and 2007, the primary laboratory had reported the results using outdated method detection limits (MDLs). Based on revised laboratory reports, Appendix H summarizes:



- results that were corrected from non-detected to detected due to lowered MDLs, and
- results that were corrected from detected to non-detected due to raised MDLs.

## **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

This section presents a discussion of groundwater levels and analytical results from 2007 groundwater sampling events conducted at SSFL. 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). Figure 2 shows the locations of the wells. Piezometer locations are presented in Figure 3. Groundwater elevation contours for the first-encountered water in the Chatsworth Formation, as determined from groundwater levels measured during the fourth quarter 2007 monitoring event, are shown in Figure 4.

Additional subsurface investigations are being conducted at SSFL as part of ongoing programs. As a result of these ongoing investigations, additional information on site geology and groundwater conditions becomes available. To the extent possible, this new information is incorporated into quarterly and annual groundwater monitoring reports.

Site geology is summarized and illustrated on Figure 5. Data collected in the eastern and central portions of SSFL indicate the presence of several geologic features that may impact groundwater flow (MWH, 2002, 2007). The geologic features depicted on Figure 5 reflect the understanding and interpretation of both the stratigraphy and structure at SSFL and are based on over five years of field and office evaluations.

The following subsections provide a review of groundwater levels, and groundwater quality results and trends. Annual precipitation, year 2007 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 2007 water levels in wells installed with FLUTe systems were prepared by MWH and are presented in Appendix A. Well construction details are summarized in Appendix C. FLUTe system and Westbay system construction details are presented in Appendix C.

Groundwater quality results and trends, as presented in Tables III through XIV, Appendices E and F, and Figures 6 through 39, are discussed in Section 2.2.

### 2.1 Groundwater Elevations and Flow Conditions

Groundwater occurs at SSFL in the alluvium, weathered bedrock, and unweathered bedrock (Montgomery Watson, 2000a). 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 narrow alluvial drainages (topographic lows) and broad valleys (e.g., Burro Flats in Area IV, Figure 40). At some locations 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, 2003d).

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

Groundwater data collection and analysis is ongoing and interpretations of existing hydrogeologic conditions will be modified appropriately.

### **2.1.1 Near-Surface Groundwater**

Water level measurements were conducted at 91 of the 92 near-surface groundwater wells during 2007 (Table II and Appendix A). During 2007, water levels were also measured at 31 piezometers installed at the Facility (Table II). Near-surface groundwater levels 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 2007 water year, a total of 5.55 inches of precipitation was measured, approximately 70% below average since 1960 (Table I). A water year begins on October 1 and concludes on September 30 of the following calendar year.

Water level data from shallow wells continue to indicate that 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, 2003d).

### **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 and 2007).

#### **2.1.2.1 Groundwater Elevations and Flow Conditions**

Water level elevations were measured during 2007 at 159 of the 162 Chatsworth Formation monitor wells (Table II and Appendix A).

Static depths to water in Chatsworth Formation wells measured during 2007 ranged from above land surface at artesian wells RD-59B, RD-59C, RD-68A, and RD-68B to 471 feet below land surface at OS-25. Water level elevations measured in Chatsworth Formation monitor wells during 2007 ranged from

approximately 1,225 feet above mean sea level (MSL) at well RD-75 to about 1,893 feet above MSL at well RD-42 (Table II, Figure 4).

Discrete depth-interval water level data from FLUTE-equipped wells were collected by dataloggers and are presented in Table II and Appendix A. Access to manually measure water levels was not available at these wells.

The water level contour map, presented as Figure 4, was prepared using October 2007 water level elevations from the shallowest well in each Chatsworth Formation cluster, and from individual Chatsworth Formation wells at non-cluster locations.

Chatsworth Formation water levels during the fourth quarter 2007 were generally lower than fourth quarter 2006 water levels (Haley & Aldrich, 2007a; Appendix A). This year-to-year decrease may have been the result of below average precipitation in 2007 (Table I).

As noted above, ongoing field investigations have resulted in the installation of several multi-port sampling devices (FLUTES) in wells in the Former Sodium Disposal Facility (FSDF) area, and the northwest and northeast portions of SSFL (Figure 40). 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.

## 2.2 Groundwater Quality Results

This section summarizes the results of quarterly groundwater sampling and analysis for 2007. The groundwater monitoring program at SSFL fulfills 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), the Happy Valley Interim Measures project (MWH, 2003f), the Perchlorate Characterization program (MWH, 2003e), the SMOU RFI program (Ogden, 2000), and the Area IV tritium investigation, and
- the DTSC requirement to “collect both filtered/unfiltered samples on a quarterly basis for five quarters in all groundwater monitoring wells in which metals are a contaminant of potential concern” (DTSC, 2007).

The Post-Closure Permit monitoring programs include the Evaluation Monitoring Program and the Detection Monitoring Program. The Evaluation Monitoring Program requires semiannual sampling of point of compliance wells, evaluation monitoring wells, and interim corrective action wells for the analysis of volatile organic compounds (VOCs; Tables III and IV) (DTSC, 2001). Detection monitoring wells, including background wells, are scheduled for quarterly sampling for the analysis of VOCs (DTSC, 2001). 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 next five-year COC monitoring required by the 1995 Post-Closure Permits is scheduled for 2010.

In this report, groundwater sampling results from Facility wells are compared to various regulatory limits for discussion purposes. For those compounds or water quality constituents that have drinking water Maximum Contaminant Levels (MCLs) [promulgated per the Safe Drinking Water Act (SDWA) and 22 CCR, sections 64431 through 64449 and 64672], the MCLs are used for comparison (DPH, 2007a). Some COCs do not have associated MCLs but have notification levels (NLs) that are used for comparison and discussion. NLs are health-based advisory levels established for chemicals in drinking water for which there are no formal MCLs. California water purveyors are required to advise their customers of the presence of these compounds in drinking water when concentrations are at or above NLs. If concentrations of these compounds exceed 10 or 100 times the NLs, water purveyors are required to remove the water source from their distribution system (DPH, 2007b). It is important to note that groundwater at SSFL is not used as a drinking water supply. References to MCLs and NLs are for purposes of discussion only.

Reporting requirements in the Post-Closure Permits call for posting of water quality results above method detection limits (MDLs). Except for n-nitrosodimethylamine (NDMA) analysis using modified Environmental Protection Agency (EPA) Method 1625, analytical results with concentrations greater than the 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. Because the currently approved SAP calls for analytical methods which are not sufficiently sensitive to detect 1,4-dioxane and NDMA (EPA Methods 8260 and 8270C, respectively) at the California Department of Public Health (DPH) notification levels (NLs) for these compounds, Boeing has elected to use more sensitive DPH approved analytical methods, including EPA Methods 8260-SIM for 1,4-dioxane and modified 1625 for NDMA.

Boeing has performed quality assurance and quality control (QA/QC) analyses to assess the presence of NDMA in water 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 have indicated that NDMA is detected in these samples at concentrations below the NL of 0.010 micrograms per liter ( $\mu\text{g/L}$ ). For this reason, sample result reporting limits are at the NL of 0.010  $\mu\text{g/L}$  per Boeing's request to DTSC dated July 1, 2005 (Boeing, 2005).

Pursuant to the groundwater monitoring program, groundwater samples were collected during 2007 from shallow and Chatsworth Formation wells, and off-site wells. A summary of the analyses conducted at individual wells during 2007 is presented in Table B-I of Appendix B.

Pursuant to the monitoring program for 2007, laboratory analyses were performed to determine the concentration of:

- volatile organic compounds (VOCs)
- fuel hydrocarbons
- metals
- cyanide
- semi-volatile organic compounds (SVOCs)
- perchlorate
- radionuclides (gross alpha, gross beta, radium, thorium, tritium, uranium, and gamma-emitting radionuclides)
- Appendix IX constituents
- dioxins and furans
- inorganic constituents
- polychlorinated biphenyls (PCBs)

Inorganic constituents included:

- major cations (calcium, magnesium, potassium, and sodium)
- major anions (bicarbonate, carbonate, chloride, nitrate, and sulfate)
- total dissolved solids
- pH
- specific conductance

Metals included antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, iron, lead, manganese, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc. At wells sampled in response to DTSC's requirement to analyze unfiltered and filtered metals in groundwater for five quarters (DTSC, 2007), additional metals were analyzed: aluminum, boron, magnesium, strontium, and tin. As part of the SMOU RFI groundwater investigation, hexavalent chromium was analyzed in a few samples.

Water quality results for groundwater samples are tabulated in Tables III through XIV. Analytical results for trichloroethene (TCE) and cis-1,2-dichloroethene (cis-1,2-DCE), the most prevalent contaminants detected in groundwater samples collected from the site, are posted on Figures 6 through 9 for the near-surface and Chatsworth Formation groundwater. Maximum concentrations of constituents of concern detected during 2007 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 any groundwater samples collected during 2007. Figure 14 presents maximum perchlorate concentrations detected during the year. Figure 37 presents

wells sampled for Appendix IX constituents during 2007. Concentrations of Appendix IX constituents detected during 2007 are posted on Figures 38 and 39.

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

Monitoring for the various characterization efforts in progress at SSFL was conducted during 2007 as follows:

- As part of the CFOU RFI groundwater investigation, a number of wells were monitored for constituents of concern and perchlorate (Table XII).
- As part of the Happy Valley Interim Measures project (MWH, 2003f), perchlorate and bromide were analyzed in groundwater samples collected from wells in the vicinity of the biotreatment area located near former Building 359 (Tables VIII and XIII). Former Building 359 is located along Area I Road approximately 175 feet east southeast of well HAR-25 (Figures 2 and 40).
- As part of the Perchlorate Characterization Work Plan (MWH, 2003e), groundwater samples were collected from private wells located off-site and Facility monitoring wells for the analysis of perchlorate and inorganic constituents (Tables VIII and XIII). Also, groundwater samples collected at well OS-09 were analyzed for stable hydrogen and oxygen isotopes (Table XIII).
- In support of the SMOU RFI program, groundwater samples were collected as part of the SMOU RFI Groups 1A, 3, 4, 6, and 8 data gap investigations (Figure 40) for analysis. Analyses performed included one or more of the following: extractable fuel hydrocarbons (EFHs), metals, hexavalent chromium, PCBs, dioxins and furans, and alcohols (Tables V, VI, XIV).
- As part of the Area IV tritium investigation, Facility monitoring wells and private wells located off-site were monitored for tritium (Table IX).
- In response to DTSC's requirement, groundwater samples were collected for the analysis of dissolved (filtered) and total (unfiltered) metals "in all groundwater monitoring wells in which metals are a contaminant of potential concern" (Table VI; DTSC, 2007). The first four of the five quarterly metals sampling events required by DTSC were completed in 2007. The fifth and final quarterly metals sampling event will occur during the first quarter of 2008.

A quality assurance summary of the monitoring program is presented in Appendix D. As discussed in Appendix D, detections of carbon disulfide reported below the reporting limit by Lancaster Laboratories, Inc. appeared to be false positives due to a laboratory process issue (Lancaster, 2007).

For a subset of data previously reported in 2006 and 2007, the primary laboratory had reported the results using outdated method detection limits (MDLs). Based on revised laboratory reports, Appendix H summarizes:

- results that were corrected from non-detected to detected due to lowered MDLs, and
- results that were corrected from detected to non-detected due to raised MDLs.

## 2.2.1 Near-Surface Groundwater

Groundwater samples were collected from 25 shallow wells and 6 piezometers as part of the groundwater monitoring program in 2007. Some shallow wells scheduled for groundwater sampling were dry or contained insufficient water for sampling when monitored (Table II and Appendix A). Analytical results for each well are summarized in Tables III, VI, VII, IX through XI, and XIV. The analytical results were within historical ranges (GWRC, 2000; Haley & Aldrich, 2001, 2002a, 2002b, 2003a, 2004, 2005, 2006, 2007a; MWH, 2003d), with the exceptions noted below. Deviations from historical water quality results for analytes exceeding the reporting limits are discussed below. Results of verification sampling are discussed below and in section 2.2.5.

In support of the SMOU RFI program, selected piezometers and shallow wells were sampled during 2007 as part of the Groups 3, 4, 6, and 8 data gap investigations. Per DTSC's requirement, selected shallow wells were sampled for dissolved and total metals (DTSC, 2007). As part of the investigation into the source and extent of tritium in groundwater, groundwater samples were collected from selected piezometers and analyzed for tritium.

### 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 2007. However, these wells had insufficient water for sampling throughout the year and were not sampled in 2007. Semiannual monitoring of shallow LUFT program wells is next scheduled for the first quarter of 2008.

### 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 2007 were within historical ranges (Table III) with the exceptions noted below:

#### Newly Detected Analytes

- Tetrachloroethene (PCE) was detected for the first time in the groundwater sample collected from evaluation monitoring well HAR-03 during the second quarter at an estimated concentration of 0.32  $\mu\text{g/L}$ . The MCL for PCE is 5  $\mu\text{g/L}$ .
- Trichlorofluoromethane was detected for the first time in the groundwater sample collected from evaluation monitoring well ES-03 during the second quarter at an estimated concentration of 0.47  $\mu\text{g/L}$ . The MCL for trichlorofluoromethane is 150  $\mu\text{g/L}$ .
- 1,1-Dichloroethene (1,1-DCE) was detected above the reporting limit for the first time in the groundwater sample collected from evaluation monitoring well RS-21 during the third quarter at a concentration of 0.6  $\mu\text{g/L}$ . 1,1-DCE is an abiotic decay product of 1,1,1-trichloroethane and a degradation product of trichloroethene (TCE),



which was detected at 75 µg/L in this sample. The MCL for 1,1-DCE is 6 µg/L.

#### 2007 Concentrations Greater than Previously Detected

- PCE was detected in groundwater collected from interim corrective action well ES-27 during the first quarter at a new maximum concentration of 5.3 µg/L. The previous maximum concentration for PCE in groundwater samples from well ES-27 was 1.7 µg/L in August 1997 (GWRC, 2000). The MCL for PCE is 5 µg/L.
- Cis-1,2- DCE was detected at 300 µg/L in groundwater collected from interim corrective action well ES-21 during the third quarter. The previous maximum concentration of 200 µg/L was detected in the ES-21 groundwater sample collected in February 2000 (Haley & Aldrich, 2001). Cis-1,2-DCE is a degradation product of TCE, which was detected at 390 µg/L in this sample. The MCL for cis-1,2-DCE is 6 µg/L.

Evaluation monitoring wells and interim corrective action wells are scheduled to be monitored semiannually for VOCs and every five years for COCs. The next VOC monitoring event for these wells is scheduled for the first quarter 2008. Constituent of concern monitoring is next scheduled for 2010.

#### 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 groundwater sampling and analysis of Appendix IX constituents during the second quarter 2007 and semiannual VOCs during the second and fourth quarters 2007.

Results of the monitoring are reported in Section 2.2.3 and Table XI. SH-04 and RS-08 were dry during the second, third, and fourth quarters.

#### 2.2.1.4 Near-Surface Groundwater Radiochemistry Analyses

During the year, near-surface groundwater samples were collected from selected wells and piezometers for the analysis of gross alpha and gross beta radioactivity, Radium-226 (Ra-226), Radium-228 (Ra-228), tritium, gamma-emitting radionuclides, isotopic thorium, and isotopic uranium using EPA Methods 900.0, 903.1, 904.0, 906.0, 901.1, 907.0, and 908.0, respectively (Tables IX and X). Samples were also collected for the analysis of additional radionuclide activities per EPA drinking water regulations (Federal Register, 2000):

- In the event gross alpha activity exceeded 15 picoCuries per liter (pCi/L), groundwater samples were analyzed for isotopic uranium using EPA Method 908.0.
- In the event gross beta activity exceeded 50 pCi/L, groundwater samples were analyzed for potassium-40 (K-40) and strontium-90 (Sr-90) using EPA Methods 901.1 and 905.0, respectively.

As discussed in Appendix D, project specific minimum detectable activities (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).

Results of analyses for groundwater samples collected from Facility wells are compared to California drinking water MCLs for discussion purposes only. Groundwater at SSFL is not used as a drinking water supply. Except for samples collected for tritium analysis by EPA Method 906.0, all groundwater radiochemistry samples are field filtered.

Results of radiological analyses of near-surface groundwater samples are noted below.

#### Gross Alpha Activity

Results for 2007 gross alpha samples were within historical ranges for near-surface groundwater (Table IX; Haley & Aldrich, 2007a). According to the EPA drinking water regulations, the adjusted gross alpha MCL excludes uranium activity (Federal Register, 2000). When the sum of isotopic uranium activity (Table X) is excluded from gross alpha activity, none of the adjusted gross alpha results for 2007 samples exceeded the adjusted gross alpha drinking water MCL of 15 pCi/L. Calculations of adjusted gross alpha are presented below for samples where gross alpha activity prior to uranium subtraction exceeded 15 pCi/L:

Well	Radiochemical Activity (pCi/L)	
	RS-11	RS-54
U-233/234	16.4	12.7
U-235	0.797	0.641
U-238	14.8	11.6
Sum of isotopic uranium activity	32.0	24.9
Gross alpha	16.7	20.0
Adjusted gross alpha	<0	<0

#### Gross Beta Activity

The gross beta activities detected in the near-surface groundwater samples were less than the drinking water MCL of 50 pCi/L (Table IX).

#### Tritium Activity

The results of analyses for tritium in near-surface groundwater samples collected during the year were less than the drinking water MCL of 20,000 pCi/L and were comparable to past results (Table IX; Haley & Aldrich, 2007a).

#### Radium-226 and Radium-228

The sum of Ra-226 and Ra-228 activities for all near-surface groundwater samples was less than the drinking water MCL of 5 pCi/L for Ra-226/228 combined (Table IX).

### Gamma Emitters

Anthropogenic gamma emitters (cesium-134, cesium-137, cobalt-57, cobalt-60, europium-152, europium-154, manganese-54, and sodium-22) were not detected in near-surface groundwater samples collected during 2007 (Table X).

### Isotopic Thorium

Thorium isotopes were not detected in near-surface groundwater samples collected during 2007 (Table X).

### Isotopic Uranium

The California MCL for total uranium is 20 pCi/L. Groundwater samples collected from shallow wells RS-11 and RS-54 were analyzed for isotopic uranium. Total uranium concentrations exceeded the 20 pCi/L MCL based on the results of analyses for uranium isotope activities (Table X):

Well	Activity Concentration (pCi/L)			Total
	Uranium-234 (U-234)	Uranium-235 (U-235)	Uranium-238 (U-238)	
RS-11	16.4	0.797 J	14.8	<b>32.0</b>
RS-54	12.7	0.641 J	11.6	<b>24.9</b>

Bold results exceed 20 pCi/L California MCL.

#### 2.2.1.5 Other Monitoring

Other monitoring of near-surface groundwater water quality during 2007 yielded results of analyses consistent with historical data with exceptions noted below.

- Methylene chloride and PCE were detected in groundwater collected from monitoring well RS-54 during February 2007 at estimated concentrations of 78 and 30  $\mu\text{g/L}$ , respectively (Table III). These concentrations exceeded the previous maximum concentrations for methylene chloride and PCE of 74  $\mu\text{g/L}$  in March 2002 and 8.6  $\mu\text{g/L}$  in November 1998, respectively (Haley & Aldrich, 2003a; GWRC, 2000). In groundwater collected from RS-54 during November 2007, methylene chloride and PCE concentrations were 9 and 8  $\mu\text{g/L}$ , respectively (Table III). The MCLs for methylene chloride and PCE are each 5  $\mu\text{g/L}$ .

### Dissolved and Total Metals

Per DTSC's requirement, groundwater was collected from shallow wells ES-21, ES-24, and RS-54 for the analysis of dissolved (filtered) and total (unfiltered) metals (DTSC, 2007). A groundwater sample for the analysis of dissolved metals was not collected from RS-54 during the second quarter because there was not sufficient water volume to collect both dissolved and

total metals. Results are summarized in Table VI. Concentrations of metals were below MCLs and NLs with the following exceptions:

- Dissolved and total manganese were detected at concentrations ranging up to 0.77 and 1 mg/L, respectively, in groundwater samples collected from well ES-24. The California drinking water NL for manganese is 0.5 mg/L.
- Total nickel was detected above the 0.1 mg/L MCL in groundwater collected from RS-54 during the first and second quarters at concentrations ranging up to 0.7 mg/L. Dissolved nickel was detected above the MCL in groundwater collected from RS-54 at a concentration of 0.6 mg/L. The MCL for nickel is 0.1 mg/L. Previous concentrations of dissolved nickel at RS-54 ranged up to 0.99 mg/L in September 2005 (Haley & Aldrich, 2006). RS-54 groundwater was not analyzed for total nickel prior to 2007.

#### SMOU RFI Data Gap

As part of the data gap investigation for SMOU RFI Groups 3, 4, 6, and 8, piezometers and shallow wells were sampled during 2007 as listed below:

Analysis	Monitoring Location
Metals	HAR-11, PZ-047, PZ-114, PZ-126, RS-54
PCBs	RS-54
Dioxins and furans	RS-54
SVOCs	RS-54

Results are summarized in Tables VI, VII, and XIV. Dioxins, SVOCs, and PCBs were not detected in RS-54 groundwater (Table VII and XIV). All results for metals were below MCLs and NLs with the following exceptions:

- Dissolved manganese was detected above the NL in groundwater collected from PZ-126 during May 2007 at a concentration of 1.3 mg/L. The California drinking water NL for manganese is 0.5 mg/L.
- As discussed earlier in this section, total nickel was detected above the 0.1 mg/L MCL in groundwater collected from well RS-54 at concentrations ranging up to 0.7 mg/L.
- Dissolved manganese was detected above the NL in groundwater collected from well HAR-11 at a concentration of 1.3 mg/L. The California drinking water NL for manganese is 0.5 mg/L.

#### **2.2.2 Chatsworth Formation**

Analytical results of Chatsworth Formation groundwater samples collected during 2007 are summarized in Tables IV through XIV. Overall, results were consistent with historical results (GWRC, 2000; Haley & Aldrich, 2001, 2002a, 2002b, 2003a, 2003b, 2004, 2005, 2006, 2007a, 2007b, 2007c, 2007d). Deviations from past water quality results for analytes reported above the reporting limits are discussed below.

Chatsworth Formation groundwater samples were collected from 131 Facility wells and 11 private off-site wells as part of the groundwater monitoring program in 2007. Detection monitoring wells and background wells are scheduled to be sampled quarterly. For the Evaluation Monitoring Program, Chatsworth Formation evaluation monitoring wells and interim corrective action wells are scheduled to be monitored semiannually during the first and third quarters. Three Chatsworth Formation wells serving as point of compliance wells are scheduled to be monitored annually for Appendix IX parameters. As part of the CFOU RFI groundwater investigation, selected Chatsworth Formation wells are scheduled to be sampled quarterly for constituents of concern. In support of the SMOU RFI program's data gap investigation for Groups 1A, 3, 6, and 8, groundwater from selected Chatsworth Formation wells was sampled and analyzed for extractable fuel hydrocarbons (EFHs), hexavalent chromium, metals, SVOCs, PCBs, dioxins and furans, and/or alcohols.

Per DTSC's requirement, groundwater from selected wells was scheduled to be sampled quarterly for the analysis of dissolved and total metals (DTSC, 2007). As part of the investigation into the source and extent of tritium in groundwater, groundwater samples were collected from selected Chatsworth Formation wells and analyzed for tritium.

#### 2.2.2.1 LUFT Program

VOC and fuel hydrocarbon analytical results for the semiannual sampling of Chatsworth Formation wells monitored under the LUFT program were within historical ranges during 2007 (Tables IV and V) with the following exceptions:

##### 2007 Concentrations Greater than Previously Detected

Well	Quarter	Analyte	Sample Concentration ( $\mu\text{g/L}$ )	Highest Previous Sample Concentration ( $\mu\text{g/L}$ ), Date	MCL or NL ( $\mu\text{g/L}$ )
RD-36C	First	Trans-1,2-DCE	40	38, 11/2006	10 MCL
RD-37	Fourth	Carbon disulfide	0.67	0.44, 05/2001	160 NL
RD-38A	First	Cis-1,2-DCE	69	66, 09/2006	6 MCL
	First	Trans-1,2-DCE	3.3 J	1.8, 11/2000	10 MCL
	Third	Vinyl chloride	1 J	0.9, 11/2000	0.5 MCL

The next semiannual monitoring of LUFT program wells will occur during the first quarter 2008.

#### 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 2007 (Table IV) with the following exceptions:

- Carbon disulfide was detected above the reporting limit in groundwater collected from detection monitoring wells RD-05B, RD-05C, and RD-43C during the fourth quarter at concentrations of 0.67,

0.70, and 0.62  $\mu\text{g/L}$ , respectively. Carbon disulfide was detected above the reporting limit in primary and duplicate groundwater samples collected from detection monitoring well RD-37 during the fourth quarter at concentrations ranging up to 0.67  $\mu\text{g/L}$ . Carbon disulfide has not been detected previously in RD-05B groundwater samples. Carbon disulfide was detected once previously in RD-05C groundwater in January 2003 at an estimated concentration of 0.34  $\mu\text{g/L}$  (Haley & Aldrich, 2004). Carbon disulfide was detected once previously in RD-37 groundwater at a concentration of 0.44  $\mu\text{g/L}$  in May 2001 (Haley & Aldrich, 2002a). The previous carbon disulfide detect in RD-43C groundwater in August 2007 was considered a laboratory contaminant. The California drinking water NL for carbon disulfide is 160  $\mu\text{g/L}$ . Verification sampling (primary, duplicate, split, and field blank samples) will be scheduled for the first quarter 2008 to confirm if carbon disulfide is detectable in RD-05B, RD-05C, RD-37, and RD-43C groundwater.

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

- TCE at estimated concentrations ranging up to 0.18  $\mu\text{g/L}$  in primary and duplicate samples collected from background well RD-48C. TCE was detected previously in RD-48C groundwater in May 1994 above the reporting limit at 1.8  $\mu\text{g/L}$  (GWRC, 2000). The MCL for TCE is 5  $\mu\text{g/L}$ .
- Chloromethane at an estimated 0.1  $\mu\text{g/L}$  in groundwater collected from detection monitoring wells RD-43A and RD-43C. Chloromethane was detected once previously in RD-43A below the reporting limit at an estimated 0.44  $\mu\text{g/L}$  in November 2002 (Haley & Aldrich, 2003a). Neither a drinking water MCL nor a California NL has been established for chloromethane.
- TCE at an estimated 0.28  $\mu\text{g/L}$  in the split sample collected from detection monitoring well RD-51C during October 2007. TCE was not detected above the 0.1  $\mu\text{g/L}$  MDL in the primary and duplicate samples collected at RD-51C. TCE was detected in five prior RD-51C samples at concentrations ranging up to 0.9  $\mu\text{g/L}$  (GWRC, 2000; Haley & Aldrich, 2001). Four of these five results were above the reporting limit. The MCL for TCE is 5  $\mu\text{g/L}$ .
- Cis-1,2-DCE at an estimated 0.1  $\mu\text{g/L}$  in groundwater collected from detection monitoring well RD-52C. Cis-1,2-DCE was detected in 10 prior RD-52C samples at concentrations ranging up to an estimated 0.49  $\mu\text{g/L}$  (Haley & Aldrich, 2001, 2002a, 2003a, 2003b, 2007a). Four of these 10 results were above the reporting limit. The MCL for cis-1,2-DCE is 6  $\mu\text{g/L}$ .

Verification sampling (primary, duplicate, split, and field blank samples) will be scheduled during the first quarter 2008 to confirm if these VOCs are detectable in groundwater:

- Chloromethane in RD-43A and RD-43C

- Cis-1,2-DCE in RD-52C
- TCE in RD-48C and RD-51C.

Results of verification sampling conducted during the fourth quarter are presented in Section 2.2.5 below. For detection monitoring and background wells, verification sampling results indicated that

- TCE was not detectable in RD-37 groundwater
- Acetone was not detectable in RD-43A groundwater
- Methylene chloride was not detectable in RD-48C groundwater
- 1,4-Dioxane was not detectable in RD-51C groundwater

Verification samples scheduled for the fourth quarter at detection monitoring well RD-39A and background well RD-48A could not be collected because these wells did not contain a sufficient water volume. TCE was detected in the RD-39A groundwater sample at 1 µg/L during the first quarter. Carbon disulfide was detected in a RD-48A groundwater sample at an estimated 0.85 µg/L in September 2006 (Haley & Aldrich, 2007a). Verification sampling for these wells and constituents will be scheduled for the first quarter 2008. The MCL for TCE is 5 µg/L and the California drinking water NL for carbon disulfide is 160 µg/L.

Verification samples collected and analyzed during the second quarter 2007 confirmed the presence of TCE in groundwater samples collected from background well RD-48B. Per the Post-Closure Permit requirements, Appendix IX monitoring of background well RD-48B occurred during the third quarter 2007. Appendix IX analytical results for RD-48B groundwater are presented in Table XI and discussed in Section 2.2.3 below. Proposed as a replacement background well for RD-48B (Boeing, 2007), well RD-67 will be scheduled for quarterly groundwater sampling and analysis of constituents of concern and background monitoring parameters per the Post-Closure Permits.

As part of other monitoring programs, some detection monitoring wells were also sampled and analyzed for fuel hydrocarbons, SVOCs, perchlorate, constituents of concern, and inorganic constituents (Tables V, VII, VIII, XII, and XIII). Results of analyses for fuel hydrocarbons in groundwater from detection monitoring wells RD-32 and RD-37 are discussed in Section 2.2.2.1. SVOCs, perchlorate, and constituents of concern were not detected in samples from detection monitoring wells except for ammonia as nitrogen and formaldehyde in RD-51C groundwater, and fluoride in RD-44 and RD-51C groundwater as discussed in Section 2.2.2.4. Results of analyses for inorganic constituents in groundwater samples are discussed in Section 2.2.4.

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 the year were within historical ranges with the exceptions noted below (Table IV):

### Newly Detected Analytes

- Benzene was detected for the first time in the groundwater sample collected from interim corrective action well RD-04 during the second quarter at an estimated concentration of 6.8  $\mu\text{g/L}$ . Benzene was not detected in RD-04 groundwater samples collected during the first, third, and fourth quarters. The MCL for benzene is 1  $\mu\text{g/L}$ .
- 1,1,2-Trichloroethane and 1,1-dichloroethane (1,1-DCA) were detected for the first time in the groundwater sample collected from evaluation monitoring well RD-46A during the first quarter at estimated concentrations of 0.34 and 0.35,  $\mu\text{g/L}$ , respectively. The MCLs for 1,1,2-trichloroethane and 1,1-DCA are each 5  $\mu\text{g/L}$ .
- Chloroethane was detected for the first time in the groundwater sample collected from evaluation monitoring well RD-51B during the fourth quarter at an estimated concentration of 0.1  $\mu\text{g/L}$ . Neither a drinking water MCL nor a California NL have been established for chloroethane.
- Trans-1,2-dichloroethene (trans-1,2-DCE) and vinyl chloride were detected for the first time in the groundwater sample collected from evaluation monitoring well RD-55B during the third quarter at estimated concentrations of 0.2 and 0.1  $\mu\text{g/L}$ , respectively. Trans-1,2-DCE and vinyl chloride are degradation products of TCE, which was detected at 21  $\mu\text{g/L}$  in this sample. Trans-1,2-DCE and vinyl chloride were also detected in RD-55B groundwater collected during the fourth quarter at estimated concentrations of 0.3 and 0.1  $\mu\text{g/L}$ , respectively. The MCLs for trans-1,2-DCE and vinyl chloride are 10 and 0.5  $\mu\text{g/L}$ , respectively.
- Toluene was detected for the first time in the groundwater sample collected from evaluation monitoring well RD-58A during the fourth quarter at an estimated concentration of 0.8  $\mu\text{g/L}$ . The MCL for toluene is 150  $\mu\text{g/L}$ .
- 1,2-Dichloropropane was detected for the first time in the groundwater sample collected from evaluation monitoring well RD-60 during the first quarter at a concentration of 2.3  $\mu\text{g/L}$ . 1,2-Dichloropropane was not detected above method detection limits of 1 and 0.35  $\mu\text{g/L}$  in primary and split groundwater samples, respectively, collected from RD-60 in August 2007. The MCL for 1,2-dichloropropane is 5  $\mu\text{g/L}$ .
- 1,4-Dioxane was detected for the first time in the groundwater sample collected from interim corrective action well WS-09A during the second quarter at an estimated 1.2  $\mu\text{g/L}$ . The California drinking water NL for 1,4-dioxane is 3  $\mu\text{g/L}$ .



## 2007 Concentrations Greater than Previously Detected

Concentrations of the following analytes detected in groundwater samples collected during the year were greater than the concentrations detected in previous samples:

Well	Quarter	Analyte	2007 Sample Concentration (µg/L)	Highest Previous Sample Concentration (µg/L), Date	MCL or NL (µg/L)
HAR-18	Second	Trichlorofluoromethane	1	0.51 J, 08/2005	150 MCL
RD-01	Third	1,1-DCE	4 J	3.2 J, 05/2007	6 MCL
	Second	1,4-Dioxane	2.8	2.6, 05/2006	3 NL
	Third	Vinyl chloride	57	35, 05/2007	0.5 MCL
RD-04	Third	1,1-DCE	2 J	1.4, 08/2006	6 MCL
RD-09	Third	Cis-1,2-DCE	67	64, 05/2007	6 MCL
	Third	Vinyl chloride	0.8 J	0.51, 05/2006	0.5 MCL
RD-36C	First	Trans-1,2-DCE	40	38, 11/2006	10 MCL
RD-38A	First	Cis-1,2-DCE	69	66, 09/2006	6 MCL
	First	Trans-1,2-DCE	3.3 J	1.8, 11/2000	10 MCL
	Third	Vinyl chloride	1 J	0.9, 11/2000	0.5 MCL
RD-45B	Third	Cis-1,2-DCE	32 J	28, 02/1999	6 MCL
RD-51B	Second	1,4-Dioxane	2.7	1.9 J, 02/2005	3 NL
RD-55B	Third	1,1-DCE	0.3 J	0.23 J, 02/2002	6 MCL
	Second	Cis-1,2-DCE	14	13, 08/2004	6 MCL
	Fourth	Trans-1,2-DCE	0.3 J	0.2 J, 08/2007	10 MCL
	Second	TCE	26	22, 11/2006	5 MCL
RD-58B	Third	Toluene	0.8	0.5, 05/2000	150 MCL
WS-06	Second	1,4-Dioxane	1.5 J	1.2 J, 02/2007	3 NL
WS-09A	Third	1,1-DCE	6 J	3.4, 05/2007	6 MCL
	Third	Cis-1,2-DCE	1,500	1,100, 09/2003	6 MCL
	Second	Vinyl chloride	5.7	4.7, 02/2007	0.5 MCL

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

Semiannual VOC analysis of groundwater samples collected from Chatsworth Formation evaluation monitoring wells and interim corrective action wells is scheduled to be conducted during the first and third quarters of the calendar year. Chatsworth Formation evaluation monitoring wells are scheduled to be monitored every five years for COCs.

### 2.2.2.4 Chatsworth Formation Operable Unit Constituents of Concern Analyses

As part of the ongoing CFOU RFI investigation, quarterly groundwater sampling and analysis for constituents of concern is conducted at 26 wells located in seven areas: Canyon, Bowl, Alfa, Bravo, ELV/B204, Delta, and STL-IV (Figures 2 and 40). Groundwater samples for perchlorate analysis are also collected from these wells, although not part of the CFOU RFI sampling plan.

During 2007, 25 of the 26 CFOU RFI wells were sampled for the analysis of COCs (Table XII; Figures 6 through 36). RD-51A contained insufficient water for sampling or was dry during the year.

In groundwater samples collected from wells in the CFOU RFI investigation, detected fluoride and nitrate concentrations were below drinking water MCLs. Formaldehyde was detected at concentrations greater than the California drinking water NL of 100 µg/L in groundwater samples collected from wells RD-04, RD-41B, RD-49B, RD-49C, RD-58B, and WS-09. Detected ammonia concentrations did not exceed the reporting limit. Drinking water MCLs are 2.0 mg/L for fluoride and 45 mg/L for nitrate. 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 RFI wells during 2007. 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.

VOC concentrations, including 1,4-dioxane, were within historical ranges in groundwater collected from the CFOU RFI wells during the year (Table IV) with the exceptions noted below:

#### Newly Detected VOC Analytes

- As discussed in Section 2.2.2.3, benzene was detected for the first time in the groundwater sample collected from interim corrective action well RD-04 during the second quarter at an estimated concentration of 6.8 µg/L. The MCL for benzene is 1 µg/L.
- Acetone, chloroethane, and chloromethane were detected for the first time in groundwater samples collected from well RD-41A at estimated concentrations of 3.6, 0.1, and 0.1 µg/L, respectively. Neither drinking water MCLs nor California NLs have been established for these analytes.
- As discussed in Section 2.2.2.3, chloroethane was detected for the first time in the groundwater sample collected from evaluation monitoring well RD-51B during the fourth quarter at an estimated concentration of 0.1 µg/L. Neither a drinking water MCL nor a California NL have been established for chloroethane.
- As discussed in Section 2.2.2.3, trans-1,2-DCE and vinyl chloride were detected for the first time in the groundwater sample collected from evaluation monitoring well RD-55B during the third quarter at estimated concentrations of 0.2 and 0.1 µg/L, respectively. Trans-1,2-DCE and vinyl chloride are degradation products of TCE, which was detected at 21 µg/L in this sample. The MCLs for trans-1,2-DCE and vinyl chloride are 10 and 0.5 µg/L, respectively.
- As discussed in Section 2.2.2.3, toluene was detected for the first time in the groundwater sample collected from evaluation monitoring well RD-58A during the fourth quarter at an estimated concentration of 0.8 µg/L. The MCL for toluene is 150 µg/L.

- As discussed in Section 2.2.2.3, 1,4-dioxane was detected for the first time in the groundwater sample collected from interim corrective action well WS-09A during the second quarter at an estimated 1.2  $\mu\text{g/L}$ . The California drinking water NL for 1,4-dioxane is 3  $\mu\text{g/L}$ .

#### 2007 VOC Concentrations Greater than Previously Detected

Concentrations of the following analytes detected in groundwater samples collected during year were greater than the concentrations detected in previous samples:

Well	Quarter	Analyte	2007 Sample Concentration ( $\mu\text{g/L}$ )	Highest Previous Sample Concentration ( $\mu\text{g/L}$ ), Date	MCL or NL ( $\mu\text{g/L}$ )
HAR-07	First	1,1-DCA	36	0.27 J, 05/2002	5 MCL
HAR-08	Second	1,4-Dioxane	2.1	1.7 J, 02/2006	3 NL
HAR-18	Second	Trichlorofluoromethane	1	0.51 J, 08/2005	150 MCL
HAR-20	Third	1,1-DCE	1 J	0.53 J, 11/2006	6 MCL
RD-01	Third	1,1-DCE	4 J	3.2 J, 05/2007	6 MCL
	Second	1,4-Dioxane	2.8	2.6, 05/2006	3 NL
	Third	Vinyl chloride	57	35, 05/2007	0.5 MCL
RD-04	Third	1,1-DCE	2 J	1.4, 08/2006	6 MCL
RD-09	Third	Cis-1,2-DCE	67	64, 05/2007	6 MCL
	Third	Vinyl chloride	0.8 J	0.51, 05/2006	0.5 MCL
RD-41B	First	1,4-Dioxane	1.7 J	1.3 J, 05/2006	3 NL
	Third	Trans-1,2-DCE	61	59, 05/2004	10 MCL
RD-51B	Second	1,4-Dioxane	2.7	1.9 J, 02/2005	3 NL
RD-55B	Third	1,1-DCE	0.3 J	0.23 J, 02/2002	6 MCL
	Second	Cis-1,2-DCE	14	13, 08/2004	6 MCL
	Fourth	Trans-1,2-DCE	0.3 J	0.2 J, 08/2007	10 MCL
	Second	TCE	26	22, 11/2006	5 MCL
RD-58B	Third	Toluene	0.8	0.5, 05/2000	150 MCL
WS-06	Second	1,4-Dioxane	1.5 J	1.2 J, 02/2007	3 NL
WS-09A	Third	1,1-DCE	6 J	3.4, 05/2007	6 MCL
	Third	Cis-1,2-DCE	1,500	1,100, 09/2003	6 MCL
	Second	Vinyl chloride	5.7	4.7, 02/2007	0.5 MCL

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

Perchlorate concentrations in groundwater samples collected from CFOU RFI wells during 2007 were within historical ranges (Table VIII).

Verification samples (primary, field duplicate, split, and field blank samples) collected from interim corrective action well WS-09A during the third quarter indicated that SVOCs bis(2-ethylhexyl) phthalate and di-n-octyl phthalate are not detectable in groundwater at this well (Table VII). These SVOCs had been reported as detectable in the groundwater sample collected from WS-09A during the second quarter 2007 at concentrations of 250  $\mu\text{g/L}$  and 560  $\mu\text{g/L}$ , respectively. These compounds are not constituents of concern.

Verification samples collected from evaluation monitoring well RD-10 and the primary sample collected from interim corrective action well RD-01 during the fourth quarter indicated that the SVOC di-n-butyl phthalate is not detectable in groundwater at these wells. Di-n-butyl phthalate was detected below the reporting limit in groundwater samples collected from RD-01 and RD-10 during the third quarter at estimated concentrations of 4.3  $\mu\text{g/L}$  and

6.4 µg/L, respectively (Table VII). This compound is not a constituent of concern.

Bis(2-ethylhexyl) phthalate was detected in the groundwater sample collected from interim corrective action well WS-05 during the fourth quarter at an estimated concentration of 5.4 µg/L (Table VII). Two previous detections of bis(2-ethylhexyl) phthalate in WS-05 groundwater were identified as laboratory contaminants (Haley & Aldrich, 2002a, 2007a). WS-05 is next scheduled for SVOC sample collection and analysis during the first quarter 2008.

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

Perchlorate was not detected in groundwater samples collected from OS-09 (Table VIII) during 2007. NDMA was not detected in samples collected from private off-site well OS-28 during the year (Table XII).

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 the year (Table IV) with the following exceptions:

- Benzene and toluene were detected above the reporting limits in groundwater samples collected from the FLUTE system installed in perimeter well RD-50 during the first and third quarters at concentrations ranging up to of 0.5 and 11 µg/L, respectively. Chlorobenzene was detected above the reporting limit in groundwater samples collected from the FLUTE system installed in perimeter well RD-50 during the third quarter at a concentration of 2.2 µg/L and in perimeter well RD-22 during the third and fourth quarters at concentrations of 1.4 and 1.3 µg/L, respectively. Groundwater samples collected from RD-22 and RD-50 prior to FLUTE installation using the procedures described in the Sampling and Analysis Plan did not have detectable concentrations of these compounds (GWRC, 2000; Haley & Aldrich, 2001, 2002a, 2003a). The benzene, chlorobenzene, and toluene reported in wells RD-22 and RD-50 may be chemicals introduced by FLUTE system components. 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). The MCLs for benzene and toluene are 1 and 150 µg/L, respectively. Neither a drinking water MCL nor a California NL have been established for chlorobenzene.
- Cis-1,2-DCE was detected above the reporting limit in groundwater collected from perimeter well RD-50 during the first quarter at a concentration of 1.9 µg/L. Cis-1,2-DCE had been detected three times previously at estimated concentrations below the reporting limit ranging up to 0.86 µg/L (Haley & Aldrich, 2007a). The MCL for cis-1,2-DCE is 6 µg/L.

- Carbon disulfide was detected above the reporting limit for the first time in groundwater collected from perimeter wells RD-70 and RD-71 during the fourth quarter at concentrations of 0.59 and 0.63  $\mu\text{g/L}$ , respectively. The California drinking water NL for carbon disulfide is 160  $\mu\text{g/L}$ .

Follow-up sampling conducted during the second quarter 2007 at perimeter well RD-39B indicated that TCE is not detectable in groundwater samples from this well. TCE was detected for the first time in groundwater samples collected at RD-39B during the fourth quarter 2006 below the reporting limit at an estimated concentration of 0.33  $\mu\text{g/L}$  (Haley & Aldrich, 2007a). Follow-up sampling conducted during the first quarter 2007 at perimeter well RD-39B was inconclusive due to the presence of TCE in a laboratory method blank (Haley & Aldrich, 2007b). The MCL for TCE is 5  $\mu\text{g/L}$ .

Verification samples (primary, field duplicate, split, and field blank samples) collected from perimeter well RD-66 during the fourth quarter indicated that methylene chloride was not detectable in groundwater at this well. Methylene chloride was detected below the reporting limit for the first time in groundwater collected from perimeter well RD-66 during the third quarter at an estimated concentration of 0.3  $\mu\text{g/L}$ . The MCL for methylene chloride is 5  $\mu\text{g/L}$ .

Verification sampling conducted during the fourth quarter to confirm the presence of cis-1,2-DCE in groundwater at perimeter well RD-68B was inconclusive. Cis-1,2-DCE was detected at an estimated 0.1  $\mu\text{g/L}$  in both the primary and duplicate fourth quarter samples, but was not detected in the split sample. At 0.32  $\mu\text{g/L}$ , the split laboratory's MDL for cis-1,2-DCE was higher than the detections reported by the primary laboratory. Cis-1,2-DCE was also reported below the reporting limit in groundwater collected from RD-68B during the third quarter at an estimated concentration of 0.1  $\mu\text{g/L}$ . Cis-1,2-DCE was detected once previously in RD-68B groundwater in February 2002 at an estimated concentration of 0.1  $\mu\text{g/L}$  (Haley & Aldrich, 2003a). The MCL for cis-1,2-DCE is 6  $\mu\text{g/L}$ .

Results of analyses for perchlorate, stable isotope, and inorganic constituents in groundwater samples collected from private off-site wells included in the Perchlorate Characterization Work Plan are discussed in Section 2.2.4.

Results of analyses for hexavalent chromium, cyanide, and dissolved metals in groundwater samples collected during the year from perimeter wells were within historical ranges (Table VI) with the following exceptions:

- Dissolved metals antimony, arsenic, mercury, molybdenum, nickel, and vanadium were detected for the first time in groundwater collected from perimeter well RD-18 at the concentrations listed below. These metal concentrations were below their respective MCLs or California drinking water NLs. Neither a drinking water MCL nor a California NL have been established for molybdenum. RD-18 was sampled to support the RFI Group 8 investigation.

Well	Analyte	2007 Sample Concentration (mg/L)	MCL or NL (mg/L)
RD-18	Antimony	0.00024 J	0.006 MCL
	Arsenic	0.00092 J	0.05 MCL
	Mercury	0.00013 J	0.002 MCL
	Molybdenum	0.0022	NA
	Nickel	0.0012 J	0.1 MCL
	Vanadium	0.0038	0.05 NL

- Dissolved metals antimony, arsenic, chromium, cobalt, molybdenum, selenium, vanadium, and zinc were detected for the first time in the groundwater sample collected from perimeter well RD-50 during the fourth quarter at the concentrations listed below. These metal concentrations were below their respective MCLs, secondary maximum contaminant levels (SMCLs), or California drinking water NLs. Neither a drinking water MCL nor a California NL have been established for cobalt and molybdenum. RD-50 was sampled to support the RFI Group 8 investigation.

Well	Analyte	2007 Sample Concentration (mg/L)	MCL or NL (mg/L)
RD-50	Antimony	0.00049 J	0.006 MCL
	Arsenic	0.007	0.05 MCL
	Chromium	0.0019 J	0.05 MCL
	Cobalt	0.00075 J	NA
	Molybdenum	0.0022	NA
	Selenium	0.00063 J	0.05 MCL
	Vanadium	0.0024	0.05 NL
	Zinc	0.14	5 SMCL

#### 2.2.2.6 Point of Compliance Program

During 2007, Chatsworth Formation point of compliance wells HAR-07, HAR-16, and HAR-17 were monitored for Appendix IX constituents. Background well RD-48B was monitored for Appendix IX constituents during the third quarter following the verification of TCE in RD-48B groundwater. Appendix IX analytical results are presented in Section 2.2.3 and Table XI.

Point of compliance wells were scheduled for semiannual VOC sampling and analysis during the second and fourth quarters (Table IV).

#### 2.2.2.7 Chatsworth Formation Radiochemistry Analyses

During the year, Chatsworth Formation groundwater samples were collected from selected wells for the analysis of gross alpha and gross beta radioactivity, gamma-emitting radionuclides, Ra-226, Ra-228, tritium, isotopic thorium, and isotopic uranium using EPA Methods 900.0, 901.1, 903.1, 904.0, 906.0, 907.0, and 908.0, respectively (Tables IX and X). Samples were also collected for the analysis of additional radionuclide activities per EPA drinking water regulations (Federal Register, 2000):

- In the event gross alpha activity exceeded 15 pCi/L, groundwater samples were analyzed for isotopic uranium using EPA Method 908.0.

- In the event gross beta activity exceeded 50 pCi/L, groundwater samples were analyzed for potassium-40 (K-40) and strontium-90 (Sr-90) using EPA Methods 901.1 and 905.0, respectively.

As part of further investigation into the source and extent of tritium in groundwater, selected Chatsworth Formation wells were monitored for tritium during the first quarter, representatives from the Radiologic Health Branch of the California Department of Public Health (DPH) were provided split tritium samples from wells RD-87, RD-88, RD-90, RD-91, and RD-93 through RD-97 during the first quarter. Laboratory results from DPH were not obtained.

As discussed in Appendix D, project specific minimum detectable activities (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).

Results of analyses for groundwater samples collected from Facility wells are compared to California drinking water MCLs for discussion purposes only. Groundwater at SSFL is not used as a drinking water supply. Except for samples collected for tritium analysis by EPA Method 906.0, all groundwater radiochemistry samples are field filtered.

Results of radiological analyses of Chatsworth Formation groundwater samples are noted below.

#### Gross Alpha Activity

Results for 2007 gross alpha samples were within historical ranges for Chatsworth Formation groundwater (Table IX; Haley & Aldrich, 2007a). According to EPA drinking water regulations, the gross alpha MCL excludes uranium activity (Federal Register, 2000). When the sum of isotopic uranium activity (Table X) is excluded from gross alpha activity, none of the adjusted gross alpha results for the 2007 samples exceeded the adjusted gross alpha drinking water MCL of 15 pCi/L. Calculations of adjusted gross alpha are presented below for samples with gross alpha activity that was greater than 15 pCi/L prior to uranium subtraction:

Well	RD-07		RD-29	RD-34A		RD-54A
	First	Third	Third	First	Third	Third
U-233/234	30.0	26.0	10.8	9.94	9.89	8.00
U-235	1.22	1.14	0.450	0.547	0.534	0.312
U-238	24.0	20.8	9.82	10.1	10.7	6.90
Sum of isotopic uranium activity	55.2	47.9	21.1	20.6	21.1	15.2
Gross alpha	39.4	40.0	18.8	20.1	23.2	20.0
Adjusted gross alpha	<0	<0	<0	<0	2.1	4.8

#### Gross Beta Activity

The gross beta activities detected in Chatsworth Formation groundwater samples were less than the drinking water MCL of 50 pCi/L (Table IX).

### Gamma Emitters

Anthropogenic gamma emitters (cesium-134, cesium-137, cobalt-57, cobalt-60, europium-152, europium-154, manganese-54, and sodium-22) were not detected in Chatsworth Formation groundwater samples collected during 2007 (Table X).

### Tritium Activity

The results of analyses for tritium in Chatsworth Formation groundwater samples collected during the year were less than the drinking water MCL of 20,000 pCi/L and were comparable to past results (Table IX; Haley & Aldrich, 2007a) with the following exceptions:

- In the first quarter, tritium was detected above the MCL in groundwater collected from wells RD-88, RD-90, and RD-95 at activities of  $57,200 \pm 5,700$ ;  $63,500 \pm 6,400$ ; and  $91,500 \pm 9,200$  pCi/L, respectively. These results were comparable to past results.

As part of further investigation into the source and extent of tritium in groundwater, selected Chatsworth Formation wells were monitored for tritium. Tritium was collected from wells RD-87, RD-88, RD-90, RD-91, and RD-93 through RD-97. Tritium activities ranged from non-detectable at wells RD-91, RD-96, and RD-97 to  $91,500 \pm 9,200$  pCi/L at well RD-95. Detected tritium activities in these wells were comparable to past results (Table IX; Haley & Aldrich, 2007a). Split radiochemistry samples from these wells were provided to DPH representatives during the first quarter 2007. Laboratory results for the DPH samples were not obtained.

### Radium-226 and Radium-228

The sum of Ra-226 and Ra-228 activities for each Chatsworth Formation groundwater sample was less than the drinking water MCL of 5 pCi/L for Ra-226/228 combined with the following exception (Table IX):

- At 5.17 pCi/L, the sum of Ra-226 and Ra-228 activities in the third quarter RD-54B sample exceeded the MCL. The sum of Ra-226 and Ra-228 activities in RD-54B groundwater was comparable to historical results (Haley & Aldrich, 2007a). Isotopic thorium analysis was not performed on this sample.

### Isotopic Thorium

Thorium isotopes were not detected in Chatsworth Formation groundwater samples collected during 2007 (Table X).

### Isotopic Uranium

The California MCL for total uranium is 20 pCi/L. The groundwater samples collected during 2007 from the following wells had total uranium



concentrations that were less than the MCL based on the results of analyses for uranium isotope activities except for RD-07, RD-29, and RD-34A.

Activity Concentration (pCi/L)					
Well	Quarter	U-234	U-235	U-238	Total
RD-07	First	30	1.22	24	<b>55.2</b>
	Third	26	1.14	20.8	<b>47.9</b>
RD-15	First	3.09	0.133 J	3.01	6.23
RD-21	Second	5.86	0.29 J	5.17	11.3
	Third	6.23	0.257 J	5.56	12.0
RD-23	First	0.677 J	0.02 U	0.525 J	1.22
RD-29	First	8.96	0.48 J	8.94	18.4
	Third	10.8	0.450 J	9.82	<b>21.1</b>
RD-34A	First	9.94	0.547 J	10.1	<b>20.6</b>
	Third	9.89	0.534 J	10.7	<b>21.2</b>
RD-34B	Third	0.592 J	0.029 J	0.51 J	1.13
RD-54A	First	10.5	0.386 J	8.59	19.5
	Third	8	0.312 J	6.9	15.2
RD-64	First	3.45	0.154 J	2.62	6.22
	Third	3.11	0.075 J	2.45	5.64

Bold results exceed 20 pCi/L California MCL.

#### 2.2.2.8 Other Monitoring

Some Facility wells sampled during the year were not perimeter wells, were not part of the perchlorate characterization or the CFOU RFI investigation, nor the LUFT, detection monitoring, evaluation monitoring, interim corrective action, or point of compliance programs. These wells are not included in any prescribed schedule.

In support of the SMOU RFI program, groundwater samples were collected from Chatsworth Formation wells as part of the data gap investigation for SMOU RFI Groups 1A, 3, 6, and 8. Per DTSC's requirement, groundwater samples collected from selected wells were analyzed for dissolved and total metals (DTSC, 2007).

VOC, fuel hydrocarbons, metal, and perchlorate analytical results were within historical ranges (Tables IV, V, VI, and VIII) with the exceptions noted below:

- Benzene and toluene were reported above the reporting limit in the groundwater samples collected from the FLUTE system installed in well RD-21 at concentrations ranging up to 0.57 and 7 µg/L, respectively. These results are not consistent with groundwater samples collected from this well prior to FLUTE installation using sampling equipment and procedures described in the Sampling and Analysis Plan (GWRC, 1995a, 1995b). Low-level concentrations of toluene and benzene have been observed in groundwater samples collected with FLUTE systems at other sites and may be attributed to equipment components (Keller, personal communication, 2003).

### Newly Detected Analytes

- 1,1-DCE was detected for the first time in the groundwater sample collected from well RD-07 during the third quarter at an estimated concentration of 0.2 µg/L. 1,1-DCE is an abiotic decay product of 1,1,1-TCA and degradation product of TCE, which was detected at 5.6 µg/L in this sample. The MCL for 1,1-DCE is 6 µg/L.
- Chloroform was detected for the first time in the groundwater sample collected from well RD-30 during the third quarter at an estimated concentration of 0.1 µg/L. The drinking water MCL for total trihalomethanes (chloroform, bromodichloromethane, dibromochloromethane, and bromoform) is 80 µg/L.
- Trans-1,2-DCE was detected for the first time in duplicate groundwater samples collected from well RD-33A during the third quarter at concentrations ranging up to 0.6 µg/L. The MCL for trans-1,2-DCE is 10 µg/L.
- Tetrachloroethene (PCE) was detected for the first time in the groundwater sample collected from well RD-63 during the third quarter at an estimated concentration of 0.1 µg/L. The MCL for PCE is 5 µg/L.

### 2007 Concentrations Greater than Previously Detected

Concentrations of the following analytes detected in groundwater samples collected during the year were greater than the concentrations detected in previous samples:

Well	Quarter	Analyte	Third Quarter 2007 Sample Concentration (µg/L)	Highest Previous Sample Concentration (µg/L), Date	MCL or NL (µg/L)
RD-07	First	Cis-1,2-DCE	73	71, 02/2006	6 MCL
RD-21	Third	1,1-DCE	2 J	1.4, 02/2007	6 MCL
	First	Cis-1,2-DCE	580	520, 08/2006	6 MCL
RD-23	Third	Cis-1,2-DCE	87	62, 11/1993	6 MCL
RD-33A	Third	Cis-1,2-DCE	4.4	2.8, 02/2006	6 MCL
RD-34B	Third	Dissolved cobalt	0.00044 J mg/L	0.00036 mg/L, 02/2005	None
		Dissolved manganese	0.11 mg/L	0.081 mg/L, 02/2006	0.5 mg/L NL
RD-54A	Third	Cis-1,2-DCE	120	110, 02/2007	6 MCL
RD-65	First	Cis-1,2-DCE	27	15, 02/2006	6 MCL

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

### Dissolved and Total Metals

Per DTSC's requirement, groundwater samples collected from selected wells were analyzed for dissolved (filtered) and total (unfiltered) metals (DTSC, 2007). Results are summarized in Table VI.

Chatsworth Formation wells with groundwater samples collected and analyzed for dissolved and total metals during the year were:

SMOU RFI Group	Chatsworth Formation Wells
1A	HAR-16, RD-73
1B	RD-46A
2	RD-09
3	RD-04, RD-49A*, RD-60, WS-09
4	HAR-07
5	HAR-18, RD-55A
6	RD-86
7	RD-34A
9	WS-09A

\*A groundwater sample for the analysis of dissolved metals was not collected from RD-49A during the third and fourth quarters because there was not sufficient water volume to collect both dissolved and total metals.

Concentrations of metals were below MCLs and NLs (Table VI) with the following exceptions:

- Total manganese was detected above the NL in groundwater collected from HAR-07 during the year at concentrations ranging from 0.53 to 0.71 mg/L. Dissolved manganese was detected below the NL in HAR-07 groundwater samples during the year at concentrations ranging from 0.11 to 0.31 mg/L. The California drinking water NL for manganese is 0.5 mg/L.
- Total manganese was detected above the NL in groundwater collected from RD-49A during the fourth quarter at a concentration of 0.58 mg/L. Dissolved manganese was not sampled in RD-49A groundwater during the fourth quarter due to insufficient water. In samples collected during the first and second quarters, dissolved manganese was detected below the NL at concentrations ranging up to 0.36 mg/L. The California drinking water NL for manganese is 0.5 mg/L.
- Total chromium was detected above the MCL in the first of four unfiltered groundwater samples collected from well RD-55A during the year at a concentration of 0.085 mg/L. Dissolved chromium was not detected in filtered RD-55A groundwater. The MCL for chromium is 0.05 mg/L.
- Total manganese was detected above the NL in RD-55A groundwater during the first quarter at a concentration of 3.1 mg/L. Dissolved manganese in the same sample was detected below the NL at a concentration of 0.019 mg/L. Total manganese concentrations in RD-55A groundwater samples collected in subsequent quarters were below the NL, ranging from 0.024 to 0.048 mg/L. The California drinking water NL for manganese is 0.5 mg/L.
- Dissolved and total manganese were detected above the 0.5 mg/L NL in all groundwater samples collected from RD-73 during the year at

concentrations ranging up to 0.89 and 0.68 mg/L, respectively. The California drinking water NL for manganese is 0.5 mg/L.

- Dissolved and total manganese were both detected at the NL concentration of 0.5 mg/L in groundwater collected from WS-09A during the first quarter. Dissolved and total manganese concentrations in WS-09A samples collected subsequently in the year were below the NL.

### SMOU RFI Data Gap

As part of the SMOU RFI data gap investigation for Groups 1A, 3, 6, and 8, selected wells were sampled and analyzed for select constituents during the year. Results are summarized in Tables V, VI, VII, and XIV.

Analyses performed on groundwater samples collected from individual wells during the year were:

Analysis	Wells
EFHs	RD-07, RD-14, RD-86
Metals	HAR-06, HAR-19, HAR-25, RD-07, RD-18, RD-21, RD-22, RD-23, RD-33A, RD-50, RD-54A, RD-54C, RD-57, RD-59A, RD-75, RD-77, RD-85, RD-91, RD-92
Hexavalent Chromium	RD-18, RD-86
SVOCs	RD-07
Alcohols	RD-86
Dioxins	HAR-19, RD-91
PCBs	RD-07

Concentrations of metals detected in the groundwater samples were below MCLs and NLs (Table VI).

Results of analyses for EFHs are presented in Table V. Hexavalent chromium, SVOCs, and PCBs were not detected (Tables VI, VII, and XIV). Results of analyses for alcohols in RD-86 groundwater are presented in Table XIV.

Dioxins were not detected in HAR-19 and RD-91 groundwater samples with the following exceptions (Table XIV):

2,3,4,7,8-Pentachlorodibenzofuran (2,3,4,7,8-PeCDF) and 1,2,3,4,6,7,8,9-octachlorodibenzo-p-dioxin (OCDD) were detected at an estimated 0.826 and an estimated 4.13 pg/L, respectively, in the split sample collected from HAR-19. No dioxins or furans were detected in the primary sample collected from HAR-19. OCDD was detected in a November 2006 sample collected at HAR-19 at an estimated 6.58 pg/L (Haley & Aldrich, 2007a).

Neither drinking water MCLs nor California NLs have been established for 2,3,4,7,8-PeCDF or OCDD. When converted to 2,3,7,8-TCDD toxic equivalency (2,3,7,8-TEQ) (van den Berg et al., 2006), the concentration of detected congeners in the HAR-19 sample was 0.25 pg/L, less than the

drinking water MCL of 30 pg/L for 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD).

### 2.2.3 Appendix IX Sampling

During the second quarter 2007, 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. SH-04 and RS-08 were dry during the second, third, and fourth quarters.

Following the confirmation of detectable TCE in groundwater at background well RD-48B, groundwater samples collected from RD-48B during the third quarter were analyzed for Appendix IX constituents.

#### 2.2.3.1 Data Validation

Results of 2007 analyses were subjected to a data validation process in accordance with guidance from the "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review" (EPA540/R-99/008, October 1999), "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review" (EPA540-R-01-008, July 2002), and the EPA method-specific protocol criteria, where applicable. A summary of the data validation process is included in Appendix D.

#### 2.2.3.2 Analytical Results

Appendix IX and VOC analytical results are presented in Tables XI, III, and IV. Appendix IX and VOC analytical results for point of compliance wells and background well RD-48B were within historical ranges with the exceptions noted below.

- Carbon disulfide was detected for the first time in groundwater collected from HAR-15 at a concentration of 0.5  $\mu\text{g/L}$ . The NL for carbon disulfide is 160  $\mu\text{g/L}$ .
- Chloromethane was detected for the first time in groundwater samples collected from HAR-14 and HAR-15 at estimated concentrations of 0.1  $\mu\text{g/L}$ . Neither a drinking water MCL nor a California NL has been established for chloromethane.
- TCE was detected above the reporting limit in groundwater samples collected from background well RD-48B during the first quarter 2007 at concentrations ranging up to 2.9  $\mu\text{g/L}$ . Verification samples (primary, field duplicate, split, and field blank samples) collected during May confirmed the presence of TCE in RD-48B groundwater samples. In RD-48B groundwater samples collected during August and October 2007, TCE was not detected. In samples collected before 2007, TCE was reported above the reporting limit in RD-48B groundwater at concentrations of 1.7 and 1.8  $\mu\text{g/L}$  in August 1994 and February 2004, respectively (Haley & Aldrich, 2000, 2005). The MCL for TCE is 5  $\mu\text{g/L}$ .

- Dissolved cobalt, lead, and selenium were detected for the first time in the groundwater sample collected from well RD-48B at estimated concentrations of 0.00083, 0.00029, and 0.00034 mg/L, respectively. In prior analyses of metals in RD-48B groundwater, the method detection limits for these three metals were less than the third quarter 2007 concentrations except for selenium (Haley & Aldrich, 2002a). The MDL for selenium was 0.00036 mg/L for the RD-48B groundwater sample analyzed in 2001. Neither a drinking water MCL nor a California NL has been established for cobalt. The regulatory action limit (RAL) for lead is 0.015 mg/L. The MCL for selenium is 0.05 mg/L.
- 1,2-Dibromo-3-chloropropane (DBCP) was detected for the first time in the groundwater sample collected from well HAR-16 at an estimated concentration of 0.0049 µg/L. The MCL for DBCP is 0.2 µg/L. Verification samples (primary, field duplicate, field blank, and split samples) will be scheduled for collection during the first quarter 2008 to confirm if DBCP is detectable in HAR-16 groundwater.

In the second quarter, Octachlorodibenzo-p-dioxin (OCDD) and 1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD) were detected in the HAR-15 primary and split samples, respectively. 1,2,3,6,7,8-Hexachlorodibenzofuran (1,2,3,6,7,8-HxCDF) was detected in the HAR-14 split sample (Haley & Aldrich, 2007c).

Verification groundwater samples collected from HAR-14 and HAR-15 during the third quarter and primary samples collected during the fourth quarter did not indicate that dioxin and furan congeners are consistently detectable in consecutive samples. During the fourth quarter, low flow sampling methodology was used to collect samples at HAR-14 and HAR-15. Concentrations of detected congeners are summarized in the table below:

Well Identifier	Dioxin/Furan	Sample Date	Sample Concentration (pg/L)			
			Primary	Duplicate	Split	Field Blank
HAR-14	1,2,3,6,7,8-HxCDF	05/08/07	0.386 U	NA	0.44 J	NA
		08/28/07	0.18 U	0.32 U	0.717 U	0.44 U
	OCDD	08/28/07	2.0 U	4.3 U	11.9 J	1.3 U
		10/19/07	13 U	NA	NA	NA
	1,2,3,4,6,7,8-HpCDD	08/28/07	0.40 U	2.1 J	1.98 J	0.73 U
		10/19/07	2.9 U	NA	NA	NA
	1,2,3,4,6,7,8-HpCDF	08/28/07	0.27 U	0.47 J	1.14 U	0.57 U
		10/19/07	1.3 U	NA	NA	NA
HAR-15	OCDD	05/08/07	10.2 J	NA	7.5 U	NA
		08/28/07	1.6 U	5.2 U	11.4 U	2.3 U
		10/19/07	10 U	NA	NA	NA
	1,2,3,4,6,7,8-HpCDD	05/08/07	1.62 U	NA	1.2 J	NA
		08/28/07	0.44 J	0.4 J	2.43 U	0.57 U
		10/19/07	2.8 U	NA	NA	NA
	1,2,3,4,7,8-HxCDF	10/19/07	1.3 J	NA	NA	NA

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

U = Not detected. Numerical value represents the detection limit or the estimated maximum possible concentration.

NA = Not applicable. Sample was not collected.

pg/L = Picograms per liter.

The congeners detected during the second, third, and fourth quarters were not consistently detected in groundwater samples collected from HAR-14 and HAR-15:

Well Identifier	Dioxin/Furan	Total Number of Samples	Number of Times Detected	Concentration Range (pg/L)
HAR-14	OCDD	14	2	1.7 U – 550
	1,2,3,4,6,7,8-HpCDD	14	3	0.4 U - 2.7 J
	1,2,3,4,6,7,8-HpCDF	14	2	0.27 U - 4.2 J
	1,2,3,6,7,8-HxCDF	14	1	0.18 U - 0.44 J
HAR-15	OCDD	20	9	0.12 - 920
	1,2,3,4,6,7,8-HpCDD	19	6	0.4 J – 19 J
	1,2,3,4,7,8-HxCDF	19	2	0.16 U– 1.45 J

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

U = Not detected. Numerical value represents the detection limit or the estimated maximum possible concentration.

pg/L = Picograms per liter.

Neither drinking water MCLs nor California NLs have been established for 1,2,3,4,6,7,8-HpCDD, 1,2,3,4,6,7,8,9-heptachlorodibenzofuran (1,2,3,4,6,7,8-HpCDF), 1,2,3,4,7,8-hexachlorodibenzofuran (1,2,3,4,7,8-HxCDF), 1,2,3,6,7,8-HxCDF, or OCDD. When converted to 2,3,7,8-TCDD TEQ (van den Berg et al., 2006), the concentrations of detected congeners in the groundwater samples collected from HAR-14 and HAR-15 were less than the drinking water MCL of 30 pg/L for 2,3,7,8-TCDD.

Well Identifier	Sample Date	Sample Type	2,3,7,8-TCDD TEQ (pg/L)
HAR-14	05/08/2007	Primary	2.51 U
HAR-14	05/08/2007	Split	0.044 J
HAR-14	08/28/2007	Primary	1.69 U
HAR-14	08/28/2007	Duplicate	0.0257 J
HAR-14	08/28/2007	Split	0.02 J
HAR-14	10/19/2007	Primary	7.92 U
HAR-15	05/08/2007	Primary	0.0031 J
HAR-15	05/08/2007	Split	0.012 J
HAR-15	08/28/2007	Primary	0.0044 J
HAR-15	08/28/2007	Duplicate	0.004 J
HAR-15	08/28/2007	Split	3.06 U
HAR-15	10/19/2007	Primary	0.013 J

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

U = Not detected. Numerical value represents the detection limit or the estimated maximum possible concentration.

pg/L = Picograms per liter.

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

second quarter 2008 for Appendix IX constituents and during the second and fourth quarters for VOCs.

## 2.2.4 Perchlorate Characterization Sampling

Groundwater sampling for the analysis of perchlorate in Facility groundwater has been conducted since 1997. Characterization and remediation activities were conducted in Happy Valley in Area I, and investigation of perchlorate was conducted in drainages north and east of the Facility (Figure 40; MWH, 2003a, 2003b, 2003c, 2003f). As part of the Perchlorate Characterization Work Plan (MWH, 2003e), well OS-09 is monitored quarterly and other wells identified in the work plan are monitored annually.

Only the analytical results of perchlorate groundwater sampling conducted as part of the 2007 Perchlorate Characterization Work Plan and the Happy Valley Interim Measures program are reported in this section.

### 2.2.4.1 Monitoring

Groundwater samples collected from selected wells, including well OS-09, were analyzed for perchlorate and general mineral constituents as described in the Perchlorate Characterization Work Plan (MWH, 2003e). Water samples collected from well OS-09 also were submitted for analysis of the stable isotopes deuterium and oxygen-18 (Table XIII). Results of analyses for perchlorate in groundwater are summarized in Table VIII and for general minerals in Table XIII.

General mineral constituent analyses included major anions (carbonate, bicarbonate, chloride, and sulfate), major cations (calcium, magnesium, sodium, and potassium), nitrate, specific conductance, total dissolved solids, and pH (Table XIII).

Wells scheduled and sampled for perchlorate characterization during the year are listed below.

Perchlorate Characterization Sampling, 2007	
Wells Sampled	OS-02, OS-03, OS-04, OS-05, OS-09, OS-10, OS-16, OS-17, OS-26, OS-27, OS-28, RD-32, RD-36B, RD-36C, RD-36D, RD-37, RD-38A, RD-38B, RD-39B, RD-43A, RD-43B, RD-43C, RD-45B, RD-45C, RD-51B, RD-51C, RD-52B, RD-52C, RD-59A, RD-59B, RD-59C, RD-66, RD-68A, RD-68B, RD-70, RD-71, RD-75, RD-77, RD-78, RD-80, RD-81, RD-82, RD-83, RD-84, WS-04A, WS-09B, WS-12, WS-13, WS-14
Wells Not Sampled due to Lack of Groundwater	PZ-062, RD-36A, RD-39A, RD-51A, RD-52A, OS-25
Wells Not Sampled for Other Reasons	RD-45A (borehole collapsed) RD-76 (borehole collapsed) OS-15 (no access agreement) OS-24 (FLUTE liner not removed)



As part of the Happy Valley Interim Measures project, groundwater samples were collected during the year from wells RD-73, RD-77, HAR-24, and HAR-25 for the analysis of perchlorate and bromide (Tables VIII and XIII).

#### 2.2.4.2 Perchlorate Results

##### Perchlorate Characterization Work Plan

Perchlorate was not detected in the groundwater samples from well OS-09 or the other Perchlorate Characterization Work Plan wells except from wells RD-77 and RD-84 (Table VIII). Perchlorate concentrations in RD-77 (230 to 330  $\mu\text{g/L}$ ) and RD-84 (1.7 J  $\mu\text{g/L}$ ) were consistent with historical samples collected from these wells (Haley & Aldrich, 2004, 2005, 2006, 2007a). RD-77 and RD-84 perchlorate concentrations in past samples have ranged from 170 to 680  $\mu\text{g/L}$  and from an estimated 1.9 to an estimated 3.1  $\mu\text{g/L}$ , respectively.

Perchlorate was not detected in groundwater samples collected from off-site wells.

##### Happy Valley Interim Measures

Perchlorate was detected in each of the groundwater samples collected in support of the Happy Valley Interim Measures project: RD-73, RD-77, HAR-24, and HAR-25 (Table VIII). Perchlorate concentrations in RD-73, RD-77, and HAR-25 were within historical ranges as shown below (Haley & Aldrich, 2005, 2006, 2007a). Perchlorate was detected in a groundwater sample collected during October 2007 from well HAR-24 at 3  $\mu\text{g/L}$ . This was lower than the previous minimum concentration of 220  $\mu\text{g/L}$  in a sample collected in November 2000 (Haley & Aldrich, 2001). The laboratory confirmed the detection by reanalyzing the sample using liquid chromatography/mass spectrometry/mass spectrometry (LC/MS/MS) method 8321A. The California drinking water NL of 6  $\mu\text{g/L}$  for perchlorate was replaced with a California MCL of 6  $\mu\text{g/L}$  in October 2007 (DPH, 2007a, 2007b).

Perchlorate Concentrations ( $\mu\text{g/L}$ )		
Well	2007 Concentration Range	Range of Previous Sample Concentrations
RD-73	34.4 - 65	4.4 - 244
RD-77	230 - 330	170 - 680
HAR-24	3 - 210	220 - 750
HAR-25	24.5 - 42	4 U - 480

U = Not detected. Numerical value represents the MDL.

Procedures for perchlorate sampling and analysis include verification procedures such as spiking of samples and reanalysis of samples using LC/MS/MS methods (e.g., EPA Method 8321). These verification procedures are presented in the Quality Assurance Project Plan (QAPP) for the Perchlorate Characterization Work Plan (MWH, 2003e).

### 2.2.4.3 Bromide Results

As part of the biotreatment phase of the Happy Valley Interim Measures project initiated on 19 October 2004 (MWH, 2003f), wells RS-02, RD-73, RD-77, HAR-24, and HAR-25 and piezometers PZ-003, PZ-067A, PZ-067B, and PZ-068 were monitored for perchlorate and bromide. During 2007, only wells RD-73, RD-77, HAR-24, and HAR-25 contained sufficient water for sampling (Table XIII). Bromide was detected in well RD-77 at concentrations similar to those of previous samples. Bromide was detected in well RD-73 during the second quarter 2007 at 2.4 mg/L, slightly higher than the previous maximum of 2.1 mg/L in a sample collected in May 2006 (Haley & Aldrich, 2007a). Bromide was detected in well HAR-24 at 0.93 mg/L, slightly higher than the previous maximum of 0.78 mg/L in a sample collected in August 2005 (Haley & Aldrich, 2006). Bromide was detected for the first time in groundwater collected from well HAR-25 during the third quarter 2007 at an estimated concentration of 0.36 mg/L. Across the site, bromide concentrations in samples collected by the University of Waterloo have ranged from 0.05 to 1.1 mg/L (Pierce, 2005).

Bromide Concentrations (mg/L)		
Well/Piezometer	2007 Concentration Range	Range of Previous Sample Concentrations
RD-73	0.92 – 2.4	0.34 J – 2.1
RD-77	0.35 U - 0.46 J	0.16 U – 0.48 J
HAR-24	0.42 J - 0.93	0.35 U – 0.78
HAR-25	0.35 U - 0.36 J	0.25 U – 0.35 U
Site Wide*	---	0.05 – 1.1

\* University of Waterloo sample results (Pierce, 2005).

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

U = Not detected. Numerical value represents the MDL.

### 2.2.4.4 General Mineral Results

Inorganic constituents in groundwater samples (Table XIII) did not exceed primary drinking water MCLs.

### 2.2.4.5 Stable Isotope Results

Results of stable isotope analyses for groundwater samples collected from well OS-09 are presented in Table XIII. The isotopes are naturally occurring and are not indicators of site activities. The ratio of deuterium to hydrogen expressed as the deviation from Vienna Standard Mean Ocean Water (V-SMOW) ranged from -51.1 to -46.0 parts per thousand (per mil) in OS-09 groundwater. The ratio of oxygen-18 to oxygen-16 expressed as the deviation from V-SMOW ranged from -7.48 to -7.44 per mil in OS-09 groundwater.

## 2.2.5 Results of Third Quarter 2007 Verification Sampling

Verification groundwater samples (primary, field duplicate, split, and field blank samples) and follow-up samples (primary samples) were collected during the fourth quarter following detections of analytes in groundwater collected from Post-Closure

Permit wells during the third quarter 2007. The table below summarizes fourth quarter 2007 verification and follow-up sampling results:

Fourth Quarter 2007 Verification and Follow-up Sampling						
Well Identifier	Monitoring Program	Constituent(s)	Sample Concentration ( $\mu\text{g/L}$ , unless otherwise noted)			
			Primary	Duplicate	Split	Field Blank
HAR-14	Point of Compliance	OCDD	13 U $\mu\text{g/L}$	NS	NS	NS
		1,2,3,4,6,7,8-HpCDD	2.9 U $\mu\text{g/L}$	NS	NS	NS
		1,2,3,4,6,7,8-HpCDF	1.3 U $\mu\text{g/L}$	NS	NS	NS
HAR-15	Point of Compliance	1,2,3,4,6,7,8-HpCDD	2.8 U $\mu\text{g/L}$	NS	NS	NS
RD-10	Evaluation	Di-n-butyl phthalate	1.9 U	1.9 U	0.53 U	1.9 U
RD-37	Detection	Trichloroethene	0.1 U	0.1 U	0.26 U	0.1 U
RD-43A	Detection	Acetone	3 U	3 U	4.5 U	3 U
RD-48C	Background	Methylene chloride	0.2 U	0.2 U	0.95 U	0.5 J
RD-51C	Detection	1,4-Dioxane	1 U	1 U	0.36 U	1 U
		Trichloroethene	0.1 U	0.1 U	0.28 J	0.1 U
RD-66	Perimeter	Methylene chloride	0.2 U	0.2 U	0.95 U	0.2 J
RD-68B	Perimeter	cis- 1,2-Dichloroethene	0.1 J	0.1 J	0.32 U	0.1 U

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

U = Not detected. Numerical value represents the MDL.

NS = Not scheduled for sampling.

## 2.2.6 Proposed First Quarter 2008 Groundwater Monitoring Schedule

The schedule proposed for the first quarter 2008 groundwater monitoring complies with that specified in the 1995 Post-Closure Permits. The fourth quarter 2007 and previous results indicated that additional sampling be conducted during the first quarter of 2008 to confirm if the following constituents are detectable in groundwater samples:

Well	Monitoring Program	Constituent	Samples Scheduled
HAR-16	Point of Compliance	1,2-Dibromo-3-chloropropane	Verification
RD-05B	Detection	Carbon disulfide	Verification
RD-05C	Detection	Carbon disulfide	Verification
RD-37	Detection	Carbon disulfide	Verification
RD-39A	Detection	Trichloroethene	Verification
RD-43A	Detection	Chloromethane	Verification
RD-43C	Detection	Carbon disulfide	Verification
RD-43C	Detection	Chloromethane	Verification
RD-48A	Background	Carbon disulfide	Verification
RD-48C	Background	Trichloroethene	Verification
RD-51C	Detection	Trichloroethene	Verification
RD-52C	Detection	cis- 1,2-Dichloroethene	Verification

Verification = primary, field duplicate, split, and field blank samples.

### **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. The systems in operation during the year were the air stripping unit (ASU) located at Delta and the WS-05 Area ultra violet light (UV)/hydrogen peroxide system (Figure 40). The Area I Road and Canyon air-stripping units and the RD-09 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). From January through August 2007, the Delta system was operated to treat groundwater collected from extraction well WS-09A. The Delta system was not operated during September through December after groundwater extraction from well WS-09A terminated. The WS-05 Area UV/hydrogen peroxide system was operated during the year to treat groundwater collected during quarterly groundwater monitoring and from extraction well RD-02 which was reactivated in April 2007. Operational data for each permitted system during the year are presented in monthly reports from EnviroSolve Corporation (2007a through 2007m).

There are 20 shallow and 12 Chatsworth Formation extraction wells at the Facility. During the year, only Chatsworth Formation wells RD-02 and WS-09A were operated. In late September 2005, the Topanga Fire damaged extraction well pipelines at SSFL. The SSFL groundwater remediation systems except the Delta system were shutoff between 2000 and 2003 to support the ongoing CFOU RFI program. The remediation systems and their associated extraction wells are listed in Tables XV and XVI. Monthly and cumulative extraction volume and VOC mass removal at each permitted system are presented in Appendix G, Figures G-1 to G-8.

Operating remedial systems are monitored monthly by EnviroSolve Corporation, which completes monthly reports listing routine operational data for all systems (EnviroSolve Corporation, 2007a through 2007m). These reports include analytical results for treatment system influent and effluent samples. Samples from remedial system influents and effluents are analyzed for VOCs by EPA Method 8260B. Delta and WS-05 Area system influents are also sampled for the analysis of perchlorate by EPA Method 314.0.

Concentrations of TCE and both isomers of 1,2-dichloroethene (the primary VOCs detected in the influent to permitted systems) are summarized for the year in Table XVII. Perchlorate results from influent samples to Delta and the WS-05 Area UV/hydrogen peroxide system are also summarized in Table XVII. Purge water collected during groundwater monitoring with detectable perchlorate was shipped off-site for treatment and disposal.

##### **3.1.1 Treated Groundwater Volumes and Analytical Results**

The Delta system and WS-05 Area UV/hydrogen peroxide system treated groundwater collected from extraction wells WS-09A and RD-02, respectively. During quarterly monitoring events, groundwater purged from wells and piezometers that did not contain detectable perchlorate was also treated at the Delta system and the WS-05 Area UV/hydrogen peroxide system. The total volume of groundwater treated during 2007 was approximately 4,200 thousand gallons at the Delta system and 1,400 thousand gallons at the WS-05 Area system.

Monthly water levels and flow rates are listed by well in Table XV. Monthly and cumulative pumpage volumes are listed by well in Table XVI.

Cis-1,2-DCE was detected in five of eight secondary effluent samples collected from the Delta system in 2007. The detected concentrations were 0.51  $\mu\text{g/L}$  in January, 0.92  $\mu\text{g/L}$  in April, 1.4  $\mu\text{g/L}$  in June, 1.3  $\mu\text{g/L}$  in July, and 9  $\mu\text{g/L}$  in August (Table XVII). Cis-1,2-DCE was not detected in Delta secondary effluent samples collected in February, March, and May. TCE was detected in one of eight secondary effluent samples collected from the Delta system in January at a concentration of 0.79  $\mu\text{g/L}$  (Table XVII). The August 7, 2007 secondary effluent was discharged into the empty R-2 Pond. Sample results for the R-2 Pond for August 20, 2007 tested below the action levels for all regulated constituents. Discharge of partially treated effluent did not occur. The Delta system was not operated after August 7, 2007. MCLs established by the State of California are 6  $\mu\text{g/L}$  for cis-1,2-DCE and 5  $\mu\text{g/L}$  for TCE.

Cis-1,2-DCE and TCE were detected in the April 2007 effluent sample collected from the WS-05 Area UV/hydrogen peroxide system at concentrations of 4.1 and 3.3  $\mu\text{g/L}$ , respectively (Table XVII). The April 2007 effluent was contained and re-treated prior to discharge. Cis-1,2-DCE and TCE were not detected in subsequent effluent samples.

Perchlorate was not detected in the influent samples to the Delta or WS-05 Area systems in 2007 (Table XVII).

#### 4. SURFACE WATER DISCHARGE

Surface water discharge is regulated by NPDES permit No. CA-0001309. Outfall 001 was dry during the year. Discharge limits and results of water quality analyses of surface water samples collected at Outfall 002 (Figure 40) during 2007 are presented in Appendix G, Tables G-I through G-IV. Discharge Monitoring Reports (DMR) for the SSFL NPDES outfalls are available at [www.boeing.com/aboutus/environment/santa\\_susana/water\\_quality.html](http://www.boeing.com/aboutus/environment/santa_susana/water_quality.html).

G:\Projects\26472\Reports\M-490 2007 Annual\2008-0228-HAI-SSFL\_M490\_text-F.doc

## REFERENCES

1. The Boeing Company (Boeing), 2005. Letter from Art Lenox, The Boeing Company, to Gerard Abrams, Department of Toxic Substances Control, re: "Laboratory Analysis of Groundwater Samples for N-nitrosodimethylamine (NDMA) at the Santa Susana Field Laboratory (SSFL)." 1 July 2005.
2. -----, 2007. Letter from Art Lenox, The Boeing Company, to James Pappas, Department of Toxic Substances Control, re: "TCE and Appendix IX Analyses for Background Monitoring Well RD-48B, Santa Susana Field Laboratory, Ventura County, California." 10 December 2007.
3. California Department of Public Health (DPH), 2006. "Article 16. Secondary Drinking Water Standards."  
<http://www.cdph.ca.gov/certlic/drinkingwater/Documents/Recentlyadoptedregulations/R-21-03-finalregtext.pdf>, updated 2 May 2006.
4. -----, 2007a. "Maximum Contaminant Levels and Regulatory Dates for Drinking Water U.S. EPA vs California."  
<http://www.cdph.ca.gov/certlic/drinkingwater/Documents/DWdocuments/EPAandCDPH.pdf>, updated September 2007.
5. -----, 2007b. "Drinking Water Notification Levels."  
<http://www.cdph.ca.gov/certlic/drinkingwater/Documents/Notificationlevels/NotificationLevels.pdf> , updated 14 December 2007.
6. California Department of Toxic Substances Control (DTSC), 1995. "Hazardous Waste Facility Post-Closure Permit, Regional Permit Numbers PC-94/95-3-02 and PC-94/95-3-03." Permits for Areas I and III, and Area II, effective 11 May 1995.
7. -----, 2001. "Hazardous Waste Facility Post-Closure Permit, Regional Permit Numbers PC-94/95-3-02 and PC-94/95-3-03, Class 1 and Class 2 Permit Modifications." Permits for Areas I and III, and Area II, modified 9 November 2001.
8. -----, 2002. Letter from Gerard Abrams, California DTSC, to Art Lenox, The Boeing Company, re: "Conditional Approval for Workplan for Additional Field Investigations, Former Sodium Disposal Facility (FSDF), Chatsworth Formation Operable Unit, Santa Susana Field Laboratory (SSFL), Ventura County, California." 30 January 2002.
9. -----, 2007. Letter from Gerard Abrams, California DTSC, to Dave Dassler, The Boeing Company, re: "Requirement to Collect Unfiltered Groundwater Samples during Water Quality Sampling, Santa Susana Field Laboratory (SSFL), Ventura County." 24 January 2007.
10. EnviroSolve Corporation, Inc., 2007a. "Santa Susana Field Laboratory, Groundwater Treatment System, Monthly Monitoring Report, December 2006."
11. -----, 2007b. "Santa Susana Field Laboratory, Groundwater Treatment System, Monthly Monitoring Report, January 2007."

12. -----, 2007c. "Santa Susana Field Laboratory, Groundwater Treatment System, Monthly Monitoring Report, February 2007."
13. -----, 2007d. "Santa Susana Field Laboratory, Groundwater Treatment System, Monthly Monitoring Report, March 2007."
14. -----, 2007e. "Santa Susana Field Laboratory, Groundwater Treatment System, Monthly Monitoring Report, April 2007."
15. -----, 2007f. "Santa Susana Field Laboratory, Groundwater Treatment System, Monthly Monitoring Report, May 2007."
16. -----, 2007g. "Santa Susana Field Laboratory, Groundwater Treatment System, Monthly Monitoring Report, June 2007."
17. -----, 2007h. "Santa Susana Field Laboratory, Groundwater Treatment System, Monthly Monitoring Report, July 2007."
18. -----, 2007i. "Santa Susana Field Laboratory, Groundwater Treatment System, Monthly Monitoring Report, August 2007."
19. -----, 2007j. "Santa Susana Field Laboratory, Groundwater Treatment System, Monthly Monitoring Report, September 2007."
20. -----, 2007k. "Santa Susana Field Laboratory, Groundwater Treatment System, Monthly Monitoring Report, October 2007."
21. -----, 2007l. "Santa Susana Field Laboratory, Groundwater Treatment System, Monthly Monitoring Report, November 2007."
22. -----, 2007m. "Santa Susana Field Laboratory, Groundwater Treatment System, Monthly Monitoring Report, December 2007."
23. Federal Register, 2000. "Environmental Protection Agency, 40 CFR Parts 9, 141, and 142, National Primary Drinking Water Regulations; Radionuclides; Final Rule." Federal Register Volume 65, Number 236, pp 76708 – 76753. 7 December 2000.
24. Groundwater Resources Consultants, Inc., 1995a. "Sampling and Analysis Plan, Hazardous Waste Facility Post-Closure Permit PC-94/95-3-02, Area II, Santa Susana Field Laboratory, Rockwell International Corporation, Rocketdyne Division." 5 June 1995.
25. -----, 1995b. "Sampling and Analysis Plan, Hazardous Waste Facility Post-Closure Permit PC-94/95-3-03, Areas I and III, Santa Susana Field Laboratory, Rockwell International Corporation, Rocketdyne Division." 5 June 1995.
26. -----, 1995c. "Groundwater Monitoring Quality Assurance Project Plan, Santa Susana Field Laboratory." 5 June 1995.
27. -----, 2000. "Annual Groundwater Monitoring Report, Santa Susana Field Laboratory, 1999, Boeing North American, Inc., Rocketdyne Propulsion & Power, Ventura County, California." 28 February 2000.



28. Haley & Aldrich, Inc., 2001. "Report on Annual Groundwater Monitoring, 2000, Santa Susana Field Laboratory, Ventura County, California." 28 February 2001.
29. -----, 2002a. "Report on Annual Groundwater Monitoring, 2001, Santa Susana Field Laboratory, Ventura County, California." 28 February 2002.
30. -----, 2002b. "Report on Appendix IX Groundwater Monitoring, 2001, Santa Susana Field Laboratory, Ventura County, California." 22 March 2002.
31. -----, 2003a. "Report on Annual Groundwater Monitoring, 2002, Santa Susana Field Laboratory, Ventura County, California." 28 February 2003.
32. -----, 2003b. "Addendum to Report on Annual Groundwater Monitoring, 2002, Santa Susana Field Laboratory, Ventura County, California." 4 March 2003.
33. -----, 2004. "Report on Annual Groundwater Monitoring, 2003, Santa Susana Field Laboratory, Ventura County, California." 27 February 2004.
34. -----, 2005. "Report on Annual Groundwater Monitoring, 2004, Santa Susana Field Laboratory, Ventura County, California." 28 February 2005.
35. -----, 2006. "Report on Annual Groundwater Monitoring, 2005, Santa Susana Field Laboratory, Ventura County, California." 28 February 2006.
36. -----, 2007a. "Report on Annual Groundwater Monitoring, 2006, Santa Susana Field Laboratory, Ventura County, California." 28 February 2007.
37. -----, 2007b. "Report on Quarterly Groundwater Monitoring, First Quarter 2007, January through March 2007, Santa Susana Field Laboratory, Ventura County, California." 31 May 2007.
38. -----, 2007c. "Report on Quarterly Groundwater Monitoring, Second Quarter 2007, April through June 2007, Santa Susana Field Laboratory, Ventura County, California." 31 August 2007.
39. -----, 2007d. "Report on Quarterly Groundwater Monitoring, Third Quarter 2007, July through September 2007, Santa Susana Field Laboratory, Ventura County, California." 30 November 2007.
40. Keller, Carl. Personal communication with Eric T. VanderVelde, MWH, on 17 February 2003.
41. Lancaster Laboratories, Inc. (Lancaster), 2007. Letter from Duane Luckenbill, Lancaster Laboratories, to Laura Davis, Haley & Aldrich, Inc., re: "Carbon Disulfide". 2 October 2007.
42. Montgomery Watson, 2000a. "Technical Memorandum, Conceptual Site Model, Movement of TCE in the Chatsworth Formation." April 2000.

43. -----, 2000b. "Work Plan for Additional Field Investigations, Chatsworth Formation Operable Unit, Santa Susana Field Laboratory, Ventura County, California." October 2000.
44. MWH, 2002. "Technical Memorandum, Geologic Characterization of the Eastern Portion of the Santa Susana Field Laboratory, Ventura County, California." February 2002.
45. -----, 2003a. "Perchlorate Source Evaluation and Technical Report, Santa Susana Field Laboratory, Ventura County, California." February 2003.
46. -----, 2003b. "Spring and Seep Sampling and Analysis Report, Santa Susana Field Laboratory, Ventura County, California." March 2003.
47. -----, 2003c. "Northern Drainage Perchlorate Sampling Results Technical Memorandum, Santa Susana Field Laboratory, Ventura County, California." November 2003.
48. -----, 2003d. "Near-Surface Groundwater Characterization Report, Santa Susana Field Laboratory, Ventura County, California." November 2003.
49. -----, 2003e. "Perchlorate Characterization Work Plan, Revision 1, Santa Susana Field Laboratory, Ventura County, California." December 2003.
50. -----, 2003f. "Work Plan for the Biotreatment of Perchlorate in Soil and Sediment, Happy Valley Interim Measures Project, Santa Susana Field Laboratory, Ventura County, California." December 2003.
51. -----, 2007. "Geologic Characterization of the Central Santa Susana Field Laboratory, Ventura County, California." August 2007.
52. Ogden Environmental and Energy Services Company, Inc., 2000. "RCRA Facility Investigation, Shallow Zone Groundwater Investigation Work Plan, Santa Susana Field Laboratory, Ventura County, California." December 2000.
53. Pierce, Amanda A., 2005. "Isotopic and Hydrochemical Investigation of Major Ion Origin and Trichloroethene Degradation in Fractured Sandstone." M.Sc. Thesis, Department of Earth Sciences, University of Waterloo, Waterloo, Ontario, Canada. 2005.
54. USEPA, 1999. "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review." OSWER 9240.1-05A-P. EPA-540/R-99/008 (PB99-963506).
55. -----, 2002. "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review." OSWER 9240.1-35. EPA 540-R-01-008. July 2002.
56. -----, 2003. "National Secondary Drinking Water Regulations." EPA 816-F-03-016. June 2003.

57. van den Berg, Martin, Linda S. Birnbaum, Michael Denison, Mike De Vito, William Farland, Mark Feeley, Heidelore Fiedler, Helen Hakansson, Annika Hanberg, Laurie Haws, Martin Rose, Stephen Safe, Dieter Schrenk, Chiharu Tohyama, Angelika Tritscher, Jouko Tuomisto, Mats Tysklind, Nigel Walker, and Richard E. Peterson, 2006. "The 2005 World Health Organization Re-evaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-like Compounds." July 2006.

**TABLE I**  
**SUMMARY OF ANNUAL RAINFALL**  
**MEASURED AT THE SANTA SUSANA FIELD LABORATORY, 1960-2007**  
**BOEING SANTA SUSANA FIELD LABORATORY**  
**VENTURA COUNTY, CALIFORNIA**

<b>Water Year Ending in</b>	<b>Precipitation (inches)</b>	<b>Water Year Ending in</b>	<b>Precipitation (inches)</b>
1960	10.52	1984	9.50
1961	6.18	1985	9.64
1962	24.79	1986	23.55
1963	13.74	1987	6.27
1964	9.96	1988	17.75
1965	16.06	1989	9.46
1966	27.18	1990	8.38
1967	23.99	1991	15.10
1968	19.54	1992	32.21
1969	32.11	1993	36.23
1970	11.81	1994	12.52
1971	16.79	1995	29.91
1972	8.68	1996	21.81
1973	20.69	1997	15.44
1974	16.11	1998	41.24
1975	16.58	1999	8.84
1976	10.99	2000	12.07
1977	13.91	2001	17.52
1978	40.06	2002	5.70
1979	22.96	2003	25.20
1980	28.61	2004	15.01
1981	16.25	2005	28.58
1982	12.11	2006	21.97
1983	40.93	2007	5.55
<b>Average Annual Precipitation (1960-2007) = 18.54 Inches</b>			

NOTE: Precipitation reported annually for the period of October through September.

**TABLE II**  
SUMMARY OF WATER LEVEL DATA, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
<b>Piezometers</b>					
PZ-003	02/01/07	1897.85	Dry	---	
PZ-003	05/01/07	1897.85	Dry	---	
PZ-003	08/03/07	1897.85	Dry	---	
PZ-003	10/16/07	1897.85	Dry	---	
PZ-016A	01/31/07	1854.34	NM	---	
PZ-016A	05/02/07	1854.34	Dry	---	
PZ-016A	08/01/07	1854.34	Dry	---	
PZ-016A	10/17/07	1854.34	Dry	---	
PZ-016B	01/31/07	1854.34	NM	---	
PZ-016B	05/02/07	1854.34	Dry	---	
PZ-016B	08/01/07	1854.34	Dry	---	
PZ-016B	10/17/07	1854.34	Dry	---	
PZ-016C	01/31/07	1854.34	NM	---	
PZ-016C	05/02/07	1854.34	Dry	---	
PZ-016C	08/01/07	1854.34	Dry	---	
PZ-016C	10/17/07	1854.34	Dry	---	
PZ-016D	01/31/07	1854.34	NM	---	
PZ-016D	05/02/07	1854.34	Dry	---	
PZ-016D	08/01/07	1854.34	Dry	---	
PZ-016D	10/17/07	1854.34	Dry	---	
PZ-016E	01/31/07	1854.34	NM	---	
PZ-016E	05/02/07	1854.34	Dry	---	
PZ-016E	08/01/07	1854.34	49.95	1804.39	
PZ-016E	10/17/07	1854.34	Dry	---	
PZ-016F	01/31/07	1854.34	NM	---	
PZ-016F	05/02/07	1854.34	Dry	---	
PZ-016F	08/01/07	1854.34	Dry	---	
PZ-016F	10/17/07	1854.34	50.78	1803.56	
PZ-016G	01/31/07	1854.34	NM	---	
PZ-016G	05/02/07	1854.34	Dry	---	
PZ-016G	08/01/07	1854.34	Dry	---	
PZ-016G	10/17/07	1854.34	UTM	---	(*)
PZ-017A	01/31/07	1837.83	8.64	1829.19	
PZ-017A	05/02/07	1837.83	9.09	1828.74	
PZ-045	01/31/07	1828.55	41.42	1787.13	
PZ-045	05/02/07	1828.55	42.25	1786.30	
PZ-045	08/01/07	1828.55	Dry	---	
PZ-045	10/17/07	1828.55	Dry	---	
PZ-046	01/31/07	1826.87	36.95	1789.92	
PZ-046	05/02/07	1826.87	Dry	---	
PZ-046	08/01/07	1826.87	Dry	---	
PZ-046	10/17/07	1826.87	Dry	---	
PZ-047	01/31/07	1835.51	38.28	1797.23	
PZ-047	05/02/07	1835.51	37.89	1797.62	
PZ-047	08/01/07	1835.51	38.29	1797.22	
PZ-047	10/17/07	1835.51	38.50	1797.01	
PZ-056	02/01/07	1805.86	Dry	---	
PZ-056	05/02/07	1805.86	Dry	---	
PZ-056	08/01/07	1805.86	Dry	---	
PZ-056	10/17/07	1805.86	Dry	---	

See page 23 of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T02-F.xls

February 2008

**TABLE II**  
SUMMARY OF WATER LEVEL DATA, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
PZ-062	01/31/07	1716.57	Dry	---	
PZ-062	05/02/07	1716.57	Dry	---	
PZ-062	08/02/07	1716.57	Dry	---	
PZ-062	10/17/07	1716.57	Dry	---	
PZ-067A	01/30/07	1909.66	Dry	---	
PZ-067A	05/01/07	1909.66	Dry	---	
PZ-067A	08/01/07	1909.66	Dry	---	
PZ-067A	10/16/07	1909.66	Dry	---	
PZ-067B	01/30/07	1909.06	Dry	---	
PZ-067B	05/01/07	1909.06	Dry	---	
PZ-067B	08/01/07	1909.06	Dry	---	
PZ-067B	10/16/07	1909.06	Dry	---	
PZ-068	01/30/07	1894.02	Dry	---	
PZ-068	05/01/07	1894.02	Dry	---	
PZ-068	08/01/07	1894.02	Dry	---	
PZ-068	10/16/07	1894.02	Dry	---	
PZ-070	02/01/07	1834.61	Dry	---	
PZ-072	05/01/07	1768.19	UTM	---	(*)
PZ-072	08/02/07	1768.19	UTM	---	(*)
PZ-072	10/16/07	1768.19	UTM	---	(*)
PZ-074	02/01/07	1772.73	Dry	---	
PZ-074	05/01/07	1772.73	23.22	1749.51	
PZ-074	08/01/07	1772.73	Dry	---	
PZ-074	10/17/07	1772.73	Dry	---	
PZ-075	01/31/07	1893.10	Dry	---	
PZ-075	04/30/07	1893.10	Dry	---	
PZ-075	08/01/07	1893.10	Dry	---	
PZ-075	10/16/07	1893.10	Dry	---	
PZ-095	01/31/07	1760.02	Dry	---	
PZ-095	05/02/07	1760.02	Dry	---	
PZ-095	08/02/07	1760.02	Dry	---	
PZ-095	10/17/07	1760.02	Dry	---	
PZ-102	02/01/07	1827.78	Dry	---	
PZ-102	05/02/07	1827.78	Dry	---	
PZ-102	08/01/07	1827.78	Dry	---	
PZ-102	10/17/07	1827.78	Dry	---	
PZ-108	01/20/07	1809.36	18.32	1791.04	
PZ-109	01/30/07	1809.51	14.54	1794.97	
PZ-114	02/01/07	1818.19	41.66	1776.53	
PZ-114	05/02/07	1818.19	43.62	1774.57	
PZ-114	08/01/07	1818.19	45.43	1772.76	
PZ-117	01/31/07	1845.90	Dry	---	
PZ-117	05/01/07	1845.90	Dry	---	
PZ-117	08/01/07	1845.90	Dry	---	
PZ-117	10/17/07	1845.90	Dry	---	
PZ-120	01/31/07	1810.96	18.04	1792.92	
PZ-121	01/30/07	1808.98	12.95	1796.03	
PZ-124	02/01/07	1764.11	26.62	1737.49	
PZ-124	05/02/07	1764.11	Dry	---	
PZ-124	08/01/07	1764.11	Dry	---	
PZ-124	10/16/07	1764.11	Dry	---	

See page 23 of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T02-F.xls

February 2008

**TABLE II**  
SUMMARY OF WATER LEVEL DATA, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
PZ-126	01/31/07	1853.62	9.34	1844.28	
PZ-126	05/02/07	1853.62	6.56	1847.06	
PZ-127	01/31/07	1877.19	64.44	1812.75	
PZ-127	05/02/07	1877.19	64.77	1812.42	
PZ-127	08/01/07	1877.19	65.38	1811.81	
PZ-127	10/17/07	1877.19	Dry	---	
<b>Shallow Wells</b>					
SH-01	01/31/07	1772.84	Dry	---	
SH-01	05/02/07	1772.84	Dry	---	
SH-01	08/02/07	1772.84	Dry	---	
SH-01	10/16/07	1772.84	Dry	---	
SH-02	01/30/07	1762.76	9.75	1753.01	
SH-02	05/02/07	1762.76	Dry	---	
SH-02	08/02/07	1762.76	Dry	---	
SH-02	10/16/07	1762.76	Dry	---	
SH-03	01/30/07	1762.53	9.54	1752.99	
SH-03	05/02/07	1762.53	Dry	---	
SH-03	08/02/07	1762.53	Dry	---	
SH-03	10/16/07	1762.53	Dry	---	
SH-04	01/30/07	1765.08	Dry	---	
SH-04	05/02/07	1765.08	Dry	---	
SH-04	08/02/07	1765.08	Dry	---	
SH-04	10/16/07	1765.08	Dry	---	
SH-05	01/31/07	1762.97	Dry	---	
SH-05	05/02/07	1762.97	Dry	---	
SH-05	08/02/07	1762.97	Dry	---	
SH-05	10/16/07	1762.97	Dry	---	
SH-06	01/31/07	1776.99	Dry	---	
SH-06	05/02/07	1776.99	Dry	---	
SH-06	08/02/07	1776.99	Dry	---	
SH-06	10/16/07	1776.99	Dry	---	
SH-07	01/31/07	1775.11	Dry	---	
SH-07	05/02/07	1775.11	Dry	---	
SH-07	08/02/07	1775.11	Dry	---	
SH-07	10/16/07	1775.11	Dry	---	
SH-08	01/31/07	1763.25	10.28	1752.97	
SH-08	05/02/07	1763.25	10.63	1752.62	
SH-08	08/02/07	1763.25	Dry	---	
SH-08	10/16/07	1763.25	Dry	---	
SH-09	01/31/07	1761.19	Dry	---	
SH-09	05/02/07	1761.19	Dry	---	
SH-09	08/02/07	1761.19	Dry	---	
SH-09	10/16/07	1761.19	Dry	---	
SH-10	01/31/07	1757.69	Dry	---	
SH-10	05/02/07	1757.69	Dry	---	
SH-10	08/02/07	1757.69	Dry	---	
SH-10	10/16/07	1757.69	Dry	---	
SH-11	01/31/07	1756.00	Dry	---	
SH-11	05/02/07	1756.00	15.90	1740.10	
SH-11	08/02/07	1756.00	Dry	---	
SH-11	10/16/07	1756.00	Dry	---	

See page 23 of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T02-F.xls

February 2008

**TABLE II**  
SUMMARY OF WATER LEVEL DATA, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
RS-01	01/30/07	1879.68	24.32	1855.36	
RS-01	05/01/07	1879.68	Dry	---	
RS-01	07/31/07	1879.68	Dry	---	
RS-01	10/16/07	1879.68	Dry	---	
RS-02	01/30/07	1901.08	Dry	---	
RS-02	05/01/07	1901.08	Dry	---	
RS-02	08/01/07	1901.08	Dry	---	
RS-02	10/16/07	1901.08	Dry	---	
RS-03	01/30/07	1834.22	Dry	---	
RS-03	05/01/07	1834.22	Dry	---	
RS-03	08/01/07	1834.22	Dry	---	
RS-03	10/16/07	1834.22	Dry	---	
RS-04	01/30/07	1826.56	Dry	---	
RS-04	05/01/07	1826.56	Dry	---	
RS-04	08/01/07	1826.56	Dry	---	
RS-04	10/17/07	1826.56	Dry	---	
RS-05	01/30/07	1783.73	19.60	1764.13	
RS-05	05/02/07	1783.73	20.82	1762.91	
RS-05	08/01/07	1783.73	Dry	---	
RS-05	10/17/07	1783.73	Dry	---	
RS-06	01/30/07	1757.43	Dry	---	
RS-06	05/01/07	1757.43	Dry	---	
RS-06	08/02/07	1757.43	Dry	---	
RS-06	10/16/07	1757.43	Dry	---	
RS-07	01/31/07	1732.27	3.16	1729.11	
RS-07	05/01/07	1732.27	5.31	1726.96	
RS-07	08/02/07	1732.27	Dry	---	
RS-07	10/16/07	1732.27	Dry	---	
RS-08	02/01/07	1821.57	Dry	---	
RS-08	05/02/07	1821.57	Dry	---	
RS-08	08/02/07	1821.57	Dry	---	
RS-08	10/16/07	1821.57	Dry	---	
RS-09	01/29/07	1735.52	20.43	1715.09	
RS-09	05/02/07	1735.52	20.01	1715.51	
RS-09	08/01/07	1735.52	Dry	---	
RS-09	10/15/07	1735.52	Dry	---	
RS-10	01/31/07	1762.08	Dry	---	
RS-10	04/30/07	1762.08	Dry	---	
RS-10	08/02/07	1762.08	Dry	---	
RS-10	10/17/07	1762.08	Dry	---	
RS-11	01/30/07	1790.39	13.85	1776.54	
RS-11	05/02/07	1790.39	14.78	1775.61	
RS-11	08/01/07	1790.39	16.68	1773.71	
RS-11	10/16/07	1790.39	Dry	---	
RS-12	01/29/07	1727.48	Dry	---	
RS-12	05/02/07	1727.48	Dry	---	
RS-12	08/01/07	1727.48	Dry	---	
RS-12	10/15/07	1727.48	Dry	---	
RS-13	02/23/07	1645.13	Dry	---	
RS-13	05/02/07	1645.13	Dry	---	
RS-13	08/01/07	1645.13	Dry	---	
RS-13	10/16/07	1645.13	Dry	---	

See page 23 of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T02-F.xls

February 2008



**TABLE II**  
SUMMARY OF WATER LEVEL DATA, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
RS-14	01/29/07	1734.78	Dry	---	
RS-14	05/02/07	1734.78	Dry	---	
RS-14	08/01/07	1734.78	Dry	---	
RS-14	10/15/07	1734.78	Dry	---	
RS-15	01/29/07	1764.86	6.67	1758.19	
RS-15	05/02/07	1764.86	7.12	1757.74	
RS-15	08/02/07	1764.86	9.54	1755.32	
RS-15	10/16/07	1764.86	9.14	1755.72	
RS-16	02/01/07	1811.05	Dry	---	
RS-16	05/02/07	1811.05	Dry	---	
RS-16	08/01/07	1811.05	Dry	---	
RS-16	10/16/07	1811.05	Dry	---	
RS-17	01/29/07	1766.52	10.68	1755.84	
RS-17	05/02/07	1766.52	11.91	1754.61	
RS-17	08/02/07	1766.52	13.85	1752.67	
RS-17	10/16/07	1766.52	13.31	1753.21	
RS-18	01/30/07	1802.86	Dry	---	
RS-18	05/01/07	1802.86	Dry	---	
RS-18	07/31/07	1802.86	Dry	---	
RS-18	10/15/07	1802.86	Dry	---	
RS-19	01/30/07	1812.42	Dry	---	
RS-19	05/02/07	1812.42	Dry	---	
RS-19	08/01/07	1812.42	Dry	---	
RS-19	10/17/07	1812.42	Dry	---	
RS-20	01/30/07	1823.77	20.46	1803.31	
RS-20	05/01/07	1823.77	Dry	---	
RS-20	08/01/07	1823.77	Dry	---	
RS-20	10/17/07	1823.77	Dry	---	
RS-21	01/31/07	1767.36	18.38	1748.98	
RS-21	05/02/07	1767.36	20.16	1747.20	
RS-21	08/01/07	1767.36	23.15	1744.21	
RS-21	10/17/07	1767.36	24.84	1742.52	
RS-22	01/31/07	1771.23	19.15	1752.08	
RS-22	05/02/07	1771.23	21.19	1750.04	
RS-22	08/01/07	1771.23	24.20	1747.03	
RS-22	10/17/07	1771.23	26.34	1744.89	
RS-23	01/30/07	1887.25	Dry	---	
RS-23	05/01/07	1887.25	Dry	---	
RS-23	07/31/07	1887.25	Dry	---	
RS-23	10/15/07	1887.25	Dry	---	
RS-24	01/31/07	1809.24	Dry	---	
RS-24	05/02/07	1809.24	Dry	---	
RS-24	07/31/07	1809.24	Dry	---	
RS-24	10/16/07	1809.24	Dry	---	
RS-25	01/31/07	1862.71	Dry	---	
RS-25	05/01/07	1862.71	14.45	1848.26	
RS-25	08/01/07	1862.71	Dry	---	
RS-25	10/16/07	1862.71	Dry	---	
RS-27	01/30/07	1804.78	Dry	---	
RS-27	05/01/07	1804.78	Dry	---	
RS-27	07/31/07	1804.78	Dry	---	
RS-27	10/16/07	1804.78	Dry	---	

See page 23 of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T02-F.xls

February 2008

**TABLE II**  
SUMMARY OF WATER LEVEL DATA, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
RS-28	01/30/07	1768.59	10.81	1757.78	
RS-28	05/01/07	1768.59	12.27	1756.32	
RS-28	07/31/07	1768.59	13.66	1754.93	
RS-28	10/16/07	1768.59	14.83	1753.76	
RS-29	01/31/07	1833.09	Dry	---	
RS-29	05/01/07	1833.09	Dry	---	
RS-29	08/01/07	1833.09	Dry	---	
RS-29	10/17/07	1833.09	Dry	---	
RS-30	01/30/07	1909.01	21.85	1887.16	
RS-30	04/30/07	1909.01	Dry	---	
RS-30	07/31/07	1909.01	Dry	---	
RS-30	10/16/07	1909.01	Dry	---	
RS-31	01/30/07	1909.03	Dry	---	
RS-31	04/30/07	1909.03	Dry	---	
RS-31	07/31/07	1909.03	Dry	---	
RS-31	10/16/07	1909.03	Dry	---	
RS-32	01/30/07	1908.99	Dry	---	
RS-32	04/30/07	1908.99	Dry	---	
RS-32	07/31/07	1908.99	Dry	---	
RS-32	10/16/07	1908.99	Dry	---	
RS-54	01/30/07	1846.66	22.34	1824.32	
RS-54	04/30/07	1846.66	23.76	1822.90	
RS-54	07/31/07	1846.66	Dry	---	
RS-54	10/15/07	1846.66	29.51	1817.15	
ES-01	01/30/07	1782.20	18.05	1764.15	
ES-01	05/02/07	1782.20	19.23	1762.97	
ES-01	08/01/07	1782.20	20.81	1761.39	
ES-01	10/17/07	1782.20	22.00	1760.20	
ES-02	01/30/07	1814.60	Dry	---	
ES-02	05/02/07	1814.60	Dry	---	
ES-02	08/01/07	1814.60	Dry	---	
ES-02	10/17/07	1814.60	Dry	---	
ES-03	01/30/07	1783.39	19.19	1764.20	
ES-03	05/02/07	1783.39	20.39	1763.00	
ES-03	08/01/07	1783.39	16.60	1766.79	
ES-03	10/17/07	1783.39	23.67	1759.72	
ES-04	01/30/07	1817.24	Dry	---	
ES-04	05/01/07	1817.24	Dry	---	
ES-04	08/01/07	1817.24	Dry	---	
ES-04	10/17/07	1817.24	Dry	---	
ES-05	01/30/07	1818.13	Dry	---	
ES-05	05/01/07	1818.13	Dry	---	
ES-05	08/01/07	1818.13	Dry	---	
ES-05	10/17/07	1818.13	Dry	---	
ES-06	01/30/07	1825.41	19.41	1806.00	
ES-06	05/01/07	1825.41	19.86	1805.55	
ES-06	08/01/07	1825.41	20.95	1804.46	
ES-06	10/17/07	1825.41	22.32	1803.09	
ES-07	01/30/07	1826.53	Dry	---	
ES-07	05/01/07	1826.53	Dry	---	
ES-07	08/01/07	1826.53	Dry	---	
ES-07	10/17/07	1826.53	Dry	---	

See page 23 of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T02-F.xls

February 2008

**TABLE II**  
SUMMARY OF WATER LEVEL DATA, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
ES-08	02/01/07	1826.60	Dry	---	
ES-08	05/01/07	1826.60	Dry	---	
ES-08	08/01/07	1826.60	Dry	---	
ES-08	10/17/07	1826.60	Dry	---	
ES-09	01/30/07	1827.80	Dry	---	
ES-09	05/01/07	1827.80	Dry	---	
ES-09	08/01/07	1827.80	Dry	---	
ES-09	10/16/07	1827.80	Dry	---	
ES-10	01/30/07	1829.46	Dry	---	
ES-10	05/01/07	1829.46	Dry	---	
ES-10	08/01/07	1829.46	19.99	1809.47	
ES-10	10/16/07	1829.46	Dry	---	
ES-11	01/30/07	1835.07	Dry	---	
ES-11	05/01/07	1835.07	Dry	---	
ES-11	08/01/07	1835.07	Dry	---	
ES-11	10/16/07	1835.07	Dry	---	
ES-12	01/30/07	1838.19	Dry	---	
ES-12	05/01/07	1838.19	Dry	---	
ES-12	08/01/07	1838.19	Dry	---	
ES-12	10/16/07	1838.19	Dry	---	
ES-13	01/30/07	1782.58	16.96	1765.62	
ES-13	05/02/07	1782.58	17.82	1764.76	
ES-13	08/01/07	1782.58	19.20	1763.38	
ES-13	10/17/07	1782.58	18.80	1763.78	
ES-14	01/29/07	1728.69	18.39	1710.30	
ES-14	05/02/07	1728.69	18.08	1710.61	
ES-14	08/01/07	1728.69	21.80	1706.89	
ES-14	10/15/07	1728.69	24.79	1703.90	
ES-15	01/29/07	1730.21	20.35	1709.86	
ES-15	05/02/07	1730.21	19.99	1710.22	
ES-15	08/01/07	1730.21	Dry	---	
ES-15	10/15/07	1730.21	Dry	---	
ES-16	01/29/07	1737.90	20.90	1717.00	
ES-16	05/02/07	1737.90	20.24	1717.66	
ES-16	08/01/07	1737.90	Dry	---	
ES-16	10/15/07	1737.90	Dry	---	
ES-17	01/29/07	1739.31	16.37	1722.94	
ES-17	05/02/07	1739.31	15.89	1723.42	
ES-17	08/01/07	1739.31	Dry	---	
ES-17	10/15/07	1739.31	25.19	1714.12	
ES-18	01/31/07	1770.25	20.32	1749.93	
ES-18	05/02/07	1770.25	22.06	1748.19	
ES-18	08/01/07	1770.25	25.26	1744.99	
ES-18	10/17/07	1770.25	Dry	---	
ES-19	01/31/07	1769.44	19.32	1750.12	
ES-19	05/02/07	1769.44	21.06	1748.38	
ES-19	08/01/07	1769.44	24.12	1745.32	
ES-19	10/17/07	1769.44	26.15	1743.29	
ES-20	01/31/07	1770.58	20.36	1750.22	
ES-20	05/02/07	1770.58	22.07	1748.51	
ES-20	08/01/07	1770.58	23.58	1747.00	
ES-20	10/17/07	1770.58	Dry	---	

See page 23 of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T02-F.xls

February 2008

**TABLE II**  
SUMMARY OF WATER LEVEL DATA, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
ES-21	01/31/07	1769.62	19.29	1750.33	
ES-21	05/02/07	1769.62	21.06	1748.56	
ES-21	08/01/07	1769.62	24.14	1745.48	
ES-21	10/17/07	1769.62	26.10	1743.52	
ES-22	01/31/07	1770.93	20.27	1750.66	
ES-22	05/02/07	1770.93	22.05	1748.88	
ES-22	08/01/07	1770.93	25.15	1745.78	
ES-22	10/17/07	1770.93	27.17	1743.76	
ES-23	02/01/07	1760.73	9.37	1751.36	
ES-23	05/02/07	1760.73	10.13	1750.60	
ES-23	08/02/07	1760.73	11.32	1749.41	
ES-23	10/16/07	1760.73	10.78	1749.95	
ES-24	01/29/07	1728.67	21.96	1706.71	
ES-24	05/02/07	1728.67	21.55	1707.12	
ES-24	08/01/07	1728.67	24.67	1704.00	
ES-24	10/15/07	1728.67	27.51	1701.16	
ES-25	02/01/07	1737.78	34.80	1702.98	
ES-25	05/02/07	1737.78	34.64	1703.14	
ES-25	08/01/07	1737.78	Dry	---	
ES-25	10/15/07	1737.78	Dry	---	
ES-26	01/29/07	1748.01	14.12	1733.89	
ES-26	05/02/07	1748.01	14.08	1733.93	
ES-26	08/01/07	1748.01	19.05	1728.96	
ES-26	10/15/07	1748.01	22.41	1725.60	
ES-27	01/29/07	1740.67	16.84	1723.83	
ES-27	05/02/07	1740.67	16.28	1724.39	
ES-27	08/01/07	1740.67	21.30	1719.37	
ES-27	10/15/07	1740.67	24.80	1715.87	
ES-28	01/31/07	1759.15	8.72	1750.43	
ES-28	05/02/07	1759.15	9.33	1749.82	
ES-28	08/02/07	1759.15	10.39	1748.76	
ES-28	10/16/07	1759.15	9.94	1749.21	
ES-29	01/31/07	1760.47	9.50	1750.97	
ES-29	05/02/07	1760.47	10.29	1750.18	
ES-29	08/02/07	1760.47	11.34	1749.13	
ES-29	10/16/07	1760.47	10.89	1749.58	
ES-30	01/31/07	1759.51	9.72	1749.79	
ES-30	05/02/07	1759.51	10.02	1749.49	
ES-30	08/02/07	1759.51	11.19	1748.32	
ES-30	10/16/07	1759.51	10.76	1748.75	
ES-31	01/30/07	1787.01	12.96	1774.05	
ES-31	05/02/07	1787.01	13.72	1773.29	
ES-31	08/01/07	1787.01	16.31	1770.70	
ES-31	10/16/07	1787.01	18.07	1768.94	
ES-32	01/29/07	1740.65	19.15	1721.50	
ES-32	05/02/07	1740.65	19.04	1721.61	
ES-32	08/01/07	1740.65	Dry	---	
ES-32	10/15/07	1740.65	Dry	---	
HAR-02	01/30/07	1886.38	Dry	---	
HAR-02	05/01/07	1886.38	Dry	---	
HAR-02	08/01/07	1886.38	Dry	---	
HAR-02	10/16/07	1886.38	Dry	---	

See page 23 of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T02-F.xls

February 2008

**TABLE II**  
SUMMARY OF WATER LEVEL DATA, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
HAR-03	01/30/07	1875.48	Dry	---	
HAR-03	04/30/07	1875.48	21.18	1854.30	
HAR-03	08/01/07	1875.48	30.99	1844.49	
HAR-03	10/16/07	1875.48	Dry	---	
HAR-04	01/29/07	1873.40	22.08	1851.32	
HAR-04	04/30/07	1873.40	20.43	1852.97	
HAR-04	08/01/07	1873.40	22.42	1850.98	
HAR-04	10/16/07	1873.40	23.63	1849.77	
HAR-09	02/01/07	1820.62	14.25	1806.37	
HAR-09	05/02/07	1820.62	15.00	1805.62	
HAR-09	08/02/07	1820.62	17.00	1803.62	
HAR-09	10/16/07	1820.62	17.54	1803.08	
HAR-11	02/01/07	1827.90	20.35	1807.55	
HAR-11	05/02/07	1827.90	23.58	1804.32	
HAR-11	08/02/07	1827.90	26.05	1801.85	
HAR-11	10/16/07	1827.90	27.57	1800.33	
HAR-12	01/31/07	1796.73	UTM	---	(*)
HAR-12	05/02/07	1796.73	UTM	---	(*)
HAR-12	08/01/07	1796.73	UTM	---	(*)
HAR-12	10/16/07	1796.73	UTM	---	(*)
HAR-13	01/31/07	1801.18	17.96	1783.22	
HAR-13	05/02/07	1801.18	19.05	1782.13	
HAR-13	08/01/07	1801.18	21.23	1779.95	
HAR-13	10/16/07	1801.18	22.71	1778.47	
HAR-14	01/31/07	1797.02	14.45	1782.57	
HAR-14	05/02/07	1797.02	15.38	1781.64	
HAR-14	08/01/07	1797.02	17.47	1779.55	
HAR-14	10/16/07	1797.02	18.79	1778.23	
HAR-15	01/31/07	1809.69	16.91	1792.78	
HAR-15	05/02/07	1809.69	18.78	1790.91	
HAR-15	08/01/07	1809.69	22.71	1786.98	
HAR-15	10/16/07	1809.69	25.67	1784.02	
HAR-27	01/31/07	1719.39	27.48	1691.91	
HAR-27	04/30/07	1719.39	27.56	1691.83	
HAR-27	08/01/07	1719.39	30.25	1689.14	
HAR-27	10/17/07	1719.39	30.51	1688.88	
HAR-28	01/31/07	1720.17	27.02	1693.15	
HAR-28	04/30/07	1720.17	27.54	1692.63	
HAR-28	08/01/07	1720.17	29.10	1691.07	
HAR-28	10/17/07	1720.17	30.55	1689.62	
HAR-29	01/31/07	1724.13	27.91	1696.22	
HAR-29	04/30/07	1724.13	28.42	1695.71	
HAR-29	08/01/07	1724.13	29.67	1694.46	
HAR-29	10/17/07	1724.13	30.89	1693.24	
HAR-30	01/31/07	1806.47	17.01	1789.46	
HAR-30	05/02/07	1806.47	UTM	---	(*)
HAR-30	08/01/07	1806.47	UTM	---	(*)
HAR-30	10/16/07	1806.47	UTM	---	(*)
HAR-31	01/31/07	1812.45	22.45	1790.00	
HAR-31	05/02/07	1812.45	24.41	1788.04	
HAR-31	08/01/07	1812.45	27.69	1784.76	
HAR-31	10/16/07	1812.45	30.81	1781.64	

See page 23 of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T02-F.xls

February 2008

**TABLE II**  
SUMMARY OF WATER LEVEL DATA, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
HAR-32	01/29/07	1736.58	16.44	1720.14	
HAR-32	05/02/07	1736.58	16.15	1720.43	
HAR-32	08/01/07	1736.58	20.67	1715.91	
HAR-32	10/15/07	1736.58	25.82	1710.76	
HAR-33	01/29/07	1744.66	18.80	1725.86	
HAR-33	05/02/07	1744.66	18.08	1726.58	
HAR-33	08/01/07	1744.66	22.61	1722.05	
HAR-33	10/15/07	1744.66	26.58	1718.08	
HAR-34	01/29/07	1751.17	16.72	1734.45	
HAR-34	05/02/07	1751.17	16.14	1735.03	
HAR-34	08/01/07	1751.17	21.22	1729.95	
HAR-34	10/15/07	1751.17	Dry	---	
<b>Chatsworth Formation Wells</b>					
RD-01	01/31/07	1935.89	200.10	1735.79	
RD-01	05/01/07	1935.89	199.61	1736.28	
RD-01	08/01/07	1935.89	200.50	1735.39	
RD-01	10/17/07	1935.89	202.81	1733.08	
RD-02	01/30/07	1873.92	154.37	1719.55	
RD-02	05/02/07	1873.92	154.52	1719.40	
RD-02	08/01/07	1873.92	162.02	1711.90	
RD-02	10/17/07	1873.92	161.05	1712.87	
RD-03	01/31/07	1743.50	9.10	1734.40	
RD-03	05/01/07	1743.50	10.29	1733.21	
RD-03	08/01/07	1743.50	11.93	1731.57	
RD-03	10/16/07	1743.50	14.57	1728.93	
RD-04	02/01/07	1883.85	293.94	1589.91	
RD-04	05/02/07	1883.85	292.43	1591.42	
RD-04	08/01/07	1883.85	290.73	1593.12	
RD-04	10/16/07	1883.85	290.21	1593.64	
RD-05A	02/01/07	1704.66	82.17	1622.49	
RD-05A	05/01/07	1704.66	93.03	1611.63	
RD-05A	08/01/07	1704.66	96.35	1608.31	
RD-05A	10/16/07	1704.66	92.70	1611.96	
RD-05B	02/01/07	1705.89	53.60	1652.29	
RD-05B	05/01/07	1705.89	54.52	1651.37	
RD-05B	08/01/07	1705.89	55.77	1650.12	
RD-05B	10/16/07	1705.89	56.79	1649.10	
RD-05C	02/01/07	1705.25	53.12	1652.13	
RD-05C	05/01/07	1705.25	52.72	1652.53	
RD-05C	08/01/07	1705.25	52.23	1653.02	
RD-05C	10/16/07	1705.25	51.91	1653.34	
RD-06	02/08/07	1617.21	46.22	1570.99	
RD-06	05/01/07	1617.21	47.22	1569.99	
RD-06	08/01/07	1617.21	48.83	1568.38	
RD-06	10/16/07	1617.21	50.10	1567.11	
RD-07	02/01/07	1812.82			(1)
RD-07	05/02/07	1812.82			(1)
RD-07	08/01/07	1812.82			(1)
RD-07	10/16/07	1812.82			(1)

See page 23 of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T02-F.xls

February 2008

**TABLE II**  
SUMMARY OF WATER LEVEL DATA, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
RD-08	01/30/07	1763.38	11.50	1751.88	
RD-08	05/02/07	1763.38	11.25	1752.13	
RD-08	08/02/07	1763.38	12.85	1750.53	
RD-08	10/16/07	1763.38	13.55	1749.83	
RD-09	01/31/07	1768.20	20.49	1747.71	
RD-09	05/02/07	1768.20	22.24	1745.96	
RD-09	08/01/07	1768.20	25.20	1743.00	
RD-09	10/17/07	1768.20	26.78	1741.42	
RD-10	01/31/07	1904.43	181.77	1722.66	
RD-10	05/01/07	1904.43	182.18	1722.25	
RD-10	08/01/07	1904.43	184.95	1719.48	
RD-10	10/17/07	1904.43	185.55	1718.88	
RD-11	01/31/07	1762.65	16.91	1745.74	
RD-11	05/02/07	1762.65	16.75	1745.90	
RD-11	08/02/07	1762.65	16.52	1746.13	
RD-11	10/16/07	1762.65	17.73	1744.92	
RD-12	01/31/07	1762.62	22.69	1739.93	
RD-12	05/02/07	1762.62	22.33	1740.29	
RD-12	08/02/07	1762.62	23.91	1738.71	
RD-12	10/16/07	1762.62	25.5	1737.12	
RD-13	01/30/07	1840.27	47.34	1792.93	
RD-13	05/01/07	1840.27	49.16	1791.11	
RD-13	07/31/07	1840.27	50.86	1789.41	
RD-13	10/15/07	1840.27	52.43	1787.84	
RD-14	01/31/07	1824.29	68.01	1756.28	
RD-14	05/01/07	1824.29	69.51	1754.78	
RD-14	08/01/07	1824.29	71.32	1752.97	
RD-14	10/16/07	1824.29	72.57	1751.72	
RD-15	01/31/07	1817.70	42.30	1775.40	
RD-15	05/02/07	1817.70	44.26	1773.44	
RD-15	08/01/07	1817.70	46.16	1771.54	
RD-15	10/16/07	1817.70	48.07	1769.63	
RD-16	01/31/07	1808.99	45.98	1763.01	
RD-16	05/02/07	1808.99	46.85	1762.14	
RD-16	08/01/07	1808.99	48.21	1760.78	
RD-16	10/16/07	1808.99	49.66	1759.33	
RD-17	01/30/07	1836.30	25.21	1811.09	
RD-17	05/01/07	1836.30	26.35	1809.95	
RD-17	08/01/07	1836.30	27.62	1808.68	
RD-17	10/16/07	1836.30	28.89	1807.41	
RD-18	01/31/07	1839.49	82.34	1757.15	
RD-18	05/01/07	1839.49	83.22	1756.27	
RD-18	08/01/07	1839.49	84.50	1754.99	
RD-18	10/16/07	1839.49	85.68	1753.81	
RD-19	01/31/07	1853.13	75.29	1777.84	
RD-19	05/01/07	1853.13	76.61	1776.52	
RD-19	08/01/07	1853.13	78.10	1775.03	
RD-19	10/16/07	1853.13	79.28	1773.85	
RD-20	01/30/07	1819.72	39.76	1779.96	
RD-20	05/01/07	1819.72	40.94	1778.78	
RD-20	07/31/07	1819.72	43.24	1776.48	
RD-20	10/15/07	1819.72	43.39	1776.33	

See page 23 of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T02-F.xls

February 2008

**TABLE II**  
SUMMARY OF WATER LEVEL DATA, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
RD-21	01/30/07	1866.96			(1)
RD-21	04/30/07	1866.96			(1)
RD-21	07/31/07	1866.96			(1)
RD-21	10/15/07	1866.96			(1)
RD-22	01/30/07	1853.41			(1)
RD-22	04/30/07	1853.41			(1)
RD-22	07/31/07	1853.41			(1)
RD-22	10/15/07	1853.41			(1)
RD-23	01/30/07	1838.19			(1)
RD-23	05/01/07	1838.19			(1)
RD-23	07/31/07	1838.19			(1)
RD-23	10/15/07	1838.19			(1)
RD-24	01/30/07	1809.93	36.98	1772.95	
RD-24	05/01/07	1809.93	38.41	1771.52	
RD-24	07/31/07	1809.93	39.34	1770.59	
RD-24	10/17/07	1809.93	40.28	1769.65	
RD-26	01/31/07	1880.39	97.41	1782.98	
RD-26	05/02/07	1880.39	99.52	1780.87	
RD-26	08/01/07	1880.39	101.66	1778.73	
RD-26	10/17/07	1880.39	102.74	1777.65	
RD-27	02/14/07	1841.67	52.57	1789.10	
RD-27	05/01/07	1841.67	NM	---	(**)
RD-27	08/09/07	1841.67	55.09	1786.58	
RD-27	10/31/07	1841.67	55.46	1786.21	
RD-29	01/30/07	1806.29	16.70	1789.59	
RD-29	05/01/07	1806.29	17.47	1788.82	
RD-29	07/31/07	1806.29	18.82	1787.47	
RD-29	10/16/07	1806.29	19.78	1786.51	
RD-30	01/30/07	1768.69	11.28	1757.41	
RD-30	05/01/07	1768.69	12.61	1756.08	
RD-30	07/31/07	1768.69	14.00	1754.69	
RD-30	10/16/07	1768.69	15.14	1753.55	
RD-31	01/31/07	1945.02	UTM	---	(*)
RD-31	04/30/07	1945.02	UTM	---	(*)
RD-31	08/01/07	1945.02	UTM	---	(*)
RD-31	10/17/07	1945.02	UTM	---	(*)
RD-32	01/30/07	1808.47	29.11	1779.36	
RD-32	05/01/07	1808.47	29.57	1778.90	
RD-32	07/31/07	1808.47	30.47	1778.00	
RD-32	10/15/07	1808.47	30.86	1777.61	
RD-33A	01/30/07	1792.97			(1)
RD-33A	04/30/07	1792.97			(1)
RD-33A	08/01/07	1792.97			(1)
RD-33A	10/17/07	1792.97			(1)
RD-33B	01/30/07	1793.21	279.34	1513.87	
RD-33B	04/30/07	1793.21	278.30	1514.91	
RD-33B	08/01/07	1793.21	276.92	1516.29	
RD-33B	10/17/07	1793.21	285.30	1507.91	(C)
RD-33C	01/30/07	1793.54	278.12	1515.42	
RD-33C	04/30/07	1793.54	278.26	1515.28	
RD-33C	08/01/07	1793.54	279.58	1513.96	
RD-33C	10/17/07	1793.54	286.47	1507.07	

See page 23 of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T02-F.xls

February 2008



**TABLE II**  
SUMMARY OF WATER LEVEL DATA, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
RD-34A	01/30/07	1761.83	34.55	1727.28	
RD-34A	05/01/07	1761.83	36.72	1725.11	
RD-34A	07/31/07	1761.83	39.51	1722.32	
RD-34A	10/16/07	1761.83	43.04	1718.79	
RD-34B	01/30/07	1762.51	37.77	1724.74	
RD-34B	05/01/07	1762.51	39.66	1722.85	
RD-34B	07/31/07	1762.51	42.32	1720.19	
RD-34B	10/16/07	1762.51	45.65	1716.86	
RD-34C	01/30/07	1762.60	9.02	1753.58	
RD-34C	05/01/07	1762.60	9.56	1753.04	
RD-34C	07/31/07	1762.60	11.15	1751.45	
RD-34C	10/16/07	1762.60	10.04	1752.56	
RD-35A	01/31/07	1908.62	83.29	1825.33	
RD-35A	04/30/07	1908.62	84.96	1823.66	
RD-35A	08/01/07	1908.62	86.90	1821.72	
RD-35A	10/16/07	1908.62	UTM	---	(*)
RD-35B	01/31/07	1905.65	83.49	1822.16	
RD-35B	04/30/07	1905.65	84.35	1821.30	
RD-35B	08/01/07	1905.65	85.99	1819.66	
RD-35B	10/16/07	1905.65	87.43	1818.22	
RD-36A	01/30/07	1913.09	88.35	1824.74	(C)
RD-36A	05/01/07	1913.09	91.22	1821.87	(C)
RD-36A	07/31/07	1913.09	92.62	1820.47	(C)
RD-36A	10/15/07	1913.09	92.90	1820.19	(C)
RD-36B	01/30/07	1915.26	135.05	1780.21	
RD-36B	05/01/07	1915.26	135.85	1779.41	
RD-36B	07/31/07	1915.26	137.30	1777.96	
RD-36B	10/15/07	1915.26	138.91	1776.35	
RD-36C	01/30/07	1913.82	189.85	1723.97	
RD-36C	05/01/07	1913.82	190.14	1723.68	
RD-36C	07/31/07	1913.82	191.62	1722.20	
RD-36C	10/15/07	1913.82	193.51	1720.31	
RD-36D	01/30/07	1920.08	362.33	1557.75	
RD-36D	05/01/07	1920.08	362.19	1557.89	
RD-36D	07/31/07	1920.08	377.18	1542.90	
RD-36D	10/15/07	1920.08	363.41	1556.67	
RD-37	01/30/07	1870.01	301.05	1568.96	
RD-37	05/01/07	1870.01	299.80	1570.21	
RD-37	07/31/07	1870.01	298.56	1571.45	
RD-37	10/16/07	1870.01	297.81	1572.20	
RD-38A	01/30/07	1879.47	105.89	1773.58	
RD-38A	05/01/07	1879.47	106.70	1772.77	
RD-38A	07/31/07	1879.47	107.75	1771.72	
RD-38A	10/15/07	1879.47	109.02	1770.45	
RD-38B	01/30/07	1881.45	325.05	1556.40	
RD-38B	05/01/07	1881.45	324.99	1556.46	
RD-38B	07/31/07	1881.45	324.95	1556.50	
RD-38B	10/15/07	1881.45	326.01	1555.44	
RD-39A	01/30/07	1960.23	146.97	1813.26	
RD-39A	05/01/07	1960.23	148.00	1812.23	
RD-39A	08/02/07	1960.23	149.01	1811.22	
RD-39A	10/16/07	1960.23	150.79	1809.44	

See page 23 of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T02-F.xls

February 2008

**TABLE II**  
SUMMARY OF WATER LEVEL DATA, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
RD-39B	01/30/07	1959.48	287.19	1672.29	
RD-39B	05/01/07	1959.48	287.24	1672.24	
RD-39B	08/02/07	1959.48	287.44	1672.04	
RD-39B	10/16/07	1959.48	287.89	1671.59	
RD-40	01/30/07	1972.02	272.95	1699.07	(C)
RD-40	05/01/07	1972.02	273.50	1698.52	(C)
RD-40	07/31/07	1972.02	273.18	1698.84	(C)
RD-40	10/17/07	1972.02	261.47	1710.55	(C)
RD-41A	01/31/07	1774.48	50.72	1723.76	
RD-41A	05/01/07	1774.48	58.81	1715.67	
RD-41A	07/31/07	1774.48	63.52	1710.96	
RD-41A	10/15/07	1774.48	69.60	1704.88	
RD-41B	01/31/07	1774.71	113.61	1661.10	
RD-41B	04/30/07	1774.71	120.71	1654.00	
RD-41B	07/31/07	1774.71	123.98	1650.73	
RD-41B	10/15/07	1774.71	123.36	1651.35	
RD-41C	01/31/07	1773.73	127.43	1646.30	
RD-41C	05/01/07	1773.73	131.65	1642.08	
RD-41C	07/31/07	1773.73	134.27	1639.46	
RD-41C	10/15/07	1773.73	134.26	1639.47	
RD-42	01/31/07	1945.46	52.06	1893.40	
RD-42	05/01/07	1945.46	53.54	1891.92	
RD-42	08/01/07	1945.46	54.59	1890.87	
RD-42	10/17/07	1945.46	55.04	1890.42	
RD-43A	01/30/07	1680.16	37.97	1642.19	
RD-43A	05/01/07	1680.16	44.51	1635.65	
RD-43A	07/31/07	1680.16	41.83	1638.33	
RD-43A	10/15/07	1680.16	50.68	1629.48	
RD-43B	01/30/07	1680.21	90.14	1590.07	
RD-43B	05/01/07	1680.21	90.14	1590.07	
RD-43B	07/31/07	1680.21	90.80	1589.41	
RD-43B	10/15/07	1680.21	92.10	1588.11	
RD-43C	01/30/07	1679.31	94.34	1584.97	
RD-43C	05/01/07	1679.31	94.53	1584.78	
RD-43C	07/31/07	1679.31	95.53	1583.78	
RD-43C	10/15/07	1679.31	96.74	1582.57	
RD-44	02/01/07	2035.92	400.83	1635.09	
RD-44	05/01/07	2035.92	399.69	1636.23	
RD-44	07/31/07	2035.92	399.46	1636.46	
RD-44	10/16/07	2035.92	400.33	1635.59	
RD-45A	01/30/07	1841.59	UTM	---	(*)
RD-45A	05/01/07	1841.59	UTM	---	(*)
RD-45A	08/01/07	1841.59	UTM	---	(*)
RD-45A	10/16/07	1841.59	258.30	1583.29	(C)
RD-45B	01/30/07	1840.09	252.79	1587.30	
RD-45B	05/01/07	1840.09	251.35	1588.74	
RD-45B	08/01/07	1840.09	250.08	1590.01	
RD-45B	10/16/07	1840.09	249.21	1590.88	
RD-45C	01/30/07	1835.74	247.15	1588.59	
RD-45C	05/01/07	1835.74	245.93	1589.81	
RD-45C	08/01/07	1835.74	244.61	1591.13	
RD-45C	10/16/07	1835.74	244.45	1591.29	

See page 23 of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T02-F.xls

February 2008

**TABLE II**  
SUMMARY OF WATER LEVEL DATA, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
RD-46A	02/01/07	1806.13	70.55	1735.58	
RD-46A	05/01/07	1806.13	71.98	1734.15	
RD-46A	08/02/07	1806.13	74.42	1731.71	
RD-46A	10/16/07	1806.13	76.58	1729.55	
RD-46B	02/01/07	1807.19	60.28	1746.91	
RD-46B	05/01/07	1807.19	62.17	1745.02	
RD-46B	08/02/07	1807.19	64.51	1742.68	
RD-46B	10/16/07	1807.19	66.81	1740.38	
RD-47	02/01/07	2045.72	458.90	1586.82	
RD-47	05/02/07	2045.72	457.45	1588.27	
RD-47	08/01/07	2045.72	455.90	1589.82	
RD-47	10/17/07	2045.72	455.41	1590.31	
RD-48A	02/01/07	1736.54	Dry	---	
RD-48A	05/01/07	1736.54	104.55	1631.99	
RD-48A	08/01/07	1736.54	104.87	1631.67	
RD-48A	10/16/07	1736.54	104.62	1631.92	
RD-48B	02/01/07	1735.40	130.33	1605.07	
RD-48B	05/01/07	1735.40	130.47	1604.93	
RD-48B	08/01/07	1735.40	130.02	1605.38	
RD-48B	10/16/07	1735.40	130.42	1604.98	
RD-48C	02/01/07	1734.95	174.62	1560.33	
RD-48C	05/01/07	1734.95	174.19	1560.76	
RD-48C	08/01/07	1734.95	174.05	1560.90	
RD-48C	10/16/07	1734.95	174.23	1560.72	
RD-49A	02/01/07	1867.25	20.87	1846.38	
RD-49A	05/02/07	1867.25	23.00	1844.25	
RD-49A	08/01/07	1867.25	25.12	1842.13	
RD-49A	10/16/07	1867.25	26.36	1840.89	
RD-49B	02/01/07	1867.95	226.56	1641.39	
RD-49B	05/02/07	1867.95	226.20	1641.75	
RD-49B	08/01/07	1867.95	225.51	1642.44	
RD-49B	10/16/07	1867.95	225.34	1642.61	
RD-49C	02/01/07	1869.45	274.73	1594.72	
RD-49C	05/02/07	1869.45	272.78	1596.67	
RD-49C	08/01/07	1869.45	270.97	1598.48	
RD-49C	10/16/07	1869.45	273.26	1596.19	
RD-50	01/30/07	1914.88			(1)
RD-50	05/01/07	1914.88			(1)
RD-50	07/31/07	1914.88			(1)
RD-50	10/15/07	1914.88			(1)
RD-51A	01/31/07	1832.51	Dry	---	
RD-51A	05/01/07	1832.51	249.34	1583.17	
RD-51A	08/01/07	1832.51	Dry	---	
RD-51A	10/17/07	1832.51	Dry	---	
RD-51B	01/31/07	1832.68	256.43	1576.25	
RD-51B	05/01/07	1832.68	255.17	1577.51	
RD-51B	08/01/07	1832.68	254.98	1577.70	
RD-51B	10/17/07	1832.68	254.04	1578.64	
RD-51C	01/31/07	1831.65	245.23	1586.42	
RD-51C	05/01/07	1831.65	243.56	1588.09	
RD-51C	08/01/07	1831.65	242.65	1589.00	
RD-51C	10/17/07	1831.65	241.52	1590.13	

See page 23 of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T02-F.xls

February 2008

**TABLE II**  
SUMMARY OF WATER LEVEL DATA, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
RD-52A	01/31/07	1755.09	Dry	---	
RD-52A	05/02/07	1755.09	126.85	1628.24	
RD-52A	08/02/07	1755.09	126.75	1628.34	
RD-52A	10/16/07	1755.09	127.24	1627.85	
RD-52B	01/31/07	1712.15	125.32	1586.83	
RD-52B	05/02/07	1712.15	123.97	1588.18	
RD-52B	08/02/07	1712.15	122.66	1589.49	
RD-52B	10/17/07	1712.15	121.82	1590.33	
RD-52C	01/31/07	1712.83	125.86	1586.97	
RD-52C	05/02/07	1712.83	124.42	1588.41	
RD-52C	08/02/07	1712.83	123.19	1589.64	
RD-52C	10/17/07	1712.83	122.52	1590.31	
RD-53	01/30/07	1909.19	136.06	1773.13	
RD-53	04/30/07	1909.19	136.77	1772.42	
RD-53	07/31/07	1909.19	137.96	1771.23	
RD-53	10/16/07	1909.19	139.32	1769.87	
RD-54A	01/30/07	1841.72			(1)
RD-54A	04/30/07	1841.72			(1)
RD-54A	07/31/07	1841.72			(1)
RD-54A	10/15/07	1841.72			(1)
RD-54B	01/30/07	1842.54	UTM	---	(*)
RD-54B	04/30/07	1842.54	242.57	1599.97	
RD-54B	07/31/07	1842.54	242.82	1599.72	
RD-54B	10/15/07	1842.54	245.38	1597.16	
RD-54C	01/30/07	1843.77	218.35	1625.42	
RD-54C	04/30/07	1843.77	218.78	1624.99	
RD-54C	07/31/07	1843.77	219.34	1624.43	
RD-54C	10/15/07	1843.77	223.56	1620.21	
RD-55A	01/29/07	1756.87	19.43	1737.44	
RD-55A	05/01/07	1756.87	20.35	1736.52	
RD-55A	08/01/07	1756.87	26.95	1729.92	
RD-55A	10/15/07	1756.87	30.19	1726.68	
RD-55B	01/29/07	1757.19	44.86	1712.33	
RD-55B	05/01/07	1757.19	45.03	1712.16	
RD-55B	08/01/07	1757.19	46.96	1710.23	
RD-55B	10/15/07	1757.19	51.32	1705.87	
RD-56A	02/01/07	1758.62	319.18	1439.44	
RD-56A	05/01/07	1758.62	318.91	1439.71	
RD-56A	08/01/07	1758.62	319.61	1439.01	
RD-56A	10/16/07	1758.62	UTM	---	(*)
RD-56B	02/01/07	1761.83	185.78	1576.05	
RD-56B	05/01/07	1761.83	186.75	1575.08	
RD-56B	08/01/07	1761.83	184.35	1577.48	
RD-56B	10/16/07	1761.83	183.23	1578.60	
RD-57	01/30/07	1774.15			(1)
RD-57	04/30/07	1774.15			(1)
RD-57	08/01/07	1774.15			(1)
RD-57	10/17/07	1774.15			(1)
RD-58A	01/29/07	1756.11	74.54	1681.57	
RD-58A	05/01/07	1756.11	75.05	1681.06	
RD-58A	07/31/07	1756.11	76.46	1679.65	
RD-58A	10/15/07	1756.11	79.70	1676.41	

See page 23 of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T02-F.xls

February 2008

**TABLE II**  
SUMMARY OF WATER LEVEL DATA, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
RD-58B	01/29/07	1761.34	100.22	1661.12	
RD-58B	05/01/07	1761.34	101.10	1660.24	
RD-58B	07/31/07	1761.34	102.81	1658.53	
RD-58B	10/15/07	1761.34	106.49	1654.85	
RD-58C	01/29/07	1759.59	118.34	1641.25	
RD-58C	05/01/07	1759.59	120.85	1638.74	
RD-58C	07/31/07	1759.59	122.72	1636.87	
RD-58C	10/15/07	1759.59	123.08	1636.51	
RD-59A	02/28/07	1340.50	26.90	1313.60	
RD-59A	05/23/07	1340.50	NM	---	(**)
RD-59A	08/16/07	1340.50	27.18	1313.32	
RD-59A	10/25/07	1340.50	26.84	1313.66	
RD-59B	02/28/07	1342.49	-30.03	1372.52	(A)
RD-59B	05/23/07	1342.49	-30.03	1372.52	(A)
RD-59B	08/16/07	1342.49	-29.68	1372.17	(A)
RD-59B	10/25/07	1342.49	-32.29	1374.78	(A)
RD-59C	02/28/07	1345.41	-32.34	1377.75	(A)
RD-59C	05/23/07	1345.41	-32.34	1377.75	(A)
RD-59C	08/16/07	1345.41	-31.98	1377.39	(A)
RD-59C	10/25/07	1345.41	-36.91	1382.32	(A)
RD-60	01/31/07	1870.40	77.67	1792.73	
RD-60	05/01/07	1870.40	80.58	1789.82	
RD-60	08/01/07	1870.40	83.53	1786.87	
RD-60	10/16/07	1870.40	86.00	1784.40	
RD-61	02/01/07	1845.87	102.43	1743.44	
RD-61	05/01/07	1845.87	103.54	1742.33	
RD-61	07/31/07	1845.87	104.72	1741.15	
RD-61	10/16/07	1845.87	105.89	1739.98	
RD-62	02/01/07	1837.20	204.94	1632.26	
RD-62	05/01/07	1837.20	204.93	1632.27	
RD-62	07/31/07	1837.20	205.31	1631.89	
RD-62	10/16/07	1837.20	205.45	1631.75	
RD-63	01/30/07	1764.85	22.00	1742.85	
RD-63	05/01/07	1764.85	23.55	1741.30	
RD-63	07/31/07	1764.85	25.26	1739.59	
RD-63	10/16/07	1764.85	27.29	1737.56	
RD-64	01/30/07	1857.04			(1)
RD-64	05/01/07	1857.04			(1)
RD-64	07/31/07	1857.04			(1)
RD-64	10/15/07	1857.04			(1)
RD-65	01/30/07	1819.14			(1)
RD-65	05/01/07	1819.14			(1)
RD-65	07/31/07	1819.14			(1)
RD-65	10/15/07	1819.14			(1)
RD-66	01/30/07	1730.79	173.57	1557.22	
RD-66	05/01/07	1730.79	173.59	1557.20	
RD-66	07/31/07	1730.79	173.58	1557.21	
RD-66	10/15/07	1730.79	174.21	1556.58	
RD-67	02/01/07	1901.71	53.95	1847.76	
RD-67	05/01/07	1901.71	55.68	1846.03	
RD-67	07/31/07	1901.71	56.96	1844.75	
RD-67	10/16/07	1901.71	58.59	1843.12	

See page 23 of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T02-F.xls

February 2008

**TABLE II**  
SUMMARY OF WATER LEVEL DATA, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
RD-68A	02/28/07	1307.64	-11.55	1319.19	(A)
RD-68A	05/23/07	1307.64	-11.55	1319.19	(A)
RD-68A	08/16/07	1307.64	-13.84	1321.48	(A)
RD-68A	10/25/07	1307.64	-11.53	1319.17	(A)
RD-68B	02/28/07	1312.44	-16.17	1328.61	(A)
RD-68B	05/23/07	1312.44	-13.86	1326.30	(A)
RD-68B	08/16/07	1312.44	-18.45	1330.89	(A)
RD-68B	10/25/07	1312.44	-16.15	1328.59	(A)
RD-69	01/31/07	1831.28	48.90	1782.38	
RD-69	05/01/07	1831.28	50.75	1780.53	
RD-69	08/02/07	1831.28	52.27	1779.01	
RD-69	10/16/07	1831.28	53.30	1777.98	
RD-70	01/31/07	1732.26	156.28	1575.98	
RD-70	05/02/07	1732.26	155.05	1577.21	
RD-70	08/02/07	1732.26	154.76	1577.50	
RD-70	10/15/07	1732.26	153.65	1578.61	
RD-71	01/30/07	1740.02	183.65	1556.37	
RD-71	05/01/07	1740.02	183.63	1556.39	(C)
RD-71	07/31/07	1740.02	183.55	1556.47	(C)
RD-71	10/15/07	1740.02	183.96	1556.06	
RD-72	01/30/07	1907.25			(1)
RD-72	04/30/07	1907.25			(1)
RD-72	07/31/07	1907.25			(1)
RD-72	10/16/07	1907.25			(1)
RD-73	01/30/07	1901.60	77.34	1824.26	
RD-73	05/01/07	1901.60	78.43	1823.17	
RD-73	08/01/07	1901.60	80.00	1821.60	
RD-73	10/16/07	1901.60	80.69	1820.91	
RD-74	02/01/07	1810.90	72.07	1738.83	
RD-74	05/02/07	1810.90	Dry	---	
RD-74	08/01/07	1810.90	UTM	---	(*)
RD-74	10/16/07	1810.90	Dry	---	
RD-75	02/01/07	1613.30	387.99	1225.31	
RD-75	05/01/07	1613.30	387.28	1226.02	
RD-75	08/01/07	1613.30	387.56	1225.74	
RD-75	10/17/07	1613.30	388.63	1224.67	
RD-76	02/01/07	1772.27	127.08	1645.19	(C)
RD-76	05/01/07	1772.27	127.03	1645.24	(C)
RD-76	08/01/07	1772.27	127.15	1645.12	(C)
RD-76	10/17/07	1772.27	127.55	1644.72	(C)
RD-77	01/30/07	1918.48	96.38	1822.10	
RD-77	05/01/07	1918.48	97.21	1821.27	
RD-77	08/01/07	1918.48	98.69	1819.79	
RD-77	10/16/07	1918.48	100.31	1818.17	
RD-78	01/31/07	1819.84	251.43	1568.41	
RD-78	05/02/07	1819.84	250.02	1569.82	
RD-78	08/02/07	1819.84	249.24	1570.60	
RD-78	10/17/07	1819.84	247.94	1571.90	
RD-80	01/31/07	1740.18	152.82	1587.36	
RD-80	05/02/07	1740.18	151.32	1588.86	
RD-80	08/02/07	1740.18	150.28	1589.90	
RD-80	10/16/07	1740.18	149.37	1590.81	

See page 23 of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T02-F.xls

February 2008

**TABLE II**  
SUMMARY OF WATER LEVEL DATA, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
RD-81	02/01/07	1705.77	118.39	1587.38	
RD-81	05/01/07	1705.77	116.91	1588.86	
RD-81	08/01/07	1705.77	115.72	1590.05	
RD-81	10/17/07	1705.77	114.88	1590.89	
RD-82	01/31/07	1676.73	89.39	1587.34	
RD-82	05/01/07	1676.73	87.96	1588.77	
RD-82	08/02/07	1676.73	86.78	1589.95	
RD-82	10/16/07	1676.73	85.73	1591.00	
RD-83	01/31/07	1661.18	74.62	1586.56	
RD-83	05/01/07	1661.18	73.19	1587.99	
RD-83	08/02/07	1661.18	72.19	1588.99	
RD-83	10/16/07	1661.18	70.91	1590.27	
RD-84	01/30/07	1907.82	133.93	1773.89	
RD-84	05/24/07	1907.83	134.89	1772.94	
RD-84	08/30/07	1907.82	136.34	1771.48	
RD-84	10/16/07	1907.82	137.16	1770.66	
RD-85	01/31/07	1849.09	57.39	1791.70	
RD-85	05/01/07	1849.09	59.91	1789.18	
RD-85	08/01/07	1849.09	62.53	1786.56	
RD-85	10/16/07	1849.09	64.96	1784.13	
RD-86	01/31/07	1830.51	29.28	1801.23	
RD-86	05/01/07	1830.51	31.28	1799.23	
RD-86	08/01/07	1830.51	35.65	1794.86	
RD-86	10/16/07	1830.51	42.08	1788.43	
RD-87	01/30/07	1789.09	44.40	1744.69	
RD-87	05/01/07	1789.09	46.21	1742.88	
RD-87	07/31/07	1789.09	45.52	1743.57	
RD-87	10/16/07	1789.09	45.84	1743.25	
RD-88	01/30/07	1774.62	22.97	1751.65	
RD-88	05/01/07	1774.62	23.53	1751.09	
RD-88	07/31/07	1774.62	23.86	1750.76	
RD-88	10/16/07	1774.62	25.61	1749.01	
RD-89	01/30/07	1814.18	36.91	1777.27	
RD-89	05/01/07	1814.18	40.71	1773.47	
RD-89	07/31/07	1814.18	39.58	1774.60	
RD-89	10/16/07	1814.18	40.79	1773.39	
RD-90	01/30/07	1784.75	29.05	1755.70	
RD-90	05/01/07	1784.75	30.00	1754.75	
RD-90	07/31/07	1784.75	31.08	1753.67	
RD-90	10/16/07	1784.75	32.19	1752.56	
RD-91	01/30/07	1818.04	22.03	1796.01	
RD-91	05/01/07	1818.04	24.91	1793.13	
RD-91	07/31/07	1818.04	28.14	1789.90	
RD-91	10/15/07	1818.04	30.14	1787.90	
RD-92	01/31/07	1833.74	54.24	1779.50	
RD-92	05/02/07	1833.74	54.50	1779.24	
RD-92	08/01/07	1833.74	54.97	1778.77	
RD-92	10/16/07	1833.74	55.52	1778.22	
RD-93	01/30/07	1810.48	33.15	1777.33	
RD-93	05/01/07	1810.48	35.96	1774.52	
RD-93	07/31/07	1810.48	35.24	1775.24	
RD-93	10/16/07	1810.48	36.48	1774.00	

See page 23 of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T02-F.xls

February 2008

**TABLE II**  
SUMMARY OF WATER LEVEL DATA, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
RD-94	01/30/07	1744.38	15.23	1729.15	
RD-94	05/01/07	1744.38	18.15	1726.23	
RD-94	07/31/07	1744.38	17.76	1726.62	
RD-94	10/16/07	1744.38	18.15	1726.23	
RD-95	01/30/07	1811.36	48.11	1763.25	
RD-95	05/01/07	1811.36	50.85	1760.51	
RD-95	07/31/07	1811.36	50.14	1761.22	
RD-95	10/16/07	1811.36	51.49	1759.87	
RD-96	02/01/07	1805.14	NM	---	(**)
RD-96	05/02/07	1805.14	54.62	1750.52	
RD-96	08/01/07	1805.14	55.40	1749.74	
RD-96	10/16/07	1805.14	UTM	---	(**)
RD-97	02/01/07	1792.22	45.91	1746.31	
RD-97	05/02/07	1792.22	46.85	1745.37	
RD-97	08/01/07	1792.22	48.24	1743.98	
RD-97	10/16/07	1792.22	48.45	1743.77	
HAR-01	01/30/07	1874.13	55.62	1818.51	(C)
HAR-01	04/30/07	1874.13	56.30	1817.83	(C)
HAR-01	08/01/07	1874.13	57.00	1817.13	(C)
HAR-01	10/16/07	1874.13	58.28	1815.85	(C)
HAR-05	01/31/07	1812.65	23.44	1789.21	
HAR-05	05/02/07	1812.65	25.05	1787.60	
HAR-05	08/01/07	1812.65	27.87	1784.78	
HAR-05	10/16/07	1812.65	30.89	1781.76	
HAR-06	01/31/07	1815.03	24.97	1790.06	
HAR-06	05/02/07	1815.03	26.06	1788.97	
HAR-06	08/01/07	1815.03	28.93	1786.10	
HAR-06	10/16/07	1815.03	31.78	1783.25	
HAR-07	01/31/07	1728.38	67.38	1661.00	
HAR-07	04/30/07	1728.38	74.10	1654.28	
HAR-07	08/01/07	1728.38	76.47	1651.91	
HAR-07	10/17/07	1728.38	78.19	1650.19	
HAR-08	01/31/07	1730.75	40.09	1690.66	
HAR-08	04/30/07	1730.75	44.69	1686.06	
HAR-08	08/01/07	1730.75	49.19	1681.56	
HAR-08	10/17/07	1730.75	52.88	1677.87	
HAR-16	01/30/07	1872.31	51.50	1820.81	
HAR-16	04/30/07	1872.31	52.17	1820.14	
HAR-16	08/01/07	1872.31	53.76	1818.55	
HAR-16	10/16/07	1872.31	55.29	1817.02	
HAR-17	01/29/07	1711.59	14.52	1697.07	
HAR-17	05/02/07	1711.59	14.63	1696.96	
HAR-17	08/01/07	1711.59	19.95	1691.64	
HAR-17	10/15/07	1711.59	23.66	1687.93	
HAR-18	01/29/07	1749.41	19.57	1729.84	
HAR-18	05/01/07	1749.41	19.51	1729.90	
HAR-18	08/02/07	1749.41	22.19	1727.22	
HAR-18	10/15/07	1749.41	24.61	1724.80	
HAR-19	02/01/07	1833.42	192.18	1641.24	
HAR-19	05/02/07	1833.42	191.56	1641.86	
HAR-19	08/02/07	1833.42	191.13	1642.29	
HAR-19	10/16/07	1833.42	189.54	1643.88	

See page 23 of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T02-F.xls

February 2008



**TABLE II**  
SUMMARY OF WATER LEVEL DATA, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
HAR-20	02/01/07	1830.47	189.60	1640.87	
HAR-20	05/02/07	1830.47	189.19	1641.28	
HAR-20	08/02/07	1830.47	188.63	1641.84	
HAR-20	10/16/07	1830.47	188.38	1642.09	
HAR-21	02/01/07	1821.30	13.32	1807.98	
HAR-21	05/02/07	1821.30	14.21	1807.09	
HAR-21	08/02/07	1821.30	16.13	1805.17	
HAR-21	10/16/07	1821.30	17.53	1803.77	
HAR-22	02/01/07	1816.41	30.20	1786.21	
HAR-22	05/02/07	1816.41	31.60	1784.81	
HAR-22	08/01/07	1816.41	34.42	1781.99	
HAR-22	10/16/07	1816.41	36.32	1780.09	
HAR-23	01/31/07	1805.87	21.86	1784.01	
HAR-23	05/02/07	1805.87	23.25	1782.62	
HAR-23	08/01/07	1805.87	25.35	1780.52	
HAR-23	10/16/07	1805.87	26.20	1779.67	
HAR-24	01/30/07	1906.89	85.47	1821.42	
HAR-24	04/30/07	1906.89	86.31	1820.58	
HAR-24	08/01/07	1906.89	87.88	1819.01	
HAR-24	10/16/07	1906.89	89.38	1817.51	
HAR-25	01/30/07	1889.75	65.52	1824.23	
HAR-25	04/30/07	1889.75	66.40	1823.35	
HAR-25	08/01/07	1889.75	67.96	1821.79	
HAR-25	10/16/07	1889.75	69.30	1820.45	
HAR-26	01/31/07	1763.23	22.34	1740.89	
HAR-26	05/02/07	1763.23	21.13	1742.10	
HAR-26	08/02/07	1763.23	21.80	1741.43	
HAR-26	10/16/07	1763.23	23.37	1739.86	
WS-04A	01/31/07	1749.77	163.35	1586.42	
WS-04A	05/02/07	1749.77	161.92	1587.85	
WS-04A	08/02/07	1749.77	160.40	1589.37	
WS-04A	10/17/07	1749.77	159.90	1589.87	
WS-05	01/30/07	1830.20	240.84	1589.36	
WS-05	05/01/07	1830.20	239.53	1590.67	
WS-05	08/01/07	1830.20	238.35	1591.85	
WS-05	10/17/07	1830.20	237.89	1592.31	
WS-06	02/01/07	1932.72	344.94	1587.78	
WS-06	05/02/07	1932.72	343.65	1589.07	
WS-06	08/01/07	1932.72	342.08	1590.64	
WS-06	10/16/07	1932.72	341.5	1591.22	
WS-07	01/31/07	1826.19	52.79	1773.40	
WS-07	05/01/07	1826.19	54.62	1771.57	
WS-07	08/01/07	1826.19	56.54	1769.65	
WS-07	10/16/07	1826.19	57.86	1768.33	
WS-08	01/31/07	1794.39	142.96	1651.43	
WS-08	05/01/07	1794.39	142.05	1652.34	
WS-08	08/02/07	1794.39	141.45	1652.94	
WS-08	10/16/07	1794.39	144.59	1649.80	
WS-09	02/01/07	1883.99	292.89	1591.10	
WS-09	05/02/07	1883.99	291.38	1592.61	
WS-09	08/01/07	1883.99	289.81	1594.18	
WS-09	10/16/07	1883.99	289.39	1594.60	

See page 23 of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T02-F.xls

February 2008

**TABLE II**  
SUMMARY OF WATER LEVEL DATA, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Notes
WS-09A	02/01/07	1647.61	33.44	1614.17	
WS-09A	05/02/07	1647.61	63.73	1583.88	(P)
WS-09A	08/01/07	1647.61	44.43	1603.18	
WS-09A	10/16/07	1647.61	35.70	1611.91	
WS-09B	02/01/07	1796.89	129.07	1667.82	
WS-09B	05/02/07	1796.89	131.49	1665.40	
WS-09B	08/01/07	1796.89	133.59	1663.30	
WS-09B	10/16/07	1796.89	135.90	1660.99	
WS-11	01/29/07	1748.70	35.86	1712.84	
WS-11	05/02/07	1748.70	35.79	1712.91	
WS-11	08/01/07	1748.70	41.25	1707.45	
WS-11	10/15/07	1748.70	46.77	1701.93	
WS-12	01/31/07	1705.98	119.21	1586.77	
WS-12	05/01/07	1705.98	117.67	1588.31	
WS-12	08/01/07	1705.98	116.50	1589.48	
WS-12	10/17/07	1705.98	115.43	1590.55	
WS-13	01/31/07	1658.62	71.78	1586.84	
WS-13	05/01/07	1658.62	70.24	1588.38	
WS-13	08/02/07	1658.62	69.21	1589.41	
WS-13	10/16/07	1658.62	68.03	1590.59	
WS-14	01/31/07	1878.23	326.08	1552.15	
WS-14	05/02/07	1878.23	324.76	1553.47	
WS-14	08/01/07	1878.23	UTM	---	(*)
WS-14	10/17/07	1878.23	324.05	1554.18	
WS-SP	01/31/07	1766.76	19.48	1747.28	
WS-SP	05/02/07	1766.76	21.09	1745.67	
WS-SP	08/01/07	1766.76	24.10	1742.66	
WS-SP	10/17/07	1766.76	25.77	1740.99	
OS-24	02/01/07	1947.30	UTM	---	(*)
OS-24	05/01/07	1947.30	UTM	---	(*)
OS-24	08/01/07	1947.30	UTM	---	(*)
OS-24	10/16/07	1947.30	UTM	---	(*)
OS-25	01/30/07	2043.58	471.37	1572.21	
OS-25	05/01/07	2043.58	420.26	1623.32	
OS-25	07/31/07	2043.58	469.24	1574.34	
OS-25	10/16/07	2043.58	468.31	1575.27	
OS-26	01/30/07	2080.58	213.70	1866.88	
OS-26	05/24/07	2080.58	222.92	1857.66	
OS-26	07/31/07	2080.58	222.50	1858.08	
OS-26	10/16/07	2080.58	222.86	1857.72	

See page 23 of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T02-F.xls

February 2008

**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.
3. (P) = Pumping.
4. (ft btc) = Feet below top of casing.
5. MSL = Mean Sea Level.
5. NM = Not measured.
6. UTM = Unable to measure.
7. --- = No data available/not applicable.
8. (\*) = Unable to measure due to the following:
  - HAR-12 The plastic casing melted the cap to the casing during the 2005 Topanga fire, obstructing access to measure water levels.
  - HAR-30 Obstruction in casing prevented water level measurement.
  - PZ-016G Obstruction in multi-level casing prevented water level measurement.
  - PZ-072 The plastic casing melted the cap to the casing during the 2005 Topanga fire, obstructing access to measure water levels.
  - RD-31 A blank FLUTe liner installed in the well prevented water level measurement.
  - RD-35A Obstruction in sounding tube prevented water level measurement.
  - RD-45A Borehole collapse prevented water level measurement.
  - RD-54B Obstruction in sounding tube prevented water level measurement.
  - RD-56A Obstruction in well fault prevented water level measurement.
  - RD-74 Borehole collapse prevented water level measurement.  
New total depth was measured in July 2007 at 72 ft.
  - WS-14 Fallen cable blocked sounder and prevented water level measurement.
  - OS-24 The partially removed FLUTe system prevented water level measurement.
9. (\*\*) = RD-27, RD-59A, and RD-96 were not monitored.
10. (1) = FLUTe installed in well. Water level could not be measured. 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 1st quarter 2007				
	No datalogger installed 2nd quarter 2007				
	No datalogger installed 3rd quarter 2007				
	No datalogger installed 4th quarter 2007				
RD-21	01/30/07	13:02	1	85 - 95	Dry
			2	105 - 115	82.560
			3	125 - 135	83.064
			4	145 - 155	98.771
			5	165 - 175	82.224
	05/01/07	13:02	1	85 - 95	Dry
			2	105 - 115	83.827
			3	125 - 135	84.287
			4	145 - 155	100.571
			5	165 - 175	83.427

**TABLE II**  
**NOTES AND ABBREVIATIONS**

Well	Date	Time	Port	Spacer Interval (ft btc)	Depth to Water (ft btc)
RD-21	08/01/07	13:02	1	85 - 95	Dry
			2	105 - 115	85.268
			3	125 - 135	85.714
			4	145 - 155	102.343
			5	165 - 175	84.759
	10/16/07	13:02	1	85 - 95	Dry
			2	105 - 115	86.360
			3	125 - 135	86.791
			4	145 - 155	103.958
			5	165 - 175	85.876
RD-22	01/30/07	13:09	1	310 - 320	295.346
			2	330 - 340	294.745
			3	350 - 360	295.137
			4	370 - 380	297.663
			5	390 - 400	300.322
			6	410 - 420	295.486
			7	430 - 440	---
	05/01/07	13:09	1	310 - 320	295.003
			2	330 - 340	294.644
			3	350 - 360	295.036
			4	370 - 380	297.548
			5	390 - 400	297.097
			6	410 - 420	295.313
			7	430 - 440	---
	08/01/07	13:09	1	310 - 320	294.803
			2	330 - 340	294.644
			3	350 - 360	295.051
			4	370 - 380	297.331
			5	390 - 400	297.183
			6	410 - 420	295.255
			7	430 - 440	---
Datalogger communication failure during the fourth quarter.					
RD-23	01/29/07	12:30	1	231 - 241	226.998
			2	251 - 261	224.566
			3	271 - 281	---
			4	291 - 301	Dry
			5	311 - 321	234.405
			6	331 - 341	235.542
			7	351 - 361	236.110
			8	371 - 381	---
			9	391 - 396.5	---
	05/01/07	11:39	1	231 - 241	229.706
			2	251 - 261	224.179
			3	271 - 281	---
			4	291 - 301	Dry
			5	311 - 321	234.274
6	331 - 341	235.586			
7	351 - 361	236.096			
8	371 - 381	---			
9	391 - 396.5	---			

**TABLE II**  
**NOTES AND ABBREVIATIONS**

Well	Date	Time	Port	Spacer Interval (ft btc)	Depth to Water (ft btc)
RD-23	08/01/07	11:39	1	231 - 241	232.169
			2	251 - 261	223.835
			3	271 - 281	---
			4	291 - 301	Dry
			5	311 - 321	235.267
			6	331 - 341	236.304
			7	351 - 361	236.696
			8	371 - 381	---
			9	391 - 396.5	---
	10/16/07	11:39	1	231 - 241	233.033
			2	251 - 261	223.863
			3	271 - 281	---
			4	291 - 301	Dry
			5	311 - 321	239.399
			6	331 - 341	240.013
			7	351 - 361	240.151
			8	371 - 381	---
			9	391 - 396.5	---
RD-33A	01/30/07	14:36	1	211 - 221	Dry
			2	231 - 241	201.979
			3	251 - 261	202.307
			4	271 - 281	202.612
			5	291 - 301	201.365
			6	311 - 321	201.894
	05/01/07	14:36	1	211 - 221	202.106
			2	231 - 241	202.037
			3	251 - 261	202.526
			4	271 - 281	202.744
			5	291 - 301	201.423
			6	311 - 321	201.996
	07/21/07	2:36	1	211 - 221	202.209
			2	231 - 241	202.140
			3	251 - 261	202.759
			4	271 - 281	203.080
			5	291 - 301	201.700
			6	311 - 321	202.375
	10/16/07	10:23	1	211 - 221	202.749
			2	231 - 241	202.770
			3	251 - 261	203.386
			4	271 - 281	203.576
			5	291 - 301	202.195
			6	311 - 321	202.608
RD-50	01/30/07	11:05	1	106 - 116	93.744
			2	126 - 136	94.153
			3	146 - 156	93.271
			4	166 - 176	93.680
			5	186 - 196	94.173
	05/01/07	11:05	1	106 - 116	96.359
			2	126 - 136	96.735
			3	146 - 156	95.791
			4	166 - 176	96.222
			5	186 - 196	96.869

**TABLE II**  
**NOTES AND ABBREVIATIONS**

Well	Date	Time	Port	Spacer Interval (ft btc)	Depth to Water (ft btc)
RD-50	08/01/07	11:05	1	106 - 116	98.699
			2	126 - 136	99.085
			3	146 - 156	98.138
			4	166 - 176	98.619
			5	186 - 196	99.349
	10/16/07	11:05	1	106 - 116	100.273
			2	126 - 136	100.695
			3	146 - 156	99.693
			4	166 - 176	100.231
			5	186 - 196	100.964
RD-54A	01/30/07	10:20	1	150.5 - 160.5	Dry
			2	170.5 - 180.5	146.545
			3	190.5 - 200.5	---
			4	210.5 - 220.5	150.065
			5	230.5 - 240.5	---
			6	250.5 - 260.5	---
			7	270.5 - 280.5	180.823
	05/01/07	10:20	1	150.5 - 160.5	Dry
			2	170.5 - 180.5	146.445
			3	190.5 - 200.5	---
			4	210.5 - 220.5	150.109
			5	230.5 - 240.5	---
			6	250.5 - 260.5	---
			7	270.5 - 280.5	180.492
	08/01/07	10:20	1	150.5 - 160.5	Dry
			2	170.5 - 180.5	147.180
			3	190.5 - 200.5	---
			4	210.5 - 220.5	150.051
			5	230.5 - 240.5	---
			6	250.5 - 260.5	---
			7	270.5 - 280.5	180.089
10/16/07	10:20	1	150.5 - 160.5	Dry	
		2	170.5 - 180.5	147.021	
		3	190.5 - 200.5	---	
		4	210.5 - 220.5	151.027	
		5	230.5 - 240.5	---	
		6	250.5 - 260.5	---	
		7	270.5 - 280.5	181.212	
RD-57	01/30/07	14:00	1	228 - 238	Dry
			2	248 - 258	Dry
			3	268 - 278	Dry
			4	288 - 298	Dry
			5	308 - 318	Dry
			6	328 - 338	Dry
			7	348 - 358	335.414
			8	368 - 378	344.923
			9	388 - 398	344.144
			10	408 - 418	342.524

**TABLE II**  
**NOTES AND ABBREVIATIONS**

Well	Date	Time	Port	Spacer Interval (ft btc)	Depth to Water (ft btc)
RD-57	05/01/07	14:00	1	228 - 238	Dry
			2	248 - 258	Dry
			3	268 - 278	Dry
			4	288 - 298	Dry
			5	308 - 318	Dry
			6	328 - 338	Dry
			7	348 - 358	336.079
			8	368 - 378	334.808
			9	388 - 398	344.001
			10	408 - 418	342.307
	08/01/07	14:00	1	228 - 238	Dry
			2	248 - 258	Dry
			3	268 - 278	Dry
			4	288 - 298	Dry
			5	308 - 318	Dry
			6	328 - 338	Dry
			7	348 - 358	336.628
			8	368 - 378	344.750
			9	388 - 398	343.986
			10	408 - 418	342.278
	11/05/07	11:23	1	228 - 238	Dry
			2	248 - 258	Dry
			3	268 - 278	Dry
			4	288 - 298	Dry
			5	308 - 318	Dry
			6	328 - 338	Dry
			7	348 - 358	344.850
			8	368 - 378	355.419
			9	388 - 398	353.194
			10	408 - 418	351.620
RD-64	01/30/07	14:23	1	170.5 - 180.5	---
			2	190.5 - 200.5	Dry
			3	210.5 - 220.5	---
			4	230.5 - 240.5	---
			5	250.5 - 260.5	229.958
			6	270.5 - 280.5	---
			7	290.5 - 300.5	---
			8	310.5 - 320.5	230.183
			9	330.5 - 340.5	---
			10	350.5 - 360.5	230.515
			11	370.5 - 380.5	231.218
			12	390.5 - 400.5	229.890
	05/01/07	14:23	1	170.5 - 180.5	---
			2	190.5 - 200.5	Dry
			3	210.5 - 220.5	---
			4	230.5 - 240.5	---
			5	250.5 - 260.5	231.257
			6	270.5 - 280.5	---
			7	290.5 - 300.5	---
			8	310.5 - 320.5	230.961
			9	330.5 - 340.5	---
			10	350.5 - 360.5	231.207
			11	370.5 - 380.5	232.205
			12	390.5 - 400.5	230.708

**TABLE II**  
**NOTES AND ABBREVIATIONS**

Well	Date	Time	Port	Spacer Interval (ft btc)	Depth to Water (ft btc)
RD-64	08/01/07	14:23	1	170.5 - 180.5	---
			2	190.5 - 200.5	Dry
			3	210.5 - 220.5	---
			4	230.5 - 240.5	---
			5	250.5 - 260.5	231.992
			6	270.5 - 280.5	---
			7	290.5 - 300.5	---
			8	310.5 - 320.5	231.566
			9	330.5 - 340.5	---
			10	350.5 - 360.5	231.943
			11	370.5 - 380.5	232.815
			12	390.5 - 400.5	231.254
	11/05/07	14:23	1	170.5 - 180.5	---
			2	190.5 - 200.5	Dry
			3	210.5 - 220.5	---
			4	230.5 - 240.5	---
			5	250.5 - 260.5	233.927
			6	270.5 - 280.5	---
			7	290.5 - 300.5	---
			8	310.5 - 320.5	233.381
			9	330.5 - 340.5	---
			10	350.5 - 360.5	233.732
			11	370.5 - 380.5	234.411
			12	390.5 - 400.5	233.005
RD-65	01/30/07	10:11	1	167 - 177	Dry
			2	187 - 197	Dry
			3	207 - 217	Dry
			4	227 - 237	217.817
			5	247 - 257	217.281
			6	267 - 277	231.106
			7	287 - 297	---
			8	307 - 317	232.174
		11:57	9	327 - 337	248.788
			10	347 - 357	---
			11	367 - 377	---
			12	387 - 397	---
	05/01/07	10:11	1	167 - 177	Dry
			2	187 - 197	Dry
			3	207 - 217	Dry
			4	227 - 237	218.956
			5	247 - 257	217.412
			6	267 - 277	231.778
			7	287 - 297	---
			8	307 - 317	231.888
		11:57	9	327 - 337	248.702
			10	347 - 357	---
			11	367 - 377	---
			12	387 - 397	---



**TABLE II**  
**NOTES AND ABBREVIATIONS**

Well	Date	Time	Port	Spacer Interval (ft btc)	Depth to Water (ft btc)
RD-65	08/01/07	10:11	1	167 - 177	Dry
			2	187 - 197	Dry
			3	207 - 217	Dry
			4	227 - 237	220.212
			5	247 - 257	217.617
			6	267 - 277	232.684
			7	287 - 297	---
			8	307 - 317	231.659
	11:57	9	327 - 337	248.602	
		10	347 - 357	243.433	
		11	367 - 377	---	
		12	387 - 397	---	
	10/16/07	10:11	1	167 - 177	Dry
			2	187 - 197	Dry
			3	207 - 217	Dry
			4	227 - 237	221.278
			5	247 - 257	218.115
			6	267 - 277	234.013
			7	287 - 297	---
			8	307 - 317	232.719
	11/05/07	12:56	9	327 - 337	251.362
			10	347 - 357	---
			11	367 - 377	---
			12	387 - 397	---
RD-72	01/30/07	13:55	1	45 - 55	Dry
			2	65 - 75	Dry
			3	85 - 95	92.068
			4	105 - 115	90.988
			5	125 - 135	90.509
			6	145 - 155	104.221
			7	165 - 175	88.680
			8	185 - 195	87.711
	05/01/07	13:55	1	45 - 55	Dry
			2	65 - 75	Dry
			3	85 - 95	93.059
			4	105 - 115	91.802
			5	125 - 135	91.560
			6	145 - 155	107.617
			7	165 - 175	89.950
			8	185 - 195	88.952
	08/01/07	13:55	1	45 - 55	Dry
			2	65 - 75	Dry
			3	85 - 95	Dry
			4	105 - 115	93.288
			5	125 - 135	92.918
			6	145 - 155	110.676
			7	165 - 175	91.381
			8	185 - 195	90.440
10/16/07	13:55	1	45 - 55	Dry	
		2	65 - 75	Dry	
		3	85 - 95	Dry	
		4	105 - 115	93.846	
		5	125 - 135	93.502	
		6	145 - 155	112.702	
		7	165 - 175	92.053	
		8	185 - 195	91.214	

**TABLE III**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN SHALLOW WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>ES-01</b>	<b>ES-03</b>	<b>ES-06</b>	<b>ES-14</b>	<b>ES-17</b>	<b>ES-17</b>
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	Lancaster
Collection Date:	05/10/2007	05/09/2007	05/14/2007	05/10/2007	02/23/2007	08/07/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	30 U	7 J
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.24 U	0.24 U	24 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	1.5 U	1.5 U	1.7 J	5800	9100
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	30 U	2 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.55 J	27 U	9 J
1,1-Dichloroethene	0.42 U	1.9	0.42 U	3.3	42 U	31
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.32 U	32 U	2 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.28 U	28 U	1 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.35 U	35 U	2 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.35 U	35 U	2 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	37 U	2 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	2.6 U	2.6 U	2.6 U	2.6 U	260 U	6 U
Acetone	4.5 U	4.5 U	4.5 U	4.5 U	450 U	150
Benzene	0.28 U	0.28 U	0.28 U	0.28 U	28 U	1 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	30 U	2 U
Bromoform	0.4 U	0.4 U	0.4 U	0.4 U	40 U	2 U
Bromomethane	0.42 U	0.42 U	0.42 U	0.42 U	42 U	2 U
Carbon Disulfide	0.48 U	0.48 U	0.48 U	0.48 U	48 U	2 U
Carbon Tetrachloride	0.28 U	0.28 U	0.28 U	0.28 U	28 U	1 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.36 U	36 U	2 U
Chloroethane	0.4 U	0.4 U	0.4 U	0.4 U	40 U	2 U
Chloroform	0.33 U	0.33 U	0.33 U	0.33 U	33 U	2 U
Chloromethane	0.4 U	0.4 U	0.4 U	0.4 U	40 U	2 U
cis-1,2-Dichloroethene	72	120	3.1	7.8	730	620
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	22 U	2 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.28 U	28 U	2 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	25 U	2 U
Methyl ethyl ketone	4.7 U	4.7 U	4.7 U	4.7 U	380 U	6 U
Methyl isobutyl ketone (MIBK)	3.5 U	3.5 U	3.5 U	3.5 U	350 U	6 U
Methylene chloride	0.95 U	0.95 U	0.95 U	0.95 U	310 U	4 U
m-Xylene & p-Xylene	0.6 U	0.6 U	0.6 U	0.6 U	60 U	2 U
o-Xylene	0.3 U	0.3 U	0.3 U	0.3 U	30 U	2 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.32 U	32 U	2 J
Toluene	0.36 U	0.36 U	0.36 U	0.36 U	36 U	1 U
trans-1,2-Dichloroethene	9.8	23	0.27 U	0.27 U	27 U	2 U
trans-1,3-Dichloropropene	0.32 U	0.32 U	0.32 U	0.32 U	32 U	2 U
Trichloroethene	96	450	6	300	3900	2800
Trichlorofluoromethane	0.34 U	0.47 J	0.34 U	0.34 U	34 U	1 U
Vinyl chloride	0.3 U	1.5	0.3 U	0.3 U	30 U	3

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T03-F.xls

February 2008

**TABLE III**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN SHALLOW WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>ES-21</b>	<b>ES-21</b>	<b>ES-22</b>	<b>ES-22</b>	<b>ES-23</b>	<b>ES-23</b>
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:	TestAmerica	Lancaster	TestAmerica	Lancaster	TestAmerica	Lancaster
Collection Date:	02/20/2007	08/07/2007	02/02/2007	08/07/2007	02/23/2007	08/08/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.8 U	0.3 U	0.8 U	0.3 U	0.8 U
1,1,2,2-Tetrachloroethane	0.24 U	0.5 U	0.24 U	0.5 U	0.24 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	2 U	1.5 U	2 U	1.5 U	2 U
1,1,2-Trichloroethane	0.3 U	0.8 U	0.3 U	0.8 U	0.3 U	0.8 U
1,1-Dichloroethane	0.27 U	1 U	0.27 U	1 U	0.27 U	1 U
1,1-Dichloroethene	0.42 U	1 J	0.42 U	0.8 U	0.42 U	0.8 U
1,2-Dichlorobenzene	0.32 U	1 U	0.32 U	1 U	0.32 U	1 U
1,2-Dichloroethane	0.28 U	0.5 U	0.28 U	0.5 U	0.28 U	0.5 U
1,2-Dichloropropane	0.35 U	1 U	0.35 U	1 U	0.35 U	1 U
1,3-Dichlorobenzene	0.35 U	1 U	0.35 U	1 U	0.35 U	1 U
1,4-Dichlorobenzene	0.37 U	1 U	0.37 U	1 U	0.37 U	1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	2.6 U	3 U	2.6 U	3 U	2.6 U	3 U
Acetone	4.5 U	6 U	4.5 U	6 U	4.5 U	6 U
Benzene	0.28 U	0.5 U	0.28 U	0.5 U	0.28 U	0.5 U
Bromodichloromethane	0.3 U	1 U	0.3 U	1 U	0.3 U	1 U
Bromoform	0.4 U	1 U	0.4 U	1 U	0.4 U	1 U
Bromomethane	0.42 U	1 U	0.42 U	1 U	0.42 U	1 U
Carbon Disulfide	0.48 U	1 U	0.48 U	1 U	0.48 U	1 U
Carbon Tetrachloride	0.28 U	0.5 U	0.28 U	0.5 U	0.28 U	0.5 U
Chlorobenzene	0.36 U	0.8 U	0.36 U	0.8 U	0.36 U	0.8 U
Chloroethane	0.4 U	1 U	0.4 U	1 U	0.4 U	1 U
Chloroform	0.33 U	0.8 U	0.33 U	0.8 U	0.33 U	0.8 U
Chloromethane	0.4 U	1 U	0.4 U	1 U	0.4 U	1 U
cis-1,2-Dichloroethene	130	300	1.2	1 J	0.69 J	0.8 U
cis-1,3-Dichloropropene	0.22 U	1 U	0.22 U	1 U	0.22 U	1 U
Dibromochloromethane	0.28 U	1 U	0.28 U	1 U	0.28 U	1 U
Ethylbenzene	0.25 U	0.8 U	0.25 U	0.8 U	0.25 U	0.8 U
Methyl ethyl ketone	4.7 U	3 U	4.7 U	3 U	4.7 U	3 U
Methyl isobutyl ketone (MIBK)	3.5 U	3 U	3.5 U	3 U	3.5 U	3 U
Methylene chloride	0.95 U	2 U	0.95 U	2 U	0.95 U	2 U
m-Xylene & p-Xylene	0.6 U	0.8 U	0.6 U	0.8 U	0.6 U	0.8 U
o-Xylene	0.3 U	0.8 U	0.3 U	0.8 U	0.3 U	0.8 U
Tetrachloroethene	0.32 U	0.8 U	0.32 U	0.8 U	0.32 U	0.8 U
Toluene	0.36 U	0.7 U	0.36 U	0.7 U	0.36 U	0.7 U
trans-1,2-Dichloroethene	4.3	12	0.27 U	0.8 U	0.27 U	0.8 U
trans-1,3-Dichloropropene	0.32 U	1 U	0.32 U	1 U	0.32 U	1 U
Trichloroethene	250	390	14	12	64	83
Trichlorofluoromethane	0.34 U	0.5 U	0.34 U	0.5 U	0.34 U	0.5 U
Vinyl chloride	0.3 U	0.7 J	0.3 U	0.5 U	0.3 U	0.5 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T03-F.xls

February 2008

**TABLE III**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN SHALLOW WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>ES-24</b>	<b>ES-24</b>	<b>ES-26</b>	<b>ES-26</b>	<b>ES-27</b>	<b>ES-27</b>
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:	TestAmerica	Lancaster	TestAmerica	Lancaster	TestAmerica	Lancaster
Collection Date:	03/01/2007	08/29/2007	05/10/2007	08/07/2007	02/23/2007	08/07/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	6 U	3 U	0.3 U	0.8 U	0.3 U	0.8 U
1,1,2,2-Tetrachloroethane	4.8 U	2 U	0.24 U	0.5 U	0.24 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	30 U	8 U	120	170	410	370
1,1,2-Trichloroethane	6 U	3 U	0.3 U	0.8 U	0.3 U	0.8 U
1,1-Dichloroethane	42	49	0.27 U	1 U	0.27 U	1 U
1,1-Dichloroethene	72	130	0.42 U	0.8 U	0.42 U	1 J
1,2-Dichlorobenzene	6.4 U	4 U	0.32 U	1 U	0.32 U	1 U
1,2-Dichloroethane	5.6 U	2 U	0.28 U	0.5 U	0.28 U	0.5 U
1,2-Dichloropropane	7 U	4 U	0.35 U	1 U	0.35 U	1 U
1,3-Dichlorobenzene	7 U	4 U	0.35 U	1 U	0.35 U	1 U
1,4-Dichlorobenzene	7.4 U	4 U	0.37 U	1 U	0.37 U	1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	52 U	12 U	2.6 U	3 U	2.6 U	3 U
Acetone	90 U	24 U	4.5 U	6 U	4.5 U	9 J
Benzene	5.6 U	2 U	0.28 U	0.5 U	0.28 U	0.5 U
Bromodichloromethane	6 U	4 U	0.3 U	1 U	0.3 U	1 U
Bromoform	8 U	4 U	0.4 U	1 U	0.4 U	1 U
Bromomethane	8.4 U	4 U	0.42 U	1 U	0.42 U	1 U
Carbon Disulfide	9.6 U	5 J,L	0.48 U	1 U	0.48 U	1 U
Carbon Tetrachloride	5.6 U	2 U	0.28 U	0.5 U	0.28 U	0.5 U
Chlorobenzene	7.2 U	3 U	0.36 U	0.8 U	0.36 U	0.8 U
Chloroethane	8 U	4 U	0.4 U	1 U	0.4 U	1 U
Chloroform	6.6 U	3 U	0.33 U	0.8 U	0.33 U	0.8 U
Chloromethane	8 U	4 U	0.4 U	1 U	0.4 U	1 U
cis-1,2-Dichloroethene	250	430	0.41 J	0.8 U	1.2	1 J
cis-1,3-Dichloropropene	4.4 U	4 U	0.22 U	1 U	0.22 U	1 U
Dibromochloromethane	5.6 U	4 U	0.28 U	1 U	0.28 U	1 U
Ethylbenzene	5 U	3 U	0.25 U	0.8 U	0.25 U	0.8 U
Methyl ethyl ketone	76 U	12 U	4.7 U	3 U	4.7 U	3 U
Methyl isobutyl ketone (MIBK)	70 U	12 U	3.5 U	3 U	3.5 U	3 U
Methylene chloride	19 U	8 U	0.95 U	2 U	0.95 U	2 U
m-Xylene & p-Xylene	12 U	3 U	0.6 U	0.8 U	0.6 U	0.8 U
o-Xylene	6 U	3 U	0.3 U	0.8 U	0.3 U	0.8 U
Tetrachloroethene	6.4 U	3 U	0.32 U	0.8 U	5.3	0.8 U
Toluene	7.2 U	3 U	0.36 U	0.7 U	0.36 U	0.7 U
trans-1,2-Dichloroethene	21	29	0.27 U	0.8 U	0.27 U	0.8 U
trans-1,3-Dichloropropene	6.4 U	4 U	0.32 U	1 U	0.32 U	1 U
Trichloroethene	4200	5000	45	52	18	33
Trichlorofluoromethane	6.8 U	2 U	0.34 U	0.5 U	0.34 U	0.5 U
Vinyl chloride	6 U	2 J	0.3 U	0.5 U	0.3 U	0.5 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T03-F.xls

February 2008

**TABLE III**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN SHALLOW WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>ES-30</b>	<b>ES-31</b>	<b>ES-31</b>	<b>HAR-03</b>	<b>HAR-04</b>	<b>HAR-04</b>
Sample Type:	Primary	Primary	Duplicate	Primary	Primary	Duplicate
Lab Name:	Lancaster	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	08/08/2007	02/28/2007	02/28/2007	05/10/2007	02/27/2007	02/27/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.8 U	0.3 U	0.3 U	3.2	9.9	11
1,1,2,2-Tetrachloroethane	0.5 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	2 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1,2-Trichloroethane	0.8 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	1 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.8 U	0.42 U	0.42 U	0.42 U	0.42 U	0.48 J
1,2-Dichlorobenzene	1 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.5 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	1 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	1 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	1 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	3 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
Acetone	6 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
Benzene	0.5 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Bromomethane	1 U	0.42 U	0.42 U	0.42 U	0.42 U	0.42 U
Carbon Disulfide	1 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
Carbon Tetrachloride	0.5 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.8 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Chloroform	0.8 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
cis-1,2-Dichloroethene	1 J	0.32 U	0.32 U	7.6	22	24
cis-1,3-Dichloropropene	1 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	1 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.8 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Methyl ethyl ketone	3 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U
Methyl isobutyl ketone (MIBK)	3 U	3.5 U	3.5 U	3.5 U	3.5 U	3.5 U
Methylene chloride	2 U	0.95 U	0.95 U	0.95 U	0.95 U	0.95 U
m-Xylene & p-Xylene	0.8 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
o-Xylene	0.8 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Tetrachloroethene	0.8 U	0.32 U	0.32 U	0.32 J	0.49 J	0.53 J
Toluene	0.7 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
trans-1,2-Dichloroethene	0.8 U	0.27 U	0.27 U	0.27 U	1	0.62 J
trans-1,3-Dichloropropene	1 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Trichloroethene	67	0.26 U	0.27 J	640	1600	1400
Trichlorofluoromethane	0.5 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Vinyl chloride	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T03-F.xls

February 2008

**TABLE III**  
**SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS**  
**IN SHALLOW WELLS, 2007**  
**BOEING SANTA SUSANA FIELD LABORATORY**  
**VENTURA COUNTY, CALIFORNIA**

<b>Well Identifier:</b>	<b>HAR-04</b>	<b>HAR-11</b>	<b>HAR-14</b>	<b>HAR-14</b>	<b>HAR-15</b>	<b>HAR-15</b>
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:	Lancaster	TestAmerica	TestAmerica	Lancaster	TestAmerica	Lancaster
Collection Date:	08/08/2007	03/01/2007	05/08/2007	10/19/2007	05/08/2007	10/19/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	4 J	0.3 U	0.67 J	0.8	0.3 U	0.1 U
1,1,2,2-Tetrachloroethane	0.5 U	0.24 U	0.24 U	0.1 U	0.24 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	2 U	1.5 U	---	13	---	0.2 U
1,1,2-Trichloroethane	0.8 U	0.3 U	0.3 U	0.1 U	0.3 U	0.1 U
1,1-Dichloroethane	1 U	0.27 U	0.27 U	0.2 J	0.27 U	0.1 U
1,1-Dichloroethene	0.8 U	0.42 U	5.6	9.7	0.42 U	0.1 U
1,2-Dichlorobenzene	1 U	0.32 U	0.32 U	0.1 U	0.32 U	0.1 U
1,2-Dichloroethane	0.5 U	0.28 U	0.28 U	0.1 U	0.28 U	0.1 U
1,2-Dichloropropane	1 U	0.35 U	0.35 U	0.1 U	0.35 U	0.1 U
1,3-Dichlorobenzene	1 U	0.35 U	0.35 U	0.1 U	0.35 U	0.1 U
1,4-Dichlorobenzene	1 U	0.37 U	0.37 U	0.1 U	0.37 U	0.1 U
1,4-Dioxane	---	---	68	---	1 U	---
2-Hexanone	3 U	2.6 U	2.6 U	1 U	2.6 U	1 U
Acetone	6 U	4.5 U	4.5 U	3 U	4.5 U	3 U
Benzene	0.5 U	0.28 U	0.28 U	0.1 U	0.28 U	0.1 U
Bromodichloromethane	1 U	0.3 U	0.3 U	0.1 U	0.3 U	0.1 U
Bromoform	1 U	0.4 U	0.4 U	0.1 U	0.4 U	0.1 U
Bromomethane	1 U	0.42 U	0.42 U	0.1 U	0.42 U	0.1 U
Carbon Disulfide	1 U	0.48 U	0.48 U	0.5 J,L	0.48 U	0.5
Carbon Tetrachloride	0.5 U	0.28 U	1.5 J	1.4	0.28 U	0.1 U
Chlorobenzene	0.8 U	0.36 U	0.36 U	0.1 U	0.36 U	0.1 U
Chloroethane	1 U	0.4 U	0.4 U	0.1 U	0.4 U	0.1 U
Chloroform	0.8 U	0.33 U	2 J	2.2 J	0.33 U	0.1 U
Chloromethane	1 U	0.4 U	0.4 U	0.1 J	0.4 U	0.1 J
cis-1,2-Dichloroethene	9	1.2	0.32 U	0.1 J	0.32 U	0.2 J
cis-1,3-Dichloropropene	1 U	0.22 U	0.22 U	0.1 U	0.22 U	0.1 U
Dibromochloromethane	1 U	0.28 U	0.28 U	0.1 U	0.28 U	0.1 U
Ethylbenzene	0.8 U	0.25 U	0.25 U	0.1 U	0.25 U	0.1 U
Methyl ethyl ketone	3 U	4.7 U	4.7 U	1 U	4.7 U	1 U
Methyl isobutyl ketone (MIBK)	3 U	3.5 U	3.5 U	1 U	3.5 U	1 U
Methylene chloride	2 U	0.95 U	0.95 U	0.2 U	0.95 U	0.2 U
m-Xylene & p-Xylene	0.8 U	0.6 U	0.6 U	0.1 U	0.6 U	0.1 U
o-Xylene	0.8 U	0.3 U	0.3 U	0.1 U	0.3 U	0.1 U
Tetrachloroethene	0.8 U	0.32 U	0.32 U	0.1 U	0.32 U	0.1 U
Toluene	0.7 U	0.36 U	0.36 U	0.1 U	0.36 U	0.1 U
trans-1,2-Dichloroethene	0.8 U	0.27 U	0.27 U	0.1 U	0.27 U	0.1 U
trans-1,3-Dichloropropene	1 U	0.32 U	0.32 U	0.1 U	0.32 U	0.1 U
Trichloroethene	630	0.26 U	3.6	4.9 J	0.49 J	1 J
Trichlorofluoromethane	0.5 U	0.34 U	0.34 U	0.1 U	0.34 U	0.1 U
Vinyl chloride	0.5 U	0.3 U	0.3 U	0.1 U	0.3 U	0.1 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T03-F.xls

February 2008

**TABLE III**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN SHALLOW WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>HAR-27</b>	<b>HAR-27</b>	<b>HAR-27</b>	<b>HAR-27</b>	<b>RS-07</b>	<b>RS-11</b>
Sample Type:	Primary	Duplicate	Primary	Split	Primary	Primary
Lab Name:	TestAmerica	TestAmerica	Lancaster	TestAmerica	TestAmerica	TestAmerica
Collection Date:	03/01/2007	03/01/2007	08/29/2007	08/29/2007	05/11/2007	02/28/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.1 U	0.24 U	0.24 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	1.5 U	0.2 U	1.5 U	1.5 U	1.5 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.1 U	0.52 J	0.27 U	0.27 U
1,1-Dichloroethene	0.42 U	0.42 U	0.1 U	0.42 U	0.42 U	0.42 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.1 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.1 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.1 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.1 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.1 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	2.6 U	2.6 U	1 U	2.6 U	2.6 U	2.6 U
Acetone	4.7 J,L	4.8 J,L	3 U	4.5 U	4.5 U	4.5 U
Benzene	0.28 U	0.28 U	0.1 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U
Bromoform	0.4 U	0.4 U	0.1 U	0.4 U	0.4 U	0.4 U
Bromomethane	0.42 U	0.42 U	0.1 U	0.42 U	0.42 U	0.42 U
Carbon Disulfide	0.48 U	0.48 U	0.1 U	0.48 U	0.48 U	0.48 U
Carbon Tetrachloride	0.28 U	0.28 U	0.1 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.1 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.4 U	0.4 U	0.1 U	0.4 U	0.4 U	0.4 U
Chloroform	0.33 U	0.33 U	0.1 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.4 U	0.4 U	0.1 J	0.4 U	0.4 U	0.4 U
cis-1,2-Dichloroethene	3.6	3.2	3.4	3.3	0.34 J	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.1 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.1 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.1 U	0.25 U	0.25 U	0.25 U
Methyl ethyl ketone	4.7 U	4.7 U	1 U	4.7 U	4.7 U	4.7 U
Methyl isobutyl ketone (MIBK)	3.5 U	3.5 U	1 U	3.5 U	3.5 U	3.5 U
Methylene chloride	0.95 U	1.8 U	0.2 U	1.5 U	0.95 U	0.95 U
m-Xylene & p-Xylene	0.6 U	0.6 U	0.1 U	0.6 U	0.6 U	0.6 U
o-Xylene	0.3 U	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U
Tetrachloroethene	0.32 U	0.32 U	0.1 U	0.32 U	0.32 U	0.32 U
Toluene	0.36 U	0.36 U	0.1 U	0.36 U	0.36 U	0.36 U
trans-1,2-Dichloroethene	2.5	1.9	2.1	2	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.32 U	0.32 U	0.1 U	0.32 U	0.32 U	0.32 U
Trichloroethene	0.26 U	0.26 U	0.1 J	0.26 U	0.26 U	0.26 U
Trichlorofluoromethane	0.34 U	0.34 U	0.1 U	0.34 U	0.34 U	0.34 U
Vinyl chloride	1.5	1.4	0.9	0.89	0.3 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T03-F.xls

February 2008

**TABLE III**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN SHALLOW WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RS-21</b>	<b>RS-21</b>	<b>RS-28</b>	<b>RS-54</b>	<b>RS-54</b>	<b>SH-11</b>
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:	TestAmerica	Lancaster	TestAmerica	TestAmerica	Lancaster	TestAmerica
Collection Date:	02/27/2007	08/07/2007	02/13/2007	02/15/2007	11/05/2007	05/23/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.1 U	0.3 U	2400	3900	0.3 U
1,1,2,2-Tetrachloroethane	0.24 U	0.1 U	0.24 U	9.6 U	0.5 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	0.2 U	2.3 J	200	280	1.5 U
1,1,2-Trichloroethane	0.3 U	0.1 U	0.3 U	12 U	4 J	0.3 U
1,1-Dichloroethane	0.27 U	0.1 U	0.27 U	910	1400	0.27 U
1,1-Dichloroethene	0.42 U	0.6	0.42 U	1000	1200	0.42 U
1,2-Dichlorobenzene	0.32 U	0.1 U	0.32 U	13 U	1 U	0.32 U
1,2-Dichloroethane	0.28 U	0.1 U	0.28 U	11 U	21	0.28 U
1,2-Dichloropropane	0.35 U	0.1 U	0.35 U	14 U	1 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.1 U	0.35 U	14 U	1 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.1 U	0.37 U	15 U	1 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	2.6 U	1 U	2.6 U	100 U	3 U	2.6 U
Acetone	4.5 U	3 U	4.5 U	180 U	8 J	9.3 U
Benzene	0.28 U	0.1 U	0.28 U	11 U	8	0.28 U
Bromodichloromethane	0.3 U	0.1 U	0.3 U	12 U	1 U	0.3 U
Bromoform	0.4 U	0.1 U	0.4 U	16 U	1 U	0.4 U
Bromomethane	0.42 U	0.1 U	0.42 U	17 U	1 U	0.42 U
Carbon Disulfide	0.48 U	0.1 U	0.48 U	19 U	1 U	0.48 U
Carbon Tetrachloride	0.28 U	0.1 U	0.28 U	11 U	0.5 U	0.28 U
Chlorobenzene	0.36 U	0.1 U	0.36 U	14 U	0.8 U	0.36 U
Chloroethane	0.4 U	0.1 U	0.4 U	16 U	2 J	0.4 U
Chloroform	0.33 U	0.1 U	0.33 U	13 U	10	0.33 U
Chloromethane	0.4 U	0.1 U	0.4 U	16 U	1 U	0.4 U
cis-1,2-Dichloroethene	1.5	25	0.9 J	30 J	73	0.58 J
cis-1,3-Dichloropropene	0.22 U	0.1 U	0.22 U	8.8 U	1 U	0.22 U
Dibromochloromethane	0.28 U	0.1 U	0.28 U	11 U	1 U	0.28 U
Ethylbenzene	0.25 U	0.1 U	0.25 U	10 U	0.8 U	0.25 U
Methyl ethyl ketone	4.7 U	1 U	4.7 U	150 U	3 U	4.7 U
Methyl isobutyl ketone (MIBK)	3.5 U	1 U	3.5 U	140 U	3 U	3.5 U
Methylene chloride	0.95 U	0.2 U	0.95 U	78 J	9	0.95 U
m-Xylene & p-Xylene	0.6 U	0.1 U	0.6 U	24 U	0.8 U	0.6 U
o-Xylene	0.3 U	0.1 U	0.3 U	12 U	0.8 U	0.3 U
Tetrachloroethene	0.32 U	0.1 U	0.99 J	30 J	8	0.32 U
Toluene	0.36 U	0.1 U	0.36 U	14 U	0.7 U	0.36 U
trans-1,2-Dichloroethene	0.27 U	1.8	0.27 U	11 U	1 J	0.27 U
trans-1,3-Dichloropropene	0.32 U	0.1 U	0.32 U	13 U	1 U	0.32 U
Trichloroethene	8.5	75	16	1500	1400	0.26 U
Trichlorofluoromethane	0.34 U	0.1 U	0.34 U	14 U	5 J	0.34 U
Vinyl chloride	0.3 U	0.2 J	0.3 U	12 U	2	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T03-F.xls

February 2008



**TABLE III**  
NOTES AND ABBREVIATIONS

- 
1. Lancaster = Lancaster Laboratories of Lancaster, Pennsylvania.
  2. TestAmerica = TestAmerica of Irvine, California.
  3. --- = Analysis not performed.
  4. ug/L = Micrograms per liter.
  5. Primary = Primary sample.
  6. Duplicate = Duplicate sample.
  7. Split = Split sample.
  8. 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).
  9. L = Laboratory contaminant.
  10. U = Not detected; numerical value represents the Method Detection Limit for that compound.
  11. 1,1,2-Trichloro-1,2,2-trifluoroethane has previously been reported using synonym Trichlorotrifluoroethane (Freon 113).
  12. Methyl ethyl ketone has previously been reported using synonym 2-Butanone.
  13. Methyl isobutyl ketone (MIBK) has previously been reported using synonym 4-methyl-2-pentanone (MIBK).
  14. Analyses were performed using EPA method 8260B for all VOCs except 1,4-dioxane which was analyzed by EPA method 8260SIM.

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>HAR-07</b>	<b>HAR-07</b>	<b>HAR-07</b>	<b>HAR-07</b>	<b>HAR-08</b>	<b>HAR-08</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:	TestAmerica	TestAmerica	Lancaster	Lancaster	TestAmerica	TestAmerica
Collection Date:	02/15/2007	05/08/2007	08/16/2007	11/06/2007	02/15/2007	05/15/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	7.5 U	30 U	2 U	2 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	--- U	24 U	1 U	1 U	0.24 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	38 U	---	4 U	4 U	1.5 U	1.5 U
1,1,2-Trichloroethane	7.5 U	30 U	2 U	2 U	0.3 U	0.3 U
1,1-Dichloroethane	36	27 U	2 U	2 U	0.27 U	0.27 U
1,1-Dichloroethene	10 U	42 U	8 J	7 J	0.42 U	0.42 U
1,2-Dichlorobenzene	8 U	32 U	2 U	2 U	0.32 U	0.32 U
1,2-Dichloroethane	7 U	28 U	1 U	1 U	0.28 U	0.28 U
1,2-Dichloropropane	8.8 U	35 U	2 U	2 U	0.35 U	0.35 U
1,3-Dichlorobenzene	8.8 U	35 U	2 U	2 U	0.35 U	0.35 U
1,4-Dichlorobenzene	9.2 U	37 U	2 U	2 U	0.37 U	0.37 U
1,4-Dioxane	10 U	1 U	1 U	1 U	1.6 J	2.1
2-Hexanone	65 U	260 U	6 U	6 U	2.6 U	2.6 U
Acetone	110 U	450 U	12 U	12 U	4.5 U	4.5 U
Benzene	7 U	28 U	1 U	1 U	0.28 U	0.28 U
Bromodichloromethane	7.5 U	30 U	2 U	2 U	0.3 U	0.3 U
Bromoform	10 U	40 U	2 U	2 U	0.4 U	0.4 U
Bromomethane	10 U	42 U	2 U	2 U	0.42 U	0.42 U
Carbon Disulfide	12 U	48 U	2 U	2 U	0.48 U	0.48 U
Carbon Tetrachloride	7 U	28 U	1 U	1 U	0.28 U	0.28 U
Chlorobenzene	9 U	36 U	2 U	2 U	0.36 U	0.36 U
Chloroethane	10 U	40 U	2 U	2 U	0.4 U	0.4 U
Chloroform	8.2 U	33 U	2 U	2 U	0.33 U	0.33 U
Chloromethane	10 U	40 U	2 U	2 U	0.4 U	0.4 U
cis-1,2-Dichloroethene	2400	2000	2300	1600	9.9	14
cis-1,3-Dichloropropene	5.5 U	22 U	2 U	2 U	0.22 U	0.22 U
Dibromochloromethane	7 U	28 U	2 U	2 U	0.28 U	0.28 U
Ethylbenzene	6.2 U	25 U	2 U	2 U	0.25 U	0.25 U
Methyl ethyl ketone	95 U	470 U	6 U	6 U	4.7 U	4.7 U
Methyl isobutyl ketone (MIBK)	88 U	350 U	6 U	6 U	3.5 U	3.5 U
Methylene chloride	34 U	95 U	4 U	4 U	0.95 U	2.1 U
m-Xylene & p-Xylene	15 U	60 U	2 U	2 U	0.6 U	0.6 U
o-Xylene	7.5 U	30 U	2 U	2 U	0.3 U	0.3 U
Tetrachloroethene	8 U	32 U	2 U	2 U	0.32 U	0.32 U
Toluene	9 U	36 U	1 U	1 U	0.36 U	0.36 U
trans-1,2-Dichloroethene	140	86 J	130	120	1.2	1.6
trans-1,3-Dichloropropene	8 U	32 U	2 U	2 U	0.32 U	0.32 U
Trichloroethene	4400	8200	3500	1600	0.98 J	1.2
Trichlorofluoromethane	8.5 U	34 U	1 U	1 U	0.34 U	0.34 U
Vinyl chloride	82	30 U	22	49	2.1	2.6

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>HAR-08</b>	<b>HAR-08</b>	<b>HAR-16</b>	<b>HAR-16</b>	<b>HAR-16</b>	<b>HAR-17</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Duplicate	Primary
Lab Name:	Lancaster	Lancaster	TestAmerica	Lancaster	Lancaster	TestAmerica
Collection Date:	08/16/2007	10/29/2007	05/07/2007	10/22/2007	10/22/2007	05/08/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.1 U	0.1 U	0.64 J	8 U	8 U	0.3 U
1,1,2,2-Tetrachloroethane	0.1 U	0.1 U	0.24 U	5 U	5 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	---	20 U	20 U	---
1,1,2-Trichloroethane	0.1 U	0.1 U	1 J	8 U	8 U	0.3 U
1,1-Dichloroethane	0.1 U	0.1 U	2	10 U	10 U	0.65 J
1,1-Dichloroethene	0.1 U	0.1 U	18	17 J	19 J	0.49 J
1,2-Dichlorobenzene	0.1 U	0.1 U	0.32 U	10 U	10 U	0.32 U
1,2-Dichloroethane	0.1 U	0.1 U	0.28 U	5 U	5 U	0.28 U
1,2-Dichloropropane	0.1 U	0.1 U	0.35 U	10 U	10 U	0.35 U
1,3-Dichlorobenzene	0.1 U	0.1 U	0.35 U	10 U	10 U	0.35 U
1,4-Dichlorobenzene	0.1 U	0.1 U	0.37 U	10 U	10 U	0.37 U
1,4-Dioxane	1.3 J	1.4 J	14	---	---	3.2
2-Hexanone	1 U	1 U	2.6 U	30 U	30 U	2.6 U
Acetone	3 U	3 U	4.5 U	60 U	60 U	4.5 U
Benzene	0.1 U	0.1 U	0.28 U	5 U	5 U	0.28 U
Bromodichloromethane	0.1 U	0.1 U	0.3 U	10 U	10 U	0.3 U
Bromoform	0.1 U	0.1 U	0.4 U	10 U	10 U	0.4 U
Bromomethane	0.1 U	0.1 U	0.42 U	10 U	10 U	0.42 U
Carbon Disulfide	0.1 U	0.1 U	0.48 U	10 U	10 U	0.48 U
Carbon Tetrachloride	0.1 U	0.1 U	0.63 J	5 U	5 U	0.28 U
Chlorobenzene	0.1 U	0.1 U	0.36 U	8 U	8 U	0.36 U
Chloroethane	0.1 U	0.1 U	0.4 U	10 U	10 U	0.4 U
Chloroform	0.1 U	0.1 U	4.1	8 U	8 U	0.33 U
Chloromethane	0.1 U	0.1 U	0.4 U	10 U	10 U	0.4 U
cis-1,2-Dichloroethene	18 J	18	110	110	110	17
cis-1,3-Dichloropropene	0.1 U	0.1 U	0.22 U	10 U	10 U	0.22 U
Dibromochloromethane	0.1 U	0.1 U	0.28 U	10 U	10 U	0.28 U
Ethylbenzene	0.1 U	0.1 U	0.25 U	8 U	8 U	0.25 U
Methyl ethyl ketone	1 U	1 U	4.7 U	30 U	30 U	4.7 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	3.5 U	30 U	30 U	3.5 U
Methylene chloride	0.2 U	0.2 U	0.95 U	20 U	20 U	0.95 U
m-Xylene & p-Xylene	0.1 U	0.1 U	0.6 U	8 U	8 U	0.6 U
o-Xylene	0.1 U	0.1 U	0.3 U	8 U	8 U	0.3 U
Tetrachloroethene	0.1 U	0.1 U	12	9 J	9 J	0.32 U
Toluene	0.1 U	0.1 U	0.36 U	7 U	7 U	0.36 U
trans-1,2-Dichloroethene	2.1 J	1.6	0.92 J	8 UJ	8 UJ	0.32 J
trans-1,3-Dichloropropene	0.1 U	0.1 U	0.32 U	10 U	10 U	0.32 U
Trichloroethene	1.8 J	1.6	11000	10000	11000	98
Trichlorofluoromethane	0.1 U	0.1 U	22	20	21	0.34 U
Vinyl chloride	4 J	2.8	0.3 U	5 U	5 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>HAR-17</b>	<b>HAR-18</b>	<b>HAR-18</b>	<b>HAR-18</b>	<b>HAR-18</b>	<b>HAR-18</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Split	Primary	Primary
Lab Name:	Lancaster	TestAmerica	TestAmerica	Lancaster	Lancaster	Lancaster
Collection Date:	11/07/2007	02/22/2007	05/15/2007	05/15/2007	08/14/2007	10/23/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.8 U	6 U	6 U	4 J	2 U	2 U
1,1,2,2-Tetrachloroethane	0.5 U	4.8 U	4.8 U	0.5 U	1 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	37	470	550	520	570	590
1,1,2-Trichloroethane	0.8 U	6 U	6 U	0.8 U	2 U	2 U
1,1-Dichloroethane	1 U	5.4 U	6.4 J	7	5 J	3 J
1,1-Dichloroethene	0.8 U	58	130	150	69	44
1,2-Dichlorobenzene	1 U	6.4 U	6.4 U	1 U	2 U	2 U
1,2-Dichloroethane	0.5 U	5.6 U	5.6 U	0.5 U	1 U	1 U
1,2-Dichloropropane	1 U	7 U	7 U	1 U	2 U	2 U
1,3-Dichlorobenzene	1 U	7 U	7 U	1 U	2 U	2 U
1,4-Dichlorobenzene	1 U	7.4 U	7.4 U	1 U	2 U	2 U
1,4-Dioxane	---	10	14	---	8.7	11 J
2-Hexanone	3 U	52 U	52 U	3 U	6 U	6 U
Acetone	6 U	90 U	90 U	13 J	12 U	15 J
Benzene	0.5 U	5.6 U	5.6 U	0.5 U	1 U	1 U
Bromodichloromethane	1 U	6 U	6 U	1 U	2 U	2 U
Bromoform	1 U	8 U	8 U	1 U	2 U	2 U
Bromomethane	1 U	8.4 U	8.4 U	1 U	2 U	2 U
Carbon Disulfide	1 U	9.6 U	9.6 U	1 U	2 U	2 U
Carbon Tetrachloride	0.5 U	5.6 U	5.6 U	0.5 U	1 U	1 U
Chlorobenzene	0.8 U	7.2 U	7.2 U	0.8 U	2 U	2 U
Chloroethane	1 U	8 U	8 U	1 U	2 U	2 U
Chloroform	0.8 U	6.6 U	6.6 U	1 J	2 U	2 U
Chloromethane	1 U	8 U	8 U	1 U	2 U	2 U
cis-1,2-Dichloroethene	16	880	1400	1100	1100	940
cis-1,3-Dichloropropene	1 U	4.4 U	4.4 U	1 U	2 U	2 U
Dibromochloromethane	1 U	5.6 U	5.6 U	1 U	2 U	2 U
Ethylbenzene	0.8 U	5 U	5 U	0.8 U	2 U	2 U
Methyl ethyl ketone	3 U	76 U	94 U	3 U	6 U	6 U
Methyl isobutyl ketone (MIBK)	3 U	70 U	70 U	3 U	6 U	6 U
Methylene chloride	2 U	19 U	63 U	2 U	4 U	4 U
m-Xylene & p-Xylene	0.8 U	12 U	12 U	0.8 U	2 U	2 U
o-Xylene	0.8 U	6 U	6 U	0.8 U	2 U	2 U
Tetrachloroethene	0.8 U	6.4 U	6.4 U	2 J	3 J	3 J
Toluene	0.7 U	7.2 U	7.2 U	0.7 U	1 U	1 U
trans-1,2-Dichloroethene	0.8 U	15 J	28	27	19	17 J
trans-1,3-Dichloropropene	1 U	6.4 U	6.4 U	1 U	2 U	2 U
Trichloroethene	89	1200	1400	1300	1500	1200
Trichlorofluoromethane	0.5 U	6.8 U	6.8 U	1	1 J	1 J
Vinyl chloride	0.5 U	68	98	120	64	61

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>HAR-20</b>	<b>HAR-20</b>	<b>HAR-20</b>	<b>HAR-20</b>	<b>HAR-20</b>	<b>HAR-22</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Duplicate	Primary	Primary
Lab Name:	TestAmerica	TestAmerica	Lancaster	Lancaster	Lancaster	TestAmerica
Collection Date:	02/15/2007	05/15/2007	08/14/2007	08/14/2007	10/24/2007	02/22/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	3 U	0.8 U	0.8 U	0.8 U	0.3 U
1,1,2,2-Tetrachloroethane	0.24 U	2.4 U	0.5 U	0.5 U	0.5 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	1.5 U	2 U	2 U	2 U	1.5 U
1,1,2-Trichloroethane	0.3 U	3 U	0.8 U	0.8 U	0.8 U	0.3 U
1,1-Dichloroethane	0.27 U	2.7 U	1 U	1 U	1 U	0.27 U
1,1-Dichloroethene	0.42 U	4.2 U	1 J	1 J	0.8 U	0.42 U
1,2-Dichlorobenzene	0.32 U	3.2 U	1 U	1 U	1 U	0.32 U
1,2-Dichloroethane	0.28 U	2.8 U	0.5 U	0.5 U	0.5 U	0.28 U
1,2-Dichloropropane	0.35 U	3.5 U	1 U	1 U	1 U	0.35 U
1,3-Dichlorobenzene	0.35 U	3.5 U	1 U	1 U	1 U	0.35 U
1,4-Dichlorobenzene	0.37 U	3.7 J,L	1 U	1 U	1 U	0.37 U
1,4-Dioxane	4.1 J	3.5	2.9	---	2.7	---
2-Hexanone	2.6 U	26 U	3 U	3 U	3 U	2.6 U
Acetone	4.5 U	45 U	6 U	6 U	6 U	4.5 U
Benzene	0.28 U	2.8 U	0.5 U	0.5 U	0.5 U	0.28 U
Bromodichloromethane	0.3 U	3 U	1 U	1 U	1 U	0.3 U
Bromoform	0.4 U	4 U	1 U	1 U	1 U	0.4 U
Bromomethane	0.42 U	4.2 U	1 U	1 U	1 U	0.42 U
Carbon Disulfide	0.48 U	4.8 U	1 U	1 U	1 U	0.48 U
Carbon Tetrachloride	0.28 U	2.8 U	0.5 U	0.5 U	0.5 U	0.28 U
Chlorobenzene	0.36 U	3.6 U	0.8 U	0.8 U	0.8 U	0.36 U
Chloroethane	0.4 U	4 U	1 U	1 U	1 U	0.4 U
Chloroform	0.33 U	3.3 U	0.8 U	0.8 U	0.8 U	0.33 U
Chloromethane	0.4 U	4 U	1 U	1 U	1 U	0.4 U
cis-1,2-Dichloroethene	180	230	250	260	180	5.4
cis-1,3-Dichloropropene	0.22 U	2.2 U	1 U	1 U	1 U	0.22 U
Dibromochloromethane	0.28 U	2.8 U	1 U	1 U	1 U	0.28 U
Ethylbenzene	0.25 U	2.5 U	0.8 U	0.8 U	0.8 U	0.25 U
Methyl ethyl ketone	4.7 U	47 U	3 U	3 U	3 U	4.7 U
Methyl isobutyl ketone (MIBK)	3.5 U	35 U	3 U	3 U	3 U	3.5 U
Methylene chloride	0.95 U	17 U	2 U	2 U	2 U	0.95 U
m-Xylene & p-Xylene	0.6 U	6 U	0.8 U	0.8 U	0.8 U	0.6 U
o-Xylene	0.3 U	3 U	0.8 U	0.8 U	0.8 U	0.3 U
Tetrachloroethene	0.32 U	3.2 U	0.8 U	0.8 U	0.8 U	0.32 U
Toluene	0.36 U	3.6 U	0.7 U	0.7 U	0.7 U	0.36 U
trans-1,2-Dichloroethene	14	16	19	19	13 J	0.27 U
trans-1,3-Dichloropropene	0.32 U	3.2 U	1 U	1 U	1 U	0.32 U
Trichloroethene	400	510	490	490	320	1.8
Trichlorofluoromethane	0.34 U	3.4 U	0.5 U	0.5 U	0.5 U	0.34 U
Vinyl chloride	0.84	3 U	1	1	0.7 J	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>HAR-22</b>	<b>HAR-23</b>	<b>HAR-23</b>	<b>HAR-23</b>	<b>HAR-23</b>	<b>HAR-24</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Duplicate	Primary	Duplicate	Primary
Lab Name:	Lancaster	TestAmerica	TestAmerica	Lancaster	Lancaster	TestAmerica
Collection Date:	08/27/2007	03/01/2007	03/01/2007	08/29/2007	08/29/2007	02/15/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.1 U	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U
1,1,2,2-Tetrachloroethane	0.1 U	0.24 U	0.24 U	0.1 U	0.1 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	1.5 U	1.5 U	0.2 U	0.2 U	8.2
1,1,2-Trichloroethane	0.1 U	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U
1,1-Dichloroethane	0.1 U	0.27 U	0.27 U	0.1 U	0.1 U	0.27 U
1,1-Dichloroethene	0.1 U	0.42 U	0.42 U	0.1 U	0.1 U	0.42 U
1,2-Dichlorobenzene	0.1 U	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U
1,2-Dichloroethane	0.1 U	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U
1,2-Dichloropropane	0.1 U	0.35 U	0.35 U	0.1 U	0.1 U	0.35 U
1,3-Dichlorobenzene	0.1 U	0.35 U	0.35 U	0.1 U	0.1 U	0.35 U
1,4-Dichlorobenzene	0.1 U	0.37 U	0.37 U	0.1 U	0.1 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	2.6 U	2.6 U	1 U	1 U	2.6 U
Acetone	3 U	4.5 U	4.5 U	3 U	3 U	4.5 U
Benzene	0.1 U	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U
Bromodichloromethane	0.1 U	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U
Bromoform	0.1 U	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U
Bromomethane	0.1 U	0.42 U	0.42 U	0.1 U	0.1 U	0.42 U
Carbon Disulfide	0.1 U	0.48 U	0.48 U	0.1 U	0.1 U	0.48 U
Carbon Tetrachloride	0.1 U	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U
Chlorobenzene	0.1 U	0.36 U	0.36 U	0.1 U	0.1 U	0.36 U
Chloroethane	0.1 U	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U
Chloroform	0.1 U	0.33 U	0.33 U	0.1 U	0.1 U	1.4
Chloromethane	0.1 U	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U
cis-1,2-Dichloroethene	5.9	0.32 U	0.32 U	0.2 J	0.2 J	1.2
cis-1,3-Dichloropropene	0.1 U	0.22 U	0.22 U	0.1 U	0.1 U	0.22 U
Dibromochloromethane	0.1 U	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U
Ethylbenzene	0.1 U	0.25 U	0.25 U	0.1 U	0.1 U	0.25 U
Methyl ethyl ketone	1 U	4.7 U	4.7 U	1 U	1 U	4.7 U
Methyl isobutyl ketone (MIBK)	1 U	3.5 U	3.5 U	1 U	1 U	3.5 U
Methylene chloride	0.2 U	0.95 U	0.95 U	0.2 U	0.2 U	0.95 U
m-Xylene & p-Xylene	0.1 U	0.6 U	0.6 U	0.1 U	0.1 U	0.6 U
o-Xylene	0.1 U	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U
Tetrachloroethene	0.1 U	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U
Toluene	0.1 U	0.36 U	0.36 U	0.1 U	0.1 U	0.36 U
trans-1,2-Dichloroethene	0.4 J	0.27 U	0.27 U	0.1 U	0.1 U	0.27 U
trans-1,3-Dichloropropene	0.1 U	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U
Trichloroethene	1.6	1.5	1.2	2.2	2.1	100
Trichlorofluoromethane	0.1 U	0.34 U	0.34 U	0.1 U	0.1 U	0.34 U
Vinyl chloride	0.2 J	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>HAR-24</b>	<b>HAR-24</b>	<b>HAR-24</b>	<b>HAR-26</b>	<b>HAR-26</b>	<b>OS-02</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Duplicate	Split	Primary	Primary	Primary	Primary
Lab Name:	TestAmerica	STL-SA	Lancaster	TestAmerica	Lancaster	TestAmerica
Collection Date:	02/15/2007	02/15/2007	08/08/2007	02/28/2007	08/20/2007	02/28/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.82 U	0.8 U	0.3 U	0.1 U	0.3 U
1,1,2,2-Tetrachloroethane	0.24 U	0.74 U	0.5 U	0.24 U	0.1 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	6.9	7.8	10	1.5 U	0.2 U	1.5 U
1,1,2-Trichloroethane	0.3 U	0.62 U	0.8 U	0.3 U	0.1 U	0.3 U
1,1-Dichloroethane	0.27 U	0.2 U	1 U	0.27 U	0.1 U	0.27 U
1,1-Dichloroethene	0.42 U	0.72 U	0.8 U	0.42 U	0.1 U	0.42 U
1,2-Dichlorobenzene	0.32 U	0.28 U	1 U	0.32 U	0.1 U	0.32 U
1,2-Dichloroethane	0.28 U	0.44 U	0.5 U	0.28 U	0.1 U	0.28 U
1,2-Dichloropropane	0.35 U	0.3 U	1 U	0.35 U	0.1 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.22 U	1 U	0.35 U	0.1 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.26 U	1 U	0.37 U	0.1 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	2.6 U	2 U	3 U	2.6 U	1 U	2.6 U
Acetone	4.5 U	2 U	6 U	4.5 U	3 U	4.5 U
Benzene	0.28 U	0.29 J	0.5 U	0.28 U	0.1 U	0.28 U
Bromodichloromethane	0.3 U	0.28 U	1 U	0.3 U	0.1 U	0.3 U
Bromoform	0.4 U	0.2 U	1 U	0.4 U	0.1 U	0.4 U
Bromomethane	0.42 U	0.16 U	1 U	0.42 U	0.1 U	0.42 U
Carbon Disulfide	0.48 U	2 U	1 U	0.48 U	0.1 U	0.48 U
Carbon Tetrachloride	0.28 U	0.3 U	0.5 U	0.28 U	0.1 U	0.28 U
Chlorobenzene	0.36 U	0.24 U	0.8 U	0.36 U	0.1 U	0.36 U
Chloroethane	0.4 U	0.68 U	1 U	0.4 U	0.1 U	0.4 U
Chloroform	1.4	1.6 J	1 J	0.33 U	0.1 U	0.33 U
Chloromethane	0.4 U	0.5 U	1 U	0.4 U	0.1 U	0.4 U
cis-1,2-Dichloroethene	1.1	1.7 J	2 J	0.32 U	0.1 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.44 U	1 U	0.22 U	0.1 U	0.22 U
Dibromochloromethane	0.28 U	0.8 U	1 U	0.28 U	0.1 U	0.28 U
Ethylbenzene	0.25 U	0.54 U	0.8 U	0.25 U	0.1 U	0.25 U
Methyl ethyl ketone	4.7 U	2 U	3 U	4.7 U	1 U	4.7 U
Methyl isobutyl ketone (MIBK)	3.5 U	2 U	3 U	3.5 U	1 U	3.5 U
Methylene chloride	0.95 U	0.7 U	2 U	0.95 U	0.2 U	0.95 U
m-Xylene & p-Xylene	0.6 U	0.36 U	0.8 U	0.6 U	0.1 U	0.6 U
o-Xylene	0.3 U	0.2 U	0.8 U	0.3 U	0.1 U	0.3 U
Tetrachloroethene	0.32 U	0.76 U	0.8 U	0.32 U	0.1 U	0.32 U
Toluene	0.36 U	0.5 U	0.7 U	0.36 U	0.1 U	0.36 U
trans-1,2-Dichloroethene	0.27 U	0.22 U	0.8 U	0.27 U	0.1 U	0.27 U
trans-1,3-Dichloropropene	0.32 U	0.6 U	1 U	0.32 U	0.1 U	0.32 U
Trichloroethene	94	110	120	0.26 U	0.1 U	0.26 U
Trichlorofluoromethane	0.34 U	0.46 U	0.5 U	0.34 U	0.1 U	0.34 U
Vinyl chloride	0.3 U	0.24 U	0.5 U	0.3 U	0.1 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>OS-04</b>	<b>OS-04</b>	<b>OS-09</b>	<b>OS-09</b>	<b>OS-16</b>	<b>OS-17</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Duplicate	Primary	Primary	Primary	Primary
Lab Name:	TestAmerica	TestAmerica	TestAmerica	Lancaster	Lancaster	TestAmerica
Collection Date:	02/28/2007	02/28/2007	02/28/2007	08/16/2007	11/02/2007	03/01/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.24 U	0.1 U	0.1 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	1.5 U	1.5 U	0.2 U	0.2 U	1.5 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.1 U	0.1 U	0.27 U
1,1-Dichloroethene	0.42 U	0.42 U	0.42 U	0.1 U	0.1 U	0.42 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.1 U	0.1 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.1 U	0.1 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.1 U	0.1 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	2.6 U	2.6 U	2.6 U	1 U	1 U	2.6 U
Acetone	4.5 U	4.5 U	4.5 U	3 U	3 U	4.5 U
Benzene	0.28 U	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U
Bromoform	0.4 U	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U
Bromomethane	0.42 U	0.42 U	0.42 U	0.1 U	0.1 U	0.42 U
Carbon Disulfide	0.48 U	0.48 U	0.48 U	0.2 J,L	0.1 U	0.48 U
Carbon Tetrachloride	0.28 U	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.1 U	0.1 U	0.36 U
Chloroethane	0.4 U	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U
Chloroform	0.33 U	0.33 U	0.33 U	0.1 U	0.1 U	0.33 U
Chloromethane	0.4 U	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.1 U	0.1 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.1 U	0.1 U	0.25 U
Methyl ethyl ketone	4.7 U	4.7 U	4.7 U	1 U	1 U	4.7 U
Methyl isobutyl ketone (MIBK)	3.5 U	3.5 U	3.5 U	1 U	1 U	3.5 U
Methylene chloride	0.95 U	0.95 U	0.95 U	0.2 U	0.2 U	0.95 U
m-Xylene & p-Xylene	0.6 U	0.6 U	0.6 U	0.1 U	0.1 U	0.6 U
o-Xylene	0.3 U	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U
Toluene	0.36 U	0.36 U	0.36 U	0.1 U	0.1 U	0.36 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.1 U	0.1 U	0.27 U
trans-1,3-Dichloropropene	0.32 U	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U
Trichloroethene	0.26 U	0.26 U	0.26 U	0.1 U	0.1 U	0.26 U
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.1 U	0.1 U	0.34 U
Vinyl chloride	0.3 U	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008



**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>OS-17</b>	<b>OS-17</b>	<b>OS-26</b>	<b>OS-26</b>	<b>OS-26</b>	<b>OS-26</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Duplicate	Primary	Primary	Primary	Duplicate	Split
Lab Name:	TestAmerica	Lancaster	TestAmerica	Lancaster	Lancaster	TestAmerica
Collection Date:	03/01/2007	08/15/2007	03/02/2007	08/20/2007	08/20/2007	08/20/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.1 U	0.3 U	0.1 U	0.1 U	0.3 U
1,1,2,2-Tetrachloroethane	0.24 U	0.1 U	0.24 U	0.1 U	0.1 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	0.2 U	1.5 U	0.2 U	0.2 U	1.5 U
1,1,2-Trichloroethane	0.3 U	0.1 U	0.3 U	0.1 U	0.1 U	0.3 U
1,1-Dichloroethane	0.27 U	0.1 U	0.27 U	0.1 U	0.1 U	0.27 U
1,1-Dichloroethene	0.42 U	0.1 U	0.42 U	0.1 U	0.1 U	0.42 U
1,2-Dichlorobenzene	0.32 U	0.1 U	0.32 U	0.1 U	0.1 U	0.32 U
1,2-Dichloroethane	0.28 U	0.1 U	0.28 U	0.1 U	0.1 U	0.28 U
1,2-Dichloropropane	0.35 U	0.1 U	0.35 U	0.1 U	0.1 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.1 U	0.35 U	0.1 U	0.1 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.1 U	0.37 U	0.1 U	0.1 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	2.6 U	1 U	2.6 U	1 U	1 U	2.6 U
Acetone	4.5 U	3 U	4.5 U	3 U	3 U	4.5 U
Benzene	0.28 U	0.1 U	0.28 U	0.1 U	0.1 U	0.28 U
Bromodichloromethane	0.3 U	0.1 U	0.3 U	0.1 U	0.1 U	0.3 U
Bromoform	0.4 U	0.1 U	0.4 U	0.1 U	0.1 U	0.4 U
Bromomethane	0.42 U	0.1 U	0.42 U	0.1 U	0.1 U	0.42 U
Carbon Disulfide	0.48 U	0.1 U	0.48 U	0.1 U	0.1 U	0.48 U
Carbon Tetrachloride	0.28 U	0.1 U	0.28 U	0.1 U	0.1 U	0.28 U
Chlorobenzene	0.36 U	0.1 U	0.36 U	0.1 U	0.1 U	0.36 U
Chloroethane	0.4 U	0.1 U	0.4 U	0.1 U	0.1 U	0.4 U
Chloroform	0.33 U	0.1 U	0.33 U	0.1 U	0.1 U	0.33 U
Chloromethane	0.4 U	0.1 U	0.4 U	0.1 U	0.1 U	0.4 U
cis-1,2-Dichloroethene	0.32 U	0.1 U	0.32 U	0.1 U	0.1 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.1 U	0.22 U	0.1 U	0.1 U	0.22 U
Dibromochloromethane	0.28 U	0.1 U	0.28 U	0.1 U	0.1 U	0.28 U
Ethylbenzene	0.25 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U
Methyl ethyl ketone	4.7 U	1 U	4.7 U	1 U	1 U	4.7 U
Methyl isobutyl ketone (MIBK)	3.5 U	1 U	3.5 U	1 U	1 U	3.5 U
Methylene chloride	0.95 U	0.2 U	0.95 U	0.2 U	0.2 U	0.95 U
m-Xylene & p-Xylene	0.6 U	0.1 U	0.6 U	0.1 U	0.1 U	0.6 U
o-Xylene	0.3 U	0.1 U	0.3 U	0.1 U	0.1 U	0.3 U
Tetrachloroethene	0.32 U	0.1 U	0.32 U	0.1 U	0.1 U	0.32 U
Toluene	0.36 U	0.1 U	0.36 U	0.1 U	0.1 U	0.36 U
trans-1,2-Dichloroethene	0.27 U	0.1 U	0.27 U	0.1 U	0.1 U	0.27 U
trans-1,3-Dichloropropene	0.32 U	0.1 U	0.32 U	0.1 U	0.1 U	0.32 U
Trichloroethene	0.26 U	0.1 U	0.26 U	0.1 U	0.1 U	0.26 U
Trichlorofluoromethane	0.34 U	0.1 U	0.34 U	0.1 U	0.1 U	0.34 U
Vinyl chloride	0.3 U	0.1 U	0.3 U	0.1 U	0.1 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>OS-27</b>	<b>OS-28</b>	<b>OS-28</b>	<b>RD-01</b>	<b>RD-01</b>	<b>RD-01</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:	TestAmerica	TestAmerica	Lancaster	TestAmerica	TestAmerica	Lancaster
Collection Date:	03/02/2007	03/01/2007	08/15/2007	02/15/2007	05/09/2007	08/15/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.3 U	0.1 U	0.3 U	1.5 U	0.8 U
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.1 U	0.24 U	1.2 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	1.5 U	0.2 U	1.5 U	7.5 U	2 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.1 U	0.3 U	1.5 U	0.8 U
1,1-Dichloroethane	0.27 U	0.27 U	0.1 U	0.27 U	1.4 U	1 U
1,1-Dichloroethene	0.42 U	0.42 U	0.1 U	1.8	3.2 J	4 J
1,2-Dichlorobenzene	0.32 U	0.32 U	0.1 U	0.32 U	1.6 U	1 U
1,2-Dichloroethane	0.28 U	0.28 U	0.1 U	0.28 U	1.4 U	0.5 U
1,2-Dichloropropane	0.35 U	0.35 U	0.1 U	0.35 U	1.8 U	1 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.1 U	0.35 U	1.8 U	1 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.1 U	0.37 U	1.8 U	1 U
1,4-Dioxane	---	---	---	2.2	2.8	2 J
2-Hexanone	2.6 U	2.6 U	1 U	2.6 U	13 U	3 U
Acetone	4.5 U	4.5 U	3 U	4.5 U	22 U	6 U
Benzene	0.28 U	0.28 U	0.1 U	0.28 U	1.4 U	0.5 U
Bromodichloromethane	0.3 U	0.3 U	0.1 U	0.3 U	1.5 U	1 U
Bromoform	0.4 U	0.4 U	0.1 U	0.4 U	2 U	1 U
Bromomethane	0.42 U	0.42 U	0.1 U	0.42 U	2.1 U	1 U
Carbon Disulfide	0.48 U	0.48 U	0.1 U	0.48 U	2.4 U	1 U
Carbon Tetrachloride	0.28 U	0.28 U	0.1 U	0.28 U	1.4 U	0.5 U
Chlorobenzene	0.36 U	0.36 U	0.1 U	0.36 U	1.8 U	0.8 U
Chloroethane	0.4 U	0.4 U	0.1 U	0.4 U	2 U	1 U
Chloroform	0.33 U	0.33 U	0.1 U	0.33 U	1.6 U	0.8 U
Chloromethane	0.4 U	0.4 U	0.1 U	0.4 U	2 U	1 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.1 U	840	850	850
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.1 U	0.22 U	1.1 U	1 U
Dibromochloromethane	0.28 U	0.28 U	0.1 U	0.28 U	1.4 U	1 U
Ethylbenzene	0.25 U	0.25 U	0.1 U	0.25 U	1.2 U	0.8 U
Methyl ethyl ketone	4.7 U	4.7 U	1 U	4.7 U	24 U	3 U
Methyl isobutyl ketone (MIBK)	3.5 U	3.5 U	1 U	3.5 U	18 U	3 U
Methylene chloride	0.95 U	0.95 U	0.2 U	0.95 U	5 U	2 U
m-Xylene & p-Xylene	0.6 U	0.6 U	0.1 U	0.6 U	3 U	0.8 U
o-Xylene	0.3 U	0.3 U	0.1 U	0.3 U	1.5 U	0.8 U
Tetrachloroethene	0.32 U	0.32 U	0.1 U	0.32 U	1.6 U	0.8 U
Toluene	0.36 U	0.36 U	0.1 U	0.36 U	1.8 U	0.7 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.1 U	30	67	37
trans-1,3-Dichloropropene	0.32 U	0.32 U	0.1 U	0.32 U	1.6 U	1 U
Trichloroethene	0.26 U	0.26 U	0.1 U	870	910	850
Trichlorofluoromethane	0.34 U	0.34 U	0.1 U	0.34 U	1.7 U	0.5 U
Vinyl chloride	0.3 U	0.3 U	0.1 U	27	35	57

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-01</b>	<b>RD-01</b>	<b>RD-02</b>	<b>RD-02</b>	<b>RD-02</b>	<b>RD-02</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Split	Primary	Primary	Duplicate	Primary
Lab Name:	Lancaster	TestAmerica	TestAmerica	Lancaster	Lancaster	Lancaster
Collection Date:	10/23/2007	10/23/2007	02/13/2007	05/21/2007	05/21/2007	08/29/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.8 U	0.3 U	0.6 U	0.8 U	0.8 U	0.8 U
1,1,2,2-Tetrachloroethane	1 U	0.24 U	0.48 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	2 U	1.5 U	3 U	2 U	2 U	2 U
1,1,2-Trichloroethane	0.8 U	0.3 U	0.6 U	0.8 U	0.8 U	0.8 U
1,1-Dichloroethane	1 U	0.27 U	0.54 U	1 U	1 U	1 U
1,1-Dichloroethene	4 J	2.9	0.98 J	1 J	1 J	2 J
1,2-Dichlorobenzene	1 U	0.32 U	0.64 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	0.28 U	0.56 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	1 U	0.35 U	0.7 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1 U	0.35 U	0.7 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	0.37 U	0.74 U	1 U	1 U	1 U
1,4-Dioxane	2.5	---	2.2	1.8 J	---	2
2-Hexanone	3 U	2.6 U	5.2 U	3 U	3 U	3 U
Acetone	6 U	4.5 U	9 U	6 U	6 U	6 U
Benzene	0.5 U	0.28 U	0.56 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	1 U	0.3 U	0.6 U	1 U	1 U	1 U
Bromoform	1 U	0.4 U	0.8 U	1 U	1 U	1 U
Bromomethane	1 U	0.42 U	0.84 U	1 U	1 U	1 U
Carbon Disulfide	1 U	0.48 U	0.96 U	1 U	1 U	1 U
Carbon Tetrachloride	1 U	0.28 U	0.56 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	0.8 U	0.36 U	0.72 U	0.8 U	0.8 U	0.8 U
Chloroethane	1 U	0.4 U	0.8 U	1 U	1 U	1 U
Chloroform	0.8 U	0.33 U	0.66 U	0.8 U	0.8 U	0.8 U
Chloromethane	1 U	0.4 U	0.8 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	950 J	930	390	270	270	400
cis-1,3-Dichloropropene	1 U	0.22 U	0.44 U	1 U	1 U	1 U
Dibromochloromethane	1 U	0.28 U	0.56 U	1 U	1 U	1 U
Ethylbenzene	0.8 U	0.25 U	0.5 U	0.8 U	0.8 U	0.8 U
Methyl ethyl ketone	3 U	4.7 U	7.6 U	3 U	3 U	3 U
Methyl isobutyl ketone (MIBK)	3 U	3.5 U	7 U	3 U	3 U	3 U
Methylene chloride	2 U	4.5 J	1.9 U	2 U	2 U	2 U
m-Xylene & p-Xylene	0.8 U	0.6 U	1.2 U	0.8 U	0.8 U	0.8 U
o-Xylene	0.8 U	0.3 U	0.6 U	0.8 U	0.8 U	0.8 U
Tetrachloroethene	0.8 U	0.32 U	0.64 U	0.8 U	0.8 U	0.8 U
Toluene	0.7 U	0.65 J	0.72 U	0.7 U	0.7 U	0.8 J
trans-1,2-Dichloroethene	35 J	33	20	15	15	30
trans-1,3-Dichloropropene	1 U	0.32 U	0.64 U	1 U	1 U	1 U
Trichloroethene	970 J	890	230	230	230	240
Trichlorofluoromethane	2 U	0.34 U	0.68 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	44	42	2.1	2	2	4

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-02</b>	<b>RD-02</b>	<b>RD-03</b>	<b>RD-03</b>	<b>RD-03</b>	<b>RD-04</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Duplicate	Primary	Primary	Duplicate	Primary
Lab Name:	Lancaster	Lancaster	TestAmerica	Lancaster	Lancaster	TestAmerica
Collection Date:	11/07/2007	11/07/2007	05/11/2007	08/28/2007	08/28/2007	02/13/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.8 U	0.8 U	0.3 U	0.1 U	0.1 U	6 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.24 U	0.1 U	0.1 U	4.8 U
1,1,2-Trichloro-1,2,2-trifluoroethane	2 U	2 U	1.5 U	0.2 U	0.2 U	30 U
1,1,2-Trichloroethane	0.8 U	0.8 U	0.3 U	0.1 U	0.1 U	6 U
1,1-Dichloroethane	1 U	1 U	0.27 U	0.1 U	0.1 U	5.4 U
1,1-Dichloroethene	1 J	1 J	0.42 U	0.1 U	0.1 U	8.4 U
1,2-Dichlorobenzene	1 U	1 U	0.32 U	0.1 U	0.1 U	6.4 U
1,2-Dichloroethane	0.5 U	0.5 U	0.28 U	0.1 U	0.1 U	5.6 U
1,2-Dichloropropane	1 U	1 U	0.35 U	0.1 U	0.1 U	7 U
1,3-Dichlorobenzene	1 U	1 U	0.35 U	0.1 U	0.1 U	7 U
1,4-Dichlorobenzene	1 U	1 U	0.37 U	0.1 U	0.1 U	7.4 U
1,4-Dioxane	2 J	---	---	---	---	1 J
2-Hexanone	3 U	3 U	2.6 U	1 U	1 U	52 U
Acetone	6 U	6 U	4.5 U	3 U	3 U	90 U
Benzene	0.5 U	0.5 U	0.28 U	0.1 U	0.1 U	5.6 U
Bromodichloromethane	1 U	1 U	0.3 U	0.1 U	0.1 U	6 U
Bromoform	1 U	1 U	0.4 U	0.1 U	0.1 U	8 U
Bromomethane	1 U	1 U	0.42 U	0.1 U	0.1 U	8.4 U
Carbon Disulfide	1 U	1 U	0.48 U	0.4 J,L	0.4 J,L	9.6 U
Carbon Tetrachloride	0.5 U	0.5 U	0.28 U	0.1 U	0.1 U	5.6 U
Chlorobenzene	0.8 U	0.8 U	0.36 U	0.1 U	0.1 U	7.2 U
Chloroethane	1 U	1 U	0.4 U	0.1 U	0.1 U	8 U
Chloroform	0.8 U	0.8 U	0.33 U	0.1 U	0.1 U	6.6 U
Chloromethane	1 U	1 U	0.4 U	0.1 U	0.1 U	8 U
cis-1,2-Dichloroethene	250	240	0.8 J	0.4 J	0.4 J	96
cis-1,3-Dichloropropene	1 U	1 U	0.22 U	0.1 U	0.1 U	4.4 U
Dibromochloromethane	1 U	1 U	0.28 U	0.1 U	0.1 U	5.6 U
Ethylbenzene	0.8 U	0.8 U	0.25 U	0.1 U	0.1 U	5 U
Methyl ethyl ketone	3 U	3 U	4.7 U	1 U	1 U	76 U
Methyl isobutyl ketone (MIBK)	3 U	3 U	3.5 U	1 U	1 U	70 U
Methylene chloride	2 U	2 U	0.95 U	0.2 U	0.2 U	30 J,L
m-Xylene & p-Xylene	0.8 U	0.8 U	0.6 U	0.1 U	0.1 U	12 U
o-Xylene	0.8 U	0.8 U	0.3 U	0.1 U	0.1 U	6 U
Tetrachloroethene	0.8 U	0.8 U	0.32 U	0.1 U	0.1 U	6.4 U
Toluene	0.7 U	0.7 U	0.36 U	0.1 U	0.1 U	7.2 U
trans-1,2-Dichloroethene	20	19	0.27 U	0.1 U	0.1 J	5.4 U
trans-1,3-Dichloropropene	1 U	1 U	0.32 U	0.1 U	0.1 U	6.4 U
Trichloroethene	240	240	0.26 U	0.1 U	0.1 U	2100
Trichlorofluoromethane	0.5 U	0.5 U	0.34 U	0.1 U	0.1 U	6.8 U
Vinyl chloride	3	3	0.3 U	0.1 U	0.1 U	6 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-04</b>	<b>RD-04</b>	<b>RD-04</b>	<b>RD-04</b>	<b>RD-05A</b>	<b>RD-05A</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Duplicate	Primary	Primary	Primary	Primary	Primary
Lab Name:	TestAmerica	TestAmerica	Lancaster	Lancaster	TestAmerica	Lancaster
Collection Date:	02/13/2007	05/10/2007	08/15/2007	10/25/2007	02/08/2007	08/10/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	6 U	2 U	0.8 U	0.3 U	0.1 U
1,1,2,2-Tetrachloroethane	0.24 U	4.8 U	1 U	0.5 U	0.24 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	30 U	4 U	2 U	1.5 U	0.2 U
1,1,2-Trichloroethane	0.3 U	6 U	2 U	0.8 U	0.3 U	0.1 U
1,1-Dichloroethane	0.27 U	5.4 U	2 U	1 U	0.27 U	0.1 U
1,1-Dichloroethene	0.68 J	8.4 U	2 J	1 J	0.42 U	0.1 U
1,2-Dichlorobenzene	0.32 U	6.4 U	2 U	1 U	0.32 U	0.1 U
1,2-Dichloroethane	0.28 U	5.6 U	1 U	0.5 U	0.28 U	0.1 U
1,2-Dichloropropane	0.35 U	7 U	2 U	1 U	0.35 U	0.1 U
1,3-Dichlorobenzene	0.35 U	7 U	2 U	1 U	0.35 U	0.1 U
1,4-Dichlorobenzene	0.37 U	7.4 U	2 U	1 U	0.37 U	0.1 U
1,4-Dioxane	---	1 U	1 U	1 U	---	---
2-Hexanone	2.6 U	52 U	6 U	3 U	2.6 U	1 U
Acetone	7.6 J,L	90 U	12 U	6 U	4.5 U	3 U
Benzene	0.28 U	6.8 J	1 U	0.5 U	0.28 U	0.1 U
Bromodichloromethane	0.3 U	6 U	2 U	1 U	0.3 U	0.1 U
Bromoform	0.4 U	8 U	2 U	1 U	0.4 U	0.1 U
Bromomethane	0.42 U	8.4 U	2 U	1 U	0.42 U	0.1 U
Carbon Disulfide	0.48 U	9.6 U	2 U	1 U	0.48 U	0.1 U
Carbon Tetrachloride	0.28 U	5.6 U	1 U	0.5 U	0.28 U	0.1 U
Chlorobenzene	0.36 U	7.2 U	2 U	0.8 U	0.36 U	0.1 U
Chloroethane	0.4 U	8 U	2 U	1 U	0.4 U	0.1 U
Chloroform	0.33 U	6.6 U	2 U	0.8 U	0.33 U	0.1 U
Chloromethane	0.4 U	8 U	2 U	1 U	0.4 U	0.1 U
cis-1,2-Dichloroethene	94	110	140	130	0.32 U	0.1 U
cis-1,3-Dichloropropene	0.22 U	4.4 U	2 U	1 U	0.22 U	0.1 U
Dibromochloromethane	0.28 U	5.6 U	2 U	1 U	0.28 U	0.1 U
Ethylbenzene	0.25 U	5 U	2 U	0.8 U	0.25 U	0.1 U
Methyl ethyl ketone	4.7 U	94 U	6 U	3 U	4.7 U	1 U
Methyl isobutyl ketone (MIBK)	3.5 U	70 U	6 U	3 U	3.5 U	1 U
Methylene chloride	0.95 U	19 U	4 U	2 U	0.95 U	0.2 U
m-Xylene & p-Xylene	0.6 U	12 U	2 U	0.8 U	0.6 U	0.1 U
o-Xylene	0.3 U	6 U	2 U	0.8 U	0.3 U	0.1 U
Tetrachloroethene	0.32 U	6.4 U	2 U	0.8 U	0.32 U	0.1 U
Toluene	0.36 U	7.2 U	1 U	0.7 U	0.36 U	0.1 U
trans-1,2-Dichloroethene	2	5.4 U	3 J	3 J	0.27 U	0.1 U
trans-1,3-Dichloropropene	0.32 U	6.4 U	2 U	1 U	0.32 U	0.1 U
Trichloroethene	1800	2200	2200	1300	0.26 U	0.1 U
Trichlorofluoromethane	0.34 U	6.8 U	1 U	0.5 U	0.34 U	0.1 U
Vinyl chloride	0.3 U	6 U	1 U	0.5 U	0.3 U	0.1 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-05B</b>	<b>RD-05B</b>	<b>RD-05B</b>	<b>RD-05B</b>	<b>RD-05B</b>	<b>RD-05B</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Duplicate	Split	Primary	Primary
Lab Name:	TestAmerica	TestAmerica	TestAmerica	STL-SA	Lancaster	Lancaster
Collection Date:	02/13/2007	05/17/2007	05/17/2007	05/17/2007	08/16/2007	10/31/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.41 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.24 U	0.37 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	1.5 U	1.5 U	1 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.31 U	0.1 U	0.1 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethene	0.42 U	0.42 U	0.42 U	0.36 U	0.1 U	0.1 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.14 U	0.1 U	0.1 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.22 U	0.1 U	0.1 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.15 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.11 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.13 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	2.6 U	2.6 U	2.6 U	1 U	1 U	1 U
Acetone	14	4.5 U	4.5 U	1 U	3 U	3 U
Benzene	0.28 U	0.28 U	0.28 U	0.13 U	0.1 U	0.1 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.14 U	0.1 U	0.1 U
Bromoform	0.4 U	0.4 U	0.4 U	0.1 U	0.1 U	0.1 U
Bromomethane	0.42 U	0.42 U	0.42 U	0.08 U	0.1 U	0.1 U
Carbon Disulfide	0.48 U	0.48 U	0.48 U	1 U	0.4 U	0.4 J,L
Carbon Tetrachloride	0.28 U	0.28 U	0.28 U	0.15 U	0.1 U	0.1 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.12 U	0.1 U	0.1 U
Chloroethane	0.4 U	0.4 U	0.4 U	0.34 U	0.1 U	0.1 U
Chloroform	0.33 U	0.33 U	0.33 U	0.12 U	0.1 U	0.1 U
Chloromethane	0.4 U	0.4 U	0.4 U	0.25 U	0.1 U	0.1 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.32 U	0.1 U	0.1 U	0.1 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.1 U	0.1 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.4 U	0.1 U	0.1 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.27 U	0.1 U	0.1 U
Methyl ethyl ketone	4.7 U	4.7 U	4.7 U	1 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	3.5 U	3.5 U	3.5 U	1 U	1 U	1 U
Methylene chloride	0.95 U	0.95 U	0.95 U	0.35 U	0.3 U	0.2 U
m-Xylene & p-Xylene	0.6 U	0.6 U	0.6 U	0.18 U	0.1 U	0.1 U
o-Xylene	0.3 U	0.3 U	0.3 U	0.1 U	0.1 U	0.1 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.38 U	0.1 U	0.1 U
Toluene	0.36 U	0.36 U	0.36 U	0.25 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.11 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	0.32 U	0.32 U	0.32 U	0.3 U	0.1 U	0.1 U
Trichloroethene	0.26 U	0.26 U	0.26 U	0.31 U	0.1 U	0.1 U
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.23 U	0.1 U	0.1 U
Vinyl chloride	0.3 U	0.3 U	0.3 U	0.12 U	0.1 U	0.1 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-05B</b>	<b>RD-05C</b>	<b>RD-05C</b>	<b>RD-05C</b>	<b>RD-05C</b>	<b>RD-05C</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Duplicate	Primary	Duplicate	Primary	Primary	Primary
Lab Name:	Lancaster	TestAmerica	TestAmerica	TestAmerica	Lancaster	Lancaster
Collection Date:	10/31/2007	02/08/2007	02/08/2007	05/17/2007	08/10/2007	10/30/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.1 U	0.3 U	0.3 U	0.3 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.1 U	0.24 U	0.24 U	0.24 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	1.5 U	1.5 U	1.5 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.1 U	0.3 U	0.3 U	0.3 U	0.1 U	0.1 U
1,1-Dichloroethane	0.1 U	0.27 U	0.27 U	0.27 U	0.1 U	0.1 U
1,1-Dichloroethene	0.1 U	0.42 U	0.42 U	0.42 U	0.1 U	0.1 U
1,2-Dichlorobenzene	0.1 U	0.32 U	0.32 U	0.32 U	0.1 U	0.1 U
1,2-Dichloroethane	0.1 U	0.28 U	0.28 U	0.28 U	0.1 U	0.1 U
1,2-Dichloropropane	0.1 U	0.35 U	0.35 U	0.35 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.1 U	0.35 U	0.35 U	0.35 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.1 U	0.37 U	0.37 U	0.37 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	2.6 U	2.6 U	2.6 U	1 U	1 U
Acetone	3 U	4.5 U	4.5 U	4.5 U	3 U	3 U
Benzene	0.1 U	0.28 U	0.28 U	0.28 U	0.1 U	0.1 U
Bromodichloromethane	0.1 U	0.3 U	0.3 U	0.3 U	0.1 U	0.1 U
Bromoform	0.1 U	0.4 U	0.4 U	0.4 U	0.1 U	0.1 U
Bromomethane	0.1 U	0.42 U	0.42 U	0.42 U	0.1 U	0.1 U
Carbon Disulfide	0.67	0.48 U	0.48 U	0.48 U	0.1 U	0.70
Carbon Tetrachloride	0.1 U	0.28 U	0.28 U	0.28 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.36 U	0.36 U	0.36 U	0.1 U	0.1 U
Chloroethane	0.1 U	0.4 U	0.4 U	0.4 U	0.1 U	0.1 U
Chloroform	0.1 U	0.33 U	0.33 U	0.33 U	0.1 U	0.1 U
Chloromethane	0.1 U	0.4 U	0.4 U	0.4 U	0.1 U	0.1 U
cis-1,2-Dichloroethene	0.1 U	0.32 U	0.32 U	0.32 U	0.1 U	0.1 U
cis-1,3-Dichloropropene	0.1 U	0.22 U	0.22 U	0.22 U	0.1 U	0.1 U
Dibromochloromethane	0.1 U	0.28 U	0.28 U	0.28 U	0.1 U	0.1 U
Ethylbenzene	0.1 U	0.25 U	0.25 U	0.25 U	0.1 U	0.1 U
Methyl ethyl ketone	1 U	4.7 U	4.7 U	4.7 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	3.5 U	3.5 U	3.5 U	1 U	1 U
Methylene chloride	0.2 U	0.95 U	0.95 U	0.95 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.1 U	0.6 U	0.6 U	0.6 U	0.1 U	0.1 U
o-Xylene	0.1 U	0.3 U	0.3 U	0.3 U	0.1 U	0.1 U
Tetrachloroethene	0.1 U	0.32 U	0.32 U	0.32 U	0.1 U	0.1 U
Toluene	0.1 U	0.36 U	0.36 U	0.36 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	0.1 U	0.27 U	0.27 U	0.27 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	0.1 U	0.32 U	0.32 U	0.32 U	0.1 U	0.1 U
Trichloroethene	0.1 U	0.26 U	0.26 U	0.26 U	0.1 U	0.1 U
Trichlorofluoromethane	0.1 U	0.34 U	0.34 U	0.34 U	0.1 U	0.1 U
Vinyl chloride	0.1 U	0.3 U	0.3 U	0.3 U	0.1 U	0.1 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-06</b>	<b>RD-06</b>	<b>RD-06</b>	<b>RD-06</b>	<b>RD-07</b>	<b>RD-07</b>
Sample Port:	---	---	---	---	Z3	Z3
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:	TestAmerica	TestAmerica	Lancaster	Lancaster	TestAmerica	Lancaster
Collection Date:	02/08/2007	05/11/2007	08/22/2007	11/01/2007	02/08/2007	08/09/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.1 U
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.1 U	0.1 U	0.24 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	1.5 U	0.2 U	0.2 U	1.5 U	0.2 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.1 U
1,1-Dichloroethane	0.27 U	0.27 U	0.1 U	0.1 U	0.27 U	0.1 U
1,1-Dichloroethene	0.42 U	0.42 U	0.1 U	0.1 U	0.42 U	0.2 J
1,2-Dichlorobenzene	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U	0.1 U
1,2-Dichloroethane	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U	0.1 U
1,2-Dichloropropane	0.35 U	0.35 U	0.1 U	0.1 U	0.35 U	0.1 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.1 U	0.1 U	0.35 U	0.1 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.1 U	0.1 U	0.37 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	2.6 U	2.6 U	1 U	1 U	2.6 U	1 U
Acetone	4.5 U	4.5 U	3 U	3 U	4.5 U	3 U
Benzene	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U	0.1 U
Bromodichloromethane	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.1 U
Bromoform	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U	0.1 U
Bromomethane	0.42 U	0.42 U	0.1 U	0.1 U	0.42 U	0.1 U
Carbon Disulfide	0.48 U	0.48 U	0.5 L	0.5 U	0.48 U	0.1 U
Carbon Tetrachloride	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U	0.1 U
Chlorobenzene	0.36 U	0.36 U	0.1 U	0.1 U	0.36 U	0.3 J,F
Chloroethane	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U	0.1 U
Chloroform	0.33 U	0.33 U	0.1 U	0.1 U	0.33 U	0.1 U
Chloromethane	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U	0.1 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.1 U	0.1 U	73	73
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.1 U	0.1 U	0.22 U	0.1 U
Dibromochloromethane	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U	0.1 U
Ethylbenzene	0.25 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U
Methyl ethyl ketone	4.7 U	4.7 U	1 U	1 U	4.7 U	1 U
Methyl isobutyl ketone (MIBK)	3.5 U	3.5 U	1 U	1 U	3.5 U	1 U
Methylene chloride	0.95 U	0.95 U	0.2 U	0.2 U	0.95 U	0.2 U
m-Xylene & p-Xylene	0.6 U	0.6 U	0.1 U	0.1 U	0.6 U	0.1 U
o-Xylene	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.1 U
Tetrachloroethene	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U	0.1 U
Toluene	0.36 U	0.36 U	0.1 U	0.1 U	0.36 U	0.1 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.1 U	0.1 U	0.28 J	0.5 J
trans-1,3-Dichloropropene	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U	0.1 U
Trichloroethene	0.26 U	0.26 U	0.1 U	0.1 U	2	5.6
Trichlorofluoromethane	0.34 U	0.34 U	0.1 U	0.1 U	0.34 U	0.1 U
Vinyl chloride	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.1 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008



**TABLE IV**  
**SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS**  
**IN CHATSWORTH FORMATION WELLS, 2007**  
**BOEING SANTA SUSANA FIELD LABORATORY**  
**VENTURA COUNTY, CALIFORNIA**

<b>Well Identifier:</b>	<b>RD-09</b>	<b>RD-09</b>	<b>RD-09</b>	<b>RD-10</b>	<b>RD-10</b>	<b>RD-10</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Duplicate	Split
Lab Name:	TestAmerica	TestAmerica	Lancaster	TestAmerica	TestAmerica	STL-SA
Collection Date:	02/14/2007	05/15/2007	08/14/2007	02/06/2007	02/06/2007	02/06/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.75 U	1.5 U	0.8 U	0.3 U	0.3 U	0.41 UJ
1,1,2,2-Tetrachloroethane	0.6 U	1.2 U	0.5 U	0.24 U	0.24 U	0.37 UJ
1,1,2-Trichloro-1,2,2-trifluoroethane	3.8 U	1.5 U	2 U	1.5 U	1.5 U	1 UJ
1,1,2-Trichloroethane	0.75 U	1.5 U	0.8 U	0.3 U	0.3 U	0.31 UJ
1,1-Dichloroethane	0.68 U	1.4 U	1 U	0.27 U	0.27 U	0.1 UJ
1,1-Dichloroethene	1 U	2.1 U	0.9 J	0.42 U	0.42 U	0.36 UJ
1,2-Dichlorobenzene	0.8 U	1.6 U	1 U	0.32 U	0.32 U	0.14 UJ
1,2-Dichloroethane	0.7 U	1.4 U	0.5 U	0.28 U	0.28 U	0.22 UJ
1,2-Dichloropropane	0.88 U	1.8 U	1 U	0.35 U	0.35 U	0.15 UJ
1,3-Dichlorobenzene	0.88 U	1.8 U	1 U	0.35 U	0.35 U	0.11 UJ
1,4-Dichlorobenzene	0.92 U	1.8 U	1 U	0.37 U	0.37 U	0.13 UJ
1,4-Dioxane	1.6 J	1.9 J	1.4 J	1.1 J	---	---
2-Hexanone	6.5 U	13 U	3 U	2.6 U	2.6 U	1 UJ
Acetone	11 U	22 U	6 U	4.5 U	4.5 U	1 UJ
Benzene	0.7 U	1.4 U	0.5 U	0.28 U	0.28 U	0.13 UJ
Bromodichloromethane	0.75 U	1.5 U	1 U	0.3 U	0.3 U	0.14 UJ
Bromoform	1 U	2 U	1 U	0.4 U	0.4 U	0.1 UJ
Bromomethane	1 U	2.1 U	1 U	0.42 U	0.42 U	0.08 UJ
Carbon Disulfide	1.2 U	2.4 U	1 U	0.48 U	0.48 U	1 UJ
Carbon Tetrachloride	0.7 U	1.4 U	0.5 U	0.28 U	0.28 U	0.15 UJ
Chlorobenzene	0.9 U	1.8 U	0.8 U	0.36 U	0.36 U	0.12 UJ
Chloroethane	1 U	2 U	1 U	0.4 U	0.4 U	0.34 UJ
Chloroform	0.82 U	1.6 U	0.8 U	0.33 U	0.33 U	0.12 UJ
Chloromethane	1 U	2 U	1 U	0.4 U	0.4 U	0.25 UJ
cis-1,2-Dichloroethene	60	64	67	7.5	7.4	8.3 J
cis-1,3-Dichloropropene	0.55 U	1.1 U	1 U	0.22 U	0.22 U	0.22 UJ
Dibromochloromethane	0.7 U	1.4 U	1 U	0.28 U	0.28 U	0.4 UJ
Ethylbenzene	0.62 U	1.2 U	0.8 U	0.25 U	0.25 U	0.27 UJ
Methyl ethyl ketone	9.5 U	24 U	3 U	4.7 U	4.7 U	1 UJ
Methyl isobutyl ketone (MIBK)	8.8 U	18 U	3 U	3.5 U	3.5 U	1 UJ
Methylene chloride	2.4 U	9.8 U	2 U	0.95 U	0.95 U	0.35 UJ
m-Xylene & p-Xylene	1.5 U	3 U	0.8 U	0.6 U	0.6 U	0.18 UJ
o-Xylene	0.75 U	1.5 U	0.8 U	0.3 U	0.3 U	0.1 UJ
Tetrachloroethene	0.8 U	1.6 U	0.8 U	0.32 U	0.32 U	0.38 UJ
Toluene	0.9 U	1.8 U	0.7 U	0.36 U	0.36 U	0.25 UJ
trans-1,2-Dichloroethene	17	18	18	0.39 J	0.51 J	0.54 J
trans-1,3-Dichloropropene	0.8 U	1.6 U	1 U	0.32 U	0.32 U	0.3 UJ
Trichloroethene	490	440	470	14	14	13 J
Trichlorofluoromethane	0.85 U	1.7 U	0.5 U	0.34 U	0.34 U	0.23 UJ
Vinyl chloride	0.75 U	1.5 U	0.8 J	0.3 U	0.3 U	0.12 UJ

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-10</b>	<b>RD-10</b>	<b>RD-10</b>	<b>RD-10</b>	<b>RD-13</b>	<b>RD-13</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Duplicate	Primary	Split
Lab Name:	TestAmerica	Lancaster	Lancaster	Lancaster	TestAmerica	STL-SA
Collection Date:	05/09/2007	08/15/2007	10/23/2007	10/23/2007	02/22/2007	02/22/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.8 U	0.8 U	0.8 U	0.3 U	0.41 U
1,1,2,2-Tetrachloroethane	0.24 U	0.5 U	0.5 U	0.5 U	0.24 U	0.37 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	2 U	2 U	2 U	1.5 U	1 U
1,1,2-Trichloroethane	0.3 U	0.8 U	0.8 U	0.8 U	0.3 U	0.31 U
1,1-Dichloroethane	0.27 U	1 U	1 U	1 U	0.27 U	0.1 U
1,1-Dichloroethene	0.42 U	0.8 U	0.8 U	0.8 U	0.42 U	0.36 U
1,2-Dichlorobenzene	0.32 U	1 U	1 U	1 U	0.32 U	0.14 U
1,2-Dichloroethane	0.28 U	0.5 U	0.5 U	0.5 U	0.28 U	0.22 U
1,2-Dichloropropane	0.35 U	1 U	1 U	1 U	0.35 U	0.15 U
1,3-Dichlorobenzene	0.35 U	1 U	1 U	1 U	0.35 U	0.11 U
1,4-Dichlorobenzene	0.37 U	1 U	1 U	1 U	0.37 U	0.13 U
1,4-Dioxane	1.1 J	1 U	1 U	---	---	---
2-Hexanone	2.6 U	3 U	3 U	3 U	2.6 U	1 U
Acetone	4.5 U	6 U	6 U	6 U	4.5 U	1 U
Benzene	0.28 U	0.5 U	0.5 U	0.5 U	0.28 U	0.13 U
Bromodichloromethane	0.3 U	1 U	1 U	1 U	0.3 U	0.14 U
Bromoform	0.4 U	1 U	1 U	1 U	0.4 U	0.1 U
Bromomethane	0.42 U	1 U	1 U	1 U	0.42 U	0.08 U
Carbon Disulfide	0.48 U	1 U	1 U	1 U	0.48 U	1 U
Carbon Tetrachloride	0.28 U	0.5 U	0.5 U	0.5 U	0.28 U	0.15 U
Chlorobenzene	0.36 U	0.8 U	0.8 U	0.8 U	0.36 U	0.12 U
Chloroethane	0.4 U	1 U	1 U	1 U	0.4 U	0.34 U
Chloroform	0.33 U	0.8 U	0.8 U	0.8 U	0.33 U	0.12 U
Chloromethane	0.4 U	1 U	1 U	1 U	0.4 U	0.25 U
cis-1,2-Dichloroethene	7.2	9	8	8	0.32 U	0.1 U
cis-1,3-Dichloropropene	0.22 U	1 U	1 U	1 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	1 U	1 U	1 U	0.28 U	0.4 U
Ethylbenzene	0.25 U	0.8 U	0.8 U	0.8 U	0.25 U	0.27 U
Methyl ethyl ketone	4.7 U	3 U	3 U	3 U	4.7 U	1 U
Methyl isobutyl ketone (MIBK)	3.5 U	3 U	3 U	3 U	3.5 U	1 U
Methylene chloride	1.1 J,L	2 U	2 U	2 U	0.95 U	0.35 U
m-Xylene & p-Xylene	0.6 U	0.8 U	0.8 U	0.8 U	0.6 U	0.18 U
o-Xylene	0.3 U	0.8 U	0.8 U	0.8 U	0.3 U	0.1 U
Tetrachloroethene	0.32 U	0.8 U	0.8 U	0.8 U	0.32 U	0.38 U
Toluene	0.36 U	0.7 U	0.7 U	0.7 U	0.36 U	0.25 U
trans-1,2-Dichloroethene	0.51 J	0.8 U	0.8 UJ	0.8 UJ	0.27 U	0.11 U
trans-1,3-Dichloropropene	0.32 U	1 U	1 U	1 U	0.32 U	0.3 U
Trichloroethene	13	15	12	12	0.68 J	0.31 U
Trichlorofluoromethane	0.34 U	0.5 U	0.5 U	0.5 U	0.34 U	0.23 U
Vinyl chloride	0.3 U	0.5 U	0.5 U	0.5 U	0.3 U	0.12 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-13</b>	<b>RD-13</b>	<b>RD-13</b>	<b>RD-13</b>	<b>RD-13</b>	<b>RD-15</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Duplicate	Primary	Primary	Split	Primary
Lab Name:	TestAmerica	TestAmerica	Lancaster	Lancaster	TestAmerica	TestAmerica
Collection Date:	05/11/2007	05/11/2007	08/09/2007	10/26/2007	10/26/2007	02/06/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.1 U	0.1 U	0.24 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	1.5 U	0.2 U	0.2 U	1.5 U	1.5 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.1 U	0.1 U	0.27 U	0.27 U
1,1-Dichloroethene	0.42 U	0.42 U	0.1 U	0.1 U	0.42 U	0.42 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.1 U	0.1 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.1 U	0.1 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.1 U	0.1 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	2.6 U	2.6 U	1 U	1 U	2.6 U	2.6 U
Acetone	4.5 U	4.5 U	3 U	3 U	4.5 U	5.2 J,L
Benzene	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U
Bromoform	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U
Bromomethane	0.42 U	0.42 U	0.1 U	0.1 U	0.42 U	0.42 U
Carbon Disulfide	0.48 U	0.48 U	0.1 U	0.1 U	0.48 U	0.48 U
Carbon Tetrachloride	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.1 U	0.1 U	0.36 U	0.36 U
Chloroethane	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U
Chloroform	0.33 U	0.33 U	0.1 U	0.1 U	0.33 U	0.33 U
Chloromethane	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.1 U	0.1 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.1 U	0.1 U	0.25 U	0.25 U
Methyl ethyl ketone	4.7 U	4.7 U	1 U	1 U	4.7 U	4.7 U
Methyl isobutyl ketone (MIBK)	3.5 U	3.5 U	1 U	1 U	3.5 U	3.5 U
Methylene chloride	0.95 U	0.95 U	0.2 U	0.2 U	1.2 U	0.95 U
m-Xylene & p-Xylene	0.6 U	0.6 U	0.1 U	0.1 U	0.6 U	0.6 U
o-Xylene	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U
Tetrachloroethene	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U
Toluene	0.36 U	0.36 U	0.1 U	0.1 U	0.36 U	0.36 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.1 U	0.1 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U
Trichloroethene	0.27 J	0.26 U	0.3 J	0.3 J	0.45 U	0.26 U
Trichlorofluoromethane	0.34 U	0.34 U	0.1 U	0.1 U	0.34 U	0.34 U
Vinyl chloride	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-16</b>	<b>RD-16</b>	<b>RD-16</b>	<b>RD-16</b>	<b>RD-17</b>	<b>RD-18</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:	TestAmerica	TestAmerica	Lancaster	Lancaster	TestAmerica	TestAmerica
Collection Date:	02/21/2007	05/24/2007	08/10/2007	10/30/2007	02/06/2007	02/28/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.1 U	0.1 U	0.24 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	1.5 U	0.2 U	0.2 U	1.5 U	1.5 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.1 U	0.1 U	0.27 U	0.27 U
1,1-Dichloroethene	0.42 U	0.42 U	0.1 U	0.1 U	0.42 U	0.42 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.1 U	0.1 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.1 U	0.1 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.1 U	0.1 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	2.6 U	2.6 U	1 U	1 U	2.6 U	2.6 U
Acetone	4.5 U	4.5 U	3 U	3 U	4.5 U	4.5 U
Benzene	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U
Bromoform	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U
Bromomethane	0.42 U	0.42 U	0.1 U	0.1 U	0.42 U	0.42 U
Carbon Disulfide	0.48 U	0.48 U	0.1 U	0.1 U	0.48 U	0.48 U
Carbon Tetrachloride	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.1 U	0.1 U	0.36 U	0.36 U
Chloroethane	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U
Chloroform	0.33 U	0.33 U	0.1 U	0.1 U	0.33 U	0.33 U
Chloromethane	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.1 U	0.1 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.1 U	0.1 U	0.25 U	0.25 U
Methyl ethyl ketone	4.7 U	4.7 U	1 U	1 U	4.7 U	4.7 U
Methyl isobutyl ketone (MIBK)	3.5 U	3.5 U	1 U	1 U	3.5 U	3.5 U
Methylene chloride	0.95 U	0.95 U	0.2 U	0.2 U	0.95 U	0.95 U
m-Xylene & p-Xylene	0.6 U	0.6 U	0.1 U	0.1 U	0.6 U	0.6 U
o-Xylene	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U
Tetrachloroethene	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U
Toluene	0.36 U	0.36 U	0.1 U	0.1 U	0.36 U	0.36 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.1 U	0.1 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U
Trichloroethene	0.26 U	0.26 U	0.1 U	0.1 U	1.1	0.43 J
Trichlorofluoromethane	0.34 U	0.34 U	0.1 U	0.1 U	0.34 U	0.34 U
Vinyl chloride	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-18</b>	<b>RD-18</b>	<b>RD-18</b>	<b>RD-19</b>	<b>RD-19</b>	<b>RD-19</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Duplicate	Split
Lab Name:	TestAmerica	Lancaster	Lancaster	TestAmerica	TestAmerica	STL-SA
Collection Date:	05/18/2007	08/14/2007	10/23/2007	02/28/2007	02/28/2007	02/28/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U	0.41 U
1,1,2,2-Tetrachloroethane	0.24 U	0.1 U	0.1 U	0.24 U	0.24 U	0.37 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	0.2 U	0.2 U	1.5 U	1.5 U	1 U
1,1,2-Trichloroethane	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U	0.31 U
1,1-Dichloroethane	0.27 U	0.1 U	0.1 U	0.27 U	0.27 U	0.1 U
1,1-Dichloroethene	0.42 U	0.1 U	0.1 U	0.42 U	0.42 U	0.36 U
1,2-Dichlorobenzene	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U	0.14 U
1,2-Dichloroethane	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U	0.22 U
1,2-Dichloropropane	0.35 U	0.1 U	0.1 U	0.35 U	0.35 U	0.15 U
1,3-Dichlorobenzene	0.35 U	0.1 U	0.1 U	0.35 U	0.35 U	0.11 U
1,4-Dichlorobenzene	0.37 U	0.1 U	0.1 U	0.37 U	0.37 U	0.13 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	2.6 U	1 U	1 U	2.6 U	2.6 U	1 U
Acetone	4.5 U	3 U	3 U	4.5 U	4.5 U	1 U
Benzene	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U	0.13 U
Bromodichloromethane	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U	0.14 U
Bromoform	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U	0.1 U
Bromomethane	0.42 U	0.1 U	0.1 U	0.42 U	0.42 U	0.08 U
Carbon Disulfide	0.48 U	0.1 U	0.1 U	0.48 U	0.48 U	1 U
Carbon Tetrachloride	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U	0.15 U
Chlorobenzene	0.36 U	0.1 U	0.1 U	0.36 U	0.36 U	0.12 U
Chloroethane	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U	0.34 U
Chloroform	0.33 U	0.1 U	0.1 U	0.33 U	0.33 U	0.12 U
Chloromethane	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U	0.25 U
cis-1,2-Dichloroethene	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U	0.1 U
cis-1,3-Dichloropropene	0.22 U	0.1 U	0.1 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U	0.4 U
Ethylbenzene	0.25 U	0.1 U	0.1 U	0.25 U	0.25 U	0.27 U
Methyl ethyl ketone	4.7 U	1 U	1 U	4.7 U	4.7 U	1 U
Methyl isobutyl ketone (MIBK)	3.5 U	1 U	1 U	3.5 U	3.5 U	1 U
Methylene chloride	0.95 U	0.2 U	0.2 U	0.95 U	0.95 U	0.35 U
m-Xylene & p-Xylene	0.6 U	0.1 U	0.1 U	0.6 U	0.6 U	0.18 U
o-Xylene	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U	0.1 U
Tetrachloroethene	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U	0.38 U
Toluene	0.36 U	0.1 U	0.1 U	0.36 U	0.36 U	0.25 U
trans-1,2-Dichloroethene	0.27 U	0.1 U	0.1 U	0.27 U	0.27 U	0.11 U
trans-1,3-Dichloropropene	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U	0.3 U
Trichloroethene	0.72 J	0.1 J	0.1 U	0.26 U	0.26 U	0.31 U
Trichlorofluoromethane	0.34 U	0.1 U	0.1 U	0.34 U	0.34 U	0.23 U
Vinyl chloride	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U	0.12 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-19</b>	<b>RD-19</b>	<b>RD-19</b>	<b>RD-21</b>	<b>RD-21</b>	<b>RD-22</b>
Sample Port:	---	---	---	Z2	Z2	Z2
Sample Type:	Primary	Primary	Duplicate	Primary	Primary	Primary
Lab Name:	TestAmerica	Lancaster	Lancaster	TestAmerica	Lancaster	TestAmerica
Collection Date:	05/17/2007	08/08/2007	08/08/2007	02/07/2007	08/09/2007	02/07/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.1 U	0.1 U	0.3 U	0.8 U	0.3 U
1,1,2,2-Tetrachloroethane	0.24 U	0.1 U	0.1 U	0.24 U	0.5 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	0.2 U	0.2 U	1.5 U	2 U	1.5 U
1,1,2-Trichloroethane	0.3 U	0.1 U	0.1 U	0.3 U	0.8 U	0.3 U
1,1-Dichloroethane	0.27 U	0.1 U	0.1 U	0.27 U	1 U	0.27 U
1,1-Dichloroethene	0.42 U	0.1 U	0.1 U	1.4	2 J	0.42 U
1,2-Dichlorobenzene	0.32 U	0.1 U	0.1 U	0.32 U	1 U	0.32 U
1,2-Dichloroethane	0.28 U	0.1 U	0.1 U	0.28 U	0.5 U	0.28 U
1,2-Dichloropropane	0.35 U	0.1 U	0.1 U	0.35 U	1 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.1 U	0.1 U	0.35 U	1 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.1 U	0.1 U	0.37 U	1 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	2.6 U	1 U	1 U	2.6 U	3 U	2.6 U
Acetone	5.3 J,L	3 U	3 U	4.5 U	6 U	5 J,F
Benzene	0.28 U	0.1 U	0.1 U	0.57 F	0.5 U	0.28 U
Bromodichloromethane	0.3 U	0.1 U	0.1 U	0.3 U	1 U	0.3 U
Bromoform	0.4 U	0.1 U	0.1 U	0.4 U	1 U	0.4 U
Bromomethane	0.42 U	0.1 U	0.1 U	0.42 U	1 U	0.42 U
Carbon Disulfide	0.48 U	0.1 U	0.1 U	0.48 U	1 U	0.48 U
Carbon Tetrachloride	0.28 U	0.1 U	0.1 U	5.5	8	0.28 U
Chlorobenzene	0.36 U	0.1 U	0.1 U	0.36 J,F	0.8 U	0.73 J,F
Chloroethane	0.4 U	0.1 U	0.1 U	0.4 U	1 U	0.4 U
Chloroform	0.33 U	0.1 U	0.1 U	6.8	7	0.33 U
Chloromethane	0.4 U	0.1 U	0.1 U	0.4 U	1 U	0.4 U
cis-1,2-Dichloroethene	0.32 U	0.1 U	0.1 U	580	490	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.1 U	0.1 U	0.22 U	1 U	0.22 U
Dibromochloromethane	0.28 U	0.1 U	0.1 U	0.28 U	1 U	0.28 U
Ethylbenzene	0.25 U	0.1 U	0.1 U	0.25 U	0.8 U	0.25 U
Methyl ethyl ketone	4.7 U	1 U	1 U	4.7 U	3 U	4.7 U
Methyl isobutyl ketone (MIBK)	3.5 U	1 U	1 U	3.5 U	3 U	3.5 U
Methylene chloride	0.95 U	0.2 U	0.2 U	0.95 U	2 U	0.95 U
m-Xylene & p-Xylene	0.6 U	0.1 U	0.1 U	0.6 U	0.8 U	0.6 U
o-Xylene	0.3 U	0.1 U	0.1 U	0.3 U	0.8 U	0.3 U
Tetrachloroethene	0.32 U	0.1 U	0.1 U	0.32 U	0.8 U	0.32 U
Toluene	0.36 U	0.1 U	0.1 U	6.7 F	7 F	0.36 U
trans-1,2-Dichloroethene	0.27 U	0.1 U	0.1 U	3.4	1 J	0.27 U
trans-1,3-Dichloropropene	0.32 U	0.1 U	0.1 U	0.32 U	1 U	0.32 U
Trichloroethene	0.26 U	0.1 U	0.1 U	190	210	0.26 U
Trichlorofluoromethane	0.34 U	0.1 U	0.1 U	0.34 U	0.5 U	0.34 U
Vinyl chloride	0.3 U	0.1 U	0.1 U	0.3 U	0.5 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
**SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS**  
**IN CHATSWORTH FORMATION WELLS, 2007**  
**BOEING SANTA SUSANA FIELD LABORATORY**  
**VENTURA COUNTY, CALIFORNIA**

<b>Well Identifier:</b>	<b>RD-22</b>	<b>RD-22</b>	<b>RD-22</b>	<b>RD-22</b>	<b>RD-23</b>	<b>RD-23</b>
Sample Port:	Z2	Z2	Z2	Z2	Z3	Z3
Sample Type:	Primary	Primary	Primary	Split	Primary	Primary
Lab Name:	TestAmerica	Lancaster	Lancaster	TestAmerica	TestAmerica	Lancaster
Collection Date:	05/21/2007	08/09/2007	11/06/2007	11/06/2007	02/07/2007	08/09/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U	0.8 U
1,1,2,2-Tetrachloroethane	0.24 U	0.1 U	0.1 U	0.24 U	0.24 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	0.2 U	0.2 U	1.5 U	1.5 U	2 U
1,1,2-Trichloroethane	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U	0.8 U
1,1-Dichloroethane	0.27 U	0.1 U	0.1 U	0.27 U	1.7	2 J
1,1-Dichloroethene	0.42 U	0.1 U	0.1 U	0.42 U	4.4	9
1,2-Dichlorobenzene	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U	1 U
1,2-Dichloroethane	0.28 U	0.1 U	0.1 U	0.28 U	1.3	0.5 U
1,2-Dichloropropane	0.35 U	0.1 U	0.1 U	0.35 U	0.35 U	1 U
1,3-Dichlorobenzene	0.35 U	0.1 U	0.1 U	0.35 U	0.35 U	1 U
1,4-Dichlorobenzene	0.37 U	0.1 U	0.1 U	0.37 U	0.37 U	1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	2.6 U	1 U	1 U	2.6 U	2.6 U	3 U
Acetone	4.5 U	3 U	3.1 J,F	4.5 U	7.8 J,F	6 U
Benzene	0.28 U	0.1 U	0.1 J,F	0.28 U	0.28 U	0.5 U
Bromodichloromethane	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U	1 U
Bromoform	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U	1 U
Bromomethane	0.42 U	0.1 U	0.1 U	0.42 U	0.42 U	1 U
Carbon Disulfide	0.48 U	0.1 U	0.1 J,L	0.48 U	0.48 U	1 U
Carbon Tetrachloride	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U	0.5 U
Chlorobenzene	0.36 U	1.4 F	1.3 F	0.36 U	0.36 U	0.8 U
Chloroethane	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U	1 U
Chloroform	0.33 U	0.1 U	0.1 U	0.33 U	0.33 U	0.8 U
Chloromethane	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U	1 U
cis-1,2-Dichloroethene	0.32 U	0.1 U	0.1 U	0.32 U	29	87
cis-1,3-Dichloropropene	0.22 U	0.1 U	0.1 U	0.22 U	0.22 U	1 U
Dibromochloromethane	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U	1 U
Ethylbenzene	0.25 U	0.1 U	0.1 U	0.25 U	0.25 U	0.8 U
Methyl ethyl ketone	4.7 U	1 U	1 U	4.7 U	4.7 U	3 U
Methyl isobutyl ketone (MIBK)	3.5 U	1 U	1 U	3.5 U	3.5 U	3 U
Methylene chloride	0.95 U	0.2 U	0.2 U	0.95 U	1.1 J,L	2 U
m-Xylene & p-Xylene	0.6 U	0.1 U	0.1 U	0.6 U	0.6 U	0.8 U
o-Xylene	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U	0.8 U
Tetrachloroethene	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U	0.8 U
Toluene	0.36 U	0.1 J,F	0.1 J,F	0.36 U	0.62 J,F	0.8 J,F
trans-1,2-Dichloroethene	0.27 U	0.1 U	0.1 U	0.27 U	0.27 U	0.8 U
trans-1,3-Dichloropropene	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U	1 U
Trichloroethene	0.26 U	0.1 U	0.1 U	0.26 U	350	490
Trichlorofluoromethane	0.34 U	0.1 U	0.1 U	0.34 U	0.34 U	0.5 U
Vinyl chloride	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U	0.5 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
**SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS**  
**IN CHATSWORTH FORMATION WELLS, 2007**  
**BOEING SANTA SUSANA FIELD LABORATORY**  
**VENTURA COUNTY, CALIFORNIA**

<b>Well Identifier:</b>	<b>RD-24</b>	<b>RD-24</b>	<b>RD-26</b>	<b>RD-26</b>	<b>RD-27</b>	<b>RD-27</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:	Lancaster	Lancaster	TestAmerica	Lancaster	TestAmerica	Lancaster
Collection Date:	05/24/2007	08/08/2007	02/23/2007	08/27/2007	02/21/2007	08/09/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.8 U	0.1 U	0.3 U	0.1 U	0.3 U	0.1 U
1,1,2,2-Tetrachloroethane	0.5 U	0.1 U	0.24 U	0.1 U	0.24 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	2 U	0.2 U	1.5 U	0.2 U	1.5 U	0.2 U
1,1,2-Trichloroethane	0.8 U	0.1 U	0.3 U	0.1 U	0.3 U	0.1 U
1,1-Dichloroethane	1 U	0.1 U	0.27 U	0.1 U	0.27 U	0.1 U
1,1-Dichloroethene	0.8 U	0.1 U	0.42 U	0.1 U	0.42 U	0.1 U
1,2-Dichlorobenzene	1 U	0.1 U	0.32 U	0.1 U	0.32 U	0.1 U
1,2-Dichloroethane	0.5 U	0.1 U	0.28 U	0.1 U	0.28 U	0.1 U
1,2-Dichloropropane	1 U	0.1 U	0.35 U	0.1 U	0.35 U	0.1 U
1,3-Dichlorobenzene	1 U	0.1 U	0.35 U	0.1 U	0.35 U	0.1 U
1,4-Dichlorobenzene	1 U	0.1 U	0.37 U	0.1 U	0.37 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	3 U	1 U	2.6 U	1 U	2.6 U	1 U
Acetone	6 U	3 U	4.5 U	3 U	4.5 U	3 U
Benzene	0.5 U	0.1 U	0.28 U	0.1 U	0.28 U	0.1 U
Bromodichloromethane	1 U	0.1 U	0.3 U	0.1 U	0.3 U	0.1 U
Bromoform	1 U	0.1 U	0.4 U	0.1 U	0.4 U	0.1 U
Bromomethane	1 U	0.1 U	0.42 U	0.1 U	0.42 U	0.1 U
Carbon Disulfide	1 U	0.1 U	0.48 U	0.1 U	0.48 U	0.1 U
Carbon Tetrachloride	0.5 U	0.1 U	0.28 U	0.1 J	0.28 U	0.1 U
Chlorobenzene	0.8 U	0.1 U	0.36 U	0.1 U	0.36 U	0.1 U
Chloroethane	1 U	0.1 U	0.4 U	0.1 U	0.4 U	0.1 U
Chloroform	0.8 U	0.1 U	0.33 U	0.1 J	0.33 U	0.1 U
Chloromethane	1 U	0.1 U	0.4 U	0.1 U	0.4 U	0.1 U
cis-1,2-Dichloroethene	0.8 U	0.4 J	0.32 U	0.1 U	0.32 U	0.1 U
cis-1,3-Dichloropropene	1 U	0.1 U	0.22 U	0.1 U	0.22 U	0.1 U
Dibromochloromethane	1 U	0.1 U	0.28 U	0.1 U	0.28 U	0.1 U
Ethylbenzene	0.8 U	0.1 U	0.25 U	0.1 U	0.25 U	0.1 U
Methyl ethyl ketone	3 U	1 U	4.7 U	1 U	4.7 U	1 U
Methyl isobutyl ketone (MIBK)	3 U	1 U	3.5 U	1 U	3.5 U	1 U
Methylene chloride	2 U	0.2 U	0.97 U	0.2 U	0.95 U	0.2 U
m-Xylene & p-Xylene	0.8 U	0.1 U	0.6 U	0.1 U	0.6 U	0.1 U
o-Xylene	0.8 U	0.1 U	0.3 U	0.1 U	0.3 U	0.1 U
Tetrachloroethene	0.8 U	0.1 J	0.32 U	0.1 U	0.32 U	0.1 U
Toluene	0.7 U	0.1 U	0.36 U	0.1 U	0.36 U	0.1 U
trans-1,2-Dichloroethene	0.8 U	0.1 U	0.27 U	0.1 U	0.27 U	0.1 U
trans-1,3-Dichloropropene	1 U	0.1 U	0.32 U	0.1 U	0.32 U	0.1 U
Trichloroethene	0.5 U	0.2 J	2.2	1.9	0.26 U	0.1 U
Trichlorofluoromethane	0.5 U	0.1 U	0.34 U	0.1 U	0.34 U	0.1 U
Vinyl chloride	0.5 U	0.1 U	0.3 U	0.1 U	0.3 U	0.1 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008



**TABLE IV**  
**SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS**  
**IN CHATSWORTH FORMATION WELLS, 2007**  
**BOEING SANTA SUSANA FIELD LABORATORY**  
**VENTURA COUNTY, CALIFORNIA**

<b>Well Identifier:</b>	<b>RD-29</b>	<b>RD-30</b>	<b>RD-30</b>	<b>RD-32</b>	<b>RD-32</b>	<b>RD-32</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:	TestAmerica	Lancaster	Lancaster	TestAmerica	TestAmerica	Lancaster
Collection Date:	02/07/2007	05/24/2007	08/21/2007	02/20/2007	05/22/2007	08/27/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.8 U	0.1 U	0.3 U	0.3 U	0.1 U
1,1,2,2-Tetrachloroethane	0.24 U	0.5 U	0.1 U	0.24 U	0.24 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	2 J	2.5	1.5 U	1.5 U	0.2 U
1,1,2-Trichloroethane	0.3 U	0.8 U	0.1 U	0.3 U	0.3 U	0.1 U
1,1-Dichloroethane	0.27 U	1 U	0.1 J	0.27 U	0.27 U	0.1 U
1,1-Dichloroethene	0.42 U	0.8 U	0.2 J	0.42 U	0.42 U	0.1 U
1,2-Dichlorobenzene	0.32 U	1 U	0.1 U	0.32 U	0.32 U	0.1 U
1,2-Dichloroethane	0.28 U	0.5 U	0.1 U	0.28 U	0.28 U	0.1 U
1,2-Dichloropropane	0.35 U	1 U	0.1 U	0.35 U	0.35 U	0.1 U
1,3-Dichlorobenzene	0.35 U	1 U	0.1 U	0.35 U	0.35 U	0.1 U
1,4-Dichlorobenzene	0.37 U	1 U	0.1 U	0.37 U	0.37 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	2.6 U	3 U	1 U	2.6 U	2.6 U	1 U
Acetone	4.5 U	6 U	3 U	4.5 U	4.5 U	3 U
Benzene	0.28 U	0.5 U	0.1 U	0.28 U	0.28 U	0.1 U
Bromodichloromethane	0.3 U	1 U	0.1 U	0.3 U	0.3 U	0.1 U
Bromoform	0.4 U	1 U	0.1 U	0.4 U	0.4 U	0.1 U
Bromomethane	0.42 U	1 U	0.1 U	0.42 U	0.42 U	0.1 U
Carbon Disulfide	0.48 U	1 U	0.1 U	0.48 U	0.48 U	0.1 U
Carbon Tetrachloride	0.28 U	0.5 U	0.1 U	0.28 U	0.28 U	0.1 U
Chlorobenzene	0.36 U	0.8 U	0.1 U	0.36 U	0.36 U	0.1 U
Chloroethane	0.4 U	1 U	0.1 U	0.4 U	0.4 U	0.1 U
Chloroform	0.33 U	0.8 U	0.1 J	0.33 U	0.33 U	0.1 U
Chloromethane	0.4 U	1 U	0.1 U	0.4 U	0.4 U	0.1 U
cis-1,2-Dichloroethene	0.32 U	0.8 U	0.7	0.32 U	0.32 U	0.1 U
cis-1,3-Dichloropropene	0.22 U	1 U	0.1 U	0.22 U	0.22 U	0.1 U
Dibromochloromethane	0.28 U	1 U	0.1 U	0.28 U	0.28 U	0.1 U
Ethylbenzene	0.25 U	0.8 U	0.1 U	0.25 U	0.25 U	0.1 U
Methyl ethyl ketone	4.7 U	3 U	1 U	4.7 U	4.7 U	1 U
Methyl isobutyl ketone (MIBK)	3.5 U	3 U	1 U	3.5 U	3.5 U	1 U
Methylene chloride	0.95 U	2 U	0.2 U	0.95 U	0.95 U	0.2 U
m-Xylene & p-Xylene	0.6 U	0.8 U	0.1 U	0.6 U	0.6 U	0.1 U
o-Xylene	0.3 U	0.8 U	0.1 U	0.3 U	0.3 U	0.1 U
Tetrachloroethene	0.32 U	0.8 U	0.7	0.32 U	0.32 U	0.1 U
Toluene	0.36 U	0.7 U	0.1 U	0.36 U	0.36 U	0.1 U
trans-1,2-Dichloroethene	0.27 U	0.8 U	0.1 U	0.27 U	0.27 U	0.1 U
trans-1,3-Dichloropropene	0.32 U	1 U	0.1 U	0.32 U	0.32 U	0.1 U
Trichloroethene	1.3	11	12	0.26 U	0.26 U	0.1 U
Trichlorofluoromethane	0.34 U	0.5 U	0.1 U	0.34 U	0.34 U	0.1 U
Vinyl chloride	0.3 U	0.5 U	0.1 U	0.3 U	0.3 U	0.1 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-32</b>	<b>RD-32</b>	<b>RD-32</b>	<b>RD-33A</b>	<b>RD-33A</b>	<b>RD-33A</b>
Sample Port:	---	---	---	Z2	Z2	Z2
Sample Type:	Duplicate	Split	Primary	Primary	Primary	Duplicate
Lab Name:	Lancaster	TestAmerica	Lancaster	TestAmerica	Lancaster	Lancaster
Collection Date:	08/27/2007	08/27/2007	11/02/2007	02/08/2007	08/13/2007	08/13/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.1 U	0.3 U	0.1 U	0.3 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.1 U	0.24 U	0.1 U	0.24 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	1.5 U	0.2 U	1.5 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.1 U	0.3 U	0.1 U	0.3 U	0.1 U	0.1 U
1,1-Dichloroethane	0.1 U	0.27 U	0.1 U	0.27 U	0.4 J	0.4 J
1,1-Dichloroethene	0.1 U	0.42 U	0.1 U	0.42 U	0.8	0.9
1,2-Dichlorobenzene	0.1 U	0.32 U	0.1 U	0.32 U	0.1 U	0.1 U
1,2-Dichloroethane	0.1 U	0.28 U	0.1 U	0.28 U	0.1 U	0.1 U
1,2-Dichloropropane	0.1 U	0.35 U	0.1 U	0.35 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.1 U	0.35 U	0.1 U	0.35 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.1 U	0.37 U	0.1 U	0.37 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	2.6 U	1 U	2.6 U	1 U	1 U
Acetone	3 U	4.5 U	3 U	8.4 J,L	3 U	3 U
Benzene	0.1 U	0.28 U	0.1 U	0.41 J,F	0.3 J,F	0.4 J,F
Bromodichloromethane	0.1 U	0.3 U	0.1 U	0.3 U	0.1 U	0.1 U
Bromoform	0.1 U	0.4 U	0.1 U	0.4 U	0.1 U	0.1 U
Bromomethane	0.1 U	0.42 U	0.1 U	0.42 U	0.1 U	0.1 U
Carbon Disulfide	0.1 U	0.48 U	0.1 U	0.48 U	0.1 U	0.1 U
Carbon Tetrachloride	0.1 U	0.28 U	0.1 U	0.28 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.36 U	0.1 U	0.36 U	0.2 J,F	0.2 J,F
Chloroethane	0.1 U	0.4 U	0.1 U	0.4 U	0.1 U	0.1 U
Chloroform	0.1 U	0.33 U	0.1 U	0.33 U	0.1 U	0.1 U
Chloromethane	0.1 U	0.4 U	0.1 U	0.4 U	0.1 U	0.1 U
cis-1,2-Dichloroethene	0.1 U	0.32 U	0.1 U	2.6	3.8	4.4
cis-1,3-Dichloropropene	0.1 U	0.22 U	0.1 U	0.22 U	0.1 U	0.1 U
Dibromochloromethane	0.1 U	0.28 U	0.1 U	0.28 U	0.1 U	0.1 U
Ethylbenzene	0.1 U	0.25 U	0.1 U	0.25 U	0.1 U	0.1 U
Methyl ethyl ketone	1 U	4.7 U	1 U	4.7 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	3.5 U	1 U	3.5 U	1 U	1 U
Methylene chloride	0.2 U	1.4 U	0.2 U	0.95 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.1 U	0.6 U	0.1 U	0.6 U	0.1 U	0.1 U
o-Xylene	0.1 U	0.3 U	0.1 U	0.3 U	0.1 U	0.1 U
Tetrachloroethene	0.1 U	0.32 U	0.1 U	0.32 U	0.1 U	0.1 U
Toluene	0.1 U	0.36 U	0.1 U	0.92 J,F	0.3 J,F	0.2 J,F
trans-1,2-Dichloroethene	0.1 U	0.27 U	0.1 U	0.27 U	0.5 J	0.6
trans-1,3-Dichloropropene	0.1 U	0.32 U	0.1 U	0.32 U	0.1 U	0.1 U
Trichloroethene	0.1 U	0.26 U	0.1 U	0.26 U	0.2 J	0.1 J
Trichlorofluoromethane	0.1 U	0.34 U	0.1 U	0.34 U	0.1 U	0.1 U
Vinyl chloride	0.1 U	0.3 U	0.1 U	0.3 U	0.1 U	0.1 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-33B</b>	<b>RD-33B</b>	<b>RD-33B</b>	<b>RD-33C</b>	<b>RD-33C</b>	<b>RD-33C</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Split
Lab Name:	TestAmerica	TestAmerica	Lancaster	TestAmerica	TestAmerica	STL-SA
Collection Date:	02/07/2007	05/23/2007	08/14/2007	02/06/2007	05/23/2007	05/23/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.3 U	0.1 U	0.3 U	0.3 U	0.41 U
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.1 U	0.24 U	0.24 U	0.37 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	1.5 U	0.2 U	1.5 U	1.5 U	1 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.1 U	0.3 U	0.3 U	0.31 U
1,1-Dichloroethane	0.27 U	0.27 U	0.1 U	0.27 U	0.27 U	0.1 U
1,1-Dichloroethene	0.42 U	0.42 U	0.1 U	0.42 U	0.42 U	0.36 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.1 U	0.32 U	0.32 U	0.14 U
1,2-Dichloroethane	0.28 U	0.28 U	0.1 U	0.28 U	0.28 U	0.22 U
1,2-Dichloropropane	0.35 U	0.35 U	0.1 U	0.35 U	0.35 U	0.15 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.1 U	0.35 U	0.35 U	0.11 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.1 U	0.37 U	0.37 U	0.13 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	2.6 U	2.6 U	1 U	2.6 U	2.6 U	1 U
Acetone	6.3 J,L	5.7 J	3 U	4.5 U	4.5 U	1 U
Benzene	0.28 U	0.28 U	0.1 U	0.28 U	0.28 U	0.13 U
Bromodichloromethane	0.3 U	0.3 U	0.1 U	0.3 U	0.3 U	0.14 U
Bromoform	0.4 U	0.4 U	0.1 U	0.4 U	0.4 U	0.1 U
Bromomethane	0.42 U	0.42 U	0.1 U	0.42 U	0.42 U	0.08 U
Carbon Disulfide	0.48 U	0.48 U	0.5 U	0.48 U	0.48 U	1 U
Carbon Tetrachloride	0.28 U	0.28 U	0.1 U	0.28 U	0.28 U	0.15 U
Chlorobenzene	0.36 U	0.36 U	0.1 U	0.36 U	0.36 U	0.12 U
Chloroethane	0.4 U	0.4 U	0.1 U	0.4 U	0.4 U	0.34 U
Chloroform	0.33 U	0.33 U	0.1 U	0.33 U	0.33 U	0.12 U
Chloromethane	0.4 U	0.4 U	0.1 U	0.4 U	0.4 U	0.25 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.1 U	0.32 U	0.32 U	0.1 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.1 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.1 U	0.28 U	0.28 U	0.4 U
Ethylbenzene	0.25 U	0.25 U	0.1 U	0.25 U	0.25 U	0.27 U
Methyl ethyl ketone	4.7 U	4.7 U	1 U	4.7 U	4.7 U	1 U
Methyl isobutyl ketone (MIBK)	3.5 U	3.5 U	1 U	3.5 U	3.5 U	1 U
Methylene chloride	0.95 U	0.95 U	0.2 U	0.95 U	0.95 U	0.35 U
m-Xylene & p-Xylene	0.6 U	0.6 U	0.1 U	0.6 U	0.6 U	0.18 U
o-Xylene	0.3 U	0.3 U	0.1 U	0.3 U	0.3 U	0.1 U
Tetrachloroethene	0.32 U	0.32 U	0.1 U	0.32 U	0.32 U	0.38 U
Toluene	0.36 U	0.36 U	0.1 U	0.36 U	0.36 U	0.25 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.1 U	0.27 U	0.27 U	0.11 U
trans-1,3-Dichloropropene	0.32 U	0.32 U	0.1 U	0.32 U	0.32 U	0.3 U
Trichloroethene	0.26 U	0.26 U	0.1 U	0.26 U	0.26 U	0.31 U
Trichlorofluoromethane	0.34 U	0.34 U	0.1 U	0.34 U	0.34 U	0.23 U
Vinyl chloride	0.3 U	0.3 U	0.1 U	0.3 U	0.3 U	0.12 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-33C</b>	<b>RD-33C</b>	<b>RD-33C</b>	<b>RD-34A</b>	<b>RD-34A</b>	<b>RD-34B</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Split	Primary	Primary	Primary
Lab Name:	Lancaster	Lancaster	TestAmerica	TestAmerica	Lancaster	Lancaster
Collection Date:	08/07/2007	11/01/2007	11/01/2007	02/28/2007	08/15/2007	08/14/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.1 U	0.1 U	0.3 U	0.3 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.1 U	0.1 U	0.24 U	0.24 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	1.5 U	1.5 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.1 U	0.1 U	0.3 U	0.3 U	0.1 U	0.1 U
1,1-Dichloroethane	0.1 U	0.1 U	0.27 U	0.27 U	0.2 J	0.1 U
1,1-Dichloroethene	0.1 U	0.1 U	0.42 U	0.42 U	0.6	0.2 J
1,2-Dichlorobenzene	0.1 U	0.1 U	0.32 U	0.32 U	0.1 U	0.1 U
1,2-Dichloroethane	0.1 U	0.1 U	0.28 U	0.28 U	0.1 U	0.1 U
1,2-Dichloropropane	0.1 U	0.1 U	0.35 U	0.35 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.1 U	0.1 U	0.35 U	0.35 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.1 U	0.1 U	0.37 U	0.37 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	1 U	2.6 U	2.6 U	1 U	1 U
Acetone	3 U	3 U	4.5 U	4.5 U	3 U	3 U
Benzene	0.1 U	0.1 U	0.28 U	0.28 U	0.1 U	0.1 U
Bromodichloromethane	0.1 U	0.1 U	0.3 U	0.3 U	0.1 U	0.1 U
Bromoform	0.1 U	0.1 U	0.4 U	0.4 U	0.1 U	0.1 U
Bromomethane	0.1 U	0.1 U	0.42 U	0.42 U	0.1 U	0.1 U
Carbon Disulfide	0.1 U	0.9 U	0.48 U	0.48 U	0.1 J,L	1.2 L
Carbon Tetrachloride	0.1 U	0.1 U	0.28 U	0.28 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.1 U	0.36 U	0.36 U	0.1 U	0.1 U
Chloroethane	0.1 U	0.1 U	0.4 U	0.4 U	0.1 U	0.1 U
Chloroform	0.1 U	0.1 U	0.33 U	0.33 U	0.1 U	0.1 U
Chloromethane	0.1 U	0.1 U	0.4 U	0.4 U	0.1 U	0.1 U
cis-1,2-Dichloroethene	0.1 U	0.1 U	0.32 U	1	0.6	0.4 J
cis-1,3-Dichloropropene	0.1 U	0.1 U	0.22 U	0.22 U	0.1 U	0.1 U
Dibromochloromethane	0.1 U	0.1 U	0.28 U	0.28 U	0.1 U	0.1 U
Ethylbenzene	0.1 U	0.1 U	0.25 U	0.25 U	0.1 U	0.1 U
Methyl ethyl ketone	1 U	1 U	4.7 U	4.7 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	3.5 U	3.5 U	1 U	1 U
Methylene chloride	0.2 U	0.2 U	0.95 U	0.95 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.1 U	0.1 U	0.6 U	0.6 U	0.1 U	0.1 U
o-Xylene	0.1 U	0.1 U	0.3 U	0.3 U	0.1 U	0.1 U
Tetrachloroethene	0.1 U	0.1 U	0.32 U	0.32 U	0.1 U	0.1 U
Toluene	0.1 U	0.1 U	0.36 U	0.36 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	0.1 U	0.1 U	0.27 U	0.27 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	0.1 U	0.1 U	0.32 U	0.32 U	0.1 U	0.1 U
Trichloroethene	0.1 U	0.1 U	0.26 U	5.7	3.1	0.6
Trichlorofluoromethane	0.1 U	0.1 U	0.34 U	0.34 U	0.1 U	0.1 U
Vinyl chloride	0.1 U	0.1 U	0.3 U	0.3 U	0.1 U	0.1 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-34C</b>	<b>RD-34C</b>	<b>RD-36B</b>	<b>RD-36B</b>	<b>RD-36C</b>	<b>RD-36C</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:	TestAmerica	Lancaster	TestAmerica	Lancaster	TestAmerica	Lancaster
Collection Date:	02/07/2007	08/08/2007	02/19/2007	08/24/2007	02/20/2007	08/24/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.1 U	0.3 U	0.8 U	0.3 U	0.8 U
1,1,2,2-Tetrachloroethane	0.24 U	0.1 U	0.24 U	0.5 U	0.24 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	0.2 U	1.5 U	2 U	1.5 U	2 U
1,1,2-Trichloroethane	0.3 U	0.1 U	0.3 U	0.8 U	0.3 U	0.8 U
1,1-Dichloroethane	0.27 U	0.1 U	0.27 U	1 U	0.97 J	1 U
1,1-Dichloroethene	0.42 U	0.1 U	0.42 U	0.8 U	3.9	4 J
1,2-Dichlorobenzene	0.32 U	0.1 U	0.32 U	1 U	0.32 U	1 U
1,2-Dichloroethane	0.28 U	0.1 U	0.28 U	0.5 U	0.28 U	0.5 U
1,2-Dichloropropane	0.35 U	0.1 U	0.35 U	1 U	0.35 U	1 U
1,3-Dichlorobenzene	0.35 U	0.1 U	0.35 U	1 U	0.35 U	1 U
1,4-Dichlorobenzene	0.37 U	0.1 U	0.37 U	1 U	0.37 U	1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	2.6 U	1 U	2.6 U	3 U	2.6 U	3 U
Acetone	4.5 U	3 U	4.5 U	6 U	4.5 UJ	6 U
Benzene	0.28 U	0.1 U	0.28 U	0.5 U	0.28 U	0.5 U
Bromodichloromethane	0.3 U	0.1 U	0.3 U	1 U	0.3 U	1 U
Bromoform	0.4 U	0.1 U	0.4 U	1 U	0.4 U	1 U
Bromomethane	0.42 U	0.1 U	0.42 U	1 U	0.42 U	1 U
Carbon Disulfide	0.48 U	0.1 U	0.48 U	1 U	0.48 U	1 U
Carbon Tetrachloride	0.28 U	0.1 U	0.28 U	0.5 U	0.28 U	0.5 U
Chlorobenzene	0.36 U	0.1 U	0.36 U	0.8 U	0.36 U	0.8 U
Chloroethane	0.4 U	0.1 U	0.4 U	1 U	0.4 U	1 U
Chloroform	0.33 U	0.1 U	0.33 U	0.8 U	0.33 U	0.8 U
Chloromethane	0.4 U	0.1 U	0.4 U	1 U	0.4 U	1 U
cis-1,2-Dichloroethene	0.32 U	0.1 U	0.32 U	0.8 U	93	82
cis-1,3-Dichloropropene	0.22 U	0.1 U	0.22 U	1 U	0.22 U	1 U
Dibromochloromethane	0.28 U	0.1 U	0.28 U	1 U	0.28 U	1 U
Ethylbenzene	0.25 U	0.1 U	0.25 U	0.8 U	0.25 U	0.8 U
Methyl ethyl ketone	4.7 U	1 U	4.7 U	3 U	4.7 U	3 U
Methyl isobutyl ketone (MIBK)	3.5 U	1 U	3.5 U	3 U	3.5 U	3 U
Methylene chloride	0.95 U	0.2 U	0.99 U	2 U	0.95 U	2 U
m-Xylene & p-Xylene	0.6 U	0.1 U	0.6 U	0.8 U	0.6 U	0.8 U
o-Xylene	0.3 U	0.1 U	0.3 U	0.8 U	0.3 U	0.8 U
Tetrachloroethene	0.32 U	0.1 U	3.8	5	0.32 U	0.8 U
Toluene	0.36 U	0.1 U	0.36 U	0.7 U	0.36 U	0.7 U
trans-1,2-Dichloroethene	0.27 U	0.1 U	0.27 U	0.8 U	40	37
trans-1,3-Dichloropropene	0.32 U	0.1 U	0.32 U	1 U	0.32 U	1 U
Trichloroethene	0.26 U	0.1 U	45	78	1.9	7
Trichlorofluoromethane	0.34 U	0.1 U	0.34 U	0.5 U	0.34 U	0.5 U
Vinyl chloride	0.3 U	0.1 U	0.3 U	0.5 U	0.46 J	0.5 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-36D</b>	<b>RD-36D</b>	<b>RD-36D</b>	<b>RD-37</b>	<b>RD-37</b>	<b>RD-37</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Duplicate	Primary	Primary	Duplicate
Lab Name:	TestAmerica	Lancaster	Lancaster	TestAmerica	TestAmerica	TestAmerica
Collection Date:	02/20/2007	08/24/2007	08/24/2007	02/21/2007	05/23/2007	05/23/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.24 U	0.1 U	0.1 U	0.24 U	0.24 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	0.2 U	0.2 U	1.5 U	1.5 U	1.5 U
1,1,2-Trichloroethane	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.1 U	0.1 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.42 U	0.1 U	0.1 U	0.42 U	0.42 U	0.42 U
1,2-Dichlorobenzene	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.1 U	0.1 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.1 U	0.1 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.1 U	0.1 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	2.6 U	1 U	1 U	2.6 U	2.6 U	2.6 U
Acetone	4.5 UJ	3 U	3 U	4.5 U	4.5 U	4.5 U
Benzene	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U	0.3 U
Bromoform	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U	0.4 U
Bromomethane	0.42 U	0.1 U	0.1 U	0.42 U	0.42 U	0.42 U
Carbon Disulfide	0.48 U	0.1 J,L	0.1 J,L	0.48 U	0.48 U	0.48 U
Carbon Tetrachloride	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.1 U	0.1 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U	0.4 U
Chloroform	0.33 U	0.1 U	0.1 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U	0.4 U
cis-1,2-Dichloroethene	0.32 U	0.1 J	0.1 J	0.32 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.1 U	0.1 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.1 U	0.1 U	0.25 U	0.25 U	0.25 U
Methyl ethyl ketone	4.7 U	1 U	1 U	4.7 U	4.7 U	4.7 U
Methyl isobutyl ketone (MIBK)	3.5 U	1 U	1 U	3.5 U	3.5 U	3.5 U
Methylene chloride	0.95 U	0.2 U	0.2 U	0.95 U	0.95 U	0.95 U
m-Xylene & p-Xylene	0.6 U	0.1 U	0.1 U	0.6 U	0.6 U	0.6 U
o-Xylene	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U	0.3 U
Tetrachloroethene	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U	0.32 U
Toluene	0.36 U	0.1 U	0.1 U	0.36 U	0.36 U	0.36 U
trans-1,2-Dichloroethene	0.27 U	0.1 U	0.1 U	0.27 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U	0.32 U
Trichloroethene	0.36 J	0.4 J	0.4 J	0.26 U	0.26 U	0.26 U
Trichlorofluoromethane	0.34 U	0.1 U	0.1 U	0.34 U	0.34 U	0.34 U
Vinyl chloride	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-37</b>	<b>RD-37</b>	<b>RD-37</b>	<b>RD-37</b>	<b>RD-38A</b>	<b>RD-38A</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Duplicate	Split	Primary	Primary
Lab Name:	Lancaster	Lancaster	Lancaster	TestAmerica	TestAmerica	Lancaster
Collection Date:	08/28/2007	11/02/2007	11/02/2007	11/02/2007	02/19/2007	08/28/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.3 U	1.5 U	0.8 U
1,1,2,2-Tetrachloroethane	0.1 U	0.1 U	0.1 U	0.24 U	1.2 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.2 U	1.5 U	7.5 U	2 U
1,1,2-Trichloroethane	0.1 U	0.1 U	0.1 U	0.3 U	1.5 U	0.8 U
1,1-Dichloroethane	0.1 U	0.1 U	0.1 U	0.27 U	5.7	6
1,1-Dichloroethene	0.1 U	0.1 U	0.1 U	0.42 U	17	22
1,2-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.32 U	1.6 U	1 U
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.28 U	1.4 U	0.5 U
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.35 U	1.8 U	1 U
1,3-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.35 U	1.8 U	1 U
1,4-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.37 U	1.8 U	1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	1 U	1 U	2.6 U	13 U	3 U
Acetone	3 U	3 U	3 U	4.5 U	22 U	6 U
Benzene	0.1 U	0.1 U	0.1 U	0.28 U	1.4 U	0.5 U
Bromodichloromethane	0.1 U	0.1 U	0.1 U	0.3 U	1.5 U	1 U
Bromoform	0.1 U	0.1 U	0.1 U	0.4 U	2 U	1 U
Bromomethane	0.1 U	0.1 U	0.1 U	0.42 U	2.1 U	1 U
Carbon Disulfide	0.1 U	0.55	0.67	0.48 U	2.4 U	1 U
Carbon Tetrachloride	0.1 U	0.1 U	0.1 U	0.28 U	1.4 U	0.5 U
Chlorobenzene	0.1 U	0.1 U	0.1 U	0.36 U	1.8 U	0.8 U
Chloroethane	0.1 U	0.1 U	0.1 U	0.4 U	2 U	1 U
Chloroform	0.1 U	0.1 U	0.1 U	0.33 U	1.6 U	0.8 U
Chloromethane	0.1 U	0.1 U	0.1 U	0.4 U	2 U	1 U
cis-1,2-Dichloroethene	0.1 U	0.1 U	0.1 U	0.32 U	69	66
cis-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	0.22 U	1.1 U	1 U
Dibromochloromethane	0.1 U	0.1 U	0.1 U	0.28 U	1.4 U	1 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.25 U	1.2 U	0.8 U
Methyl ethyl ketone	1 U	1 U	1 U	4.7 U	19 U	3 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	3.5 U	18 U	3 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.95 U	4.8 U	2 U
m-Xylene & p-Xylene	0.1 U	0.1 U	0.1 U	0.6 U	3 U	0.8 U
o-Xylene	0.1 U	0.1 U	0.1 U	0.3 U	1.5 U	0.8 U
Tetrachloroethene	0.1 U	0.1 U	0.1 U	0.32 U	1.6 U	0.8 U
Toluene	0.1 U	0.1 U	0.1 U	0.36 U	1.8 U	0.7 U
trans-1,2-Dichloroethene	0.1 U	0.1 U	0.1 U	0.27 U	3.3 J	2 J
trans-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	0.32 U	1.6 U	1 U
Trichloroethene	0.1 J	0.1 U	0.1 U	0.26 U	510	500
Trichlorofluoromethane	0.1 U	0.1 U	0.1 U	0.34 U	1.7 U	0.5 U
Vinyl chloride	0.1 U	0.1 U	0.1 U	0.3 U	1.5 U	1 J

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-38B</b>	<b>RD-38B</b>	<b>RD-39A</b>	<b>RD-39B</b>	<b>RD-39B</b>	<b>RD-39B</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Duplicate	Split
Lab Name:	TestAmerica	Lancaster	TestAmerica	TestAmerica	TestAmerica	STL-SA
Collection Date:	02/19/2007	08/28/2007	03/02/2007	02/22/2007	02/22/2007	02/22/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U	0.41 U
1,1,2,2-Tetrachloroethane	0.24 U	0.1 U	0.24 U	0.24 U	0.24 U	0.37 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	0.2 U	1.5 U	1.5 U	1.5 U	1 U
1,1,2-Trichloroethane	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U	0.31 U
1,1-Dichloroethane	0.27 U	0.1 U	0.27 U	0.27 U	0.27 U	0.1 U
1,1-Dichloroethene	0.42 U	0.1 U	0.42 U	0.42 U	0.42 U	0.36 U
1,2-Dichlorobenzene	0.32 U	0.1 U	0.32 U	0.32 U	0.32 U	0.14 U
1,2-Dichloroethane	0.28 U	0.1 U	0.28 U	0.28 U	0.28 U	0.22 U
1,2-Dichloropropane	0.35 U	0.1 U	0.35 U	0.35 U	0.35 U	0.15 U
1,3-Dichlorobenzene	0.35 U	0.1 U	0.35 U	0.35 U	0.35 U	0.11 U
1,4-Dichlorobenzene	0.37 U	0.1 U	0.37 U	0.37 U	0.37 U	0.13 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	2.6 U	1 U	2.6 U	2.6 U	2.6 U	1 U
Acetone	4.5 U	3 U	4.5 U	4.5 U	4.5 U	2 J
Benzene	0.28 U	0.1 U	0.28 U	0.28 U	0.28 U	0.13 U
Bromodichloromethane	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U	0.14 U
Bromoform	0.4 U	0.1 U	0.4 U	0.4 U	0.4 U	0.1 U
Bromomethane	0.42 U	0.1 U	0.42 U	0.42 U	0.42 U	0.08 U
Carbon Disulfide	0.48 U	0.3 J,L	0.48 U	0.48 U	0.48 U	1 U
Carbon Tetrachloride	0.28 U	0.1 U	0.28 U	0.28 U	0.28 U	0.15 U
Chlorobenzene	0.36 U	0.1 U	0.36 U	0.36 U	0.36 U	0.12 U
Chloroethane	0.4 U	0.1 U	0.4 U	0.4 U	0.4 U	0.34 U
Chloroform	0.33 U	0.1 U	0.33 U	0.33 U	0.33 U	0.12 U
Chloromethane	0.4 U	0.1 U	0.4 U	0.4 U	0.4 U	0.25 U
cis-1,2-Dichloroethene	0.32 U	0.1 U	0.32 U	0.32 U	0.32 U	0.1 U
cis-1,3-Dichloropropene	0.22 U	0.1 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.1 U	0.28 U	0.28 U	0.28 U	0.4 U
Ethylbenzene	0.25 U	0.1 U	0.25 U	0.25 U	0.25 U	0.27 U
Methyl ethyl ketone	4.7 U	1 U	4.7 U	4.7 U	4.7 U	1 U
Methyl isobutyl ketone (MIBK)	3.5 U	1 U	3.5 U	3.5 U	3.5 U	1 U
Methylene chloride	0.95 U	0.2 U	0.95 U	0.95 U	0.95 U	0.35 U
m-Xylene & p-Xylene	0.6 U	0.1 U	0.6 U	0.6 U	0.6 U	0.18 U
o-Xylene	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U	0.1 U
Tetrachloroethene	0.32 U	0.1 U	0.32 U	0.32 U	0.32 U	0.38 U
Toluene	0.36 U	0.1 U	0.36 U	0.36 U	0.36 U	0.25 U
trans-1,2-Dichloroethene	0.27 U	0.1 U	0.27 U	0.27 U	0.27 U	0.11 U
trans-1,3-Dichloropropene	0.32 U	0.1 U	0.32 U	0.32 U	0.32 U	0.3 U
Trichloroethene	0.26 U	0.1 U	1	0.45 U	0.37 U	0.31 U
Trichlorofluoromethane	0.34 U	0.1 U	0.34 U	0.34 U	0.34 U	0.23 U
Vinyl chloride	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U	0.12 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008



**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-39B</b>	<b>RD-39B</b>	<b>RD-39B</b>	<b>RD-39B</b>	<b>RD-39B</b>	<b>RD-39B</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Duplicate	Split	Primary	Duplicate	Primary
Lab Name:	TestAmerica	TestAmerica	STL-SA	Lancaster	Lancaster	Lancaster
Collection Date:	05/22/2007	05/22/2007	05/22/2007	08/29/2007	08/29/2007	10/30/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.3 U	0.41 U	0.1 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.37 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	1.5 U	1 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.31 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.27 U	0.27 U	0.1 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethene	0.42 U	0.42 U	0.36 U	0.1 U	0.1 U	0.1 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.14 U	0.1 U	0.1 U	0.1 U
1,2-Dichloroethane	0.28 U	0.28 U	0.22 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	0.35 U	0.35 U	0.15 U	0.1 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.11 U	0.1 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.13 U	0.1 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	2.6 U	2.6 U	1 U	1 U	1 U	1 U
Acetone	4.5 U	4.5 U	1 U	3 U	3 U	3 U
Benzene	0.28 U	0.28 U	0.13 U	0.1 U	0.1 U	0.1 U
Bromodichloromethane	0.3 U	0.3 U	0.14 U	0.1 U	0.1 U	0.1 U
Bromoform	0.4 U	0.4 U	0.1 U	0.1 U	0.1 U	0.1 U
Bromomethane	0.42 U	0.42 U	0.08 U	0.1 U	0.1 U	0.1 U
Carbon Disulfide	0.48 U	0.48 U	1 U	2.1 U	2.7 U	0.2 J,L
Carbon Tetrachloride	0.28 U	0.28 U	0.15 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.36 U	0.36 U	0.12 U	0.1 U	0.1 U	0.1 U
Chloroethane	0.4 U	0.4 U	0.34 U	0.1 U	0.1 U	0.1 U
Chloroform	0.33 U	0.33 U	0.12 U	0.1 U	0.1 U	0.1 U
Chloromethane	0.4 U	0.4 U	0.25 U	0.1 U	0.1 U	0.1 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.1 U	0.1 U	0.1 U	0.1 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.1 U	0.1 U	0.1 U
Dibromochloromethane	0.28 U	0.28 U	0.4 U	0.1 U	0.1 U	0.1 U
Ethylbenzene	0.25 U	0.25 U	0.27 U	0.1 U	0.1 U	0.1 U
Methyl ethyl ketone	4.7 U	4.7 U	1 U	1 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	3.5 U	3.5 U	1 U	1 U	1 U	1 U
Methylene chloride	0.95 U	0.95 U	0.35 U	0.2 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.6 U	0.6 U	0.18 U	0.1 U	0.1 U	0.1 U
o-Xylene	0.3 U	0.3 U	0.1 U	0.1 U	0.1 U	0.1 U
Tetrachloroethene	0.32 U	0.32 U	0.38 U	0.1 U	0.1 U	0.1 U
Toluene	0.36 U	0.36 U	0.25 U	0.1 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.11 U	0.1 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	0.32 U	0.32 U	0.3 U	0.1 U	0.1 U	0.1 U
Trichloroethene	0.26 U	0.26 U	0.31 U	0.1 U	0.1 U	0.1 U
Trichlorofluoromethane	0.34 U	0.34 U	0.23 U	0.1 U	0.1 U	0.1 U
Vinyl chloride	0.3 U	0.3 U	0.12 U	0.1 U	0.1 U	0.1 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-41A</b>	<b>RD-41A</b>	<b>RD-41A</b>	<b>RD-41A</b>	<b>RD-41A</b>	<b>RD-41A</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Duplicate	Primary	Split
Lab Name:	TestAmerica	TestAmerica	Lancaster	Lancaster	Lancaster	TestAmerica
Collection Date:	02/14/2007	05/16/2007	08/20/2007	08/20/2007	10/29/2007	10/29/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.3 U	0.1 U	0.1 U	0.1 U	0.3 U
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.1 U	0.1 U	0.1 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	1.5 U	0.2 U	0.2 U	0.2 U	1.5 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.1 U	0.1 U	0.1 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.1 U	0.1 U	0.1 U	0.27 U
1,1-Dichloroethene	0.42 U	0.42 U	0.1 U	0.1 U	0.1 U	0.42 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.1 U	0.1 U	0.1 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.1 U	0.1 U	0.1 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.1 U	0.1 U	0.1 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.1 U	0.1 U	0.1 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.1 U	0.1 U	0.1 U	0.37 U
1,4-Dioxane	1 U	1 U	1 U	---	1 U	---
2-Hexanone	2.6 U	2.6 U	1 U	1 U	1 U	2.6 U
Acetone	5.2 J,L	4.5 U	3 U	3.6 J	3 U	4.5 U
Benzene	0.28 U	0.28 U	0.1 U	0.1 U	0.1 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.1 U	0.1 U	0.1 U	0.3 U
Bromoform	0.4 U	0.4 U	0.1 U	0.1 U	0.1 U	0.4 U
Bromomethane	0.42 U	0.42 U	0.1 U	0.1 U	0.1 U	0.42 U
Carbon Disulfide	0.48 U	0.48 U	0.3 U	0.4 U	0.4 J,L	0.48 U
Carbon Tetrachloride	0.28 U	0.28 U	0.1 U	0.1 U	0.1 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.1 U	0.1 U	0.1 U	0.36 U
Chloroethane	0.4 U	0.4 U	0.1 U	0.1 U	0.1 J	0.4 U
Chloroform	0.33 U	0.33 U	0.1 U	0.1 U	0.1 U	0.33 U
Chloromethane	0.4 U	0.4 U	0.1 U	0.1 U	0.1 J	0.4 U
cis-1,2-Dichloroethene	5.1	4.9	4 J	4.1 J	4.3	4
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.1 U	0.1 U	0.1 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.1 U	0.1 U	0.1 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.1 U	0.1 U	0.1 U	0.25 U
Methyl ethyl ketone	4.7 U	4.7 U	1 U	1 U	1 U	4.7 U
Methyl isobutyl ketone (MIBK)	3.5 U	3.5 U	1 U	1 U	1 U	3.5 U
Methylene chloride	0.95 U	0.95 U	0.3 U	0.2 U	0.2 U	0.95 U
m-Xylene & p-Xylene	0.6 U	0.6 U	0.1 U	0.1 U	0.1 U	0.6 U
o-Xylene	0.3 U	0.3 U	0.1 U	0.1 U	0.1 U	0.3 U
Tetrachloroethene	0.32 U	0.32 U	0.1 U	0.1 U	0.1 U	0.32 U
Toluene	0.36 U	0.36 U	0.1 U	0.1 U	0.1 U	0.36 U
trans-1,2-Dichloroethene	0.9 J	0.77 J	0.8 J	0.8 J	1.2	1
trans-1,3-Dichloropropene	0.32 U	0.32 U	0.1 U	0.1 U	0.1 U	0.32 U
Trichloroethene	6.2	5.2	4.8 J	4.5 J	3.4	3.4
Trichlorofluoromethane	0.34 U	0.34 U	0.1 U	0.1 U	0.1 U	0.34 U
Vinyl chloride	0.3 U	0.41 J	0.3 J	0.3 J	0.8	0.58

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-41B</b>	<b>RD-41B</b>	<b>RD-41B</b>	<b>RD-41B</b>	<b>RD-43A</b>	<b>RD-43A</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:	TestAmerica	Lancaster	Lancaster	Lancaster	TestAmerica	TestAmerica
Collection Date:	02/14/2007	05/21/2007	08/20/2007	10/25/2007	02/16/2007	05/21/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.8 U	0.8 U	0.8 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.24 U	0.5 U	0.5 U	0.5 U	0.24 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	2 U	2 U	2 U	1.5 U	1.5 U
1,1,2-Trichloroethane	0.3 U	0.8 U	0.8 U	0.8 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	1 U	1 U	1 U	0.27 U	0.27 U
1,1-Dichloroethene	2.1	3 J	6	4 J	0.42 U	0.42 U
1,2-Dichlorobenzene	0.32 U	1 U	1 U	1 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.5 U	0.5 U	0.5 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	1 U	1 U	1 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	1 U	1 U	1 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	1 U	1 U	1 U	0.37 U	0.37 U
1,4-Dioxane	1.7 J	1.3 J	1 J	1.3 J	---	---
2-Hexanone	2.6 U	3 U	3 U	3 U	2.6 U	2.6 U
Acetone	4.5 U	6 U	6 U	6 U	4.5 U	4.5 U
Benzene	0.28 U	0.5 U	0.5 U	0.5 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	1 U	1 U	1 U	0.3 U	0.3 U
Bromoform	0.4 U	1 U	1 U	1 U	0.4 U	0.4 U
Bromomethane	0.42 U	1 U	1 U	1 U	0.42 U	0.42 U
Carbon Disulfide	0.48 U	1 U	1 U	1 U	0.48 U	0.48 U
Carbon Tetrachloride	0.28 U	0.5 U	0.5 U	0.5 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.8 U	0.8 U	0.8 U	0.36 U	0.36 U
Chloroethane	0.4 U	1 U	1 U	1 U	0.4 U	0.4 U
Chloroform	0.33 U	0.8 U	0.8 U	0.8 U	0.33 U	0.33 U
Chloromethane	0.4 U	1 U	1 U	1 U	0.4 U	0.4 U
cis-1,2-Dichloroethene	700	610	840	570	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	1 U	1 U	1 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	1 U	1 U	1 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.8 U	0.8 U	0.8 U	0.25 U	0.25 U
Methyl ethyl ketone	4.7 U	3 U	3 U	3 U	4.7 U	4.7 U
Methyl isobutyl ketone (MIBK)	3.5 U	3 U	3 U	3 U	3.5 U	3.5 U
Methylene chloride	0.95 U	2 U	2 U	2 U	0.95 U	0.95 U
m-Xylene & p-Xylene	0.6 U	0.8 U	0.8 U	0.8 U	0.6 U	0.6 U
o-Xylene	0.3 U	0.8 U	0.8 U	0.8 U	0.3 U	0.3 U
Tetrachloroethene	0.32 U	0.8 U	0.8 U	0.8 U	0.32 U	0.32 U
Toluene	0.36 U	0.7 U	0.7 U	0.7 U	0.36 U	0.36 U
trans-1,2-Dichloroethene	36	39	61	41 J	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.32 U	1 U	1 U	1 U	0.32 U	0.32 U
Trichloroethene	1200	900	1200	980	0.26 U	0.26 U
Trichlorofluoromethane	0.34 U	0.5 U	0.5 U	0.5 U	0.34 U	0.34 U
Vinyl chloride	24	19	29	26	0.3 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-43A</b>	<b>RD-43A</b>	<b>RD-43A</b>	<b>RD-43A</b>	<b>RD-43A</b>	<b>RD-43B</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Split	Primary	Primary	Duplicate	Split	Primary
Lab Name:	STL-SA	Lancaster	Lancaster	Lancaster	TestAmerica	TestAmerica
Collection Date:	05/21/2007	08/23/2007	10/31/2007	10/31/2007	10/31/2007	02/16/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.41 U	0.1 U	0.1 U	0.1 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.37 U	0.1 U	0.1 U	0.1 U	0.24 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1 U	0.2 U	0.2 U	0.2 U	1.5 U	1.5 U
1,1,2-Trichloroethane	0.31 U	0.1 U	0.1 U	0.1 U	0.3 U	0.3 U
1,1-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.27 U	0.27 U
1,1-Dichloroethene	0.36 U	0.1 U	0.1 U	0.1 U	0.42 U	0.42 U
1,2-Dichlorobenzene	0.14 U	0.1 U	0.1 U	0.1 U	0.32 U	0.32 U
1,2-Dichloroethane	0.22 U	0.1 U	0.1 U	0.1 U	0.28 U	0.28 U
1,2-Dichloropropane	0.15 U	0.1 U	0.1 U	0.1 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.11 U	0.1 U	0.1 U	0.1 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.13 U	0.1 U	0.1 U	0.1 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	1 U	1 U	1 U	2.6 U	2.6 U
Acetone	1 U	3.6 J	3 U	3 U	4.5 U	4.5 U
Benzene	0.13 U	0.1 U	0.1 U	0.1 U	0.28 U	0.28 U
Bromodichloromethane	0.14 U	0.1 U	0.1 U	0.1 U	0.3 U	0.3 U
Bromoform	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.4 U
Bromomethane	0.08 U	0.1 U	0.1 U	0.1 U	0.42 U	0.42 U
Carbon Disulfide	1 U	0.3 J,L	0.3 J,L	0.2 J,L	0.48 U	0.48 U
Carbon Tetrachloride	0.15 U	0.1 U	0.1 U	0.1 U	0.28 U	0.28 U
Chlorobenzene	0.12 U	0.1 U	0.1 U	0.1 U	0.36 U	0.36 U
Chloroethane	0.34 U	0.1 U	0.1 U	0.1 U	0.4 U	0.4 U
Chloroform	0.12 U	0.1 U	0.1 U	0.1 U	0.33 U	0.33 U
Chloromethane	0.25 U	0.1 U	0.1 J	0.1 U	0.4 U	0.4 U
cis-1,2-Dichloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.1 U	0.1 U	0.1 U	0.22 U	0.22 U
Dibromochloromethane	0.4 U	0.1 U	0.1 U	0.1 U	0.28 U	0.28 U
Ethylbenzene	0.27 U	0.1 U	0.1 U	0.1 U	0.25 U	0.25 U
Methyl ethyl ketone	1 U	1 U	1 U	1 U	4.7 U	4.7 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	3.5 U	3.5 U
Methylene chloride	0.35 U	0.2 U	0.2 U	0.2 U	0.95 U	0.95 U
m-Xylene & p-Xylene	0.18 U	0.1 U	0.1 U	0.1 U	0.6 U	0.6 U
o-Xylene	0.1 U	0.1 U	0.1 U	0.1 U	0.3 U	0.3 U
Tetrachloroethene	0.38 U	0.1 U	0.1 U	0.1 U	0.32 U	0.32 U
Toluene	0.25 U	0.1 U	0.1 U	0.1 U	0.36 U	0.36 U
trans-1,2-Dichloroethene	0.11 U	0.1 U	0.1 U	0.1 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.3 U	0.1 U	0.1 U	0.1 U	0.32 U	0.32 U
Trichloroethene	0.31 U	0.1 U	0.1 U	0.1 U	0.26 U	0.26 U
Trichlorofluoromethane	0.23 U	0.1 U	0.1 U	0.1 U	0.34 U	0.34 U
Vinyl chloride	0.12 U	0.1 U	0.1 U	0.1 U	0.3 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-43B</b>	<b>RD-43B</b>	<b>RD-43B</b>	<b>RD-43B</b>	<b>RD-43C</b>	<b>RD-43C</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Duplicate	Primary	Primary	Primary	Duplicate
Lab Name:	TestAmerica	TestAmerica	Lancaster	Lancaster	TestAmerica	TestAmerica
Collection Date:	05/21/2007	05/21/2007	08/22/2007	10/31/2007	02/16/2007	02/16/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.1 U	0.1 U	0.24 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	1.5 U	0.2 U	0.2 U	1.5 U	1.5 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.1 U	0.1 U	0.27 U	0.27 U
1,1-Dichloroethene	0.42 U	0.42 U	0.1 U	0.1 U	0.42 U	0.42 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.1 U	0.1 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.1 U	0.1 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.1 U	0.1 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	2.6 U	2.6 U	1 U	1 U	2.6 U	2.6 U
Acetone	4.5 U	4.5 U	3 U	3 U	4.5 U	4.5 U
Benzene	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U
Bromoform	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U
Bromomethane	0.42 U	0.42 U	0.1 U	0.1 U	0.42 U	0.42 U
Carbon Disulfide	0.48 U	0.48 U	0.1 U	0.4 J,L	0.48 U	0.48 U
Carbon Tetrachloride	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.1 U	0.1 U	0.36 U	0.36 U
Chloroethane	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U
Chloroform	0.33 U	0.33 U	0.1 U	0.1 U	0.33 U	0.33 U
Chloromethane	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.1 U	0.1 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.1 U	0.1 U	0.25 U	0.25 U
Methyl ethyl ketone	4.7 U	4.7 U	1 U	1 U	4.7 U	4.7 U
Methyl isobutyl ketone (MIBK)	3.5 U	3.5 U	1 U	1 U	3.5 U	3.5 U
Methylene chloride	0.95 U	0.95 U	0.2 U	0.2 U	0.95 U	0.95 U
m-Xylene & p-Xylene	0.6 U	0.6 U	0.1 U	0.1 U	0.6 U	0.6 U
o-Xylene	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U
Tetrachloroethene	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U
Toluene	0.36 U	0.36 U	0.1 U	0.1 U	0.36 U	0.36 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.1 U	0.1 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U
Trichloroethene	0.26 U	0.26 U	0.1 U	0.1 U	0.26 U	0.26 U
Trichlorofluoromethane	0.34 U	0.34 U	0.1 U	0.1 U	0.34 U	0.34 U
Vinyl chloride	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-43C</b>	<b>RD-43C</b>	<b>RD-43C</b>	<b>RD-43C</b>	<b>RD-44</b>	<b>RD-44</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Duplicate	Primary	Primary	Primary	Primary
Lab Name:	TestAmerica	TestAmerica	Lancaster	Lancaster	TestAmerica	TestAmerica
Collection Date:	05/21/2007	05/21/2007	08/23/2007	10/31/2007	02/07/2007	05/14/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.1 U	0.1 U	0.24 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	1.5 U	0.2 U	0.2 U	1.5 U	1.5 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.1 U	0.1 U	0.27 U	0.27 U
1,1-Dichloroethene	0.42 U	0.42 U	0.1 U	0.1 U	0.42 U	0.42 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.1 U	0.1 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.1 U	0.1 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.1 U	0.1 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	1 U	1 U
2-Hexanone	2.6 U	2.6 U	1 U	1 U	2.6 U	2.6 U
Acetone	4.5 U	4.5 U	3 U	3 U	4.5 U	4.5 U
Benzene	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U
Bromoform	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U
Bromomethane	0.42 U	0.42 U	0.1 U	0.1 U	0.42 U	0.42 U
Carbon Disulfide	0.48 U	0.48 U	0.2 J,L	0.62	0.48 U	0.48 U
Carbon Tetrachloride	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.1 U	0.1 U	0.36 U	0.36 U
Chloroethane	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U
Chloroform	0.33 U	0.33 U	0.1 U	0.1 U	0.33 U	0.33 U
Chloromethane	0.4 U	0.4 U	0.1 U	0.1 J	0.4 U	0.4 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.1 U	0.1 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.1 U	0.1 U	0.25 U	0.25 U
Methyl ethyl ketone	4.7 U	4.7 U	1 U	1 U	4.7 U	4.7 U
Methyl isobutyl ketone (MIBK)	3.5 U	3.5 U	1 U	1 U	3.5 U	3.5 U
Methylene chloride	0.95 U	0.95 U	0.2 U	0.2 U	0.95 U	0.95 U
m-Xylene & p-Xylene	0.6 U	0.6 U	0.1 U	0.1 U	0.6 U	0.6 U
o-Xylene	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U
Tetrachloroethene	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U
Toluene	0.36 U	0.36 U	0.1 U	0.1 U	0.36 U	0.36 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.1 U	0.1 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U
Trichloroethene	0.26 U	0.26 U	0.1 U	0.1 U	0.26 U	0.26 U
Trichlorofluoromethane	0.34 U	0.34 U	0.1 U	0.1 U	0.34 U	0.34 U
Vinyl chloride	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
**SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS**  
**IN CHATSWORTH FORMATION WELLS, 2007**  
**BOEING SANTA SUSANA FIELD LABORATORY**  
**VENTURA COUNTY, CALIFORNIA**

<b>Well Identifier:</b>	<b>RD-44</b>	<b>RD-44</b>	<b>RD-44</b>	<b>RD-45B</b>	<b>RD-45B</b>	<b>RD-45B</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Duplicate	Primary	Primary	Duplicate	Primary
Lab Name:	Lancaster	Lancaster	Lancaster	TestAmerica	TestAmerica	Lancaster
Collection Date:	08/15/2007	08/15/2007	10/24/2007	02/22/2007	02/22/2007	08/21/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.3 U	0.3 U	0.8 U
1,1,2,2-Tetrachloroethane	0.1 U	0.1 U	0.1 U	0.24 U	0.24 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.2 U	1.5 U	1.5 U	2 U
1,1,2-Trichloroethane	0.1 U	0.1 U	0.1 U	0.3 U	0.3 U	0.8 U
1,1-Dichloroethane	0.1 U	0.1 U	0.1 U	0.27 U	0.27 U	1 U
1,1-Dichloroethene	0.1 U	0.1 U	0.1 U	0.42 U	0.42 U	0.8 U
1,2-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.32 U	0.32 U	1 U
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.28 U	0.28 U	0.5 U
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.35 U	0.35 U	1 U
1,3-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.35 U	0.35 U	1 U
1,4-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.37 U	0.37 U	1 U
1,4-Dioxane	1 U	---	1 U	---	---	---
2-Hexanone	1 U	1 U	1 U	2.6 U	2.6 U	3 U
Acetone	3 U	3 U	3 U	4.5 U	4.5 U	6 U
Benzene	0.1 U	0.1 U	0.1 U	0.28 U	0.28 U	0.5 U
Bromodichloromethane	0.1 U	0.1 U	0.1 U	0.3 U	0.3 U	1 U
Bromoform	0.1 U	0.1 U	0.1 U	0.4 U	0.4 U	1 U
Bromomethane	0.1 U	0.1 U	0.1 U	0.42 U	0.42 U	1 U
Carbon Disulfide	0.1 U	0.1 U	0.1 U	0.48 U	0.48 U	1 U
Carbon Tetrachloride	0.1 U	0.1 U	0.1 U	0.28 U	0.28 U	0.5 U
Chlorobenzene	0.1 U	0.1 U	0.1 U	0.36 U	0.36 U	0.8 U
Chloroethane	0.1 U	0.1 U	0.1 U	0.4 U	0.4 U	1 U
Chloroform	0.1 U	0.1 U	0.1 U	0.33 U	0.33 U	0.8 U
Chloromethane	0.1 U	0.1 U	0.1 U	0.4 U	0.4 U	1 U
cis-1,2-Dichloroethene	0.1 U	0.1 U	0.1 U	21	22	31 J
cis-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	0.22 U	0.22 U	1 U
Dibromochloromethane	0.1 U	0.1 U	0.1 U	0.28 U	0.28 U	1 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.25 U	0.25 U	0.8 U
Methyl ethyl ketone	1 U	1 U	1 U	4.7 U	4.7 U	3 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	3.5 U	3.5 U	3 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.95 U	0.95 U	2 U
m-Xylene & p-Xylene	0.1 U	0.1 U	0.1 U	0.6 U	0.6 U	0.8 U
o-Xylene	0.1 U	0.1 U	0.1 U	0.3 U	0.3 U	0.8 U
Tetrachloroethene	0.1 U	0.1 U	0.1 U	0.32 U	0.32 U	0.8 U
Toluene	0.1 U	0.1 U	0.1 U	0.36 U	0.36 U	0.7 U
trans-1,2-Dichloroethene	0.1 U	0.1 U	0.1 U	1.7	1.8	2 J
trans-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	0.32 U	0.32 U	1 U
Trichloroethene	0.1 U	0.1 U	0.1 U	1.2	1.2	2 J
Trichlorofluoromethane	0.1 U	0.1 U	0.1 U	0.34 U	0.34 U	0.5 U
Vinyl chloride	0.1 U	0.1 U	0.1 U	0.3 U	0.3 U	0.5 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-45B</b>	<b>RD-45C</b>	<b>RD-45C</b>	<b>RD-46A</b>	<b>RD-46A</b>	<b>RD-47</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Duplicate	Primary	Primary	Primary	Primary	Primary
Lab Name:	Lancaster	TestAmerica	Lancaster	TestAmerica	Lancaster	TestAmerica
Collection Date:	08/21/2007	02/23/2007	08/22/2007	02/26/2007	08/22/2007	02/02/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.8 U	0.3 U	0.1 U	0.3 U	0.8 U	0.3 U
1,1,2,2-Tetrachloroethane	0.5 U	0.24 U	0.1 U	0.24 U	0.5 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	2 U	1.5 U	0.2 U	1.5 U	2 U	1.5 U
1,1,2-Trichloroethane	0.8 U	0.3 U	0.1 U	0.34 J	0.8 U	0.3 U
1,1-Dichloroethane	1 U	0.27 U	0.1 U	0.35 J	1 U	0.27 U
1,1-Dichloroethene	0.8 U	0.42 U	0.1 U	0.9 J	2 J	0.42 U
1,2-Dichlorobenzene	1 U	0.32 U	0.1 U	0.32 U	1 U	0.32 U
1,2-Dichloroethane	0.5 U	0.28 U	0.1 U	0.28 U	0.5 U	0.28 U
1,2-Dichloropropane	1 U	0.35 U	0.1 U	0.35 U	1 U	0.35 U
1,3-Dichlorobenzene	1 U	0.35 U	0.1 U	0.35 U	1 U	0.35 U
1,4-Dichlorobenzene	1 U	0.37 U	0.1 U	0.37 U	1 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	3 U	2.6 U	1 U	2.6 U	3 U	2.6 U
Acetone	6 U	4.5 U	3 U	4.5 U	6 U	4.5 U
Benzene	0.5 U	0.28 U	0.1 U	0.28 U	0.5 U	0.28 U
Bromodichloromethane	1 U	0.3 U	0.1 U	0.3 U	1 U	0.3 U
Bromoform	1 U	0.4 U	0.1 U	0.4 U	1 U	0.4 U
Bromomethane	1 U	0.42 U	0.1 U	0.42 U	1 U	0.42 U
Carbon Disulfide	1 U	0.48 U	0.1 U	0.48 U	1 U	0.48 U
Carbon Tetrachloride	0.5 U	0.28 U	0.1 U	0.28 U	0.5 U	0.28 U
Chlorobenzene	0.8 U	0.36 U	0.1 U	0.36 U	0.8 U	0.36 U
Chloroethane	1 U	0.4 U	0.1 U	0.4 U	1 U	0.4 U
Chloroform	0.8 U	0.33 U	0.1 U	2.4	1 J	0.33 U
Chloromethane	1 U	0.4 U	0.1 U	0.4 U	1 U	0.4 U
cis-1,2-Dichloroethene	32 J	0.32 U	0.1 U	160	200	0.89 J
cis-1,3-Dichloropropene	1 U	0.22 U	0.1 U	0.22 U	1 U	0.22 U
Dibromochloromethane	1 U	0.28 U	0.1 U	0.28 U	1 U	0.28 U
Ethylbenzene	0.8 U	0.25 U	0.1 U	0.25 U	0.8 U	0.25 U
Methyl ethyl ketone	3 U	4.7 U	1 U	4.7 U	3 U	4.7 U
Methyl isobutyl ketone (MIBK)	3 U	3.5 U	1 U	3.5 U	3 U	3.5 U
Methylene chloride	2 U	0.95 U	0.2 U	0.95 U	2 U	0.95 U
m-Xylene & p-Xylene	0.8 U	0.6 U	0.1 U	0.6 U	0.8 U	0.6 U
o-Xylene	0.8 U	0.3 U	0.1 U	0.3 U	0.8 U	0.3 U
Tetrachloroethene	0.8 U	0.32 U	0.1 U	0.88 J	0.8 U	0.32 U
Toluene	0.7 U	0.36 U	0.1 U	0.36 U	0.7 U	0.36 U
trans-1,2-Dichloroethene	2 J	0.27 U	0.1 U	6.3	2 J	0.27 U
trans-1,3-Dichloropropene	1 U	0.32 U	0.1 U	0.32 U	1 U	0.32 U
Trichloroethene	2 J	0.26 U	0.1 U	8100	4000	0.26 U
Trichlorofluoromethane	0.5 U	0.34 U	0.1 U	0.34 U	0.5 U	0.34 U
Vinyl chloride	0.5 U	0.3 U	0.1 U	0.3 U	0.5 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008



**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-47</b>	<b>RD-48B</b>	<b>RD-48B</b>	<b>RD-48B</b>	<b>RD-48B</b>	<b>RD-48B</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Duplicate	Split	Primary	Duplicate
Lab Name:	Lancaster	TestAmerica	TestAmerica	STL-SA	TestAmerica	TestAmerica
Collection Date:	08/03/2007	02/27/2007	02/27/2007	02/27/2007	05/17/2007	05/17/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.1 U	0.3 U	0.3 U	0.41 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.1 U	0.24 U	0.24 U	0.37 U	0.24 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	1.5 U	1.5 U	1 U	1.5 U	1.5 U
1,1,2-Trichloroethane	0.1 U	0.3 U	0.3 U	0.31 U	0.3 U	0.3 U
1,1-Dichloroethane	0.1 U	0.27 U	0.27 U	0.1 U	0.27 U	0.27 U
1,1-Dichloroethene	0.1 U	0.42 U	0.42 U	0.36 U	0.42 U	0.42 U
1,2-Dichlorobenzene	0.1 U	0.32 U	0.32 U	0.14 U	0.32 U	0.32 U
1,2-Dichloroethane	0.1 U	0.28 U	0.28 U	0.22 U	0.28 U	0.28 U
1,2-Dichloropropane	0.1 U	0.35 U	0.35 U	0.15 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.1 U	0.35 U	0.35 U	0.11 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.1 U	0.37 U	0.37 U	0.13 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	2.6 U	2.6 U	1 U	2.6 U	2.6 U
Acetone	3 U	4.5 U	4.5 U	1 U	4.5 U	4.5 U
Benzene	0.1 U	0.28 U	0.28 U	0.13 U	0.28 U	0.28 U
Bromodichloromethane	0.1 U	0.3 U	0.3 U	0.14 U	0.3 U	0.3 U
Bromoform	0.1 U	0.4 U	0.4 U	0.1 U	0.4 U	0.4 U
Bromomethane	0.1 U	0.42 U	0.42 U	0.08 U	0.42 U	0.42 U
Carbon Disulfide	0.1 U	0.48 U	0.48 U	1 U	0.48 U	0.48 U
Carbon Tetrachloride	0.1 U	0.28 U	0.28 U	0.15 U	0.28 U	0.28 U
Chlorobenzene	0.1 U	0.36 U	0.36 U	0.12 U	0.36 U	0.36 U
Chloroethane	0.1 U	0.4 U	0.4 U	0.34 U	0.4 U	0.4 U
Chloroform	0.1 U	0.33 U	0.33 U	0.12 U	0.33 U	0.33 U
Chloromethane	0.1 U	0.4 U	0.4 U	0.25 U	0.4 U	0.4 U
cis-1,2-Dichloroethene	0.9	0.32 U	0.32 U	0.1 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.1 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.1 U	0.28 U	0.28 U	0.4 U	0.28 U	0.28 U
Ethylbenzene	0.1 U	0.25 U	0.25 U	0.27 U	0.25 U	0.25 U
Methyl ethyl ketone	1 U	4.7 U	4.7 U	1 U	4.7 U	4.7 U
Methyl isobutyl ketone (MIBK)	1 U	3.5 U	3.5 U	1 U	3.5 U	3.5 U
Methylene chloride	0.2 U	0.95 U	1.3 U	0.35 U	0.95 U	0.95 U
m-Xylene & p-Xylene	0.1 U	0.6 U	0.6 U	0.18 U	0.6 U	0.6 U
o-Xylene	0.1 U	0.3 U	0.3 U	0.1 U	0.3 U	0.3 U
Tetrachloroethene	0.1 U	0.32 U	0.32 U	0.38 U	0.32 U	0.32 U
Toluene	0.1 U	0.36 U	0.36 U	0.25 U	0.36 U	0.36 U
trans-1,2-Dichloroethene	0.1 U	0.27 U	0.27 U	0.11 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.1 U	0.32 U	0.32 U	0.3 U	0.32 U	0.32 U
Trichloroethene	0.1 U	2.9	2.9	2.7	0.48 J	1
Trichlorofluoromethane	0.1 U	0.34 U	0.34 U	0.23 U	0.34 U	0.34 U
Vinyl chloride	0.1 U	0.3 U	0.3 U	0.12 U	0.3 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-48B</b>	<b>RD-48B</b>	<b>RD-48B</b>	<b>RD-48C</b>	<b>RD-48C</b>	<b>RD-48C</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Split	Primary	Primary	Primary	Primary	Duplicate
Lab Name:	STL-SA	TestAmerica	Lancaster	TestAmerica	TestAmerica	TestAmerica
Collection Date:	05/17/2007	08/29/2007	10/31/2007	02/27/2007	05/16/2007	05/16/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.41 U	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.37 U	0.24 U	0.1 U	0.24 U	0.24 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1 U	---	0.2 U	1.5 U	1.5 U	1.5 U
1,1,2-Trichloroethane	0.31 U	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.1 U	0.27 U	0.1 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.36 U	0.42 U	0.1 U	0.42 U	0.42 U	0.42 U
1,2-Dichlorobenzene	0.14 U	0.32 U	0.1 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.22 U	0.28 U	0.1 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.15 U	0.35 U	0.1 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.11 U	0.35 U	0.1 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.13 U	0.37 U	0.1 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	1 U	---	---	---	---
2-Hexanone	1 U	4.7 U	1 U	2.6 U	2.6 U	2.6 U
Acetone	1 U	4.5 U	3 U	4.5 U	4.5 U	4.5 U
Benzene	0.13 U	0.28 U	0.1 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	0.14 U	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U
Bromoform	0.1 U	0.4 U	0.1 U	0.4 U	0.4 U	0.4 U
Bromomethane	0.08 U	0.42 U	0.1 U	0.42 U	0.42 U	0.42 U
Carbon Disulfide	1 U	0.48 U	0.1 J,L	0.48 U	0.48 U	0.48 U
Carbon Tetrachloride	0.15 U	0.28 U	0.1 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.12 U	0.36 U	0.1 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.34 U	0.4 U	0.1 U	0.4 U	0.4 U	0.4 U
Chloroform	0.12 U	0.33 U	0.1 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.25 U	0.4 U	0.1 U	0.4 U	0.4 U	0.4 U
cis-1,2-Dichloroethene	0.1 U	0.32 U	0.1 U	0.32 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.1 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.4 U	0.28 U	0.1 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.27 U	0.25 U	0.1 U	0.25 U	0.25 U	0.25 U
Methyl ethyl ketone	1 U	4.7 U	1 U	4.7 U	4.7 U	4.7 U
Methyl isobutyl ketone (MIBK)	1 U	3.5 U	1 U	3.5 U	3.5 U	3.5 U
Methylene chloride	0.35 U	0.95 U	0.2 U	0.95 U	0.95 U	0.95 U
m-Xylene & p-Xylene	0.18 U	0.6 U	0.1 U	0.6 U	0.6 U	0.6 U
o-Xylene	0.1 U	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U
Tetrachloroethene	0.38 U	0.32 U	0.1 U	0.32 U	0.32 U	0.32 U
Toluene	0.25 U	0.36 U	0.1 U	0.36 U	0.36 U	0.36 U
trans-1,2-Dichloroethene	0.11 U	0.27 U	0.1 U	0.27 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.3 U	0.32 U	0.1 U	0.32 U	0.32 U	0.32 U
Trichloroethene	0.46 J	0.26 U	0.1 U	0.26 U	0.26 U	0.26 U
Trichlorofluoromethane	0.23 U	0.34 U	0.1 U	0.34 U	0.34 U	0.34 U
Vinyl chloride	0.12 U	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-48C</b>	<b>RD-48C</b>	<b>RD-48C</b>	<b>RD-48C</b>	<b>RD-48C</b>	<b>RD-49A</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Duplicate	Primary	Duplicate	Split	Primary
Lab Name:	Lancaster	Lancaster	Lancaster	Lancaster	TestAmerica	TestAmerica
Collection Date:	08/23/2007	08/23/2007	10/30/2007	10/30/2007	10/30/2007	02/13/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.3 U	12 U
1,1,2,2-Tetrachloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.24 U	9.6 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.2 U	0.2 U	1.5 U	60 U
1,1,2-Trichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.3 U	12 U
1,1-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.27 U	11 U
1,1-Dichloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.42 U	17 U
1,2-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.32 U	13 U
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.28 U	11 U
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.1 U	0.35 U	14 U
1,3-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.35 U	14 U
1,4-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.37 U	15 U
1,4-Dioxane	---	---	---	---	---	1 U
2-Hexanone	1 U	1 U	1 U	1 U	2.6 U	100 U
Acetone	3 U	3 U	3 U	3 U	4.5 U	180 U
Benzene	0.1 U	0.1 U	0.1 U	0.1 U	0.28 U	11 U
Bromodichloromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.3 U	12 U
Bromoform	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	16 U
Bromomethane	0.1 U	0.1 U	0.1 U	0.1 U	0.42 U	17 U
Carbon Disulfide	0.4 J,L	0.4 J,L	0.5 J,L	0.5 J,L	0.58 J,L	19 U
Carbon Tetrachloride	0.1 U	0.1 U	0.1 U	0.1 U	0.28 U	11 U
Chlorobenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.36 U	14 U
Chloroethane	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	16 U
Chloroform	0.1 U	0.1 U	0.1 U	0.1 U	0.33 U	13 U
Chloromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	16 U
cis-1,2-Dichloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.32 U	1700
cis-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	0.1 U	0.22 U	8.8 U
Dibromochloromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.28 U	11 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	10 U
Methyl ethyl ketone	1 U	1 U	1 U	1 U	4.7 U	150 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	1 U	3.5 U	140 U
Methylene chloride	0.3 J	0.2 J	0.2 U	0.2 U	0.95 U	94 U
m-Xylene & p-Xylene	0.1 U	0.1 U	0.1 U	0.1 U	0.6 U	24 U
o-Xylene	0.1 U	0.1 U	0.1 U	0.1 U	0.3 U	12 U
Tetrachloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.32 U	13 U
Toluene	0.1 U	0.1 U	0.1 U	0.1 U	0.36 U	14 U
trans-1,2-Dichloroethene	0.1 U	0.1 U	0.1 U	0.1 U	0.27 U	63
trans-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	0.1 U	0.32 U	13 U
Trichloroethene	0.1 U	0.1 U	0.18 J	0.13 J	0.6 U	2700
Trichlorofluoromethane	0.1 U	0.1 U	0.1 U	0.1 U	0.34 U	14 U
Vinyl chloride	0.1 U	0.1 U	0.1 U	0.1 U	0.3 U	12 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
**SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS**  
**IN CHATSWORTH FORMATION WELLS, 2007**  
**BOEING SANTA SUSANA FIELD LABORATORY**  
**VENTURA COUNTY, CALIFORNIA**

<b>Well Identifier:</b>	<b>RD-49A</b>	<b>RD-49A</b>	<b>RD-49A</b>	<b>RD-49B</b>	<b>RD-49B</b>	<b>RD-49B</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:	TestAmerica	Lancaster	Lancaster	TestAmerica	TestAmerica	Lancaster
Collection Date:	05/14/2007	08/29/2007	11/07/2007	02/08/2007	05/10/2007	08/14/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	12 U	2 U	2 U	0.3 U	1.5 U	0.8 U
1,1,2,2-Tetrachloroethane	9.6 U	1 U	1 U	0.24 U	1.2 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	60 U	4 U	4 U	1.5 U	7.5 U	2 U
1,1,2-Trichloroethane	12 U	2 U	2 U	0.3 U	1.5 U	0.8 U
1,1-Dichloroethane	11 U	2 U	2 U	0.27 U	1.4 U	1 U
1,1-Dichloroethene	17 U	5 J	4 J	0.74 J	2.1 U	1 J
1,2-Dichlorobenzene	13 U	2 U	2 U	0.32 U	1.6 U	1 U
1,2-Dichloroethane	11 U	1 U	1 U	0.28 U	1.4 U	0.5 U
1,2-Dichloropropane	14 U	2 U	2 U	0.35 U	1.8 U	1 U
1,3-Dichlorobenzene	14 U	2 U	2 U	0.35 U	1.8 U	1 U
1,4-Dichlorobenzene	15 U	2 U	2 U	0.37 U	1.8 U	1 U
1,4-Dioxane	1.2 J	1 U	1 U	2.2	2.6	2.2
2-Hexanone	100 U	6 U	6 U	2.6 U	13 U	3 U
Acetone	180 U	12 U	12 U	4.5 U	22 U	6 U
Benzene	11 U	1 U	1 U	0.28 U	1.4 U	0.5 U
Bromodichloromethane	12 U	2 U	2 U	0.3 U	1.5 U	1 U
Bromoform	16 U	2 U	2 U	0.4 U	2 U	1 U
Bromomethane	17 U	2 U	2 U	0.42 U	2.1 U	1 U
Carbon Disulfide	19 U	2 U	2 U	0.48 U	2.4 U	1 U
Carbon Tetrachloride	11 U	1 U	1 U	0.28 U	1.4 U	0.5 U
Chlorobenzene	14 U	2 U	2 U	0.36 U	1.8 U	0.8 U
Chloroethane	16 U	2 U	2 U	0.4 U	2 U	1 U
Chloroform	13 U	2 U	2 U	0.33 U	1.6 U	0.8 U
Chloromethane	16 U	2 U	2 U	0.4 U	2 U	1 U
cis-1,2-Dichloroethene	1400	1700	1400	260	260	270
cis-1,3-Dichloropropene	8.8 U	2 U	2 U	0.22 U	1.1 U	1 U
Dibromochloromethane	11 U	2 U	2 U	0.28 U	1.4 U	1 U
Ethylbenzene	10 U	2 U	2 U	0.25 U	1.2 U	0.8 U
Methyl ethyl ketone	190 U	6 U	6 U	4.7 U	24 U	3 U
Methyl isobutyl ketone (MIBK)	140 U	6 U	6 U	3.5 U	18 U	3 U
Methylene chloride	70 J,L	4 U	4 U	0.95 U	4.8 U	2 U
m-Xylene & p-Xylene	24 U	2 U	2 U	0.6 U	3 U	0.8 U
o-Xylene	12 U	2 U	2 U	0.3 U	1.5 U	0.8 U
Tetrachloroethene	13 U	2 U	2 U	0.32 U	1.6 U	0.8 U
Toluene	14 U	1 U	1 U	0.36 U	1.8 U	0.7 U
trans-1,2-Dichloroethene	25 J	36	35	18	14	18
trans-1,3-Dichloropropene	13 U	2 U	2 U	0.32 U	1.6 U	1 U
Trichloroethene	2500	2000	1600	250	330	300
Trichlorofluoromethane	14 U	1 U	1 U	0.34 U	1.7 U	0.5 U
Vinyl chloride	12 U	2	2 J	5.9	6	6

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-49B</b>	<b>RD-49B</b>	<b>RD-49B</b>	<b>RD-49C</b>	<b>RD-49C</b>	<b>RD-49C</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Duplicate	Primary	Split	Primary	Primary	Duplicate
Lab Name:	Lancaster	Lancaster	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	08/14/2007	10/25/2007	10/25/2007	02/08/2007	05/14/2007	05/14/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.8 U	0.8 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	2 U	2 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1,2-Trichloroethane	0.8 U	0.8 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	1 U	1 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	1 J	0.8 J	0.64 J	0.42 U	0.42 U	0.42 U
1,2-Dichlorobenzene	1 U	1 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.5 U	0.5 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	1 U	1 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	1 U	1 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	1 U	1 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	2.4	---	1.1 J	1.5 J	---
2-Hexanone	3 U	3 U	2.6 U	2.6 U	2.6 U	2.6 U
Acetone	6 U	6 U	4.5 U	4.5 U	4.5 U	4.5 U
Benzene	0.5 U	0.5 U	0.28 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	1 U	1 U	0.4 U	0.4 U	0.4 U	0.4 U
Bromomethane	1 U	1 U	0.42 U	0.42 U	0.42 U	0.42 U
Carbon Disulfide	1 U	1 U	0.51 J,L	0.48 U	0.48 U	0.48 U
Carbon Tetrachloride	0.5 U	0.5 U	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.8 U	0.8 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	1 U	1 U	0.4 U	0.4 U	0.4 U	0.4 U
Chloroform	0.8 U	0.8 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	1 U	1 U	0.4 U	0.4 U	0.4 U	0.4 U
cis-1,2-Dichloroethene	280	280	230	92	96	98
cis-1,3-Dichloropropene	1 U	1 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	1 U	1 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.8 U	0.8 U	0.25 U	0.25 U	0.25 U	0.25 U
Methyl ethyl ketone	3 U	3 U	4.7 U	4.7 U	4.7 U	4.7 U
Methyl isobutyl ketone (MIBK)	3 U	3 U	3.5 U	3.5 U	3.5 U	3.5 U
Methylene chloride	2 U	2 U	0.95 U	0.95 U	0.95 U	0.95 U
m-Xylene & p-Xylene	0.8 U	0.8 U	0.6 U	0.6 U	0.6 U	0.6 U
o-Xylene	0.8 U	0.8 U	0.3 U	0.3 U	0.3 U	0.3 U
Tetrachloroethene	0.8 U	0.8 U	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	0.7 U	0.7 U	0.36 U	0.36 U	0.36 U	0.36 U
trans-1,2-Dichloroethene	19	15 J	14	3	5.2	5.9
trans-1,3-Dichloropropene	1 U	1 U	0.32 U	0.32 U	0.32 U	0.32 U
Trichloroethene	310	240	250	14	16	16
Trichlorofluoromethane	0.5 U	0.5 U	0.34 U	0.34 U	0.34 U	0.34 U
Vinyl chloride	7	4	3.7	2.2	1.8	1.8

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-49C</b>	<b>RD-49C</b>	<b>RD-50</b>	<b>RD-50</b>	<b>RD-50</b>	<b>RD-51B</b>
Sample Port:	---	---	Z2	Z2	Z2	---
Sample Type:	Primary	Primary	Primary	Duplicate	Primary	Primary
Lab Name:	Lancaster	Lancaster	TestAmerica	TestAmerica	Lancaster	TestAmerica
Collection Date:	08/20/2007	10/25/2007	02/07/2007	02/07/2007	08/10/2007	02/12/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.8 U	0.8 U	0.3 U	0.3 U	0.1 U	0.3 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.24 U	0.24 U	0.1 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	2 U	2 U	1.5 U	1.5 U	0.2 U	1.5 U
1,1,2-Trichloroethane	0.8 U	0.8 U	0.3 U	0.3 U	0.1 U	0.3 U
1,1-Dichloroethane	1 U	1 U	0.27 U	0.27 U	0.1 U	0.27 U
1,1-Dichloroethene	0.8 U	0.8 U	0.42 U	0.42 U	0.1 U	0.42 U
1,2-Dichlorobenzene	1 U	1 U	0.32 U	0.32 U	0.1 U	0.32 U
1,2-Dichloroethane	0.5 U	0.5 U	0.28 U	0.28 U	0.1 U	0.28 U
1,2-Dichloropropane	1 U	1 U	0.35 U	0.35 U	0.1 U	0.35 U
1,3-Dichlorobenzene	1 U	1 U	0.35 U	0.35 U	0.1 U	0.35 U
1,4-Dichlorobenzene	1 U	1 U	0.37 U	0.37 U	0.1 U	0.37 U
1,4-Dioxane	1.1 J	1.1 J	---	---	---	1 U
2-Hexanone	3 U	3 U	2.6 U	2.6 U	1 U	2.6 U
Acetone	6 U	6 U	4.6 J,F	4.5 U	3 U	5 U
Benzene	0.5 U	0.5 U	0.5 F	0.49 J,F	0.5 F	0.28 U
Bromodichloromethane	1 U	1 U	0.3 U	0.3 U	0.1 U	0.3 U
Bromoform	1 U	1 U	0.4 U	0.4 U	0.1 U	0.4 U
Bromomethane	1 U	1 U	0.42 U	0.42 U	0.1 U	0.42 U
Carbon Disulfide	1 U	1 U	0.48 U	0.48 U	0.1 U	0.48 U
Carbon Tetrachloride	0.5 U	0.5 U	0.28 U	0.28 U	0.1 U	0.28 U
Chlorobenzene	0.8 U	0.8 U	0.36 U	0.36 U	2.2 F	0.36 U
Chloroethane	1 U	1 U	0.4 U	0.4 U	0.1 U	0.4 U
Chloroform	0.8 U	0.8 U	0.33 U	0.33 U	0.1 U	0.33 U
Chloromethane	1 U	1 U	0.4 U	0.4 U	0.1 U	0.4 U
cis-1,2-Dichloroethene	120 J	85	1.9	0.86 J	0.1 U	11
cis-1,3-Dichloropropene	1 U	1 U	0.22 U	0.22 U	0.1 U	0.22 U
Dibromochloromethane	1 U	1 U	0.28 U	0.28 U	0.1 U	0.28 U
Ethylbenzene	0.8 U	0.8 U	0.25 U	0.25 U	0.1 U	0.25 U
Methyl ethyl ketone	3 U	3 U	4.7 U	4.7 U	1 U	4.7 U
Methyl isobutyl ketone (MIBK)	3 U	3 U	3.5 U	3.5 U	1 U	3.5 U
Methylene chloride	2 U	2 U	0.95 U	0.95 U	0.2 U	0.95 U
m-Xylene & p-Xylene	0.8 U	0.8 U	0.6 U	0.6 U	0.1 U	0.6 U
o-Xylene	0.8 U	0.8 U	0.3 U	0.3 U	0.1 U	0.3 U
Tetrachloroethene	0.8 U	0.8 U	0.32 U	0.32 U	0.1 U	0.32 U
Toluene	0.7 U	0.7 U	11 F	10 F	8.8 F	0.36 U
trans-1,2-Dichloroethene	4 J	3 J	0.27 U	0.27 U	0.1 U	0.89 J
trans-1,3-Dichloropropene	1 U	1 U	0.32 U	0.32 U	0.1 U	0.32 U
Trichloroethene	20 J	15	0.68 J	0.41 J	0.2 J	4.4
Trichlorofluoromethane	0.5 U	0.5 U	0.34 U	0.34 U	0.1 U	0.34 U
Vinyl chloride	2 J	2	0.3 U	0.3 U	0.1 U	7.8

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-51B</b>	<b>RD-51B</b>	<b>RD-51B</b>	<b>RD-51C</b>	<b>RD-51C</b>	<b>RD-51C</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:	TestAmerica	Lancaster	Lancaster	TestAmerica	TestAmerica	Lancaster
Collection Date:	05/10/2007	08/13/2007	10/23/2007	02/13/2007	05/10/2007	08/13/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U	0.1 U
1,1,2,2-Tetrachloroethane	0.24 U	0.1 U	0.1 U	0.24 U	0.24 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	0.2 U	0.2 U	1.5 U	1.5 U	0.2 U
1,1,2-Trichloroethane	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U	0.1 U
1,1-Dichloroethane	0.27 U	0.1 U	0.1 U	0.27 U	0.27 U	0.1 U
1,1-Dichloroethene	0.42 U	0.1 U	0.1 U	0.42 U	0.42 U	0.1 U
1,2-Dichlorobenzene	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U	0.1 U
1,2-Dichloroethane	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U	0.1 U
1,2-Dichloropropane	0.35 U	0.1 U	0.1 U	0.35 U	0.35 U	0.1 U
1,3-Dichlorobenzene	0.35 U	0.1 U	0.1 U	0.35 U	0.35 U	0.1 U
1,4-Dichlorobenzene	0.37 U	0.1 U	0.1 U	0.37 U	0.37 U	0.1 U
1,4-Dioxane	2.7	1 U	1 U	1 U	1.6 J	1 U
2-Hexanone	2.6 U	1 U	1 U	2.6 U	2.6 U	1 U
Acetone	4.5 U	3 U	3 U	4.5 U	4.5 U	3 U
Benzene	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U	0.1 U
Bromodichloromethane	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U	0.1 U
Bromoform	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U	0.1 U
Bromomethane	0.42 U	0.1 U	0.1 U	0.42 U	0.42 U	0.1 U
Carbon Disulfide	0.48 U	0.5 J,L	0.3 J,L	0.48 U	0.48 U	0.4 J,L
Carbon Tetrachloride	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U	0.1 U
Chlorobenzene	0.36 U	0.1 U	0.1 U	0.36 U	0.36 U	0.1 U
Chloroethane	0.4 U	0.1 U	0.1 J	0.4 U	0.4 U	0.1 U
Chloroform	0.33 U	0.1 U	0.1 U	0.33 U	0.33 U	0.1 U
Chloromethane	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U	0.1 U
cis-1,2-Dichloroethene	10	12	12	0.32 U	0.32 U	0.1 U
cis-1,3-Dichloropropene	0.22 U	0.1 U	0.1 U	0.22 U	0.22 U	0.1 U
Dibromochloromethane	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U	0.1 U
Ethylbenzene	0.25 U	0.1 U	0.1 U	0.25 U	0.25 U	0.1 U
Methyl ethyl ketone	4.7 U	1 U	1 U	4.7 U	4.7 U	1 U
Methyl isobutyl ketone (MIBK)	3.5 U	1 U	1 U	3.5 U	3.5 U	1 U
Methylene chloride	0.95 U	0.2 U	0.2 U	2.5 U	0.95 U	0.2 U
m-Xylene & p-Xylene	0.6 U	0.1 U	0.1 U	0.6 U	0.6 U	0.1 U
o-Xylene	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U	0.1 U
Tetrachloroethene	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U	0.1 U
Toluene	0.36 U	0.1 U	0.1 U	0.36 U	0.36 U	0.1 U
trans-1,2-Dichloroethene	0.83 J	1.3	1.2	0.27 U	0.27 U	0.1 U
trans-1,3-Dichloropropene	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U	0.1 U
Trichloroethene	4.2	4.7	4.7	0.26 U	0.26 U	0.1 J
Trichlorofluoromethane	0.34 U	0.1 U	0.1 U	0.34 U	0.34 U	0.1 U
Vinyl chloride	8.8	7.6	9	0.3 U	0.3 U	0.1 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-51C</b>	<b>RD-51C</b>	<b>RD-51C</b>	<b>RD-51C</b>	<b>RD-51C</b>	<b>RD-52B</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Duplicate	Split	Primary	Duplicate	Split	Primary
Lab Name:	TestAmerica	TestAmerica	Lancaster	Lancaster	TestAmerica	TestAmerica
Collection Date:	08/13/2007	08/13/2007	10/23/2007	10/23/2007	10/23/2007	02/09/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	---	---	0.1 U	0.1 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	---	---	0.1 U	0.1 U	0.24 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	---	---	0.2 U	0.2 U	1.5 U	1.5 U
1,1,2-Trichloroethane	---	---	0.1 U	0.1 U	0.3 U	0.3 U
1,1-Dichloroethane	---	---	0.1 U	0.1 U	0.27 U	0.27 U
1,1-Dichloroethene	---	---	0.1 U	0.1 U	0.42 U	0.42 U
1,2-Dichlorobenzene	---	---	0.1 U	0.1 U	0.32 U	0.32 U
1,2-Dichloroethane	---	---	0.1 U	0.1 U	0.28 U	0.28 U
1,2-Dichloropropane	---	---	0.1 U	0.1 U	0.35 U	0.35 U
1,3-Dichlorobenzene	---	---	0.1 U	0.1 U	0.35 U	0.35 U
1,4-Dichlorobenzene	---	---	0.1 U	0.1 U	0.37 U	0.37 U
1,4-Dioxane	1 U	0.52 J	1 U	1 U	0.36 U	---
2-Hexanone	---	---	1 U	1 U	2.6 U	2.6 U
Acetone	---	---	3 U	3 U	4.5 U	4.5 U
Benzene	---	---	0.1 U	0.1 U	0.28 U	0.28 U
Bromodichloromethane	---	---	0.1 U	0.1 U	0.3 U	0.3 U
Bromoform	---	---	0.1 U	0.1 U	0.4 U	0.4 U
Bromomethane	---	---	0.1 U	0.1 U	0.42 U	0.42 U
Carbon Disulfide	---	---	0.3 J,L	0.2 J,L	0.48 U	0.48 U
Carbon Tetrachloride	---	---	0.1 U	0.1 U	0.28 U	0.28 U
Chlorobenzene	---	---	0.1 U	0.1 U	0.36 U	0.36 U
Chloroethane	---	---	0.1 U	0.1 U	0.4 U	0.4 U
Chloroform	---	---	0.1 U	0.1 U	0.33 U	0.33 U
Chloromethane	---	---	0.1 U	0.1 U	0.4 U	0.4 U
cis-1,2-Dichloroethene	---	---	0.1 U	0.1 U	0.32 U	3.7
cis-1,3-Dichloropropene	---	---	0.1 U	0.1 U	0.22 U	0.22 U
Dibromochloromethane	---	---	0.1 U	0.1 U	0.28 U	0.28 U
Ethylbenzene	---	---	0.1 U	0.1 U	0.25 U	0.25 U
Methyl ethyl ketone	---	---	1 U	1 U	4.7 U	4.7 U
Methyl isobutyl ketone (MIBK)	---	---	1 U	1 U	3.5 U	3.5 U
Methylene chloride	---	---	0.2 U	0.2 U	0.95 U	1.1 J,L
m-Xylene & p-Xylene	---	---	0.1 U	0.1 U	0.6 U	0.6 U
o-Xylene	---	---	0.1 U	0.1 U	0.3 U	0.3 U
Tetrachloroethene	---	---	0.1 U	0.1 U	0.32 U	0.32 U
Toluene	---	---	0.1 U	0.1 U	0.36 U	0.36 U
trans-1,2-Dichloroethene	---	---	0.1 U	0.1 U	0.27 U	1.2
trans-1,3-Dichloropropene	---	---	0.1 U	0.1 U	0.32 U	0.32 U
Trichloroethene	---	---	0.1 U	0.1 U	0.28 J	1.2
Trichlorofluoromethane	---	---	0.1 U	0.1 U	0.34 U	0.34 U
Vinyl chloride	---	---	0.1 U	0.1 U	0.3 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008



**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-52B</b>	<b>RD-52C</b>	<b>RD-52C</b>	<b>RD-52C</b>	<b>RD-52C</b>	<b>RD-52C</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Duplicate	Primary	Primary
Lab Name:	Lancaster	TestAmerica	TestAmerica	TestAmerica	Lancaster	Lancaster
Collection Date:	08/23/2007	02/09/2007	05/18/2007	05/18/2007	08/23/2007	11/01/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.1 U	0.3 U	0.3 U	0.3 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.1 U	0.24 U	0.24 U	0.24 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	1.5 U	1.5 U	1.5 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.1 U	0.3 U	0.3 U	0.3 U	0.1 U	0.1 U
1,1-Dichloroethane	0.1 U	0.27 U	0.27 U	0.27 U	0.1 U	0.1 U
1,1-Dichloroethene	0.1 U	0.42 U	0.42 U	0.42 U	0.1 U	0.1 U
1,2-Dichlorobenzene	0.1 U	0.32 U	0.32 U	0.32 U	0.1 U	0.1 U
1,2-Dichloroethane	0.1 U	0.28 U	0.28 U	0.28 U	0.1 U	0.1 U
1,2-Dichloropropane	0.1 U	0.35 U	0.35 U	0.35 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.1 U	0.35 U	0.35 U	0.35 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.1 U	0.37 U	0.37 U	0.37 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	2.6 U	2.6 U	2.6 U	1 U	1 U
Acetone	3 U	4.5 U	4.5 U	4.5 U	3 U	3 U
Benzene	0.1 U	0.28 U	0.28 U	0.28 U	0.1 U	0.1 U
Bromodichloromethane	0.1 U	0.3 U	0.3 U	0.3 U	0.1 U	0.1 U
Bromoform	0.1 U	0.4 U	0.4 U	0.4 U	0.1 U	0.1 U
Bromomethane	0.1 U	0.42 U	0.42 U	0.42 U	0.1 U	0.1 U
Carbon Disulfide	0.7 L	0.48 U	0.48 U	0.48 U	0.1 U	0.2 U
Carbon Tetrachloride	0.1 U	0.28 U	0.28 U	0.28 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.36 U	0.36 U	0.36 U	0.1 U	0.1 U
Chloroethane	0.1 U	0.4 U	0.4 U	0.4 U	0.1 U	0.1 U
Chloroform	0.1 U	0.33 U	0.33 U	0.33 U	0.1 U	0.1 U
Chloromethane	0.1 U	0.4 U	0.4 U	0.4 U	0.1 U	0.1 U
cis-1,2-Dichloroethene	4.6	0.32 U	0.32 U	0.32 U	0.1 U	0.1 J
cis-1,3-Dichloropropene	0.1 U	0.22 U	0.22 U	0.22 U	0.1 U	0.1 U
Dibromochloromethane	0.1 U	0.28 U	0.28 U	0.28 U	0.1 U	0.1 U
Ethylbenzene	0.1 U	0.25 U	0.25 U	0.25 U	0.1 U	0.1 U
Methyl ethyl ketone	1 U	4.7 U	4.7 U	4.7 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	3.5 U	3.5 U	3.5 U	1 U	1 U
Methylene chloride	0.2 U	0.95 U	0.95 U	0.95 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.1 U	0.6 U	0.6 U	0.6 U	0.1 U	0.1 U
o-Xylene	0.1 U	0.3 U	0.3 U	0.3 U	0.1 U	0.1 U
Tetrachloroethene	0.1 U	0.32 U	0.32 U	0.32 U	0.1 U	0.1 U
Toluene	0.1 U	0.36 U	0.36 U	0.36 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	1.8	0.27 U	0.27 U	0.27 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	0.1 U	0.32 U	0.32 U	0.32 U	0.1 U	0.1 U
Trichloroethene	1.4	0.26 U	0.26 U	0.26 U	0.1 U	0.1 U
Trichlorofluoromethane	0.1 U	0.34 U	0.34 U	0.34 U	0.1 U	0.1 U
Vinyl chloride	0.1 U	0.3 U	0.3 U	0.3 U	0.1 U	0.1 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-53</b>	<b>RD-53</b>	<b>RD-54A</b>	<b>RD-54A</b>	<b>RD-54B</b>	<b>RD-54B</b>
Sample Port:	---	---	Z2	Z2	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:	TestAmerica	Lancaster	TestAmerica	Lancaster	TestAmerica	Lancaster
Collection Date:	02/26/2007	08/22/2007	02/07/2007	08/10/2007	02/12/2007	08/14/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.8 U	0.3 U	0.8 U	0.3 U	0.1 U
1,1,2,2-Tetrachloroethane	0.24 U	0.5 U	0.24 U	0.5 U	0.24 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	4 J	5 J	1.5 U	2 U	1.5 U	0.2 U
1,1,2-Trichloroethane	0.3 U	0.8 U	0.3 U	0.8 U	0.3 U	0.1 U
1,1-Dichloroethane	1.6	2 J	0.81 J	1 U	0.27 U	0.1 U
1,1-Dichloroethene	8.3	17	4.1	5 J	0.42 U	0.1 U
1,2-Dichlorobenzene	0.32 U	1 U	0.32 U	1 U	0.32 U	0.1 U
1,2-Dichloroethane	0.28 U	0.5 U	2.8	2	0.28 U	0.1 U
1,2-Dichloropropane	0.35 U	1 U	0.35 U	1 U	0.35 U	0.1 U
1,3-Dichlorobenzene	0.35 U	1 U	0.35 U	1 U	0.35 U	0.1 U
1,4-Dichlorobenzene	0.37 U	1 U	0.37 U	1 U	0.37 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	2.6 U	3 U	2.6 U	3 U	2.6 U	1 U
Acetone	4.5 U	6 U	4.5 U	6 U	4.5 U	3 U
Benzene	0.28 U	0.5 U	0.28 U	0.5 U	0.28 U	0.1 U
Bromodichloromethane	0.3 U	1 U	0.3 U	1 U	0.3 U	0.1 U
Bromoform	0.4 U	1 U	0.4 U	1 U	0.4 U	0.1 U
Bromomethane	0.42 U	1 U	0.42 U	1 U	0.42 U	0.1 U
Carbon Disulfide	0.48 U	1 U	0.48 U	1 U	0.48 U	0.9 L
Carbon Tetrachloride	0.28 U	0.5 U	0.28 U	0.5 U	0.28 U	0.1 U
Chlorobenzene	0.36 U	0.8 U	0.54 J,F	0.8 U	0.36 U	0.1 U
Chloroethane	0.4 U	1 U	0.4 U	1 U	0.4 U	0.1 J
Chloroform	0.33 U	0.8 U	2.7	0.8 U	0.33 U	0.1 U
Chloromethane	0.4 U	1 U	0.4 U	1 U	0.4 U	0.1 U
cis-1,2-Dichloroethene	8.5	11	110	120	0.32 U	0.1 U
cis-1,3-Dichloropropene	0.22 U	1 U	0.22 U	1 U	0.22 U	0.1 U
Dibromochloromethane	0.28 U	1 U	0.28 U	1 U	0.28 U	0.1 U
Ethylbenzene	0.25 U	0.8 U	0.25 U	0.8 U	0.25 U	0.1 U
Methyl ethyl ketone	4.7 U	3 U	4.7 U	3 U	4.7 U	1 U
Methyl isobutyl ketone (MIBK)	3.5 U	3 U	3.5 U	3 U	3.5 U	1 U
Methylene chloride	0.95 U	2 U	0.95 U	2 U	2.7 U	0.2 U
m-Xylene & p-Xylene	0.6 U	0.8 U	0.6 U	0.8 U	0.6 U	0.1 U
o-Xylene	0.3 U	0.8 U	0.3 U	0.8 U	0.3 U	0.1 U
Tetrachloroethene	0.32 U	0.8 U	0.32 U	0.8 U	0.32 U	0.1 U
Toluene	0.36 U	0.7 U	0.36 U	0.7 U	0.72 J	0.1 U
trans-1,2-Dichloroethene	0.27 U	0.8 U	0.51 J	0.8 U	0.27 U	0.1 U
trans-1,3-Dichloropropene	0.32 U	1 U	0.32 U	1 U	0.32 U	0.1 U
Trichloroethene	280	270	73	15	0.26 U	0.1 U
Trichlorofluoromethane	0.34 U	0.5 U	0.34 U	0.5 U	0.34 U	0.1 U
Vinyl chloride	0.3 U	0.5 U	0.3 U	0.5 U	0.3 U	0.1 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
**SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS**  
**IN CHATSWORTH FORMATION WELLS, 2007**  
**BOEING SANTA SUSANA FIELD LABORATORY**  
**VENTURA COUNTY, CALIFORNIA**

<b>Well Identifier:</b>	<b>RD-54C</b>	<b>RD-54C</b>	<b>RD-54C</b>	<b>RD-55A</b>	<b>RD-55A</b>	<b>RD-55A</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Split	Primary	Primary	Primary
Lab Name:	TestAmerica	Lancaster	Lancaster	TestAmerica	TestAmerica	Lancaster
Collection Date:	02/12/2007	08/07/2007	08/07/2007	02/12/2007	05/17/2007	08/14/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U	0.1 U
1,1,2,2-Tetrachloroethane	--- U	0.1 U	0.24 U	0.24 U	0.24 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	0.2 U	1.5 U	1.5 U	1.5 U	0.2 U
1,1,2-Trichloroethane	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U	0.1 U
1,1-Dichloroethane	0.27 U	0.1 U	0.27 U	0.27 U	0.27 U	0.1 U
1,1-Dichloroethene	0.42 U	0.1 U	0.42 U	0.42 U	0.42 U	0.2 J
1,2-Dichlorobenzene	0.32 U	0.1 U	0.32 U	0.32 U	0.32 U	0.1 U
1,2-Dichloroethane	0.28 U	0.1 U	0.28 U	0.28 U	0.28 U	0.1 U
1,2-Dichloropropane	0.35 U	0.1 U	0.35 U	0.35 U	0.35 U	0.1 U
1,3-Dichlorobenzene	0.35 U	0.1 U	0.35 U	0.35 U	0.35 U	0.1 U
1,4-Dichlorobenzene	0.37 U	0.1 U	0.42 U	0.37 U	0.37 U	0.1 U
1,4-Dioxane	---	---	---	1 U	1 U	1 U
2-Hexanone	2.6 U	1 U	2.6 U	2.6 U	2.6 U	U
Acetone	4.5 U	3 U	4.5 U	4.5 U	4.5 U	3 U
Benzene	0.28 U	0.1 U	0.28 U	0.28 U	0.28 U	0.1 U
Bromodichloromethane	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U	0.1 U
Bromoform	0.4 U	0.1 U	0.4 U	0.4 U	0.4 U	0.1 U
Bromomethane	0.42 U	0.1 U	0.42 U	0.42 U	0.42 U	0.1 U
Carbon Disulfide	0.48 U	0.1 U	0.48 U	0.48 U	0.48 U	0.1 U
Carbon Tetrachloride	0.28 U	0.1 U	0.28 U	0.28 U	0.28 U	0.1 U
Chlorobenzene	0.36 U	0.1 U	0.36 U	0.36 U	0.36 U	0.1 U
Chloroethane	0.4 U	0.1 J	0.4 U	0.4 U	0.4 U	0.1 U
Chloroform	0.33 U	0.1 U	0.33 U	0.33 U	0.33 U	0.1 U
Chloromethane	0.4 U	0.1 U	0.4 U	0.4 U	0.4 U	0.1 U
cis-1,2-Dichloroethene	0.32 U	0.1 U	0.32 U	2.7	1.6	29
cis-1,3-Dichloropropene	0.22 U	0.1 U	0.22 U	0.22 U	0.22 U	0.1 U
Dibromochloromethane	0.28 U	0.1 U	0.28 U	0.28 U	0.28 U	0.1 U
Ethylbenzene	0.25 U	0.1 U	0.25 U	0.25 U	0.25 U	0.1 U
Methyl ethyl ketone	4.7 U	1 U	4.7 U	4.7 U	4.7 U	1 U
Methyl isobutyl ketone (MIBK)	3.5 U	1 U	3.5 U	3.5 U	3.5 U	1 U
Methylene chloride	2.9 U	0.2 U	0.95 U	0.95 U	0.95 U	0.2 U
m-Xylene & p-Xylene	0.6 U	0.1 U	0.6 U	0.6 U	0.6 U	0.1 U
o-Xylene	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U	0.1 U
Tetrachloroethene	0.32 U	0.1 U	0.32 U	0.32 U	0.32 U	0.9
Toluene	0.36 U	0.1 U	0.36 U	0.36 U	0.36 U	0.1 U
trans-1,2-Dichloroethene	0.27 U	0.1 U	0.27 U	0.27 U	0.27 U	2.1
trans-1,3-Dichloropropene	0.32 U	0.1 U	0.32 U	0.32 U	0.32 U	0.1 U
Trichloroethene	0.26 U	0.1 U	0.26 U	5.4	4.8	27
Trichlorofluoromethane	0.34 U	0.1 U	0.34 U	0.34 U	0.34 U	0.1 U
Vinyl chloride	0.3 U	0.1 U	0.3 U	1.2	0.51	8.8

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-55A</b>	<b>RD-55B</b>	<b>RD-55B</b>	<b>RD-55B</b>	<b>RD-55B</b>	<b>RD-56B</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:	Lancaster	TestAmerica	TestAmerica	Lancaster	Lancaster	TestAmerica
Collection Date:	10/29/2007	02/13/2007	05/17/2007	08/14/2007	10/29/2007	02/09/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.1 U	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U
1,1,2,2-Tetrachloroethane	0.1 U	0.24 U	0.24 U	0.1 U	0.1 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	1.5 U	1.5 U	0.2 U	0.2 U	1.5 U
1,1,2-Trichloroethane	0.1 U	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U
1,1-Dichloroethane	0.1 U	0.27 U	0.27 U	0.1 U	0.1 U	0.27 U
1,1-Dichloroethene	0.1 U	0.42 U	0.42 U	0.3 J	0.3 J	0.42 U
1,2-Dichlorobenzene	0.1 U	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U
1,2-Dichloroethane	0.1 U	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U
1,2-Dichloropropane	0.1 U	0.35 U	0.35 U	0.1 U	0.1 U	0.35 U
1,3-Dichlorobenzene	0.1 U	0.35 U	0.35 U	0.1 U	0.1 U	0.35 U
1,4-Dichlorobenzene	0.1 U	0.37 U	0.37 U	0.1 U	0.1 U	0.37 U
1,4-Dioxane	1 U	1 U	1 U	1 U	1 U	---
2-Hexanone	1 U	2.6 U	2.6 U	1 U	1 U	2.6 U
Acetone	3 U	4.5 U	4.5 U	3 U	3 U	4.5 U
Benzene	0.1 U	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U
Bromodichloromethane	0.1 U	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U
Bromoform	0.1 U	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U
Bromomethane	0.1 U	0.42 U	0.42 U	0.1 U	0.1 U	0.42 U
Carbon Disulfide	0.1 U	0.48 U	0.48 U	0.2 J,L	0.3 J,L	0.48 U
Carbon Tetrachloride	0.1 U	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U
Chlorobenzene	0.1 U	0.36 U	0.36 U	0.1 U	0.1 U	0.36 U
Chloroethane	0.1 U	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U
Chloroform	0.1 U	0.33 U	0.33 U	0.1 U	0.1 U	0.33 U
Chloromethane	0.1 U	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U
cis-1,2-Dichloroethene	17	0.32 U	14	13	14	0.32 U
cis-1,3-Dichloropropene	0.1 U	0.22 U	0.22 U	0.1 U	0.1 U	0.22 U
Dibromochloromethane	0.1 U	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U
Ethylbenzene	0.1 U	0.25 U	0.25 U	0.1 U	0.1 U	0.25 U
Methyl ethyl ketone	1 U	4.7 U	4.7 U	1 U	1 U	4.7 U
Methyl isobutyl ketone (MIBK)	1 U	3.5 U	3.5 U	1 U	1 U	3.5 U
Methylene chloride	0.2 U	0.95 U	0.95 U	0.2 U	0.2 U	0.95 U
m-Xylene & p-Xylene	0.1 U	0.6 U	0.6 U	0.1 U	0.1 U	0.6 U
o-Xylene	0.1 U	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U
Tetrachloroethene	0.2 J	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U
Toluene	0.1 U	0.36 U	0.36 U	0.1 U	0.1 U	0.36 U
trans-1,2-Dichloroethene	0.9	0.27 U	0.27 U	0.2 J	0.3 J	0.27 U
trans-1,3-Dichloropropene	0.1 U	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U
Trichloroethene	20	0.26 U	26	21	22	0.42 J
Trichlorofluoromethane	0.1 U	0.34 U	0.34 U	0.1 U	0.1 U	0.34 U
Vinyl chloride	2	0.3 U	0.3 U	0.1 J	0.1 J	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-56B</b>	<b>RD-56B</b>	<b>RD-56B</b>	<b>RD-57</b>	<b>RD-57</b>	<b>RD-57</b>
Sample Port:	---	---	---	Z7	Z7	Z7
Sample Type:	Primary	Primary	Primary	Primary	Primary	Duplicate
Lab Name:	TestAmerica	Lancaster	Lancaster	TestAmerica	TestAmerica	TestAmerica
Collection Date:	05/23/2007	08/21/2007	10/31/2007	02/08/2007	05/24/2007	05/24/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.24 U	0.1 U	0.1 U	0.24 U	0.24 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	0.2 U	0.2 U	1.5 U	1.5 U	1.5 U
1,1,2-Trichloroethane	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.1 U	0.1 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.42 U	0.1 U	0.1 U	0.42 U	0.42 U	0.42 U
1,2-Dichlorobenzene	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.1 U	0.1 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.1 U	0.1 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.1 U	0.1 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	2.6 U	1 U	1 U	2.6 U	2.6 U	2.6 U
Acetone	4.5 U	3 U	3 U	4.5 U	4.6 U	4.5 U
Benzene	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U	0.3 U
Bromoform	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U	0.4 U
Bromomethane	0.42 U	0.1 U	0.1 U	0.42 U	0.42 U	0.42 U
Carbon Disulfide	0.48 U	1.1 U	0.4 J,L	0.48 U	0.48 U	0.48 U
Carbon Tetrachloride	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.1 U	0.1 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U	0.4 U
Chloroform	0.33 U	0.1 U	0.1 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U	0.4 U
cis-1,2-Dichloroethene	0.32 U	0.2 J	0.1 J	0.32 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.1 U	0.1 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.1 U	0.1 U	0.25 U	0.25 U	0.25 U
Methyl ethyl ketone	4.7 U	1 U	1 U	4.7 U	4.7 U	4.7 U
Methyl isobutyl ketone (MIBK)	3.5 U	1 U	1 U	3.5 U	3.5 U	3.5 U
Methylene chloride	0.95 U	0.3 U	0.2 U	0.95 U	0.95 U	0.95 U
m-Xylene & p-Xylene	0.6 U	0.1 U	0.1 U	0.6 U	0.6 U	0.6 U
o-Xylene	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U	0.3 U
Tetrachloroethene	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U	0.32 U
Toluene	0.36 U	0.1 U	0.1 U	0.36 U	0.36 U	0.36 U
trans-1,2-Dichloroethene	0.27 U	0.1 U	0.1 U	0.27 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U	0.32 U
Trichloroethene	0.4 J	0.5 J	0.4 J	0.26 U	0.26 U	0.26 U
Trichlorofluoromethane	0.34 U	0.1 U	0.1 U	0.34 U	0.34 U	0.34 U
Vinyl chloride	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-57</b>	<b>RD-58A</b>	<b>RD-58A</b>	<b>RD-58A</b>	<b>RD-58A</b>	<b>RD-58B</b>
Sample Port:	Z8	---	---	---	---	---
Sample Type:	Primary	Primary	Duplicate	Primary	Primary	Primary
Lab Name:	Lancaster	TestAmerica	TestAmerica	TestAmerica	Lancaster	TestAmerica
Collection Date:	11/07/2007	02/15/2007	02/15/2007	05/21/2007	10/31/2007	02/13/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.1 U	0.3 U	0.3 U	0.3 U	0.8 U	0.3 U
1,1,2,2-Tetrachloroethane	0.1 U	0.24 U	0.24 U	0.24 U	0.5 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	6	16	1.5 U	3 J	1.5 U
1,1,2-Trichloroethane	0.1 U	0.3 U	0.3 U	0.3 U	0.8 U	0.3 U
1,1-Dichloroethane	0.1 U	0.27 U	0.27 U	0.27 U	1 U	0.27 U
1,1-Dichloroethene	0.1 U	0.42 U	0.42 U	0.42 U	0.8 U	0.42 U
1,2-Dichlorobenzene	0.1 U	0.32 U	0.32 U	0.32 U	1 U	0.32 U
1,2-Dichloroethane	0.1 U	0.28 U	0.28 U	0.28 U	0.5 U	0.28 U
1,2-Dichloropropane	0.1 U	0.35 U	0.35 U	0.35 U	1 U	0.35 U
1,3-Dichlorobenzene	0.1 U	0.35 U	0.35 U	0.35 U	1 U	0.35 U
1,4-Dichlorobenzene	0.1 U	0.37 U	0.37 U	0.37 U	1 U	0.37 U
1,4-Dioxane	---	2.5 U	---	1 U	1 U	1 U
2-Hexanone	1 U	2.6 U	2.6 U	2.6 U	3 U	2.6 U
Acetone	3 U	4.5 U	4.5 U	4.5 U	6 U	4.5 U
Benzene	0.1 U	0.28 U	0.28 U	0.28 U	0.5 U	0.28 U
Bromodichloromethane	0.1 U	0.3 U	0.3 U	0.3 U	1 U	0.3 U
Bromoform	0.1 U	0.4 U	0.4 U	0.4 U	1 U	0.4 U
Bromomethane	0.1 U	0.42 U	0.42 U	0.42 U	1 U	0.42 U
Carbon Disulfide	0.1 U	0.48 U	0.48 U	0.48 U	1 U	0.48 U
Carbon Tetrachloride	0.1 U	0.28 U	0.28 U	0.28 U	0.5 U	0.28 U
Chlorobenzene	0.3 J,F	0.36 U	0.36 U	0.36 U	0.8 U	0.36 U
Chloroethane	0.1 U	0.4 U	0.4 U	0.4 U	1 U	0.4 U
Chloroform	0.1 U	0.47 J	0.41 J	0.33 U	0.8 U	0.33 U
Chloromethane	0.1 U	0.4 U	0.4 U	0.4 U	1 U	0.4 U
cis-1,2-Dichloroethene	0.1 U	85	110	91	53	0.32 U
cis-1,3-Dichloropropene	0.1 U	0.22 U	0.22 U	0.22 U	1 U	0.22 U
Dibromochloromethane	0.1 U	0.28 U	0.28 U	0.28 U	1 U	0.28 U
Ethylbenzene	0.1 U	0.25 U	0.25 U	0.25 U	0.8 U	0.25 U
Methyl ethyl ketone	1 U	4.7 U	4.7 U	4.7 U	3 U	4.7 U
Methyl isobutyl ketone (MIBK)	1 U	3.5 U	3.5 U	3.5 U	3 U	3.5 U
Methylene chloride	0.2 U	0.95 U	0.95 U	0.95 U	2 U	2.7 U
m-Xylene & p-Xylene	0.1 U	0.6 U	0.6 U	0.6 U	0.8 U	0.6 U
o-Xylene	0.1 U	0.3 U	0.3 U	0.3 U	0.8 U	0.3 U
Tetrachloroethene	0.1 U	0.32 U	0.32 U	0.32 U	0.8 U	0.32 U
Toluene	0.1 U	0.36 U	0.36 U	0.36 U	0.8 J	0.36 U
trans-1,2-Dichloroethene	0.1 U	0.4 J	0.5 J	0.53 J	0.8 U	0.27 U
trans-1,3-Dichloropropene	0.1 U	0.32 U	0.32 U	0.32 U	1 U	0.32 U
Trichloroethene	0.1 U	390	400	110	77	0.26 U
Trichlorofluoromethane	0.1 U	0.34 U	0.34 U	0.34 U	0.5 U	0.34 U
Vinyl chloride	0.1 U	0.3 U	0.3 U	0.3 U	0.5 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-58B</b>	<b>RD-58B</b>	<b>RD-58B</b>	<b>RD-58C</b>	<b>RD-58C</b>	<b>RD-59A</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:	TestAmerica	Lancaster	Lancaster	TestAmerica	Lancaster	TestAmerica
Collection Date:	05/16/2007	08/13/2007	10/25/2007	02/09/2007	08/20/2007	02/28/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.1 U	0.1 U	0.3 U	0.1 U	0.3 U
1,1,2,2-Tetrachloroethane	0.24 U	0.1 U	0.1 U	0.24 U	0.1 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	0.2 U	0.2 U	1.5 U	0.2 U	1.5 U
1,1,2-Trichloroethane	0.3 U	0.1 U	0.1 U	0.3 U	0.1 U	0.3 U
1,1-Dichloroethane	0.27 U	0.1 U	0.1 U	0.27 U	0.1 U	0.27 U
1,1-Dichloroethene	0.42 U	0.1 U	0.1 U	0.42 U	0.1 U	0.42 U
1,2-Dichlorobenzene	0.32 U	0.1 U	0.1 U	0.32 U	0.1 U	0.32 U
1,2-Dichloroethane	0.28 U	0.1 U	0.1 U	0.28 U	0.1 U	0.28 U
1,2-Dichloropropane	0.35 U	0.1 U	0.1 U	0.35 U	0.1 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.1 U	0.1 U	0.35 U	0.1 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.1 U	0.1 U	0.37 U	0.1 U	0.37 U
1,4-Dioxane	1.4 J	1 U	1 U	---	---	---
2-Hexanone	2.6 U	1 U	1 U	2.6 U	1 U	2.6 U
Acetone	4.5 U	3 U	3 U	4.5 U	3 U	5.9 J,L
Benzene	0.28 U	0.1 U	0.1 U	0.28 U	0.1 U	0.28 U
Bromodichloromethane	0.3 U	0.1 U	0.1 U	0.3 U	0.1 U	0.3 U
Bromoform	0.4 U	0.1 U	0.1 U	0.4 U	0.1 U	0.4 U
Bromomethane	0.42 U	0.1 U	0.1 U	0.42 U	0.1 U	0.42 U
Carbon Disulfide	0.48 U	0.1 U	0.1 U	0.48 U	0.1 U	0.48 U
Carbon Tetrachloride	0.28 U	0.1 U	0.1 U	0.28 U	0.1 U	0.28 U
Chlorobenzene	0.36 U	0.1 U	0.1 U	0.36 U	0.1 U	0.36 U
Chloroethane	0.4 U	0.1 U	0.1 U	0.4 U	0.1 U	0.4 U
Chloroform	0.33 U	0.1 U	0.1 U	0.33 U	0.1 U	0.33 U
Chloromethane	0.4 U	0.1 U	0.1 U	0.4 U	0.1 U	0.4 U
cis-1,2-Dichloroethene	0.32 U	0.1 U	0.1 U	0.53 J	0.8	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.1 U	0.1 U	0.22 U	0.1 U	0.22 U
Dibromochloromethane	0.28 U	0.1 U	0.1 U	0.28 U	0.1 U	0.28 U
Ethylbenzene	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.25 U
Methyl ethyl ketone	4.7 U	1 U	1 U	4.7 U	1 U	4.7 U
Methyl isobutyl ketone (MIBK)	3.5 U	1 U	1 U	3.5 U	1 U	3.5 U
Methylene chloride	0.95 U	0.2 U	0.2 U	0.95 U	0.2 U	0.95 U
m-Xylene & p-Xylene	0.6 U	0.1 U	0.1 U	0.6 U	0.1 U	0.6 U
o-Xylene	0.3 U	0.1 U	0.1 U	0.3 U	0.1 U	0.3 U
Tetrachloroethene	0.32 U	0.1 U	0.1 U	0.32 U	0.1 U	0.32 U
Toluene	0.36 U	0.8	0.1 U	0.36 U	0.1 U	0.36 U
trans-1,2-Dichloroethene	0.27 U	0.1 U	0.1 U	0.27 U	0.1 J	0.27 U
trans-1,3-Dichloropropene	0.32 U	0.1 U	0.1 U	0.32 U	0.1 U	0.32 U
Trichloroethene	0.26 U	0.1 U	0.1 U	0.26 U	0.1 U	0.26 U
Trichlorofluoromethane	0.34 U	0.1 U	0.1 U	0.34 U	0.1 U	0.34 U
Vinyl chloride	0.3 U	0.1 U	0.1 U	0.99	1.7	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-59A</b>	<b>RD-59A</b>	<b>RD-59B</b>	<b>RD-59B</b>	<b>RD-59B</b>	<b>RD-59B</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:	Lancaster	Lancaster	TestAmerica	TestAmerica	Lancaster	Lancaster
Collection Date:	08/16/2007	10/25/2007	02/28/2007	05/23/2007	08/16/2007	10/25/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.1 U	0.1 U	0.3 U	0.3 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.1 U	0.1 U	0.24 U	0.24 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	1.5 U	1.5 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.1 U	0.1 U	0.3 U	0.3 U	0.1 U	0.1 U
1,1-Dichloroethane	0.1 U	0.1 U	0.27 U	0.27 U	0.1 U	0.1 U
1,1-Dichloroethene	0.1 U	0.1 U	0.42 U	0.42 U	0.1 U	0.1 U
1,2-Dichlorobenzene	0.1 U	0.1 U	0.32 U	0.32 U	0.1 U	0.1 U
1,2-Dichloroethane	0.1 U	0.1 U	0.28 U	0.28 U	0.1 U	0.1 U
1,2-Dichloropropane	0.1 U	0.1 U	0.35 U	0.35 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.1 U	0.1 U	0.35 U	0.35 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.1 U	0.1 U	0.37 U	0.37 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	1 U	2.6 U	2.6 U	1 U	1 U
Acetone	3 U	3 U	4.5 U	4.5 U	3 U	3 U
Benzene	0.1 U	0.1 U	0.28 U	0.28 U	0.1 U	0.1 U
Bromodichloromethane	0.1 U	0.1 U	0.3 U	0.3 U	0.1 U	0.1 U
Bromoform	0.1 U	0.1 U	0.4 U	0.4 U	0.1 U	0.1 U
Bromomethane	0.1 U	0.1 U	0.42 U	0.42 U	0.1 U	0.1 U
Carbon Disulfide	0.1 U	0.1 U	0.48 U	0.48 U	0.3 J,L	0.3 J,L
Carbon Tetrachloride	0.1 U	0.1 U	0.28 U	0.28 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.1 U	0.36 U	0.36 U	0.1 U	0.1 U
Chloroethane	0.1 U	0.1 U	0.4 U	0.4 U	0.1 U	0.1 U
Chloroform	0.1 U	0.1 U	0.33 U	0.33 U	0.1 U	0.1 U
Chloromethane	0.1 U	0.1 U	0.4 U	0.4 U	0.1 U	0.1 J
cis-1,2-Dichloroethene	0.1 U	0.1 U	0.32 U	0.32 U	0.1 U	0.1 U
cis-1,3-Dichloropropene	0.1 U	0.1 U	0.22 U	0.22 U	0.1 U	0.1 U
Dibromochloromethane	0.1 U	0.1 U	0.28 U	0.28 U	0.1 U	0.1 U
Ethylbenzene	0.1 U	0.1 U	0.25 U	0.25 U	0.1 U	0.1 U
Methyl ethyl ketone	1 U	1 U	4.7 U	4.7 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	3.5 U	3.5 U	1 U	1 U
Methylene chloride	0.2 U	0.2 U	0.95 U	0.95 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.1 U	0.1 U	0.6 U	0.6 U	0.1 U	0.1 U
o-Xylene	0.1 U	0.1 U	0.3 U	0.3 U	0.1 U	0.1 U
Tetrachloroethene	0.1 U	0.1 U	0.32 U	0.32 U	0.1 U	0.1 U
Toluene	0.1 U	0.1 U	0.36 U	0.36 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	0.1 U	0.1 U	0.27 U	0.27 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	0.1 U	0.1 U	0.32 U	0.32 U	0.1 U	0.1 U
Trichloroethene	0.1 U	0.1 U	0.26 U	0.26 U	0.1 U	0.1 U
Trichlorofluoromethane	0.1 U	0.1 U	0.34 U	0.34 U	0.1 U	0.1 U
Vinyl chloride	0.1 U	0.1 U	0.3 U	0.3 U	0.1 U	0.1 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008



**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-59C</b>	<b>RD-59C</b>	<b>RD-59C</b>	<b>RD-59C</b>	<b>RD-60</b>	<b>RD-60</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:	TestAmerica	TestAmerica	Lancaster	Lancaster	TestAmerica	Lancaster
Collection Date:	02/28/2007	05/23/2007	08/16/2007	10/25/2007	03/01/2007	08/06/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.8 U
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.1 U	0.1 U	0.24 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	1.5 U	0.2 U	0.2 U	1.5 U	2 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.1 U	0.1 U	0.37 J	0.8 U
1,1-Dichloroethane	0.27 U	0.27 U	0.1 U	0.1 U	2	2 J
1,1-Dichloroethene	0.42 U	0.42 U	0.1 U	0.1 U	1.8	2 J
1,2-Dichlorobenzene	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U	1 U
1,2-Dichloroethane	0.28 U	0.28 U	0.1 U	0.1 U	6.7	0.5 U
1,2-Dichloropropane	0.35 U	0.35 U	0.1 U	0.1 U	2.3	1 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.1 U	0.1 U	0.35 U	1 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.1 U	0.1 U	0.37 U	1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	2.6 U	2.6 U	1 U	1 U	2.6 U	3 U
Acetone	4.5 U	4.5 U	3 U	3 U	4.5 U	6 U
Benzene	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U	0.5 U
Bromodichloromethane	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	1 U
Bromoform	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U	1 U
Bromomethane	0.42 U	0.42 U	0.1 U	0.1 U	0.42 U	1 U
Carbon Disulfide	0.48 U	0.48 U	0.4 J,L	0.4 J,L	0.48 U	1 U
Carbon Tetrachloride	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U	0.5 U
Chlorobenzene	0.36 U	0.36 U	0.1 U	0.1 U	0.36 U	0.8 U
Chloroethane	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U	1 U
Chloroform	0.33 U	0.33 U	0.1 U	0.1 U	0.45 J	0.8 U
Chloromethane	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U	1 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.1 U	0.1 U	22	19
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.1 U	0.1 U	0.22 U	1 U
Dibromochloromethane	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U	1 U
Ethylbenzene	0.25 U	0.25 U	0.1 U	0.1 U	0.25 U	0.8 U
Methyl ethyl ketone	4.7 U	4.7 U	1 U	1 U	4.7 U	3 U
Methyl isobutyl ketone (MIBK)	3.5 U	3.5 U	1 U	1 U	3.5 U	3 U
Methylene chloride	0.95 U	0.95 U	0.2 U	0.2 U	0.95 U	2 U
m-Xylene & p-Xylene	0.6 U	0.6 U	0.1 U	0.1 U	0.6 U	0.8 U
o-Xylene	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.8 U
Tetrachloroethene	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U	0.8 U
Toluene	0.36 U	0.36 U	0.1 U	0.1 U	0.36 U	0.7 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.1 U	0.1 U	0.47 J	0.8 U
trans-1,3-Dichloropropene	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U	1 U
Trichloroethene	0.26 U	0.26 U	0.1 U	0.1 U	640	440
Trichlorofluoromethane	0.34 U	0.34 U	0.1 U	0.1 U	0.34 U	0.5 U
Vinyl chloride	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.5 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-60</b>	<b>RD-61</b>	<b>RD-61</b>	<b>RD-61</b>	<b>RD-61</b>	<b>RD-61</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Split	Primary	Primary	Split	Primary	Split
Lab Name:	TestAmerica	TestAmerica	TestAmerica	STL-SA	Lancaster	TestAmerica
Collection Date:	08/06/2007	02/26/2007	05/21/2007	05/21/2007	08/06/2007	08/06/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.41 U	0.1 U	0.3 U
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.24 U	0.37 U	0.1 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	1.5 U	1.5 U	1 U	0.2 U	1.5 U
1,1,2-Trichloroethane	0.34 J	0.3 U	0.3 U	0.31 U	0.1 U	0.3 U
1,1-Dichloroethane	2.2	0.27 U	0.27 U	0.1 U	0.1 U	0.27 U
1,1-Dichloroethene	1.5	0.42 U	0.42 U	0.36 U	0.1 U	0.42 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.14 U	0.1 U	0.32 U
1,2-Dichloroethane	3.9	0.28 U	0.28 U	0.22 U	0.1 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.15 U	0.1 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.11 U	0.1 U	0.35 U
1,4-Dichlorobenzene	0.44 U	0.37 U	0.37 U	0.13 U	0.1 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	2.6 U	2.6 U	2.6 U	1 U	1 U	2.6 U
Acetone	4.5 U	4.5 U	4.5 U	1 U	3 U	4.5 U
Benzene	0.28 U	0.28 U	0.28 U	0.13 U	0.1 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.14 U	0.1 U	0.3 U
Bromoform	0.4 U	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U
Bromomethane	0.42 U	0.42 U	0.42 U	0.08 U	0.1 U	0.42 U
Carbon Disulfide	0.48 U	0.48 U	0.48 U	1 U	0.1 U	0.48 U
Carbon Tetrachloride	0.28 U	0.28 U	0.28 U	0.15 U	0.1 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.12 U	0.1 U	0.36 U
Chloroethane	0.4 U	0.4 U	0.4 U	0.34 U	0.1 U	0.4 U
Chloroform	0.33 U	0.33 U	0.33 U	0.12 U	0.1 U	0.33 U
Chloromethane	0.4 U	0.4 U	0.4 U	0.25 U	0.1 U	0.4 U
cis-1,2-Dichloroethene	15	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.1 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.4 U	0.1 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.27 U	0.1 U	0.25 U
Methyl ethyl ketone	4.7 U	4.7 U	4.7 U	1 U	1 U	4.7 U
Methyl isobutyl ketone (MIBK)	3.5 U	3.5 U	3.5 U	1 U	1 U	3.5 U
Methylene chloride	0.95 U	0.95 U	0.95 U	0.35 U	0.2 U	0.95 U
m-Xylene & p-Xylene	0.6 U	0.6 U	0.6 U	0.18 U	0.1 U	0.6 U
o-Xylene	0.3 U	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.38 U	0.1 U	0.32 U
Toluene	0.36 U	0.36 U	0.36 U	0.25 U	0.1 U	0.36 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.11 U	0.1 U	0.27 U
trans-1,3-Dichloropropene	0.32 U	0.32 U	0.32 U	0.3 U	0.1 U	0.32 U
Trichloroethene	420	0.26 U	0.26 U	0.31 U	0.1 U	0.26 U
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.23 U	0.1 U	0.34 U
Vinyl chloride	0.3 U	0.3 U	0.3 U	0.12 U	0.1 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
**SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS**  
**IN CHATSWORTH FORMATION WELLS, 2007**  
**BOEING SANTA SUSANA FIELD LABORATORY**  
**VENTURA COUNTY, CALIFORNIA**

<b>Well Identifier:</b>	<b>RD-61</b>	<b>RD-61</b>	<b>RD-62</b>	<b>RD-62</b>	<b>RD-62</b>	<b>RD-62</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Split	Primary	Primary	Primary	Primary
Lab Name:	Lancaster	TestAmerica	TestAmerica	TestAmerica	Lancaster	Lancaster
Collection Date:	10/19/2007	10/19/2007	02/26/2007	05/17/2007	08/22/2007	10/19/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.1 UJ	0.3 U	0.3 U	0.3 U	0.1 U	0.1 UJ
1,1,2,2-Tetrachloroethane	0.1 UJ	0.24 U	0.24 U	0.24 U	0.1 U	0.1 UJ
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 UJ	1.5 U	1.5 U	1.5 U	0.2 U	0.2 UJ
1,1,2-Trichloroethane	0.1 UJ	0.3 U	0.3 U	0.3 U	0.1 U	0.1 UJ
1,1-Dichloroethane	0.1 UJ	0.27 U	0.27 U	0.27 U	0.1 U	0.1 UJ
1,1-Dichloroethene	0.1 UJ	0.42 U	0.42 U	0.42 U	0.1 U	0.1 UJ
1,2-Dichlorobenzene	0.1 UJ	0.32 U	0.32 U	0.32 U	0.1 U	0.1 UJ
1,2-Dichloroethane	0.1 UJ	0.28 U	0.28 U	0.28 U	0.1 U	0.1 UJ
1,2-Dichloropropane	0.1 UJ	0.35 U	0.35 U	0.35 U	0.1 U	0.1 UJ
1,3-Dichlorobenzene	0.1 UJ	0.35 U	0.35 U	0.35 U	0.1 U	0.1 UJ
1,4-Dichlorobenzene	0.1 UJ	0.37 U	0.37 U	0.37 U	0.1 U	0.1 UJ
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 UJ	2.6 U	2.6 U	2.6 U	1 U	1 UJ
Acetone	3 UJ	4.5 U	4.5 U	4.5 U	3 U	3 UJ
Benzene	0.1 UJ	0.28 U	0.28 U	0.28 U	0.1 U	0.1 UJ
Bromodichloromethane	0.1 UJ	0.3 U	0.3 U	0.3 U	0.1 U	0.1 UJ
Bromoform	0.1 UJ	0.4 U	0.4 U	0.4 U	0.1 U	0.1 UJ
Bromomethane	0.1 UJ	0.42 U	0.42 U	0.42 U	0.1 U	0.1 UJ
Carbon Disulfide	0.3 J,L	1.4 J,L	0.48 U	0.48 U	0.1 J,L	0.1 J,L
Carbon Tetrachloride	0.1 UJ	0.28 U	0.28 U	0.28 U	0.1 U	0.1 UJ
Chlorobenzene	0.1 UJ	0.36 U	0.36 U	0.36 U	0.1 U	0.1 UJ
Chloroethane	0.1 UJ	0.4 U	0.4 U	0.4 U	0.1 U	0.1 UJ
Chloroform	0.1 UJ	0.33 U	0.33 U	0.33 U	0.1 U	0.1 UJ
Chloromethane	0.1 UJ	0.4 U	0.4 U	0.4 U	0.1 U	0.1 UJ
cis-1,2-Dichloroethene	0.1 UJ	0.32 U	0.32 U	0.32 U	0.1 U	0.1 UJ
cis-1,3-Dichloropropene	0.1 UJ	0.22 U	0.22 U	0.22 U	0.1 U	0.1 UJ
Dibromochloromethane	0.1 UJ	0.28 U	0.28 U	0.28 U	0.1 U	0.1 UJ
Ethylbenzene	0.1 UJ	0.25 U	0.25 U	0.25 U	0.1 U	0.1 UJ
Methyl ethyl ketone	1 UJ	4.7 U	4.7 U	4.7 U	1 U	1 UJ
Methyl isobutyl ketone (MIBK)	1 UJ	3.5 U	3.5 U	3.5 U	1 U	1 UJ
Methylene chloride	0.2 UJ	0.95 U	0.95 U	0.95 U	0.2 U	0.2 UJ
m-Xylene & p-Xylene	0.1 UJ	0.6 U	0.6 U	0.6 U	0.1 U	0.1 UJ
o-Xylene	0.1 UJ	0.3 U	0.3 U	0.3 U	0.1 U	0.1 UJ
Tetrachloroethene	0.1 UJ	0.32 U	0.32 U	0.32 U	0.1 U	0.1 UJ
Toluene	0.1 UJ	0.36 U	0.36 U	0.36 U	0.1 U	0.1 UJ
trans-1,2-Dichloroethene	0.1 UJ	0.27 U	0.27 U	0.27 U	0.1 U	0.1 UJ
trans-1,3-Dichloropropene	0.1 UJ	0.32 U	0.32 U	0.32 U	0.1 U	0.1 UJ
Trichloroethene	0.1 UJ	0.26 U	0.26 U	0.26 U	0.1 U	0.1 UJ
Trichlorofluoromethane	0.1 UJ	0.34 U	0.34 U	0.34 U	0.1 U	0.1 UJ
Vinyl chloride	0.1 UJ	0.3 U	0.3 U	0.3 U	0.1 U	0.1 UJ

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-63</b>	<b>RD-63</b>	<b>RD-64</b>	<b>RD-65</b>	<b>RD-66</b>	<b>RD-66</b>
Sample Port:	---	---	Z6	Z5	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Duplicate
Lab Name:	Lancaster	Lancaster	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	05/24/2007	08/21/2007	02/08/2007	02/07/2007	02/16/2007	02/16/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.8 U	0.1 U	0.3 U	0.62 J	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.5 U	0.1 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	2 U	0.3 J	1.5 U	1.5 U	1.5 U	1.5 U
1,1,2-Trichloroethane	0.8 U	0.1 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	1 U	0.7	0.28 J	9.8	0.27 U	0.27 U
1,1-Dichloroethene	2 J	1.5	1.5	41	0.42 U	0.42 U
1,2-Dichlorobenzene	1 U	0.1 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.5 U	0.1 U	0.3 J	0.96	0.28 U	0.28 U
1,2-Dichloropropane	1 U	0.1 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	1 U	0.1 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	1 U	0.1 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	3 U	1 U	2.6 U	2.6 U	2.6 U	2.6 U
Acetone	6 U	3 U	4.5 U	4.5 U	4.5 U	4.5 U
Benzene	0.5 U	0.1 U	0.28 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	1 U	0.1 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	1 U	0.1 U	0.4 U	0.4 U	0.4 U	0.4 U
Bromomethane	1 U	0.1 U	0.42 U	0.42 U	0.42 U	0.42 U
Carbon Disulfide	1 U	0.1 U	0.48 U	0.48 U	0.48 U	0.48 U
Carbon Tetrachloride	0.5 U	0.1 U	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.8 U	0.1 U	0.36 U	0.56 J,F	0.36 U	0.36 U
Chloroethane	1 U	0.1 U	0.4 U	0.4 U	0.4 U	0.4 U
Chloroform	0.8 U	0.1 U	0.33 U	0.4 J	0.33 U	0.33 U
Chloromethane	1 U	0.1 U	0.4 U	0.4 U	0.4 U	0.4 U
cis-1,2-Dichloroethene	4 J	4.5	230	27	0.32 U	0.32 U
cis-1,3-Dichloropropene	1 U	0.1 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	1 U	0.1 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.8 U	0.1 U	0.25 U	0.25 U	0.25 U	0.25 U
Methyl ethyl ketone	3 U	1 U	4.7 U	4.7 U	4.7 U	4.7 U
Methyl isobutyl ketone (MIBK)	3 U	1 U	3.5 U	3.5 U	3.5 U	3.5 U
Methylene chloride	2 U	0.2 U	1.2 J,L	0.95 U	0.95 U	0.95 U
m-Xylene & p-Xylene	0.8 U	0.1 U	0.6 U	0.6 U	0.6 U	0.6 U
o-Xylene	0.8 U	0.1 U	0.3 U	0.3 U	0.3 U	0.3 U
Tetrachloroethene	0.8 U	0.1 J	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	0.7 U	0.1 U	0.36 U	0.36 U	0.36 U	0.36 U
trans-1,2-Dichloroethene	0.8 U	0.1 U	2	0.27 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	1 U	0.1 U	0.32 U	0.32 U	0.32 U	0.32 U
Trichloroethene	11	11	180	180	0.26 U	0.26 U
Trichlorofluoromethane	0.5 U	0.1 U	0.34 U	0.34 U	0.34 U	0.34 U
Vinyl chloride	0.5 U	0.1 U	0.3 U	0.3 U	0.3 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-66</b>	<b>RD-66</b>	<b>RD-66</b>	<b>RD-66</b>	<b>RD-66</b>	<b>RD-66</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Split	Primary	Primary	Primary	Duplicate	Split
Lab Name:	STL-SA	TestAmerica	Lancaster	Lancaster	Lancaster	TestAmerica
Collection Date:	02/16/2007	05/22/2007	08/23/2007	10/30/2007	10/30/2007	10/30/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.41 U	0.3 U	0.1 U	0.1 U	0.1 U	0.3 U
1,1,2,2-Tetrachloroethane	0.37 U	0.24 U	0.1 U	0.1 U	0.1 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1 U	1.5 U	0.2 U	0.2 U	0.2 U	1.5 U
1,1,2-Trichloroethane	0.31 U	0.3 U	0.1 U	0.1 U	0.1 U	0.3 U
1,1-Dichloroethane	0.1 U	0.27 U	0.1 U	0.1 U	0.1 U	0.27 U
1,1-Dichloroethene	0.36 U	0.42 U	0.1 U	0.1 U	0.1 U	0.42 U
1,2-Dichlorobenzene	0.14 U	0.32 U	0.1 U	0.1 U	0.1 U	0.32 U
1,2-Dichloroethane	0.22 U	0.28 U	0.1 U	0.1 U	0.1 U	0.28 U
1,2-Dichloropropane	0.15 U	0.35 U	0.1 U	0.1 U	0.1 U	0.35 U
1,3-Dichlorobenzene	0.11 U	0.35 U	0.1 U	0.1 U	0.1 U	0.35 U
1,4-Dichlorobenzene	0.13 U	0.37 U	0.1 U	0.1 U	0.1 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	2.6 U	1 U	1 U	1 U	2.6 U
Acetone	1 U	4.5 U	3 U	3 U	3 U	4.5 U
Benzene	0.13 U	0.28 U	0.1 U	0.1 U	0.1 U	0.28 U
Bromodichloromethane	0.14 U	0.3 U	0.1 U	0.1 U	0.1 U	0.3 U
Bromoform	0.1 U	0.4 U	0.1 U	0.1 U	0.1 U	0.4 U
Bromomethane	0.08 U	0.42 U	0.1 U	0.1 U	0.1 U	0.42 U
Carbon Disulfide	1 U	0.48 U	0.1 U	0.1 U	0.1 U	0.48 U
Carbon Tetrachloride	0.15 U	0.28 U	0.1 U	0.1 U	0.1 U	0.28 U
Chlorobenzene	0.12 U	0.36 U	0.1 U	0.1 U	0.1 U	0.36 U
Chloroethane	0.34 U	0.4 U	0.1 U	0.1 U	0.1 U	0.4 U
Chloroform	0.12 U	0.33 U	0.1 U	0.1 U	0.1 U	0.33 U
Chloromethane	0.25 U	0.4 U	0.1 U	0.1 U	0.1 U	0.4 U
cis-1,2-Dichloroethene	0.1 U	0.32 U	0.1 U	0.1 U	0.1 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.1 U	0.1 U	0.1 U	0.22 U
Dibromochloromethane	0.4 U	0.28 U	0.1 U	0.1 U	0.1 U	0.28 U
Ethylbenzene	0.27 U	0.25 U	0.1 U	0.1 U	0.1 U	0.25 U
Methyl ethyl ketone	1 U	4.7 U	1 U	1 U	1 U	4.7 U
Methyl isobutyl ketone (MIBK)	1 U	3.5 U	1 U	1 U	1 U	3.5 U
Methylene chloride	0.35 U	0.95 U	0.3 J	0.2 U	0.2 U	0.95 U
m-Xylene & p-Xylene	0.18 U	0.6 U	0.1 U	0.1 U	0.1 U	0.6 U
o-Xylene	0.1 U	0.3 U	0.1 U	0.1 U	0.1 U	0.3 U
Tetrachloroethene	0.38 U	0.32 U	0.1 U	0.1 U	0.1 U	0.32 U
Toluene	0.25 U	0.36 U	0.1 U	0.1 U	0.1 U	0.36 U
trans-1,2-Dichloroethene	0.11 U	0.27 U	0.1 U	0.1 U	0.1 U	0.27 U
trans-1,3-Dichloropropene	0.3 U	0.32 U	0.1 U	0.1 U	0.1 U	0.32 U
Trichloroethene	0.31 U	0.26 U	0.1 U	0.1 U	0.1 U	0.26 U
Trichlorofluoromethane	0.23 U	0.34 U	0.1 U	0.1 U	0.1 U	0.34 U
Vinyl chloride	0.12 U	0.3 U	0.1 U	0.1 U	0.1 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
**SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS**  
**IN CHATSWORTH FORMATION WELLS, 2007**  
**BOEING SANTA SUSANA FIELD LABORATORY**  
**VENTURA COUNTY, CALIFORNIA**

<b>Well Identifier:</b>	<b>RD-67</b>	<b>RD-67</b>	<b>RD-68A</b>	<b>RD-68A</b>	<b>RD-68A</b>	<b>RD-68A</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Duplicate	Primary	Primary
Lab Name:	TestAmerica	Lancaster	TestAmerica	TestAmerica	TestAmerica	Lancaster
Collection Date:	02/06/2007	08/17/2007	02/28/2007	02/28/2007	05/23/2007	08/16/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U	0.1 U
1,1,2,2-Tetrachloroethane	0.24 U	0.1 U	0.24 U	0.24 U	0.24 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	0.2 U	1.5 U	1.5 U	1.5 U	0.2 U
1,1,2-Trichloroethane	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U	0.1 U
1,1-Dichloroethane	0.27 U	0.1 U	0.27 U	0.27 U	0.27 U	0.1 U
1,1-Dichloroethene	0.42 U	0.1 U	0.42 U	0.42 U	0.42 U	0.1 U
1,2-Dichlorobenzene	0.32 U	0.1 U	0.32 U	0.32 U	0.32 U	0.1 U
1,2-Dichloroethane	0.28 U	0.1 U	0.28 U	0.28 U	0.28 U	0.1 U
1,2-Dichloropropane	0.35 U	0.1 U	0.35 U	0.35 U	0.35 U	0.1 U
1,3-Dichlorobenzene	0.35 U	0.1 U	0.35 U	0.35 U	0.35 U	0.1 U
1,4-Dichlorobenzene	0.37 U	0.1 U	0.37 U	0.37 U	0.37 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	2.6 U	1 U	2.6 U	2.6 U	2.6 U	1 U
Acetone	4.5 U	3 U	4.5 U	4.5 U	4.5 U	3 U
Benzene	0.28 U	0.1 U	0.28 U	0.28 U	0.28 U	0.1 U
Bromodichloromethane	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U	0.1 U
Bromoform	0.4 U	0.1 U	0.4 U	0.4 U	0.4 U	0.1 U
Bromomethane	0.42 U	0.1 U	0.42 U	0.42 U	0.42 U	0.1 U
Carbon Disulfide	0.48 U	0.1 U	0.48 U	0.48 U	0.48 U	0.1 U
Carbon Tetrachloride	0.28 U	0.1 U	0.28 U	0.28 U	0.28 U	0.1 U
Chlorobenzene	0.36 U	0.1 U	0.36 U	0.36 U	0.36 U	0.1 U
Chloroethane	0.4 U	0.1 U	0.4 U	0.4 U	0.4 U	0.1 U
Chloroform	0.33 U	0.1 U	0.33 U	0.33 U	0.33 U	0.1 U
Chloromethane	0.4 U	0.1 U	0.4 U	0.4 U	0.4 U	0.1 U
cis-1,2-Dichloroethene	0.32 U	0.1 U	0.32 U	0.32 U	0.32 U	0.1 U
cis-1,3-Dichloropropene	0.22 U	0.1 U	0.22 U	0.22 U	0.22 U	0.1 U
Dibromochloromethane	0.28 U	0.1 U	0.28 U	0.28 U	0.28 U	0.1 U
Ethylbenzene	0.25 U	0.1 U	0.25 U	0.25 U	0.25 U	0.1 U
Methyl ethyl ketone	4.7 U	1 U	4.7 U	4.7 U	4.7 U	1 U
Methyl isobutyl ketone (MIBK)	3.5 U	1 U	3.5 U	3.5 U	3.5 U	1 U
Methylene chloride	0.95 U	0.2 U	0.95 U	0.95 U	0.95 U	0.2 U
m-Xylene & p-Xylene	0.6 U	0.1 U	0.6 U	0.6 U	0.6 U	0.1 U
o-Xylene	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U	0.1 U
Tetrachloroethene	0.32 U	0.1 U	0.32 U	0.32 U	0.32 U	0.1 U
Toluene	0.36 U	0.1 U	0.36 U	0.36 U	0.36 U	0.1 U
trans-1,2-Dichloroethene	0.27 U	0.1 U	0.27 U	0.27 U	0.27 U	0.1 U
trans-1,3-Dichloropropene	0.32 U	0.1 U	0.32 U	0.32 U	0.32 U	0.1 U
Trichloroethene	0.26 U	0.1 U	0.26 U	0.26 U	0.26 U	0.1 U
Trichlorofluoromethane	0.34 U	0.1 U	0.34 U	0.34 U	0.34 U	0.1 U
Vinyl chloride	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U	0.1 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-68A</b>	<b>RD-68B</b>	<b>RD-68B</b>	<b>RD-68B</b>	<b>RD-68B</b>	<b>RD-68B</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Duplicate
Lab Name:	Lancaster	TestAmerica	TestAmerica	Lancaster	Lancaster	Lancaster
Collection Date:	10/25/2007	02/28/2007	05/23/2007	08/16/2007	10/25/2007	10/25/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.1 U	0.3 U	0.3 U	0.1 U	0.1 U	0.1 U
1,1,2,2-Tetrachloroethane	0.1 U	0.24 U	0.24 U	0.1 U	0.1 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	1.5 U	1.5 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	0.1 U	0.3 U	0.3 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethane	0.1 U	0.27 U	0.27 U	0.1 U	0.1 U	0.1 U
1,1-Dichloroethene	0.1 U	0.42 U	0.42 U	0.1 U	0.1 U	0.1 U
1,2-Dichlorobenzene	0.1 U	0.32 U	0.32 U	0.1 U	0.1 U	0.1 U
1,2-Dichloroethane	0.1 U	0.28 U	0.28 U	0.1 U	0.1 U	0.1 U
1,2-Dichloropropane	0.1 U	0.35 U	0.35 U	0.1 U	0.1 U	0.1 U
1,3-Dichlorobenzene	0.1 U	0.35 U	0.35 U	0.1 U	0.1 U	0.1 U
1,4-Dichlorobenzene	0.1 U	0.37 U	0.37 U	0.1 U	0.1 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	2.6 U	2.6 U	1 U	1 U	1 U
Acetone	3 U	4.5 U	4.5 U	3 U	3 U	3 U
Benzene	0.1 U	0.28 U	0.28 U	0.1 U	0.1 U	0.1 U
Bromodichloromethane	0.1 U	0.3 U	0.3 U	0.1 U	0.1 U	0.1 U
Bromoform	0.1 U	0.4 U	0.4 U	0.1 U	0.1 U	0.1 U
Bromomethane	0.1 U	0.42 U	0.42 U	0.1 U	0.1 U	0.1 U
Carbon Disulfide	0.1 U	0.48 U	0.48 U	0.1 U	0.1 U	0.1 U
Carbon Tetrachloride	0.1 U	0.28 U	0.28 U	0.1 U	0.1 U	0.1 U
Chlorobenzene	0.1 U	0.36 U	0.36 U	0.1 U	0.1 U	0.1 U
Chloroethane	0.1 U	0.4 U	0.4 U	0.1 U	0.1 U	0.1 U
Chloroform	0.1 U	0.33 U	0.33 U	0.1 U	0.1 U	0.1 U
Chloromethane	0.1 U	0.4 U	0.4 U	0.1 U	0.1 U	0.1 U
cis-1,2-Dichloroethene	0.1 U	0.32 U	0.32 U	0.1 J	0.1 J	0.1 J
cis-1,3-Dichloropropene	0.1 U	0.22 U	0.22 U	0.1 U	0.1 U	0.1 U
Dibromochloromethane	0.1 U	0.28 U	0.28 U	0.1 U	0.1 U	0.1 U
Ethylbenzene	0.1 U	0.25 U	0.25 U	0.1 U	0.1 U	0.1 U
Methyl ethyl ketone	1 U	4.7 U	4.7 U	1 U	1 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	3.5 U	3.5 U	1 U	1 U	1 U
Methylene chloride	0.2 U	0.95 U	0.95 U	0.2 U	0.2 U	0.2 U
m-Xylene & p-Xylene	0.1 U	0.6 U	0.6 U	0.1 U	0.1 U	0.1 U
o-Xylene	0.1 U	0.3 U	0.3 U	0.1 U	0.1 U	0.1 U
Tetrachloroethene	0.1 U	0.32 U	0.32 U	0.1 U	0.1 U	0.1 U
Toluene	0.1 U	0.36 U	0.36 U	0.1 U	0.1 U	0.1 U
trans-1,2-Dichloroethene	0.1 U	0.27 U	0.27 U	0.1 U	0.1 U	0.1 U
trans-1,3-Dichloropropene	0.1 U	0.32 U	0.32 U	0.1 U	0.1 U	0.1 U
Trichloroethene	0.1 U	0.26 U	0.26 U	0.1 U	0.1 U	0.1 U
Trichlorofluoromethane	0.1 U	0.34 U	0.34 U	0.1 U	0.1 U	0.1 U
Vinyl chloride	0.1 U	0.3 U	0.3 U	0.1 U	0.1 U	0.1 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-68B</b>	<b>RD-69</b>	<b>RD-69</b>	<b>RD-69</b>	<b>RD-70</b>	<b>RD-70</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Split	Primary	Primary	Duplicate	Primary	Primary
Lab Name:	TestAmerica	TestAmerica	Lancaster	Lancaster	TestAmerica	TestAmerica
Collection Date:	10/25/2007	02/28/2007	08/20/2007	08/20/2007	02/26/2007	05/09/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.1 U	0.1 U	0.24 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	1.5 U	0.2 U	0.2 U	1.5 U	1.5 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.1 U	0.1 U	0.27 U	0.27 U
1,1-Dichloroethene	0.42 U	0.42 U	0.1 U	0.1 U	0.42 U	0.42 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.1 U	0.1 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.1 U	0.1 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.1 U	0.1 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	2.6 U	2.6 U	1 U	1 U	2.6 U	2.6 U
Acetone	4.5 U	4.5 U	3 U	3 U	4.5 U	4.5 U
Benzene	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U
Bromoform	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U
Bromomethane	0.42 U	0.42 U	0.1 U	0.1 U	0.42 U	0.42 U
Carbon Disulfide	0.48 U	0.48 U	0.2 U	0.2 U	0.48 U	0.48 U
Carbon Tetrachloride	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.1 U	0.1 U	0.36 U	0.36 U
Chloroethane	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U
Chloroform	0.33 U	0.33 U	0.1 U	0.1 U	0.33 U	0.33 U
Chloromethane	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U	0.4 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.1 U	0.1 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.1 U	0.1 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.1 U	0.1 U	0.25 U	0.25 U
Methyl ethyl ketone	4.7 U	4.7 U	1 U	1 U	4.7 U	4.7 U
Methyl isobutyl ketone (MIBK)	3.5 U	3.5 U	1 U	1 U	3.5 U	3.5 U
Methylene chloride	0.95 U	0.95 U	0.4 U	0.2 U	0.95 U	1.2 U
m-Xylene & p-Xylene	0.6 U	0.6 U	0.1 U	0.1 U	0.6 U	0.6 U
o-Xylene	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U
Tetrachloroethene	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U
Toluene	0.36 U	0.36 U	0.1 U	0.1 U	0.36 U	0.36 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.1 U	0.1 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.32 U	0.32 U	0.1 U	0.1 U	0.32 U	0.32 U
Trichloroethene	0.33 U	0.26 U	0.1 U	0.1 U	0.26 U	0.26 U
Trichlorofluoromethane	0.34 U	0.34 U	0.1 U	0.1 U	0.34 U	0.34 U
Vinyl chloride	0.3 U	0.3 U	0.1 U	0.1 U	0.3 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008



**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-70</b>	<b>RD-70</b>	<b>RD-71</b>	<b>RD-73</b>	<b>WS-04A</b>	<b>WS-04A</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:	Lancaster	Lancaster	Lancaster	TestAmerica	TestAmerica	Lancaster
Collection Date:	08/03/2007	10/24/2007	10/26/2007	02/15/2007	02/20/2007	08/23/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	12 U	0.3 U	0.1 U
1,1,2,2-Tetrachloroethane	0.1 U	0.1 U	0.1 U	9.6 U	0.24 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.2 U	60 U	1.5 U	0.2 U
1,1,2-Trichloroethane	0.1 U	0.1 U	0.1 U	12 U	0.3 U	0.1 U
1,1-Dichloroethane	0.1 U	0.1 U	0.1 U	15 J	0.27 U	0.1 U
1,1-Dichloroethene	0.1 U	0.1 U	0.1 U	290	0.42 U	0.1 U
1,2-Dichlorobenzene	0.1 U	0.1 U	0.1 U	13 U	0.32 U	0.1 U
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	11 U	0.28 U	0.1 U
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	14 U	0.35 U	0.1 U
1,3-Dichlorobenzene	0.1 U	0.1 U	0.1 U	14 U	0.35 U	0.1 U
1,4-Dichlorobenzene	0.1 U	0.1 U	0.1 U	15 U	0.37 U	0.1 U
1,4-Dioxane	---	---	---	---	---	---
2-Hexanone	1 U	1 U	1 U	100 U	2.6 U	1 U
Acetone	3 U	3 U	3 U	180 U	4.5 U	3 U
Benzene	0.1 U	0.1 U	0.1 U	22	0.28 U	0.1 U
Bromodichloromethane	0.1 U	0.1 U	0.1 U	12 U	0.3 U	0.1 U
Bromoform	0.1 U	0.1 U	0.1 U	16 U	0.4 U	0.1 U
Bromomethane	0.1 U	0.1 U	0.1 U	17 U	0.42 U	0.1 U
Carbon Disulfide	0.1 U	0.59	0.63	19 U	0.48 U	0.1 U
Carbon Tetrachloride	0.1 U	0.1 U	0.1 U	11 U	0.28 U	0.1 U
Chlorobenzene	0.1 U	0.1 U	0.1 U	14 U	0.36 U	0.1 U
Chloroethane	0.1 U	0.1 U	0.1 U	16 U	0.4 U	0.1 U
Chloroform	0.1 U	0.1 U	0.1 U	13 J	0.33 U	0.1 U
Chloromethane	0.1 U	0.1 J	0.1 U	16 U	0.4 U	0.1 U
cis-1,2-Dichloroethene	0.1 U	0.1 U	0.1 U	260	0.32 U	0.1 U
cis-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	8.8 U	0.22 U	0.1 U
Dibromochloromethane	0.1 U	0.1 U	0.1 U	11 U	0.28 U	0.1 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	10 U	0.25 U	0.1 U
Methyl ethyl ketone	1 U	1 U	1 U	150 U	4.7 U	1 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	140 U	3.5 U	1 U
Methylene chloride	0.2 U	0.2 U	0.2 U	38 U	0.95 U	0.2 U
m-Xylene & p-Xylene	0.1 U	0.1 U	0.1 U	24 U	0.6 U	0.1 U
o-Xylene	0.1 U	0.1 U	0.1 U	12 U	0.3 U	0.1 U
Tetrachloroethene	0.1 U	0.1 U	0.1 U	13 U	0.32 U	0.1 U
Toluene	0.1 U	0.1 U	0.1 U	14 U	0.36 U	0.1 U
trans-1,2-Dichloroethene	0.1 U	0.1 U	0.1 U	11 U	0.27 U	0.1 U
trans-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	13 U	0.32 U	0.1 U
Trichloroethene	0.1 U	0.1 U	0.1 U	9500	0.26 U	0.1 U
Trichlorofluoromethane	0.1 U	0.1 U	0.1 U	14 U	0.34 U	0.1 U
Vinyl chloride	0.1 U	0.1 U	0.1 U	12 U	0.3 U	0.1 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>WS-05</b>	<b>WS-05</b>	<b>WS-05</b>	<b>WS-05</b>	<b>WS-05</b>	<b>WS-05</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Duplicate	Split	Primary	Duplicate	Primary
Lab Name:	TestAmerica	TestAmerica	STL-SA	TestAmerica	TestAmerica	Lancaster
Collection Date:	02/27/2007	02/27/2007	02/27/2007	05/15/2007	05/15/2007	08/21/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.3 U	0.3 U	0.41 U	0.3 U	0.3 U	0.1 U
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.37 U	0.24 U	0.24 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	1.5 U	1 U	1.5 U	1.5 U	0.2 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.31 U	0.3 U	0.3 U	0.1 U
1,1-Dichloroethane	0.27 U	0.27 U	0.1 U	0.27 U	0.27 U	0.1 U
1,1-Dichloroethene	0.42 U	0.42 U	0.36 U	0.42 U	0.42 U	0.1 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.14 U	0.32 U	0.32 U	0.1 U
1,2-Dichloroethane	0.28 U	0.28 U	0.22 U	0.28 U	0.28 U	0.1 U
1,2-Dichloropropane	0.35 U	0.35 U	0.15 U	0.35 U	0.35 U	0.1 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.11 U	0.35 U	0.35 U	0.1 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.13 U	0.37 U	0.37 U	0.1 U
1,4-Dioxane	3.2	---	---	3	---	2.5
2-Hexanone	2.6 U	2.6 U	1 U	2.6 U	2.6 U	1 U
Acetone	4.5 U	4.5 U	1 U	4.5 U	4.5 U	3 U
Benzene	0.28 U	0.28 U	0.13 U	0.28 U	0.28 U	0.1 U
Bromodichloromethane	0.3 U	0.3 U	0.14 U	0.3 U	0.3 U	0.1 U
Bromoform	0.4 U	0.4 U	0.1 U	0.4 U	0.4 U	0.1 U
Bromomethane	0.42 U	0.42 U	0.08 U	0.42 U	0.42 U	0.1 U
Carbon Disulfide	0.48 U	0.48 U	1 U	0.48 U	0.48 U	0.1 U
Carbon Tetrachloride	0.28 U	0.28 U	0.15 U	0.28 U	0.28 U	0.1 U
Chlorobenzene	0.36 U	0.36 U	0.12 U	0.36 U	0.36 U	0.1 U
Chloroethane	0.4 U	0.4 U	0.34 U	0.4 U	0.4 U	0.1 U
Chloroform	0.33 U	0.33 U	0.12 U	0.33 U	0.33 U	0.1 U
Chloromethane	0.4 U	0.4 U	0.25 U	0.4 U	0.4 U	0.1 U
cis-1,2-Dichloroethene	1.8	2	2.3	2.3	2.2	2 J
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.1 U
Dibromochloromethane	0.28 U	0.28 U	0.4 U	0.28 U	0.28 U	0.1 U
Ethylbenzene	0.25 U	0.25 U	0.27 U	0.25 U	0.25 U	0.1 U
Methyl ethyl ketone	4.7 U	4.7 U	1 U	4.7 U	4.7 U	1 U
Methyl isobutyl ketone (MIBK)	3.5 U	3.5 U	1 U	3.5 U	3.5 U	1 U
Methylene chloride	0.95 U	0.95 U	0.35 U	2.1 U	2 U	0.2 U
m-Xylene & p-Xylene	0.6 U	0.6 U	0.18 U	0.6 U	0.6 U	0.1 U
o-Xylene	0.3 U	0.3 U	0.1 U	0.3 U	0.3 U	0.1 U
Tetrachloroethene	0.32 U	0.32 U	0.38 U	0.32 U	0.32 U	0.1 U
Toluene	0.36 U	0.36 U	0.25 U	0.36 U	0.36 U	0.1 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.11 U	0.27 U	0.27 U	0.2 J
trans-1,3-Dichloropropene	0.32 U	0.32 U	0.3 U	0.32 U	0.32 U	0.1 U
Trichloroethene	1.3	0.91 J	0.79 J	0.81 J	0.77 J	0.8 J
Trichlorofluoromethane	0.34 U	0.34 U	0.23 U	0.34 U	0.34 U	0.1 U
Vinyl chloride	0.3 U	0.3 U	0.12 U	0.3 U	0.3 U	0.1 J

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
**SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS**  
**IN CHATSWORTH FORMATION WELLS, 2007**  
**BOEING SANTA SUSANA FIELD LABORATORY**  
**VENTURA COUNTY, CALIFORNIA**

<b>Well Identifier:</b>	<b>WS-05</b>	<b>WS-05</b>	<b>WS-05</b>	<b>WS-06</b>	<b>WS-06</b>	<b>WS-06</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Duplicate	Primary	Duplicate	Primary	Primary	Split
Lab Name:	Lancaster	Lancaster	Lancaster	TestAmerica	TestAmerica	Lancaster
Collection Date:	08/21/2007	10/29/2007	10/29/2007	02/14/2007	05/15/2007	05/15/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.1 U	0.1 U	0.1 U	0.3 U	0.3 U	0.8 U
1,1,2,2-Tetrachloroethane	0.1 U	0.1 U	0.1 U	0.24 U	0.24 U	0.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	0.2 U	1.5 U	1.5 U	2 U
1,1,2-Trichloroethane	0.1 U	0.1 U	0.1 U	0.3 U	0.3 U	0.8 U
1,1-Dichloroethane	0.1 U	0.1 U	0.1 U	0.27 U	0.27 U	1 U
1,1-Dichloroethene	0.1 U	0.1 U	0.1 U	0.42 U	0.42 U	0.8 U
1,2-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.32 U	0.32 U	1 U
1,2-Dichloroethane	0.1 U	0.1 U	0.1 U	0.28 U	0.28 U	0.5 U
1,2-Dichloropropane	0.1 U	0.1 U	0.1 U	0.35 U	0.35 U	1 U
1,3-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.35 U	0.35 U	1 U
1,4-Dichlorobenzene	0.1 U	0.1 U	0.1 U	0.37 U	0.37 U	1 U
1,4-Dioxane	---	2.7	---	1.2 J	1.5 J	---
2-Hexanone	1 U	1 U	1 U	2.6 U	2.6 U	3 U
Acetone	3 U	3 U	3 U	4.5 U	4.5 U	6 U
Benzene	0.1 U	0.1 U	0.1 U	0.28 U	0.28 U	0.5 U
Bromodichloromethane	0.1 U	0.1 U	0.1 U	0.3 U	0.3 U	1 U
Bromoform	0.1 U	0.1 U	0.1 U	0.4 U	0.4 U	1 U
Bromomethane	0.1 U	0.1 U	0.1 U	0.42 U	0.42 U	1 U
Carbon Disulfide	0.1 U	0.1 U	0.1 U	0.48 U	0.48 U	1 U
Carbon Tetrachloride	0.1 U	0.1 U	0.1 U	0.28 U	0.28 U	0.5 U
Chlorobenzene	0.1 U	0.1 U	0.1 U	0.36 U	0.36 U	0.8 U
Chloroethane	0.1 U	0.1 U	0.1 U	0.4 U	0.4 U	1 U
Chloroform	0.1 U	0.1 U	0.1 U	0.33 U	0.33 U	0.8 U
Chloromethane	0.1 U	0.1 U	0.1 U	0.4 U	0.4 U	1 U
cis-1,2-Dichloroethene	2 J	2.1	2	80	55 J	95
cis-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	0.22 U	0.22 U	1 U
Dibromochloromethane	0.1 U	0.1 U	0.1 U	0.28 U	0.28 U	1 U
Ethylbenzene	0.1 U	0.1 U	0.1 U	0.25 U	0.25 U	0.8 U
Methyl ethyl ketone	1 U	1 U	1 U	4.7 U	4.7 U	3 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1 U	3.5 U	3.5 U	3 U
Methylene chloride	0.2 U	0.2 U	0.2 U	0.95 U	1.5 U	2 U
m-Xylene & p-Xylene	0.1 U	0.1 U	0.1 U	0.6 U	0.6 U	0.8 U
o-Xylene	0.1 U	0.1 U	0.1 U	0.3 U	0.3 U	0.8 U
Tetrachloroethene	0.1 U	0.1 U	0.1 U	0.32 U	0.32 U	0.8 U
Toluene	0.1 U	0.1 U	0.1 U	0.36 U	0.36 U	0.7 U
trans-1,2-Dichloroethene	0.2 J	0.2 J	0.2 J	6.9	4	7
trans-1,3-Dichloropropene	0.1 U	0.1 U	0.1 U	0.32 U	0.32 U	1 U
Trichloroethene	0.8 J	0.7	0.7	4.3	2.6	5
Trichlorofluoromethane	0.1 U	0.1 U	0.1 U	0.34 U	0.34 U	0.5 U
Vinyl chloride	0.1 J	0.1 J	0.1 J	3.7	1.3	4

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>WS-06</b>	<b>WS-06</b>	<b>WS-09</b>	<b>WS-09</b>	<b>WS-09</b>	<b>WS-09</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:	Lancaster	Lancaster	TestAmerica	TestAmerica	Lancaster	Lancaster
Collection Date:	08/21/2007	10/24/2007	02/14/2007	05/10/2007	08/21/2007	10/25/2007
<b>Analyte (ug/L)</b>						
1,1,1-Trichloroethane	0.1 U	0.1 U	120 U	30 U	8 U	4 U
1,1,2,2-Tetrachloroethane	0.1 U	0.1 U	96 U	24 U	5 U	3 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	0.2 U	600 U	150 U	20 U	10 U
1,1,2-Trichloroethane	0.1 U	0.1 U	120 U	30 U	8 U	4 U
1,1-Dichloroethane	0.1 U	0.1 U	110 U	27 U	10 U	5 U
1,1-Dichloroethene	0.3 J	0.3 J	170 U	42 U	8 U	5 J
1,2-Dichlorobenzene	0.1 U	0.1 U	130 U	32 U	10 U	5 U
1,2-Dichloroethane	0.1 U	0.1 U	110 U	28 U	5 U	3 U
1,2-Dichloropropane	0.1 U	0.1 U	140 U	35 U	10 U	5 U
1,3-Dichlorobenzene	0.1 U	0.1 U	140 U	35 U	10 U	5 U
1,4-Dichlorobenzene	0.1 U	0.1 U	150 U	37 U	10 U	5 U
1,4-Dioxane	1.1 J	1.2 J	5.6	1 U	3.8	4.1
2-Hexanone	1 U	1 U	1000 U	260 U	30 U	15 U
Acetone	3 U	3 U	1800 U	450 U	60 U	30 U
Benzene	0.1 U	0.1 U	110 U	28 U	5 U	3 U
Bromodichloromethane	0.1 U	0.1 U	120 U	30 U	10 U	5 U
Bromoform	0.1 U	0.1 U	160 U	40 U	10 U	5 U
Bromomethane	0.1 U	0.1 U	170 U	42 U	10 U	5 U
Carbon Disulfide	0.1 U	0.1 U	190 U	48 U	10 U	5 U
Carbon Tetrachloride	0.1 U	0.1 U	110 U	28 U	5 U	3 U
Chlorobenzene	0.1 U	0.1 U	140 U	36 U	8 U	4 U
Chloroethane	0.1 U	0.1 U	160 U	40 U	10 U	5 U
Chloroform	0.1 U	0.1 U	130 U	33 U	8 U	4 U
Chloromethane	0.1 U	0.1 U	160 U	40 U	10 U	5 U
cis-1,2-Dichloroethene	100 J	110	660	670	670	550
cis-1,3-Dichloropropene	0.1 U	0.1 U	88 U	22 U	10 U	5 U
Dibromochloromethane	0.1 U	0.1 U	110 U	28 U	10 U	5 U
Ethylbenzene	0.1 U	0.1 U	100 U	25 U	8 U	4 U
Methyl ethyl ketone	1 U	1 U	1500 U	470 U	30 U	15 U
Methyl isobutyl ketone (MIBK)	1 U	1 U	1400 U	350 U	30 U	15 U
Methylene chloride	0.2 U	0.2 U	1100 U	95 U	20 U	10 U
m-Xylene & p-Xylene	0.1 U	0.1 U	240 U	60 U	8 U	4 U
o-Xylene	0.1 U	0.1 U	120 U	30 U	8 U	4 U
Tetrachloroethene	0.1 U	0.1 U	130 U	32 U	8 U	4 U
Toluene	0.1 U	0.1 U	140 U	36 U	7 U	4 U
trans-1,2-Dichloroethene	12 J	14	110 U	27 U	15 J	12 J
trans-1,3-Dichloropropene	0.1 U	0.1 U	130 U	32 U	10 U	5 U
Trichloroethene	6.5 J	6.4	19000	17000	15000	8700
Trichlorofluoromethane	0.1 U	0.1 U	140 U	34 U	5 U	3 U
Vinyl chloride	5.3 J	6.4	120 U	30 U	5 U	3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
SUMMARY OF ANALYSES FOR VOLATILE ORGANIC COMPOUNDS  
IN CHATSWORTH FORMATION WELLS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>WS-09A</b>	<b>WS-09A</b>	<b>WS-09A</b>	<b>WS-09A</b>
Sample Port:	---	---	---	---
Sample Type:	Primary	Duplicate	Primary	Primary
Lab Name:	TestAmerica	TestAmerica	TestAmerica	Lancaster
Collection Date:	02/12/2007	02/12/2007	05/09/2007	08/09/2007
<b>Analyte (ug/L)</b>				
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	2 U
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.24 U	1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5 U	1.5 U	1.5 U	4 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	2 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	2 U
1,1-Dichloroethene	1.9	1.9	3.4	6 J
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	2 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	1 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	2 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	2 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	2 U
1,4-Dioxane	1 U	---	1.2 J	1 U
2-Hexanone	2.6 U	2.6 U	2.6 U	6 U
Acetone	4.5 U	4.5 U	5 J,L	12 U
Benzene	0.28 U	0.28 U	0.28 U	1 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	2 U
Bromoform	0.4 U	0.4 U	0.4 U	2 U
Bromomethane	0.42 U	0.42 U	0.42 U	2 U
Carbon Disulfide	0.48 U	0.48 U	0.48 U	2 U
Carbon Tetrachloride	0.28 U	0.28 U	0.28 U	1 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	2 U
Chloroethane	0.4 U	0.4 U	0.4 U	2 U
Chloroform	0.33 U	0.33 U	0.33 U	2 U
Chloromethane	0.4 U	0.4 U	0.4 U	2 U
cis-1,2-Dichloroethene	860	830	720	1500
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	2 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	2 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	2 U
Methyl ethyl ketone	4.7 U	4.7 U	4.7 U	6 U
Methyl isobutyl ketone (MIBK)	3.5 U	3.5 U	3.5 U	6 U
Methylene chloride	0.95 U	0.95 U	0.95 U	4 U
m-Xylene & p-Xylene	0.6 U	0.6 U	0.6 U	2 U
o-Xylene	0.3 U	0.3 U	0.3 U	2 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	2 U
Toluene	0.36 U	0.36 U	0.36 U	1 U
trans-1,2-Dichloroethene	22	22	26	42
trans-1,3-Dichloropropene	0.32 U	0.32 U	0.32 U	2 U
Trichloroethene	670	660	1200	1900
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	1 U
Vinyl chloride	4.6	4.7	5.7	5

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T04-F.xls

February 2008

**TABLE IV**  
**NOTES AND ABBREVIATIONS**

- 
1. Lancaster = Lancaster Laboratories of Lancaster, Pennsylvania.
  2. STL-SA = Severn Trent Laboratories of Sacramento, California.
  3. TestAmerica = TestAmerica of Irvine, California.
  4. --- = Analysis not performed.
  5. ug/L = Micrograms per liter.
  6. Primary = Primary sample.
  7. Duplicate = Duplicate sample.
  8. Split = Split sample.
  9. 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.
  10. 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).
  11. L = Laboratory contaminant.
  12. U = Not detected; numerical value represents the Method Detection Limit for that compound.
  13. UJ = Not detected. Estimated detection limit as a result of analytical quality control deficiencies (see Appendix D for details).
  14. Z = FLUTe sample port number.
  15. Low level 1,4-dioxane analyses were performed on primary and duplicate samples by TestAmerica of Irvine, California, and on split samples by TestAmerica of Phoenix, Arizona, using modified EPA method 8260SIM.
  16. 1,1,2-Trichloro-1,2,2-trifluoroethane has previously been reported using synonym Trichlorotrifluoroethane (Freon 113).
  17. Methyl ethyl ketone has previously been reported using synonym 2-Butanone.
  18. Methyl isobutyl ketone (MIBK) has previously been reported using synonym 4-methyl-2-pentanone (MIBK).
  19. Analyses were performed using EPA method 8260B for all VOCs except 1,4-dioxane which was analyzed by EPA method 8260SIM.

**TABLE V**  
SUMMARY OF ANALYSES FOR FUEL HYDROCARBONS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>		<b>RD-07</b>	<b>RD-14</b>	<b>RD-32</b>	<b>RD-32</b>	<b>RD-36B</b>	<b>RD-36B</b>	<b>RD-36C</b>
Sample Port:		Z3	---	---	---	---	---	---
Sample Type:		Primary	Primary	Primary	Primary	Primary	Primary	Primary
Analysis Method:		8015M	8015M	8015B	8015M	8015B	8015M	8015B
Lab Name:		TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:		11/06/2007	08/28/2007	02/20/2007	08/27/2007	02/19/2007	08/24/2007	02/20/2007
Analyte	Units							
Extractable Fuel Hydrocarbons (C8-C11)	mg/L	0.51	0.095 U	---	---	---	---	---
Extractable Fuel Hydrocarbons (C12-C14)	mg/L	0.095 U	0.095 U	---	---	---	---	---
Extractable Fuel Hydrocarbons (C15-C20)	mg/L	0.095 U	0.095 U	---	---	---	---	---
Extractable Fuel Hydrocarbons (C21-C30)	mg/L	0.095 U	0.095 U	---	---	---	---	---
Extractable Fuel Hydrocarbons (C8-C30)	mg/L	0.53	0.095 U	---	---	---	---	---
Gasoline Range Organics (C6-C12)	ug/L	---	---	25 U	25 U	28 J	33 J,W	41 J,W

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T05-F.xls

February 2008

**TABLE V**  
SUMMARY OF ANALYSES FOR FUEL HYDROCARBONS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>		<b>RD-36C</b>	<b>RD-36D</b>	<b>RD-36D</b>	<b>RD-37</b>	<b>RD-37</b>	<b>RD-38A</b>	<b>RD-38A</b>
Sample Port:		---	---	---	---	---	---	---
Sample Type:		Primary	Primary	Primary	Primary	Primary	Primary	Primary
Analysis Method:		8015M	8015B	8015M	8015B	8015M	8015B	8015M
Lab Name:		TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:		08/24/2007	02/20/2007	08/24/2007	02/21/2007	08/28/2007	02/19/2007	08/28/2007
Analyte	Units							
Extractable Fuel Hydrocarbons (C8-C11)	mg/L	---	---	---	---	---	---	---
Extractable Fuel Hydrocarbons (C12-C14)	mg/L	---	---	---	---	---	---	---
Extractable Fuel Hydrocarbons (C15-C20)	mg/L	---	---	---	---	---	---	---
Extractable Fuel Hydrocarbons (C21-C30)	mg/L	---	---	---	---	---	---	---
Extractable Fuel Hydrocarbons (C8-C30)	mg/L	---	---	---	---	---	---	---
Gasoline Range Organics (C6-C12)	ug/L	25 U	25 U	25 U	25 U	25 U	160 W	170 W

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T05-F.xls

February 2008



**TABLE V**  
SUMMARY OF ANALYSES FOR FUEL HYDROCARBONS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>		<b>RD-38B</b>	<b>RD-38B</b>	<b>RD-53</b>	<b>RD-53</b>	<b>RD-60</b>	<b>RD-73</b>	<b>RD-86</b>
Sample Port:		---	---	---	---	---	---	---
Sample Type:		Primary	Primary	Primary	Primary	Primary	Primary	Primary
Analysis Method:		8015B	8015M	8015B	8015M	8015B	8015B	8015M
Lab Name:		TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:		02/19/2007	08/28/2007	02/26/2007	08/22/2007	03/01/2007	02/15/2007	08/29/2007
Analyte	Units							
Extractable Fuel Hydrocarbons (C8-C11)	mg/L	---	---	---	---	---	---	0.096 U
Extractable Fuel Hydrocarbons (C12-C14)	mg/L	---	---	---	---	---	---	0.096 U
Extractable Fuel Hydrocarbons (C15-C20)	mg/L	---	---	---	---	---	---	0.096 U
Extractable Fuel Hydrocarbons (C21-C30)	mg/L	---	---	---	---	---	---	0.096 U
Extractable Fuel Hydrocarbons (C8-C30)	mg/L	---	---	---	---	---	---	0.096 U
Gasoline Range Organics (C6-C12)	ug/L	25 U	25 U	82 W	100 W	190 W	3100	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T05-F.xls

February 2008

**TABLE V**  
NOTES AND ABBREVIATIONS

---

1. TestAmerica = TestAmerica of Irvine, California.
2. --- = Analysis not performed.
3. mg/L = Milligrams per liter.
4. ug/L = Micrograms per liter.
5. Primary = Primary sample.
6. 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).
7. U = Not detected; numerical value represents the Method Detection Limit for that compound.
8. W = Hydrocarbon result partly due to individual peaks such as trichloroethene in quantitation range.
9. Z = FLUTe sample port number.

**TABLE VI**  
SUMMARY OF ANALYSES FOR METAL CONSTITUENTS AND CYANIDE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:	ES-21	ES-21	ES-21	ES-21	ES-21	ES-21	ES-21	ES-21
Sample Port:	---	---	---	---	---	---	---	---
Sample Preparation:	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Dissolved
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	02/20/2007	02/20/2007	05/10/2007	05/10/2007	08/07/2007	08/07/2007	08/07/2007	10/19/2007
Analyte (mg/L)	MCL							
Aluminum	0.2 SMCL	0.064	0.04 U	0.04 U	0.47	0.04 U	0.04 U	0.04 U
Antimony	0.006	0.00018 J	0.000074 J	0.0002 U	0.00036 J	0.0002 U	0.0002 U	0.0002 J
Arsenic	0.05	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U
Barium	1	0.063	0.065	0.065	0.069	0.072	0.061	0.066
Beryllium	0.004	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U
Boron	1 NL	0.44	0.43	0.39	0.38	0.39	0.34	0.32
Cadmium	0.005	0.000065 J	0.000073 J	0.00011 U	0.00011 J	0.00011 U	0.00011 U	0.00011 U
Chromium	0.05	0.00086 J	0.0007 U	0.0007 U	0.0028	0.0007 U	0.0007 U	0.0007 U
Cobalt	NA	0.00041 J	0.00034 J	0.00039 J	0.00062 J	0.00038 J	0.00034	0.0005 J
Copper	1 SMCL	0.16	0.017	0.0042	0.019	0.0048	0.011	0.003
Cyanide	0.15	---	---	---	---	---	---	---
Hexavalent Chromium	0.05	---	---	---	---	---	---	---
Iron	0.30 SMCL	0.58	0.33	0.12	2.1	0.15	0.25	0.059
Lead	0.015 RAL	0.0099	0.0013	0.0025	0.024	0.0012	0.0028	0.0021
Magnesium	NA	22	21	21	21	23	21	21
Manganese	0.5 NL	0.039	0.037	0.037	0.053	0.025	0.033	0.068
Mercury	0.002	0.000073 UJ	0.000073 UJ	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U
Molybdenum	NA	0.0006 J	0.00068 J	0.00074 U	0.00058 J	0.0006 J	0.00068 J	0.00069 J
Nickel	0.1	0.0096	0.0078	0.0024	0.0039	0.0027	0.0021	0.003
Selenium	0.05	0.0006 J	0.00042 U	0.0003 U	0.00037 J	0.00062 J	0.0003 U	0.00058 J
Silver	0.1 SMCL	0.00015 J	0.0001 U	0.0002 U	0.00084 J	0.0002 U	0.0002 U	0.0002 U
Strontium	NA	0.35	0.31	0.32	0.32	0.35	0.34	0.32
Thallium	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Tin	NA	0.01 U	0.01 U	0.01 U	0.01 U	0.012 U	0.012 U	0.012 U
Vanadium	0.05 NL	0.0013 J	0.0007 U	0.0007 U	0.0022	0.0007 U	0.0008 J	0.00085 J
Zinc	5 SMCL	0.32	0.2	0.093	0.18	0.18	0.2	0.37

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T06-F.xls

February 2008

**TABLE VI**  
SUMMARY OF ANALYSES FOR METAL CONSTITUENTS AND CYANIDE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:	ES-21	ES-24	ES-24	ES-24	ES-24	ES-24	ES-24	ES-24
Sample Port:	---	---	---	---	---	---	---	---
Sample Preparation:	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Total
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow	Shallow
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	10/19/2007	03/01/2007	03/01/2007	05/14/2007	05/14/2007	08/29/2007	08/29/2007	
Analyte (mg/L)	MCL							
Aluminum	0.2 SMCL	0.072	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.075
Antimony	0.006	0.0002 U	0.00005 U	0.00012 J	0.0002 U	0.00022 J	0.0002 U	0.00066 J
Arsenic	0.05	0.0017	0.0017	0.0019	0.0017	0.0023	0.0013	0.0034
Barium	1	0.072	0.074	0.078	0.06	0.044	0.071	0.089
Beryllium	0.004	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000084 J
Boron	1 NL	0.3	0.15	0.16 U	0.11	0.14	0.16	0.14
Cadmium	0.005	0.00011 U	0.00005 U	0.00005 U	0.00011 U	0.00011 U	0.00011 U	0.00026 J
Chromium	0.05	0.0007 U	0.0007 U	0.0014 J	0.0007 U	0.0007 U	0.0007 U	0.009
Cobalt	NA	0.00052 J	0.00044 J	0.00057 J	0.0012	0.0015	0.0006 J	0.0014
Copper	1 SMCL	0.0063	0.0043	0.017	0.0016 J	0.012	0.0037	0.069 J
Cyanide	0.15	---	---	---	---	---	---	---
Hexavalent Chromium	0.05	---	---	---	---	---	---	---
Iron	0.30 SMCL	0.39	0.059	0.55	0.15	0.73	0.1	5.2
Lead	0.015 RAL	0.0063	0.00051 J	0.0036	0.00081 J	0.011	0.0053	0.078
Magnesium	NA	21	26	24	24	25	22	24
Manganese	0.5 NL	0.075	0.02	0.057	0.77	1	0.16	0.5
Mercury	0.002	0.000073 U	0.000073 UJ	0.000073 UJ	0.000073 U	0.000073 U	0.000073 U	0.000073 U
Molybdenum	NA	0.00055 J	0.0031	0.0028	0.0055	0.0061	0.0033	0.0034
Nickel	0.1	0.0035	0.0035	0.0034	0.014	0.007	0.011	0.024
Selenium	0.05	0.001 J	0.001 J	0.00082 J	0.00077 J	0.0012 J	0.00076 J	0.0018 J
Silver	0.1 SMCL	0.0002 U	0.0001 U	0.0001 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Strontium	NA	0.31	0.6	0.55	0.56	0.52	0.56	0.53
Thallium	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Tin	NA	0.012 U	0.01 U	0.01 U	0.014 J	0.01 U	0.012 U	0.012 U
Vanadium	0.05 NL	0.0013 J	0.0007 U	0.00092 J	0.0007 U	0.0007 U	0.0007 U	0.0046
Zinc	5 SMCL	0.28	0.2	0.29	4.7	7.5	1.1	1.9

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T06-F.xls

February 2008

**TABLE VI**  
SUMMARY OF ANALYSES FOR METAL CONSTITUENTS AND CYANIDE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:	HAR-06	HAR-07	HAR-07	HAR-07	HAR-07	HAR-07	HAR-07	HAR-07
Sample Port:	---	---	---	---	---	---	---	---
Sample Preparation:	Dissolved	Dissolved	Total	Dissolved	Total	Dissolved	Total	
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	02/22/2007	02/15/2007	02/15/2007	05/08/2007	05/08/2007	08/16/2007	08/16/2007	
Analyte (mg/L)	MCL							
Aluminum	0.2 SMCL	---	0.04 U	0.091	0.04 U	0.04 U	0.04 U	0.04 U
Antimony	0.006	0.00005 U	0.00005 U	0.00005 U	0.00005 U	0.00005 U	0.0002 U	0.0002 U
Arsenic	0.05	0.0007 U	0.0007 U	0.0007 U	0.0016	0.0007 U	0.0007 U	0.0007 U
Barium	1	0.053	0.025	0.029	0.023	0.023	0.02	0.031
Beryllium	0.004	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U
Boron	1 NL	---	0.066	0.077 U	0.066	0.084	0.062	0.072
Cadmium	0.005	0.00005 U	0.00005 U	0.00005 U	0.00005 U	0.00005 U	0.00011 U	0.00011 U
Chromium	0.05	0.0007 U	0.0007 U	0.0007 U	0.00074 J	0.00094 J	0.0007 U	0.00098 J
Cobalt	NA	0.00026 J	0.00027 J	0.00055 J	0.00022 J	0.00062 J	0.00026 J	0.00085 J
Copper	1 SMCL	0.00074 J	0.0068	0.02	0.0064	0.022	0.011	0.018
Cyanide	0.15	---	---	---	---	0.017 UJ	---	---
Hexavalent Chromium	0.05	---	---	---	---	---	---	---
Iron	0.30 SMCL	1.5	0.04	1.6	0.015 U	0.39	0.026	1.2
Lead	0.015 RAL	0.00036 J	0.002	0.0038	0.0021	0.0023	0.0019 U	0.002
Magnesium	NA	---	20	18	20	19	20	19
Manganese	0.5 NL	0.16	0.31	0.53	0.11	0.56	0.17	0.71
Mercury	0.002	0.000073 UJ	0.000073 UJ	0.000073 UJ	0.000073 U	0.000073 U	0.000073 U	0.000073 U
Molybdenum	NA	0.0014 J	0.0014 J	0.0011 J	0.0012 J	0.0011 J	0.0012 J	0.00084 J
Nickel	0.1	0.0009 U	0.0017 J	0.0035	0.002	0.0029	0.0024	0.0041
Selenium	0.05	0.00059 J	0.00064 J	0.0004 U	0.0009 J	0.0004 J	0.00052 J	0.00038 J
Silver	0.1 SMCL	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0002 U	0.0002 U
Strontium	NA	---	0.34	0.3	0.33	0.3	0.32	0.32
Thallium	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Tin	NA	---	0.01 U	0.01 U	0.01 U	0.01 U	0.012 U	0.012 U
Vanadium	0.05 NL	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U
Zinc	5 SMCL	0.023 U	0.035	0.094	0.083	0.1	0.04	0.088

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T06-F.xls

February 2008

**TABLE VI**  
SUMMARY OF ANALYSES FOR METAL CONSTITUENTS AND CYANIDE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:		HAR-07	HAR-07	HAR-11	HAR-14	HAR-15	HAR-16	HAR-16
Sample Port:		---	---	---	---	---	---	---
Sample Preparation:		Dissolved	Total	Dissolved	Dissolved	Dissolved	Dissolved	Total
Sample Type:		Primary	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Shallow	Shallow	Shallow	Chatsworth	Chatsworth
Lab Name:		TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:		11/06/2007	11/06/2007	03/01/2007	05/08/2007	05/08/2007	05/07/2007	05/07/2007
Analyte (mg/L)	MCL							
Aluminum	0.2 SMCL	0.04 U	0.04 U	---	---	---	0.04 U	0.04 U
Antimony	0.006	0.0002 U	0.0002 U	0.00032 J	0.00005 U	0.00018 J	0.00005 U	0.00005 U
Arsenic	0.05	0.0007 U	0.0007 U	0.0013	0.0007 U	0.0024	0.0007 U	0.0007 U
Barium	1	0.016	0.028	0.12	0.034	0.0093	0.023	0.021
Beryllium	0.004	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U
Boron	1 NL	0.045 J	0.054	---	---	---	0.37	0.36
Cadmium	0.005	0.00011 U	0.00011 U	0.00014 J	0.000058 J	0.000076 J	0.00005 U	0.00005 U
Chromium	0.05	0.00088 J	0.0027 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0019 J
Cobalt	NA	0.00023 J	0.00073 J	0.0012	0.00024 J	0.00015 U	0.00015 J	0.00016 J
Copper	1 SMCL	0.01	0.019	0.0057 U	0.025	0.0019 J	0.0017 J	0.017
Cyanide	0.15	---	---	---	0.017 UJ	0.017 UJ	---	0.017 UJ
Hexavalent Chromium	0.05	---	---	---	---	---	---	---
Iron	0.30 SMCL	0.034	0.68	0.015 U	---	---	0.015 J	0.22
Lead	0.015 RAL	0.003	0.0029	0.0001 U	0.0001 U	0.00014 J	0.00087 J	0.0013
Magnesium	NA	20	20	---	---	---	12	11
Manganese	0.5 NL	0.17	0.7	1.3	---	---	0.003	0.0042 J
Mercury	0.002	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U
Molybdenum	NA	0.0014 J	0.0012 J	0.0018 J	---	---	0.00064 J	0.00078 J
Nickel	0.1	0.0019 J	0.0038	0.0093	0.0009 U	0.0022	0.0016 J	0.0023
Selenium	0.05	0.00038 J	0.00042 J	0.0018 J	0.0016 J	0.00044 J	0.0024	0.0017 J
Silver	0.1 SMCL	0.0002 U	0.0002 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U
Strontium	NA	0.32	0.32	---	---	---	0.25	0.22
Thallium	0.002	0.00015 U	0.0002 J	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Tin	NA	0.012 U	0.012 U	---	0.01 U	0.01 U	0.01 U	0.01 U
Vanadium	0.05 NL	0.0007 U	0.0007 U	0.0014 J	0.001 J	0.0041	0.00095 J	0.00095 J
Zinc	5 SMCL	0.056	0.15	0.0086 U	0.004 J	0.004 J	2.1	2.3

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T06-F.xls

February 2008

**TABLE VI**  
SUMMARY OF ANALYSES FOR METAL CONSTITUENTS AND CYANIDE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:		HAR-16	HAR-16	HAR-16	HAR-16	HAR-17	HAR-18	HAR-18
Sample Port:		---	---	---	---	---	---	---
Sample Preparation:		Dissolved	Total	Dissolved	Total	Dissolved	Dissolved	Total
Sample Type:		Primary	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:		08/28/2007	08/28/2007	10/22/2007	10/22/2007	05/08/2007	02/22/2007	02/22/2007
Analyte (mg/L)	MCL							
Aluminum	0.2 SMCL	0.04 U	0.074	0.04 U	0.04 U	---	0.04 U	0.04 U
Antimony	0.006	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00005 U	0.00005 U	0.00005 U
Arsenic	0.05	0.0007 U	0.0007 U	0.0007 U	0.00089 J	0.0007 U	0.0007 U	0.0007 U
Barium	1	0.021	0.02	0.023	0.024	0.07	0.027	0.033
Beryllium	0.004	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U
Boron	1 NL	0.44	0.5	0.42	0.42	---	0.068	0.069 U
Cadmium	0.005	0.00011 U	0.00011 U	0.00011 U	0.00011 U	0.00005 U	0.00005 U	0.00005 U
Chromium	0.05	0.0007 U	0.0011 J	0.0007 U	0.00072 J	0.0007 U	0.0007 U	0.0007 U
Cobalt	NA	0.00015 U	0.00018 J	0.00015 U	0.00018 J	0.00066 J	0.00015 J	0.00024 J
Copper	1 SMCL	0.0023	0.012 J	0.0057	0.015	0.0068	0.0038	0.0028
Cyanide	0.15	---	---	---	---	0.017 UJ	---	---
Hexavalent Chromium	0.05	---	---	---	---	---	---	---
Iron	0.30 SMCL	0.015 U	0.19	0.015 U	0.12	---	0.015 U	0.11
Lead	0.015 RAL	0.0097	0.012	0.012	0.0079	0.00063 J	0.00061 J	0.00044 J
Magnesium	NA	14	12	14	14	---	18	17
Manganese	0.5 NL	0.001	0.0022	0.0014	0.0022	---	0.089	0.15
Mercury	0.002	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 UJ	0.000073 UJ
Molybdenum	NA	0.00048 J	0.00076 U	0.00044 J	0.00062 J	---	0.00037 J	0.00058 J
Nickel	0.1	0.0016 J	0.0027	0.0017 J	0.0024	0.0026	0.0072	0.0016 J
Selenium	0.05	0.0024	0.0032	0.0024	0.0024	0.0014 J	0.00089 J	0.001 U
Silver	0.1 SMCL	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0001 U	0.0001 U	0.0001 U
Strontium	NA	0.28	0.27	0.29	0.29	---	0.39	0.38
Thallium	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Tin	NA	0.012 U	0.012 U	0.012 U	0.012 U	0.01 U	0.01 U	0.01 U
Vanadium	0.05 NL	0.00082 J	0.0015 J	0.00078 J	0.001 J	0.0007 U	0.0007 U	0.0007 U
Zinc	5 SMCL	1.7	1.8	1.4	1.4	0.47	0.13	0.058

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T06-F.xls

February 2008

**TABLE VI**  
SUMMARY OF ANALYSES FOR METAL CONSTITUENTS AND CYANIDE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:		HAR-18	HAR-18	HAR-18	HAR-18	HAR-18	HAR-18	HAR-19
Sample Port:		---	---	---	---	---	---	---
Sample Preparation:		Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Sample Type:		Primary	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:		05/15/2007	05/15/2007	08/14/2007	08/14/2007	10/23/2007	10/23/2007	03/01/2007
Analyte (mg/L)	MCL							
Aluminum	0.2 SMCL	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	---
Antimony	0.006	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.000074 J
Arsenic	0.05	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U
Barium	1	0.033	0.032	0.03	0.026	0.03	0.031	0.069
Beryllium	0.004	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U
Boron	1 NL	0.03 J	0.051	0.056	0.062 U	0.061	0.056	---
Cadmium	0.005	0.00011 U	0.00011 U	0.00011 U	0.00011 U	0.00011 U	0.00011 U	0.00005 U
Chromium	0.05	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U
Cobalt	NA	0.0002 J	0.00024 J	0.00018 J	0.00021 J	0.00019 J	0.0002 J	0.0002 J
Copper	1 SMCL	0.0011 J	0.003	0.0015 U	0.012	0.0013 J	0.0048	0.00098 U
Cyanide	0.15	---	---	---	---	---	---	---
Hexavalent Chromium	0.05	---	---	---	---	---	---	---
Iron	0.30 SMCL	0.015 U	0.1	0.016 J	0.2	0.015 U	0.1	0.015 U
Lead	0.015 RAL	0.00077 J	0.0011	0.0019 U	0.0029	0.00074 J	0.00092 J	0.0001 U
Magnesium	NA	17	17	18	18	19	19	---
Manganese	0.5 NL	0.11	0.15	0.042	0.049	0.044	0.05	0.0022 U
Mercury	0.002	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U
Molybdenum	NA	0.00047 U	0.00078 J	0.0003 J	0.00034 J	0.00029 J	0.00028 J	0.002
Nickel	0.1	0.0009 U	0.0019 J	0.0009 U	0.0009 U	0.0009 U	0.0016 J	0.0042
Selenium	0.05	0.00083 J	0.0017 J	0.00079 J	0.00074 J	0.00085 J	0.001 J	0.00094 J
Silver	0.1 SMCL	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0001 U
Strontium	NA	0.38	0.36	0.37	0.37	0.4	0.41	---
Thallium	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Tin	NA	0.012 J	0.01 U	0.012 U	0.012 U	0.012 U	0.012 U	---
Vanadium	0.05 NL	0.0007 U	0.00098 J	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.001 J
Zinc	5 SMCL	0.056	0.059	0.078	0.077	0.049	0.046	0.024 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T06-F.xls

February 2008



**TABLE VI**  
SUMMARY OF ANALYSES FOR METAL CONSTITUENTS AND CYANIDE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:	HAR-25	PZ-047	PZ-114	PZ-114	PZ-126	PZ-126	RD-04	
Sample Port:	---	---	---	---	---	---	---	
Sample Preparation:	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary	Primary	
Geological Unit:	Chatsworth	Shallow	Shallow	Shallow	Shallow	Shallow	Chatsworth	
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	
Collection Date:	02/15/2007	05/23/2007	05/23/2007	08/24/2007	02/27/2007	05/23/2007	02/13/2007	
Analyte (mg/L)	MCL							
Aluminum	0.2 SMCL	---	---	---	---	---	0.04 U	
Antimony	0.006	0.0001 J	0.00023 J	0.0002 U	0.0002 U	0.00049 J	0.0002 U	0.00005 U
Arsenic	0.05	0.001	0.00078 J	0.0007 U	0.00083 J	0.00097 J	0.0011	0.0007 U
Barium	1	0.011	0.0033	0.023	0.013	0.024	0.048	0.05
Beryllium	0.004	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U
Boron	1 NL	---	---	---	---	---	---	0.04 J
Cadmium	0.005	0.00005 U	0.00011 U	0.00022 J	0.00014 J	0.0014	0.00024 J	0.00005 U
Chromium	0.05	0.0007 U	0.0029	0.0007 U	0.0014 J	0.0007 U	0.0007 U	0.0007 U
Cobalt	NA	0.00015 U	0.00019 J	0.029	0.028	0.00026 J	0.00072 J	0.00053 J
Copper	1 SMCL	0.00087 J	0.0035	0.0012 J	0.014	0.0041 U	0.0025	0.0019 J
Cyanide	0.15	---	---	---	---	---	---	---
Hexavalent Chromium	0.05	---	---	---	---	---	---	---
Iron	0.30 SMCL	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.24	0.21
Lead	0.015 RAL	0.00067 J	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.00058 J
Magnesium	NA	---	---	---	---	---	---	39
Manganese	0.5 NL	0.00089 J	0.00097 J	0.24	0.041	0.16	1.3	0.1
Mercury	0.002	---	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 UJ
Molybdenum	NA	0.0037	0.0057	0.088	0.061	0.014	0.018	0.003
Nickel	0.1	0.0009 U	0.0012 J	0.0034	0.0018 J	0.0021	0.0032	0.0038
Selenium	0.05	0.0011 J	0.0078	0.0019 J	0.0023	0.0022	0.00074 J	0.00056 J
Silver	0.1 SMCL	0.0001 U	0.0002 U	0.0002 U	0.0002 U	0.0001 U	0.0002 U	0.0001 U
Strontium	NA	---	---	---	---	---	---	0.76
Thallium	0.002	0.00015 U	0.00021 J	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Tin	NA	---	---	---	---	---	---	0.01 U
Vanadium	0.05 NL	0.003	0.0025	0.002	0.0026	0.002	0.0014 J	0.0007 U
Zinc	5 SMCL	0.25	0.02	0.0025 U	0.0025 U	0.0092 J	0.0058 J	0.43

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T06-F.xls

February 2008

**TABLE VI**  
SUMMARY OF ANALYSES FOR METAL CONSTITUENTS AND CYANIDE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:	RD-04	RD-04	RD-04	RD-04	RD-04	RD-04	RD-04	RD-04
Sample Port:	---	---	---	---	---	---	---	---
Sample Preparation:	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	02/13/2007	05/10/2007	05/10/2007	08/15/2007	08/15/2007	10/25/2007	10/25/2007	
Analyte (mg/L)	MCL							
Aluminum	0.2 SMCL	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Antimony	0.006	0.000071 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Arsenic	0.05	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0014	0.0007 U
Barium	1	0.051	0.049	0.051	0.048	0.046	0.05	0.052
Beryllium	0.004	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U
Boron	1 NL	0.066 U	0.03 J	0.045 J	0.038 J	0.051	0.037 J	0.037 J
Cadmium	0.005	0.00005 U	0.00011 U	0.00011 U	0.00011 U	0.00011 U	0.00011 U	0.00011 U
Chromium	0.05	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U
Cobalt	NA	0.00054 J	0.00055 J	0.00059 J	0.0007 J	0.00073 J	0.00069 J	0.00067 J
Copper	1 SMCL	0.0083	0.0013 J	0.01	0.00095 U	0.0039	0.00079 J	0.03
Cyanide	0.15	---	---	---	---	---	---	---
Hexavalent Chromium	0.05	---	---	---	---	---	---	---
Iron	0.30 SMCL	0.25	0.26	0.27	0.3	0.39	0.26	0.34
Lead	0.015 RAL	0.0008 J	0.00047 J	0.001	0.0008 U	0.0011	0.00044 J	0.0036
Magnesium	NA	40	41	39	37	40	38	38
Manganese	0.5 NL	0.099	0.11	0.11	0.16	0.16	0.18	0.16
Mercury	0.002	0.000073 UJ	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U
Molybdenum	NA	0.0027	0.003	0.0051	0.003	0.0029	0.0033	0.0031
Nickel	0.1	0.0011 J	0.0016 J	0.003	0.0015 J	0.0016 J	0.0013 J	0.0029
Selenium	0.05	0.0005 J	0.0003 U	0.0027	0.00037 J	0.00036 J	0.00033 J	0.00078 J
Silver	0.1 SMCL	0.0001 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Strontium	NA	0.77	0.8	0.75	0.69	0.72	0.72	0.71
Thallium	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00016 J	0.00015 U
Tin	NA	0.01 U	0.01 U	0.01 U	0.012 U	0.012 U	0.012 U	0.012 U
Vanadium	0.05 NL	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.00089 J	0.0007 U
Zinc	5 SMCL	0.43	0.39	0.42	0.45	0.47	0.4	0.43

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T06-F.xls

February 2008

**TABLE VI**  
SUMMARY OF ANALYSES FOR METAL CONSTITUENTS AND CYANIDE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:	RD-07	RD-07	RD-07	RD-07	RD-09	RD-09	RD-09	
Sample Port:	Z3	Z3	Z3	Z3	---	---	---	
Sample Preparation:	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Total	Dissolved	
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary	Primary	
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	
Collection Date:	02/08/2007	05/21/2007	08/09/2007	11/06/2007	02/14/2007	02/14/2007	05/15/2007	
Analyte (mg/L)	MCL							
Aluminum	0.2 SMCL	---	---	---	---	0.04 U	0.04 U	0.04 U
Antimony	0.006	0.00015 J	0.0002 U	0.0002 U	0.0002 U	0.00012 J	0.0002 J	0.0002 U
Arsenic	0.05	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U
Barium	1	0.021	0.022	0.021	0.019	0.043	0.049	0.044
Beryllium	0.004	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U
Boron	1 NL	---	---	---	---	0.35	0.35	0.3
Cadmium	0.005	0.00005 U	0.00011 U	0.00011 U	0.00011 U	0.00005 U	0.00005 U	0.00011 U
Chromium	0.05	0.0007 U	0.002	0.00078 J	0.0012 J	0.0007 U	0.0007 U	0.0007 U
Cobalt	NA	0.00015 J	0.00021 J	0.00018 J	0.00018 J	0.00077 J	0.00074 J	0.00072 J
Copper	1 SMCL	0.0044	0.012	0.0071	0.0023	0.0021	0.015	0.0012 J
Cyanide	0.15	---	---	---	---	---	---	---
Hexavalent Chromium	0.05	---	---	---	---	---	---	---
Iron	0.30 SMCL	0.015 U	0.015 U	0.015 U	0.015 U	0.79	1.8	0.62
Lead	0.015 RAL	0.0029	0.00059 J	0.0025	0.0021	0.00029 J	0.013	0.00033 J
Magnesium	NA	---	---	---	---	27	27	27
Manganese	0.5 NL	0.0021	0.00075 U	0.00075 U	0.00075 U	0.21	0.2	0.16
Mercury	0.002	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 UJ	0.000073 UJ	0.000073 U
Molybdenum	NA	0.00036 J	0.00043 J	0.00032 J	0.00015 U	0.0007 J	0.00057 J	0.00081 U
Nickel	0.1	0.0009 U	0.0015 J	0.0009 U	0.0009 U	0.0068	0.0027	0.0026
Selenium	0.05	0.004	0.0036	0.0045	0.0037	0.0012 J	0.0012 U	0.00049 J
Silver	0.1 SMCL	0.0001 U	0.0002 U	0.0002 U	0.0002 U	0.0001 U	0.0001 U	0.0002 U
Strontium	NA	---	---	---	---	0.4	0.38	0.37
Thallium	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Tin	NA	---	---	---	---	0.01 U	0.01 U	0.01 U
Vanadium	0.05 NL	0.0007 U	0.00087 J	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U
Zinc	5 SMCL	0.053	0.066	0.043	0.083	0.48	0.74	0.48

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T06-F.xls

February 2008

**TABLE VI**  
SUMMARY OF ANALYSES FOR METAL CONSTITUENTS AND CYANIDE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:		RD-09	RD-09	RD-09	RD-15	RD-18	RD-21	RD-21
Sample Port:		---	---	---	---	---	Z2	Z2
Sample Preparation:		Total	Dissolved	Total	Dissolved	Dissolved	Dissolved	Dissolved
Sample Type:		Primary	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:		05/15/2007	08/14/2007	08/14/2007	02/06/2007	08/14/2007	02/07/2007	08/09/2007
<b>Analyte (mg/L)</b>	<b>MCL</b>							
Aluminum	0.2 SMCL	0.04 U	0.04 U	0.04 U	---	---	---	---
Antimony	0.006	0.00023 J	0.0002 U	0.00021 J	0.00016 J	0.00024 J	0.000083 J	0.0002 U
Arsenic	0.05	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.00092 J	0.00091 J	0.0015
Barium	1	0.043	0.045	0.046	0.049	0.06	0.043	0.047
Beryllium	0.004	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U
Boron	1 NL	0.31	0.34	0.36	---	---	---	---
Cadmium	0.005	0.00011 U	0.00011 U	0.00011 U	0.00005 U	0.00011 U	0.00005 U	0.00011 U
Chromium	0.05	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U
Cobalt	NA	0.00075 J	0.0008 J	0.00086 J	0.0014	0.00015 U	0.00017 J	0.00019 J
Copper	1 SMCL	0.013	0.00086 U	0.014	0.0013 J	0.002 U	0.0014 J	0.0013 J
Cyanide	0.15	---	---	---	---	---	---	---
Hexavalent Chromium	0.05	---	---	---	---	0.0002 U	---	---
Iron	0.30 SMCL	1.9	1.8	2.3	0.056	0.015 U	0.015 U	0.015 U
Lead	0.015 RAL	0.01	0.00025 U	0.002	0.00034 J	0.00068 U	0.00082 J	0.0012
Magnesium	NA	27	27	27	---	---	---	---
Manganese	0.5 NL	0.17	0.17	0.17	0.077	0.00075 U	0.0038	0.0026
Mercury	0.002	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.00013 J	0.000073 U	0.000073 U
Molybdenum	NA	0.00079 J	0.00059 J	0.00058 J	0.0012 J	0.0022	0.0019 J	0.002
Nickel	0.1	0.0034	0.002	0.0024	0.0019 J	0.0012 J	0.0009 U	0.0009 U
Selenium	0.05	0.0014 J	0.0011 J	0.00082 J	0.00081 J	0.0003 U	0.0029	0.0029
Silver	0.1 SMCL	0.0002 U	0.0002 U	0.0002 U	0.0001 U	0.0002 U	0.0001 U	0.0002 U
Strontium	NA	0.36	0.37	0.38	---	---	---	---
Thallium	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Tin	NA	0.01 U	0.012 U	0.012 U	---	---	---	---
Vanadium	0.05 NL	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0038	0.0007 U	0.0007 U
Zinc	5 SMCL	0.63	0.67	0.69	0.64	0.79	0.045	0.024

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T06-F.xls

February 2008

**TABLE VI**  
SUMMARY OF ANALYSES FOR METAL CONSTITUENTS AND CYANIDE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:	RD-21	RD-22	RD-22	RD-22	RD-23	RD-23	RD-23	
Sample Port:	Z2	Z2	Z2	Z2	Z3	Z3	Z3	
Sample Preparation:	Dissolved	Dissolved	Total	Dissolved	Dissolved	Total	Dissolved	
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary	Primary	
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	
Collection Date:	11/06/2007	02/07/2007	05/21/2007	11/06/2007	02/07/2007	05/21/2007	08/09/2007	
Analyte (mg/L)	MCL							
Aluminum	0.2 SMCL	---	---	---	---	---	---	
Antimony	0.006	0.0002 U	0.00005 U	---	0.0002 U	0.000097 J	0.00021 J	0.0002 U
Arsenic	0.05	0.0007 U	0.0007 U	---	0.0007 U	0.0016	0.0011	0.0019
Barium	1	0.046	0.052	---	0.053	0.032	0.033	0.031
Beryllium	0.004	0.000075 U	0.000075 U	---	0.000075 U	0.000075 U	0.000075 U	0.000075 U
Boron	1 NL	---	---	---	---	---	---	---
Cadmium	0.005	0.00011 U	0.00005 U	---	0.00011 U	0.00005 U	0.00011 U	0.00011 U
Chromium	0.05	0.0007 U	0.00086 J	---	0.003	0.0007 U	0.00084 J	0.0007 U
Cobalt	NA	0.00019 J	0.00019 J	---	0.00024 J	0.00039 J	0.00032 J	0.00032 J
Copper	1 SMCL	0.0037	0.00096 J	---	0.0041	0.0039	0.009	0.0017 J
Cyanide	0.15	---	---	0.017 U	---	---	---	---
Hexavalent Chromium	0.05	---	---	---	---	---	---	---
Iron	0.30 SMCL	0.015 U	0.36	---	0.31	0.015 U	0.073	0.015 U
Lead	0.015 RAL	0.009	0.0001 U	---	0.0021	0.00091 J	0.0053	0.00033 J
Magnesium	NA	---	---	---	---	---	---	---
Manganese	0.5 NL	0.0023	0.032	---	0.032	0.0058	0.005	0.0034
Mercury	0.002	0.000073 U	0.000073 U	---	0.000073 U	0.000073 U	0.000073 UJ	0.000073 U
Molybdenum	NA	0.0019 J	0.0017 J	---	0.0011 J	0.0022	0.0021	0.002
Nickel	0.1	0.0009 U	0.0009 U	---	0.0009 U	0.0025	0.0032	0.0019 J
Selenium	0.05	0.0024	0.00043 J	---	0.00035 J	0.0003 U	0.0003 U	0.00034 J
Silver	0.1 SMCL	0.0002 U	0.0001 U	---	0.0002 U	0.0001 U	0.0002 U	0.0002 U
Strontium	NA	---	---	---	---	---	---	---
Thallium	0.002	0.00019 J	0.00015 U	---	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Tin	NA	---	---	---	---	---	---	---
Vanadium	0.05 NL	0.0007 U	0.0007 U	---	0.0007 U	0.0007 U	0.0007 U	0.0007 U
Zinc	5 SMCL	0.055	0.009 U	---	0.08	0.031	0.015 J	0.023

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T06-F.xls

February 2008

**TABLE VI**  
**SUMMARY OF ANALYSES FOR METAL CONSTITUENTS AND CYANIDE, 2007**  
**BOEING SANTA SUSANA FIELD LABORATORY**  
**VENTURA COUNTY, CALIFORNIA**

Well Identifier:	RD-23	RD-33A	RD-33A	RD-33B	RD-33C	RD-34A	RD-34A
Sample Port:	Z3	Z2	Z2	---	---	---	---
Sample Preparation:	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Total
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	11/06/2007	02/08/2007	11/07/2007	02/07/2007	02/06/2007	02/28/2007	02/28/2007
Analyte (mg/L)	MCL						
Aluminum	0.2 SMCL	---	---	---	---	0.04 U	0.04 U
Antimony	0.006	0.0002 U	0.00012 J	0.0002 U	0.00005 U	0.00005 U	0.00011 J
Arsenic	0.05	0.0007 U	0.0031	0.0007 U	0.0007 U	0.0007 U	0.00075 J
Barium	1	0.031	0.048	0.049	0.075	0.086	0.038
Beryllium	0.004	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U
Boron	1 NL	---	---	---	---	0.24	0.24 U
Cadmium	0.005	0.00011 U	0.00005 U	0.00011 U	0.00005 U	0.00005 U	0.000052 J
Chromium	0.05	0.0017 J	0.0009 J	0.00088 J	0.0007 U	0.0007 U	0.0007 U
Cobalt	NA	0.00021 J	0.00015 U	0.00015 U	0.00057 J	0.0002 J	0.00022 J
Copper	1 SMCL	0.0017 J	0.0051	0.00075 U	0.0017 J	0.002	0.013
Cyanide	0.15	---	0.017 U	---	0.017 U	0.017 U	---
Hexavalent Chromium	0.05	---	---	---	---	---	---
Iron	0.30 SMCL	0.015 U	0.025	0.032	0.42	0.2	0.03
Lead	0.015 RAL	0.0001 U	0.0018	0.00011 J	0.00012 J	0.00024 J	0.0011
Magnesium	NA	---	---	---	---	---	44
Manganese	0.5 NL	0.0029	0.017	0.014	0.13	0.05	0.003 U
Mercury	0.002	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U
Molybdenum	NA	0.002	0.0018 J	0.0016 J	0.0025	0.002	0.0017 J
Nickel	0.1	0.0012 J	0.0009 U	0.0009 U	0.0062	0.0048	0.0009 U
Selenium	0.05	0.0003 U	0.0003 U	0.0003 U	0.0003 U	0.0003 U	0.0018 J
Silver	0.1 SMCL	0.0002 U	0.0001 U	0.0002 U	0.0001 U	0.0001 U	0.0001 U
Strontium	NA	---	---	---	---	---	0.34
Thallium	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Tin	NA	---	---	---	---	---	0.01 U
Vanadium	0.05 NL	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U
Zinc	5 SMCL	0.0071 J	0.0085 J	0.015 J	0.48	0.16	0.064 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T06-F.xls

**TABLE VI**  
**SUMMARY OF ANALYSES FOR METAL CONSTITUENTS AND CYANIDE, 2007**  
**BOEING SANTA SUSANA FIELD LABORATORY**  
**VENTURA COUNTY, CALIFORNIA**

Well Identifier:		RD-34A	RD-34A	RD-34A	RD-34A	RD-34A	RD-34A	RD-34B
Sample Port:		---	---	---	---	---	---	---
Sample Preparation:		Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Sample Type:		Primary	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:		05/23/2007	05/23/2007	08/15/2007	08/15/2007	10/31/2007	10/31/2007	08/14/2007
Analyte (mg/L)	MCL							
Aluminum	0.2 SMCL	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	---
Antimony	0.006	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Arsenic	0.05	0.0007 U	0.0007 U	0.0007 U	0.00072 J	0.0007 U	0.0007 U	0.0007 U
Barium	1	0.04	0.039	0.036	0.037	0.037	0.035	0.088
Beryllium	0.004	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U
Boron	1 NL	0.23	0.22	0.24	0.25	0.23	0.23	---
Cadmium	0.005	0.00011 U	0.00011 U	0.00011 U	0.00011 U	0.00011 U	0.00011 U	0.00011 U
Chromium	0.05	0.00074 J	0.0007 U	0.0007 U	0.00089 J	0.00086 J	0.0007 U	0.0007 U
Cobalt	NA	0.00042 J	0.00048 J	0.00027 J	0.00026 J	0.0003 J	0.00048 J	0.00044 J
Copper	1 SMCL	0.0012 J	0.048	0.0017 U	0.0034	0.0023	0.016	0.0014 U
Cyanide	0.15	---	---	---	---	---	---	0.017 U
Hexavalent Chromium	0.05	---	---	---	---	---	---	---
Iron	0.30 SMCL	0.21	0.28	0.14	0.26	0.17	0.53	1.1
Lead	0.015 RAL	0.0014	0.0032	0.00064 U	0.00084 J	0.0012	0.0025	0.0069
Magnesium	NA	40	40	41	40	45	42	---
Manganese	0.5 NL	0.02	0.018	0.0076	0.006	0.015	0.017	0.11
Mercury	0.002	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U
Molybdenum	NA	0.0016 J	0.0012 J	0.001 J	0.0011 J	0.0011 J	0.0015 J	0.001 J
Nickel	0.1	0.0023	0.0041	0.0009 U	0.0009 U	0.00091 J	0.0043	0.0009 U
Selenium	0.05	0.0014 J	0.0014 J	0.0014 J	0.0013 J	0.00051 J	0.0009 J	0.00032 J
Silver	0.1 SMCL	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Strontium	NA	0.29	0.3	0.3	0.3	0.31	0.31	---
Thallium	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Tin	NA	0.01 U	0.01 U	0.012 U	0.012 U	0.012 U	0.012 U	---
Vanadium	0.05 NL	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U
Zinc	5 SMCL	0.1	0.19	0.061	0.068	0.13	0.17 J	0.7

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T06-F.xls

February 2008

**TABLE VI**  
SUMMARY OF ANALYSES FOR METAL CONSTITUENTS AND CYANIDE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:	RD-34C	RD-46A	RD-46A	RD-46A	RD-46A	RD-46A	RD-46A	RD-46A
Sample Port:	---	---	---	---	---	---	---	---
Sample Preparation:	Dissolved	Dissolved	Total	Dissolved	Total	Dissolved	Total	
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	02/07/2007	02/26/2007	02/26/2007	05/17/2007	05/17/2007	08/22/2007	08/22/2007	
Analyte (mg/L)	MCL							
Aluminum	0.2 SMCL	---	0.04 U	0.04 U	0.04 U	0.045 U	0.04 U	0.29 U
Antimony	0.006	0.000057 J	0.00005 U	0.00005 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Arsenic	0.05	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U
Barium	1	0.065	0.034	0.035	0.033	0.033	0.029	0.036
Beryllium	0.004	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U
Boron	1 NL	---	0.14	0.16 U	0.1	0.13	0.13	0.13
Cadmium	0.005	0.00005 U	0.00005 U	0.00005 U	0.00011 U	0.00011 U	0.00011 U	0.00011 U
Chromium	0.05	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U
Cobalt	NA	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00017 J	0.0002 J
Copper	1 SMCL	0.00066 J	0.0022	0.011	0.0014 J	0.0022	0.00075 U	0.015
Cyanide	0.15	0.017 U	---	---	---	---	---	---
Hexavalent Chromium	0.05	---	---	---	---	---	---	---
Iron	0.30 SMCL	0.24	0.11	2.8	0.1	0.65	0.21	0.76 J
Lead	0.015 RAL	0.00021 J	0.0012	0.0029	0.00079 J	0.0015	0.00018 J	0.001
Magnesium	NA	---	37	35	34	34	38	39
Manganese	0.5 NL	0.015	0.012	0.014	0.011	0.014	0.021	0.027
Mercury	0.002	0.000073 U	0.000073 UJ	0.000073 UJ	0.000073 U	0.000073 U	0.000073 U	0.000073 U
Molybdenum	NA	0.0015 J	0.00076 J	0.00062 J	0.00075 J	0.00075 J	0.00087 J	0.00076 J
Nickel	0.1	0.0009 U	0.0009 U	0.0022	0.0009 U	0.0009 U	0.0015 J	0.0016 J
Selenium	0.05	0.0003 U	0.0012 J	0.00097 U	0.0017 J	0.0012 J	0.0012 J	0.0022
Silver	0.1 SMCL	0.0001 U	0.0001 U	0.0001 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Strontium	NA	---	0.29	0.26	0.28	0.27	0.27	0.28
Thallium	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Tin	NA	---	0.01 U	0.01 U	0.01 U	0.01 U	0.012 U	0.012 U
Vanadium	0.05 NL	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U
Zinc	5 SMCL	0.058	0.24	0.31	0.22	0.25	0.3	0.3

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T06-F.xls

February 2008



**TABLE VI**  
SUMMARY OF ANALYSES FOR METAL CONSTITUENTS AND CYANIDE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:		RD-46A	RD-46A	RD-48B	RD-49A	RD-49A	RD-49A	RD-49A
Sample Port:		---	---	---	---	---	---	---
Sample Preparation:		Dissolved	Total	Dissolved	Dissolved	Total	Dissolved	Total
Sample Type:		Primary	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:		11/01/2007	11/01/2007	08/29/2007	02/13/2007	02/13/2007	05/14/2007	05/14/2007
<b>Analyte (mg/L)</b>	<b>MCL</b>							
Aluminum	0.2 SMCL	0.04 U	0.04 U	---	0.04 U	0.064	0.04 U	0.04 U
Antimony	0.006	0.0002 U	0.0002 U	0.0002 U	0.0001 J	0.0001 J	0.00021 J	0.0002 U
Arsenic	0.05	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U
Barium	1	0.034	0.034	0.018	0.022	0.024	0.024	0.023
Beryllium	0.004	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U
Boron	1 NL	0.13	0.13	---	0.3	0.31	0.27	0.31
Cadmium	0.005	0.00011 U	0.00011 U	0.00011 U	0.00009 J	0.00005 U	0.00011 U	0.00011 U
Chromium	0.05	0.00097 J	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U
Cobalt	NA	0.00016 J	0.00018 J	0.00083 J	0.0019	0.0023	0.0049	0.0019
Copper	1 SMCL	0.00075 U	0.0022	0.00075 U	0.0032	0.0037	0.0058	0.0041
Cyanide	0.15	---	---	0.017 U	---	---	---	---
Hexavalent Chromium	0.05	---	---	---	---	---	---	---
Iron	0.30 SMCL	0.3	1.5	---	0.015 U	0.53	0.015 U	0.077
Lead	0.015 RAL	0.00016 J	0.002	0.00029 J	0.00016 J	0.00041 J	0.00079 J	0.00022 J
Magnesium	NA	39	37	---	98	93	94	95
Manganese	0.5 NL	0.024	0.027	---	0.36	0.4	0.34	0.36
Mercury	0.002	0.000073 U	0.000073 U	0.000073 U	0.000073 UJ	0.000073 UJ	0.000073 U	0.000073 U
Molybdenum	NA	0.00085 J	0.0008 J	---	0.0019 J	0.00097 J	0.0024	0.0023
Nickel	0.1	0.0009 U	0.0009 U	0.0009 U	0.0055	0.0095	0.0072	0.0055
Selenium	0.05	0.00076 J	0.00069 J	0.00034 J	0.0014 J	0.0015 U	0.0013 J	0.0013 J
Silver	0.1 SMCL	0.0002 U	0.0002 U	0.0002 U	0.0001 U	0.0001 U	0.0002 U	0.0002 U
Strontium	NA	0.27	0.28	---	1.1	1	1	1.1
Thallium	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Tin	NA	0.012 U	0.012 U	0.012 U	0.01 U	0.01 U	0.01 U	0.01 U
Vanadium	0.05 NL	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U
Zinc	5 SMCL	0.29	0.35	0.3	0.069	0.094	0.24	0.051

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T06-F.xls

February 2008

**TABLE VI**  
SUMMARY OF ANALYSES FOR METAL CONSTITUENTS AND CYANIDE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:	RD-49A	RD-49A	RD-50	RD-54A	RD-54A	RD-54A	RD-54B
Sample Port:	---	---	Z2	Z2	Z2	Z2	---
Sample Preparation:	Total	Total	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	08/29/2007	11/07/2007	11/06/2007	02/07/2007	08/10/2007	11/07/2007	02/12/2007
Analyte (mg/L)	MCL						
Aluminum	0.2 SMCL	0.04 U	0.04 U	---	---	---	---
Antimony	0.006	0.0002 J	0.0002 U	0.00049 J	0.00022 J	0.0002 U	0.00005 U
Arsenic	0.05	0.0007 U	0.0007 U	0.007	0.0021	0.0025	0.0021
Barium	1	0.022	0.027	0.068	0.049	0.047	0.048
Beryllium	0.004	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U
Boron	1 NL	0.33	0.32	---	---	---	---
Cadmium	0.005	0.00011 U	0.00011 U	0.00011 U	0.00005 U	0.00011 U	0.00011 U
Chromium	0.05	0.00075 J	0.0012 U	0.0019 J	0.0007 U	0.0007 U	0.0059
Cobalt	NA	0.0033	0.0034	0.00075 J	0.00043 J	0.00034 J	0.00035 J
Copper	1 SMCL	0.024	0.013	0.00075 U	0.0042	0.0017 J	0.0029
Cyanide	0.15	---	---	---	---	---	---
Hexavalent Chromium	0.05	---	---	---	---	---	---
Iron	0.30 SMCL	0.26	0.38	0.015 U	0.015 U	0.015 U	0.015 U
Lead	0.015 RAL	0.0073	0.0064	0.00017 J	0.0018	0.0013	0.00067 J
Magnesium	NA	100	96	---	---	---	---
Manganese	0.5 NL	0.48	0.58	0.02	0.051	0.062	0.076
Mercury	0.002	0.000073 U	---	0.000073 U	0.000073 U	0.000073 U	0.000073 U
Molybdenum	NA	0.0019 J	0.0016 J	0.0022	0.0017 J	0.0017 J	0.0016 J
Nickel	0.1	0.0088	0.0062	0.0009 U	0.0052	0.0025	0.0029
Selenium	0.05	0.0015 J	0.00087 J	0.00063 J	0.0011 J	0.00075 J	0.0003 U
Silver	0.1 SMCL	0.0002 U	0.0002 U	0.0002 U	0.0001 U	0.0002 U	0.0002 U
Strontium	NA	1.2	1.2	---	---	---	---
Thallium	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Tin	NA	0.012 U	0.012 U	---	---	---	---
Vanadium	0.05 NL	0.0007 U	0.0007 U	0.0024	0.0007 U	0.0007 U	0.0007 U
Zinc	5 SMCL	0.12	0.11	0.14	0.061	0.047	0.099

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T06-F.xls

February 2008

**TABLE VI**  
SUMMARY OF ANALYSES FOR METAL CONSTITUENTS AND CYANIDE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:	RD-54B	RD-54C	RD-54C	RD-54C	RD-55A	RD-55A	RD-55A	
Sample Port:	---	---	---	---	---	---	---	
Sample Preparation:	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Total	Dissolved	
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary	Primary	
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	
Collection Date:	08/14/2007	02/12/2007	08/07/2007	11/01/2007	02/12/2007	02/12/2007	05/17/2007	
Analyte (mg/L)	MCL							
Aluminum	0.2 SMCL	---	---	---	---	0.04 U	4.4	0.04 U
Antimony	0.006	0.0002 U	0.000051 J	0.0002 U	0.0002 U	0.00005 U	0.00018 J	0.0002 U
Arsenic	0.05	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0052	0.0007 U
Barium	1	0.051	0.064	0.041	0.028	0.041	0.13	0.048
Beryllium	0.004	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.00012 J	0.000075 U
Boron	1 NL	---	---	---	---	0.067	0.081 U	0.035 J
Cadmium	0.005	0.00011 U	0.00005 U	0.00011 U	0.00011 U	0.00005 U	0.00045 J	0.00011 U
Chromium	0.05	0.0007 U	0.0007 U	0.0007 U	0.00084 J	0.0007 U	0.085	0.0007 U
Cobalt	NA	0.00023 J	0.0002 J	0.00015 U	0.00015 U	0.00015 U	0.007	0.00015 U
Copper	1 SMCL	0.00099 U	0.0016 U	0.00075 U	0.00075 U	0.0013 J	0.038	0.00075 U
Cyanide	0.15	---	---	---	---	---	---	---
Hexavalent Chromium	0.05	---	---	---	---	---	---	---
Iron	0.30 SMCL	2.6	1.7	1	0.62	0.015 U	27	0.015 U
Lead	0.015 RAL	0.0023	0.0012	0.0005 J	0.0015	0.00019 J	0.018	0.0003 J
Magnesium	NA	---	---	---	---	17	17	16
Manganese	0.5 NL	0.088	0.3	0.22	0.16	0.019	3.1	0.0029
Mercury	0.002	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 UJ	0.000073 UJ	0.000073 U
Molybdenum	NA	0.002 J	0.006	0.0032	0.0031	0.0022	0.0034	0.0019 J
Nickel	0.1	0.0009 U	0.0009 U	0.0012 J	0.0009 U	0.0018 J	0.038	0.0012 J
Selenium	0.05	0.00063 J	0.0003 U	0.0003 U	0.0003 U	0.0014 J	0.0018 U	0.0023
Silver	0.1 SMCL	0.0002 U	0.0001 U	0.0002 U	0.0002 U	0.0001 U	0.00027 J	0.0002 U
Strontium	NA	---	---	---	---	0.44	0.42	0.43
Thallium	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Tin	NA	---	---	---	---	0.01 U	0.01 U	0.01 U
Vanadium	0.05 NL	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0012 J	0.023	0.0015 J
Zinc	5 SMCL	1.8	1.9	0.66	0.31	0.008 J	0.12	0.018 J

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T06-F.xls

February 2008

**TABLE VI**  
SUMMARY OF ANALYSES FOR METAL CONSTITUENTS AND CYANIDE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:	RD-55A	RD-55A	RD-55A	RD-55A	RD-55A	RD-57	RD-57	
Sample Port:	---	---	---	---	---	Z7	Z8	
Sample Preparation:	Total	Dissolved	Total	Dissolved	Total	Dissolved	Dissolved	
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary	Primary	
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	
Collection Date:	05/17/2007	08/14/2007	08/14/2007	10/29/2007	10/29/2007	02/08/2007	11/07/2007	
<b>Analyte (mg/L)</b>	<b>MCL</b>							
Aluminum	0.2 SMCL	0.063 U	0.04 U	0.04 U	0.04 U	0.04 U	---	---
Antimony	0.006	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00038 J	0.0002 U
Arsenic	0.05	0.0007 U	0.0007 U	0.00088 J	0.0007 U	0.0007 U	0.0045	0.0007 U
Barium	1	0.047	0.047	0.045	0.052	0.052	0.038	0.052
Beryllium	0.004	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U
Boron	1 NL	0.063	0.072	0.074	0.1	0.066	---	---
Cadmium	0.005	0.00011 U	0.00011 U	0.00011 U	0.00011 U	0.00011 U	0.00005 U	0.00011 U
Chromium	0.05	0.0007 U	0.0007 U	0.00088 J	0.0007 U	0.00076 J	0.0011 J	0.001 J
Cobalt	NA	0.00015 U	0.00015 J	0.00018 J	0.00015 U	0.00029 J	0.001	0.00037 J
Copper	1 SMCL	0.0063	0.0013 U	0.012	0.0016 J	0.029	0.0027	0.00075 U
Cyanide	0.15	---	---	---	---	---	---	---
Hexavalent Chromium	0.05	---	---	---	---	---	---	---
Iron	0.30 SMCL	0.15	0.015 U	0.16	0.028	0.37	0.015 U	0.018 J
Lead	0.015 RAL	0.00072 J	0.00093 U	0.0021	0.00074 J	0.0024	0.0074	0.0001 U
Magnesium	NA	17	17	16	18	18	---	---
Manganese	0.5 NL	0.024	0.012	0.041	0.0024	0.048	0.011	0.041
Mercury	0.002	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U
Molybdenum	NA	0.0019 J	0.0026	0.0025	0.0024	0.0026	0.0012 J	0.0014 J
Nickel	0.1	0.0009 U	0.001 J	0.0012 J	0.0012 J	0.0031	0.0062	0.0009 U
Selenium	0.05	0.0018 J	0.0013 J	0.0012 J	0.0014 J	0.0014 J	0.001 J	0.0003 U
Silver	0.1 SMCL	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0001 U	0.0002 U
Strontium	NA	0.45	0.41	0.41	0.42	0.44	---	---
Thallium	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Tin	NA	0.01 U	0.012 U	0.012 U	0.012 U	0.012 U	---	---
Vanadium	0.05 NL	0.0016 J	0.00084 J	0.00098 J	0.0007 U	0.0022	0.0014 J	0.0007 U
Zinc	5 SMCL	0.023	0.023	0.026	0.028	0.044 J	0.18	0.0038 J

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T06-F.xls

February 2008

**TABLE VI**  
SUMMARY OF ANALYSES FOR METAL CONSTITUENTS AND CYANIDE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:	RD-59A	RD-59A	RD-59A	RD-59B	RD-59B	RD-59C	RD-59C
Sample Port:	---	---	---	---	---	---	---
Sample Preparation:	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	02/28/2007	08/16/2007	10/25/2007	02/28/2007	08/16/2007	02/28/2007	08/16/2007
Analyte (mg/L)	MCL						
Aluminum	0.2 SMCL	---	---	---	---	---	---
Antimony	0.006	0.000068 J	0.0002 U	0.0002 U	0.00005 U	0.0002 U	0.00005 U
Arsenic	0.05	0.0007 U	0.0007 U	0.00092 J	0.0007 U	0.0007 U	0.0007 U
Barium	1	0.054	0.058	0.06	0.043	0.044	0.05
Beryllium	0.004	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U
Boron	1 NL	---	---	---	---	---	---
Cadmium	0.005	0.00005 U	0.00011 U	0.00011 U	0.00005 U	0.00011 U	0.00005 U
Chromium	0.05	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U
Cobalt	NA	0.0003 J	0.00027 J	0.00026 J	0.00015 U	0.00015 U	0.00015 U
Copper	1 SMCL	0.004 U	0.0052 U	0.0042	0.0013 U	0.00075 U	0.0015 U
Cyanide	0.15	---	---	---	---	---	---
Hexavalent Chromium	0.05	---	---	---	---	---	---
Iron	0.30 SMCL	0.8	0.031	0.021	0.064	0.06	0.015 U
Lead	0.015 RAL	0.0013	0.0011 U	0.0017	0.00033 J	0.0005 U	0.0004 J
Magnesium	NA	---	---	---	---	---	---
Manganese	0.5 NL	0.19	0.26	0.3	0.025	0.026	0.019
Mercury	0.002	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U
Molybdenum	NA	0.0028	0.0025	0.0029	0.0016 J	0.0015 J	0.0016 J
Nickel	0.1	0.0033	0.0016 J	0.0014 J	0.0013 J	0.0009 U	0.0009 U
Selenium	0.05	0.0003 U	0.0003 U	0.0003 U	0.0003 U	0.0003 U	0.0003 U
Silver	0.1 SMCL	0.0001 U	0.0002 U	0.0002 U	0.0001 U	0.0002 U	0.0001 U
Strontium	NA	---	---	---	---	---	---
Thallium	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Tin	NA	---	---	---	---	---	---
Vanadium	0.05 NL	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U
Zinc	5 SMCL	0.045 U	0.028	0.022	0.011 U	0.0075 J	0.0081 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T06-F.xls

February 2008

**TABLE VI**  
SUMMARY OF ANALYSES FOR METAL CONSTITUENTS AND CYANIDE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:		RD-60	RD-60	RD-60	RD-60	RD-60	RD-60	RD-60
Sample Port:		---	---	---	---	---	---	---
Sample Preparation:		Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Sample Type:		Primary	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:		03/01/2007	03/01/2007	05/24/2007	05/24/2007	08/06/2007	08/06/2007	10/30/2007
Analyte (mg/L)	MCL							
Aluminum	0.2 SMCL	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Antimony	0.006	0.00005 U	0.00015 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Arsenic	0.05	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.00082 J	0.0007 U
Barium	1	0.028	0.032	0.03	0.029	0.032	0.031	0.039
Beryllium	0.004	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U
Boron	1 NL	0.19	0.19 U	0.17 U	0.17 U	0.17	0.16	0.15
Cadmium	0.005	0.00005 U	0.00005 U	0.00013 J	0.00011 U	0.00011 U	0.00011 U	0.00011 U
Chromium	0.05	0.0007 U	0.0007 U	0.0013 J	0.0026	0.0007 U	0.0015 J	0.0007 U
Cobalt	NA	0.00076 J	0.00073 J	0.00061 J	0.00073 J	0.00056 J	0.00063 J	0.0008 J
Copper	1 SMCL	0.008	0.25	0.029	0.02	0.0054	0.025	0.006
Cyanide	0.15	---	---	---	---	---	---	---
Hexavalent Chromium	0.05	---	---	---	---	---	---	---
Iron	0.30 SMCL	0.039	1.5	0.06	0.59	0.047	1.7	0.56
Lead	0.015 RAL	0.0019	0.018	0.004	0.0057	0.0021	0.01	0.00091 J
Magnesium	NA	89	82	79	83	79	87	100
Manganese	0.5 NL	0.042	0.05	0.046	0.048	0.046	0.057	0.11
Mercury	0.002	0.000073 UJ	0.000073 UJ	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U
Molybdenum	NA	0.0017 J	0.0011 J	0.0016 J	0.0017 J	0.0016 J	0.0013 J	0.00034 J
Nickel	0.1	0.0051	0.0098	0.0062	0.0092	0.0058	0.005	0.0043
Selenium	0.05	0.0066	0.0074	0.0056	0.0067	0.0068	0.0069	0.0031
Silver	0.1 SMCL	0.0001 U	0.0001 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Strontium	NA	0.63	0.56	0.54	0.54	0.53	0.55	0.63
Thallium	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Tin	NA	0.01 U	0.01 U	0.01	0.01 U	0.012 UJ	0.012 U	0.012 U
Vanadium	0.05 NL	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U
Zinc	5 SMCL	1.5	1.6	1.7	1.7	1.4	2	2

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T06-F.xls

February 2008

**TABLE VI**  
SUMMARY OF ANALYSES FOR METAL CONSTITUENTS AND CYANIDE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:	RD-60	RD-73	RD-73	RD-73	RD-73	RD-73	RD-73
Sample Port:	---	---	---	---	---	---	---
Sample Preparation:	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	10/30/2007	02/15/2007	02/15/2007	05/14/2007	05/14/2007	08/15/2007	08/15/2007
Analyte (mg/L)	MCL						
Aluminum	0.2 SMCL	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Antimony	0.006	0.0002 U	0.00005 U	0.00014 J	0.0002 U	0.0002 U	0.0002 U
Arsenic	0.05	0.001	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U
Barium	1	0.037	0.059	0.067	0.062	0.052	0.063
Beryllium	0.004	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U
Boron	1 NL	0.14	0.87	0.83	0.72	0.72	0.78
Cadmium	0.005	0.00011 U	0.00005 U	0.00005 U	0.00011 U	0.00011 U	0.00011 U
Chromium	0.05	0.00095 J	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U
Cobalt	NA	0.00071 J	0.00057 J	0.00056 J	0.00064 J	0.00068 J	0.00058 J
Copper	1 SMCL	0.045	0.0014 J	0.0061	0.0012 J	0.0016 J	0.0036 U
Cyanide	0.15	---	---	---	---	---	---
Hexavalent Chromium	0.05	---	---	---	---	---	---
Iron	0.30 SMCL	1.8	0.015 U	0.19	0.042	0.13	0.015 U
Lead	0.015 RAL	0.0048	0.0014	0.0027	0.0012	0.0012	0.002
Magnesium	NA	93	25	23	22	23	23
Manganese	0.5 NL	0.11	0.57	0.52	0.57	0.66	0.59
Mercury	0.002	0.000073 U	0.000073 UJ	0.000073 UJ	0.000073 U	0.000073 U	0.000073 U
Molybdenum	NA	0.00094 J	0.0016 J	0.002	0.0019 J	0.0019 J	0.0017 J
Nickel	0.1	0.0033	0.0036	0.0041	0.0033	0.0041	0.0032
Selenium	0.05	0.0032	0.0023	0.0017 U	0.0017 J	0.0018 J	0.0021
Silver	0.1 SMCL	0.0002 U	0.0001 U	0.0001 U	0.0002 U	0.0002 U	0.0002 U
Strontium	NA	0.59	0.54	0.49	0.48	0.44	0.47
Thallium	0.002	0.00015 U	0.00015 U	0.00023 J	0.00015 U	0.00015 U	0.00015 U
Tin	NA	0.012 U	0.01 U	0.01 U	0.012 J	0.01 U	0.012 U
Vanadium	0.05 NL	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U
Zinc	5 SMCL	2.5 J	1.2	1.1	1.1	1.1	0.99

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T06-F.xls

February 2008

**TABLE VI**  
SUMMARY OF ANALYSES FOR METAL CONSTITUENTS AND CYANIDE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:		RD-73	RD-73	RD-75	RD-75	RD-77	RD-85	RD-86
Sample Port:		---	---	---	---	---	---	---
Sample Preparation:		Dissolved	Total	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
Sample Type:		Primary	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:		10/23/2007	10/23/2007	02/26/2007	05/24/2007	02/15/2007	08/23/2007	05/24/2007
Analyte (mg/L)	MCL							
Aluminum	0.2 SMCL	0.04 U	0.04 U	---	---	---	---	0.04 U
Antimony	0.006	0.0002 U	0.0002 U	0.00005 U	0.0002 U	0.00005 U	0.0002 U	0.0002 U
Arsenic	0.05	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0016	0.0007 U	0.0007 U
Barium	1	0.064	0.066	0.023	0.025	0.019	0.041	0.039
Beryllium	0.004	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U
Boron	1 NL	0.63	0.63	---	---	---	---	0.11
Cadmium	0.005	0.00011 U	0.00011 U	0.00005 U	0.00011 U	0.00005 U	0.00011 U	0.00011 U
Chromium	0.05	0.0007 U	0.0007 U	0.0007 U	0.00072 J	0.0007 U	0.0007 U	0.0011 J
Cobalt	NA	0.00066 J	0.00061 J	0.00021 J	0.00033 J	0.00015 U	0.00087 J	0.00027 J
Copper	1 SMCL	0.0027	0.073	0.0014 J	0.0013 J	0.0012 J	0.002 J	0.0024
Cyanide	0.15	---	---	---	---	---	---	---
Hexavalent Chromium	0.05	---	---	---	---	---	---	---
Iron	0.30 SMCL	0.068	0.13	0.5	0.47	0.015 U	0.015 U	0.15
Lead	0.015 RAL	0.0028	0.0055	0.00047 J	0.00022 J	0.00066 J	0.0001 U	0.00056 J
Magnesium	NA	27	27	---	84	---	---	27
Manganese	0.5 NL	0.89	0.68	0.16	0.21	0.0023	0.37	0.056
Mercury	0.002	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U
Molybdenum	NA	0.0021	0.0022	0.00088 J	0.001 J	0.00059 J	0.0021	0.001 J
Nickel	0.1	0.0037	0.0049	0.001 J	0.0018 J	0.0011 J	0.0065	0.0087
Selenium	0.05	0.0013 J	0.0012 J	0.00035 J	0.00042 J	0.0018 J	0.00035 J	0.00064 J
Silver	0.1 SMCL	0.0002 U	0.0002 U	0.0001 U	0.0002 U	0.0001 U	0.0002 U	0.0002 U
Strontium	NA	0.5	0.5	---	---	---	---	0.4
Thallium	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Tin	NA	0.012 U	0.012 U	---	---	---	---	0.01 U
Vanadium	0.05 NL	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.00099 J	0.0007 U
Zinc	5 SMCL	1	1	1.2	1.4	0.61	0.0034 U	0.044

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T06-F.xls

February 2008



**TABLE VI**  
SUMMARY OF ANALYSES FOR METAL CONSTITUENTS AND CYANIDE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:		RD-86	RD-86	RD-86	RD-86	RD-86	RD-91	RD-91
Sample Port:		---	---	---	---	---	---	---
Sample Preparation:		Total	Dissolved	Total	Dissolved	Total	Dissolved	Dissolved
Sample Type:		Primary	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:		05/24/2007	08/29/2007	08/29/2007	10/23/2007	10/23/2007	02/22/2007	05/24/2007
<b>Analyte (mg/L)</b>	<b>MCL</b>							
Aluminum	0.2 SMCL	0.04 U	0.04 U	0.04 U	0.04 U	0.042 J	---	---
Antimony	0.006	0.0002 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.000069 J	0.0002 U
Arsenic	0.05	0.0007 U	0.0007 U	0.00074 J	0.0012	0.0015	0.0007 U	0.0007 U
Barium	1	0.038	0.039	0.04	0.038	0.041	0.082	0.086
Beryllium	0.004	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U
Boron	1 NL	0.13 U	0.13	0.14	0.12	0.14	---	---
Cadmium	0.005	0.00011 U	0.00011 U	0.00011 U	0.00011 U	0.00011 U	0.00005 U	0.00011 U
Chromium	0.05	0.0011 J	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0008 J	0.0011 J
Cobalt	NA	0.00031 J	0.00023 J	0.00029 J	0.00023 J	0.00023 J	0.0003 J	0.00033 J
Copper	1 SMCL	0.0088	0.0025	0.015	0.005	0.015	0.0064	0.0018 J
Cyanide	0.15	---	---	---	---	---	---	---
Hexavalent Chromium	0.05	---	0.0002 U	0.0002 U	---	---	---	---
Iron	0.30 SMCL	0.21	0.23	0.26	0.099	0.43	0.015 U	0.015 U
Lead	0.015 RAL	0.00088 J	0.0053	0.0059	0.0015	0.0036	0.0013	0.0011
Magnesium	NA	26	28	27	25	30	---	---
Manganese	0.5 NL	0.054	0.05	0.054	0.012	0.02	0.0079	0.0035
Mercury	0.002	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.00015 U
Molybdenum	NA	0.0011 J	0.00063 J	0.00071 J	0.00059 J	0.00066 J	0.00059 J	0.0007 J
Nickel	0.1	0.0096	0.0079	0.0091	0.0062	0.0075	0.0066	0.0087
Selenium	0.05	0.00057 J	0.00073 J	0.00093 J	0.00084 J	0.0011 J	0.0023	0.0024
Silver	0.1 SMCL	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0001 U	0.0002 U
Strontium	NA	0.4	0.39	0.4	0.37	0.4	---	---
Thallium	0.002	0.00016 J	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Tin	NA	0.01 U	0.012 U	0.1 U	0.012 U	0.012 U	---	---
Vanadium	0.05 NL	0.00095 J	0.0013	0.0007 U	0.0013 J	0.0012 J	0.00099 J	0.00098 J
Zinc	5 SMCL	0.066	0.029	0.032 J	0.028	0.042	0.32	0.21

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T06-F.xls

February 2008

**TABLE VI**  
SUMMARY OF ANALYSES FOR METAL CONSTITUENTS AND CYANIDE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:	RD-91	RD-92	RS-54	RS-54	RS-54	WS-09	WS-09	
Sample Port:	---	---	---	---	---	---	---	
Sample Preparation:	Dissolved	Dissolved	Dissolved	Total	Total	Dissolved	Total	
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary	Primary	
Geological Unit:	Chatsworth	Chatsworth	Shallow	Shallow	Shallow	Chatsworth	Chatsworth	
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	
Collection Date:	08/14/2007	08/14/2007	02/15/2007	02/15/2007	05/24/2007	02/14/2007	02/14/2007	
Analyte (mg/L)	MCL							
Aluminum	0.2 SMCL	---	---	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Antimony	0.006	0.0002 U	0.0002 U	0.00038 J	0.0005 J	0.00025 J	0.00005 U	0.000091 J
Arsenic	0.05	0.0007 U	0.0007 U	0.00083 J	0.0007 U	0.00074 J	0.0007 U	0.0007 U
Barium	1	0.088	0.038	0.056	0.065	0.05	0.046	0.051
Beryllium	0.004	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U
Boron	1 NL	---	---	0.58	0.59	0.49	0.049 J	0.052 U
Cadmium	0.005	0.00011 U	0.00011 U	0.0021	0.0023	0.0025	0.00005 U	0.00005 U
Chromium	0.05	0.0007 U	0.0007 U	0.0007 U	0.013	0.0012 J	0.0007 U	0.0007 U
Cobalt	NA	0.00033 J	0.00015 U	0.19	0.17	0.13	0.00026 J	0.00028 J
Copper	1 SMCL	0.0038 U	0.0073 U	0.034	0.051	0.032	0.0025	0.014
Cyanide	0.15	---	---	---	---	---	---	---
Hexavalent Chromium	0.05	---	---	---	---	---	---	---
Iron	0.30 SMCL	0.015 U	0.015 U	0.046	0.41	0.26	0.8	0.86
Lead	0.015 RAL	0.017	0.0017 U	0.00065 J	0.0026	0.0017	0.00077 J	0.0016
Magnesium	NA	---	---	25	24	22	43	44
Manganese	0.5 NL	0.0029	0.018	0.41	0.49	0.07	0.023	0.025
Mercury	0.002	0.000073 U	0.000073 U	0.000073 U	0.000073 UJ	0.000073 U	0.000073 UJ	0.000073 UJ
Molybdenum	NA	0.0006 J	0.00094 J	0.054	0.059	0.044	0.0023	0.0024
Nickel	0.1	0.0097	0.0009 U	0.6	0.7	0.56	0.0064	0.0025
Selenium	0.05	0.0027	0.0003 U	0.0029	0.0032 U	0.0027	0.00047 J	0.0003 U
Silver	0.1 SMCL	0.0002 U	0.0002 U	0.0001 U	0.0001 U	0.0002 U	0.0001 U	0.0001 U
Strontium	NA	---	---	0.46	0.43	0.4	0.85	0.82
Thallium	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Tin	NA	---	---	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Vanadium	0.05 NL	0.0013 J	0.0022	0.001 J	0.0015 J	0.0007 U	0.0007 U	0.0007 U
Zinc	5 SMCL	0.2	0.066	0.094	0.12	0.063	0.18	0.18

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T06-F.xls

February 2008

**TABLE VI**  
SUMMARY OF ANALYSES FOR METAL CONSTITUENTS AND CYANIDE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:		WS-09	WS-09	WS-09	WS-09	WS-09	WS-09	WS-09A
Sample Port:		---	---	---	---	---	---	---
Sample Preparation:		Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Sample Type:		Primary	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:		05/10/2007	05/10/2007	08/21/2007	08/21/2007	10/25/2007	10/25/2007	02/12/2007
Analyte (mg/L)	MCL							
Aluminum	0.2 SMCL	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Antimony	0.006	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00005 U
Arsenic	0.05	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0012	0.0007 U	0.0015
Barium	1	0.046	0.045	0.041	0.049	0.042	0.044	0.062
Beryllium	0.004	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U
Boron	1 NL	0.032 J	0.047 J	0.044 J	0.052	0.042 J	0.038 J	0.12
Cadmium	0.005	0.00011 U	0.00011 U	0.00011 U	0.00015 J	0.00011 U	0.00011 U	0.00005 U
Chromium	0.05	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U
Cobalt	NA	0.0003 J	0.00033 J	0.00028 J	0.0006 J	0.00026 J	0.00036 J	0.00053 J
Copper	1 SMCL	0.0016 J	0.011	0.0012 J	0.016	0.0009 J	0.031	0.00073 J
Cyanide	0.15	---	---	---	---	---	---	---
Hexavalent Chromium	0.05	---	---	---	---	---	---	---
Iron	0.30 SMCL	0.62	0.73	0.59	1.9	0.49	0.62	0.92
Lead	0.015 RAL	0.00052 J	0.0022	0.0021	0.023	0.001	0.0028	0.0001 U
Magnesium	NA	45	44	51	54	47	45	25
Manganese	0.5 NL	0.02	0.026	0.017	0.046	0.016	0.027	0.5
Mercury	0.002	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 U	0.000073 UJ
Molybdenum	NA	0.0028	0.0024	0.0024	0.0024	0.0024	0.0024	0.0034
Nickel	0.1	0.002	0.0019 J	0.0036	0.0043	0.0012 J	0.0032	0.0019 J
Selenium	0.05	0.0003 U	0.0003 U	0.0003 U	0.00094 J	0.0003 J	0.00047 J	0.0004 J
Silver	0.1 SMCL	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0001 U
Strontium	NA	0.84	0.84	0.87	0.94	0.84	0.84	0.64
Thallium	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U	0.0002 J	0.00015 U	0.00015 U
Tin	NA	0.01 U	0.01 U	0.012 U	0.012 U	0.012 U	0.012 U	0.01 U
Vanadium	0.05 NL	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U
Zinc	5 SMCL	0.12	0.13	0.15	1.7	0.12	0.13	0.032

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T06-F.xls

February 2008

**TABLE VI**  
SUMMARY OF ANALYSES FOR METAL CONSTITUENTS AND CYANIDE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:		WS-09A	WS-09A	WS-09A	WS-09A	WS-09A
Sample Port:		---	---	---	---	---
Sample Preparation:		Total	Dissolved	Total	Dissolved	Total
Sample Type:		Primary	Primary	Primary	Primary	Primary
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:		TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:		02/12/2007	05/09/2007	05/09/2007	08/09/2007	08/09/2007
Analyte (mg/L)	MCL					
Aluminum	0.2 SMCL	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
Antimony	0.006	0.00005 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Arsenic	0.05	0.0018	0.0007 U	0.0007 U	0.0014	0.0016
Barium	1	0.067	0.06	0.064	0.067	0.069
Beryllium	0.004	0.000075 U	0.000075 U	0.000075 U	0.000075 U	0.000075 U
Boron	1 NL	0.13 U	0.1	0.11	0.099	0.11
Cadmium	0.005	0.00005 U	0.00011 U	0.00011 U	0.00011 U	0.00011 U
Chromium	0.05	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U
Cobalt	NA	0.00065 J	0.00051 J	0.0005 J	0.00054 J	0.00049 J
Copper	1 SMCL	0.0021	0.00075 U	0.0037	0.001 J	0.0027
Cyanide	0.15	---	---	---	---	---
Hexavalent Chromium	0.05	---	---	---	---	---
Iron	0.30 SMCL	1	0.63	0.62	0.88	1.5
Lead	0.015 RAL	0.00022 J	0.0001 U	0.00026 J	0.00024 J	0.00048 J
Magnesium	NA	25	25	24	24	25
Manganese	0.5 NL	0.5	0.25	0.25	0.32	0.31
Mercury	0.002	0.000073 UJ	0.000073 U	0.000073 U	0.000073 U	0.000073 U
Molybdenum	NA	0.0036	0.0041	0.0041	0.0034	0.0033
Nickel	0.1	0.0025	0.0023	0.0019 J	0.0015 J	0.0021
Selenium	0.05	0.00033 U	0.0003 U	0.0003 U	0.00056 J	0.00074 J
Silver	0.1 SMCL	0.0001 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Strontium	NA	0.64	0.66	0.63	0.62	0.66
Thallium	0.002	0.00015 U	0.00015 U	0.00015 U	0.00017 J	0.00015 U
Tin	NA	0.01 U	0.01 U	0.01 U	0.012 U	0.012 U
Vanadium	0.05 NL	0.0007 U	0.0007 U	0.0007 U	0.0007 U	0.0007 U
Zinc	5 SMCL	0.038	0.027	0.022	0.033	0.027

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T06-F.xls

February 2008

**TABLE VI**  
**NOTES AND ABBREVIATIONS**

---

1. TestAmerica = TestAmerica of Irvine, California.  
Mercury samples were analyzed by Weck Laboratories of City of Industry, California.
2. Chatsworth = Chatsworth Formation wells.
3. Shallow = Shallow wells.
4. Dissolved = Dissolved metals. Dissolved metal samples were filtered and preserved in the field using a 0.45 micron filter.
5. Total = Total metals. Total metal samples were not filtered, but were preserved in the field.
6. --- = Analysis not performed.
7. Primary = Primary sample.
8. mg/L = Milligrams per liter.
9. C = Possible carry-over contaminant.
10. 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).
11. U = Not detected; numerical value represents the Method Detection Limit for that compound.
12. UJ = Not detected. Estimated detection limit as a result of analytical quality control deficiencies (see Appendix D for details).
13. MCL = Maximum Contaminant Level, California primary drinking water standard.
14. NA = Not available; no MCL promulgated.
15. SMCL = Secondary drinking water MCL.
16. RAL = Regulatory Action Level to be met at a customer tap.
17. NL = Advisory California Notification Level for unregulated chemical contaminants.
18. MCLs, SMCLs, RALs, and NLs are listed by the California Department of Public Health (2006, 2007a, 2007b).
19. Mercury was analyzed by EPA method 7470A.  
Metals were analyzed by EPA method 6020.  
Aluminum, boron, iron, magnesium, strontium, and tin were analyzed by EPA method 6010B.  
Cyanide was analyzed by EPA method 9014.
20. Cyanide samples were not filtered.
21. RD-49A was not sampled for dissolved metals in August and November and dissolved metals were not sampled in RS-54 groundwater in May because there was not sufficient water volume to collect both dissolved and total metals.

TABLE VII

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier:	HAR-07	HAR-07	HAR-07	HAR-07	HAR-08	HAR-08
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	02/15/2007	05/08/2007	08/16/2007	11/06/2007	02/15/2007	05/15/2007
<b>Analyte (ug/L)</b>						
1,2,4-Trichlorobenzene	2.4 U	0.26 U	2.4 U	2.4 U	2.4 R	2.4 U
1,2-Dichlorobenzene	2.9 U	---	2.9 U	2.9 U	2.9 R	2.9 U
1,2-Diphenylhydrazine	1.9 U	---	1.9 U	1.9 U	1.9 R	1.9 U
1,3-Dichlorobenzene	2.9 U	---	2.9 U	2.9 U	2.9 R	2.9 U
1,3-Dinitrobenzene	2.9 U	1.9 U	2.9 U	2.9 U	2.9 R	2.9 U
1,4-Dichlorobenzene	2.4 U	---	2.4 U	2.4 U	2.4 R	2.4 U
2,4,6-Trichlorophenol	2.9 U	0.88 U	2.9 U	2.9 U	2.9 R	2.9 U
2,4-Dichlorophenol	1.9 U	0.77 U	1.9 U	1.9 U	1.9 R	1.9 U
2,4-Dimethylphenol	3.4 U	0.8 U	3.4 U	3.3 U	3.4 R	3.3 U
2,4-Dinitrophenol	4.4 U	1.4 U	4.3 U	4.3 U	4.4 R	4.3 U
2,4-Dinitrotoluene	1.9 U	0.4 U	1.9 U	1.9 U	1.9 R	1.9 U
2,6-Dinitrotoluene	1.9 U	0.24 U	1.9 U	1.9 U	1.9 R	1.9 U
2-Chloronaphthalene	1.9 U	0.26 U	1.9 U	1.9 U	1.9 R	1.9 U
2-Chlorophenol	1.9 U	0.71 U	1.9 U	1.9 U	1.9 R	1.9 U
2-Nitrophenol	3.4 U	0.84 U	3.4 U	3.3 U	3.4 R	3.3 U
3,3'-Dichlorobenzidine	2.9 U	1.5 U	2.9 U	2.9 U	2.9 R	2.9 U
4,6-Dinitro-o-cresol	3.9 U	0.33 U	3.8 U	3.8 U	3.9 R	3.8 U
4-Bromophenyl phenyl ether	2.4 U	0.23 U	2.4 U	2.4 U	2.4 R	2.4 U
4-Chlorophenylphenyl ether	1.9 U	0.24 U	1.9 U	1.9 U	1.9 R	1.9 U
4-Nitrophenol	5.3 U	1 U	5.3 U	5.2 U	5.3 R	5.3 U
Acenaphthene	1.9 U	0.31 U	1.9 U	1.9 U	1.9 R	1.9 U
Acenaphthylene	1.9 U	0.26 U	1.9 U	1.9 U	1.9 R	1.9 U
Anthracene	1.9 U	0.28 U	1.9 U	1.9 U	1.9 R	1.9 U
Benzidine	8.3 R	---	8.2 U	8.1 U	8.3 R	8.1 R
Benzo(a)anthracene	1.9 U	0.19 U	1.9 U	1.9 U	1.9 R	1.9 U
Benzo(a)pyrene	1.9 U	0.2 U	1.9 U	1.9 U	1.9 R	1.9 U
Benzo(b)fluoranthene	1.9 U	0.16 U	1.9 U	1.9 U	1.9 R	1.9 U
Benzo(ghi)perylene	2.9 U	0.31 U	2.9 U	2.9 U	2.9 R	2.9 U
Benzo(k)fluoranthene	1.9 U	0.23 U	1.9 U	1.9 U	1.9 R	1.9 U
bis(2-Chloroethoxy)methane	1.9 U	0.4 U	1.9 U	1.9 U	1.9 R	1.9 U
bis(2-Chloroethyl) ether	2.4 U	0.46 U	2.4 U	2.4 U	2.4 R	2.4 U
bis(2-Chloroisopropyl) ether	2.4 U	0.48 U	2.4 U	2.4 U	2.4 R	2.4 U
bis(2-Ethylhexyl) phthalate	3.9 U	0.59 U	3.8 U	3.8 U	3.9 R	3.8 U
Butyl benzyl phthalate	3.9 U	0.29 U	3.8 U	3.8 U	3.9 R	3.8 U
Chrysene	1.9 U	0.25 U	1.9 U	1.9 U	1.9 R	1.9 U
Dibenzo(a,h)anthracene	2.9 U	0.32 U	2.9 U	2.9 U	2.9 R	2.9 U
Diethyl phthalate	1.9 U	0.23 U	1.9 U	1.9 U	1.9 R	1.9 U
Dimethyl phthalate	1.9 U	0.26 U	1.9 U	1.9 U	1.9 R	1.9 U
Di-n-butyl phthalate	1.9 U	0.53 U	1.9 U	1.9 U	1.9 R	1.9 U
Di-n-octyl phthalate	1.9 U	0.28 U	1.9 U	1.9 U	1.9 R	1.9 U
Fluoranthene	1.9 U	0.16 U	1.9 U	1.9 U	1.9 R	1.9 U
Fluorene	1.9 U	0.28 U	1.9 U	1.9 U	1.9 R	1.9 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

**TABLE VII**

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>HAR-07</b>	<b>HAR-07</b>	<b>HAR-07</b>	<b>HAR-07</b>	<b>HAR-08</b>	<b>HAR-08</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	02/15/2007	05/08/2007	08/16/2007	11/06/2007	02/15/2007	05/15/2007
<b>Analyte (ug/L)</b>						
Hexachlorobenzene	2.4 U	0.15 U	2.4 U	2.4 U	2.4 R	2.4 U
Hexachlorobutadiene	3.4 U	0.41 U	3.4 U	3.3 U	3.4 R	3.3 U
Hexachloroethane	2.9 U	0.36 U	2.9 U	2.9 U	2.9 R	2.9 U
Indeno(1,2,3-cd)pyrene	2.9 U	0.32 U	2.9 U	2.9 U	2.9 R	2.9 U
Isophorone	1.9 U	0.33 U	1.9 U	1.9 U	1.9 R	1.9 U
Naphthalene	2.4 U	0.35 U	2.4 U	2.4 U	2.4 R	2.4 U
Nitrobenzene	2.4 U	0.37 U	2.4 U	2.4 U	2.4 R	2.4 U
n-Nitrosodimethylamine	2.4 U	0.36 U	2.4 U	2.4 U	2.4 R	2.4 U
n-Nitrosodi-n-propylamine	2.4 U	0.41 U	2.4 U	2.4 U	2.4 R	2.4 U
n-Nitrosodiphenylamine	1.9 U	0.23 U	1.9 U	1.9 U	1.9 R	1.9 U
p-Chloro-m-cresol	1.9 U	0.4 U	1.9 U	1.9 U	1.9 R	1.9 U
Pentachlorophenol	3.4 U	0.56 U	3.4 U	3.3 U	3.4 R	3.3 U
Phenanthrene	1.9 U	0.25 U	1.9 U	1.9 U	1.9 R	1.9 U
Phenol	1.9 U	0.3 U	1.9 U	1.9 U	1.9 R	1.9 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

TABLE VII

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:	HAR-08	HAR-08	HAR-14	HAR-15	HAR-16	HAR-17
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Shallow	Shallow	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	08/16/2007	10/29/2007	05/08/2007	05/08/2007	05/07/2007	05/08/2007
<b>Analyte (ug/L)</b>						
1,2,4-Trichlorobenzene	2.4 U	2.4 U	0.26 U	0.26 U	0.26 U	0.26 U
1,2-Dichlorobenzene	2.9 U	2.9 U	---	---	---	---
1,2-Diphenylhydrazine	1.9 U	1.9 U	---	---	---	---
1,3-Dichlorobenzene	2.9 U	2.9 U	---	---	---	---
1,3-Dinitrobenzene	2.9 U	2.9 U	1.9 U	1.9 U	1.9 U	1.9 U
1,4-Dichlorobenzene	2.4 U	2.4 U	---	---	---	---
2,4,6-Trichlorophenol	2.9 U	2.9 U	0.88 U	0.88 U	0.88 U	0.88 U
2,4-Dichlorophenol	1.9 U	1.9 U	0.77 U	0.77 U	0.77 U	0.77 U
2,4-Dimethylphenol	3.4 U	3.4 U	0.8 U	0.8 U	0.8 U	0.8 U
2,4-Dinitrophenol	4.3 U	4.3 U	1.4 U	1.4 U	1.4 U	1.4 U
2,4-Dinitrotoluene	1.9 U	1.9 U	0.4 U	0.4 U	0.4 U	0.4 U
2,6-Dinitrotoluene	1.9 U	1.9 U	0.24 U	0.24 U	0.24 U	0.24 U
2-Chloronaphthalene	1.9 U	1.9 U	0.26 U	0.26 U	0.26 U	0.26 U
2-Chlorophenol	1.9 U	1.9 U	0.71 U	0.71 U	0.71 U	0.71 U
2-Nitrophenol	3.4 U	3.4 U	0.84 U	0.84 U	0.84 U	0.84 U
3,3'-Dichlorobenzidine	2.9 U	2.9 U	1.5 U	1.5 U	1.5 U	1.5 U
4,6-Dinitro-o-cresol	3.9 U	3.8 U	0.33 U	0.33 U	0.33 U	0.33 U
4-Bromophenyl phenyl ether	2.4 U	2.4 U	0.23 U	0.23 U	0.23 U	0.23 U
4-Chlorophenylphenyl ether	1.9 U	1.9 U	0.24 U	0.24 U	0.24 U	0.24 U
4-Nitrophenol	5.3 U	5.3 U	1 U	1 U	1 U	1 U
Acenaphthene	1.9 U	1.9 U	0.31 U	0.31 U	0.31 U	0.31 U
Acenaphthylene	1.9 U	1.9 U	0.26 U	0.26 U	0.26 U	0.26 U
Anthracene	1.9 U	1.9 U	0.28 U	0.28 U	0.28 U	0.28 U
Benzidine	8.2 U	8.2 U	---	---	---	---
Benzo(a)anthracene	1.9 U	1.9 U	0.19 U	0.19 U	0.19 U	0.19 U
Benzo(a)pyrene	1.9 U	1.9 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzo(b)fluoranthene	1.9 U	1.9 U	0.16 U	0.16 U	0.16 U	0.16 U
Benzo(ghi)perylene	2.9 U	2.9 U	0.31 U	0.31 U	0.31 U	0.31 U
Benzo(k)fluoranthene	1.9 U	1.9 U	0.23 U	0.23 U	0.23 U	0.23 U
bis(2-Chloroethoxy)methane	1.9 U	1.9 U	0.4 U	0.4 U	0.4 U	0.4 U
bis(2-Chloroethyl) ether	2.4 U	2.4 U	0.46 U	0.46 U	0.46 U	0.46 U
bis(2-Chloroisopropyl) ether	2.4 U	2.4 U	0.48 U	0.48 U	0.48 U	0.48 U
bis(2-Ethylhexyl) phthalate	3.9 U	3.8 U	0.34 J	0.49 U	0.72 U	0.49 U
Butyl benzyl phthalate	3.9 U	3.8 U	0.29 U	0.29 U	0.29 U	0.29 U
Chrysene	1.9 U	1.9 U	0.25 U	0.25 U	0.25 U	0.25 U
Dibenzo(a,h)anthracene	2.9 U	2.9 U	0.32 U	0.32 U	0.32 U	0.32 U
Diethyl phthalate	1.9 U	1.9 U	0.23 U	0.42 J,L	0.23 U	0.23 U
Dimethyl phthalate	1.9 U	1.9 U	0.26 U	0.26 U	0.26 U	0.26 U
Di-n-butyl phthalate	1.9 U	1.9 U	0.53 U	0.53 U	0.53 U	0.53 U
Di-n-octyl phthalate	1.9 U	1.9 U	0.28 U	0.28 U	0.28 U	0.28 U
Fluoranthene	1.9 U	1.9 U	0.16 U	0.16 U	0.16 U	0.16 U
Fluorene	1.9 U	1.9 U	0.28 U	0.28 U	0.28 U	0.28 U

See last page of table for notes and abbreviations.

Haley &amp; Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008



**TABLE VII**

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>HAR-08</b>	<b>HAR-08</b>	<b>HAR-14</b>	<b>HAR-15</b>	<b>HAR-16</b>	<b>HAR-17</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Shallow	Shallow	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	08/16/2007	10/29/2007	05/08/2007	05/08/2007	05/07/2007	05/08/2007
<b>Analyte (ug/L)</b>						
Hexachlorobenzene	2.4 U	2.4 U	0.15 U	0.15 U	0.15 U	0.15 U
Hexachlorobutadiene	3.4 U	3.4 U	0.41 U	0.41 U	0.41 U	0.41 U
Hexachloroethane	2.9 U	2.9 U	0.36 U	0.36 U	0.36 U	0.36 U
Indeno(1,2,3-cd)pyrene	2.9 U	2.9 U	0.32 U	0.32 U	0.32 U	0.32 U
Isophorone	1.9 U	1.9 U	0.33 U	0.33 U	0.33 U	0.33 U
Naphthalene	2.4 U	2.4 U	0.35 U	0.35 U	0.35 U	0.35 U
Nitrobenzene	2.4 U	2.4 U	0.37 U	0.37 U	0.37 U	0.37 U
n-Nitrosodimethylamine	2.4 U	2.4 U	0.36 U	0.36 U	7.5	0.36 U
n-Nitrosodi-n-propylamine	2.4 U	2.4 U	0.41 U	0.41 U	0.41 U	0.41 U
n-Nitrosodiphenylamine	1.9 U	1.9 U	0.23 U	0.23 U	0.23 U	0.23 U
p-Chloro-m-cresol	1.9 U	1.9 U	0.4 U	0.4 U	0.4 U	0.4 U
Pentachlorophenol	3.4 U	3.4 U	0.56 U	0.56 U	0.56 U	0.56 U
Phenanthrene	1.9 U	1.9 U	0.25 U	0.25 U	0.25 U	0.25 U
Phenol	1.9 U	1.9 U	0.3 U	0.3 U	0.3 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

TABLE VII

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
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:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	02/22/2007	05/15/2007	08/14/2007	10/23/2007	02/15/2007	05/15/2007
<b>Analyte (ug/L)</b>						
1,2,4-Trichlorobenzene	2.6 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
1,2-Dichlorobenzene	3.1 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
1,2-Diphenylhydrazine	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
1,3-Dichlorobenzene	3.1 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
1,3-Dinitrobenzene	3.1 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
1,4-Dichlorobenzene	2.6 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
2,4,6-Trichlorophenol	3.1 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
2,4-Dichlorophenol	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4-Dimethylphenol	3.6 U	3.4 U	3.4 U	3.3 U	3.4 U	3.4 U
2,4-Dinitrophenol	4.6 U	4.3 U	4.4 U	4.3 U	4.3 U	4.4 U
2,4-Dinitrotoluene	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,6-Dinitrotoluene	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Chloronaphthalene	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Chlorophenol	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Nitrophenol	3.6 U	3.4 U	3.4 U	3.3 U	3.4 U	3.4 U
3,3'-Dichlorobenzidine	3.1 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
4,6-Dinitro-o-cresol	4.1 U	3.8 U	3.9 U	3.8 U	3.8 U	3.9 U
4-Bromophenyl phenyl ether	2.6 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
4-Chlorophenylphenyl ether	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
4-Nitrophenol	5.6 U	5.3 U	5.3 U	5.2 U	5.3 U	5.3 U
Acenaphthene	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Acenaphthylene	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Anthracene	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzidine	8.7 U	8.2 R	8.3 R	8.1 R	8.2 R	8.3 R
Benzo(a)anthracene	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(a)pyrene	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(b)fluoranthene	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(ghi)perylene	3.1 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
Benzo(k)fluoranthene	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Chloroethoxy)methane	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Chloroethyl) ether	2.6 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
bis(2-Chloroisopropyl) ether	2.6 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
bis(2-Ethylhexyl) phthalate	4.1 U	3.8 U	3.9 U	3.8 U	3.8 U	3.9 U
Butyl benzyl phthalate	4.1 U	3.8 U	3.9 U	3.8 U	3.8 U	3.9 U
Chrysene	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Dibenzo(a,h)anthracene	3.1 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
Diethyl phthalate	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Dimethyl phthalate	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Di-n-butyl phthalate	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Di-n-octyl phthalate	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Fluoranthene	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Fluorene	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

**TABLE VII**

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>HAR-18</b>	<b>HAR-18</b>	<b>HAR-18</b>	<b>HAR-18</b>	<b>HAR-20</b>	<b>HAR-20</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	02/22/2007	05/15/2007	08/14/2007	10/23/2007	02/15/2007	05/15/2007
<b>Analyte (ug/L)</b>						
Hexachlorobenzene	2.6 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Hexachlorobutadiene	3.6 U	3.4 U	3.4 U	3.3 U	3.4 U	3.4 U
Hexachloroethane	3.1 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
Indeno(1,2,3-cd)pyrene	3.1 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
Isophorone	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Naphthalene	2.6 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Nitrobenzene	2.6 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
n-Nitrosodimethylamine	2.6 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
n-Nitrosodi-n-propylamine	2.6 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
n-Nitrosodiphenylamine	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
p-Chloro-m-cresol	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Pentachlorophenol	3.6 U	3.4 U	3.4 U	3.3 U	3.4 U	3.4 U
Phenanthrene	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Phenol	2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

TABLE VII

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:	HAR-20	HAR-20	RD-01	RD-01	RD-01	RD-01
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	08/14/2007	10/24/2007	02/15/2007	05/09/2007	08/15/2007	10/23/2007
Analyte (ug/L)						
1,2,4-Trichlorobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
1,2-Dichlorobenzene	2.8 U	2.8 U	2.9 U	2.9 U	2.9 U	2.9 U
1,2-Diphenylhydrazine	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
1,3-Dichlorobenzene	2.8 U	2.8 U	2.9 U	2.9 U	2.9 U	2.9 U
1,3-Dinitrobenzene	2.8 U	2.8 U	2.9 U	2.9 U	2.9 U	2.9 U
1,4-Dichlorobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
2,4,6-Trichlorophenol	2.8 U	2.8 U	2.9 U	2.9 U	2.9 U	2.9 U
2,4-Dichlorophenol	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4-Dimethylphenol	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
2,4-Dinitrophenol	4.2 U	4.2 U	4.3 U	4.3 U	4.3 U	4.3 U
2,4-Dinitrotoluene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,6-Dinitrotoluene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Chloronaphthalene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Chlorophenol	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Nitrophenol	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
3,3'-Dichlorobenzidine	2.8 U	2.8 U	2.9 U	2.9 U	2.9 U	2.9 U
4,6-Dinitro-o-cresol	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
4-Bromophenyl phenyl ether	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
4-Chlorophenylphenyl ether	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
4-Nitrophenol	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
Acenaphthene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Acenaphthylene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Anthracene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzidine	8 R	8 R	8.1 R	8.1 U	8.1 R	8.1 R
Benzo(a)anthracene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(a)pyrene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(b)fluoranthene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(ghi)perylene	2.8 U	2.8 U	2.9 U	2.9 U	2.9 U	2.9 U
Benzo(k)fluoranthene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Chloroethoxy)methane	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Chloroethyl) ether	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
bis(2-Chloroisopropyl) ether	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
bis(2-Ethylhexyl) phthalate	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
Butyl benzyl phthalate	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
Chrysene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Dibenzo(a,h)anthracene	2.8 U	2.8 U	2.9 U	2.9 U	2.9 U	2.9 U
Diethyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Dimethyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Di-n-butyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	4.3 J	1.9 U
Di-n-octyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Fluoranthene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Fluorene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

**TABLE VII**

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>HAR-20</b>	<b>HAR-20</b>	<b>RD-01</b>	<b>RD-01</b>	<b>RD-01</b>	<b>RD-01</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	08/14/2007	10/24/2007	02/15/2007	05/09/2007	08/15/2007	10/23/2007
<b>Analyte (ug/L)</b>						
Hexachlorobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Hexachlorobutadiene	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
Hexachloroethane	2.8 U	2.8 U	2.9 U	2.9 U	2.9 U	2.9 U
Indeno(1,2,3-cd)pyrene	2.8 U	2.8 U	2.9 U	2.9 U	2.9 U	2.9 U
Isophorone	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Naphthalene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Nitrobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
n-Nitrosodimethylamine	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
n-Nitrosodi-n-propylamine	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
n-Nitrosodiphenylamine	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
p-Chloro-m-cresol	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Pentachlorophenol	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
Phenanthrene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Phenol	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

TABLE VII

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:	RD-02	RD-02	RD-02	RD-02	RD-04	RD-04
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	02/13/2007	05/21/2007	08/29/2007	11/07/2007	02/13/2007	05/10/2007
Analyte (ug/L)						
1,2,4-Trichlorobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
1,2-Dichlorobenzene	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
1,2-Diphenylhydrazine	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
1,3-Dichlorobenzene	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
1,3-Dinitrobenzene	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
1,4-Dichlorobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
2,4,6-Trichlorophenol	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
2,4-Dichlorophenol	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
2,4-Dimethylphenol	3.3 U	3.3 U	3.4 U	3.4 U	3.4 U	3.4 U
2,4-Dinitrophenol	4.3 U	4.3 U	4.4 U	4.3 U	4.4 U	4.3 U
2,4-Dinitrotoluene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
2,6-Dinitrotoluene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
2-Chloronaphthalene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
2-Chlorophenol	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
2-Nitrophenol	3.3 U	3.3 U	3.4 U	3.4 U	3.4 U	3.4 U
3,3'-Dichlorobenzidine	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
4,6-Dinitro-o-cresol	3.8 U	3.8 U	3.9 U	3.8 U	3.9 U	3.8 U
4-Bromophenyl phenyl ether	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
4-Chlorophenylphenyl ether	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
4-Nitrophenol	5.3 U	5.2 U	5.3 U	5.3 U	5.4 U	5.3 U
Acenaphthene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Acenaphthylene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Anthracene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Benzidine	8.1 U	8.1 U	8.3 U	8.2 U	8.3 U	8.2 R
Benzo(a)anthracene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Benzo(a)pyrene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Benzo(b)fluoranthene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Benzo(ghi)perylene	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
Benzo(k)fluoranthene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
bis(2-Chloroethoxy)methane	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
bis(2-Chloroethyl) ether	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
bis(2-Chloroisopropyl) ether	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
bis(2-Ethylhexyl) phthalate	3.8 U	3.8 U	3.9 U	3.8 U	3.9 U	3.8 U
Butyl benzyl phthalate	3.8 U	3.8 U	3.9 U	3.8 U	3.9 U	3.8 U
Chrysene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Dibenzo(a,h)anthracene	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
Diethyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Dimethyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Di-n-butyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Di-n-octyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Fluoranthene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Fluorene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

**TABLE VII**

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-02</b>	<b>RD-02</b>	<b>RD-02</b>	<b>RD-02</b>	<b>RD-04</b>	<b>RD-04</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	02/13/2007	05/21/2007	08/29/2007	11/07/2007	02/13/2007	05/10/2007
<b>Analyte (ug/L)</b>						
Hexachlorobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Hexachlorobutadiene	3.3 U	3.3 U	3.4 U	3.4 U	3.4 U	3.4 U
Hexachloroethane	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
Indeno(1,2,3-cd)pyrene	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U
Isophorone	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Naphthalene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Nitrobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
n-Nitrosodimethylamine	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
n-Nitrosodi-n-propylamine	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
n-Nitrosodiphenylamine	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
p-Chloro-m-cresol	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Pentachlorophenol	3.3 U	3.3 U	3.4 U	3.4 U	3.4 U	3.4 U
Phenanthrene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Phenol	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

TABLE VII

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:	RD-04	RD-04	RD-07	RD-09	RD-09	RD-09
Sample Port:	---	---	Z3	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	08/15/2007	10/25/2007	11/06/2007	02/14/2007	05/15/2007	08/14/2007
Analyte (ug/L)						
1,2,4-Trichlorobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
1,2-Dichlorobenzene	2.9 U	2.8 U	2.9 U	2.8 U	2.9 U	2.8 U
1,2-Diphenylhydrazine	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
1,3-Dichlorobenzene	2.9 U	2.8 U	2.9 U	2.8 U	2.9 U	2.8 U
1,3-Dinitrobenzene	2.9 U	2.8 U	---	2.8 U	2.9 U	2.8 U
1,4-Dichlorobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
2,4,6-Trichlorophenol	2.9 U	2.8 U	2.9 U	2.8 U	2.9 U	2.8 U
2,4-Dichlorophenol	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4-Dimethylphenol	3.4 U	3.3 U	3.4 U	3.3 U	3.3 U	3.3 U
2,4-Dinitrophenol	4.4 U	4.3 U	4.3 U	4.2 U	4.3 U	4.2 U
2,4-Dinitrotoluene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,6-Dinitrotoluene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Chloronaphthalene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Chlorophenol	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Nitrophenol	3.4 U	3.3 U	3.4 U	3.3 U	3.3 U	3.3 U
3,3'-Dichlorobenzidine	2.9 U	2.8 U	2.9 U	2.8 R	2.9 U	2.8 U
4,6-Dinitro-o-cresol	3.9 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
4-Bromophenyl phenyl ether	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
4-Chlorophenylphenyl ether	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
4-Nitrophenol	5.3 U	5.2 U	5.3 U	5.2 U	5.2 U	5.2 U
Acenaphthene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Acenaphthylene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Anthracene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzidine	8.3 R	8.1 R	8.2 U	8 R	8.1 R	8 R
Benzo(a)anthracene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(a)pyrene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(b)fluoranthene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(ghi)perylene	2.9 U	2.8 U	2.9 U	2.8 U	2.9 U	2.8 U
Benzo(k)fluoranthene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Chloroethoxy)methane	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Chloroethyl) ether	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
bis(2-Chloroisopropyl) ether	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
bis(2-Ethylhexyl) phthalate	3.9 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
Butyl benzyl phthalate	3.9 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
Chrysene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Dibenzo(a,h)anthracene	2.9 U	2.8 U	2.9 U	2.8 U	2.9 U	2.8 U
Diethyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Dimethyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Di-n-butyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Di-n-octyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Fluoranthene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Fluorene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008



**TABLE VII**

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-04</b>	<b>RD-04</b>	<b>RD-07</b>	<b>RD-09</b>	<b>RD-09</b>	<b>RD-09</b>
Sample Port:	---	---	Z3	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	08/15/2007	10/25/2007	11/06/2007	02/14/2007	05/15/2007	08/14/2007
<b>Analyte (ug/L)</b>						
Hexachlorobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Hexachlorobutadiene	3.4 U	3.3 U	3.4 U	3.3 U	3.3 U	3.3 U
Hexachloroethane	2.9 U	2.8 U	2.9 U	2.8 U	2.9 U	2.8 U
Indeno(1,2,3-cd)pyrene	2.9 U	2.8 U	2.9 U	2.8 U	2.9 U	2.8 U
Isophorone	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Naphthalene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Nitrobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
n-Nitrosodimethylamine	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
n-Nitrosodi-n-propylamine	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
n-Nitrosodiphenylamine	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
p-Chloro-m-cresol	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Pentachlorophenol	3.4 U	3.3 U	3.4 U	3.3 U	3.3 U	3.3 U
Phenanthrene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Phenol	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

TABLE VII

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:	RD-10	RD-10	RD-10	RD-10	RD-10	RD-10
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Duplicate	Split
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	02/06/2007	05/09/2007	08/15/2007	10/23/2007	10/23/2007	10/23/2007
Analyte (ug/L)						
1,2,4-Trichlorobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	0.26 U
1,2-Dichlorobenzene	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	0.3 U
1,2-Diphenylhydrazine	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.3 U
1,3-Dichlorobenzene	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	0.36 U
1,3-Dinitrobenzene	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	1.9 U
1,4-Dichlorobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	0.32 U
2,4,6-Trichlorophenol	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	0.88 U
2,4-Dichlorophenol	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.77 U
2,4-Dimethylphenol	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	0.8 U
2,4-Dinitrophenol	4.3 U	4.4 U	4.3 U	4.3 U	4.4 U	1.4 U
2,4-Dinitrotoluene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.4 U
2,6-Dinitrotoluene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.24 U
2-Chloronaphthalene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.26 U
2-Chlorophenol	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.71 U
2-Nitrophenol	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	0.84 U
3,3'-Dichlorobenzidine	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	1.5 U
4,6-Dinitro-o-cresol	3.8 U	3.9 U	3.8 U	3.8 U	3.9 U	0.33 U
4-Bromophenyl phenyl ether	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	0.23 U
4-Chlorophenylphenyl ether	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.24 U
4-Nitrophenol	5.3 U	5.3 U	5.3 U	5.3 U	5.3 U	1 U
Acenaphthene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.31 U
Acenaphthylene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.26 U
Anthracene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.28 U
Benzidine	8.2 U	8.3 U	8.2 R	8.2 R	8.3 R	3.2 U
Benzo(a)anthracene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.19 U
Benzo(a)pyrene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.2 U
Benzo(b)fluoranthene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.16 U
Benzo(ghi)perylene	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	0.31 U
Benzo(k)fluoranthene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.23 U
bis(2-Chloroethoxy)methane	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.4 U
bis(2-Chloroethyl) ether	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	0.46 U
bis(2-Chloroisopropyl) ether	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	0.48 U
bis(2-Ethylhexyl) phthalate	3.8 U	3.9 U	3.8 U	3.8 U	3.9 U	0.32 U
Butyl benzyl phthalate	3.8 U	3.9 U	3.8 U	3.8 U	3.9 U	0.29 U
Chrysene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.25 U
Dibenzo(a,h)anthracene	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	0.32 U
Diethyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.88 U
Dimethyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.26 U
Di-n-butyl phthalate	1.9 U	1.9 U	6.4 J	1.9 U	1.9 U	0.53 U
Di-n-octyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.28 U
Fluoranthene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.16 U
Fluorene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.28 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

**TABLE VII**

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-10</b>	<b>RD-10</b>	<b>RD-10</b>	<b>RD-10</b>	<b>RD-10</b>	<b>RD-10</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Duplicate	Split
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	02/06/2007	05/09/2007	08/15/2007	10/23/2007	10/23/2007	10/23/2007
<b>Analyte (ug/L)</b>						
Hexachlorobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	0.15 U
Hexachlorobutadiene	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	0.41 U
Hexachloroethane	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	0.36 U
Indeno(1,2,3-cd)pyrene	2.9 U	2.9 U	2.9 U	2.9 U	2.9 U	0.32 U
Isophorone	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.33 U
Naphthalene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	0.35 U
Nitrobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	0.37 U
n-Nitrosodimethylamine	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	0.36 U
n-Nitrosodi-n-propylamine	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	0.41 U
n-Nitrosodiphenylamine	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.23 U
p-Chloro-m-cresol	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.4 U
Pentachlorophenol	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	0.56 U
Phenanthrene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.25 U
Phenol	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

TABLE VII

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:	RD-41A	RD-41A	RD-41A	RD-41A	RD-41B	RD-41B
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	02/14/2007	05/16/2007	08/20/2007	10/29/2007	02/14/2007	05/21/2007
Analyte (ug/L)						
1,2,4-Trichlorobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.5 U	2.4 U
1,2-Dichlorobenzene	2.9 U	2.9 U	2.8 U	2.9 U	3 U	2.9 U
1,2-Diphenylhydrazine	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
1,3-Dichlorobenzene	2.9 U	2.9 U	2.8 U	2.9 U	3 U	2.9 U
1,3-Dinitrobenzene	2.9 U	2.9 U	2.8 U	2.9 U	3 U	2.9 U
1,4-Dichlorobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.5 U	2.4 U
2,4,6-Trichlorophenol	2.9 U	2.9 U	2.8 U	2.9 U	3 U	2.9 U
2,4-Dichlorophenol	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
2,4-Dimethylphenol	3.3 U	3.3 U	3.3 U	3.4 U	3.5 U	3.3 U
2,4-Dinitrophenol	4.3 U	4.3 U	4.2 U	4.4 U	4.5 U	4.3 U
2,4-Dinitrotoluene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
2,6-Dinitrotoluene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
2-Chloronaphthalene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
2-Chlorophenol	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
2-Nitrophenol	3.3 U	3.3 U	3.3 U	3.4 U	3.5 U	3.3 U
3,3'-Dichlorobenzidine	2.9 R	2.9 U	2.8 U	2.9 U	3 R	2.9 U
4,6-Dinitro-o-cresol	3.8 U	3.8 U	3.8 U	3.9 U	4 U	3.8 U
4-Bromophenyl phenyl ether	2.4 U	2.4 U	2.4 U	2.4 U	2.5 U	2.4 U
4-Chlorophenylphenyl ether	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
4-Nitrophenol	5.2 U	5.2 U	5.2 U	5.3 U	5.6 U	5.2 U
Acenaphthene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Acenaphthylene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Anthracene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Benzidine	8.1 R	8.1 R	8 U	8.3 U	8.6 R	8.1 U
Benzo(a)anthracene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Benzo(a)pyrene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Benzo(b)fluoranthene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Benzo(ghi)perylene	2.9 U	2.9 U	2.8 U	2.9 U	3 U	2.9 U
Benzo(k)fluoranthene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
bis(2-Chloroethoxy)methane	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
bis(2-Chloroethyl) ether	2.4 U	2.4 U	2.4 U	2.4 U	2.5 U	2.4 U
bis(2-Chloroisopropyl) ether	2.4 U	2.4 U	2.4 U	2.4 U	2.5 U	2.4 U
bis(2-Ethylhexyl) phthalate	3.8 U	3.8 U	3.8 U	3.9 U	4 U	3.8 U
Butyl benzyl phthalate	3.8 U	3.8 U	3.8 U	3.9 U	4 U	3.8 U
Chrysene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Dibenzo(a,h)anthracene	2.9 U	2.9 U	2.8 U	2.9 U	3 U	2.9 U
Diethyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Dimethyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Di-n-butyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Di-n-octyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Fluoranthene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Fluorene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

**TABLE VII**

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-41A</b>	<b>RD-41A</b>	<b>RD-41A</b>	<b>RD-41A</b>	<b>RD-41B</b>	<b>RD-41B</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	02/14/2007	05/16/2007	08/20/2007	10/29/2007	02/14/2007	05/21/2007
<b>Analyte (ug/L)</b>						
Hexachlorobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.5 U	2.4 U
Hexachlorobutadiene	3.3 U	3.3 U	3.3 U	3.4 U	3.5 U	3.3 U
Hexachloroethane	2.9 U	2.9 U	2.8 U	2.9 U	3 U	2.9 U
Indeno(1,2,3-cd)pyrene	2.9 U	2.9 U	2.8 U	2.9 U	3 U	2.9 U
Isophorone	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Naphthalene	2.4 U	2.4 U	2.4 U	2.4 U	2.5 U	2.4 U
Nitrobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.5 U	2.4 U
n-Nitrosodimethylamine	2.4 U	2.4 U	2.4 U	2.4 U	2.5 U	2.4 U
n-Nitrosodi-n-propylamine	2.4 U	2.4 U	2.4 U	2.4 U	2.5 U	2.4 U
n-Nitrosodiphenylamine	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
p-Chloro-m-cresol	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Pentachlorophenol	3.3 U	3.3 U	3.3 U	3.4 U	3.5 U	3.3 U
Phenanthrene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Phenol	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

TABLE VII

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:	RD-41B	RD-41B	RD-44	RD-44	RD-44	RD-44
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	08/20/2007	10/25/2007	02/07/2007	05/14/2007	08/15/2007	10/24/2007
<b>Analyte (ug/L)</b>						
1,2,4-Trichlorobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
1,2-Dichlorobenzene	2.9 U	2.8 U	2.8 U	2.9 U	2.9 U	2.9 U
1,2-Diphenylhydrazine	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
1,3-Dichlorobenzene	2.9 U	2.8 U	2.8 U	2.9 U	2.9 U	2.9 U
1,3-Dinitrobenzene	2.9 U	2.8 U	2.8 U	2.9 U	2.9 U	2.9 U
1,4-Dichlorobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
2,4,6-Trichlorophenol	2.9 U	2.8 U	2.8 U	2.9 U	2.9 U	2.9 U
2,4-Dichlorophenol	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4-Dimethylphenol	3.4 U	3.3 U	3.3 U	3.3 U	3.4 U	3.3 U
2,4-Dinitrophenol	4.3 U	4.2 U	4.2 U	4.3 U	4.3 U	4.3 U
2,4-Dinitrotoluene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,6-Dinitrotoluene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Chloronaphthalene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Chlorophenol	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Nitrophenol	3.4 U	3.3 U	3.3 U	3.3 U	3.4 U	3.3 U
3,3'-Dichlorobenzidine	2.9 U	2.8 U	2.8 U	2.9 U	2.9 U	2.9 U
4,6-Dinitro-o-cresol	3.8 U	3.8 U	3.8 U	3.8 U	3.9 U	3.8 U
4-Bromophenyl phenyl ether	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
4-Chlorophenylphenyl ether	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
4-Nitrophenol	5.3 U	5.2 U	5.2 U	5.3 U	5.3 U	5.2 U
Acenaphthene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Acenaphthylene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Anthracene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzidine	8.2 U	8 U	8 U	8.1 R	8.2 R	8.1 R
Benzo(a)anthracene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(a)pyrene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(b)fluoranthene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(ghi)perylene	2.9 U	2.8 U	2.8 U	2.9 U	2.9 U	2.9 U
Benzo(k)fluoranthene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Chloroethoxy)methane	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Chloroethyl) ether	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
bis(2-Chloroisopropyl) ether	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
bis(2-Ethylhexyl) phthalate	3.8 U	3.8 U	3.8 U	3.8 U	3.9 U	3.8 U
Butyl benzyl phthalate	3.8 U	3.8 U	3.8 U	3.8 U	3.9 U	3.8 U
Chrysene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Dibenzo(a,h)anthracene	2.9 U	2.8 U	2.8 U	2.9 U	2.9 U	2.9 U
Diethyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Dimethyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Di-n-butyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Di-n-octyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Fluoranthene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Fluorene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

**TABLE VII**

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-41B</b>	<b>RD-41B</b>	<b>RD-44</b>	<b>RD-44</b>	<b>RD-44</b>	<b>RD-44</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	08/20/2007	10/25/2007	02/07/2007	05/14/2007	08/15/2007	10/24/2007
<b>Analyte (ug/L)</b>						
Hexachlorobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Hexachlorobutadiene	3.4 U	3.3 U	3.3 U	3.3 U	3.4 U	3.3 U
Hexachloroethane	2.9 U	2.8 U	2.8 U	2.9 U	2.9 U	2.9 U
Indeno(1,2,3-cd)pyrene	2.9 U	2.8 U	2.8 U	2.9 U	2.9 U	2.9 U
Isophorone	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Naphthalene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Nitrobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
n-Nitrosodimethylamine	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
n-Nitrosodi-n-propylamine	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
n-Nitrosodiphenylamine	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
p-Chloro-m-cresol	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Pentachlorophenol	3.4 U	3.3 U	3.3 U	3.3 U	3.4 U	3.3 U
Phenanthrene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Phenol	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

TABLE VII

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:	RD-48B	RD-49A	RD-49A	RD-49A	RD-49B	RD-49B
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	08/29/2007	02/13/2007	05/14/2007	08/29/2007	02/08/2007	05/10/2007
Analyte (ug/L)						
1,2,4-Trichlorobenzene	0.26 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
1,2-Dichlorobenzene	---	2.9 U	2.9 U	2.8 U	2.8 U	2.8 U
1,2-Diphenylhydrazine	---	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
1,3-Dichlorobenzene	---	2.9 U	2.9 U	2.8 U	2.8 U	2.8 U
1,3-Dinitrobenzene	1.9 U	2.9 U	2.9 U	2.8 U	2.8 U	2.8 U
1,4-Dichlorobenzene	---	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
2,4,6-Trichlorophenol	0.88 U	2.9 U	2.9 U	2.8 U	2.8 U	2.8 U
2,4-Dichlorophenol	0.77 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4-Dimethylphenol	0.8 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
2,4-Dinitrophenol	1.4 U	4.3 U	4.3 U	4.2 U	4.3 U	4.2 U
2,4-Dinitrotoluene	0.4 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,6-Dinitrotoluene	1 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Chloronaphthalene	0.26 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Chlorophenol	0.71 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Nitrophenol	0.84 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
3,3'-Dichlorobenzidine	1.5 U	2.9 U	2.9 U	2.8 U	2.8 U	2.8 U
4,6-Dinitro-o-cresol	0.33 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
4-Bromophenyl phenyl ether	0.23 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
4-Chlorophenylphenyl ether	0.24 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
4-Nitrophenol	1 U	5.2 U	5.2 U	5.2 U	5.2 U	5.2 U
Acenaphthene	0.31 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Acenaphthylene	0.26 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Anthracene	0.28 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzidine	---	8.1 U	8.1 R	8 U	8.1 U	8 R
Benzo(a)anthracene	0.19 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(a)pyrene	0.2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(b)fluoranthene	0.16 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(ghi)perylene	0.31 U	2.9 U	2.9 U	2.8 U	2.8 U	2.8 U
Benzo(k)fluoranthene	0.23 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Chloroethoxy)methane	0.4 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Chloroethyl) ether	0.46 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
bis(2-Chloroisopropyl) ether	0.48 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
bis(2-Ethylhexyl) phthalate	1.7 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
Butyl benzyl phthalate	0.29 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
Chrysene	0.25 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Dibenzo(a,h)anthracene	0.32 U	2.9 U	2.9 U	2.8 U	2.8 U	2.8 U
Diethyl phthalate	3.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Dimethyl phthalate	0.26 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Di-n-butyl phthalate	1.3 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Di-n-octyl phthalate	0.28 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Fluoranthene	0.16 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Fluorene	0.28 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008



**TABLE VII**

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-48B</b>	<b>RD-49A</b>	<b>RD-49A</b>	<b>RD-49A</b>	<b>RD-49B</b>	<b>RD-49B</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	08/29/2007	02/13/2007	05/14/2007	08/29/2007	02/08/2007	05/10/2007
<b>Analyte (ug/L)</b>						
Hexachlorobenzene	0.15 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Hexachlorobutadiene	0.41 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
Hexachloroethane	0.36 U	2.9 U	2.9 U	2.8 U	2.8 U	2.8 U
Indeno(1,2,3-cd)pyrene	0.32 U	2.9 U	2.9 U	2.8 U	2.8 U	2.8 U
Isophorone	0.33 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Naphthalene	0.35 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Nitrobenzene	0.37 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
n-Nitrosodimethylamine	0.36 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
n-Nitrosodi-n-propylamine	0.41 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
n-Nitrosodiphenylamine	0.23 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
p-Chloro-m-cresol	0.40 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Pentachlorophenol	0.56 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U
Phenanthrene	0.25 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Phenol	0.3 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

TABLE VII

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier:	RD-49B	RD-49B	RD-49C	RD-49C	RD-49C	RD-49C
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	08/14/2007	10/25/2007	02/08/2007	05/14/2007	08/20/2007	10/25/2007
<b>Analyte (ug/L)</b>						
1,2,4-Trichlorobenzene	2.4 U	2.4 U	2.4 U	2.7 U	2.4 U	2.4 U
1,2-Dichlorobenzene	2.9 U	2.8 U	2.9 U	3.2 U	2.9 U	2.8 U
1,2-Diphenylhydrazine	1.9 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U
1,3-Dichlorobenzene	2.9 U	2.8 U	2.9 U	3.2 U	2.9 U	2.8 U
1,3-Dinitrobenzene	2.9 U	2.8 U	2.9 U	3.2 U	2.9 U	2.8 U
1,4-Dichlorobenzene	2.4 U	2.4 U	2.4 U	2.7 U	2.4 U	2.4 U
2,4,6-Trichlorophenol	2.9 U	2.8 U	2.9 U	3.2 U	2.9 U	2.8 U
2,4-Dichlorophenol	1.9 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U
2,4-Dimethylphenol	3.4 U	3.3 U	3.4 U	3.8 U	3.3 U	3.3 U
2,4-Dinitrophenol	4.3 U	4.2 U	4.4 U	4.8 U	4.3 U	4.3 U
2,4-Dinitrotoluene	1.9 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U
2,6-Dinitrotoluene	1.9 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U
2-Chloronaphthalene	1.9 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U
2-Chlorophenol	1.9 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U
2-Nitrophenol	3.4 U	3.3 U	3.4 U	3.8 U	3.3 U	3.3 U
3,3'-Dichlorobenzidine	2.9 U	2.8 U	2.9 U	3.2 U	2.9 U	2.8 U
4,6-Dinitro-o-cresol	3.8 U	3.8 U	3.9 U	4.3 U	3.8 U	3.8 U
4-Bromophenyl phenyl ether	2.4 U	2.4 U	2.4 U	2.7 U	2.4 U	2.4 U
4-Chlorophenylphenyl ether	1.9 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U
4-Nitrophenol	5.3 U	5.2 U	5.3 U	5.9 U	5.2 U	5.2 U
Acenaphthene	1.9 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U
Acenaphthylene	1.9 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U
Anthracene	1.9 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U
Benzidine	8.2 R	8 U	8.3 U	9.1 R	8.1 U	8.1 U
Benzo(a)anthracene	1.9 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U
Benzo(a)pyrene	1.9 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U
Benzo(b)fluoranthene	1.9 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U
Benzo(ghi)perylene	2.9 U	2.8 U	2.9 U	3.2 U	2.9 U	2.8 U
Benzo(k)fluoranthene	1.9 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U
bis(2-Chloroethoxy)methane	1.9 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U
bis(2-Chloroethyl) ether	2.4 U	2.4 U	2.4 U	2.7 U	2.4 U	2.4 U
bis(2-Chloroisopropyl) ether	2.4 U	2.4 U	2.4 U	2.7 U	2.4 U	2.4 U
bis(2-Ethylhexyl) phthalate	3.8 U	3.8 U	3.9 U	4.3 U	3.8 U	3.8 U
Butyl benzyl phthalate	3.8 U	3.8 U	3.9 U	4.3 U	3.8 U	3.8 U
Chrysene	1.9 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U
Dibenzo(a,h)anthracene	2.9 U	2.8 U	2.9 U	3.2 U	2.9 U	2.8 U
Diethyl phthalate	1.9 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U
Dimethyl phthalate	1.9 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U
Di-n-butyl phthalate	1.9 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U
Di-n-octyl phthalate	1.9 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U
Fluoranthene	1.9 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U
Fluorene	1.9 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

**TABLE VII**

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-49B</b>	<b>RD-49B</b>	<b>RD-49C</b>	<b>RD-49C</b>	<b>RD-49C</b>	<b>RD-49C</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	08/14/2007	10/25/2007	02/08/2007	05/14/2007	08/20/2007	10/25/2007
<b>Analyte (ug/L)</b>						
Hexachlorobenzene	2.4 U	2.4 U	2.4 U	2.7 U	2.4 U	2.4 U
Hexachlorobutadiene	3.4 U	3.3 U	3.4 U	3.8 U	3.3 U	3.3 U
Hexachloroethane	2.9 U	2.8 U	2.9 U	3.2 U	2.9 U	2.8 U
Indeno(1,2,3-cd)pyrene	2.9 U	2.8 U	2.9 U	3.2 U	2.9 U	2.8 U
Isophorone	1.9 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U
Naphthalene	2.4 U	2.4 U	2.4 U	2.7 U	2.4 U	2.4 U
Nitrobenzene	2.4 U	2.4 U	2.4 U	2.7 U	2.4 U	2.4 U
n-Nitrosodimethylamine	2.4 U	2.4 U	2.4 U	2.7 U	2.4 U	2.4 U
n-Nitrosodi-n-propylamine	2.4 U	2.4 U	2.4 U	2.7 U	2.4 U	2.4 U
n-Nitrosodiphenylamine	1.9 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U
p-Chloro-m-cresol	1.9 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U
Pentachlorophenol	3.4 U	3.3 U	3.4 U	3.8 U	3.3 U	3.3 U
Phenanthrene	1.9 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U
Phenol	1.9 U	1.9 U	1.9 U	2.2 U	1.9 U	1.9 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

TABLE VII

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:	RD-51B	RD-51B	RD-51B	RD-51B	RD-51C	RD-51C
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	02/12/2007	05/10/2007	08/13/2007	10/23/2007	02/13/2007	05/10/2007
Analyte (ug/L)						
1,2,4-Trichlorobenzene	2.4 U	2.4 U	2.4 UJ	2.4 U	2.4 U	2.4 U
1,2-Dichlorobenzene	2.8 U	2.9 U	2.9 UJ	2.9 U	2.8 U	2.9 U
1,2-Diphenylhydrazine	1.9 U	1.9 U	1.9 UJ	1.9 U	1.9 U	1.9 U
1,3-Dichlorobenzene	2.8 U	2.9 U	2.9 UJ	2.9 U	2.8 U	2.9 U
1,3-Dinitrobenzene	2.8 U	2.9 U	2.9 UJ	2.9 U	2.8 U	2.9 U
1,4-Dichlorobenzene	2.4 U	2.4 U	2.4 UJ	2.4 U	2.4 U	2.4 U
2,4,6-Trichlorophenol	2.8 U	2.9 U	2.9 UJ	2.9 U	2.8 U	2.9 U
2,4-Dichlorophenol	1.9 U	1.9 U	1.9 UJ	1.9 U	1.9 U	1.9 U
2,4-Dimethylphenol	3.3 U	3.3 U	3.3 UJ	3.3 U	3.3 U	3.3 U
2,4-Dinitrophenol	4.2 U	4.3 U	4.3 UJ	4.3 U	4.2 U	4.3 U
2,4-Dinitrotoluene	1.9 U	1.9 U	1.9 UJ	1.9 U	1.9 U	1.9 U
2,6-Dinitrotoluene	1.9 U	1.9 U	1.9 UJ	1.9 U	1.9 U	1.9 U
2-Chloronaphthalene	1.9 U	1.9 U	1.9 UJ	1.9 U	1.9 U	1.9 U
2-Chlorophenol	1.9 U	1.9 U	1.9 UJ	1.9 U	1.9 U	1.9 U
2-Nitrophenol	3.3 U	3.3 U	3.3 UJ	3.3 U	3.3 U	3.3 U
3,3'-Dichlorobenzidine	2.8 U	2.9 U	2.9 UJ	2.9 U	2.8 U	2.9 U
4,6-Dinitro-o-cresol	3.8 U	3.8 U	3.8 UJ	3.8 U	3.8 U	3.8 U
4-Bromophenyl phenyl ether	2.4 U	2.4 U	2.4 UJ	2.4 U	2.4 U	2.4 U
4-Chlorophenylphenyl ether	1.9 U	1.9 U	1.9 UJ	1.9 U	1.9 U	1.9 U
4-Nitrophenol	5.2 U	5.3 U	5.2 UJ	5.2 U	5.2 U	5.2 U
Acenaphthene	1.9 U	1.9 U	1.9 UJ	1.9 U	1.9 U	1.9 U
Acenaphthylene	1.9 U	1.9 U	1.9 UJ	1.9 U	1.9 U	1.9 U
Anthracene	1.9 U	1.9 U	1.9 UJ	1.9 U	1.9 U	1.9 U
Benzidine	8 U	8.1 R	8.1 R	8.1 R	8 U	8.1 R
Benzo(a)anthracene	1.9 U	1.9 U	1.9 UJ	1.9 U	1.9 U	1.9 U
Benzo(a)pyrene	1.9 U	1.9 U	1.9 UJ	1.9 U	1.9 U	1.9 U
Benzo(b)fluoranthene	1.9 U	1.9 U	1.9 UJ	1.9 U	1.9 U	1.9 U
Benzo(ghi)perylene	2.8 U	2.9 U	2.9 UJ	2.9 U	2.8 U	2.9 U
Benzo(k)fluoranthene	1.9 U	1.9 U	1.9 UJ	1.9 U	1.9 U	1.9 U
bis(2-Chloroethoxy)methane	1.9 U	1.9 U	1.9 UJ	1.9 U	1.9 U	1.9 U
bis(2-Chloroethyl) ether	2.4 U	2.4 U	2.4 UJ	2.4 U	2.4 U	2.4 U
bis(2-Chloroisopropyl) ether	2.4 U	2.4 U	2.4 UJ	2.4 U	2.4 U	2.4 U
bis(2-Ethylhexyl) phthalate	3.8 U	3.8 U	3.8 UJ	3.8 U	3.8 U	3.8 U
Butyl benzyl phthalate	3.8 U	3.8 U	3.8 UJ	3.8 U	3.8 U	3.8 U
Chrysene	1.9 U	1.9 U	1.9 UJ	1.9 U	1.9 U	1.9 U
Dibenzo(a,h)anthracene	2.8 U	2.9 U	2.9 UJ	2.9 U	2.8 U	2.9 U
Diethyl phthalate	1.9 U	1.9 U	1.9 UJ	1.9 U	1.9 U	1.9 U
Dimethyl phthalate	1.9 U	1.9 U	1.9 UJ	1.9 U	1.9 U	1.9 U
Di-n-butyl phthalate	1.9 U	1.9 U	1.9 UJ	1.9 U	4.7 U	1.9 U
Di-n-octyl phthalate	1.9 U	1.9 U	1.9 UJ	1.9 U	1.9 U	1.9 U
Fluoranthene	1.9 U	1.9 U	1.9 UJ	1.9 U	1.9 U	1.9 U
Fluorene	1.9 U	1.9 U	1.9 UJ	1.9 U	1.9 U	1.9 U

See last page of table for notes and abbreviations.

Haley &amp; Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

**TABLE VII**

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-51B</b>	<b>RD-51B</b>	<b>RD-51B</b>	<b>RD-51B</b>	<b>RD-51C</b>	<b>RD-51C</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	02/12/2007	05/10/2007	08/13/2007	10/23/2007	02/13/2007	05/10/2007
<b>Analyte (ug/L)</b>						
Hexachlorobenzene	2.4 U	2.4 U	2.4 UJ	2.4 U	2.4 U	2.4 U
Hexachlorobutadiene	3.3 U	3.3 U	3.3 UJ	3.3 U	3.3 U	3.3 U
Hexachloroethane	2.8 U	2.9 U	2.9 UJ	2.9 U	2.8 U	2.9 U
Indeno(1,2,3-cd)pyrene	2.8 U	2.9 U	2.9 UJ	2.9 U	2.8 U	2.9 U
Isophorone	1.9 U	1.9 U	1.9 UJ	1.9 U	1.9 U	1.9 U
Naphthalene	2.4 U	2.4 U	2.4 UJ	2.4 U	2.4 U	2.4 U
Nitrobenzene	2.4 U	2.4 U	2.4 UJ	2.4 U	2.4 U	2.4 U
n-Nitrosodimethylamine	2.4 U	2.4 U	2.4 UJ	2.4 U	2.4 U	2.4 U
n-Nitrosodi-n-propylamine	2.4 U	2.4 U	2.4 UJ	2.4 U	2.4 U	2.4 U
n-Nitrosodiphenylamine	1.9 U	1.9 U	1.9 UJ	1.9 U	1.9 U	1.9 U
p-Chloro-m-cresol	1.9 U	1.9 U	1.9 UJ	1.9 U	1.9 U	1.9 U
Pentachlorophenol	3.3 U	3.3 U	3.3 UJ	3.3 U	3.3 U	3.3 U
Phenanthrene	1.9 U	1.9 U	1.9 UJ	1.9 U	1.9 U	1.9 U
Phenol	1.9 U	1.9 U	1.9 UJ	1.9 U	1.9 U	1.9 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

TABLE VII

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier:	RD-51C	RD-51C	RD-55A	RD-55A	RD-55A	RD-55A
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	08/13/2007	10/23/2007	02/12/2007	05/17/2007	08/14/2007	10/29/2007
Analyte (ug/L)						
1,2,4-Trichlorobenzene	2.4 U	2.4 U	2.5 U	2.4 U	2.5 U	2.4 U
1,2-Dichlorobenzene	2.9 U	2.9 U	3 U	2.9 U	2.9 U	2.8 U
1,2-Diphenylhydrazine	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U
1,3-Dichlorobenzene	2.9 U	2.9 U	3 U	2.9 U	2.9 U	2.8 U
1,3-Dinitrobenzene	2.9 U	2.9 U	3 U	2.9 U	2.9 U	2.8 U
1,4-Dichlorobenzene	2.4 U	2.4 U	2.5 U	2.4 U	2.5 U	2.4 U
2,4,6-Trichlorophenol	2.9 U	2.9 U	3 U	2.9 U	2.9 U	2.8 U
2,4-Dichlorophenol	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U
2,4-Dimethylphenol	3.3 U	3.3 U	3.5 U	3.4 U	3.4 U	3.3 U
2,4-Dinitrophenol	4.3 U	4.3 U	4.5 U	4.3 U	4.4 U	4.2 U
2,4-Dinitrotoluene	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U
2,6-Dinitrotoluene	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U
2-Chloronaphthalene	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U
2-Chlorophenol	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U
2-Nitrophenol	3.3 U	3.3 U	3.5 U	3.4 U	3.4 U	3.3 U
3,3'-Dichlorobenzidine	2.9 U	2.9 U	3 U	2.9 U	2.9 U	2.8 U
4,6-Dinitro-o-cresol	3.8 U	3.8 U	4 U	3.8 U	3.9 U	3.8 U
4-Bromophenyl phenyl ether	2.4 U	2.4 U	2.5 U	2.4 U	2.5 U	2.4 U
4-Chlorophenylphenyl ether	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U
4-Nitrophenol	5.3 U	5.2 U	5.5 U	5.3 U	5.4 U	5.2 U
Acenaphthene	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U
Acenaphthylene	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U
Anthracene	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U
Benzidine	8.1 R	8.1 R	8.5 U	8.2 R	8.3 R	8 U
Benzo(a)anthracene	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U
Benzo(a)pyrene	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U
Benzo(b)fluoranthene	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U
Benzo(ghi)perylene	2.9 U	2.9 U	3 U	2.9 U	2.9 U	2.8 U
Benzo(k)fluoranthene	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U
bis(2-Chloroethoxy)methane	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U
bis(2-Chloroethyl) ether	2.4 U	2.4 U	2.5 U	2.4 U	2.5 U	2.4 U
bis(2-Chloroisopropyl) ether	2.4 U	2.4 U	2.5 U	2.4 U	2.5 U	2.4 U
bis(2-Ethylhexyl) phthalate	3.8 U	3.8 U	4 U	3.8 U	3.9 U	3.8 U
Butyl benzyl phthalate	3.8 U	3.8 U	4 U	3.8 U	3.9 U	3.8 U
Chrysene	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U
Dibenzo(a,h)anthracene	2.9 U	2.9 U	3 U	2.9 U	2.9 U	2.8 U
Diethyl phthalate	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U
Dimethyl phthalate	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U
Di-n-butyl phthalate	1.9 U	1.9 U	4 U	1.9 U	2 U	1.9 U
Di-n-octyl phthalate	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U
Fluoranthene	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U
Fluorene	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

**TABLE VII**

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-51C</b>	<b>RD-51C</b>	<b>RD-55A</b>	<b>RD-55A</b>	<b>RD-55A</b>	<b>RD-55A</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	08/13/2007	10/23/2007	02/12/2007	05/17/2007	08/14/2007	10/29/2007
<b>Analyte (ug/L)</b>						
Hexachlorobenzene	2.4 U	2.4 U	2.5 U	2.4 U	2.5 U	2.4 U
Hexachlorobutadiene	3.3 U	3.3 U	3.5 U	3.4 U	3.4 U	3.3 U
Hexachloroethane	2.9 U	2.9 U	3 U	2.9 U	2.9 U	2.8 U
Indeno(1,2,3-cd)pyrene	2.9 U	2.9 U	3 U	2.9 U	2.9 U	2.8 U
Isophorone	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U
Naphthalene	2.4 U	2.4 U	2.5 U	2.4 U	2.5 U	2.4 U
Nitrobenzene	2.4 U	2.4 U	2.5 U	2.4 U	2.5 U	2.4 U
n-Nitrosodimethylamine	2.4 U	2.4 U	2.5 U	2.4 U	2.5 U	2.4 U
n-Nitrosodi-n-propylamine	2.4 U	2.4 U	2.5 U	2.4 U	2.5 U	2.4 U
n-Nitrosodiphenylamine	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U
p-Chloro-m-cresol	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U
Pentachlorophenol	3.3 U	3.3 U	3.5 U	3.4 U	3.4 U	3.3 U
Phenanthrene	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U
Phenol	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

TABLE VII

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:	RD-55B	RD-55B	RD-55B	RD-55B	RD-58A	RD-58A
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	02/13/2007	05/17/2007	08/14/2007	10/29/2007	02/15/2007	05/21/2007
<b>Analyte (ug/L)</b>						
1,2,4-Trichlorobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.5 U	2.4 U
1,2-Dichlorobenzene	2.9 U	2.9 U	2.8 U	2.8 U	2.9 U	2.9 U
1,2-Diphenylhydrazine	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
1,3-Dichlorobenzene	2.9 U	2.9 U	2.8 U	2.8 U	2.9 U	2.9 U
1,3-Dinitrobenzene	2.9 U	2.9 U	2.8 U	2.8 U	2.9 U	2.9 U
1,4-Dichlorobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.5 U	2.4 U
2,4,6-Trichlorophenol	2.9 U	2.9 U	2.8 U	2.8 U	2.9 U	2.9 U
2,4-Dichlorophenol	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
2,4-Dimethylphenol	3.4 U	3.3 U	3.3 U	3.3 U	3.4 U	3.3 U
2,4-Dinitrophenol	4.3 U	4.3 U	4.2 U	4.2 U	4.4 U	4.3 U
2,4-Dinitrotoluene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
2,6-Dinitrotoluene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
2-Chloronaphthalene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
2-Chlorophenol	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
2-Nitrophenol	3.4 U	3.3 U	3.3 U	3.3 U	3.4 U	3.3 U
3,3'-Dichlorobenzidine	2.9 U	2.9 U	2.8 U	2.8 U	2.9 U	2.9 U
4,6-Dinitro-o-cresol	3.9 U	3.8 U	3.8 U	3.8 U	3.9 U	3.8 U
4-Bromophenyl phenyl ether	2.4 U	2.4 U	2.4 U	2.4 U	2.5 U	2.4 U
4-Chlorophenylphenyl ether	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
4-Nitrophenol	5.3 U	5.2 U	5.2 U	5.2 U	5.4 U	5.2 U
Acenaphthene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Acenaphthylene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Anthracene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Benzidine	8.2 U	8.1 U	8 R	8 U	8.3 R	8.1 U
Benzo(a)anthracene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Benzo(a)pyrene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Benzo(b)fluoranthene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Benzo(ghi)perylene	2.9 U	2.9 U	2.8 U	2.8 U	2.9 U	2.9 U
Benzo(k)fluoranthene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
bis(2-Chloroethoxy)methane	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
bis(2-Chloroethyl) ether	2.4 U	2.4 U	2.4 U	2.4 U	2.5 U	2.4 U
bis(2-Chloroisopropyl) ether	2.4 U	2.4 U	2.4 U	2.4 U	2.5 U	2.4 U
bis(2-Ethylhexyl) phthalate	3.9 U	3.8 U	3.8 U	3.8 U	3.9 U	3.8 U
Butyl benzyl phthalate	3.9 U	3.8 U	3.8 U	3.8 U	3.9 U	3.8 U
Chrysene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Dibenzo(a,h)anthracene	2.9 U	2.9 U	2.8 U	2.8 U	2.9 U	2.9 U
Diethyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Dimethyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Di-n-butyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Di-n-octyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Fluoranthene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Fluorene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008



**TABLE VII**

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-55B</b>	<b>RD-55B</b>	<b>RD-55B</b>	<b>RD-55B</b>	<b>RD-58A</b>	<b>RD-58A</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	02/13/2007	05/17/2007	08/14/2007	10/29/2007	02/15/2007	05/21/2007
<b>Analyte (ug/L)</b>						
Hexachlorobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.5 U	2.4 U
Hexachlorobutadiene	3.4 U	3.3 U	3.3 U	3.3 U	3.4 U	3.3 U
Hexachloroethane	2.9 U	2.9 U	2.8 U	2.8 U	2.9 U	2.9 U
Indeno(1,2,3-cd)pyrene	2.9 U	2.9 U	2.8 U	2.8 U	2.9 U	2.9 U
Isophorone	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Naphthalene	2.4 U	2.4 U	2.4 U	2.4 U	2.5 U	2.4 U
Nitrobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.5 U	2.4 U
n-Nitrosodimethylamine	2.4 U	2.4 U	2.4 U	2.4 U	2.5 U	2.4 U
n-Nitrosodi-n-propylamine	2.4 U	2.4 U	2.4 U	2.4 U	2.5 U	2.4 U
n-Nitrosodiphenylamine	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
p-Chloro-m-cresol	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Pentachlorophenol	3.4 U	3.3 U	3.3 U	3.3 U	3.4 U	3.3 U
Phenanthrene	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U
Phenol	1.9 U	1.9 U	1.9 U	1.9 U	2 U	1.9 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

TABLE VII

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:	RD-58A	RD-58B	RD-58B	RD-58B	RD-58B	RS-54
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Shallow
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	10/31/2007	02/13/2007	05/16/2007	08/13/2007	10/25/2007	11/05/2007
<b>Analyte (ug/L)</b>						
1,2,4-Trichlorobenzene	2.4 U	2.4 U	2.5 U	2.4 U	2.4 U	2.4 U
1,2-Dichlorobenzene	2.8 U	2.9 U	2.9 U	2.8 U	2.8 U	2.9 U
1,2-Diphenylhydrazine	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
1,3-Dichlorobenzene	2.8 U	2.9 U	2.9 U	2.8 U	2.8 U	2.9 U
1,3-Dinitrobenzene	2.8 U	2.9 U	2.9 U	2.8 U	2.8 U	---
1,4-Dichlorobenzene	2.4 U	2.4 U	2.5 U	2.4 U	2.4 U	2.4 U
2,4,6-Trichlorophenol	2.8 U	2.9 U	2.9 U	2.8 U	2.8 U	2.9 U
2,4-Dichlorophenol	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
2,4-Dimethylphenol	3.3 U	3.3 U	3.4 U	3.3 U	3.3 U	3.4 U
2,4-Dinitrophenol	4.2 U	4.3 U	4.4 U	4.2 U	4.2 U	4.4 U
2,4-Dinitrotoluene	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
2,6-Dinitrotoluene	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
2-Chloronaphthalene	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
2-Chlorophenol	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
2-Nitrophenol	3.3 U	3.3 U	3.4 U	3.3 U	3.3 U	3.4 U
3,3'-Dichlorobenzidine	2.8 U	2.9 U	2.9 U	2.8 U	2.8 U	2.9 U
4,6-Dinitro-o-cresol	3.8 U	3.8 U	3.9 U	3.8 U	3.8 U	3.9 U
4-Bromophenyl phenyl ether	2.4 U	2.4 U	2.5 U	2.4 U	2.4 U	2.4 U
4-Chlorophenylphenyl ether	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
4-Nitrophenol	5.2 U	5.3 U	5.4 U	5.2 U	5.2 U	5.3 U
Acenaphthene	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Acenaphthylene	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Anthracene	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Benzidine	8 R	8.1 U	8.3 R	8 R	8 U	8.3 U
Benzo(a)anthracene	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Benzo(a)pyrene	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Benzo(b)fluoranthene	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Benzo(ghi)perylene	2.8 U	2.9 U	2.9 U	2.8 U	2.8 U	2.9 U
Benzo(k)fluoranthene	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
bis(2-Chloroethoxy)methane	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
bis(2-Chloroethyl) ether	2.4 U	2.4 U	2.5 U	2.4 U	2.4 U	2.4 U
bis(2-Chloroisopropyl) ether	2.4 U	2.4 U	2.5 U	2.4 U	2.4 U	2.4 U
bis(2-Ethylhexyl) phthalate	3.8 U	3.8 U	3.9 U	3.8 U	3.8 U	3.9 U
Butyl benzyl phthalate	3.8 U	3.8 U	3.9 U	3.8 U	3.8 U	3.9 U
Chrysene	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Dibenzo(a,h)anthracene	2.8 U	2.9 U	2.9 U	2.8 U	2.8 U	2.9 U
Diethyl phthalate	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Dimethyl phthalate	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Di-n-butyl phthalate	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Di-n-octyl phthalate	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Fluoranthene	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Fluorene	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

**TABLE VII**

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-58A</b>	<b>RD-58B</b>	<b>RD-58B</b>	<b>RD-58B</b>	<b>RD-58B</b>	<b>RS-54</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Shallow
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	10/31/2007	02/13/2007	05/16/2007	08/13/2007	10/25/2007	11/05/2007
<b>Analyte (ug/L)</b>						
Hexachlorobenzene	2.4 U	2.4 U	2.5 U	2.4 U	2.4 U	2.4 U
Hexachlorobutadiene	3.3 U	3.3 U	3.4 U	3.3 U	3.3 U	3.4 U
Hexachloroethane	2.8 U	2.9 U	2.9 U	2.8 U	2.8 U	2.9 U
Indeno(1,2,3-cd)pyrene	2.8 U	2.9 U	2.9 U	2.8 U	2.8 U	2.9 U
Isophorone	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Naphthalene	2.4 U	2.4 U	2.5 U	2.4 U	2.4 U	2.4 U
Nitrobenzene	2.4 U	2.4 U	2.5 U	2.4 U	2.4 U	2.4 U
n-Nitrosodimethylamine	2.4 U	2.4 U	2.5 U	2.4 U	2.4 U	2.4 U
n-Nitrosodi-n-propylamine	2.4 U	2.4 U	2.5 U	2.4 U	2.4 U	2.4 U
n-Nitrosodiphenylamine	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
p-Chloro-m-cresol	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Pentachlorophenol	3.3 U	3.3 U	3.4 U	3.3 U	3.3 U	3.4 U
Phenanthrene	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U
Phenol	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.9 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

TABLE VII

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>WS-05</b>	<b>WS-05</b>	<b>WS-05</b>	<b>WS-05</b>	<b>WS-06</b>	<b>WS-06</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	02/27/2007	05/15/2007	08/21/2007	10/29/2007	02/14/2007	05/15/2007
<b>Analyte (ug/L)</b>						
1,2,4-Trichlorobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
1,2-Dichlorobenzene	2.9 U	2.9 U	2.8 U	2.8 U	2.8 U	2.9 U
1,2-Diphenylhydrazine	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
1,3-Dichlorobenzene	2.9 U	2.9 U	2.8 U	2.8 U	2.8 U	2.9 U
1,3-Dinitrobenzene	2.9 U	2.9 U	2.8 U	2.8 U	2.8 U	2.9 U
1,4-Dichlorobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
2,4,6-Trichlorophenol	2.9 U	2.9 U	2.8 U	2.8 U	2.8 U	2.9 U
2,4-Dichlorophenol	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4-Dimethylphenol	3.4 U	3.4 U	3.3 U	3.3 U	3.3 U	3.3 U
2,4-Dinitrophenol	4.4 U	4.3 U	4.2 U	4.2 U	4.3 U	4.3 U
2,4-Dinitrotoluene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,6-Dinitrotoluene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Chloronaphthalene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Chlorophenol	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Nitrophenol	3.4 U	3.4 U	3.3 U	3.3 U	3.3 U	3.3 U
3,3'-Dichlorobenzidine	2.9 U	2.9 U	2.8 U	2.8 U	2.8 R	2.9 U
4,6-Dinitro-o-cresol	3.9 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
4-Bromophenyl phenyl ether	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
4-Chlorophenylphenyl ether	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
4-Nitrophenol	5.3 U	5.3 U	5.2 U	5.2 U	5.2 U	5.2 U
Acenaphthene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Acenaphthylene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Anthracene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzidine	8.3 U	8.2 R	8 U	8 U	8.1 R	8.1 R
Benzo(a)anthracene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(a)pyrene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(b)fluoranthene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(ghi)perylene	2.9 U	2.9 U	2.8 U	2.8 U	2.8 U	2.9 U
Benzo(k)fluoranthene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Chloroethoxy)methane	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Chloroethyl) ether	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
bis(2-Chloroisopropyl) ether	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
bis(2-Ethylhexyl) phthalate	3.9 U	3.8 U	3.8 U	5.4 J	3.8 U	3.8 U
Butyl benzyl phthalate	3.9 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
Chrysene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Dibenzo(a,h)anthracene	2.9 U	2.9 U	2.8 U	2.8 U	2.8 U	2.9 U
Diethyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Dimethyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Di-n-butyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Di-n-octyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Fluoranthene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Fluorene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

**TABLE VII**

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>WS-05</b>	<b>WS-05</b>	<b>WS-05</b>	<b>WS-05</b>	<b>WS-06</b>	<b>WS-06</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	02/27/2007	05/15/2007	08/21/2007	10/29/2007	02/14/2007	05/15/2007
<b>Analyte (ug/L)</b>						
Hexachlorobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Hexachlorobutadiene	3.4 U	3.4 U	3.3 U	3.3 U	3.3 U	3.3 U
Hexachloroethane	2.9 U	2.9 U	2.8 U	2.8 U	2.8 U	2.9 U
Indeno(1,2,3-cd)pyrene	2.9 U	2.9 U	2.8 U	2.8 U	2.8 U	2.9 U
Isophorone	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Naphthalene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Nitrobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
n-Nitrosodimethylamine	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
n-Nitrosodi-n-propylamine	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
n-Nitrosodiphenylamine	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
p-Chloro-m-cresol	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Pentachlorophenol	3.4 U	3.4 U	3.3 U	3.3 U	3.3 U	3.3 U
Phenanthrene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Phenol	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

TABLE VII

 SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier:	WS-06	WS-06	WS-09	WS-09	WS-09	WS-09
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	08/21/2007	10/24/2007	02/14/2007	05/10/2007	08/21/2007	10/25/2007
<b>Analyte (ug/L)</b>						
1,2,4-Trichlorobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
1,2-Dichlorobenzene	2.9 U	2.8 U	2.9 U	2.9 U	2.9 U	2.8 U
1,2-Diphenylhydrazine	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
1,3-Dichlorobenzene	2.9 U	2.8 U	2.9 U	2.9 U	2.9 U	2.8 U
1,3-Dinitrobenzene	2.9 U	2.8 U	2.9 U	2.9 U	2.9 U	2.8 U
1,4-Dichlorobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
2,4,6-Trichlorophenol	2.9 U	2.8 U	2.9 U	2.9 U	2.9 U	2.8 U
2,4-Dichlorophenol	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4-Dimethylphenol	3.3 U	3.3 U	3.4 U	3.3 U	3.4 U	3.3 U
2,4-Dinitrophenol	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U	4.3 U
2,4-Dinitrotoluene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,6-Dinitrotoluene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Chloronaphthalene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Chlorophenol	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2-Nitrophenol	3.3 U	3.3 U	3.4 U	3.3 U	3.4 U	3.3 U
3,3'-Dichlorobenzidine	2.9 U	2.8 U	2.9 R	2.9 U	2.9 U	2.8 U
4,6-Dinitro-o-cresol	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
4-Bromophenyl phenyl ether	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
4-Chlorophenylphenyl ether	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
4-Nitrophenol	5.2 U	5.2 U	5.3 U	5.3 U	5.3 U	5.2 U
Acenaphthene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Acenaphthylene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Anthracene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzidine	8.1 U	8.1 R	8.2 R	8.1 R	8.2 U	8.1 R
Benzo(a)anthracene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(a)pyrene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(b)fluoranthene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Benzo(ghi)perylene	2.9 U	2.8 U	2.9 U	2.9 U	2.9 U	2.8 U
Benzo(k)fluoranthene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Chloroethoxy)methane	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
bis(2-Chloroethyl) ether	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
bis(2-Chloroisopropyl) ether	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
bis(2-Ethylhexyl) phthalate	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
Butyl benzyl phthalate	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
Chrysene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Dibenzo(a,h)anthracene	2.9 U	2.8 U	2.9 U	2.9 U	2.9 U	2.8 U
Diethyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Dimethyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Di-n-butyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Di-n-octyl phthalate	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Fluoranthene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Fluorene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U

See last page of table for notes and abbreviations.

Haley &amp; Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

**TABLE VII**

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>WS-06</b>	<b>WS-06</b>	<b>WS-09</b>	<b>WS-09</b>	<b>WS-09</b>	<b>WS-09</b>
Sample Port:	---	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	08/21/2007	10/24/2007	02/14/2007	05/10/2007	08/21/2007	10/25/2007
<b>Analyte (ug/L)</b>						
Hexachlorobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Hexachlorobutadiene	3.3 U	3.3 U	3.4 U	3.3 U	3.4 U	3.3 U
Hexachloroethane	2.9 U	2.8 U	2.9 U	2.9 U	2.9 U	2.8 U
Indeno(1,2,3-cd)pyrene	2.9 U	2.8 U	2.9 U	2.9 U	2.9 U	2.8 U
Isophorone	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Naphthalene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Nitrobenzene	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
n-Nitrosodimethylamine	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
n-Nitrosodi-n-propylamine	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
n-Nitrosodiphenylamine	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
p-Chloro-m-cresol	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Pentachlorophenol	3.3 U	3.3 U	3.4 U	3.3 U	3.4 U	3.3 U
Phenanthrene	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Phenol	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

TABLE VII

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier:	WS-09A	WS-09A	WS-09A	WS-09A	WS-09A
Sample Port:	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Duplicate	Split
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	02/12/2007	05/09/2007	08/09/2007	08/09/2007	08/09/2007
Analyte (ug/L)					
1,2,4-Trichlorobenzene	2.4 U	24 U	2.4 U	2.4 U	0.26 U
1,2-Dichlorobenzene	2.9 U	29 U	2.9 U	2.9 U	0.3 U
1,2-Diphenylhydrazine	1.9 U	19 U	1.9 U	1.9 U	0.3 U
1,3-Dichlorobenzene	2.9 U	29 U	2.9 U	2.9 U	0.36 U
1,3-Dinitrobenzene	2.9 U	29 U	2.9 U	2.9 U	---
1,4-Dichlorobenzene	2.4 U	24 U	2.4 U	2.4 U	0.32 U
2,4,6-Trichlorophenol	2.9 U	29 U	2.9 U	2.9 U	0.88 U
2,4-Dichlorophenol	1.9 U	19 U	1.9 U	1.9 U	0.77 U
2,4-Dimethylphenol	3.3 U	34 U	3.3 U	3.3 U	0.8 U
2,4-Dinitrophenol	4.3 U	43 U	4.3 U	4.3 U	1.4 U
2,4-Dinitrotoluene	1.9 U	19 U	1.9 U	1.9 U	0.4 U
2,6-Dinitrotoluene	1.9 U	19 U	1.9 U	1.9 U	0.24 U
2-Chloronaphthalene	1.9 U	19 U	1.9 U	1.9 U	0.26 U
2-Chlorophenol	1.9 U	19 U	1.9 U	1.9 U	0.71 U
2-Nitrophenol	3.3 U	34 U	3.3 U	3.3 U	0.84 U
3,3'-Dichlorobenzidine	2.9 U	29 U	2.9 U	2.9 U	1.5 U
4,6-Dinitro-o-cresol	3.8 U	38 U	3.8 U	3.8 U	0.33 U
4-Bromophenyl phenyl ether	2.4 U	24 U	2.4 U	2.4 U	0.23 U
4-Chlorophenylphenyl ether	1.9 U	19 U	1.9 U	1.9 U	0.24 U
4-Nitrophenol	5.2 U	53 U	5.2 U	5.2 U	1 U
Acenaphthene	1.9 U	19 U	1.9 U	1.9 U	0.31 U
Acenaphthylene	1.9 U	19 U	1.9 U	1.9 U	0.26 U
Anthracene	1.9 U	19 U	1.9 U	1.9 U	0.28 U
Benzidine	8.1 U	82 U	8.1 U	8.1 U	3.2 U
Benzo(a)anthracene	1.9 U	19 U	1.9 U	1.9 U	0.19 U
Benzo(a)pyrene	1.9 U	19 U	1.9 U	1.9 U	0.2 U
Benzo(b)fluoranthene	1.9 U	19 U	1.9 U	1.9 U	0.16 U
Benzo(ghi)perylene	2.9 U	29 U	2.9 U	2.9 U	0.31 U
Benzo(k)fluoranthene	1.9 U	19 U	1.9 U	1.9 U	0.23 U
bis(2-Chloroethoxy)methane	1.9 U	19 U	1.9 U	1.9 U	0.4 U
bis(2-Chloroethyl) ether	2.4 U	24 U	2.4 U	2.4 U	0.46 U
bis(2-Chloroisopropyl) ether	2.4 U	24 U	2.4 U	2.4 U	0.48 U
bis(2-Ethylhexyl) phthalate	3.8 U	250 J	3.8 U	3.8 U	0.91 U
Butyl benzyl phthalate	3.8 U	38 U	3.8 U	3.8 U	0.29 U
Chrysene	1.9 U	19 U	1.9 U	1.9 U	0.25 U
Dibenzo(a,h)anthracene	2.9 U	29 U	2.9 U	2.9 U	0.32 U
Diethyl phthalate	1.9 U	19 U	1.9 U	1.9 U	0.23 U
Dimethyl phthalate	1.9 U	19 U	1.9 U	1.9 U	0.26 U
Di-n-butyl phthalate	1.9 U	19 U	1.9 U	1.9 U	0.53 U
Di-n-octyl phthalate	1.9 U	560	1.9 U	1.9 U	0.28 U
Fluoranthene	1.9 U	19 U	1.9 U	1.9 U	0.16 U
Fluorene	1.9 U	19 U	1.9 U	1.9 U	0.28 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008



**TABLE VII**

SUMMARY OF ANALYSES FOR SEMI-VOLATILE ORGANIC CONSTITUENTS, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>WS-09A</b>	<b>WS-09A</b>	<b>WS-09A</b>	<b>WS-09A</b>	<b>WS-09A</b>
Sample Port:	---	---	---	---	---
Sample Type:	Primary	Primary	Primary	Duplicate	Split
Geological Unit:	Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	02/12/2007	05/09/2007	08/09/2007	08/09/2007	08/09/2007
<b>Analyte (ug/L)</b>					
Hexachlorobenzene	2.4 U	24 U	2.4 U	2.4 U	0.15 U
Hexachlorobutadiene	3.3 U	34 U	3.3 U	3.3 U	0.41 U
Hexachloroethane	2.9 U	29 U	2.9 U	2.9 U	0.36 U
Indeno(1,2,3-cd)pyrene	2.9 U	29 U	2.9 U	2.9 U	0.32 U
Isophorone	1.9 U	19 U	1.9 U	1.9 U	0.33 U
Naphthalene	2.4 U	24 U	2.4 U	2.4 U	0.35 U
Nitrobenzene	2.4 U	24 U	2.4 U	2.4 U	0.37 U
n-Nitrosodimethylamine	2.4 U	24 U	2.4 U	2.4 U	0.36 U
n-Nitrosodi-n-propylamine	2.4 U	24 U	2.4 U	2.4 U	0.41 U
n-Nitrosodiphenylamine	1.9 U	19 U	1.9 U	1.9 U	0.23 U
p-Chloro-m-cresol	1.9 U	19 U	1.9 U	1.9 U	0.4 U
Pentachlorophenol	3.3 U	34 U	3.3 U	3.3 U	0.56 U
Phenanthrene	1.9 U	19 U	1.9 U	1.9 U	0.25 U
Phenol	1.9 U	19 U	1.9 U	1.9 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T07-F.xls

February 2008

**TABLE VII**  
**NOTES AND ABBREVIATIONS**

---

1. TestAmerica = TestAmerica of Irvine, California.
2. Chatsworth = Chatsworth Formation wells.
3. Shallow = Shallow wells.
4. Primary = Primary sample.
5. Duplicate = Duplicate sample.
6. Split = Split sample; analyzed by Weck Laboratories of City of Industry, California.
7. ug/L = Micrograms per liter.
8. 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).
9. L = Laboratory contaminant.
10. R = Rejected result.
11. U = Not detected; numerical value represents the Method Detection Limit for that compound.
12. UJ = Not detected. Estimated detection limit as a result of analytical quality control deficiencies (see Appendix D for details).
13. Z = FLUTe sample port number.
14. Standard semi-volatile organic constituents analyzed by EPA method 8270C. Additional SVOCs for Appendix IX are listed in Table XI.
15. 4,6-Dinitro-o-cresol has been previously reported using synonym 4,6-dinitro-2-methylphenol.
16. p-Chloro-m-cresol has been previously reported using synonym 4-chloro-3-methylphenol.

**TABLE VIII**  
SUMMARY OF ANALYSES FOR PERCHLORATE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Analyte:</b>				<b>Perchlorate</b>
<b>Method:</b>				<b>314.0</b>
<b>Result Value Units:</b>				<b>ug/L</b>
<b>Well Identifier</b>	<b>Sample Type</b>	<b>Lab Name</b>	<b>Date Collected</b>	
HAR-07	Primary Sample	TestAmerica	02/15/2007	0.8 U
HAR-07	Primary Sample	TestAmerica	05/08/2007	0.65 U
HAR-07	Primary Sample	TestAmerica	08/16/2007	0.65 U
HAR-07	Primary Sample	Lancaster	11/06/2007	0.7 U
HAR-08	Primary Sample	TestAmerica	02/15/2007	0.8 U
HAR-08	Primary Sample	TestAmerica	05/15/2007	0.65 U
HAR-08	Primary Sample	TestAmerica	08/16/2007	0.65 U
HAR-08	Primary Sample	Lancaster	10/29/2007	0.7 U
HAR-08	Field Duplicate	Lancaster	10/29/2007	0.7 U
HAR-08	Split Sample	TestAmerica	10/29/2007	0.65 U
HAR-18	Primary Sample	TestAmerica	02/22/2007	0.8 U
HAR-18	Primary Sample	TestAmerica	05/15/2007	0.65 U
HAR-18	Primary Sample	TestAmerica	08/14/2007	0.65 U
HAR-18	Primary Sample	Lancaster	10/23/2007	0.7 U
HAR-20	Primary Sample	TestAmerica	02/15/2007	0.8 U
HAR-20	Primary Sample	TestAmerica	05/15/2007	0.65 U
HAR-20	Primary Sample	TestAmerica	08/14/2007	0.65 U
HAR-20	Primary Sample	Lancaster	10/24/2007	0.7 U
HAR-24	Primary Sample	TestAmerica	02/15/2007	180
HAR-24	Primary Sample	TestAmerica	05/11/2007	210
HAR-24	Primary Sample	TestAmerica	08/08/2007	130
HAR-24	Primary Sample	Lancaster	10/24/2007	3
HAR-25	Primary Sample	TestAmerica	02/15/2007	26
HAR-25	Primary Sample	TestAmerica	05/11/2007	31
HAR-25	Split Sample	STL-SA	05/11/2007	41.9
HAR-25	Primary Sample	TestAmerica	08/08/2007	39
HAR-25	Primary Sample	Lancaster	10/25/2007	24.5
HAR-25	Split Sample	TestAmerica	10/25/2007	42
OS-02	Primary Sample	TestAmerica	05/23/2007	0.65 U
OS-03	Primary Sample	TestAmerica	05/23/2007	0.65 U
OS-04	Primary Sample	TestAmerica	05/23/2007	0.65 U
OS-05	Primary Sample	TestAmerica	08/16/2007	0.65 U
OS-09	Primary Sample	TestAmerica	02/28/2007	0.8 U
OS-09	Primary Sample	TestAmerica	05/23/2007	0.65 U
OS-09	Primary Sample	TestAmerica	08/16/2007	0.65 U
OS-09	Split Sample	TestAmerica-SA	08/16/2007	0.68 U
OS-10	Primary Sample	TestAmerica	05/23/2007	0.65 U
OS-16	Primary Sample	Lancaster	11/02/2007	0.7 U
OS-17	Primary Sample	TestAmerica	05/24/2007	0.65 U
OS-26	Primary Sample	TestAmerica	05/24/2007	0.65 U
OS-27	Primary Sample	TestAmerica	05/24/2007	0.65 U
OS-28	Primary Sample	TestAmerica	05/24/2007	0.65 U
OS-28	Primary Sample	TestAmerica	08/15/2007	0.65 U
RD-01	Primary Sample	TestAmerica	02/15/2007	0.8 U
RD-01	Primary Sample	TestAmerica	05/09/2007	0.65 U
RD-01	Field Duplicate	TestAmerica	05/09/2007	0.65 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T08-F.xls

February 2008

**TABLE VIII**  
SUMMARY OF ANALYSES FOR PERCHLORATE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Analyte:</b>				<b>Perchlorate</b>
<b>Method:</b>				<b>314.0</b>
<b>Result Value Units:</b>				<b>ug/L</b>
<b>Well Identifier</b>	<b>Sample Type</b>	<b>Lab Name</b>	<b>Date Collected</b>	
RD-01	Primary Sample	TestAmerica	08/15/2007	0.65 U
RD-01	Primary Sample	Lancaster	10/23/2007	0.7 U
RD-02	Primary Sample	TestAmerica	02/13/2007	0.8 U
RD-02	Primary Sample	TestAmerica	05/21/2007	0.65 U
RD-02	Primary Sample	TestAmerica	08/29/2007	0.65 U
RD-02	Primary Sample	Lancaster	11/07/2007	0.7 U
RD-02	Field Duplicate	Lancaster	11/07/2007	0.7 U
RD-04	Primary Sample	TestAmerica	02/13/2007	0.8 U
RD-04	Primary Sample	TestAmerica	05/10/2007	0.65 U
RD-04	Primary Sample	TestAmerica	08/15/2007	0.65 U
RD-04	Primary Sample	Lancaster	10/25/2007	0.7 U
RD-04	Split Sample	TestAmerica	10/25/2007	0.65 U
RD-09	Primary Sample	TestAmerica	02/14/2007	0.8 U
RD-09	Primary Sample	TestAmerica	05/15/2007	0.65 U
RD-09	Primary Sample	TestAmerica	08/14/2007	0.65 U
RD-10	Primary Sample	TestAmerica	02/06/2007	100
RD-10	Primary Sample	TestAmerica	05/09/2007	94
RD-10	Primary Sample	TestAmerica	08/15/2007	78
RD-10	Primary Sample	Lancaster	10/23/2007	62.2
RD-32	Primary Sample	TestAmerica	05/22/2007	0.65 U
RD-36B	Primary Sample	TestAmerica	05/22/2007	0.65 UJ
RD-36C	Primary Sample	TestAmerica	05/23/2007	0.65 U
RD-36D	Primary Sample	TestAmerica	05/22/2007	0.65 U
RD-37	Primary Sample	TestAmerica	05/23/2007	0.65 U
RD-38A	Primary Sample	TestAmerica	05/24/2007	0.65 U
RD-38B	Primary Sample	TestAmerica	05/24/2007	0.65 U
RD-39B	Primary Sample	TestAmerica	05/22/2007	0.65 U
RD-41A	Primary Sample	TestAmerica	02/14/2007	0.8 U
RD-41A	Primary Sample	TestAmerica	05/16/2007	0.65 U
RD-41A	Primary Sample	TestAmerica	08/20/2007	0.65 U
RD-41A	Primary Sample	Lancaster	10/29/2007	0.7 U
RD-41B	Primary Sample	TestAmerica	02/14/2007	0.8 U
RD-41B	Primary Sample	TestAmerica	05/21/2007	0.65 U
RD-41B	Primary Sample	TestAmerica	08/20/2007	0.65 U
RD-41B	Primary Sample	Lancaster	10/25/2007	0.7 U
RD-43A	Primary Sample	TestAmerica	05/21/2007	0.65 U
RD-43B	Primary Sample	TestAmerica	05/21/2007	0.65 U
RD-43C	Primary Sample	TestAmerica	05/21/2007	0.65 U
RD-44	Primary Sample	TestAmerica	02/07/2007	0.8 U
RD-44	Primary Sample	TestAmerica	05/14/2007	0.65 U
RD-44	Primary Sample	TestAmerica	08/15/2007	0.65 U
RD-44	Primary Sample	Lancaster	10/24/2007	0.7 U
RD-45B	Primary Sample	TestAmerica	05/17/2007	0.65 U
RD-45C	Primary Sample	TestAmerica	05/18/2007	0.65 U
RD-47	Primary Sample	TestAmerica	02/02/2007	0.8 U
RD-49A	Primary Sample	TestAmerica	02/13/2007	0.8 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T08-F.xls

February 2008

**TABLE VIII**  
SUMMARY OF ANALYSES FOR PERCHLORATE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Analyte:</b>				<b>Perchlorate</b>
<b>Method:</b>				<b>314.0</b>
<b>Result Value Units:</b>				<b>ug/L</b>
<b>Well Identifier</b>	<b>Sample Type</b>	<b>Lab Name</b>	<b>Date Collected</b>	
RD-49A	Primary Sample	TestAmerica	05/14/2007	0.65 U
RD-49A	Primary Sample	TestAmerica	08/29/2007	0.65 U
RD-49B	Primary Sample	TestAmerica	02/08/2007	0.8 U
RD-49B	Primary Sample	TestAmerica	05/10/2007	0.65 U
RD-49B	Primary Sample	TestAmerica	08/14/2007	0.65 U
RD-49B	Field Duplicate	TestAmerica	08/14/2007	0.65 U
RD-49B	Primary Sample	Lancaster	10/25/2007	0.7 U
RD-49C	Primary Sample	TestAmerica	02/08/2007	0.8 U
RD-49C	Primary Sample	TestAmerica	05/14/2007	0.65 U
RD-49C	Primary Sample	TestAmerica	08/20/2007	0.65 U
RD-49C	Primary Sample	Lancaster	10/25/2007	0.7 U
RD-51B	Primary Sample	TestAmerica	02/12/2007	0.8 U
RD-51B	Primary Sample	TestAmerica	05/10/2007	0.65 U
RD-51B	Primary Sample	TestAmerica	08/13/2007	0.65 U
RD-51B	Primary Sample	Lancaster	10/23/2007	0.7 U
RD-51C	Primary Sample	TestAmerica	02/13/2007	0.8 U
RD-51C	Primary Sample	TestAmerica	05/10/2007	0.65 U
RD-51C	Primary Sample	TestAmerica	08/13/2007	0.65 U
RD-51C	Split Sample	TestAmerica-SA	08/13/2007	0.68 U
RD-51C	Primary Sample	Lancaster	10/23/2007	0.7 U
RD-52B	Primary Sample	TestAmerica	05/18/2007	0.65 U
RD-52C	Primary Sample	TestAmerica	05/18/2007	0.65 U
RD-55A	Primary Sample	TestAmerica	02/12/2007	0.8 U
RD-55A	Primary Sample	TestAmerica	05/17/2007	0.65 U
RD-55A	Primary Sample	TestAmerica	08/14/2007	0.65 U
RD-55A	Primary Sample	Lancaster	10/29/2007	0.7 U
RD-55A	Field Duplicate	Lancaster	10/29/2007	0.7 U
RD-55B	Primary Sample	TestAmerica	02/13/2007	0.8 U
RD-55B	Primary Sample	TestAmerica	05/17/2007	0.65 U
RD-55B	Primary Sample	TestAmerica	08/14/2007	0.65 U
RD-55B	Primary Sample	Lancaster	10/29/2007	0.7 U
RD-58A	Primary Sample	TestAmerica	02/15/2007	0.8 U
RD-58A	Primary Sample	TestAmerica	05/21/2007	0.65 U
RD-58A	Primary Sample	Lancaster	10/31/2007	0.7 U
RD-58B	Primary Sample	TestAmerica	02/13/2007	0.8 U
RD-58B	Primary Sample	TestAmerica	05/16/2007	0.65 U
RD-58B	Primary Sample	TestAmerica	08/13/2007	0.65 U
RD-58B	Primary Sample	Lancaster	10/25/2007	0.7 U
RD-58B	Field Duplicate	Lancaster	10/25/2007	0.7 U
RD-59A	Primary Sample	TestAmerica	08/16/2007	0.65 U
RD-59B	Primary Sample	TestAmerica	05/23/2007	0.65 U
RD-59C	Primary Sample	TestAmerica	05/23/2007	0.65 U
RD-66	Primary Sample	TestAmerica	05/22/2007	0.65 U
RD-68A	Primary Sample	TestAmerica	05/23/2007	0.65 U
RD-68B	Primary Sample	TestAmerica	05/23/2007	0.65 U
RD-70	Primary Sample	TestAmerica	05/09/2007	0.65 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T08-F.xls

February 2008

**TABLE VIII**  
SUMMARY OF ANALYSES FOR PERCHLORATE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Analyte:</b>				<b>Perchlorate</b>
<b>Method:</b>				<b>314.0</b>
<b>Result Value Units:</b>				<b>ug/L</b>
<b>Well Identifier</b>	<b>Sample Type</b>	<b>Lab Name</b>	<b>Date Collected</b>	
RD-71	Primary Sample	Lancaster	10/26/2007	0.7 U
RD-73	Primary Sample	TestAmerica	02/15/2007	65
RD-73	Primary Sample	TestAmerica	05/14/2007	47
RD-73	Primary Sample	TestAmerica	08/15/2007	63
RD-73	Split Sample	TestAmerica-SA	08/15/2007	58.5
RD-73	Primary Sample	Lancaster	10/23/2007	34.4
RD-73	Split Sample	TestAmerica	10/23/2007	41
RD-75	Primary Sample	TestAmerica	05/24/2007	0.65 U
RD-77	Primary Sample	TestAmerica	02/15/2007	330
RD-77	Primary Sample	TestAmerica	05/11/2007	300
RD-77	Primary Sample	TestAmerica	08/08/2007	230
RD-77	Primary Sample	Lancaster	10/19/2007	308
RD-78	Primary Sample	TestAmerica	05/22/2007	0.65 U
RD-80	Primary Sample	TestAmerica	05/23/2007	0.65 U
RD-81	Primary Sample	TestAmerica	05/18/2007	0.65 U
RD-82	Primary Sample	TestAmerica	05/15/2007	0.65 U
RD-83	Primary Sample	TestAmerica	05/21/2007	0.65 U
RD-84	Primary Sample	TestAmerica	05/24/2007	1.7 J
WS-04A	Primary Sample	TestAmerica	05/16/2007	0.65 U
WS-05	Primary Sample	TestAmerica	02/27/2007	0.8 U
WS-05	Primary Sample	TestAmerica	05/15/2007	0.65 U
WS-05	Primary Sample	TestAmerica	08/21/2007	1.5 U
WS-05	Primary Sample	Lancaster	10/29/2007	0.7 U
WS-06	Primary Sample	TestAmerica	02/14/2007	0.8 U
WS-06	Primary Sample	TestAmerica	05/15/2007	0.65 U
WS-06	Primary Sample	TestAmerica	08/21/2007	1.5 U
WS-06	Primary Sample	Lancaster	10/24/2007	0.7 U
WS-09	Primary Sample	TestAmerica	02/14/2007	0.8 U
WS-09	Primary Sample	TestAmerica	05/10/2007	0.65 U
WS-09	Primary Sample	TestAmerica	08/21/2007	1.5 U
WS-09	Primary Sample	Lancaster	10/25/2007	0.7 U
WS-09A	Primary Sample	TestAmerica	02/12/2007	0.8 U
WS-09A	Primary Sample	TestAmerica	05/09/2007	0.65 U
WS-09A	Primary Sample	TestAmerica	08/09/2007	0.65 U
WS-09B	Primary Sample	TestAmerica	08/22/2007	0.65 U
WS-12	Primary Sample	TestAmerica	05/21/2007	0.65 U
WS-13	Primary Sample	TestAmerica	05/22/2007	0.65 U
WS-14	Primary Sample	Lancaster	10/29/2007	0.7 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T08-F.xls

February 2008

**TABLE VIII**  
**NOTES AND ABBREVIATIONS**

---

1. Lancaster = Lancaster Laboratories of Lancaster, Pennsylvania.
2. STL-SA = Severn Trent Laboratories of Sacramento, California.
3. TestAmerica = TestAmerica of Irvine, California.
4. TestAmerica-SA = TestAmerica of Sacramento, California, formerly Severn Trent Laboratories.
5. ug/L = Micrograms per liter.
6. U = Not detected; numerical value represents the Method Detection Limit for that compound.
7. UJ = Not detected. Estimated detection limit as a result of analytical quality control deficiencies (see Appendix D for details).
8. 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).

**TABLE IX**

SUMMARY OF ANALYSES FOR GROSS ALPHA, GROSS BETA, RADIUM ISOTOPES, AND TRITIUM ACTIVITIES, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Sample Port	Sample Type	Collection Date	EPA Method Number	Radionuclide	Result (pCi/L)		
							Activity	Error	MDA
ES-31	Shallow	Primary	Primary	02/28/2007	900.0	Gross Alpha	2.59 U	2	2.72
					900.0	Gross Beta	3.71 U	3.9	6.05
					903.1	Radium-226	0.145 U	0.34	0.6
					904.0	Radium-228	0.197 U	0.16	0.407
					906.0	Tritium	4.75 U	55	92
		Primary	08/16/2007	900.0	Gross Alpha	-2.14 U	3.4	6.06	
				900.0	Gross Beta	14.1	3.5	2.85	
				903.1	Radium-226	0.097 U	0.32	0.608	
				904.0	Radium-228	0.047 U	0.13	0.361	
OS-02	Chatsworth		Primary	02/28/2007	906.0	Tritium	-6.69 U	56	92.8
OS-04	Chatsworth		Primary	02/28/2007	906.0	Tritium	0 U	55	92.2
OS-09	Chatsworth		Primary	02/28/2007	906.0	Tritium	-65.1 U	55	93.4
PZ-108	Shallow		Primary	02/22/2007	906.0	Tritium	-61 U	52	89.3
PZ-109	Shallow		Primary	02/23/2007	906.0	Tritium	-47.6 U	52	89.6
PZ-120	Shallow		Primary	02/23/2007	906.0	Tritium	-46.2 U	54	91.3
RD-07	Chatsworth	Z3	Primary	02/08/2007	900.0	Gross Alpha	39.4	13	7.24
					900.0	Gross Beta	22	7.2	7.49
					903.1	Radium-226	0.428 U	0.46	0.739
					904.0	Radium-228	1.35	1.2	0.475
					906.0	Tritium	22.8 U	52	85.7
		Z3	Primary	08/09/2007	900.0	Gross Alpha	40.0	14	7.81
					900.0	Gross Beta	17.2	7.5	9.92
					903.1	Radium-226	0.076 U	0.41	0.801
					904.0	Radium-228	1.2	0.22	0.472
					906.0	Tritium	-56.7 U	58	98.6
RD-15	Chatsworth	Primary	Primary	02/06/2007	900.0	Gross Alpha	5.02	2.1	2.11
					900.0	Gross Beta	7.42	2.3	2.52
					903.1	Radium-226	0.579 U	0.49	0.774
					904.0	Radium-228	0.752 J	0.41	0.432
					906.0	Tritium	26.4 U	54	89
		Primary	08/07/2007	900.0	Gross Alpha	3.54 U	3.2	4.44	
900.0	Gross Beta			8.24	2.4	2.58			

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T09-F.xls

February 2008



**TABLE IX**

SUMMARY OF ANALYSES FOR GROSS ALPHA, GROSS BETA, RADIUM ISOTOPES, AND TRITIUM ACTIVITIES, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Sample Port	Sample Type	Collection Date	EPA Method Number	Radionuclide	Result (pCi/L)				
							Activity	Error	MDA		
RD-15	Chatsworth		Primary	08/07/2007	903.1	Radium-226	1.44	0.64	0.747		
					904.0	Radium-228	1.18	0.26	0.435		
			Split	08/07/2007	900.0	Gross Alpha	7.31	2.4	2.04		
					900.0	Gross Beta	9.79	2.8	4.65		
					903.1	Radium-226	0.993	0.2	0.142		
					904.0	Radium-228	1.14	0.31	0.544		
RD-17	Chatsworth	Primary	02/06/2007	900.0	Gross Alpha	2.72 J	1.5	1.81			
				900.0	Gross Beta	6.32	1.7	1.68			
				903.1	Radium-226	1.04	0.53	0.716			
				904.0	Radium-228	0.676 J	0.25	0.345			
				906.0	Tritium	-8.88 U	50	83.6			
				906.0	Tritium	24.5 U	81	108			
		Split	02/06/2007	900.0	Gross Alpha	6.95	2.9	1.81			
				900.0	Gross Beta	7.82	2.9	4.77			
				903.1	Radium-226	1.15	0.31	0.142			
				904.0	Radium-228	1.48	0.35	0.465			
		Primary	08/06/2007	900.0	Gross Alpha	5.49	2.5	2.87			
				900.0	Gross Beta	6.82	2.2	2.46			
				903.1	Radium-226	0.966 J	0.59	0.845			
				904.0	Radium-228	0.713 J	0.21	0.484			
RD-21	Chatsworth	Z2	Primary	02/07/2007	906.0	Tritium	24.8 U	51	85		
					Primary	05/21/2007	900.0	Gross Alpha	13.2	7.8	9.72
			900.0	Gross Beta			5.84	3.2	4.69		
			903.1	Radium-226			0.332 U	0.4	0.664		
			904.0	Radium-228			0.25 U	0.46	0.396		
			906.0	Tritium			-13.6 U	49	82.2		
			Primary	08/09/2007			900.0	Gross Alpha	13.5	4.7	4.52
							900.0	Gross Beta	6.41	3.2	4.76
							903.1	Radium-226	0.753 U	0.60	0.926
					904.0	Radium-228	0.459 J	0.18	0.433		

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T09-F.xls

February 2008

**TABLE IX**

SUMMARY OF ANALYSES FOR GROSS ALPHA, GROSS BETA, RADIUM ISOTOPES, AND TRITIUM ACTIVITIES, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Sample Port	Sample Type	Collection Date	EPA Method Number	Radionuclide	Result (pCi/L)		
							Activity	Error	MDA
RD-22	Chatsworth	Z2	Primary	02/07/2007	900.0	Gross Alpha	1.58 U	2	3.13
					900.0	Gross Beta	7.04	2.5	3.12
					903.1	Radium-226	1.31	0.62	0.819
					904.0	Radium-228	2.07	0.77	0.334
					906.0	Tritium	36.1 U	51	85
			Primary	08/09/2007	900.0	Gross Alpha	5.00 U	3.8	5.34
					900.0	Gross Beta	5.99 U	5.8	9.11
					903.1	Radium-226	1.49	0.62	0.766
					904.0	Radium-228	2.38	0.28	0.483
RD-23	Chatsworth	Z3	Primary	02/07/2007	900.0	Gross Alpha	1.7 U	1.9	2.76
					900.0	Gross Beta	3.17 U	2.3	3.43
					903.1	Radium-226	1.06	0.57	0.757
					904.0	Radium-228	0.624 J	0.16	0.363
					906.0	Tritium	13.4 U	50	84
			Primary	08/09/2007	900.0	Gross Alpha	2.97 U	2.4	3.41
					900.0	Gross Beta	4.21	1.9	2.77
					903.1	Radium-226	1.16	0.61	0.707
					904.0	Radium-228	0.844 J	0.23	0.503
RD-24	Chatsworth		Primary	05/24/2007	900.0	Gross Alpha	5.21	2.6	3.01
					900.0	Gross Beta	8.68	2.8	3.36
					903.1	Radium-226	0.667 U	0.48	0.725
					904.0	Radium-228	1.97	0.25	0.45
					906.0	Tritium	69.2 U	50	81.2
			Primary	08/08/2007	900.0	Gross Alpha	8.54	3.7	4.03
					900.0	Gross Beta	6.20	2.3	2.83
					903.1	Radium-226	1.30	0.58	0.696
					904.0	Radium-228	1.63	0.24	0.485
					906.0	Tritium	25.5 U	59	97.7
RD-27	Chatsworth		Primary	02/14/2007	900.0	Gross Alpha	2.33 J	1.3	1.54
					900.0	Gross Beta	6.81	1.8	1.46
					903.1	Radium-226	1.96	0.6	0.631

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T09-F.xls

February 2008

**TABLE IX**

SUMMARY OF ANALYSES FOR GROSS ALPHA, GROSS BETA, RADIUM ISOTOPES, AND TRITIUM ACTIVITIES, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Sample Port	Sample Type	Collection Date	EPA Method Number	Radionuclide	Result (pCi/L)			
							Activity	Error	MDA	
RD-27	Chatsworth	Primary		02/14/2007	904.0	Radium-228	2.4	0.54	0.367	
					906.0	Tritium	-38.6 U	57	95.8	
		Split	02/14/2007	900.0	Gross Alpha	5.69	2.3	1.15		
				900.0	Gross Beta	7.95	2.4	3.57		
				903.1	Radium-226	1.27	0.32	0.113		
				904.0	Radium-228	2.89	0.52	0.532		
				906.0	Tritium	-11 U	74	106		
		Primary	08/09/2007	900.0	Gross Alpha	5.69	2.5	2.63		
				900.0	Gross Beta	7.02	2.0	2.04		
				903.1	Radium-226	1.62	0.69	0.814		
				904.0	Radium-228	2.52	0.34	0.600		
				906.0	Tritium	-46.4 U	58	98.6		
		RD-29	Chatsworth	Primary	02/07/2007	900.0	Gross Alpha	10	5.3	5.62
						900.0	Gross Beta	10.7	6	8.59
903.1	Radium-226					0.487 U	0.45	0.717		
904.0	Radium-228					0.6 J	0.28	0.353		
906.0	Tritium					27.4 U	52	86		
Primary	08/08/2007			900.0	Gross Alpha	18.8	8.9	7.99		
				900.0	Gross Beta	15.5	5.7	6.57		
				903.1	Radium-226	0.307 U	0.44	0.752		
				904.0	Radium-228	1.07	0.22	0.478		
RD-30	Chatsworth	Primary	05/24/2007	900.0	Gross Alpha	6.86	3	3.31		
				900.0	Gross Beta	6.17	2.7	3.75		
				903.1	Radium-226	0.129 U	0.32	0.582		
				904.0	Radium-228	0.684 J	0.15	0.396		
				906.0	Tritium	36.8 U	45	62		
		Primary	08/21/2007	900.0	Gross Alpha	5.67	3.5	4.52		
				900.0	Gross Beta	7.66	2.9	3.81		
				903.1	Radium-226	0.788 J	0.46	0.579		
				904.0	Radium-228	0.248 U	0.22	0.378		
				906.0	Tritium	-29.8 U	52	87.9		

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T09-F.xls

February 2008

**TABLE IX**

SUMMARY OF ANALYSES FOR GROSS ALPHA, GROSS BETA, RADIUM ISOTOPES, AND TRITIUM ACTIVITIES, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Sample Port	Sample Type	Collection Date	EPA Method Number	Radionuclide	Result (pCi/L)		
							Activity	Error	MDA
RD-33A	Chatsworth	Z2	Primary	02/08/2007	900.0	Gross Alpha	5.35	2.7	2.64
					900.0	Gross Beta	7.39	2.6	2.72
					903.1	Radium-226	0.539 U	0.46	0.719
					904.0	Radium-228	1.14	0.48	0.39
					906.0	Tritium	-43.2 U	53	89
		Primary	08/13/2007	900.0	Gross Alpha	6.20	3.2	2.99	
				900.0	Gross Beta	4.05	2.2	2.91	
				903.1	Radium-226	0.262 U	0.34	0.568	
				904.0	Radium-228	1.93	0.24	0.430	
				RD-33B	Chatsworth	Primary	02/07/2007	900.0	Gross Alpha
900.0	Gross Beta	5.06	2.6	3.71					
903.1	Radium-226	1.37	0.62	0.789					
904.0	Radium-228	1.32	0.43	0.34					
906.0	Tritium	4.49 U	51	84.6					
Primary	08/14/2007	900.0	Gross Alpha	-1.51 U		2.0	3.60		
		900.0	Gross Beta	3.22 J		1.8	2.87		
		903.1	Radium-226	0.772 J		0.47	0.658		
		904.0	Radium-228	0.978 J		0.23	0.494		
		906.0	Tritium	14.8 U		50	83.8		
RD-33C	Chatsworth	Primary	02/06/2007	900.0	Gross Alpha	-0.318 U	1.8	3.86	
				900.0	Gross Beta	-2.85 U	1.9	3.46	
				903.1	Radium-226	1.67	0.55	0.575	
				904.0	Radium-228	1.61	0.88	0.387	
				906.0	Tritium	-52.9 U	53	89.2	
		Primary	08/07/2007	900.0	Gross Alpha	3.01	2.0	2.56	
				900.0	Gross Beta	4.97	1.8	2.25	
				903.1	Radium-226	1.93	0.66	0.614	
				904.0	Radium-228	2.13	0.25	0.431	
				906.0	Tritium	10.2 U	59	98.0	
		Split	08/07/2007	900.0	Gross Alpha	1.34 U	1.4	2.48	
				900.0	Gross Beta	4.94	1.8	3.27	
				903.1	Radium-226	2.07	0.26	0.133	
904.0	Radium-228			2.09	0.41	0.640			
		906.0	Tritium	1.37 U	56	126			

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T09-F.xls

February 2008

**TABLE IX**

SUMMARY OF ANALYSES FOR GROSS ALPHA, GROSS BETA, RADIUM ISOTOPES, AND TRITIUM ACTIVITIES, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Sample Port	Sample Type	Collection Date	EPA Method Number	Radionuclide	Result (pCi/L)		
							Activity	Error	MDA
RD-34A	Chatsworth		Primary	02/28/2007	900.0	Gross Alpha	20.1	6.3	4.71
					900.0	Gross Beta	14.7	4.8	5.8
					903.1	Radium-226	0.194 U	0.32	0.545
					904.0	Radium-228	0.079 U	0.16	0.372
					906.0	Tritium	1160	140	92.6
			Primary	08/15/2007	900.0	Gross Alpha	23.2	7.1	5.27
					900.0	Gross Beta	13.2	4.0	4.50
					903.1	Radium-226	0.602 U	0.45	0.665
					904.0	Radium-228	1.14	0.20	0.418
					906.0	Tritium	1230	140	83.3
RD-34B	Chatsworth		Primary	08/14/2007	900.0	Gross Alpha	2.05 U	2.7	4.26
					900.0	Gross Beta	3.79 J	2.4	3.64
					903.1	Radium-226	0.949 J	0.49	0.644
					904.0	Radium-228	1.24	0.24	0.394
					906.0	Tritium	188 J	56	82.2
RD-34C	Chatsworth		Primary	02/07/2007	900.0	Gross Alpha	1.36 U	1.9	2.98
					900.0	Gross Beta	4.17	2.2	2.99
					903.1	Radium-226	1.19	0.61	0.78
					904.0	Radium-228	1.1	0.26	0.354
					906.0	Tritium	31.4 U	51	84.4
			Primary	08/08/2007	900.0	Gross Alpha	-0.962 U	1.5	2.82
					900.0	Gross Beta	4.98	1.5	1.66
					903.1	Radium-226	1.07	0.61	0.827
					904.0	Radium-228	1.41	0.21	0.427
					906.0	Tritium	-70.2 U	58	99.5
RD-54A	Chatsworth	Z2	Primary	02/07/2007	900.0	Gross Alpha	9.54	5.4	5.79
					900.0	Gross Beta	7.14	4	5.5
					903.1	Radium-226	1.29	0.63	0.825
					904.0	Radium-228	1.07	0.27	0.328
					906.0	Tritium	244	61	85.2
			Primary	08/10/2007	900.0	Gross Alpha	20.0	8.8	8.03
					900.0	Gross Beta	12.9	4.4	4.79
					903.1	Radium-226	1.46	0.60	0.701

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T09-F.xls

February 2008

**TABLE IX**

SUMMARY OF ANALYSES FOR GROSS ALPHA, GROSS BETA, RADIUM ISOTOPES, AND TRITIUM ACTIVITIES, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Sample Port	Sample Type	Collection Date	EPA Method Number	Radionuclide	Result (pCi/L)							
							Activity	Error	MDA					
RD-54A	Chatsworth	Z2	Primary	08/10/2007	904.0	Radium-228	1.39	0.23	0.462					
					906.0	Tritium	47.8 U	58	96.3					
RD-54B	Chatsworth		Primary	02/12/2007	900.0	Gross Alpha	1.93 U	2	3.06					
					900.0	Gross Beta	6.13	2.4	3.26					
					903.1	Radium-226	1.24	0.51	0.654					
					904.0	Radium-228	1.99	1.3	0.374					
					906.0	Tritium	0 U	58	96.2					
			Primary	08/14/2007	900.0	Gross Alpha	3.48 U	3.7	5.55					
					900.0	Gross Beta	5.67	2.8	4.09					
					903.1	Radium-226	2.51	0.65	0.621					
					904.0	Radium-228	2.66	0.25	0.413					
					906.0	Tritium	-12.7 U	52	86.7					
RD-54C	Chatsworth		Primary	02/12/2007	900.0	Gross Alpha	0.241 U	1.3	2.25					
					900.0	Gross Beta	4.37	2.2	3.14					
					903.1	Radium-226	0.46 U	0.49	0.794					
					904.0	Radium-228	1.1	0.81	0.346					
					906.0	Tritium	-14.3 U	57	94.7					
			Primary	08/07/2007	900.0	Gross Alpha	1.32 U	1.4	2.11					
					900.0	Gross Beta	5.14	1.6	1.67					
					903.1	Radium-226	0.218 U	0.50	0.886					
					904.0	Radium-228	0.628 J	0.19	0.444					
					906.0	Tritium	-2.55 U	58	97.6					
RD-57	Chatsworth		Primary	02/08/2007	900.0	Gross Alpha	5.1	1.7	1.19					
					900.0	Gross Beta	5.7	1.7	1.62					
					903.1	Radium-226	1.01	0.52	0.714					
					904.0	Radium-228	1.08	0.19	0.397					
					906.0	Tritium	-30.2 U	56	93.8					
			Z8	Primary	08/14/2007	906.0	Tritium	17.3 U	51	84.3				
						RD-59A	Chatsworth	Primary	02/28/2007	900.0	Gross Alpha	0.439 U	1.6	2.72
										900.0	Gross Beta	5.39	2.2	2.88
										903.1	Radium-226	0.6 U	0.48	0.717
										904.0	Radium-228	0.35 U	0.16	0.39
906.0	Tritium	58.5 U	55	90.6										

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T09-F.xls

February 2008

**TABLE IX**

SUMMARY OF ANALYSES FOR GROSS ALPHA, GROSS BETA, RADIUM ISOTOPES, AND TRITIUM ACTIVITIES, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Sample Port	Sample Type	Collection Date	EPA Method Number	Radionuclide	Result (pCi/L)			
							Activity	Error	MDA	
RD-59A	Chatsworth	Primary		08/16/2007	900.0	Gross Alpha	-0.848 U	3.1	5.52	
					900.0	Gross Beta	5.29	2.4	3.38	
					903.1	Radium-226	0.514 U	0.47	0.724	
					904.0	Radium-228	0.297 U	0.15	0.372	
					906.0	Tritium	23.9 U	49	81.4	
RD-59B	Chatsworth	Primary		02/28/2007	900.0	Gross Alpha	-0.443 U	1.2	2.21	
					900.0	Gross Beta	3.77 J	1.5	1.91	
					903.1	Radium-226	0.58 U	0.48	0.718	
					904.0	Radium-228	1.2	0.32	0.407	
					906.0	Tritium	9.38 U	55	90.8	
		Split	02/28/2007			900.0	Gross Alpha	2.77 J	1.7	1.93
						900.0	Gross Beta	4.65	2.1	3.6
						903.1	Radium-226	0.532 J	0.19	0.157
						904.0	Radium-228	1.18	0.32	0.414
						906.0	Tritium	-28 U	73	118
		Primary	08/16/2007			900.0	Gross Alpha	1.65 U	2.0	3.10
						900.0	Gross Beta	2.95 J	1.9	2.79
						903.1	Radium-226	0.234 U	0.47	0.829
						904.0	Radium-228	1.50	0.20	0.392
906.0	Tritium					38.8 U	50	82.5		
RD-59C	Chatsworth	Primary		02/28/2007	900.0	Gross Alpha	1.4 U	1.3	1.94	
					900.0	Gross Beta	3.82 J	1.6	2.09	
					903.1	Radium-226	0.706 J	0.38	0.532	
					904.0	Radium-228	0.479 J	0.17	0.423	
					906.0	Tritium	-9.57 U	55	92.7	
		Primary	08/16/2007			900.0	Gross Alpha	1.27 U	1.8	2.90
						900.0	Gross Beta	2.64 J	1.6	2.33
						903.1	Radium-226	0.375 U	0.40	0.650
						904.0	Radium-228	1.36	0.24	0.397
						906.0	Tritium	45.7 U	50	81.9
RD-63	Chatsworth	Primary		05/24/2007	900.0	Gross Alpha	10.4	3.8	3.3	
					900.0	Gross Beta	11.7	3	2.57	
					903.1	Radium-226	1.87	0.62	0.702	

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T09-F.xls

February 2008

**TABLE IX**

SUMMARY OF ANALYSES FOR GROSS ALPHA, GROSS BETA, RADIUM ISOTOPES, AND TRITIUM ACTIVITIES, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Sample Port	Sample Type	Collection Date	EPA Method Number	Radionuclide	Result (pCi/L)		
							Activity	Error	MDA
RD-63	Chatsworth		Primary	05/24/2007	904.0	Radium-228	1.3	0.39	0.415
					906.0	Tritium	51.4 U	49	81
			Split	05/24/2007	900.0	Gross Alpha	10.7	3.6	2.25
					900.0	Gross Beta	11.5	3.4	5.03
					903.1	Radium-226	1.72	0.46	0.205
					904.0	Radium-228	1.72	0.44	0.563
					906.0	Tritium	-9.7 U	69	112
					Primary	08/21/2007	900.0	Gross Alpha	8.45
			900.0	Gross Beta			8.41	4.9	7.12
			903.1	Radium-226			1.03	0.57	0.757
904.0	Radium-228	1.94	0.36	0.423					
RD-64	Chatsworth	Z6	Primary	02/08/2007	900.0	Gross Alpha	5.13	2.2	2.36
					900.0	Gross Beta	5.44	1.9	2.45
					903.1	Radium-226	1.62	0.66	0.815
					904.0	Radium-228	1.2	0.35	0.381
					906.0	Tritium	118 J	53	83.6
		Z2	Primary	08/10/2007	900.0	Gross Alpha	14.6	4.4	3.11
					900.0	Gross Beta	6.91	2.2	2.53
					903.1	Radium-226	1.24	0.56	0.654
					904.0	Radium-228	1.33	0.26	0.547
					906.0	Tritium	-8.88 U	55	92.4
RD-68A	Chatsworth		Primary	02/28/2007	906.0	Tritium	-31.5 U	56	93.7
RD-68B	Chatsworth		Primary	02/28/2007	906.0	Tritium	12,800	1,300	90
RD-87	Chatsworth		Primary	02/22/2007	906.0	Tritium	57,200	5,700	144
RD-88	Chatsworth		Primary	02/22/2007	906.0	Tritium	63,500	6,400	154
RD-90	Chatsworth		Primary	02/23/2007	906.0	Tritium	-71 U	53	90.6
RD-91	Chatsworth		Primary	02/22/2007	906.0	Tritium	13,700	1,400	89.7
RD-93	Chatsworth		Primary	02/22/2007	906.0	Tritium	13,400	1,400	90.2
RD-94	Chatsworth		Primary	02/22/2007	906.0	Tritium	91,500	9,200	185
RD-95	Chatsworth		Primary	02/22/2007	906.0	Tritium	-53.8 U	52	88.6
RD-96	Chatsworth		Primary	02/22/2007	906.0	Tritium	-55 U	53	90.6
RD-97	Chatsworth		Primary	02/22/2007	906.0	Tritium			

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T09-F.xls

February 2008



**TABLE IX**

SUMMARY OF ANALYSES FOR GROSS ALPHA, GROSS BETA, RADIUM ISOTOPES, AND TRITIUM ACTIVITIES, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Geological Unit	Sample Port	Sample Type	Collection Date	EPA Method Number	Radionuclide	Result (pCi/L)			
							Activity	Error	MDA	
RS-11	Shallow		Primary	02/28/2007	900.0	Gross Alpha	16.7	5.6	4.58	
					900.0	Gross Beta	14.1	4.4	4.91	
					903.1	Radium-226	0.344 U	0.3	0.46	
					904.0	Radium-228	-0.104 U	0.28	0.491	
					906.0	Tritium	25.8 U	55	90.8	
RS-28	Shallow		Primary	02/13/2007	900.0	Gross Alpha	2.72 J	1.9	2.5	
					900.0	Gross Beta	7.06	2.2	2.42	
					903.1	Radium-226	0.723 J	0.47	0.707	
					904.0	Radium-228	0.549 J	0.14	0.339	
					906.0	Tritium	-12 U	57	95.2	
				Primary	11/05/2007	900.0	Gross Alpha	4.77 U	6.4	9.87
						900.0	Gross Beta	9.05	4.3	5.70
						903.1	Radium-226	0.479 U	0.54	0.880
						904.0	Radium-228	0.303 U	0.28	0.388
RS-54	Shallow		Primary	02/15/2007	900.0	Gross Alpha	20	6.4	4.95	
					900.0	Gross Beta	13.2	3.7	3.68	
					903.1	Radium-226	-0.001 U	0.31	0.584	
					904.0	Radium-228	0.063 U	0.28	0.381	
					906.0	Tritium	90.4 U	58	92.1	

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T09-F.xls

February 2008

**TABLE IX**  
**NOTES AND ABBREVIATIONS**

---

1. MDA = Minimum detectable activity.
2. J = Result is less than contract-required MDA and greater than or equal to the MDA.
3. U = Not detected above the MDA; numerical value is the activity for that radionuclide.
4. Z = FLUTe sample port number.
5. pCi/L = PicoCuries per liter.
6. Primary = Primary sample.
7. Split = Split sample.
8. Chatsworth = Chatsworth Formation wells.
9. Shallow = Shallow wells and piezometers.
10. Primary sample analyses were performed by Eberline Services of Richmond, California.  
Split sample analyses were performed by Severn Trent Laboratories of Richland, Washington.
11. Results are presented as the activity plus or minus the error. Any activity is reported by the laboratory.  
Analytical results that are less than the procedure background value are shown as negative values.  
Samples are filtered and acidified in the field with the exception of tritium.
12. EPA method 900.0 was used to analyze Gross Alpha and Gross Beta; EPA methods 903.1, 904.0, and 906.0 were used to analyze Radium-226, Radium-228, and Tritium, respectively.
13. 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 X**  
SUMMARY OF ANALYSES FOR GAMMA-EMITTING RADIONUCLIDES, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>ES-31</b>		<b>RD-07</b>		<b>RD-07</b>		<b>RD-15</b>		<b>RD-17</b>	
Sample Port:	---		Z3		Z3		---		---	
Sample Type:	Primary		Primary		Primary		Primary		Primary	
Geological Unit:	Shallow		Chatsworth		Chatsworth		Chatsworth		Chatsworth	
Collection Date:	02/28/2007		02/08/2007		08/09/2007		02/06/2007		02/06/2007	
Radionuclides (pCi/L)	Result	MDA	Result	MDA	Result	MDA	Result	MDA	Result	MDA
<b><i>Gamma-Emitting Radionuclides</i></b>										
Cesium-134	ND	1.6	ND	1.27	---	---	ND	1.34	ND	1.26
Cesium-137	ND	1	ND	0.991	---	---	ND	1	ND	0.992
Cobalt-57	ND	0.605	ND	0.703	---	---	ND	0.647	ND	0.599
Cobalt-60	ND	1.04	ND	1.07	---	---	ND	1.11	ND	1.01
Europium-152	ND	2.89	ND	2.84	---	---	ND	2.74	ND	2.67
Europium-154	ND	3.37	ND	3.2	---	---	ND	3.3	ND	3.12
Manganese-54	ND	0.939	ND	0.952	---	---	ND	0.998	ND	0.956
Potassium-40	ND	28.9	ND	27.3	---	---	ND	28.5	ND	21.4
Sodium-22	ND	1.15	ND	1.09	---	---	ND	1.12	ND	1.06
<b><i>Isotopic Uranium and Thorium</i></b>										
Thorium-228	---	---	0.009 U +/- 0.036	0.062	---	---	---	---	---	---
Thorium-230	---	---	-0.023 U +/- 0.05	0.103	---	---	---	---	---	---
Thorium-232	---	---	-0.005 U +/- 0.014	0.028	---	---	---	---	---	---
Uranium-233 & 234	---	---	30 +/- 1.8	0.094	26.0 +/- 1.8	0.131	3.09 +/- 0.38	0.065	---	---
Uranium-235	---	---	1.22 +/- 0.15	0.027	1.14 +/- 0.20	0.054	0.133 J +/- 0.082	0.078	---	---
Uranium-238	---	---	24 +/- 1.5	0.091	20.8 +/- 1.5	0.125	3.01 +/- 0.38	0.065	---	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T10-F.xls

February 2008

**TABLE X**  
SUMMARY OF ANALYSES FOR GAMMA-EMITTING RADIONUCLIDES, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-17</b>		<b>RD-21</b>		<b>RD-21</b>		<b>RD-22</b>		<b>RD-23</b>	
Sample Port:	---		Z2		Z2		Z2		Z3	
Sample Type:	Split		Primary		Primary		Primary		Primary	
Geological Unit:	Chatsworth		Chatsworth		Chatsworth		Chatsworth		Chatsworth	
Collection Date:	02/06/2007		05/21/2007		08/09/2007		02/07/2007		02/07/2007	
Radionuclides (pCi/L)	Result	MDA	Result	MDA	Result	MDA	Result	MDA	Result	MDA
<b><i>Gamma-Emitting Radionuclides</i></b>										
Cesium-134	ND	1.38	ND	0.716	---	---	ND	1.43	ND	0.718
Cesium-137	ND	1.18	ND	0.54	---	---	ND	2.09	ND	0.544
Cobalt-57	ND	5.43	ND	0.335	---	---	ND	0.756	ND	0.329
Cobalt-60	ND	1.39	ND	0.611	---	---	ND	1.24	ND	0.642
Europium-152	ND	3	ND	1.61	---	---	ND	3.09	ND	1.52
Europium-154	ND	3.76	ND	1.6	---	---	ND	3.49	ND	1.7
Manganese-54	ND	1.3	ND	0.521	---	---	ND	1.12	ND	0.535
Potassium-40	ND	36.9	ND	7.14	---	---	ND	24.4	ND	6.96
Sodium-22	ND	1.36	ND	0.549	---	---	ND	1.19	ND	0.577
<b><i>Isotopic Uranium and Thorium</i></b>										
Thorium-228	---	---	---	---	---	---	---	---	---	---
Thorium-230	---	---	---	---	---	---	---	---	---	---
Thorium-232	---	---	---	---	---	---	---	---	---	---
Uranium-233 & 234	---	---	5.86 +/- 0.45	0.058	6.23 +/- 0.45	0.051	---	---	0.677 J +/- 0.1	0.032
Uranium-235	---	---	0.29 J +/- 0.071	0.033	0.257 J +/- 0.059	0.028	---	---	0.02 U +/- 0.016	0.031
Uranium-238	---	---	5.17 +/- 0.4	0.058	5.56 +/- 0.41	0.046	---	---	0.525 J +/- 0.093	0.032

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T10-F.xls

February 2008

**TABLE X**  
 SUMMARY OF ANALYSES FOR GAMMA-EMITTING RADIONUCLIDES, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-24</b>		<b>RD-24</b>		<b>RD-27</b>		<b>RD-27</b>		<b>RD-27</b>	
Sample Port:	---		---		---		---		---	
Sample Type:	Primary		Primary		Primary		Split		Primary	
Geological Unit:	Chatsworth		Chatsworth		Chatsworth		Chatsworth		Chatsworth	
Collection Date:	05/24/2007		08/08/2007		02/14/2007		02/14/2007		08/09/2007	
Radionuclides (pCi/L)	Result	MDA	Result	MDA	Result	MDA	Result	MDA	Result	MDA
<b><i>Gamma-Emitting Radionuclides</i></b>										
Cesium-134	ND	1.88	ND	1.01	ND	0.746	ND	1.42	ND	0.989
Cesium-137	ND	1.2	ND	1.27	ND	0.57	ND	1.28	ND	0.754
Cobalt-57	ND	0.822	ND	0.605	ND	0.324	ND	3.97	ND	0.399
Cobalt-60	ND	1.22	ND	0.789	ND	0.628	ND	1.33	ND	0.882
Europium-152	ND	3.39	ND	2.34	ND	1.55	ND	2.86	ND	2.18
Europium-154	ND	3.57	ND	2.21	ND	1.48	ND	4.05	ND	2.14
Manganese-54	ND	1.12	ND	0.778	ND	0.524	ND	1.28	ND	0.745
Potassium-40	ND	30.6	ND	19.7	ND	7.7	ND	33	ND	10.0
Sodium-22	ND	1.22	ND	0.755	ND	0.503	ND	1.46	ND	0.725
<b><i>Isotopic Uranium and Thorium</i></b>										
Thorium-228	---	---	---	---	---	---	---	---	---	---
Thorium-230	---	---	---	---	---	---	---	---	---	---
Thorium-232	---	---	---	---	---	---	---	---	---	---
Uranium-233 & 234	---	---	---	---	---	---	---	---	---	---
Uranium-235	---	---	---	---	---	---	---	---	---	---
Uranium-238	---	---	---	---	---	---	---	---	---	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T10-F.xls

**TABLE X**  
SUMMARY OF ANALYSES FOR GAMMA-EMITTING RADIONUCLIDES, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-29</b>		<b>RD-29</b>		<b>RD-30</b>		<b>RD-30</b>		<b>RD-33A</b>	
Sample Port:	---		---		---		---		Z2	
Sample Type:	Primary		Primary		Primary		Primary		Primary	
Geological Unit:	Chatsworth		Chatsworth		Chatsworth		Chatsworth		Chatsworth	
Collection Date:	02/07/2007		08/08/2007		05/24/2007		08/21/2007		02/08/2007	
Radionuclides (pCi/L)	Result	MDA	Result	MDA	Result	MDA	Result	MDA	Result	MDA
<b><i>Gamma-Emitting Radionuclides</i></b>										
Cesium-134	ND	1.28	---	---	ND	1.24	ND	0.678	ND	1.01
Cesium-137	ND	1.14	---	---	ND	1.05	ND	0.555	ND	0.882
Cobalt-57	ND	0.767	---	---	ND	0.761	ND	0.330	ND	0.614
Cobalt-60	ND	1.09	---	---	ND	1.06	ND	0.632	ND	0.971
Europium-152	ND	2.92	---	---	ND	2.99	ND	1.74	ND	2.26
Europium-154	ND	3.10	---	---	ND	3.36	ND	1.97	ND	2.4
Manganese-54	ND	1	---	---	ND	1.04	ND	0.602	ND	0.841
Potassium-40	ND	22.4	---	---	ND	25.6	ND	7.76	ND	16.3
Sodium-22	ND	1.06	---	---	ND	1.11	ND	0.669	ND	0.848
<b><i>Isotopic Uranium and Thorium</i></b>										
Thorium-228	---	---	---	---	---	---	---	---	---	---
Thorium-230	---	---	---	---	---	---	---	---	---	---
Thorium-232	---	---	---	---	---	---	---	---	---	---
Uranium-233 & 234	8.96 +/- 1	0.204	10.8 +/- 0.69	0.058	---	---	---	---	---	---
Uranium-235	0.48 J +/- 0.17	0.131	0.450 J +/- 0.074	0.022	---	---	---	---	---	---
Uranium-238	8.94 +/- 1	0.174	9.82 +/- 0.63	0.054	---	---	---	---	---	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T10-F.xls

February 2008

**TABLE X**  
SUMMARY OF ANALYSES FOR GAMMA-EMITTING RADIONUCLIDES, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-33B</b>		<b>RD-33C</b>		<b>RD-34A</b>		<b>RD-34A</b>		<b>RD-34B</b>	
Sample Port:	---		---		---		---		---	
Sample Type:	Primary		Primary		Primary		Primary		Primary	
Geological Unit:	Chatsworth		Chatsworth		Chatsworth		Chatsworth		Chatsworth	
Collection Date:	02/07/2007		02/06/2007		02/28/2007		08/15/2007		08/14/2007	
Radionuclides (pCi/L)	Result	MDA	Result	MDA	Result	MDA	Result	MDA	Result	MDA
<b><i>Gamma-Emitting Radionuclides</i></b>										
Cesium-134	ND	0.68	ND	0.724	ND	1.36	---	---	ND	0.708
Cesium-137	ND	0.576	ND	0.581	ND	1.19	---	---	ND	0.600
Cobalt-57	ND	0.332	ND	0.429	ND	0.866	---	---	ND	0.338
Cobalt-60	ND	0.649	ND	0.634	ND	1.11	---	---	ND	0.623
Europium-152	ND	1.52	ND	1.54	ND	3.01	---	---	ND	1.75
Europium-154	ND	1.69	ND	1.63	ND	3.1	---	---	ND	1.64
Manganese-54	ND	0.556	ND	0.54	ND	1.05	---	---	ND	0.618
Potassium-40	ND	11.6	ND	7.89	ND	22.4	---	---	ND	6.83
Sodium-22	ND	0.575	ND	0.556	ND	1.06	---	---	ND	0.558
<b><i>Isotopic Uranium and Thorium</i></b>										
Thorium-228	---	---	---	---	0.007 U +/- 0.043	0.073	---	---	---	---
Thorium-230	---	---	---	---	0.002 U +/- 0.047	0.098	---	---	---	---
Thorium-232	---	---	---	---	-0.014 U +/- 0.01	0.034	---	---	---	---
Uranium-233 & 234	---	---	---	---	9.94 +/- 0.84	0.114	9.89 +/- 0.64	0.064	0.592 J +/- 0.089	0.028
Uranium-235	---	---	---	---	0.547 J +/- 0.14	0.065	0.534 J +/- 0.088	0.024	0.029 J +/- 0.022	0.027
Uranium-238	---	---	---	---	10.1 +/- 0.85	0.102	10.7 +/- 0.69	0.058	0.510 J +/- 0.082	0.028

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T10-F.xls

February 2008

**TABLE X**  
SUMMARY OF ANALYSES FOR GAMMA-EMITTING RADIONUCLIDES, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-34C</b>		<b>RD-54A</b>		<b>RD-54A</b>		<b>RD-54B</b>		<b>RD-54C</b>	
Sample Port:	---		Z2		Z2		---		---	
Sample Type:	Primary		Primary		Primary		Primary		Primary	
Geological Unit:	Chatsworth		Chatsworth		Chatsworth		Chatsworth		Chatsworth	
Collection Date:	02/07/2007		02/07/2007		08/10/2007		02/12/2007		02/12/2007	
Radionuclides (pCi/L)	Result	MDA	Result	MDA	Result	MDA	Result	MDA	Result	MDA
<b><i>Gamma-Emitting Radionuclides</i></b>										
Cesium-134	ND	1	ND	2.08	---	---	ND	1.42	ND	1.03
Cesium-137	ND	0.946	ND	1	---	---	ND	1.25	ND	0.842
Cobalt-57	ND	0.621	ND	0.644	---	---	ND	0.981	ND	0.6
Cobalt-60	ND	1.03	ND	1.06	---	---	ND	1.18	ND	0.982
Europium-152	ND	2.21	ND	2.88	---	---	ND	3.53	ND	2.26
Europium-154	ND	2.79	ND	3.05	---	---	ND	3.42	ND	2.53
Manganese-54	ND	0.866	ND	0.959	---	---	ND	1.16	ND	0.894
Potassium-40	ND	20.5	ND	28.3	---	---	ND	28.2	ND	22.7
Sodium-22	ND	0.983	ND	1.04	---	---	ND	1.16	ND	0.915
<b><i>Isotopic Uranium and Thorium</i></b>										
Thorium-228	---	---	0.038 U +/- 0.038	0.058	---	---	---	---	---	---
Thorium-230	---	---	-0.034 U +/- 0.053	0.103	---	---	---	---	---	---
Thorium-232	---	---	0 U +/- 0.015	0.029	---	---	---	---	---	---
Uranium-233 & 234	---	---	10.5 +/- 0.070	0.061	8.00 +/- 0.68	0.084	---	---	---	---
Uranium-235	---	---	0.386 J +/- 0.078	0.029	0.312 J +/- 0.093	0.058	---	---	---	---
Uranium-238	---	---	8.59 +/- 0.59	0.057	6.90 +/- 0.61	0.077	---	---	---	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T10-F.xls

February 2008



**TABLE X**  
SUMMARY OF ANALYSES FOR GAMMA-EMITTING RADIONUCLIDES, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-57</b>		<b>RD-59A</b>		<b>RD-59B</b>		<b>RD-59B</b>		<b>RD-59C</b>		<b>RD-63</b>	
Sample Port:	Z7		---		---		---		---		---	
Sample Type:	Primary		Primary		Primary		Split		Primary		Primary	
Geological Unit:	Chatsworth		Chatsworth		Chatsworth		Chatsworth		Chatsworth		Chatsworth	
Collection Date:	02/08/2007		02/28/2007		02/28/2007		02/28/2007		02/28/2007		05/24/2007	
Radionuclides (pCi/L)	Result	MDA	Result	MDA	Result	MDA	Result	MDA	Result	MDA	Result	MDA
<b><i>Gamma-Emitting Radionuclides</i></b>												
Cesium-134	ND	1.35	ND	1.29	ND	1.06	ND	1.36	ND	1.35	ND	1.09
Cesium-137	ND	1.04	ND	1.03	ND	0.947	ND	1.24	ND	1.03	ND	0.93
Cobalt-57	ND	0.706	ND	0.715	ND	0.615	ND	5.68	ND	0.666	ND	0.636
Cobalt-60	ND	1.07	ND	1.09	ND	0.976	ND	1.15	ND	1.06	ND	0.898
Europium-152	ND	2.93	ND	2.91	ND	2.53	ND	3.08	ND	2.79	ND	2.49
Europium-154	ND	3.3	ND	3.14	ND	2.73	ND	3.61	ND	3.21	ND	3
Manganese-54	ND	1.01	ND	0.978	ND	0.97	ND	1.27	ND	1.01	ND	0.895
Potassium-40	ND	25.2	ND	21.6	ND	16.6	ND	31.6	ND	23.8	ND	17.3
Sodium-22	ND	1.12	ND	1.07	ND	0.93	ND	1.31	ND	1.09	ND	1.02
<b><i>Isotopic Uranium and Thorium</i></b>												
Thorium-228	---	---	---	---	---	---	---	---	---	---	---	---
Thorium-230	---	---	---	---	---	---	---	---	---	---	---	---
Thorium-232	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-233 & 234	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	---	---	---	---	---	---	---	---	---	---	---	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T10-F.xls

February 2008

**TABLE X**  
SUMMARY OF ANALYSES FOR GAMMA-EMITTING RADIONUCLIDES, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-63</b>		<b>RD-64</b>		<b>RD-64</b>		<b>RS-11</b>		<b>RS-28</b>	
Sample Port:	---		Z6		Z2		---		---	
Sample Type:	Split		Primary		Primary		Primary		Primary	
Geological Unit:	Chatsworth		Chatsworth		Chatsworth		Shallow		Shallow	
Collection Date:	05/24/2007		02/08/2007		08/10/2007		02/28/2007		02/13/2007	
Radionuclides (pCi/L)	Result	Result	Result	MDA	Result	MDA	Result	MDA	Result	MDA
<b><i>Gamma-Emitting Radionuclides</i></b>										
Cesium-134	ND	1.46	ND	1.26	---	---	ND	1.05	ND	1.38
Cesium-137	ND	1.29	ND	0.984	---	---	ND	0.949	ND	1.06
Cobalt-57	ND	6.08	ND	0.59	---	---	ND	0.627	ND	0.692
Cobalt-60	ND	1.36	ND	1	---	---	ND	0.936	ND	1.05
Europium-152	ND	3.51	ND	2.67	---	---	ND	2.57	ND	2.95
Europium-154	ND	4.17	ND	3.04	---	---	ND	2.88	ND	3.32
Manganese-54	ND	1.41	ND	0.969	---	---	ND	0.857	ND	1.02
Potassium-40	ND	38.8	ND	21.5	---	---	ND	17.6	ND	24.9
Sodium-22	ND	1.49	ND	1.04	---	---	ND	0.981	ND	1.13
<b><i>Isotopic Uranium and Thorium</i></b>										
Thorium-228	---	---	---	---	---	---	---	---	---	---
Thorium-230	---	---	---	---	---	---	---	---	---	---
Thorium-232	---	---	---	---	---	---	---	---	---	---
Uranium-233 & 234	---	---	3.45 +/- 0.3	0.047	3.11 +/- 0.26	0.033	16.4 +/- 0.99	0.071	---	---
Uranium-235	---	---	0.154 J +/- 0.049	0.03	0.075 J +/- 0.036	0.027	0.797 J +/- 0.11	0.022	---	---
Uranium-238	---	---	2.62 +/- 0.24	0.044	2.45 +/- 0.22	0.028	14.8 +/- 0.91	0.065	---	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T10-F.xls

February 2008

**TABLE X**  
SUMMARY OF ANALYSES FOR GAMMA-EMITTING RADIONUCLIDES, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RS-54</b>	
Sample Port:	---	
Sample Type:	Primary	
Geological Unit:	Shallow	
Collection Date:	02/15/2007	
Radionuclides (pCi/L)	Result	MDA
<b><i>Gamma-Emitting Radionuclides</i></b>		
Cesium-134	ND	1.22
Cesium-137	ND	1.04
Cobalt-57	ND	0.67
Cobalt-60	ND	1.03
Europium-152	ND	2.89
Europium-154	ND	3.14
Manganese-54	ND	0.997
Potassium-40	ND	26.3
Sodium-22	ND	1.08
<b><i>Isotopic Uranium and Thorium</i></b>		
Thorium-228	0.016 U +/- 0.037	0.063
Thorium-230	-0.007 U +/- 0.047	0.096
Thorium-232	-0.005 U +/- 0.014	0.031
Uranium-233 & 234	12.7 +/- 1.1	0.134
Uranium-235	0.641 J +/- 0.16	0.077
Uranium-238	11.6 +/- 1	0.119

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T10-F.xls

February 2008

**TABLE X**  
**NOTES AND ABBREVIATIONS**

---

1. Primary = Primary sample.
2. Split = Split sample.
3. pCi/L = PicoCuries per liter.
4. --- = Analysis not performed.
5. J = Result is less than the contract-required MDA and greater than or equal to the MDA.
6. U = Not detected above the MDA; numerical value represents the activity for that radionuclide.
7. Z = FLUTe sample port number.
8. Chatsworth = Chatsworth Formation wells.
9. Shallow = Shallow wells.
10. Detected concentrations are presented as the activity plus or minus the error.
11. Non-detectable results are presented as "ND" with the minimum detectable activity (MDA).
12. Primary sample analyses were performed by Eberline Services of Richmond, California.  
Split sample analyses were performed by Severn Trent Laboratories of Richland, Washington.
13. Samples are filtered and acidified in the field.
14. Analytical results that are less than the procedure background value are shown as negative values.
15. EPA methods 901.1, 907.0, and 908.0 were used to analyze gamma-emitting radionuclides, isotopic thorium, and isotopic uranium, respectively.
16. 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 XI**  
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY CALIFORNIA

<b>Inorganics</b>						
<b>Well Identifier:</b>		<b>HAR-07</b>	<b>HAR-07</b>	<b>HAR-14</b>	<b>HAR-15</b>	
Geological Unit:		Chatsworth	Chatsworth	Shallow	Shallow	
Sample Type:		Primary	Primary	Primary	Primary	
Sample Preparation:		Dissolved	Total	Dissolved	Dissolved	
Lab Name:		TestAmerica	TestAmerica	TestAmerica	TestAmerica	
Collection Date:		05/08/2007	05/08/2007	05/08/2007	05/08/2007	
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>				
Antimony	mg/L	0.006	0.00005 U	0.00005 U	0.00005 U	0.00018 J
Arsenic	mg/L	0.05	0.0016	0.0007 U	0.0007 U	0.0024
Barium	mg/L	1	0.023	0.023	0.034	0.0093
Beryllium	mg/L	0.004	0.000075 U	0.000075 U	0.000075 U	0.000075 U
Cadmium	mg/L	0.005	0.00005 U	0.00005 U	0.000058 J	0.000076 J
Chromium	mg/L	0.05	0.00074 J	0.00094 J	0.0007 U	0.0007 U
Cobalt	mg/L	NA	0.00022 J	0.00062 J	0.00024 J	0.00015 U
Copper	mg/L	1 SMCL	0.0064		0.025	0.0019 J
Cyanide	mg/L	0.15	---	0.017 UJ	0.017 UJ	0.017 UJ
Lead	mg/L	0.015 RAL	0.0021	0.0023	0.0001 U	0.00014 J
Mercury	mg/L	0.002	0.000073 U	0.000073 U	0.000073 U	0.000073 U
Nickel	mg/L	0.1	0.002	0.0029	0.0009 U	0.0022
Selenium	mg/L	0.05	0.0009 J	0.0004 J	0.0016 J	0.00044 J
Silver	mg/L	0.1 SMCL	0.0001 U	0.0001 U	0.0001 U	0.0001 U
Sulfide	mg/L	NA	---	0.024 J	0.026 J	0.02 U
Thallium	mg/L	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Tin	mg/L	NA	0.01 U	0.01 U	0.01 U	0.01 U
Vanadium	mg/L	0.05	0.0007 U	0.0007 U	0.001 J	0.0041
Zinc	mg/L	5 SMCL	0.083	0.1	0.004 J	0.004 J

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T11-F.xls

February 2008

**TABLE XI**  
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY CALIFORNIA

<b>Inorganics</b>						
<b>Well Identifier:</b>		<b>HAR-16</b>	<b>HAR-16</b>	<b>HAR-17</b>	<b>RD-48B</b>	
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	
Sample Type:		Primary	Primary	Primary	Primary	
Sample Preparation:		Dissolved	Total	Dissolved	Dissolved	
Lab Name:		TestAmerica	TestAmerica	TestAmerica	TestAmerica	
Collection Date:		05/07/2007	05/07/2007	05/08/2007	08/29/2007	
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>				
Antimony	mg/L	0.006	0.00005 U	0.00005 U	0.00005 U	0.0002 U
Arsenic	mg/L	0.05	0.0007 U	0.0007 U	0.0007 U	0.0007 U
Barium	mg/L	1	0.023	0.021	0.07	0.018
Beryllium	mg/L	0.004	0.000075 U	0.000075 U	0.000075 U	0.000075 U
Cadmium	mg/L	0.005	0.00005 U	0.00005 U	0.00005 U	0.00011 U
Chromium	mg/L	0.05	0.0007 U	0.0019 J	0.0007 U	0.0007 U
Cobalt	mg/L	NA	0.00015 J	0.00016 J	0.00066 J	0.00083 J
Copper	mg/L	1 SMCL	0.0017 J	0.017	0.0068	0.00075 U
Cyanide	mg/L	0.15	---	0.017 UJ	0.017 UJ	0.017 U
Lead	mg/L	0.015 RAL	0.00087 J	0.0013	0.00063 J	0.00029 J
Mercury	mg/L	0.002	0.000073 U	0.000073 U	0.000073 U	0.000073 U
Nickel	mg/L	0.1	0.0016 J	0.0023	0.0026	0.0009 U
Selenium	mg/L	0.05	0.0024	0.0017 J	0.0014 J	0.00034 J
Silver	mg/L	0.1 SMCL	0.0001 U	0.0001 U	0.0001 U	0.0002 U
Sulfide	mg/L	NA	---	0.03 J	0.026 J	0.032 U
Thallium	mg/L	0.002	0.00015 U	0.00015 U	0.00015 U	0.00015 U
Tin	mg/L	NA	0.01 U	0.01 U	0.01 U	0.012 U
Vanadium	mg/L	0.05	0.00095 J	0.00095 J	0.0007 U	0.0007 U
Zinc	mg/L	5 SMCL	2.1	2.3	0.47	0.3

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T11-F.xls

February 2008

**TABLE XI**  
**SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2007**  
**BOEING SANTA SUSANA FIELD LABORATORY**  
**VENTURA COUNTY CALIFORNIA**

<b>Pesticides</b>							
<b>Well Identifier:</b>			<b>HAR-07</b>	<b>HAR-07</b>	<b>HAR-14</b>	<b>HAR-14</b>	<b>HAR-14</b>
Geological Unit:			Chatsworth	Chatsworth	Shallow	Shallow	Shallow
Sample Type:			Primary	Split	Primary	Split	Primary
Lab Name:			TestAmerica	STL-Knox	TestAmerica	STL-Knox	TA-Knox
Collection Date:			05/08/2007	05/08/2007	05/08/2007	05/08/2007	08/28/2007
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>					
Aldrin	ug/L	0.002 NL	0.0014 U	---	0.0014 U	---	---
alpha-BHC	ug/L	0.015 NL	0.0024 U	---	0.0024 U	---	---
beta-BHC	ug/L	0.025 NL	0.0038 U	---	0.0038 U	---	---
delta-BHC	ug/L	NA	0.019 U	---	0.019 U	---	---
Gamma-BHC (Lindane)	ug/L	0.2	0.029 U	---	0.029 U	---	---
Chlordane	ug/L	0.1	0.029 U	---	0.029 U	---	---
Chlorobenzilate	ug/L	NA	7.1 U	---	7.1 U	---	---
4,4'-DDD	ug/L	NA	0.029 U	---	0.029 U	---	---
4,4'-DDE	ug/L	NA	0.029 U	---	0.029 U	---	---
4,4'-DDT	ug/L	NA	0.029 U	---	0.029 U	---	---
Diallate	ug/L	NA	1.4 U	---	1.4 U	---	---
Dieldrin	ug/L	0.002 NL	0.0019 U	---	0.0019 U	---	---
Dinoseb	ug/L	7	0.277 U	---	0.277 U	---	---
Endosulfan-I	ug/L	NA	0.029 U	---	0.029 U	---	---
Endosulfan-II	ug/L	NA	0.038 U	---	0.038 U	---	---
Endosulfan sulfate	ug/L	NA	0.048 U	---	0.048 U	---	---
Endrin	ug/L	2	0.029 U	---	0.029 U	---	---
Endrin aldehyde	ug/L	NA	0.048 U	---	0.048 U	---	---
Heptachlor	ug/L	0.01	0.0029 U	---	0.0029 U	---	---
Heptachlor epoxide	ug/L	0.01	0.0024 U	---	0.0024 U	---	---
Isodrin	ug/L	NA	0.94 U	---	0.94 U	---	---
Kepone	ug/L	NA	20 U	---	20 U	---	---
Methoxychlor	ug/L	30	0.038 U	---	0.038 U	---	---
Aroclor 1016	ug/L	0.5(total)	0.33 U	---	0.33 U	---	---
Aroclor 1221	ug/L	0.5(total)	0.095 U	---	0.095 U	---	---
Aroclor 1232	ug/L	0.5(total)	0.24 U	---	0.24 U	---	---
Aroclor 1242	ug/L	0.5(total)	0.24 U	---	0.24 U	---	---
Aroclor 1248	ug/L	0.5(total)	0.24 U	---	0.24 U	---	---
Aroclor 1254	ug/L	0.5(total)	0.24 U	---	0.24 U	---	---
Aroclor 1260	ug/L	0.5(total)	0.29 U	---	0.29 U	---	---
Toxaphene	ug/L	3	1.4 U	---	1.4 U	---	---
2,4-D	ug/L	70	0.229 U	---	0.229 U	---	---
2,4,5-T	ug/L	NA	0.474 U	---	0.474 U	---	---
2,4,5-TP (Silvex)	ug/L	50	0.233 U	---	0.233 U	---	---
2,3,7,8-TCDD	pg/L	30	1.36 U	10 U	0.886 U	9.5 U	1 U
2,3,7,8-TCDD TEQ (2005)	pg/L	30	3.308 U	6.2 U	2.51 U	0.044 J,W	1.69 U

See last page of table for notes and abbreviations.

Haley &amp; Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T11-F.xls

February 2008

**TABLE XI**  
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY CALIFORNIA

<b>Pesticides</b>							
<b>Well Identifier:</b>			<b>HAR-14</b>	<b>HAR-14</b>	<b>HAR-14</b>	<b>HAR-15</b>	<b>HAR-15</b>
Geological Unit:			Shallow	Shallow	Shallow	Shallow	Shallow
Sample Type:			Dup	Split	Primary	Primary	Split
Lab Name:			TA-Knox	TestAmerica	TA-Knox	TestAmerica	STL-Knox
Collection Date:			08/28/2007	08/28/2007	10/19/2007	05/08/2007	05/08/2007
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>					
Aldrin	ug/L	0.002 NL	---	---	---	0.0014 U	---
alpha-BHC	ug/L	0.015 NL	---	---	---	0.0024 U	---
beta-BHC	ug/L	0.025 NL	---	---	---	0.0038 U	---
delta-BHC	ug/L	NA	---	---	---	0.019 U	---
Gamma-BHC (Lindane)	ug/L	0.2	---	---	---	0.029 U	---
Chlordane	ug/L	0.1	---	---	---	0.029 U	---
Chlorobenzilate	ug/L	NA	---	---	---	7.1 U	---
4,4'-DDD	ug/L	NA	---	---	---	0.029 U	---
4,4'-DDE	ug/L	NA	---	---	---	0.029 U	---
4,4'-DDT	ug/L	NA	---	---	---	0.029 U	---
Diallate	ug/L	NA	---	---	---	1.4 U	---
Dieldrin	ug/L	0.002 NL	---	---	---	0.0019 U	---
Dinoseb	ug/L	7	---	---	---	0.277 U	---
Endosulfan-I	ug/L	NA	---	---	---	0.029 U	---
Endosulfan-II	ug/L	NA	---	---	---	0.038 U	---
Endosulfan sulfate	ug/L	NA	---	---	---	0.048 U	---
Endrin	ug/L	2	---	---	---	0.029 U	---
Endrin aldehyde	ug/L	NA	---	---	---	0.048 U	---
Heptachlor	ug/L	0.01	---	---	---	0.0029 U	---
Heptachlor epoxide	ug/L	0.01	---	---	---	0.0024 U	---
Isodrin	ug/L	NA	---	---	---	0.94 U	---
Kepone	ug/L	NA	---	---	---	20 U	---
Methoxychlor	ug/L	30	---	---	---	0.038 U	---
Aroclor 1016	ug/L	0.5(total)	---	---	---	0.33 U	---
Aroclor 1221	ug/L	0.5(total)	---	---	---	0.095 U	---
Aroclor 1232	ug/L	0.5(total)	---	---	---	0.24 U	---
Aroclor 1242	ug/L	0.5(total)	---	---	---	0.24 U	---
Aroclor 1248	ug/L	0.5(total)	---	---	---	0.24 U	---
Aroclor 1254	ug/L	0.5(total)	---	---	---	0.24 U	---
Aroclor 1260	ug/L	0.5(total)	---	---	---	0.29 U	---
Toxaphene	ug/L	3	---	---	---	1.4 U	---
2,4-D	ug/L	70	---	---	---	0.229 U	---
2,4,5-T	ug/L	NA	---	---	---	0.474 U	---
2,4,5-TP (Silvex)	ug/L	50	---	---	---	0.233 U	---
2,3,7,8-TCDD	pg/L	30	1.8 U	1.42 U	4.2 U	1.11 U	9.5 U
2,3,7,8-TCDD TEQ (2005)	pg/L	30	0.0257 J,W	0.02 J,W	7.92 U	0.0031 J,W	0.012 J,W

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.



**TABLE XI**  
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY CALIFORNIA

<b>Pesticides</b>						
<b>Well Identifier:</b>		<b>HAR-15</b>	<b>HAR-15</b>	<b>HAR-15</b>	<b>HAR-15</b>	<b>HAR-16</b>
Geological Unit:		Shallow	Shallow	Shallow	Shallow	Chatsworth
Sample Type:		Primary	Dup	Split	Primary	Primary
Lab Name:		TA-Knox	TA-Knox	TestAmerica	TA-Knox	TestAmerica
Collection Date:		08/28/2007	08/28/2007	08/28/2007	10/19/2007	05/07/2007
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>				
Aldrin	ug/L	0.002 NL	---	---	---	0.0014 U
alpha-BHC	ug/L	0.015 NL	---	---	---	0.0024 U
beta-BHC	ug/L	0.025 NL	---	---	---	0.0038 U
delta-BHC	ug/L	NA	---	---	---	0.019 U
Gamma-BHC (Lindane)	ug/L	0.2	---	---	---	0.029 U
Chlordane	ug/L	0.1	---	---	---	0.029 U
Chlorobenzilate	ug/L	NA	---	---	---	7.1 U
4,4'-DDD	ug/L	NA	---	---	---	0.029 U
4,4'-DDE	ug/L	NA	---	---	---	0.029 U
4,4'-DDT	ug/L	NA	---	---	---	0.029 U
Diallate	ug/L	NA	---	---	---	1.4 U
Dieldrin	ug/L	0.002 NL	---	---	---	0.0019 U
Dinoseb	ug/L	7	---	---	---	0.277 U
Endosulfan-I	ug/L	NA	---	---	---	0.029 U
Endosulfan-II	ug/L	NA	---	---	---	0.038 U
Endosulfan sulfate	ug/L	NA	---	---	---	0.048 U
Endrin	ug/L	2	---	---	---	0.029 U
Endrin aldehyde	ug/L	NA	---	---	---	0.048 U
Heptachlor	ug/L	0.01	---	---	---	0.0029 U
Heptachlor epoxide	ug/L	0.01	---	---	---	0.0024 U
Isodrin	ug/L	NA	---	---	---	0.94 U
Kepone	ug/L	NA	---	---	---	20 U
Methoxychlor	ug/L	30	---	---	---	0.038 U
Aroclor 1016	ug/L	0.5(total)	---	---	---	0.33 U
Aroclor 1221	ug/L	0.5(total)	---	---	---	0.095 U
Aroclor 1232	ug/L	0.5(total)	---	---	---	0.24 U
Aroclor 1242	ug/L	0.5(total)	---	---	---	0.24 U
Aroclor 1248	ug/L	0.5(total)	---	---	---	0.24 U
Aroclor 1254	ug/L	0.5(total)	---	---	---	0.24 U
Aroclor 1260	ug/L	0.5(total)	---	---	---	0.29 U
Toxaphene	ug/L	3	---	---	---	1.4 U
2,4-D	ug/L	70	---	---	---	0.229 U
2,4,5-T	ug/L	NA	---	---	---	0.474 U
2,4,5-TP (Silvex)	ug/L	50	---	---	---	0.233 U
2,3,7,8-TCDD	pg/L	30	1.6 U	1 U	0.865 U	4.4 U
2,3,7,8-TCDD TEQ (2005)	pg/L	30	0.0044 J,W	0.004 J,W	3.06 U	0.013 J,W

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T11-F.xls

February 2008

**TABLE XI**  
**SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2007**  
**BOEING SANTA SUSANA FIELD LABORATORY**  
**VENTURA COUNTY CALIFORNIA**

<b>Pesticides</b>						
<b>Well Identifier:</b>		<b>HAR-16</b>	<b>HAR-17</b>	<b>HAR-17</b>	<b>RD-48B</b>	
Geological Unit:		Chatsworth	Chatsworth	Chatsworth	Chatsworth	
Sample Type:		Split	Primary	Split	Primary	
Lab Name:		STL-Knox	TestAmerica	STL-Knox	TestAmerica	
Collection Date:		05/07/2007	05/08/2007	05/08/2007	08/29/2007	
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>				
Aldrin	ug/L	0.002 NL	---	0.0014 U	---	0.0014 U
alpha-BHC	ug/L	0.015 NL	---	0.0024 U	---	0.0024 U
beta-BHC	ug/L	0.025 NL	---	0.0038 U	---	0.0038 U
delta-BHC	ug/L	NA	---	0.019 U	---	0.019 U
Gamma-BHC (Lindane)	ug/L	0.2	---	0.028 U	---	0.028 U
Chlordane	ug/L	0.1	---	0.028 U	---	0.028 U
Chlorobenzilate	ug/L	NA	---	7.1 U	---	7.1 U
4,4'-DDD	ug/L	NA	---	0.028 U	---	0.028 U
4,4'-DDE	ug/L	NA	---	0.028 U	---	0.028 U
4,4'-DDT	ug/L	NA	---	0.028 U	---	0.028 U
Diallate	ug/L	NA	---	1.4 U	---	1.4 U
Dieldrin	ug/L	0.002 NL	---	0.0019 U	---	0.0019 U
Dinoseb	ug/L	7	---	0.277 U	---	3.39 U
Endosulfan-I	ug/L	NA	---	0.028 U	---	0.028 U
Endosulfan-II	ug/L	NA	---	0.038 U	---	0.038 U
Endosulfan sulfate	ug/L	NA	---	0.047 U	---	0.047 U
Endrin	ug/L	2	---	0.028 U	---	0.028 U
Endrin aldehyde	ug/L	NA	---	0.047 U	---	0.047 U
Heptachlor	ug/L	0.01	---	0.0028 U	---	0.0028 U
Heptachlor epoxide	ug/L	0.01	---	0.0024 U	---	0.0024 U
Isodrin	ug/L	NA	---	0.94 U	---	0.94 U
Kepone	ug/L	NA	---	20 U	---	20 U
Methoxychlor	ug/L	30	---	0.038 U	---	0.038 U
Aroclor 1016	ug/L	0.5(total)	---	0.33 U	---	0.42 U
Aroclor 1221	ug/L	0.5(total)	---	0.094 U	---	0.094 U
Aroclor 1232	ug/L	0.5(total)	---	0.24 U	---	0.24 U
Aroclor 1242	ug/L	0.5(total)	---	0.24 U	---	0.24 U
Aroclor 1248	ug/L	0.5(total)	---	0.24 U	---	0.24 U
Aroclor 1254	ug/L	0.5(total)	---	0.24 U	---	0.24 U
Aroclor 1260	ug/L	0.5(total)	---	0.28 U	---	0.28 U
Toxaphene	ug/L	3	---	1.4 U	---	1.4 U
2,4-D	ug/L	70	---	0.229 U	---	2.19 U
2,4,5-T	ug/L	NA	---	0.474 U	---	2.96 U
2,4,5-TP (Silvex)	ug/L	50	---	0.233 U	---	2.11 U
2,3,7,8-TCDD	pg/L	30	9.5 U	0.829 U	9.5 U	1.3 U
2,3,7,8-TCDD TEQ (2005)	pg/L	30	5.157 U	2.8 U	7.5 U	2.1 UJ

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T11-F.xls

February 2008

**TABLE XI**  
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY CALIFORNIA

<b>Semi-Volatile Organic Compounds</b>						
<b>Well Identifier:</b>			<b>HAR-07</b>	<b>HAR-07</b>	<b>HAR-07</b>	<b>HAR-14</b>
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Shallow
Sample Type:			Primary	Primary	Dup	Primary
Lab Name:			TestAmerica	Pacific	Pacific	TestAmerica
Collection Date:			05/08/2007	05/08/2007	05/08/2007	05/08/2007
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>				
1,2,4,5-Tetrachlorobenzene	ug/L	NA	0.44 U	---	---	0.44 U
1,2,4-Trichlorobenzene	ug/L	5	0.26 U	---	---	0.26 U
1,3-Dinitrobenzene	ug/L	NA	1.9 U	---	---	1.9 U
1,3,5-Trinitrobenzene	ug/L	NA	1.5 U	---	---	1.5 U
1,4-Phenylenediamine	ug/L	NA	5.3 U	---	---	5.3 U
1-Naphthylamine	ug/L	NA	3.7 U	---	---	3.7 U
1,4-Naphthoquinone	ug/L	NA	1.1 U	---	---	1.1 U
2,3,4,6-Tetrachlorophenol	ug/L	NA	3.1 U	---	---	3.1 U
2,4,5-Trichlorophenol	ug/L	NA	0.29 U	---	---	0.29 U
2,4,6-Trichlorophenol	ug/L	NA	0.88 U	---	---	0.88 U
2,4-Dichlorophenol	ug/L	NA	0.77 U	---	---	0.77 U
2,4-Dimethylphenol	ug/L	100 NL	0.8 U	---	---	0.8 U
2,4-Dinitrophenol	ug/L	NA	1.4 U	---	---	1.4 U
2,4-Dinitrotoluene	ug/L	NA	0.4 U	---	---	0.4 U
2,6-Dichlorophenol	ug/L	NA	1 U	---	---	1 U
2,6-Dinitrotoluene	ug/L	NA	0.24 U	---	---	0.24 U
2-Acetylaminofluorene	ug/L	NA	6.5 U	---	---	6.5 U
2-Chloronaphthalene	ug/L	NA	0.26 U	---	---	0.26 U
2-Chlorophenol	ug/L	NA	0.71 U	---	---	0.71 U
2-Methylnaphthalene	ug/L	NA	0.3 U	---	---	0.3 U
2-Methylphenol	ug/L	NA	0.48 U	---	---	0.48 U
2-Nitroaniline	ug/L	NA	0.23 U	---	---	0.23 U
2-Nitrophenol	ug/L	NA	0.84 U	---	---	0.84 U
3 & 4-Methylphenol	ug/L	NA	0.3 U	---	---	0.3 U
3,3'-Dichlorobenzidine	ug/L	NA	1.5 U	---	---	1.5 U
3,3'-Dimethylbenzidine	ug/L	NA	1.5 U	---	---	1.5 U
3-Methylcholanthrene	ug/L	NA	1.1 U	---	---	1.1 U
3-Nitroaniline	ug/L	NA	0.34 U	---	---	0.34 U
4,6-Dinitro-2-Methylphenol	ug/L	NA	0.33 U	---	---	0.33 U
4-Aminobiphenyl	ug/L	NA	4.9 U	---	---	4.9 U
4-Bromophenyl phenyl ether	ug/L	NA	0.23 U	---	---	0.23 U
4-Chloro-3-methylphenol	ug/L	NA	0.4 U	---	---	0.4 U
4-Chloroaniline	ug/L	NA	1.1 U	---	---	1.1 U
4-Chlorophenylphenyl ether	ug/L	NA	0.24 U	---	---	0.24 U
4-Nitroaniline	ug/L	NA	0.55 U	---	---	0.55 U
4-Nitrophenol	ug/L	NA	1 U	---	---	1 U
4-Nitroquinoline-1-oxide	ug/L	NA	2.2 U	---	---	2.2 U
5-Nitro-o-toluidine	ug/L	NA	4.4 U	---	---	4.4 U
7,12-Dimethylbenz(a)anthracene	ug/L	NA	3.6 U	---	---	3.6 U
a,a-Dimethylphenethylamine	ug/L	NA	2 U	---	---	2 U
Acenaphthene	ug/L	NA	0.31 U	---	---	0.31 U
Acenaphthylene	ug/L	NA	0.26 U	---	---	0.26 U
Acetophenone	ug/L	NA	0.6 U	---	---	0.6 U
alpha-Picoline	ug/L	NA	0.3 U	---	---	0.3 U
Aniline	ug/L	NA	0.63 U	---	---	0.63 U
Anthracene	ug/L	NA	0.28 U	---	---	0.28 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T11-F.xls

February 2008

**TABLE XI**  
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY CALIFORNIA

<b>Semi-Volatile Organic Compounds</b>						
<b>Well Identifier:</b>			<b>HAR-07</b>	<b>HAR-07</b>	<b>HAR-07</b>	<b>HAR-14</b>
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Shallow
Sample Type:			Primary	Primary	Dup	Primary
Lab Name:			TestAmerica	Pacific	Pacific	TestAmerica
Collection Date:			05/08/2007	05/08/2007	05/08/2007	05/08/2007
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>				
Aramite	ug/L	NA	3.7 U	---	---	3.7 U
Benzo(a)anthracene	ug/L	NA	0.19 U	---	---	0.19 U
Benzo(a)pyrene	ug/L	0.2	0.2 U	---	---	0.2 U
Benzo(b)fluoranthene	ug/L	NA	0.16 U	---	---	0.16 U
Benzo(ghi)perylene	ug/L	NA	0.31 U	---	---	0.31 U
Benzo(k)fluoranthene	ug/L	NA	0.23 U	---	---	0.23 U
Benzyl alcohol	ug/L	NA	0.55 U	---	---	0.55 U
beta-Naphthylamine	ug/L	NA	3.2 U	---	---	3.2 U
bis(2-Chloroethoxy)methane	ug/L	NA	0.4 U	---	---	0.4 U
bis(2-Chloroethyl) ether	ug/L	NA	0.46 U	---	---	0.46 U
bis(2-Chloroisopropyl) ether	ug/L	NA	0.48 U	---	---	0.48 U
bis(2-Ethylhexyl) phthalate	ug/L	4	0.59 U	---	---	0.34 U
Butyl benzyl phthalate	ug/L	NA	0.29 U	---	---	0.29 U
Chrysene	ug/L	NA	0.25 U	---	---	0.25 U
Dibenzo(a,h)anthracene	ug/L	NA	0.32 U	---	---	0.32 U
Dibenzofuran	ug/L	NA	0.33 U	---	---	0.33 U
Diethyl phthalate	ug/L	NA	0.23 U	---	---	0.23 U
Dimethoate	ug/L	1 NL	0.1 U	---	---	0.1 U
Dimethyl phthalate	ug/L	NA	0.26 U	---	---	0.26 U
Di-n-butyl phthalate	ug/L	NA	0.53 U	---	---	0.53 U
Di-n-octyl phthalate	ug/L	NA	0.28 U	---	---	0.28 U
Diphenylamine	ug/L	NA	1.2 U	---	---	1.2 U
Disulfoton	ug/L	NA	0.15 U	---	---	0.15 U
Ethyl methanesulfonate	ug/L	NA	0.94 U	---	---	0.94 U
Famphur	ug/L	NA	2.4 U	---	---	2.4 U
Fluoranthene	ug/L	NA	0.16 U	---	---	0.16 U
Fluorene	ug/L	NA	0.28 U	---	---	0.28 U
Hexachlorobenzene	ug/L	1	0.15 U	---	---	0.15 U
Hexachlorobutadiene	ug/L	NA	0.41 U	---	---	0.41 U
Hexachlorocyclopentadiene	ug/L	50	14 U	---	---	14 U
Hexachloroethane	ug/L	NA	0.36 U	---	---	0.36 U
Hexachlorophene	ug/L	NA	15 U	---	---	15 U
Hexachloropropene	ug/L	NA	5.5 U	---	---	5.5 U
Indeno(1,2,3-cd)pyrene	ug/L	NA	0.32 U	---	---	0.32 U
Isodrin	ug/L	NA	0.94 U	---	---	0.94 U
Isophorone	ug/L	NA	0.33 U	---	---	0.33 U
Isosafrole	ug/L	NA	1 U	---	---	1 U
Methapyrilene	ug/L	NA	1.8 U	---	---	1.8 U
Methyl methanesulfonate	ug/L	NA	0.94 U	---	---	0.94 U
Methyl parathion	ug/L	2 NL	0.13 U	---	---	0.13 U
Naphthalene	ug/L	17 NL	0.35 U	---	---	0.35 U
Nitrobenzene	ug/L	NA	0.37 U	---	---	0.37 U
n-Nitrosodiethylamine	ug/L	0.01 NL	0.78 U	---	---	0.78 U
n-Nitrosodimethylamine	ug/L	0.01 NL	0.36 U	0.0514	0.0498	0.36 U
n-Nitrosodi-n-butylamine	ug/L	NA	3 U	---	---	3 U
n-Nitrosodi-n-propylamine	ug/L	0.01 NL	0.41 U	---	---	0.41 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T11-F.xls

February 2008

**TABLE XI**  
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY CALIFORNIA

<b>Semi-Volatile Organic Compounds</b>						
<b>Well Identifier:</b>			<b>HAR-07</b>	<b>HAR-07</b>	<b>HAR-07</b>	<b>HAR-14</b>
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Shallow
Sample Type:			Primary	Primary	Dup	Primary
Lab Name:			TestAmerica	Pacific	Pacific	TestAmerica
Collection Date:			05/08/2007	05/08/2007	05/08/2007	05/08/2007
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>				
n-Nitrosodiphenylamine	ug/L	NA	0.23 U	---	---	0.23 U
n-Nitrosomethylethylamine	ug/L	NA	0.66 U	---	---	0.66 U
n-Nitrosomorpholine	ug/L	NA	1.5 U	---	---	1.5 U
n-Nitrosopiperidine	ug/L	NA	0.53 U	---	---	0.53 U
n-Nitrosopyrrolidine	ug/L	NA	6 U	---	---	6 U
o,o,o-Triethylphosphorothioate	ug/L	NA	0.56 U	---	---	0.56 U
o-Toluidine	ug/L	NA	0.66 U	---	---	0.66 U
Parathion	ug/L	40 NL	0.081 U	---	---	0.081 U
p-Dimethylaminoazobenzene	ug/L	NA	3.3 U	---	---	3.3 U
Pentachlorobenzene	ug/L	NA	1.7 U	---	---	1.7 U
Pentachloroethane	ug/L	NA	6 U	---	---	6 U
Pentachloronitrobenzene	ug/L	20 NL	1.7 U	---	---	1.7 U
Pentachlorophenol	ug/L	1	0.56 U	---	---	0.56 U
Phenacetin	ug/L	NA	6 U	---	---	6 U
Phenanthrene	ug/L	NA	0.25 U	---	---	0.25 U
Phenol	ug/L	4200 NL	0.3 U	---	---	0.3 U
Phorate	ug/L	NA	0.11 U	---	---	0.11 U
Pronamide	ug/L	NA	3.2 U	---	---	3.2 U
Pyrene	ug/L	NA	0.16 U	---	---	0.16 U
Pyridine	ug/L	NA	0.49 U	---	---	0.49 U
Safrole	ug/L	NA	0.76 U	---	---	0.76 U
Sulfotepp	ug/L	NA	0.13 U	---	---	0.13 U
Thionazin	ug/L	NA	0.081 U	---	---	0.081 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T11-F.xls

February 2008

**TABLE XI**  
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY CALIFORNIA

<b>Semi-Volatile Organic Compounds</b>						
<b>Well Identifier:</b>			<b>HAR-14</b>	<b>HAR-14</b>	<b>HAR-15</b>	<b>HAR-15</b>
Geological Unit:			Shallow	Shallow	Shallow	Shallow
Sample Type:			Primary	Dup	Primary	Primary
Lab Name:			Pacific	Pacific	TestAmerica	Pacific
Collection Date:			05/08/2007	05/08/2007	05/08/2007	05/08/2007
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>				
1,2,4,5-Tetrachlorobenzene	ug/L	NA	---	---	0.44 U	---
1,2,4-Trichlorobenzene	ug/L	5	---	---	0.26 U	---
1,3-Dinitrobenzene	ug/L	NA	---	---	1.9 U	---
1,3,5-Trinitrobenzene	ug/L	NA	---	---	1.5 U	---
1,4-Phenylenediamine	ug/L	NA	---	---	5.3 U	---
1-Naphthylamine	ug/L	NA	---	---	3.7 U	---
1,4-Naphthoquinone	ug/L	NA	---	---	1.1 U	---
2,3,4,6-Tetrachlorophenol	ug/L	NA	---	---	3.1 U	---
2,4,5-Trichlorophenol	ug/L	NA	---	---	0.29 U	---
2,4,6-Trichlorophenol	ug/L	NA	---	---	0.88 U	---
2,4-Dichlorophenol	ug/L	NA	---	---	0.77 U	---
2,4-Dimethylphenol	ug/L	100 NL	---	---	0.8 U	---
2,4-Dinitrophenol	ug/L	NA	---	---	1.4 U	---
2,4-Dinitrotoluene	ug/L	NA	---	---	0.4 U	---
2,6-Dichlorophenol	ug/L	NA	---	---	1 U	---
2,6-Dinitrotoluene	ug/L	NA	---	---	0.24 U	---
2-Acetylamino fluorene	ug/L	NA	---	---	6.5 U	---
2-Chloronaphthalene	ug/L	NA	---	---	0.26 U	---
2-Chlorophenol	ug/L	NA	---	---	0.71 U	---
2-Methylnaphthalene	ug/L	NA	---	---	0.3 U	---
2-Methylphenol	ug/L	NA	---	---	0.48 U	---
2-Nitroaniline	ug/L	NA	---	---	0.23 U	---
2-Nitrophenol	ug/L	NA	---	---	0.84 U	---
3 & 4-Methylphenol	ug/L	NA	---	---	0.3 U	---
3,3'-Dichlorobenzidine	ug/L	NA	---	---	1.5 U	---
3,3'-Dimethylbenzidine	ug/L	NA	---	---	1.5 U	---
3-Methylcholanthrene	ug/L	NA	---	---	1.1 U	---
3-Nitroaniline	ug/L	NA	---	---	0.34 U	---
4,6-Dinitro-2-Methylphenol	ug/L	NA	---	---	0.33 U	---
4-Aminobiphenyl	ug/L	NA	---	---	4.9 U	---
4-Bromophenyl phenyl ether	ug/L	NA	---	---	0.23 U	---
4-Chloro-3-methylphenol	ug/L	NA	---	---	0.4 U	---
4-Chloroaniline	ug/L	NA	---	---	1.1 U	---
4-Chlorophenylphenyl ether	ug/L	NA	---	---	0.24 U	---
4-Nitroaniline	ug/L	NA	---	---	0.55 U	---
4-Nitrophenol	ug/L	NA	---	---	1 U	---
4-Nitroquinoline-1-oxide	ug/L	NA	---	---	2.2 U	---
5-Nitro-o-toluidine	ug/L	NA	---	---	4.4 U	---
7,12-Dimethylbenz(a)anthracene	ug/L	NA	---	---	3.6 U	---
a,a-Dimethylphenethylamine	ug/L	NA	---	---	2 U	---
Acenaphthene	ug/L	NA	---	---	0.31 U	---
Acenaphthylene	ug/L	NA	---	---	0.26 U	---
Acetophenone	ug/L	NA	---	---	0.6 U	---
alpha-Picoline	ug/L	NA	---	---	0.3 U	---
Aniline	ug/L	NA	---	---	0.63 U	---
Anthracene	ug/L	NA	---	---	0.28 U	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T11-F.xls

February 2008

**TABLE XI**  
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY CALIFORNIA

<b>Semi-Volatile Organic Compounds</b>						
<b>Well Identifier:</b>			<b>HAR-14</b>	<b>HAR-14</b>	<b>HAR-15</b>	<b>HAR-15</b>
Geological Unit:			Shallow	Shallow	Shallow	Shallow
Sample Type:			Primary	Dup	Primary	Primary
Lab Name:			Pacific	Pacific	TestAmerica	Pacific
Collection Date:			05/08/2007	05/08/2007	05/08/2007	05/08/2007
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>				
Aramite	ug/L	NA	---	---	3.7 U	---
Benzo(a)anthracene	ug/L	NA	---	---	0.19 U	---
Benzo(a)pyrene	ug/L	0.2	---	---	0.2 U	---
Benzo(b)fluoranthene	ug/L	NA	---	---	0.16 U	---
Benzo(ghi)perylene	ug/L	NA	---	---	0.31 U	---
Benzo(k)fluoranthene	ug/L	NA	---	---	0.23 U	---
Benzyl alcohol	ug/L	NA	---	---	0.55 U	---
beta-Naphthylamine	ug/L	NA	---	---	3.2 U	---
bis(2-Chloroethoxy)methane	ug/L	NA	---	---	0.4 U	---
bis(2-Chloroethyl) ether	ug/L	NA	---	---	0.46 U	---
bis(2-Chloroisopropyl) ether	ug/L	NA	---	---	0.48 U	---
bis(2-Ethylhexyl) phthalate	ug/L	4	---	---	0.49 U	---
Butyl benzyl phthalate	ug/L	NA	---	---	0.29 U	---
Chrysene	ug/L	NA	---	---	0.25 U	---
Dibenzo(a,h)anthracene	ug/L	NA	---	---	0.32 U	---
Dibenzofuran	ug/L	NA	---	---	0.33 U	---
Diethyl phthalate	ug/L	NA	---	---	0.42 J,L	---
Dimethoate	ug/L	1 NL	---	---	0.1 U	---
Dimethyl phthalate	ug/L	NA	---	---	0.26 U	---
Di-n-butyl phthalate	ug/L	NA	---	---	0.53 U	---
Di-n-octyl phthalate	ug/L	NA	---	---	0.28 U	---
Diphenylamine	ug/L	NA	---	---	1.2 U	---
Disulfoton	ug/L	NA	---	---	0.15 U	---
Ethyl methanesulfonate	ug/L	NA	---	---	0.94 U	---
Famphur	ug/L	NA	---	---	2.4 U	---
Fluoranthene	ug/L	NA	---	---	0.16 U	---
Fluorene	ug/L	NA	---	---	0.28 U	---
Hexachlorobenzene	ug/L	1	---	---	0.15 U	---
Hexachlorobutadiene	ug/L	NA	---	---	0.41 U	---
Hexachlorocyclopentadiene	ug/L	50	---	---	14 U	---
Hexachloroethane	ug/L	NA	---	---	0.36 U	---
Hexachlorophene	ug/L	NA	---	---	15 U	---
Hexachloropropene	ug/L	NA	---	---	5.5 U	---
Indeno(1,2,3-cd)pyrene	ug/L	NA	---	---	0.32 U	---
Isodrin	ug/L	NA	---	---	0.94 U	---
Isophorone	ug/L	NA	---	---	0.33 U	---
Isosafrole	ug/L	NA	---	---	1 U	---
Methapyrilene	ug/L	NA	---	---	1.8 U	---
Methyl methanesulfonate	ug/L	NA	---	---	0.94 U	---
Methyl parathion	ug/L	2 NL	---	---	0.13 U	---
Naphthalene	ug/L	17 NL	---	---	0.35 U	---
Nitrobenzene	ug/L	NA	---	---	0.37 U	---
n-Nitrosodiethylamine	ug/L	0.01 NL	---	---	0.78 U	---
n-Nitrosodimethylamine	ug/L	0.01 NL	0.3559	0.3396	0.36 U	0.01 U
n-Nitrosodi-n-butylamine	ug/L	NA	---	---	3 U	---
n-Nitrosodi-n-propylamine	ug/L	0.01 NL	---	---	0.41 U	---

See last page of table for notes and abbreviations.

Haley &amp; Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T11-F.xls

February 2008

**TABLE XI**  
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY CALIFORNIA

<b>Semi-Volatile Organic Compounds</b>						
<b>Well Identifier:</b>			<b>HAR-14</b>	<b>HAR-14</b>	<b>HAR-15</b>	<b>HAR-15</b>
Geological Unit:			Shallow	Shallow	Shallow	Shallow
Sample Type:			Primary	Dup	Primary	Primary
Lab Name:			Pacific	Pacific	TestAmerica	Pacific
Collection Date:			05/08/2007	05/08/2007	05/08/2007	05/08/2007
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>				
n-Nitrosodiphenylamine	ug/L	NA	---	---	0.23 U	---
n-Nitrosomethylethylamine	ug/L	NA	---	---	0.66 U	---
n-Nitrosomorpholine	ug/L	NA	---	---	1.5 U	---
n-Nitrosopiperidine	ug/L	NA	---	---	0.53 U	---
n-Nitrosopyrrolidine	ug/L	NA	---	---	6 U	---
o,o,o-Triethylphosphorothioate	ug/L	NA	---	---	0.56 U	---
o-Toluidine	ug/L	NA	---	---	0.66 U	---
Parathion	ug/L	40 NL	---	---	0.081 U	---
p-Dimethylaminoazobenzene	ug/L	NA	---	---	3.3 U	---
Pentachlorobenzene	ug/L	NA	---	---	1.7 U	---
Pentachloroethane	ug/L	NA	---	---	6 U	---
Pentachloronitrobenzene	ug/L	20 NL	---	---	1.7 U	---
Pentachlorophenol	ug/L	1	---	---	0.56 U	---
Phenacetin	ug/L	NA	---	---	6 U	---
Phenanthrene	ug/L	NA	---	---	0.25 U	---
Phenol	ug/L	4200 NL	---	---	0.3 U	---
Phorate	ug/L	NA	---	---	0.11 U	---
Pronamide	ug/L	NA	---	---	3.2 U	---
Pyrene	ug/L	NA	---	---	0.16 U	---
Pyridine	ug/L	NA	---	---	0.49 U	---
Safrole	ug/L	NA	---	---	0.76 U	---
Sulfotepp	ug/L	NA	---	---	0.13 U	---
Thionazin	ug/L	NA	---	---	0.081 U	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T11-F.xls

February 2008



**TABLE XI**  
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY CALIFORNIA

<b>Semi-Volatile Organic Compounds</b>						
<b>Well Identifier:</b>			<b>HAR-16</b>	<b>HAR-16</b>	<b>HAR-16</b>	<b>HAR-17</b>
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth
Sample Type:			Primary	Primary	Dup	Primary
Lab Name:			TestAmerica	Pacific	Pacific	TestAmerica
Collection Date:			05/07/2007	05/07/2007	05/07/2007	05/08/2007
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>				
1,2,4,5-Tetrachlorobenzene	ug/L	NA	0.44 U	---	---	0.44 U
1,2,4-Trichlorobenzene	ug/L	5	0.26 U	---	---	0.26 U
1,3-Dinitrobenzene	ug/L	NA	1.9 U	---	---	1.9 U
1,3,5-Trinitrobenzene	ug/L	NA	1.5 U	---	---	1.5 U
1,4-Phenylenediamine	ug/L	NA	5.3 U	---	---	5.3 U
1-Naphthylamine	ug/L	NA	3.7 U	---	---	3.7 U
1,4-Naphthoquinone	ug/L	NA	1.1 U	---	---	1.1 U
2,3,4,6-Tetrachlorophenol	ug/L	NA	3.1 U	---	---	3.1 U
2,4,5-Trichlorophenol	ug/L	NA	0.29 U	---	---	0.29 U
2,4,6-Trichlorophenol	ug/L	NA	0.88 U	---	---	0.88 U
2,4-Dichlorophenol	ug/L	NA	0.77 U	---	---	0.77 U
2,4-Dimethylphenol	ug/L	100 NL	0.8 U	---	---	0.8 U
2,4-Dinitrophenol	ug/L	NA	1.4 U	---	---	1.4 U
2,4-Dinitrotoluene	ug/L	NA	0.4 U	---	---	0.4 U
2,6-Dichlorophenol	ug/L	NA	1 U	---	---	1 U
2,6-Dinitrotoluene	ug/L	NA	0.24 U	---	---	0.24 U
2-Acetylaminofluorene	ug/L	NA	6.5 U	---	---	6.5 U
2-Chloronaphthalene	ug/L	NA	0.26 U	---	---	0.26 U
2-Chlorophenol	ug/L	NA	0.71 U	---	---	0.71 U
2-Methylnaphthalene	ug/L	NA	0.3 U	---	---	0.3 U
2-Methylphenol	ug/L	NA	0.48 U	---	---	0.48 U
2-Nitroaniline	ug/L	NA	0.23 U	---	---	0.23 U
2-Nitrophenol	ug/L	NA	0.84 U	---	---	0.84 U
3 & 4-Methylphenol	ug/L	NA	0.3 U	---	---	0.3 U
3,3'-Dichlorobenzidine	ug/L	NA	1.5 U	---	---	1.5 U
3,3'-Dimethylbenzidine	ug/L	NA	1.5 U	---	---	1.5 U
3-Methylcholanthrene	ug/L	NA	1.1 U	---	---	1.1 U
3-Nitroaniline	ug/L	NA	0.34 U	---	---	0.34 U
4,6-Dinitro-2-Methylphenol	ug/L	NA	0.33 U	---	---	0.33 U
4-Aminobiphenyl	ug/L	NA	4.9 U	---	---	4.9 U
4-Bromophenyl phenyl ether	ug/L	NA	0.23 U	---	---	0.23 U
4-Chloro-3-methylphenol	ug/L	NA	0.4 U	---	---	0.4 U
4-Chloroaniline	ug/L	NA	1.1 U	---	---	1.1 U
4-Chlorophenylphenyl ether	ug/L	NA	0.24 U	---	---	0.24 U
4-Nitroaniline	ug/L	NA	0.55 U	---	---	0.55 U
4-Nitrophenol	ug/L	NA	1 U	---	---	1 U
4-Nitroquinoline-1-oxide	ug/L	NA	2.2 U	---	---	2.2 U
5-Nitro-o-toluidine	ug/L	NA	4.4 U	---	---	4.4 U
7,12-Dimethylbenz(a)anthracene	ug/L	NA	3.6 U	---	---	3.6 U
a,a-Dimethylphenethylamine	ug/L	NA	2 U	---	---	2 U
Acenaphthene	ug/L	NA	0.31 U	---	---	0.31 U
Acenaphthylene	ug/L	NA	0.26 U	---	---	0.26 U
Acetophenone	ug/L	NA	0.6 U	---	---	0.6 U
alpha-Picoline	ug/L	NA	0.3 U	---	---	0.3 U
Aniline	ug/L	NA	0.63 U	---	---	0.63 U
Anthracene	ug/L	NA	0.28 U	---	---	0.28 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T11-F.xls

February 2008

**TABLE XI**  
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY CALIFORNIA

<b>Semi-Volatile Organic Compounds</b>						
<b>Well Identifier:</b>			<b>HAR-16</b>	<b>HAR-16</b>	<b>HAR-16</b>	<b>HAR-17</b>
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth
Sample Type:			Primary	Primary	Dup	Primary
Lab Name:			TestAmerica	Pacific	Pacific	TestAmerica
Collection Date:			05/07/2007	05/07/2007	05/07/2007	05/08/2007
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>				
Aramite	ug/L	NA	3.7 U	---	---	3.7 U
Benzo(a)anthracene	ug/L	NA	0.19 U	---	---	0.19 U
Benzo(a)pyrene	ug/L	0.2	0.2 U	---	---	0.2 U
Benzo(b)fluoranthene	ug/L	NA	0.16 U	---	---	0.16 U
Benzo(ghi)perylene	ug/L	NA	0.31 U	---	---	0.31 U
Benzo(k)fluoranthene	ug/L	NA	0.23 U	---	---	0.23 U
Benzyl alcohol	ug/L	NA	0.55 U	---	---	0.55 U
beta-Naphthylamine	ug/L	NA	3.2 U	---	---	3.2 U
bis(2-Chloroethoxy)methane	ug/L	NA	0.4 U	---	---	0.4 U
bis(2-Chloroethyl) ether	ug/L	NA	0.46 U	---	---	0.46 U
bis(2-Chloroisopropyl) ether	ug/L	NA	0.48 U	---	---	0.48 U
bis(2-Ethylhexyl) phthalate	ug/L	4	0.72 U	---	---	0.49 U
Butyl benzyl phthalate	ug/L	NA	0.29 U	---	---	0.29 U
Chrysene	ug/L	NA	0.25 U	---	---	0.25 U
Dibenzo(a,h)anthracene	ug/L	NA	0.32 U	---	---	0.32 U
Dibenzofuran	ug/L	NA	0.33 U	---	---	0.33 U
Diethyl phthalate	ug/L	NA	0.23 U	---	---	0.23 U
Dimethoate	ug/L	1 NL	0.1 U	---	---	0.1 U
Dimethyl phthalate	ug/L	NA	0.26 U	---	---	0.26 U
Di-n-butyl phthalate	ug/L	NA	0.53 U	---	---	0.53 U
Di-n-octyl phthalate	ug/L	NA	0.28 U	---	---	0.28 U
Diphenylamine	ug/L	NA	1.2 U	---	---	1.2 U
Disulfoton	ug/L	NA	0.15 U	---	---	0.15 U
Ethyl methanesulfonate	ug/L	NA	0.94 U	---	---	0.94 U
Famphur	ug/L	NA	2.4 U	---	---	2.4 U
Fluoranthene	ug/L	NA	0.16 U	---	---	0.16 U
Fluorene	ug/L	NA	0.28 U	---	---	0.28 U
Hexachlorobenzene	ug/L	1	0.15 U	---	---	0.15 U
Hexachlorobutadiene	ug/L	NA	0.41 U	---	---	0.41 U
Hexachlorocyclopentadiene	ug/L	50	14 U	---	---	14 U
Hexachloroethane	ug/L	NA	0.36 U	---	---	0.36 U
Hexachlorophene	ug/L	NA	15 U	---	---	15 U
Hexachloropropene	ug/L	NA	5.5 U	---	---	5.5 U
Indeno(1,2,3-cd)pyrene	ug/L	NA	0.32 U	---	---	0.32 U
Isodrin	ug/L	NA	0.94 U	---	---	0.94 U
Isophorone	ug/L	NA	0.33 U	---	---	0.33 U
Isosafrole	ug/L	NA	1 U	---	---	1 U
Methapyrilene	ug/L	NA	1.8 U	---	---	1.8 U
Methyl methanesulfonate	ug/L	NA	0.94 U	---	---	0.94 U
Methyl parathion	ug/L	2 NL	0.13 U	---	---	0.13 U
Naphthalene	ug/L	17 NL	0.35 U	---	---	0.35 U
Nitrobenzene	ug/L	NA	0.37 U	---	---	0.37 U
n-Nitrosodiethylamine	ug/L	0.01 NL	0.78 U	---	---	0.78 U
n-Nitrosodimethylamine	ug/L	0.01 NL	7.5	10.3181	5.8519	0.36 U
n-Nitrosodi-n-butylamine	ug/L	NA	3 U	---	---	3 U
n-Nitrosodi-n-propylamine	ug/L	0.01 NL	0.41 U	---	---	0.41 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T11-F.xls

February 2008

**TABLE XI**  
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY CALIFORNIA

<b>Semi-Volatile Organic Compounds</b>						
<b>Well Identifier:</b>			<b>HAR-16</b>	<b>HAR-16</b>	<b>HAR-16</b>	<b>HAR-17</b>
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth
Sample Type:			Primary	Primary	Dup	Primary
Lab Name:			TestAmerica	Pacific	Pacific	TestAmerica
Collection Date:			05/07/2007	05/07/2007	05/07/2007	05/08/2007
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>				
n-Nitrosodiphenylamine	ug/L	NA	0.23 U	---	---	0.23 U
n-Nitrosomethylethylamine	ug/L	NA	0.66 U	---	---	0.66 U
n-Nitrosomorpholine	ug/L	NA	1.5 U	---	---	1.5 U
n-Nitrosopiperidine	ug/L	NA	0.53 U	---	---	0.53 U
n-Nitrosopyrrolidine	ug/L	NA	6 U	---	---	6 U
o,o,o-Triethylphosphorothioate	ug/L	NA	0.56 U	---	---	0.56 U
o-Toluidine	ug/L	NA	0.66 U	---	---	0.66 U
Parathion	ug/L	40 NL	0.081 U	---	---	0.081 U
p-Dimethylaminoazobenzene	ug/L	NA	3.3 U	---	---	3.3 U
Pentachlorobenzene	ug/L	NA	1.7 U	---	---	1.7 U
Pentachloroethane	ug/L	NA	6 U	---	---	6 U
Pentachloronitrobenzene	ug/L	20 NL	1.7 U	---	---	1.7 U
Pentachlorophenol	ug/L	1	0.56 U	---	---	0.56 U
Phenacetin	ug/L	NA	6 U	---	---	6 U
Phenanthrene	ug/L	NA	0.25 U	---	---	0.25 U
Phenol	ug/L	4200 NL	0.3 U	---	---	0.3 U
Phorate	ug/L	NA	0.11 U	---	---	0.11 U
Pronamide	ug/L	NA	3.2 U	---	---	3.2 U
Pyrene	ug/L	NA	0.16 U	---	---	0.16 U
Pyridine	ug/L	NA	0.49 U	---	---	0.49 U
Safrole	ug/L	NA	0.76 U	---	---	0.76 U
Sulfotepp	ug/L	NA	0.13 U	---	---	0.13 U
Thionazin	ug/L	NA	0.081 U	---	---	0.081 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T11-F.xls

February 2008

**TABLE XI**  
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY CALIFORNIA

<b>Semi-Volatile Organic Compounds</b>						
<b>Well Identifier:</b>			<b>HAR-17</b>	<b>HAR-17</b>	<b>RD-48B</b>	<b>RD-48B</b>
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth
Sample Type:			Primary	Dup	Primary	Primary
Lab Name:			Pacific	Pacific	TestAmerica	Pacific
Collection Date:			05/08/2007	05/08/2007	08/29/2007	08/29/2007
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>				
1,2,4,5-Tetrachlorobenzene	ug/L	NA	---	---	0.44 U	---
1,2,4-Trichlorobenzene	ug/L	5	---	---	0.26 U	---
1,3-Dinitrobenzene	ug/L	NA	---	---	1.9 U	---
1,3,5-Trinitrobenzene	ug/L	NA	---	---	1.5 U	---
1,4-Phenylenediamine	ug/L	NA	---	---	5.3 U	---
1-Naphthylamine	ug/L	NA	---	---	3.7 U	---
1,4-Naphthoquinone	ug/L	NA	---	---	1.1 U	---
2,3,4,6-Tetrachlorophenol	ug/L	NA	---	---	3.1 U	---
2,4,5-Trichlorophenol	ug/L	NA	---	---	0.29 U	---
2,4,6-Trichlorophenol	ug/L	NA	---	---	0.88 U	---
2,4-Dichlorophenol	ug/L	NA	---	---	0.77 U	---
2,4-Dimethylphenol	ug/L	100 NL	---	---	0.8 U	---
2,4-Dinitrophenol	ug/L	NA	---	---	1.4 U	---
2,4-Dinitrotoluene	ug/L	NA	---	---	0.4 U	---
2,6-Dichlorophenol	ug/L	NA	---	---	1 U	---
2,6-Dinitrotoluene	ug/L	NA	---	---	0.24 U	---
2-Acetylamino fluorene	ug/L	NA	---	---	6.5 U	---
2-Chloronaphthalene	ug/L	NA	---	---	0.26 U	---
2-Chlorophenol	ug/L	NA	---	---	0.71 U	---
2-Methylnaphthalene	ug/L	NA	---	---	0.3 U	---
2-Methylphenol	ug/L	NA	---	---	0.48 U	---
2-Nitroaniline	ug/L	NA	---	---	0.23 U	---
2-Nitrophenol	ug/L	NA	---	---	0.84 U	---
3 & 4-Methylphenol	ug/L	NA	---	---	0.3 U	---
3,3'-Dichlorobenzidine	ug/L	NA	---	---	1.5 U	---
3,3'-Dimethylbenzidine	ug/L	NA	---	---	1.5 U	---
3-Methylcholanthrene	ug/L	NA	---	---	1.1 U	---
3-Nitroaniline	ug/L	NA	---	---	0.34 U	---
4,6-Dinitro-2-Methylphenol	ug/L	NA	---	---	0.33 U	---
4-Aminobiphenyl	ug/L	NA	---	---	4.9 U	---
4-Bromophenyl phenyl ether	ug/L	NA	---	---	0.23 U	---
4-Chloro-3-methylphenol	ug/L	NA	---	---	0.4 U	---
4-Chloroaniline	ug/L	NA	---	---	1.1 U	---
4-Chlorophenylphenyl ether	ug/L	NA	---	---	0.24 U	---
4-Nitroaniline	ug/L	NA	---	---	0.55 U	---
4-Nitrophenol	ug/L	NA	---	---	1 U	---
4-Nitroquinoline-1-oxide	ug/L	NA	---	---	2.2 U	---
5-Nitro-o-toluidine	ug/L	NA	---	---	4.4 U	---
7,12-Dimethylbenz(a)anthracene	ug/L	NA	---	---	3.6 U	---
a,a-Dimethylphenethylamine	ug/L	NA	---	---	2 U	---
Acenaphthene	ug/L	NA	---	---	0.31 U	---
Acenaphthylene	ug/L	NA	---	---	0.26 U	---
Acetophenone	ug/L	NA	---	---	0.6 U	---
alpha-Picoline	ug/L	NA	---	---	0.3 U	---
Aniline	ug/L	NA	---	---	0.63 U	---
Anthracene	ug/L	NA	---	---	0.28 U	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T11-F.xls

February 2008

**TABLE XI**  
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY CALIFORNIA

<b>Semi-Volatile Organic Compounds</b>						
<b>Well Identifier:</b>			<b>HAR-17</b>	<b>HAR-17</b>	<b>RD-48B</b>	<b>RD-48B</b>
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth
Sample Type:			Primary	Dup	Primary	Primary
Lab Name:			Pacific	Pacific	TestAmerica	Pacific
Collection Date:			05/08/2007	05/08/2007	08/29/2007	08/29/2007
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>				
Aramite	ug/L	NA	---	---	3.7 U	---
Benzo(a)anthracene	ug/L	NA	---	---	0.19 U	---
Benzo(a)pyrene	ug/L	0.2	---	---	0.2 U	---
Benzo(b)fluoranthene	ug/L	NA	---	---	0.16 U	---
Benzo(ghi)perylene	ug/L	NA	---	---	0.31 U	---
Benzo(k)fluoranthene	ug/L	NA	---	---	0.23 U	---
Benzyl alcohol	ug/L	NA	---	---	0.58 U	---
beta-Naphthylamine	ug/L	NA	---	---	0.13 U	---
bis(2-Chloroethoxy)methane	ug/L	NA	---	---	0.4 U	---
bis(2-Chloroethyl) ether	ug/L	NA	---	---	0.46 U	---
bis(2-Chloroisopropyl) ether	ug/L	NA	---	---	0.48 U	---
bis(2-Ethylhexyl) phthalate	ug/L	4	---	---	1.7 U	---
Butyl benzyl phthalate	ug/L	NA	---	---	0.29 U	---
Chrysene	ug/L	NA	---	---	0.25 U	---
Dibenzo(a,h)anthracene	ug/L	NA	---	---	0.32 U	---
Dibenzofuran	ug/L	NA	---	---	0.33 U	---
Diethyl phthalate	ug/L	NA	---	---	3.9 U	---
Dimethoate	ug/L	1 NL	---	---	0.1 U	---
Dimethyl phthalate	ug/L	NA	---	---	0.26 U	---
Di-n-butyl phthalate	ug/L	NA	---	---	1.3 U	---
Di-n-octyl phthalate	ug/L	NA	---	---	0.28 U	---
Diphenylamine	ug/L	NA	---	---	1.2 U	---
Disulfoton	ug/L	NA	---	---	0.15 U	---
Ethyl methanesulfonate	ug/L	NA	---	---	0.94 U	---
Famphur	ug/L	NA	---	---	2.4 U	---
Fluoranthene	ug/L	NA	---	---	0.16 U	---
Fluorene	ug/L	NA	---	---	0.28 U	---
Hexachlorobenzene	ug/L	1	---	---	0.15 U	---
Hexachlorobutadiene	ug/L	NA	---	---	0.41 U	---
Hexachlorocyclopentadiene	ug/L	50	---	---	14 U	---
Hexachloroethane	ug/L	NA	---	---	0.36 U	---
Hexachlorophene	ug/L	NA	---	---	15 U	---
Hexachloropropene	ug/L	NA	---	---	5.5 U	---
Indeno(1,2,3-cd)pyrene	ug/L	NA	---	---	0.32 U	---
Isodrin	ug/L	NA	---	---	0.94 U	---
Isophorone	ug/L	NA	---	---	0.33 U	---
Isosafrole	ug/L	NA	---	---	1 U	---
Methapyrilene	ug/L	NA	---	---	1.8 U	---
Methyl methanesulfonate	ug/L	NA	---	---	0.94 U	---
Methyl parathion	ug/L	2 NL	---	---	0.13 U	---
Naphthalene	ug/L	17 NL	---	---	0.35 U	---
Nitrobenzene	ug/L	NA	---	---	0.37 U	---
n-Nitrosodiethylamine	ug/L	0.01 NL	---	---	0.78 U	---
n-Nitrosodimethylamine	ug/L	0.01 NL	0.0461	0.0425	0.36 U	0.01 U
n-Nitrosodi-n-butylamine	ug/L	NA	---	---	3 U	---
n-Nitrosodi-n-propylamine	ug/L	0.01 NL	---	---	0.41 U	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T11-F.xls

February 2008

**TABLE XI**  
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY CALIFORNIA

<b>Semi-Volatile Organic Compounds</b>						
<b>Well Identifier:</b>			<b>HAR-17</b>	<b>HAR-17</b>	<b>RD-48B</b>	<b>RD-48B</b>
Geological Unit:			Chatsworth	Chatsworth	Chatsworth	Chatsworth
Sample Type:			Primary	Dup	Primary	Primary
Lab Name:			Pacific	Pacific	TestAmerica	Pacific
Collection Date:			05/08/2007	05/08/2007	08/29/2007	08/29/2007
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>				
n-Nitrosodiphenylamine	ug/L	NA	---	---	0.23 U	---
n-Nitrosomethylethylamine	ug/L	NA	---	---	0.66 U	---
n-Nitrosomorpholine	ug/L	NA	---	---	1.5 U	---
n-Nitrosopiperidine	ug/L	NA	---	---	0.53 U	---
n-Nitrosopyrrolidine	ug/L	NA	---	---	6 U	---
o,o,o-Triethylphosphorothioate	ug/L	NA	---	---	0.56 U	---
o-Toluidine	ug/L	NA	---	---	0.66 U	---
Parathion	ug/L	40 NL	---	---	0.081 U	---
p-Dimethylaminoazobenzene	ug/L	NA	---	---	3.3 U	---
Pentachlorobenzene	ug/L	NA	---	---	1.7 U	---
Pentachloroethane	ug/L	NA	---	---	6 U	---
Pentachloronitrobenzene	ug/L	20 NL	---	---	1.7 U	---
Pentachlorophenol	ug/L	1	---	---	0.56 U	---
Phenacetin	ug/L	NA	---	---	6 U	---
Phenanthrene	ug/L	NA	---	---	0.25 U	---
Phenol	ug/L	4200 NL	---	---	0.3 U	---
Phorate	ug/L	NA	---	---	0.11 U	---
Pronamide	ug/L	NA	---	---	3.2 U	---
Pyrene	ug/L	NA	---	---	0.16 U	---
Pyridine	ug/L	NA	---	---	0.49 U	---
Safrole	ug/L	NA	---	---	0.76 U	---
Sulfotepp	ug/L	NA	---	---	0.13 U	---
Thionazin	ug/L	NA	---	---	0.081 U	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T11-F.xls

February 2008

**TABLE XI**  
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY CALIFORNIA

<b>Semi-Volatile Organic Compounds</b>			
<b>Well Identifier:</b>	<b>RD-48B</b>		
Geological Unit:	Chatsworth		
Sample Type:	Dup		
Lab Name:	Pacific		
Collection Date:	08/29/2007		
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>	
1,2,4,5-Tetrachlorobenzene	ug/L	NA	---
1,2,4-Trichlorobenzene	ug/L	5	---
1,3-Dinitrobenzene	ug/L	NA	---
1,3,5-Trinitrobenzene	ug/L	NA	---
1,4-Phenylenediamine	ug/L	NA	---
1-Naphthylamine	ug/L	NA	---
1,4-Naphthoquinone	ug/L	NA	---
2,3,4,6-Tetrachlorophenol	ug/L	NA	---
2,4,5-Trichlorophenol	ug/L	NA	---
2,4,6-Trichlorophenol	ug/L	NA	---
2,4-Dichlorophenol	ug/L	NA	---
2,4-Dimethylphenol	ug/L	100 NL	---
2,4-Dinitrophenol	ug/L	NA	---
2,4-Dinitrotoluene	ug/L	NA	---
2,6-Dichlorophenol	ug/L	NA	---
2,6-Dinitrotoluene	ug/L	NA	---
2-Acetylaminofluorene	ug/L	NA	---
2-Chloronaphthalene	ug/L	NA	---
2-Chlorophenol	ug/L	NA	---
2-Methylnaphthalene	ug/L	NA	---
2-Methylphenol	ug/L	NA	---
2-Nitroaniline	ug/L	NA	---
2-Nitrophenol	ug/L	NA	---
3 & 4-Methylphenol	ug/L	NA	---
3,3'-Dichlorobenzidine	ug/L	NA	---
3,3'-Dimethylbenzidine	ug/L	NA	---
3-Methylcholanthrene	ug/L	NA	---
3-Nitroaniline	ug/L	NA	---
4,6-Dinitro-2-Methylphenol	ug/L	NA	---
4-Aminobiphenyl	ug/L	NA	---
4-Bromophenyl phenyl ether	ug/L	NA	---
4-Chloro-3-methylphenol	ug/L	NA	---
4-Chloroaniline	ug/L	NA	---
4-Chlorophenylphenyl ether	ug/L	NA	---
4-Nitroaniline	ug/L	NA	---
4-Nitrophenol	ug/L	NA	---
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	---
Acenaphthylene	ug/L	NA	---
Acetophenone	ug/L	NA	---
alpha-Picoline	ug/L	NA	---
Aniline	ug/L	NA	---
Anthracene	ug/L	NA	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T11-F.xls

February 2008

**TABLE XI**  
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY CALIFORNIA

<b>Semi-Volatile Organic Compounds</b>			
<b>Well Identifier:</b>	<b>RD-48B</b>		
Geological Unit:	Chatsworth		
Sample Type:	Dup		
Lab Name:	Pacific		
Collection Date:	08/29/2007		
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>	
Aramite	ug/L	NA	---
Benzo(a)anthracene	ug/L	NA	---
Benzo(a)pyrene	ug/L	0.2	---
Benzo(b)fluoranthene	ug/L	NA	---
Benzo(ghi)perylene	ug/L	NA	---
Benzo(k)fluoranthene	ug/L	NA	---
Benzyl alcohol	ug/L	NA	---
beta-Naphthylamine	ug/L	NA	---
bis(2-Chloroethoxy)methane	ug/L	NA	---
bis(2-Chloroethyl) ether	ug/L	NA	---
bis(2-Chloroisopropyl) ether	ug/L	NA	---
bis(2-Ethylhexyl) phthalate	ug/L	4	---
Butyl benzyl phthalate	ug/L	NA	---
Chrysene	ug/L	NA	---
Dibenzo(a,h)anthracene	ug/L	NA	---
Dibenzofuran	ug/L	NA	---
Diethyl phthalate	ug/L	NA	---
Dimethoate	ug/L	1 NL	---
Dimethyl phthalate	ug/L	NA	---
Di-n-butyl phthalate	ug/L	NA	---
Di-n-octyl phthalate	ug/L	NA	---
Diphenylamine	ug/L	NA	---
Disulfoton	ug/L	NA	---
Ethyl methanesulfonate	ug/L	NA	---
Famphur	ug/L	NA	---
Fluoranthene	ug/L	NA	---
Fluorene	ug/L	NA	---
Hexachlorobenzene	ug/L	1	---
Hexachlorobutadiene	ug/L	NA	---
Hexachlorocyclopentadiene	ug/L	50	---
Hexachloroethane	ug/L	NA	---
Hexachlorophene	ug/L	NA	---
Hexachloropropene	ug/L	NA	---
Indeno(1,2,3-cd)pyrene	ug/L	NA	---
Isodrin	ug/L	NA	---
Isophorone	ug/L	NA	---
Isosafrole	ug/L	NA	---
Methapyrilene	ug/L	NA	---
Methyl methanesulfonate	ug/L	NA	---
Methyl parathion	ug/L	2 NL	---
Naphthalene	ug/L	17 NL	---
Nitrobenzene	ug/L	NA	---
n-Nitrosodiethylamine	ug/L	0.01 NL	---
n-Nitrosodimethylamine	ug/L	0.01 NL	0.01 U
n-Nitrosodi-n-butylamine	ug/L	NA	---
n-Nitrosodi-n-propylamine	ug/L	0.01 NL	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T11-F.xls

February 2008



**TABLE XI**  
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY CALIFORNIA

<b>Semi-Volatile Organic Compounds</b>			
<b>Well Identifier:</b>	<b>RD-48B</b>		
Geological Unit:	Chatsworth		
Sample Type:	Dup		
Lab Name:	Pacific		
Collection Date:	08/29/2007		
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>	
n-Nitrosodiphenylamine	ug/L	NA	---
n-Nitrosomethylethylamine	ug/L	NA	---
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	---
Parathion	ug/L	40 NL	---
p-Dimethylaminoazobenzene	ug/L	NA	---
Pentachlorobenzene	ug/L	NA	---
Pentachloroethane	ug/L	NA	---
Pentachloronitrobenzene	ug/L	20 NL	---
Pentachlorophenol	ug/L	1	---
Phenacetin	ug/L	NA	---
Phenanthrene	ug/L	NA	---
Phenol	ug/L	4200 NL	---
Phorate	ug/L	NA	---
Pronamide	ug/L	NA	---
Pyrene	ug/L	NA	---
Pyridine	ug/L	NA	---
Safrole	ug/L	NA	---
Sulfotepp	ug/L	NA	---
Thionazin	ug/L	NA	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T11-F.xls

February 2008

**TABLE XI**  
**SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2007**  
**BOEING SANTA SUSANA FIELD LABORATORY**  
**VENTURA COUNTY CALIFORNIA**

<b>Volatile Organic Compounds</b>							
<b>Well Identifier:</b>			<b>HAR-07</b>	<b>HAR-14</b>	<b>HAR-15</b>	<b>HAR-16</b>	<b>HAR-17</b>
Geological Unit:			Chatsworth	Shallow	Shallow	Chatsworth	Chatsworth
Sample Type:			Primary	Primary	Primary	Primary	Primary
Lab Name:			TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:			05/08/2007	05/08/2007	05/08/2007	05/07/2007	05/08/2007
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>					
1,1,1,2-Tetrachloroethane	ug/L	NA	27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1,1-Trichloroethane	ug/L	200	30 U	0.67 J	0.3 U	0.64 J	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	1	24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1,2-Trichloroethane	ug/L	5	30 U	0.3 U	0.3 U	1 J	0.3 U
1,1-Dichloroethane	ug/L	5	27 U	0.27 U	0.27 U	2	0.65 J
1,1-Dichloroethene	ug/L	6	42 U	5.6	0.42 U	18	0.49 J
1,2,3-Trichloropropane	ug/L	0.005 NL	0.0017 U	0.0017 U	0.0017 U	0.0076	0.0017 U
1,2-Dibromo-3-chloropropane	ug/L	0.2	0.0023 U	0.0023 U	0.0023 U	0.0049 J	0.0023 U
1,2-Dibromoethane	ug/L	0.05	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
1,2-Dichlorobenzene	ug/L	600	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	ug/L	0.5	28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	ug/L	5	35 ` `	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	ug/L	600 NL	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	ug/L	5	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	ug/L	3 NL	1 U	68	1 U	14	3.2
2-Hexanone	ug/L	NA	260 U	2.6 U	2.6 U	2.6 U	2.6 U
Acetone	ug/L	NA	450 U	4.5 U	4.5 U	4.5 U	4.5 U
Acetonitrile	ug/L	NA	900 U	9 U	9 U	9 U	9 U
Acrolein	ug/L	NA	460 U	4.6 U	4.6 U	4.6 U	4.6 U
Acrylonitrile	ug/L	NA	70 U	0.7 U	0.7 U	0.7 U	0.7 U
Allyl chloride	ug/L	NA	40 U	0.4 U	0.4 U	0.4 U	0.4 U
Benzene	ug/L	1	28 U	0.28 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	ug/L	NA	30 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	ug/L	NA	40 U	0.4 U	0.4 U	0.4 U	0.4 U
Bromomethane	ug/L	NA	42 U	0.42 U	0.42 U	0.42 U	0.42 U
Carbon Disulfide	ug/L	160 NL	48 U	0.48 U	0.48 U	0.48 U	0.48 U
Carbon Tetrachloride	ug/L	0.5	28 U	1.5 J	0.28 U	0.63 J	0.28 U
Chlorobenzene	ug/L	70	36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	ug/L	NA	40 U	0.4 U	0.4 U	0.4 U	0.4 U
Chloroform	ug/L	NA	33 U	2 J	0.33 U	4.1	0.33 U
Chloromethane	ug/L	NA	40 U	0.4 U	0.4 U	0.4 U	0.4 U
Chloroprene	ug/L	NA	60 U	0.6 U	0.6 U	0.6 U	0.6 U
cis-1,2-Dichloroethene	ug/L	6	2000	0.32 U	0.32 U	110	17
cis-1,3-Dichloropropene	ug/L	0.5(total)	22 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	ug/L	NA	28 U	0.28 U	0.28 U	0.28 U	0.28 U
Dibromomethane	ug/L	NA	36 U	0.36 U	0.36 U	0.36 U	0.36 U
Dichlorodifluoromethane	ug/L	1000 NL	79 U	0.79 U	0.79 U	0.79 U	0.79 U
Ethyl cyanide	ug/L	NA	700 U	7 U	7 U	7 U	7 U
Ethyl methacrylate	ug/L	NA	90 U	0.9 U	0.9 U	0.9 U	0.9 U
Ethylbenzene	ug/L	300	25 U	0.25 U	0.25 U	0.25 U	0.25 U
Iodomethane	ug/L	NA	100 U	1 U	1 U	1 U	1 U
Isobutanol	ug/L	NA	700 U	7 U	7 U	7 U	7 U
Methacrylonitrile	ug/L	NA	90 U	0.9 U	0.9 U	0.9 U	0.9 U
Methyl ethyl ketone	ug/L	NA	470 U	4.7 U	4.7 U	4.7 U	4.7 U
Methyl isobutyl ketone (MIBK)	ug/L	120 NL	350 U	3.5 U	3.5 U	3.5 U	3.5 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T11-F.xls

February 2008

**TABLE XI**  
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY CALIFORNIA

<b>Volatile Organic Compounds</b>							
<b>Well Identifier:</b>		<b>HAR-07</b>	<b>HAR-14</b>	<b>HAR-15</b>	<b>HAR-16</b>	<b>HAR-17</b>	
Geological Unit:		Chatsworth	Shallow	Shallow	Chatsworth	Chatsworth	
Sample Type:		Primary	Primary	Primary	Primary	Primary	
Lab Name:		TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	
Collection Date:		05/08/2007	05/08/2007	05/08/2007	05/07/2007	05/08/2007	
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>					
Methyl methacrylate	ug/L	NA	90 U	0.9 U	0.9 U	0.9 U	0.9 U
Methylene chloride	ug/L	5	95 U	0.95 U	0.95 U	0.95 U	0.95 U
m-Xylene & p-Xylene	ug/L	1750(total)	60 U	0.6 U	0.6 U	0.6 U	0.6 U
o-Xylene	ug/L	1750(total)	30 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	100	16 U	0.16 U	0.16 U	0.16 U	0.16 U
Tetrachloroethene	ug/L	5	32 U	0.32 U	0.32 U	12	0.32 U
Toluene	ug/L	150	36 U	0.36 U	0.36 U	0.36 U	0.36 U
trans-1,2-Dichloroethene	ug/L	10	86 J	0.27 U	0.27 U	0.92 J	0.32 J
trans-1,3-Dichloropropene	ug/L	0.5(total)	32 U	0.32 U	0.32 U	0.32 U	0.32 U
trans-1,4-Dichloro-2-butene	ug/L	NA	250 U	2.5 U	2.5 U	2.5 U	2.5 U
Trichloroethene	ug/L	5	8200	3.6	0.49 J	11000	98
Trichlorofluoromethane	ug/L	150	34 U	0.34 U	0.34 U	22	0.34 U
Vinyl acetate	ug/L	NA	100 U	1 U	1 U	1 U	1 U
Vinyl chloride	ug/L	0.5	30 U	0.3 U	0.3 U	0.3 U	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T11-F.xls

February 2008

**TABLE XI**  
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY CALIFORNIA

<b>Volatile Organic Compounds</b>			
<b>Well Identifier:</b>	<b>RD-48B</b>		
Geological Unit:	Chatsworth		
Sample Type:	Primary		
Lab Name:	TestAmerica		
Collection Date:	08/29/2007		
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>	
1,1,1,2-Tetrachloroethane	ug/L	NA	0.27 U
1,1,1-Trichloroethane	ug/L	200	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	1	0.24 U
1,1,2-Trichloroethane	ug/L	5	0.3 U
1,1-Dichloroethane	ug/L	5	0.27 U
1,1-Dichloroethene	ug/L	6	0.42 U
1,2,3-Trichloropropane	ug/L	0.005 NL	0.32 U
1,2-Dibromo-3-chloropropane	ug/L	0.2	0.0023 U
1,2-Dibromoethane	ug/L	0.05	0.28 U
1,2-Dichlorobenzene	ug/L	600	0.32 U
1,2-Dichloroethane	ug/L	0.5	0.28 U
1,2-Dichloropropane	ug/L	5	0.35 U
1,3-Dichlorobenzene	ug/L	600 NL	0.35 U
1,4-Dichlorobenzene	ug/L	5	0.37 U
1,4-Dioxane	ug/L	3 NL	1 U
2-Hexanone	ug/L	NA	4.7 U
Acetone	ug/L	NA	4.5 U
Acetonitrile	ug/L	NA	9 U
Acrolein	ug/L	NA	4 U
Acrylonitrile	ug/L	NA	0.7 U
Allyl chloride	ug/L	NA	0.4 U
Benzene	ug/L	1	0.28 U
Bromodichloromethane	ug/L	NA	0.3 U
Bromoform	ug/L	NA	0.4 U
Bromomethane	ug/L	NA	0.42 U
Carbon Disulfide	ug/L	160 NL	0.48 U
Carbon Tetrachloride	ug/L	0.5	0.28 U
Chlorobenzene	ug/L	70	0.36 U
Chloroethane	ug/L	NA	0.4 U
Chloroform	ug/L	NA	0.33 U
Chloromethane	ug/L	NA	0.4 U
Chloroprene	ug/L	NA	0.6 U
cis-1,2-Dichloroethene	ug/L	6	0.32 U
cis-1,3-Dichloropropene	ug/L	0.5(total)	0.22 U
Dibromochloromethane	ug/L	NA	0.28 U
Dibromomethane	ug/L	NA	0.36 U
Dichlorodifluoromethane	ug/L	1000 NL	0.26 U
Ethyl cyanide	ug/L	NA	7 U
Ethyl methacrylate	ug/L	NA	0.9 U
Ethylbenzene	ug/L	300	0.25 U
Iodomethane	ug/L	NA	1 U
Isobutanol	ug/L	NA	7 U
Methacrylonitrile	ug/L	NA	0.9 U
Methyl ethyl ketone	ug/L	NA	4.7 U
Methyl isobutyl ketone (MIBK)	ug/L	120 NL	3.5 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T11-F.xls

February 2008

**TABLE XI**  
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY CALIFORNIA

<b>Volatile Organic Compounds</b>			
<b>Well Identifier:</b>	<b>RD-48B</b>		
Geological Unit:	Chatsworth		
Sample Type:	Primary		
Lab Name:	TestAmerica		
Collection Date:	08/29/2007		
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>	
Methyl methacrylate	ug/L	NA	0.9 U
Methylene chloride	ug/L	5	0.95 U
m-Xylene & p-Xylene	ug/L	1750(total)	0.6 U
o-Xylene	ug/L	1750(total)	0.3 U
Styrene	ug/L	100	0.16 U
Tetrachloroethene	ug/L	5	0.32 U
Toluene	ug/L	150	0.36 U
trans-1,2-Dichloroethene	ug/L	10	0.27 U
trans-1,3-Dichloropropene	ug/L	0.5(total)	0.32 U
trans-1,4-Dichloro-2-butene	ug/L	NA	2.5 U
Trichloroethene	ug/L	5	0.26 U
Trichlorofluoromethane	ug/L	150	0.34 U
Vinyl acetate	ug/L	NA	1 U
Vinyl chloride	ug/L	0.5	0.3 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T11-F.xls

February 2008

1. STL-Knox = Severn Trent Laboratories of Knoxville, Tennessee.
2. TA-Knox = TestAmerica of Knoxville, Tennessee, formerly Severn Trent Laboratories.
3. TestAmerica = TestAmerica of Irvine, California.
4. Pacific = Pacific Analytical of Carlsbad, California.
  
5. --- = Analysis not performed.
  
6. Primary = Primary sample.
7. Dup = Duplicate sample.
8. Split = Split sample.
  
9. Chatsworth = Chatsworth Formation wells.
10. Shallow = Shallow wells.
  
11. mg/L = Milligrams per liter.
12. ug/L = Micrograms per liter.
13. pg/L = Picograms per liter.
  
14. Dissolved = Dissolved trace metals. Dissolved trace metal samples were filtered and preserved in the field using a 0.45 micron filter.
15. Total = Total trace metals. Total trace metal samples were not filtered, but were preserved in the field.
  
16. MCL = Maximum Contaminant Level, California primary drinking water standard.
17. SMCL = Secondary drinking water MCL.
18. RAL = Regulatory Action Level to be met at a customer tap.
19. NL = Advisory California Notification Level for unregulated chemical contaminants.
20. NA = Not applicable; no MCL promulgated.
  
21. 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).
22. TEQ = Toxicity equivalent. TEQs were calculated using 2005 toxic equivalency factors (van den Berg et al., 2006).
23. U = Not detected; numerical value represents the Method Detection Limit for that compound.
24. UJ = Not detected. Estimated detection limit as a result of analytical quality control deficiencies (see Appendix D for details).
25. W = The following dioxins and furans were detected:

Well Identifier	Sample Type	Sample Date	Compound	Concentration (pg/L)
HAR-14	Split	05/08/07	1,2,3,6,7,8-Hexachlorodibenzofuran	0.44 J
	Dup	08/28/07	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	2.1 J
			1,2,3,4,6,7,8-Heptachlorodibenzofuran	0.47 J
			1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	1.98 J
	Split		Octachlorodibenzo-p-dioxin	11.9 J
HAR-15	Primary	05/08/07	Octachlorodibenzo-p-dioxin	10.2 J
	Split		1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	1.2 J
	Primary	08/28/07	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	0.44 J
	Dup		1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	0.40 J
	Primary	10/19/07	1,2,3,4,7,8-Hexachlorodibenzofuran	1.3 J

26. Low-level N-nitrosodimethylamine analyses were performed by Pacific Analytical for primary and duplicate samples using modified EPA method 1625. NDMA analyses were also performed by TestAmerica using EPA method 8270C.

27. Dioxins and furans analyses were performed on primary samples by Vista Analytical and on split samples by STL-Knoxville using EPA method 8290 during the second quarter.

Dioxins and furans analyses were performed on primary samples by TestAmerica-Knoxville and on split samples by Vista Analytical using EPA method 8290 during the third quarter.

28. Cyanide samples were not filtered and were analyzed by EPA method 9014.

Analyte	Primary Laboratory	EPA Method
1,2-Dibromoethane & 1,2-Dibromo-3-chloropropane	TestAmerica of Ontario, California	504.1
Chlorinated Herbicides	TestAmerica of Portland, Oregon	8151A
Low level 1,4-dioxane	TestAmerica of Irvine, California	modified EPA method 8260SIM
Low-level 1,2,3-trichloropropane	TestAmerica of Ontario, California	SRL 524M-TCP
Mercury	Weck Laboratories of City of Industry, California	7470A
Organochlorine Pesticides	TestAmerica of Irvine, California	8081A
Organophosphorus Pesticides	TestAmerica of Morgan Hill, California	8141A
Polychlorinated biphenyls (PCBs)	TestAmerica of Irvine, California	8082
Semi-Volatile Organic Compounds	Weck Laboratories of City of Industry, California	8270C
Sulfide	TestAmerica of Irvine, California	376.2
Trace metals	TestAmerica of Irvine, California	6020
Tin	TestAmerica of Irvine, California	6010B
Volatile Organic Compounds	TestAmerica of Irvine, California	8260B

29. MCLs, SMCLs, RAL, and NLs are listed by the California Department of Public Health (2006, 2007a, 2007b).

Reported synonyms:	Previously reported:
Ethyl Cyanide	Propionitrile
Methyl ethyl ketone	2-Butanone
Methyl isobutyl ketone (MIBK)	4-Methyl-2-pentanone (MIBK)
Methyl parathion	Parathion-methyl
Parathion	Parathion-ethyl

**TABLE XII**

SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN AND PERCHLORATE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:		HAR-07	HAR-07	HAR-07	HAR-07	HAR-07	HAR-08	HAR-08	
Sample Type:		Primary	Primary	Duplicate	Primary	Primary	Primary	Primary	
Lab Name:		TestAmerica	TestAmerica	Pacific	Lancaster	Lancaster	TestAmerica	TestAmerica	
Collection Date:		02/15/2007	05/08/2007	05/08/2007	08/16/2007	11/06/2007	02/15/2007	05/15/2007	
Analyte	Units	MCL							
<b>Organic Constituents and Perchlorate</b>									
1,1,1-Trichloroethane	ug/L	200	7.5 U	30 U	---	2 U	2 U	0.3 U	0.3 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	38 U	---	---	4 U	4 U	1.5 U	1.5 U
1,1,2-Trichloroethane	ug/L	5	7.5 U	30 U	---	2 U	2 U	0.3 U	0.3 U
1,1-Dichloroethane	ug/L	5	36	27 U	---	2 U	2 U	0.27 U	0.27 U
1,1-Dichloroethene	ug/L	6	10 U	42 U	---	8 J	7 J	0.42 U	0.42 U
1,2-Dichloroethane	ug/L	0.5	7 U	28 U	---	1 U	1 U	0.28 U	0.28 U
1,3-Dinitrobenzene	ug/L	NA	2.9 U	1.9 U	---	2.9 U	2.9 U	2.9 R	2.9 U
1,4-Dioxane	ug/L	3 NL	10 U	1 U	---	1 U	1 U	1.6 J	2.1
Acetone	ug/L	NA	110 U	450 U	---	12 U	12 U	4.5 U	4.5 U
Benzene	ug/L	1	7 U	28 U	---	1 U	1 U	0.28 U	0.28 U
Carbon Tetrachloride	ug/L	0.5	7 U	28 U	---	1 U	1 U	0.28 U	0.28 U
Chloroform	ug/L	NA	8.2 U	33 U	---	2 U	2 U	0.33 U	0.33 U
cis-1,2-Dichloroethene	ug/L	6	2400	2000	---	2300	1600	9.9	14
Ethylbenzene	ug/L	300	6.2 U	25 U	---	2 U	2 U	0.25 U	0.25 U
Methyl ethyl ketone	ug/L	NA	95 U	470 U	---	6 U	6 U	3.8 U	4.7 U
Methylene chloride	ug/L	5	34 U	95 U	---	4 U	4 U	0.95 U	2.1 U
m-Xylene & p-Xylene	ug/L	1750 total	15 U	60 U	---	2 U	2 U	0.6 U	0.6 U
Nitrobenzene	ug/L	NA	2.4 U	0.37 U	---	2.4 U	2.4 U	2.4 R	2.4 U
n-Nitrosodimethylamine	ug/L	0.01 NL	0.0373	0.0514	0.0498	0.0448	0.0333	0.0265	0.0206
o-Xylene	ug/L	1750 total	7.5 U	30 U	---	2 U	2 U	0.3 U	0.3 U
Perchlorate	ug/L	6	0.8 U	0.65 U	---	0.65 U	0.7 U	0.8 U	0.65 U
Tetrachloroethene	ug/L	5	8 U	32 U	---	2 U	2 U	0.32 U	0.32 U
Toluene	ug/L	150	9 U	36 U	---	1 U	1 U	0.36 U	0.36 U
trans-1,2-Dichloroethene	ug/L	10	140	86 J	---	130	120	1.2	1.6
Trichloroethene	ug/L	5	4400	8200	---	3500	1600	0.98 J	1.2
Trichlorofluoromethane	ug/L	150	8.5 U	34 U	---	1 U	1 U	0.34 U	0.34 U
Vinyl chloride	ug/L	0.5	82	30 U	---	22	49	2.1	2.6
<b>Naturally Occurring Constituents</b>									
Ammonia-N	mg/L	NA	0.07 U	0.077 U	---	0.07 U	0.07 U	0.22 U	0.07 U
Fluoride	mg/L	2	0.27 J	0.39 J	---	0.35 J	0.25 J	0.25 J	0.31 J
Formaldehyde	ug/L	100 NL	34 U	23 U	---	110 R	23 U	43 U	23 UJ
Nitrate-NO3	mg/L	45	0.25 U	---	---	0.57	0.25 U	0.25 U	0.25 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T12-F.xls

February 2008



**TABLE XII**

SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN AND PERCHLORATE, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>		<b>HAR-08</b>	<b>HAR-08</b>	<b>HAR-08</b>	<b>HAR-08</b>	<b>HAR-18</b>	<b>HAR-18</b>	<b>HAR-18</b>	
Sample Type:		Primary	Primary	Duplicate	Split	Primary	Primary	Split	
Lab Name:		Lancaster	Lancaster	Lancaster	TestAmerica	Test America	TestAmerica	Lancaster	
Collection Date:		08/16/2007	10/29/2007	10/29/2007	10/29/2007	02/22/2007	05/15/2007	05/15/2007	
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>							
<b>Organic Constituents and Perchlorate</b>									
1,1,1-Trichloroethane	ug/L	200	0.1 U	0.1 U	---	---	6 U	6 U	4 J
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	0.2 U	0.2 U	---	---	470	550	520
1,1,2-Trichloroethane	ug/L	5	0.1 U	0.1 U	---	---	6 U	6 U	0.8 U
1,1-Dichloroethane	ug/L	5	0.1 U	0.1 U	---	---	5.4 U	6.4 J	7
1,1-Dichloroethene	ug/L	6	0.1 U	0.1 U	---	---	58	130	150
1,2-Dichloroethane	ug/L	0.5	0.1 U	0.1 U	---	---	5.6 U	5.6 U	0.5 U
1,3-Dinitrobenzene	ug/L	NA	2.9 U	2.9 U	---	---	3.1 U	2.9 U	---
1,4-Dioxane	ug/L	3 NL	1.3 J	1.4 J	---	---	10	14	---
Acetone	ug/L	NA	3 U	3 U	---	---	90 U	90 U	13 J
Benzene	ug/L	1	0.1 U	0.1 U	---	---	5.6 U	5.6 U	0.5 U
Carbon Tetrachloride	ug/L	0.5	0.1 U	0.1 U	---	---	5.6 U	5.6 U	0.5 U
Chloroform	ug/L	NA	0.1 U	0.1 U	---	---	6.6 U	6.6 U	1 J
cis-1,2-Dichloroethene	ug/L	6	18 J	18	---	---	880	1400	1100
Ethylbenzene	ug/L	300	0.1 U	0.1 U	---	---	5 U	5 U	0.8 U
Methyl ethyl ketone	ug/L	NA	1 U	1 U	---	---	76 U	94 U	3 U
Methylene chloride	ug/L	5	0.2 U	0.2 U	---	---	19 U	63 U	2 U
m-Xylene & p-Xylene	ug/L	1750 total	0.1 U	0.1 U	---	---	12 U	12 U	0.8 U
Nitrobenzene	ug/L	NA	2.4 U	2.4 U	---	---	2.6 U	2.4 U	---
n-Nitrosodimethylamine	ug/L	0.01 NL	0.0195	0.0173	0.0175	---	0.6599	0.491	---
o-Xylene	ug/L	1750 total	0.1 U	0.1 U	---	---	6 U	6 U	0.8 U
Perchlorate	ug/L	6	0.65 U	0.7 U	0.7 U	0.65 U	0.8 U	0.65 U	---
Tetrachloroethene	ug/L	5	0.1 U	0.1 U	---	---	6.4 U	6.4 U	2 J
Toluene	ug/L	150	0.1 U	0.1 U	---	---	7.2 U	7.2 U	0.7 U
trans-1,2-Dichloroethene	ug/L	10	2.1 J	1.6	---	---	15 J	28	27
Trichloroethene	ug/L	5	1.8 J	1.6	---	---	1200	1400	1300
Trichlorofluoromethane	ug/L	150	0.1 U	0.1 U	---	---	6.8 U	6.8 U	1
Vinyl chloride	ug/L	0.5	4 J	2.8	---	---	68	98	120
<b>Naturally Occurring Constituents</b>									
Ammonia-N	mg/L	NA	0.07 U	0.07 U	---	---	0.096 U	0.07 U	---
Fluoride	mg/L	2	0.29 J	0.28 J	---	---	0.46 J	0.28 J	---
Formaldehyde	ug/L	100 NL	120 R	56 J	---	---	49 R	23 UJ	---
Nitrate-NO3	mg/L	45	0.25 U	0.25 U	---	---	33	23	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T12-F.xls

February 2008

**TABLE XII**

SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN AND PERCHLORATE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:		HAR-18	HAR-18	HAR-20	HAR-20	HAR-20	HAR-20	HAR-20
Sample Type:		Primary	Primary	Primary	Primary	Primary	Duplicate	Primary
Lab Name:		Lancaster	Lancaster	TestAmerica	TestAmerica	Lancaster	Lancaster	Lancaster
Collection Date:		08/14/2007	10/23/2007	02/15/2007	05/15/2007	08/14/2007	08/14/2007	10/24/2007
Analyte	Units	MCL						
<b>Organic Constituents and Perchlorate</b>								
1,1,1-Trichloroethane	ug/L	200	2 U	2 U	0.3 U	3 U	0.8 U	0.8 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	570	590	1.5 U	1.5 U	2 U	2 U
1,1,2-Trichloroethane	ug/L	5	2 U	2 U	0.3 U	3 U	0.8 U	0.8 U
1,1-Dichloroethane	ug/L	5	5 J	3 J	0.27 U	2.7 U	1 U	1 U
1,1-Dichloroethene	ug/L	6	69	44	0.42 U	4.2 U	1 J	1 J
1,2-Dichloroethane	ug/L	0.5	1 U	1 U	0.28 U	2.8 U	0.5 U	0.5 U
1,3-Dinitrobenzene	ug/L	NA	2.9 U	2.9 U	2.9 U	2.9 U	2.8 U	---
1,4-Dioxane	ug/L	3 NL	8.7	11 J	4.1 J	3.5	2.9	---
Acetone	ug/L	NA	12 U	15 J	4.5 U	45 U	6 U	6 U
Benzene	ug/L	1	1 U	1 U	0.28 U	2.8 U	0.5 U	0.5 U
Carbon Tetrachloride	ug/L	0.5	1 U	1 U	0.28 U	2.8 U	0.5 U	0.5 U
Chloroform	ug/L	NA	2 U	2 U	0.33 U	3.3 U	0.8 U	0.8 U
cis-1,2-Dichloroethene	ug/L	6	1100	940	180	230	250	260
Ethylbenzene	ug/L	300	2 U	2 U	0.25 U	2.5 U	0.8 U	0.8 U
Methyl ethyl ketone	ug/L	NA	6 U	6 U	3.8 U	47 U	3 U	3 U
Methylene chloride	ug/L	5	4 U	4 U	0.95 U	17 U	2 U	2 U
m-Xylene & p-Xylene	ug/L	1750 total	2 U	2 U	0.6 U	6 U	0.8 U	0.8 U
Nitrobenzene	ug/L	NA	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	---
n-Nitrosodimethylamine	ug/L	0.01 NL	1.3743	1.541	0.0991	0.0999	0.0971	---
o-Xylene	ug/L	1750 total	2 U	2 U	0.3 U	3 U	0.8 U	0.8 U
Perchlorate	ug/L	6	0.65 U	0.7 U	0.8 U	0.65 U	0.65 U	---
Tetrachloroethene	ug/L	5	3 J	3 J	0.32 U	3.2 U	0.8 U	0.8 U
Toluene	ug/L	150	1 U	1 U	0.36 U	3.6 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	10	19	17 J	14	16	19	19
Trichloroethene	ug/L	5	1500	1200	400	510	490	490
Trichlorofluoromethane	ug/L	150	1 J	1 J	0.34 U	3.4 U	0.5 U	0.5 U
Vinyl chloride	ug/L	0.5	64	61	0.84	3 U	1	1
<b>Naturally Occurring Constituents</b>								
Ammonia-N	mg/L	NA	0.073 J	0.092 J	0.088 U	0.07 U	0.07 U	---
Fluoride	mg/L	2	0.55	0.36 J	0.2 J	0.28 J	0.42 J	---
Formaldehyde	ug/L	100 NL	32 J	23 U	43 U	23 UJ	32 J	---
Nitrate-NO3	mg/L	45	29	34	0.25 U	0.25 U	0.25 U	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T12-F.xls

February 2008

**TABLE XII**

SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN AND PERCHLORATE, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>		<b>OS-28</b>	<b>OS-28</b>	<b>RD-01</b>	<b>RD-01</b>	<b>RD-01</b>	<b>RD-01</b>	<b>RD-01</b>	
Sample Type:		Primary	Primary	Primary	Primary	Duplicate	Primary	Primary	
Lab Name:		Pacific	Pacific	TestAmerica	TestAmerica	TestAmerica	Lancaster	Lancaster	
Collection Date:		03/01/2007	08/15/2007	02/15/2007	05/09/2007	05/09/2007	08/15/2007	10/23/2007	
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>							
<b>Organic Constituents and Perchlorate</b>									
1,1,1-Trichloroethane	ug/L	200	---	---	0.3 U	1.5 U	---	0.8 U	0.8 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	---	---	1.5 U	7.5 U	---	2 U	2 U
1,1,2-Trichloroethane	ug/L	5	---	---	0.3 U	1.5 U	---	0.8 U	0.8 U
1,1-Dichloroethane	ug/L	5	---	---	0.27 U	1.4 U	---	1 U	1 U
1,1-Dichloroethene	ug/L	6	---	---	1.8	3.2 J	---	4 J	4 J
1,2-Dichloroethane	ug/L	0.5	---	---	0.28 U	1.4 U	---	0.5 U	1 U
1,3-Dinitrobenzene	ug/L	NA	---	---	2.9 U	2.9 U	---	2.9 U	2.9 U
1,4-Dioxane	ug/L	3 NL	---	---	2.2	2.8	---	2 J	2.5
Acetone	ug/L	NA	---	---	4.5 U	22 U	---	6 U	6 U
Benzene	ug/L	1	---	---	0.28 U	1.4 U	---	0.5 U	0.5 U
Carbon Tetrachloride	ug/L	0.5	---	---	0.28 U	1.4 U	---	0.5 U	1 U
Chloroform	ug/L	NA	---	---	0.33 U	1.6 U	---	0.8 U	0.8 U
cis-1,2-Dichloroethene	ug/L	6	---	---	840	850	---	850	950 J
Ethylbenzene	ug/L	300	---	---	0.25 U	1.2 U	---	0.8 U	0.8 U
Methyl ethyl ketone	ug/L	NA	---	---	3.8 U	24 U	---	3 U	3 U
Methylene chloride	ug/L	5	---	---	0.95 U	5 U	---	2 U	2 U
m-Xylene & p-Xylene	ug/L	1750 total	---	---	0.6 U	3 U	---	0.8 U	0.8 U
Nitrobenzene	ug/L	NA	---	---	2.4 U	2.4 U	---	2.4 U	2.4 U
n-Nitrosodimethylamine	ug/L	0.01 NL	0.01 U	0.01 U	0.0213	0.0263	---	0.0236	0.0205
o-Xylene	ug/L	1750 total	---	---	0.3 U	1.5 U	---	0.8 U	0.8 U
Perchlorate	ug/L	6	---	---	0.8 U	0.65 U	0.65 U	0.65 U	0.7 U
Tetrachloroethene	ug/L	5	---	---	0.32 U	1.6 U	---	0.8 U	0.8 U
Toluene	ug/L	150	---	---	0.36 U	1.8 U	---	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	10	---	---	30	67	---	37	35 J
Trichloroethene	ug/L	5	---	---	870	910	---	850	970 J
Trichlorofluoromethane	ug/L	150	---	---	0.34 U	1.7 U	---	0.5 U	2 U
Vinyl chloride	ug/L	0.5	---	---	27	35	---	57	44
<b>Naturally Occurring Constituents</b>									
Ammonia-N	mg/L	NA	---	---	0.072 U	0.19 U	---	0.079 J	0.07 U
Fluoride	mg/L	2	---	---	0.33 J	0.49 J	---	0.34 J	0.34 J
Formaldehyde	ug/L	100 NL	---	---	46 U	23 UJ	---	170 R	23 UJ
Nitrate-NO3	mg/L	45	---	---	0.34 J	0.3 J	---	0.25 U	0.4 J

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T12-F.xls

February 2008

**TABLE XII**

SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN AND PERCHLORATE, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier:		RD-01	RD-02	RD-02	RD-02	RD-02	RD-02	RD-02	RD-02
Sample Type:		Split	Primary	Primary	Duplicate	Primary	Primary	Primary	Duplicate
Lab Name:		TestAmerica	TestAmerica	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster	Lancaster
Collection Date:		10/23/2007	02/13/2007	05/21/2007	05/21/2007	08/29/2007	11/07/2007	11/07/2007	
Analyte	Units	MCL							
<b>Organic Constituents and Perchlorate</b>									
1,1,1-Trichloroethane	ug/L	200	0.3 U	0.6 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	1.5 U	3 U	2 U	2 U	2 U	2 U	2 U
1,1,2-Trichloroethane	ug/L	5	0.3 U	0.6 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1-Dichloroethane	ug/L	5	0.27 U	0.54 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	ug/L	6	2.9	0.98 J	1 J	1 J	2 J	1 J	1 J
1,2-Dichloroethane	ug/L	0.5	0.28 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dinitrobenzene	ug/L	NA	---	2.9 U	2.9 U	---	2.9 U	2.9 U	---
1,4-Dioxane	ug/L	3 NL	---	2.2	1.8 J	---	2	2 J	---
Acetone	ug/L	NA	4.5 U	9 U	6 U	6 U	6 U	6 U	6 U
Benzene	ug/L	1	0.28 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon Tetrachloride	ug/L	0.5	0.28 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	NA	0.33 U	0.66 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
cis-1,2-Dichloroethene	ug/L	6	930	390	270	270	400	250	240
Ethylbenzene	ug/L	300	0.25 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Methyl ethyl ketone	ug/L	NA	4.7 U	7.6 U	3 U	3 U	3 U	3 U	3 U
Methylene chloride	ug/L	5	4.5 J	1.9 U	2 U	2 U	2 U	2 U	2 U
m-Xylene & p-Xylene	ug/L	1750 total	0.6 U	1.2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Nitrobenzene	ug/L	NA	---	2.4 U	2.4 U	---	2.4 U	2.4 U	---
n-Nitrosodimethylamine	ug/L	0.01 NL	---	0.01 U	0.01 U	---	0.01 U	0.01 U	---
o-Xylene	ug/L	1750 total	0.3 U	0.6 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Perchlorate	ug/L	6	---	0.8 U	0.65 U	---	0.65 U	0.7 U	0.7 U
Tetrachloroethene	ug/L	5	0.32 U	0.64 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Toluene	ug/L	150	0.65 J	0.72 U	0.7 U	0.7 U	0.8 J	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	10	33	20	15	15	30	20	19
Trichloroethene	ug/L	5	890	230	230	230	240	240	240
Trichlorofluoromethane	ug/L	150	0.34 U	0.68 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride	ug/L	0.5	42	2.1	2	2	4	3	3
<b>Naturally Occurring Constituents</b>									
Ammonia-N	mg/L	NA	---	0.07 U	0.079 J	---	0.23 J	0.07 U	---
Fluoride	mg/L	2	---	0.44 J	0.35 J	---	0.48 J	0.31 J	---
Formaldehyde	ug/L	100 NL	---	23 U	23 U	---	23 U	23 U	---
Nitrate-NO3	mg/L	45	---	0.25 U	0.25 U	---	0.25 U	0.25 U	---

See last page of table for notes and abbreviations.

Haley &amp; Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T12-F.xls

February 2008

TABLE XII

SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN AND PERCHLORATE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:		RD-04	RD-04	RD-04	RD-04	RD-04	RD-04	RD-09	
Sample Type:		Primary	Duplicate	Primary	Primary	Primary	Split	Primary	
Lab Name:		TestAmerica	TestAmerica	TestAmerica	Lancaster	Lancaster	TestAmerica	TestAmerica	
Collection Date:		02/13/2007	02/13/2007	05/10/2007	08/15/2007	10/25/2007	10/25/2007	02/14/2007	
Analyte	Units	MCL							
<b>Organic Constituents and Perchlorate</b>									
1,1,1-Trichloroethane	ug/L	200	6 U	0.3 U	6 U	2 U	0.8 U	---	0.75 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	30 U	1.5 U	30 U	4 U	2 U	---	3.8 U
1,1,2-Trichloroethane	ug/L	5	6 U	0.3 U	6 U	2 U	0.8 U	---	0.75 U
1,1-Dichloroethane	ug/L	5	5.4 U	0.27 U	5.4 U	2 U	1 U	---	0.68 U
1,1-Dichloroethene	ug/L	6	8.4 U	0.68 J	8.4 U	2 J	1 J	---	1 U
1,2-Dichloroethane	ug/L	0.5	5.6 U	0.28 U	5.6 U	1 U	0.5 U	---	0.7 U
1,3-Dinitrobenzene	ug/L	NA	2.9 U	---	2.9 U	2.9 U	2.8 U	---	2.8 U
1,4-Dioxane	ug/L	3 NL	1 J	---	1 U	1 U	1 U	---	1.6 J
Acetone	ug/L	NA	90 U	7.6 J,L	90 U	12 U	6 U	---	11 U
Benzene	ug/L	1	5.6 U	0.28 U	6.8 J	1 U	0.5 U	---	0.7 U
Carbon Tetrachloride	ug/L	0.5	5.6 U	0.28 U	5.6 U	1 U	0.5 U	---	0.7 U
Chloroform	ug/L	NA	6.6 U	0.33 U	6.6 U	2 U	0.8 U	---	0.82 U
cis-1,2-Dichloroethene	ug/L	6	96	94	110	140	130	---	60
Ethylbenzene	ug/L	300	5 U	0.25 U	5 U	2 U	0.8 U	---	0.62 U
Methyl ethyl ketone	ug/L	NA	76 U	3.8 U	94 U	6 U	3 U	---	9.5 U
Methylene chloride	ug/L	5	30 J,L	0.95 U	19 U	4 U	2 U	---	2.4 U
m-Xylene & p-Xylene	ug/L	1750 total	12 U	0.6 U	12 U	2 U	0.8 U	---	1.5 U
Nitrobenzene	ug/L	NA	2.4 U	---	2.4 U	2.4 U	2.4 U	---	2.4 U
n-Nitrosodimethylamine	ug/L	0.01 NL	0.01 U	---	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
o-Xylene	ug/L	1750 total	6 U	0.3 U	6 U	2 U	0.8 U	---	0.75 U
Perchlorate	ug/L	6	0.8 U	---	0.65 U	0.65 U	0.7 U	0.65 U	0.8 U
Tetrachloroethene	ug/L	5	6.4 U	0.32 U	6.4 U	2 U	0.8 U	---	0.8 U
Toluene	ug/L	150	7.2 U	0.36 U	7.2 U	1 U	0.7 U	---	0.9 U
trans-1,2-Dichloroethene	ug/L	10	5.4 U	2	5.4 U	3 J	3 J	---	17
Trichloroethene	ug/L	5	2100	1800	2200	2200	1300	---	490
Trichlorofluoromethane	ug/L	150	6.8 U	0.34 U	6.8 U	1 U	0.5 U	---	0.85 U
Vinyl chloride	ug/L	0.5	6 U	0.3 U	6 U	1 U	0.5 U	---	0.75 U
<b>Naturally Occurring Constituents</b>									
Ammonia-N	mg/L	NA	0.07 U	---	0.084 U	0.19 J	0.074 J	---	0.081 J
Fluoride	mg/L	2	0.38 J	---	0.26 J	0.25 J	0.27 J	---	0.23 J
Formaldehyde	ug/L	100 NL	23 U	---	23 UJ	170 R	140 J	---	34 U
Nitrate-NO3	mg/L	45	0.25 U	---	0.25 U	0.25 U	0.25 U	---	0.25 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T12-F.xls

February 2008

**TABLE XII**

SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN AND PERCHLORATE, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>		<b>RD-09</b>	<b>RD-09</b>	<b>RD-09</b>	<b>RD-09</b>	<b>RD-10</b>	<b>RD-10</b>	<b>RD-10</b>	
Sample Type:		Primary	Split	Primary	Split	Primary	Duplicate	Split	
Lab Name:		TestAmerica	TestAmerica	Lancaster	TestAmerica	TestAmerica	TestAmerica	STL-SA	
Collection Date:		05/15/2007	05/15/2007	08/14/2007	08/14/2007	02/06/2007	02/06/2007	02/06/2007	
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>							
<b>Organic Constituents and Perchlorate</b>									
1,1,1-Trichloroethane	ug/L	200	1.5 U	---	0.8 U	---	0.3 U	0.3 U	0.41 UJ
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	1.5 U	---	2 U	---	1.5 U	1.5 U	1 UJ
1,1,2-Trichloroethane	ug/L	5	1.5 U	---	0.8 U	---	0.3 U	0.3 U	0.31 UJ
1,1-Dichloroethane	ug/L	5	1.4 U	---	1 U	---	0.27 U	0.27 U	0.1 UJ
1,1-Dichloroethene	ug/L	6	2.1 U	---	0.9 J	---	0.42 U	0.42 U	0.36 UJ
1,2-Dichloroethane	ug/L	0.5	1.4 U	---	0.5 U	---	0.28 U	0.28 U	0.22 UJ
1,3-Dinitrobenzene	ug/L	NA	2.9 U	---	2.8 U	---	2.9 U	---	---
1,4-Dioxane	ug/L	3 NL	1.9 J	---	1.4 J	---	1.1 J	---	---
Acetone	ug/L	NA	22 U	---	6 U	---	4.5 U	4.5 U	1 UJ
Benzene	ug/L	1	1.4 U	---	0.5 U	---	0.28 U	0.28 U	0.13 UJ
Carbon Tetrachloride	ug/L	0.5	1.4 U	---	0.5 U	---	0.28 U	0.28 U	0.15 UJ
Chloroform	ug/L	NA	1.6 U	---	0.8 U	---	0.33 U	0.33 U	0.12 UJ
cis-1,2-Dichloroethene	ug/L	6	64	---	67	---	7.5	7.4	8.3 J
Ethylbenzene	ug/L	300	1.2 U	---	0.8 U	---	0.25 U	0.25 U	0.27 UJ
Methyl ethyl ketone	ug/L	NA	24 U	---	3 U	---	3.8 U	3.8 U	1 UJ
Methylene chloride	ug/L	5	9.8 U	---	2 U	---	0.95 U	0.95 U	0.35 UJ
m-Xylene & p-Xylene	ug/L	1750 total	3 U	---	0.8 U	---	0.6 U	0.6 U	0.18 UJ
Nitrobenzene	ug/L	NA	2.4 U	---	2.4 U	---	2.4 U	---	---
n-Nitrosodimethylamine	ug/L	0.01 NL	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	---	0.01 U
o-Xylene	ug/L	1750 total	1.5 U	---	0.8 U	---	0.3 U	0.3 U	0.1 UJ
Perchlorate	ug/L	6	0.65 U	---	0.65 U	---	100	---	---
Tetrachloroethene	ug/L	5	1.6 U	---	0.8 U	---	0.32 U	0.32 U	0.38 UJ
Toluene	ug/L	150	1.8 U	---	0.7 U	---	0.36 U	0.36 U	0.25 UJ
trans-1,2-Dichloroethene	ug/L	10	18	---	18	---	0.39 J	0.51 J	0.54 J
Trichloroethene	ug/L	5	440	---	470	---	14	14	13 J
Trichlorofluoromethane	ug/L	150	1.7 U	---	0.5 U	---	0.34 U	0.34 U	0.23 UJ
Vinyl chloride	ug/L	0.5	1.5 U	---	0.8 J	---	0.3 U	0.3 U	0.12 UJ
<b>Naturally Occurring Constituents</b>									
Ammonia-N	mg/L	NA	0.074 J	---	0.07 U	---	0.15 J	---	---
Fluoride	mg/L	2	0.28 J	---	0.44 J	---	0.41 J	---	---
Formaldehyde	ug/L	100 NL	23 UJ	---	36 J	---	23 U	---	---
Nitrate-NO3	mg/L	45	0.25 U	---	0.25 U	---	0.73	---	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T12-F.xls

February 2008

**TABLE XII**  
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN AND PERCHLORATE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:		RD-10	RD-10	RD-10	RD-10	RD-10	RD-41A	RD-41A	
Sample Type:		Primary	Primary	Primary	Duplicate	Split	Primary	Primary	
Lab Name:		TestAmerica	Lancaster	Lancaster	Lancaster	TestAmerica	TestAmerica	TestAmerica	
Collection Date:		05/09/2007	08/15/2007	10/23/2007	10/23/2007	10/23/2007	02/14/2007	05/16/2007	
Analyte	Units	MCL							
<b>Organic Constituents and Perchlorate</b>									
1,1,1-Trichloroethane	ug/L	200	0.3 U	0.8 U	0.8 U	0.8 U	---	0.3 U	0.3 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	1.5 U	2 U	2 U	2 U	---	1.5 U	1.5 U
1,1,2-Trichloroethane	ug/L	5	0.3 U	0.8 U	0.8 U	0.8 U	---	0.3 U	0.3 U
1,1-Dichloroethane	ug/L	5	0.27 U	1 U	1 U	1 U	---	0.27 U	0.27 U
1,1-Dichloroethene	ug/L	6	0.42 U	0.8 U	0.8 U	0.8 U	---	0.42 U	0.42 U
1,2-Dichloroethane	ug/L	0.5	0.28 U	0.5 U	0.5 U	0.5 U	---	0.28 U	0.28 U
1,3-Dinitrobenzene	ug/L	NA	2.9 U	2.9 U	2.9 U	2.9 U	1.9 U	2.9 U	2.9 U
1,4-Dioxane	ug/L	3 NL	1.1 J	1 U	1 U	---	---	1 U	1 U
Acetone	ug/L	NA	4.5 U	6 U	6 U	6 U	---	5.2 J,L	4.5 U
Benzene	ug/L	1	0.28 U	0.5 U	0.5 U	0.5 U	---	0.28 U	0.28 U
Carbon Tetrachloride	ug/L	0.5	0.28 U	0.5 U	0.5 U	0.5 U	---	0.28 U	0.28 U
Chloroform	ug/L	NA	0.33 U	0.8 U	0.8 U	0.8 U	---	0.33 U	0.33 U
cis-1,2-Dichloroethene	ug/L	6	7.2	9	8	8	---	5.1	4.9
Ethylbenzene	ug/L	300	0.25 U	0.8 U	0.8 U	0.8 U	---	0.25 U	0.25 U
Methyl ethyl ketone	ug/L	NA	4.7 U	3 U	3 U	3 U	---	3.8 U	4.7 U
Methylene chloride	ug/L	5	1.1 J,L	2 U	2 U	2 U	---	0.95 U	0.95 U
m-Xylene & p-Xylene	ug/L	1750 total	0.6 U	0.8 U	0.8 U	0.8 U	---	0.6 U	0.6 U
Nitrobenzene	ug/L	NA	2.4 U	2.4 U	2.4 U	2.4 U	0.37 U	2.4 U	2.4 U
n-Nitrosodimethylamine	ug/L	0.01 NL	0.01 U	0.01 U	0.01 U	---	---	0.01 U	0.01 U
o-Xylene	ug/L	1750 total	0.3 U	0.8 U	0.8 U	0.8 U	---	0.3 U	0.3 U
Perchlorate	ug/L	6	94	78	62.2	---	---	0.8 U	0.65 U
Tetrachloroethene	ug/L	5	0.32 U	0.8 U	0.8 U	0.8 U	---	0.32 U	0.32 U
Toluene	ug/L	150	0.36 U	0.7 U	0.7 U	0.7 U	---	0.36 U	0.36 U
trans-1,2-Dichloroethene	ug/L	10	0.51 J	0.8 U	0.8 UJ	0.8 UJ	---	0.9 J	0.77 J
Trichloroethene	ug/L	5	13	15	12	12	---	6.2	5.2
Trichlorofluoromethane	ug/L	150	0.34 U	0.5 U	0.5 U	0.5 U	---	0.34 U	0.34 U
Vinyl chloride	ug/L	0.5	0.3 U	0.5 U	0.5 U	0.5 U	---	0.3 U	0.41 J
<b>Naturally Occurring Constituents</b>									
Ammonia-N	mg/L	NA	0.07 U	0.09 J	0.07 U	---	---	0.088 J	0.25 J
Fluoride	mg/L	2	0.47 J	0.31 J	0.28 J	---	---	0.43 J	0.38 J
Formaldehyde	ug/L	100 NL	23 UJ	130 R	23 UJ	---	---	42 U	54 U
Nitrate-NO3	mg/L	45	0.73	0.73	0.53	---	---	0.25 U	0.25 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T12-F.xls

February 2008

TABLE XII

SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN AND PERCHLORATE, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier:		RD-41A	RD-41A	RD-41A	RD-41A	RD-41B	RD-41B	RD-41B	
Sample Type:		Primary	Duplicate	Primary	Split	Primary	Primary	Primary	
Lab Name:		Lancaster	Lancaster	Lancaster	TestAmerica	TestAmerica	Lancaster	Lancaster	
Collection Date:		08/20/2007	08/20/2007	10/29/2007	10/29/2007	02/14/2007	05/21/2007	08/20/2007	
Analyte	Units	MCL							
<b>Organic Constituents and Perchlorate</b>									
1,1,1-Trichloroethane	ug/L	200	0.1 U	0.1 U	0.1 U	0.3 U	0.3 U	0.8 U	0.8 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	0.2 U	0.2 U	0.2 U	1.5 U	1.5 U	2 U	2 U
1,1,2-Trichloroethane	ug/L	5	0.1 U	0.1 U	0.1 U	0.3 U	0.3 U	0.8 U	0.8 U
1,1-Dichloroethane	ug/L	5	0.1 U	0.1 U	0.1 U	0.27 U	0.27 U	1 U	1 U
1,1-Dichloroethene	ug/L	6	0.1 U	0.1 U	0.1 U	0.42 U	2.1	3 J	6
1,2-Dichloroethane	ug/L	0.5	0.1 U	0.1 U	0.1 U	0.28 U	0.28 U	0.5 U	0.5 U
1,3-Dinitrobenzene	ug/L	NA	2.8 U	---	2.9 U	---	3 U	2.9 U	2.9 U
1,4-Dioxane	ug/L	3 NL	1 U	---	1 U	---	1.7 J	1.3 J	1 J
Acetone	ug/L	NA	3 U	3.6 J	3 U	4.5 U	4.5 U	6 U	6 U
Benzene	ug/L	1	0.1 U	0.1 U	0.1 U	0.28 U	0.28 U	0.5 U	0.5 U
Carbon Tetrachloride	ug/L	0.5	0.1 U	0.1 U	0.1 U	0.28 U	0.28 U	0.5 U	0.5 U
Chloroform	ug/L	NA	0.1 U	0.1 U	0.1 U	0.33 U	0.33 U	0.8 U	0.8 U
cis-1,2-Dichloroethene	ug/L	6	4 J	4.1 J	4.3	4	700	610	840
Ethylbenzene	ug/L	300	0.1 U	0.1 U	0.1 U	0.25 U	0.25 U	0.8 U	0.8 U
Methyl ethyl ketone	ug/L	NA	1 U	1 U	1 U	4.7 U	3.8 U	3 U	3 U
Methylene chloride	ug/L	5	0.3 U	0.2 U	0.2 U	0.95 U	0.95 U	2 U	2 U
m-Xylene & p-Xylene	ug/L	1750 total	0.1 U	0.1 U	0.1 U	0.6 U	0.6 U	0.8 U	0.8 U
Nitrobenzene	ug/L	NA	2.4 U	---	2.4 U	---	2.5 U	2.4 U	2.4 U
n-Nitrosodimethylamine	ug/L	0.01 NL	0.01 U	---	0.01 U	---	0.01 U	0.01 U	0.01 U
o-Xylene	ug/L	1750 total	0.1 U	0.1 U	0.1 U	0.3 U	0.3 U	0.8 U	0.8 U
Perchlorate	ug/L	6	0.65 U	---	0.7 U	---	0.8 U	0.65 U	0.65 U
Tetrachloroethene	ug/L	5	0.1 U	0.1 U	0.1 U	0.32 U	0.32 U	0.8 U	0.8 U
Toluene	ug/L	150	0.1 U	0.1 U	0.1 U	0.36 U	0.36 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	10	0.8 J	0.8 J	1.2	1	36	39	61
Trichloroethene	ug/L	5	4.8 J	4.5 J	3.4	3.4	1200	900	1200
Trichlorofluoromethane	ug/L	150	0.1 U	0.1 U	0.1 U	0.34 U	0.34 U	0.5 U	0.5 U
Vinyl chloride	ug/L	0.5	0.3 J	0.3 J	0.8	0.58	24	19	29
<b>Naturally Occurring Constituents</b>									
Ammonia-N	mg/L	NA	0.074 J	---	0.07 U	---	0.078 J	0.089 J	0.07 U
Fluoride	mg/L	2	0.35 J	---	0.33 J	---	0.24 J	0.21 J	0.26 J
Formaldehyde	ug/L	100 NL	23 U	---	91 J	---	50 U	23 U	23 U
Nitrate-NO3	mg/L	45	0.25 U	---	0.25 U	---	0.25 U	0.25 U	0.25 U

See last page of table for notes and abbreviations.

Haley &amp; Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T12-F.xls

February 2008



**TABLE XII**

SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN AND PERCHLORATE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:		RD-41B	RD-44	RD-44	RD-44	RD-44	RD-44	RD-44	RD-49A
Sample Type:		Primary	Primary	Primary	Primary	Duplicate	Primary	Primary	Primary
Lab Name:		Lancaster	TestAmerica	TestAmerica	Lancaster	Lancaster	Lancaster	Lancaster	Test America
Collection Date:		10/25/2007	02/07/2007	05/14/2007	08/15/2007	08/15/2007	10/24/2007	02/13/2007	
Analyte	Units	MCL							
<b>Organic Constituents and Perchlorate</b>									
1,1,1-Trichloroethane	ug/L	200	0.8 U	0.3 U	0.3 U	0.1 U	0.1 U	0.1 U	12 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	2 U	1.5 U	1.5 U	0.2 U	0.2 U	0.2 U	60 U
1,1,2-Trichloroethane	ug/L	5	0.8 U	0.3 U	0.3 U	0.1 U	0.1 U	0.1 U	12 U
1,1-Dichloroethane	ug/L	5	1 U	0.27 U	0.27 U	0.1 U	0.1 U	0.1 U	11 U
1,1-Dichloroethene	ug/L	6	4 J	0.42 U	0.42 U	0.1 U	0.1 U	0.1 U	17 U
1,2-Dichloroethane	ug/L	0.5	0.5 U	0.28 U	0.28 U	0.1 U	0.1 U	0.1 U	11 U
1,3-Dinitrobenzene	ug/L	NA	2.8 U	2.8 U	2.9 U	2.9 U	---	2.9 U	2.9 U
1,4-Dioxane	ug/L	3 NL	1.3 J	1 U	1 U	1 U	---	1 U	1 U
Acetone	ug/L	NA	6 U	4.5 U	4.5 U	3 U	3 U	3 U	180 U
Benzene	ug/L	1	0.5 U	0.28 U	0.28 U	0.1 U	0.1 U	0.1 U	11 U
Carbon Tetrachloride	ug/L	0.5	0.5 U	0.28 U	0.28 U	0.1 U	0.1 U	0.1 U	11 U
Chloroform	ug/L	NA	0.8 U	0.33 U	0.33 U	0.1 U	0.1 U	0.1 U	13 U
cis-1,2-Dichloroethene	ug/L	6	570	0.32 U	0.32 U	0.1 U	0.1 U	0.1 U	1700
Ethylbenzene	ug/L	300	0.8 U	0.25 U	0.25 U	0.1 U	0.1 U	0.1 U	10 U
Methyl ethyl ketone	ug/L	NA	3 U	3.8 U	4.7 U	1 U	1 U	1 U	150 U
Methylene chloride	ug/L	5	2 U	0.95 U	0.95 U	0.2 U	0.2 U	0.2 U	94 U
m-Xylene & p-Xylene	ug/L	1750 total	0.8 U	0.6 U	0.6 U	0.1 U	0.1 U	0.1 U	24 U
Nitrobenzene	ug/L	NA	2.4 U	2.4 U	2.4 U	2.4 U	---	2.4 U	2.4 U
n-Nitrosodimethylamine	ug/L	0.01 NL	0.01 U	0.01 U	0.01 U	0.01 U	---	0.01 U	0.01 U
o-Xylene	ug/L	1750 total	0.8 U	0.3 U	0.3 U	0.1 U	0.1 U	0.1 U	12 U
Perchlorate	ug/L	6	0.7 U	0.8 U	0.65 U	0.65 U	---	0.7 U	0.8 U
Tetrachloroethene	ug/L	5	0.8 U	0.32 U	0.32 U	0.1 U	0.1 U	0.1 U	13 U
Toluene	ug/L	150	0.7 U	0.36 U	0.36 U	0.1 U	0.1 U	0.1 U	14 U
trans-1,2-Dichloroethene	ug/L	10	41 J	0.27 U	0.27 U	0.1 U	0.1 U	0.1 U	63
Trichloroethene	ug/L	5	980	0.26 U	0.26 U	0.1 U	0.1 U	0.1 U	2700
Trichlorofluoromethane	ug/L	150	0.5 U	0.34 U	0.34 U	0.1 U	0.1 U	0.1 U	14 U
Vinyl chloride	ug/L	0.5	26	0.3 U	0.3 U	0.1 U	0.1 U	0.1 U	12 U
<b>Naturally Occurring Constituents</b>									
Ammonia-N	mg/L	NA	0.07 U	0.07 U	0.07 U	0.07 U	---	0.07 U	0.07 U
Fluoride	mg/L	2	0.21 J	0.37 J	0.44 J	0.34 J	---	0.23 J	0.41 J
Formaldehyde	ug/L	100 NL	160 J	27 U	23 U	120 R	---	23 UJ	23 U
Nitrate-NO3	mg/L	45	0.25 U	0.25 U	0.25 U	0.25 U	---	0.25 UJ	0.25 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T12-F.xls

February 2008

**TABLE XII**

SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN AND PERCHLORATE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:		RD-49A	RD-49A	RD-49A	RD-49B	RD-49B	RD-49B	RD-49B	
Sample Type:		Primary	Primary	Primary	Primary	Primary	Primary	Duplicate	
Lab Name:		TestAmerica	Lancaster	Lancaster	TestAmerica	TestAmerica	Lancaster	Lancaster	
Collection Date:		05/14/2007	08/29/2007	11/07/2007	02/08/2007	05/10/2007	08/14/2007	08/14/2007	
Analyte	Units	MCL							
<b>Organic Constituents and Perchlorate</b>									
1,1,1-Trichloroethane	ug/L	200	12 U	2 U	2 U	0.3 U	1.5 U	0.8 U	0.8 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	60 U	4 U	4 U	1.5 U	7.5 U	2 U	2 U
1,1,2-Trichloroethane	ug/L	5	12 U	2 U	2 U	0.3 U	1.5 U	0.8 U	0.8 U
1,1-Dichloroethane	ug/L	5	11 U	2 U	2 U	0.27 U	1.4 U	1 U	1 U
1,1-Dichloroethene	ug/L	6	17 U	5 J	4 J	0.74 J	2.1 U	1 J	1 J
1,2-Dichloroethane	ug/L	0.5	11 U	1 U	1 U	0.28 U	1.4 U	0.5 U	0.5 U
1,3-Dinitrobenzene	ug/L	NA	2.9 U	2.8 U	---	2.8 U	2.8 U	2.9 U	---
1,4-Dioxane	ug/L	3 NL	1.2 J	1 U	1 U	2.2	2.6	2.2	---
Acetone	ug/L	NA	180 U	12 U	12 U	4.5 U	22 U	6 U	6 U
Benzene	ug/L	1	11 U	1 U	1 U	0.28 U	1.4 U	0.5 U	0.5 U
Carbon Tetrachloride	ug/L	0.5	11 U	1 U	1 U	0.28 U	1.4 U	0.5 U	0.5 U
Chloroform	ug/L	NA	13 U	2 U	2 U	0.33 U	1.6 U	0.8 U	0.8 U
cis-1,2-Dichloroethene	ug/L	6	1400	1700	1400	260	260	270	280
Ethylbenzene	ug/L	300	10 U	2 U	2 U	0.25 U	1.2 U	0.8 U	0.8 U
Methyl ethyl ketone	ug/L	NA	190 U	6 U	6 U	3.8 U	24 U	3 U	3 U
Methylene chloride	ug/L	5	70 J,L	4 U	4 U	0.95 U	4.8 U	2 U	2 U
m-Xylene & p-Xylene	ug/L	1750 total	24 U	2 U	2 U	0.6 U	3 U	0.8 U	0.8 U
Nitrobenzene	ug/L	NA	2.4 U	2.4 U	---	2.4 U	2.4 U	2.4 U	---
n-Nitrosodimethylamine	ug/L	0.01 NL	0.01 U	0.01 U	---	0.0526	0.056	0.0525	---
o-Xylene	ug/L	1750 total	12 U	2 U	2 U	0.3 U	1.5 U	0.8 U	0.8 U
Perchlorate	ug/L	6	0.65 U	0.65 U	---	0.8 U	0.65 U	0.65 U	0.65 U
Tetrachloroethene	ug/L	5	13 U	2 U	2 U	0.32 U	1.6 U	0.8 U	0.8 U
Toluene	ug/L	150	14 U	1 U	1 U	0.36 U	1.8 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	10	25 J	36	35	18	14	18	19
Trichloroethene	ug/L	5	2500	2000	1600	250	330	300	310
Trichlorofluoromethane	ug/L	150	14 U	1 U	1 U	0.34 U	1.7 U	0.5 U	0.5 U
Vinyl chloride	ug/L	0.5	12 U	2	2 J	5.9	6	6	7
<b>Naturally Occurring Constituents</b>									
Ammonia-N	mg/L	NA	0.07 U	0.07 U	0.07 U	0.088 J	0.092 U	0.07 U	---
Fluoride	mg/L	2	0.39 J	0.51	0.35 J	0.27 J	0.23 J	0.44 J	---
Formaldehyde	ug/L	100 NL	23 UJ	23 U	23 U	26 U	23 UJ	30 J	---
Nitrate-NO3	mg/L	45	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T12-F.xls

February 2008

**TABLE XII**

SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN AND PERCHLORATE, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier:		RD-49B	RD-49B	RD-49C	RD-49C	RD-49C	RD-49C	RD-49C
Sample Type:		Primary	Split	Primary	Primary	Duplicate	Primary	Primary
Lab Name:		Lancaster	TestAmerica	TestAmerica	TestAmerica	TestAmerica	Lancaster	Lancaster
Collection Date:		10/25/2007	10/25/2007	02/08/2007	05/14/2007	05/14/2007	08/20/2007	10/25/2007
Analyte	Units	MCL						
<b>Organic Constituents and Perchlorate</b>								
1,1,1-Trichloroethane	ug/L	200	0.8 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	2 U	1.5 U	1.5 U	1.5 U	1.5 U	2 U
1,1,2-Trichloroethane	ug/L	5	0.8 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U
1,1-Dichloroethane	ug/L	5	1 U	0.27 U	0.27 U	0.27 U	0.27 U	1 U
1,1-Dichloroethene	ug/L	6	0.8 J	0.64 J	0.42 U	0.42 U	0.42 U	0.8 U
1,2-Dichloroethane	ug/L	0.5	0.5 U	0.28 U	0.28 U	0.28 U	0.28 U	0.5 U
1,3-Dinitrobenzene	ug/L	NA	2.8 U	---	2.9 U	3.2 U	---	2.9 U
1,4-Dioxane	ug/L	3 NL	2.4	---	1.1 J	1.5 J	---	1.1 J
Acetone	ug/L	NA	6 U	4.5 U	4.5 U	4.5 U	4.5 U	6 U
Benzene	ug/L	1	0.5 U	0.28 U	0.28 U	0.28 U	0.28 U	0.5 U
Carbon Tetrachloride	ug/L	0.5	0.5 U	0.28 U	0.28 U	0.28 U	0.28 U	0.5 U
Chloroform	ug/L	NA	0.8 U	0.33 U	0.33 U	0.33 U	0.33 U	0.8 U
cis-1,2-Dichloroethene	ug/L	6	280	230	92	96	98	120 J
Ethylbenzene	ug/L	300	0.8 U	0.25 U	0.25 U	0.25 U	0.25 U	0.8 U
Methyl ethyl ketone	ug/L	NA	3 U	4.7 U	3.8 U	4.7 U	4.7 U	3 U
Methylene chloride	ug/L	5	2 U	0.95 U	0.95 U	0.95 U	0.95 U	2 U
m-Xylene & p-Xylene	ug/L	1750 total	0.8 U	0.6 U	0.6 U	0.6 U	0.6 U	0.8 U
Nitrobenzene	ug/L	NA	2.4 U	---	2.4 U	2.7 U	---	2.4 U
n-Nitrosodimethylamine	ug/L	0.01 NL	0.0391	---	0.01 U	0.01 U	---	0.01 U
o-Xylene	ug/L	1750 total	0.8 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U
Perchlorate	ug/L	6	0.7 U	---	0.8 U	0.65 U	---	0.65 U
Tetrachloroethene	ug/L	5	0.8 U	0.32 U	0.32 U	0.32 U	0.32 U	0.8 U
Toluene	ug/L	150	0.7 U	0.36 U	0.36 U	0.36 U	0.36 U	0.7 U
trans-1,2-Dichloroethene	ug/L	10	15 J	14	3	5.2	5.9	4 J
Trichloroethene	ug/L	5	240	250	14	16	16	20 J
Trichlorofluoromethane	ug/L	150	0.5 U	0.34 U	0.34 U	0.34 U	0.34 U	0.5 U
Vinyl chloride	ug/L	0.5	4	3.7	2.2	1.8	1.8	2 J
<b>Naturally Occurring Constituents</b>								
Ammonia-N	mg/L	NA	0.07 U	---	0.07 J	0.07 U	---	0.077 J
Fluoride	mg/L	2	0.26 J	---	0.29 J	0.26 J	---	0.31 J
Formaldehyde	ug/L	100 NL	160 J	---	29 U	23 U	---	23 U
Nitrate-NO3	mg/L	45	0.25 U	---	0.25 U	0.25 U	---	0.25 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T12-F.xls

February 2008

**TABLE XII**

SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN AND PERCHLORATE, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier:		RD-51B	RD-51B	RD-51B	RD-51B	RD-51B	RD-51C	RD-51C	
Sample Type:		Primary	Primary	Primary	Primary	Duplicate	Primary	Primary	
Lab Name:		TestAmerica	TestAmerica	Lancaster	Lancaster	Pacific	TestAmerica	TestAmerica	
Collection Date:		02/12/2007	05/10/2007	08/13/2007	10/23/2007	10/23/2007	02/13/2007	05/10/2007	
Analyte	Units	MCL							
<b>Organic Constituents and Perchlorate</b>									
1,1,1-Trichloroethane	ug/L	200	0.3 U	0.3 U	0.1 U	0.1 U	---	0.3 U	0.3 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	1.5 U	1.5 U	0.2 U	0.2 U	---	1.5 U	1.5 U
1,1,2-Trichloroethane	ug/L	5	0.3 U	0.3 U	0.1 U	0.1 U	---	0.3 U	0.3 U
1,1-Dichloroethane	ug/L	5	0.27 U	0.27 U	0.1 U	0.1 U	---	0.27 U	0.27 U
1,1-Dichloroethene	ug/L	6	0.42 U	0.42 U	0.1 U	0.1 U	---	0.42 U	0.42 U
1,2-Dichloroethane	ug/L	0.5	0.28 U	0.28 U	0.1 U	0.1 U	---	0.28 U	0.28 U
1,3-Dinitrobenzene	ug/L	NA	2.8 U	2.9 U	2.9 UJ	2.9 U	---	2.8 U	2.9 U
1,4-Dioxane	ug/L	3 NL	1 U	2.7	1 U	1 U	---	1 U	1.6 J
Acetone	ug/L	NA	5 U	4.5 U	3 U	3 U	---	4.5 U	4.5 U
Benzene	ug/L	1	0.28 U	0.28 U	0.1 U	0.1 U	---	0.28 U	0.28 U
Carbon Tetrachloride	ug/L	0.5	0.28 U	0.28 U	0.1 U	0.1 U	---	0.28 U	0.28 U
Chloroform	ug/L	NA	0.33 U	0.33 U	0.1 U	0.1 U	---	0.33 U	0.33 U
cis-1,2-Dichloroethene	ug/L	6	11	10	12	12	---	0.32 U	0.32 U
Ethylbenzene	ug/L	300	0.25 U	0.25 U	0.1 U	0.1 U	---	0.25 U	0.25 U
Methyl ethyl ketone	ug/L	NA	3.8 U	4.7 U	1 U	1 U	---	3.8 U	4.7 U
Methylene chloride	ug/L	5	0.95 U	0.95 U	0.2 U	0.2 U	---	2.5 U	0.95 U
m-Xylene & p-Xylene	ug/L	1750 total	0.6 U	0.6 U	0.1 U	0.1 U	---	0.6 U	0.6 U
Nitrobenzene	ug/L	NA	2.4 U	2.4 U	2.4 UJ	2.4 U	---	2.4 U	2.4 U
n-Nitrosodimethylamine	ug/L	0.01 NL	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
o-Xylene	ug/L	1750 total	0.3 U	0.3 U	0.1 U	0.1 U	---	0.3 U	0.3 U
Perchlorate	ug/L	6	0.8 U	0.65 U	0.65 U	0.7 U	---	0.8 U	0.65 U
Tetrachloroethene	ug/L	5	0.32 U	0.32 U	0.1 U	0.1 U	---	0.32 U	0.32 U
Toluene	ug/L	150	0.36 U	0.36 U	0.1 U	0.1 U	---	0.36 U	0.36 U
trans-1,2-Dichloroethene	ug/L	10	0.89 J	0.83 J	1.3	1.2	---	0.27 U	0.27 U
Trichloroethene	ug/L	5	4.4	4.2	4.7	4.7	---	0.26 U	0.26 U
Trichlorofluoromethane	ug/L	150	0.34 U	0.34 U	0.1 U	0.1 U	---	0.34 U	0.34 U
Vinyl chloride	ug/L	0.5	7.8	8.8	7.6	9	---	0.3 U	0.3 U
<b>Naturally Occurring Constituents</b>									
Ammonia-N	mg/L	NA	0.091 J	0.1 U	0.088 J	0.073 J	---	0.087 J	0.12 U
Fluoride	mg/L	2	0.34 J	0.3 J	0.3 J	0.31 J	---	0.25 J	0.24 J
Formaldehyde	ug/L	100 NL	23 U	23 UJ	40 J	23 UJ	---	23 U	23 UJ
Nitrate-NO3	mg/L	45	0.25 U	0.25 U	0.25 U	0.25 U	---	0.25 U	0.25 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T12-F.xls

February 2008

**TABLE XII**  
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN AND PERCHLORATE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>		<b>RD-51C</b>	<b>RD-51C</b>	<b>RD-51C</b>	<b>RD-51C</b>	<b>RD-51C</b>	<b>RD-51C</b>	<b>RD-55A</b>	
Sample Type:		Primary	Duplicate	Split	Primary	Duplicate	Split	Primary	
Lab Name:		Lancaster	TestAmerica	TestAmerica	Lancaster	Lancaster	TestAmerica	TestAmerica	
Collection Date:		08/13/2007	08/13/2007	08/13/2007	10/23/2007	10/23/2007	10/23/2007	02/12/2007	
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>							
<b>Organic Constituents and Perchlorate</b>									
1,1,1-Trichloroethane	ug/L	200	0.1 U	---	---	0.1 U	0.1 U	0.3 U	0.3 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	0.2 U	---	---	0.2 U	0.2 U	1.5 U	1.5 U
1,1,2-Trichloroethane	ug/L	5	0.1 U	---	---	0.1 U	0.1 U	0.3 U	0.3 U
1,1-Dichloroethane	ug/L	5	0.1 U	---	---	0.1 U	0.1 U	0.27 U	0.27 U
1,1-Dichloroethene	ug/L	6	0.1 U	---	---	0.1 U	0.1 U	0.42 U	0.42 U
1,2-Dichloroethane	ug/L	0.5	0.1 U	---	---	0.1 U	0.1 U	0.28 U	0.28 U
1,3-Dinitrobenzene	ug/L	NA	2.9 U	---	---	2.9 U	---	---	3 U
1,4-Dioxane	ug/L	3 NL	1 U	1 U	0.52 J	1 U	1 U	0.36 U	1 U
Acetone	ug/L	NA	3 U	---	---	3 U	3 U	4.5 U	4.5 U
Benzene	ug/L	1	0.1 U	---	---	0.1 U	0.1 U	0.28 U	0.28 U
Carbon Tetrachloride	ug/L	0.5	0.1 U	---	---	0.1 U	0.1 U	0.28 U	0.28 U
Chloroform	ug/L	NA	0.1 U	---	---	0.1 U	0.1 U	0.33 U	0.33 U
cis-1,2-Dichloroethene	ug/L	6	0.1 U	---	---	0.1 U	0.1 U	0.32 U	2.7
Ethylbenzene	ug/L	300	0.1 U	---	---	0.1 U	0.1 U	0.25 U	0.25 U
Methyl ethyl ketone	ug/L	NA	1 U	---	---	1 U	1 U	4.7 U	3.8 U
Methylene chloride	ug/L	5	0.2 U	---	---	0.2 U	0.2 U	0.95 U	0.95 U
m-Xylene & p-Xylene	ug/L	1750 total	0.1 U	---	---	0.1 U	0.1 U	0.6 U	0.6 U
Nitrobenzene	ug/L	NA	2.4 U	---	---	2.4 U	---	---	2.5 U
n-Nitrosodimethylamine	ug/L	0.01 NL	0.01 U	---	---	0.01 U	0.01 U	---	0.01 U
o-Xylene	ug/L	1750 total	0.1 U	---	---	0.1 U	0.1 U	0.3 U	0.3 U
Perchlorate	ug/L	6	0.65 U	---	0.68 U	0.7 U	---	---	0.8 U
Tetrachloroethene	ug/L	5	0.1 U	---	---	0.1 U	0.1 U	0.32 U	0.32 U
Toluene	ug/L	150	0.1 U	---	---	0.1 U	0.1 U	0.36 U	0.36 U
trans-1,2-Dichloroethene	ug/L	10	0.1 U	---	---	0.1 U	0.1 U	0.27 U	0.27 U
Trichloroethene	ug/L	5	0.1 J	---	---	0.1 U	0.1 U	0.28 J	5.4
Trichlorofluoromethane	ug/L	150	0.1 U	---	---	0.1 U	0.1 U	0.34 U	0.34 U
Vinyl chloride	ug/L	0.5	0.1 U	---	---	0.1 U	0.1 U	0.3 U	1.2
<b>Naturally Occurring Constituents</b>									
Ammonia-N	mg/L	NA	0.4 J	---	---	0.15 J	---	---	0.07 U
Fluoride	mg/L	2	0.23 J	---	---	0.29 J	---	---	0.39 J
Formaldehyde	ug/L	100 NL	27 J	---	---	23 UJ	---	---	23 U
Nitrate-NO3	mg/L	45	0.25 U	---	---	0.25 U	---	---	16

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T12-F.xls

February 2008

**TABLE XII**  
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN AND PERCHLORATE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:		RD-55A	RD-55A	RD-55A	RD-55A	RD-55B	RD-55B	RD-55B	
Sample Type:		Primary	Primary	Primary	Duplicate	Primary	Primary	Primary	
Lab Name:		TestAmerica	Lancaster	Lancaster	Lancaster	Test America	TestAmerica	Lancaster	
Collection Date:		05/17/2007	08/14/2007	10/29/2007	10/29/2007	02/13/2007	05/17/2007	08/14/2007	
Analyte	Units	MCL							
<b>Organic Constituents and Perchlorate</b>									
1,1,1-Trichloroethane	ug/L	200	0.3 U	0.1 U	0.1 U	---	0.3 U	0.3 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	1.5 U	0.2 U	0.2 U	---	1.5 U	1.5 U	0.2 U
1,1,2-Trichloroethane	ug/L	5	0.3 U	0.1 U	0.1 U	---	0.3 U	0.3 U	0.1 U
1,1-Dichloroethane	ug/L	5	0.27 U	0.1 U	0.1 U	---	0.27 U	0.27 U	0.1 U
1,1-Dichloroethene	ug/L	6	0.42 U	0.2 J	0.1 U	---	0.42 U	0.42 U	0.3 J
1,2-Dichloroethane	ug/L	0.5	0.28 U	0.1 U	0.1 U	---	0.28 U	0.28 U	0.1 U
1,3-Dinitrobenzene	ug/L	NA	2.9 U	2.9 U	2.8 U	---	2.9 U	2.9 U	2.8 U
1,4-Dioxane	ug/L	3 NL	1 U	1 U	1 U	---	1 U	1 U	1 U
Acetone	ug/L	NA	4.5 U	3 U	3 U	---	4.5 U	4.5 U	3 U
Benzene	ug/L	1	0.28 U	0.1 U	0.1 U	---	0.28 U	0.28 U	0.1 U
Carbon Tetrachloride	ug/L	0.5	0.28 U	0.1 U	0.1 U	---	0.28 U	0.28 U	0.1 U
Chloroform	ug/L	NA	0.33 U	0.1 U	0.1 U	---	0.33 U	0.33 U	0.1 U
cis-1,2-Dichloroethene	ug/L	6	1.6	29	17	---	0.32 U	14	13
Ethylbenzene	ug/L	300	0.25 U	0.1 U	0.1 U	---	0.25 U	0.25 U	0.1 U
Methyl ethyl ketone	ug/L	NA	4.7 U	1 U	1 U	---	3.8 U	4.7 U	1 U
Methylene chloride	ug/L	5	0.95 U	0.2 U	0.2 U	---	0.95 U	0.95 U	0.2 U
m-Xylene & p-Xylene	ug/L	1750 total	0.6 U	0.1 U	0.1 U	---	0.6 U	0.6 U	0.1 U
Nitrobenzene	ug/L	NA	2.4 U	2.5 U	2.4 U	---	2.4 U	2.4 U	2.4 U
n-Nitrosodimethylamine	ug/L	0.01 NL	0.01 U	0.01 U	0.01 U	---	0.01 U	0.01 U	0.01 U
o-Xylene	ug/L	1750 total	0.3 U	0.1 U	0.1 U	---	0.3 U	0.3 U	0.1 U
Perchlorate	ug/L	6	0.65 U	0.65 U	0.7 U	0.7 U	0.8 U	0.65 U	0.65 U
Tetrachloroethene	ug/L	5	0.32 U	0.9	0.2 J	---	0.32 U	0.32 U	0.1 U
Toluene	ug/L	150	0.36 U	0.1 U	0.1 U	---	0.36 U	0.36 U	0.1 U
trans-1,2-Dichloroethene	ug/L	10	0.27 U	2.1	0.9	---	0.27 U	0.27 U	0.2 J
Trichloroethene	ug/L	5	4.8	27	20	---	0.26 U	26	21
Trichlorofluoromethane	ug/L	150	0.34 U	0.1 U	0.1 U	---	0.34 U	0.34 U	0.1 U
Vinyl chloride	ug/L	0.5	0.51	8.8	2	---	0.3 U	0.3 U	0.1 J
<b>Naturally Occurring Constituents</b>									
Ammonia-N	mg/L	NA	0.07 U	0.07 U	0.07 U	---	0.07 U	0.07 U	0.07 U
Fluoride	mg/L	2	0.39 J	0.67	0.43 J	---	0.54	0.61	0.78
Formaldehyde	ug/L	100 NL	54 U	29 J	56 J	---	23 U	50 U	26 J
Nitrate-NO3	mg/L	45	15	10	12	---	0.25 U	0.25 U	0.25 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T12-F.xls

February 2008

**TABLE XII**

SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN AND PERCHLORATE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:		RD-55B	RD-58A	RD-58A	RD-58A	RD-58A	RD-58B	RD-58B	
Sample Type:		Primary	Primary	Duplicate	Primary	Primary	Primary	Primary	
Lab Name:		Lancaster	Test America	Test America	TestAmerica	Lancaster	Test America	TestAmerica	
Collection Date:		10/29/2007	02/15/2007	02/15/2007	05/21/2007	10/31/2007	02/13/2007	05/16/2007	
Analyte	Units	MCL							
<b>Organic Constituents and Perchlorate</b>									
1,1,1-Trichloroethane	ug/L	200	0.1 U	0.3 U	0.3 U	0.3 U	0.8 U	0.3 U	0.3 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	0.2 U	6	16	1.5 U	3 J	1.5 U	1.5 U
1,1,2-Trichloroethane	ug/L	5	0.1 U	0.3 U	0.3 U	0.3 U	0.8 U	0.3 U	0.3 U
1,1-Dichloroethane	ug/L	5	0.1 U	0.27 U	0.27 U	0.27 U	1 U	0.27 U	0.27 U
1,1-Dichloroethene	ug/L	6	0.3 J	0.42 U	0.42 U	0.42 U	0.8 U	0.42 U	0.42 U
1,2-Dichloroethane	ug/L	0.5	0.1 U	0.28 U	0.28 U	0.28 U	0.5 U	0.28 U	0.28 U
1,3-Dinitrobenzene	ug/L	NA	2.8 U	2.9 U	---	2.9 U	2.8 U	2.9 U	2.9 U
1,4-Dioxane	ug/L	3 NL	1 U	2.5 U	---	1 U	1 U	1 U	1.4 J
Acetone	ug/L	NA	3 U	4.5 U	4.5 U	4.5 U	6 U	4.5 U	4.5 U
Benzene	ug/L	1	0.1 U	0.28 U	0.28 U	0.28 U	0.5 U	0.28 U	0.28 U
Carbon Tetrachloride	ug/L	0.5	0.1 U	0.28 U	0.28 U	0.28 U	0.5 U	0.28 U	0.28 U
Chloroform	ug/L	NA	0.1 U	0.47 J	0.41 J	0.33 U	0.8 U	0.33 U	0.33 U
cis-1,2-Dichloroethene	ug/L	6	14	85	110	91	53	0.32 U	0.32 U
Ethylbenzene	ug/L	300	0.1 U	0.25 U	0.25 U	0.25 U	0.8 U	0.25 U	0.25 U
Methyl ethyl ketone	ug/L	NA	1 U	3.8 U	3.8 U	4.7 U	3 U	3.8 U	4.7 U
Methylene chloride	ug/L	5	0.2 U	0.95 U	0.95 U	0.95 U	2 U	2.7 U	0.95 U
m-Xylene & p-Xylene	ug/L	1750 total	0.1 U	0.6 U	0.6 U	0.6 U	0.8 U	0.6 U	0.6 U
Nitrobenzene	ug/L	NA	2.4 U	2.5 U	---	2.4 U	2.4 U	2.4 U	2.5 U
n-Nitrosodimethylamine	ug/L	0.01 NL	0.01 U	0.01 U	---	0.01 U	0.01 U	0.01 U	0.01 U
o-Xylene	ug/L	1750 total	0.1 U	0.3 U	0.3 U	0.3 U	0.8 U	0.3 U	0.3 U
Perchlorate	ug/L	6	0.7 U	0.8 U	---	0.65 U	0.7 U	0.8 U	0.65 U
Tetrachloroethene	ug/L	5	0.1 U	0.32 U	0.32 U	0.32 U	0.8 U	0.32 U	0.32 U
Toluene	ug/L	150	0.1 U	0.36 U	0.36 U	0.36 U	0.8 J	0.36 U	0.36 U
trans-1,2-Dichloroethene	ug/L	10	0.3 J	0.4 J	0.5 J	0.53 J	0.8 U	0.27 U	0.27 U
Trichloroethene	ug/L	5	22	390	400	110	77	0.26 U	0.26 U
Trichlorofluoromethane	ug/L	150	0.1 U	0.34 U	0.34 U	0.34 U	0.5 U	0.34 U	0.34 U
Vinyl chloride	ug/L	0.5	0.1 J	0.3 U	0.3 U	0.3 U	0.5 U	0.3 U	0.3 U
<b>Naturally Occurring Constituents</b>									
Ammonia-N	mg/L	NA	0.07 U	0.17 U	---	0.079 J	0.07 U	0.08 J	0.17 J
Fluoride	mg/L	2	0.59	0.45 J	---	0.42 J	0.68	0.39 J	0.5 J
Formaldehyde	ug/L	100 NL	54 J	41 U	---	23 U	150 U	23 U	45 U
Nitrate-NO3	mg/L	45	0.25 U	0.28 J	---	0.25 U	0.25 U	0.25 U	0.25 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T12-F.xls

February 2008

**TABLE XII**

SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN AND PERCHLORATE, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>		<b>RD-58B</b>	<b>RD-58B</b>	<b>RD-58B</b>	<b>RD-58B</b>	<b>WS-05</b>	<b>WS-05</b>	<b>WS-05</b>	
Sample Type:		Primary	Primary	Duplicate	Split	Primary	Duplicate	Split	
Lab Name:		Lancaster	Lancaster	Lancaster	Weck	TestAmerica	TestAmerica	STL-SA	
Collection Date:		08/13/2007	10/25/2007	10/25/2007	10/25/2007	02/27/2007	02/27/2007	02/27/2007	
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>							
<b>Organic Constituents and Perchlorate</b>									
1,1,1-Trichloroethane	ug/L	200	0.1 U	0.1 U	---	---	0.3 U	0.3 U	0.41 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	0.2 U	0.2 U	---	---	1.5 U	1.5 U	1 U
1,1,2-Trichloroethane	ug/L	5	0.1 U	0.1 U	---	---	0.3 U	0.3 U	0.31 U
1,1-Dichloroethane	ug/L	5	0.1 U	0.1 U	---	---	0.27 U	0.27 U	0.1 U
1,1-Dichloroethene	ug/L	6	0.1 U	0.1 U	---	---	0.42 U	0.42 U	0.36 U
1,2-Dichloroethane	ug/L	0.5	0.1 U	0.1 U	---	---	0.28 U	0.28 U	0.22 U
1,3-Dinitrobenzene	ug/L	NA	2.8 U	2.8 U	---	---	2.9 U	---	---
1,4-Dioxane	ug/L	3 NL	1 U	1 U	---	---	3.2	---	---
Acetone	ug/L	NA	3 U	3 U	---	---	4.5 U	4.5 U	1 U
Benzene	ug/L	1	0.1 U	0.1 U	---	---	0.28 U	0.28 U	0.13 U
Carbon Tetrachloride	ug/L	0.5	0.1 U	0.1 U	---	---	0.28 U	0.28 U	0.15 U
Chloroform	ug/L	NA	0.1 U	0.1 U	---	---	0.33 U	0.33 U	0.12 U
cis-1,2-Dichloroethene	ug/L	6	0.1 U	0.1 U	---	---	1.8	2	2.3
Ethylbenzene	ug/L	300	0.1 U	0.1 U	---	---	0.25 U	0.25 U	0.27 U
Methyl ethyl ketone	ug/L	NA	1 U	1 U	---	---	3.8 U	3.8 U	1 U
Methylene chloride	ug/L	5	0.2 U	0.2 U	---	---	0.95 U	0.95 U	0.35 U
m-Xylene & p-Xylene	ug/L	1750 total	0.1 U	0.1 U	---	---	0.6 U	0.6 U	0.18 U
Nitrobenzene	ug/L	NA	2.4 U	2.4 U	---	---	2.4 U	---	---
n-Nitrosodimethylamine	ug/L	0.01 NL	0.01 U	0.01 U	---	0.01 U	0.01 U	---	---
o-Xylene	ug/L	1750 total	0.1 U	0.1 U	---	---	0.3 U	0.3 U	0.1 U
Perchlorate	ug/L	6 NL	0.65 U	0.7 U	0.7 U	---	0.8 U	---	---
Tetrachloroethene	ug/L	5	0.1 U	0.1 U	---	---	0.32 U	0.32 U	0.38 U
Toluene	ug/L	150	0.8	0.1 U	---	---	0.36 U	0.36 U	0.25 U
trans-1,2-Dichloroethene	ug/L	10	0.1 U	0.1 U	---	---	0.27 U	0.27 U	0.11 U
Trichloroethene	ug/L	5	0.1 U	0.1 U	---	---	1.3	0.91 J	0.79 J
Trichlorofluoromethane	ug/L	150	0.1 U	0.1 U	---	---	0.34 U	0.34 U	0.23 U
Vinyl chloride	ug/L	0.5	0.1 U	0.1 U	---	---	0.3 U	0.3 U	0.12 U
<b>Naturally Occurring Constituents</b>									
Ammonia-N	mg/L	NA	0.088 J	0.07 U	---	---	0.11 U	---	---
Fluoride	mg/L	2	0.41 J	0.38 J	---	---	0.41 J	---	---
Formaldehyde	ug/L	100 NL	24 J	160 J	---	---	23 U	---	---
Nitrate-NO3	mg/L	45	0.25 U	0.25 U	---	---	0.25 U	---	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T12-F.xls

February 2008



**TABLE XII**  
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN AND PERCHLORATE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:		WS-05	WS-05	WS-05	WS-05	WS-05	WS-05	WS-06	
Sample Type:		Primary	Duplicate	Primary	Duplicate	Primary	Duplicate	Primary	
Lab Name:		TestAmerica	TestAmerica	Lancaster	Lancaster	Lancaster	Lancaster	TestAmerica	
Collection Date:		05/15/2007	05/15/2007	08/21/2007	08/21/2007	10/29/2007	10/29/2007	02/14/2007	
Analyte	Units	MCL							
<b>Organic Constituents and Perchlorate</b>									
1,1,1-Trichloroethane	ug/L	200	0.3 U	0.3 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	1.5 U	1.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1.5 U
1,1,2-Trichloroethane	ug/L	5	0.3 U	0.3 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 U
1,1-Dichloroethane	ug/L	5	0.27 U	0.27 U	0.1 U	0.1 U	0.1 U	0.1 U	0.27 U
1,1-Dichloroethene	ug/L	6	0.42 U	0.42 U	0.1 U	0.1 U	0.1 U	0.1 U	0.42 U
1,2-Dichloroethane	ug/L	0.5	0.28 U	0.28 U	0.1 U	0.1 U	0.1 U	0.1 U	0.28 U
1,3-Dinitrobenzene	ug/L	NA	2.9 U	---	2.8 U	---	2.8 U	---	2.8 U
1,4-Dioxane	ug/L	3 NL	3	---	2.5	---	2.7	---	1.2 J
Acetone	ug/L	NA	4.5 U	4.5 U	3 U	3 U	3 U	3 U	4.5 U
Benzene	ug/L	1	0.28 U	0.28 U	0.1 U	0.1 U	0.1 U	0.1 U	0.28 U
Carbon Tetrachloride	ug/L	0.5	0.28 U	0.28 U	0.1 U	0.1 U	0.1 U	0.1 U	0.28 U
Chloroform	ug/L	NA	0.33 U	0.33 U	0.1 U	0.1 U	0.1 U	0.1 U	0.33 U
cis-1,2-Dichloroethene	ug/L	6	2.3	2.2	2 J	2 J	2.1	2	80
Ethylbenzene	ug/L	300	0.25 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
Methyl ethyl ketone	ug/L	NA	4.7 U	4.7 U	1 U	1 U	1 U	1 U	3.8 U
Methylene chloride	ug/L	5	2.1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.95 U
m-Xylene & p-Xylene	ug/L	1750 total	0.6 U	0.6 U	0.1 U	0.1 U	0.1 U	0.1 U	0.6 U
Nitrobenzene	ug/L	NA	2.4 U	---	2.4 U	---	2.4 U	---	2.4 U
n-Nitrosodimethylamine	ug/L	0.01 NL	0.01 U	---	0.01 U	---	0.01 U	0.01 U	0.01 U
o-Xylene	ug/L	1750 total	0.3 U	0.3 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 U
Perchlorate	ug/L	6 NL	0.65 U	---	1.5 U	---	0.7 U	---	0.8 U
Tetrachloroethene	ug/L	5	0.32 U	0.32 U	0.1 U	0.1 U	0.1 U	0.1 U	0.32 U
Toluene	ug/L	150	0.36 U	0.36 U	0.1 U	0.1 U	0.1 U	0.1 U	0.36 U
trans-1,2-Dichloroethene	ug/L	10	0.27 U	0.27 U	0.2 J	0.2 J	0.2 J	0.2 J	6.9
Trichloroethene	ug/L	5	0.81 J	0.77 J	0.8 J	0.8 J	0.7	0.7	4.3
Trichlorofluoromethane	ug/L	150	0.34 U	0.34 U	0.1 U	0.1 U	0.1 U	0.1 U	0.34 U
Vinyl chloride	ug/L	0.5	0.3 U	0.3 U	0.1 J	0.1 J	0.1 J	0.1 J	3.7
<b>Naturally Occurring Constituents</b>									
Ammonia-N	mg/L	NA	0.14 J	---	0.077 J	---	0.11 J	---	0.1 J
Fluoride	mg/L	2	0.36 J	---	0.45 J	---	0.31 J	---	0.31 J
Formaldehyde	ug/L	100 NL	23 UJ	---	23 U	---	52 J	---	42 U
Nitrate-NO3	mg/L	45	0.25 U	---	0.25 U	---	0.25 U	---	0.25 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T12-F.xls

February 2008

**TABLE XII**

SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN AND PERCHLORATE, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier:		WS-06	WS-06	WS-06	WS-06	WS-09	WS-09	WS-09	
Sample Type:		Primary	Split	Primary	Primary	Primary	Primary	Primary	
Lab Name:		TestAmerica	Lancaster	Lancaster	Lancaster	TestAmerica	TestAmerica	Lancaster	
Collection Date:		05/15/2007	05/15/2007	08/21/2007	10/24/2007	02/14/2007	05/10/2007	08/21/2007	
Analyte	Units	MCL							
<b>Organic Constituents and Perchlorate</b>									
1,1,1-Trichloroethane	ug/L	200	0.3 U	0.8 U	0.1 U	0.1 U	120 U	30 U	8 U
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	1.5 U	2 U	0.2 U	0.2 U	600 U	150 U	20 U
1,1,2-Trichloroethane	ug/L	5	0.3 U	0.8 U	0.1 U	0.1 U	120 U	30 U	8 U
1,1-Dichloroethane	ug/L	5	0.27 U	1 U	0.1 U	0.1 U	110 U	27 U	10 U
1,1-Dichloroethene	ug/L	6	0.42 U	0.8 U	0.3 J	0.3 J	170 U	42 U	8 U
1,2-Dichloroethane	ug/L	0.5	0.28 U	0.5 U	0.1 U	0.1 U	110 U	28 U	5 U
1,3-Dinitrobenzene	ug/L	NA	2.9 U	---	2.9 U	2.8 U	2.9 U	2.9 U	2.9 U
1,4-Dioxane	ug/L	3 NL	1.5 J	---	1.1 J	1.2 J	5.6	1 U	3.8
Acetone	ug/L	NA	4.5 U	6 U	3 U	3 U	1800 U	450 U	60 U
Benzene	ug/L	1	0.28 U	0.5 U	0.1 U	0.1 U	110 U	28 U	5 U
Carbon Tetrachloride	ug/L	0.5	0.28 U	0.5 U	0.1 U	0.1 U	110 U	28 U	5 U
Chloroform	ug/L	NA	0.33 U	0.8 U	0.1 U	0.1 U	130 U	33 U	8 U
cis-1,2-Dichloroethene	ug/L	6	55 J	95	100 J	110	660	670	670
Ethylbenzene	ug/L	300	0.25 U	0.8 U	0.1 U	0.1 U	100 U	25 U	8 U
Methyl ethyl ketone	ug/L	NA	4.7 U	3 U	1 U	1 U	1500 U	470 U	30 U
Methylene chloride	ug/L	5	1.5 U	2 U	0.2 U	0.2 U	1100 U	95 U	20 U
m-Xylene & p-Xylene	ug/L	1750 total	0.6 U	0.8 U	0.1 U	0.1 U	240 U	60 U	8 U
Nitrobenzene	ug/L	NA	2.4 U	---	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
n-Nitrosodimethylamine	ug/L	0.01 NL	0.01 U	---	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
o-Xylene	ug/L	1750 total	0.3 U	0.8 U	0.1 U	0.1 U	120 U	30 U	8 U
Perchlorate	ug/L	6 NL	0.65 U	---	1.5 U	0.7 U	0.8 U	0.65 U	1.5 U
Tetrachloroethene	ug/L	5	0.32 U	0.8 U	0.1 U	0.1 U	130 U	32 U	8 U
Toluene	ug/L	150	0.36 U	0.7 U	0.1 U	0.1 U	140 U	36 U	7 U
trans-1,2-Dichloroethene	ug/L	10	4	7	12 J	14	110 U	27 U	15 J
Trichloroethene	ug/L	5	2.6	5	6.5 J	6.4	19000	17000	15000
Trichlorofluoromethane	ug/L	150	0.34 U	0.5 U	0.1 U	0.1 U	140 U	34 U	5 U
Vinyl chloride	ug/L	0.5	1.3	4	5.3 J	6.4	120 U	30 U	5 U
<b>Naturally Occurring Constituents</b>									
Ammonia-N	mg/L	NA	0.17 J	---	0.15 J	0.07 U	0.14 J	0.088 U	0.12 J
Fluoride	mg/L	2	0.31 J	---	0.4 J	0.15 U	0.28 J	0.25 J	0.45 J
Formaldehyde	ug/L	100 NL	23 UJ	---	23 U	23 UJ	37 U	23 UJ	23 U
Nitrate-NO3	mg/L	45	0.25 U	---	0.25 U	0.25 UJ	0.25 U	0.25 U	0.25 U

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T12-F.xls

February 2008

**TABLE XII**

SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN AND PERCHLORATE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier:		WS-09	WS-09A	WS-09A	WS-09A	WS-09A	WS-09A	WS-09A	WS-09A
Sample Type:		Primary	Primary	Duplicate	Split	Primary	Primary	Duplicate	
Lab Name:		Lancaster	TestAmerica	TestAmerica	Weck	TestAmerica	Lancaster	TestAmerica	
Collection Date:		10/25/2007	02/12/2007	02/12/2007	02/12/2007	05/09/2007	08/09/2007	08/09/2007	
Analyte	Units	MCL							
<b>Organic Constituents and Perchlorate</b>									
1,1,1-Trichloroethane	ug/L	200	4 U	0.3 U	0.3 U	---	0.3 U	2 U	---
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/L	1200	10 U	1.5 U	1.5 U	---	1.5 U	4 U	---
1,1,2-Trichloroethane	ug/L	5	4 U	0.3 U	0.3 U	---	0.3 U	2 U	---
1,1-Dichloroethane	ug/L	5	5 U	0.27 U	0.27 U	---	0.27 U	2 U	---
1,1-Dichloroethene	ug/L	6	5 J	1.9	1.9	---	3.4	6 J	---
1,2-Dichloroethane	ug/L	0.5	3 U	0.28 U	0.28 U	---	0.28 U	1 U	---
1,3-Dinitrobenzene	ug/L	NA	2.8 U	2.9 U	---	---	29 U	2.9 U	2.9 U
1,4-Dioxane	ug/L	3 NL	4.1	1 U	---	---	1.2 J	1 U	---
Acetone	ug/L	NA	30 U	4.5 U	4.5 U	---	5 J,L	12 U	---
Benzene	ug/L	1	3 U	0.28 U	0.28 U	---	0.28 U	1 U	---
Carbon Tetrachloride	ug/L	0.5	3 U	0.28 U	0.28 U	---	0.28 U	1 U	---
Chloroform	ug/L	NA	4 U	0.33 U	0.33 U	---	0.33 U	2 U	---
cis-1,2-Dichloroethene	ug/L	6	550	860	830	---	720	1500	---
Ethylbenzene	ug/L	300	4 U	0.25 U	0.25 U	---	0.25 U	2 U	---
Methyl ethyl ketone	ug/L	NA	15 U	3.8 U	3.8 U	---	4.7 U	6 U	---
Methylene chloride	ug/L	5	10 U	0.95 U	0.95 U	---	0.95 U	4 U	---
m-Xylene & p-Xylene	ug/L	1750 total	4 U	0.6 U	0.6 U	---	0.6 U	2 U	---
Nitrobenzene	ug/L	NA	2.4 U	2.4 U	---	---	24 U	2.4 U	2.4 U
n-Nitrosodimethylamine	ug/L	0.01 NL	0.01 U	0.01 U	---	0.01 U	0.01 U	0.01 U	---
o-Xylene	ug/L	1750 total	4 U	0.3 U	0.3 U	---	0.3 U	2 U	---
Perchlorate	ug/L	6 NL	0.7 U	0.8 U	---	---	0.65 U	0.65 U	---
Tetrachloroethene	ug/L	5	4 U	0.32 U	0.32 U	---	0.32 U	2 U	---
Toluene	ug/L	150	4 U	0.36 U	0.36 U	---	0.36 U	1 U	---
trans-1,2-Dichloroethene	ug/L	10	12 J	22	22	---	26	42	---
Trichloroethene	ug/L	5	8700	670	660	---	1200	1900	---
Trichlorofluoromethane	ug/L	150	3 U	0.34 U	0.34 U	---	0.34 U	1 U	---
Vinyl chloride	ug/L	0.5	3 U	4.6	4.7	---	5.7	5	---
<b>Naturally Occurring Constituents</b>									
Ammonia-N	mg/L	NA	0.07 U	0.11 J	---	---	0.12 U	0.16 U	---
Fluoride	mg/L	2	0.3 J	0.34 J	---	---	0.53	0.44	---
Formaldehyde	ug/L	100 NL	130 J	23 U	---	---	23 UJ	27 J	---
Nitrate-NO3	mg/L	45	0.25 U	0.25 U	---	---	0.25 U	0.25 U	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T12-F.xls

February 2008

**TABLE XII**  
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN AND PERCHLORATE, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>		<b>WS-09A</b>	
Sample Type:		Split	
Lab Name:		TestAmerica	
Collection Date:		08/09/2007	
<b>Analyte</b>	<b>Units</b>	<b>MCL</b>	
<b>Organic Constituents and Perchlorate</b>			
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	---
1,3-Dinitrobenzene	ug/L	NA	---
1,4-Dioxane	ug/L	3 NL	---
Acetone	ug/L	NA	---
Benzene	ug/L	1	---
Carbon Tetrachloride	ug/L	0.5	---
Chloroform	ug/L	NA	---
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	---
Nitrobenzene	ug/L	NA	0.37 U
n-Nitrosodimethylamine	ug/L	0.01 NL	---
o-Xylene	ug/L	1750 total	---
Perchlorate	ug/L	6 NL	---
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	---
<b>Naturally Occurring Constituents</b>			
Ammonia-N	mg/L	NA	---
Fluoride	mg/L	2	---
Formaldehyde	ug/L	100 NL	---
Nitrate-NO3	mg/L	45	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T12-F.xls

**TABLE XII**  
NOTES AND ABBREVIATIONS

- 
1. TestAmerica = TestAmerica of Irvine, California.
  2. Lancaster = Lancaster Laboratories of Lancaster, Pennsylvania.
  3. Pacific = Pacific Analytical of Carlsbad, California.
  4. STL-SA = Severn Trent Laboratories of Sacramento, California.
  5. Weck = Weck Laboratories of City of Industry, California.
  6. Primary = Primary sample.
  7. Duplicate = Duplicate sample.
  8. Split = Split sample.
  9. NA = Not applicable; no MCL promulgated.
  10. NL = Advisory California Notification Level for unregulated chemical contaminants.
  11. MCL = Maximum Contaminant Level, California primary drinking water standard.
  12. mg/L = Milligrams per liter.
  13. ug/L = Micrograms per liter.
  14. --- = Analysis not performed.
  15. Total = MCL for sum of xylene isomers.
  16. 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).
  17. L = Laboratory contaminant.
  18. R = Rejected result.
  19. U = Not detected; numerical value represents the Method Detection Limit for that compound.
  20. UJ = Not detected. Estimated detection limit as a result of analytical quality control deficiencies (see Appendix D for details).
21. Low level N-nitrosodimethylamine (NDMA) analyses were performed using modified EPA method 1625 on primary and duplicate samples by Pacific Analytical, and on split samples by Weck Laboratories.
  22. Low level 1,4-dioxane analyses were performed on primary and duplicate samples by TestAmerica of Irvine, California, and on split samples by TestAmerica of Phoenix, Arizona, using modified EPA method 8260SIM.
  23. Ammonia-N, fluoride, formaldehyde, and nitrate-NO<sub>3</sub> analyses were performed using modified EPA methods 350.3, 300.0, 8315A, and 300.0, respectively, by TestAmerica of Irvine, California.
  24. During the first and second quarters, perchlorate analyses were performed on primary and duplicate samples by TestAmerica of Irvine, California, and on split samples by STL of Sacramento, California, using modified EPA method 314.0  
  
During the third and fourth quarters, perchlorate analyses were performed on primary and duplicate samples by Lancaster Laboratories of Lancaster, Pennsylvania and on split samples by TestAmerica of Irvine, California, using modified EPA method 314.0
  25. Semi-volatile organic compounds: 1,3-dinitrobenzene and nitrobenzene were performed using modified EPA method 8270C on primary and duplicate samples by TestAmerica of Irvine, California, and on split samples by Weck Laboratories.
  26. MCLs and NLs are listed by the California Department of Public Health (2007a, 2007b). Prior to October 2007, perchlorate had a NL of 6 ug/L. The MCL of 6 ug/L for perchlorate became effective in October 2007.
  27. 1,1,2-Trichloro-1,2,2-trifluoroethane has previously been reported using synonym Trichlorotrifluoroethane (Freon 113).
  28. Methyl ethyl ketone has previously been reported using synonym 2-Butanone.

**TABLE XIII**  
SUMMARY OF ANALYSES FOR INORGANIC CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>HAR-24</b>	<b>HAR-24</b>	<b>HAR-24</b>	<b>HAR-24</b>	<b>HAR-25</b>	<b>HAR-25</b>	<b>HAR-25</b>
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	02/15/2007	05/11/2007	08/08/2007	10/24/2007	02/15/2007	05/11/2007	08/08/2007

<b>Analyte</b>	<b>Result Value</b>	<b>MCL</b>						
	<b>Units</b>							
Bicarbonate	mg/L	NA	---	---	---	---	---	---
Bromide	mg/L	NA	0.93	0.71	0.52	0.42 J	0.35 U	0.35 U
Calcium, Dissolved	mg/L	NA	---	---	---	---	---	---
Carbonate	mg/L	NA	---	---	---	---	---	---
Chloride	mg/L	250, 500, 600 SMCL	---	---	---	---	---	---
Magnesium, Dissolved	mg/L	NA	---	---	---	---	---	---
Nitrate-NO3	mg/L	45	---	---	---	---	---	---
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	---	---	---	---	---	---
Total Dissolved Solids	mg/L	500, 1000, 1500 SMCL	---	---	---	---	---	---
Delta Deuterium	per mil	NA	---	---	---	---	---	---
Delta Oxygen-18	per mil	NA	---	---	---	---	---	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T13-F.xls

February 2008

**TABLE XIII**  
SUMMARY OF ANALYSES FOR INORGANIC CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>HAR-25</b>	<b>OS-02</b>	<b>OS-03</b>	<b>OS-04</b>	<b>OS-05</b>	<b>OS-09</b>	<b>OS-09</b>
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	10/25/2007	05/23/2007	05/23/2007	05/23/2007	08/16/2007	02/28/2007	05/23/2007

<b>Analyte</b>	<b>Result Value</b>	<b>MCL</b>							
	<b>Units</b>								
Bicarbonate	mg/L	NA	---	300	310	360	340	310	330
Bromide	mg/L	NA	0.35 U	---	---	---	---	---	---
Calcium, Dissolved	mg/L	NA	---	9.1	52	110	88	3	3.1
Carbonate	mg/L	NA	---	1.2 U	1.2 U	1.2 U	1.2 U	2.4	1.2 U
Chloride	mg/L	250, 500, 600 SMCL	---	28	33	43	45	26	26
Magnesium, Dissolved	mg/L	NA	---	3.3	15	28	23	1.9	1.9
Nitrate-NO3	mg/L	45	---	0.33 J	0.25 U	0.25 U	0.25 U	0.25 U	0.25 UJ
pH	pH Units	6.5-8.5 SMCL	---	8.33 J	7.92 J	7.39 J	7.77	8.66 J	8.59
Potassium, Dissolved	mg/L	NA	---	1.4 U	3	4.3	3.6	1 U	1.4 U
Sodium, Dissolved	mg/L	NA	---	170	110	85	91	190	200
Specific Conductivity	umhos/cm	900, 1600, 2200 SMCL	---	800	800	1000	980	880	870
Sulfate	mg/L	250, 500, 600 SMCL	---	81	100	170	160	130	120
Total Dissolved Solids	mg/L	500, 1000, 1500 SMCL	---	470	490	670	600	510	540
Delta Deuterium	per mil	NA	---	---	---	---	---	-46.0	-51.1
Delta Oxygen-18	per mil	NA	---	---	---	---	---	-7.44	-7.48

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T13-F.xls

February 2008

**TABLE XIII**  
SUMMARY OF ANALYSES FOR INORGANIC CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>			<b>OS-09</b>	<b>OS-10</b>	<b>OS-16</b>	<b>OS-17</b>	<b>OS-26</b>	<b>OS-27</b>	<b>OS-28</b>
Sample Type:			Primary	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:			TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:			08/16/2007	05/23/2007	11/02/2007	05/24/2007	05/24/2007	05/24/2007	05/24/2007
<b>Analyte</b>	<b>Result Value Units</b>	<b>MCL</b>							
Bicarbonate	mg/L	NA	310	310	420	510	410	440	400
Bromide	mg/L	NA	---	---	---	---	---	---	---
Calcium, Dissolved	mg/L	NA	3.2	4.9	120	120	120	120	110
Carbonate	mg/L	NA	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Chloride	mg/L	250, 500, 600 SMCL	28	21	51	50	55	42	43
Magnesium, Dissolved	mg/L	NA	1.9	1.4	24	67	55	32	58
Nitrate-NO3	mg/L	45	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
pH	pH Units	6.5-8.5 SMCL	8.64	8.51	7.46	7.32	7.4	7.42	7.43
Potassium, Dissolved	mg/L	NA	1.3	1.5 U	3.6	4.8	3.8	3.5	4.2
Sodium, Dissolved	mg/L	NA	190	160	54	70	57	57	66
Specific Conductivity	umhos/cm	900, 1600, 2200 SMCL	890	700	1000	1200	1200	1000	1200
Sulfate	mg/L	250, 500, 600 SMCL	120	66	120	200	220	130	240
Total Dissolved Solids	mg/L	500, 1000, 1500 SMCL	550	420	650	760	760	650	800
Delta Deuterium	per mil	NA	-49.8	---	---	---	---	---	---
Delta Oxygen-18	per mil	NA	-7.47	---	---	---	---	---	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T13-F.xls

February 2008



**TABLE XIII**  
SUMMARY OF ANALYSES FOR INORGANIC CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>			<b>RD-32</b>	<b>RD-36B</b>	<b>RD-36C</b>	<b>RD-36D</b>	<b>RD-37</b>	<b>RD-38A</b>	<b>RD-38B</b>
Sample Type:			Primary	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:			TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:			05/22/2007	05/22/2007	05/23/2007	05/22/2007	05/23/2007	05/24/2007	05/24/2007
<b>Analyte</b>	<b>Result Value Units</b>	<b>MCL</b>							
Bicarbonate	mg/L	NA	310	100	230	350	300	370	370
Bromide	mg/L	NA	---	---	---	---	---	---	---
Calcium, Dissolved	mg/L	NA	96	36	100	100	120	120	98
Carbonate	mg/L	NA	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Chloride	mg/L	250, 500, 600 SMCL	39	33	150	64	200	47	34
Magnesium, Dissolved	mg/L	NA	19	5.5	22	23	37	16	24
Nitrate-NO3	mg/L	45	0.25 U	12	0.25 U	0.25 U	0.25 U	2.1	0.25 U
pH	pH Units	6.5-8.5 SMCL	7.53	6.64	7.39	7.58	7.61	7.18	7.59
Potassium, Dissolved	mg/L	NA	2.5	0.45 J	3.9	2.8	5	1.7	2.9
Sodium, Dissolved	mg/L	NA	43	28	59	43	76	41	49
Specific Conductivity	umhos/cm	900, 1600, 2200 SMCL	820	390	910	900	1200	840	810
Sulfate	mg/L	250, 500, 600 SMCL	79	28	39	75	92	72	85
Total Dissolved Solids	mg/L	500, 1000, 1500 SMCL	490	260	580	550	710	520	500
Delta Deuterium	per mil	NA	---	---	---	---	---	---	---
Delta Oxygen-18	per mil	NA	---	---	---	---	---	---	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T13-F.xls

February 2008

**TABLE XIII**  
SUMMARY OF ANALYSES FOR INORGANIC CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-39B</b>	<b>RD-43A</b>	<b>RD-43B</b>	<b>RD-43C</b>	<b>RD-45B</b>	<b>RD-45C</b>	<b>RD-51B</b>
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	05/22/2007	05/21/2007	05/21/2007	05/21/2007	05/17/2007	05/18/2007	05/10/2007

<b>Analyte</b>	<b>Result Value</b>	<b>MCL</b>							
	<b>Units</b>								
Bicarbonate	mg/L	NA	360	400	390	400	290	240	380
Bromide	mg/L	NA	---	---	---	---	---	---	---
Calcium, Dissolved	mg/L	NA	110	130	120	120	110	56	100
Carbonate	mg/L	NA	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Chloride	mg/L	250, 500, 600 SMCL	37	22	39	40	32	27	54
Magnesium, Dissolved	mg/L	NA	24	27	23	26	27	13	36
Nitrate-NO3	mg/L	45	2.8	0.25 U	0.25 U	0.25 U	0.25 U	0.25 UJ	0.25 U
pH	pH Units	6.5-8.5 SMCL	7.53	7.23	7.38	7.39	7.5	7.84	7.45
Potassium, Dissolved	mg/L	NA	2.5	3.6	3.9	3.9	4.9	2.8	4.6
Sodium, Dissolved	mg/L	NA	44	35	52	51	67	52	62
Specific Conductivity	umhos/cm	900, 1600, 2200 SMCL	910	900	900	950	970	610	1000
Sulfate	mg/L	250, 500, 600 SMCL	81	95	95	110	210	69	140
Total Dissolved Solids	mg/L	500, 1000, 1500 SMCL	550	540	530	570	640	360	650
Delta Deuterium	per mil	NA	---	---	---	---	---	---	---
Delta Oxygen-18	per mil	NA	---	---	---	---	---	---	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T13-F.xls

February 2008

**TABLE XIII**  
SUMMARY OF ANALYSES FOR INORGANIC CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-51C</b>	<b>RD-52B</b>	<b>RD-52C</b>	<b>RD-59A</b>	<b>RD-59B</b>	<b>RD-59C</b>	<b>RD-66</b>
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	05/10/2007	05/18/2007	05/18/2007	08/16/2007	05/23/2007	05/23/2007	05/22/2007

<b>Analyte</b>	<b>Result Value</b>	<b>MCL</b>							
	<b>Units</b>								
Bicarbonate	mg/L	NA	360	410	340	330	310	310	430
Bromide	mg/L	NA	---	---	---	---	---	---	---
Calcium, Dissolved	mg/L	NA	88	140	130	96	55	36	150
Carbonate	mg/L	NA	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Chloride	mg/L	250, 500, 600 SMCL	46	44	36	51	35	34	70
Magnesium, Dissolved	mg/L	NA	30	35	29	27	16	12	32
Nitrate-NO3	mg/L	45	0.25 U	0.25 UJ	0.25 UJ	0.25 U	0.25 U	0.25 U	0.25 U
pH	pH Units	6.5-8.5 SMCL	7.75	7.41	7.29	7.62	7.88	8.06	7.43
Potassium, Dissolved	mg/L	NA	3.7	4	3.4	3.8	3.1	2.5	2.4
Sodium, Dissolved	mg/L	NA	90	64	56	89	99	130	59
Specific Conductivity	umhos/cm	900, 1600, 2200 SMCL	1100	1200	1000	1100	800	810	1200
Sulfate	mg/L	250, 500, 600 SMCL	160	200	200	190	97	110	200
Total Dissolved Solids	mg/L	500, 1000, 1500 SMCL	660	730	680	690	470	490	800
Delta Deuterium	per mil	NA	---	---	---	---	---	---	---
Delta Oxygen-18	per mil	NA	---	---	---	---	---	---	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T13-F.xls

February 2008

**TABLE XIII**  
SUMMARY OF ANALYSES FOR INORGANIC CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-68A</b>	<b>RD-68B</b>	<b>RD-70</b>	<b>RD-71</b>	<b>RD-73</b>	<b>RD-73</b>	<b>RD-73</b>
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	05/23/2007	05/23/2007	05/09/2007	10/26/2007	02/15/2007	05/14/2007	08/15/2007

<b>Analyte</b>	<b>Result Value</b>	<b>MCL</b>							
	<b>Units</b>								
Bicarbonate	mg/L	NA	290	290	370	380	---	---	---
Bromide	mg/L	NA	---	---	---	---	1.4	2.4	0.92
Calcium, Dissolved	mg/L	NA	54	67	110	92	---	---	---
Carbonate	mg/L	NA	1.2 U	1.2 U	1.2 U	1.2 U	---	---	---
Chloride	mg/L	250, 500, 600 SMCL	40	32	41	33	---	---	---
Magnesium, Dissolved	mg/L	NA	27	20	31	18	---	---	---
Nitrate-NO3	mg/L	45	0.25 U	0.25 U	0.25 U	0.25 U	---	---	---
pH	pH Units	6.5-8.5 SMCL	8.02	7.7	7.46	5.8	---	---	---
Potassium, Dissolved	mg/L	NA	4.4	3.5	4.6	2.9	---	---	---
Sodium, Dissolved	mg/L	NA	79	91	61	51	---	---	---
Specific Conductivity	umhos/cm	900, 1600, 2200 SMCL	760	840	990	800	---	---	---
Sulfate	mg/L	250, 500, 600 SMCL	88	99	170 J	41	---	---	---
Total Dissolved Solids	mg/L	500, 1000, 1500 SMCL	450	500	630	470	---	---	---
Delta Deuterium	per mil	NA	---	---	---	---	---	---	---
Delta Oxygen-18	per mil	NA	---	---	---	---	---	---	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T13-F.xls

February 2008

**TABLE XIII**

SUMMARY OF ANALYSES FOR INORGANIC CONSTITUENTS, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>RD-73</b>	<b>RD-75</b>	<b>RD-77</b>	<b>RD-77</b>	<b>RD-77</b>	<b>RD-77</b>	<b>RD-78</b>
Sample Type:	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:	10/23/2007	05/24/2007	02/15/2007	05/11/2007	08/08/2007	10/19/2007	05/22/2007

<b>Analyte</b>	<b>Result Value</b>	<b>MCL</b>						
	<b>Units</b>							
Bicarbonate	mg/L	NA	---	400	---	160	---	370
Bromide	mg/L	NA	1.5	---	0.42 J	0.36 J	0.46 J	0.35 U
Calcium, Dissolved	mg/L	NA	---	160	---	54	---	180
Carbonate	mg/L	NA	---	1.2 U	---	1.2 U	---	1.2 U
Chloride	mg/L	250, 500, 600 SMCL	---	38	---	33	---	84
Magnesium, Dissolved	mg/L	NA	---	84	---	11	---	36
Nitrate-NO3	mg/L	45	---	0.25 U	---	32	---	0.25 U
pH	pH Units	6.5-8.5 SMCL	---	7.37	---	6.69 J	---	7.41
Potassium, Dissolved	mg/L	NA	---	4.3	---	2	---	3.4
Sodium, Dissolved	mg/L	NA	---	67	---	35	---	63
Specific Conductivity	umhos/cm	900, 1600, 2200 SMCL	---	1600	---	530	---	1400
Sulfate	mg/L	250, 500, 600 SMCL	---	480	---	59	---	300
Total Dissolved Solids	mg/L	500, 1000, 1500 SMCL	---	1200	---	360	---	960
Delta Deuterium	per mil	NA	---	---	---	---	---	---
Delta Oxygen-18	per mil	NA	---	---	---	---	---	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T13-F.xls

February 2008

**TABLE XIII**  
SUMMARY OF ANALYSES FOR INORGANIC CONSTITUENTS, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>			<b>RD-80</b>	<b>RD-81</b>	<b>RD-82</b>	<b>RD-83</b>	<b>RD-84</b>	<b>WS-04A</b>	<b>WS-09B</b>
Sample Type:			Primary	Primary	Primary	Primary	Primary	Primary	Primary
Lab Name:			TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica	TestAmerica
Collection Date:			05/23/2007	05/18/2007	05/15/2007	05/21/2007	05/24/2007	05/16/2007	08/22/2007
<b>Analyte</b>	<b>Result Value Units</b>	<b>MCL</b>							
Bicarbonate	mg/L	NA	400	420	380	320	370	300	430
Bromide	mg/L	NA	---	---	---	---	---	---	---
Calcium, Dissolved	mg/L	NA	240	140	110	130	140	160	130
Carbonate	mg/L	NA	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Chloride	mg/L	250, 500, 600 SMCL	41	63	56	45	130	36	53
Magnesium, Dissolved	mg/L	NA	52	57	42	41	20	38	47
Nitrate-NO3	mg/L	45	0.25 U	0.25 U	0.25 U	0.25 U	24	0.25 U	0.25 U
pH	pH Units	6.5-8.5 SMCL	7.2	7.36	7.12	7.22	7.05	7.21	7.06
Potassium, Dissolved	mg/L	NA	6.2	6.1	3.8	5.5	2	4.2	5.6
Sodium, Dissolved	mg/L	NA	62	86	70	79	68	46	59
Specific Conductivity	umhos/cm	900, 1600, 2200 SMCL	1700	1400	1100	1200	1200	1200	1200
Sulfate	mg/L	250, 500, 600 SMCL	550	310	170	280	76	330	180
Total Dissolved Solids	mg/L	500, 1000, 1500 SMCL	1200	940	710	750	680	850	760
Delta Deuterium	per mil	NA	---	---	---	---	---	---	---
Delta Oxygen-18	per mil	NA	---	---	---	---	---	---	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T13-F.xls

February 2008

**TABLE XIII**

SUMMARY OF ANALYSES FOR INORGANIC CONSTITUENTS, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>	<b>WS-12</b>	<b>WS-13</b>	<b>WS-14</b>
Sample Type:	Primary	Primary	Primary
Lab Name:	TestAmerica	TestAmerica	TestAmerica
Collection Date:	05/21/2007	05/22/2007	10/29/2007

<b>Analyte</b>	<b>Result Value Units</b>	<b>MCL</b>			
Bicarbonate	mg/L	NA	330	350	310
Bromide	mg/L	NA	---	---	---
Calcium, Dissolved	mg/L	NA	92	81	98
Carbonate	mg/L	NA	1.2 U	1.2 U	1.2 U
Chloride	mg/L	250, 500, 600 SMCL	35	41	61
Magnesium, Dissolved	mg/L	NA	29	28	26
Nitrate-NO3	mg/L	45	0.25 U	0.25 U	0.25 U
pH	pH Units	6.5-8.5 SMCL	7.62	7.81	7.66
Potassium, Dissolved	mg/L	NA	4.4	3.4	3.9
Sodium, Dissolved	mg/L	NA	73	74	56
Specific Conductivity	umhos/cm	900, 1600, 2200 SMCL	930	960	920
Sulfate	mg/L	250, 500, 600 SMCL	150	150	130
Total Dissolved Solids	mg/L	500, 1000, 1500 SMCL	540	600	600
Delta Deuterium	per mil	NA	---	---	---
Delta Oxygen-18	per mil	NA	---	---	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 Annual 2007\Tables\2008-0228-HAI-SSFL\_M490\_T13-F.xls

February 2008

**TABLE XIII**  
**NOTES AND ABBREVIATIONS**

---

1. TestAmerica = TestAmerica of Irvine, California.
2. MCL = Maximum Contaminant Level, California primary drinking water standard.
3. NA = Not applicable; no MCL promulgated.
4. SMCL = California Secondary Drinking Water MCL Ranges: Recommended, Upper, and Short Term.
5. Primary = Primary sample.
6. --- = Analysis not performed.
7. mg/L = Milligrams per liter.
8. per mil = Parts per thousand.
9. umhos/cm = Micromhos per centimeter.
  
10. 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).
11. U = Not detected; numerical value represents the Method Detection Limit for that compound.
12. UJ = Not detected. Estimated detection limit as a result of analytical quality control deficiencies (see Appendix D for details).
  
13. Well OS-09 has been also referred to as Brandeis-Bardin Institute "Bathtub Well No. 1".
14. MCLs and SMCLs are listed by the California Department of Public Health (2006, 2007b). The pH SMCL is listed by the Environmental Protection Agency (2003).
15. G.G. Hatch Laboratories of Ottawa, Ontario performed oxygen-18 and deuterium isotope analyses using mass spectroscopy.
16. Calcium, magnesium, potassium, and sodium samples were filtered and acidified in the field and were analyzed using EPA method 6010B.
17. Bicarbonate and carbonate samples were analyzed using EPA method SM2320B.
18. Bromide, chloride, nitrate-NO<sub>3</sub>, and sulfate samples were analyzed using EPA method 300.0.
19. Total dissolved solids, pH, and specific conductivity samples were analyzed using EPA methods 160.1, 150.1, and 120.1, respectively.



**TABLE XIV**  
SUMMARY OF ANALYSES FOR POLYCHLORINATED BIPHENYLS, DIOXINS, AND ALCOHOLS  
RCRA FACILITY INVESTIGATION, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>				<b>HAR-19</b>	<b>HAR-19</b>	<b>RD-07</b>	<b>RD-86</b>	<b>RD-91</b>
Sample Port:				---	---	Z3	---	---
Geological Unit:				Chatsworth	Chatsworth	Chatsworth	Chatsworth	Chatsworth
Sample Type:				Primary	Split	Primary	Primary	Primary
Lab Name:				Vista	SGS	TestAmerica	TestAmerica	TA-Knoxville
Collection Date:				03/01/2007	03/01/2007	11/06/2007	8/29/2007	10/23/2007
<b>Analyte</b>	<b>Method</b>	<b>Result Value Units</b>	<b>MCL</b>					
1,2,3,4,6,7,8-Heptachlorodibenzofuran	8290	pg/L	NA	1.44 U	5.58 U	---	---	1.7 U
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	8290	pg/L	NA	2.82 U	5.58 U	---	---	3 U
1,2,3,4,7,8,9-Heptachlorodibenzofuran	8290	pg/L	NA	1.78 U	5.58 U	---	---	2.6 U
1,2,3,4,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	0.712 U	5.58 U	---	---	1.2 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	3.76 U	5.58 U	---	---	1.9 U
1,2,3,6,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	0.766 U	5.58 U	---	---	1.1 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	1.88 U	5.58 U	---	---	2.6 U
1,2,3,7,8,9-Hexachlorodibenzofuran	8290	pg/L	NA	1.42 U	5.58 U	---	---	1.7 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	1.80 U	5.58 U	---	---	2.1 U
1,2,3,7,8-Pentachlorodibenzofuran	8290	pg/L	NA	0.861 U	5.58 U	---	---	2.1 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	8290	pg/L	NA	1.36 U	5.58 U	---	---	2.2 U
2,3,4,6,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	0.881 U	5.58 U	---	---	1.3 U
2,3,4,7,8-Pentachlorodibenzofuran	8290	pg/L	NA	0.874 U	0.826 J	---	---	1.6 U
2,3,7,8-TCDD	8290	pg/L	30	0.552 U	1.52 U	---	---	4.3 U
2,3,7,8-TCDD TEQ	8290	pg/L	30	3.45 U	0.25	---	---	8.7 U
2,3,7,8-Tetrachlorodibenzofuran	8290	pg/L	NA	0.646 U	2.41 UJ	---	---	3.9 U
Octachlorodibenzofuran	8290	pg/L	NA	1.35 U	11.2 U	---	---	6.2 U
Octachlorodibenzo-p-dioxin	8290	pg/L	NA	2.61 UJ	4.13 J	---	---	6.6 U
Aroclor 1016	8082	ug/L	0.5 (total)	---	---	0.43 U	---	---
Aroclor 1221	8082	ug/L	0.5 (total)	---	---	0.095 U	---	---
Aroclor 1232	8082	ug/L	0.5 (total)	---	---	0.24 U	---	---
Aroclor 1242	8082	ug/L	0.5 (total)	---	---	0.24 U	---	---
Aroclor 1248	8082	ug/L	0.5 (total)	---	---	0.24 U	---	---
Aroclor 1254	8082	ug/L	0.5 (total)	---	---	0.24 U	---	---
Aroclor 1260	8082	ug/L	0.5 (total)	---	---	0.29 U	---	---
Ethanol	8015B	mg/L	NA	---	---	---	0.16 U	---
Ethylene glycol	8015B	ug/L	14,000 NL	---	---	---	1000 U	---
Isopropyl alcohol	8260B	ug/L	NA	---	---	---	110	---
Methanol	8015B	mg/L	NA	---	---	---	0.15 U	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T14-F.xls

February 2008

**TABLE XIV**  
 SUMMARY OF ANALYSES FOR POLYCHLORINATED BIPHENYLS, DIOXINS, AND ALCOHOLS  
 RCRA FACILITY INVESTIGATION, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier:</b>				<b>RS-54</b>	<b>RS-54</b>	<b>RS-54</b>
Sample Port:				---	---	---
Geological Unit:				Shallow	Shallow	Shallow
Sample Type:				Primary	Split	Primary
Lab Name:				TestAmerica \ Vista	SGS	TestAmerica
Collection Date:				02/15/2007	02/15/2007	11/05/2007

<b>Analyte</b>	<b>Method</b>	<b>Result Value Units</b>	<b>MCL</b>			
1,2,3,4,6,7,8-Heptachlorodibenzofuran	8290	pg/L	NA	1.44 U	2.31 U	---
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	8290	pg/L	NA	1.87 U	3.42 U	---
1,2,3,4,7,8,9-Heptachlorodibenzofuran	8290	pg/L	NA	1.27 U	2.88 U	---
1,2,3,4,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	0.903 U	1.88 U	---
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	4.68 U	3.03 U	---
1,2,3,6,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	0.84 U	1.8 U	---
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	5.27 U	3.14 U	---
1,2,3,7,8,9-Hexachlorodibenzofuran	8290	pg/L	NA	1.77 U	2.12 U	---
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	8290	pg/L	NA	4.93 U	3.06 U	---
1,2,3,7,8-Pentachlorodibenzofuran	8290	pg/L	NA	1.29 U	1.53 U	---
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	8290	pg/L	NA	1.26 U	1.97 U	---
2,3,4,6,7,8-Hexachlorodibenzofuran	8290	pg/L	NA	1.33 U	1.86 U	---
2,3,4,7,8-Pentachlorodibenzofuran	8290	pg/L	NA	1.24 U	1.47 U	---
2,3,7,8-TCDD	8290	pg/L	30	1.31 U	2.88 U	---
2,3,7,8-TCDD TEQ	8290	pg/L	30	5.13 U	7.37 U	---
2,3,7,8-Tetrachlorodibenzofuran	8290	pg/L	NA	1.33 U	2.56 U	---
Octachlorodibenzofuran	8290	pg/L	NA	3.24 U	5.95 U	---
Octachlorodibenzo-p-dioxin	8290	pg/L	NA	3.18 U	5.77 UJ	---
Aroclor 1016	8082	ug/L	0.5 (total)	0.34 U	---	0.42 U
Aroclor 1221	8082	ug/L	0.5 (total)	0.096 U	---	0.094 U
Aroclor 1232	8082	ug/L	0.5 (total)	0.24 U	---	0.24 U
Aroclor 1242	8082	ug/L	0.5 (total)	0.24 U	---	0.24 U
Aroclor 1248	8082	ug/L	0.5 (total)	0.24 U	---	0.24 U
Aroclor 1254	8082	ug/L	0.5 (total)	0.24 U	---	0.24 U
Aroclor 1260	8082	ug/L	0.5 (total)	0.29 U	---	0.28 U
Ethanol	8015B	mg/L	NA	---	---	---
Ethylene glycol	8015B	ug/L	14,000 NL	---	---	---
Isopropyl alcohol	8260B	ug/L	NA	---	---	---
Methanol	8015B	mg/L	NA	---	---	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T14-F.xls

**TABLE XIV**  
NOTES AND ABBREVIATIONS

---

1.	Vista	=	Vista Analytical Laboratory, Inc. of El Dorado Hills, California, formerly Alta Analytical Laboratory.
2.	SGS	=	SGS Environmental Services, Inc. of Wilmington, NC.
3.	TA-Knoxville	=	TestAmerica of Knoxville, Tennessee.
4.	TestAmerica	=	TestAmerica of Irvine, California.
5.	Primary	=	Primary sample.
6.	Split	=	Split sample.
7.	Chatsworth	=	Chatsworth Formation wells.
8.	Shallow	=	Shallow wells.
9.	mg/L	=	Milligrams per liter.
10.	pg/L	=	Picograms per liter.
11.	ug/L	=	Micrograms per liter.
12.	J	=	Estimated value. Concentration estimated due to analytical quality control deficiencies (see Appendix D for details).
13.	U	=	Not detected; numerical value represents the Method Detection Limit for that compound.
14.	UJ	=	Not detected. Estimated detection limit as a result of analytical quality control deficiencies (see Appendix D for details).
15.	Z	=	FLUTE sample port number.
16.	MCL	=	Maximum Contaminant Level, California primary drinking water standard.
17.	NA	=	Not available; no MCL promulgated.
18.	NL	=	Advisory California Notification Level for unregulated chemical contaminants.
19.	MCLs and NLs are listed by the California Department of Public Health (2007a, 2007b).		
20.	1,2,3,4,6,7,8-Heptachlorodibenzofuran	=	1,2,3,4,6,7,8-HpCDF
	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	=	1,2,3,4,6,7,8-HpCDD
	1,2,3,4,7,8,9-Heptachlorodibenzofuran	=	1,2,3,4,7,8,9-HpCDF
	1,2,3,4,7,8-Hexachlorodibenzofuran	=	1,2,3,4,7,8-HxCDF
	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	=	1,2,3,4,7,8-HxCDD
	1,2,3,6,7,8-Hexachlorodibenzofuran	=	1,2,3,6,7,8-HxCDF
	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	=	1,2,3,6,7,8-HxCDD
	1,2,3,7,8,9-Hexachlorodibenzofuran	=	1,2,3,7,8,9-HxCDF
	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	=	1,2,3,7,8,9-HxCDD
	1,2,3,7,8-Pentachlorodibenzofuran	=	1,2,3,7,8-PeCDF
	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	=	1,2,3,7,8-PeCDD
	2,3,4,6,7,8-Hexachlorodibenzofuran	=	2,3,4,6,7,8-HxCDF
	2,3,4,7,8-Pentachlorodibenzofuran	=	2,3,4,7,8-PeCDF
	2,3,7,8-Tetrachlorodibenzo-p-dioxin	=	2,3,7,8-TCDD
	2,3,7,8-Tetrachlorodibenzo-p-dioxin toxic equivalency	=	2,3,7,8-TCDD TEQ
	2,3,7,8-Tetrachlorodibenzofuran	=	2,3,7,8-TCDF
	1,2,3,4,6,7,8,9-Octachlorodibenzofuran	=	OCDF
	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	=	OCDD

**TABLE XIV**  
NOTES AND ABBREVIATIONS

---

21. 2,3,7,8-TCDD TEQ calculated using 2005 toxic equivalency factors (van den Berg et al., 2006).
22. During the first quarter 2007, dioxins and furans analyses were performed on primary samples by Vista Analytical (formerly Alta Analytical) and on split samples by SGS Environmental Services, Inc. using EPA method 8290. During the fourth quarter 2007, dioxins and furans analyses were performed on primary samples by TestAmerica-Knoxville using EPA method 8290.
23. Polychlorinated biphenyls (PCBs) were analyzed by TestAmerica using EPA method 8082.

**TABLE XV**

SUMMARY OF EXTRACTION WELL WATER LEVELS AND FLOW RATES, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Treatment System	Extraction Well	Water Level Measurement Date	Measuring Point Elevation (ft, MSL)	Depth to Water (feet)	Water Level Elevation (ft, MSL)	Average Monthly Flow Rate (gpm)	Average Quarterly Flow Rate (gpm)	Footnotes	
Alfa ASU	WS-06	01/03/07	1932.72	NA	---	0			
		02/01/07	1932.72	344.94	1587.78	0			
		03/01/07	1932.72	NA	---	0	0		
		04/01/07	1932.72	NA	---	0			
		05/02/07	1932.72	343.65	1589.07	0			
		06/01/07	1932.72	NA	---	0	0		
		07/02/07	1932.72	NA	---	0			
		08/01/07	1932.72	342.08	1590.64	0			
		09/05/07	1932.72	NA	---	0	0		
		10/01/07	1932.72	NA	---	0			
		10/16/07	1932.72	341.5	1591.22	0			
		12/03/07	1932.72	NA	---	0	0		
Bravo ASU	ES-21	01/03/07	1769.62	NA	---	0			
		01/31/07	1769.62	19.29	1750.33	0			
		03/01/07	1769.62	NA	---	0	0		
		04/01/07	1769.62	NA	---	0			
		05/02/07	1769.62	21.06	1748.56	0			
		06/01/07	1769.62	NA	---	0	0		
		07/02/07	1769.62	NA	---	0			
		08/01/07	1769.62	24.14	1745.48	0			
		09/05/07	1769.62	NA	---	0	0		
		10/01/07	1769.62	NA	---	0			
		10/17/07	1769.62	26.10	1743.52	0			
		12/03/07	1769.62	NA	---	0	0		
	ES-22		01/03/07	1770.93	NA	---	0		
			01/31/07	1770.93	20.27	1750.66	0		
			03/01/07	1770.93	NA	---	0	0	
			04/01/07	1770.93	NA	---	0		
			05/02/07	1770.93	22.05	1748.88	0		
			06/01/07	1770.93	NA	---	0	0	
			07/02/07	1770.93	NA	---	0		
			08/01/07	1770.93	25.15	1745.78	0		
			09/05/07	1770.93	NA	---	0	0	
			10/01/07	1770.93	NA	---	0		
			10/17/07	1770.93	27.17	1743.76	0		
			12/03/07	1770.93	NA	---	0	0	
RD-04		01/03/07	1883.85	NA	---	0			
		02/01/07	1883.85	293.94	1589.91	0			
		03/01/07	1883.85	NA	---	0	0		
		04/01/07	1883.85	NA	---	0			
		05/02/07	1883.85	292.43	1591.42	0			
		06/01/07	1883.85	NA	---	0	0		
		07/02/07	1883.85	NA	---	0			
		08/01/07	1883.85	290.73	1593.12	0			
		09/05/07	1883.85	NA	---	0	0		
		10/01/07	1883.85	NA	---	0			
		10/16/07	1883.85	290.21	1593.64	0			
		12/03/07	1883.85	NA	---	0	0		

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T15-F.xls

February 2008

**TABLE XV**  
**SUMMARY OF EXTRACTION WELL WATER LEVELS AND FLOW RATES, 2007**  
**BOEING SANTA SUSANA FIELD LABORATORY**  
**VENTURA COUNTY, CALIFORNIA**

Treatment System	Extraction Well	Water Level Measurement Date	Measuring Point Elevation (ft, MSL)	Depth to Water (feet)	Water Level Elevation (ft, MSL)	Average Monthly Flow Rate (gpm)	Average Quarterly Flow Rate (gpm)	Footnotes
Bravo ASU	RD-09	01/03/07	1768.20	NA	---	0		
		01/31/07	1768.20	20.49	1747.71	0		
		03/01/07	1768.20	NA	---	0	0	
		04/01/07	1768.20	NA	---	0		
		05/02/07	1768.20	22.24	1745.96	0		
		06/01/07	1768.20	NA	---	0	0	
		07/02/07	1768.20	NA	---	0		
		08/01/07	1768.20	25.20	1743.00	0		
		09/05/07	1768.20	NA	---	0	0	
		10/01/07	1768.20	NA	---	0		
		10/17/07	1768.20	26.78	1741.42	0		
		12/03/07	1768.20	NA	---	0	0	
	WS-09	01/03/07	1883.99	NA	---	0		
		02/01/07	1883.99	292.89	1591.10	0		
		03/01/07	1883.99	NA	---	0	0	
		04/01/07	1883.99	NA	---	0		
		05/02/07	1883.99	291.38	1592.61	0		
		06/01/07	1883.99	NA	---	0	0	
		07/02/07	1883.99	NA	---	0		
		08/01/07	1883.99	289.81	1594.18	0		
		09/05/07	1883.99	NA	---	0	0	
		10/01/07	1883.99	NA	---	0		
		10/16/07	1883.99	289.39	1594.60	0		
		12/03/07	1883.99	NA	---	0	0	
Delta ASU	HAR-07	01/03/07	1728.38	NA	---	0		
		01/31/07	1728.38	67.38	1661.00	0		
		03/01/07	1728.38	NA	---	0	0	
		04/01/07	1728.38	NA	---	0		
		04/30/07	1728.38	74.10	1654.28	0		
		06/01/07	1728.38	NA	---	0	0	
		07/02/07	1728.38	NA	---	0		
		08/01/07	1728.38	76.47	1651.91	0		
		09/05/07	1728.38	NA	---	0	0	
		10/01/07	1728.38	NA	---	0		
		10/17/07	1728.38	78.19	1650.19	0		
		12/03/07	1728.38	NA	---	0	0	
	WS-09A	01/03/07	1647.61	NA	---	3.64		
		02/01/07	1647.61	33.44	1614.17	25.90		
		03/01/07	1647.61	51.90	1595.71 (P)	22.59	17.09	(1)
		04/02/07	1647.61	58.20	1589.41 (P)	19.71		(1)
		05/02/07	1647.61	63.73	1583.88 (P)	15.42		
		06/01/07	1647.61	59.50	1588.11 (P)	7.63	14.25	(1)
		07/02/07	1647.61	54.60	1593.01 (P)	1.85		(1)
		08/01/07	1647.61	44.43	1603.18	1.58		
		09/05/07	1647.61	38.20	1609.41	0.00	1.16	(1)
		10/01/07	1647.61	36.90	1610.71	0.00		(1)
		10/16/07	1647.61	35.70	1611.91	0.00		
		12/03/07	1647.61	33.25	1614.36	0.00	0.00	(1)

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T15-F.xls

February 2008

**TABLE XV**

SUMMARY OF EXTRACTION WELL WATER LEVELS AND FLOW RATES, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Treatment System	Extraction Well	Water Level Measurement Date	Measuring Point Elevation (ft, MSL)	Depth to Water (feet)	Water Level Elevation (ft, MSL)	Average Monthly Flow Rate (gpm)	Average Quarterly Flow Rate (gpm)	Footnotes
STL-IV ASU	ECL FD	01/03/07	---	NA	---	0		
		02/01/07	---	8.51	---	0		
		03/01/07	---	NA	---	0	0	
		04/01/07	---	NA	---	0		
		05/02/07	---	Dry	---	0		
		06/01/07	---	NA	---	0	0	
		07/02/07	---	NA	---	0		
		08/03/07	---	Dry	---	0		
		09/05/07	---	NA	---	0	0	
		10/01/07	---	NA	---	0		
		10/15/07	---	NA	---	0		
		12/03/07	---	NA	---	0	0	
		ECL Sump	ECL Sump	01/03/07	---	NA	---	0
02/01/07	---			8.65	---	0		
03/01/07	---			NA	---	0	0	
04/01/07	---			NA	---	0		
05/02/07	---			9.41	---	0		
06/01/07	---			NA	---	0	0	
07/02/07	---			NA	---	0		
08/03/07	---			9.41	---	0		
09/05/07	---			NA	---	0	0	
10/01/07	---			NA	---	0		
10/15/07	---			NA	---	0		
12/03/07	---			NA	---	0	0	
ES-14	ES-14			01/03/07	1728.69	NA	---	0
		01/29/07	1728.69	18.39	1710.30	0		
		03/01/07	1728.69	NA	---	0	0	
		04/01/07	1728.69	NA	---	0		
		05/02/07	1728.69	18.08	1710.61	0		
		06/01/07	1728.69	NA	---	0	0	
		07/02/07	1728.69	NA	---	0		
		08/01/07	1728.69	21.80	1706.89	0		
		09/05/07	1728.69	NA	---	0	0	
		10/01/07	1728.69	NA	---	0		
		10/15/07	1728.69	24.79	1703.90	0		
		12/03/07	1728.69	NA	---	0	0	
		ES-17	ES-17	01/03/07	1739.31	NA	---	0
01/29/07	1739.31			16.37	1722.94	0		
03/01/07	1739.31			NA	---	0	0	
04/01/07	1739.31			NA	---	0		
05/02/07	1739.31			15.89	1723.42	0		
06/01/07	1739.31			NA	---	0	0	
07/02/07	1739.31			NA	---	0		
08/01/07	1739.31			Dry	---	0		
09/05/07	1739.31			NA	---	0	0	
10/01/07	1739.31			NA	---	0		
10/15/07	1739.31			25.19	1714.12	0		
12/03/07	1739.31			NA	---	0	0	

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T15-F.xls

February 2008

**TABLE XV**

SUMMARY OF EXTRACTION WELL WATER LEVELS AND FLOW RATES, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Treatment System	Extraction Well	Water Level Measurement Date	Measuring Point Elevation (ft, MSL)	Depth to Water (feet)	Water Level Elevation (ft, MSL)	Average Monthly Flow Rate (gpm)	Average Quarterly Flow Rate (gpm)	Footnotes
STL-IV ASU	ES-23	01/03/07	1760.73	NA	---	0		
		02/01/07	1760.73	9.37	1751.36	0		
		03/01/07	1760.73	NA	---	0	0	
		04/01/07	1760.73	NA	---	0		
		05/02/07	1760.73	10.13	1750.60	0		
		06/01/07	1760.73	NA	---	0	0	
		07/02/07	1760.73	NA	---	0		
		08/02/07	1760.73	11.32	1749.41	0		
		09/05/07	1760.73	NA	---	0	0	
		10/01/07	1760.73	NA	---	0		
		10/16/07	1760.73	10.78	1749.95	0		
		12/03/07	1760.73	NA	---	0	0	
			ES-24	01/03/07	1728.67	NA	---	0
01/29/07	1728.67			21.96	1706.71	0		
03/01/07	1728.67			NA	---	0	0	
04/01/07	1728.67			NA	---	0		
05/02/07	1728.67			21.55	1707.12	0		
06/01/07	1728.67			NA	---	0	0	
07/02/07	1728.67			NA	---	0		
08/01/07	1728.67			24.67	1704.00	0		
09/05/07	1728.67			NA	---	0	0	
10/01/07	1728.67			NA	---	0		
10/15/07	1728.67			27.51	1701.16	0		
12/03/07	1728.67			NA	---	0	0	
	ES-26	01/03/07	1748.01	NA	---	0		
		01/29/07	1748.01	14.12	1733.89	0		
		03/01/07	1748.01	NA	---	0	0	
		04/01/07	1748.01	NA	---	0		
		05/02/07	1748.01	14.08	1733.93	0		
		06/01/07	1748.01	NA	---	0	0	
		07/02/07	1748.01	NA	---	0		
		08/01/07	1748.01	19.05	1728.96	0		
		09/05/07	1748.01	NA	---	0	0	
		10/01/07	1748.01	NA	---	0		
		10/15/07	1748.01	22.41	1725.60	0		
		12/03/07	1748.01	NA	---	0	0	
	ES-27	01/03/07	1740.67	NA	---	0		
		01/29/07	1740.67	16.84	1723.83	0		
		03/01/07	1740.67	NA	---	0	0	
		04/01/07	1740.67	NA	---	0		
		05/02/07	1740.67	16.28	1724.39	0		
		06/01/07	1740.67	NA	---	0	0	
		07/02/07	1740.67	NA	---	0		
		08/01/07	1740.67	21.30	1719.37	0		
		09/05/07	1740.67	NA	---	0	0	
		10/01/07	1740.67	NA	---	0		
		10/15/07	1740.67	24.80	1715.87	0		
		12/03/07	1740.67	NA	---	0	0	

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T15-F.xls

February 2008



**TABLE XV**  
**SUMMARY OF EXTRACTION WELL WATER LEVELS AND FLOW RATES, 2007**  
**BOEING SANTA SUSANA FIELD LABORATORY**  
**VENTURA COUNTY, CALIFORNIA**

Treatment System	Extraction Well	Water Level Measurement Date	Measuring Point Elevation (ft, MSL)	Depth to Water (feet)	Water Level Elevation (ft, MSL)	Average Monthly Flow Rate (gpm)	Average Quarterly Flow Rate (gpm)	Footnotes
STL-IV ASU	ES-30	01/03/07	1759.51	NA	---	0		
		01/31/07	1759.51	9.72	1749.79	0		
		03/01/07	1759.51	NA	---	0	0	
		04/01/07	1759.51	NA	---	0		
		05/02/07	1759.51	10.02	1749.49	0		
		06/01/07	1759.51	NA	---	0	0	
		07/02/07	1759.51	NA	---	0		
		08/02/07	1759.51	11.19	1748.32	0		
		09/05/07	1759.51	NA	---	0	0	
		10/01/07	1759.51	NA	---	0		
		10/16/07	1759.51	10.76	1748.75	0		
		12/03/07	1759.51	NA	---	0	0	
			ES-32	01/03/07	1740.65	NA	---	0
01/29/07	1740.65			19.15	1721.50	0		
03/01/07	1740.65			NA	---	0	0	
04/01/07	1740.65			NA	---	0		
05/02/07	1740.65			19.04	1721.61	0		
06/01/07	1740.65			NA	---	0	0	
07/02/07	1740.65			NA	---	0		
08/01/07	1740.65			Dry	---	0		
09/05/07	1740.65			NA	---	0	0	
10/01/07	1740.65			NA	---	0		
10/15/07	1740.65			Dry	---	0		
12/03/07	1740.65			NA	---	0	0	
	HAR-17	01/03/07	1711.59	NA	---	0		
		01/29/07	1711.59	14.52	1697.07	0		
		03/01/07	1711.59	NA	---	0	0	
		04/01/07	1711.59	NA	---	0		
		05/02/07	1711.59	14.63	1696.96	0		
		06/01/07	1711.59	NA	---	0	0	
		07/02/07	1711.59	NA	---	0		
		08/01/07	1711.59	19.95	1691.64	0		
		09/05/07	1711.59	NA	---	0	0	
		10/01/07	1711.59	NA	---	0		
		10/15/07	1711.59	23.66	1687.93	0		
		12/03/07	1711.59	NA	---	0	0	
	HAR-18	01/03/07	1749.41	NA	---	0		
		01/29/07	1749.41	19.57	1729.84	0		
		03/01/07	1749.41	NA	---	0	0	
		04/01/07	1749.41	NA	---	0		
		05/01/07	1749.41	19.51	1729.90	0		
		06/01/07	1749.41	NA	---	0	0	
		07/02/07	1749.41	NA	---	0		
		08/02/07	1749.41	22.19	1727.22	0		
		09/05/07	1749.41	NA	---	0	0	
		10/01/07	1749.41	NA	---	0		
		10/15/07	1749.41	24.61	1724.80	0		
		12/03/07	1749.41	NA	---	0	0	

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T15-F.xls

February 2008

**TABLE XV**  
**SUMMARY OF EXTRACTION WELL WATER LEVELS AND FLOW RATES, 2007**  
**BOEING SANTA SUSANA FIELD LABORATORY**  
**VENTURA COUNTY, CALIFORNIA**

Treatment System	Extraction Well	Water Level Measurement Date	Measuring Point Elevation (ft, MSL)	Depth to Water (feet)	Water Level Elevation (ft, MSL)	Average Monthly Flow Rate (gpm)	Average Quarterly Flow Rate (gpm)	Footnotes
WS-05 UV/H2O2	ES-01	01/03/07	1782.20	NA	---	0		
		01/30/07	1782.20	18.05	1764.15	0		
		03/01/07	1782.20	NA	---	0	0	
		04/01/07	1782.20	NA	---	0		
		05/02/07	1782.20	19.23	1762.97	0		
		06/01/07	1782.20	NA	---	0	0	
		07/02/07	1782.20	NA	---	0		
		08/01/07	1782.20	20.81	1761.39	0		
		09/05/07	1782.20	NA	---	0	0	
		10/01/07	1782.20	NA	---	0		
		10/17/07	1782.20	22.00	1760.20	0		
		12/03/07	1782.20	NA	---	0	0	
			ES-03	01/03/07	1783.39	NA	---	0
01/30/07	1783.39			19.19	1764.20	0		
03/01/07	1783.39			NA	---	0	0	
04/01/07	1783.39			NA	---	0		
05/02/07	1783.39			20.39	1763.00	0		
06/01/07	1783.39			NA	---	0	0	
07/02/07	1783.39			NA	---	0		
08/01/07	1783.39			16.60	1766.79	0		
09/05/07	1783.39			NA	---	0	0	
10/01/07	1783.39			NA	---	0		
10/17/07	1783.39			23.67	1759.72	0		
12/03/07	1783.39			NA	---	0	0	
	ES-04			01/03/07	1817.24	NA	---	0
		01/30/07	1817.24	Dry	---	0		
		03/01/07	1817.24	NA	---	0	0	
		04/01/07	1817.24	NA	---	0		
		05/01/07	1817.24	Dry	---	0		
		06/01/07	1817.24	NA	---	0	0	
		07/02/07	1817.24	NA	---	0		
		08/01/07	1817.24	Dry	---	0		
		09/05/07	1817.24	NA	---	0	0	
		10/01/07	1817.24	NA	---	0		
		10/17/07	1817.24	Dry	---	0		
		12/03/07	1817.24	NA	---	0	0	
			ES-05	01/03/07	1818.13	NA	---	0
01/30/07	1818.13			Dry	---	0		
03/01/07	1818.13			NA	---	0	0	
04/01/07	1818.13			NA	---	0		
05/01/07	1818.13			Dry	---	0		
06/01/07	1818.13			NA	---	0	0	
07/02/07	1818.13			NA	---	0		
08/01/07	1818.13			Dry	---	0		
09/05/07	1818.13			NA	---	0	0	
10/01/07	1818.13			NA	---	0		
10/17/07	1818.13			Dry	---	0		
12/03/07	1818.13			NA	---	0	0	

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T15-F.xls

February 2008

**TABLE XV**

SUMMARY OF EXTRACTION WELL WATER LEVELS AND FLOW RATES, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Treatment System	Extraction Well	Water Level Measurement Date	Measuring Point Elevation (ft, MSL)	Depth to Water (feet)	Water Level Elevation (ft, MSL)	Average Monthly Flow Rate (gpm)	Average Quarterly Flow Rate (gpm)	Footnotes
WS-05 UV/H2O2	ES-06	01/03/07	1825.41	NA	---	0		
		01/30/07	1825.41	19.41	1806.00	0		
		03/01/07	1825.41	NA	---	0	0	
		04/01/07	1825.41	NA	---	0		
		05/01/07	1825.41	19.86	1805.55	0		
		06/01/07	1825.41	NA	---	0	0	
		07/02/07	1825.41	NA	---	0		
		08/01/07	1825.41	20.95	1804.46	0		
		09/05/07	1825.41	NA	---	0	0	
		10/01/07	1825.41	NA	---	0		
		10/17/07	1825.41	22.32	1803.09	0		
		12/03/07	1825.41	NA	---	0	0	
			ES-07	01/03/07	1826.53	NA	---	0
01/30/07	1826.53			Dry	---	0		
03/01/07	1826.53			NA	---	0	0	
04/01/07	1826.53			NA	---	0		
05/01/07	1826.53			Dry	---	0		
06/01/07	1826.53			NA	---	0	0	
07/02/07	1826.53			NA	---	0		
08/01/07	1826.53			Dry	---	0		
09/05/07	1826.53			NA	---	0	0	
10/01/07	1826.53			NA	---	0		
10/17/07	1826.53			Dry	---	0		
12/03/07	1826.53			NA	---	0	0	
	ES-11	01/03/07	1835.07	NA	---	0		
		01/30/07	1835.07	Dry	---	0		
		03/01/07	1835.07	NA	---	0	0	
		04/01/07	1835.07	NA	---	0		
		05/01/07	1835.07	Dry	---	0		
		06/01/07	1835.07	NA	---	0	0	
		07/02/07	1835.07	NA	---	0		
		08/01/07	1835.07	Dry	---	0		
		09/05/07	1835.07	NA	---	0	0	
		10/01/07	1835.07	NA	---	0		
		10/16/07	1835.07	Dry	---	0		
		12/03/07	1835.07	NA	---	0	0	
	HAR-04	01/03/07	1873.40	NA	---	0		
		01/29/07	1873.40	22.08	1851.32	0		
		03/01/07	1873.40	NA	---	0	0	
		04/01/07	1873.40	NA	---	0		
		04/30/07	1873.40	20.43	1852.97	0		
		06/01/07	1873.40	NA	---	0	0	
		07/02/07	1873.40	NA	---	0		
		08/01/07	1873.40	22.42	1850.98	0		
		09/05/07	1873.40	NA	---	0	0	
		10/01/07	1873.40	NA	---	0		
		10/16/07	1873.40	23.63	1849.77	0		
		12/03/07	1873.40	NA	---	0	0	

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T15-F.xls

February 2008

**TABLE XV**

**SUMMARY OF EXTRACTION WELL WATER LEVELS AND FLOW RATES, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA**

Treatment System	Extraction Well	Water Level Measurement Date	Measuring Point Elevation (ft, MSL)	Depth to Water (feet)	Water Level Elevation (ft, MSL)	Average Monthly Flow Rate (gpm)	Average Quarterly Flow Rate (gpm)	Footnotes
WS-05 UV/H2O2	HAR-16	01/03/07	1872.31	NA	---	0		
		01/30/07	1872.31	51.50	1820.81	0		
		03/01/07	1872.31	NA	---	0	0	
		04/01/07	1872.31	NA	---	0		
		04/30/07	1872.31	52.17	1820.14	0		
		06/01/07	1872.31	NA	---	0	0	
		07/02/07	1872.31	NA	---	0		
		08/01/07	1872.31	53.76	1818.55	0		
		09/05/07	1872.31	NA	---	0	0	
		10/01/07	1872.31	NA	---	0		
		10/16/07	1872.31	55.29	1817.02	0		
		12/03/07	1872.31	NA	---	0	0	
		RD-01	RD-01	01/03/07	1935.89	NA	---	0
01/31/07	1935.89			200.10	1735.79	0		
03/01/07	1935.89			NA	---	0	0	
04/01/07	1935.89			NA	---	0		
05/01/07	1935.89			199.61	1736.28	0		
06/01/07	1935.89			NA	---	0	0	
07/02/07	1935.89			NA	---	0		
08/01/07	1935.89			200.50	1735.39	0		
09/05/07	1935.89			NA	---	0	0	
10/01/07	1935.89			NA	---	0		
10/17/07	1935.89			202.81	1733.08	0		
12/03/07	1935.89			NA	---	0	0	
RD-02	RD-02	01/03/07	1873.92	NA	---	0		
		01/30/07	1873.92	154.37	1719.55	0		
		03/01/07	1873.92	154.30	1719.62	0	0	(1)
		04/01/07	1873.92	NA	---	0.03		
		05/02/07	1873.92	154.52	1719.40	4.82		
		06/01/07	1873.92	156.30	1717.62	7.06	3.93	(1)
		07/02/07	1873.92	162.50	1711.42 (P)	8.10		(1)
		08/01/07	1873.92	162.02	1711.90	1.27		
		09/05/07	1873.92	162.80	1711.12	0.33	3.26	(1)
		10/01/07	1873.92	162.80	1711.12	3.63		(1)
		10/17/07	1873.92	161.05	1712.87	3.40		
		12/03/07	1873.92	160.25	1713.67	2.91	3.31	(1)
WS-05	WS-05	01/03/07	1830.20	NA	---	0		
		01/30/07	1830.20	240.84	1589.36	0		
		03/01/07	1830.20	NA	---	0	0	
		04/01/07	1830.20	NA	---	0		
		05/01/07	1830.20	239.53	1590.67	0		
		06/01/07	1830.20	NA	---	0	0	
		07/02/07	1830.20	NA	---	0		
		08/01/07	1830.20	238.35	1591.85	0		
		09/05/07	1830.20	NA	---	0	0	
		10/01/07	1830.20	NA	---	0		
		10/17/07	1830.20	237.89	1592.31	0		
		12/03/07	1830.20	NA	---	0	0	

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T15-F.xls

**TABLE XV**  
**NOTES AND ABBREVIATIONS**

---

1. NA = Not available. Well was not monitored or transducer was inoperable.  
Water level measurement at inactive wells was discontinued in June 2004.
2. MSL = Mean sea level.
3. (P) = Pumping water level.
4. UTM = Unable to measure.
5. (---) = No data available/not applicable.
6. (1) = Water level measured by EnviroSolve Corporation.
7. ASU = Air stripping unit.
8. UV/H<sub>2</sub>O<sub>2</sub> = Ultraviolet light/ peroxidation.
9. Several extraction wells were inactive due to ongoing Shallow Zone Groundwater Investigation (Ogden, 2000), the Chatsworth Formation Operable Unit Investigation (Montgomery Watson, 2000b), and damage due to the September 2005 Topanga fire.

**TABLE XVI**

SUMMARY OF GROUNDWATER EXTRACTIONS, PERMITTED GROUNDWATER REMEDIATION FACILITIES, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

		Gallons x 1,000												Total Annual Pumpage	Total Pumpage to Date
Remediation System		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
<b>Extraction Well(s)</b>															
Delta ASU	WS-09A	162.4	1,044.1	1,008.4	851.6	666.2	329.4	82.7	70.5	0.0	0.0	0.0	0.0	4,215.3	
	HAR-07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Alfa ASU	WS-06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Bravo ASU	WS-09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	RD-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	RD-09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	ES-21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	ES-22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
WS-5 Area	WS-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
UV/H <sub>2</sub> O <sub>2</sub>	ES-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	ES-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	ES-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	ES-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	ES-06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	ES-07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	ES-11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	HAR-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	HAR-16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	RD-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	RD-02	0.0	0.0	0.0	1.5	208.1	305.1	361.5	56.7	14.2	161.9	146.9	129.9	1,385.8	
STL-IV ASU	ES-14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	ES-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	ES-23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	ES-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	ES-26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	ES-27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	ES-30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	ES-32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	HAR-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	HAR-18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
ECL-Sump	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
ECL-FD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
<b>Total System</b>		<b>162.4</b>	<b>1,044.1</b>	<b>1008.4</b>	<b>853.1</b>	<b>874.3</b>	<b>634.5</b>	<b>444.2</b>	<b>127.2</b>	<b>14.2</b>	<b>161.9</b>	<b>146.9</b>	<b>129.9</b>	<b>5,601.1</b>	<b>1,761,800.7</b>

## Notes and Abbreviations:

- ASU = Air stripping unit
- UV/H<sub>2</sub>O<sub>2</sub> = Ultraviolet light/peroxidation

- Remediation system monitoring conducted by EnviroSolve Corporation. Pumpage data and cumulative pumpage provided by EnviroSolve Corporation. Several extraction wells were inactive due to ongoing Shallow Zone Groundwater Investigation (Ogden, 2000), Chatsworth Formation Operable Unit Investigation (Montgomery Watson, 2000b), and damage due to the September 2005 Topanga fire.

**TABLE XVII**

SUMMARY OF WATER QUALITY RESULTS  
 FOR PERMITTED GROUNDWATER REMEDIATION FACILITIES, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Sample Location		Date Sampled	TCE (ug/L)	1,2-DCE (ug/L)		Perchlorate (ug/L)	VOCs Removed			
				cis	trans		By Quarter (lbs)	To Date (lbs)		
Delta ASU	Influent	01/03/07	730	490	18	4 U	35.5	1345.4		
		02/02/07	1300	900	30	4 U		1364.8		
		03/01/07	1000	680	21	4 U		1379.2		
		04/02/07	1100	1100	27	4 U	35.1	1394.9		
		05/01/07	250	1600	36	4 U		1405.5		
		06/01/07	1800	1400	37	4 U		1414.3		
		07/02/07	1500	1600	35	4 U	3.9	1416.5		
		08/07/07	810	1900	48	4 U		1418.2		
		09/01/07	Not Operating					0.0	1418.2	
		10/01/07					1418.2			
		11/01/07					1418.2			
		12/04/07					1418.2			
	Primary Effluent	01/03/07	0.55	0.96	0.5 U	---				
		02/02/07	0.87	1.4	0.5 U	---				
		03/01/07	0.5 U	0.88	0.5 U	---				
		04/02/07	0.50	2.1	0.5 U	---				
		05/01/07	0.5 U	0.6	0.5 U	---				
		06/01/07	24	170	0.98	---				
		07/02/07	19	170	0.5 U	---				
		08/07/07	46 (1X DF) 55 (10X DF)	670	4	---				
		09/01/07	Not Operating							
		10/01/07								
		11/01/07								
		12/04/07								
	Secondary Effluent	01/03/07	0.79	0.51	0.5 U	---				
		02/02/07	0.5 U	0.5 U	0.5 U	---				
		03/01/07	0.5 U	0.5 U	0.5 U	---				
		04/02/07	0.5 U	0.92	0.5 U	---				
		05/01/07	0.5 U	0.5 U	0.5 U	---				
		06/01/07	0.5 U	1.4	0.5 U	---				
		07/02/07	0.5 U	1.3	0.5 U	---				
		08/07/07	0.5 U	9*	0.5 U	---				
		09/01/07	Not Operating							
10/01/07										
11/01/07										
12/04/07										
Alfa ASU	Influent	01/03/07	Not Operating				0.0	456.4		
		02/02/07						456.4		
		03/01/07						456.4		
		04/02/07					456.4			
		05/01/07					0.0	456.4		
		06/01/07						456.4		
		07/01/07						456.4		
		08/01/07					456.4			

See last page of table for notes and abbreviations.

Haley &amp; Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T17-F.xls

February 2008

**TABLE XVII**

SUMMARY OF WATER QUALITY RESULTS  
 FOR PERMITTED GROUNDWATER REMEDIATION FACILITIES, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Sample Location	Date Sampled	TCE (ug/L)	1,2-DCE (ug/L)		Perchlorate (ug/L)	VOCs Removed		
			cis	trans		By Quarter (lbs)	To Date (lbs)	
Alfa ASU	Influent	09/01/07				0.0	456.4	
		10/01/07					456.4	
		11/01/07					456.4	
		12/04/07				0.0	456.4	
	Primary Effluent	01/03/07						
		02/02/07						
		03/01/07						
		04/02/07						
		05/01/07						
		06/01/07						
		07/01/07						
		08/01/07						
		09/01/07						
		10/01/07						
		11/01/07						
		12/04/07						
	Secondary Effluent	01/03/07						
		02/02/07						
		03/01/07						
		04/02/07						
		05/01/07						
		06/01/07						
		07/01/07						
		08/01/07						
		09/01/07						
		10/01/07						
		11/01/07						
12/04/07								
Bravo ASU	Influent	01/03/07					123.7	
		02/02/07					123.7	
		03/01/07				0.0	123.7	
		04/02/07					123.7	
		05/01/07					123.7	
		06/01/07					123.7	
		07/01/07				0.0	123.7	
		08/01/07					123.7	
		09/01/07					123.7	
		10/01/07					123.7	
		11/01/07					123.7	
		12/04/07				0.0	123.7	
	Primary Effluent	01/03/07						
		02/02/07						
		03/01/07						
		04/02/07						
		05/01/07						

See last page of table for notes and abbreviations.

Haley &amp; Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T17-F.xls

February 2008



**TABLE XVII**

SUMMARY OF WATER QUALITY RESULTS  
 FOR PERMITTED GROUNDWATER REMEDIATION FACILITIES, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Sample Location	Date Sampled	TCE (ug/L)	1,2-DCE (ug/L)		Perchlorate (ug/L)	VOCs Removed		
			cis	trans		By Quarter (lbs)	To Date (lbs)	
Bravo ASU	Primary Effluent	06/01/07	Not Operating					
		07/01/07						
		08/01/07						
		09/01/07						
		10/01/07						
		11/01/07						
		12/04/07						
	Secondary Effluent	01/03/07	Not Operating					
		02/02/07						
		03/01/07						
		04/02/07						
		05/01/07						
		06/01/07	Not Operating					
		07/01/07						
		08/01/07						
		09/01/07						
		10/01/07						
		11/01/07						
		12/04/07						
WS-05 UV/H <sub>2</sub> O <sub>2</sub>	Influent	01/03/07	Not Operating					<b>225.6</b>
		02/09/07	<b>11</b>	<b>20</b>	0.5 U	4 U	1.7	<b>225.6</b>
		03/01/07	<b>16</b>	<b>1.0</b>	0.5 U	4 U		<b>225.6</b>
		04/20/07	<b>250</b>	<b>420</b>	<b>24</b>	4 U		<b>225.6</b>
		05/07/07	<b>2.8</b>	<b>0.8</b>	0.5 U	---	2.1	<b>226.5</b>
		05/09/07	<b>160</b>	<b>360</b>	<b>17</b>	---		<b>226.5</b>
		05/22/07	<b>190</b>	<b>280</b>	<b>19</b>	4 U		<b>226.5</b>
		06/20/07	<b>180</b>	<b>290</b>	<b>16</b>	---	0.4	<b>227.7</b>
		07/01/07	Not Sampled					<b>227.7</b>
		08/13/07	<b>190</b>	<b>480</b>	<b>25</b>	4 U		<b>228.1</b>
		09/05/07	<b>260</b>	<b>420</b>	<b>30</b>	4 U	2.4	<b>228.1</b>
		10/01/07	<b>240</b>	<b>390</b>	<b>30</b>	4 U		<b>229.0</b>
		11/01/07	<b>220</b>	<b>350</b>	<b>29</b>	4 U		<b>229.8</b>
	12/04/07	<b>220</b>	<b>400</b>	<b>39</b>	4 U	<b>230.5</b>		
	Effluent	01/03/07	Not Operating					
		02/09/07	0.5 U	0.5 U	0.5 U	---		
		03/01/07	0.5 U	0.5 U	0.5 U	---		
		04/20/07	<b>3.3</b>	<b>4.1</b>	0.5 U	---		
		05/07/07	0.5 U	0.5 U	0.5 U	---		
05/09/07		0.5 U	0.5 U	0.5 U	---			
05/22/07		0.5 U	0.5 U	0.5 U	---			
06/20/07		0.5 U	0.5 U	0.5 U	---			
07/10/07		0.5 U	0.5 U	0.5 U	---			
08/13/07		0.5 U	0.5 U	0.5 U	---			
09/05/07	0.5 U	0.5 U	0.5 U	---				
10/01/07	0.5 U	0.5 U	0.5 U	---				

See last page of table for notes and abbreviations.

Haley &amp; Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T17-F.xls

February 2008

**TABLE XVII**

SUMMARY OF WATER QUALITY RESULTS  
 FOR PERMITTED GROUNDWATER REMEDIATION FACILITIES, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Sample Location		Date Sampled	TCE (ug/L)	1,2-DCE (ug/L)		Perchlorate (ug/L)	VOCs Removed						
				cis	trans		By Quarter (lbs)	To Date (lbs)					
WS-05 UV/H <sub>2</sub> O <sub>2</sub>	Effluent	11/01/07	0.5 U	0.5 U	0.5 U	---							
		12/04/07	0.5 U	0.5 U	0.5 U	---							
STL-IV ASU	Influent	01/03/07	Not Operating	Not Operating	Not Operating	---	0.0	<b>80.7</b>					
		02/02/07						<b>80.7</b>					
		03/01/07						<b>80.7</b>					
		04/02/07											<b>80.7</b>
		05/01/07											<b>80.7</b>
		06/01/07									0.0		<b>80.7</b>
		07/01/07											<b>80.7</b>
		08/01/07											<b>80.7</b>
		09/01/07									0.0		<b>80.7</b>
		10/01/07											<b>80.7</b>
		11/01/07											<b>80.7</b>
		12/04/07									0.0		<b>80.7</b>
		Primary Effluent					Primary Effluent	01/03/07	Not Operating	Not Operating	Not Operating	---	
02/02/07													
03/01/07													
04/02/07													
05/01/07													
06/01/07													
07/01/07													
08/01/07													
09/01/07													
10/01/07													
11/01/07													
12/04/07													
Secondary Effluent	Secondary Effluent	01/03/07	Not Operating	Not Operating	Not Operating	---							
		02/02/07											
		03/01/07											
		04/02/07											
		05/01/07											
		06/01/07											
		07/01/07											
		08/01/07											
		09/01/07											
		10/01/07											
		11/01/07											
12/04/07													

See last page of table for notes and abbreviations.

Haley &amp; Aldrich, Inc.

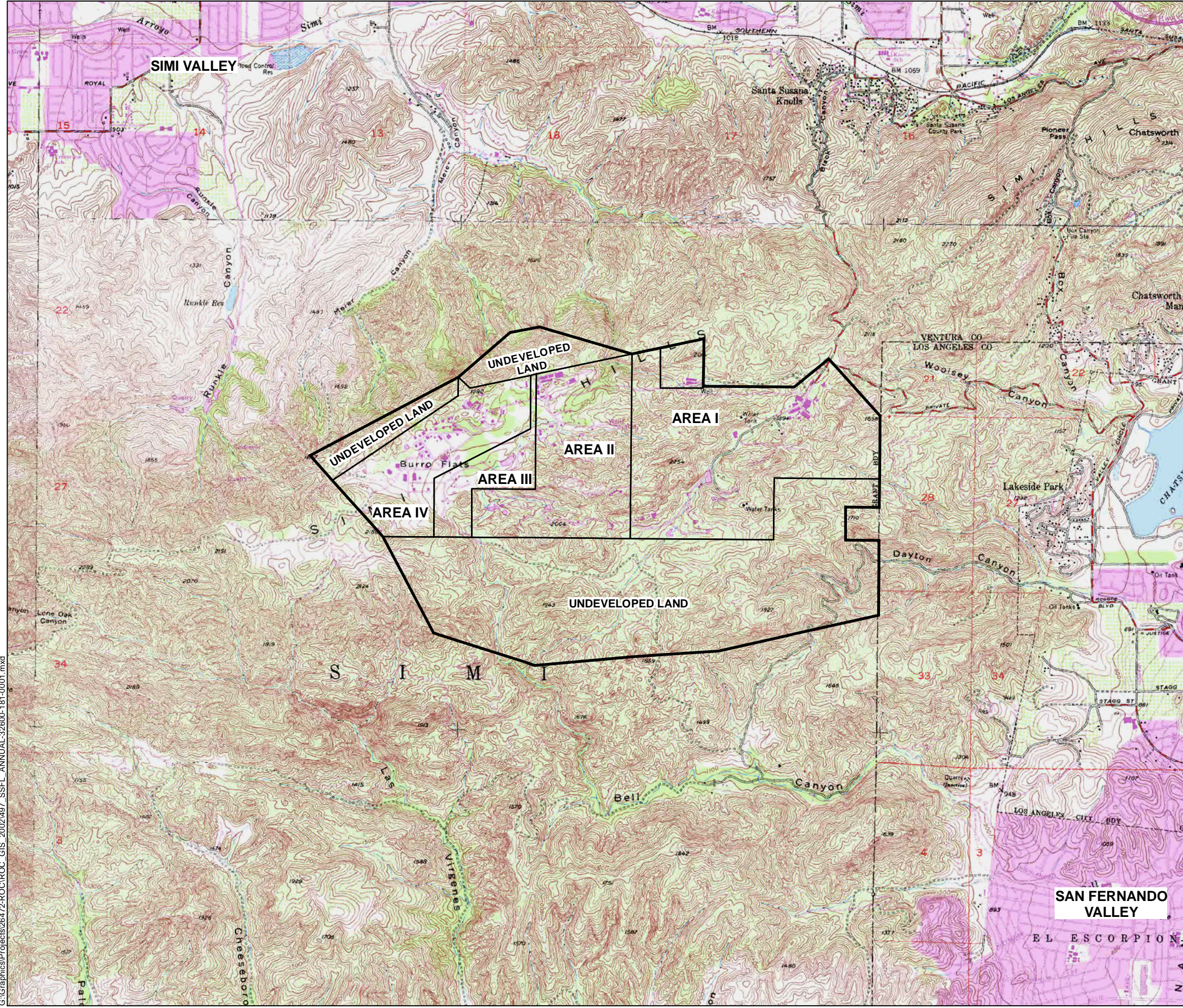
G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_T17-F.xls

February 2008



**TABLE XVII**  
**NOTES AND ABBREVIATIONS**

---

1. ASU = Air-stripping unit.
2. U = Not detected; numerical value is the reporting limit for that compound.
3. TCE = Trichloroethene or trichloroethylene.
4. 1,2-DCE = 1,2-Dichloroethene or 1,2-dichloroethylene.
5. ug/L = Micrograms per liter.
6. lbs = Pounds.
7. UV/H<sub>2</sub>O<sub>2</sub> = Ultraviolet light/peroxidation.
8. --- = Not analyzed.
9. Several extraction wells were inactive due to the ongoing Shallow Zone Groundwater Investigation (Ogden, 2000), the Chatsworth Formation Operable Unit Investigation (Montgomery Watson, 2000b), and damage due to the September 2005 Topanga fire.
10. Samples analyzed for TCE and 1,2-DCE by EPA Method 8260B and perchlorate by EPA Method 314.0.
11. All groundwater remediation facilities water quality samples were collected by EnviroSolve Corporation personnel and analyzed by TestAmerica.
12. DF = Dilution factor. The August 2007 sample from Delta's primary effluent was analyzed for TCE at no dilution (1X DF) and at a 10X dilution (10X DF).
13. \* = August 7, 2007 secondary effluent from Delta ASU had a total VOC concentration of 9 µg/L and was discharged into the empty R-2 Pond. Sample results for the R-2 Pond for August 20, 2007 tested below the action levels for all regulated constituents. Discharge of partially treated effluent did not occur. Delta ASU was not operated after August 7, 2007.

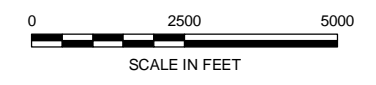
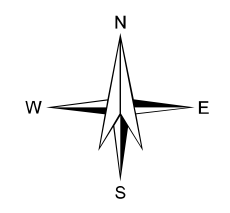


**LEGEND**

-  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



ANNUAL GROUNDWATER MONITORING REPORT, 2007



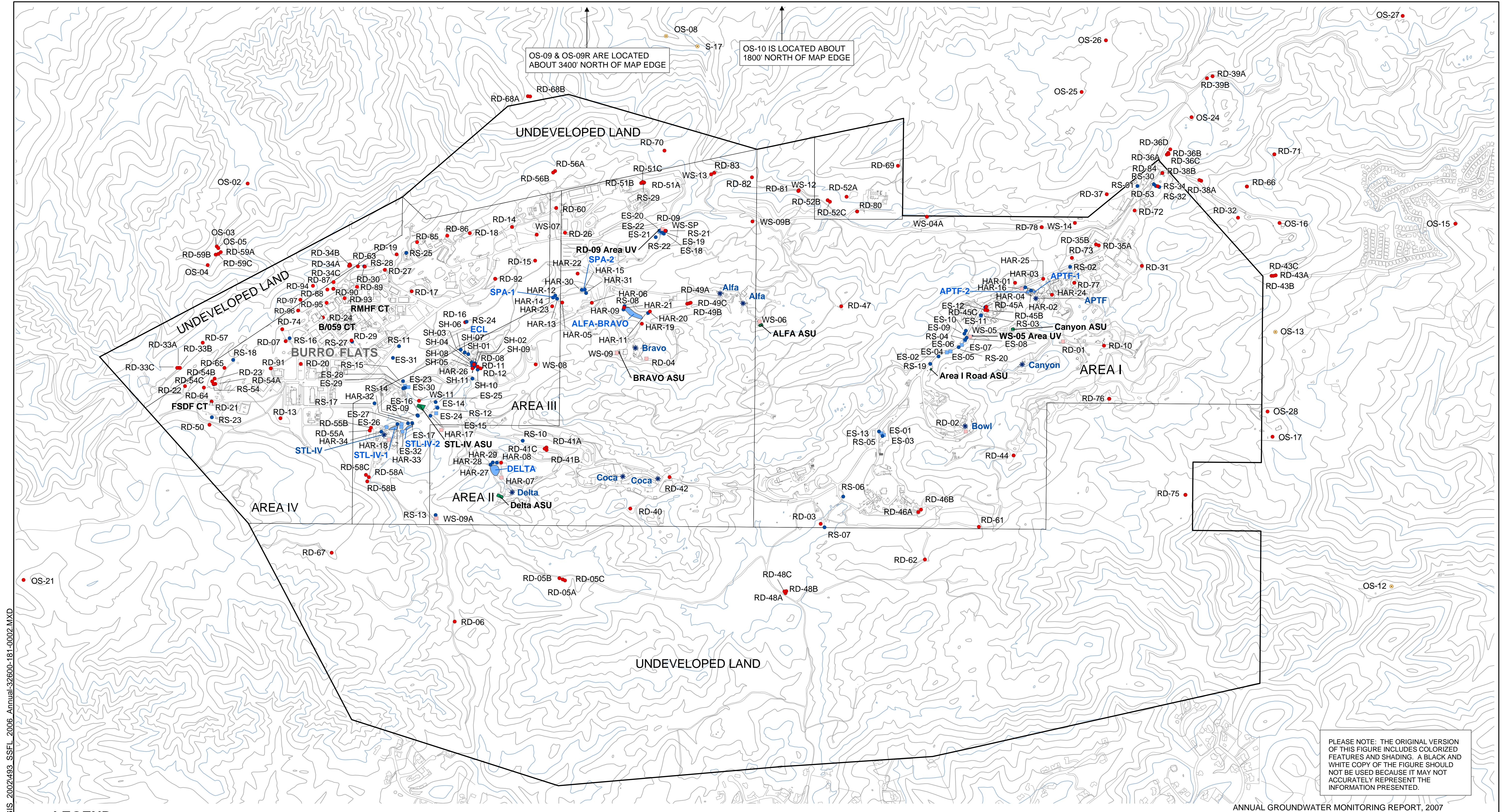
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

**FACILITY LOCATION MAP**

SCALE: AS SHOWN  
FEBRUARY 2008

**FIGURE 1**

G:\Graphics\Projects\26472-ROC\ROC GIS\_2002\497\_SSFL\_ANNUAL-181-0001.mxd



G:\Graphics\Projects\26472-RC\ROC GIS 2002\493\_SFL\_2006\_Annual-32600-181-0002.MXD

OS-09 & OS-09R ARE LOCATED ABOUT 3400' NORTH OF MAP EDGE

OS-10 IS LOCATED ABOUT 1800' NORTH OF MAP EDGE

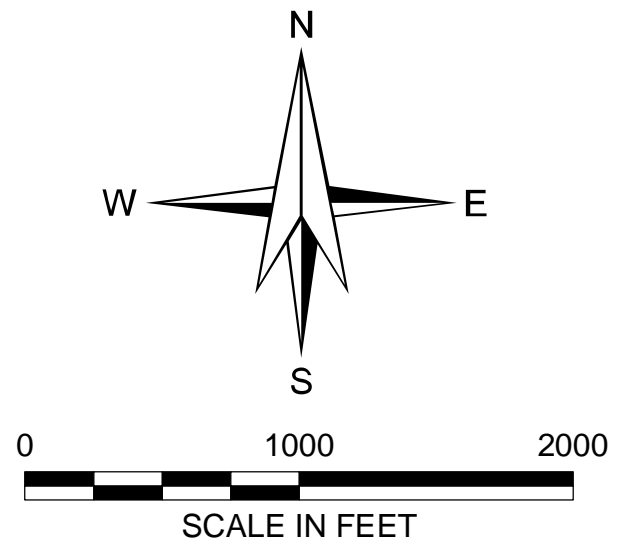
PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE INCLUDES COLORIZED FEATURES AND SHADING. A BLACK AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED BECAUSE IT MAY NOT ACCURATELY REPRESENT THE INFORMATION PRESENTED.

ANNUAL GROUNDWATER MONITORING REPORT, 2007

**LEGEND**

- CHATSWORTH FORMATION MONITORING WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- SHALLOW MONITORING WELL
- SHALLOW EXTRACTION WELL
- SPRING
- PROPERTY BOUNDARY LINE
- RCRA IMPOUNDMENT
- \* FORMER OR INACTIVE TEST STAND
- △ INTERIM CARBON TREATMENT SYSTEM (CT)
- PERMITTED GROUNDWATER TREATMENT SYSTEM - AIR STRIPPING UNIT (ASU)
- PERMITTED GROUNDWATER TREATMENT SYSTEM - UV/H2O2(UV)

NOTES:  
 RMHF = RADIOACTIVE MATERIALS HANDLING FACILITY  
 FSDF = FORMER SODIUM DISPOSAL FACILITY  
 B/059 = B/059 CONSTRUCTION/DEWATERING SYSTEM  
 NONE OF THE INTERIM TREATMENT SYSTEMS WERE OPERATED DURING 2007.



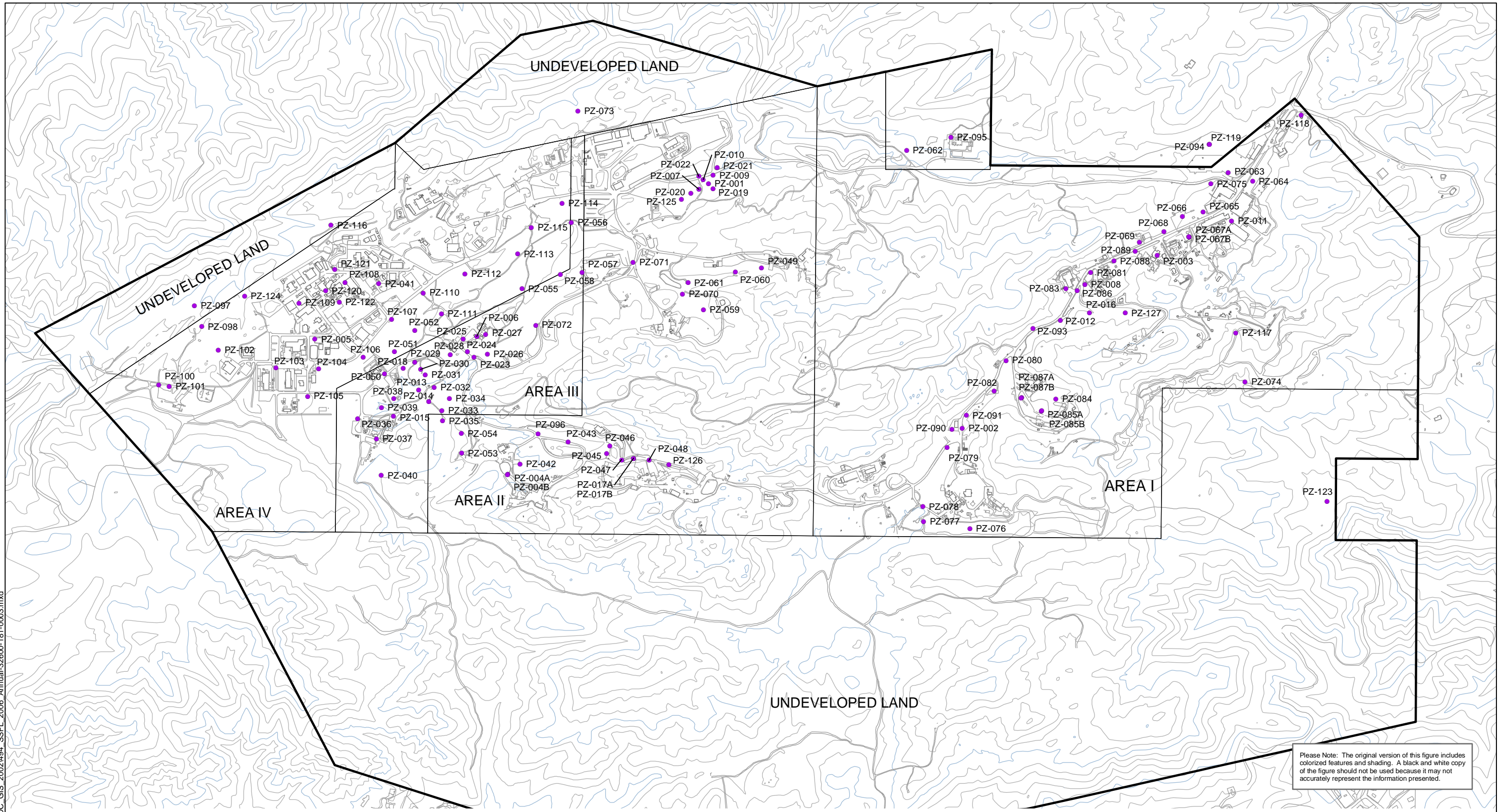
THE BOEING COMPANY  
 SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

**LOCATIONS OF WELLS, SPRINGS, AND GROUNDWATER RECLAMATION COMPONENTS**

SCALE: AS SHOWN  
 FEBRUARY 2008

**FIGURE 2**

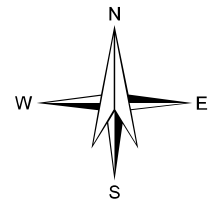
G:\Graphics\Projects\26472 - Boeing Roc\ROC\_GIS\_2002\494 SSFL\_2006 Annual\32600-181-0003.mxd



Please Note: The original version of this figure includes colored 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**

- PROPERTY BOUNDARY LINE
- PIEZOMETER



0 1000 2000  
SCALE IN FEET

**HALEY & ALDRICH**

THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

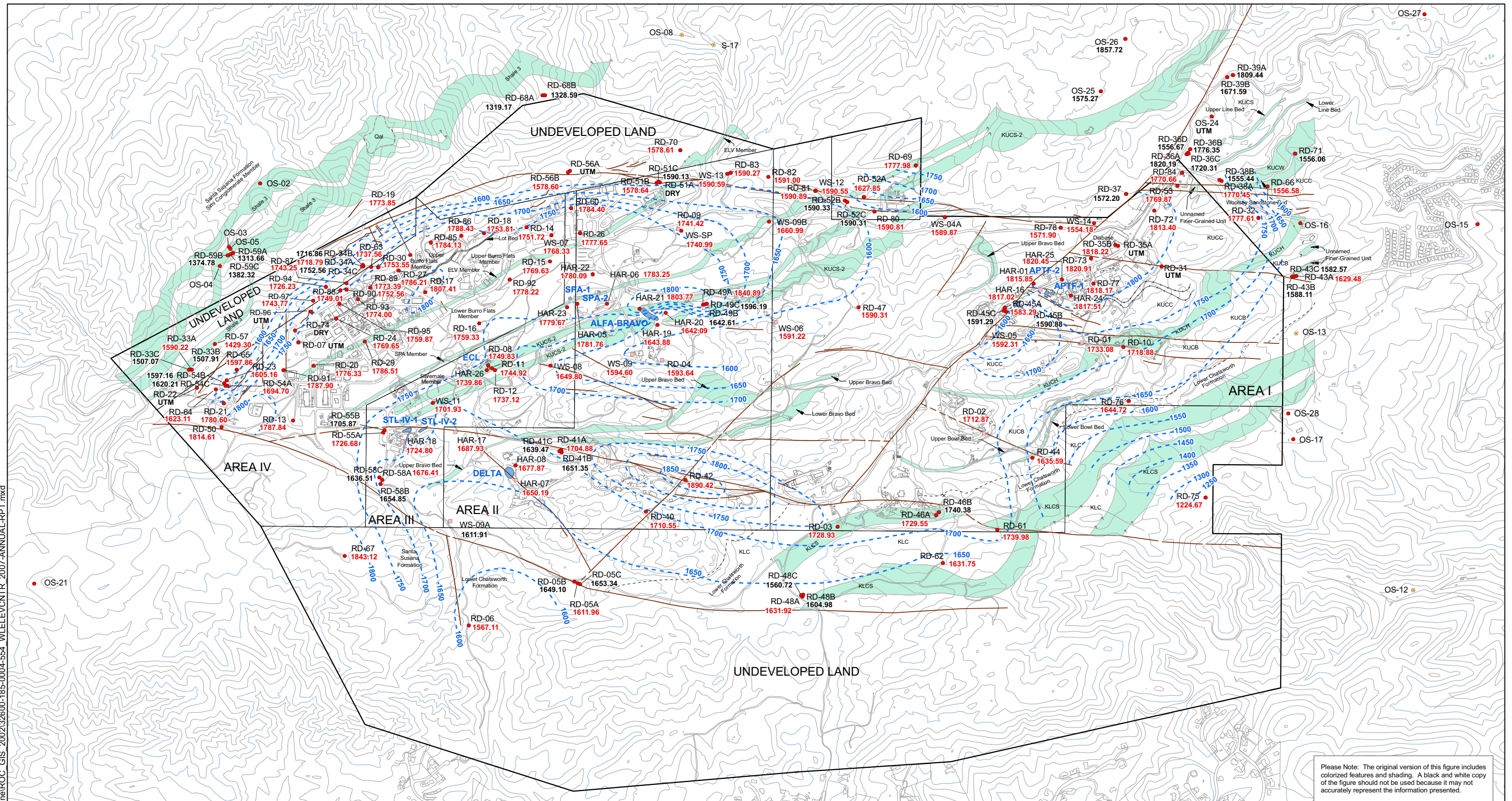
ANNUAL GROUNDWATER MONITORING REPORT, 2007

LOCATIONS OF PIEZOMETERS

SCALE: AS SHOWN  
FEBRUARY 2008

FIGURE 3

G:\Graphics\Projects\26472 - Boeing Rocketdyne\ROC\_GIS\_2002\32600-185-0004-554\_WILELEVCTR\_2007-ANNUAL-RPT.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.

**LEGEND**

- SPRING
- CHATSWORTH FORMATION MONITORING WELL
- CHATSWORTH FORMATION EXTRACTION WELL
- PROPERTY BOUNDARY LINE
- 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.
- 1670.75 WATER LEVEL ELEVATION, IN FEET ABOVE MEAN SEA LEVEL.
- 1653.17 WATER LEVEL ELEVATION, IN FEET ABOVE MEAN SEA LEVEL. WATER LEVEL NOT USED TO GENERATE CONTOUR LINES.
- UTM UNABLE TO MEASURE
- NM NOT MEASURED

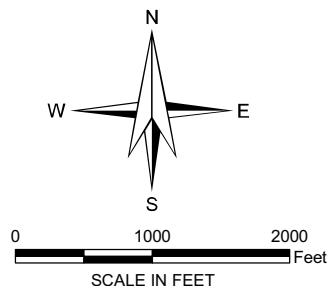
LEGEND FOR GEOLOGY: REFER TO FIGURE 4, GEOLOGIC MAP, IN HALEY & ALDRICH'S "REPORT ON THE ANNUAL GROUNDWATER MONITORING, 2007, SANTA SUSANA FIELD LABORATORY, VENTURA COUNTY, CALIFORNIA," FEBRUARY 28, 2008.

- KUCC GEOLOGIC UNIT
- MARKER BED
- KLCS GEOLOGIC UNIT

GEOLOGY PROVIDED BY MWH. "GEOLOGIC CHARACTERIZATION OF THE CENTRAL SANTA SUSANA FIELD LABORATORY, VENTURA COUNTY, CA", 2007.

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.

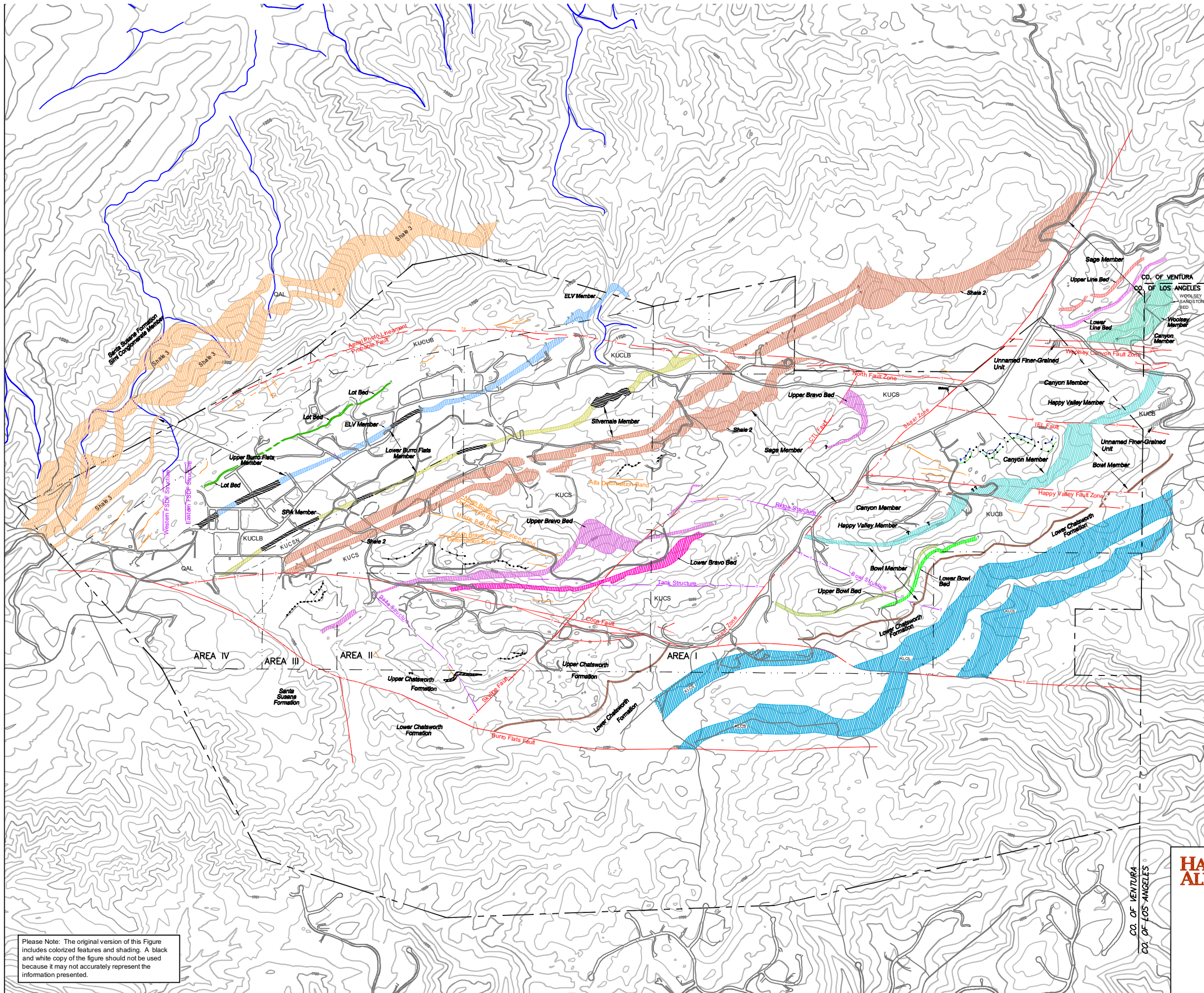
CONTOURS ARE BASED ON MEASURED WATER LEVELS IN CONVENTIONAL WELLS. ACTUAL WATER LEVELS IN THE SUBSURFACE WILL VARY FROM THOSE SHOWN.



**HALEY & ALDRICH**  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

**CHATSWORTH FORMATION  
WATER LEVEL ELEVATION  
CONTOUR MAP - OCTOBER 2007**

SCALE: AS SHOWN  
FEBRUARY 2008



**LEGEND**

- FAULT OR SHEAR LOCATION - DASHED FOR APPROXIMATE LOCATION, QUERIED WHERE UNCERTAIN
  - DEFORMATION BAND LOCATION - DASHED FOR APPROXIMATE LOCATION, QUERIED WHERE UNCERTAIN
  - STRUCTURE LOCATION - DASHED FOR APPROXIMATE LOCATION, QUERIED WHERE UNCERTAIN
  - CONGLOMERATE
  - SSFL PROPERTY BOUNDARY
  - SSFL AREA BOUNDARY
- STRATIGRAPHIC COLUMN**
- |   |                     |                            |
|---|---------------------|----------------------------|
| QAL   | QUATERNARY ALLUVIUM | ELV MEMBER (INTERPRETED)   |
| SANTA SUSANA FORMATION  |                     | SPA MEMBER (INTERPRETED)   |
| SIMI CONGLOMERATE MEMBER  |                     | SILVERNALE MEMBER - KUCSN  |
| SHALE 3 - KUCS-3  |                     | SHALE 2 - KUCS-2           |
| UPPER BURRO FLATS MEMBER - KUCUB  |                     | SAGE MEMBER - KUCS         |
| LOT BED   |                     | UPPER BRAVO BED            |
| ELV MEMBER - KUCE   |                     | LOWER BRAVO BED            |
| LOWER BURRO FLATS MEMBER - KUCLB  |                     | UPPER LINE BED             |
| SPA MEMBER - KUCSA  |                     | LOWER LINE BED             |
| SILVERNALE MEMBER - KUCSN   |                     | WOOLSEY MEMBER - KUCW      |
| SHALE 2 - KUCS-2  |                     | WOOLSEY SANDSTONE BED      |
| SAGE MEMBER - KUCS  |                     | CANYON MEMBER - KUCC       |
| UPPER BRAVO BED   |                     | UNNAMED FINER-GRAINED UNIT |
| LOWER BRAVO BED   |                     | UPPER CANYON BED           |
| UPPER LINE BED  |                     | LOWER CANYON BED           |
| LOWER LINE BED  |                     | HAPPY VALLEY MEMBER - KUCH |
| WOOLSEY MEMBER - KUCW   |                     | BOWL MEMBER - KUCB         |
| WOOLSEY SANDSTONE BED   |                     | UNNAMED FINER-GRAINED UNIT |
| CANYON MEMBER - KUCC  |                     | UPPER BOWL BED             |
| UPPER CANYON BED  |                     | LOWER BOWL BED             |
| LOWER CANYON BED  |                     |                            |
| HAPPY VALLEY MEMBER - KUCH  |                     |                            |
| BOWL MEMBER - KUCB  |                     |                            |
| UNNAMED FINER-GRAINED UNIT  |                     |                            |
| CONTACT BETWEEN LOWER CHATSWORTH FORMATION AND UPPER CHATSWORTH FORMATION |                     |                            |
| LOWER CHATSWORTH FORMATION - KLC  |                     |                            |
| FINE GRAINED BEDS - KLCS  |                     |                            |

The geologic features depicted on this figure reflect the understanding and interpretation of both the stratigraphy and structure at the SSFL and are based on over five years of field and office evaluations. Geology based on MWH 2007 report "Geologic Characterization of the Central Santa Susana Field Laboratory, Ventura County, CA".

The locations where the finer-grained members Shale 2 and the Spa Member are shown as discontinuous are solely related to the lack of accessible surface exposure, due to the presence of site features. It should not be inferred that these units are discontinuous at these locations.

N  
W E  
S

0 1500 3000  
APPROXIMATE SCALE IN FEET  
ANNUAL GROUNDWATER MONITORING REPORT, 2007

**HALEY & ALDRICH** THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

**GEOLOGIC MAP**

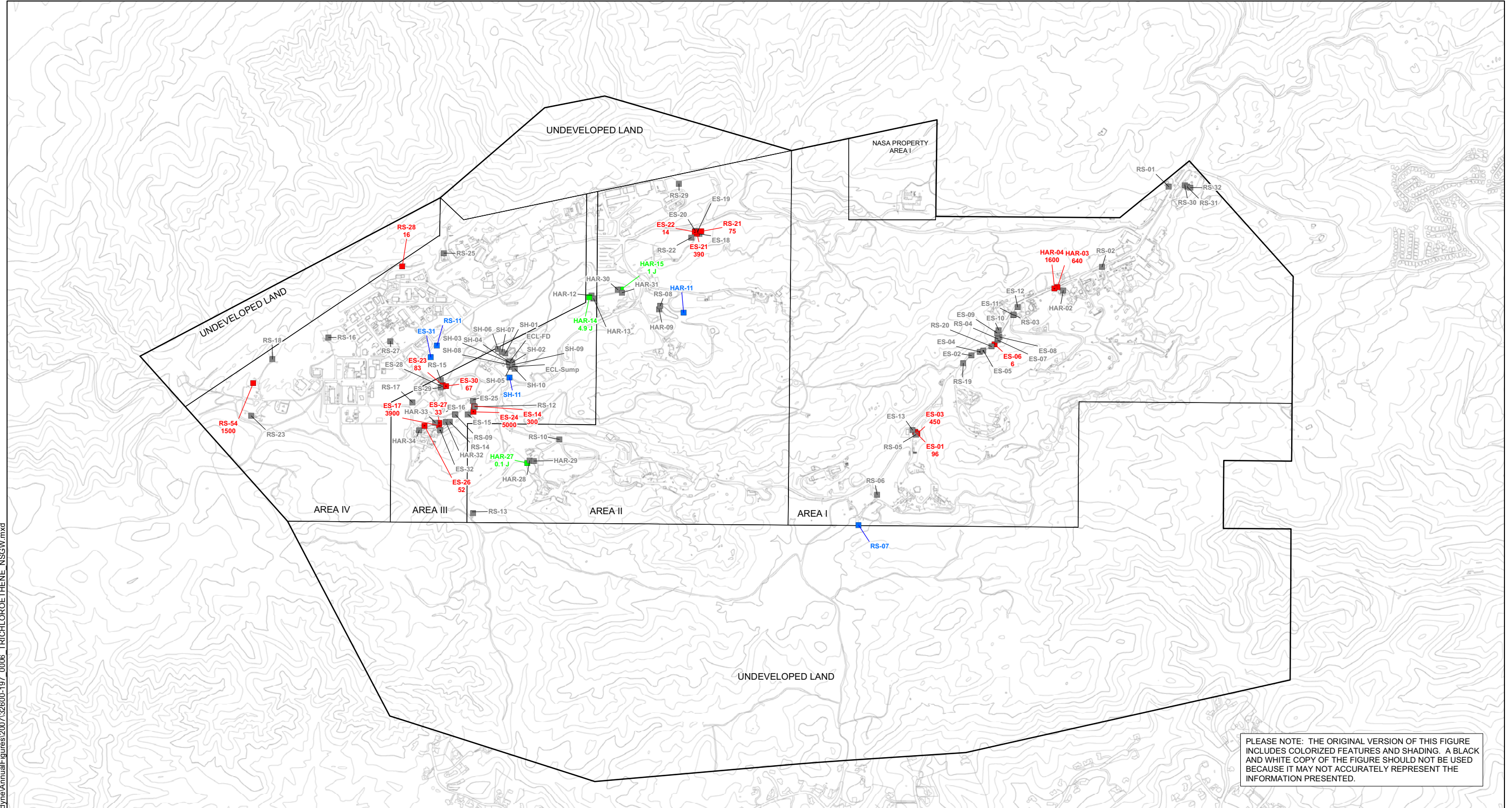
SCALE: AS SHOWN  
FEBRUARY 2008

**FIGURE 5**

Please Note: The original version of this Figure includes colored features and shading. A black and white copy of the figure should not be used because it may not accurately represent the information presented.



G:\Graphics\Projects\26472 - Boeing Rocketdyne\AnnualFigures\2007\32600-197\_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.

**LEGEND**

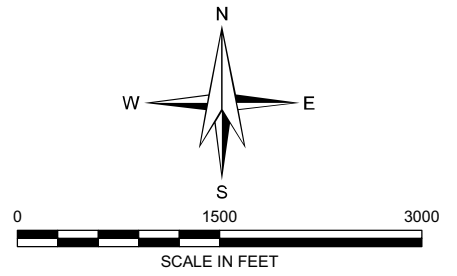
- WELL TYPE**
- SHALLOW MONITORING WELL
  - ▣ SHALLOW EXTRACTION WELL
  - PROPERTY BOUNDARY LINE

- 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).

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR TRICHLOROETHENE IN DRINKING WATER IS 5 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.



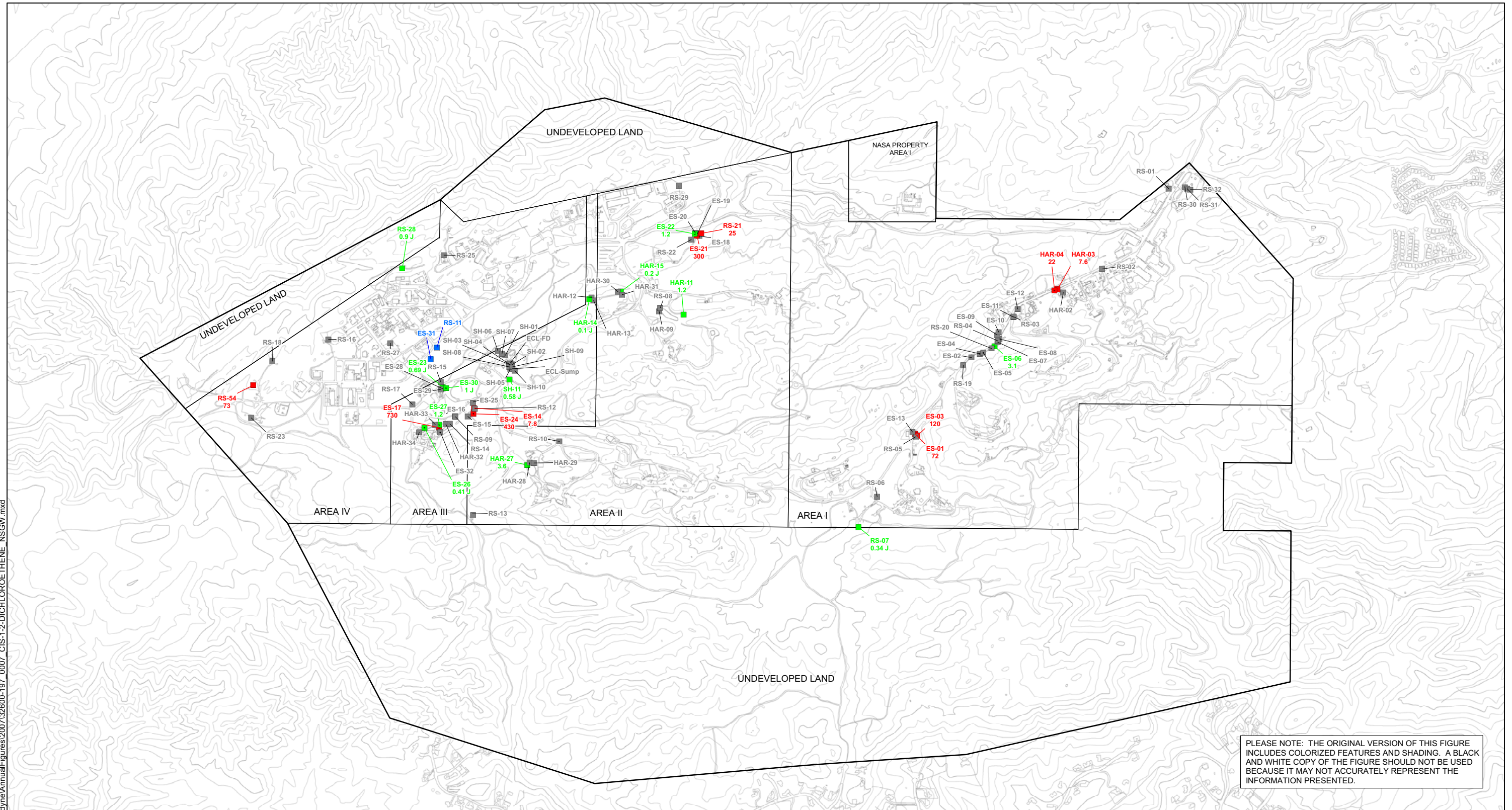
**HALEY & ALDRICH**  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

ANNUAL GROUNDWATER MONITORING REPORT, 2007

**MAXIMUM CONCENTRATION OF TRICHLOROETHENE IN NEAR-SURFACE GROUNDWATER, 2007**

SCALE: AS SHOWN  
FEBRUARY 2008

G:\Graphics\Projects\26472 - Boeing Rockeddyne\AnnualFigures\2007\32600-197\_0007\_CIS-1,2-DICHLOROETHENE\_NSGW.mxd



**LEGEND**

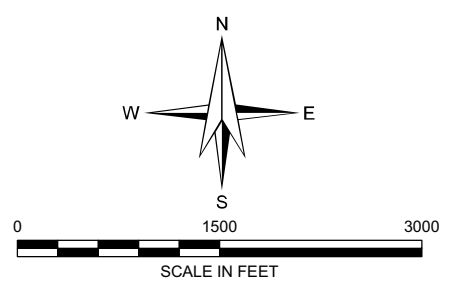
- WELL TYPE**
- SHALLOW MONITORING WELL
  - ▣ SHALLOW EXTRACTION WELL
  - PROPERTY BOUNDARY LINE

- 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).

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.



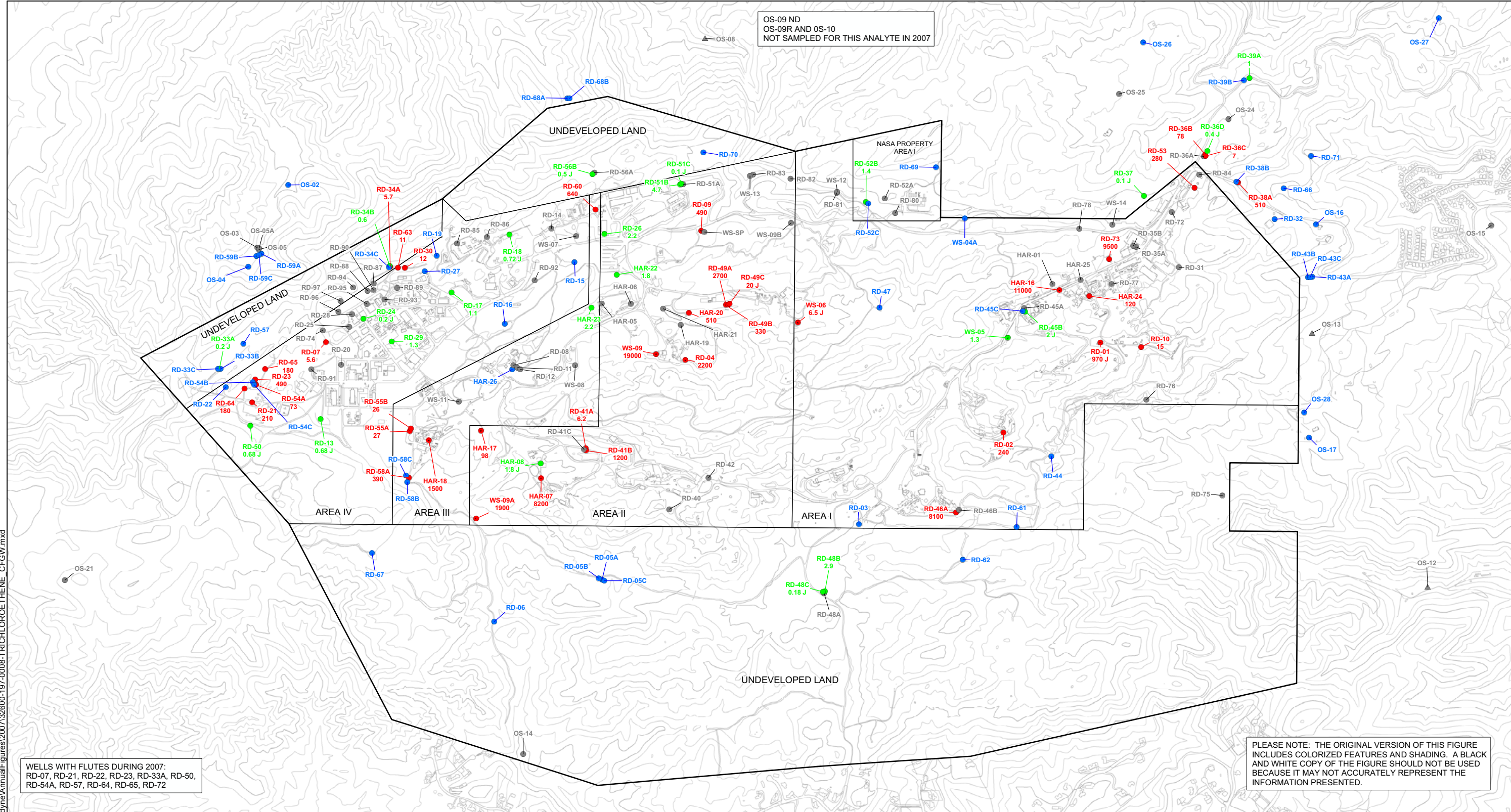
**HALEY & ALDRICH** THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

**MAXIMUM CONCENTRATION OF CIS-1,2-DICHLOROETHENE IN NEAR-SURFACE GROUNDWATER, 2007**

SCALE: AS SHOWN  
FEBRUARY 2008

**FIGURE 7**

OS-09 ND  
 OS-09R AND OS-10  
 NOT SAMPLED FOR THIS ANALYTE IN 2007



WELLS WITH FLUTES DURING 2007:  
 RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
 RD-54A, RD-57, RD-64, RD-65, RD-72

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**

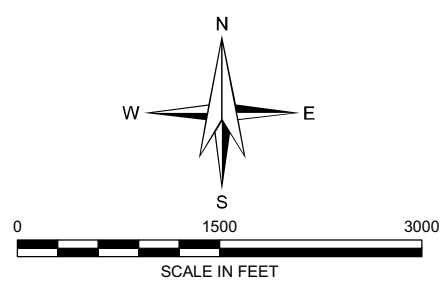
- WELL TYPE**
- CHATSWORTH FORMATION MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - △ SPRING
  - PROPERTY BOUNDARY LINE

- 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).

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR TRICHLOROETHENE IN DRINKING WATER IS 5 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.



ANNUAL GROUNDWATER MONITORING REPORT, 2007

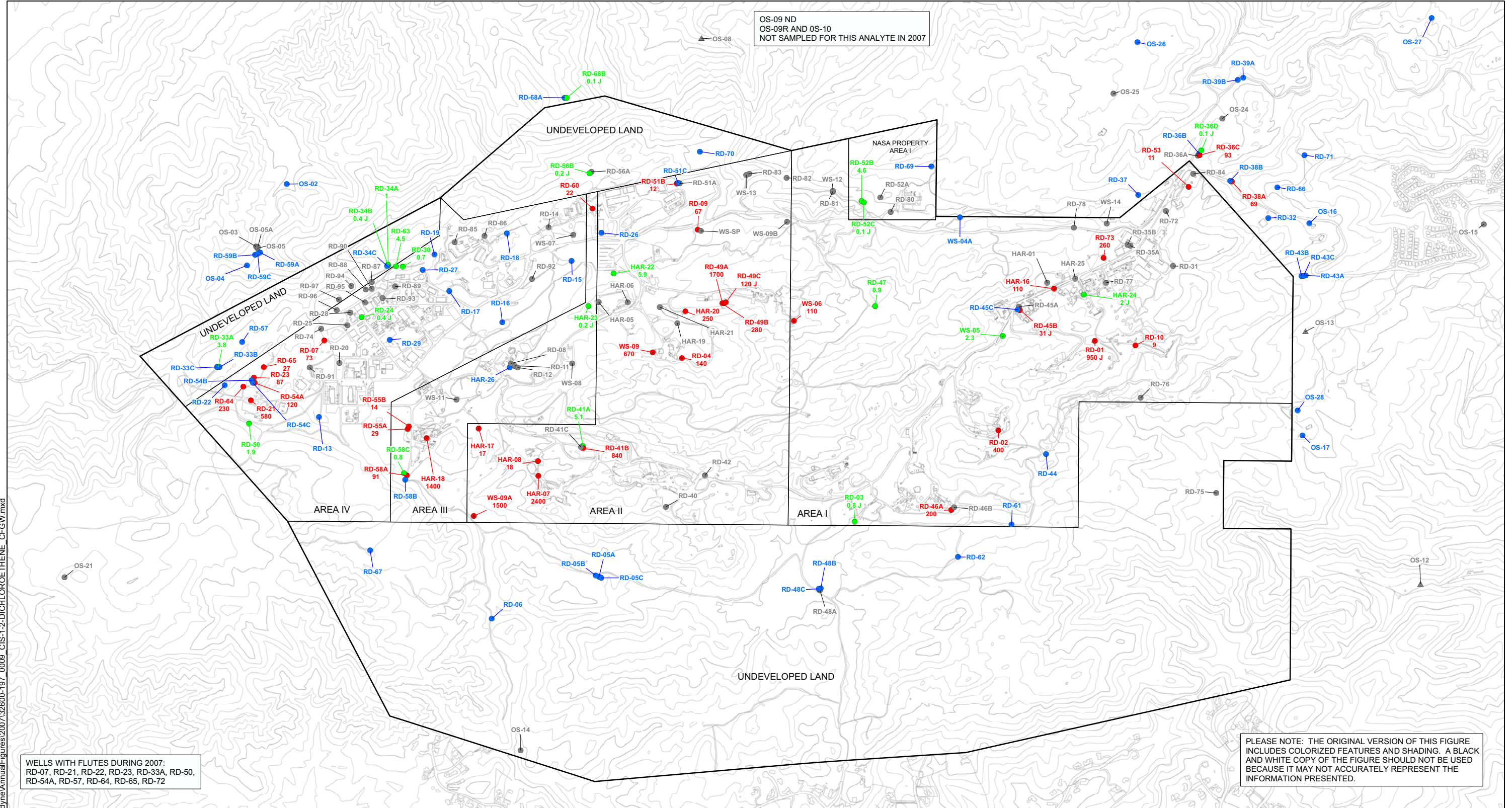
**HALEY & ALDRICH** THE BOEING COMPANY  
 SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

**MAXIMUM CONCENTRATION OF TRICHLOROETHENE IN CHATSWORTH FORMATION GROUNDWATER, 2007**

SCALE: AS SHOWN  
 FEBRUARY 2008

G:\Graphics\Projects\26472 - Boeing Rockaldyne\AnnualFigures\2007\32600-197-0008-TRICHLOROETHENE\_CFGW.mxd

OS-09 ND  
 OS-09R AND OS-10  
 NOT SAMPLED FOR THIS ANALYTE IN 2007



WELLS WITH FLUTES DURING 2007:  
 RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
 RD-54A, RD-57, RD-64, RD-65, RD-72

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**

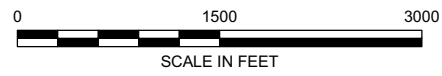
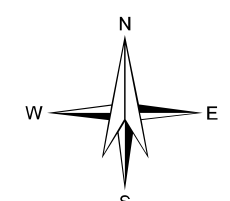
- WELL TYPE**
- CHATSWORTH FORMATION MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - △ SPRING
  - PROPERTY BOUNDARY LINE

- 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).

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.



ANNUAL GROUNDWATER MONITORING REPORT, 2007

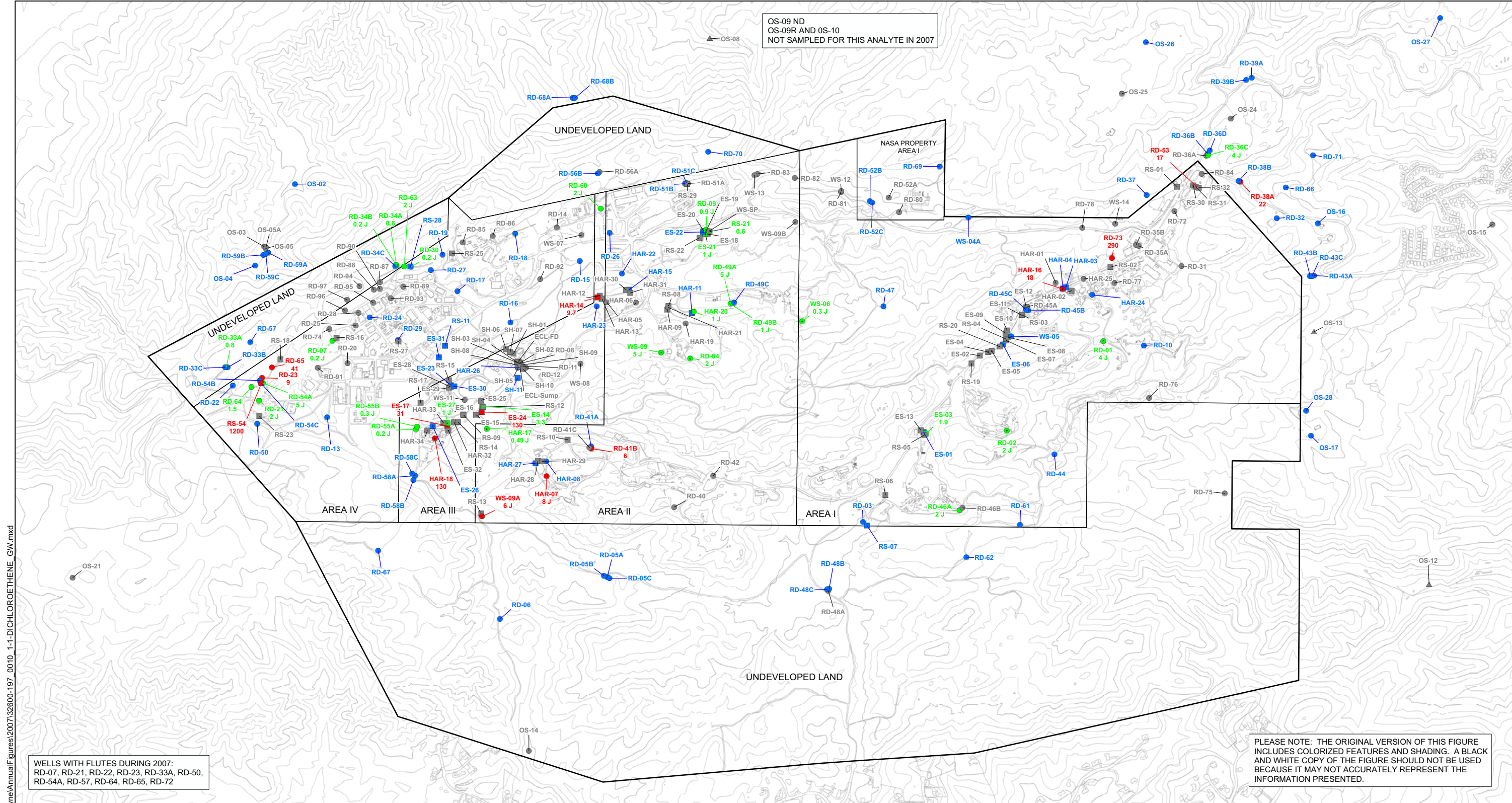
**HALEY & ALDRICH**  
 THE BOEING COMPANY  
 SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

**MAXIMUM CONCENTRATION OF  
 CIS-1,2-DICHLOROETHENE IN  
 CHATSWORTH FORMATION  
 GROUNDWATER, 2007**

SCALE: AS SHOWN  
 FEBRUARY 2008

G:\Graphics\Projects\26472 - Boeing Rockaldyne\AnnualFigures\2007\32600-197\_0009\_CIS-1,2-DICHLOROETHENE\_CFGW.mxd

OS-09 ND  
OS-09R AND OS-10  
NOT SAMPLED FOR THIS ANALYTE IN 2007



WELLS WITH FLUTES DURING 2007:  
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
RD-54A, RD-57, RD-64, RD-65, RD-72

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**

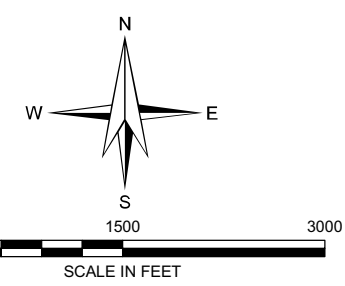
- WELL TYPE**
- CHATSWORTH FORMATION MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - SHALLOW MONITORING WELL
  - ▣ SHALLOW EXTRACTION WELL
  - △ SPRING
  - PROPERTY BOUNDARY LINE

- 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).

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.



ANNUAL GROUNDWATER MONITORING REPORT, 2007

**HALEY & ALDRICH** THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

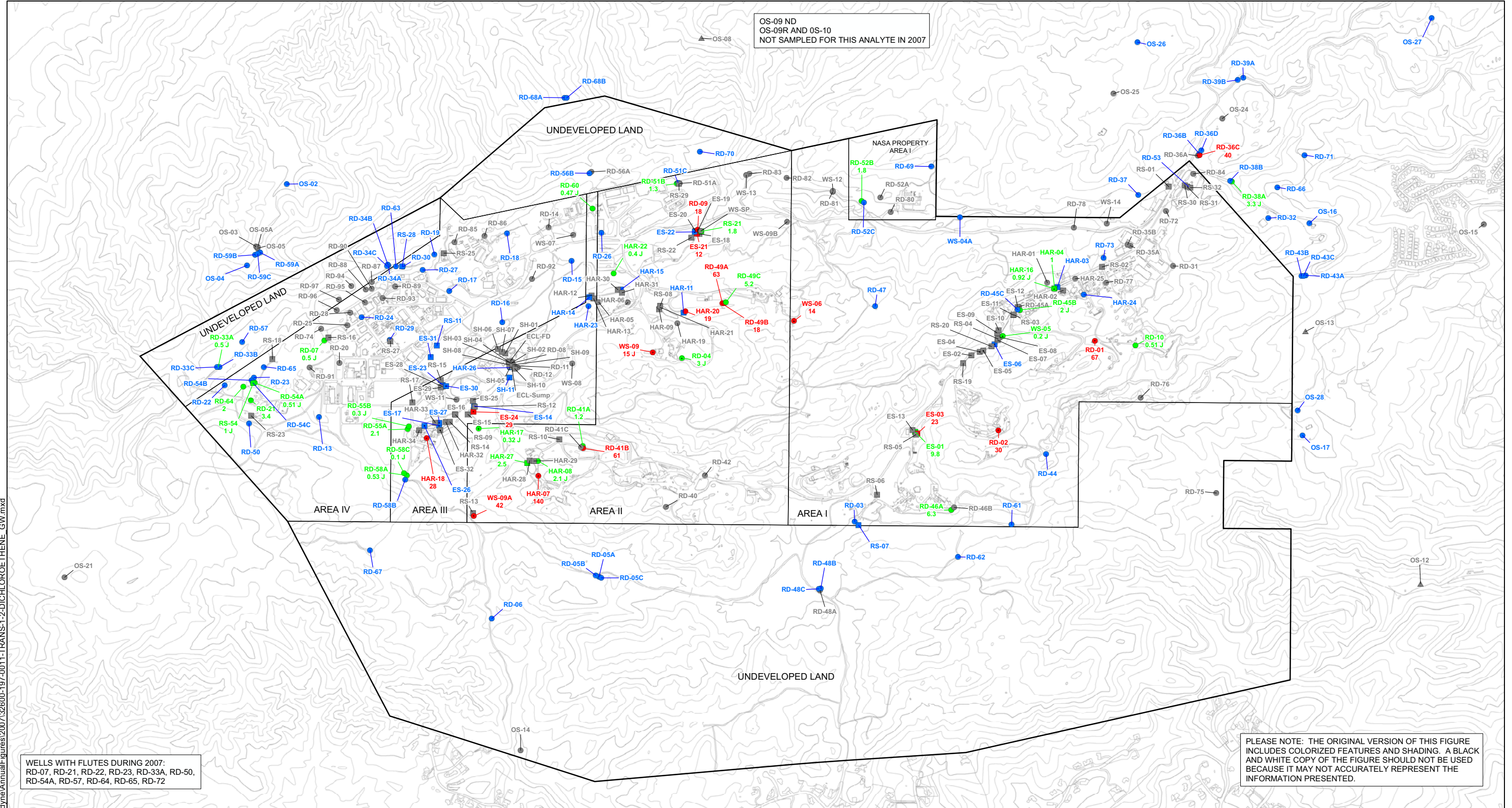
**MAXIMUM CONCENTRATION OF 1,1-DICHLOROETHENE IN GROUNDWATER, 2007**

SCALE: AS SHOWN  
FEBRUARY 2008

**FIGURE 10**

G:\Graphics\Projects\26472\_Boeing\_Rockaldyne\AnnualFigures\2007\32600-197\_0010\_1-1-DICHLOROETHENE\_GW.mxd

OS-09 ND  
OS-09R AND OS-10  
NOT SAMPLED FOR THIS ANALYTE IN 2007



WELLS WITH FLUTES DURING 2007:  
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
RD-54A, RD-57, RD-64, RD-65, RD-72

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**

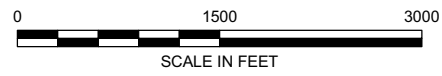
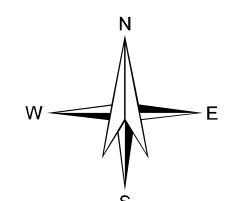
- WELL TYPE**
- CHATSWORTH FORMATION MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - SHALLOW MONITORING WELL
  - ▣ SHALLOW EXTRACTION WELL
  - △ SPRING
  - PROPERTY BOUNDARY LINE

- 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).

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.



ANNUAL GROUNDWATER MONITORING REPORT, 2007

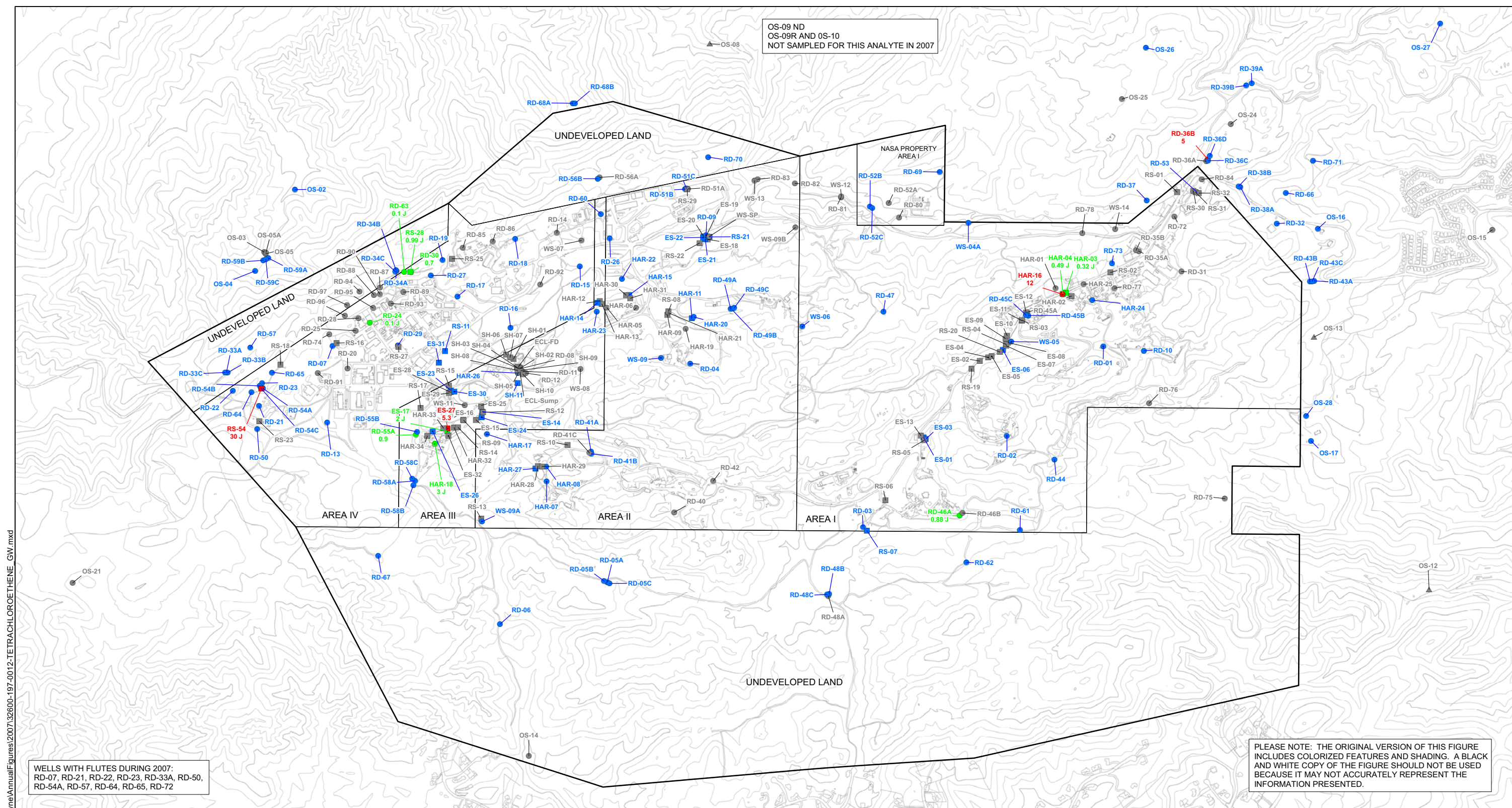
**HALEY & ALDRICH** THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

**MAXIMUM CONCENTRATION OF TRANS-1,2-DICHLOROETHENE IN GROUNDWATER, 2007**

SCALE: AS SHOWN  
FEBRUARY 2008

G:\Graphics\Projects\26472 - Boeing Rocketdyne\AnnualFigures\2007\32600-197-0011-TRANS-1-2-DICHLOROETHENE\_GW.mxd

OS-09 ND  
OS-09R AND OS-10  
NOT SAMPLED FOR THIS ANALYTE IN 2007



WELLS WITH FLUTES DURING 2007:  
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
RD-54A, RD-57, RD-64, RD-65, RD-72

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**

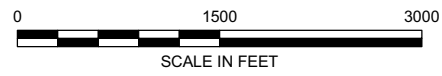
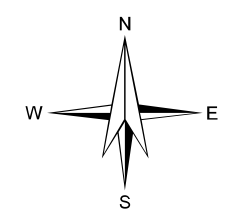
- WELL TYPE**
- CHATSWORTH FORMATION MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - SHALLOW MONITORING WELL
  - ▣ SHALLOW EXTRACTION WELL
  - △ SPRING
  - PROPERTY BOUNDARY LINE

- 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).

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR TETRACHLOROETHENE IN DRINKING WATER IS 5 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.



ANNUAL GROUNDWATER MONITORING REPORT, 2007

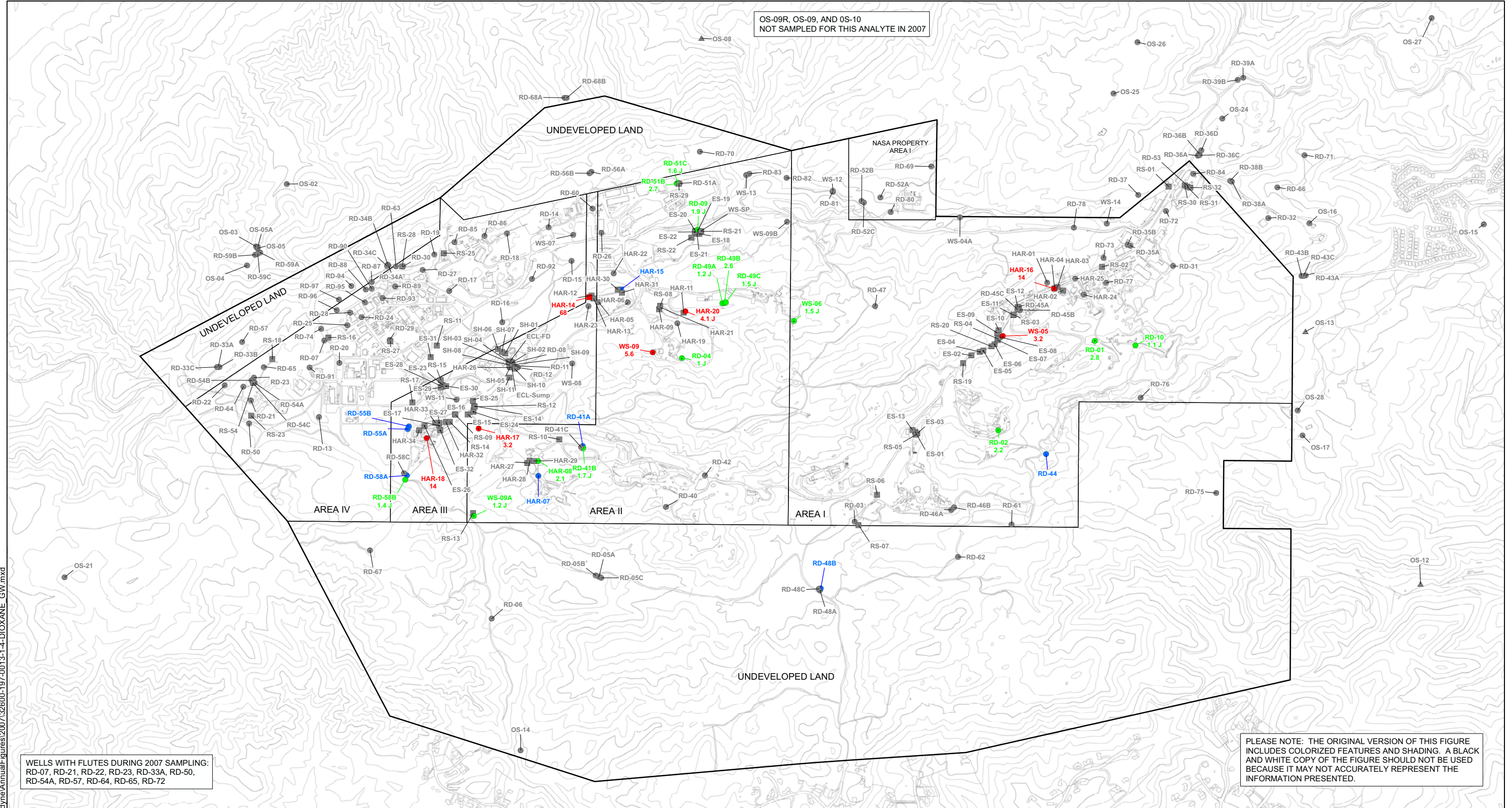
**HALEY & ALDRICH** THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

**MAXIMUM CONCENTRATION OF TETRACHLOROETHENE IN GROUNDWATER, 2007**

SCALE: AS SHOWN  
FEBRUARY 2008

G:\Graphics\Projects\26472 - Boeing, Rockeddyne\AnnualFigures\2007\32600-197-0012-TETRACHLOROETHENE\_GW.mxd

OS-09R, OS-09, AND OS-10  
NOT SAMPLED FOR THIS ANALYTE IN 2007



WELLS WITH FLUTES DURING 2007 SAMPLING:  
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
RD-54A, RD-57, RD-64, RD-65, RD-72

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**

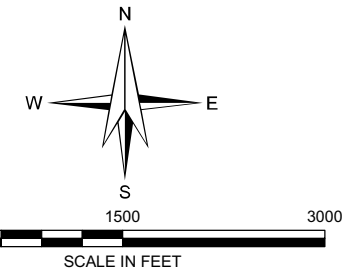
- WELL TYPE**
- CHATSWORTH FORMATION MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - SHALLOW MONITORING WELL
  - ▣ SHALLOW EXTRACTION WELL
  - △ SPRING
  - PROPERTY BOUNDARY LINE

- 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).

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.



ANNUAL GROUNDWATER MONITORING REPORT, 2007

**HALEY & ALDRICH** THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

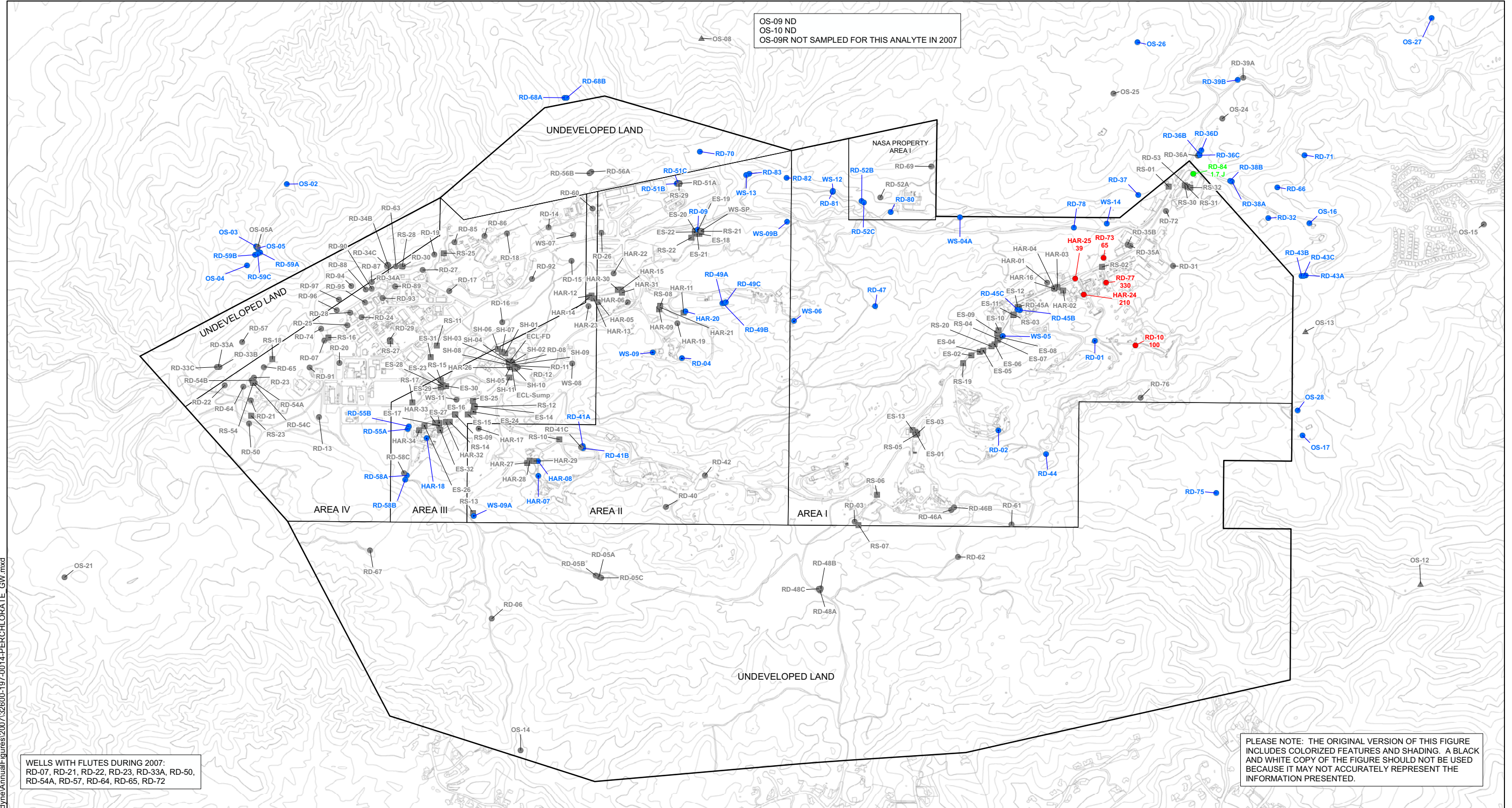
**MAXIMUM CONCENTRATION OF  
1,4-DIOXANE  
IN GROUNDWATER, 2007**

SCALE: AS SHOWN  
FEBRUARY 2008

G:\Graphics\Projects\26472 - Boeing Rocketdyne\AnnualFigures\2007\32600-197-0013-14-DIOXANE\_GW.mxd



OS-09 ND  
 OS-10 ND  
 OS-09R NOT SAMPLED FOR THIS ANALYTE IN 2007



WELLS WITH FLUTES DURING 2007:  
 RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
 RD-54A, RD-57, RD-64, RD-65, RD-72

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**

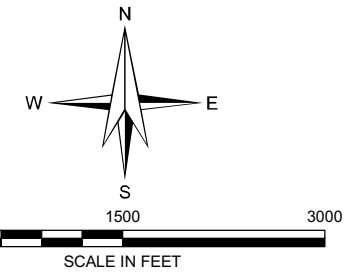
- WELL TYPE**
- CHATSWORTH FORMATION MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - SHALLOW MONITORING WELL
  - ▣ SHALLOW EXTRACTION WELL
  - △ SPRING
  - PROPERTY BOUNDARY LINE

- 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).

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR PERCHLORATE IN DRINKING WATER IS 6 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.



ANNUAL GROUNDWATER MONITORING REPORT, 2007

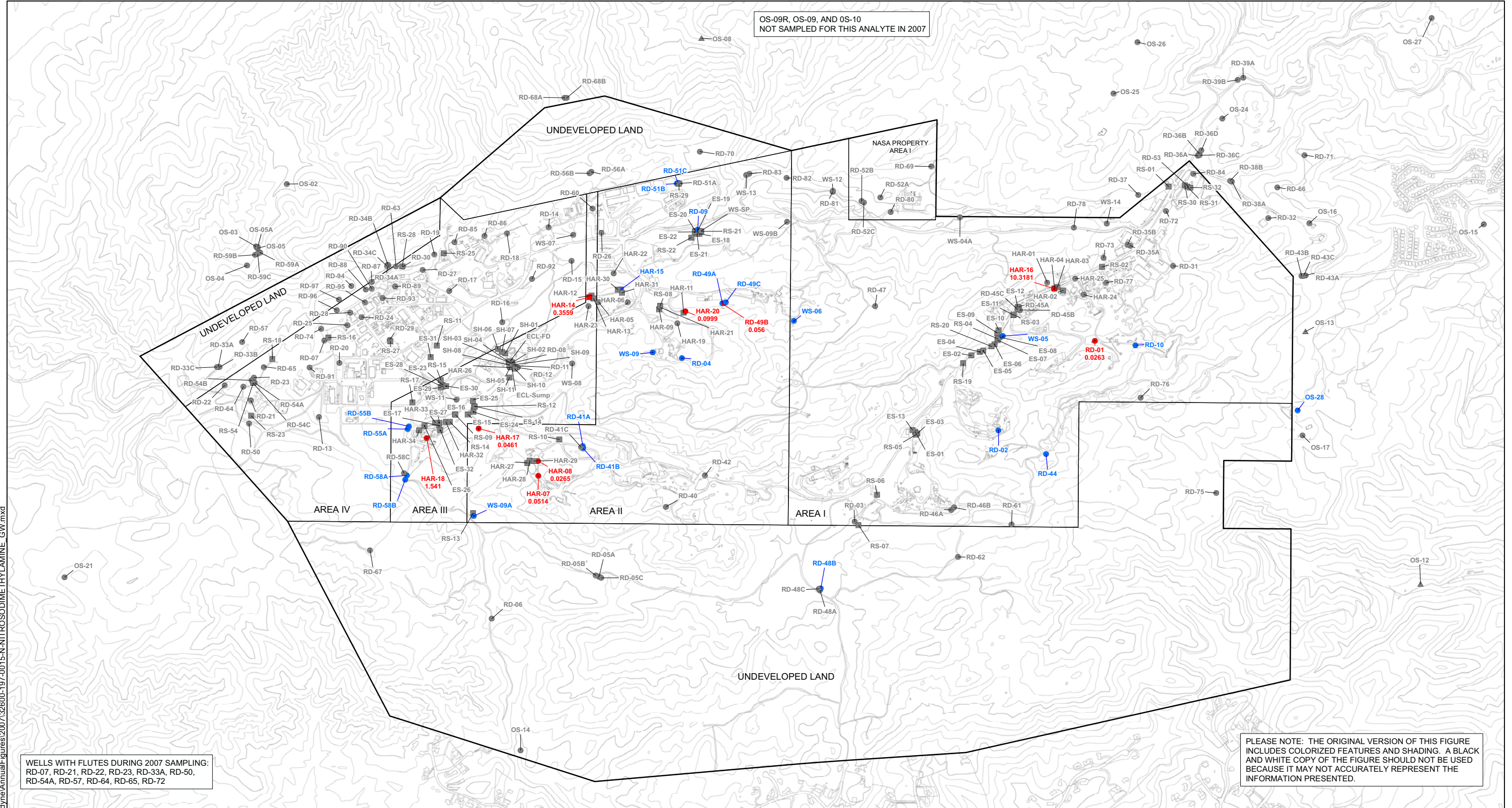
**HALEY & ALDRICH** THE BOEING COMPANY  
 SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

**MAXIMUM CONCENTRATION OF PERCHLORATE IN GROUNDWATER, 2007**

SCALE: AS SHOWN  
 FEBRUARY 2008

G:\Graphics\Projects\26472 - Boeing Rockaldyne\AnnualFigures\2007\32600-197-0014-PERCHLORATE\_GW.mxd

OS-09R, OS-09, AND OS-10  
NOT SAMPLED FOR THIS ANALYTE IN 2007



WELLS WITH FLUTES DURING 2007 SAMPLING:  
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
RD-54A, RD-57, RD-64, RD-65, RD-72

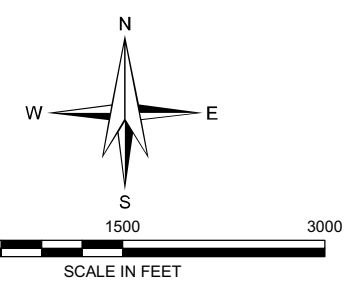
PLEASE NOTE: THE ORIGINAL VERSION OF THIS FIGURE  
INCLUDES COLORIZED FEATURES AND SHADING. A BLACK  
AND WHITE COPY OF THE FIGURE SHOULD NOT BE USED  
BECAUSE IT MAY NOT ACCURATELY REPRESENT THE  
INFORMATION PRESENTED.

**LEGEND**

- WELL TYPE**
- CHATSWORTH FORMATION MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - SHALLOW MONITORING WELL
  - ▣ SHALLOW EXTRACTION WELL
  - △ SPRING
  - PROPERTY BOUNDARY LINE

- SYMBOL FILL / TEXT COLOR INDICATOR**
- MAXIMUM CONCENTRATION >= 0.01 UG/L
  - NOT DETECTED (ND)
  - SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
  - NOT SAMPLED

THE CALIFORNIA NOTIFICATION LEVEL  
FOR NDMA IN DRINKING WATER IS 0.01 UG/L.  
  
ONLY DATA FROM PRIMARY SAMPLES  
ANALYZED BY EPA METHOD 1625M  
ARE PRESENTED ON THIS FIGURE.



ANNUAL GROUNDWATER MONITORING REPORT, 2007

**HALEY & ALDRICH** THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

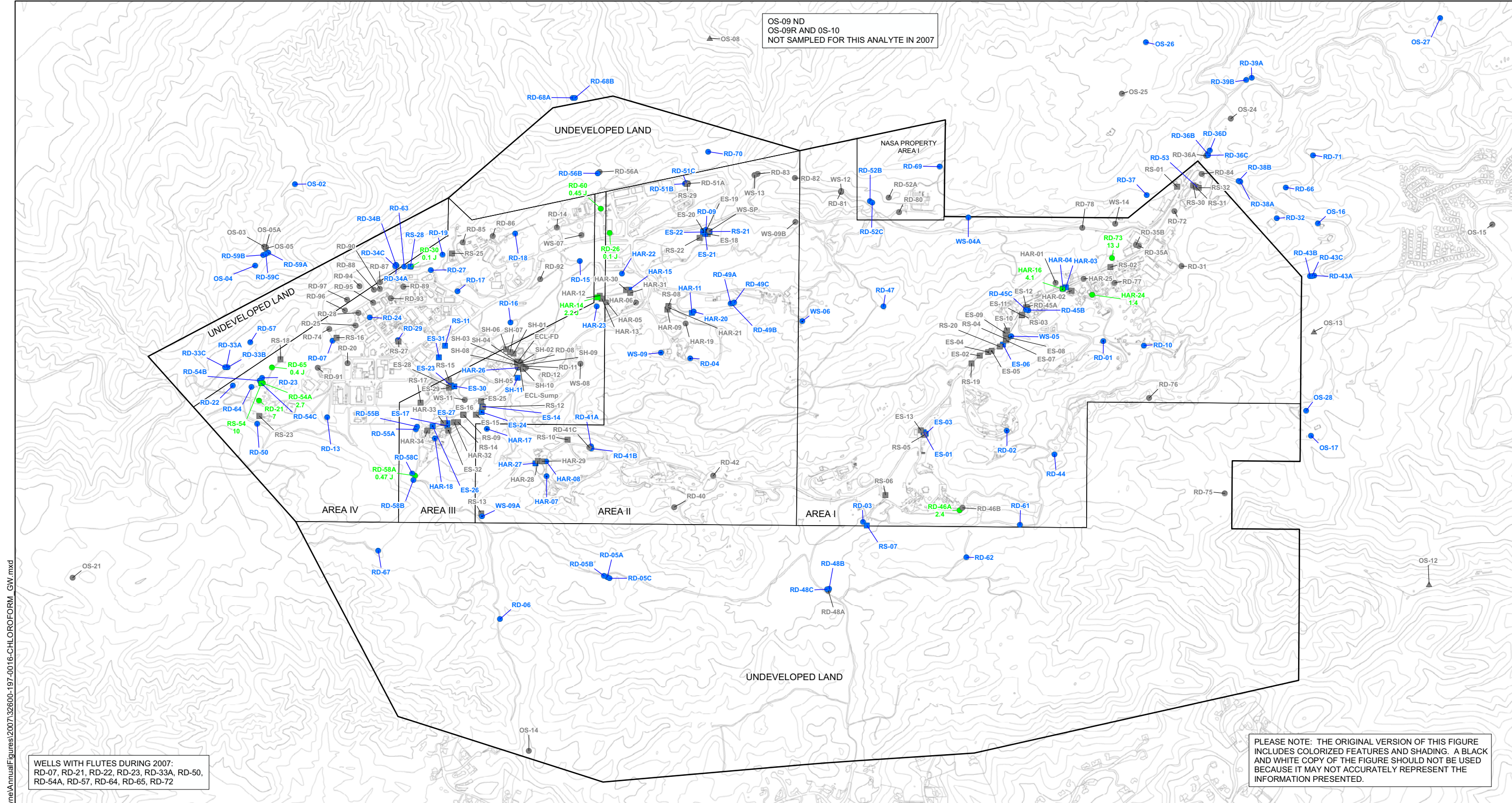
**MAXIMUM CONCENTRATION OF  
N-NITROSODIMETHYLAMINE (NDMA)  
IN GROUNDWATER, 2007**

SCALE: AS SHOWN  
FEBRUARY 2008

**FIGURE 15**

G:\Graphics\Projects\AnnualFigures\2007\32600-197-0015-N-NITROSODIMETHYLAMINE\_GW.mxd

OS-09 ND  
OS-09R AND OS-10  
NOT SAMPLED FOR THIS ANALYTE IN 2007



WELLS WITH FLUTES DURING 2007:  
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
RD-54A, RD-57, RD-64, RD-65, RD-72

**LEGEND**

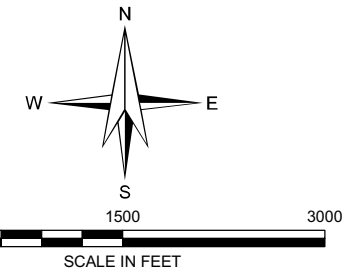
- WELL TYPE**
- CHATSWORTH FORMATION MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - SHALLOW MONITORING WELL
  - ⊠ SHALLOW EXTRACTION WELL
  - △ SPRING
  - PROPERTY BOUNDARY LINE

- 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).

CHLOROFORM 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.



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, 2007

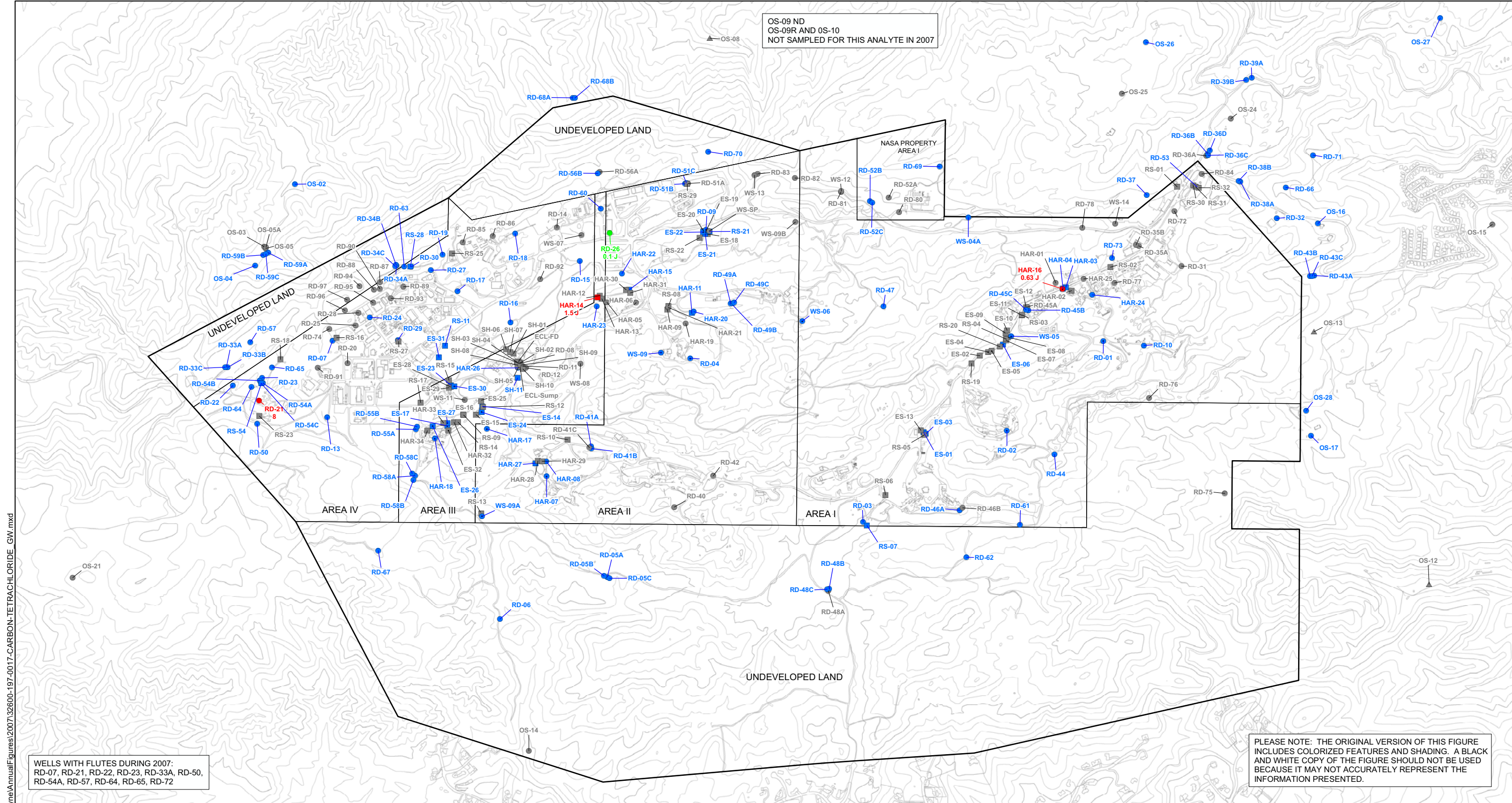
**HALEY & ALDRICH** THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

**MAXIMUM CONCENTRATION OF CHLOROFORM IN GROUNDWATER, 2007**

SCALE: AS SHOWN  
FEBRUARY 2008

G:\Graphics\Projects\26472 - Boeing Rocketdyne\AnnualFigures\2007\32600-197-0016-CHLOROFORM\_GW.mxd

OS-09 ND  
OS-09R AND OS-10  
NOT SAMPLED FOR THIS ANALYTE IN 2007



WELLS WITH FLUTES DURING 2007:  
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
RD-54A, RD-57, RD-64, RD-65, RD-72

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**

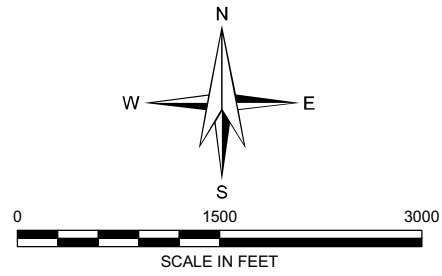
- WELL TYPE**
- CHATSWORTH FORMATION MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - SHALLOW MONITORING WELL
  - ▣ SHALLOW EXTRACTION WELL
  - △ SPRING
  - PROPERTY BOUNDARY LINE

- 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).

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.



ANNUAL GROUNDWATER MONITORING REPORT, 2007



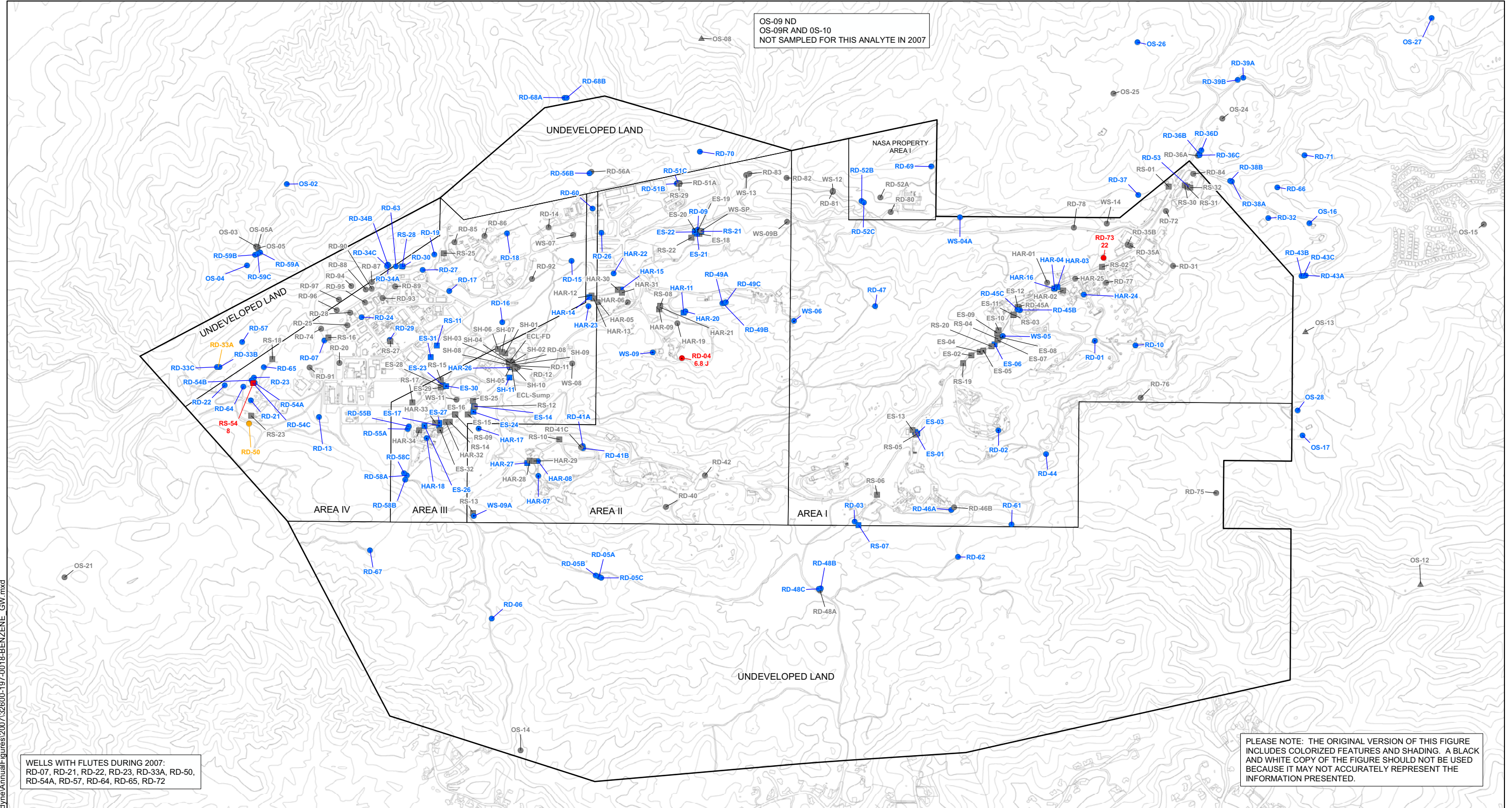
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

**MAXIMUM CONCENTRATION OF  
CARBON TETRACHLORIDE  
IN GROUNDWATER, 2007**

SCALE: AS SHOWN  
FEBRUARY 2008

G:\Graphics\Projects\26472 - Boeing Rockaldyne\AnnualFigures\2007\32600-197-0017-CARBON-TETRACHLORIDE\_GW.mxd

OS-09 ND  
 OS-09R AND OS-10  
 NOT SAMPLED FOR THIS ANALYTE IN 2007



WELLS WITH FLUTES DURING 2007:  
 RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
 RD-54A, RD-57, RD-64, RD-65, RD-72

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**

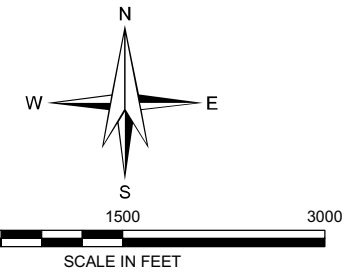
- WELL TYPE**
- CHATSWORTH FORMATION MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - SHALLOW MONITORING WELL
  - ▣ SHALLOW EXTRACTION WELL
  - △ SPRING
  - PROPERTY BOUNDARY LINE

- 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).

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR BENZENE IN DRINKING WATER IS 1 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.



ANNUAL GROUNDWATER MONITORING REPORT, 2007

**HALEY & ALDRICH** THE BOEING COMPANY  
 SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

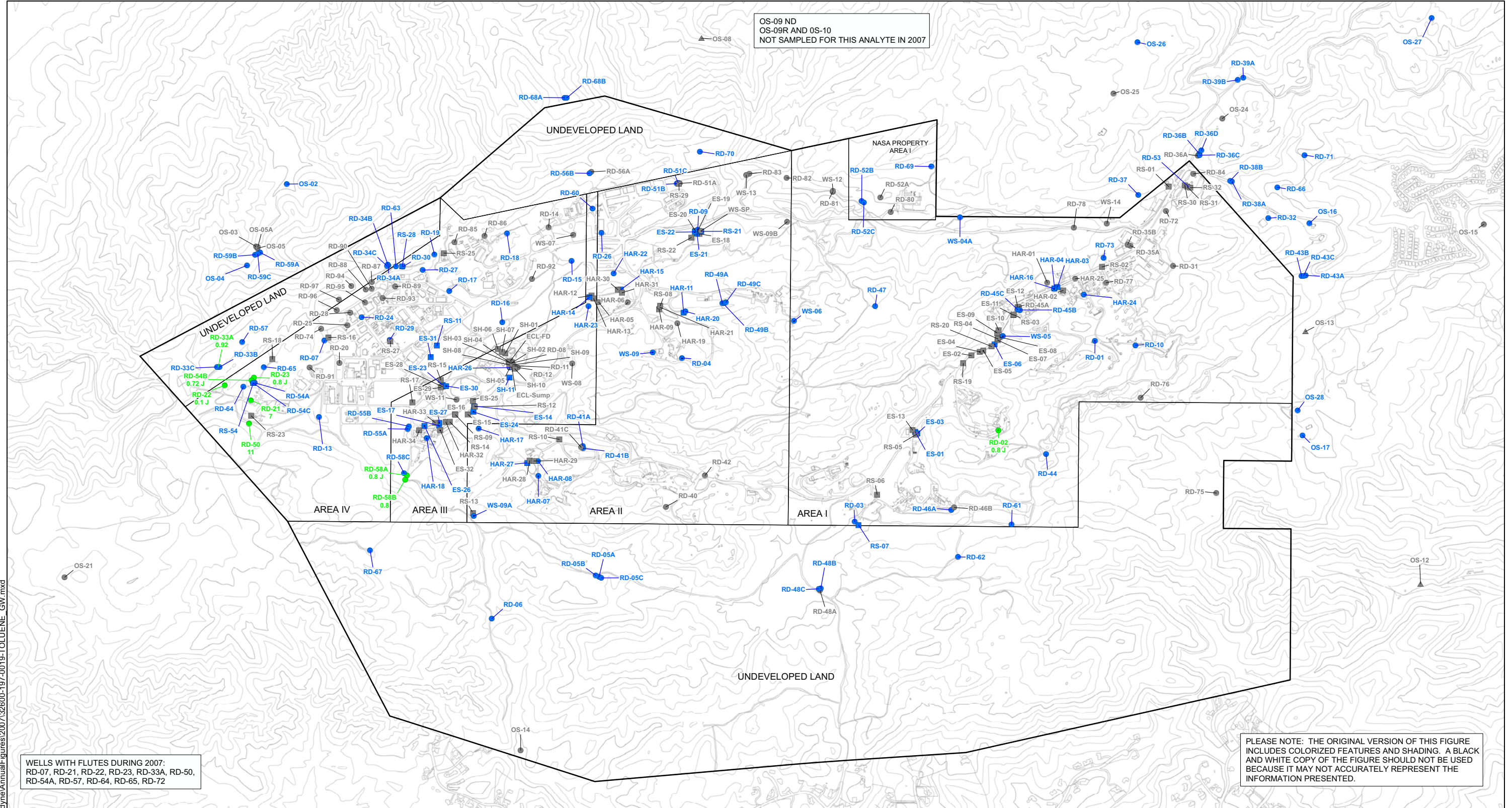
**MAXIMUM CONCENTRATION OF BENZENE IN GROUNDWATER, 2007**

SCALE: AS SHOWN  
 FEBRUARY 2008

**FIGURE 18**

G:\Graphics\Projects\26472 - Boeing Rockaldyne\AnnualFigures\2007\32600-197-0018-BENZENE\_GW.mxd

OS-09 ND  
 OS-09R AND OS-10  
 NOT SAMPLED FOR THIS ANALYTE IN 2007



WELLS WITH FLUTES DURING 2007:  
 RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
 RD-54A, RD-57, RD-64, RD-65, RD-72

**LEGEND**

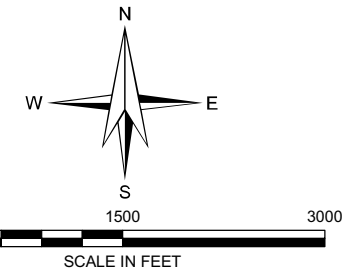
- WELL TYPE**
- CHATSWORTH FORMATION MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - SHALLOW MONITORING WELL
  - ▣ SHALLOW EXTRACTION WELL
  - △ SPRING
  - PROPERTY BOUNDARY LINE

- 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).

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR TOLUENE IN DRINKING WATER IS 150 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.



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, 2007

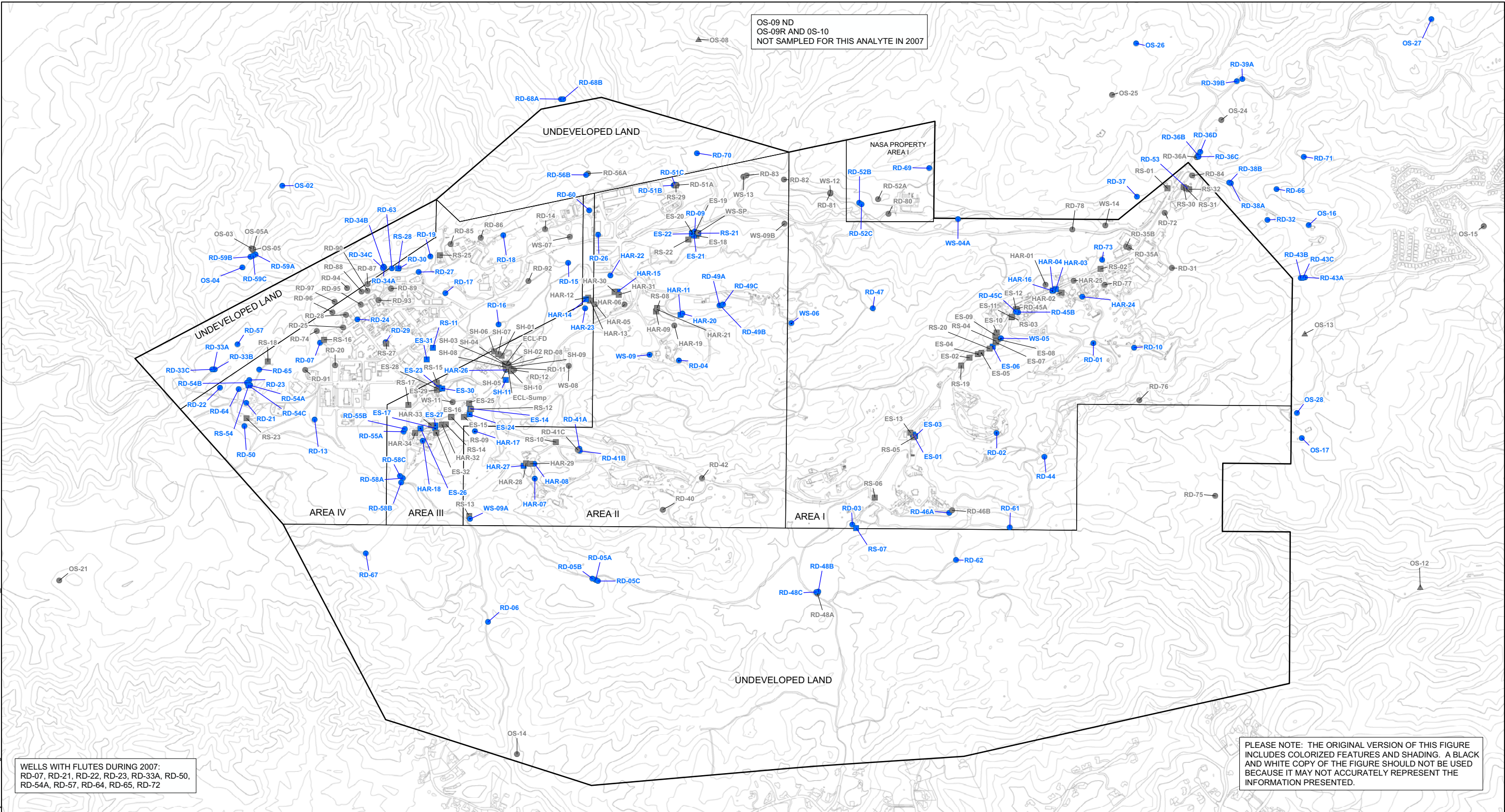
**HALEY & ALDRICH** THE BOEING COMPANY  
 SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

**MAXIMUM CONCENTRATION OF TOLUENE IN GROUNDWATER, 2007**

SCALE: AS SHOWN  
 FEBRUARY 2008

G:\Graphics\Projects\26472 - Boeing Rocketdyne\AnnualFigures\2007\32600-197-0019-TOLUENE\_GW.mxd

OS-09 ND  
 OS-09R AND OS-10  
 NOT SAMPLED FOR THIS ANALYTE IN 2007



WELLS WITH FLUTES DURING 2007:  
 RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
 RD-54A, RD-57, RD-64, RD-65, RD-72

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.

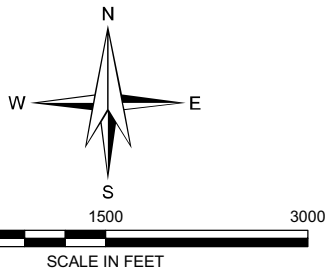
**LEGEND**

- WELL TYPE**
- CHATSWORTH FORMATION MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - SHALLOW MONITORING WELL
  - ▣ SHALLOW EXTRACTION WELL
  - △ 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.



ANNUAL GROUNDWATER MONITORING REPORT, 2007



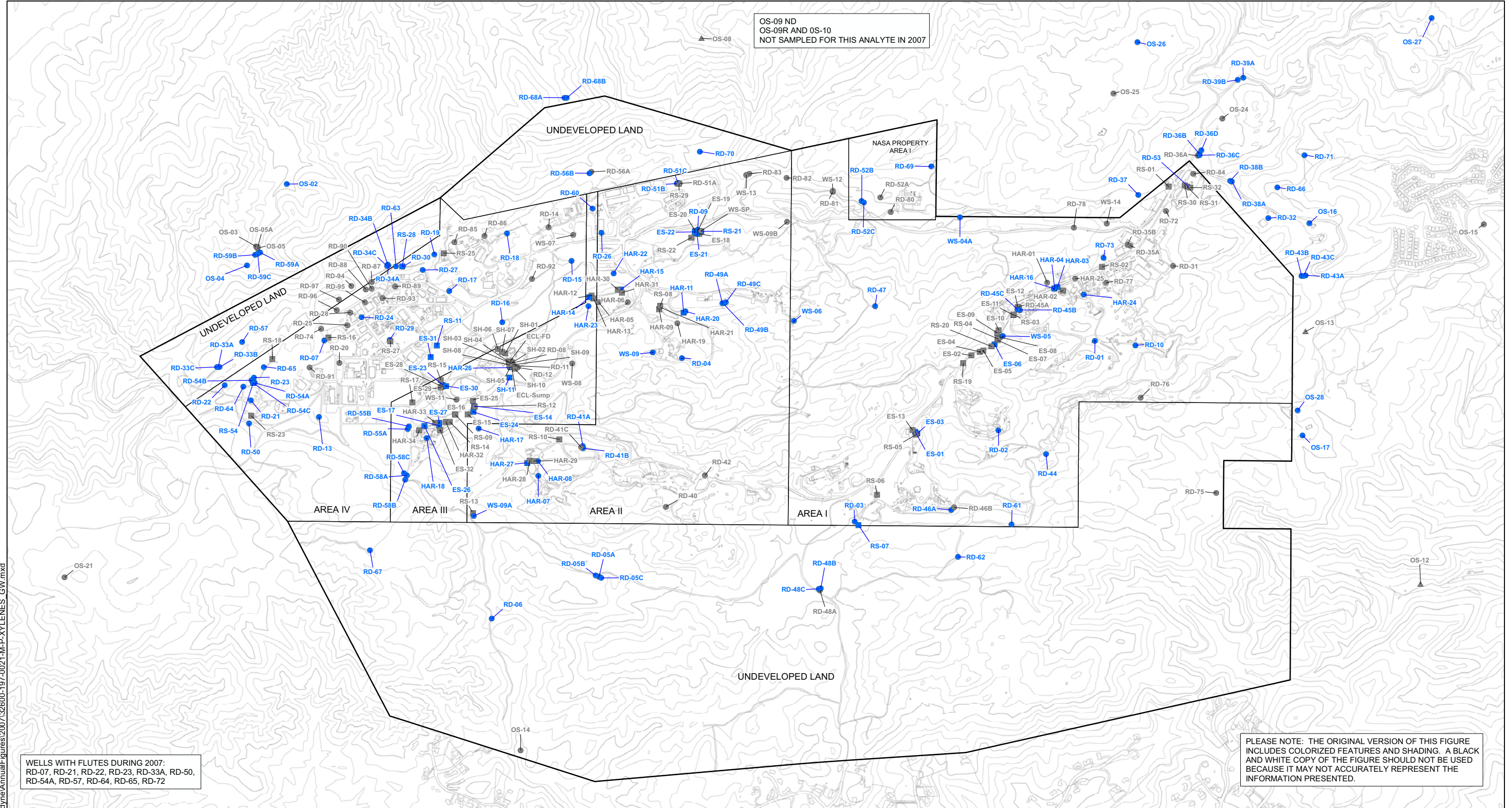
THE BOEING COMPANY  
 SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

**MAXIMUM CONCENTRATION OF  
 ETHYLBENZENE IN  
 GROUNDWATER, 2007**

SCALE: AS SHOWN  
 FEBRUARY 2008

G:\Graphics\Projects\AnnualFigures\2007\32600-197-0020-ETHYLBENZENE\_GW.mxd

OS-09 ND  
 OS-09R AND OS-10  
 NOT SAMPLED FOR THIS ANALYTE IN 2007



WELLS WITH FLUTES DURING 2007:  
 RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
 RD-54A, RD-57, RD-64, RD-65, RD-72

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.

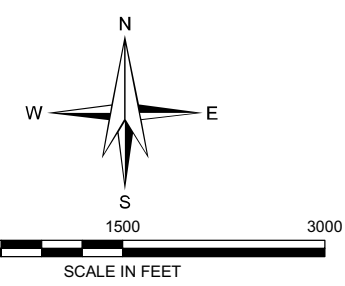
**LEGEND**

- WELL TYPE**
- CHATSWORTH FORMATION MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - SHALLOW MONITORING WELL
  - ▣ SHALLOW EXTRACTION WELL
  - △ 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.



ANNUAL GROUNDWATER MONITORING REPORT, 2007

**HALEY & ALDRICH** THE BOEING COMPANY  
 SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

**MAXIMUM CONCENTRATION OF  
 M- & P-XYLENES IN  
 GROUNDWATER, 2007**

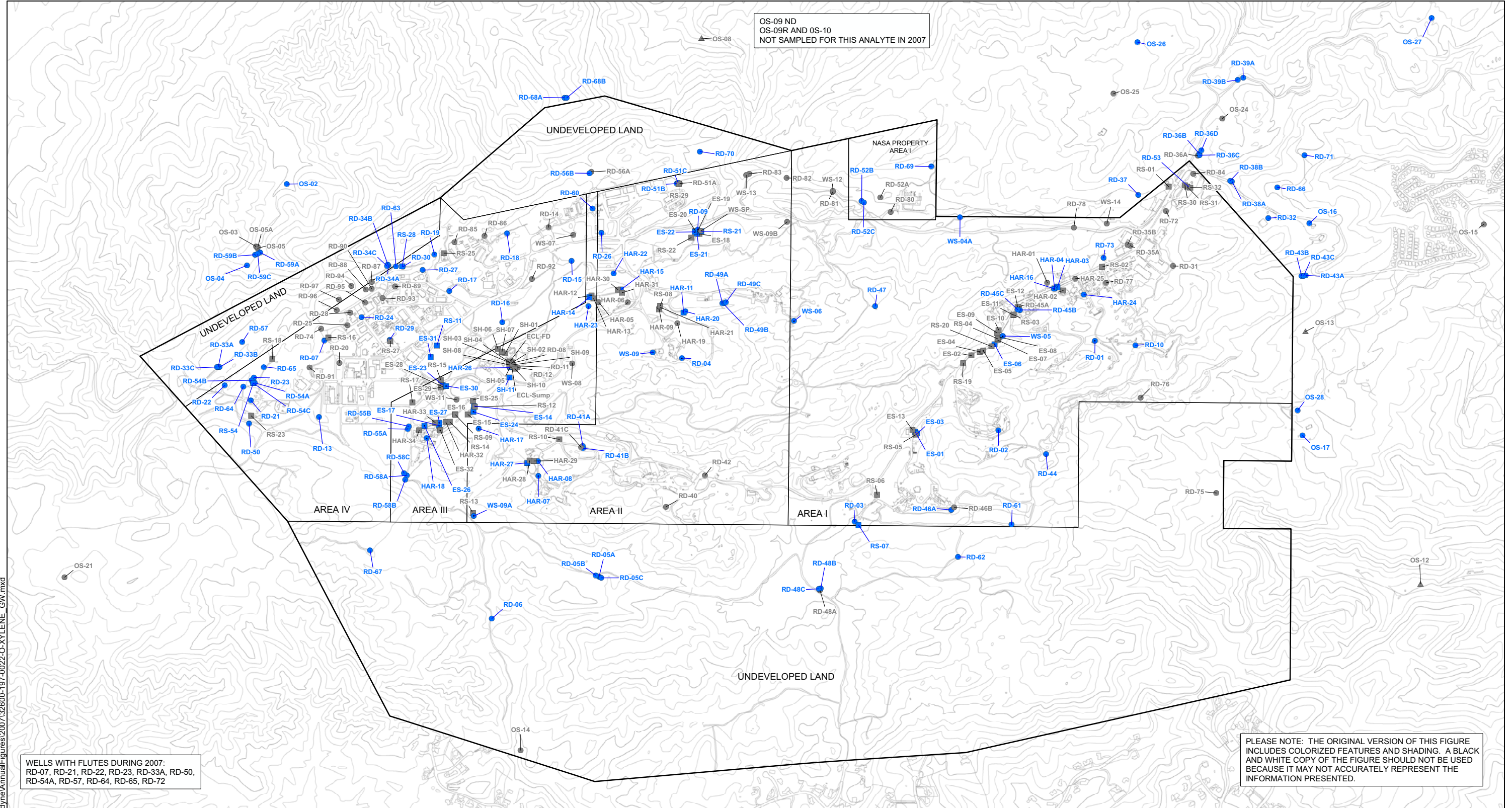
SCALE: AS SHOWN  
 FEBRUARY 2008

**FIGURE 21**

G:\Graphics\Projects\AnnualFigures\2007\32600-197-0021-M-P-XYLENES\_GW.mxd



OS-09 ND  
 OS-09R AND OS-10  
 NOT SAMPLED FOR THIS ANALYTE IN 2007



WELLS WITH FLUTES DURING 2007:  
 RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
 RD-54A, RD-57, RD-64, RD-65, RD-72

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.

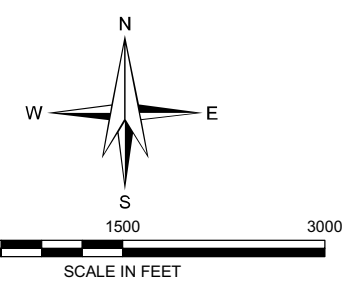
**LEGEND**

- WELL TYPE**
- CHATSWORTH FORMATION MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - SHALLOW MONITORING WELL
  - ▣ SHALLOW EXTRACTION WELL
  - △ 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.



ANNUAL GROUNDWATER MONITORING REPORT, 2007

**HALEY & ALDRICH** THE BOEING COMPANY  
 SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

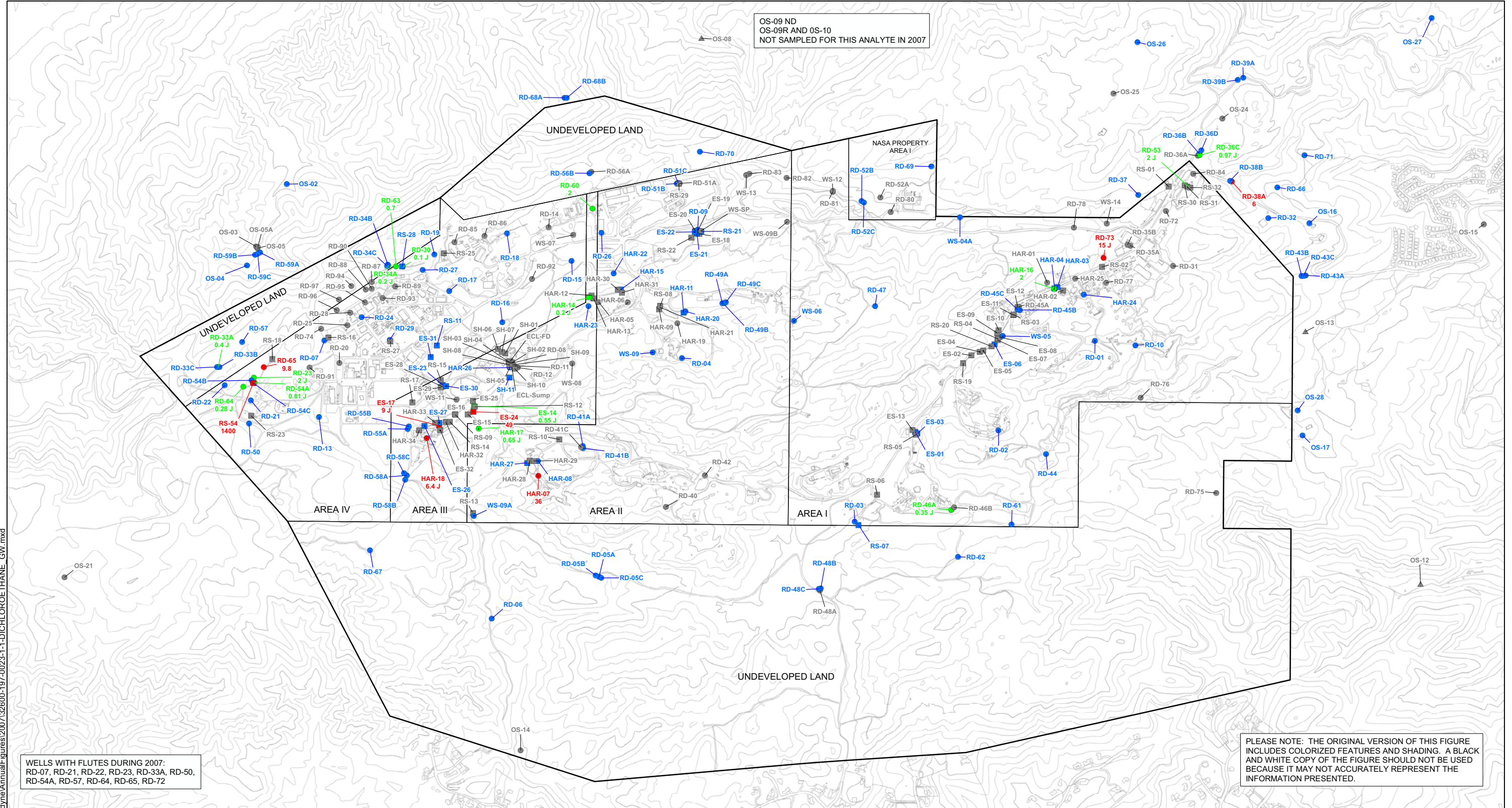
**MAXIMUM CONCENTRATION OF  
 O-XYLENE IN  
 GROUNDWATER, 2007**

SCALE: AS SHOWN  
 FEBRUARY 2008

**FIGURE 22**

G:\Graphics\Projects\26472 - Boeing Rockaldyne\AnnualFigures\2007\32600-197-0022-O-XYLENE\_GW.mxd

OS-09 ND  
 OS-09R AND OS-10  
 NOT SAMPLED FOR THIS ANALYTE IN 2007



WELLS WITH FLUTES DURING 2007:  
 RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
 RD-54A, RD-57, RD-64, RD-65, RD-72

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**

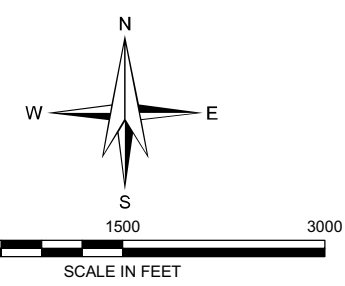
- WELL TYPE**
- CHATSWORTH FORMATION MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - SHALLOW MONITORING WELL
  - ▣ SHALLOW EXTRACTION WELL
  - △ SPRING
  - PROPERTY BOUNDARY LINE

- 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).

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.



ANNUAL GROUNDWATER MONITORING REPORT, 2007

**HALEY & ALDRICH**  
 THE BOEING COMPANY  
 SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

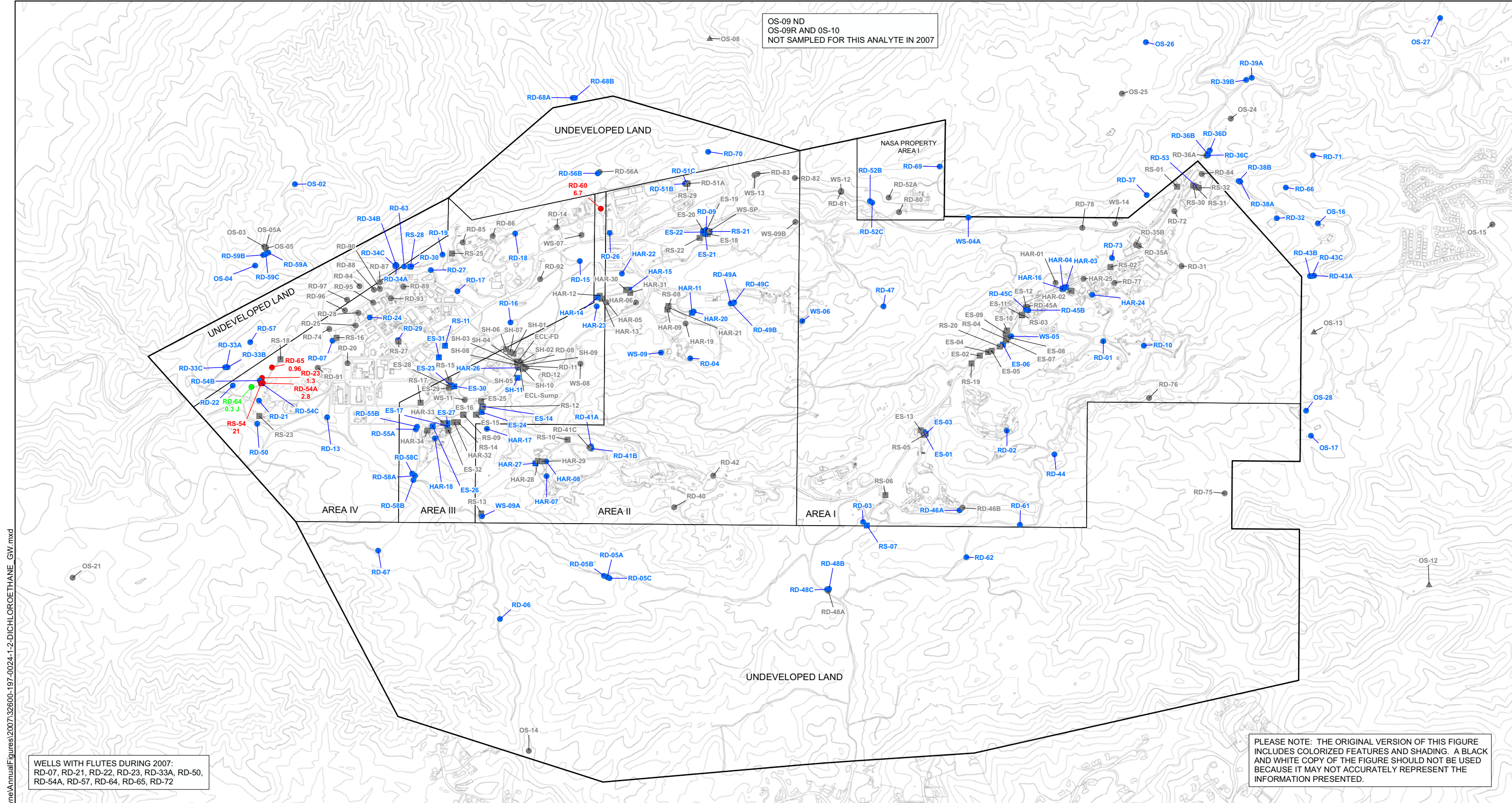
**MAXIMUM CONCENTRATION OF  
 1,1-DICHLOROETHANE IN  
 GROUNDWATER, 2007**

SCALE: AS SHOWN  
 FEBRUARY 2008

FIGURE 23

G:\Graphics\Projects\AnnualFigures\2007\32600-197-0023-1-1-DICHLOROETHANE\_GW.mxd

OS-09 ND  
 OS-09R AND OS-10  
 NOT SAMPLED FOR THIS ANALYTE IN 2007



WELLS WITH FLUTES DURING 2007:  
 RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
 RD-54A, RD-57, RD-64, RD-65, RD-72

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**

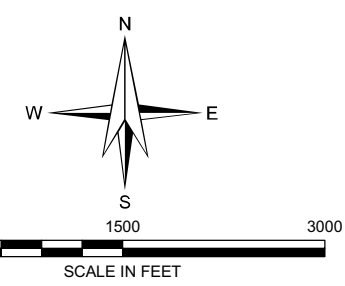
- WELL TYPE**
- CHATSWORTH FORMATION MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - SHALLOW MONITORING WELL
  - ▣ SHALLOW EXTRACTION WELL
  - △ SPRING
  - PROPERTY BOUNDARY LINE

- 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).

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.



ANNUAL GROUNDWATER MONITORING REPORT, 2007

**HALEY & ALDRICH** THE BOEING COMPANY  
 SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

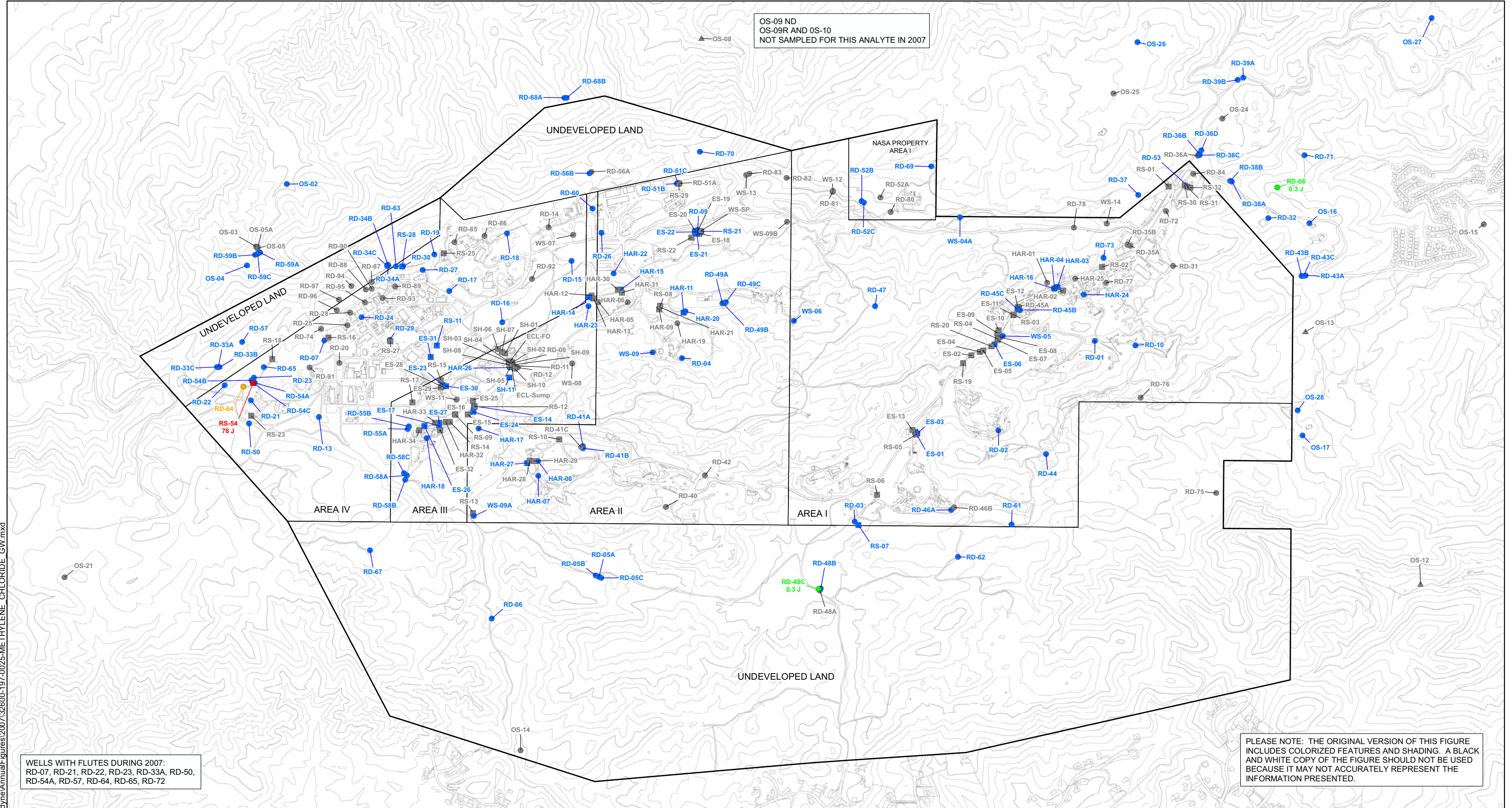
**MAXIMUM CONCENTRATION OF 1,2-DICHLOROETHANE IN GROUNDWATER, 2007**

SCALE: AS SHOWN  
 FEBRUARY 2008

**FIGURE 24**

G:\Graphics\Projects\AnnualFigures\2007\32600-197-0024-1-2-DICHLOROETHANE\_GW.mxd

OS-09 ND  
 OS-09R AND OS-10  
 NOT SAMPLED FOR THIS ANALYTE IN 2007



WELLS WITH FLUTES DURING 2007:  
 RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
 RD-54A, RD-57, RD-64, RD-65, RD-72

**LEGEND**

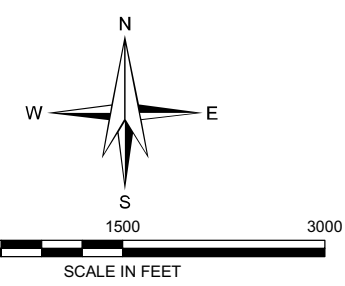
- WELL TYPE**
- CHATSWORTH FORMATION MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - SHALLOW MONITORING WELL
  - ▣ SHALLOW EXTRACTION WELL
  - △ SPRING
  - PROPERTY BOUNDARY LINE

- 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).

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.



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, 2007

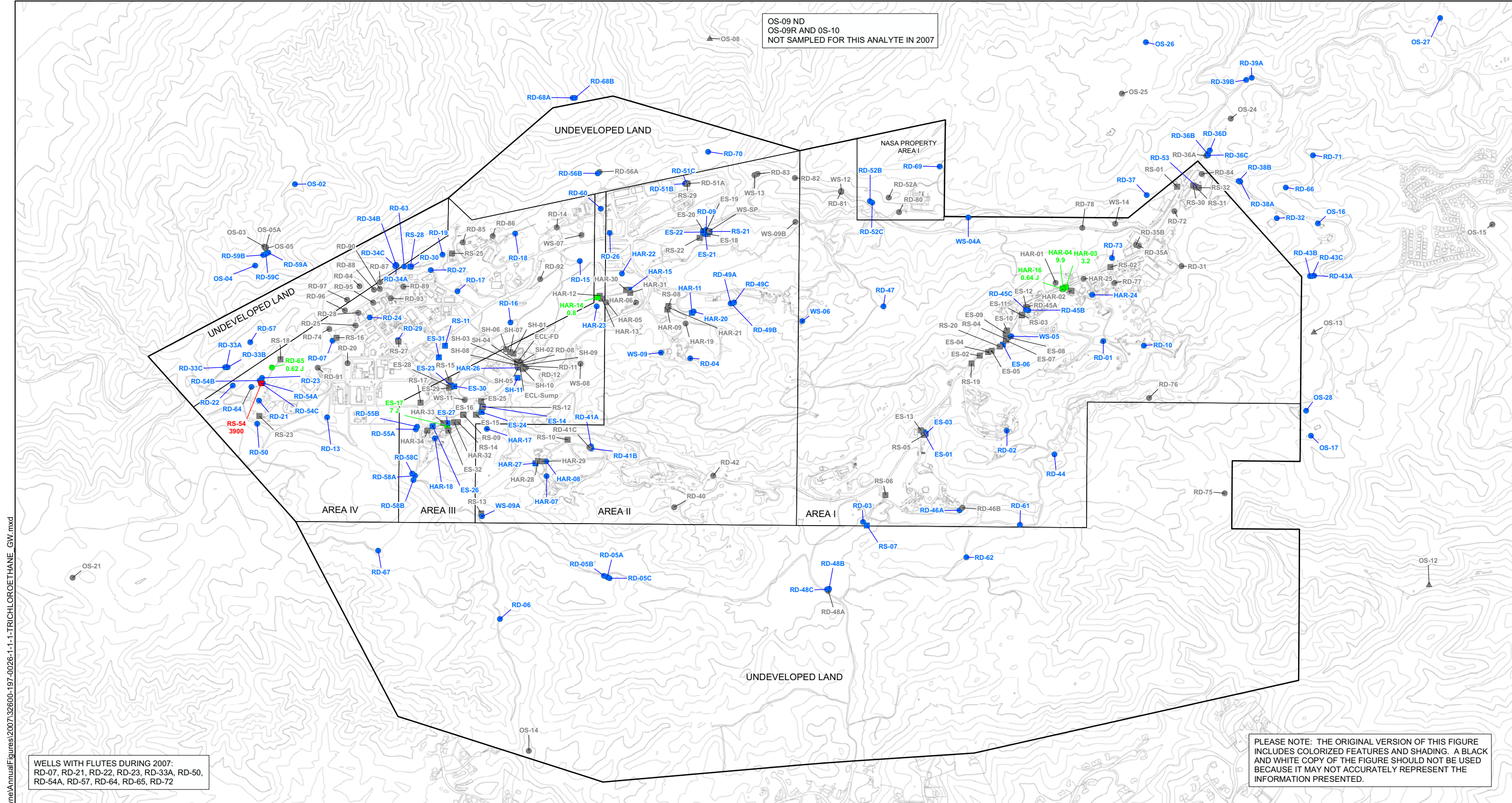
**HALEY & ALDRICH** THE BOEING COMPANY  
 SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

**MAXIMUM CONCENTRATION OF METHYLENE CHLORIDE IN GROUNDWATER, 2007**

SCALE: AS SHOWN  
 FEBRUARY 2008

G:\Graphics\Projects\26472 - Boeing Rockaldyne\AnnualFigures\2007\32600-197-0025-METHYLENE CHLORIDE\_GW.mxd

OS-09 ND  
OS-09R AND OS-10  
NOT SAMPLED FOR THIS ANALYTE IN 2007



WELLS WITH FLUTES DURING 2007:  
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
RD-54A, RD-57, RD-64, RD-65, RD-72

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**

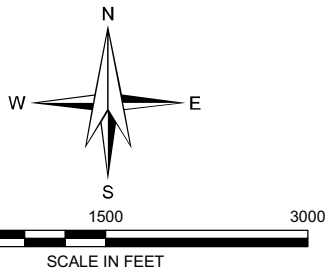
- WELL TYPE**
- CHATSWORTH FORMATION MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - SHALLOW MONITORING WELL
  - ▣ SHALLOW EXTRACTION WELL
  - △ SPRING
  - PROPERTY BOUNDARY LINE

- 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).

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.



ANNUAL GROUNDWATER MONITORING REPORT, 2007



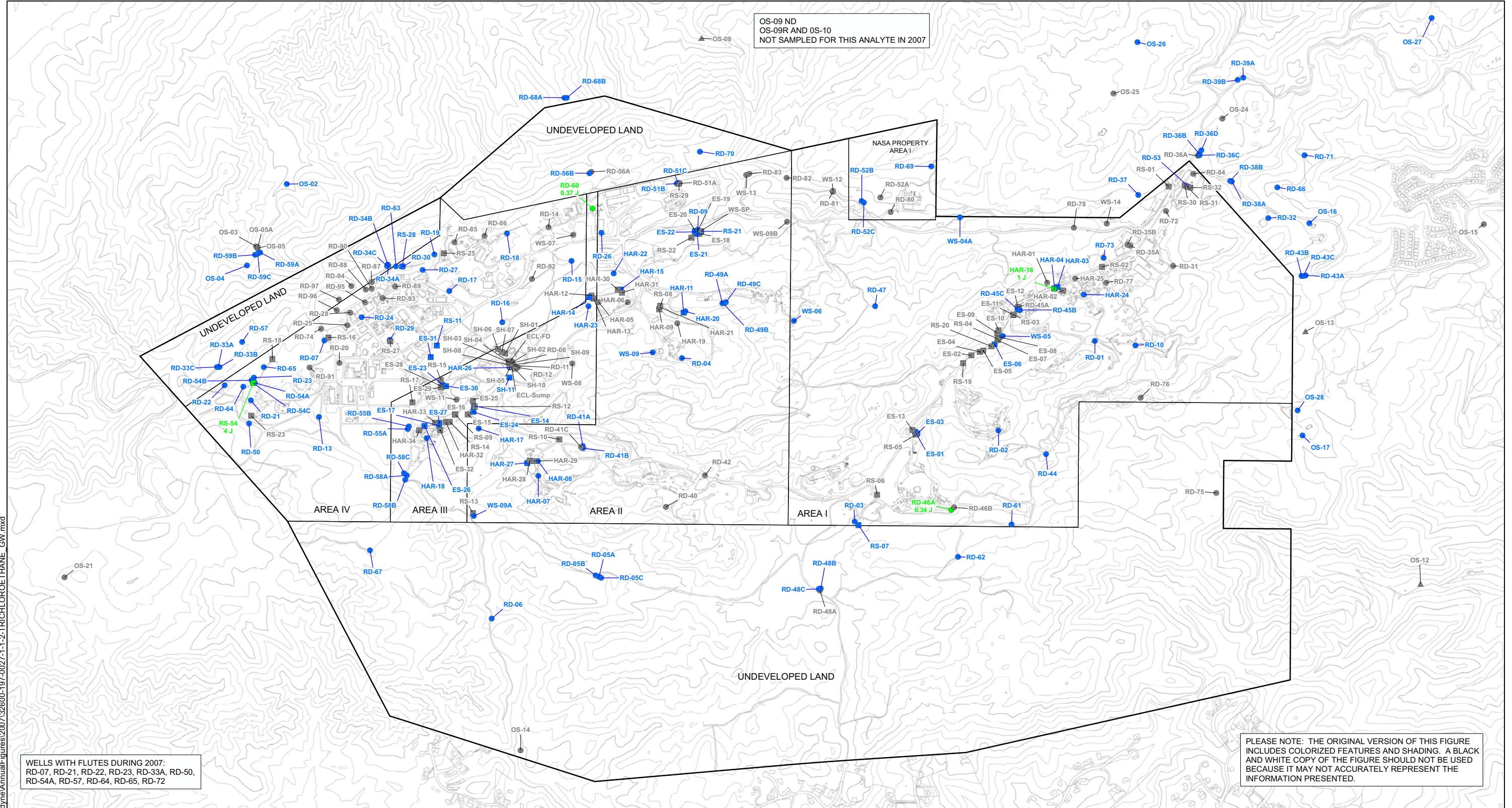
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

**MAXIMUM CONCENTRATION OF  
1,1,1-TRICHLOROETHANE IN  
GROUNDWATER, 2007**

SCALE: AS SHOWN  
FEBRUARY 2008

G:\Graphics\Projects\AnnualFigures\2007\32600-197-0026-1-1-1-TRICHLOROETHANE\_GW.mxd

OS-09 ND  
OS-09R AND OS-10  
NOT SAMPLED FOR THIS ANALYTE IN 2007



WELLS WITH FLUTES DURING 2007:  
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
RD-54A, RD-57, RD-64, RD-65, RD-72

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**

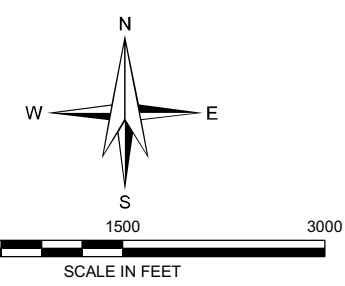
- WELL TYPE**
- CHATSWORTH FORMATION MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - SHALLOW MONITORING WELL
  - ▣ SHALLOW EXTRACTION WELL
  - △ SPRING
  - PROPERTY BOUNDARY LINE

- 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).

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.



ANNUAL GROUNDWATER MONITORING REPORT, 2007

**HALEY & ALDRICH** THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

**MAXIMUM CONCENTRATION OF  
1,1,2-TRICHLOROETHANE IN  
GROUNDWATER, 2007**

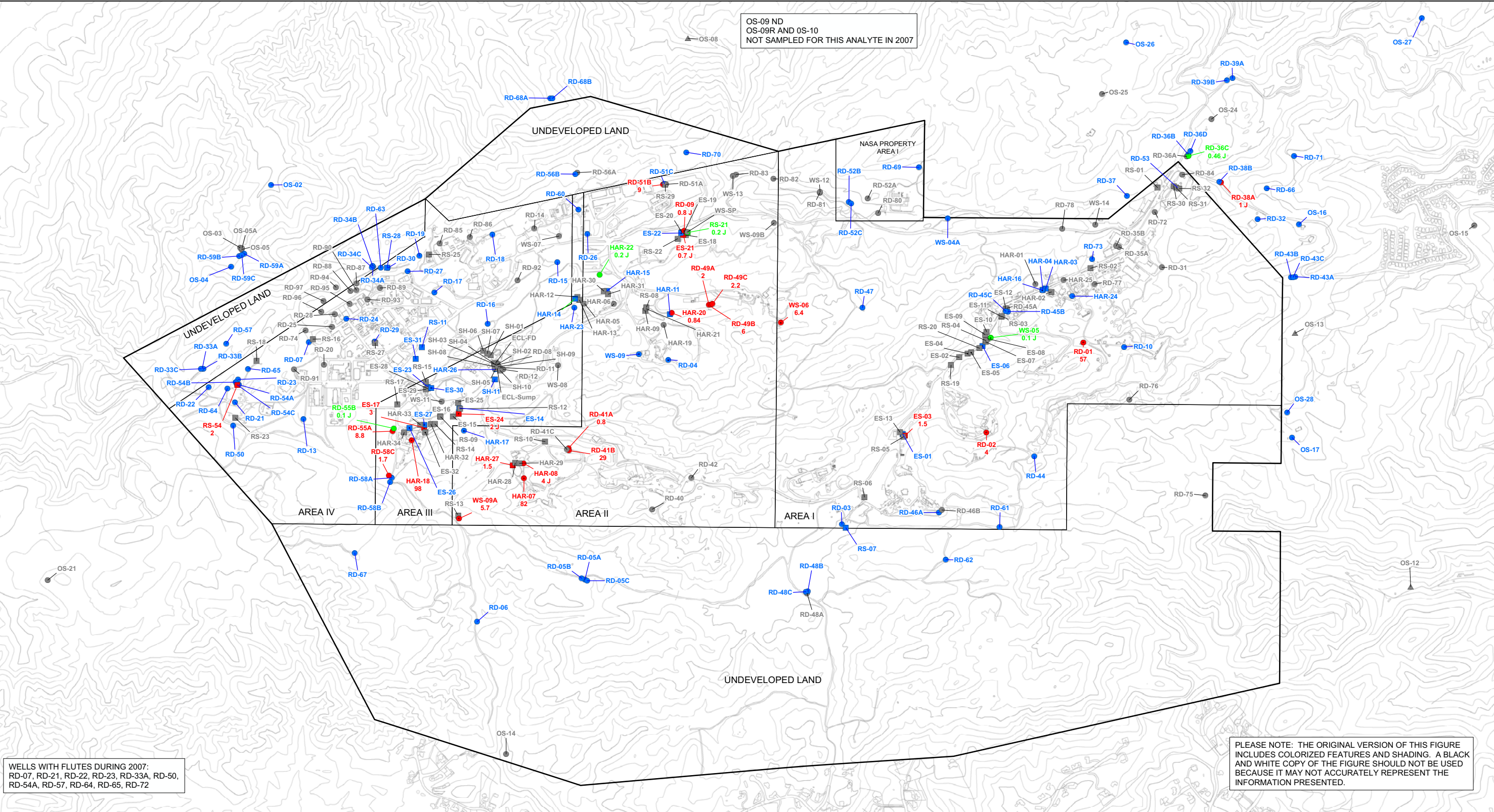
SCALE: AS SHOWN  
FEBRUARY 2008

**FIGURE 27**

G:\Graphics\Projects\AnnualFigures\2007\32600-197-0027-1-1-2-TRICHLOROETHANE\_GW.mxd

OS-09 ND  
OS-09R AND OS-10  
NOT SAMPLED FOR THIS ANALYTE IN 2007

G:\Graphics\Projects\AnnualFigures\2007\32600-197-0028-VINYL\_CHLORIDE\_GW.mxd



WELLS WITH FLUTES DURING 2007:  
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
RD-54A, RD-57, RD-64, RD-65, RD-72

### LEGEND

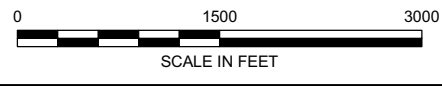
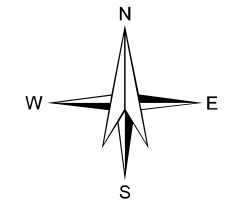
- WELL TYPE**
- CHATSWORTH FORMATION MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - SHALLOW MONITORING WELL
  - ▣ SHALLOW EXTRACTION WELL
  - △ SPRING
  - PROPERTY BOUNDARY LINE

- 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).

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.



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.

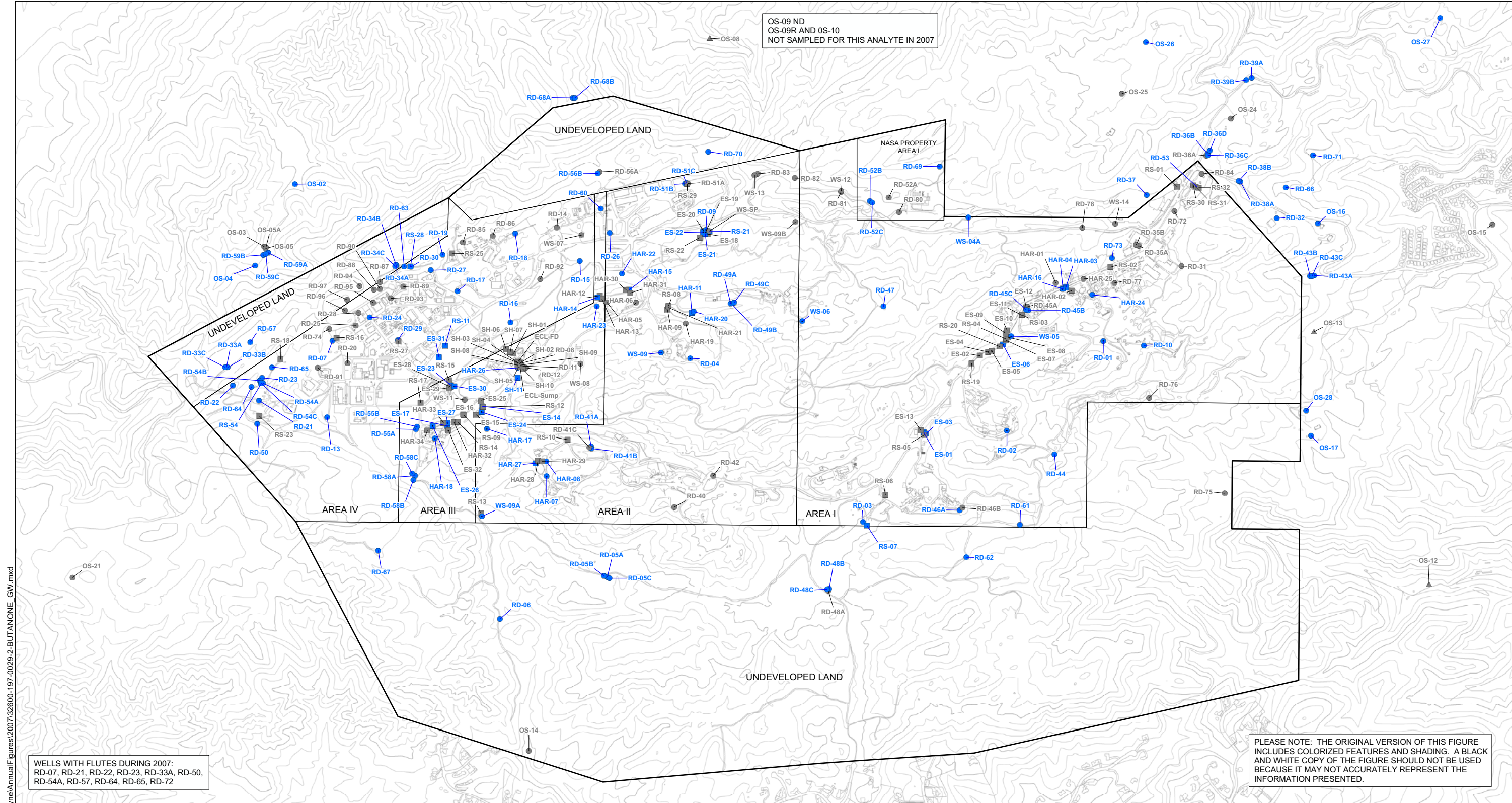
ANNUAL GROUNDWATER MONITORING REPORT, 2007

**HALEY & ALDRICH** THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

## MAXIMUM CONCENTRATION OF VINYL CHLORIDE IN GROUNDWATER, 2007

SCALE: AS SHOWN  
FEBRUARY 2008

OS-09 ND  
 OS-09R AND OS-10  
 NOT SAMPLED FOR THIS ANALYTE IN 2007



WELLS WITH FLUTES DURING 2007:  
 RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
 RD-54A, RD-57, RD-64, RD-65, RD-72

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**

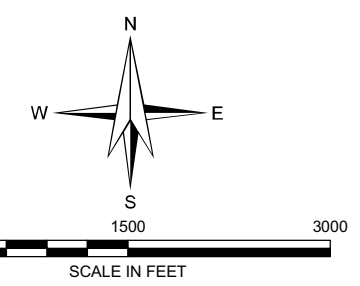
- WELL TYPE**
- CHATSWORTH FORMATION MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - SHALLOW MONITORING WELL
  - ▣ SHALLOW EXTRACTION WELL
  - △ SPRING
  - PROPERTY BOUNDARY LINE

- 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

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.

METHYL ETHYL KETONE HAS PREVIOUSLY  
 BEEN REPORTED USING SYNONYM 2-BUTANONE.



ANNUAL GROUNDWATER MONITORING REPORT, 2007

**HALEY & ALDRICH** THE BOEING COMPANY  
 SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

**MAXIMUM CONCENTRATION OF  
 METHYL ETHYL KETONE  
 IN GROUNDWATER, 2007**

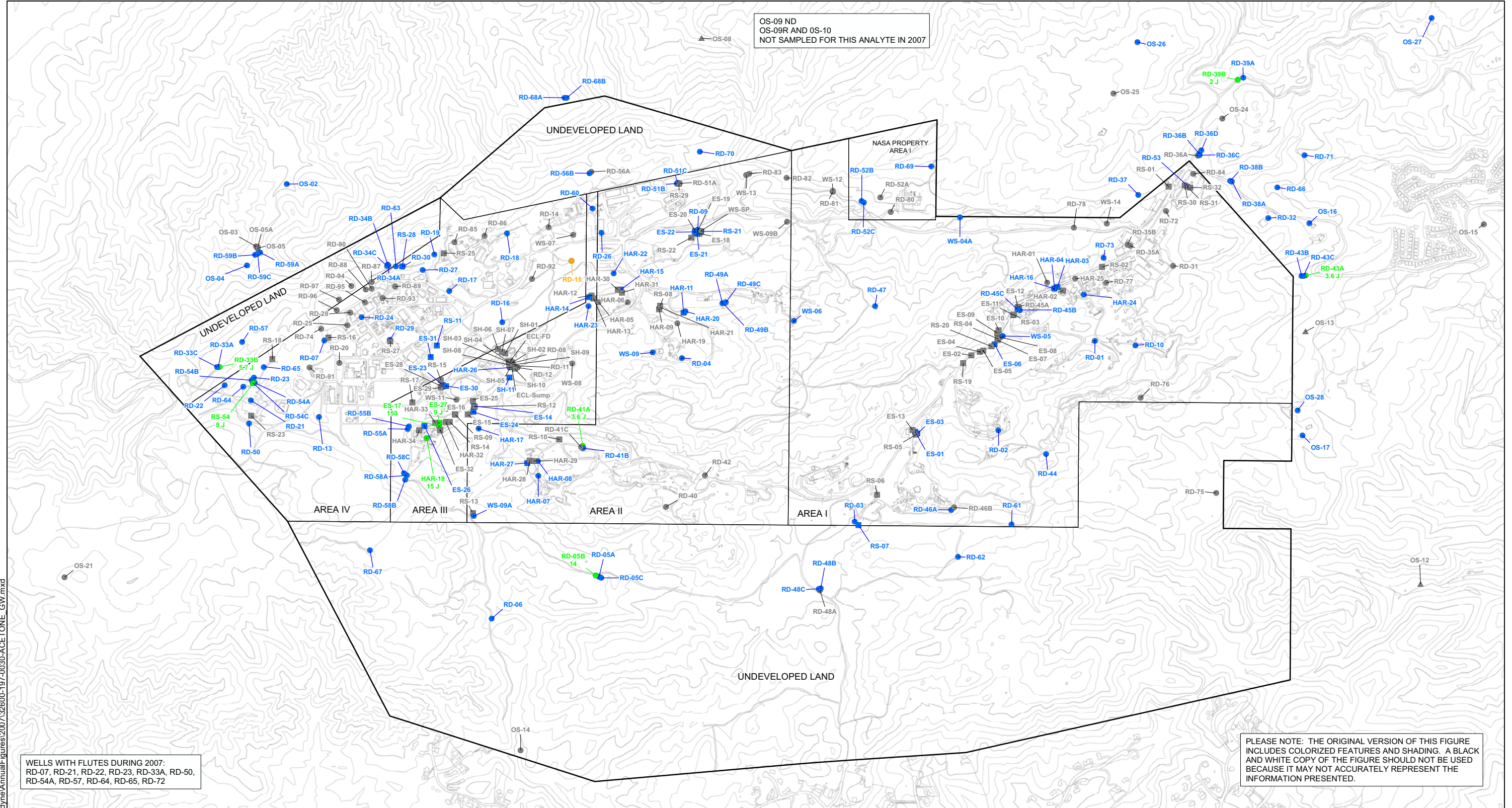
SCALE: AS SHOWN  
 FEBRUARY 2008

**FIGURE 29**

G:\Graphics\Projects\26472 - Boeing Rocketdyne\AnnualFigures\2007\32600-197-0029-2-BUTANONE\_GW.mxd



OS-09 ND  
OS-09R AND OS-10  
NOT SAMPLED FOR THIS ANALYTE IN 2007



WELLS WITH FLUTES DURING 2007:  
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
RD-54A, RD-57, RD-64, RD-65, RD-72

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**

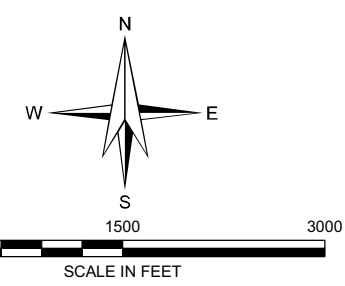
- WELL TYPE**
- CHATSWORTH FORMATION MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - SHALLOW MONITORING WELL
  - ▣ SHALLOW EXTRACTION WELL
  - △ SPRING
  - PROPERTY BOUNDARY LINE

- 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).

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.



ANNUAL GROUNDWATER MONITORING REPORT, 2007

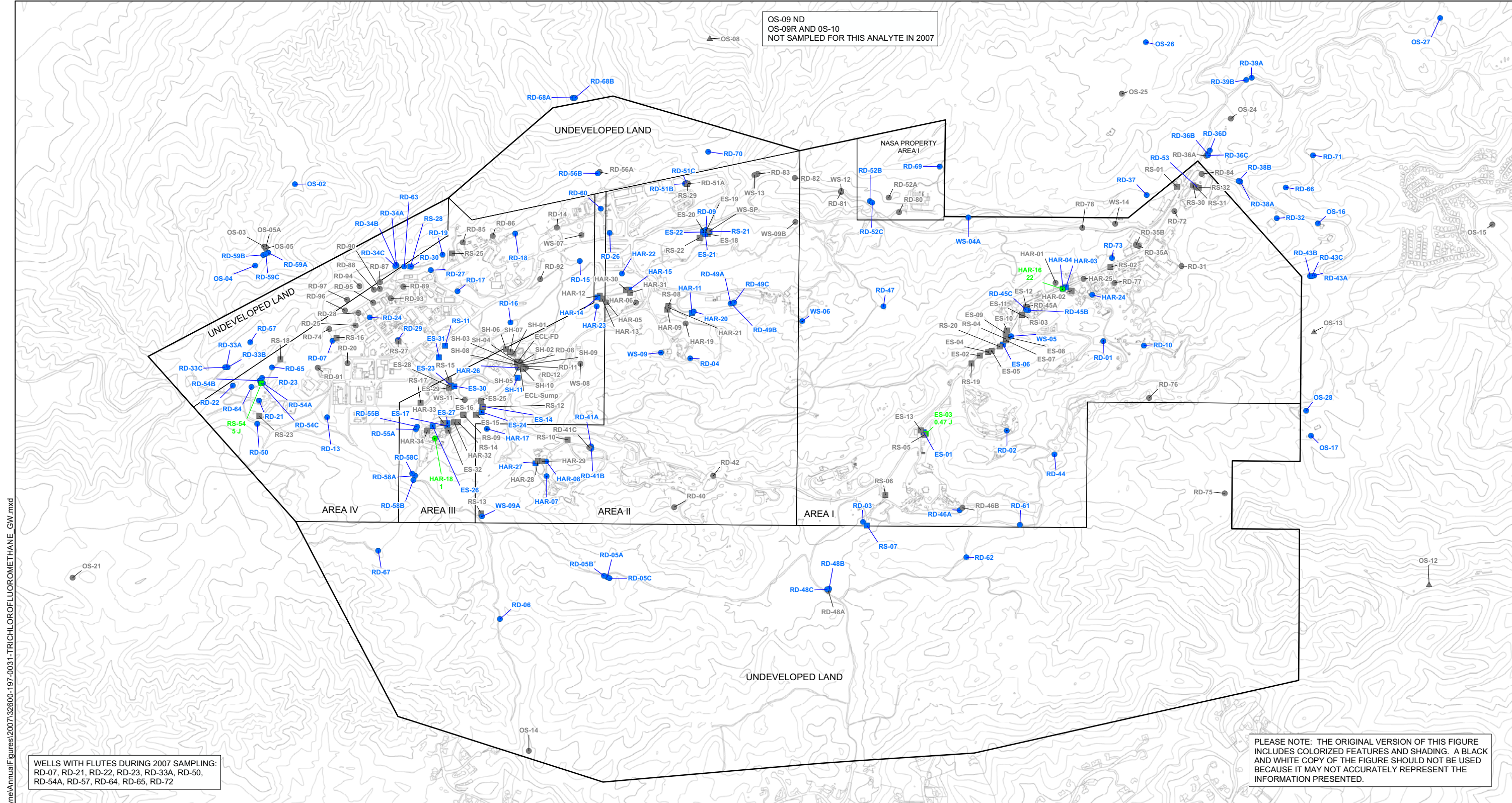
**HALEY & ALDRICH** THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

**MAXIMUM CONCENTRATION OF ACETONE IN GROUNDWATER, 2007**

SCALE: AS SHOWN  
FEBRUARY 2008

G:\Graphics\Projects\AnnualFigures\2007\32600-197-0030-ACETONE\_GW.mxd

OS-09 ND  
 OS-09R AND OS-10  
 NOT SAMPLED FOR THIS ANALYTE IN 2007



G:\Graphics\Projects\AnnualFigures\2007\32600-197-0031-TRICHLOROFLUOROMETHANE\_GW.mxd

WELLS WITH FLUTES DURING 2007 SAMPLING:  
 RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
 RD-54A, RD-57, RD-64, RD-65, RD-72

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**

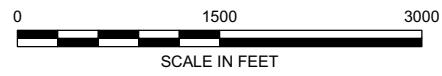
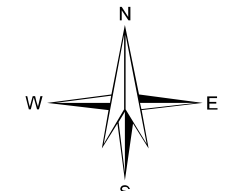
- WELL TYPE**
- CHATSWORTH FORMATION MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - SHALLOW MONITORING WELL
  - ▣ SHALLOW EXTRACTION WELL
  - △ SPRING
  - PROPERTY BOUNDARY LINE

- 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).

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL FOR TRICHLOROFLUOROMETHANE IN DRINKING WATER IS 150 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.

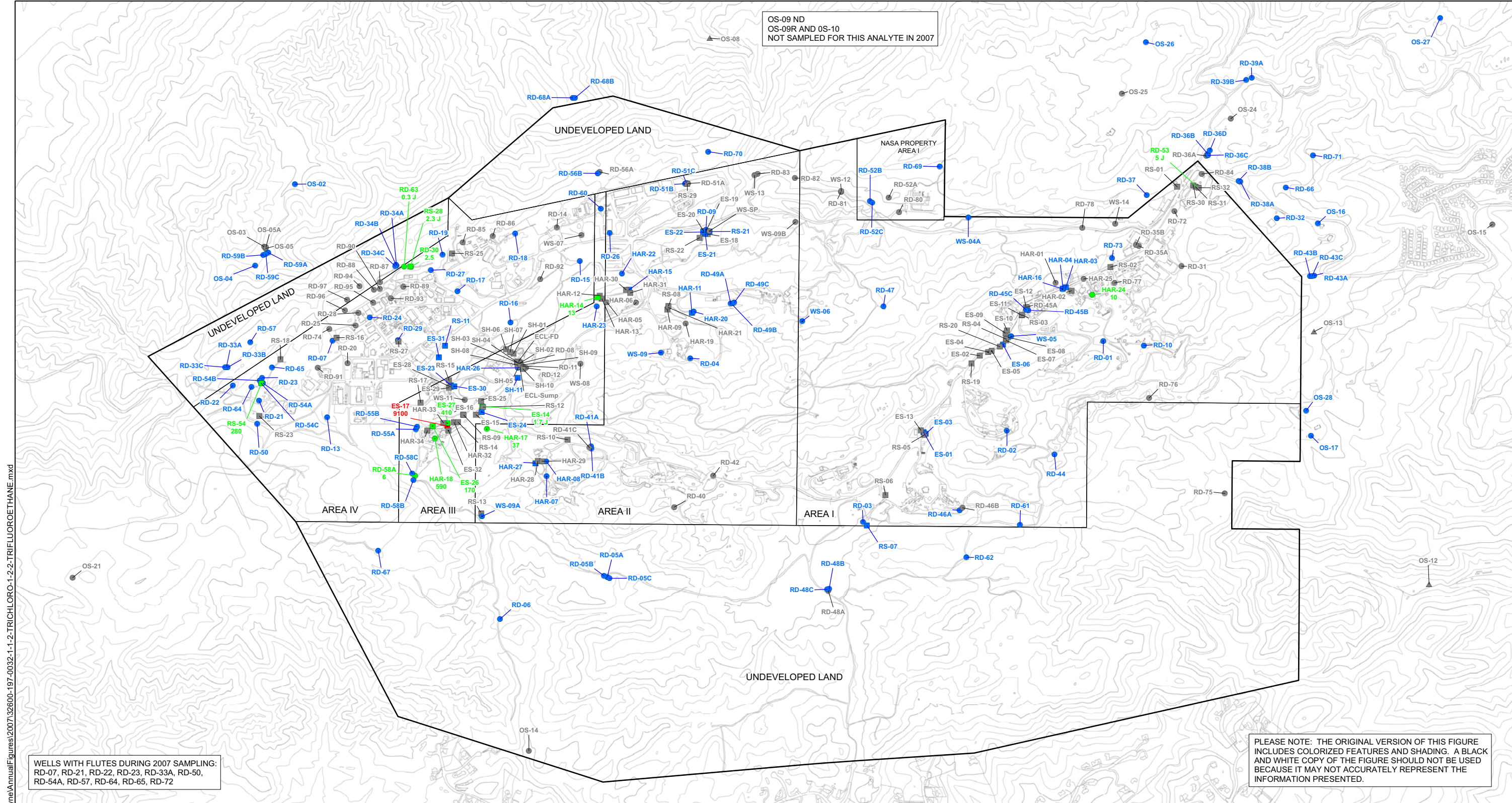


**HALEY & ALDRICH** THE BOEING COMPANY  
 SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

**MAXIMUM CONCENTRATION OF TRICHLOROFLUOROMETHANE IN GROUNDWATER, 2007**

SCALE: AS SHOWN  
 FEBRUARY 2008

OS-09 ND  
 OS-09R AND OS-10  
 NOT SAMPLED FOR THIS ANALYTE IN 2007



WELLS WITH FLUTES DURING 2007 SAMPLING:  
 RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
 RD-54A, RD-57, RD-64, RD-65, RD-72

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 MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - SHALLOW MONITORING WELL
  - ▣ SHALLOW EXTRACTION WELL
  - △ SPRING
  - PROPERTY BOUNDARY LINE

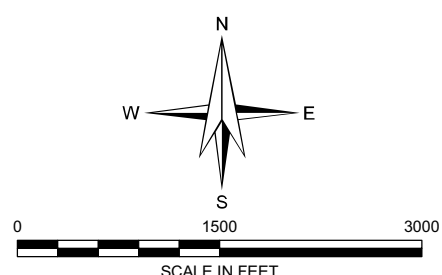
- SYMBOL FILL / TEXT COLOR INDICATOR**
- MAXIMUM CONCENTRATION >= 1200 UG/L
  - MAXIMUM CONCENTRATION < 1200 UG/L
  - NOT DETECTED (ND)
  - SAMPLED; LABORATORY, FIELD, OR EQUIPMENT CONTAMINANT OR RESULT REJECTED; VALUE NOT PLOTTED
  - NOT SAMPLED

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).

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.

1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE HAS PREVIOUSLY BEEN REPORTED USING SYNONYM TRICHLOROTRIFLUOROETHANE (FREON 113).



ANNUAL GROUNDWATER MONITORING REPORT, 2007

**HALEY & ALDRICH** THE BOEING COMPANY  
 SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

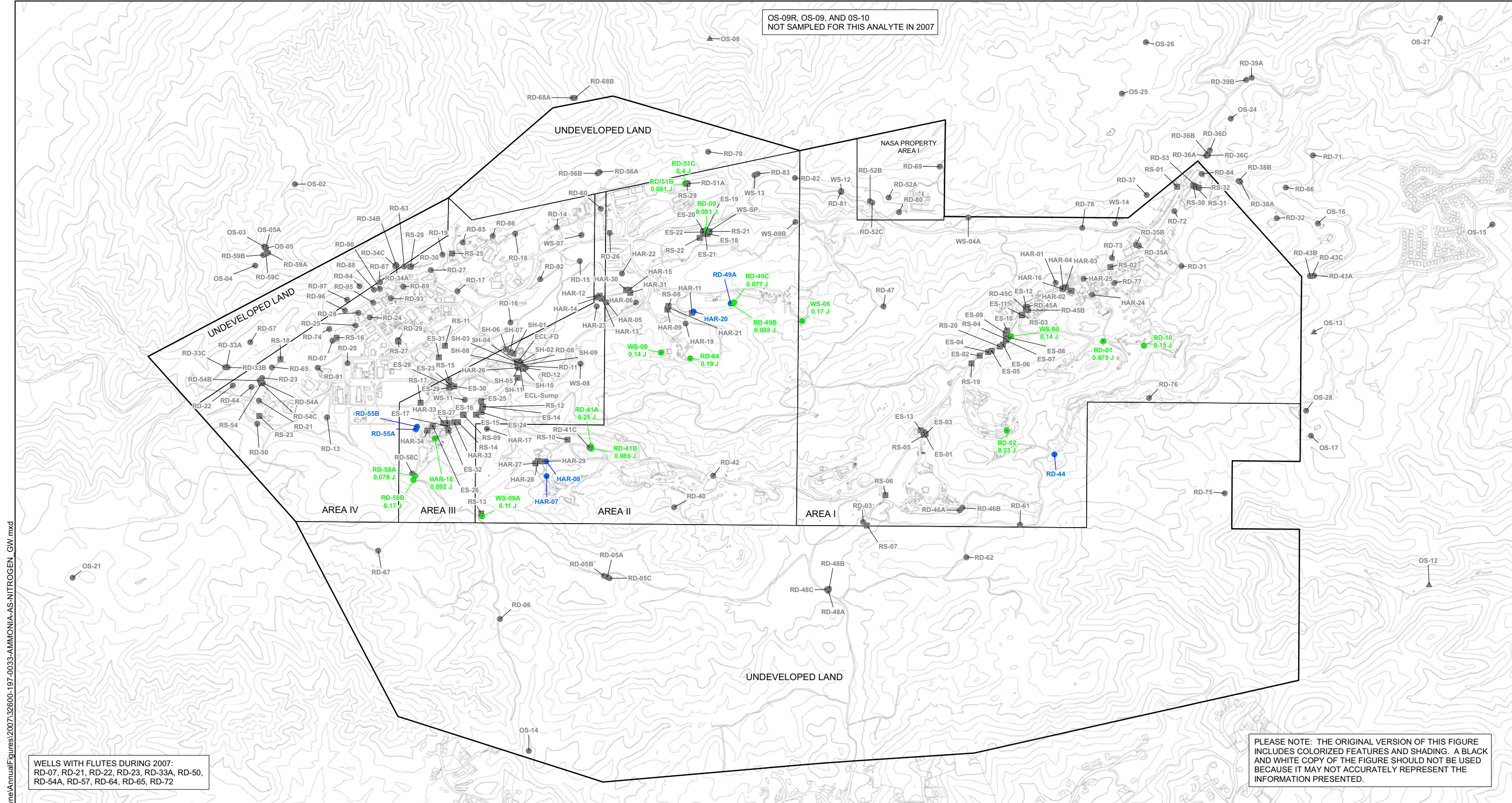
**MAXIMUM CONCENTRATION OF  
 1,1,2-TRICHLORO-1,2,2-TRIFLUORO-  
 ETHANE IN GROUNDWATER, 2007**

SCALE: AS SHOWN  
 FEBRUARY 2008

**FIGURE 32**

G:\Graphics\Projects\AnnualFigures\2007\32600-197-0032-1-1-2-TRICHLORO-1,2,2-TRIFLUOROETHANE.mxd

OS-09R, OS-09, AND OS-10  
NOT SAMPLED FOR THIS ANALYTE IN 2007



WELLS WITH FLUTES DURING 2007:  
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
RD-54A, RD-57, RD-64, RD-65, RD-72

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**

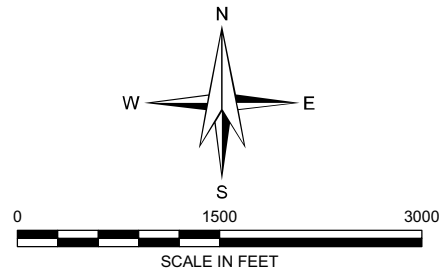
- WELL TYPE**
- CHATSWORTH FORMATION MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - SHALLOW MONITORING WELL
  - ▣ SHALLOW EXTRACTION WELL
  - △ SPRING
  - PROPERTY BOUNDARY LINE

- 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).

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.



ANNUAL GROUNDWATER MONITORING REPORT, 2007

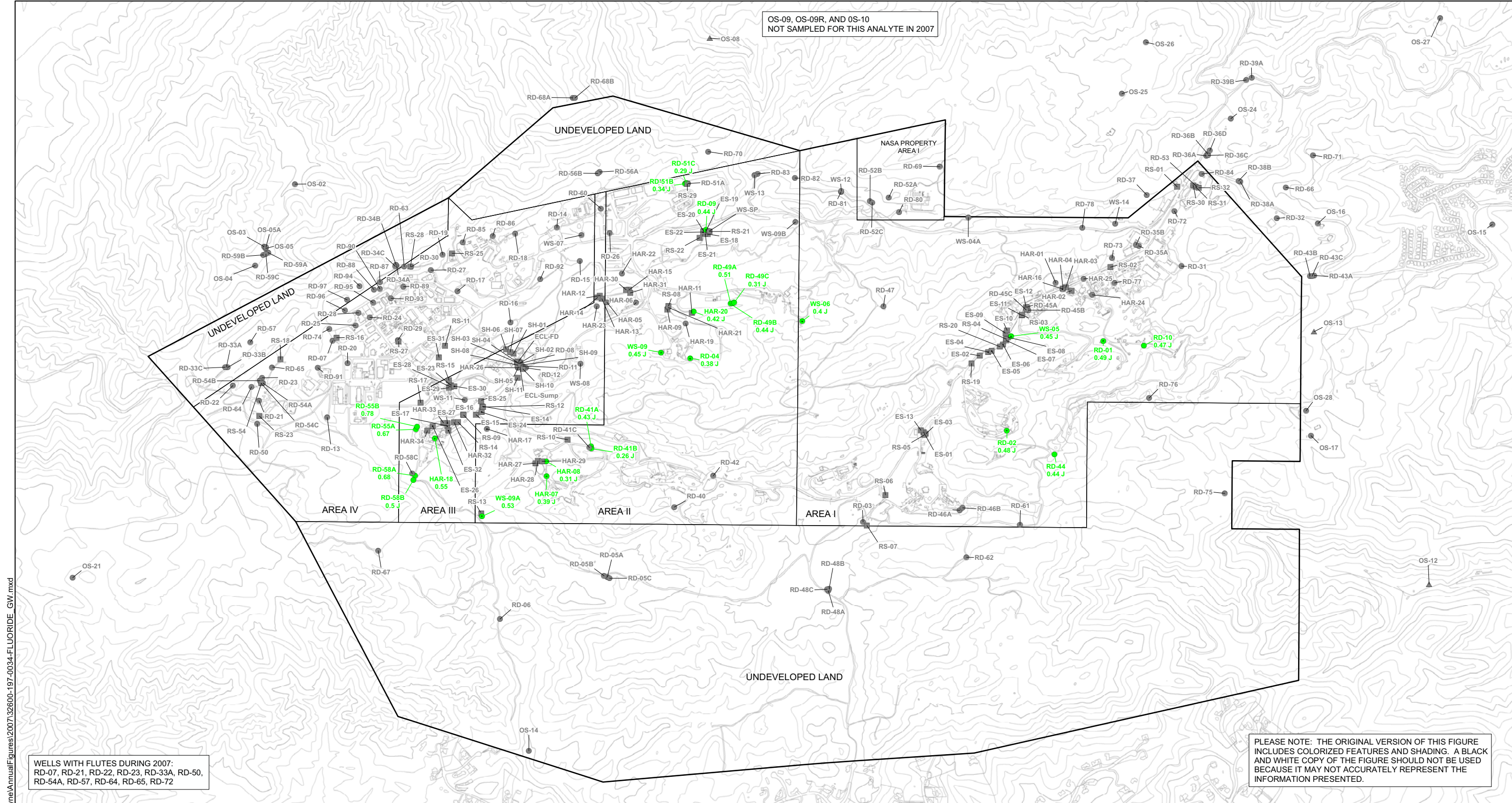
**HALEY & ALDRICH** THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

**MAXIMUM CONCENTRATION OF AMMONIA AS NITROGEN IN GROUNDWATER, 2007**

SCALE: AS SHOWN  
FEBRUARY 2008

G:\Graphics\Projects\26472 - Boeing Rocketdyne\AnnualFigures\2007\32600-197-0033-AMMONIA-AS-NITROGEN\_GW.mxd

OS-09, OS-09R, AND OS-10  
NOT SAMPLED FOR THIS ANALYTE IN 2007



WELLS WITH FLUTES DURING 2007:  
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
RD-54A, RD-57, RD-64, RD-65, RD-72

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**

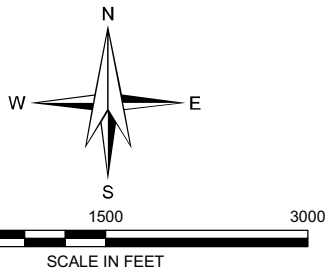
- WELL TYPE**
- CHATSWORTH FORMATION MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - SHALLOW MONITORING WELL
  - ▣ SHALLOW EXTRACTION WELL
  - △ SPRING
  - PROPERTY BOUNDARY LINE

- 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).

THE CALIFORNIA MAXIMUM CONTAMINANT LEVEL  
FOR FLUORIDE IN DRINKING WATER IS 2 MG/L.

ONLY DATA FROM PRIMARY SAMPLES  
ARE PRESENTED ON THIS FIGURE.



ANNUAL GROUNDWATER MONITORING REPORT, 2007



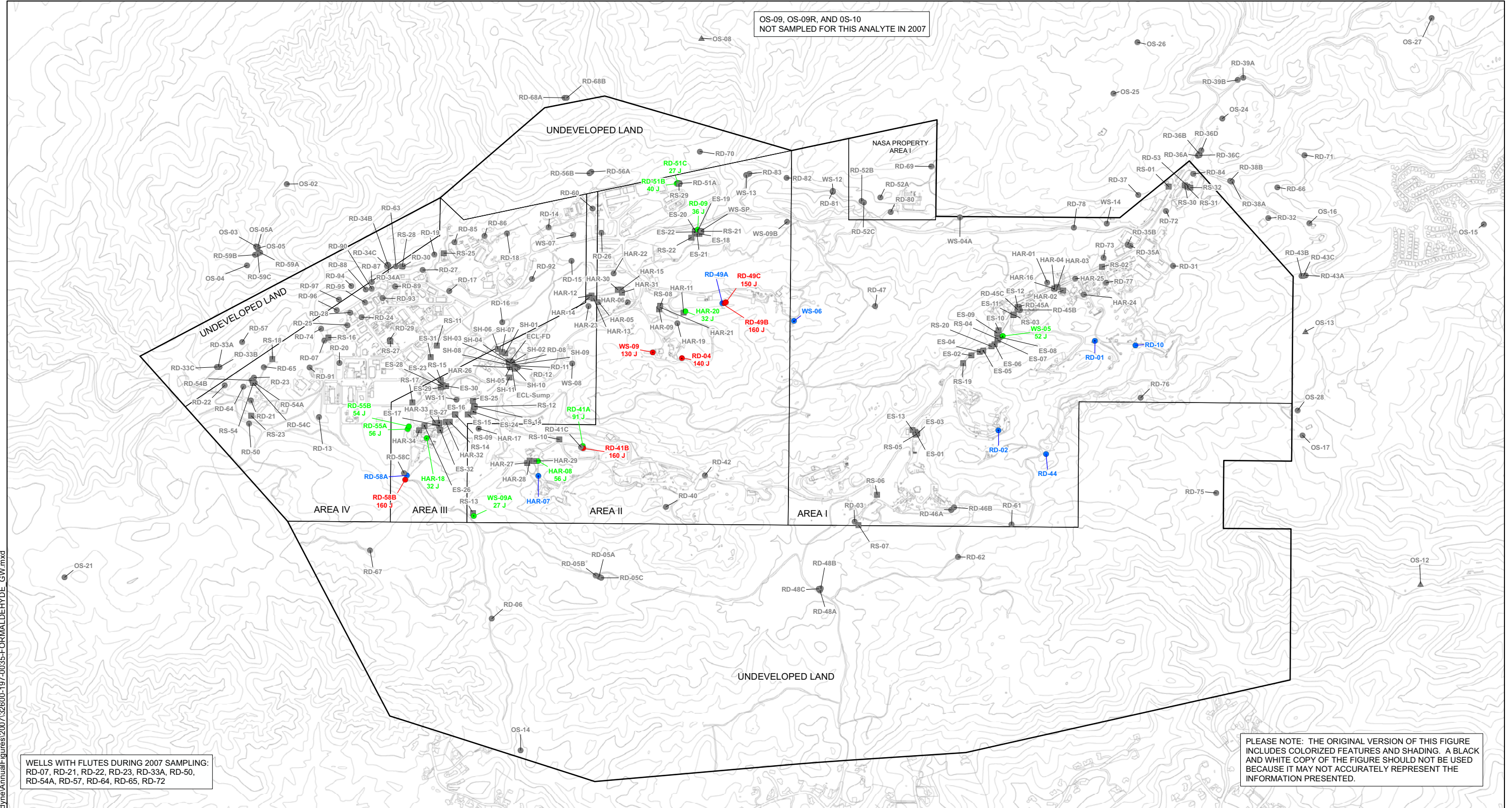
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

**MAXIMUM CONCENTRATION OF  
FLUORIDE  
IN GROUNDWATER, 2007**

SCALE: AS SHOWN  
FEBRUARY 2008

G:\Graphics\Projects\26472 - Boeing Rockeddyne\AnnualFigures\2007\32600-197-0034-FLUORIDE\_GW.mxd

OS-09, OS-09R, AND OS-10  
NOT SAMPLED FOR THIS ANALYTE IN 2007



WELLS WITH FLUTES DURING 2007 SAMPLING:  
RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
RD-54A, RD-57, RD-64, RD-65, RD-72

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**

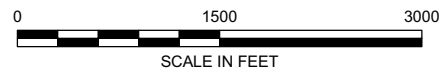
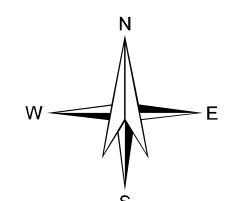
- WELL TYPE**
- CHATSWORTH FORMATION MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - SHALLOW MONITORING WELL
  - ▣ SHALLOW EXTRACTION WELL
  - △ SPRING
  - PROPERTY BOUNDARY LINE

- 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).

THE CALIFORNIA NOTIFICATION LEVEL FOR FORMALDEHYDE IN DRINKING WATER IS 100 UG/L.

ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.



ANNUAL GROUNDWATER MONITORING REPORT, 2007

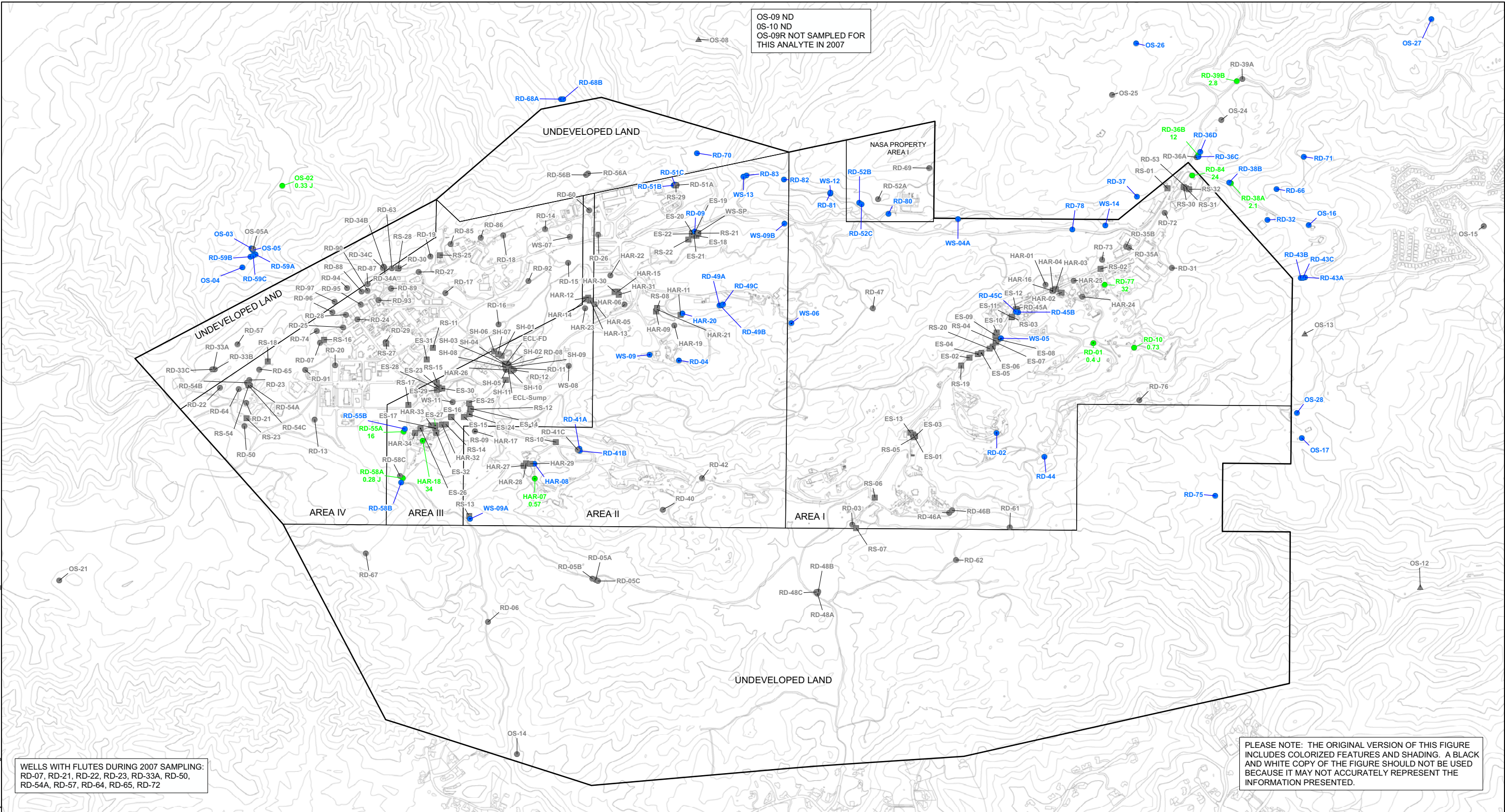
**HALEY & ALDRICH** THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

**MAXIMUM CONCENTRATION OF FORMALDEHYDE IN GROUNDWATER, 2007**

SCALE: AS SHOWN  
FEBRUARY 2008

G:\Graphics\Projects\AnnualFigures\2007\32600-197-0035-FORMALDEHYDE\_GW.mxd

OS-09 ND  
 OS-10 ND  
 OS-09R NOT SAMPLED FOR  
 THIS ANALYTE IN 2007



WELLS WITH FLUTES DURING 2007 SAMPLING:  
 RD-07, RD-21, RD-22, RD-23, RD-33A, RD-50,  
 RD-54A, RD-57, RD-64, RD-65, RD-72

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**

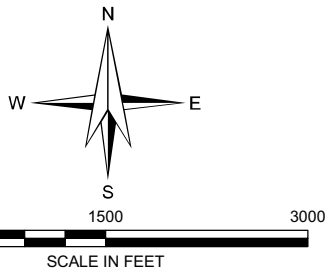
- WELL TYPE**
- CHATSWORTH FORMATION MONITORING WELL
  - ⊙ CHATSWORTH FORMATION EXTRACTION WELL
  - SHALLOW MONITORING WELL
  - ▣ SHALLOW EXTRACTION WELL
  - △ SPRING
  - PROPERTY BOUNDARY LINE

- 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).

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.



ANNUAL GROUNDWATER MONITORING REPORT, 2007



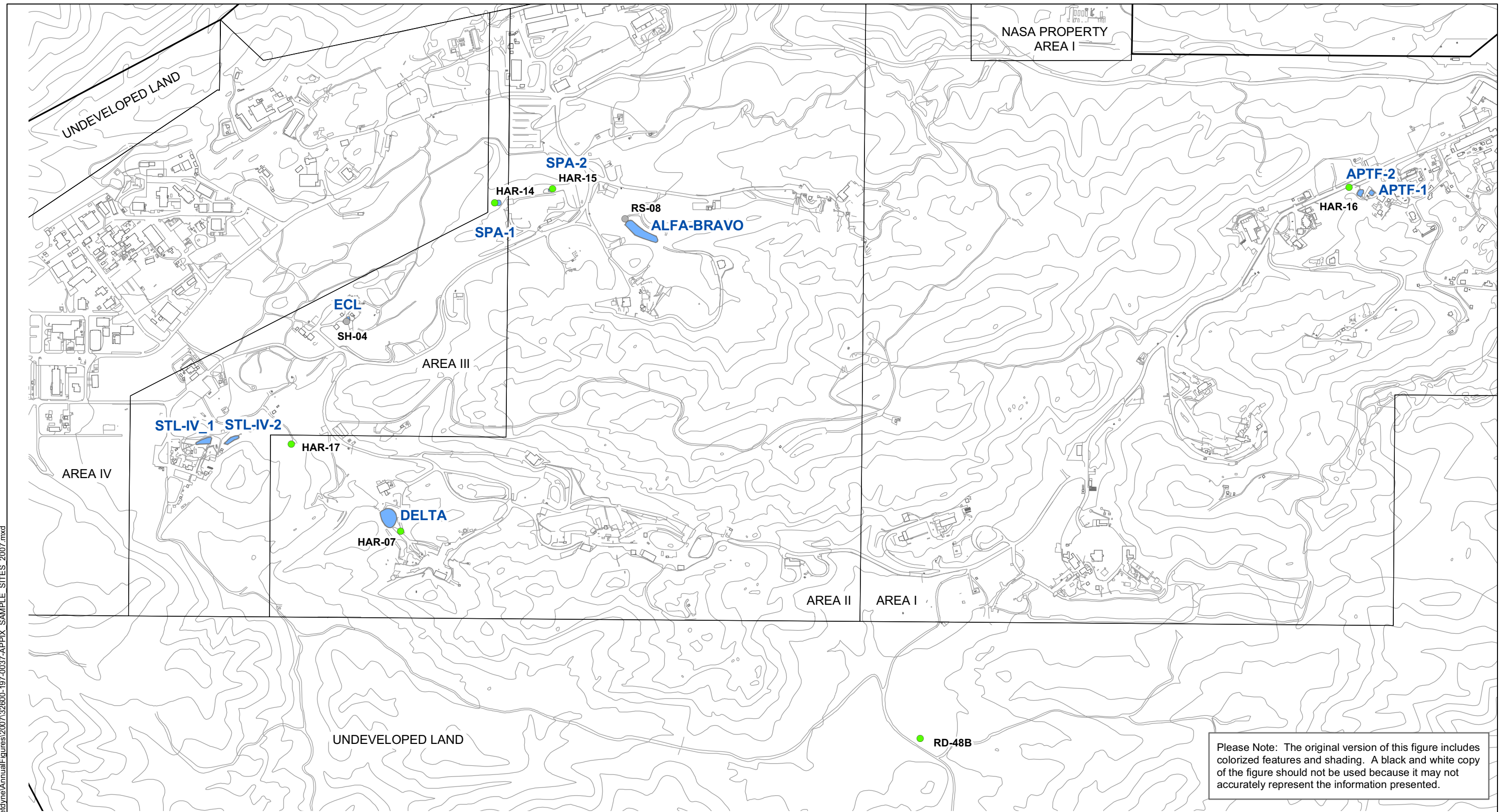
THE BOEING COMPANY  
 SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

**MAXIMUM CONCENTRATION OF  
 NITRATE AS NO3  
 IN GROUNDWATER, 2007**

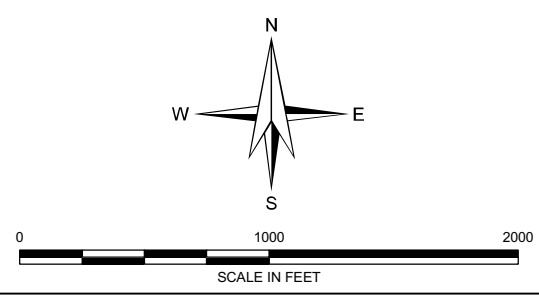
SCALE: AS SHOWN  
 FEBRUARY 2008

G:\Graphics\Projects\26472 - Boeing Rocketdyne\AnnualFigures\2007\32600-197-0036-NITRATE-AS-NO3\_GW.mxd

G:\Graphics\Projects\26472\_Boeing\_Rocketdyne\AnnualFigures\2007\32600-197-0037-APPX\_SAMPLE\_SITES\_2007.mxd



- LEGEND**
- SAMPLED
  - NOT SAMPLED
  - RCRA IMPOUNDMENT



Please Note: The original version of this figure includes colored 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, 2007

**HALEY & ALDRICH** THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

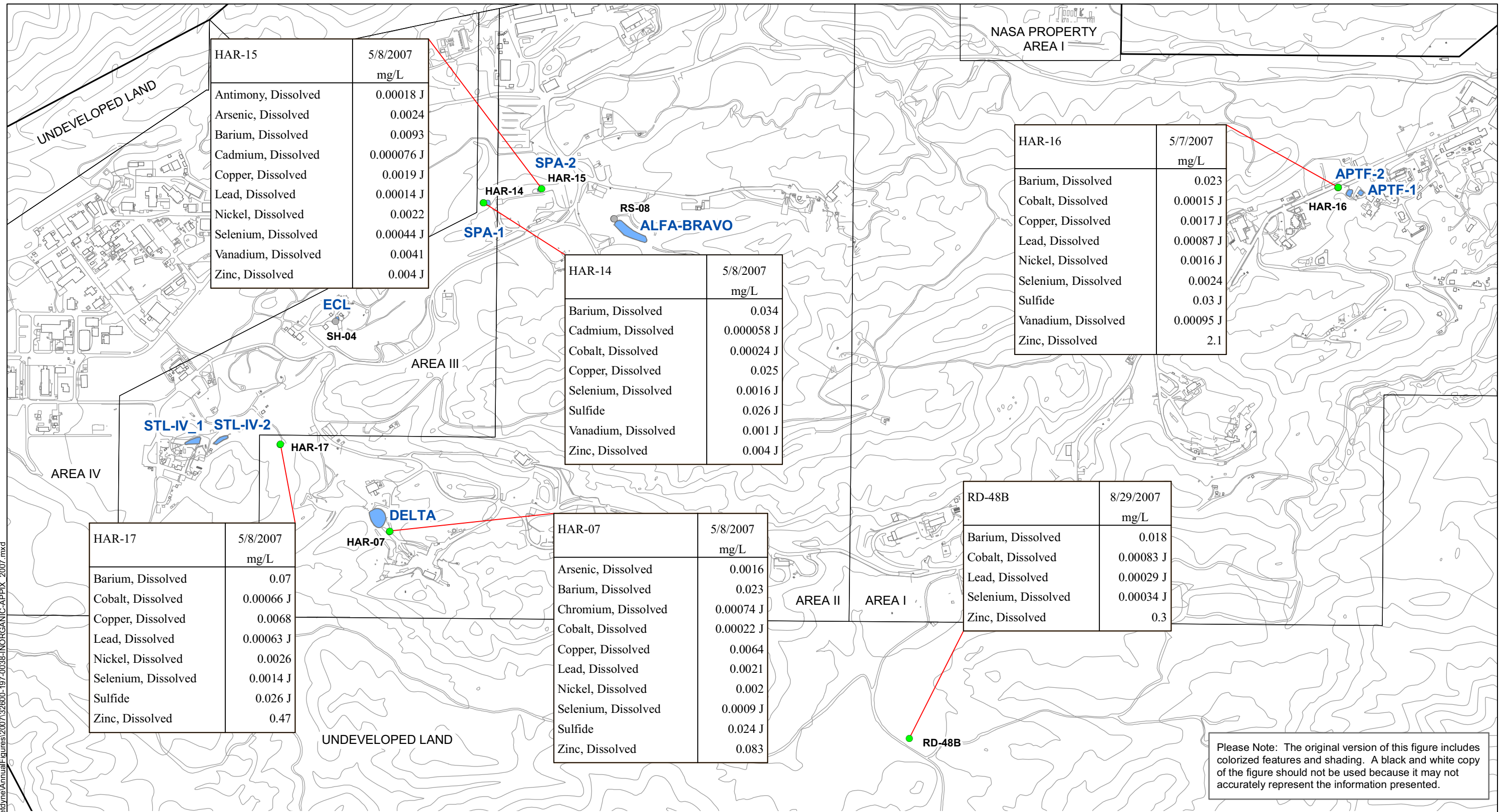
LOCATION OF WELLS  
SAMPLED FOR APPENDIX IX  
CONSTITUENTS DURING 2007

SCALE: AS SHOWN  
FEBRUARY 2008

**FIGURE 37**



G:\Graphics\Projects\26472 - Boeing Rocketdyne\AnnualFigures\2007\32800-197-0038-INORGANIC-APPX\_2007.mxd



HAR-15	5/8/2007 mg/L
Antimony, Dissolved	0.00018 J
Arsenic, Dissolved	0.0024
Barium, Dissolved	0.0093
Cadmium, Dissolved	0.000076 J
Copper, Dissolved	0.0019 J
Lead, Dissolved	0.00014 J
Nickel, Dissolved	0.0022
Selenium, Dissolved	0.00044 J
Vanadium, Dissolved	0.0041
Zinc, Dissolved	0.004 J

HAR-14	5/8/2007 mg/L
Barium, Dissolved	0.034
Cadmium, Dissolved	0.000058 J
Cobalt, Dissolved	0.00024 J
Copper, Dissolved	0.025
Selenium, Dissolved	0.0016 J
Sulfide	0.026 J
Vanadium, Dissolved	0.001 J
Zinc, Dissolved	0.004 J

HAR-16	5/7/2007 mg/L
Barium, Dissolved	0.023
Cobalt, Dissolved	0.00015 J
Copper, Dissolved	0.0017 J
Lead, Dissolved	0.00087 J
Nickel, Dissolved	0.0016 J
Selenium, Dissolved	0.0024
Sulfide	0.03 J
Vanadium, Dissolved	0.00095 J
Zinc, Dissolved	2.1

HAR-17	5/8/2007 mg/L
Barium, Dissolved	0.07
Cobalt, Dissolved	0.00066 J
Copper, Dissolved	0.0068
Lead, Dissolved	0.00063 J
Nickel, Dissolved	0.0026
Selenium, Dissolved	0.0014 J
Sulfide	0.026 J
Zinc, Dissolved	0.47

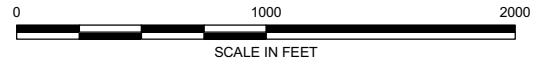
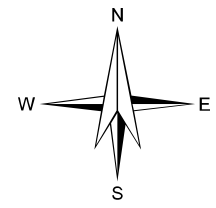
HAR-07	5/8/2007 mg/L
Arsenic, Dissolved	0.0016
Barium, Dissolved	0.023
Chromium, Dissolved	0.00074 J
Cobalt, Dissolved	0.00022 J
Copper, Dissolved	0.0064
Lead, Dissolved	0.0021
Nickel, Dissolved	0.002
Selenium, Dissolved	0.0009 J
Sulfide	0.024 J
Zinc, Dissolved	0.083

RD-48B	8/29/2007 mg/L
Barium, Dissolved	0.018
Cobalt, Dissolved	0.00083 J
Lead, Dissolved	0.00029 J
Selenium, Dissolved	0.00034 J
Zinc, Dissolved	0.3

- LEGEND**
- SAMPLED
  - NOT SAMPLED
  - 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).

CONCENTRATIONS OF INORGANICS (METALS, SULFIDE, AND CYANIDE) ARE IN mg/L. FOR METALS RESULTS, ONLY DETECTED DISSOLVED METALS RESULTS ARE PRESENTED ON THIS FIGURE.



Please Note: The original version of this figure includes colored features and shading. A black and white copy of the figure should not be used because it may not accurately represent the information presented.

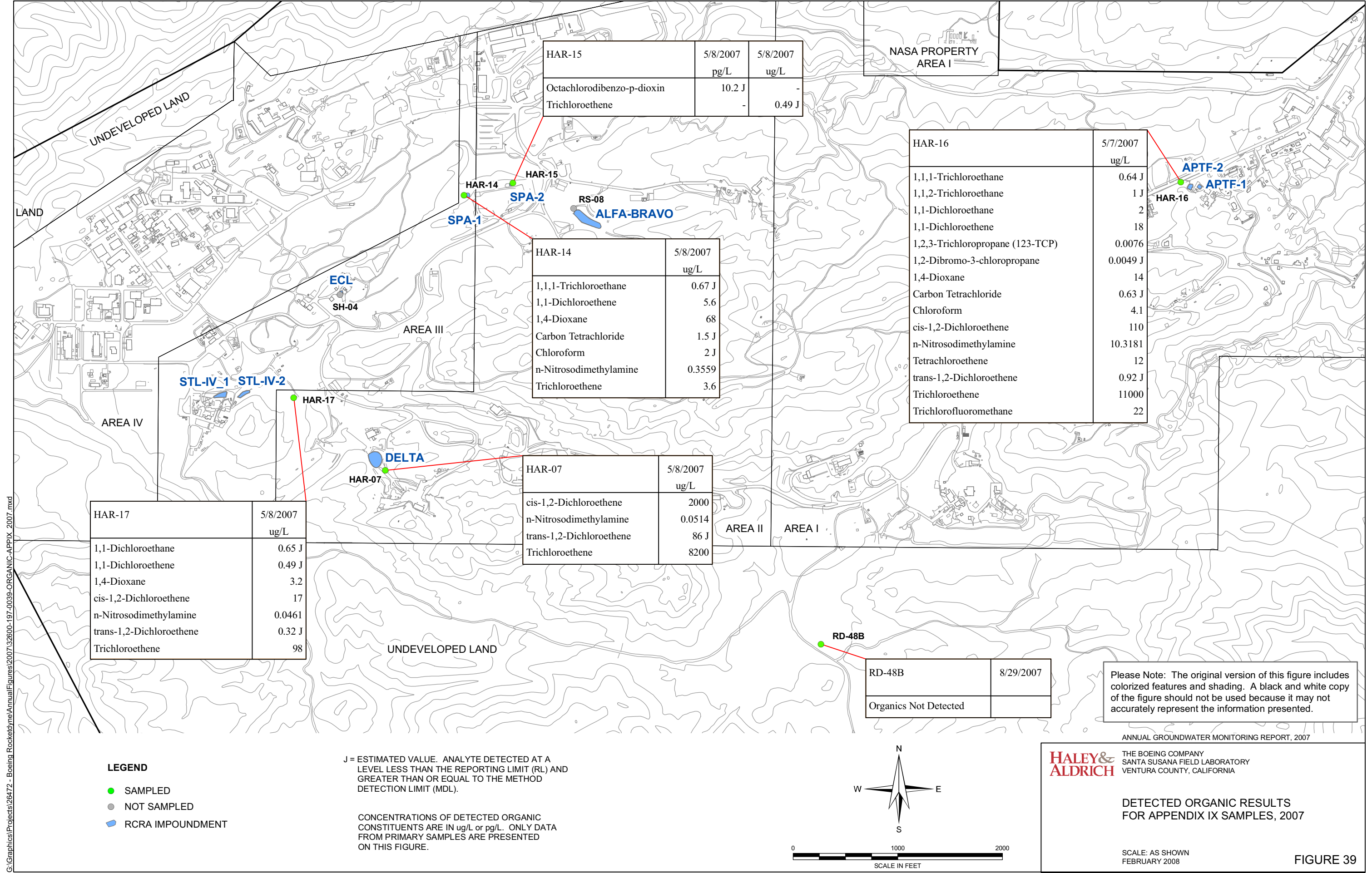
ANNUAL GROUNDWATER MONITORING REPORT, 2007

**HALEY & ALDRICH** THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

DETECTED INORGANIC RESULTS  
FOR APPENDIX IX SAMPLES, 2007

SCALE: AS SHOWN  
FEBRUARY 2008

**FIGURE 38**



HAR-15	5/8/2007	5/8/2007
	pg/L	ug/L
Octachlorodibenzo-p-dioxin	10.2 J	-
Trichloroethene	-	0.49 J

NASA PROPERTY  
AREA I

HAR-16	5/7/2007
	ug/L
1,1,1-Trichloroethane	0.64 J
1,1,2-Trichloroethane	1 J
1,1-Dichloroethane	2
1,1-Dichloroethene	18
1,2,3-Trichloropropane (123-TCP)	0.0076
1,2-Dibromo-3-chloropropane	0.0049 J
1,4-Dioxane	14
Carbon Tetrachloride	0.63 J
Chloroform	4.1
cis-1,2-Dichloroethene	110
n-Nitrosodimethylamine	10.3181
Tetrachloroethene	12
trans-1,2-Dichloroethene	0.92 J
Trichloroethene	11000
Trichlorofluoromethane	22

HAR-14	5/8/2007
	ug/L
1,1,1-Trichloroethane	0.67 J
1,1-Dichloroethene	5.6
1,4-Dioxane	68
Carbon Tetrachloride	1.5 J
Chloroform	2 J
n-Nitrosodimethylamine	0.3559
Trichloroethene	3.6

HAR-07	5/8/2007
	ug/L
cis-1,2-Dichloroethene	2000
n-Nitrosodimethylamine	0.0514
trans-1,2-Dichloroethene	86 J
Trichloroethene	8200

HAR-17	5/8/2007
	ug/L
1,1-Dichloroethane	0.65 J
1,1-Dichloroethene	0.49 J
1,4-Dioxane	3.2
cis-1,2-Dichloroethene	17
n-Nitrosodimethylamine	0.0461
trans-1,2-Dichloroethene	0.32 J
Trichloroethene	98

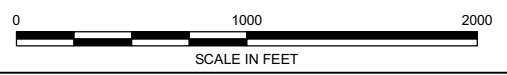
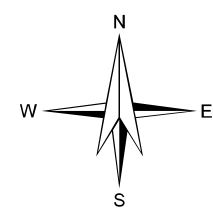
RD-48B	8/29/2007
Organics Not Detected	

Please Note: The original version of this figure includes colored 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**
- SAMPLED
  - NOT SAMPLED
  - 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).

CONCENTRATIONS OF DETECTED ORGANIC CONSTITUENTS ARE IN ug/L or pg/L. ONLY DATA FROM PRIMARY SAMPLES ARE PRESENTED ON THIS FIGURE.



ANNUAL GROUNDWATER MONITORING REPORT, 2007

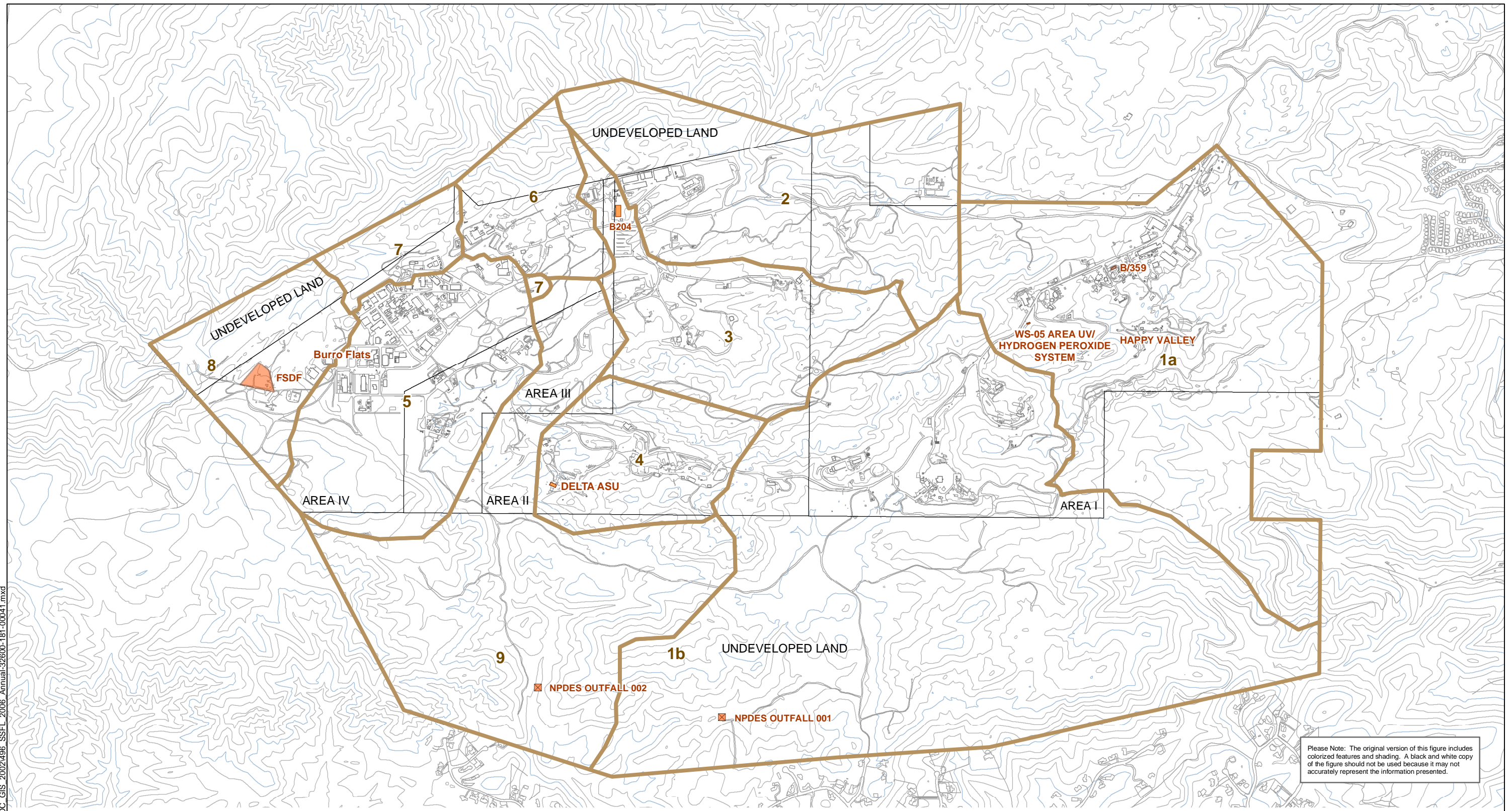
**HALEY & ALDRICH** THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

DETECTED ORGANIC RESULTS  
FOR APPENDIX IX SAMPLES, 2007

SCALE: AS SHOWN  
FEBRUARY 2008

G:\Graphics\Projects\26472\_Boeing\_Rocketdyne\AnnualFigures\2007\32600-197-0039-ORGANIC-APPX\_2007.mxd




G:\Graphics\Projects\26472\_Boeing Roc\ROC\_GIS\_2002\496\_SSEL\_2006\_Annual-32600-181-00041.mxd



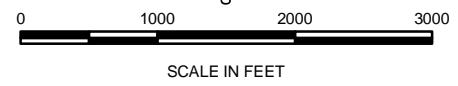
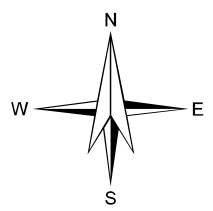
Please Note: The original version of this figure includes colored features and shading. A black and white copy of the figure should not be used because it may not accurately represent the information presented.

ANNUAL GROUNDWATER MONITORING REPORT, 2007

**LEGEND**

-  SMOU RFI GROUP
-  SITE AREA BOUNDARY
-  SITE FEATURE

NOTES:  
FSDF = FORMER SODIUM DISPOSAL FACILITY



**HALEY & ALDRICH**

THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY

**LOCATION OF REFERENCED SITE FEATURES**

SCALE: AS SHOWN  
FEBRUARY 2008

**FIGURE 40**

**REPORT ON  
ANNUAL GROUNDWATER MONITORING, 2007  
SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA**

**VOLUME II OF II**

for

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

by

**Haley & Aldrich, Inc.  
Tucson, Arizona**



**Lawrence P. Smith, P.G.  
Executive Vice President/COO  
California Professional Geologist No. 3944**



**Kurt J. Blust, P.G.  
Vice President  
California Professional Geologist No. 4828**



**Laura A. Davis, P.G.  
Senior Hydrogeologist  
California Professional Geologist No. 8334**

**File No. 32600/05/10/M490  
28 February 2008**

## TABLE OF CONTENTS

	Page
<b>LIST OF TABLES</b>	<b>ii</b>
<b>LIST OF FIGURES</b>	<b>iii</b>
<b>1. INTRODUCTION</b>	<b>1</b>
1.1 Report Organization	2
<b>2. GROUNDWATER MONITORING</b>	<b>3</b>
2.1 Groundwater Elevations and Flow Conditions	3
2.1.1 Near-Surface Groundwater	4
2.1.2 Chatsworth Formation	4
2.1.2.1 Groundwater Elevations and Flow Conditions	4
2.2 Groundwater Quality Results	6
2.2.1 Near-Surface Groundwater	9
2.2.1.1 LUFT Program	9
2.2.1.2 Evaluation Monitoring Program/Interim Corrective Action Program	9
2.2.1.3 Point of Compliance Program	10
2.2.1.4 Near-Surface Groundwater Radiochemistry Analyses	10
2.2.1.5 Other Monitoring	12
2.2.2 Chatsworth Formation	13
2.2.2.1 LUFT Program	14
2.2.2.2 Detection Monitoring Program	14
2.2.2.3 Evaluation Monitoring Program/Interim Corrective Action Program	16
2.2.2.4 Chatsworth Formation Operable Unit Constituents of Concern Analyses	18
2.2.2.5 Monitoring of Perimeter Wells and Private Off-Site Wells and Springs	21
2.2.2.6 Point of Compliance Program	23
2.2.2.7 Chatsworth Formation Radiochemistry Analyses	23
2.2.2.8 Other Monitoring	26
2.2.3 Appendix IX Sampling	30
2.2.3.1 Data Validation	30
2.2.3.2 Analytical Results	30
2.2.4 Perchlorate Characterization Sampling	33
2.2.4.1 Monitoring	33
2.2.4.2 Perchlorate Results	34
2.2.4.3 Bromide Results	35
2.2.4.4 General Mineral Results	35
2.2.4.5 Stable Isotope Results	35
2.2.5 Results of Third Quarter 2007 Verification Sampling	35
2.2.6 Proposed First Quarter 2008 Groundwater Monitoring Schedule	36
<b>3. REMEDIAL SYSTEMS</b>	<b>37</b>
3.1 Remedial Systems Activities	37
3.1.1 Treated Groundwater Volumes and Analytical Results	37
<b>4. SURFACE WATER DISCHARGE</b>	<b>39</b>
<b>REFERENCES</b>	<b>40</b>

**TABLE OF CONTENTS  
(Continued)**

**TABLES  
FIGURES**

**VOLUME II OF II**

- APPENDIX A** - Water Level Hydrographs
- APPENDIX B** - Groundwater Monitoring Schedule
- APPENDIX C** - Monitor Well Construction Data
- APPENDIX D** - Quality Assurance Assessment
- APPENDIX E** - Results of Radiological Analyses
- APPENDIX F** - Constituents of Concern and Perchlorate Concentration versus Time Plots
- APPENDIX G** - Surface Water Discharge and Permitted Groundwater Remediation Systems
- APPENDIX H** - Corrected Chemical Results

**LIST OF TABLES**

<b>Table No.</b>	<b>Title</b>
I.	Summary of Annual Rainfall Measured at the Santa Susana Field Laboratory, 1960-2007
II.	Summary of Water Level Data, 2007
III.	Summary of Results for Volatile Organic Compounds in Shallow Wells, 2007
IV.	Summary of Results for Volatile Organic Compounds in Chatsworth Formation Wells, 2007
V.	Summary of Analyses for Fuel Hydrocarbons, 2007
VI.	Summary of Analyses for Metal Constituents and Cyanide, 2007
VII.	Summary of Analyses for Semi-Volatile Organic Constituents, 2007
VIII.	Summary of Analyses for Perchlorate, 2007
IX.	Summary of Analyses for Gross Alpha, Gross Beta, Radium Isotopes, and Tritium Activities, 2007
X.	Summary of Analyses for Gamma-Emitting Radionuclides, 2007
XI.	Summary of Analyses for Appendix IX Constituents, 2007
XII.	Summary of Analyses for Constituents of Concern and Perchlorate, 2007
XIII.	Summary of Analyses for Inorganic Constituents, 2007

- XIV. Summary of Analyses for Polychlorinated Biphenyls, Dioxins, and Alcohols, RCRA Facility Investigations, 2007
- XV. Summary of Extraction Well Water Levels and Flow Rates, 2007
- XVI. Summary of Groundwater Extractions, Permitted Groundwater Remediation Facilities, 2007
- XVII. Summary of Water Quality Results for Permitted Groundwater Remediation Facilities, 2007

#### LIST OF FIGURES

<b>Figure No.</b>	<b>Title</b>
1.	Facility Location Map
2.	Locations of Wells, Springs, and Groundwater Reclamation Components
3.	Locations of Piezometers
4.	Chatsworth Formation Water Level Elevation Contour Map – October 2007
5.	Geologic Map
6.	Maximum Concentration of Trichloroethene in Near-Surface Groundwater, 2007
7.	Maximum Concentration of cis-1,2-Dichloroethene in Near-Surface Groundwater, 2007
8.	Maximum Concentration of Trichloroethene in Chatsworth Formation Groundwater, 2007
9.	Maximum Concentration of cis-1,2-Dichloroethene in Chatsworth Formation Groundwater, 2007
10.	Maximum Concentration of 1,1-Dichloroethene in Groundwater, 2007
11.	Maximum Concentration of trans-1,2-Dichloroethene in Groundwater, 2007
12.	Maximum Concentration of Tetrachloroethene in Groundwater, 2007
13.	Maximum Concentration of 1,4-Dioxane in Groundwater, 2007
14.	Maximum Concentration of Perchlorate in Groundwater, 2007
15.	Maximum Concentration of N-Nitrosodimethylamine (NDMA) in Groundwater, 2007

16. Maximum Concentration of Chloroform in Groundwater, 2007
17. Maximum Concentration of Carbon Tetrachloride in Groundwater, 2007
18. Maximum Concentration of Benzene in Groundwater, 2007
19. Maximum Concentration of Toluene in Groundwater, 2007
20. Maximum Concentration of Ethylbenzene in Groundwater, 2007
21. Maximum Concentration of m- & p-Xylenes in Groundwater, 2007
22. Maximum Concentration of o-Xylene in Groundwater, 2007
23. Maximum Concentration of 1,1-Dichloroethane in Groundwater, 2007
24. Maximum Concentration of 1,2-Dichloroethane in Groundwater, 2007
25. Maximum Concentration of Methylene Chloride in Groundwater, 2007
26. Maximum Concentration of 1,1,1-Trichloroethane in Groundwater, 2007

---

27. Maximum Concentration of 1,1,2-Trichloroethane in Groundwater, 2007
28. Maximum Concentration of Vinyl Chloride in Groundwater, 2007
29. Maximum Concentration of Methyl Ethyl Ketone in Groundwater, 2007
30. Maximum Concentration of Acetone in Groundwater, 2007
31. Maximum Concentration of Trichlorofluoromethane in Groundwater, 2007
32. Maximum Concentration of 1,1,2-Trichloro-1,2,2-Trifluoroethane in Groundwater, 2007
33. Maximum Concentration of Ammonia as Nitrogen in Groundwater, 2007
34. Maximum Concentration of Fluoride in Groundwater, 2007
35. Maximum Concentration of Formaldehyde in Groundwater, 2007
36. Maximum Concentration of Nitrate as NO<sub>3</sub> in Groundwater, 2007
37. Location of Wells Sampled for Appendix IX Constituents during 2007
38. Detected Inorganic Results for Appendix IX Samples, 2007
39. Detected Organic Results for Appendix IX Samples, 2007
40. Location of Referenced Site Features



**APPENDIX A**

**Water Level Hydrographs**

**APPENDIX A**  
**WATER LEVEL HYDROGRAPHS**

**TABLE OF CONTENTS**

**Figures**

Water Level Hydrographs

A-1 through A-256

FLUTe System Hydrographs

A-257 through A-274

**APPENDIX A  
WATER LEVEL HYDROGRAPHS**

**LIST OF HYDROGRAPHS**

***Shallow Wells***

<b>Figure</b>			<b>Well Identifier</b>
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***

<b>Figure</b>			<b>Well Identifier</b>
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-224	RD-80 through RD-97

**APPENDIX A  
WATER LEVEL HYDROGRAPHS**

**LIST OF HYDROGRAPHS**

***Chatsworth Formation Wells - continued***

<b>Figure</b>	<b>Well Identifier</b>
A-225 through A-229	HAR-01, and HAR-05 through HAR-08
A-230 through A-240	HAR-16 through HAR-26
A-241 through A-245	WS-04A through WS-08
A-246 through A-248	WS-09, WS-09A, WS-09B
A-249 through A-253	WS-11 through WS-14, and WS-SP
A-254 through A-256	OS-24 through OS-26

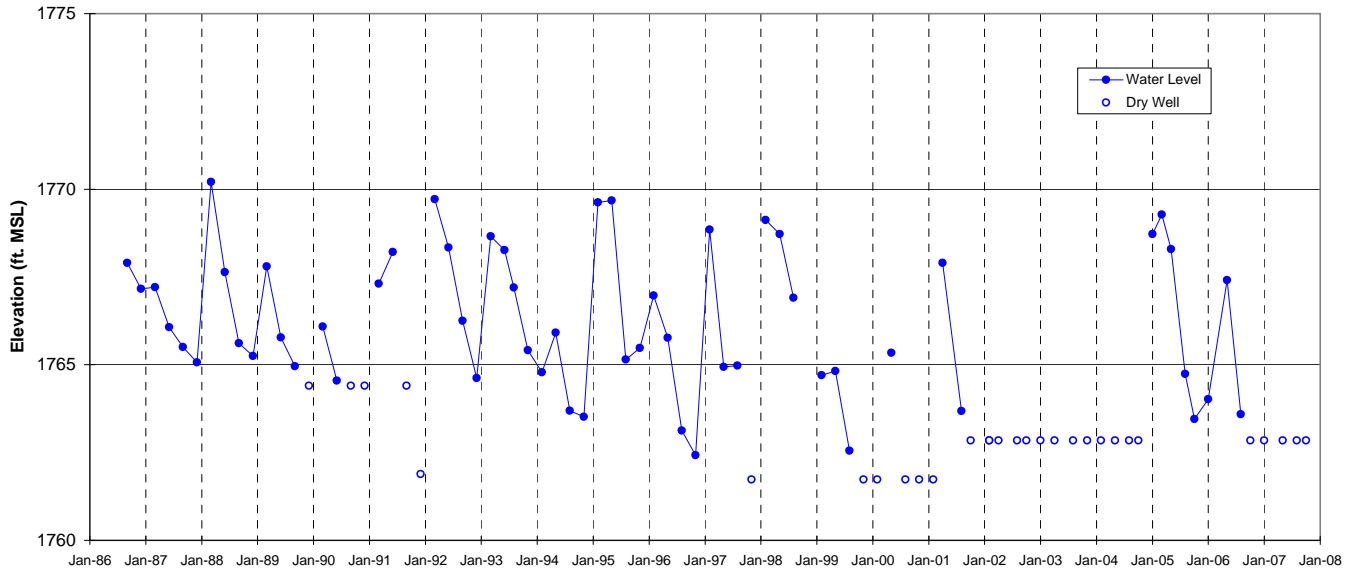
***FLUTe System Hydrographs***

<b>Figure</b>	<b>Well Identifier</b>
A-257	RD-10
A-258	RD-21
A-259	RD-22
A-260	RD-23
A-261	RD-31
A-262	RD-33A
A-263	RD-50
A-264	RD-53
A-265	RD-54A
A-266	RD-57
A-267	RD-64
A-268	RD-65
A-269	RD-72
A-270	RD-73
A-271	HAR-01
A-272	HAR-16
A-273	HAR-24
A-274	OS-24

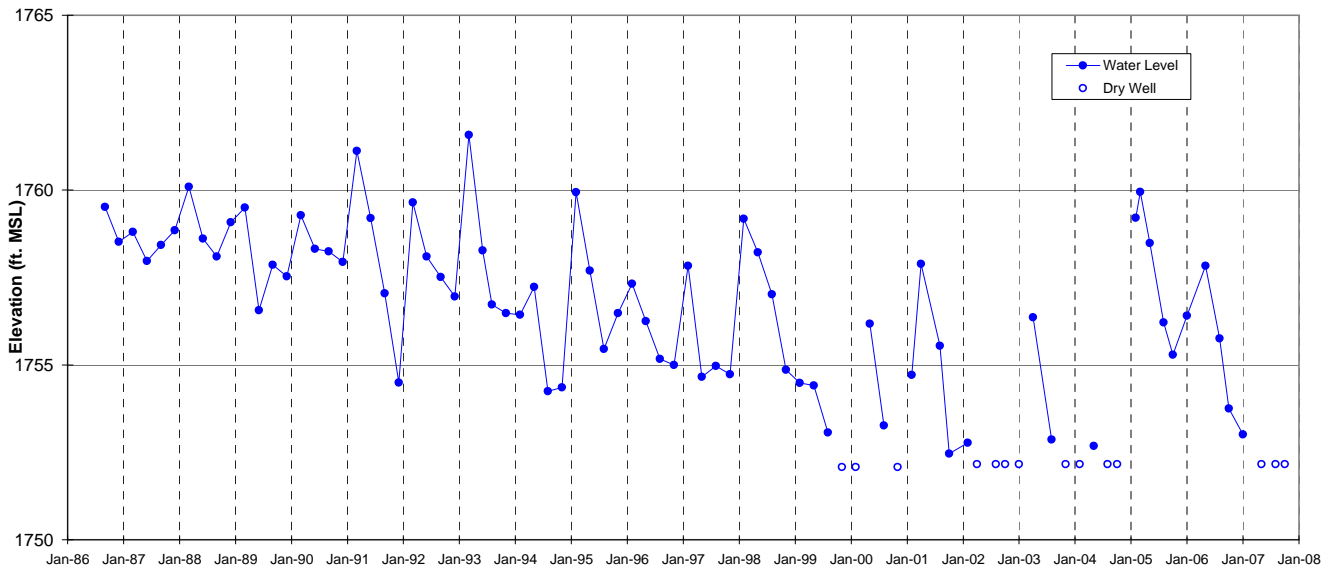
Note: FLUTe system hydrographs were not available for well RD-07 because the transducer was inoperable.

Water levels for the following types of ports are not graphed on FLUTe hydrographs:

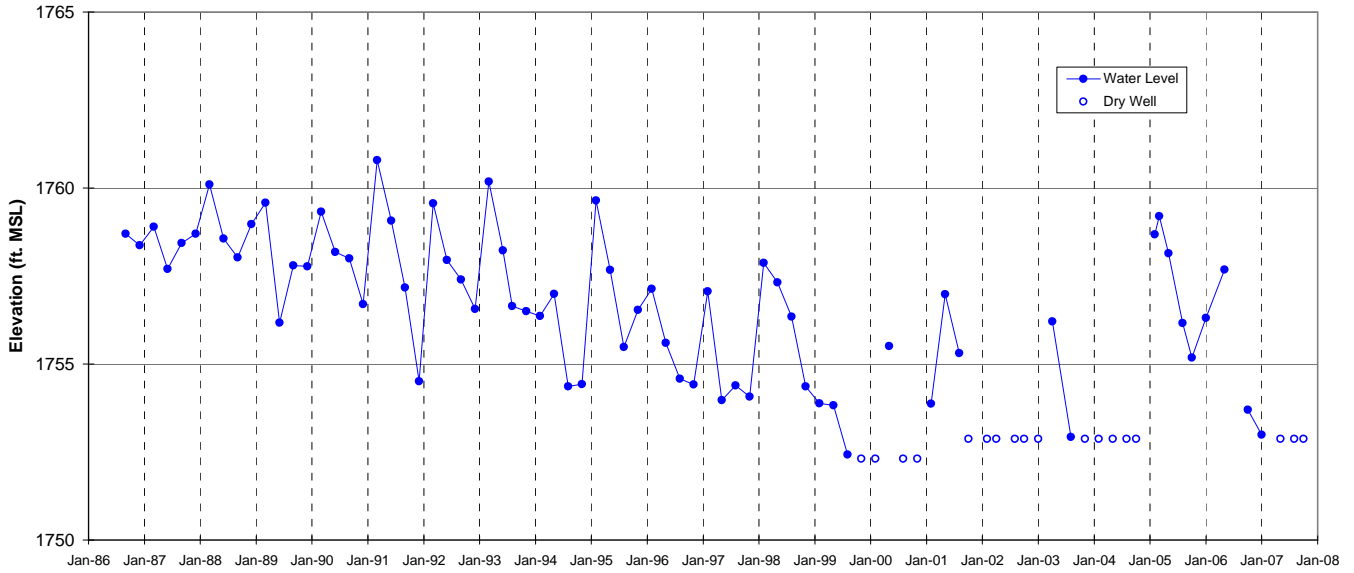
1. A port that has been consistently dry.
2. An unverted port.
3. A port with a consistently malfunctioning transducer.



WATER LEVEL HYDROGRAPH  
 Shallow Well SH-01  
**Figure A-1**

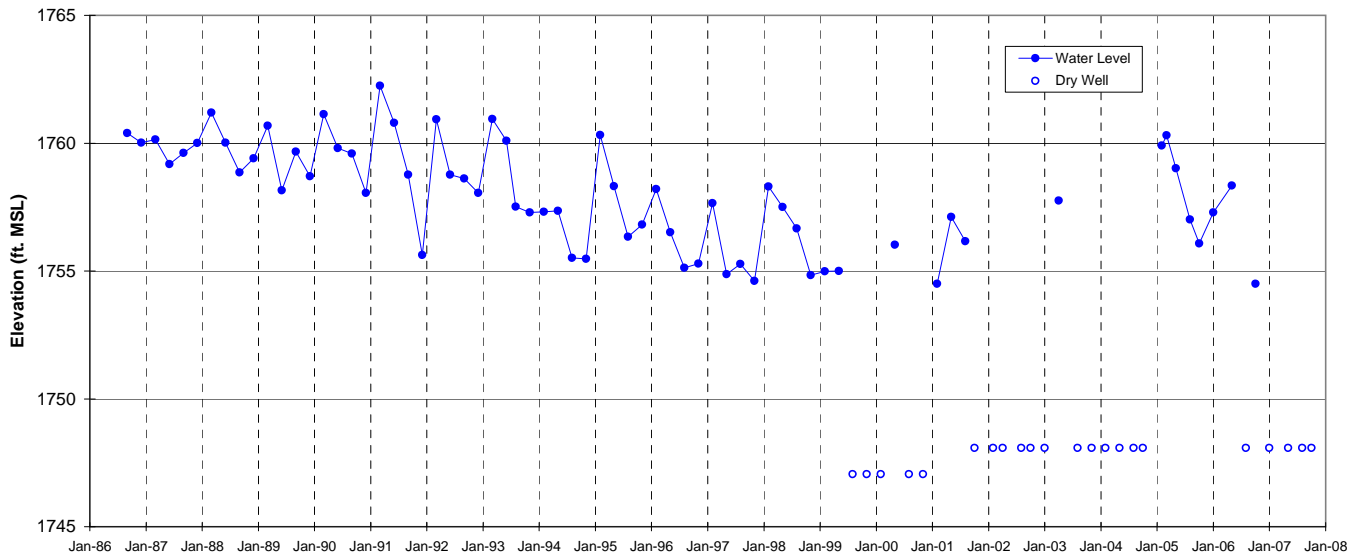


WATER LEVEL HYDROGRAPH  
 Shallow Well SH-02  
**Figure A-2**

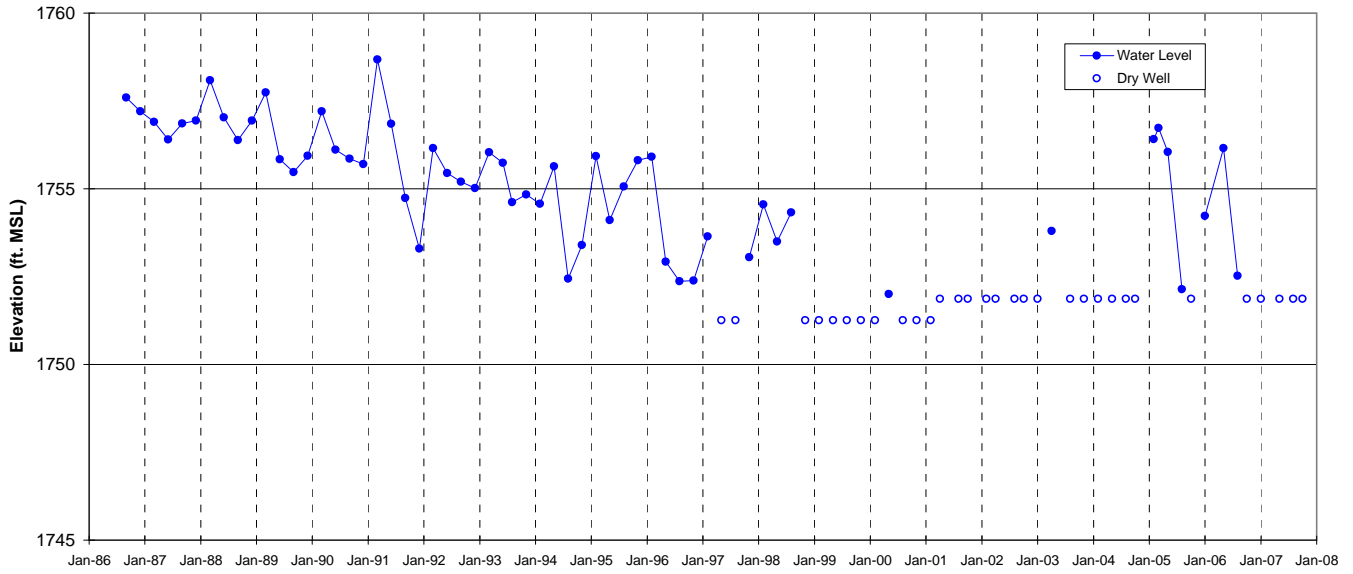


WATER LEVEL HYDROGRAPH  
 Shallow Well SH-03  
**Figure A-3**

Dry well elevations were corrected  
 in January 2007.

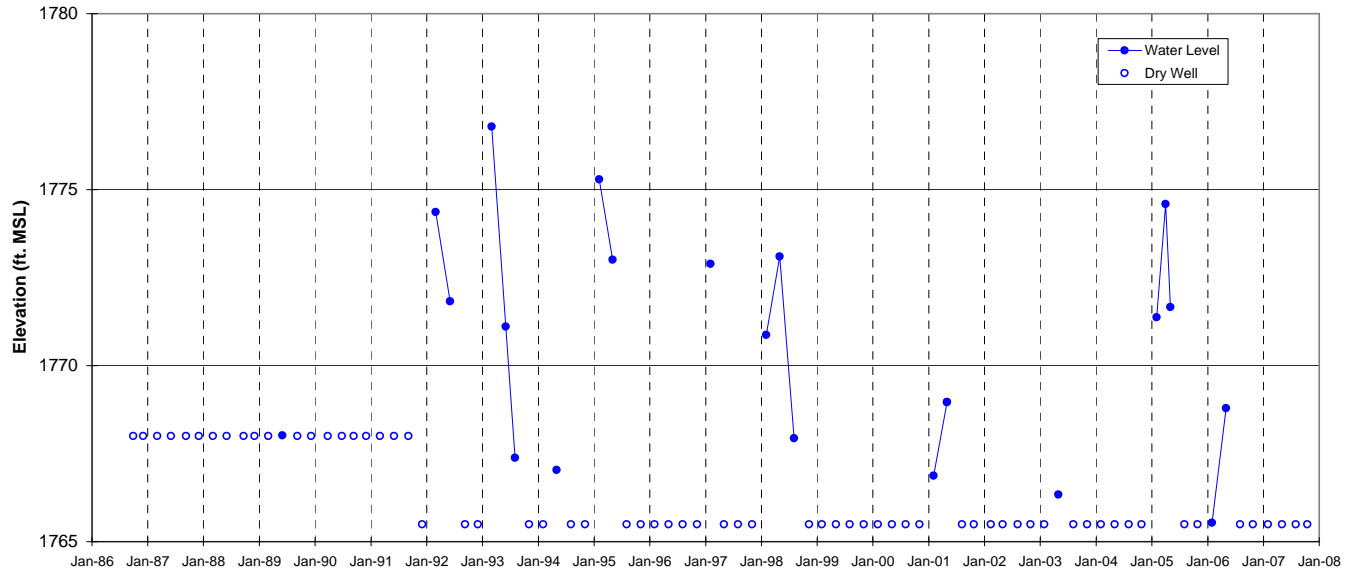


WATER LEVEL HYDROGRAPH  
 Shallow Well SH-04  
**Figure A-4**

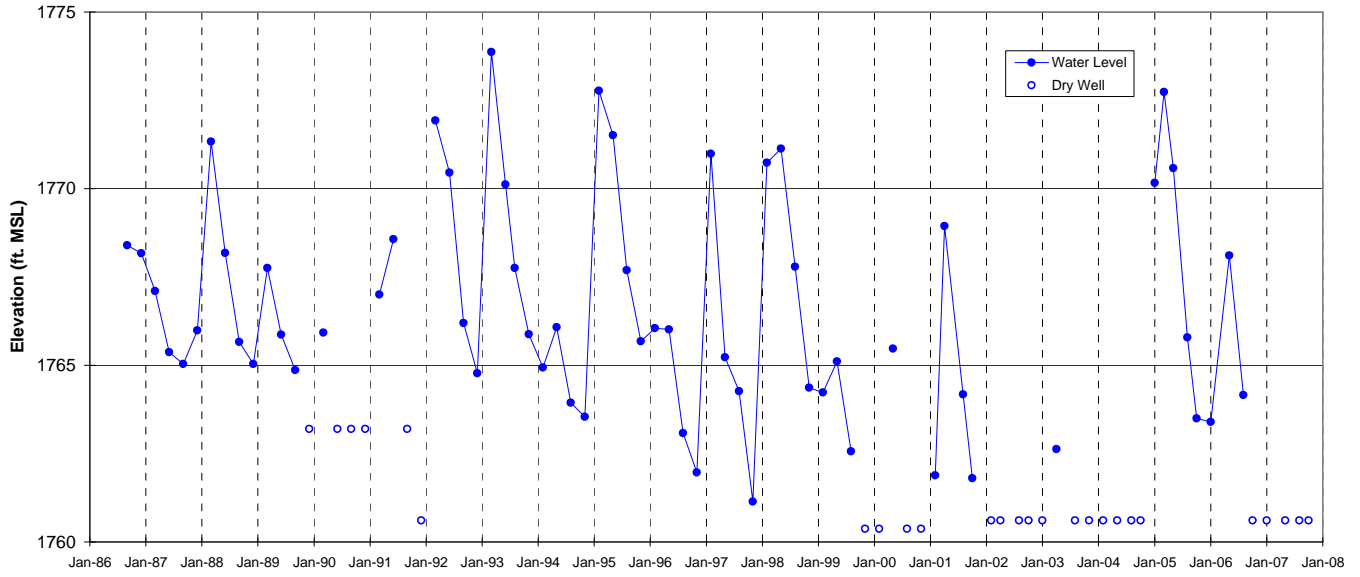


WATER LEVEL HYDROGRAPH  
Shallow Well SH-05  
Figure A-5

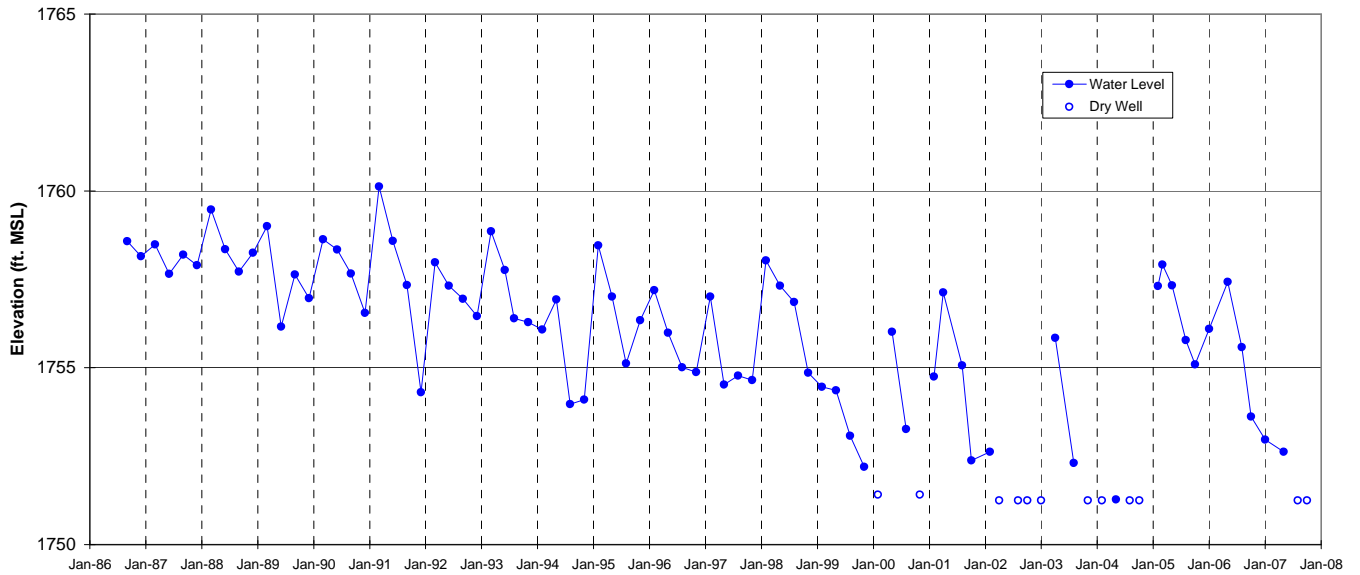
Dry well elevations were corrected  
in January 2007.



WATER LEVEL HYDROGRAPH  
Shallow Well SH-06  
Figure A-6

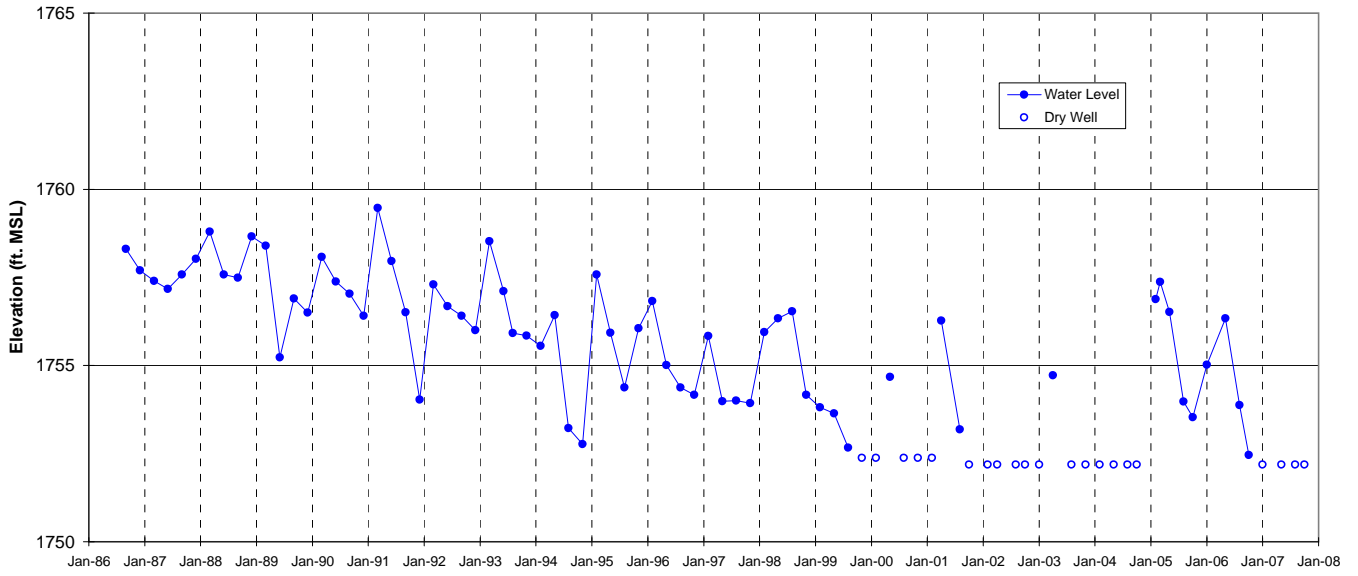


WATER LEVEL HYDROGRAPH  
 Shallow Well SH-07  
**Figure A-7**

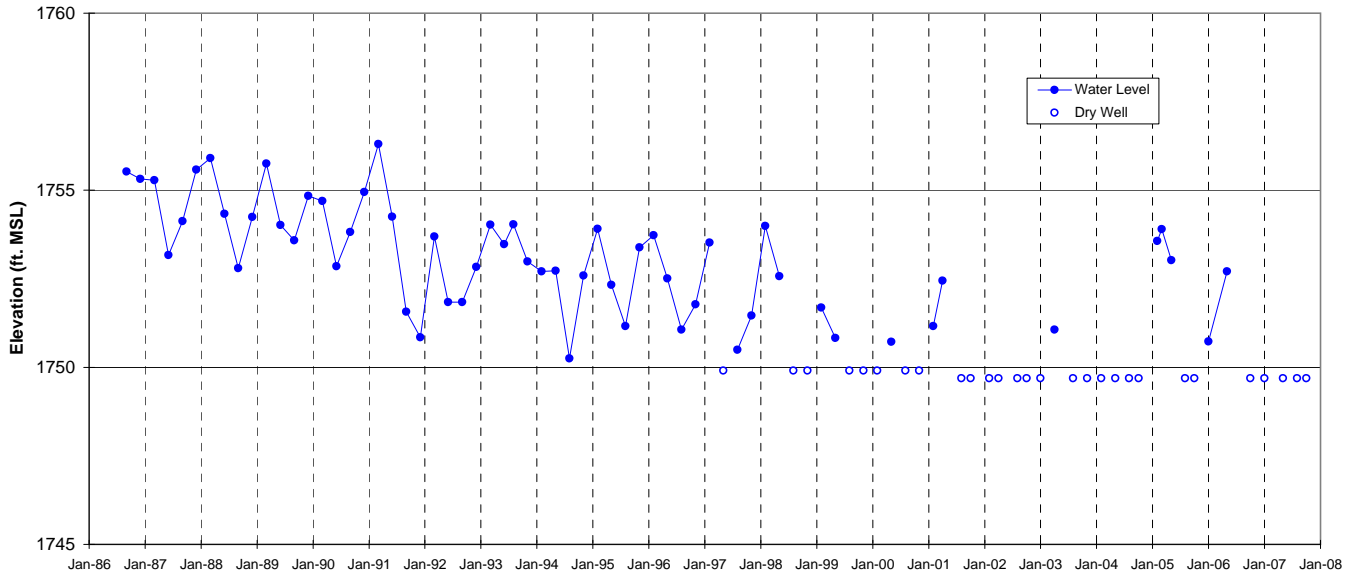


WATER LEVEL HYDROGRAPH  
 Shallow Well SH-08  
**Figure A-8**

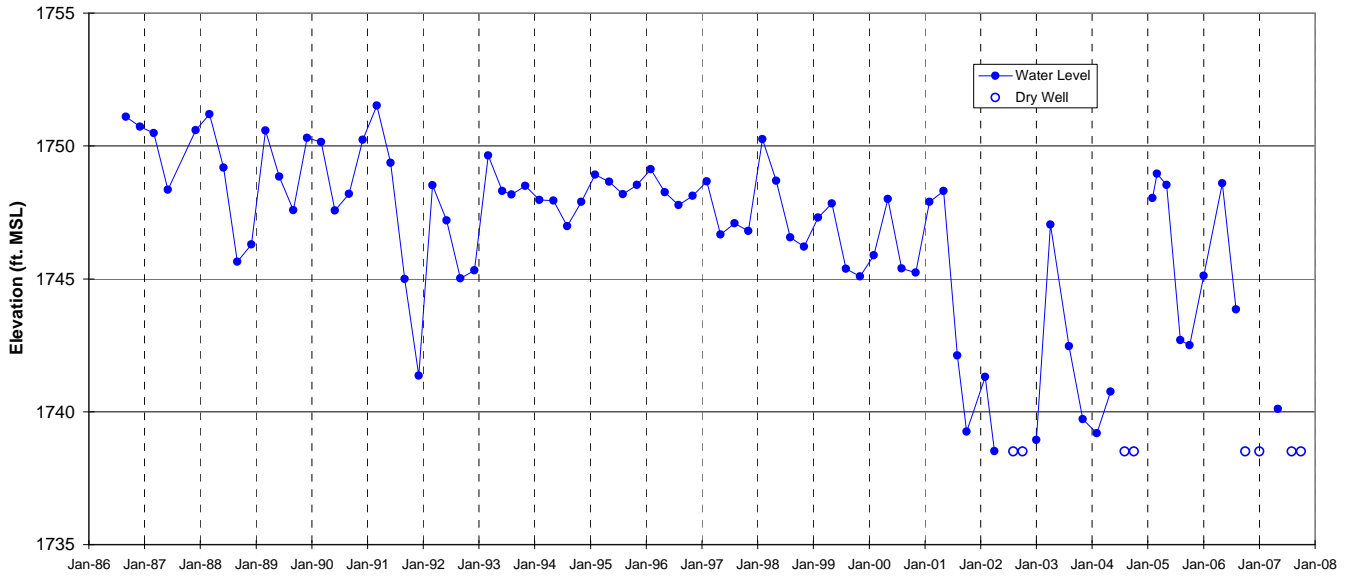




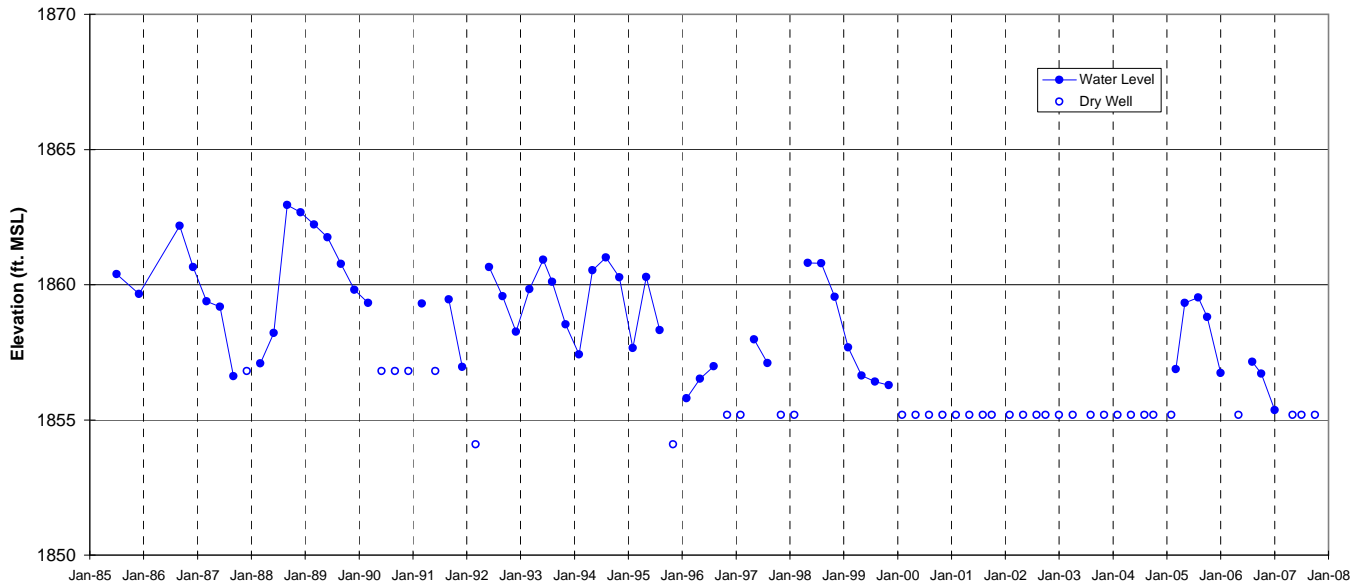
**Figure A-9**



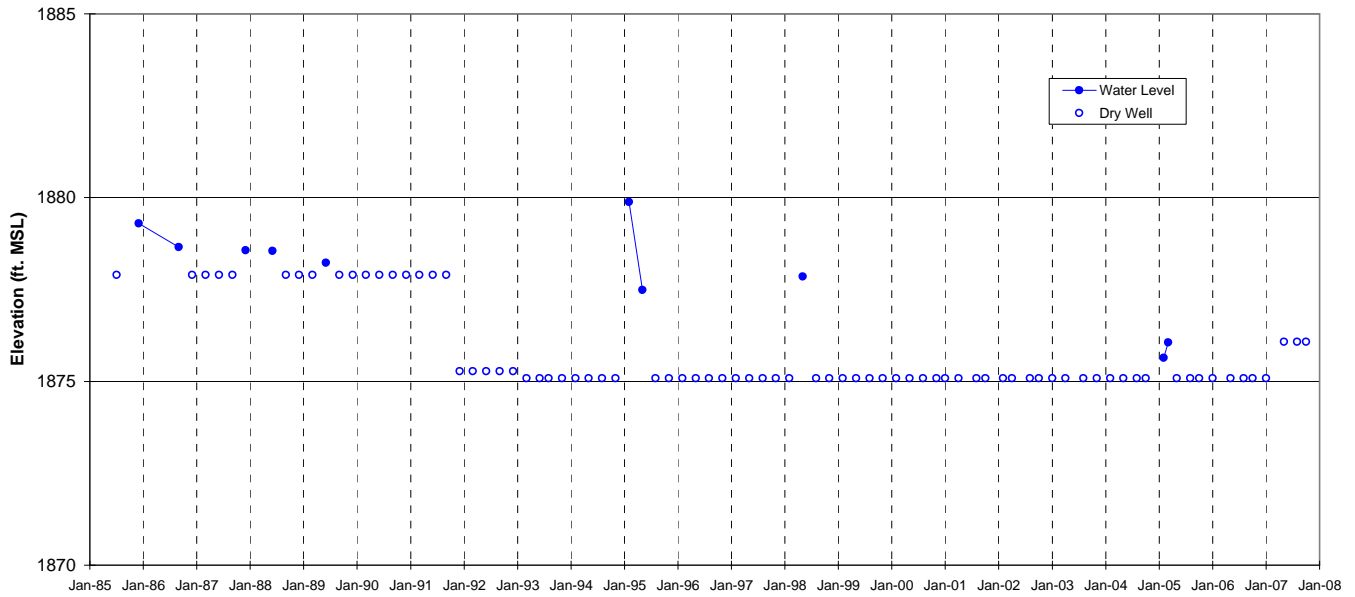
**Figure A-10**



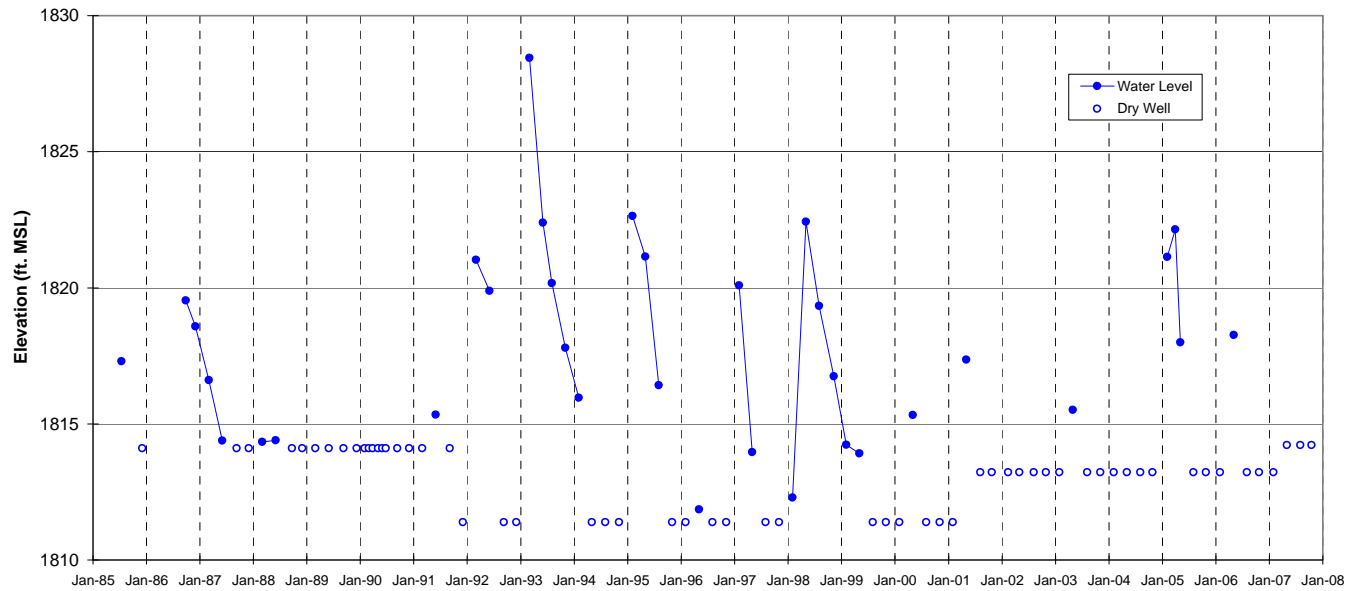
WATER LEVEL HYDROGRAPH  
 Shallow Well SH-11  
**Figure A-11**



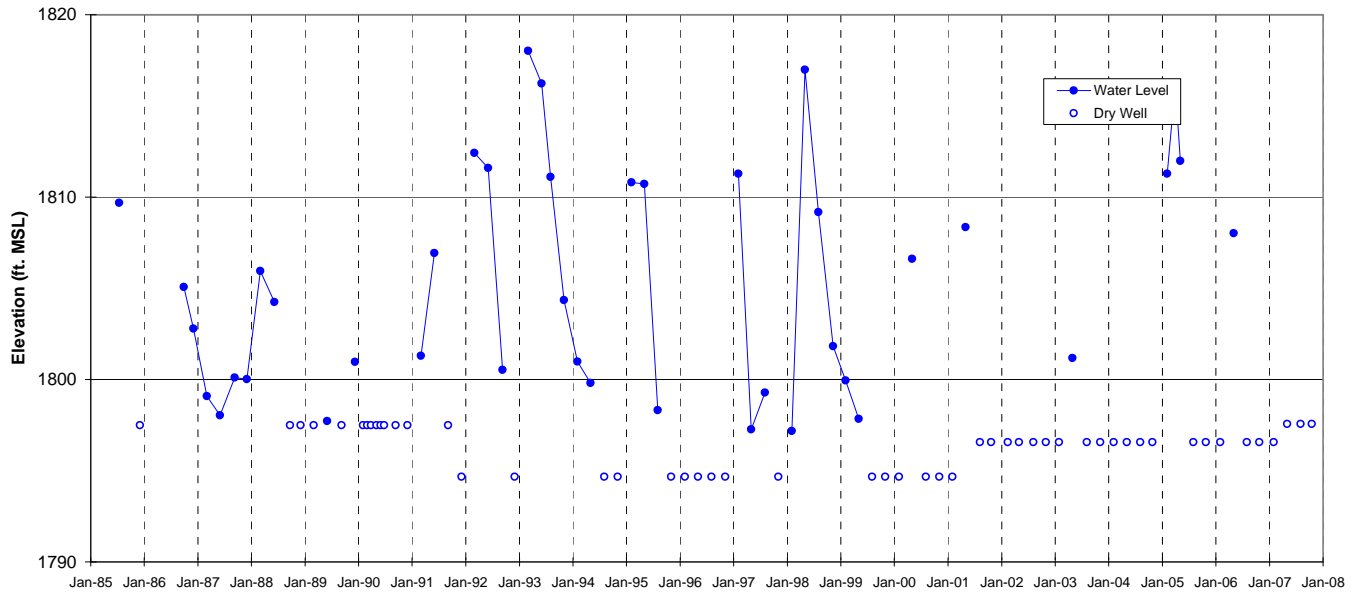
WATER LEVEL HYDROGRAPH  
 Shallow Well RS-01  
**Figure A-12**



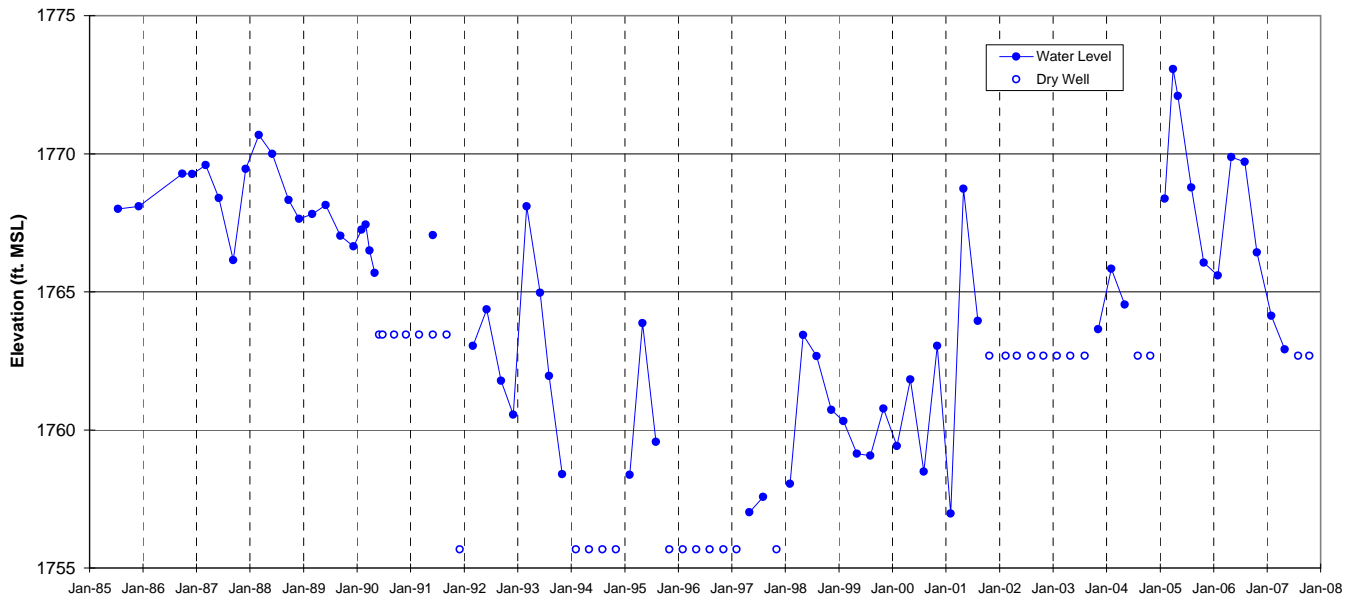
WATER LEVEL HYDROGRAPH  
 Shallow Well RS-02  
 Figure A-13



WATER LEVEL HYDROGRAPH  
 Shallow Well RS-03  
 Figure A-14

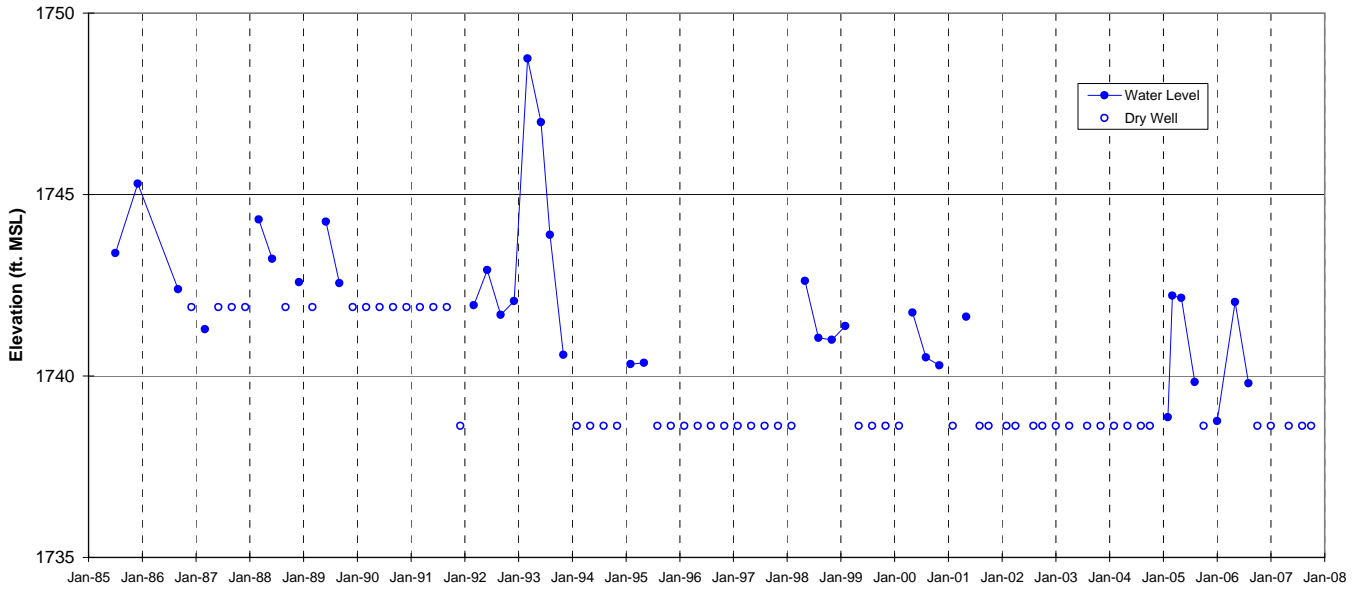


WATER LEVEL HYDROGRAPH  
 Shallow Well RS-04  
 Figure A-15



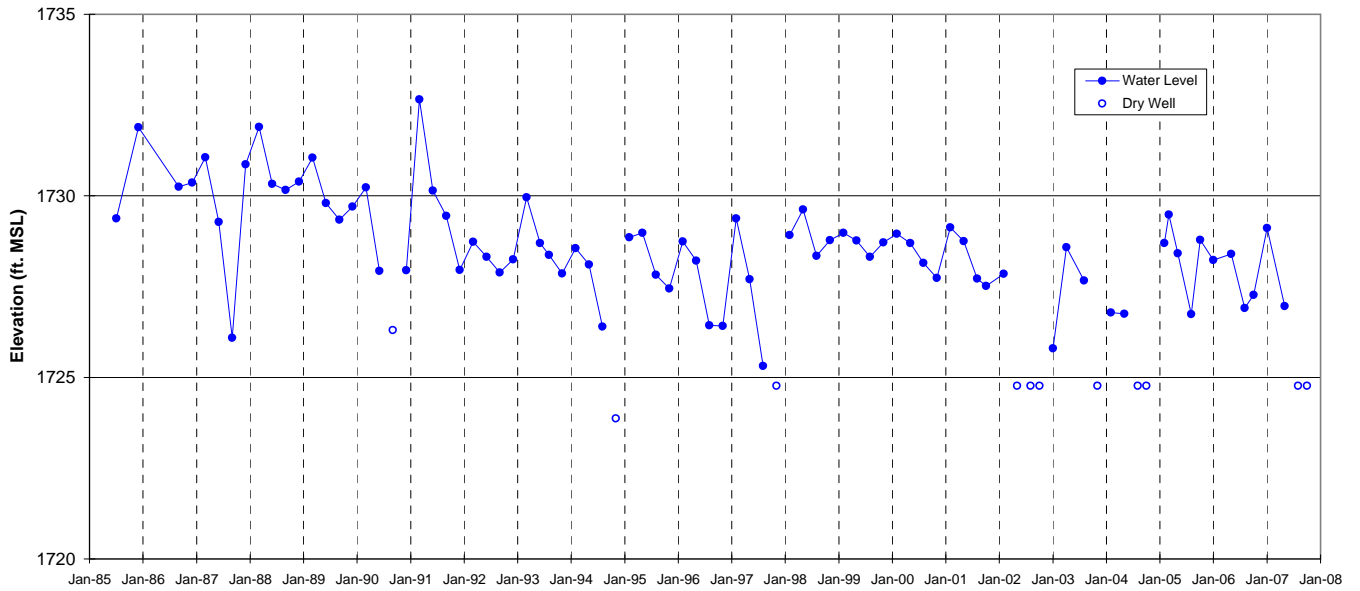
WATER LEVEL HYDROGRAPH  
 Shallow Well RS-05  
 Figure A-16

Dry well elevations were corrected  
 in January 2007.

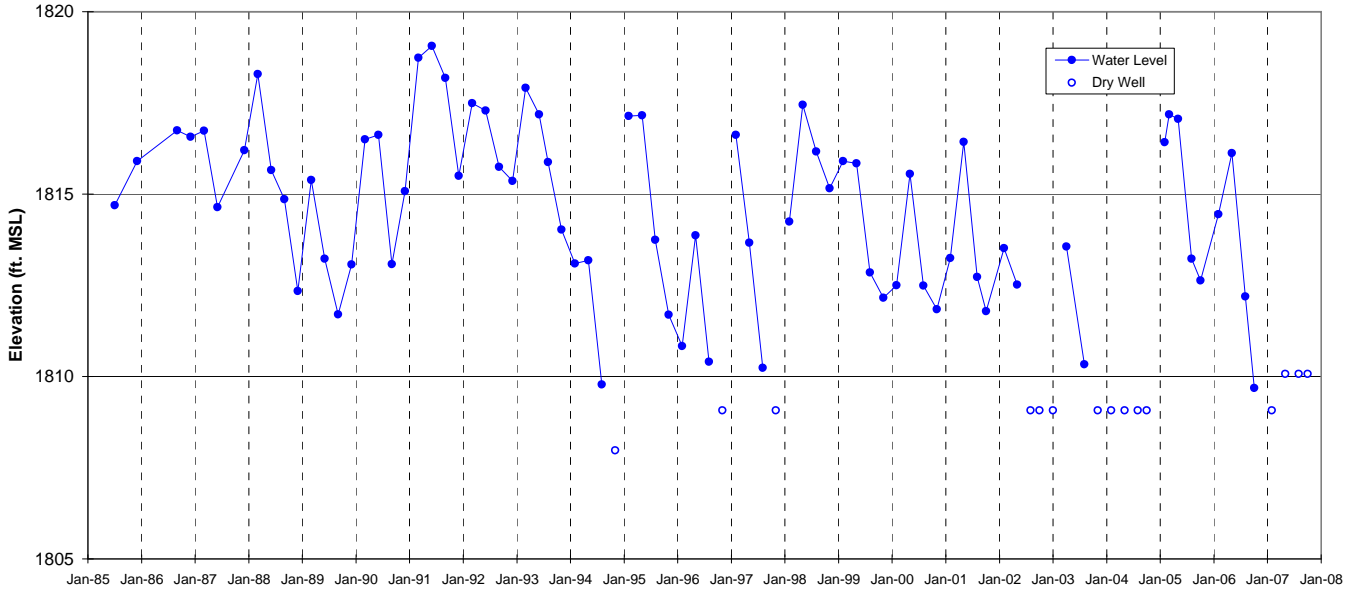


WATER LEVEL HYDROGRAPH  
Shallow Well RS-06  
Figure A-17

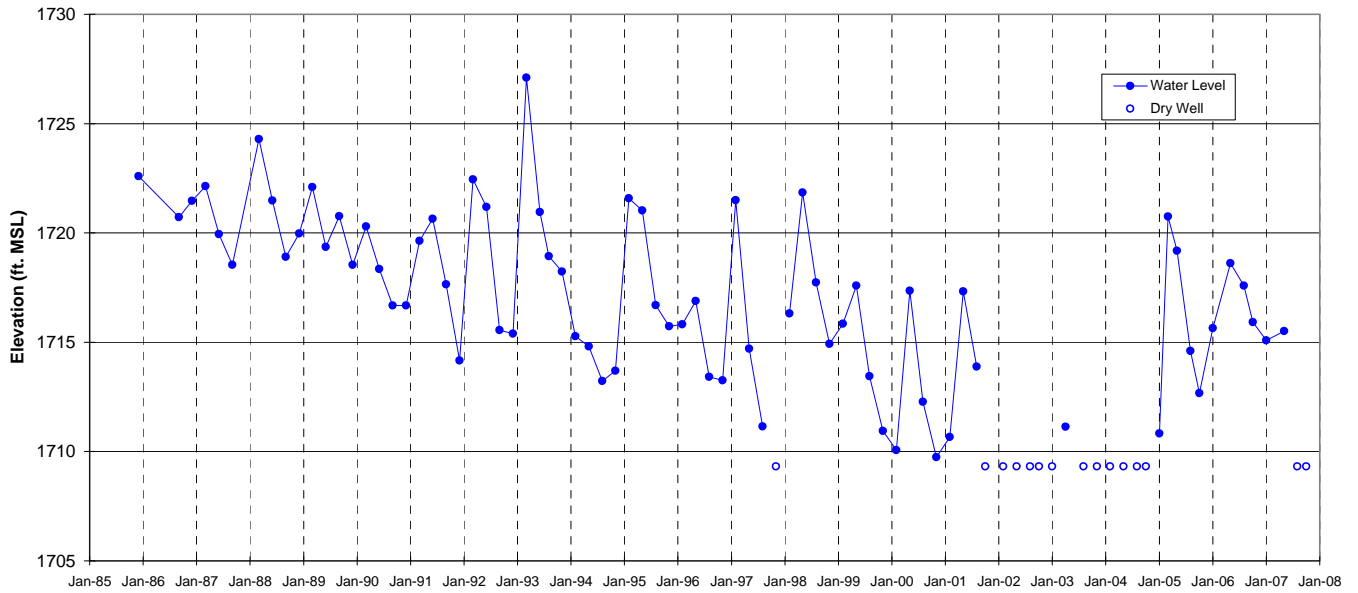
Dry well elevations were corrected  
in January 2007.



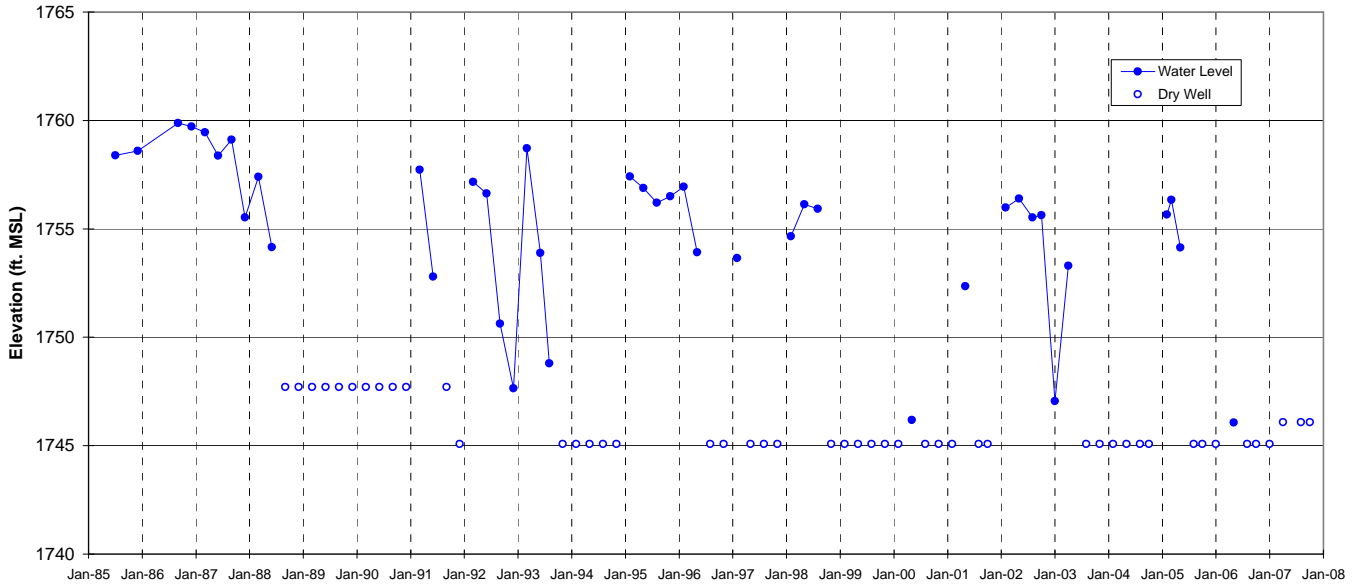
WATER LEVEL HYDROGRAPH  
Shallow Well RS-07  
Figure A-18



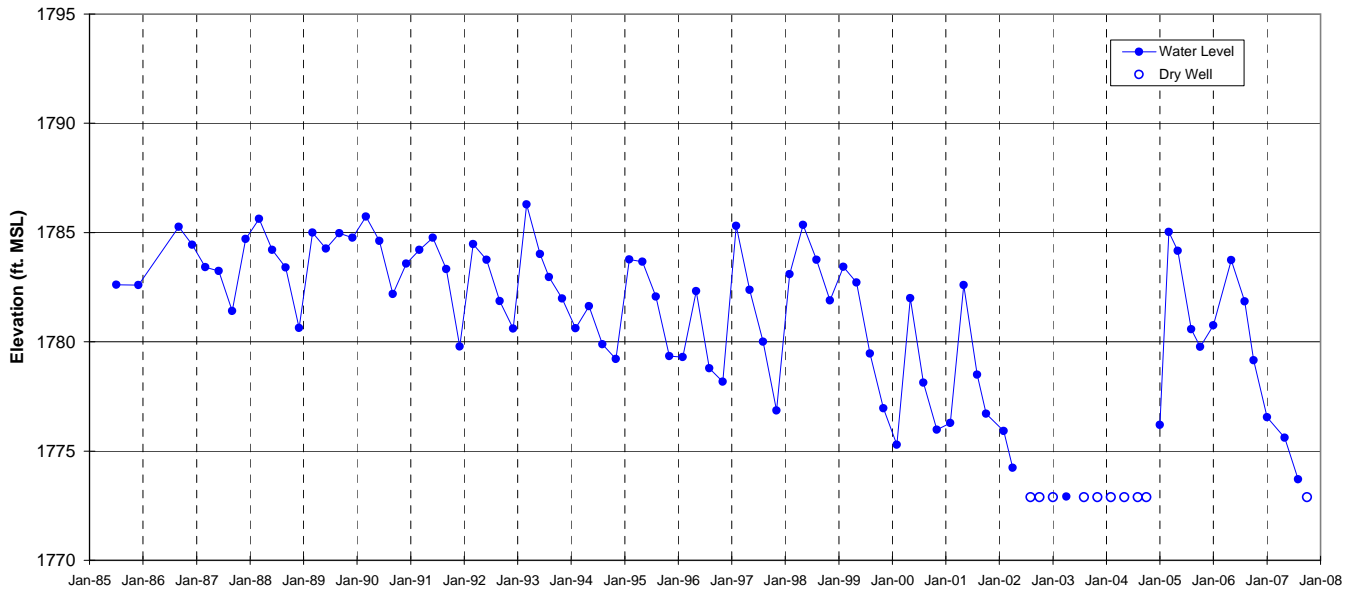
WATER LEVEL HYDROGRAPH  
Shallow Well RS-08  
Figure A-19



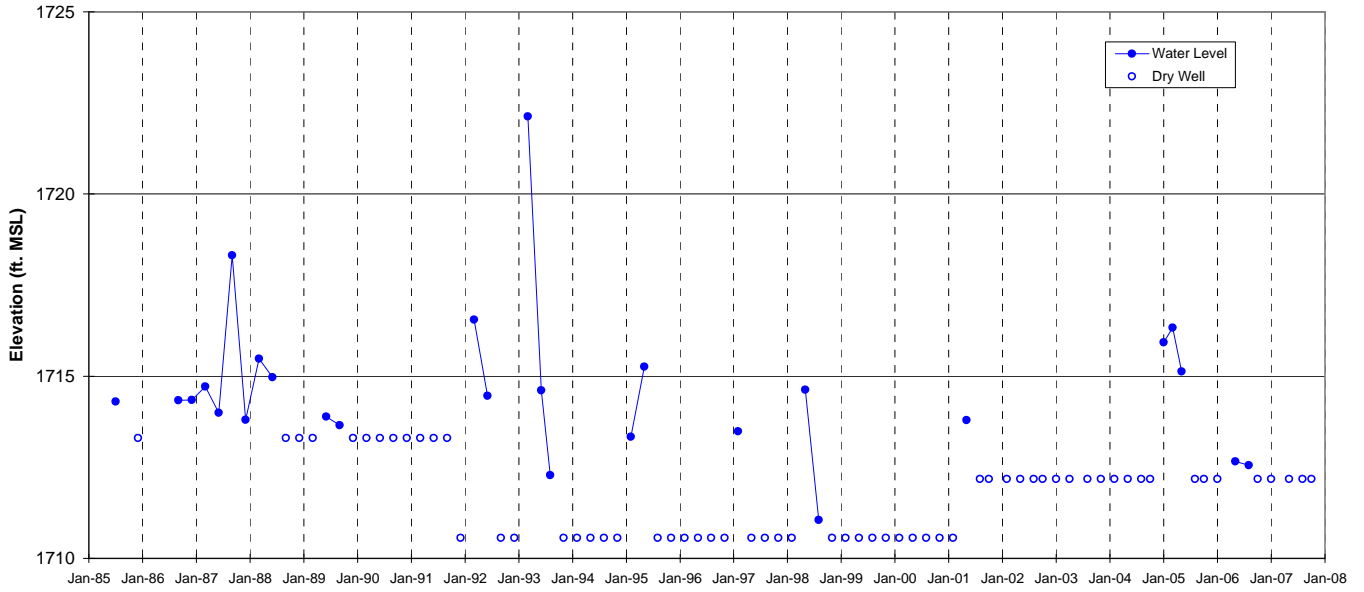
WATER LEVEL HYDROGRAPH  
Shallow Well RS-09  
Figure A-20



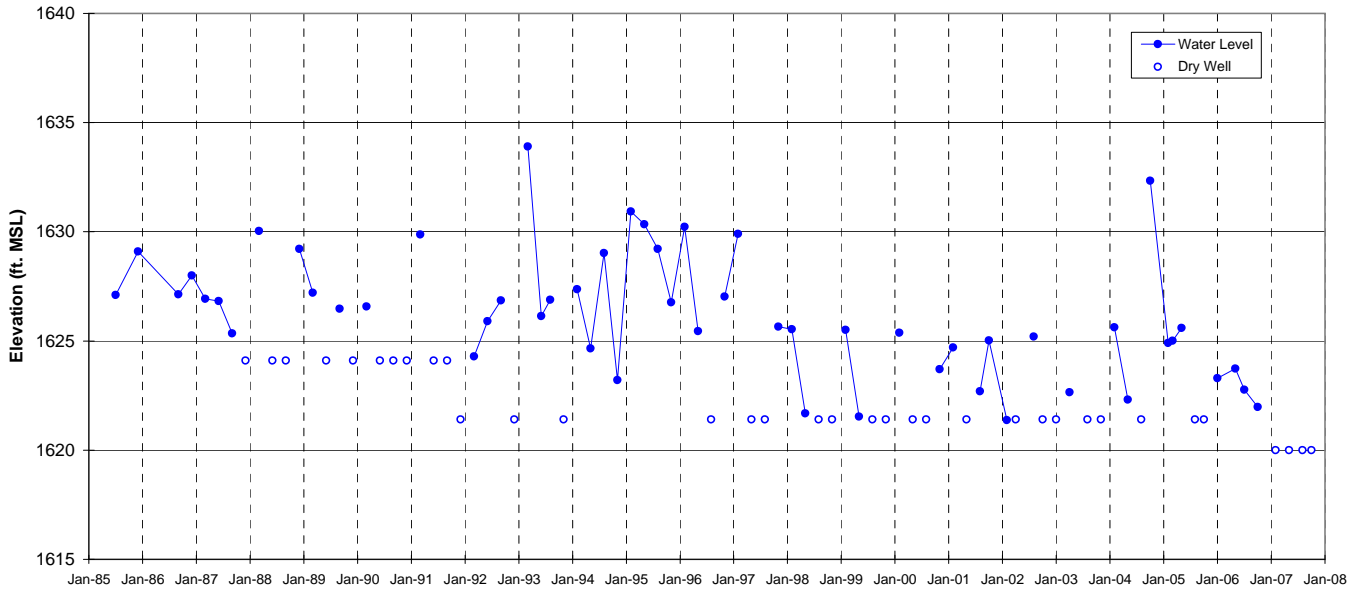
WATER LEVEL HYDROGRAPH  
 Shallow Well RS-10  
**Figure A-21**



WATER LEVEL HYDROGRAPH  
 Shallow Well RS-11  
**Figure A-22**



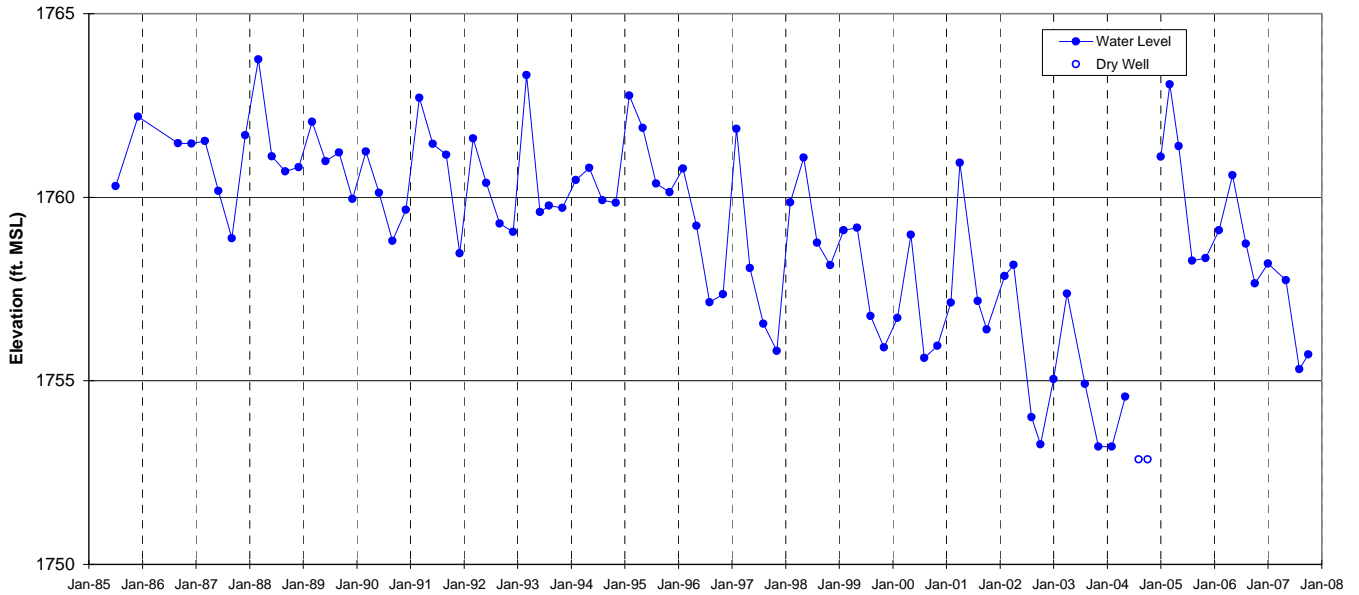
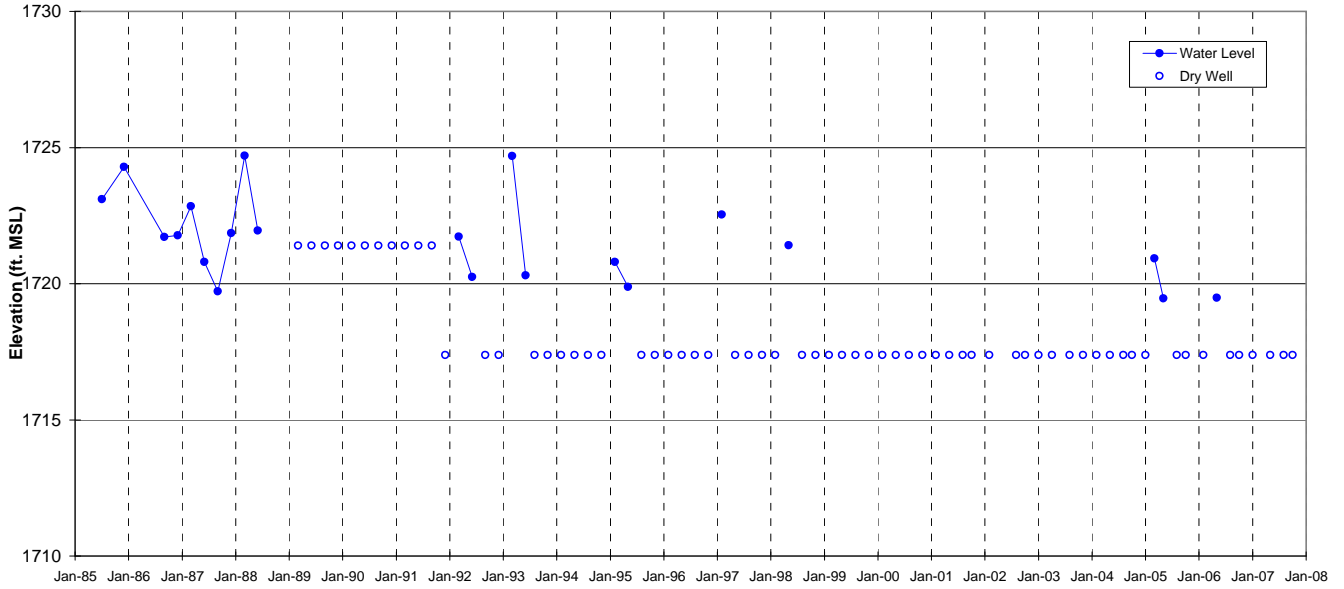
WATER LEVEL HYDROGRAPH  
 Shallow Well RS-12  
 Figure A-23

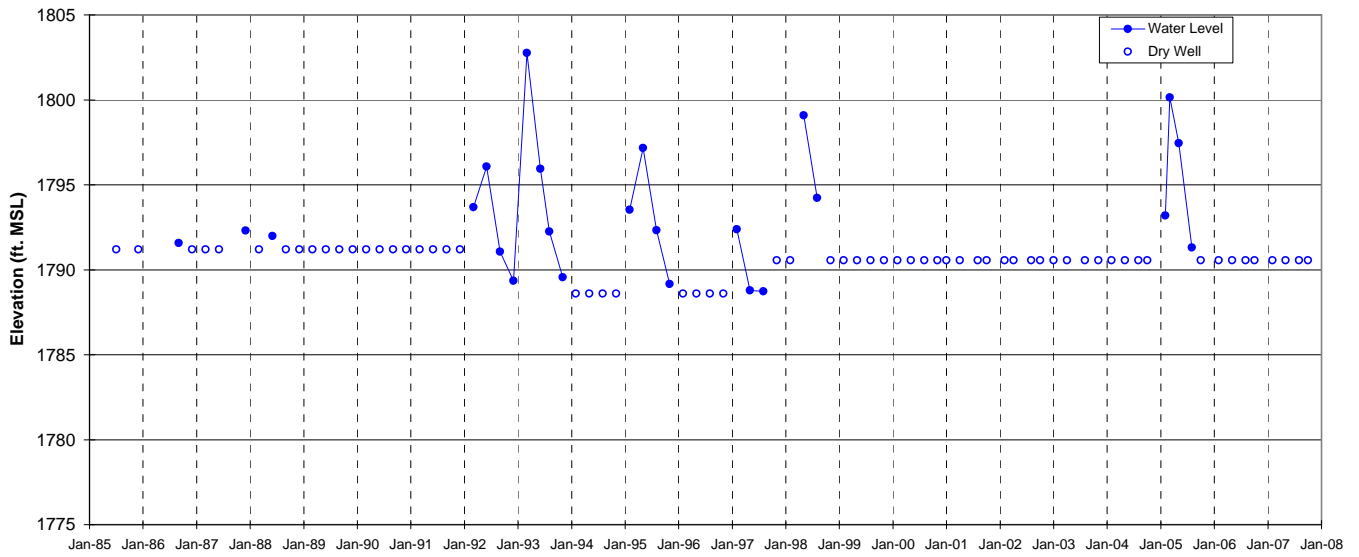


WATER LEVEL HYDROGRAPH  
 Shallow Well RS-13  
 Figure A-24

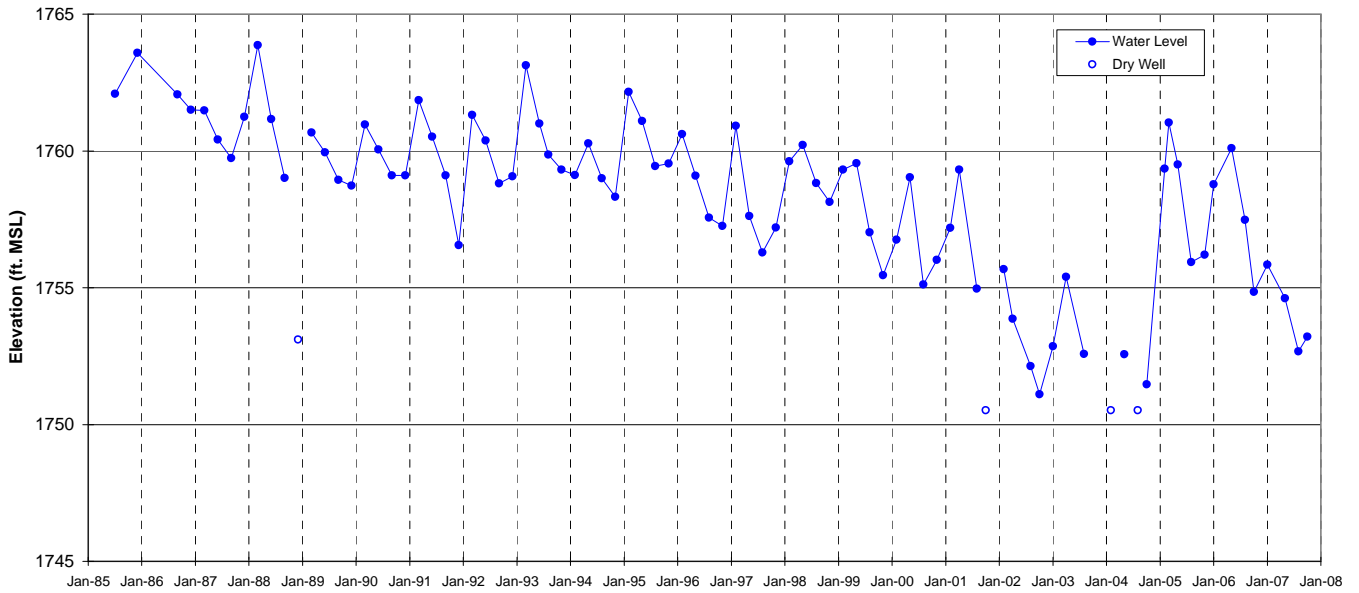
Dry well elevations were corrected  
 in February 2007.



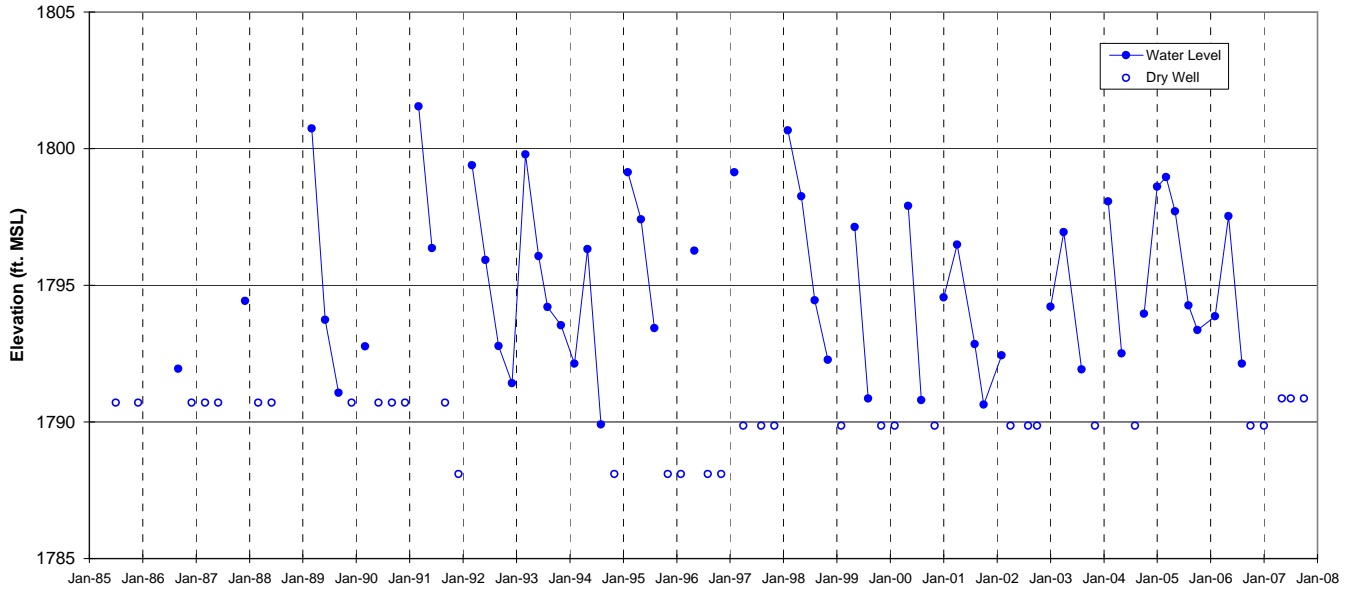




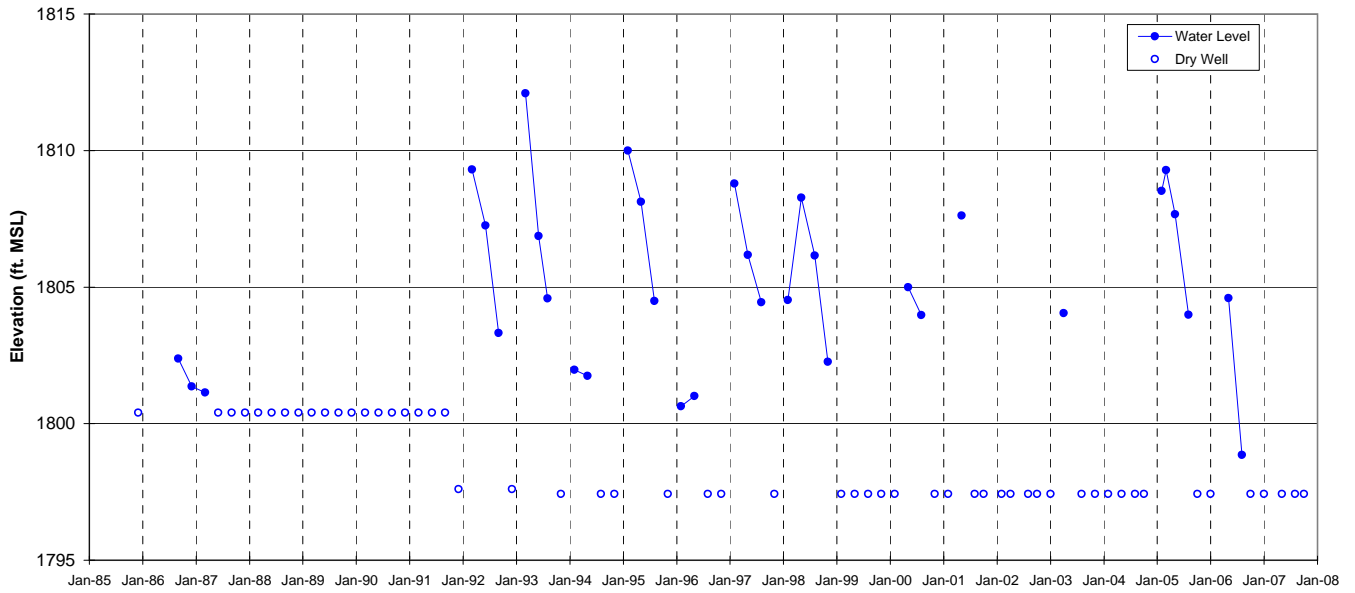
WATER LEVEL HYDROGRAPH  
 Shallow Well RS-16  
 Figure A-27



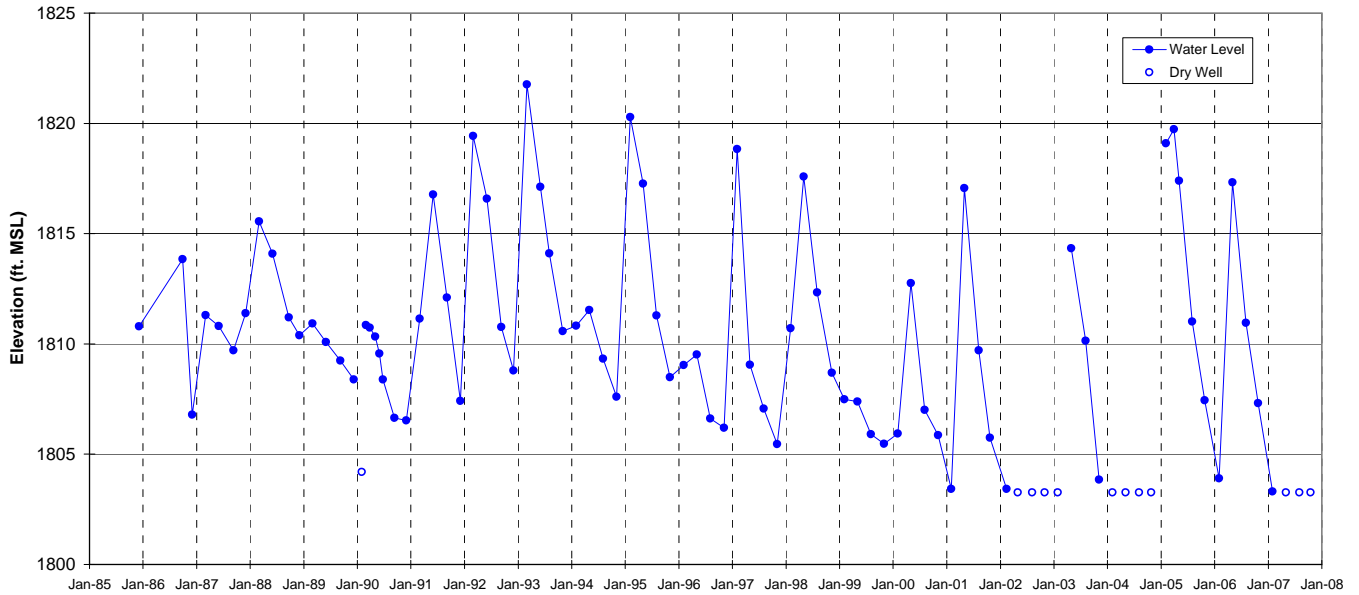
WATER LEVEL HYDROGRAPH  
 Shallow Well RS-17  
 Figure A-28



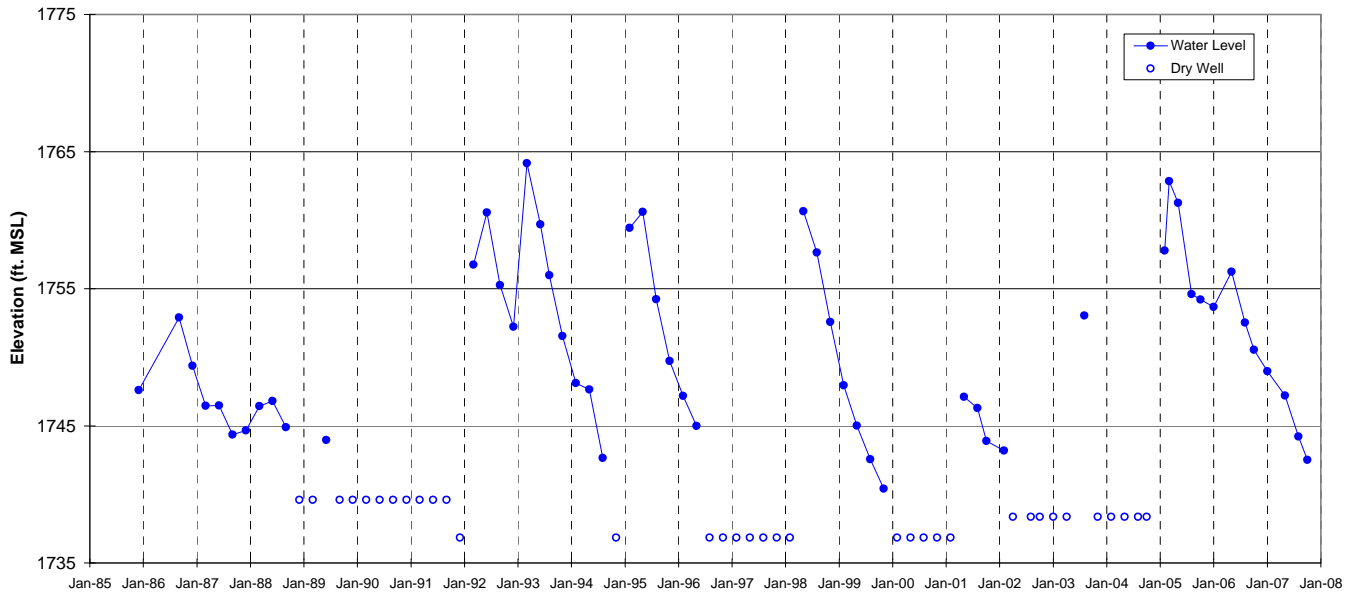
WATER LEVEL HYDROGRAPH  
 Shallow Well RS-18  
**Figure A-29**



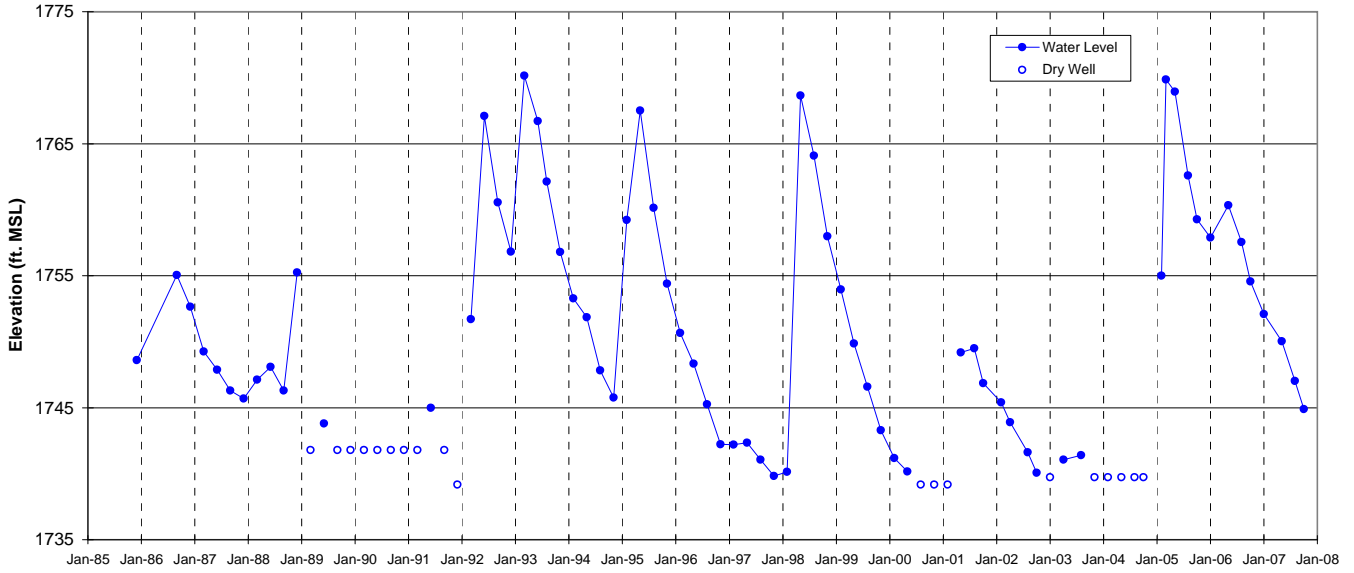
WATER LEVEL HYDROGRAPH  
 Shallow Well RS-19  
**Figure A-30**



WATER LEVEL HYDROGRAPH  
Shallow Well RS-20  
Figure A-31

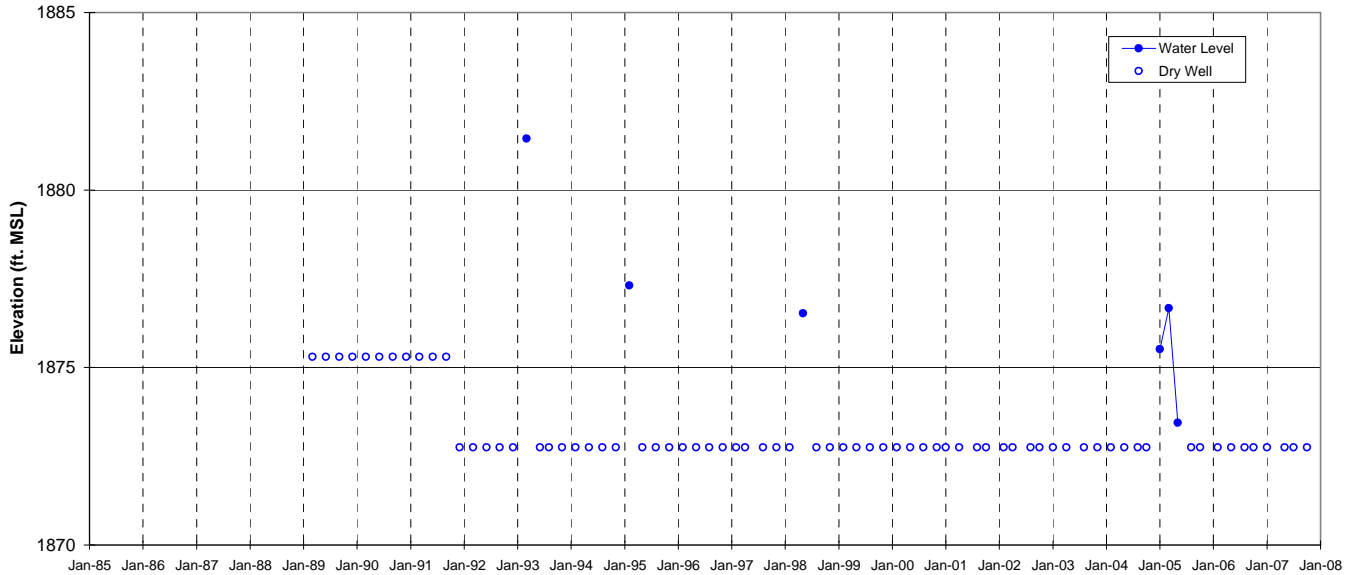


WATER LEVEL HYDROGRAPH  
Shallow Well RS-21  
Figure A-32



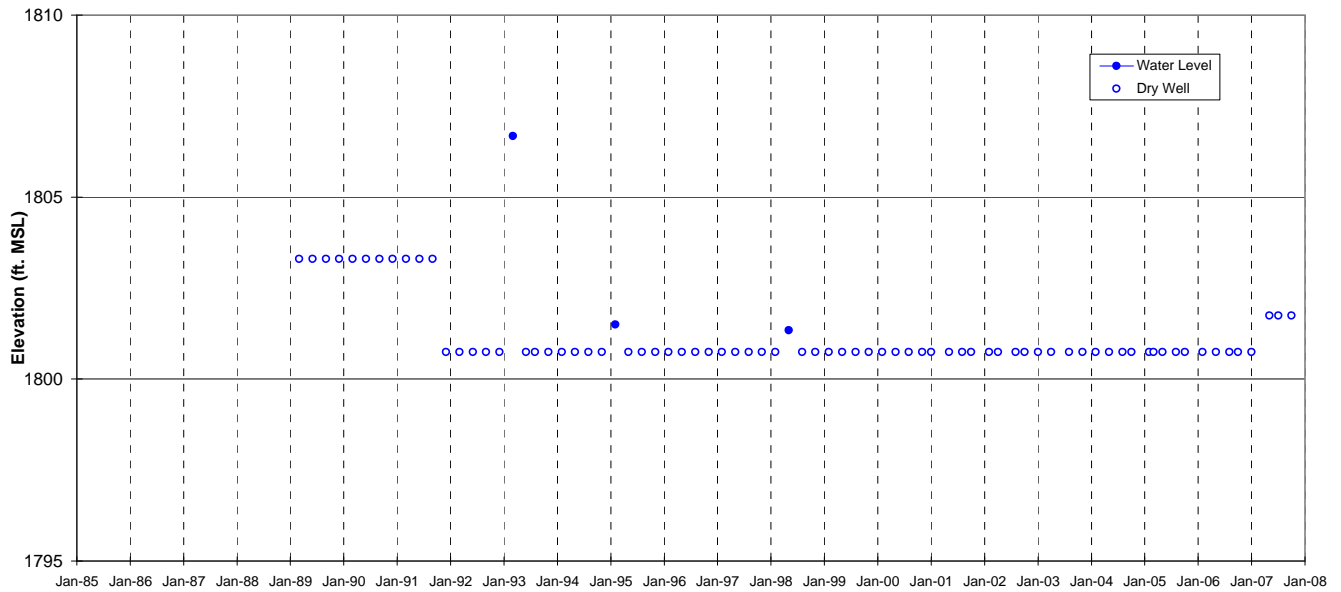
WATER LEVEL HYDROGRAPH  
 Shallow Well RS-22  
**Figure A-33**

Dry well elevations were corrected  
 in January 2007.

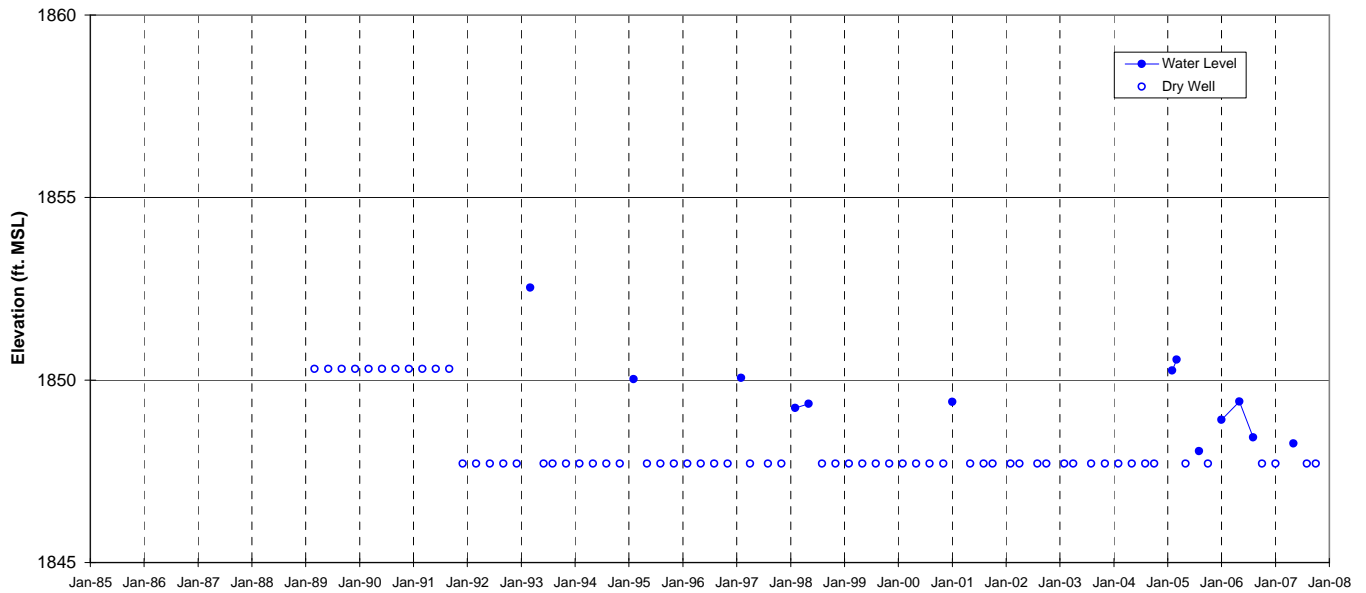


WATER LEVEL HYDROGRAPH  
 Shallow Well RS-23  
**Figure A-34**

Dry well elevations were corrected  
 in January 2007.

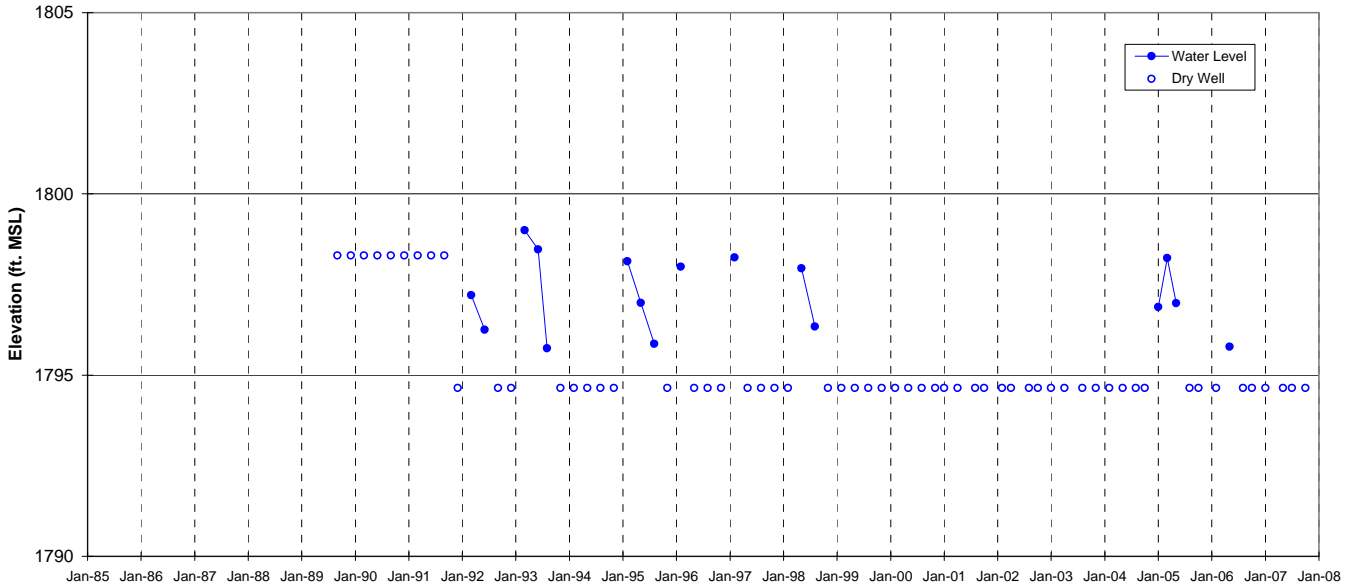


WATER LEVEL HYDROGRAPH  
Shallow Well RS-24  
Figure A-35



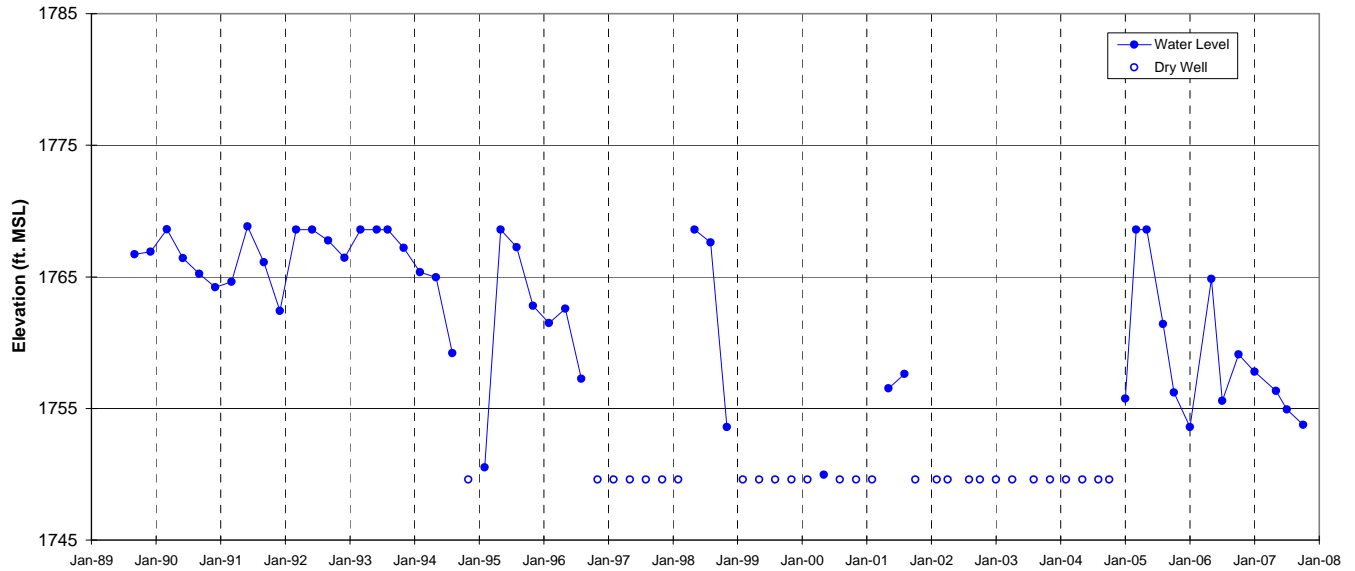
WATER LEVEL HYDROGRAPH  
Shallow Well RS-25  
Figure A-36

Dry well elevations were corrected  
in January 2007.

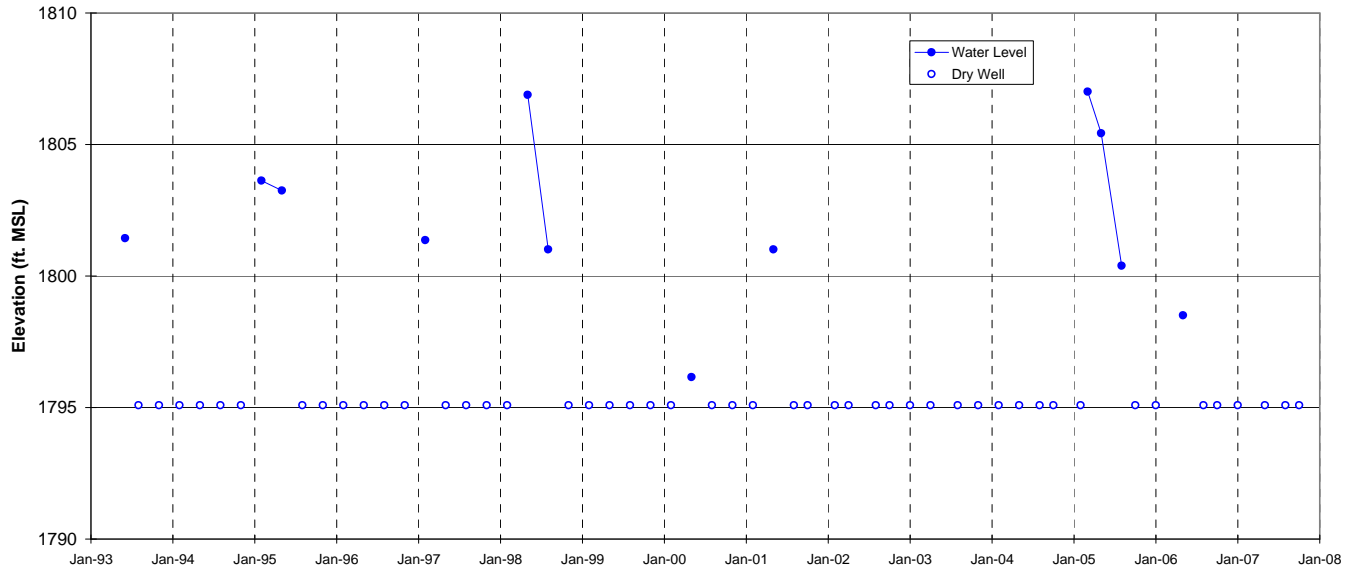


WATER LEVEL HYDROGRAPH  
 Shallow Well RS-27  
**Figure A-37**

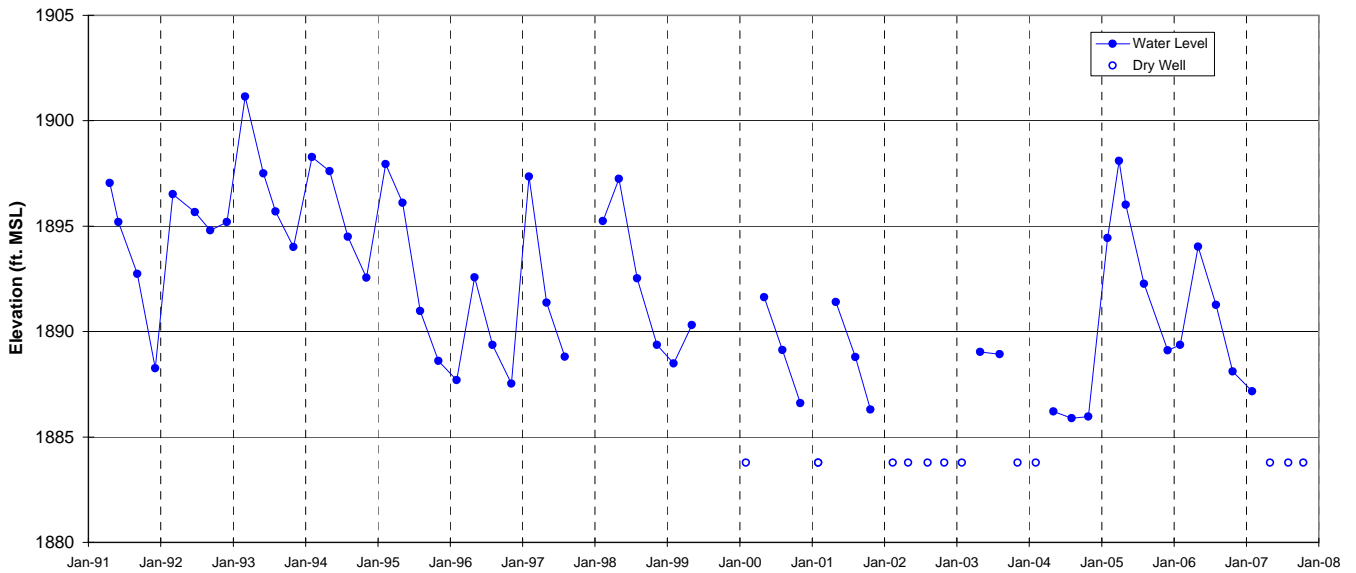
Dry well elevations were corrected  
 in January 2007.



WATER LEVEL HYDROGRAPH  
 Shallow Well RS-28  
**Figure A-38**



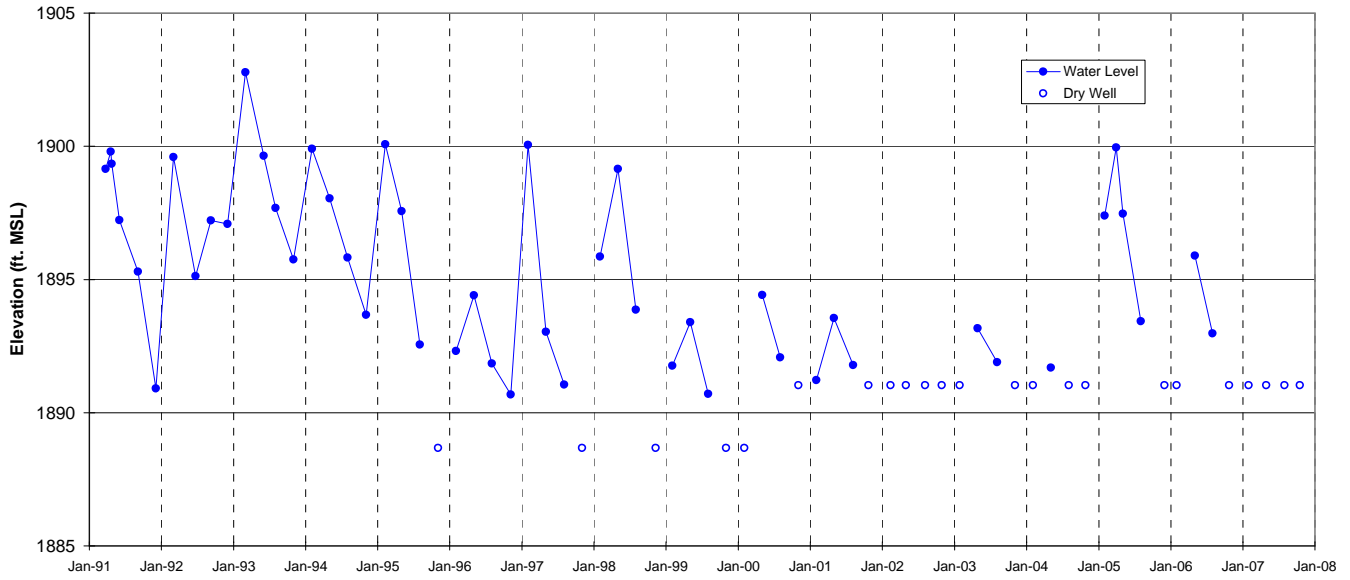
WATER LEVEL HYDROGRAPH  
Shallow Well RS-29  
Figure A-39



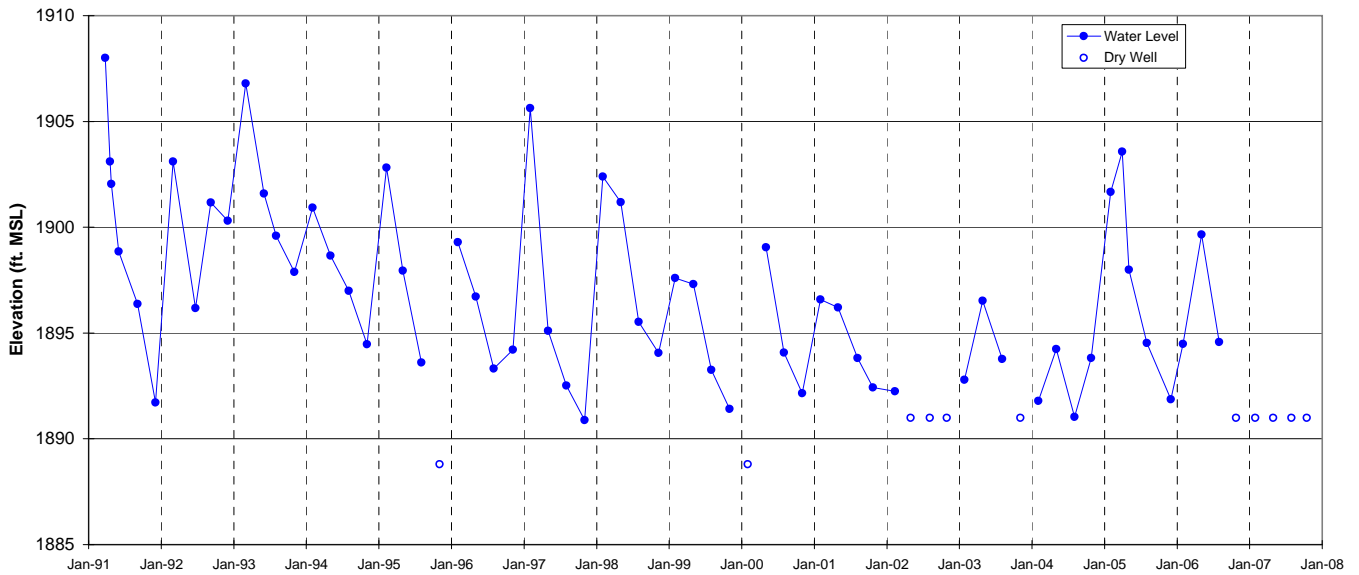
WATER LEVEL HYDROGRAPH  
Shallow Well RS-30  
Figure A-40

Dry well elevations were corrected  
in January 2007.

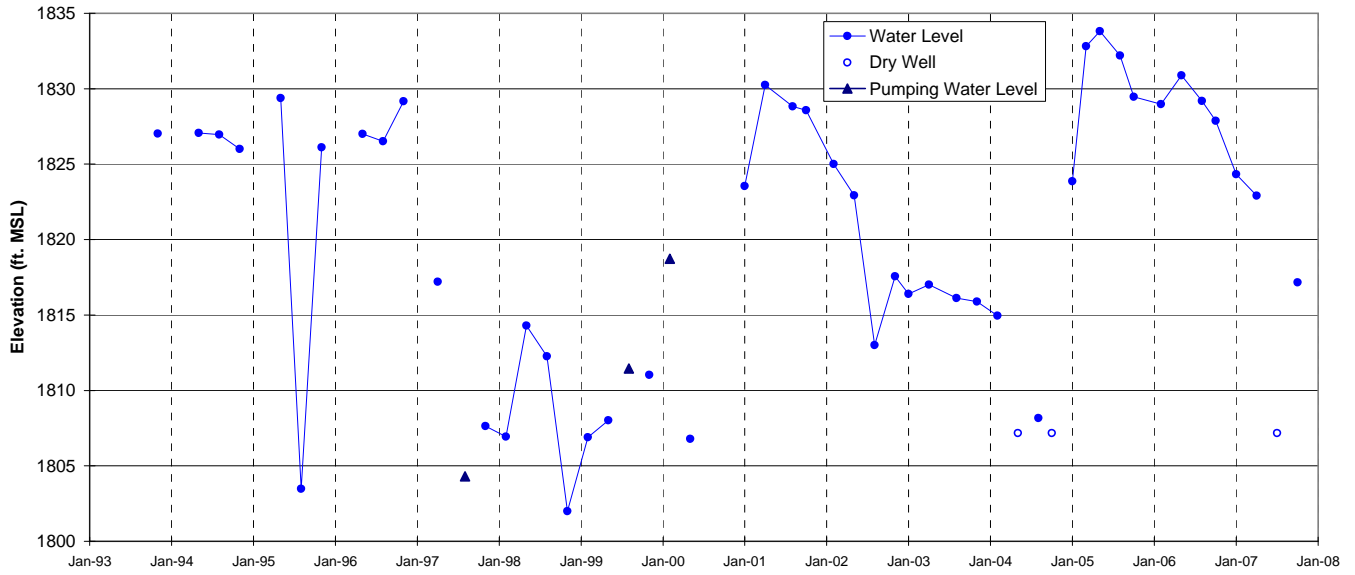




WATER LEVEL HYDROGRAPH  
 Shallow Well RS-31  
**Figure A-41**

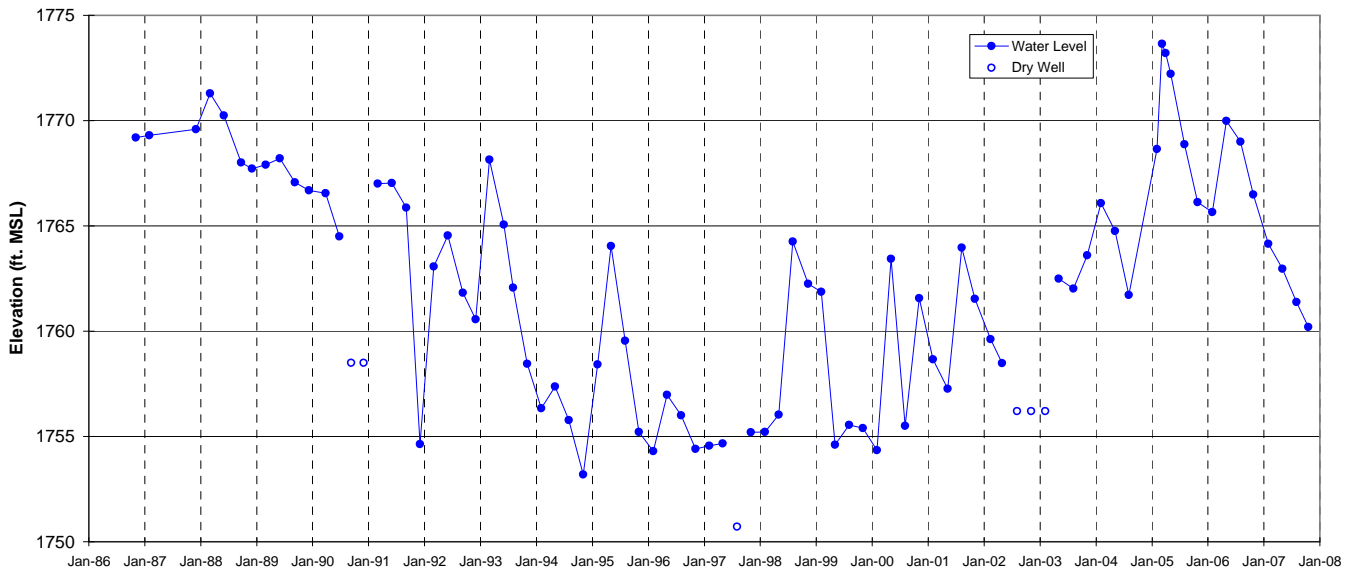


WATER LEVEL HYDROGRAPH  
 Shallow Well RS-32  
**Figure A-42**

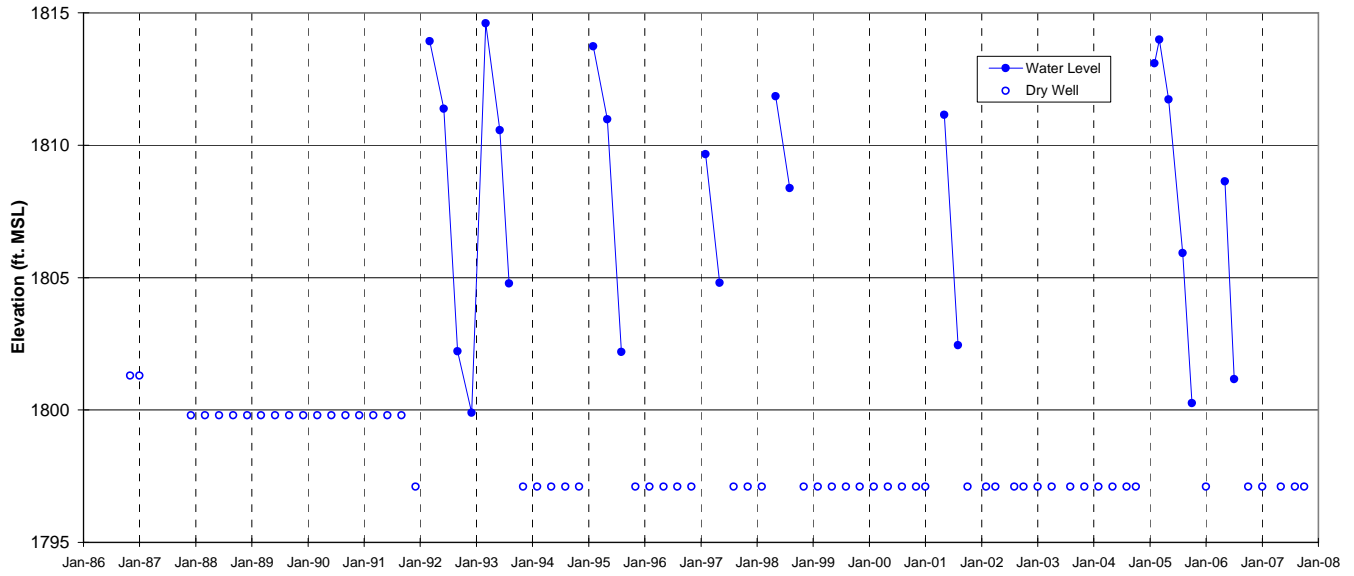


WATER LEVEL HYDROGRAPH  
 Shallow Well RS-54  
 Figure A-43

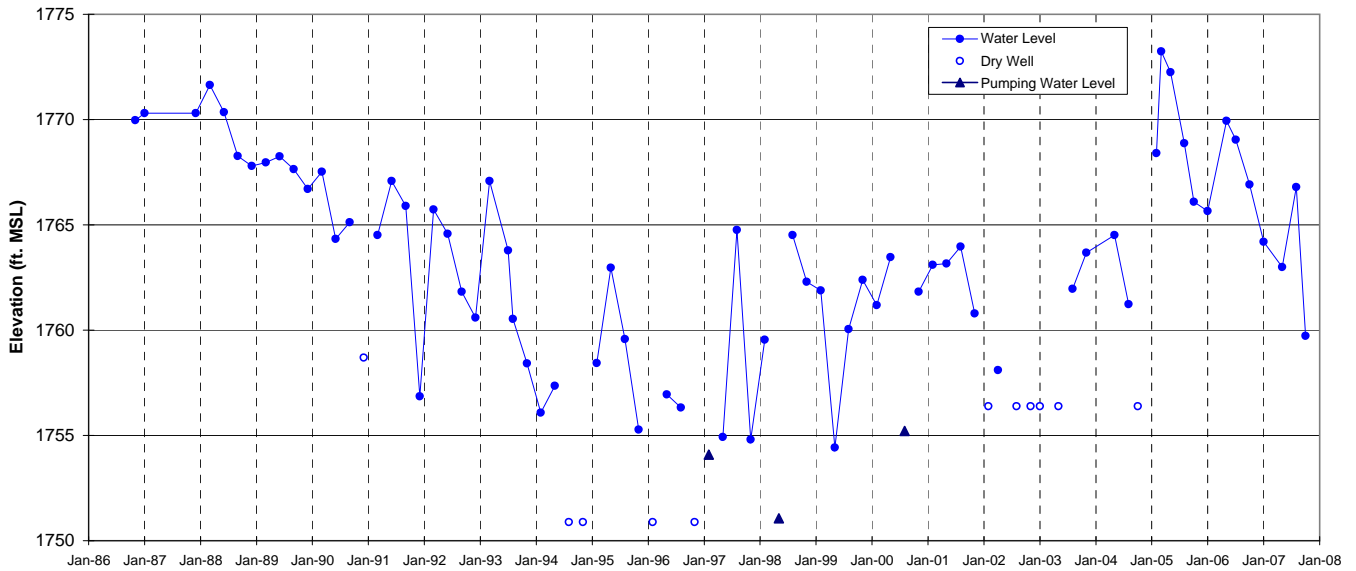
Dry well elevations were corrected  
 in January 2007.



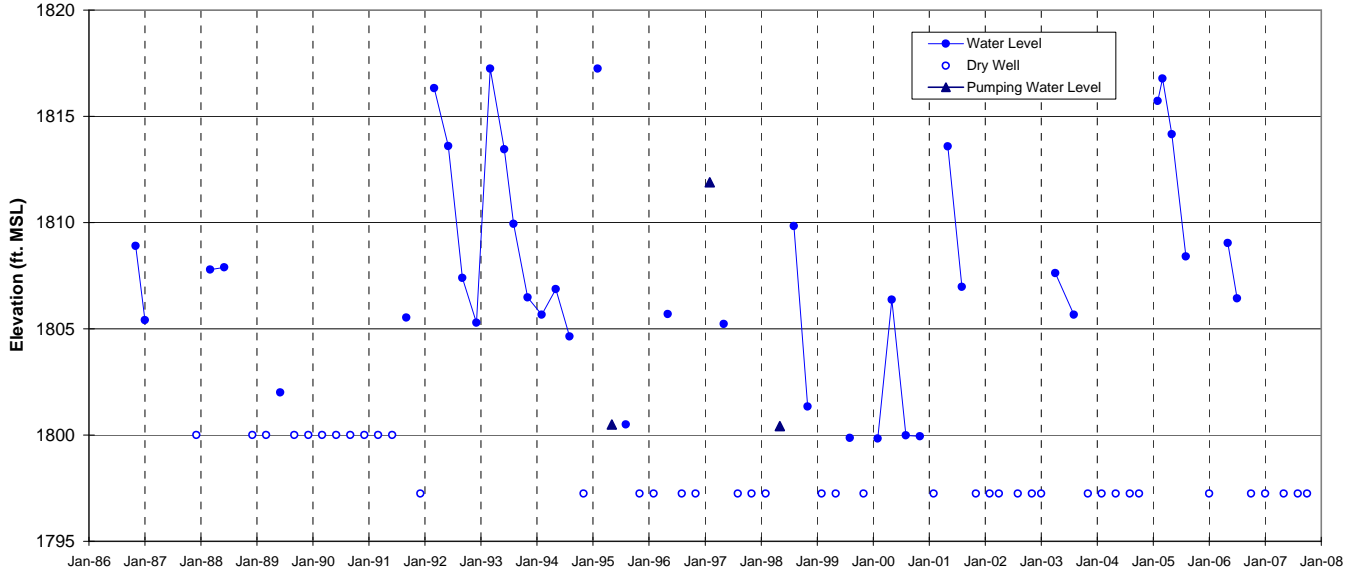
WATER LEVEL HYDROGRAPH  
 Shallow Well ES-01  
 Figure A-44



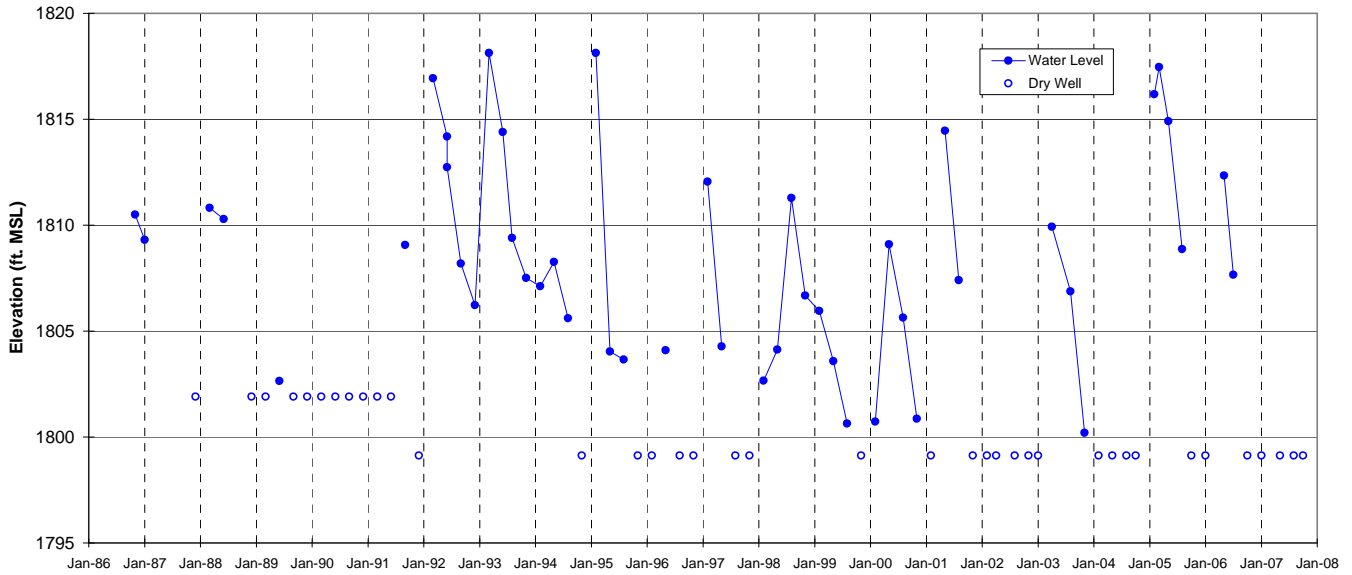
WATER LEVEL HYDROGRAPH  
 Shallow Well ES-02  
 Figure A-45



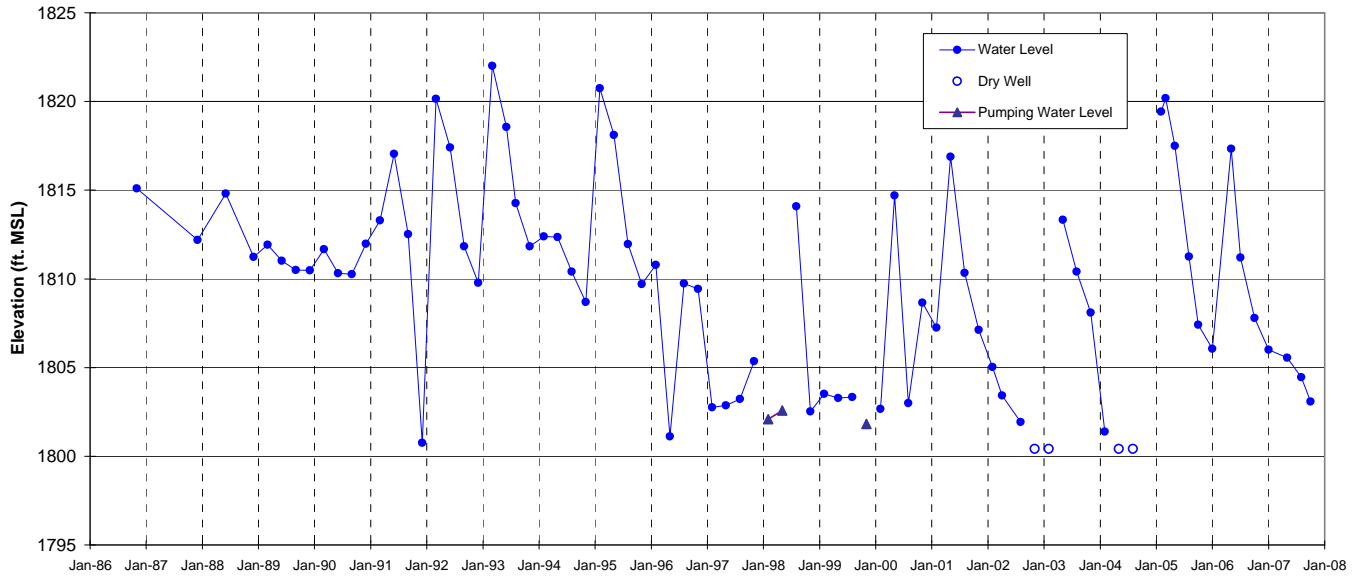
WATER LEVEL HYDROGRAPH  
 Shallow Well ES-03  
 Figure A-46



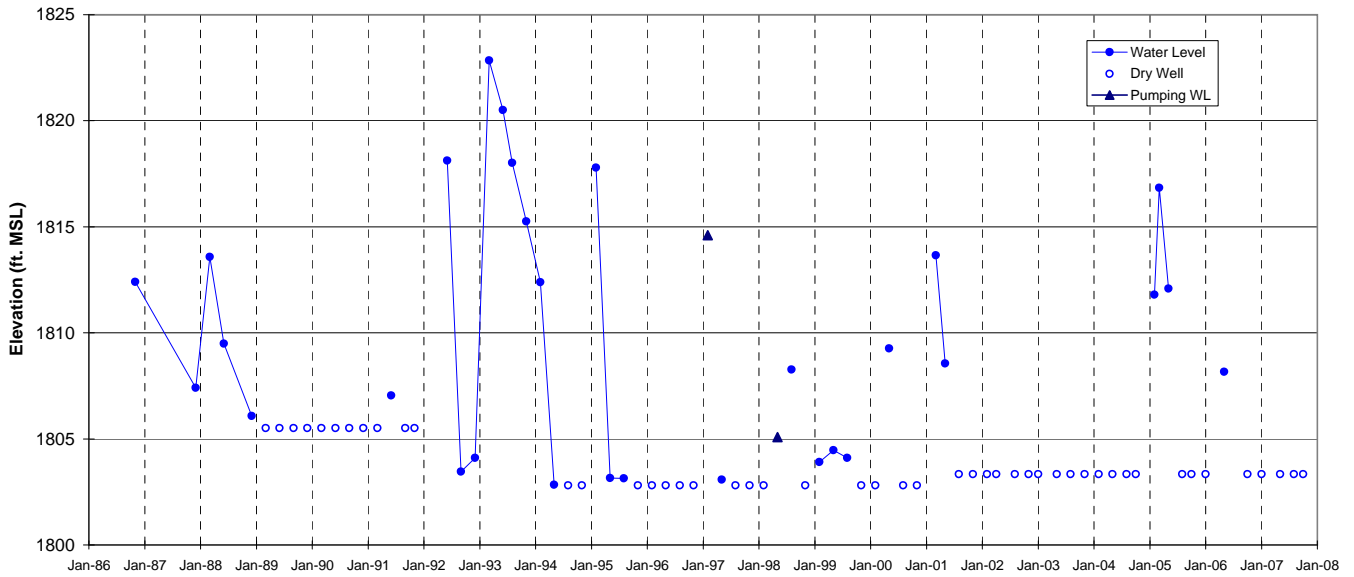
WATER LEVEL HYDROGRAPH  
 Shallow Well ES-04  
**Figure A-47**



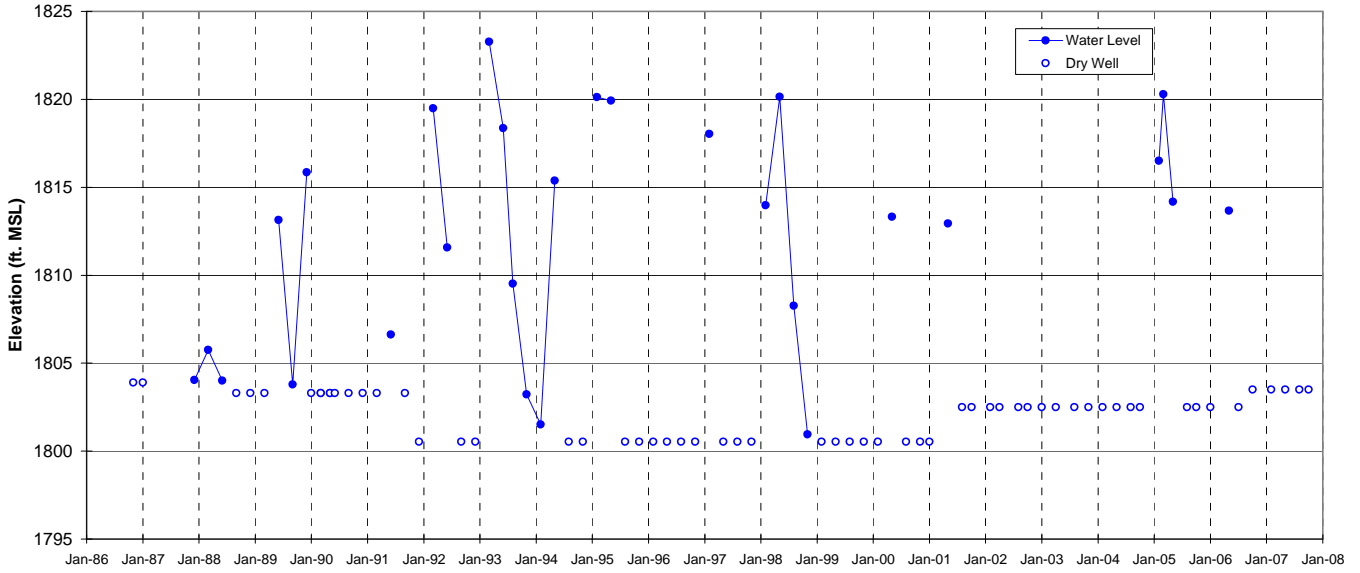
WATER LEVEL HYDROGRAPH  
 Shallow Well ES-05  
**Figure A-48**



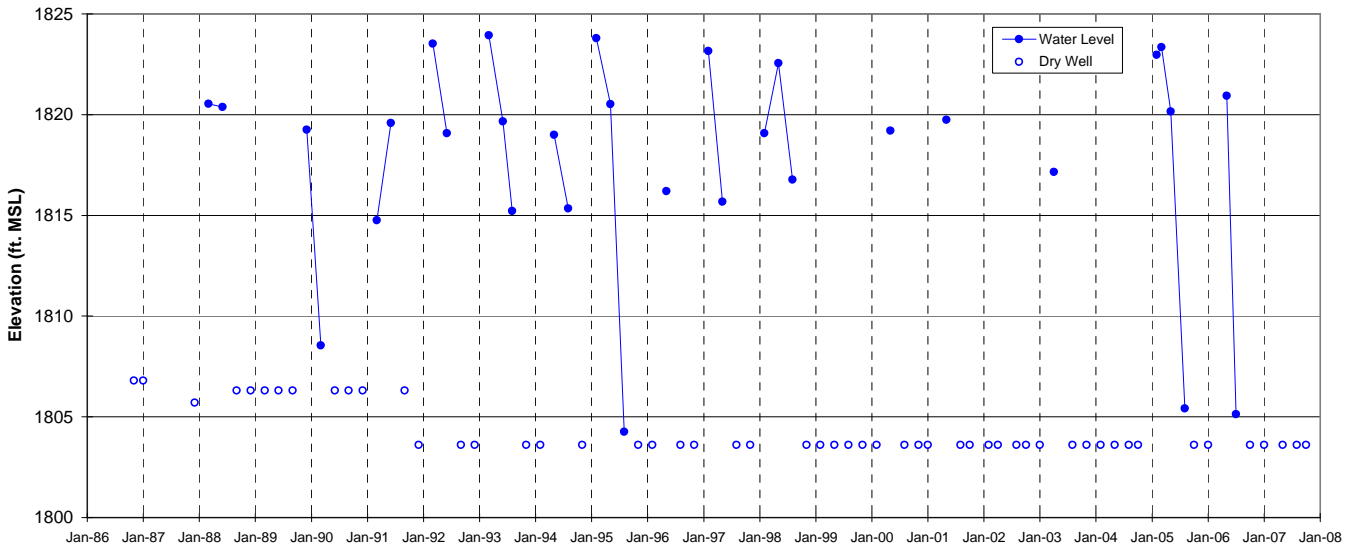
WATER LEVEL HYDROGRAPH  
 Shallow Well ES-06  
 Figure A-49



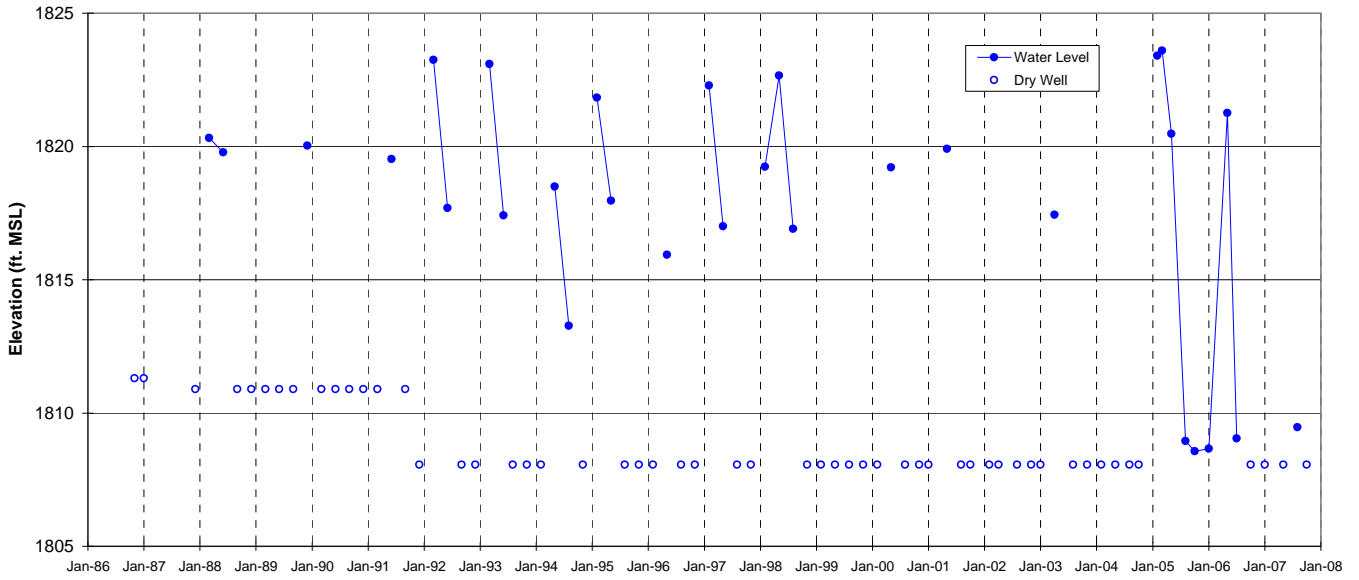
WATER LEVEL HYDROGRAPH  
 Shallow Well ES-07  
 Figure A-50



WATER LEVEL HYDROGRAPH  
Shallow Well ES-08  
**Figure A-51**

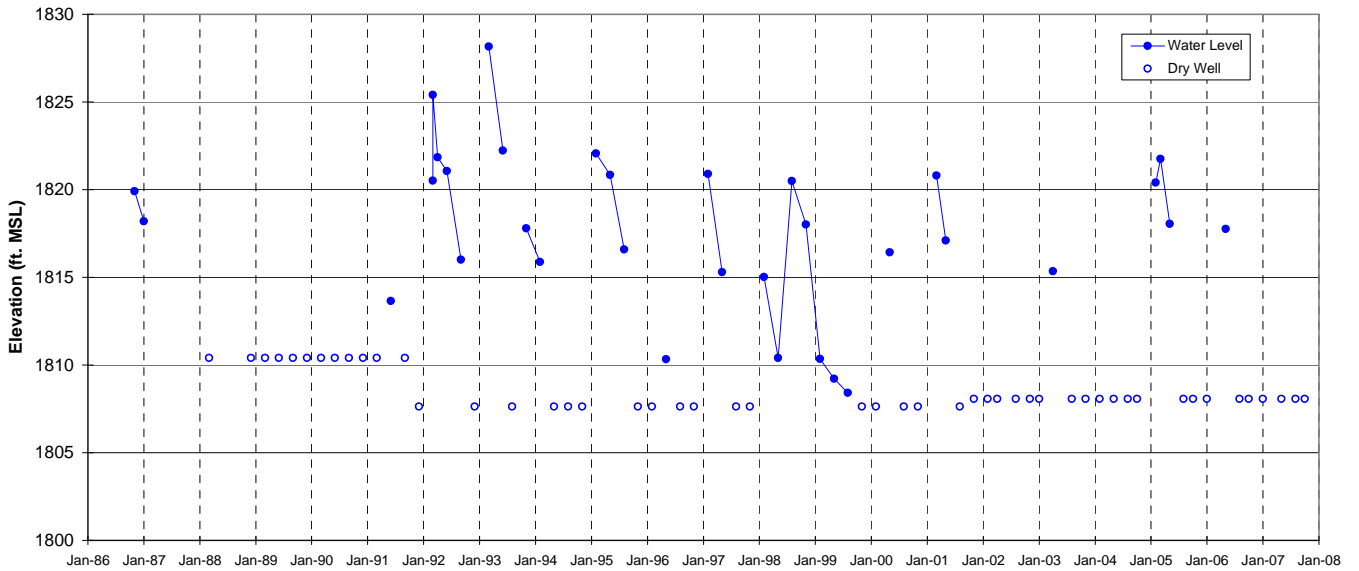


WATER LEVEL HYDROGRAPH  
Shallow Well ES-09  
**Figure A-52**

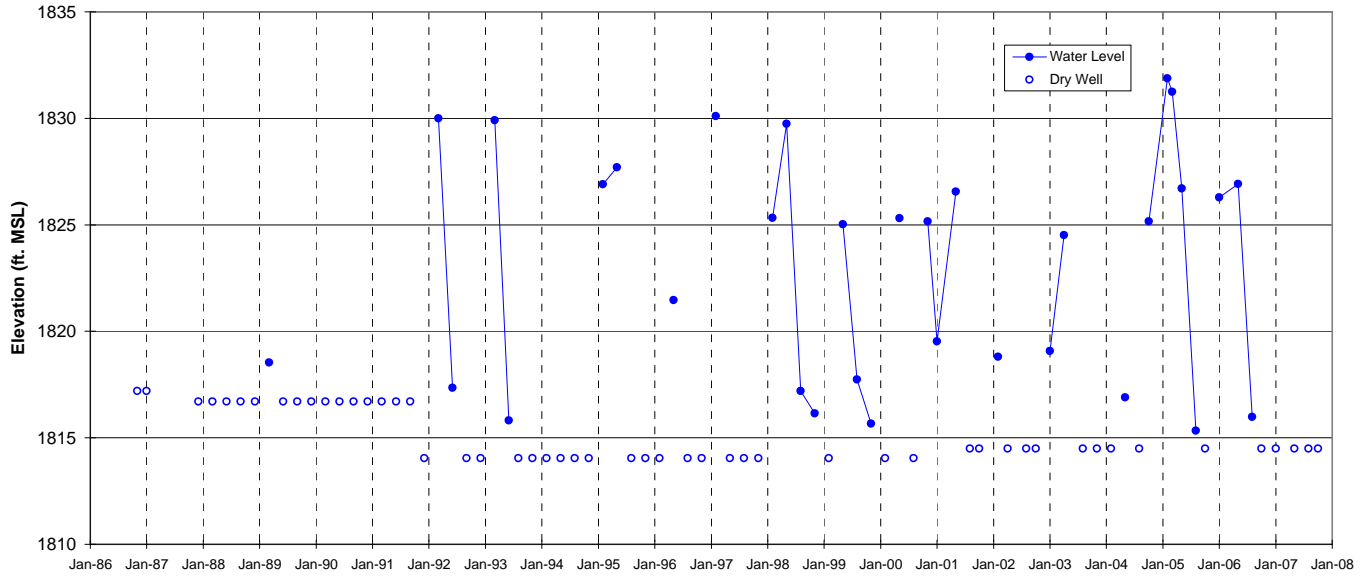


WATER LEVEL HYDROGRAPH  
Shallow Well ES-10  
**Figure A-53**

Dry well elevations were corrected  
in January 2007.

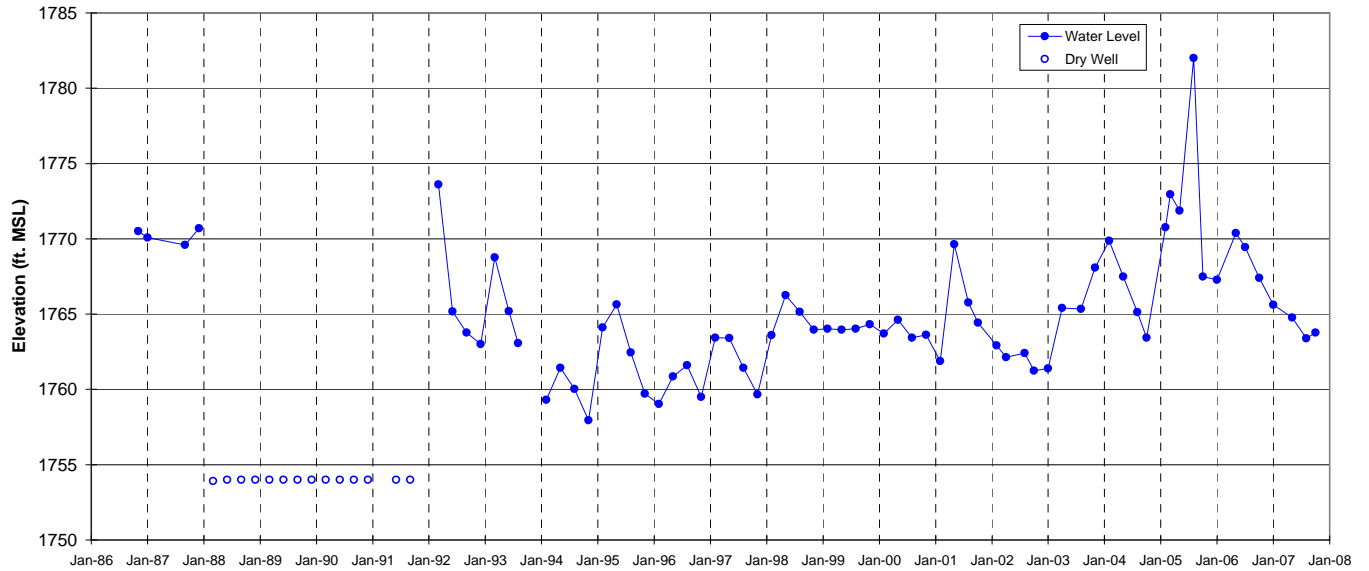


WATER LEVEL HYDROGRAPH  
Shallow Well ES-11  
**Figure A-54**



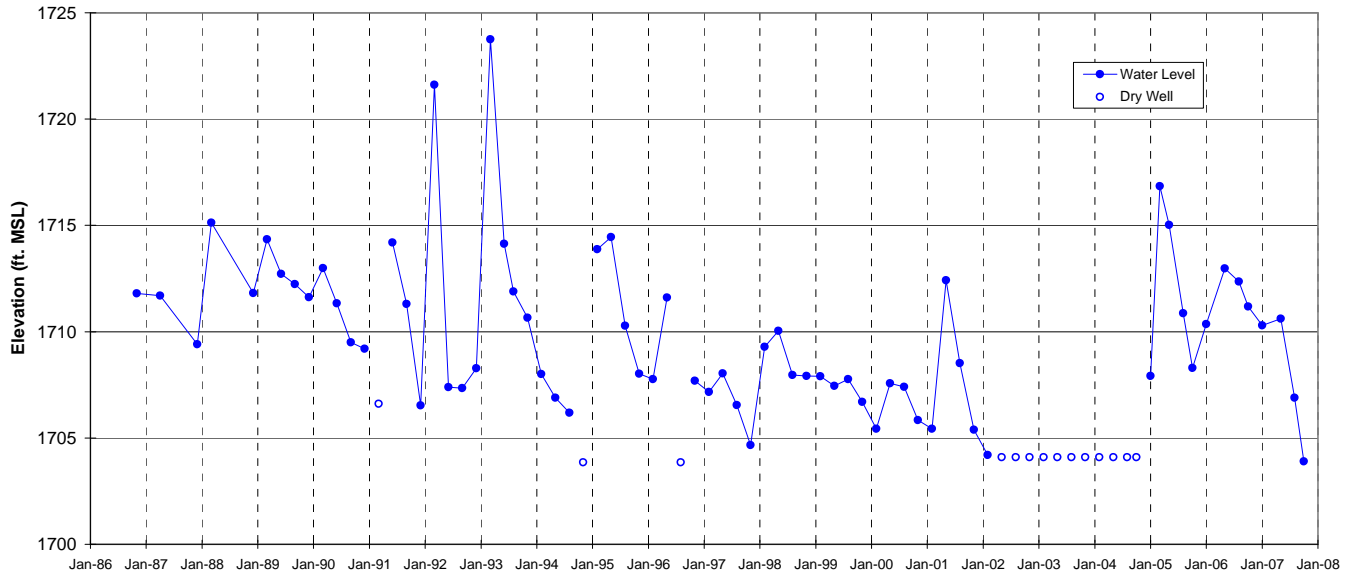
WATER LEVEL HYDROGRAPH  
 Shallow Well ES-12  
 Figure A-55

Dry well elevations were corrected  
 in January 2007.

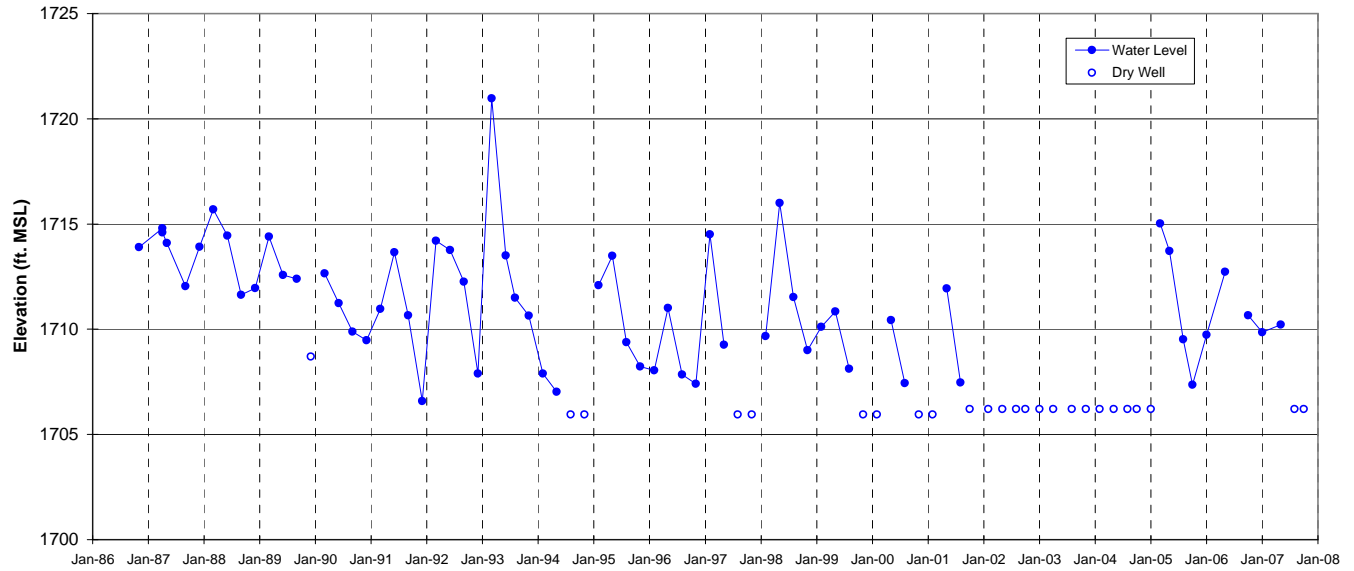


WATER LEVEL HYDROGRAPH  
 Shallow Well ES-13  
 Figure A-56

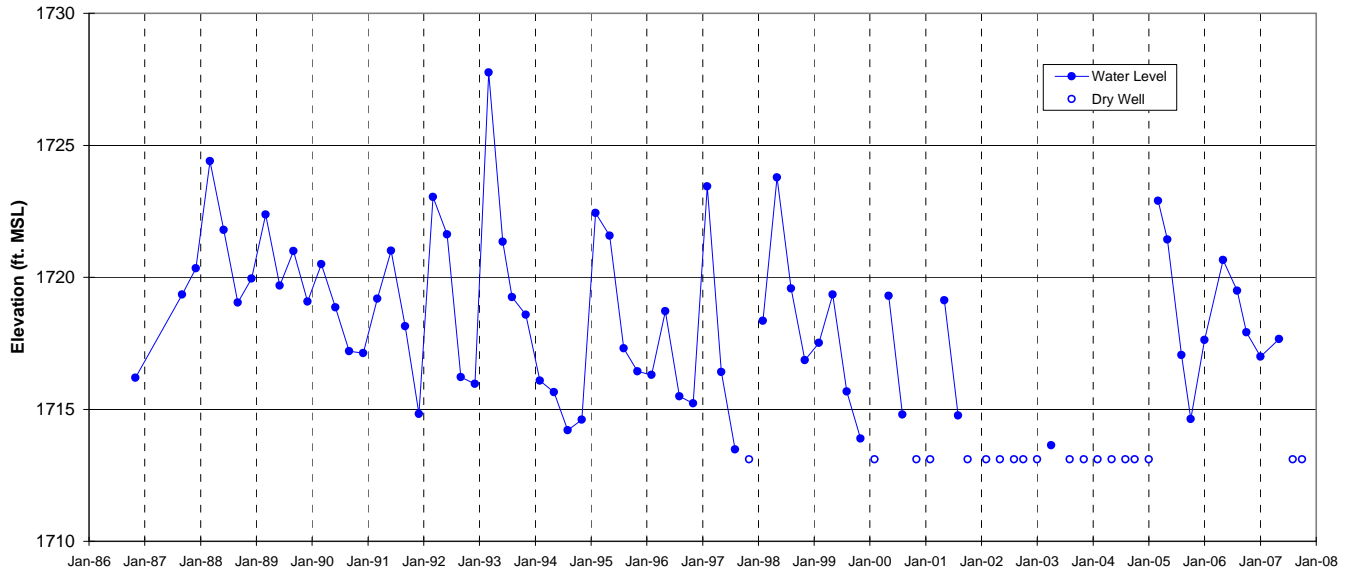




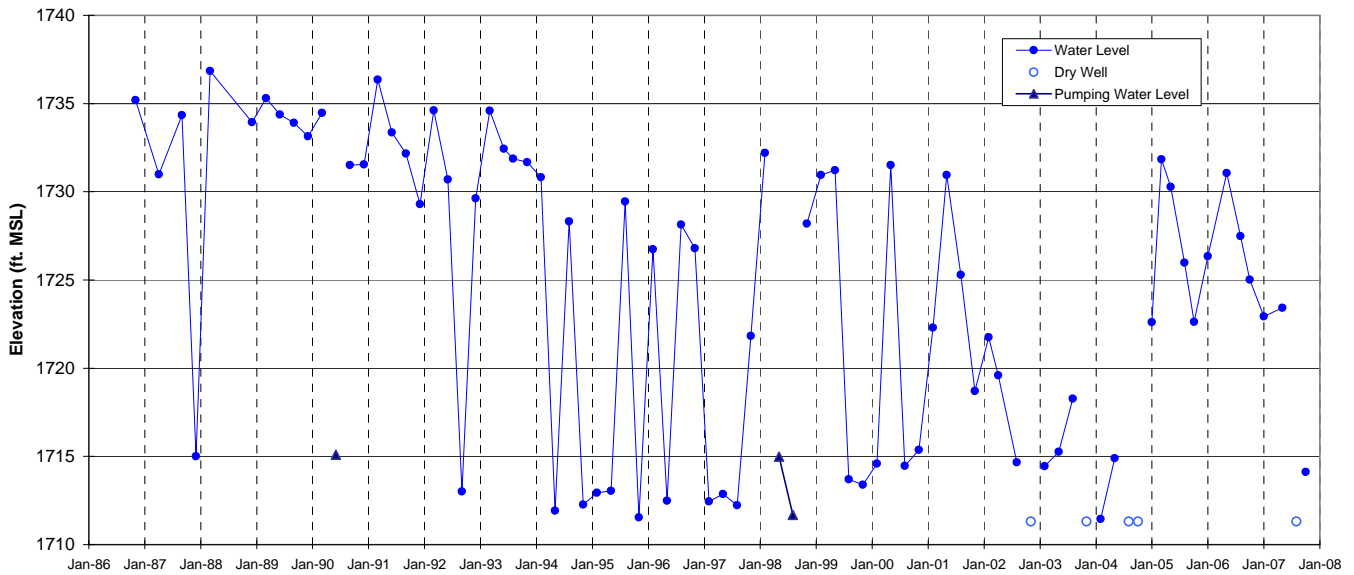
WATER LEVEL HYDROGRAPH  
Shallow Well ES-14  
**Figure A-57**



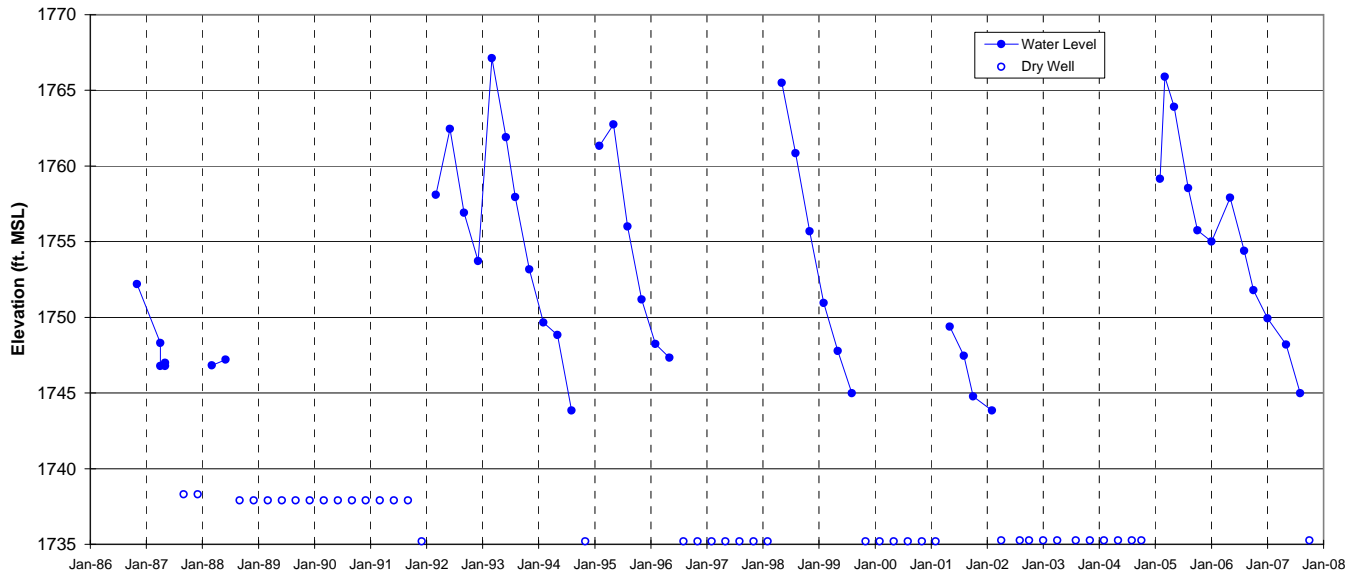
WATER LEVEL HYDROGRAPH  
Shallow Well ES-15  
**Figure A-58**



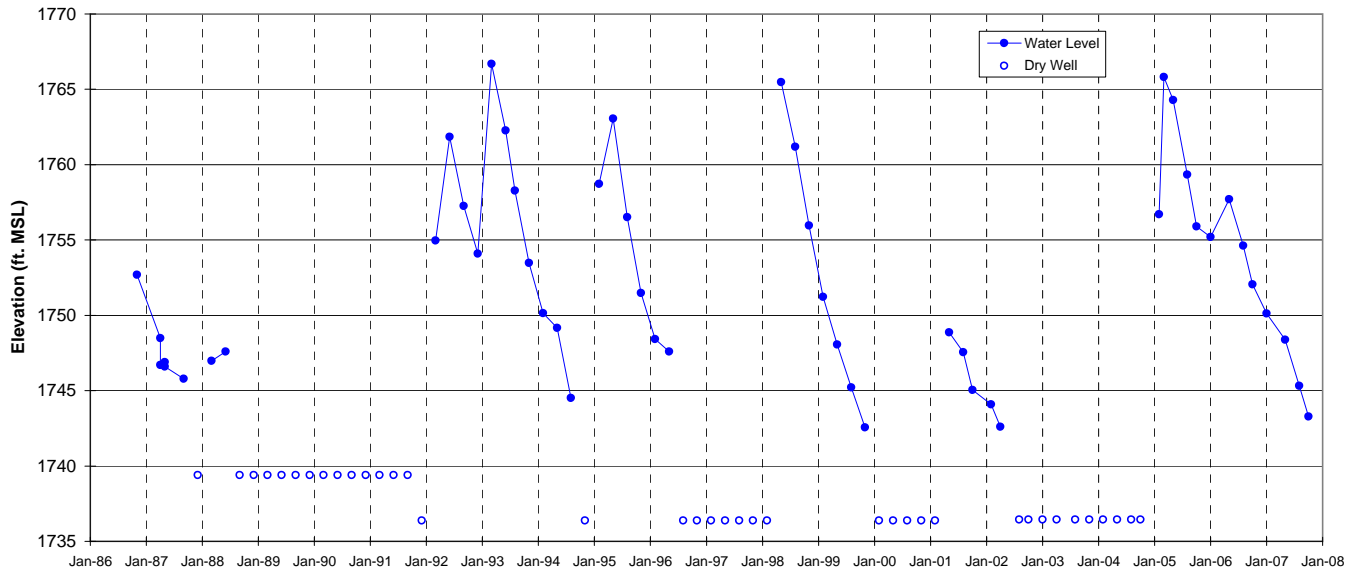
WATER LEVEL HYDROGRAPH  
 Shallow Well ES-16  
**Figure A-59**



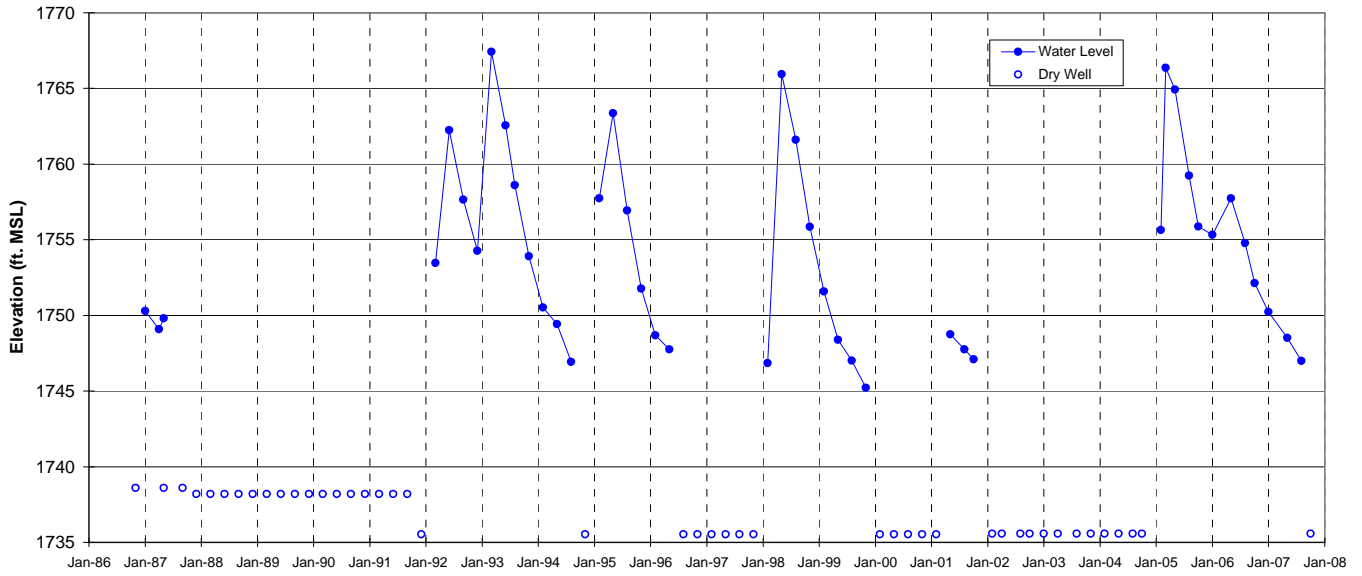
WATER LEVEL HYDROGRAPH  
 Shallow Well ES-17  
**Figure A-60**



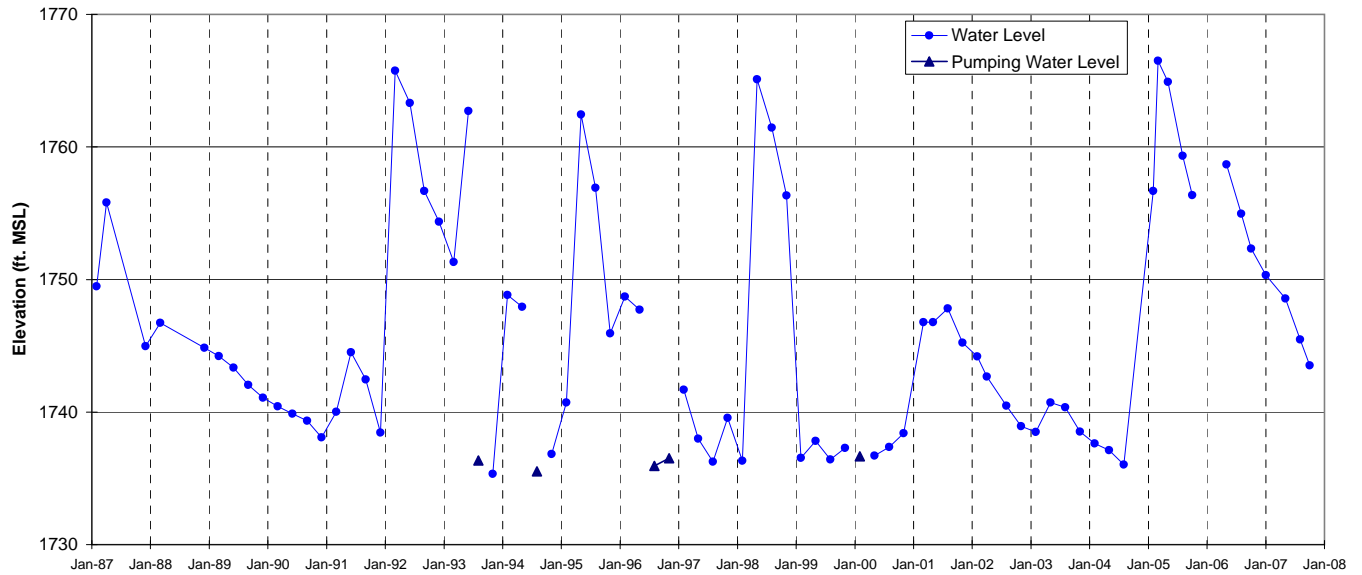
WATER LEVEL HYDROGRAPH  
 Shallow Well ES-18  
**Figure A-61**



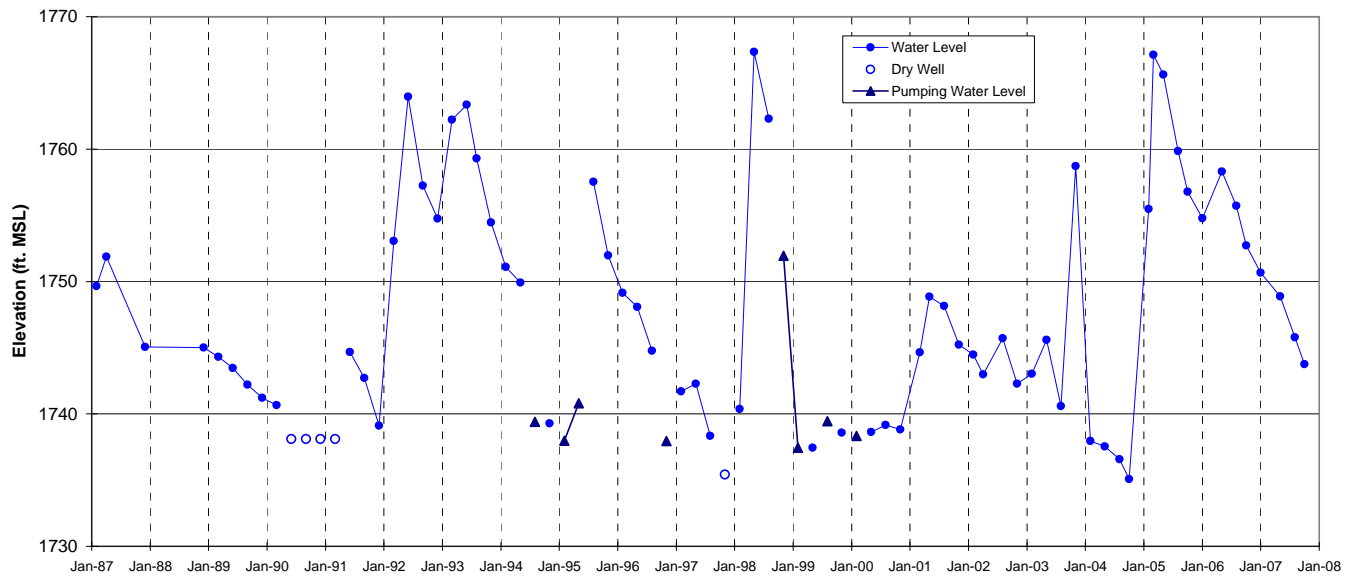
WATER LEVEL HYDROGRAPH  
 Shallow Well ES-19  
**Figure A-62**



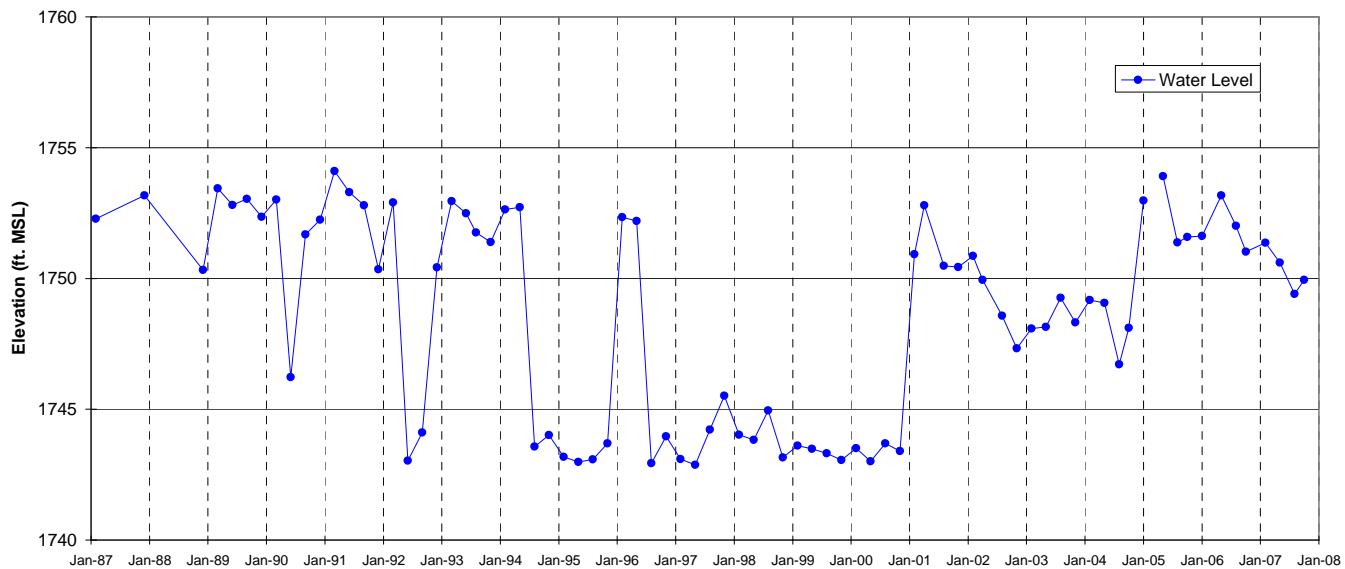
WATER LEVEL HYDROGRAPH  
Shallow Well ES-20  
**Figure A-63**



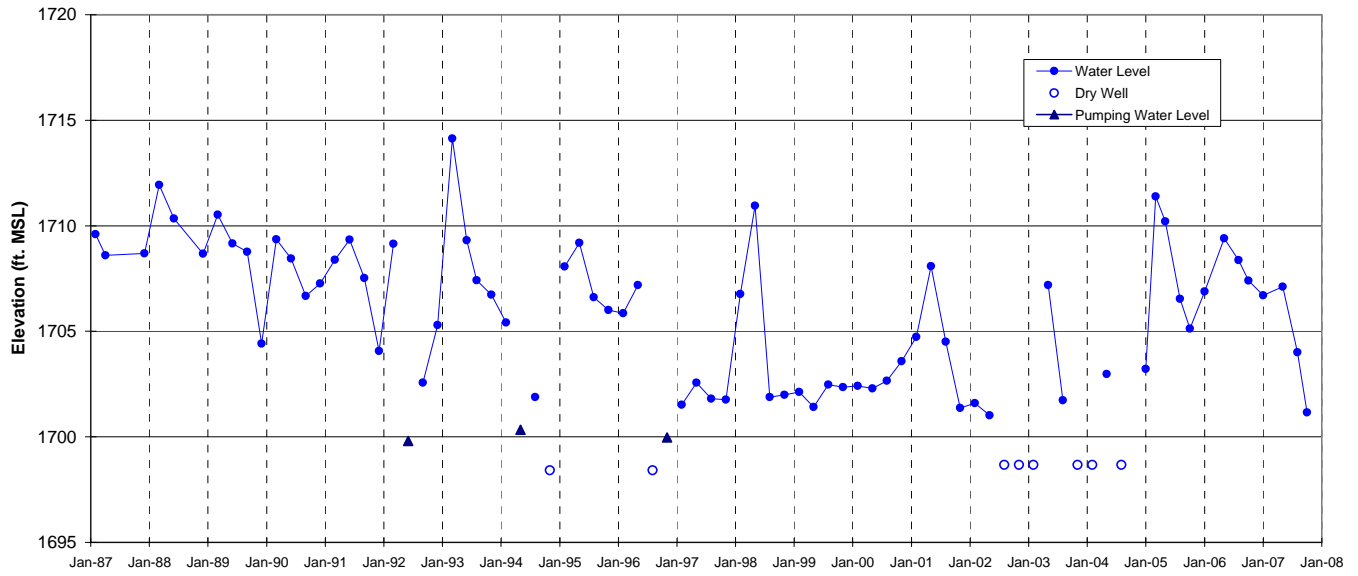
WATER LEVEL HYDROGRAPH  
Shallow Well ES-21  
**Figure A-64**



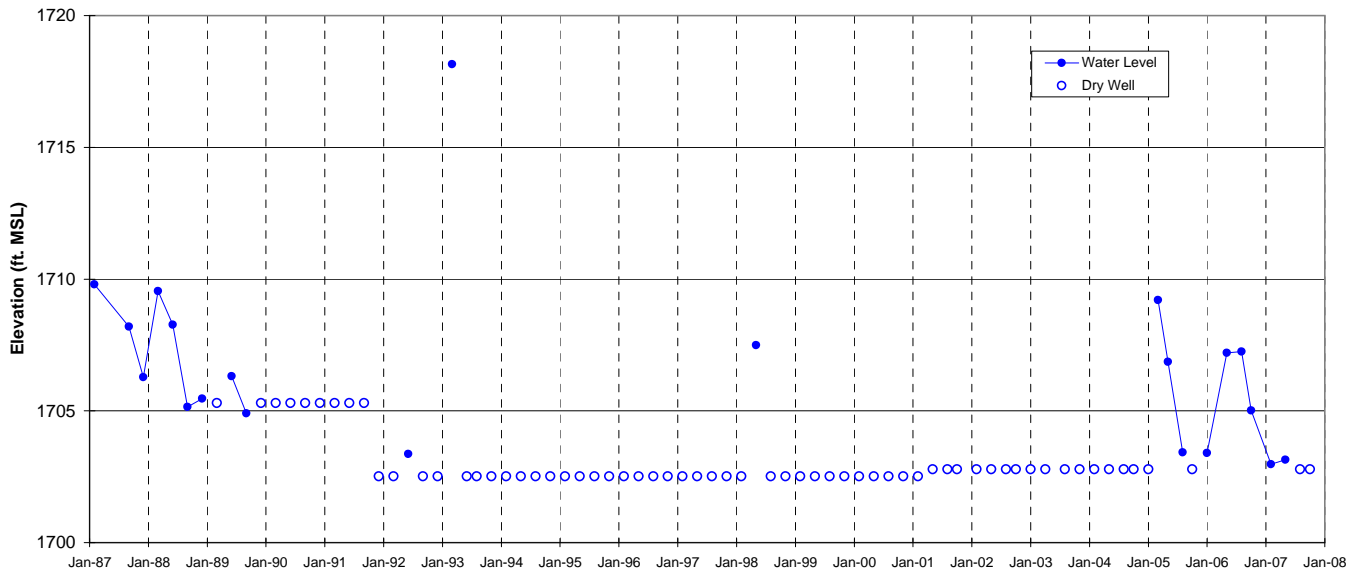
WATER LEVEL HYDROGRAPH  
 Shallow Well ES-22  
**Figure A-65**



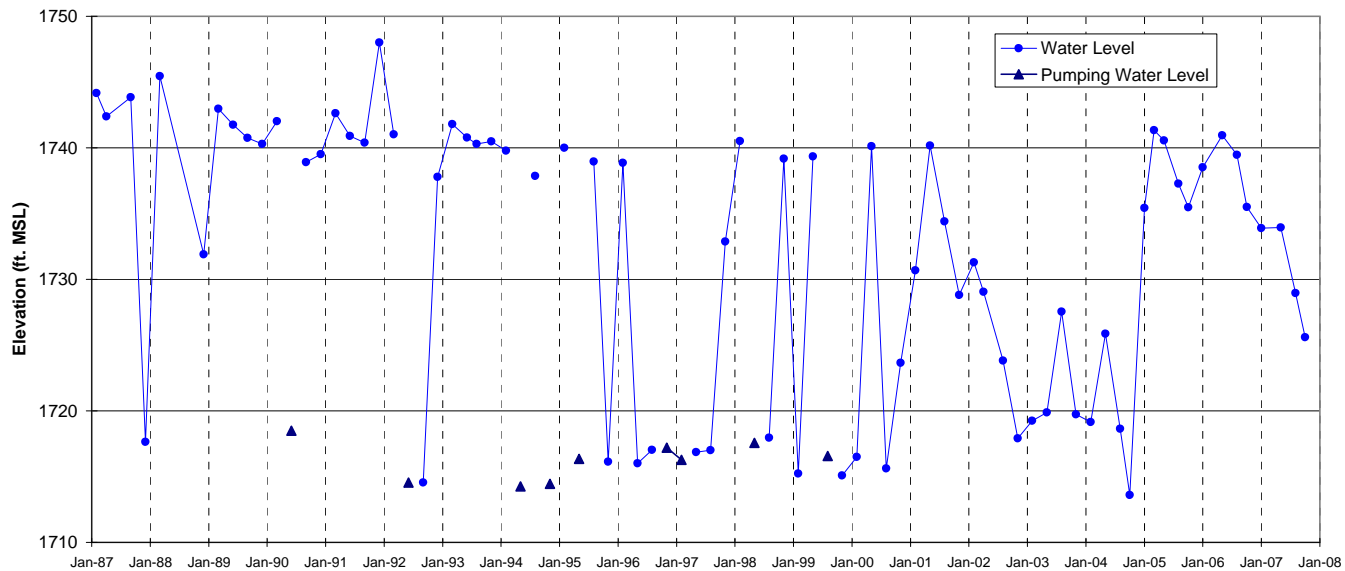
WATER LEVEL HYDROGRAPH  
 Shallow Well ES-23  
**Figure A-66**



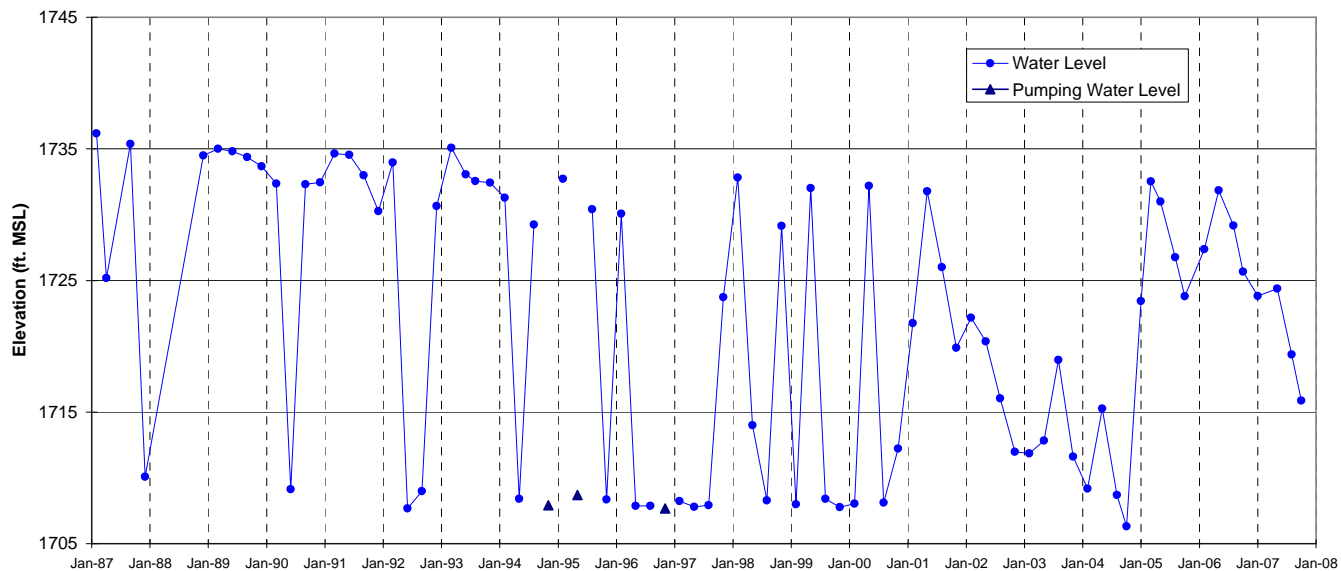
WATER LEVEL HYDROGRAPH  
 Shallow Well ES-24  
**Figure A-67**



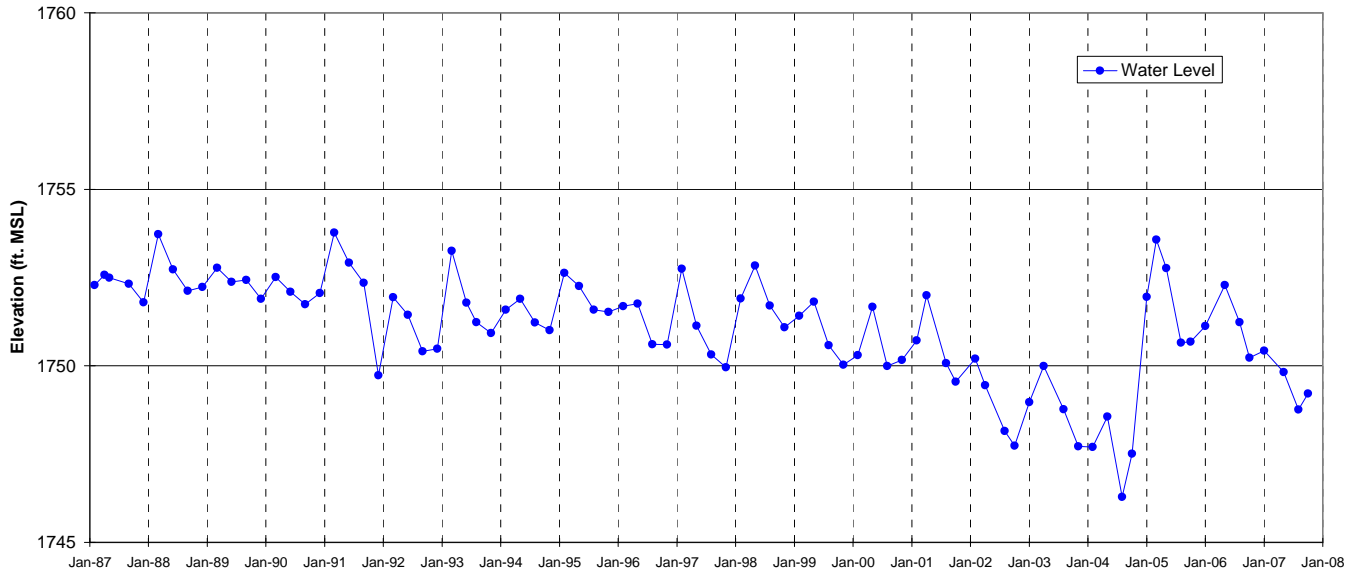
WATER LEVEL HYDROGRAPH  
 Shallow Well ES-25  
**Figure A-68**



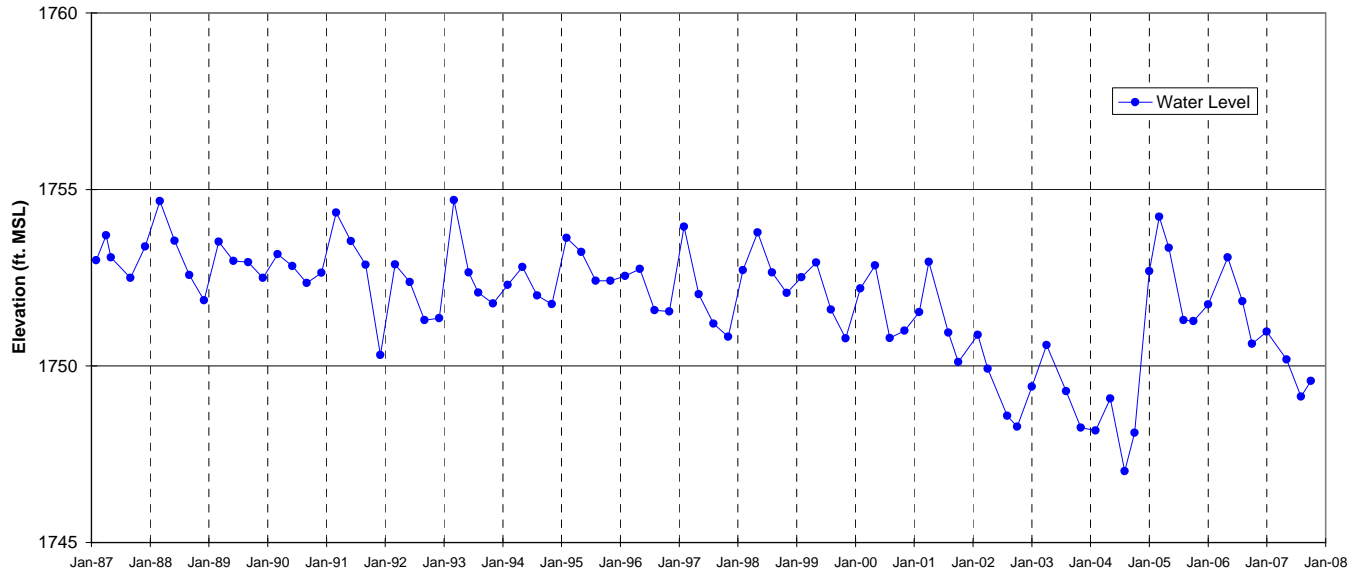
WATER LEVEL HYDROGRAPH  
 Shallow Well ES-26  
 Figure A-69



WATER LEVEL HYDROGRAPH  
 Shallow Well ES-27  
 Figure A-70

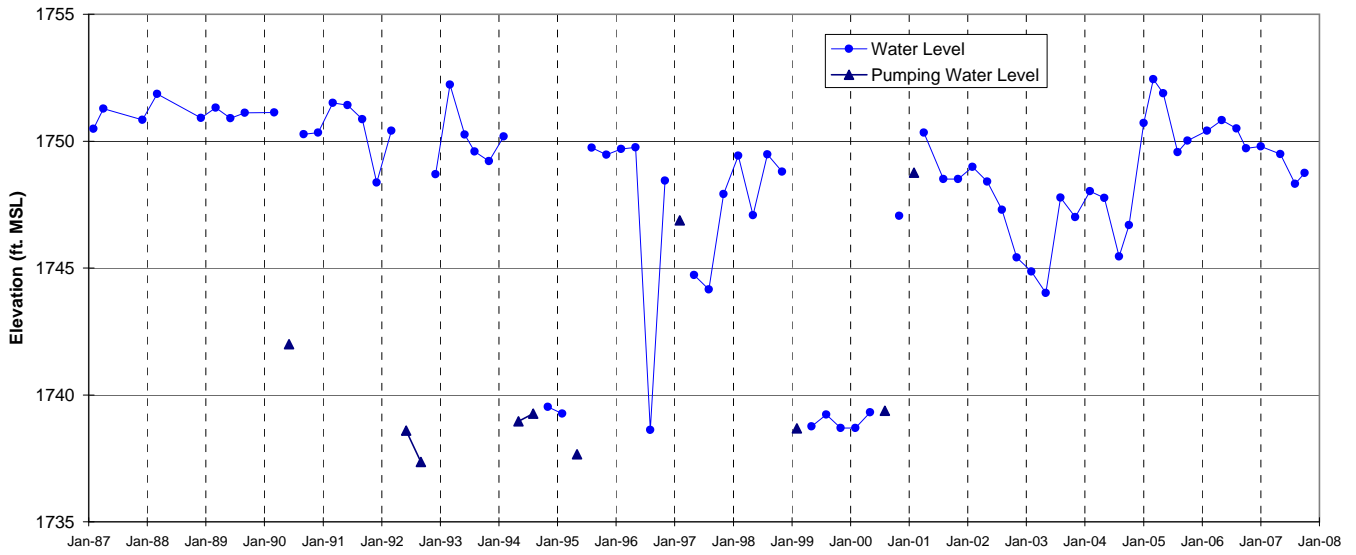


WATER LEVEL HYDROGRAPH  
 Shallow Well ES-28  
 Figure A-71

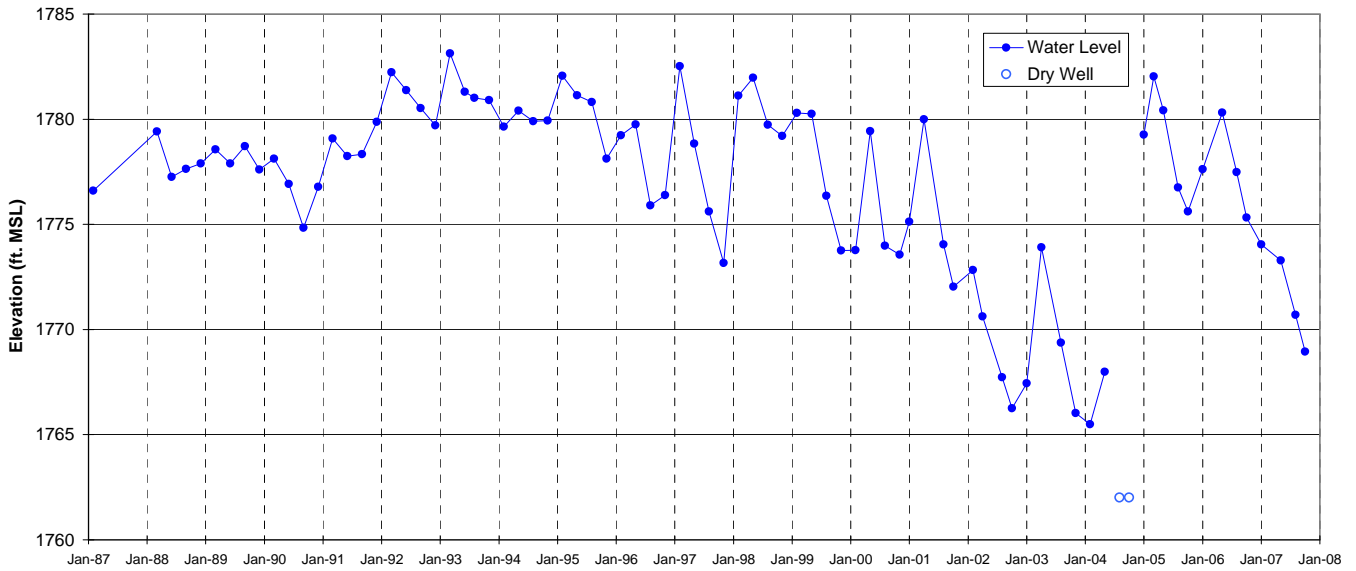


WATER LEVEL HYDROGRAPH  
 Shallow Well ES-29  
 Figure A-72

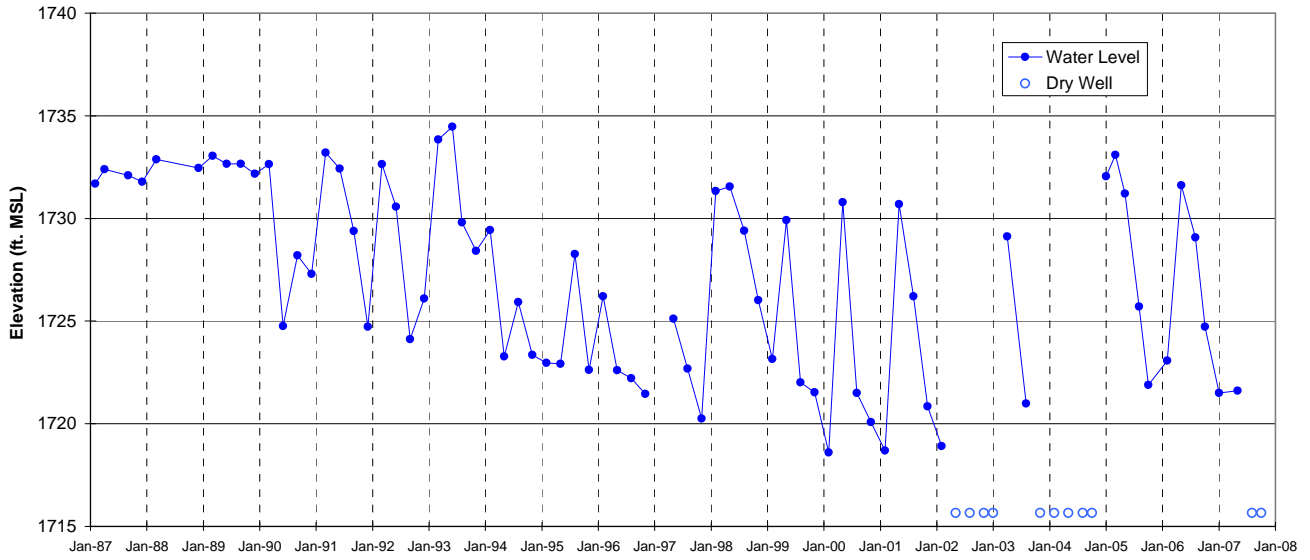




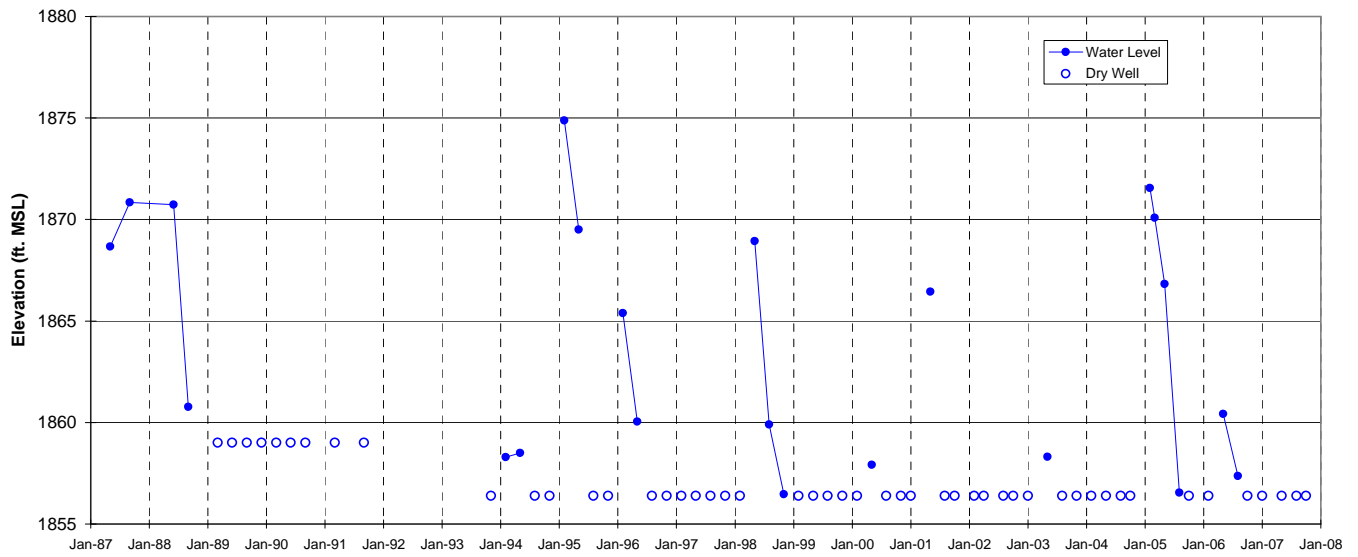
WATER LEVEL HYDROGRAPH  
 Shallow Well ES-30  
 Figure A-73



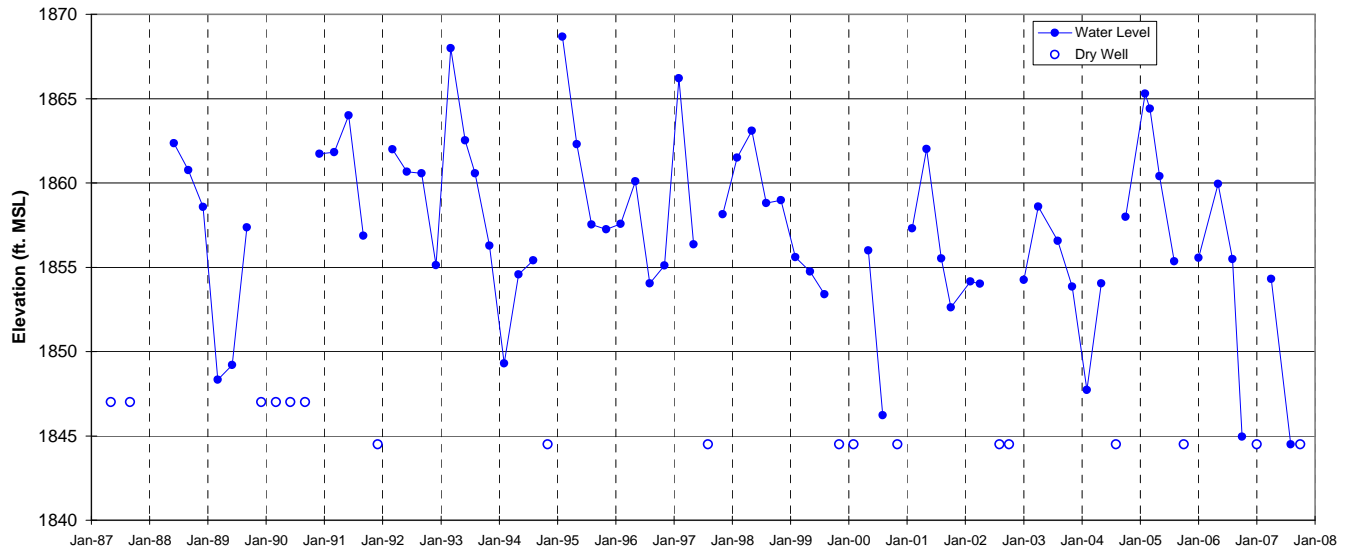
WATER LEVEL HYDROGRAPH  
 Shallow Well ES-31  
 Figure A-74



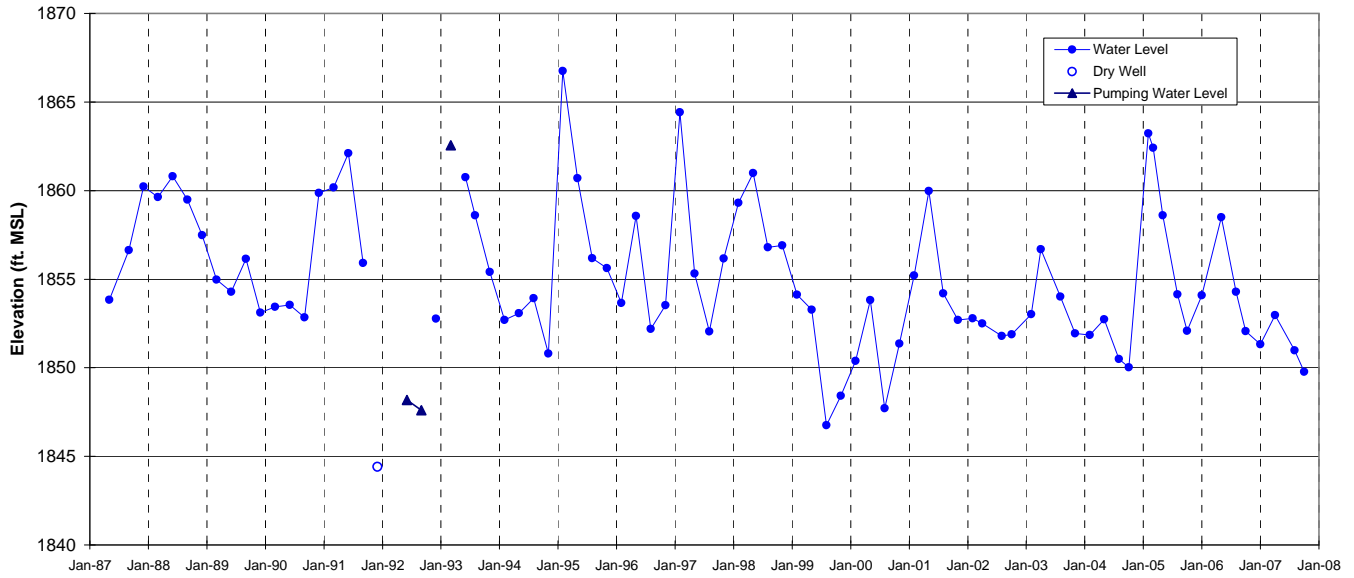
WATER LEVEL HYDROGRAPH  
 Shallow Well ES-32  
**Figure A-75**



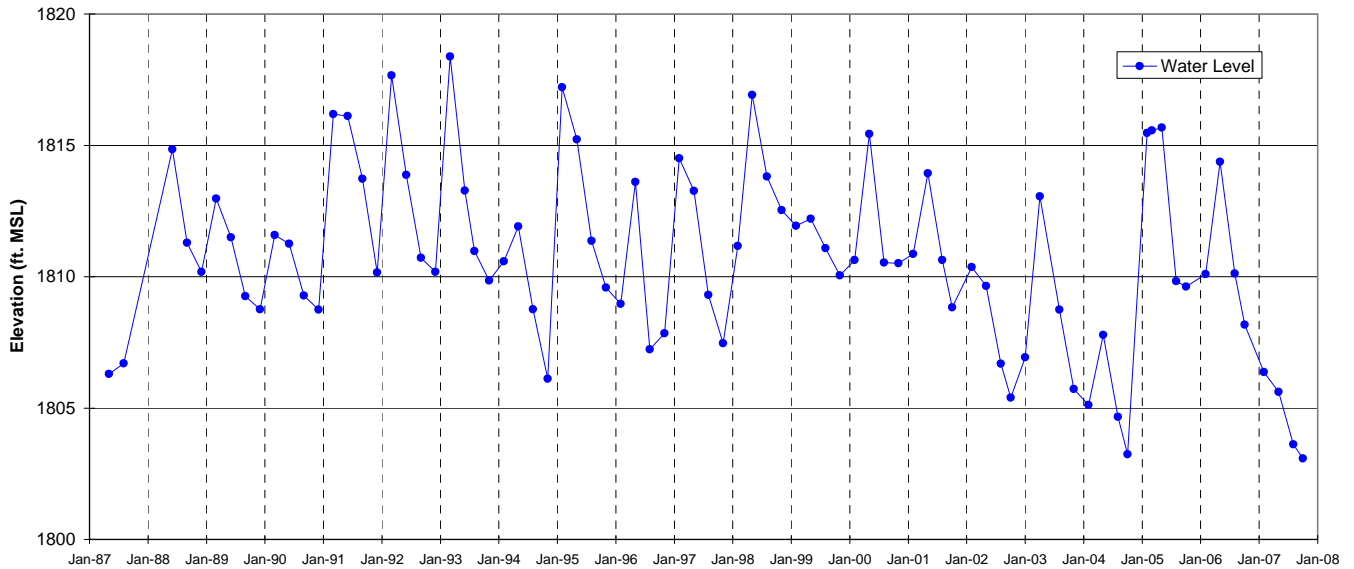
WATER LEVEL HYDROGRAPH  
 Shallow Well HAR-02  
**Figure A-76**



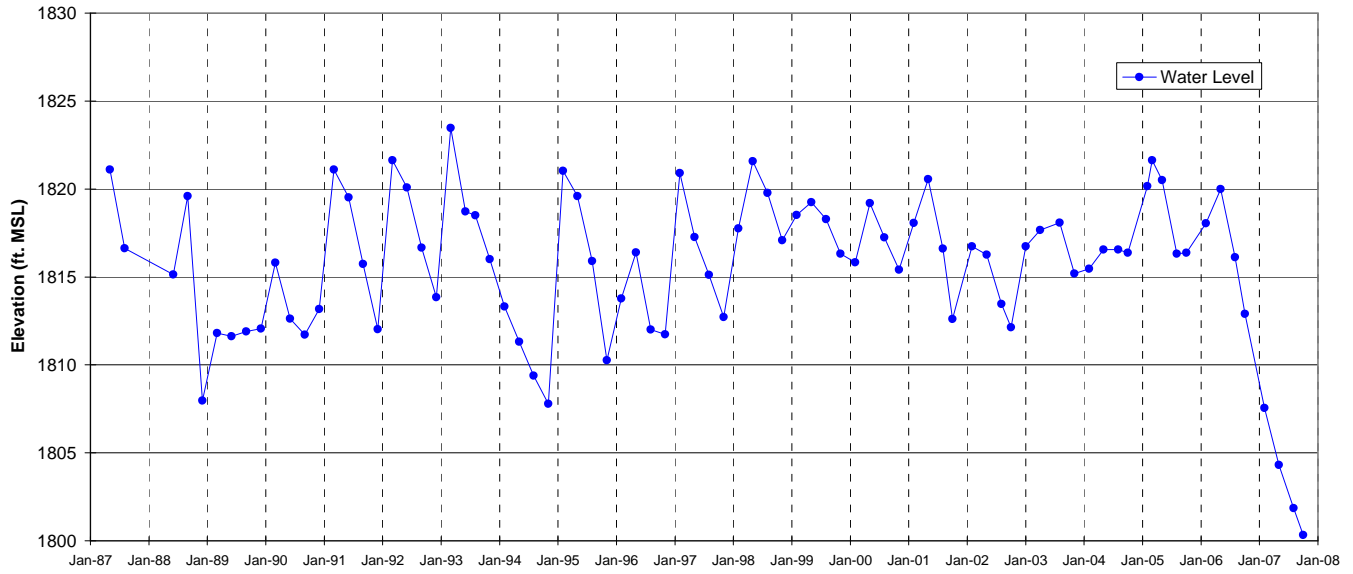
WATER LEVEL HYDROGRAPH  
 Shallow Well HAR-03  
**Figure A-77**



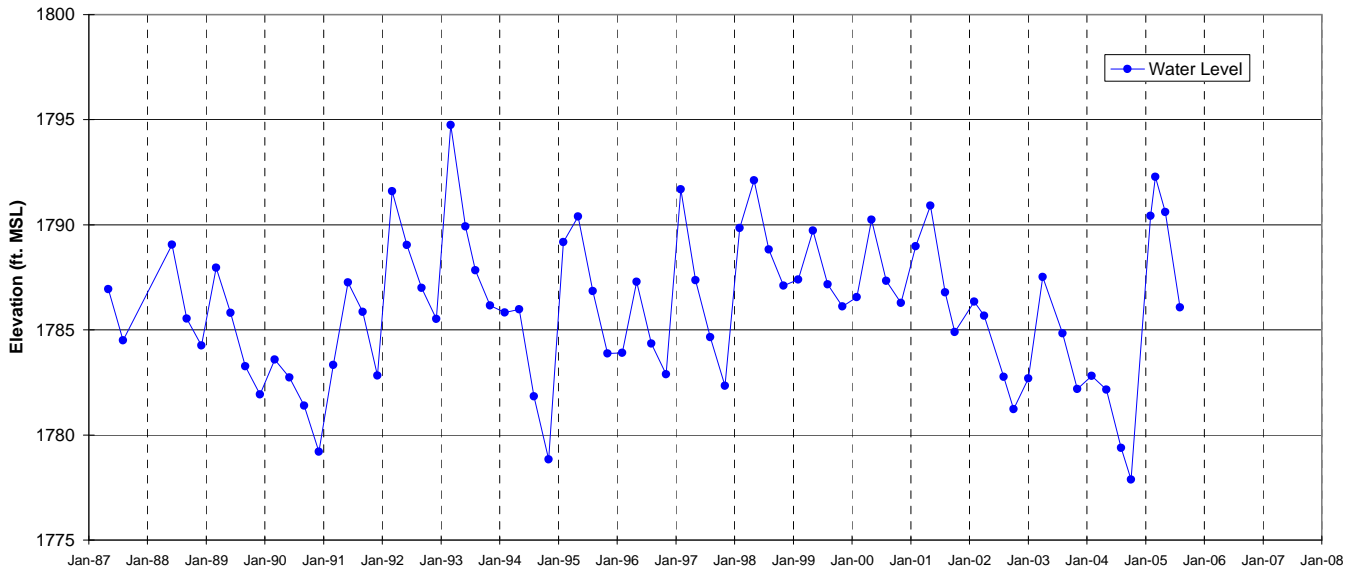
WATER LEVEL HYDROGRAPH  
Shallow Well HAR-04  
Figure A-78



WATER LEVEL HYDROGRAPH  
Shallow Well HAR-09  
Figure A-79

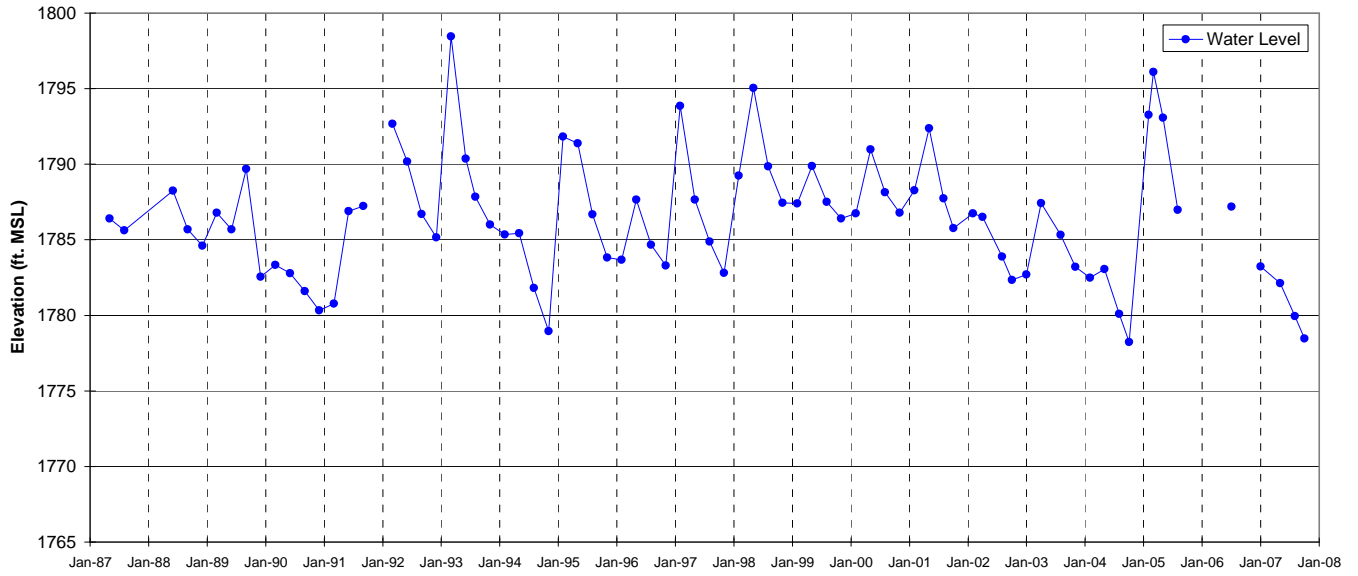


WATER LEVEL HYDROGRAPH  
 Shallow Well HAR-11  
**Figure A-80**

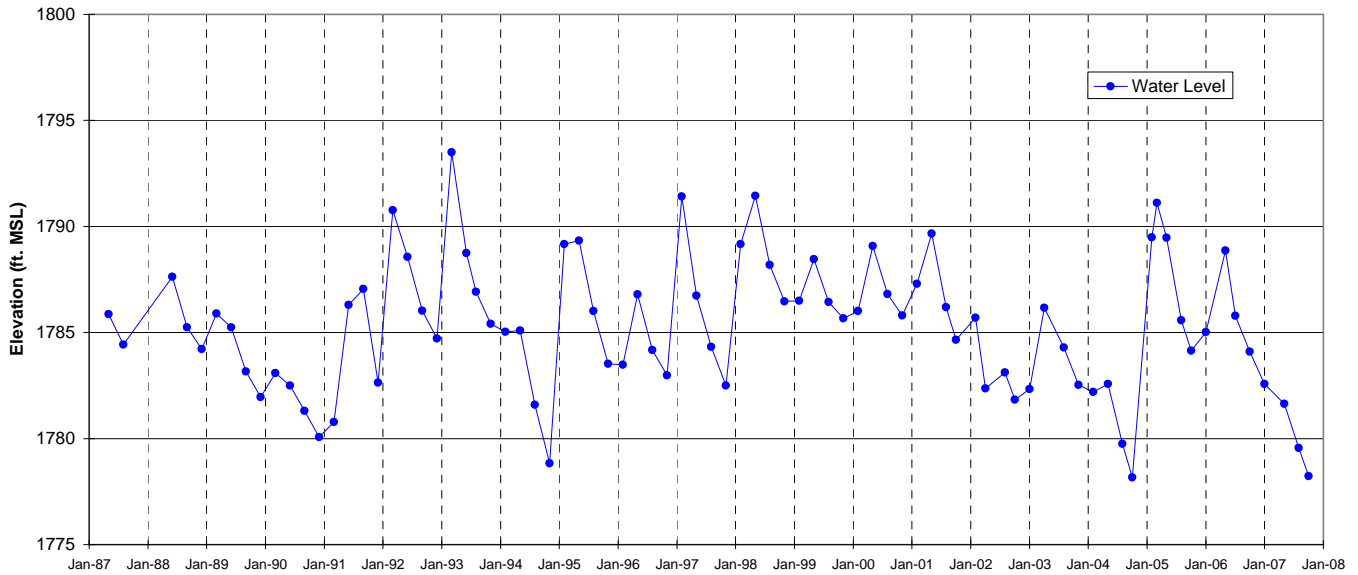


WATER LEVEL HYDROGRAPH  
 Shallow Well HAR-12  
**Figure A-81**

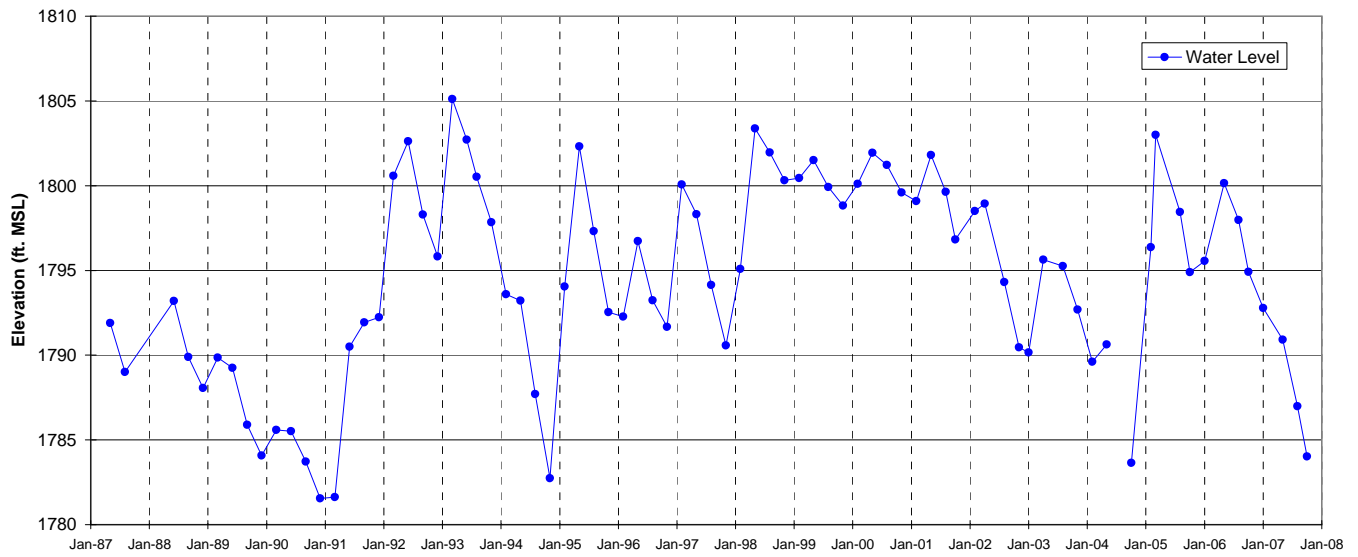
The plastic casing melted the cap to the casing during the 2005 Topanga fire, obstructing access to measure water levels.



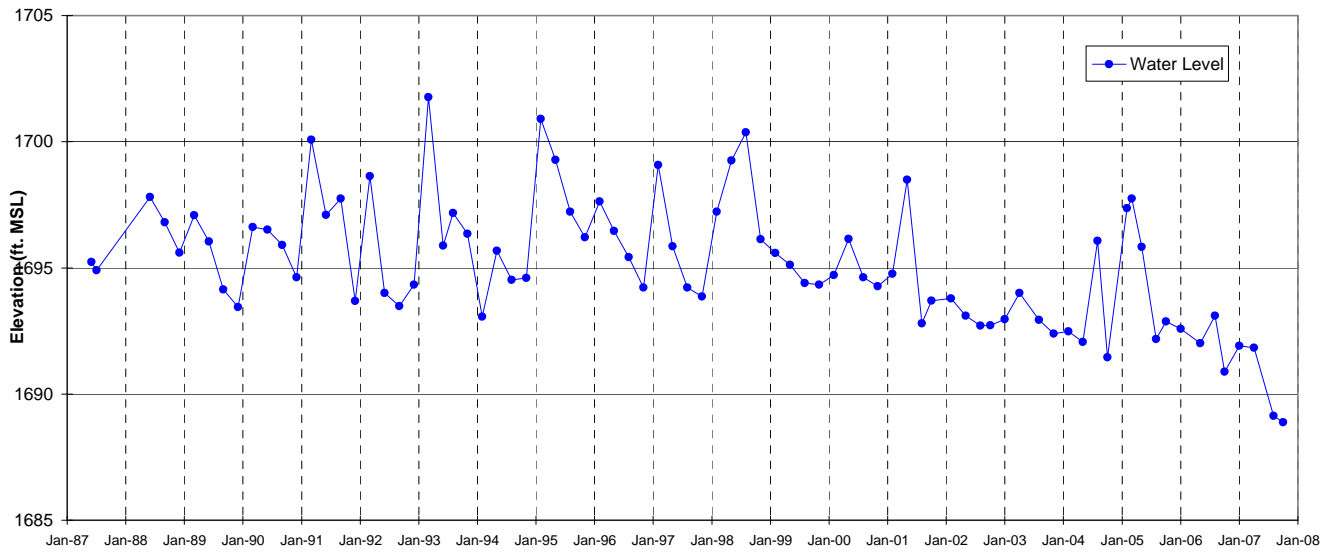
WATER LEVEL HYDROGRAPH  
 Shallow Well HAR-13  
 Figure A-82



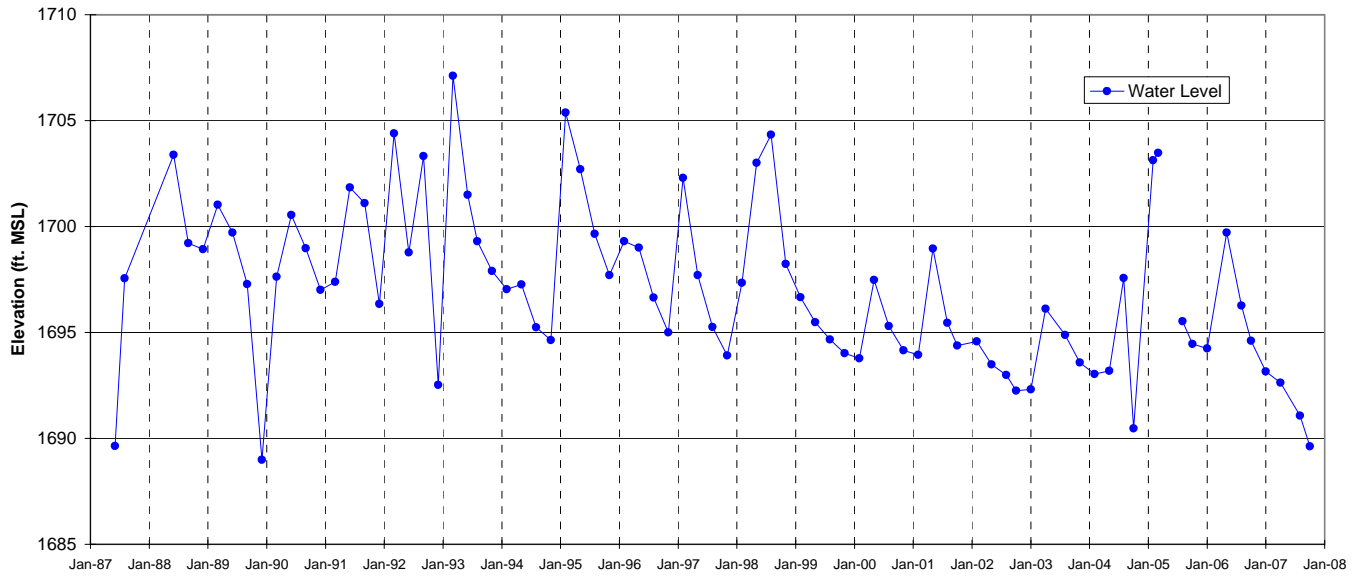
WATER LEVEL HYDROGRAPH  
 Shallow Well HAR-14  
 Figure A-83



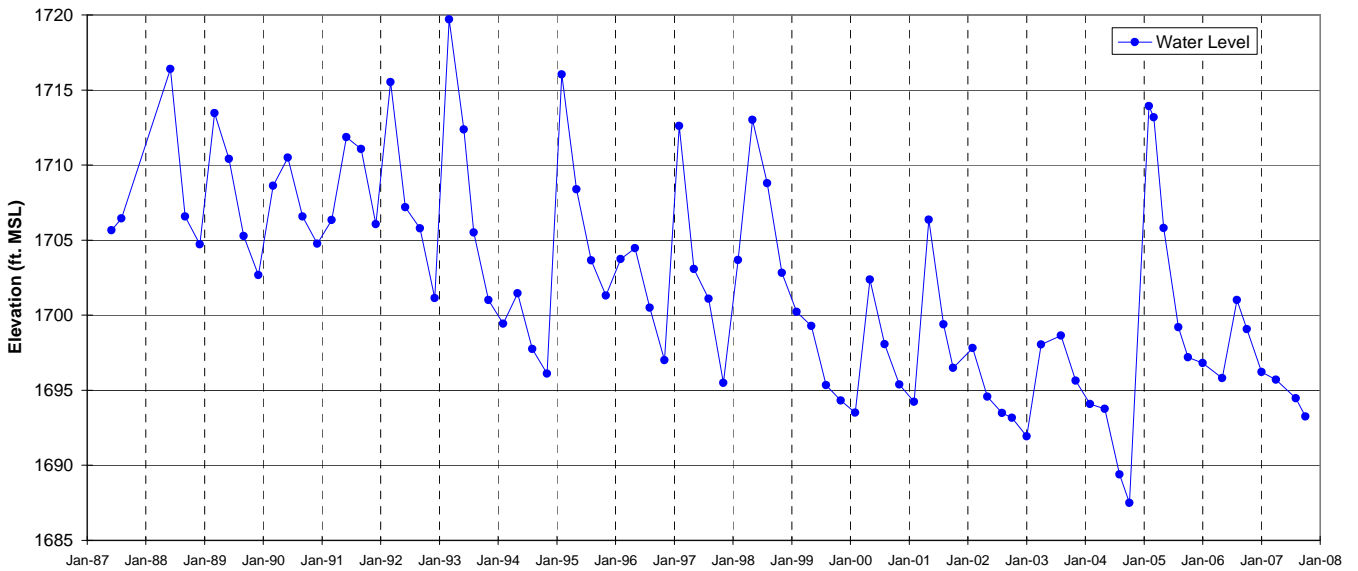
WATER LEVEL HYDROGRAPH  
 Shallow Well HAR-15  
 Figure A-84



WATER LEVEL HYDROGRAPH  
 Shallow Well HAR-27  
 Figure A-85

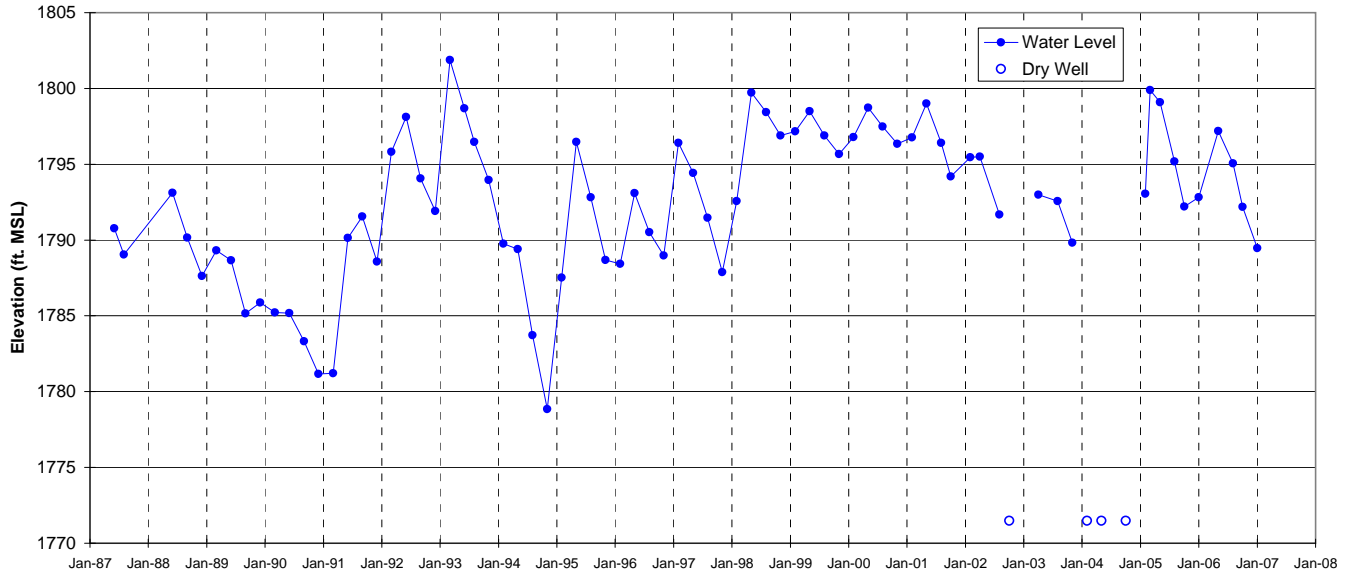


WATER LEVEL HYDROGRAPH  
 Shallow Well HAR-28  
**Figure A-86**



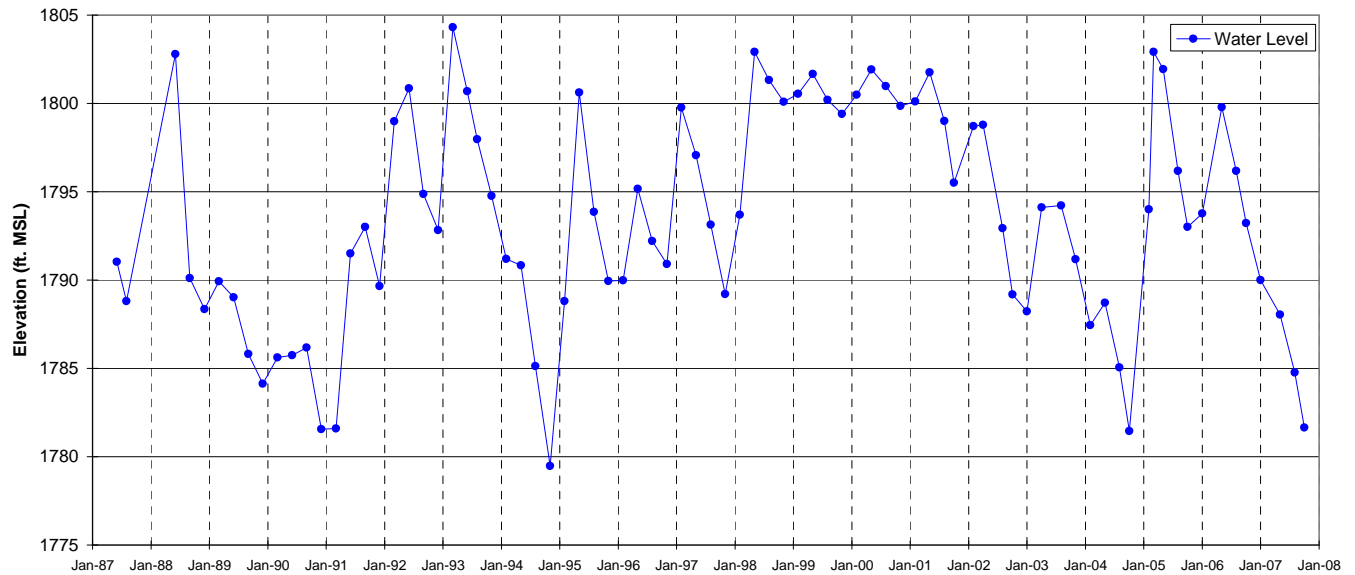
WATER LEVEL HYDROGRAPH  
 Shallow Well HAR-29  
**Figure A-87**



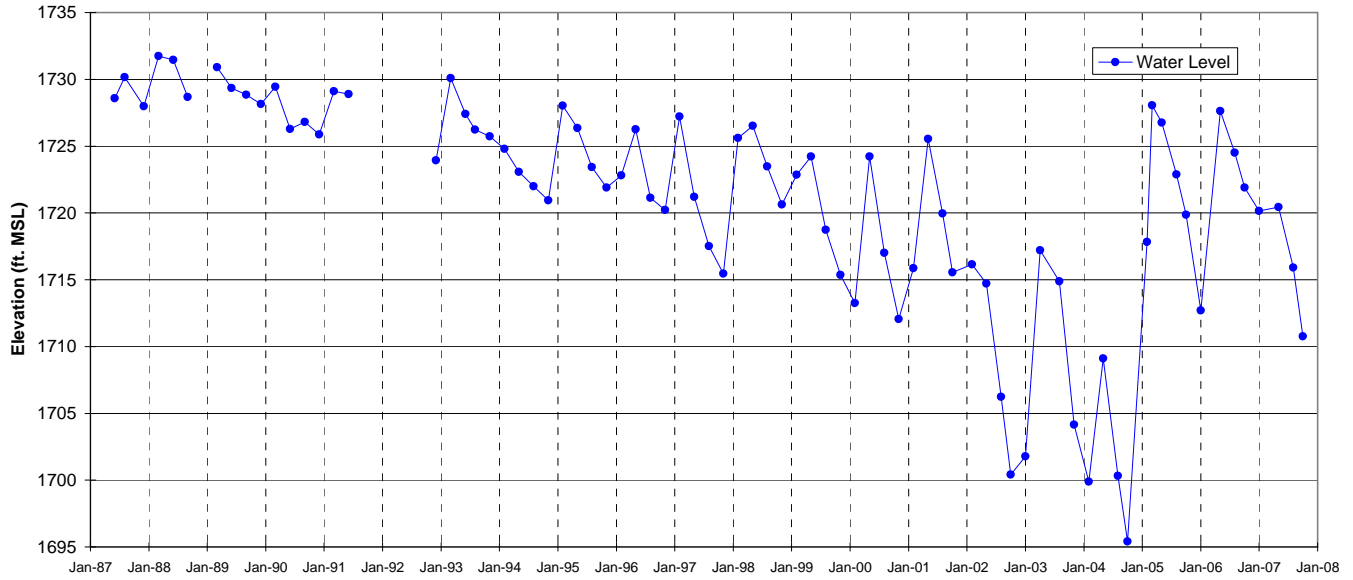


WATER LEVEL HYDROGRAPH  
Shallow Well HAR-30  
Figure A-88

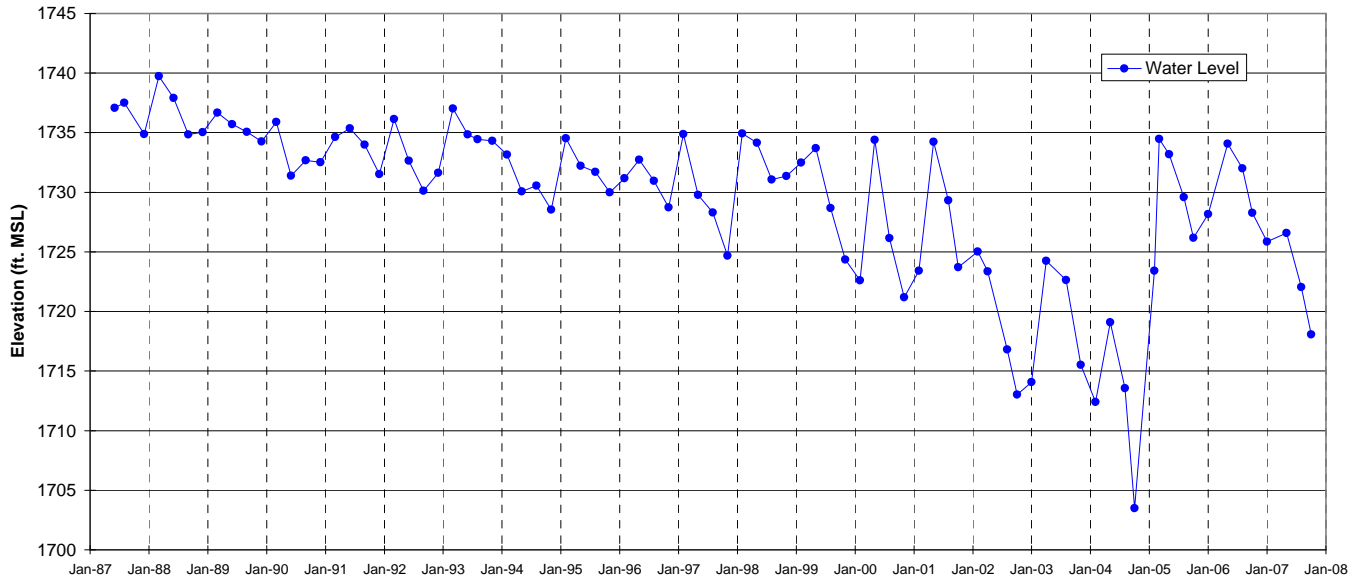
Obstruction in casing prevented water level measurement starting in May 2007.



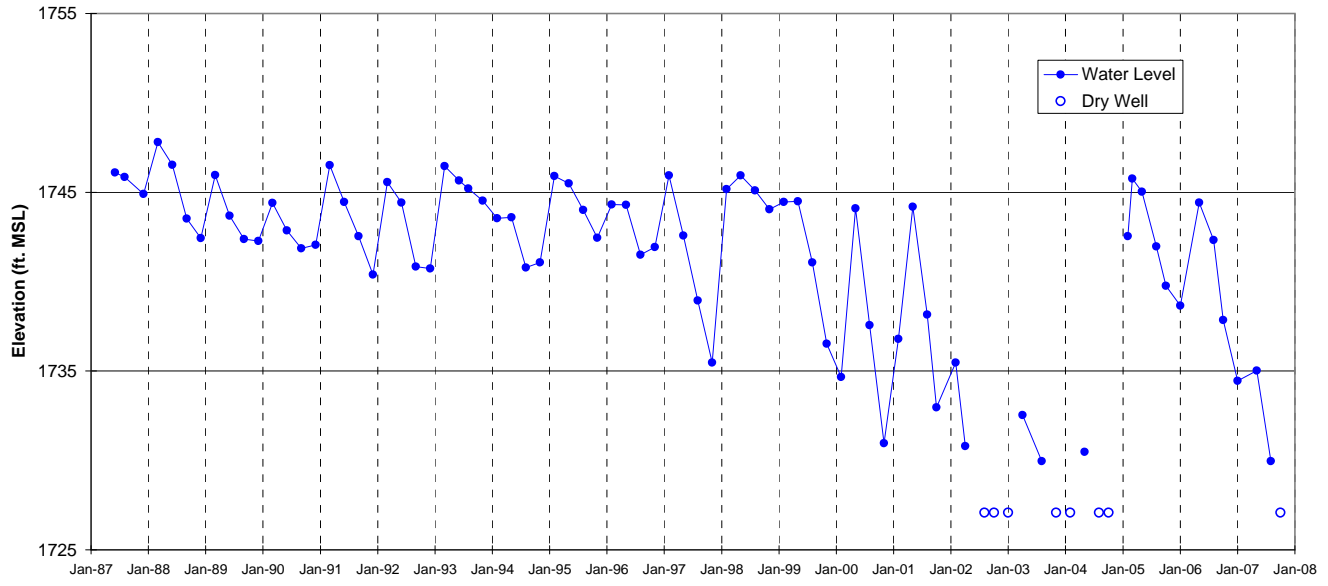
WATER LEVEL HYDROGRAPH  
Shallow Well HAR-31  
Figure A-89



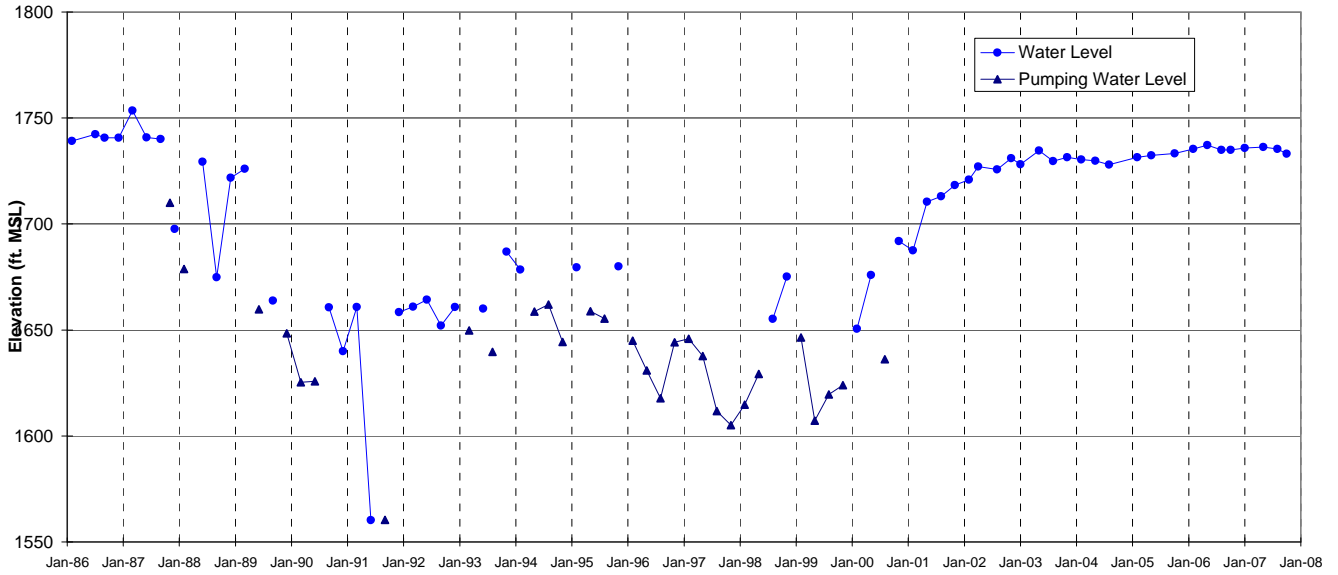
WATER LEVEL HYDROGRAPH  
 Shallow Well HAR-32  
**Figure A-90**



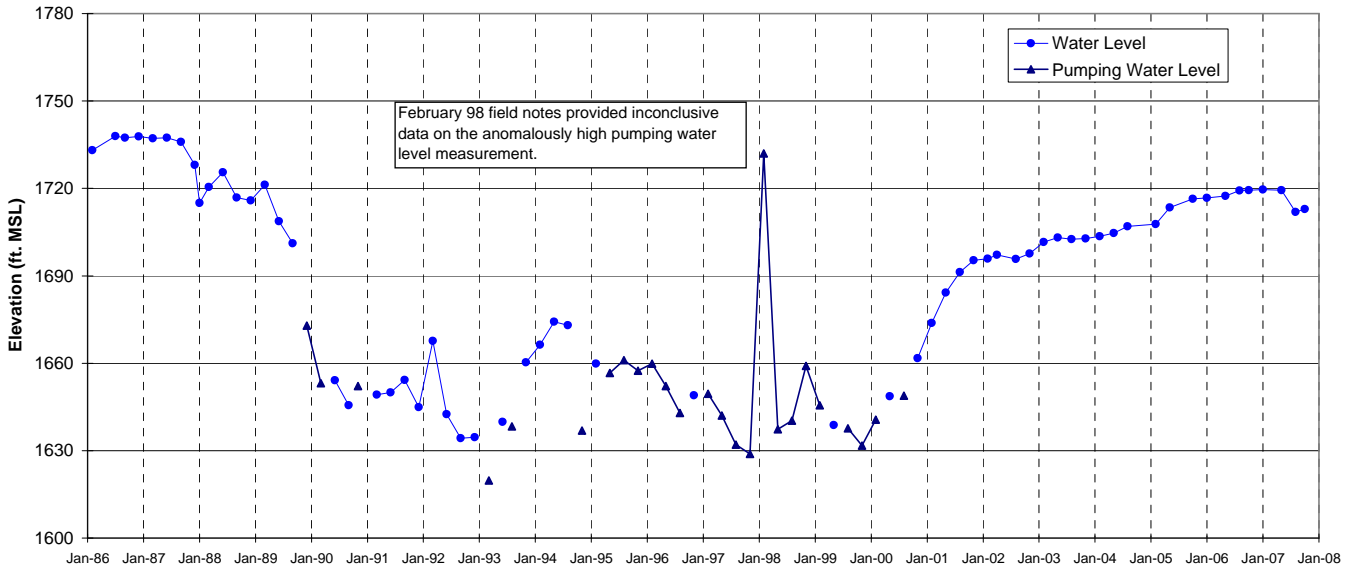
WATER LEVEL HYDROGRAPH  
 Shallow Well HAR-33  
**Figure A-91**



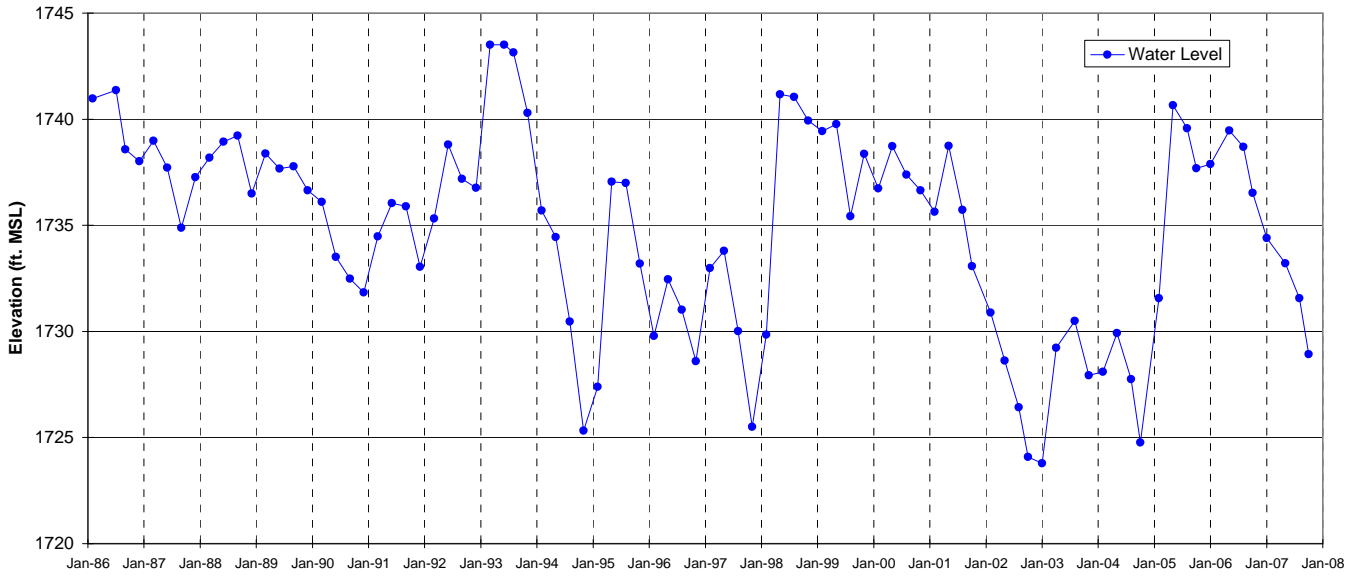
WATER LEVEL HYDROGRAPH  
 Shallow Well HAR-34  
**Figure A-92**



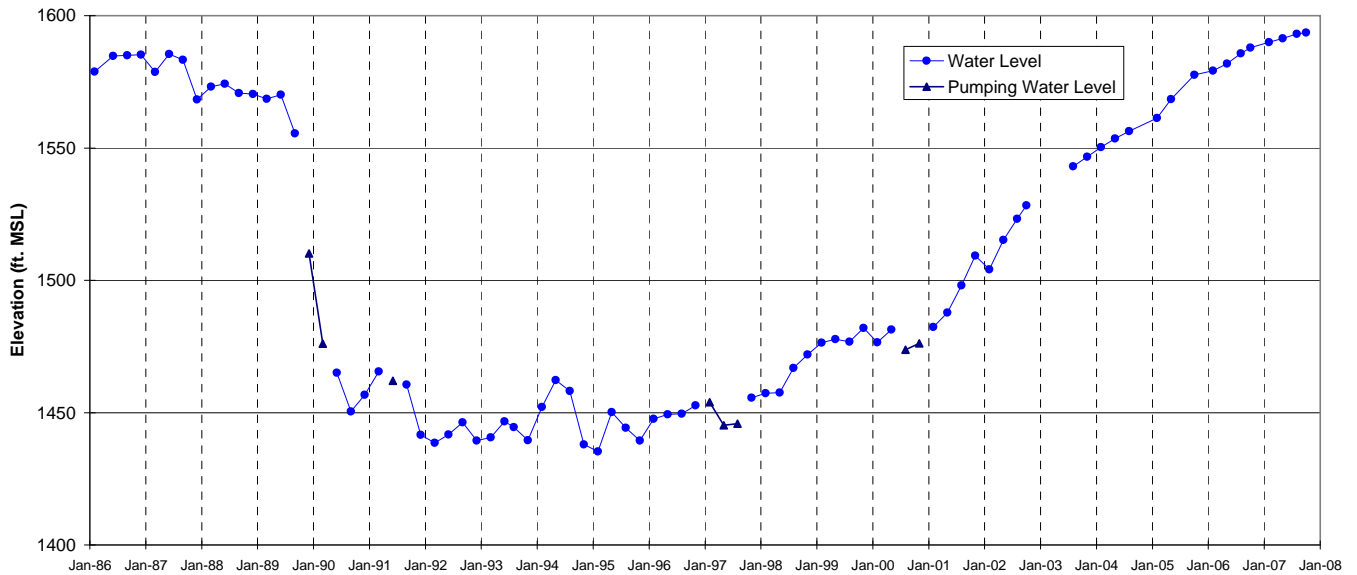
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-01  
**Figure A-93**



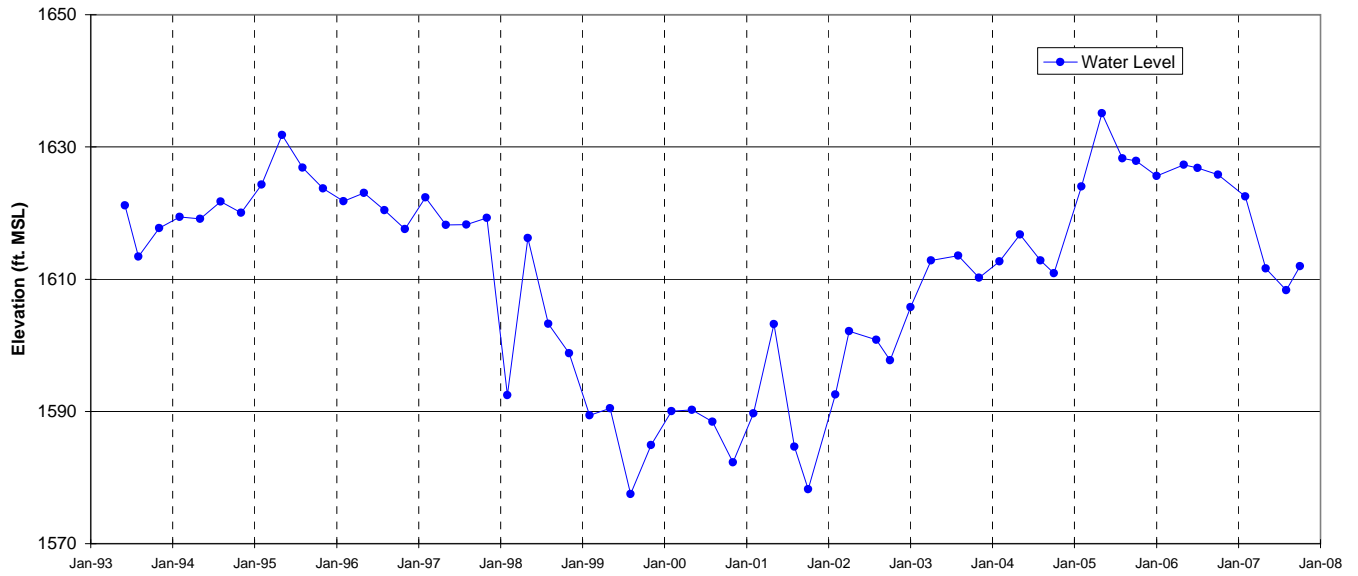
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-02  
**Figure A-94**



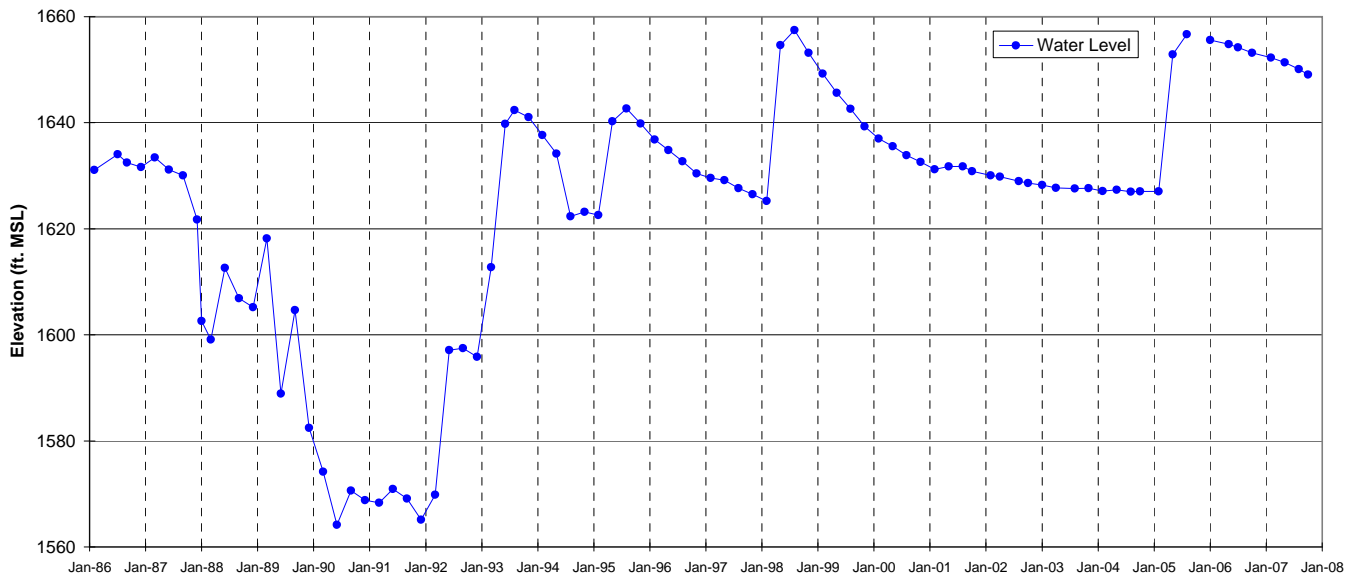
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-03  
Figure A-95



WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-04  
Figure A-96

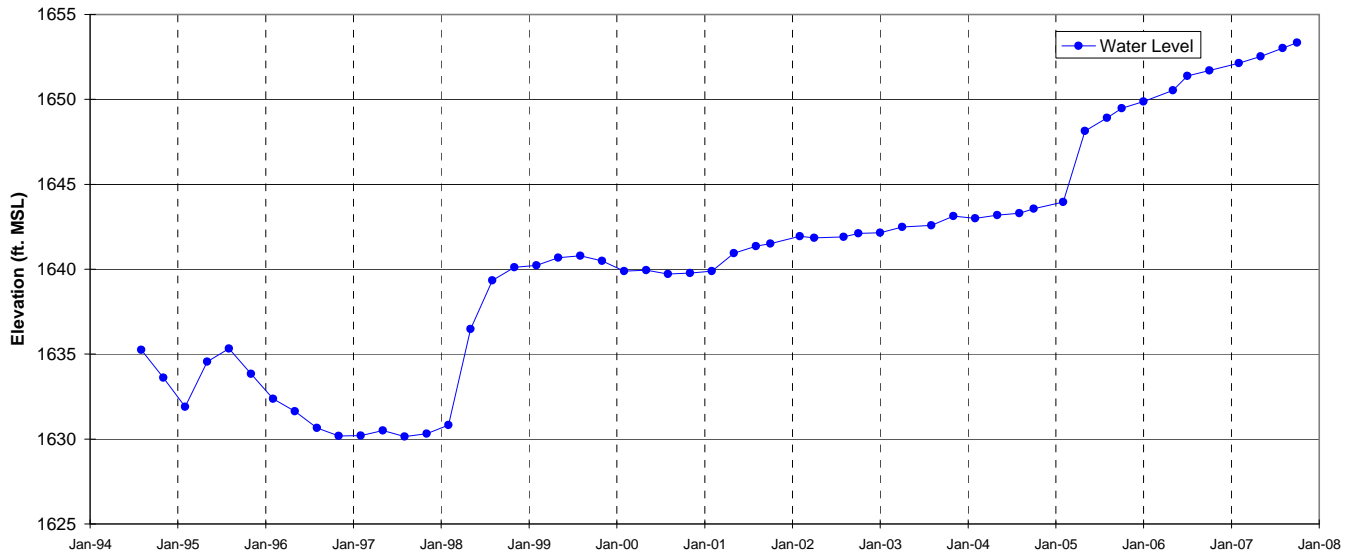


WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-05A  
**Figure A-97**

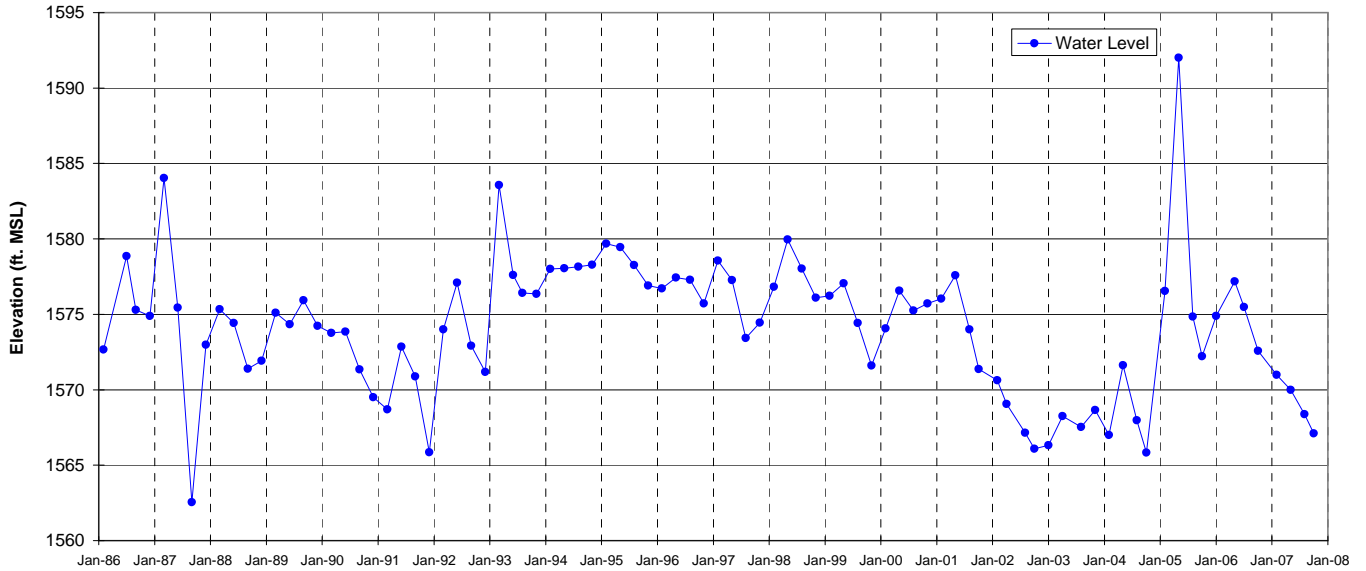


WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-05B\*  
**Figure A-98**

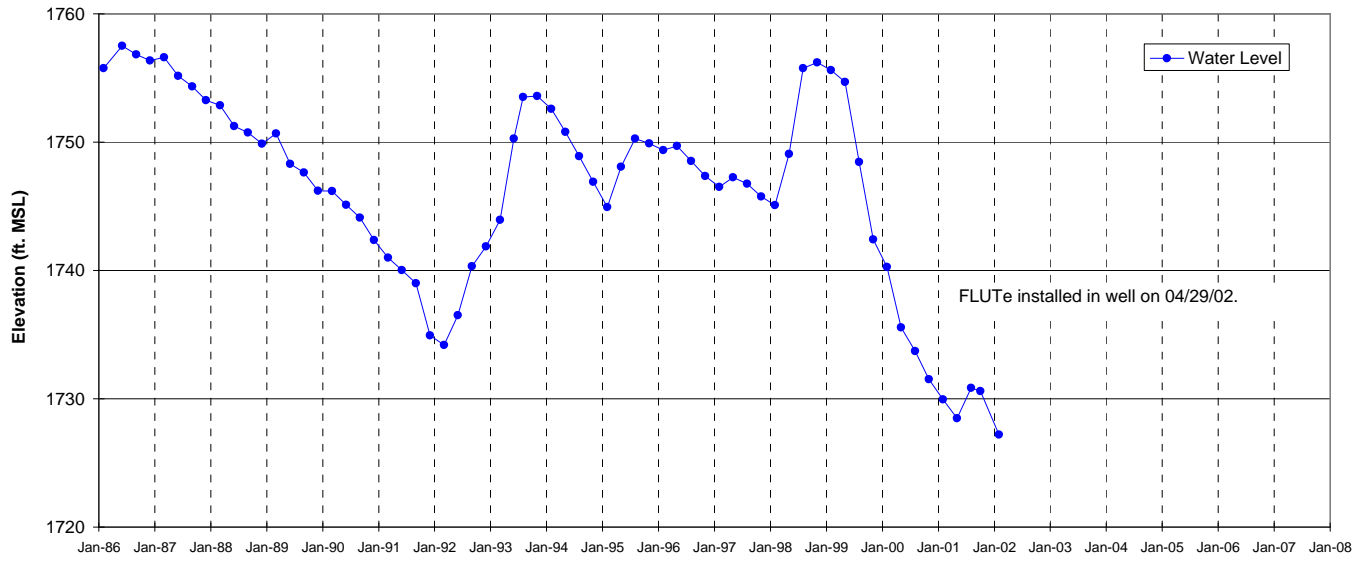
\* Well known as RD-05 prior to 05/93



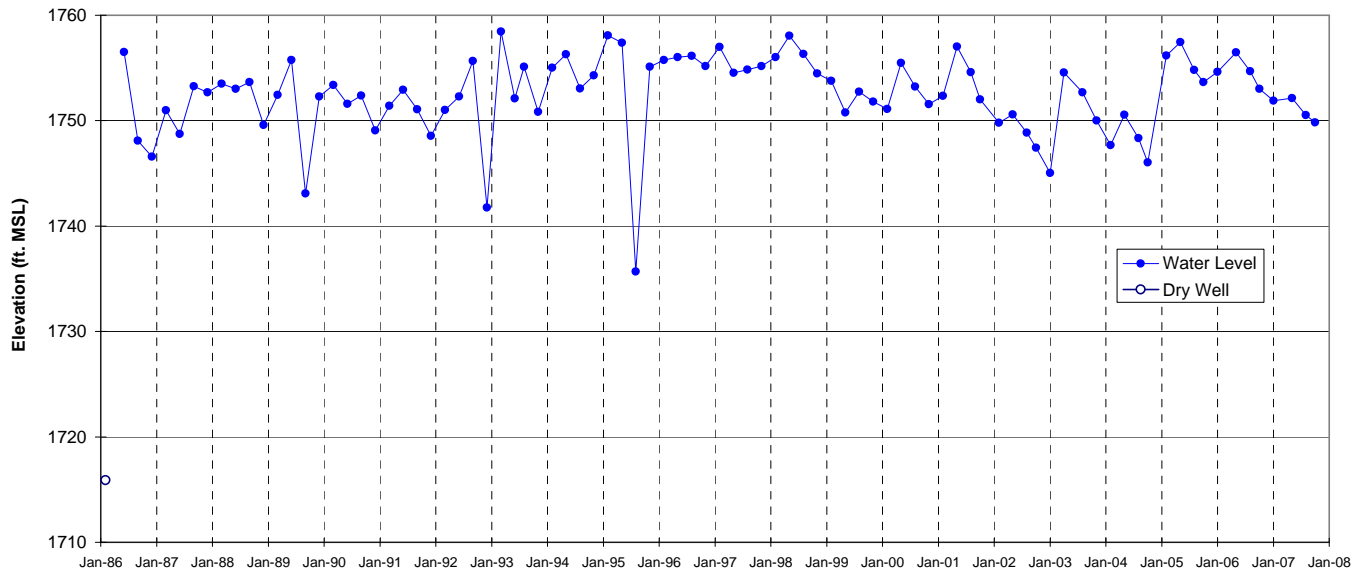
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-05C  
**Figure A-99**



WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-06  
**Figure A-100**

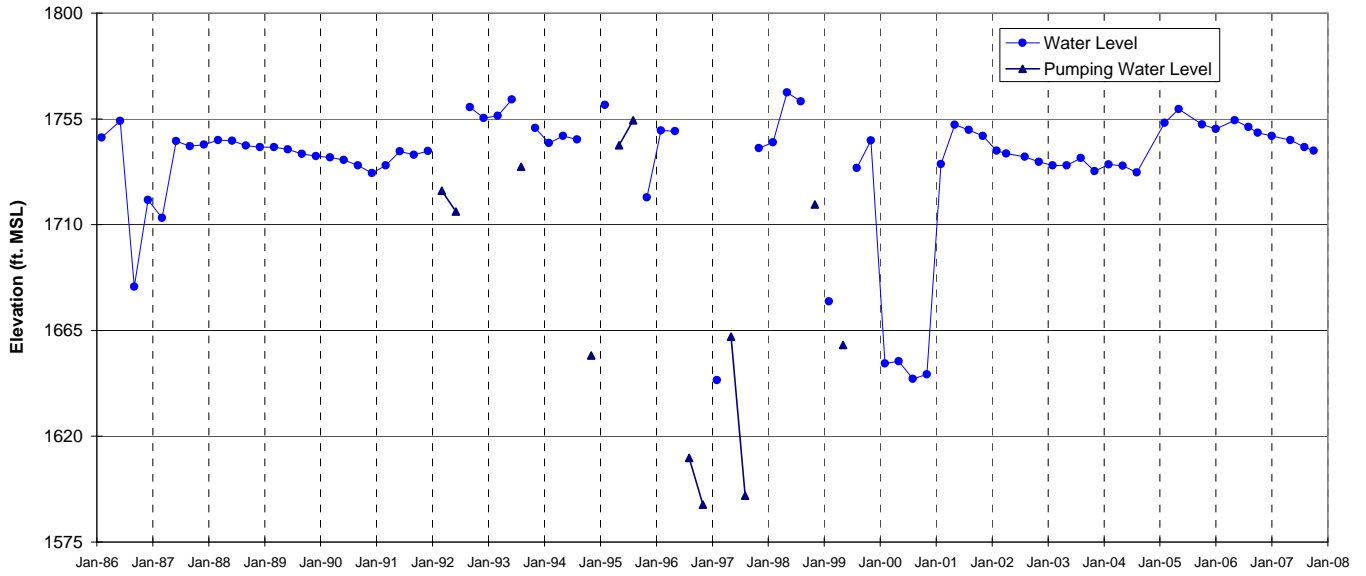


WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-07  
**Figure A-101**

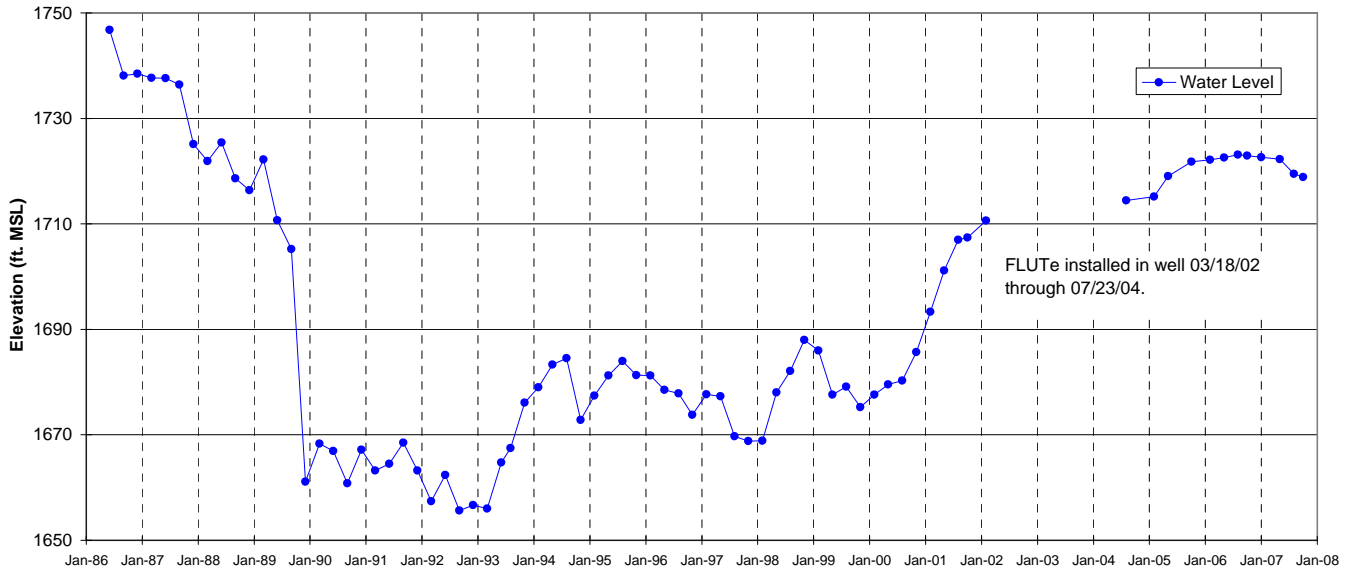


WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-08  
**Figure A-102**

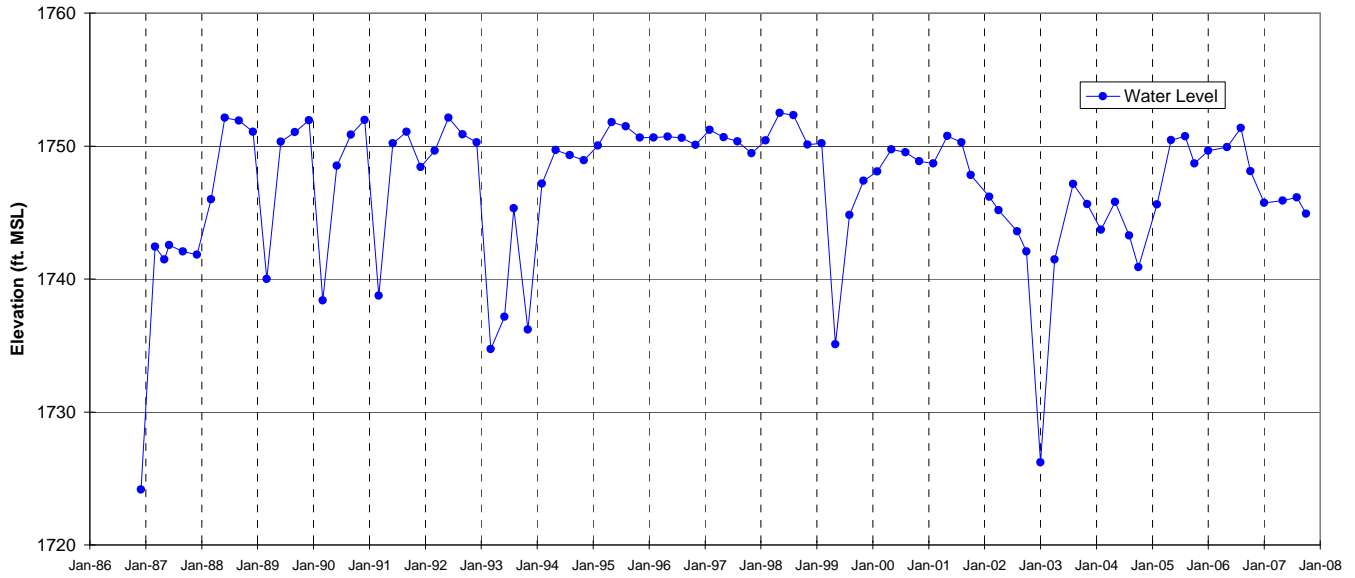




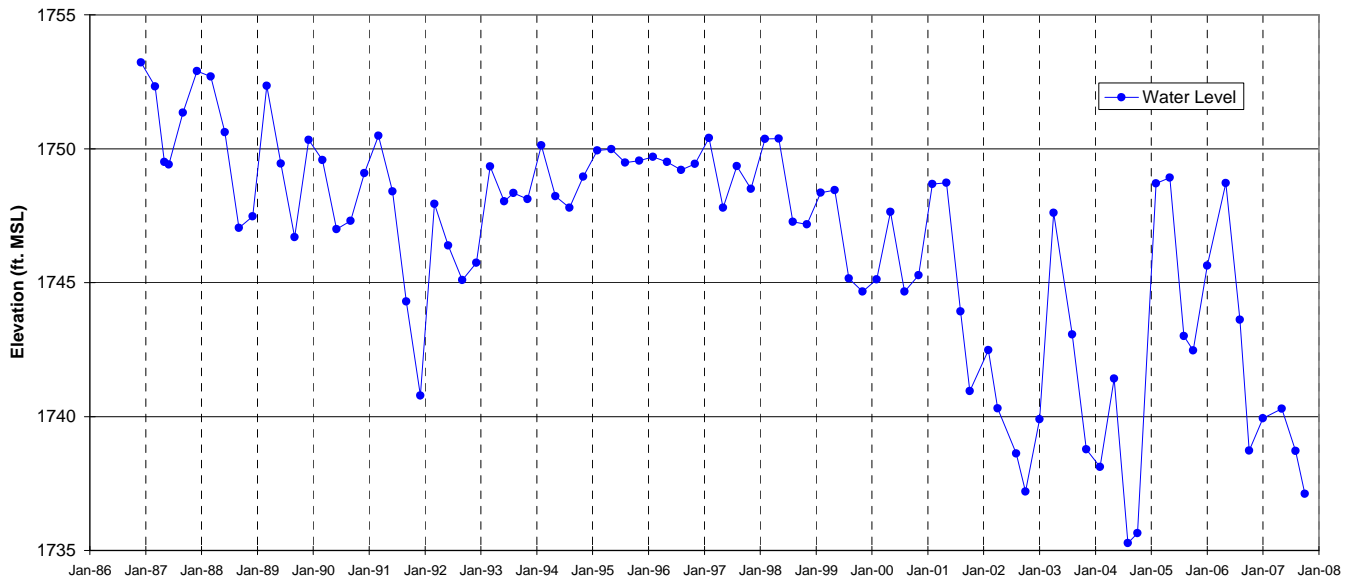
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-09  
 Figure A-103



WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-10  
 Figure A-104



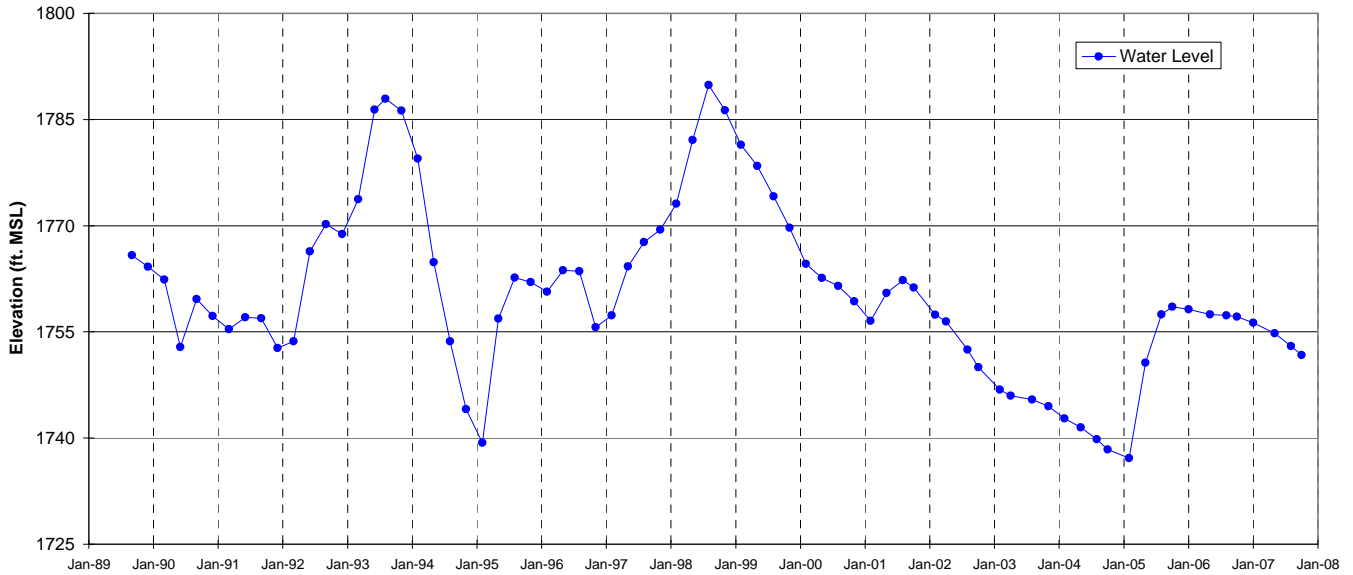
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-11  
**Figure A-105**



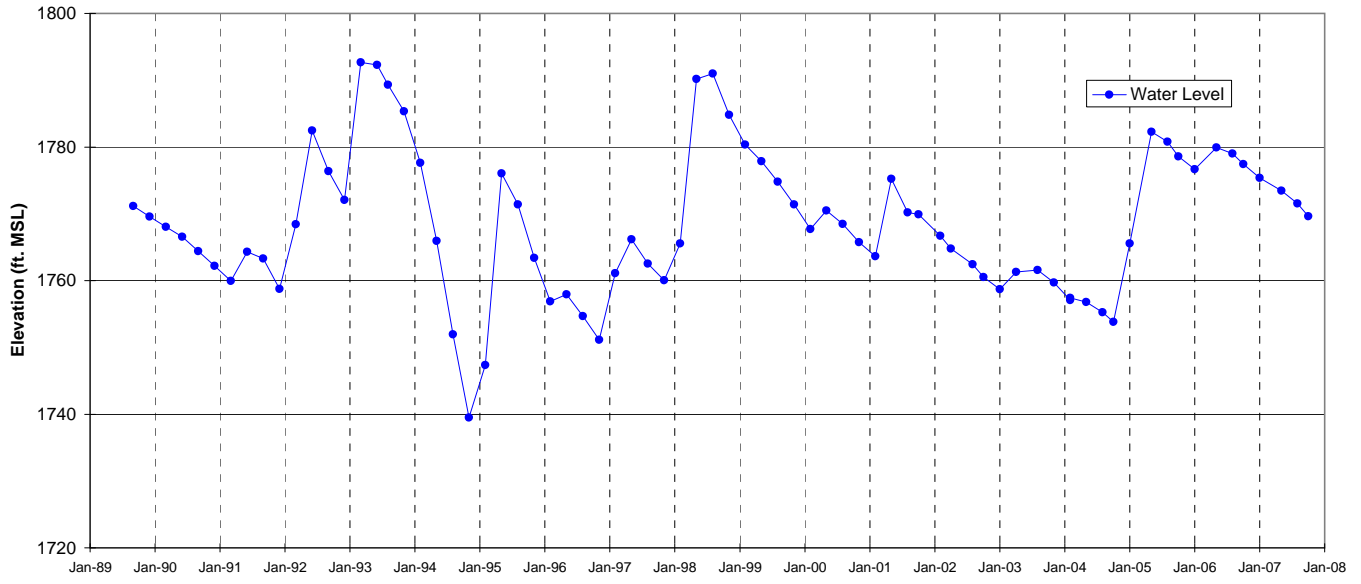
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-12  
**Figure A-106**



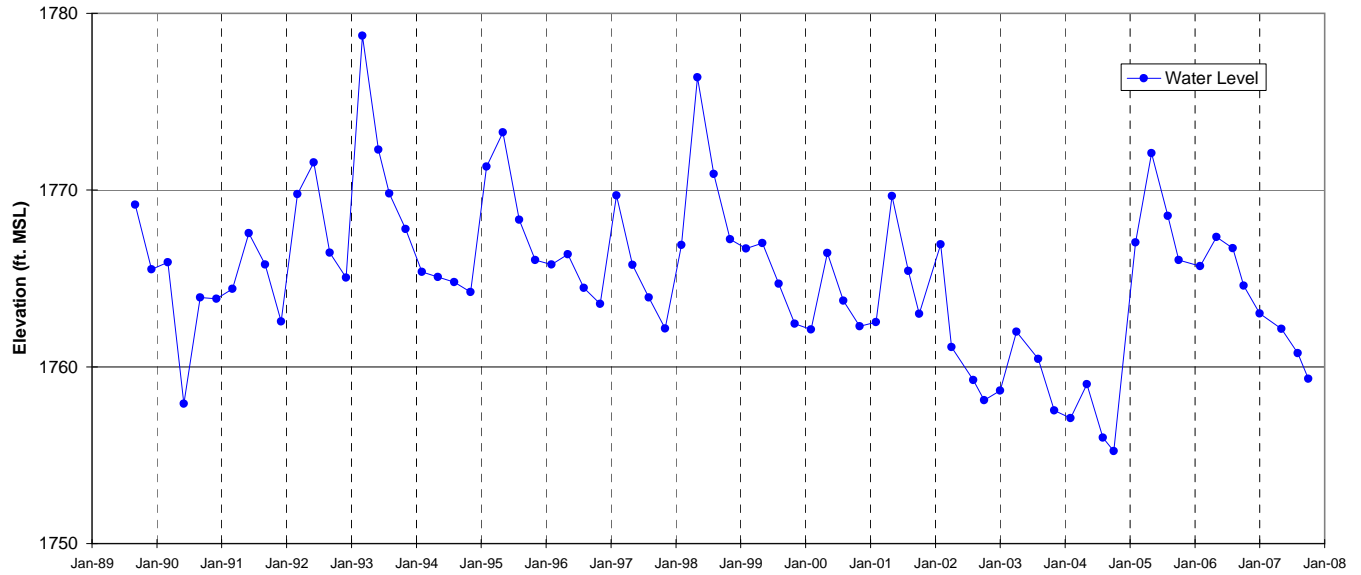
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-13  
Figure A-107



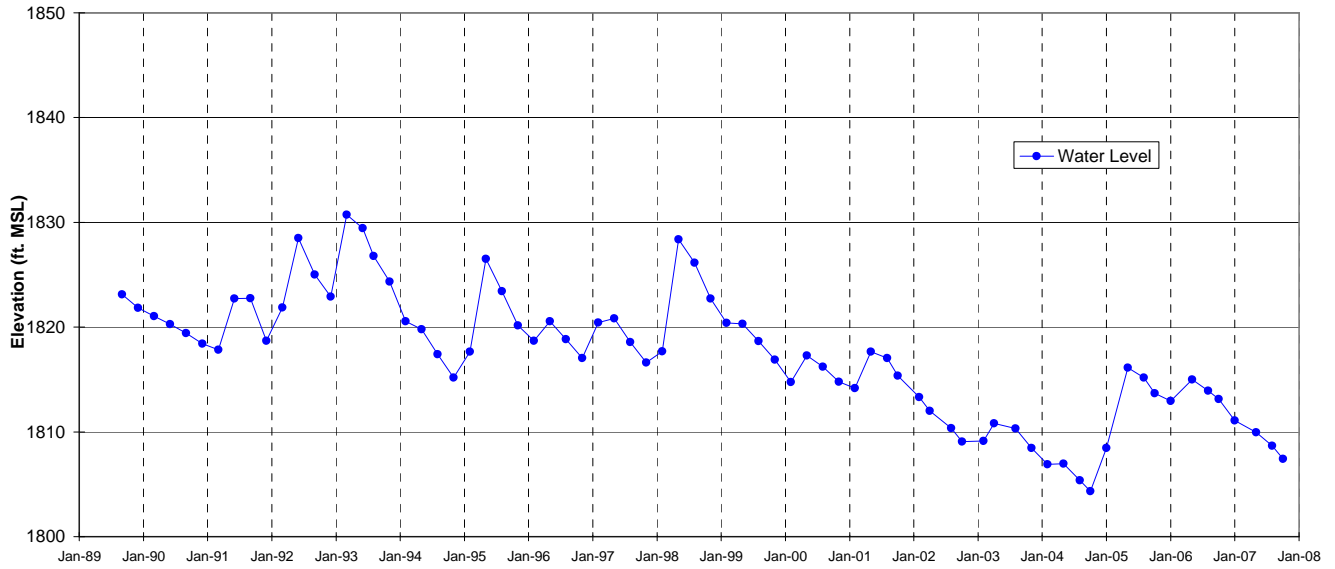
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-14  
Figure A-108



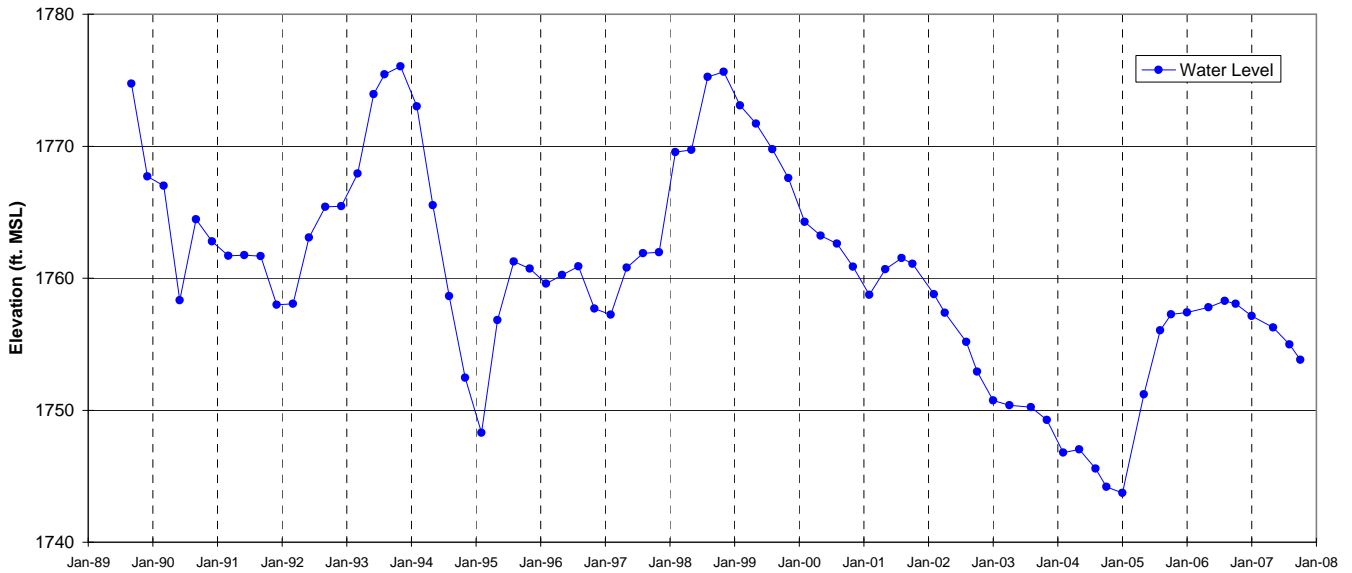
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-15  
Figure A-109



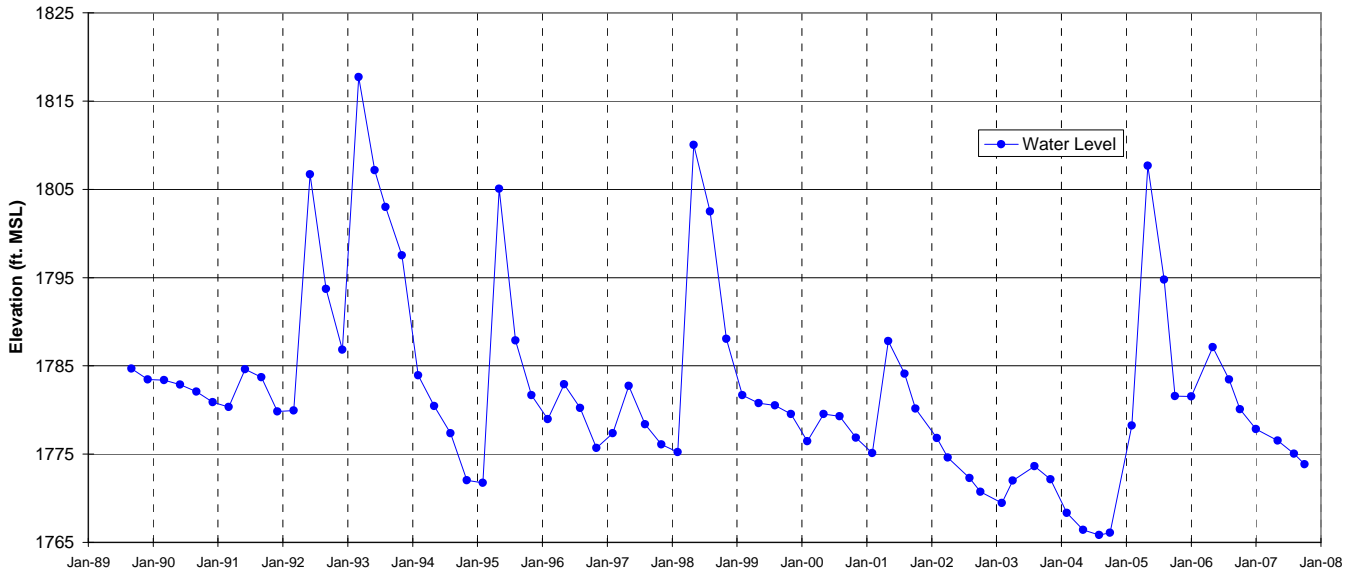
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-16  
Figure A-110



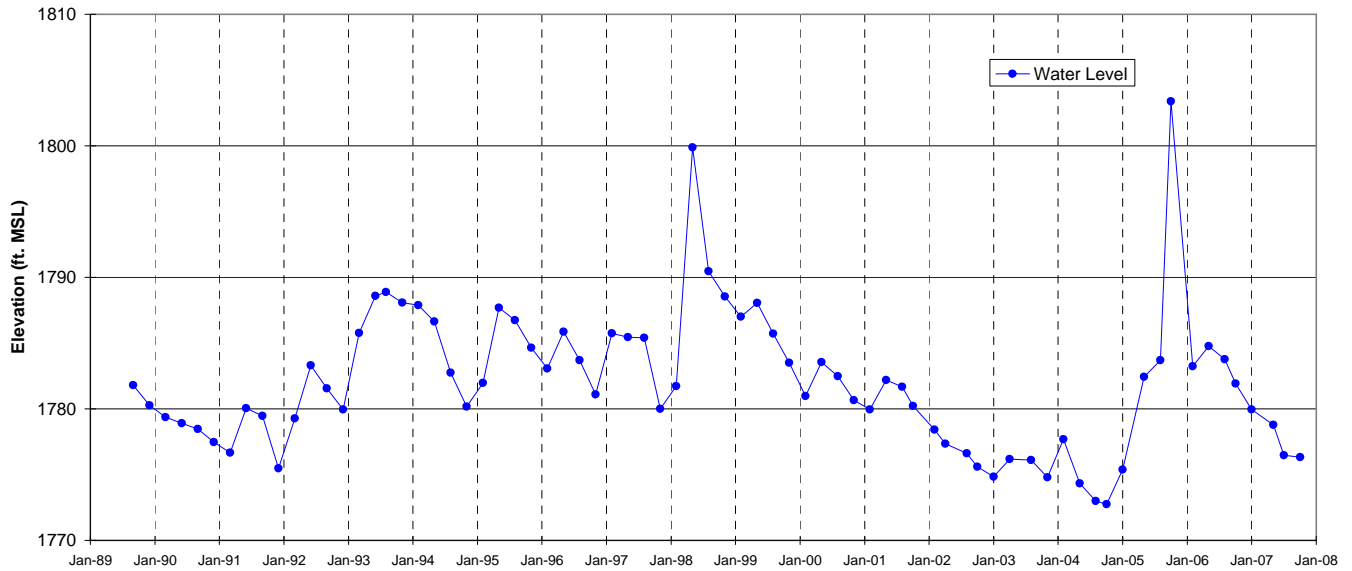
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-17  
Figure A-111



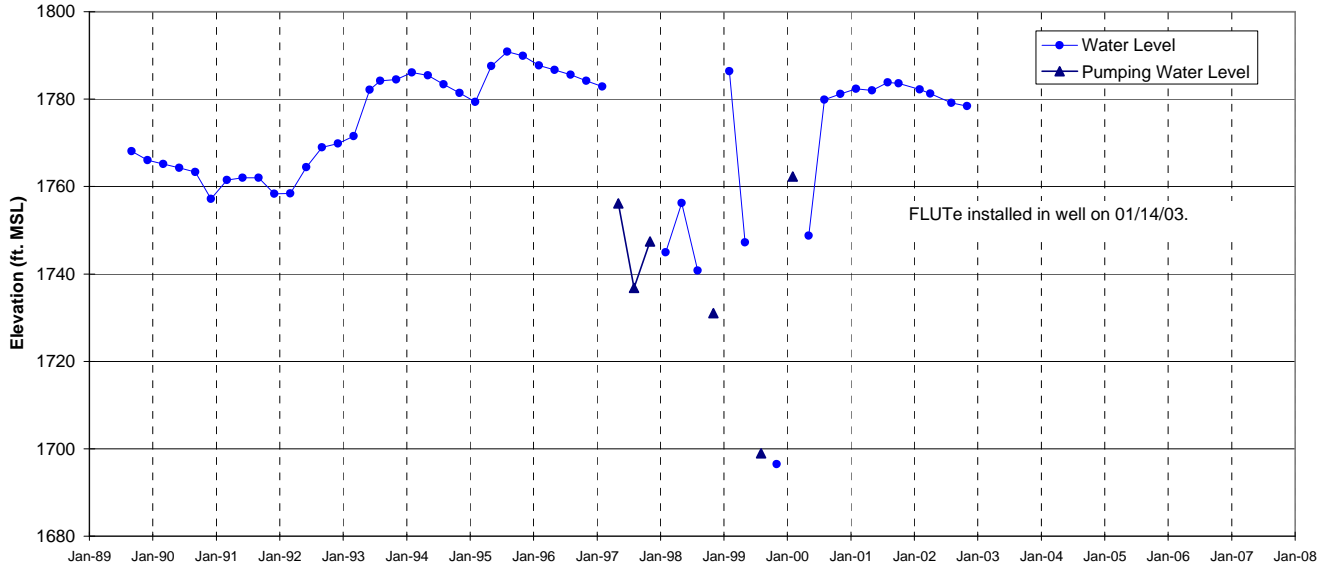
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-18  
Figure A-112



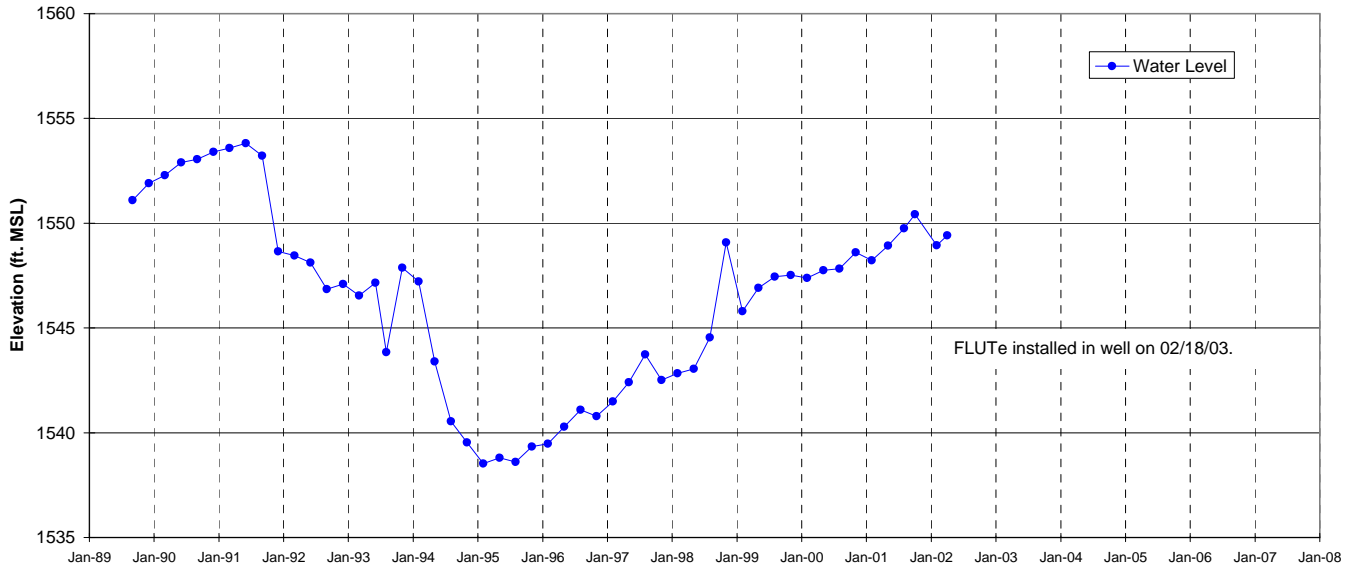
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-19  
Figure A-113



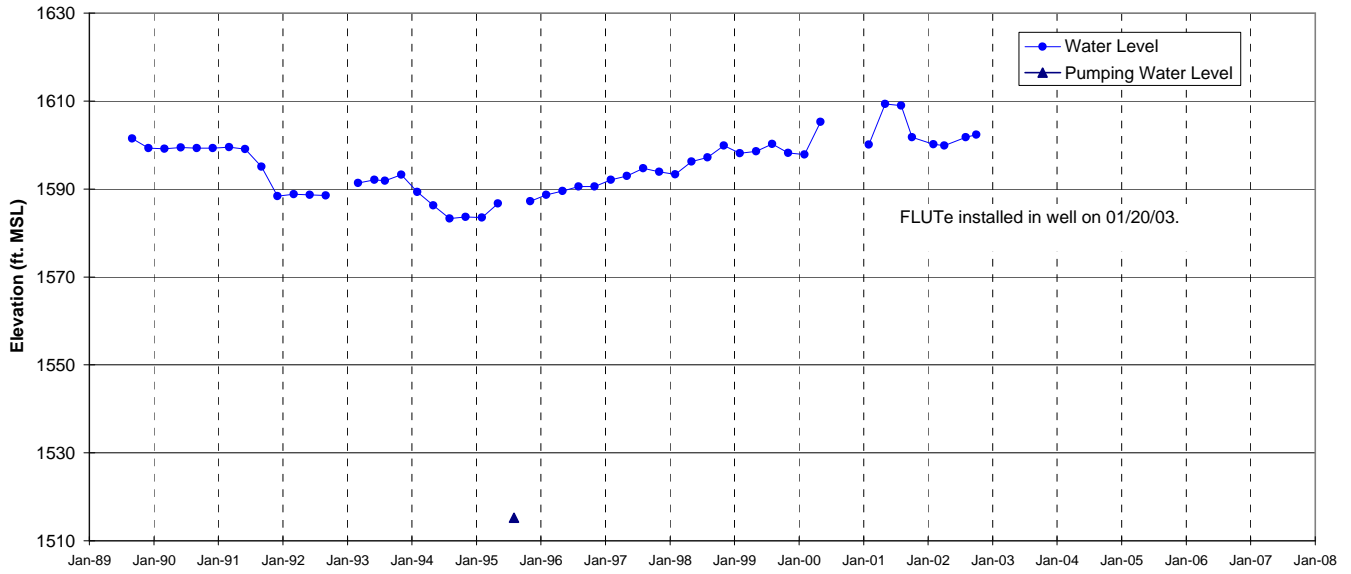
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-20  
Figure A-114



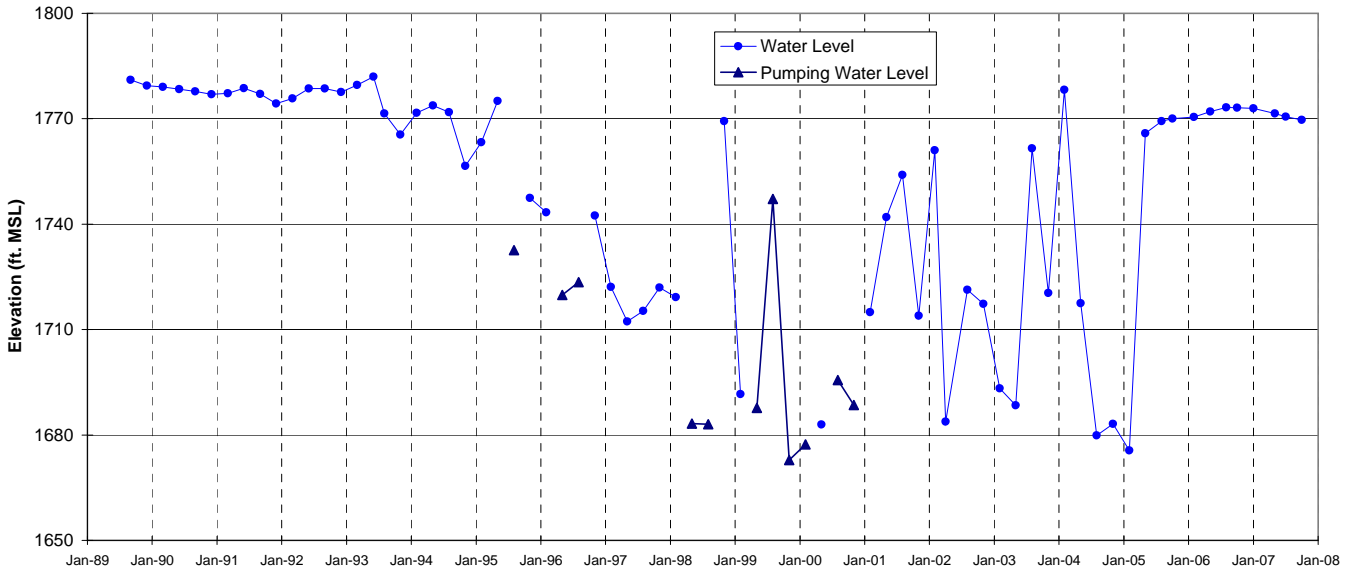
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-21  
Figure A-115



WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-22  
Figure A-116

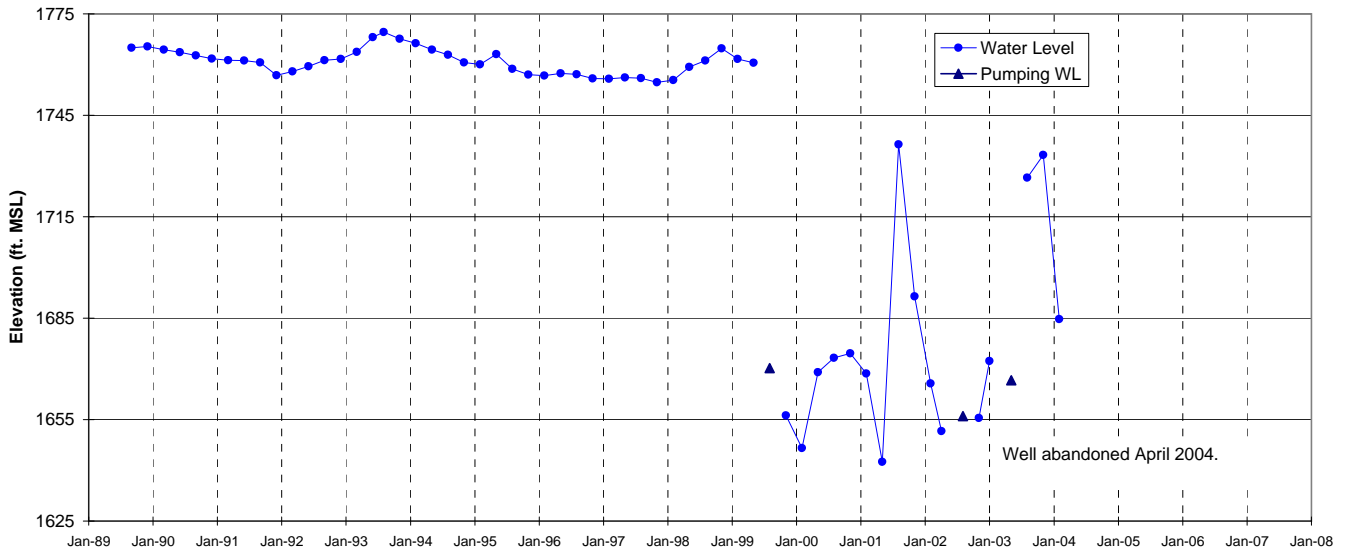


WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-23  
**Figure A-117**

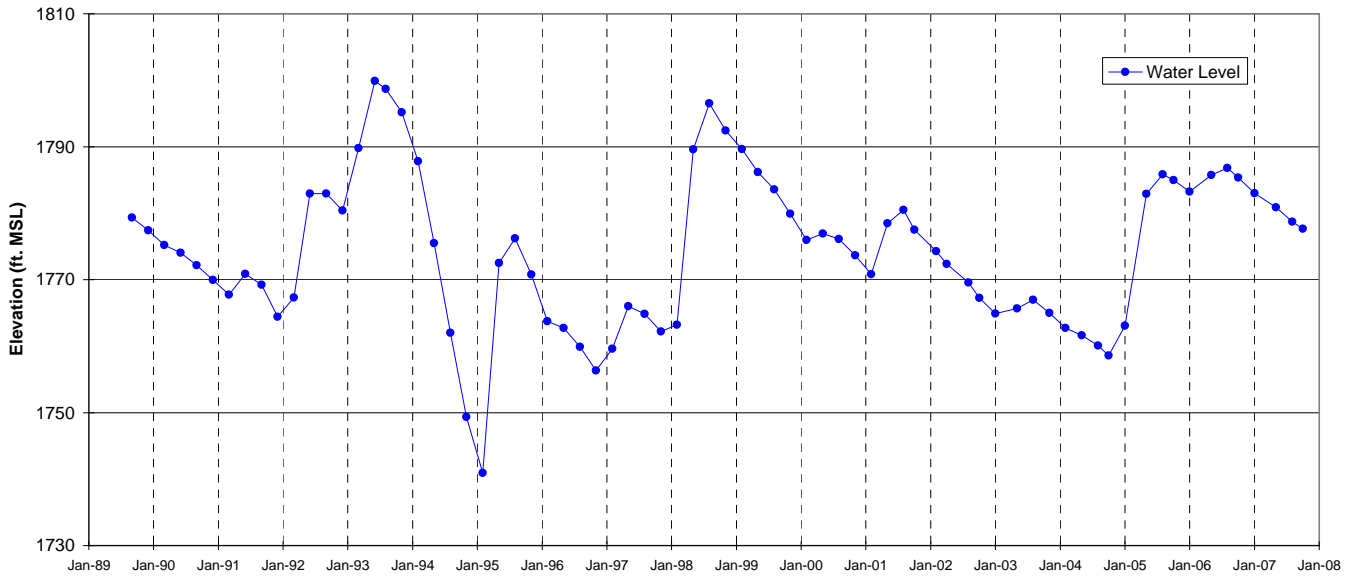


WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-24  
**Figure A-118**

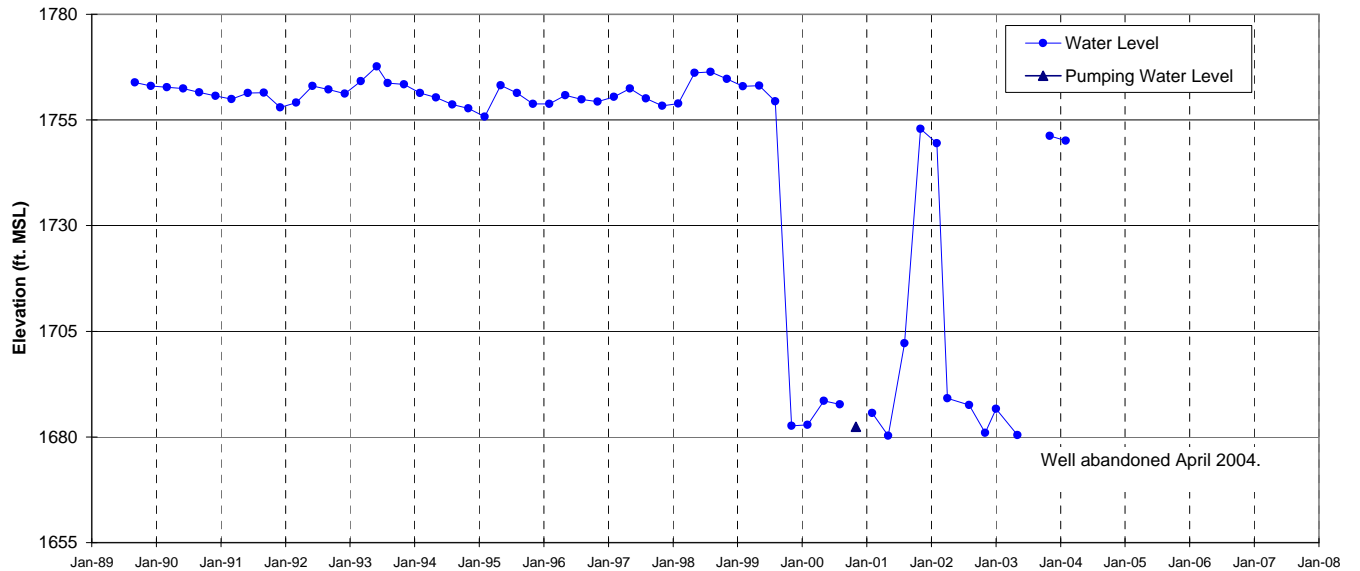
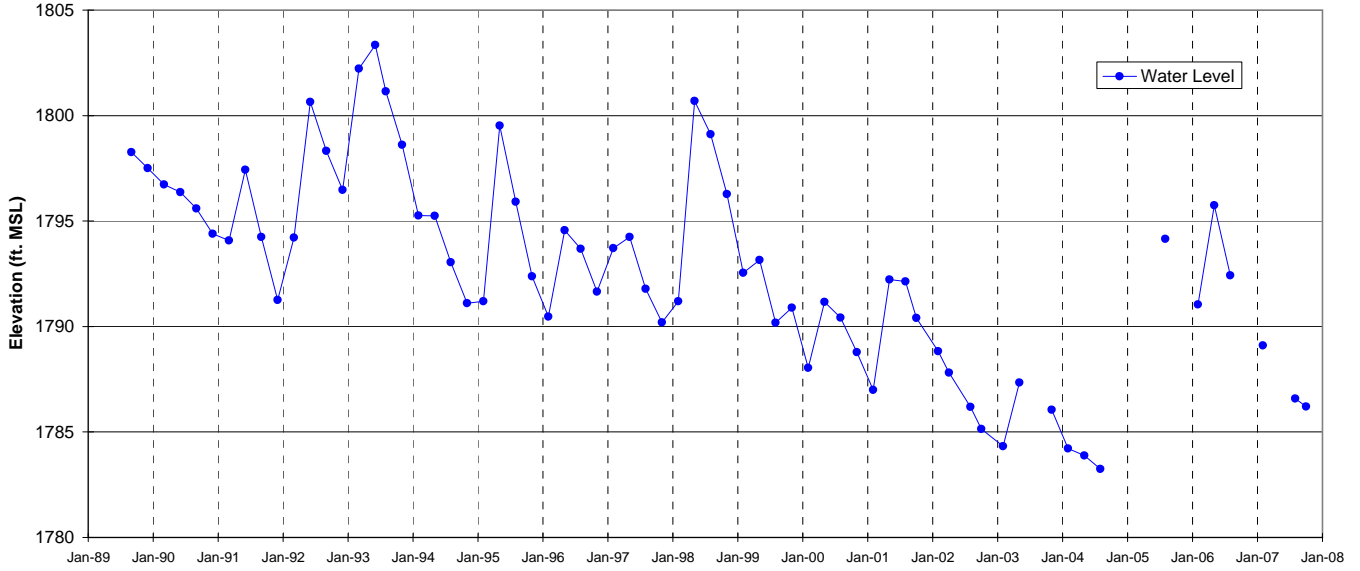


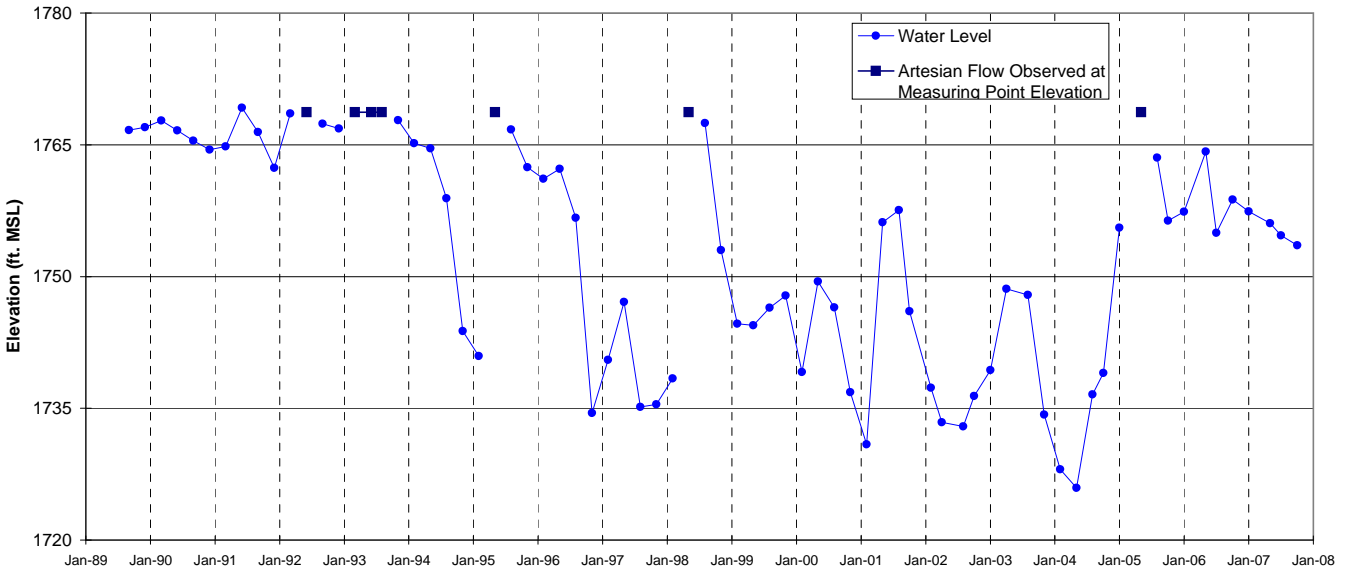
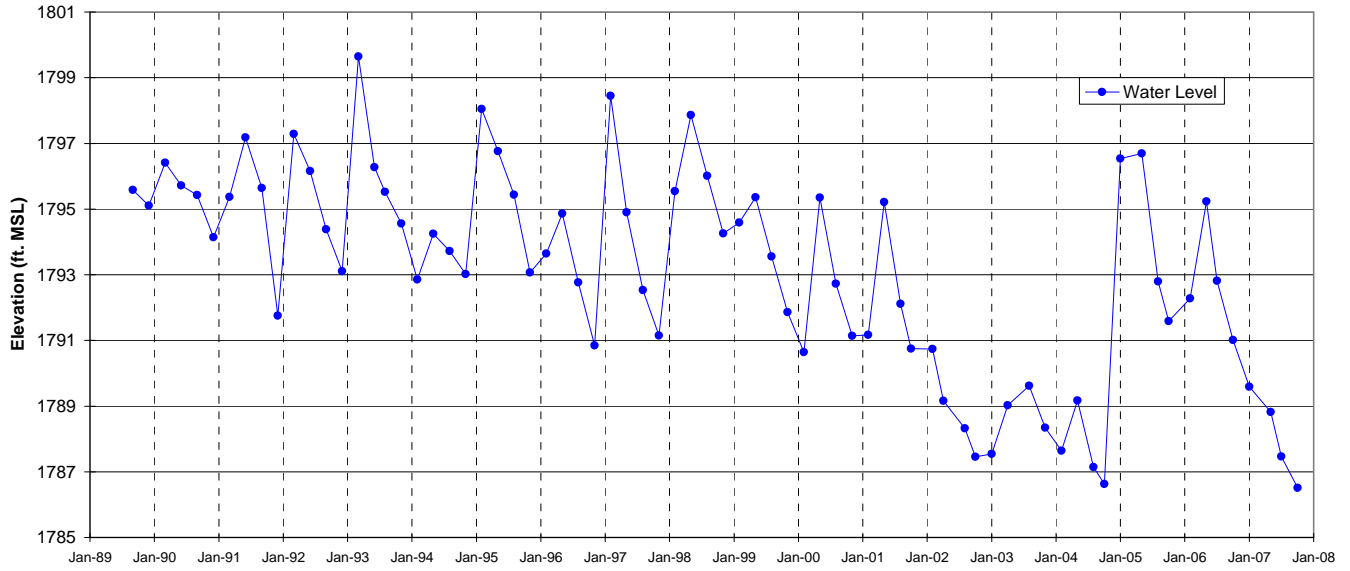


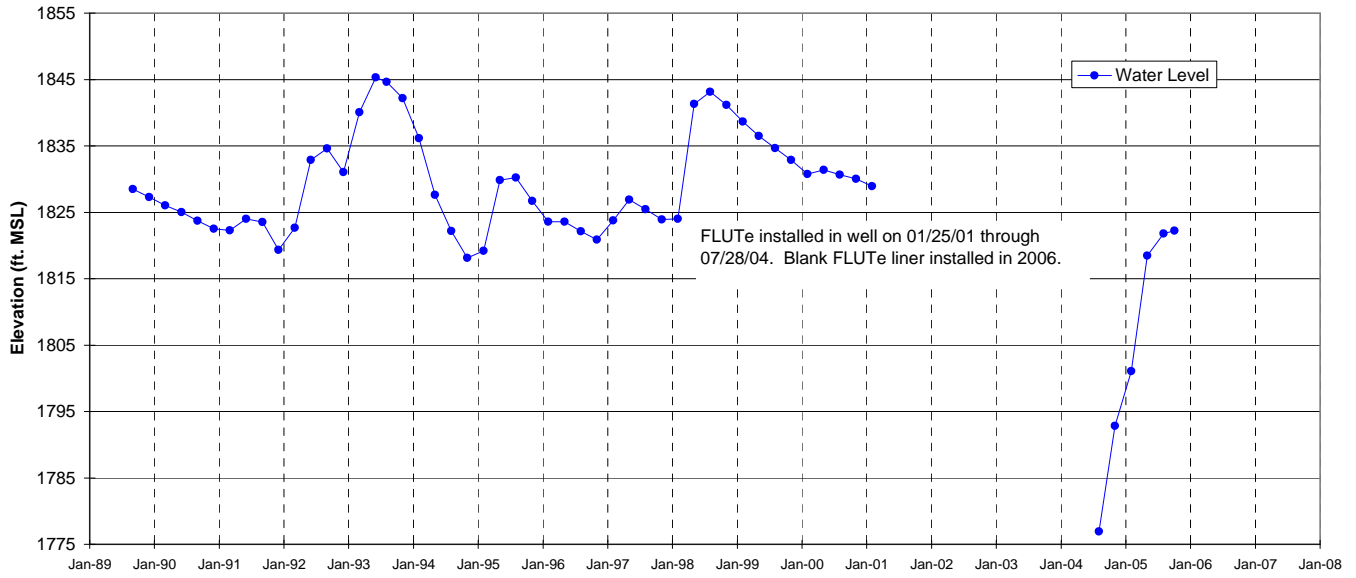
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-25  
Figure A-119



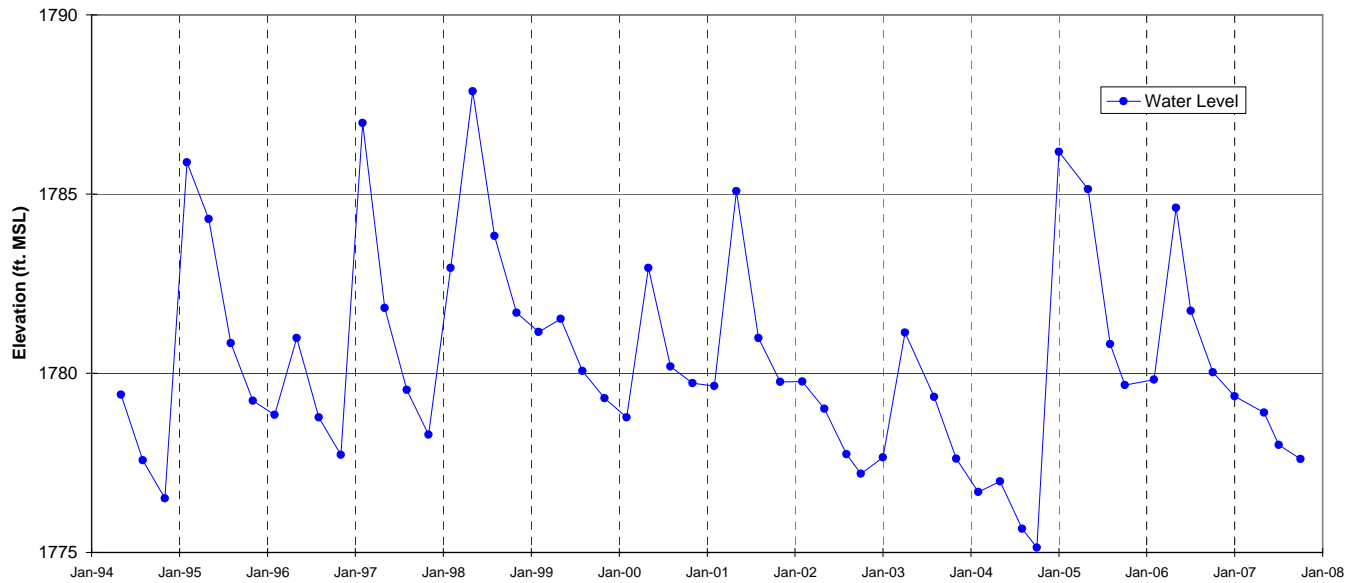
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-26  
Figure A-120



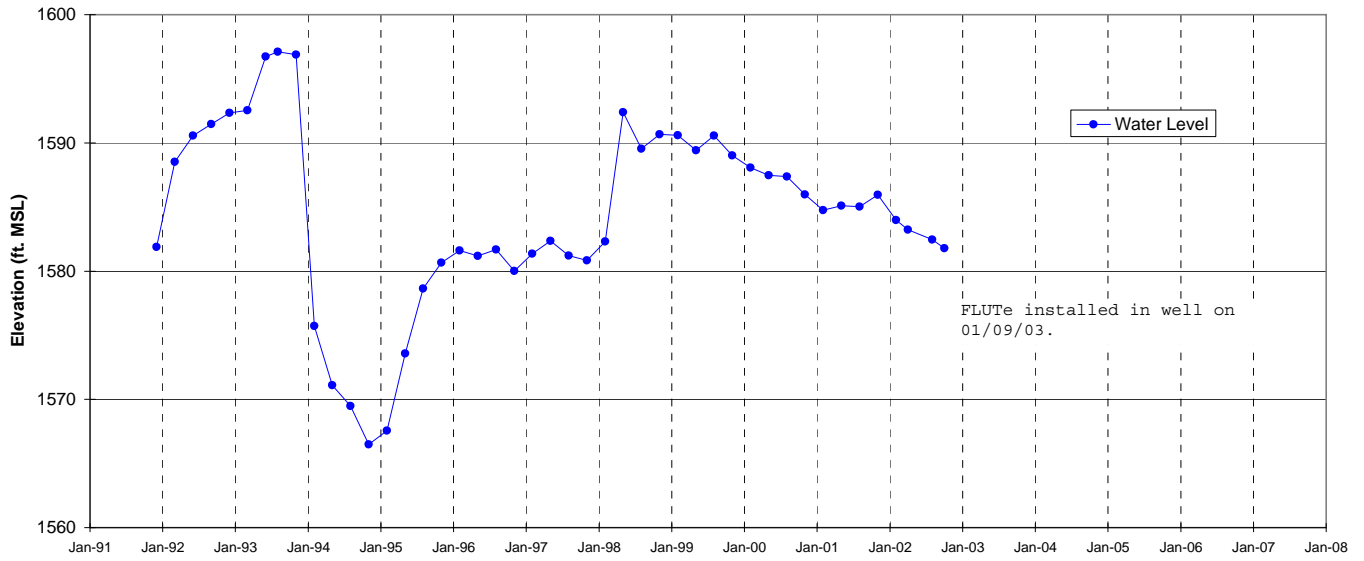




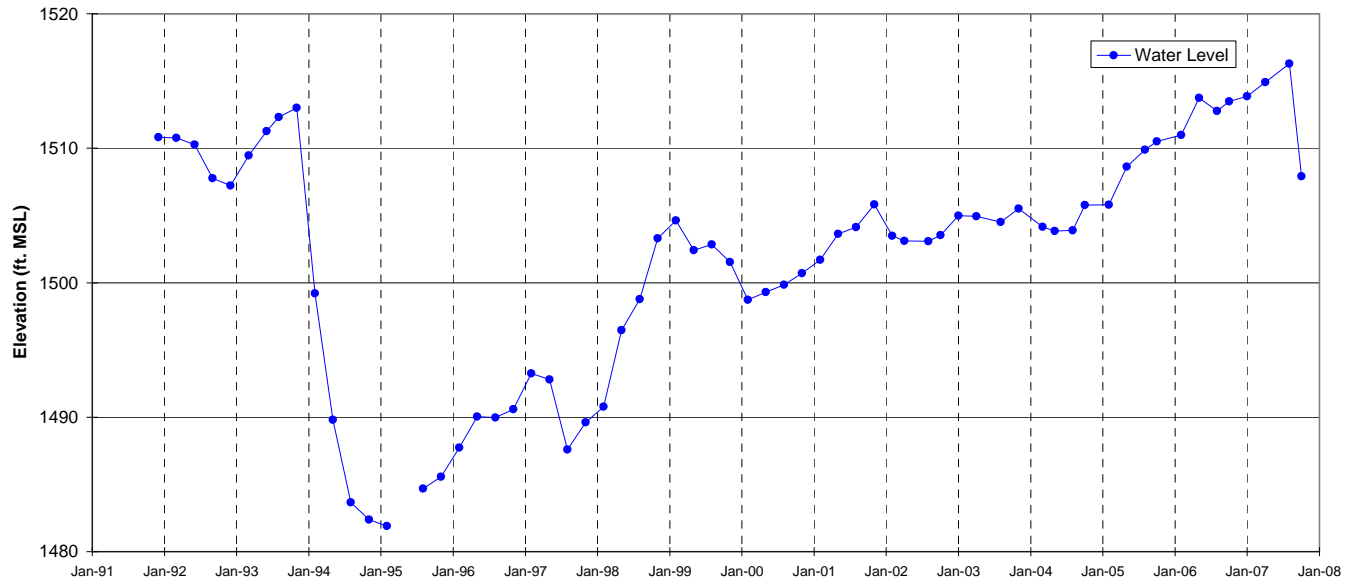
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-31  
Figure A-125



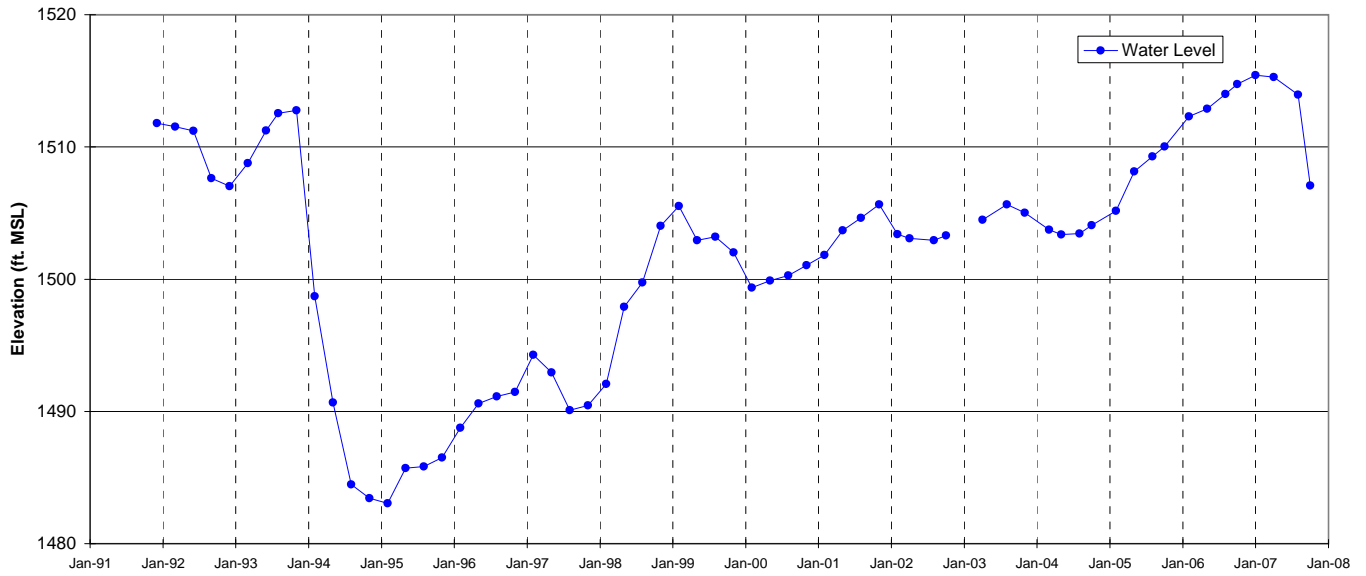
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-32  
Figure A-126



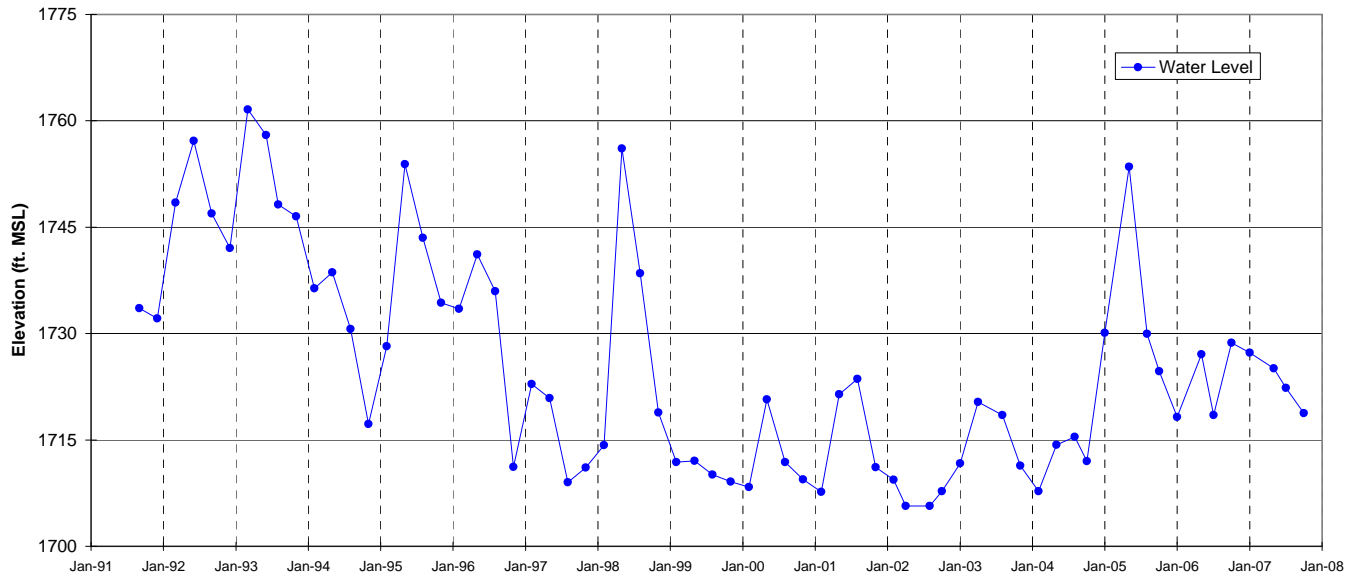
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-33A  
Figure A-127



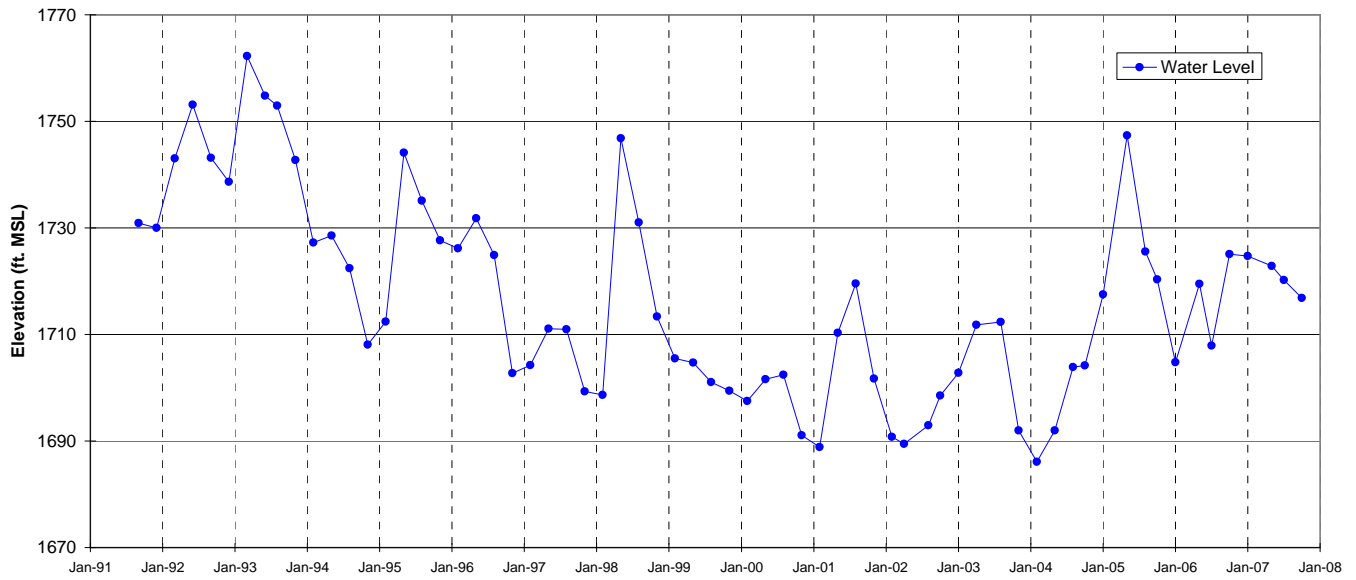
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-33B  
Figure A-128



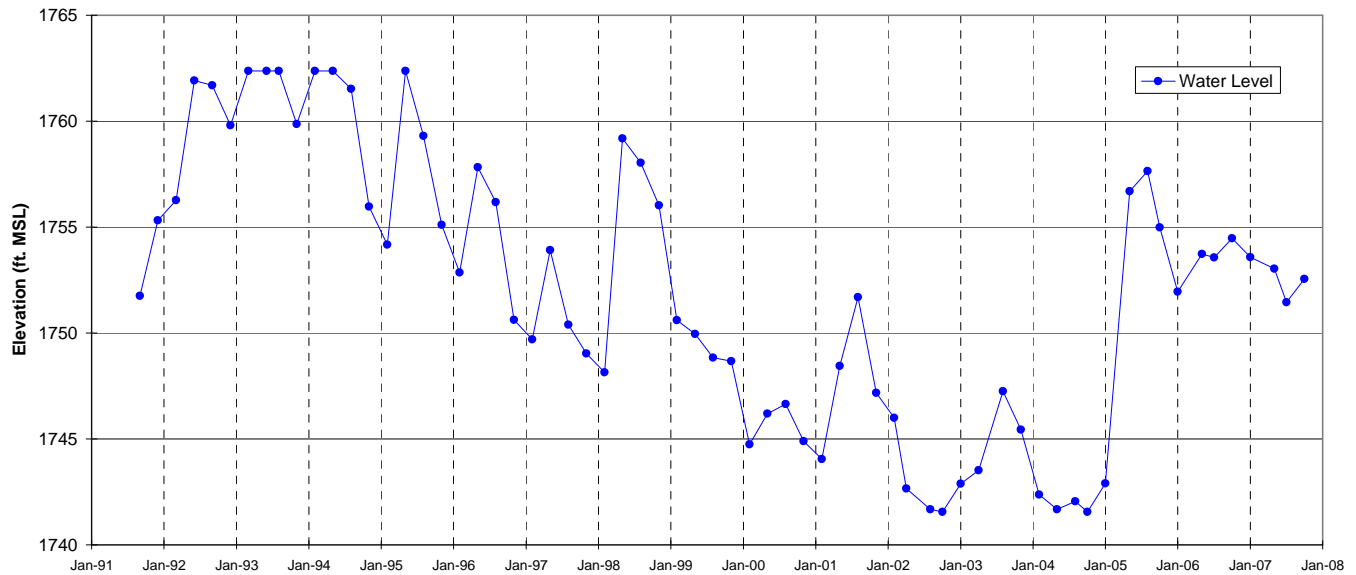
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-33C  
 Figure A-129



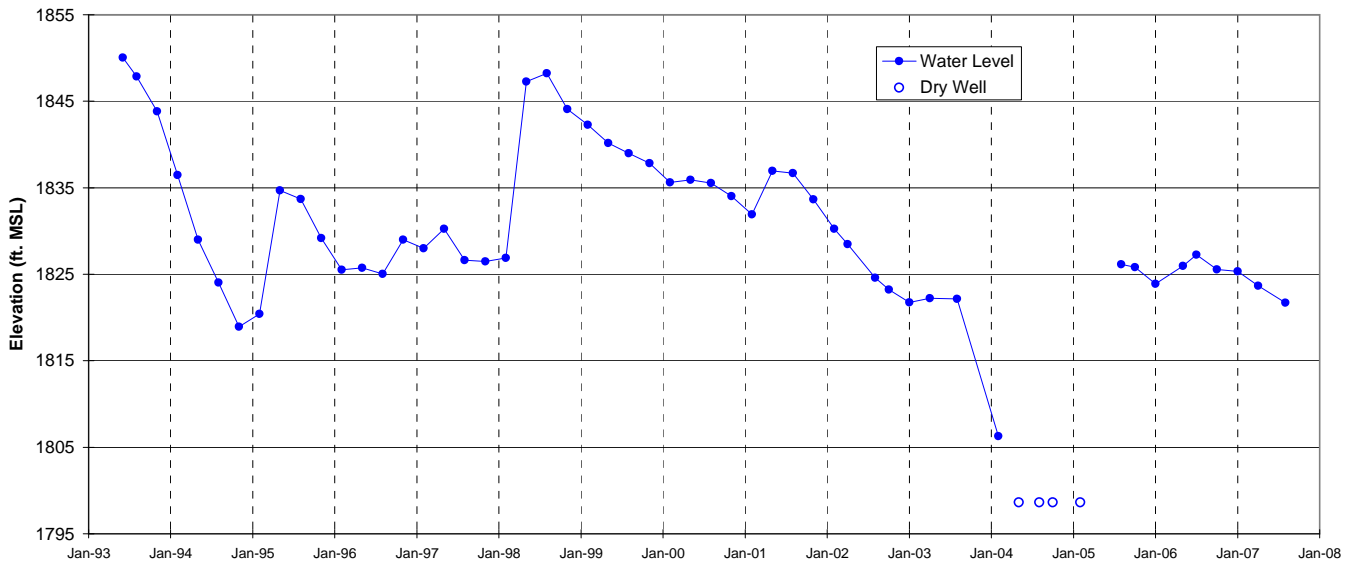
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-34A  
 Figure A-130



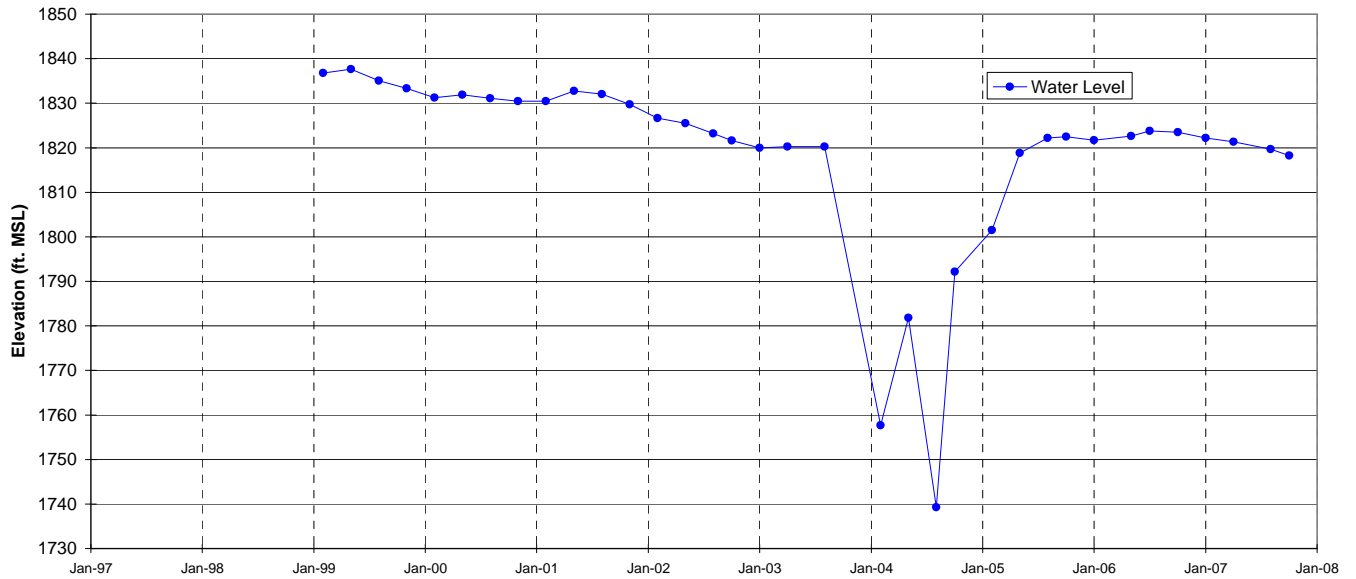
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-34B  
Figure A-131



WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-34C  
Figure A-132

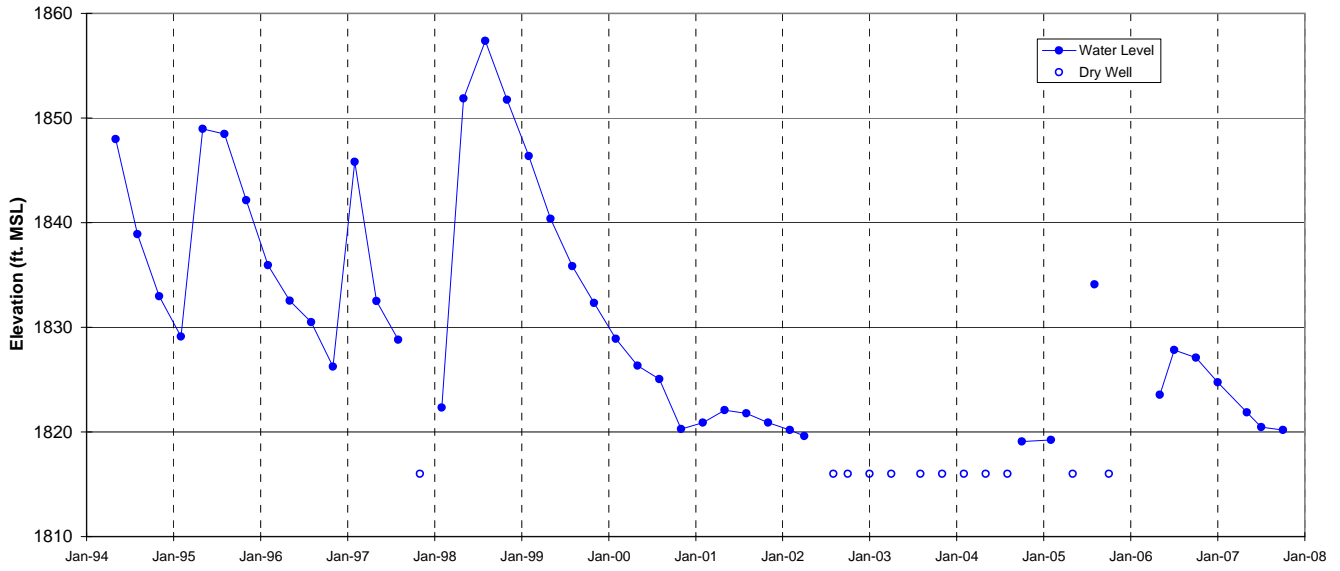


WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-35A  
 Figure A-133

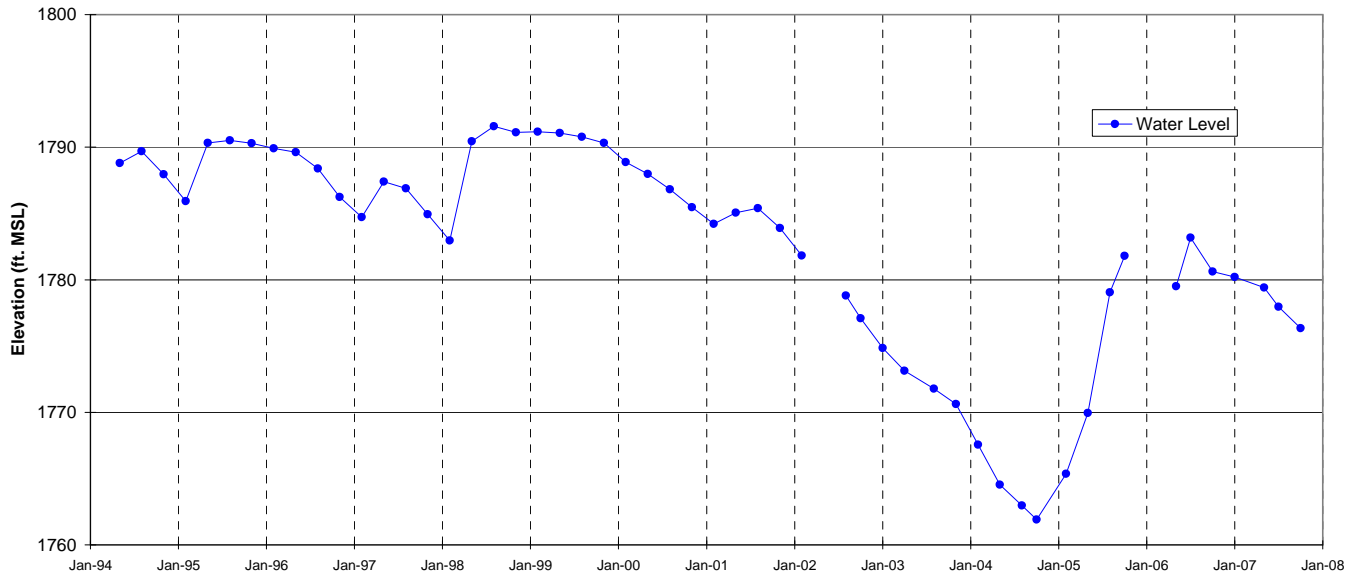


WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-35B  
 Figure A-134

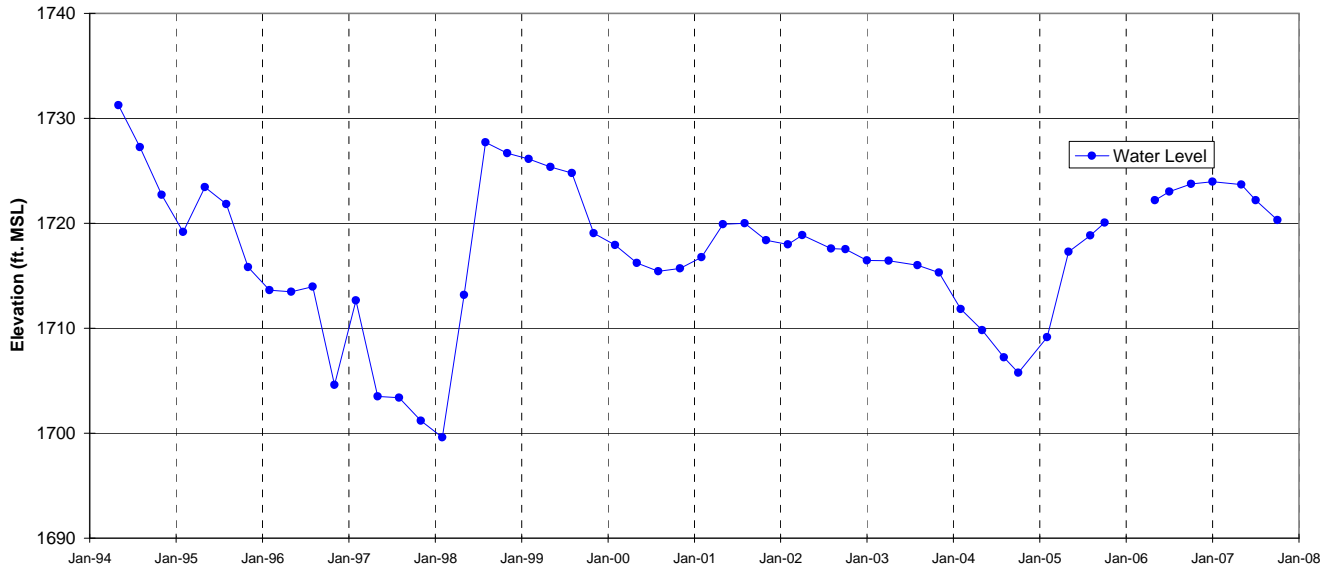




WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-36A  
 Figure A-135



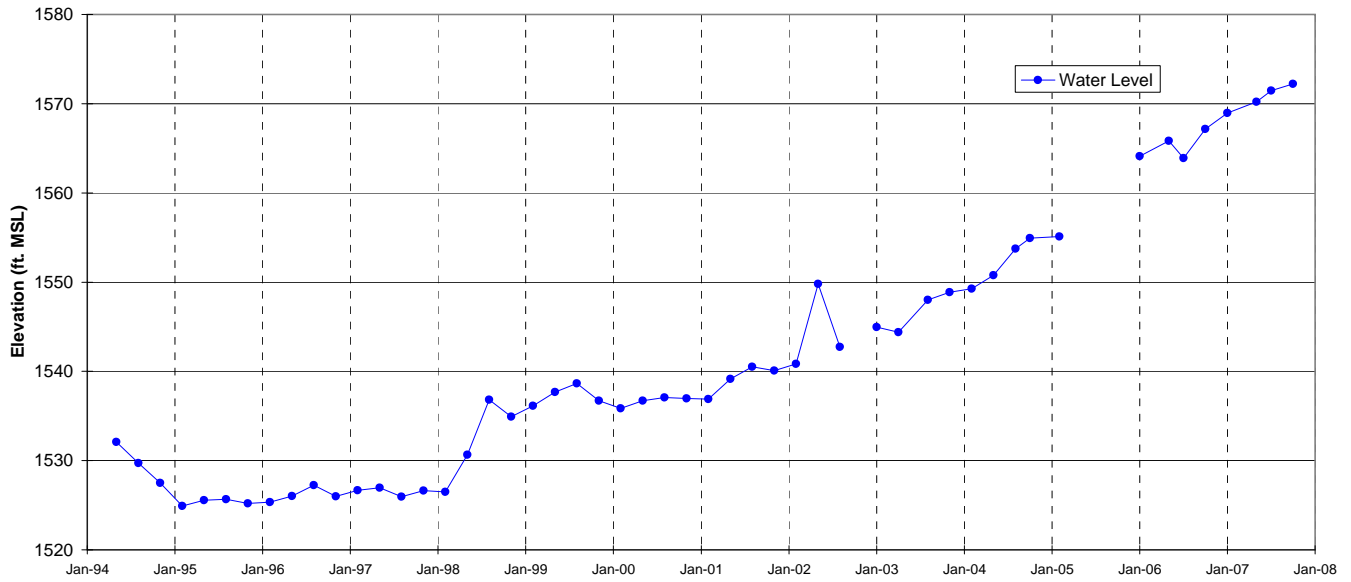
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-36B  
 Figure A-136



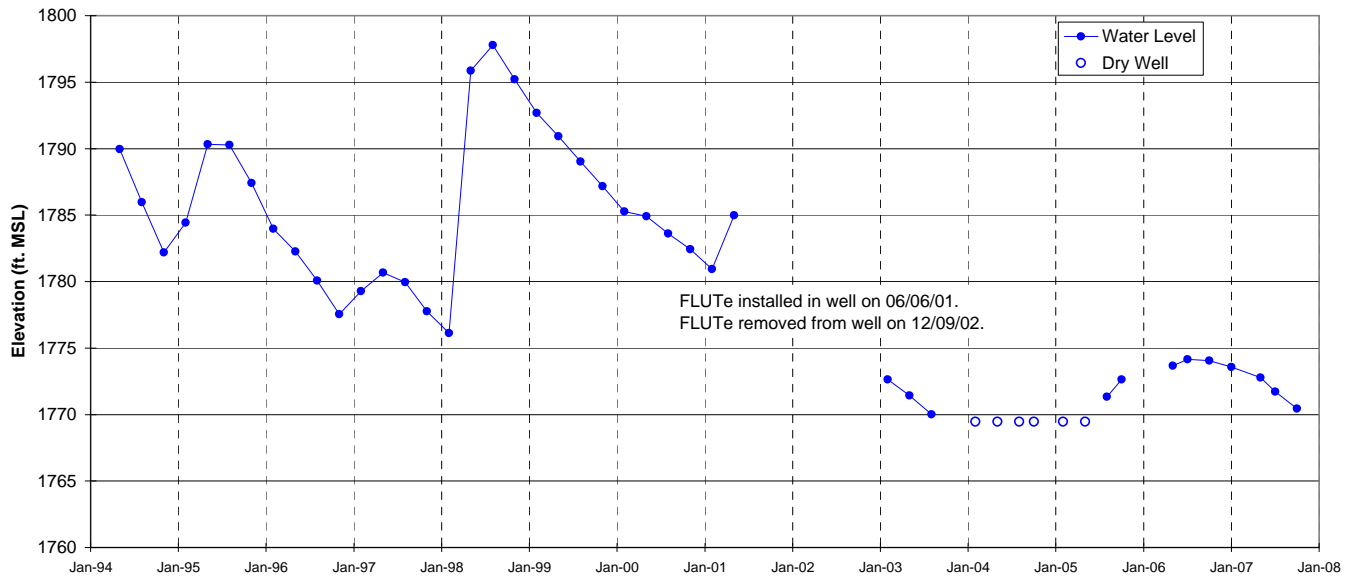
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-36C  
 Figure A-137



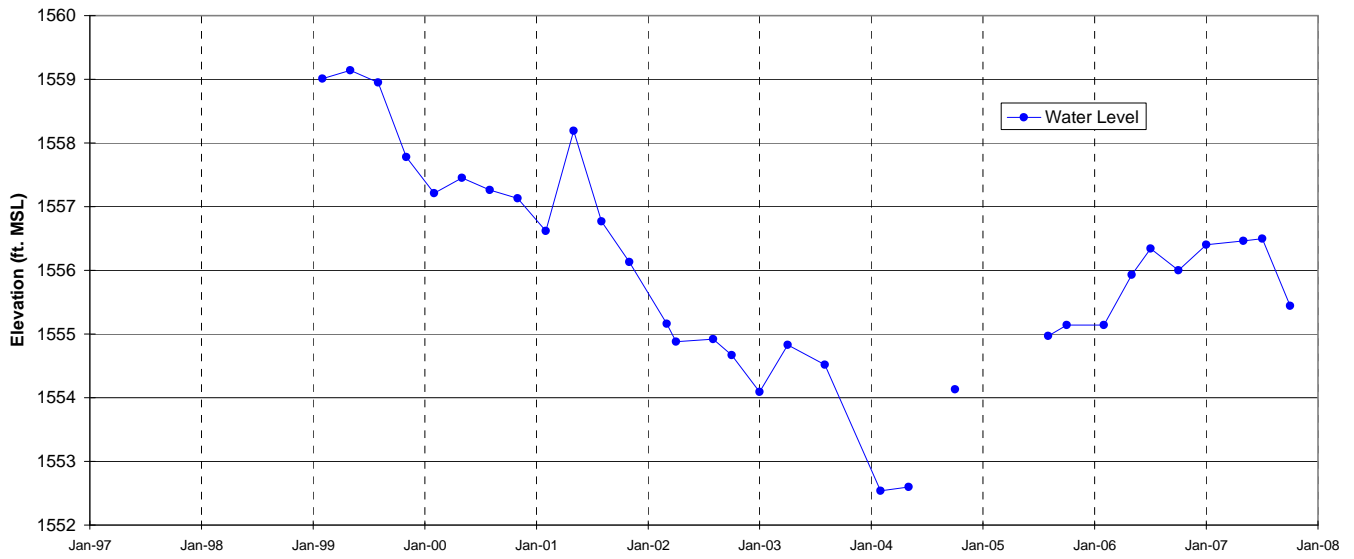
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-36D  
 Figure A-138



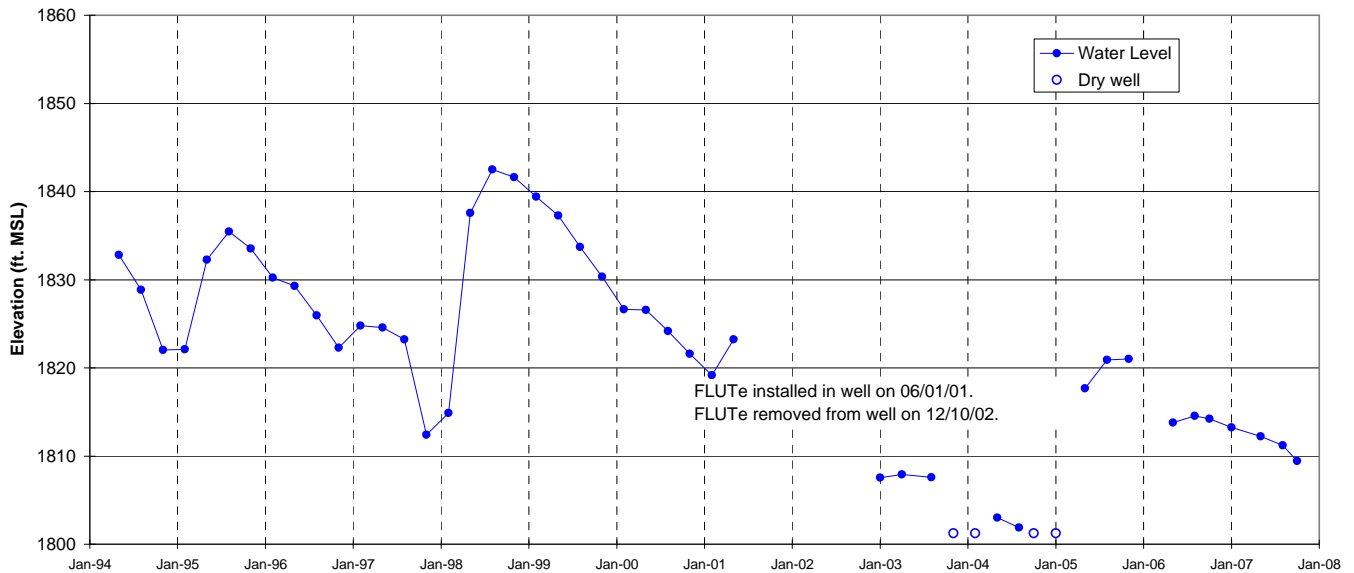
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-37  
**Figure A-139**



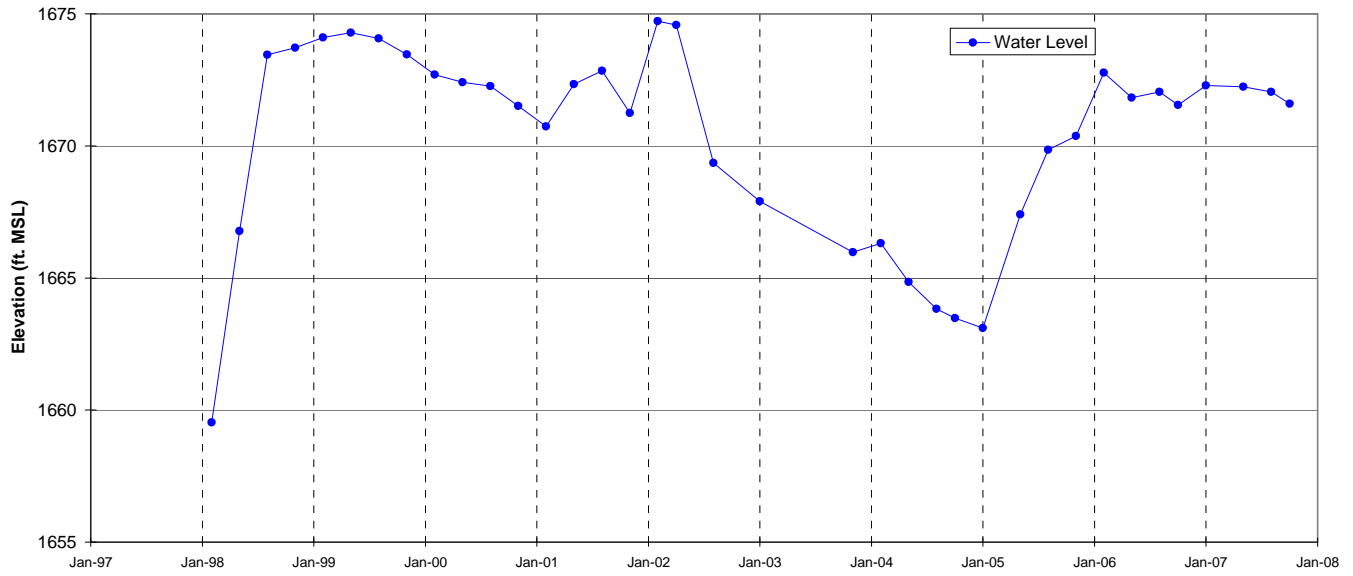
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-38A  
**Figure A-140**



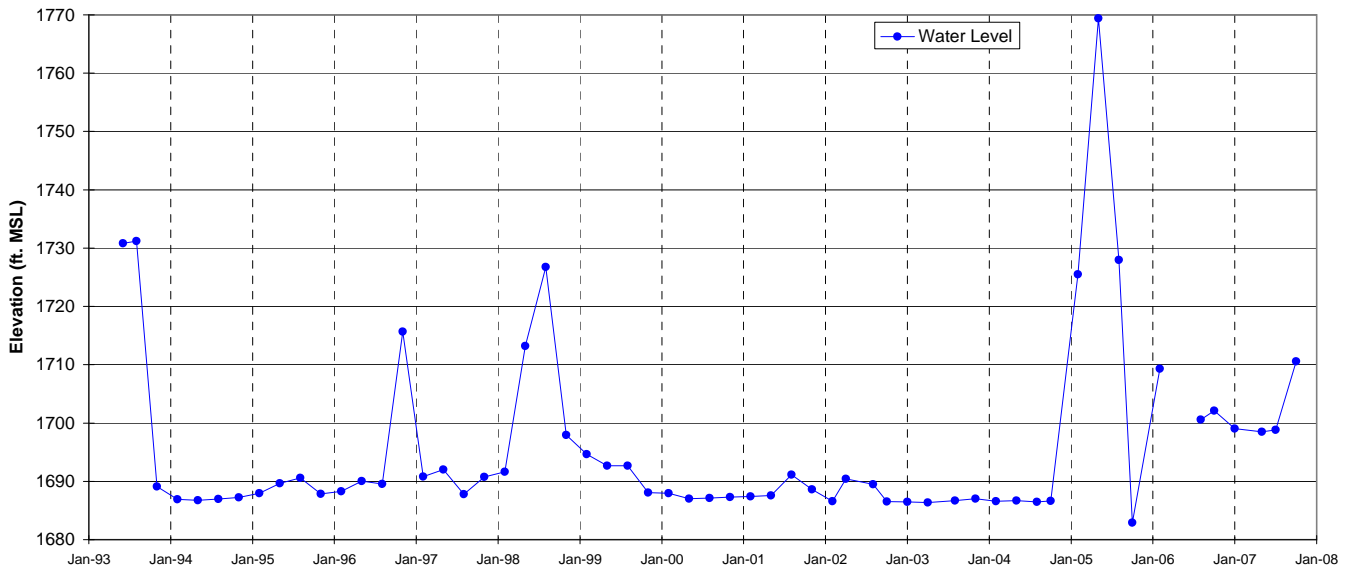
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-38B  
**Figure A-141**



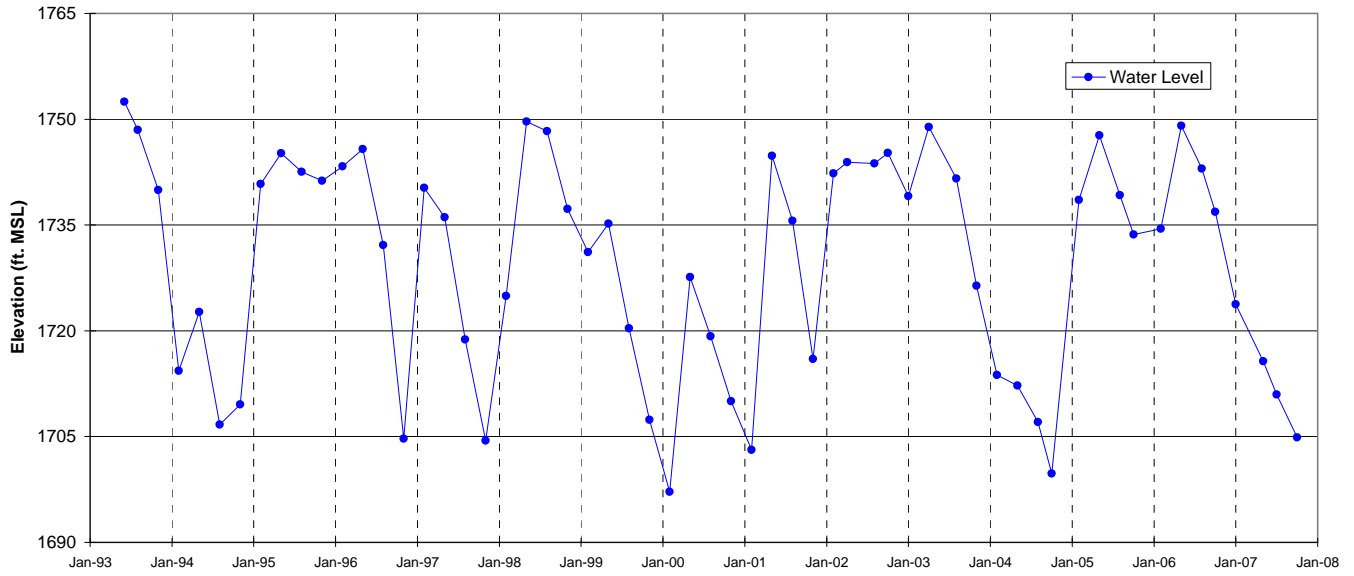
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-39A  
**Figure A-142**



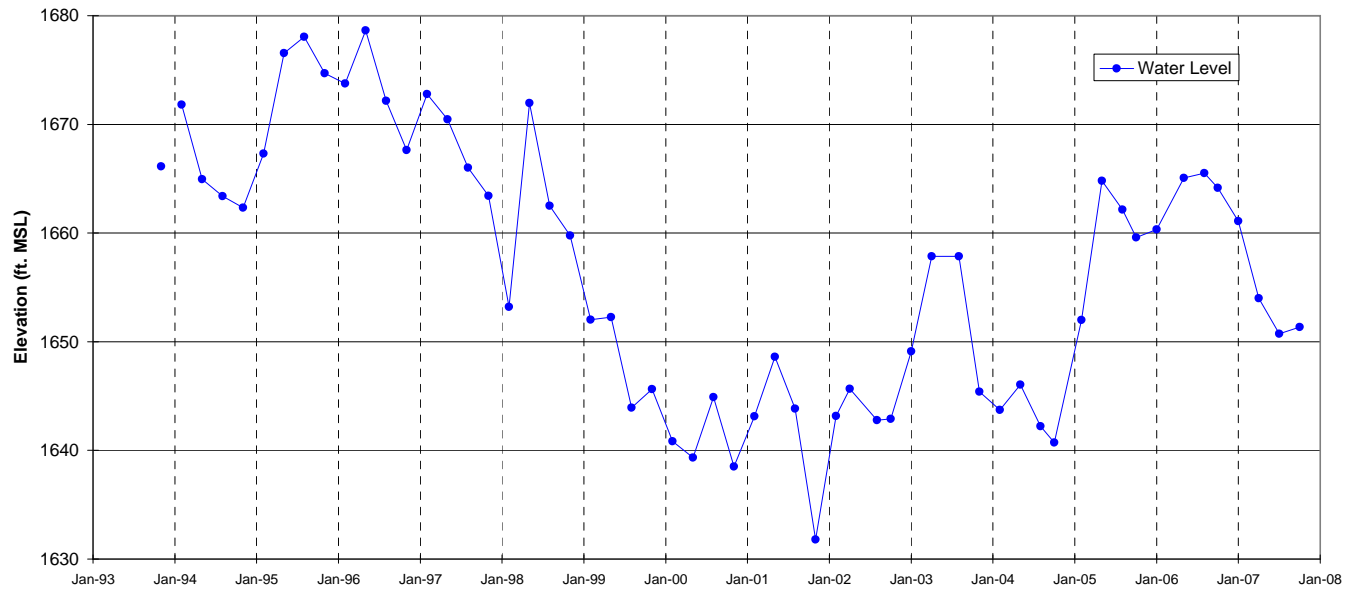
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-39B  
 Figure A-143



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**

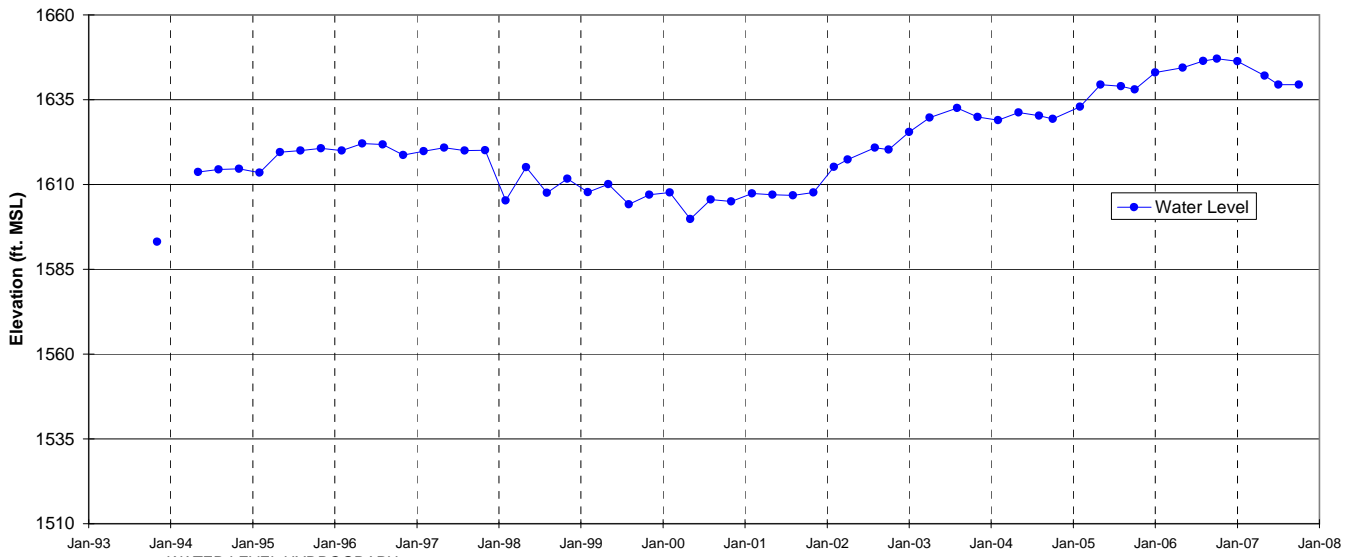


Figure A-147

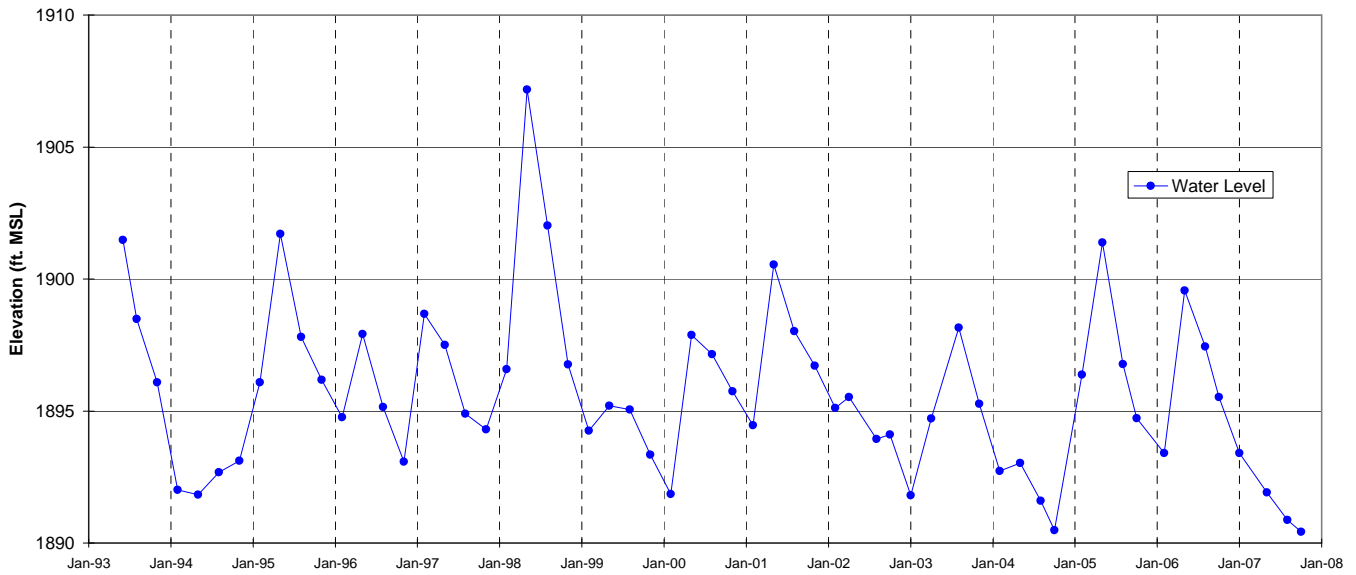
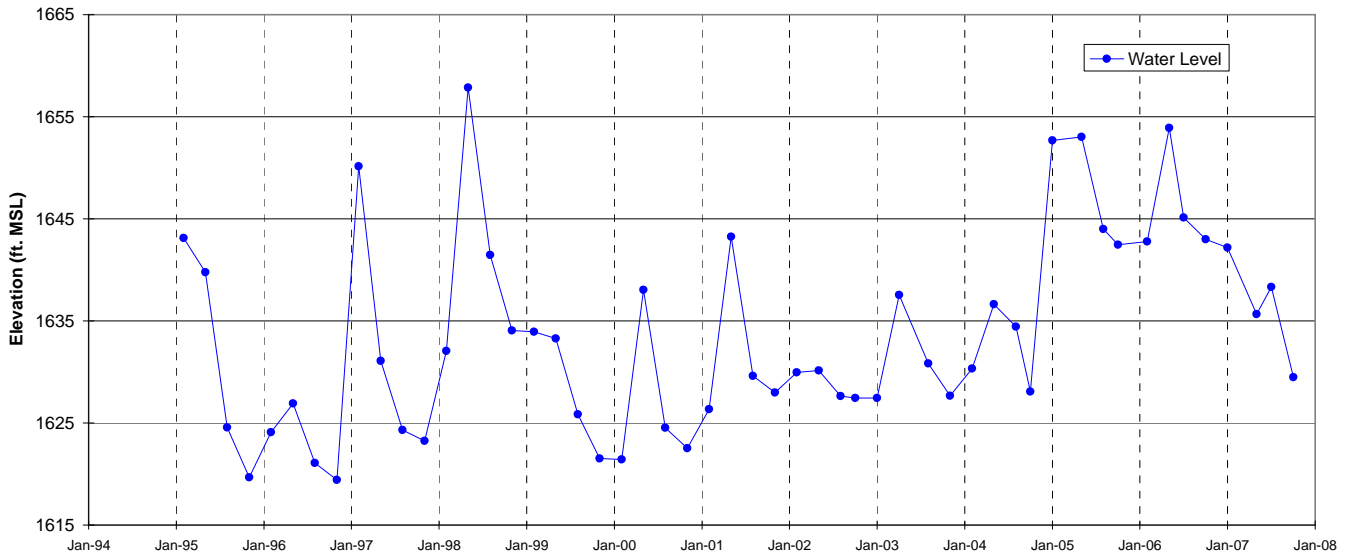
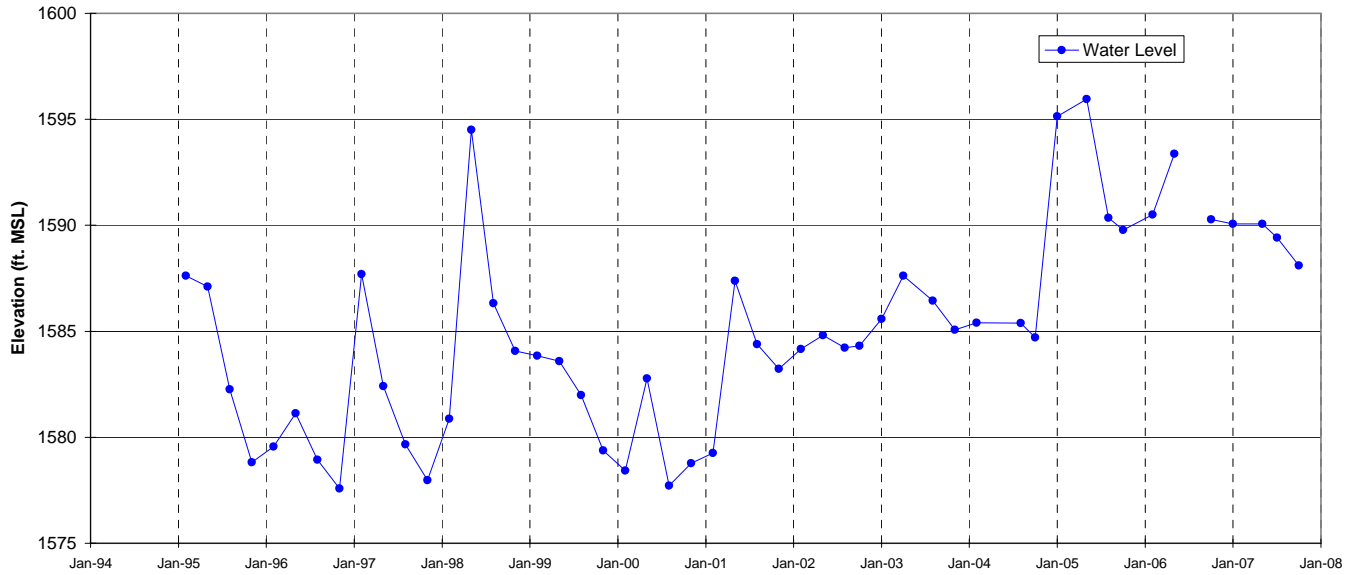


Figure A-148

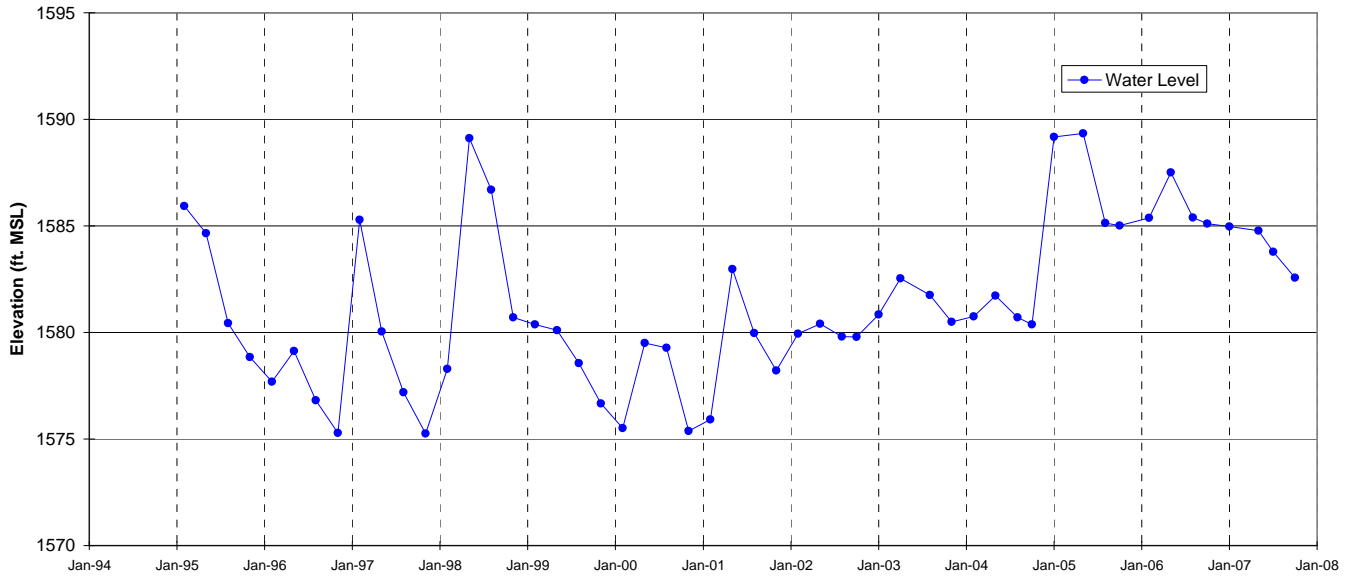


WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-43A  
**Figure A-149**



WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-43B  
**Figure A-150**

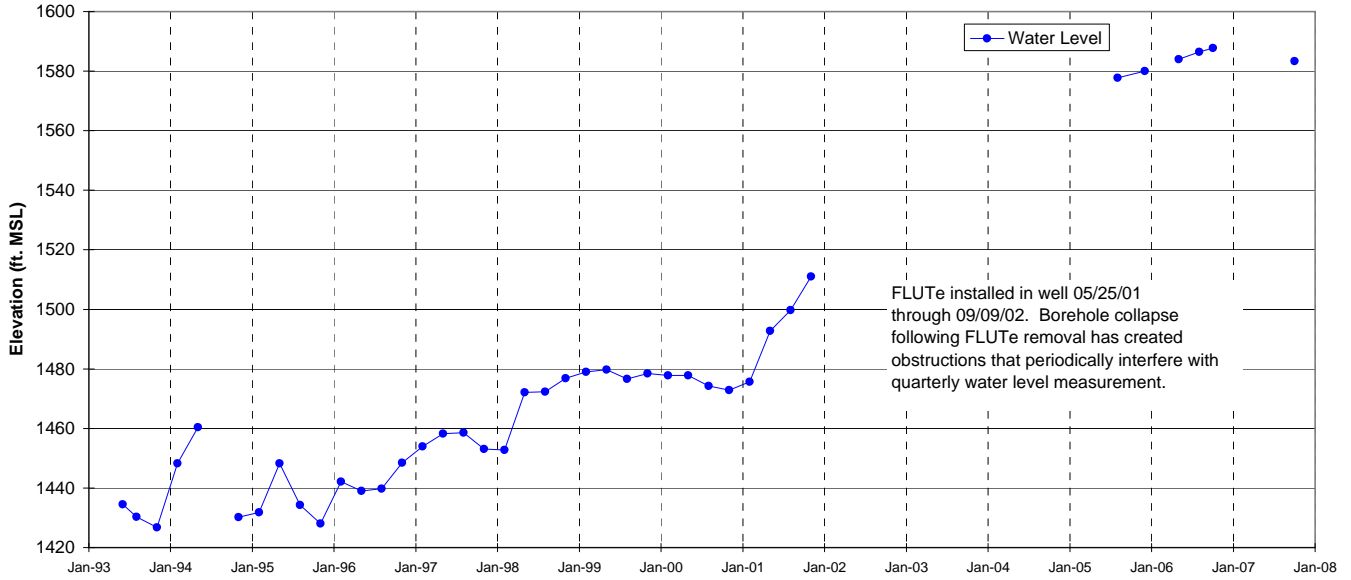




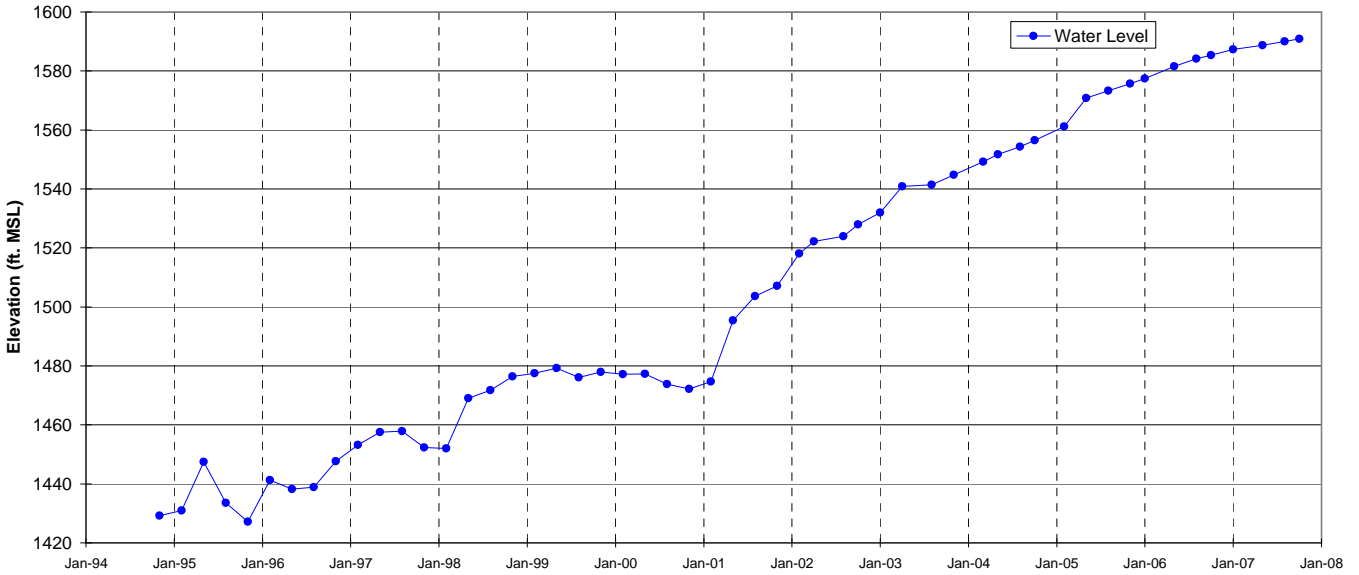
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-43C  
**Figure A-151**



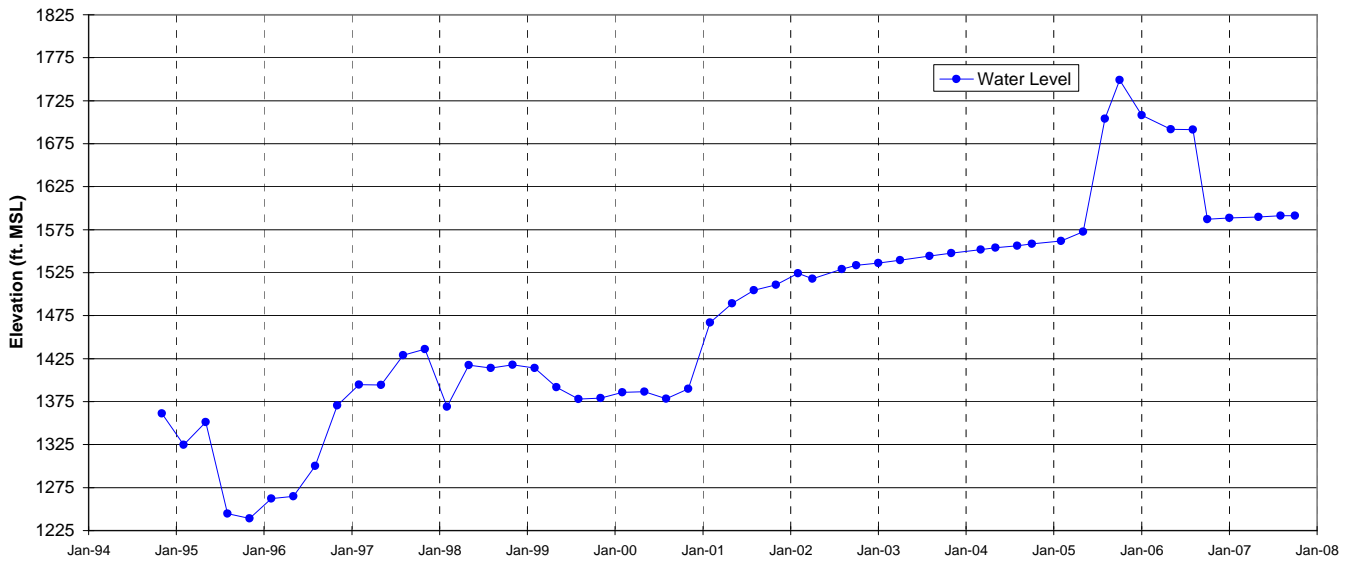
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-44  
**Figure A-152**



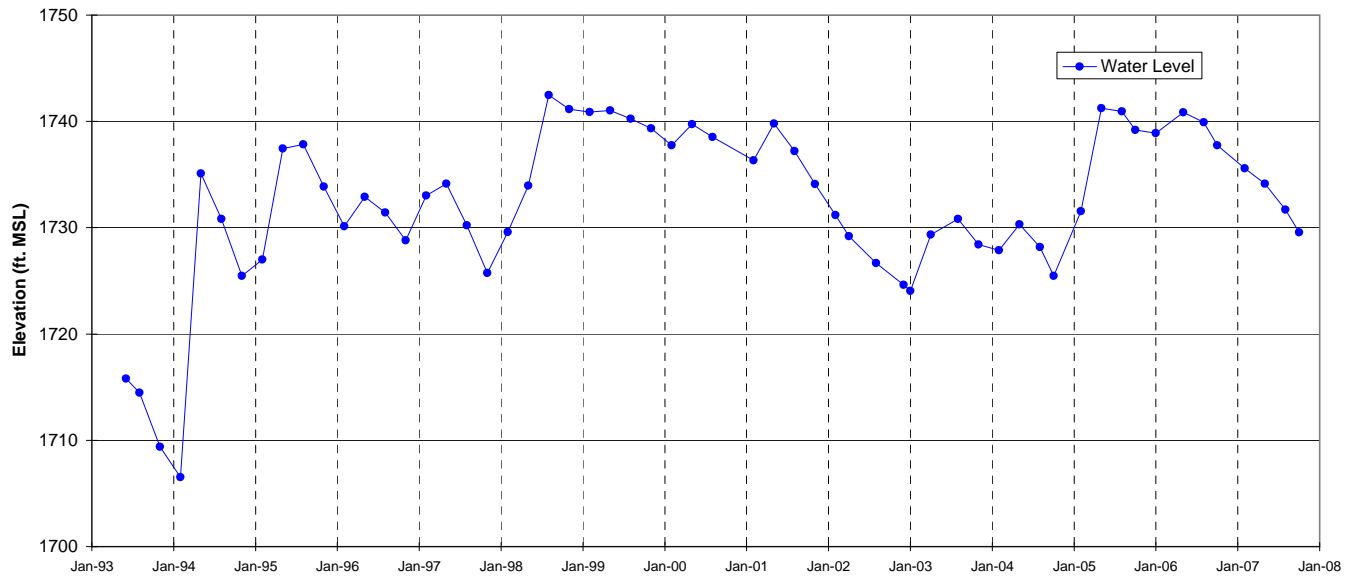
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-45A  
**Figure A-153**



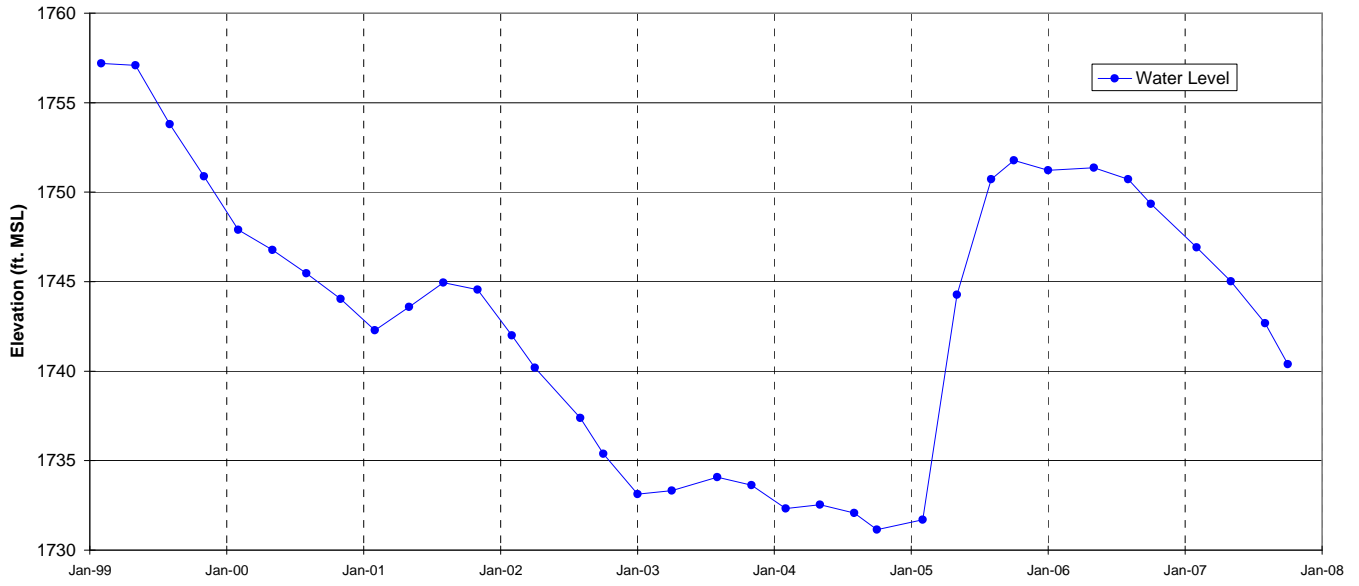
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-45B  
**Figure A-154**



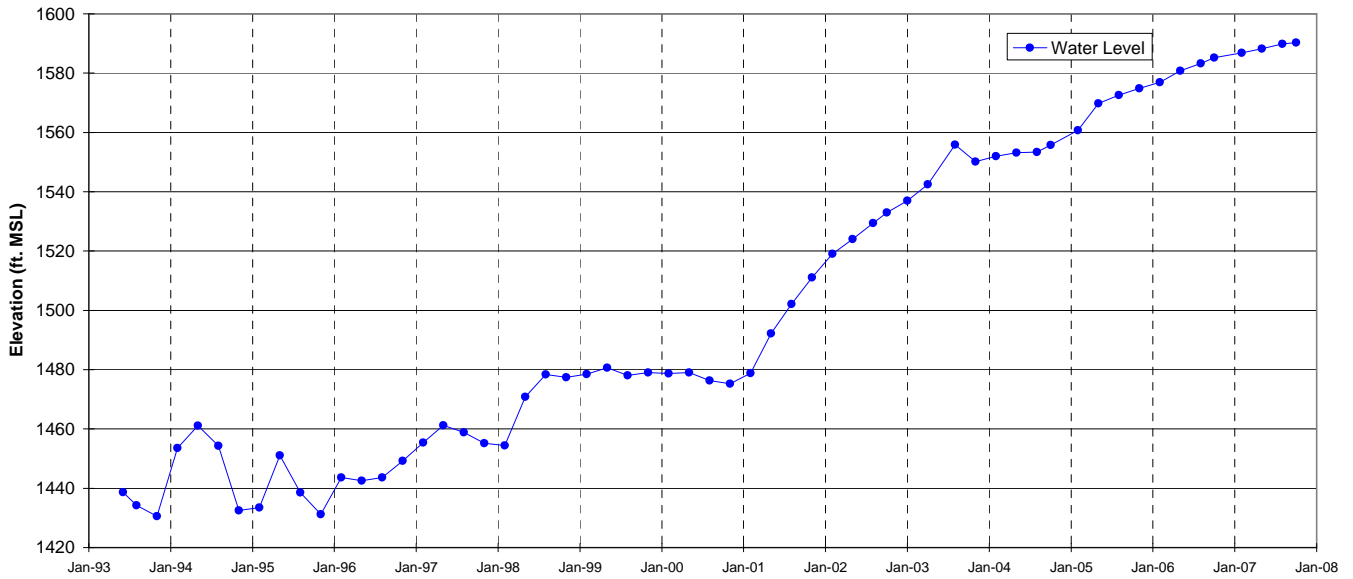
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-45C  
**Figure A-155**



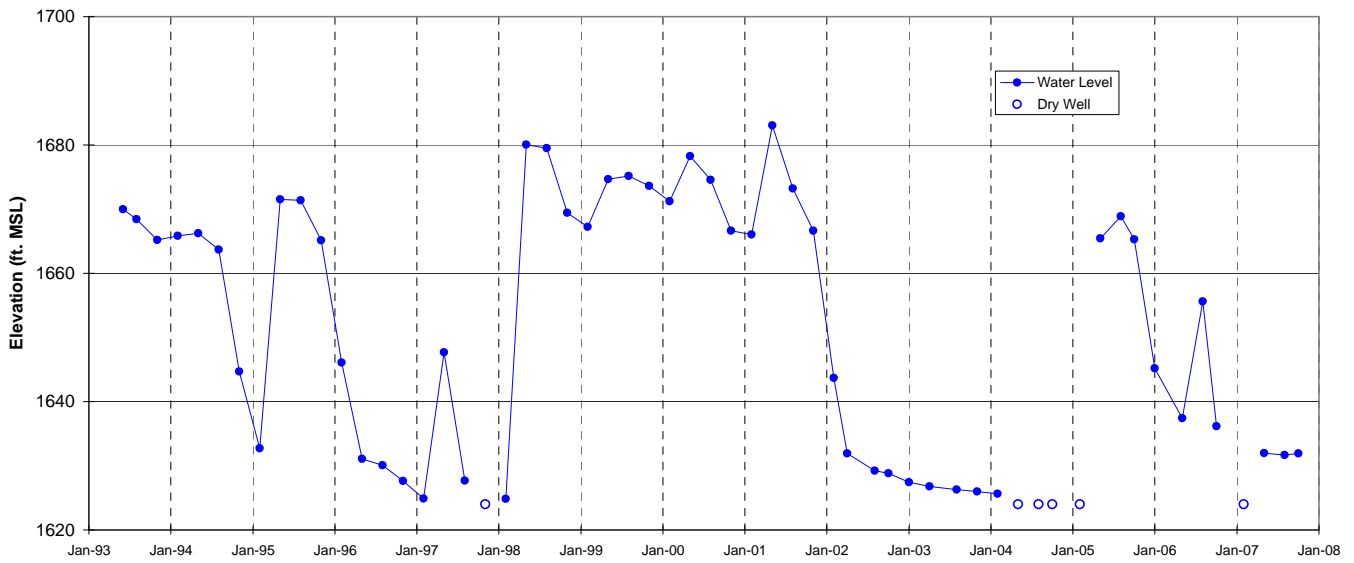
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-46A  
**Figure A-156**



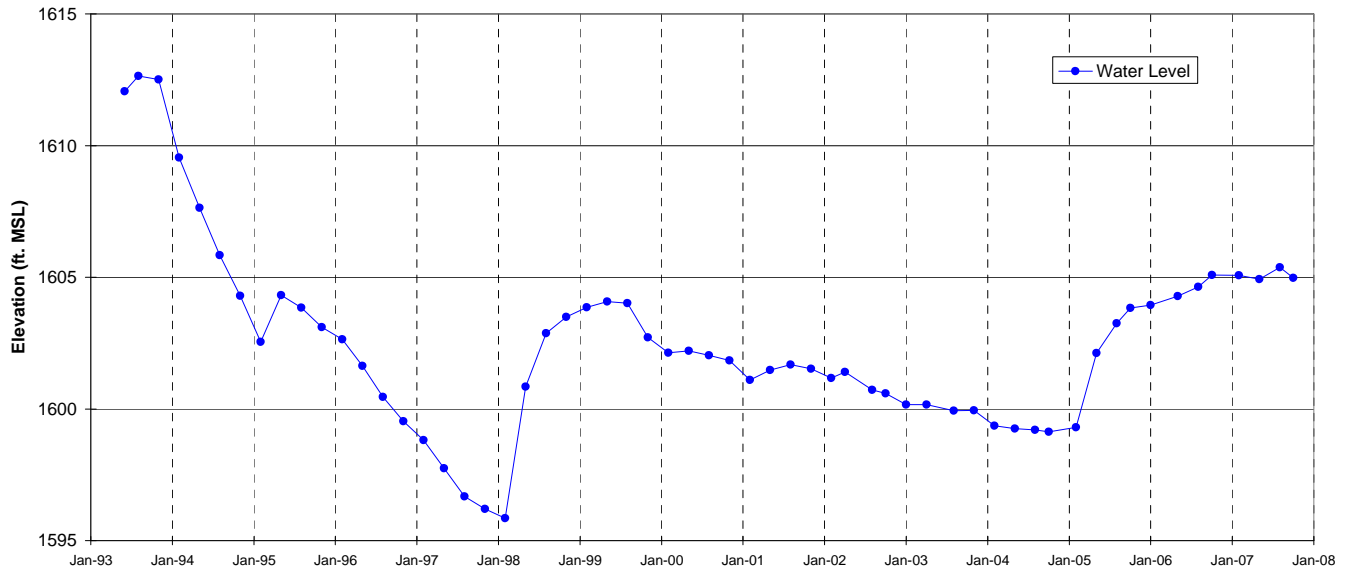
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-46B  
 Figure A-157



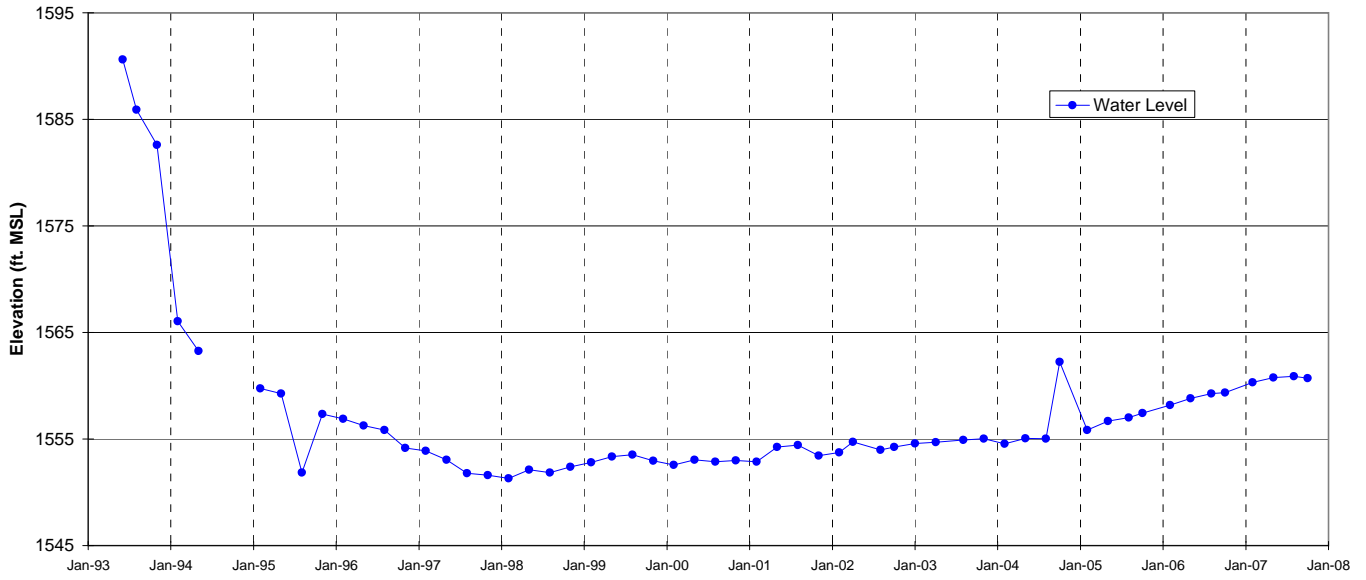
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-47  
 Figure A-158



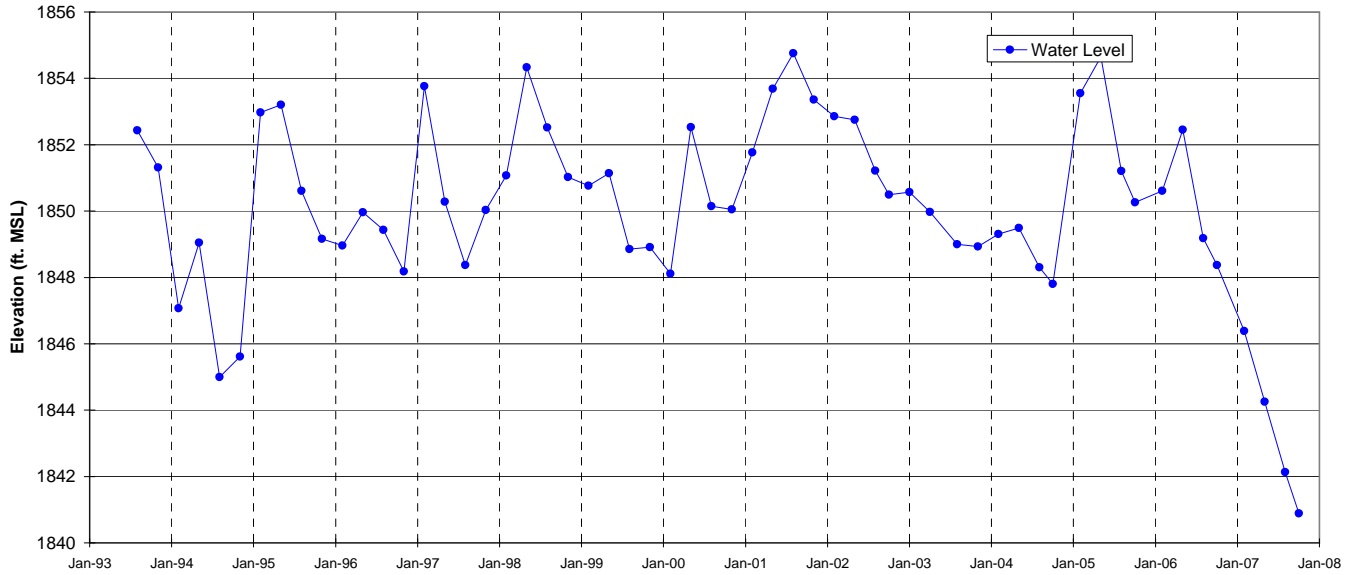
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-48A  
 Figure A-159



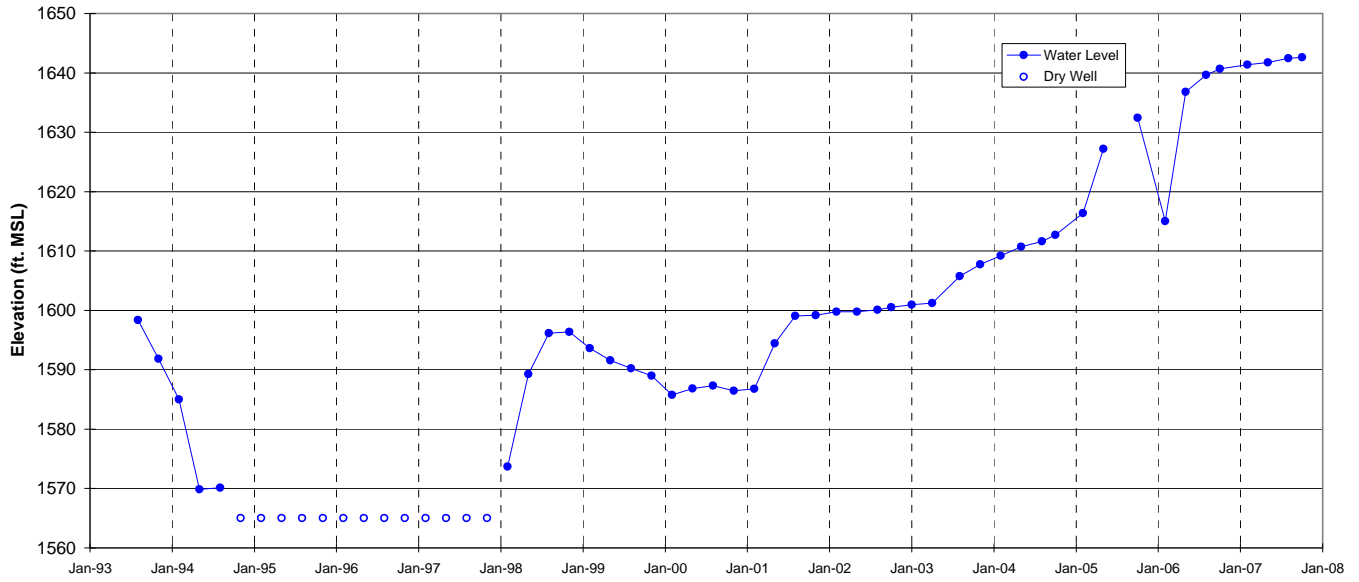
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-48B  
 Figure A-160



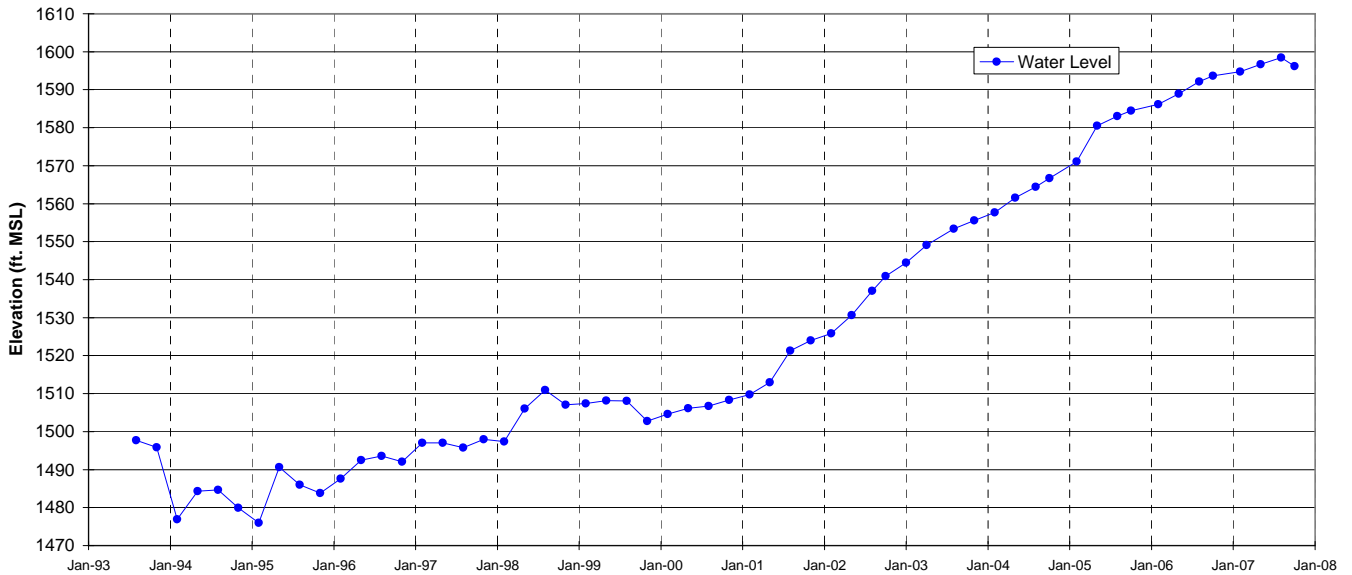
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-48C  
Figure A-161



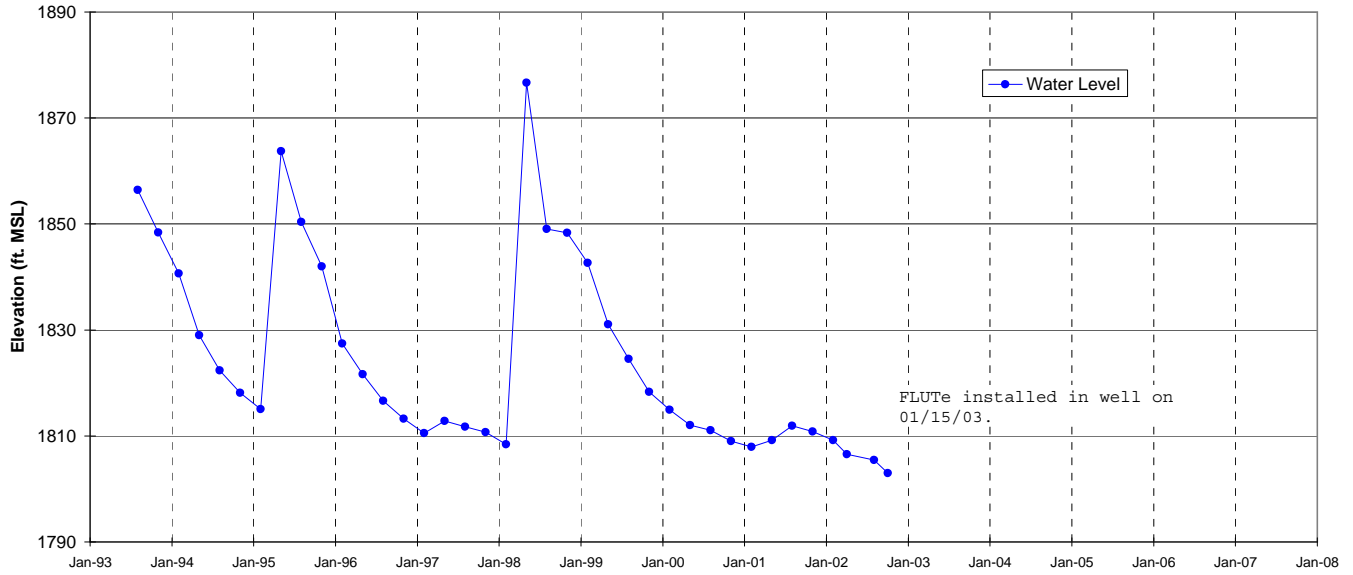
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-49A  
Figure A-162



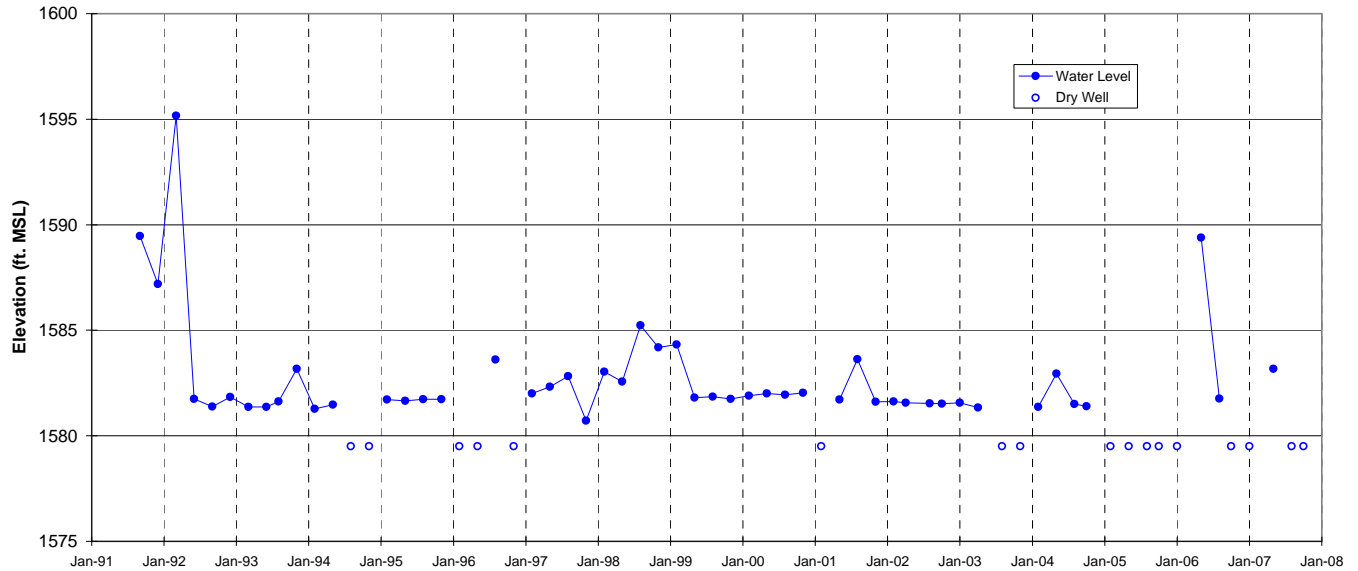
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-49B  
**Figure A-163**



WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-49C  
**Figure A-164**

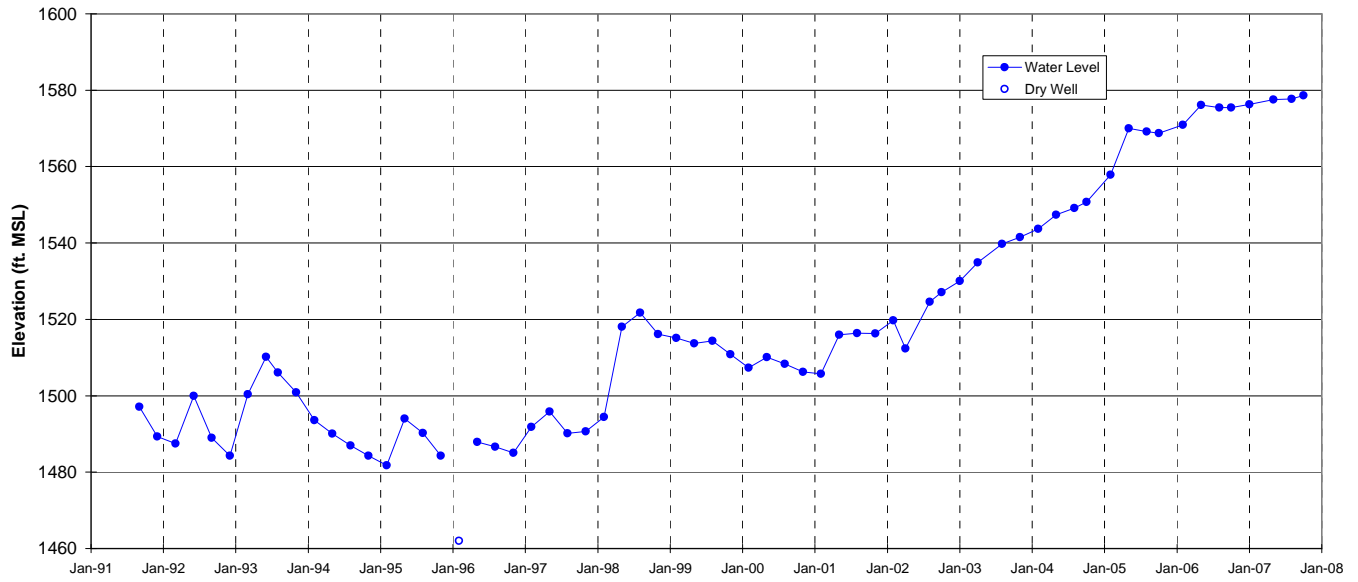


WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-50  
**Figure A-165**

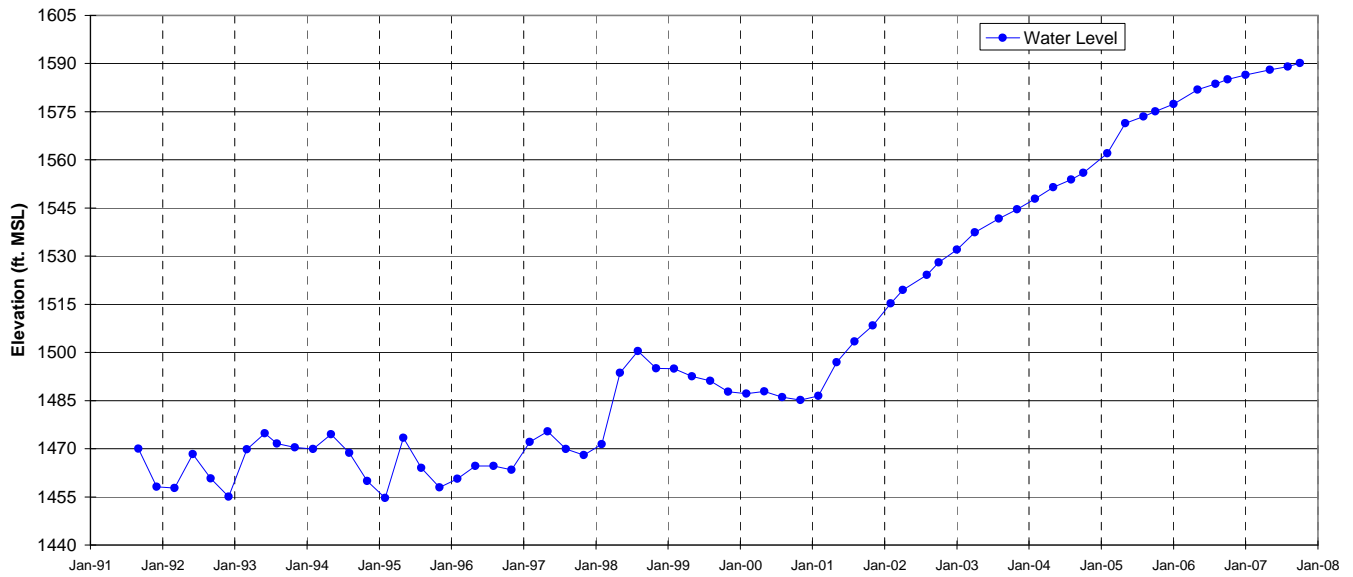


WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-51A  
**Figure A-166**

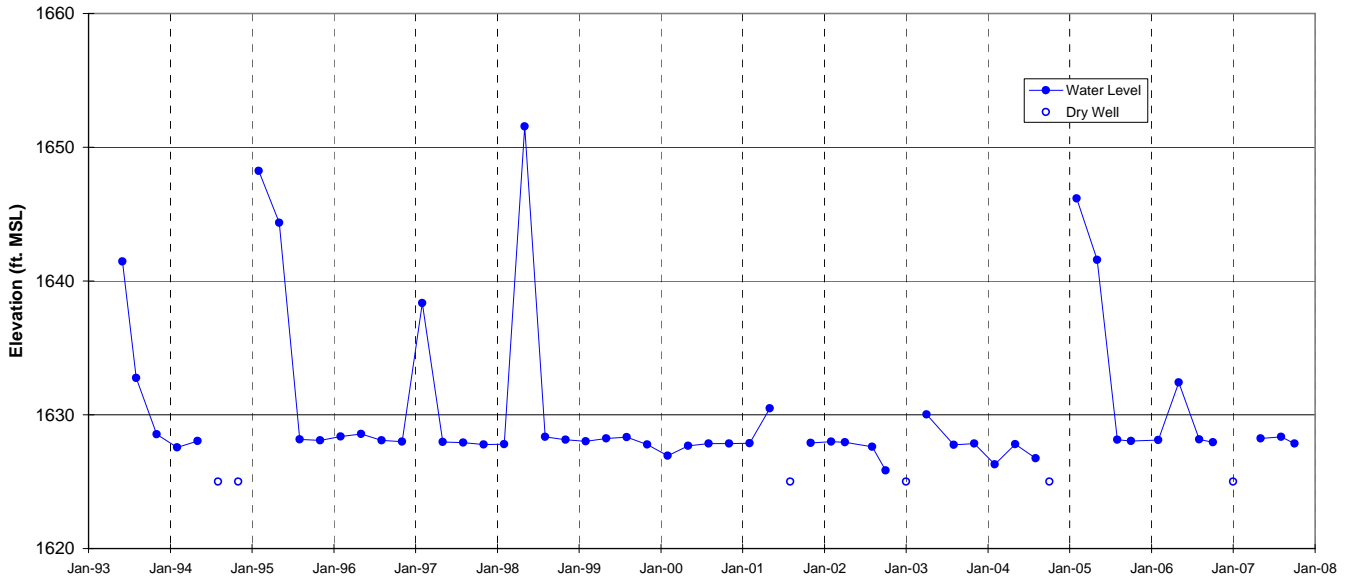




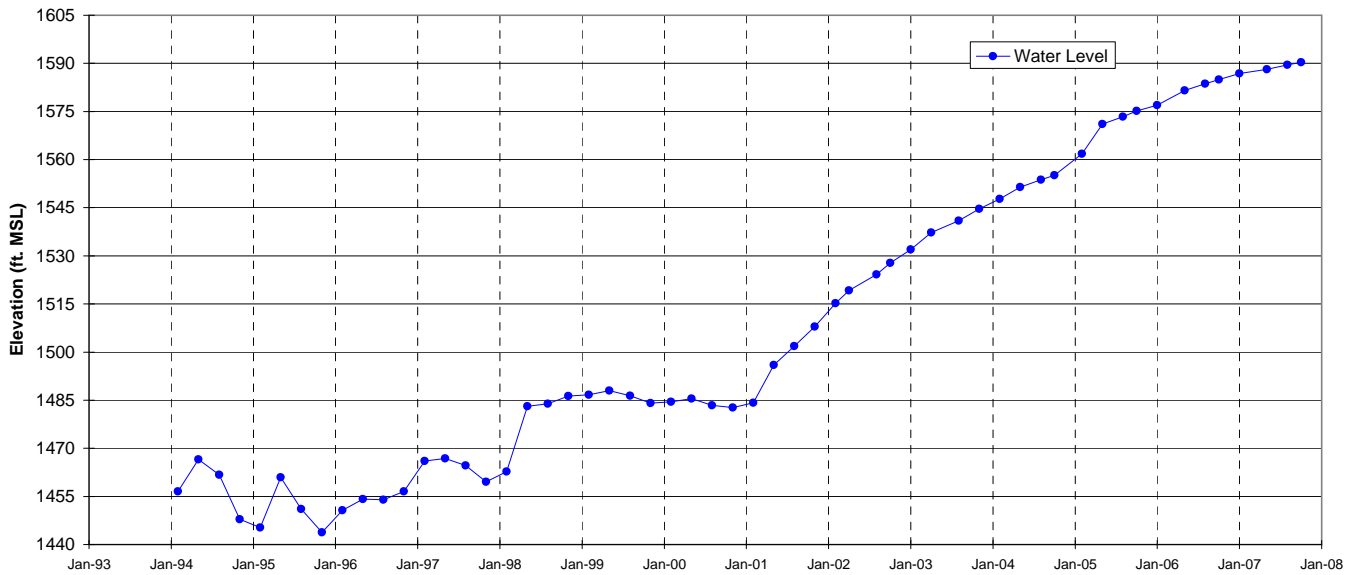
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-51B  
**Figure A-167**



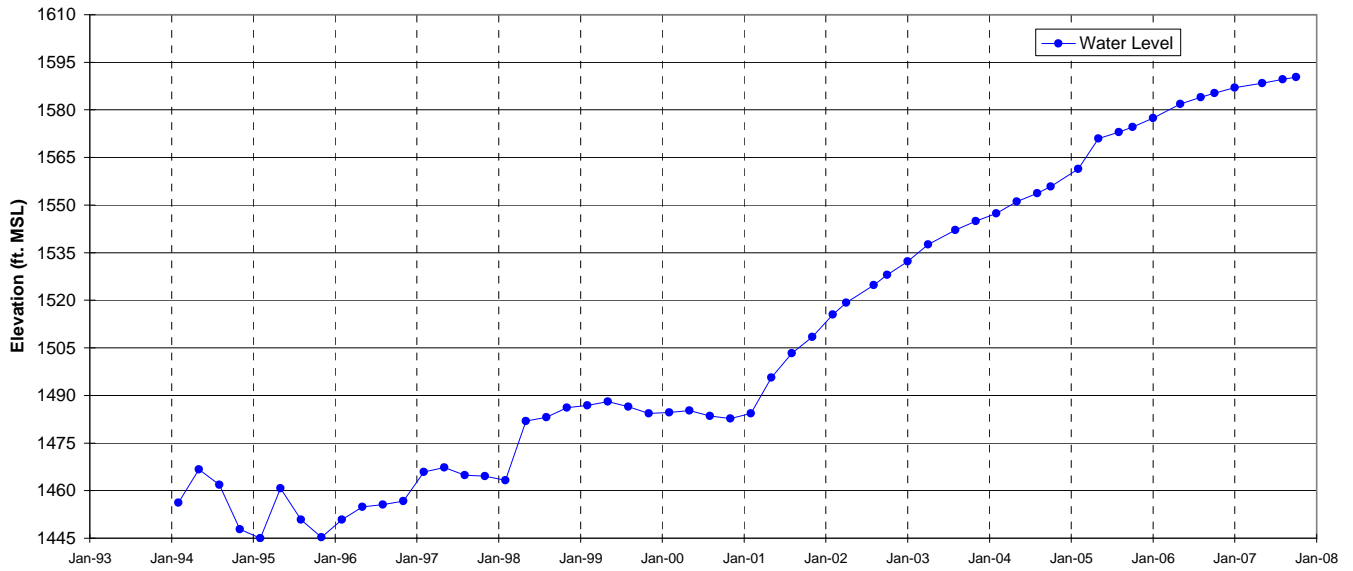
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-51C  
**Figure A-168**



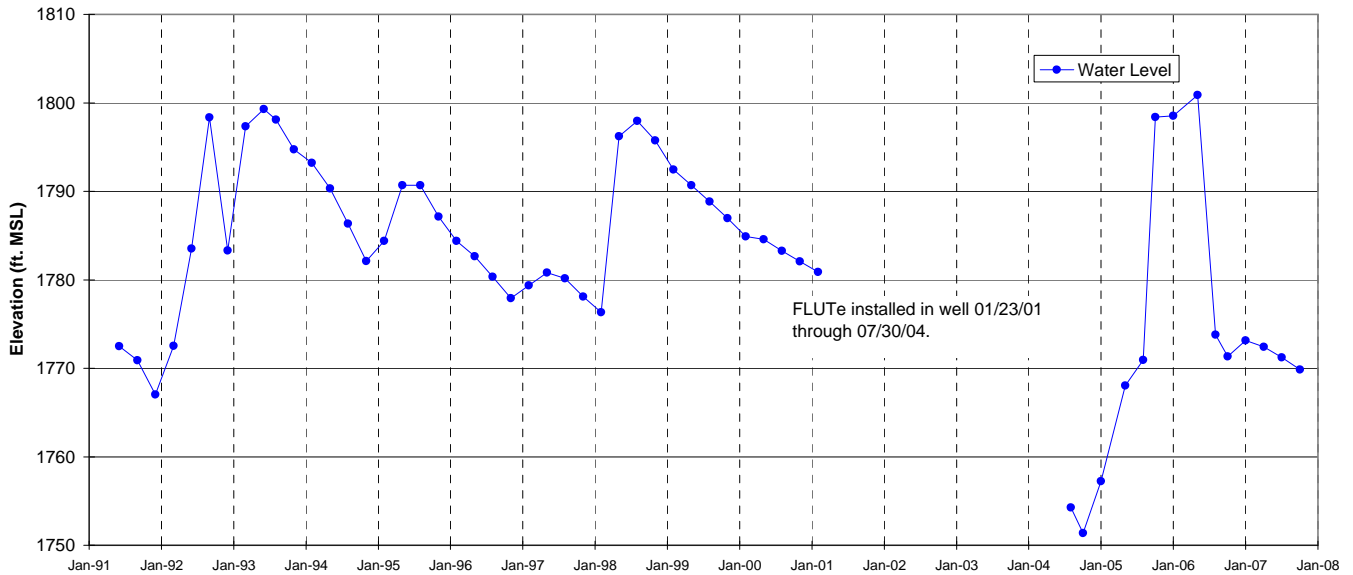
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-52A  
**Figure A-169**



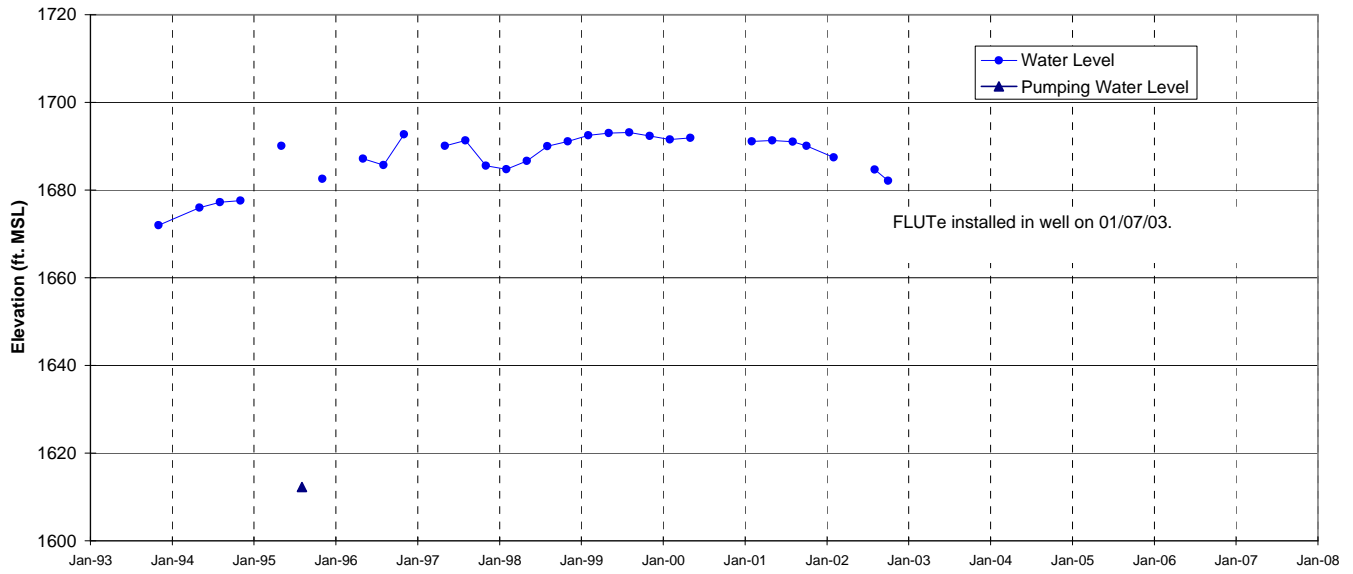
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-52B  
**Figure A-170**



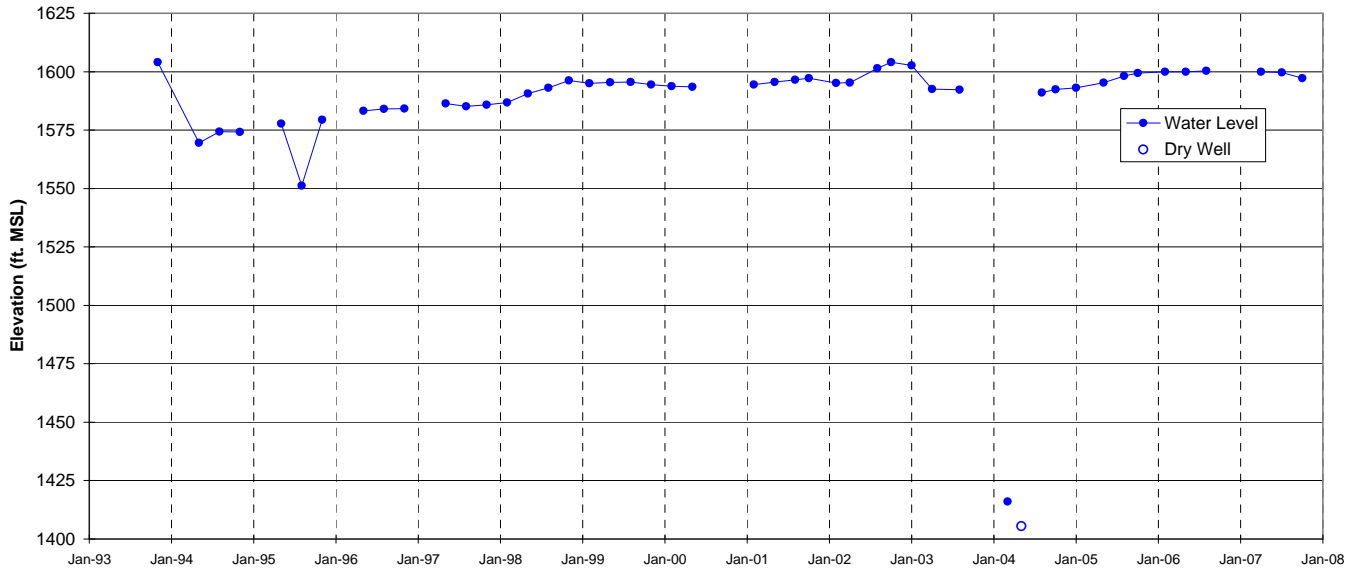
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-52C  
**Figure A-171**



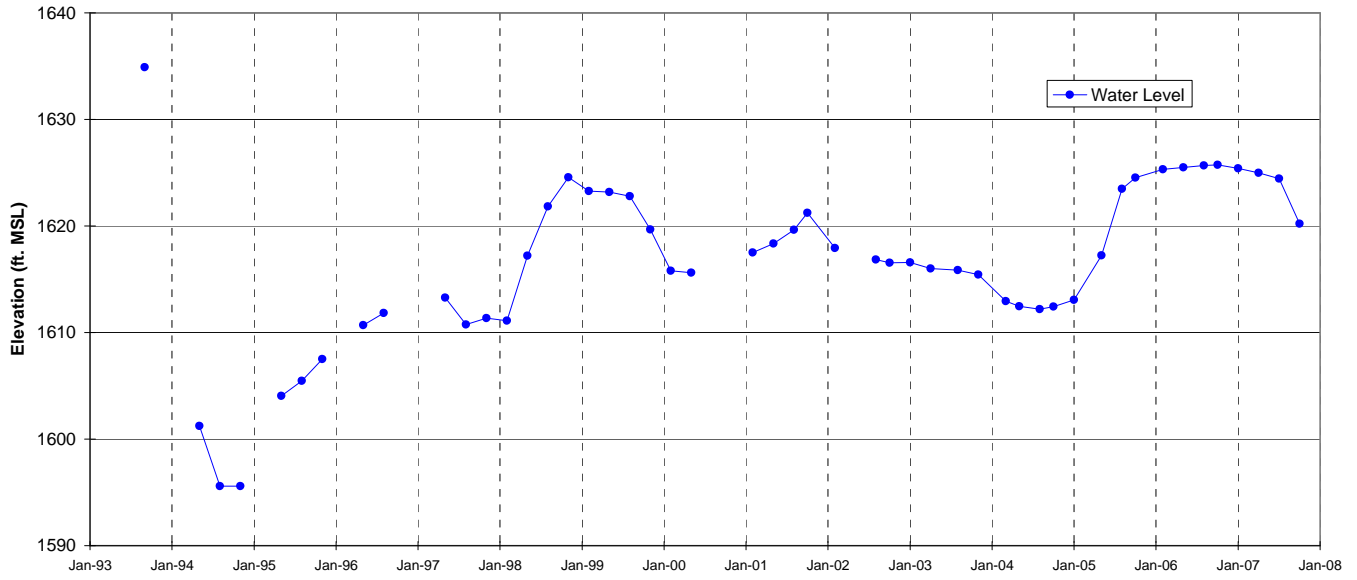
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-53  
**Figure A-172**



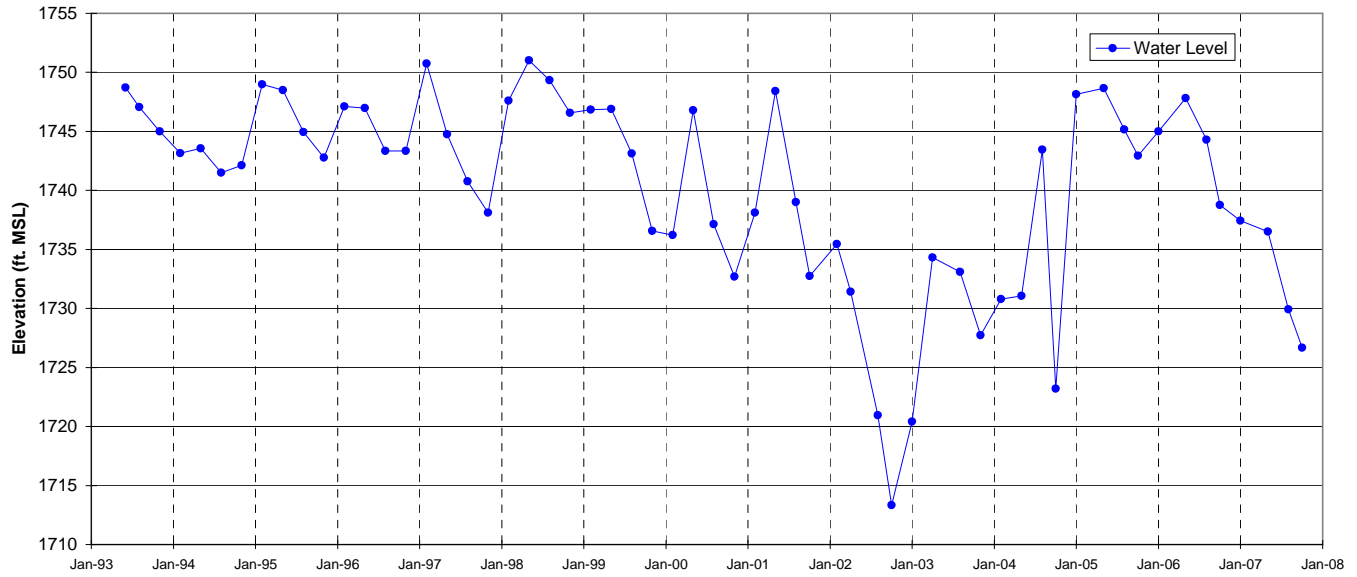
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-54A  
**Figure A-173**



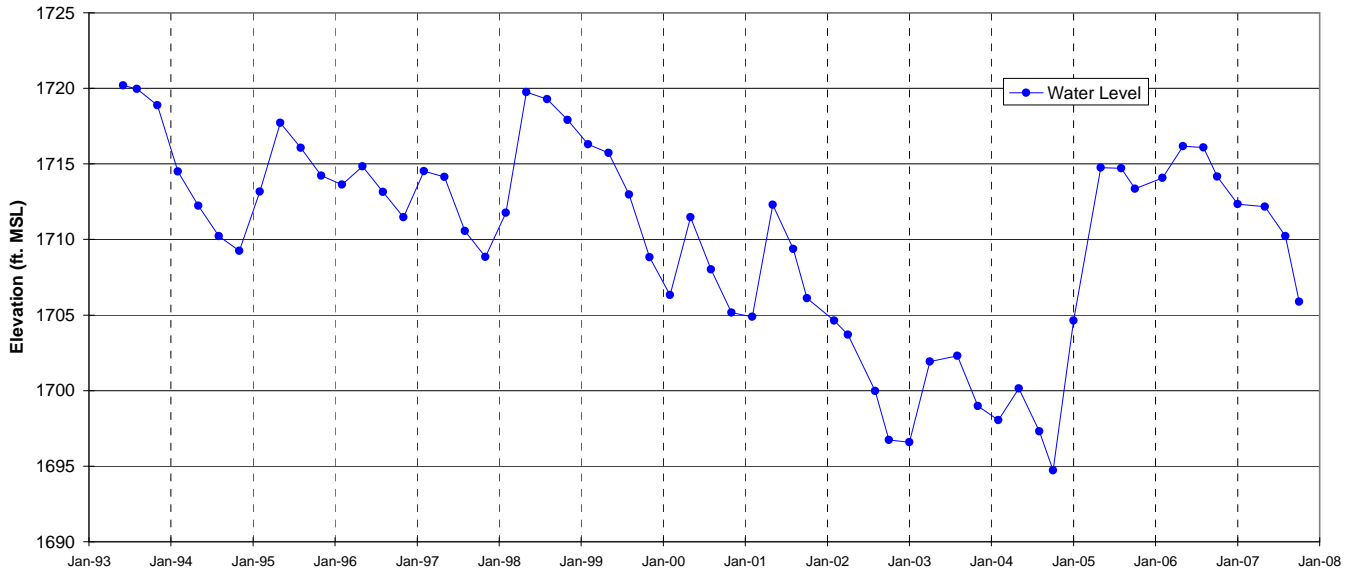
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-54B  
**Figure A-174**



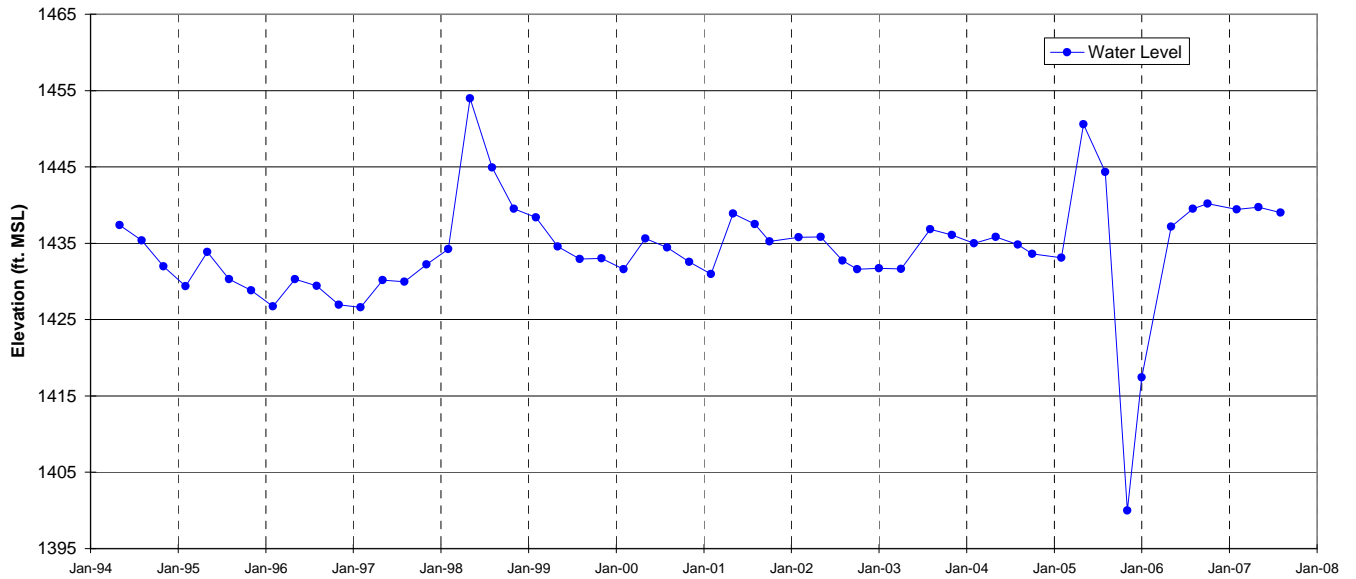
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-54C  
 Figure A-175



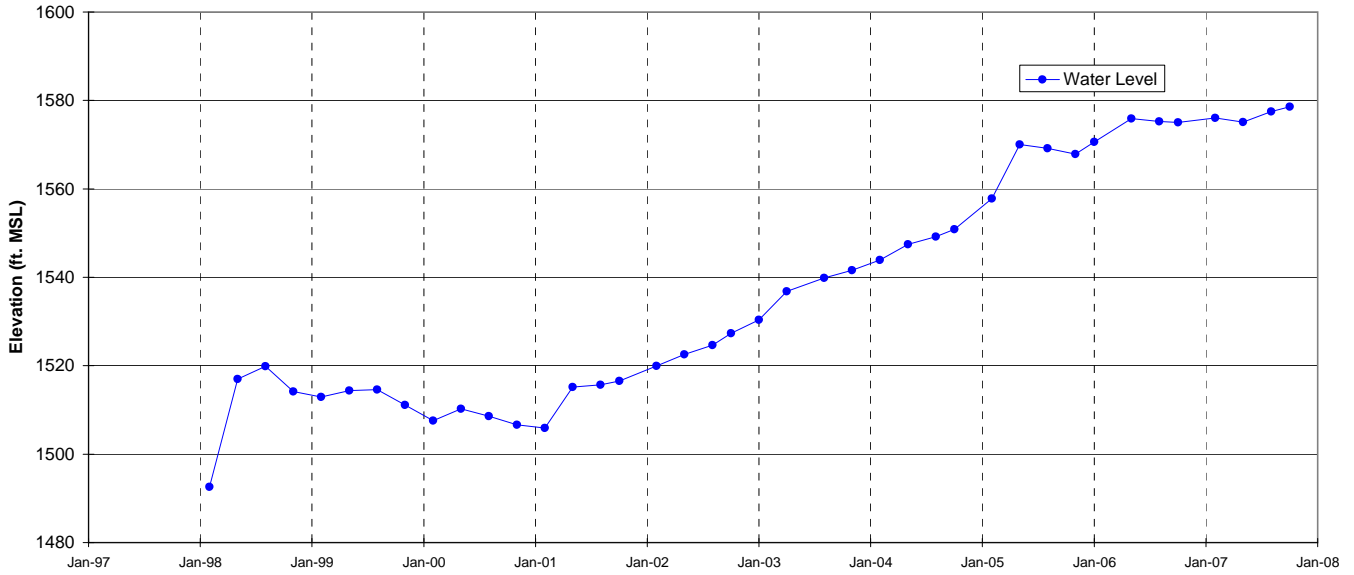
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-55A  
 Figure A-176



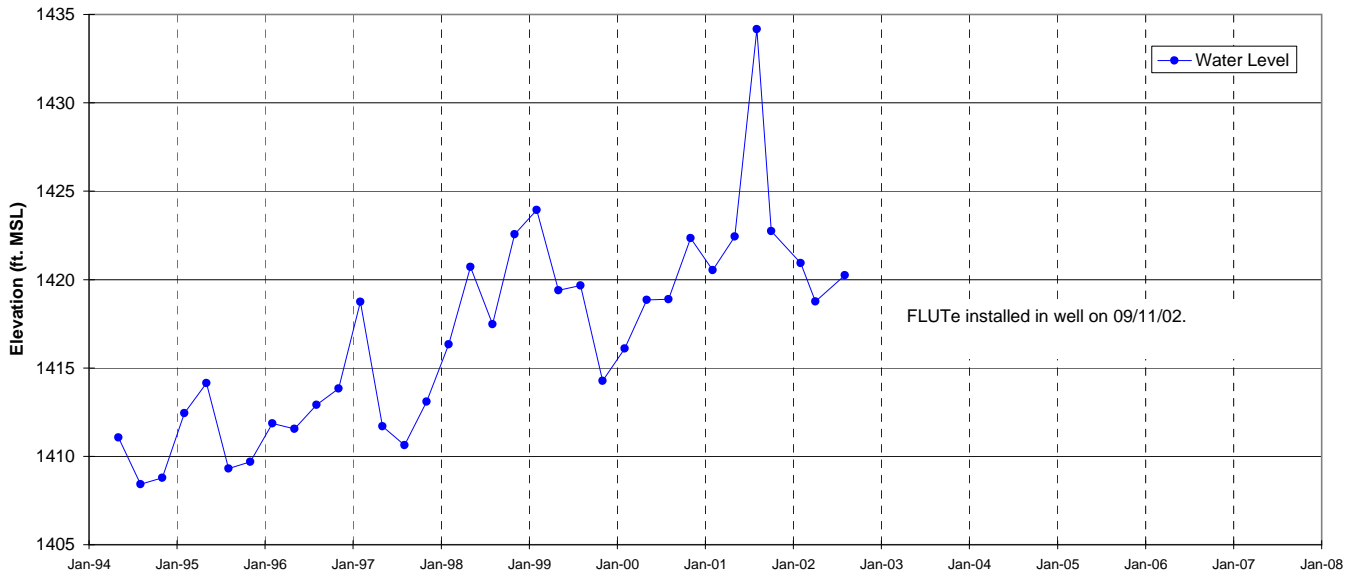
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-55B  
**Figure A-177**



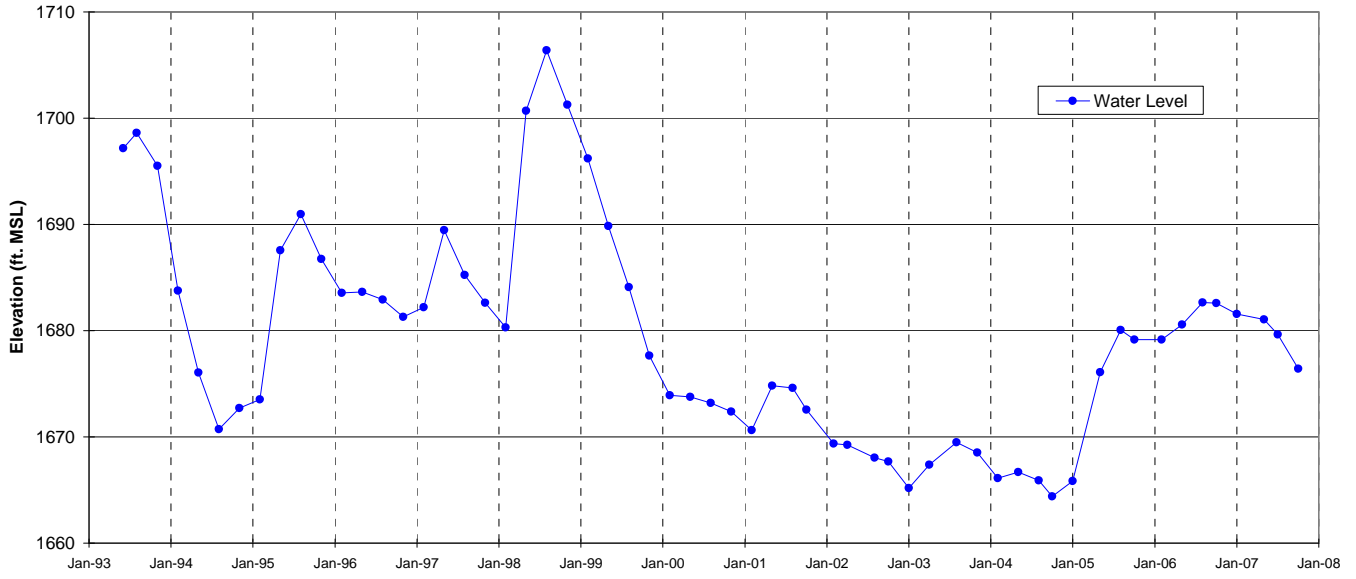
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-56A  
**Figure A-178**



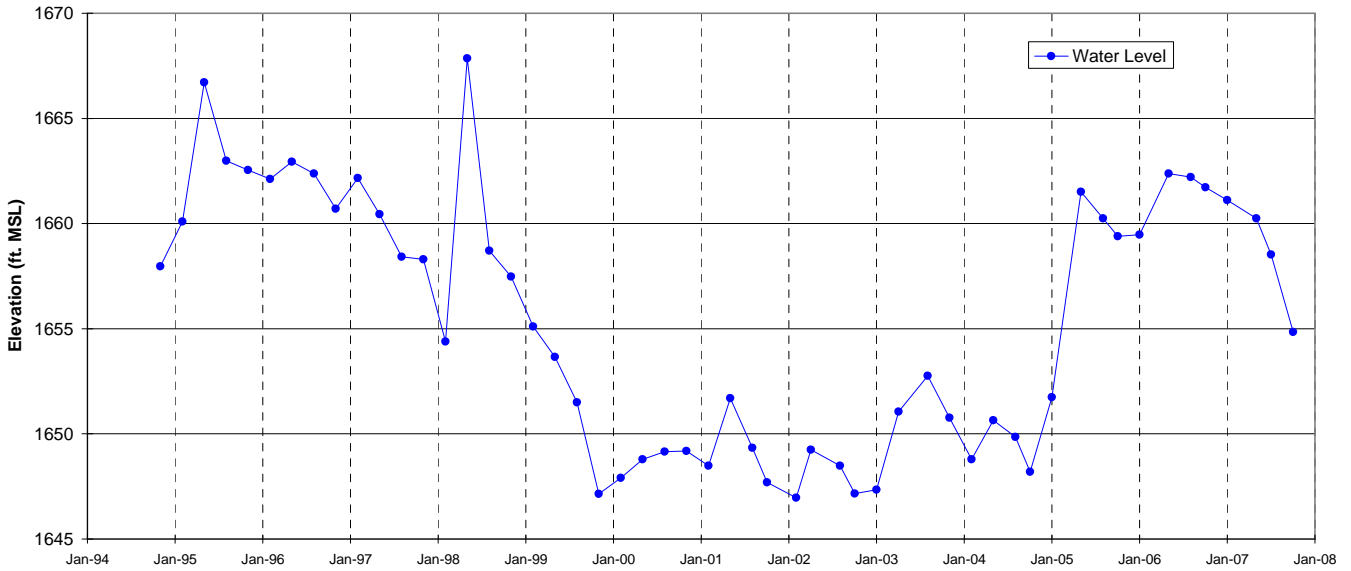
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-56B  
Figure A-179



WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-57  
Figure A-180

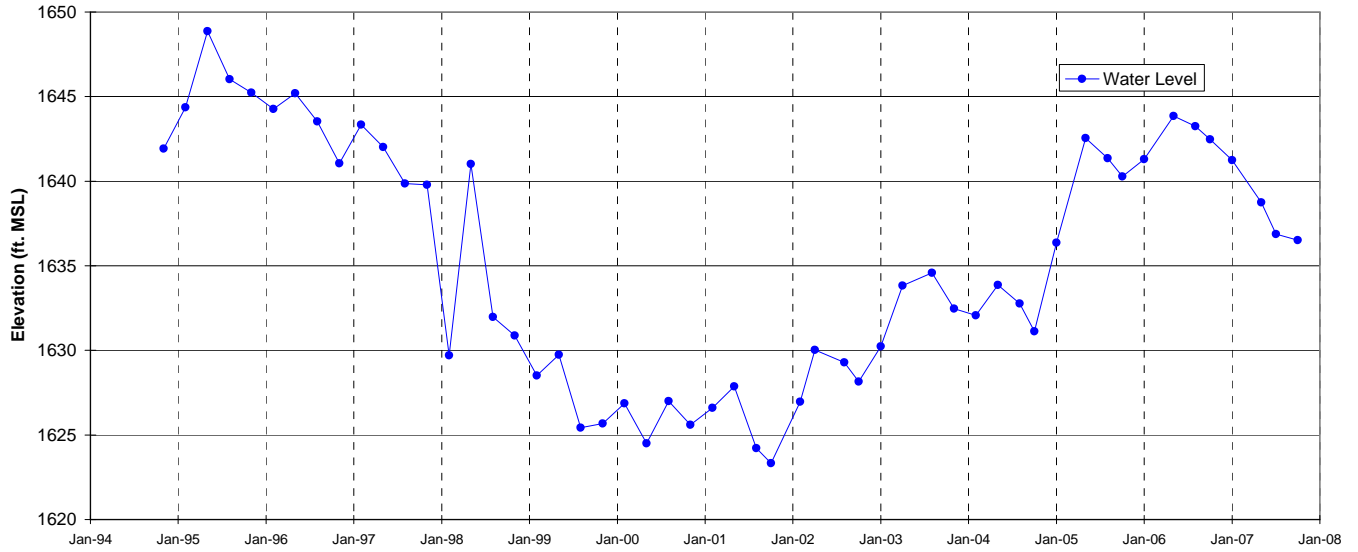


WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-58A  
**Figure A-181**

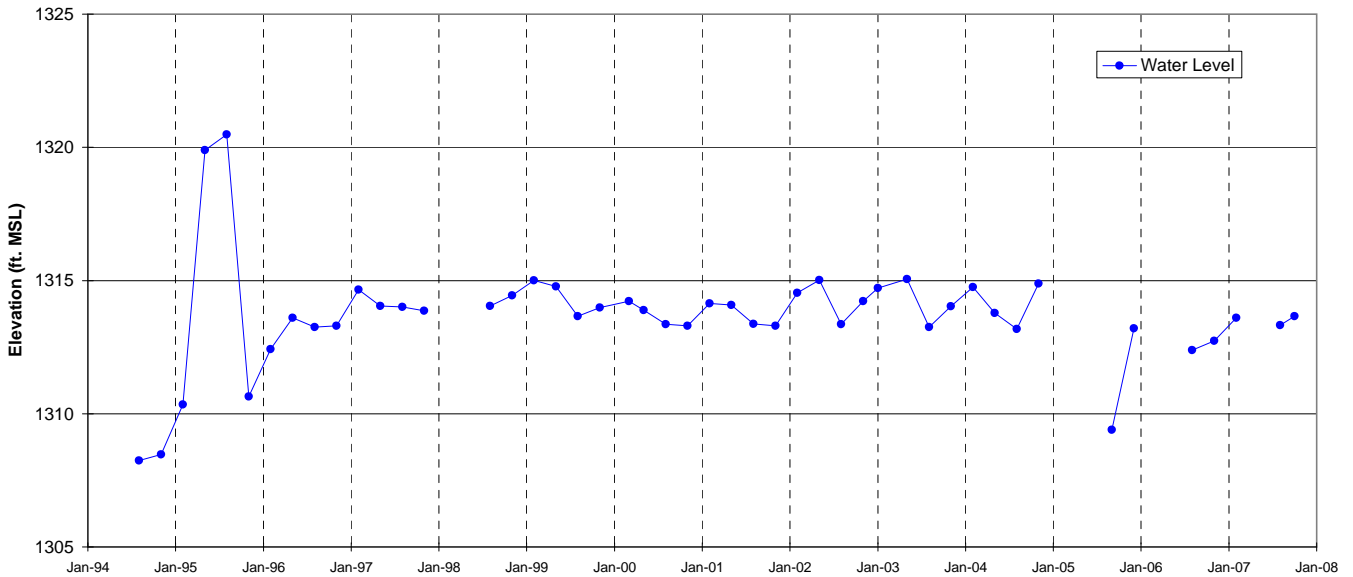


WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-58B  
**Figure A-182**

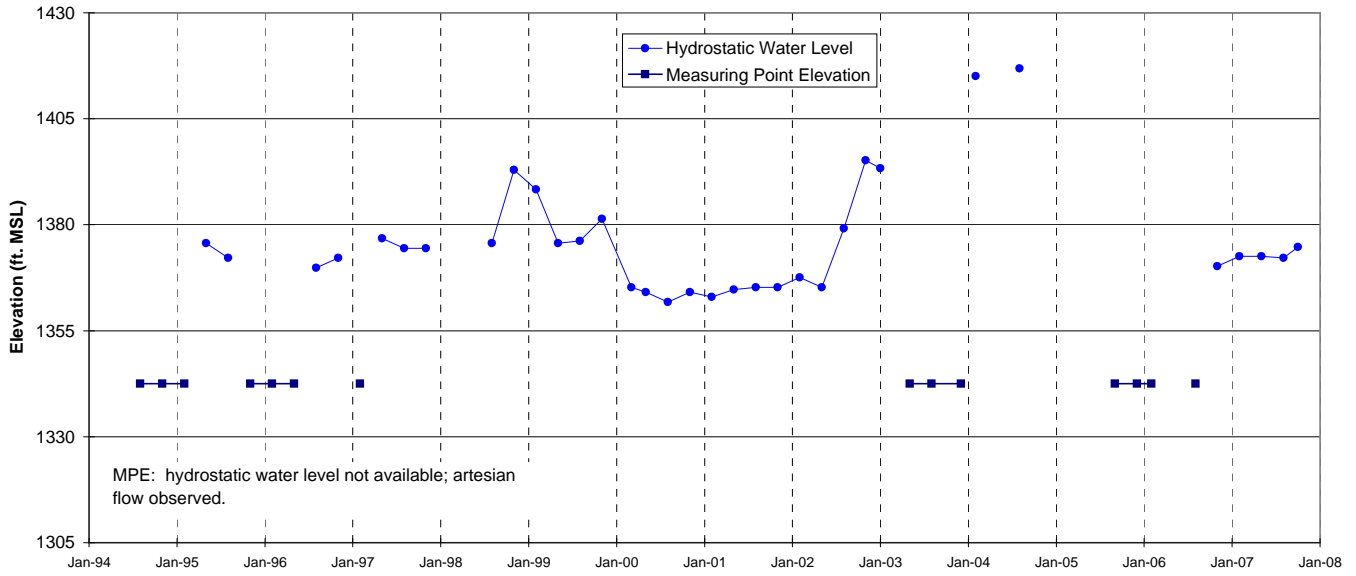




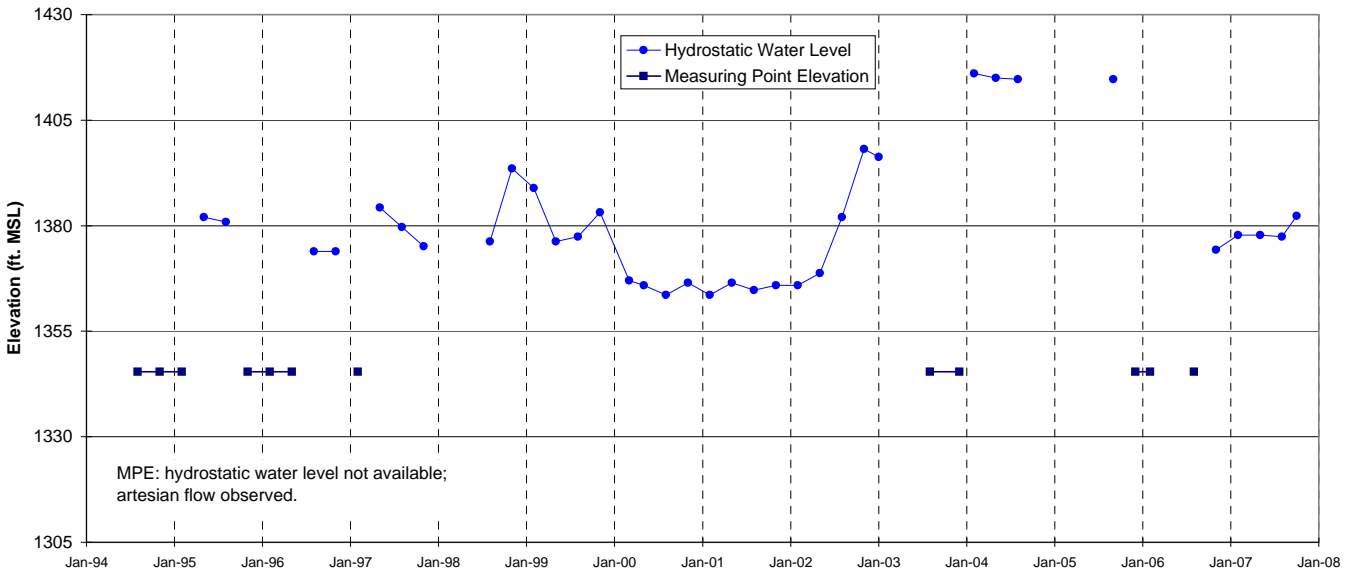
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-58C  
 Figure A-183



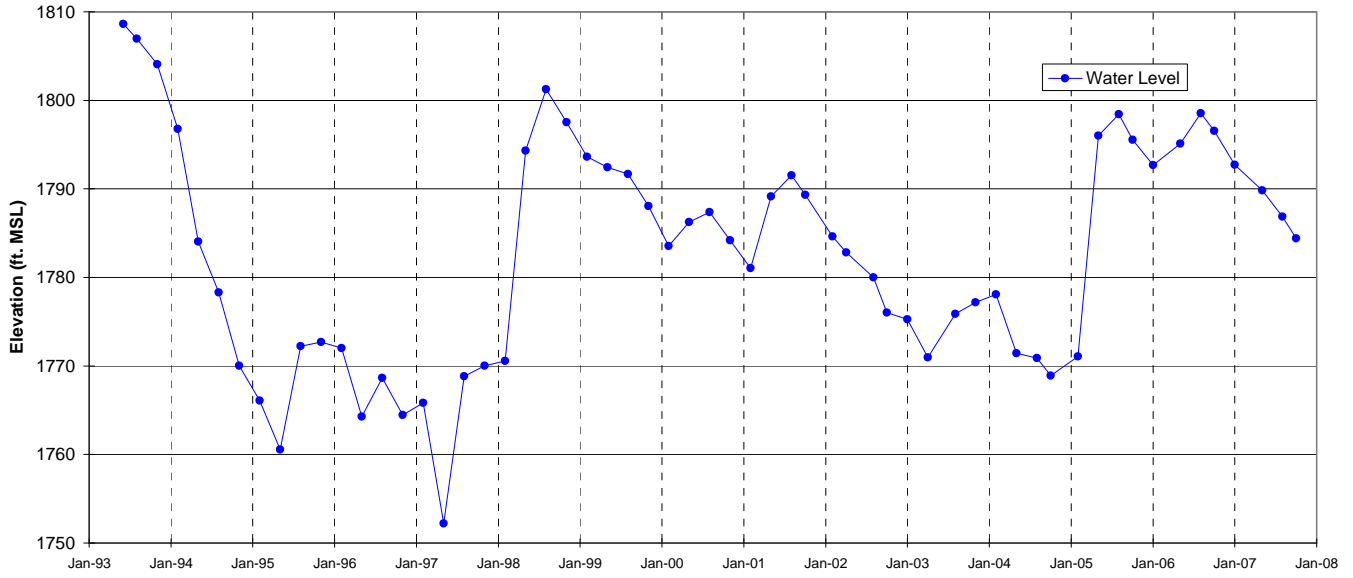
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-59A  
 Figure A-184



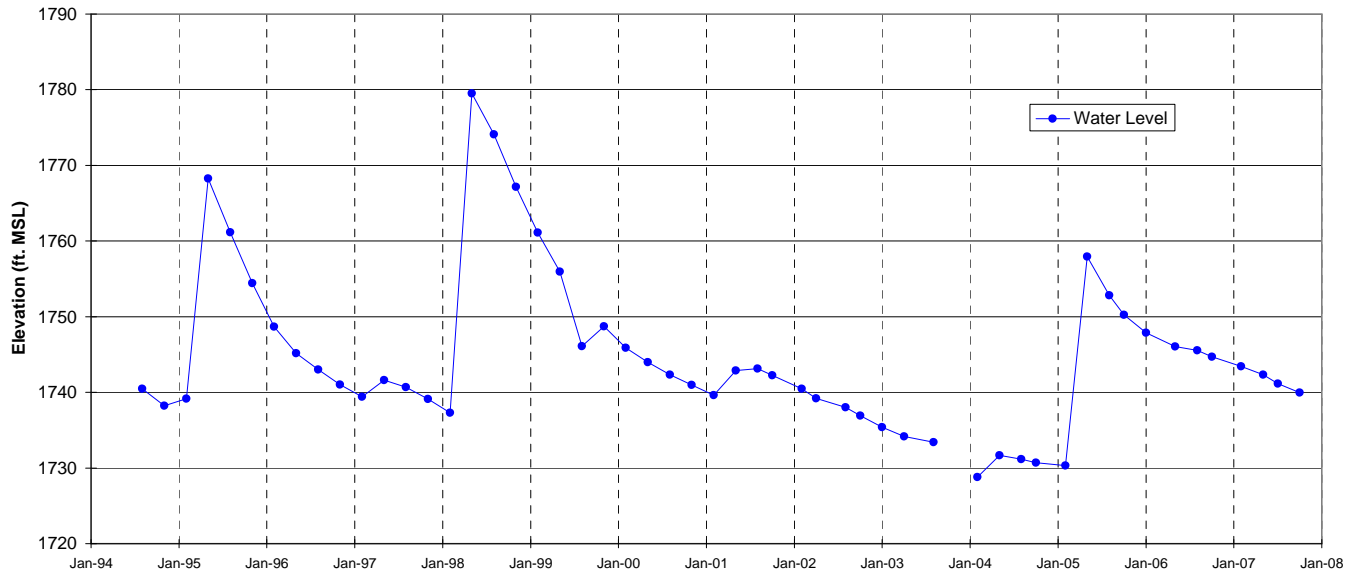
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-59B  
Figure A-185



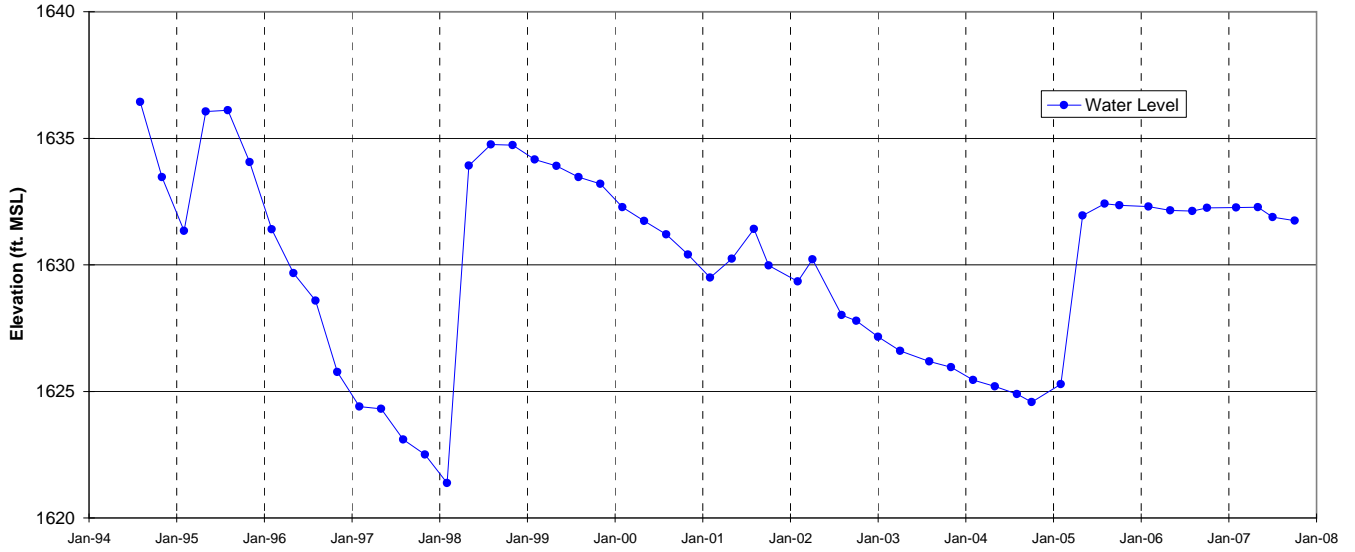
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-59C  
Figure A-186



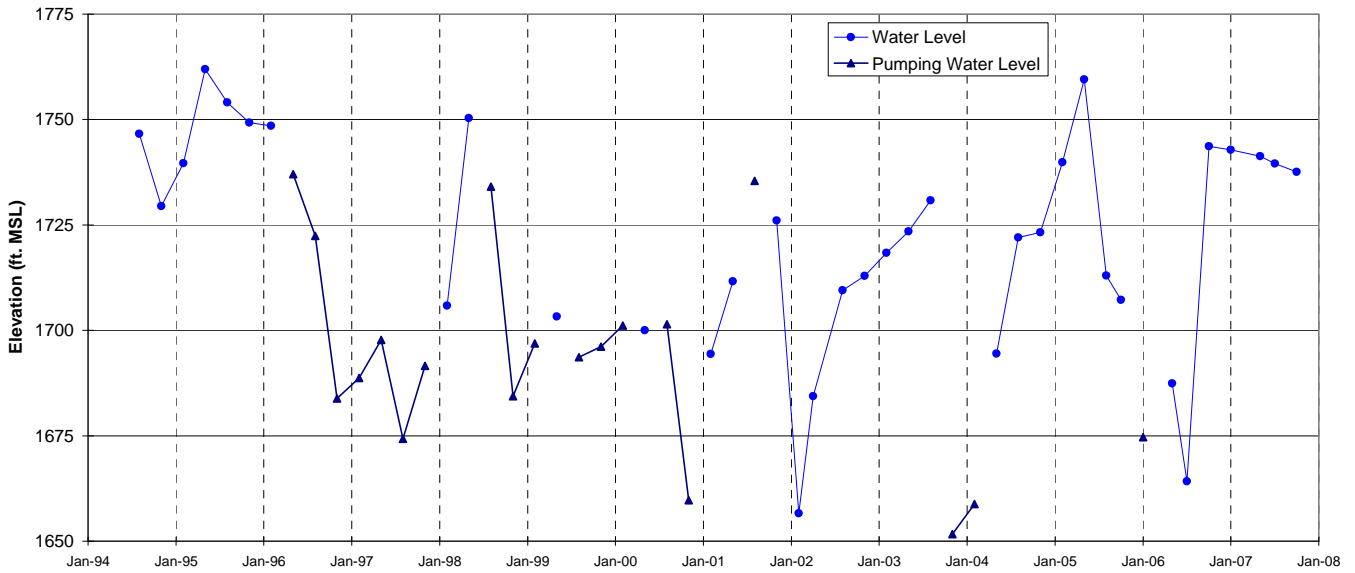
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-60  
**Figure A-187**



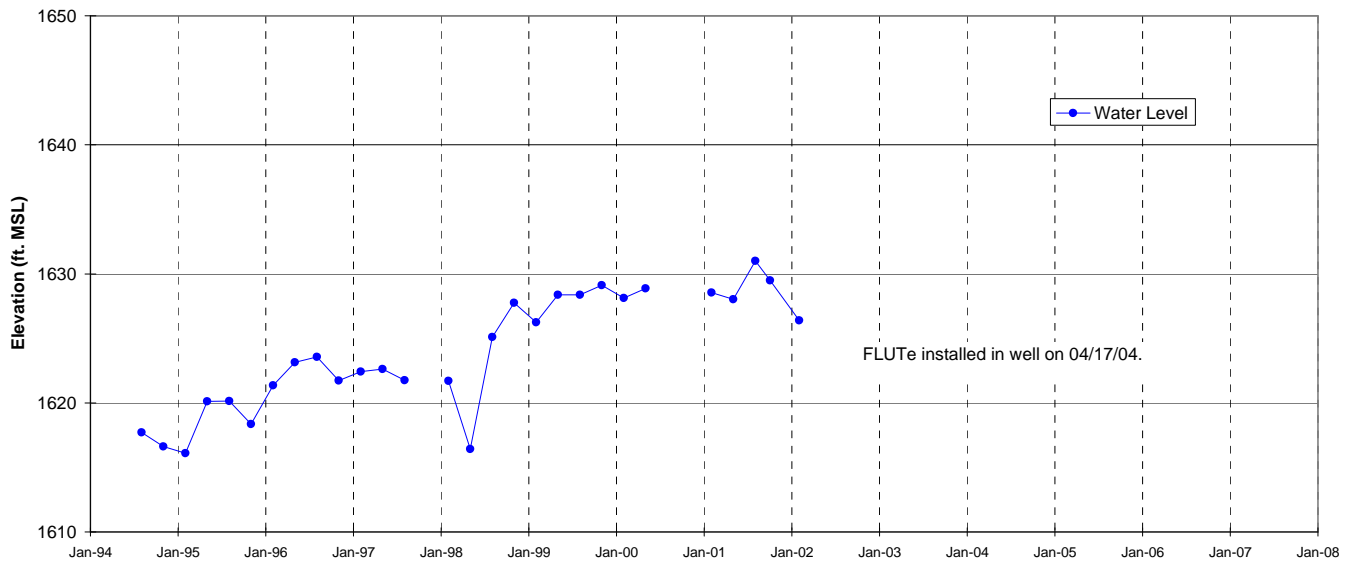
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-61  
**Figure A-188**



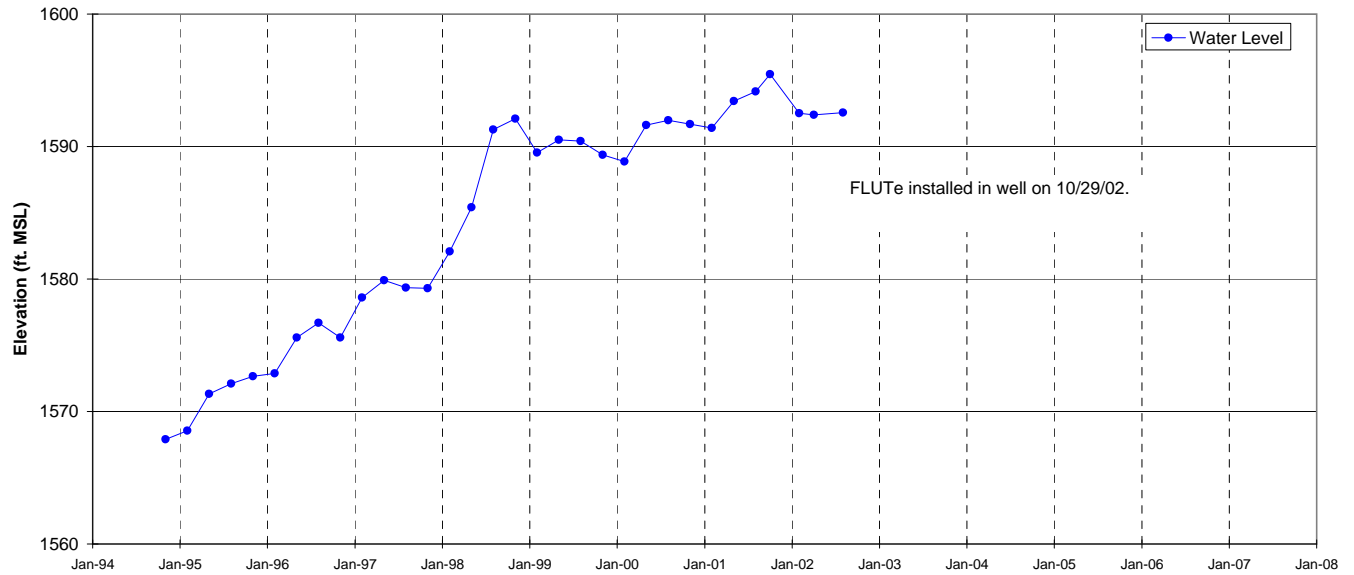
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-62  
**Figure A-189**



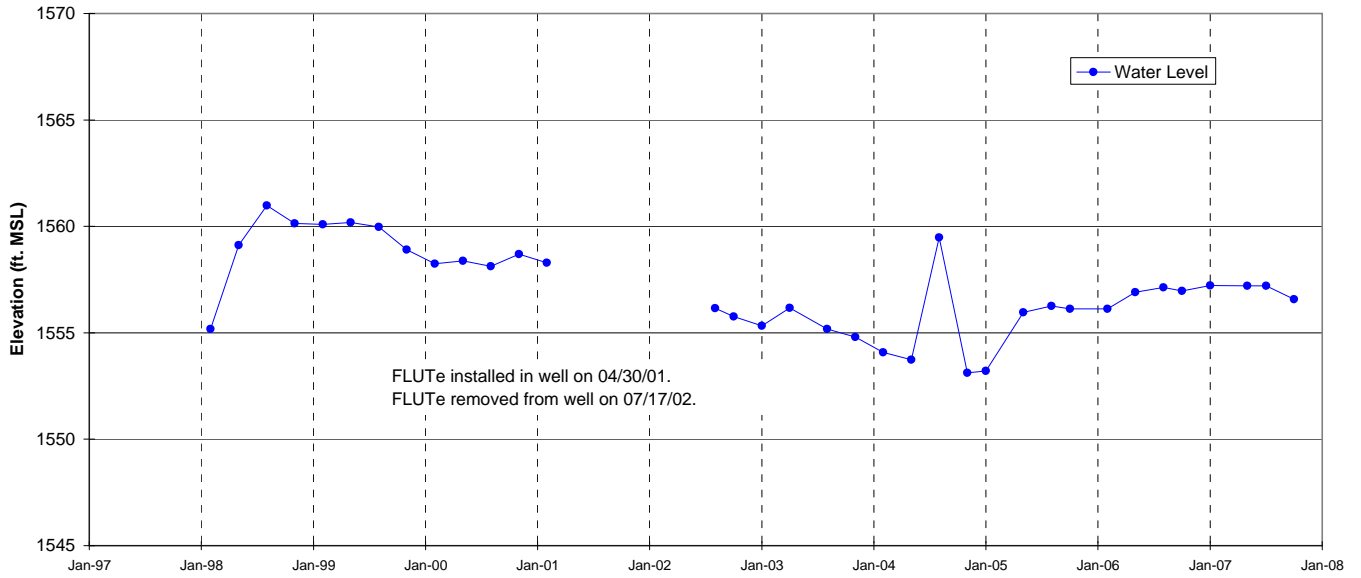
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-63  
**Figure A-190**



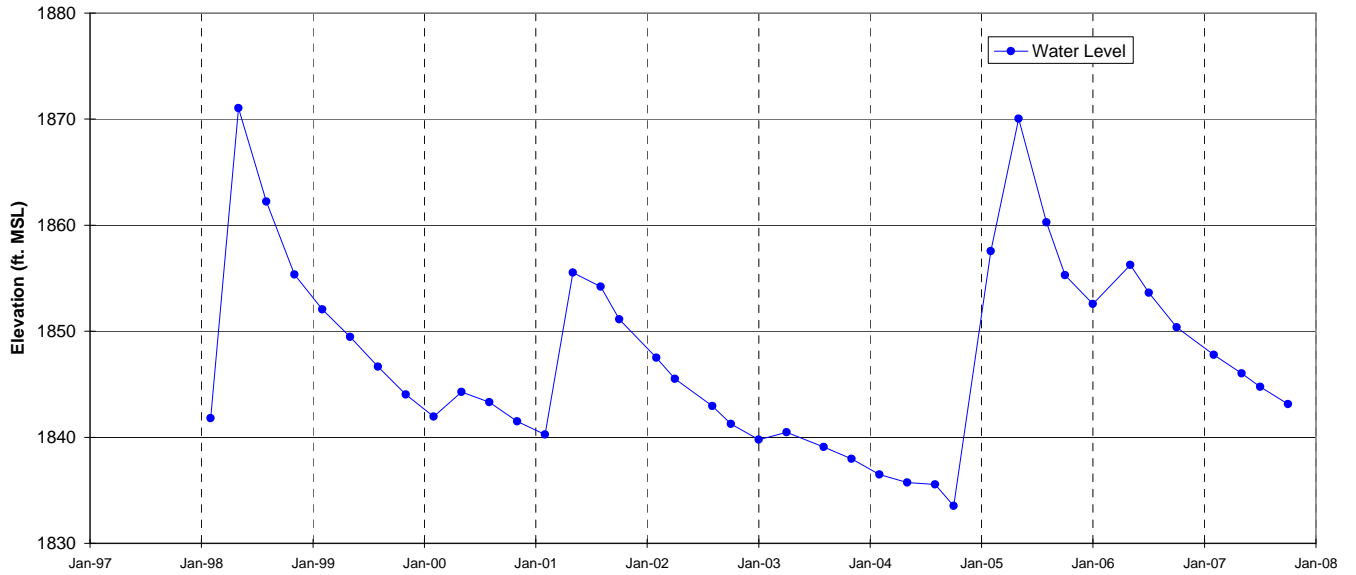
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-64  
**Figure A-191**



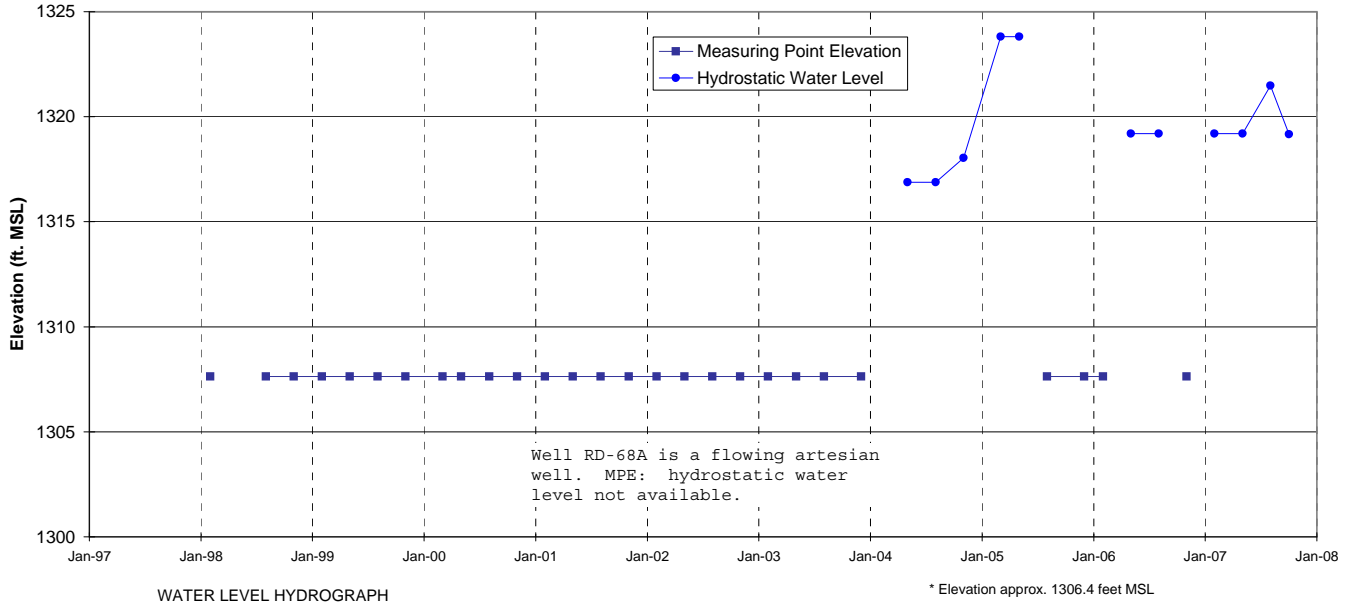
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-65  
**Figure A-192**



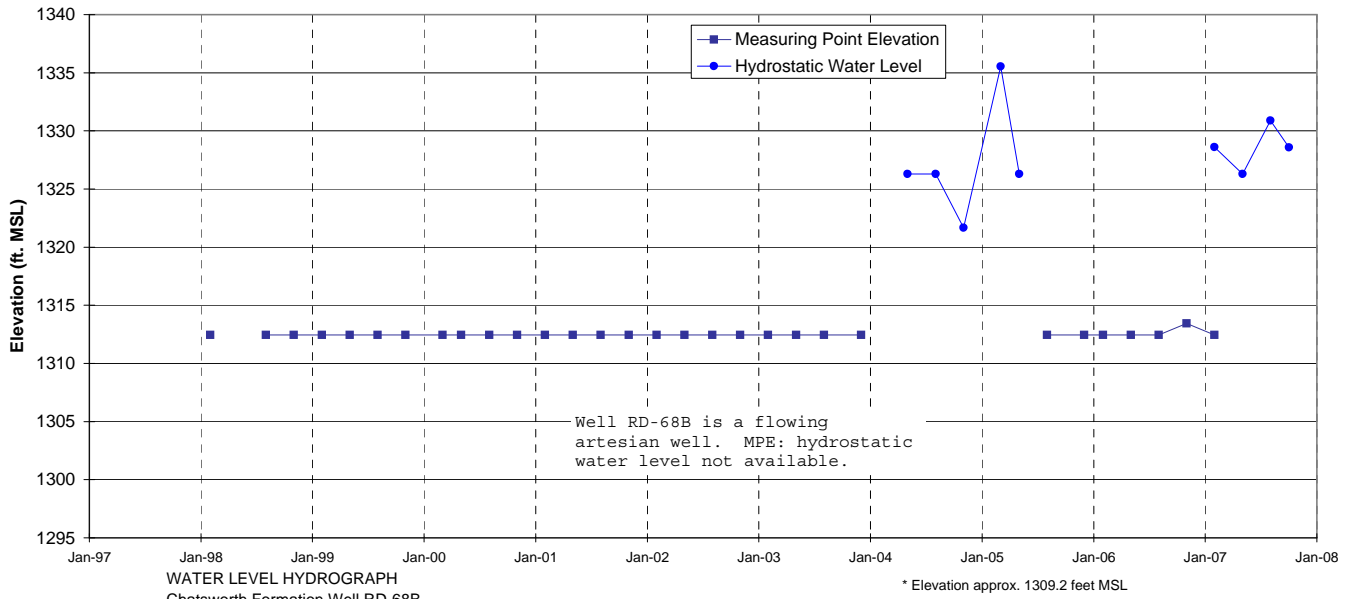
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-66  
**Figure A-193**



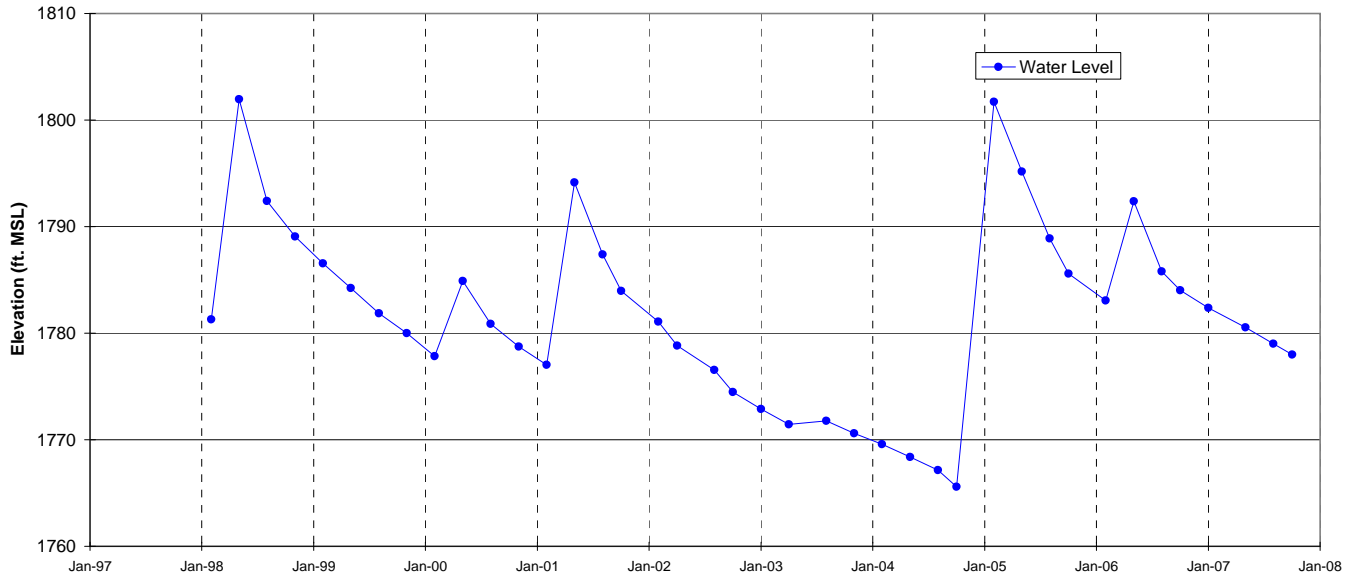
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-67  
**Figure A-194**



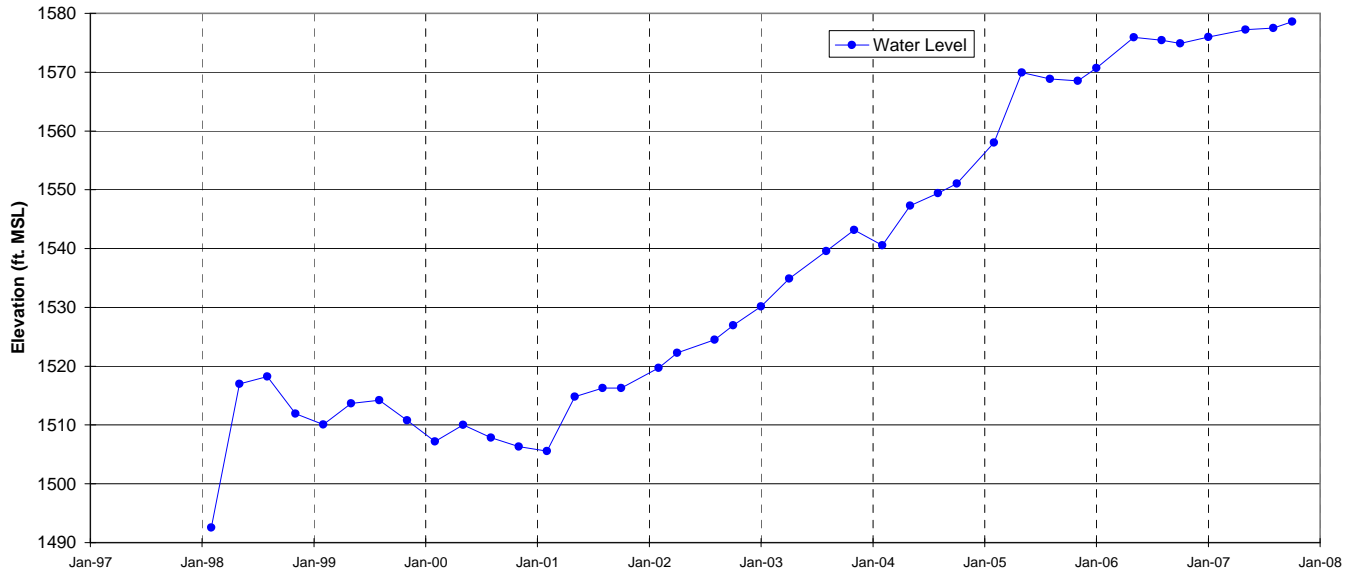
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-68A  
**Figure A-195**



WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-68B  
**Figure A-196**

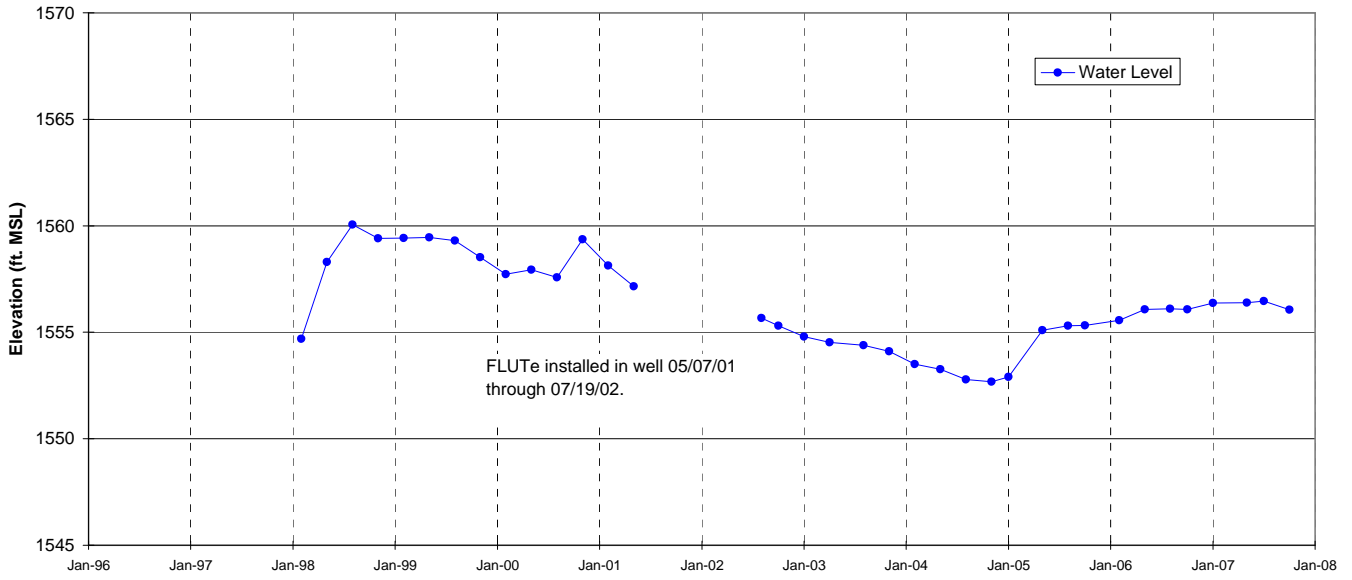


WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-69  
 Figure A-197

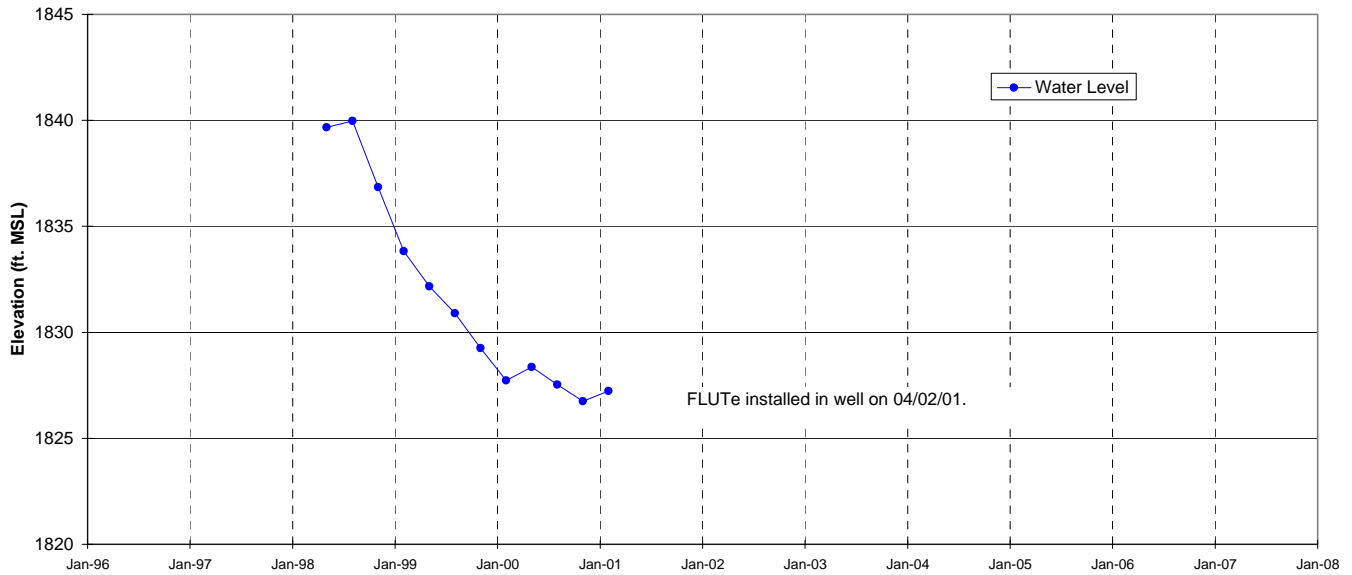


WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-70  
 Figure A-198

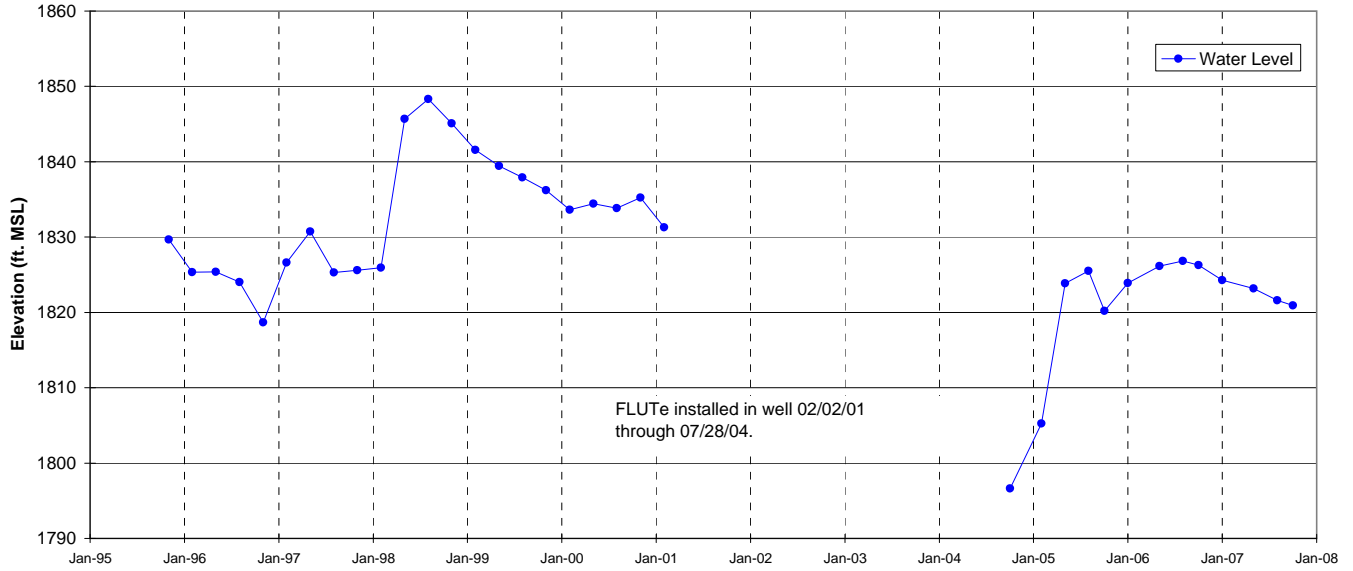




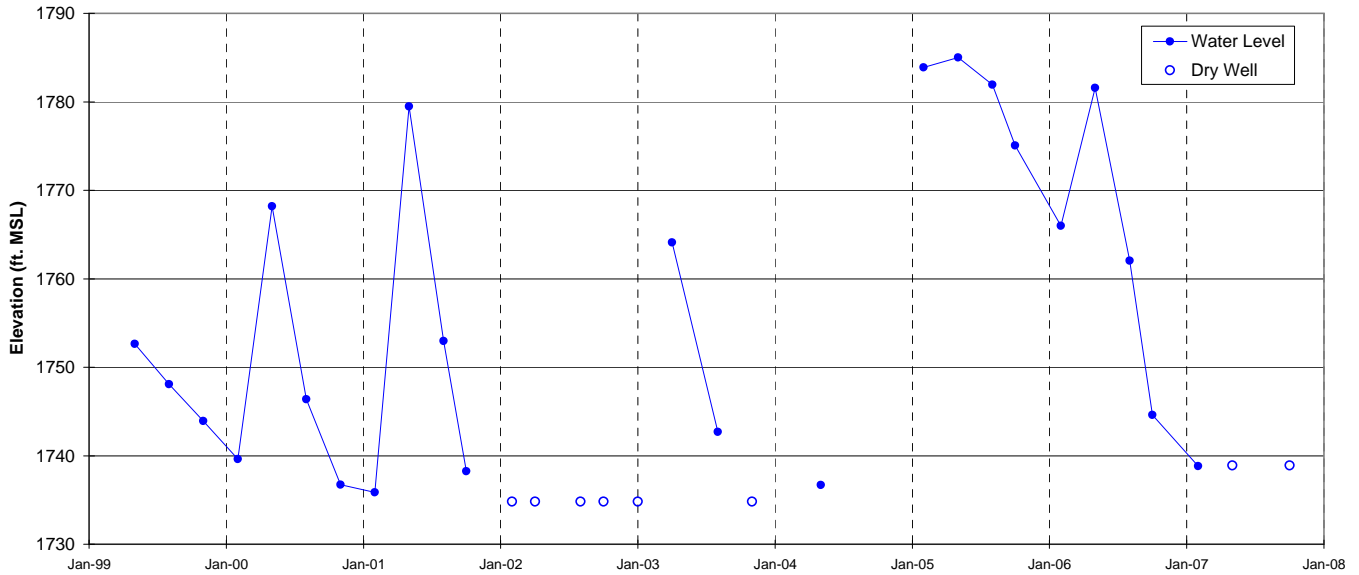
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-71  
**Figure A-199**



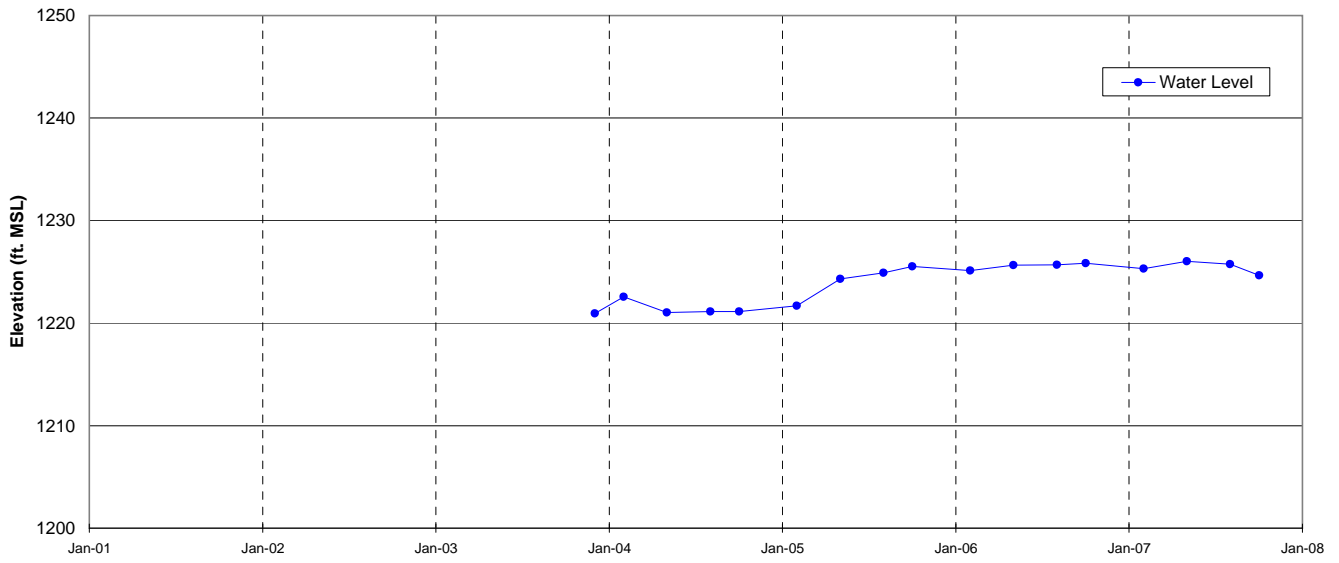
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-72  
**Figure A-200**



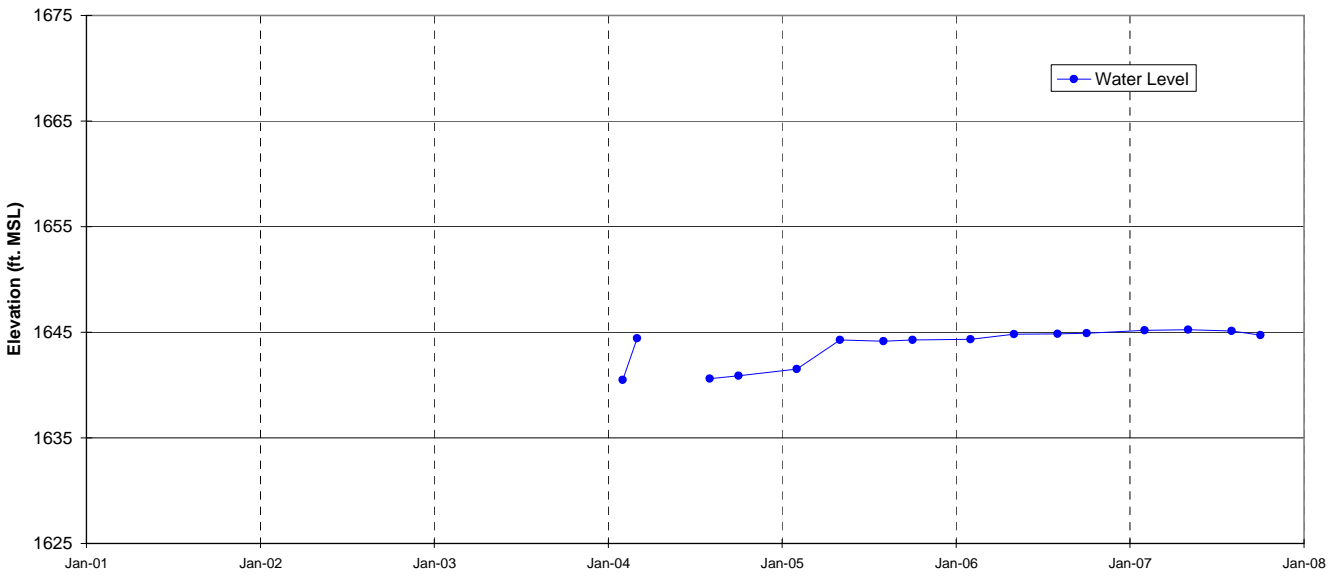
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-73  
Figure A-201



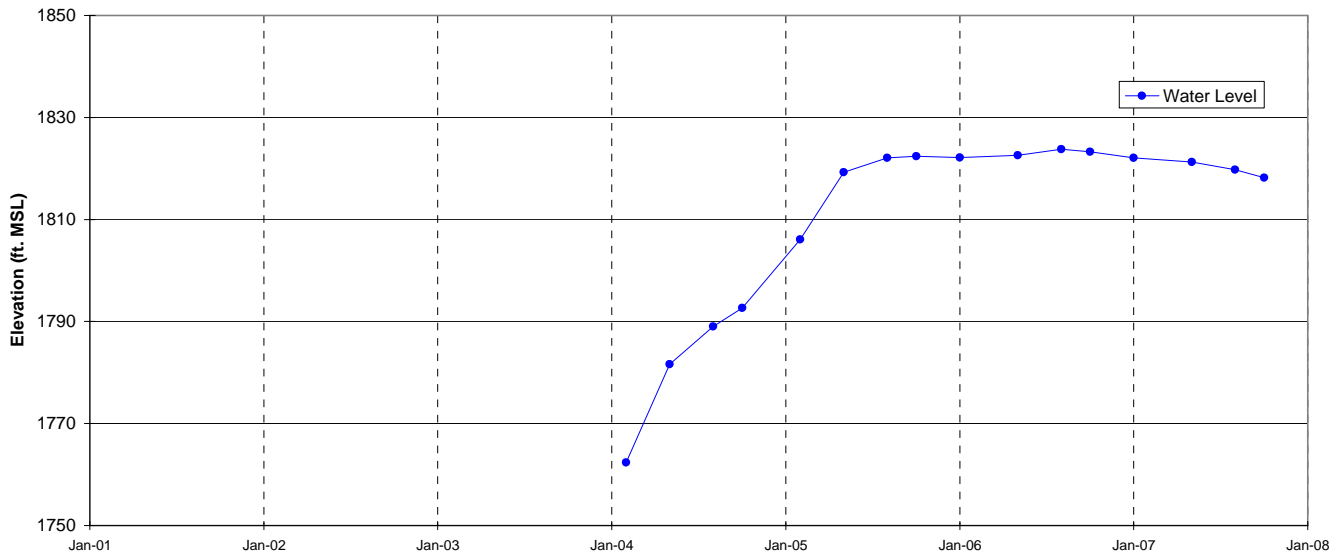
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-74  
Figure A-202



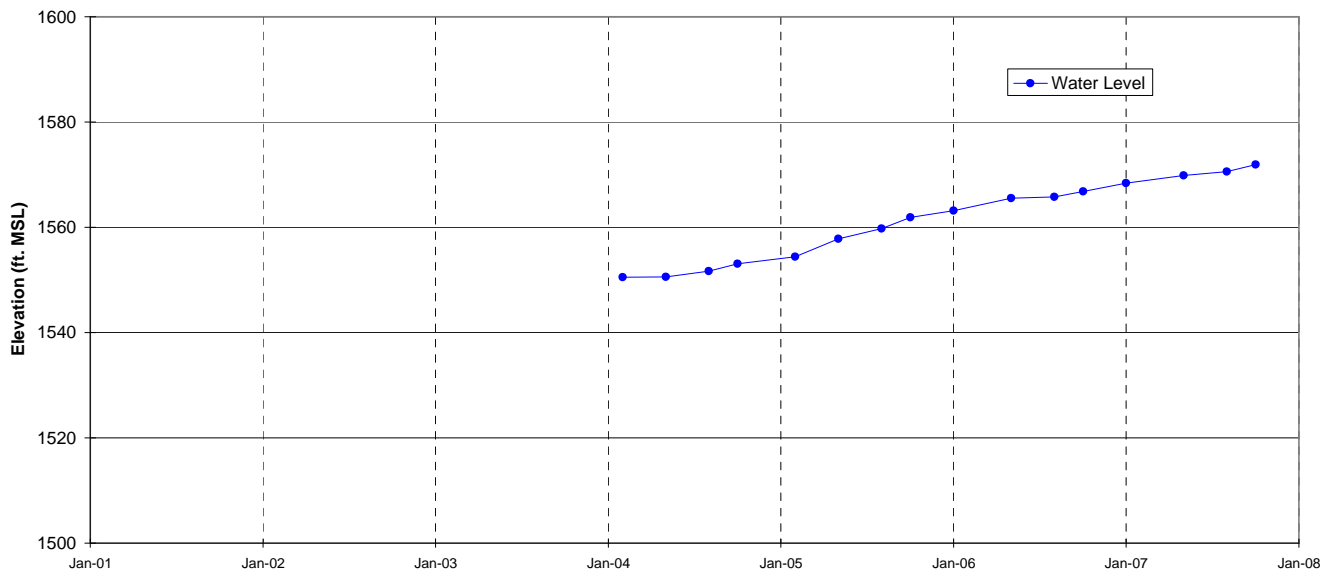
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-75  
**Figure A-203**



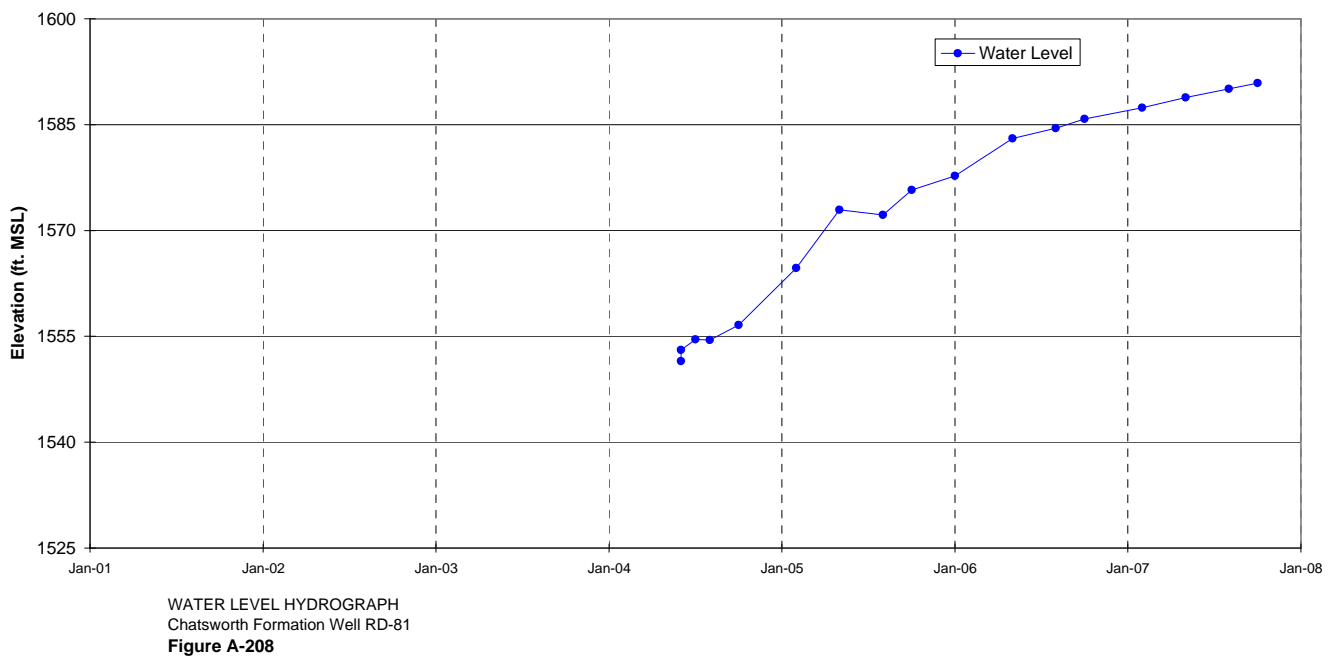
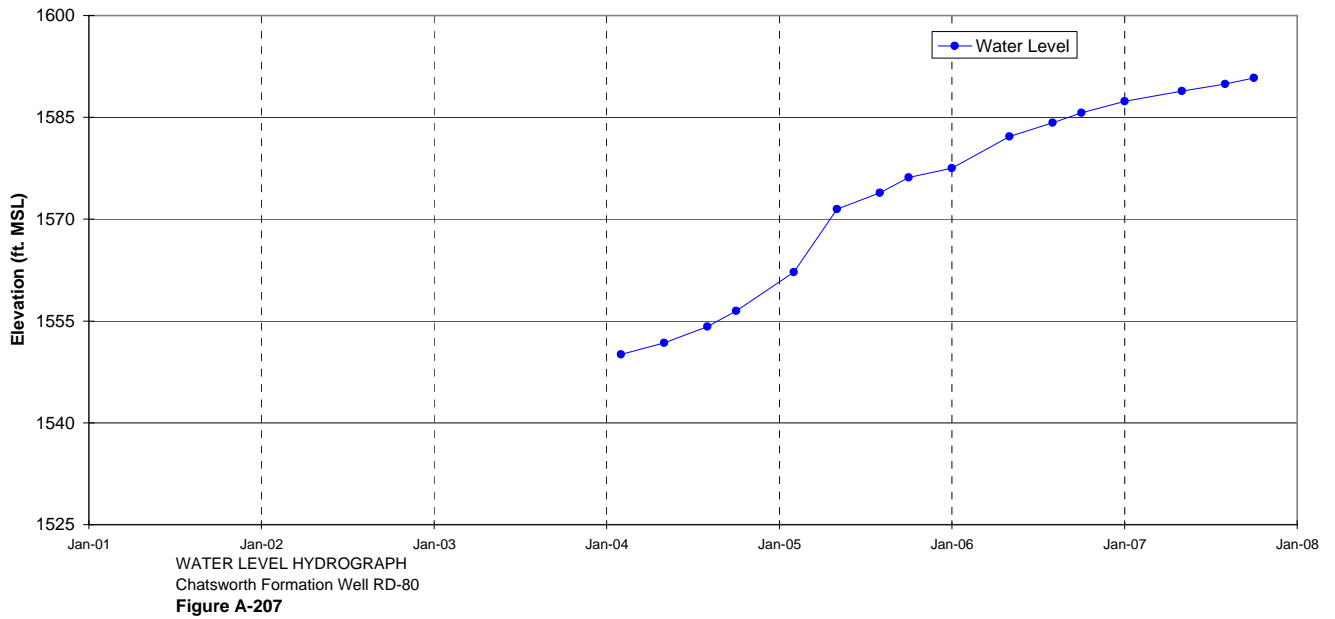
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-76  
**Figure A-204**

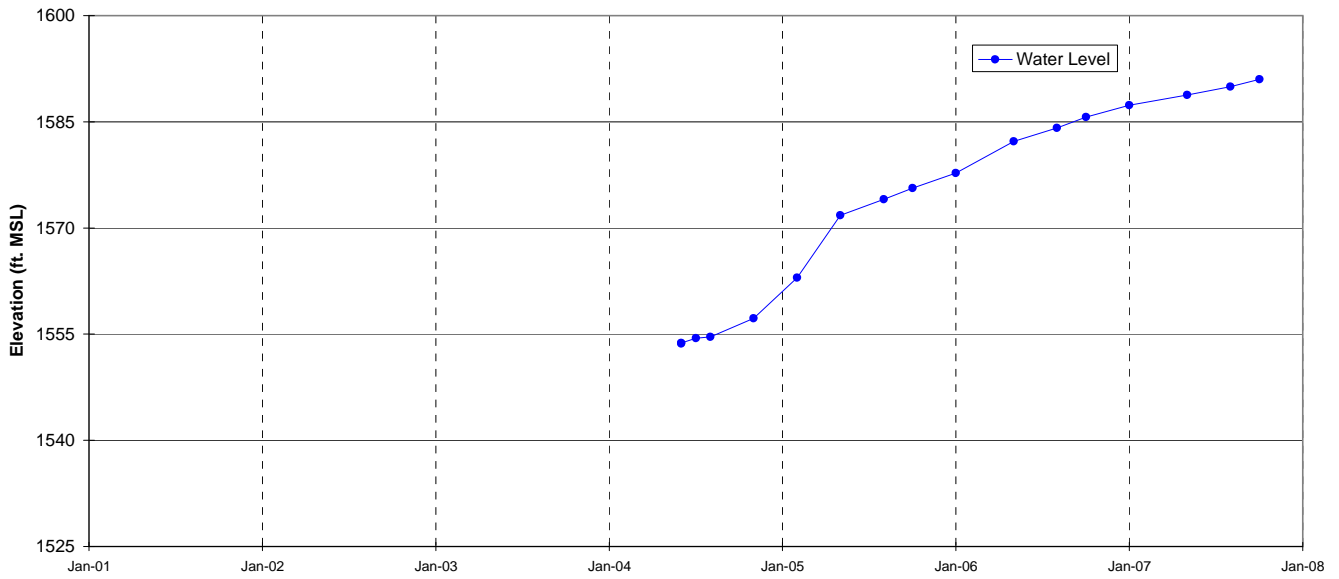


WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-77  
**Figure A-205**

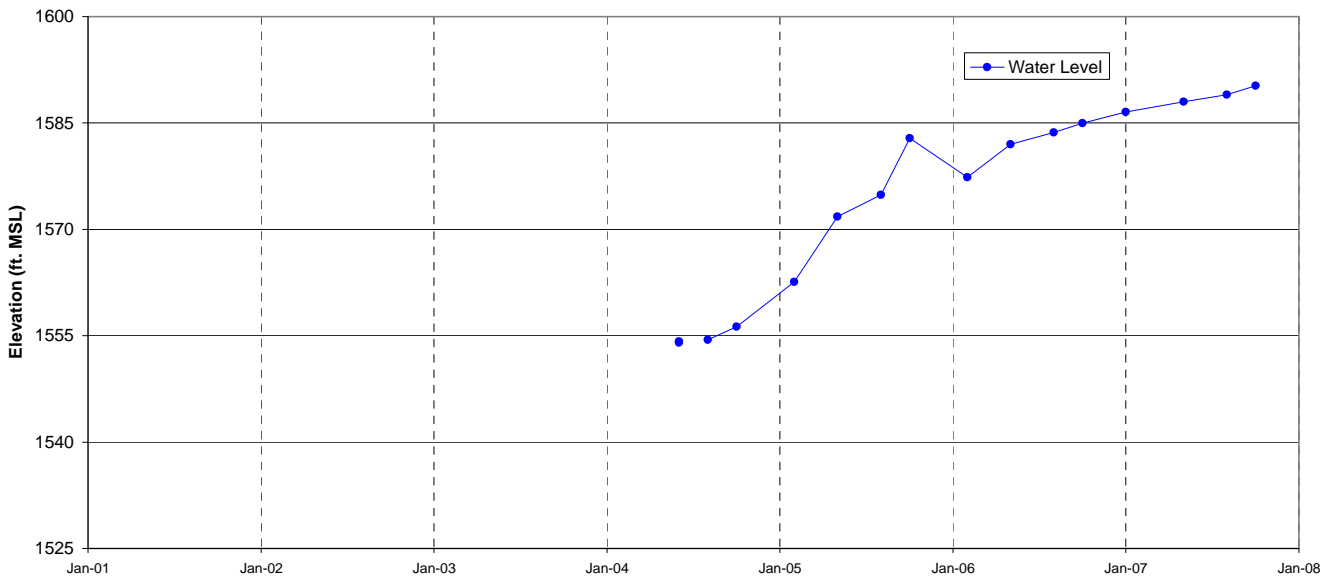


WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-78  
**Figure A-206**

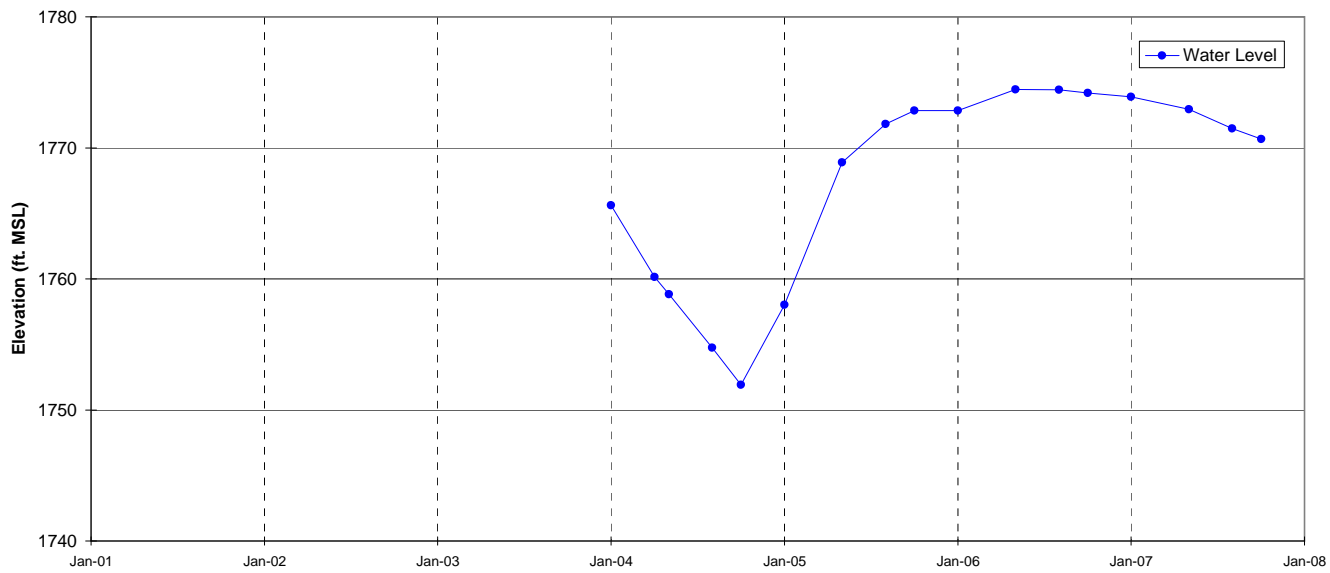




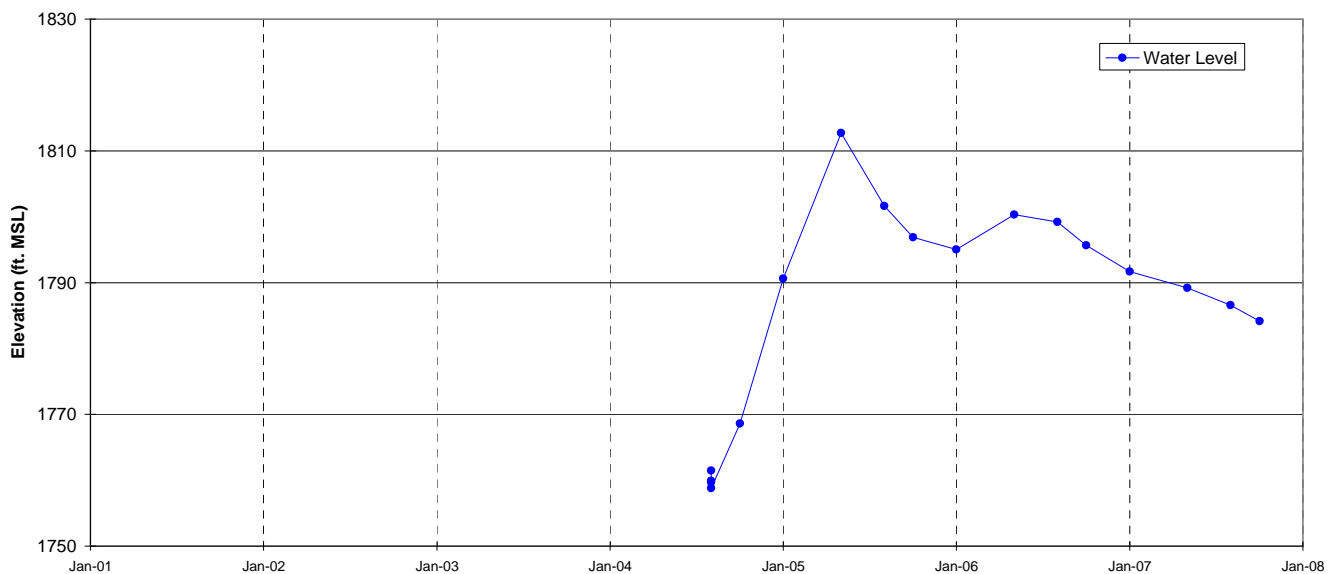
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-82  
**Figure A-209**



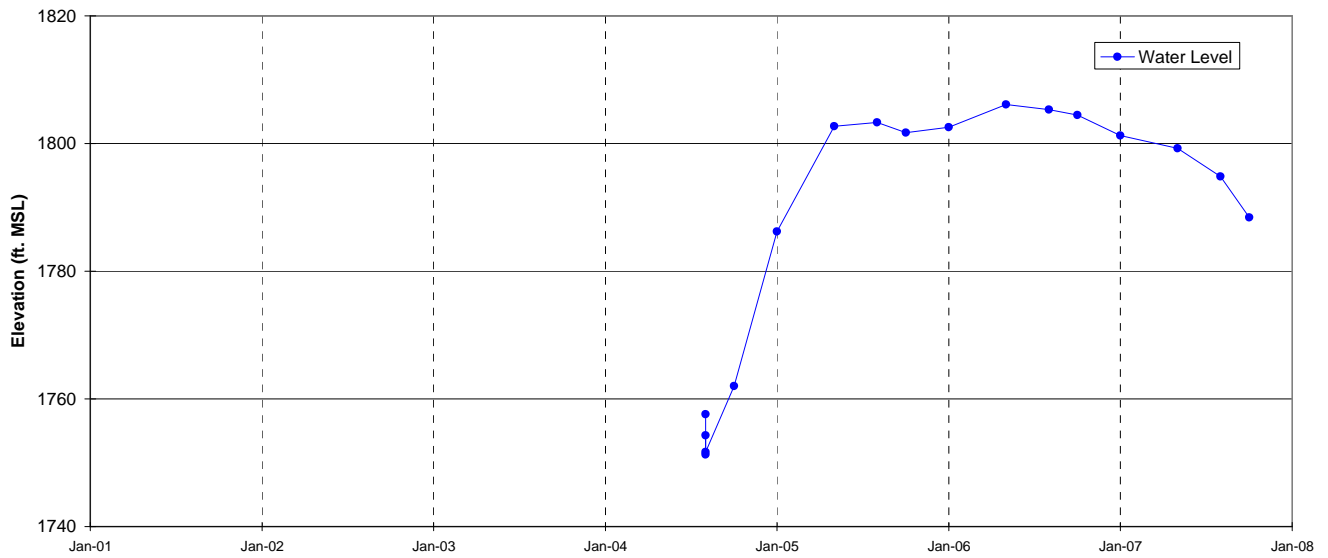
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-83  
**Figure A-210**



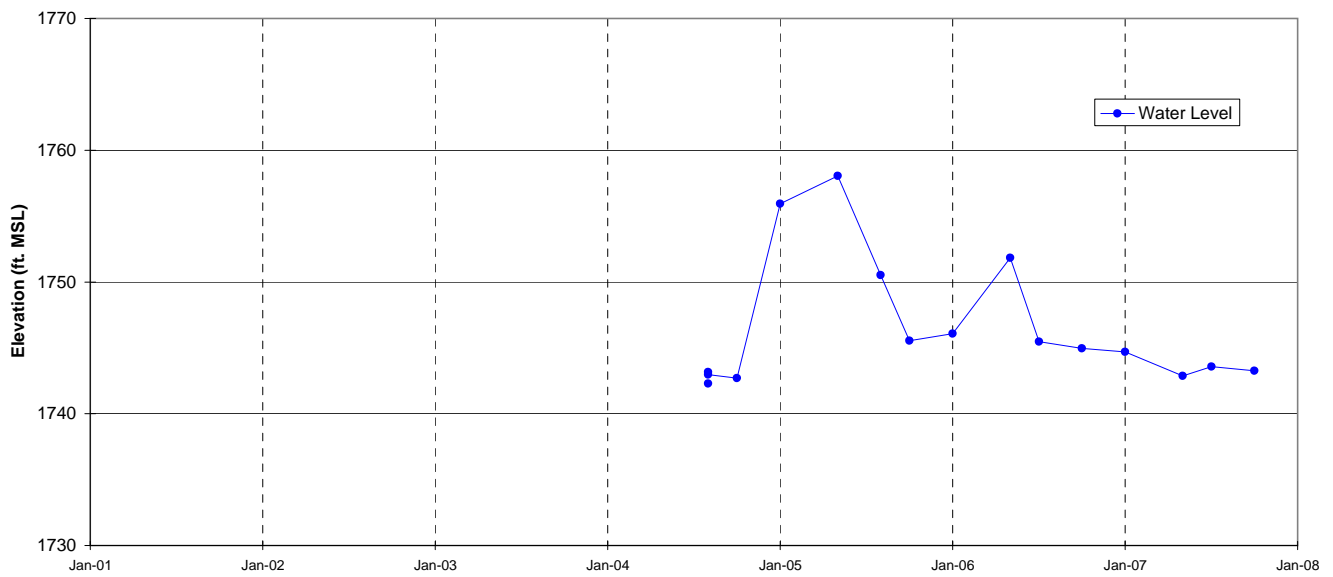
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-84  
**Figure A-211**



WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-85  
**Figure A-212**

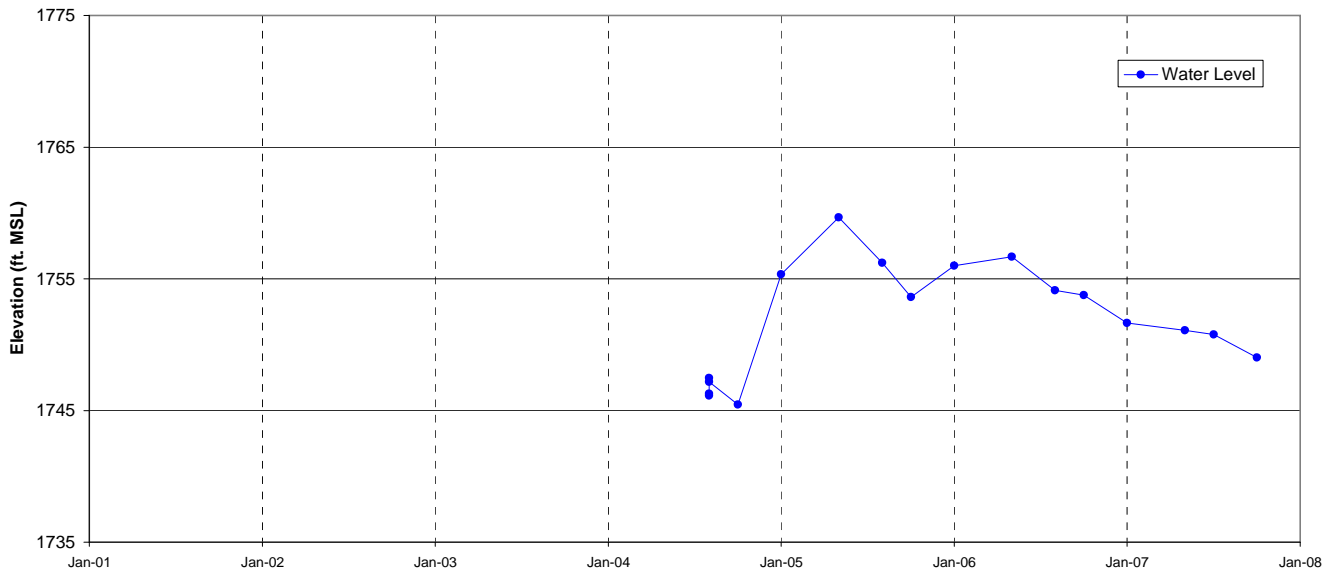


WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-86  
 Figure A-213

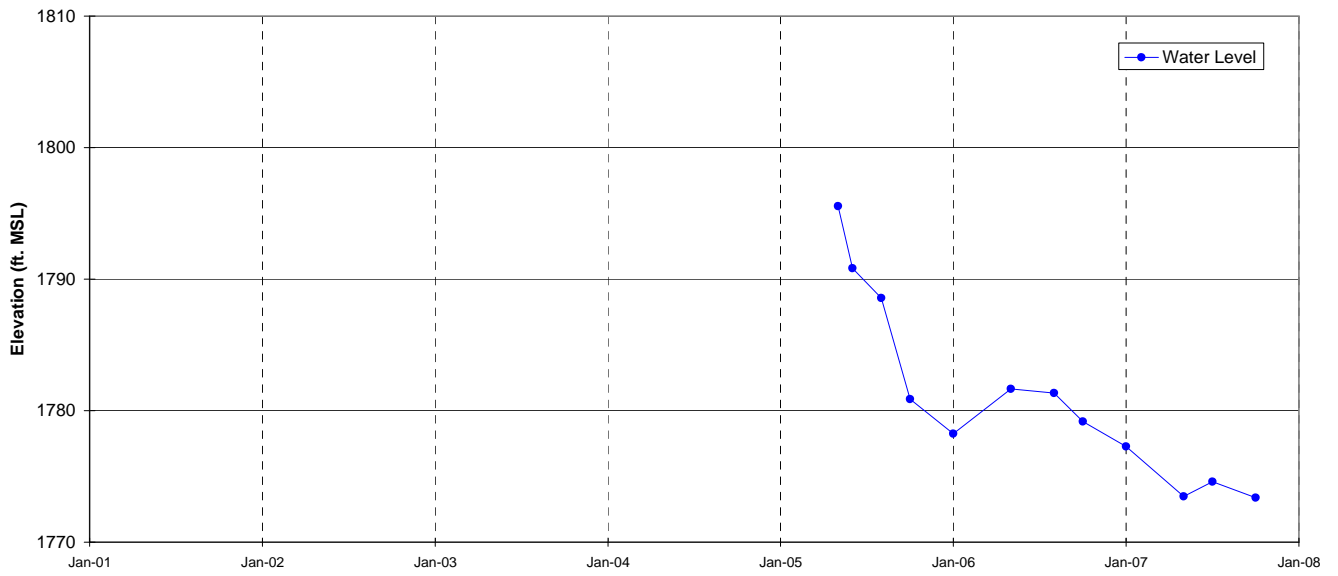


WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-87  
 Figure A-214

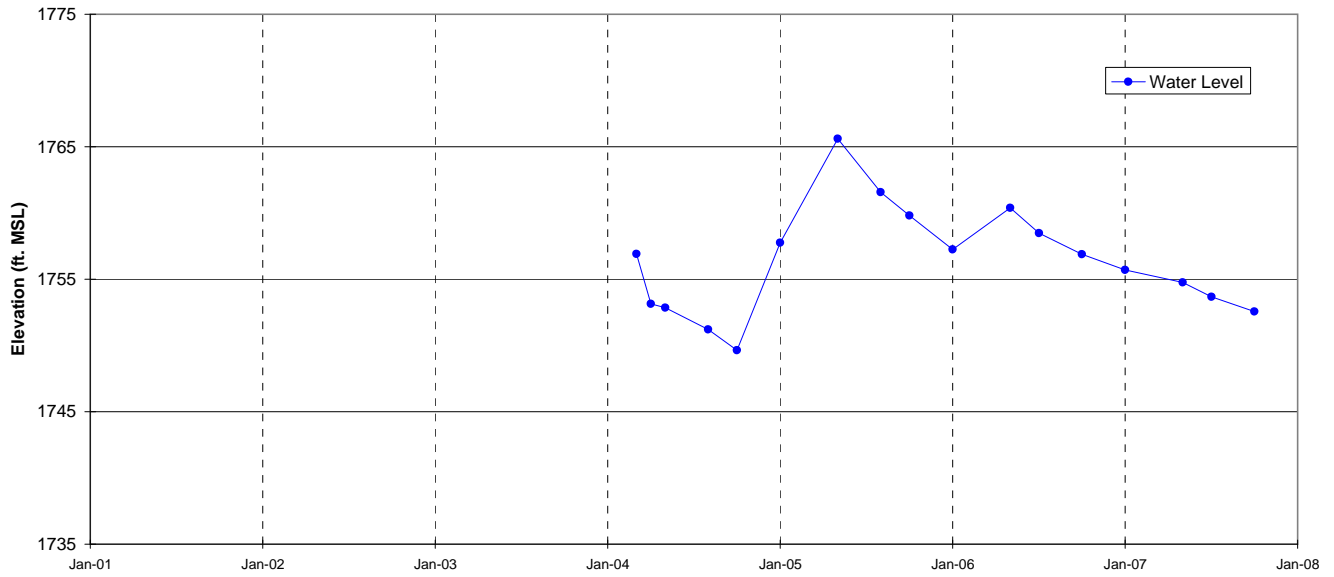




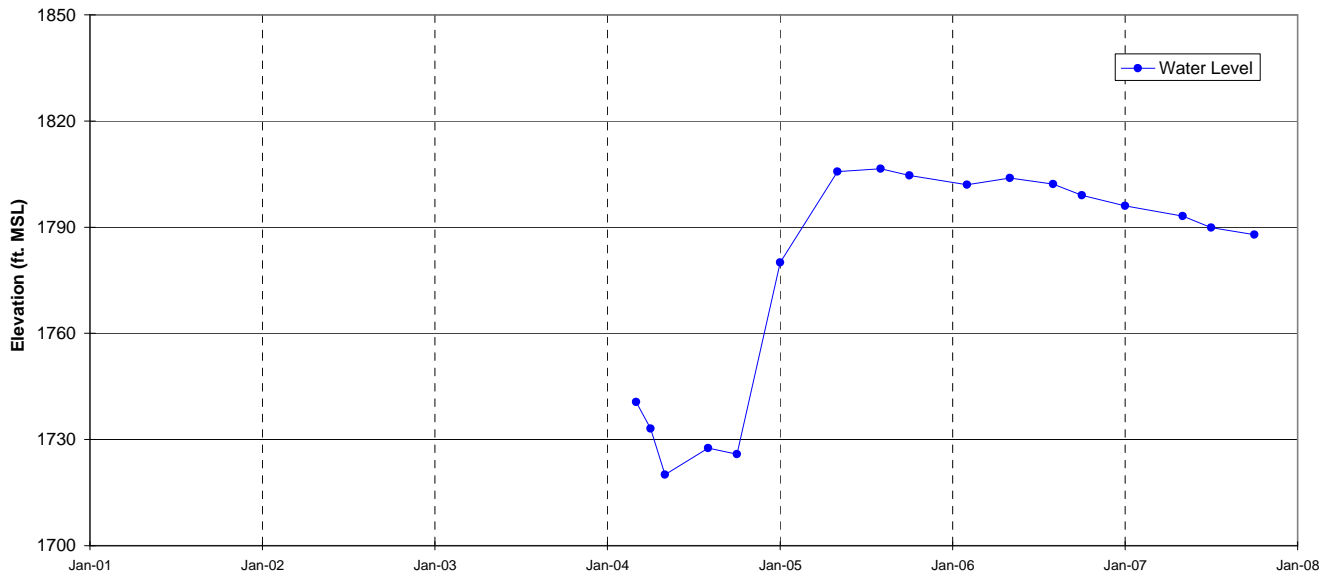
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-88  
**Figure A-215**



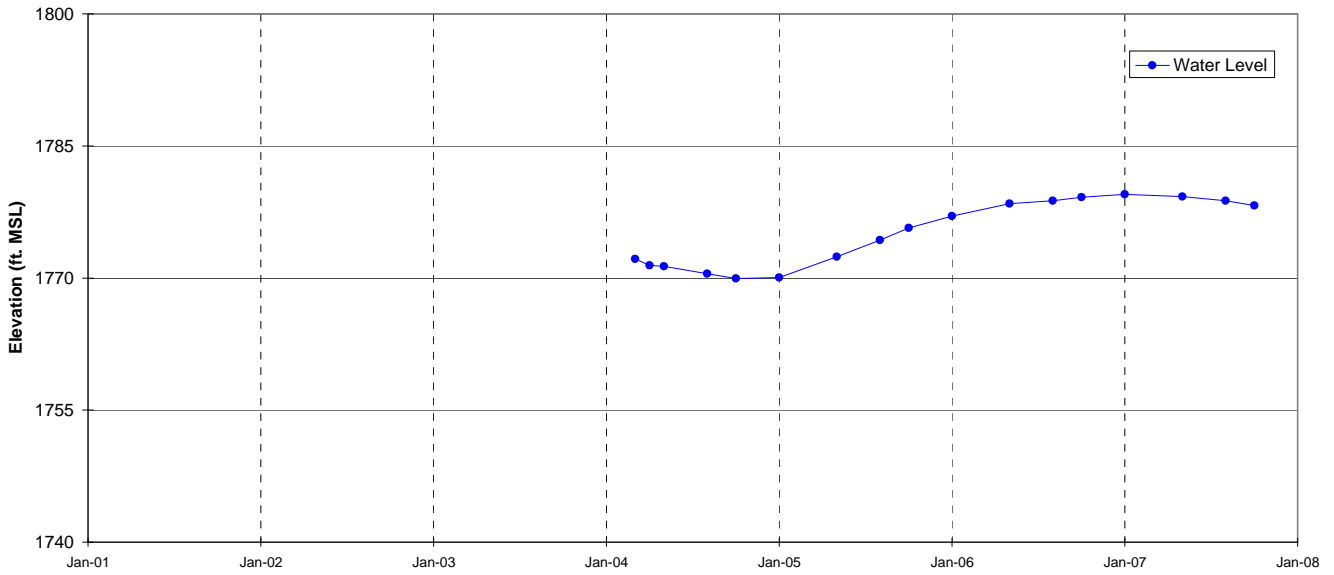
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-89  
**Figure A-216**



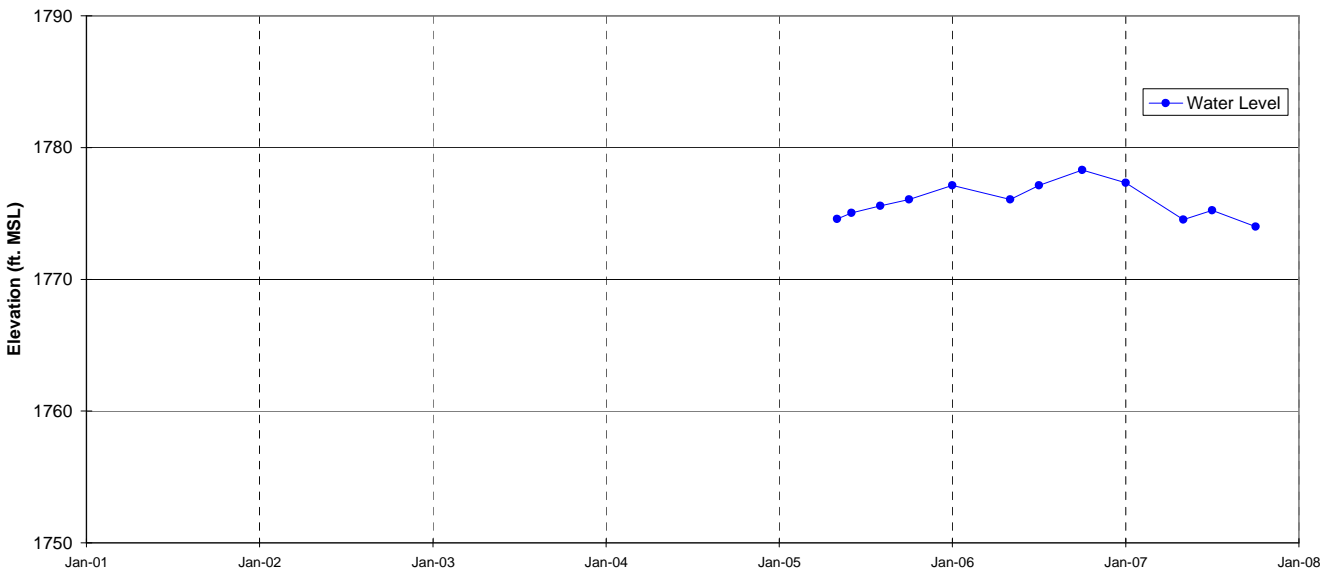
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-90  
**Figure A-217**



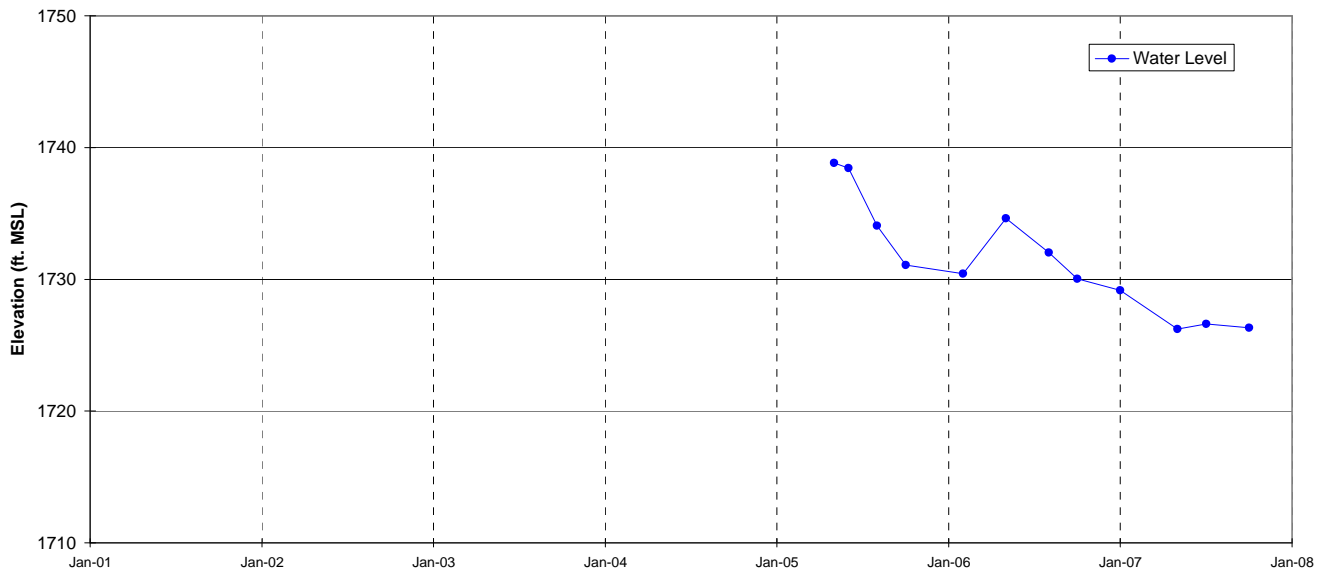
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well RD-91  
**Figure A-218**



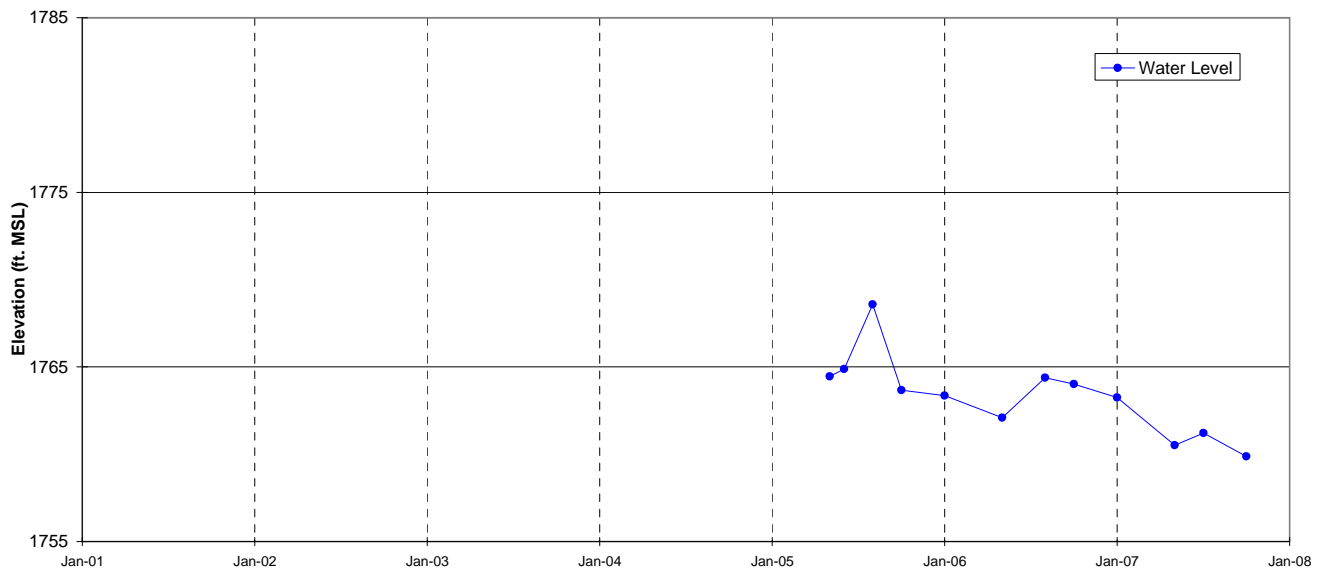
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-92  
**Figure A-219**



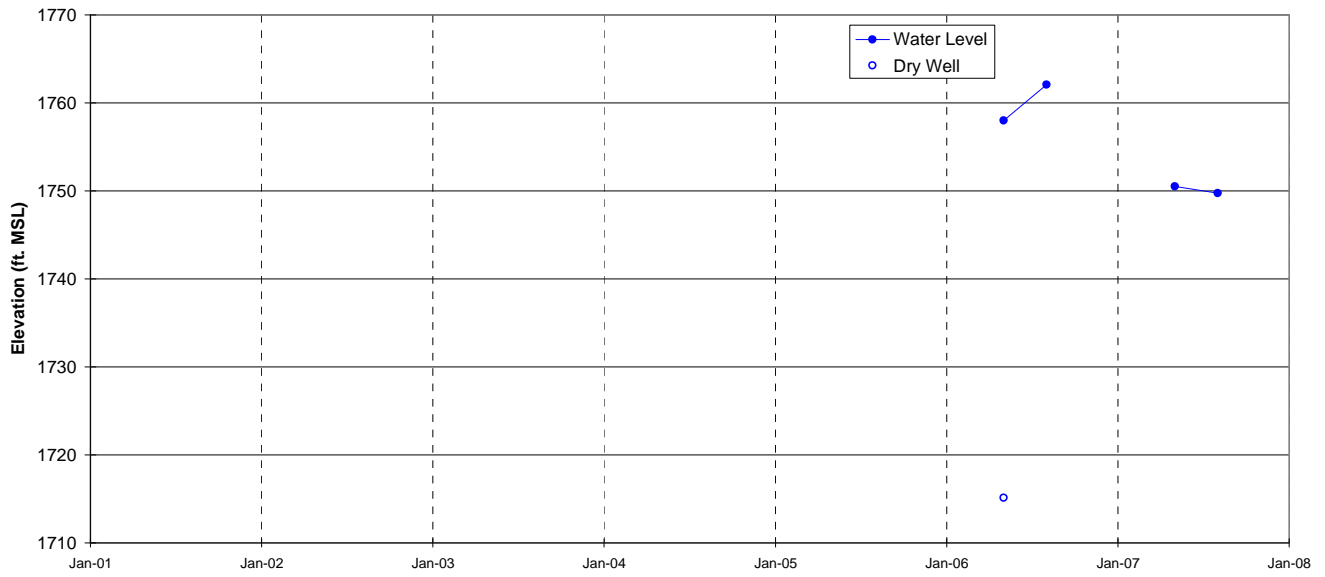
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-93  
**Figure A-220**



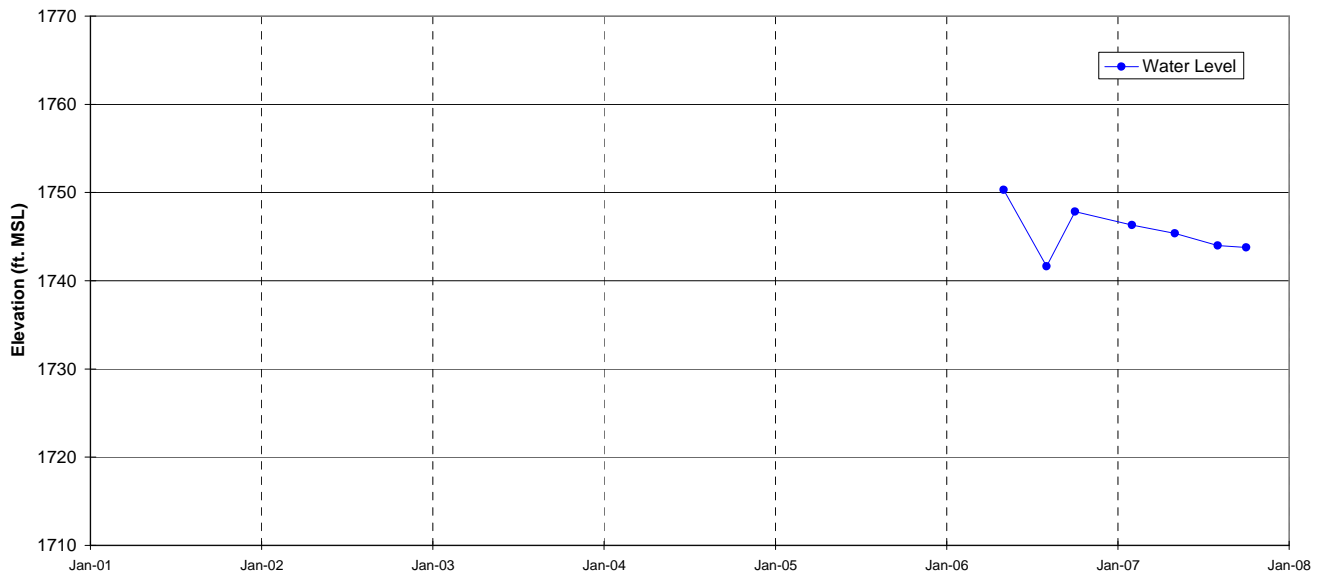
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-94  
**Figure A-221**



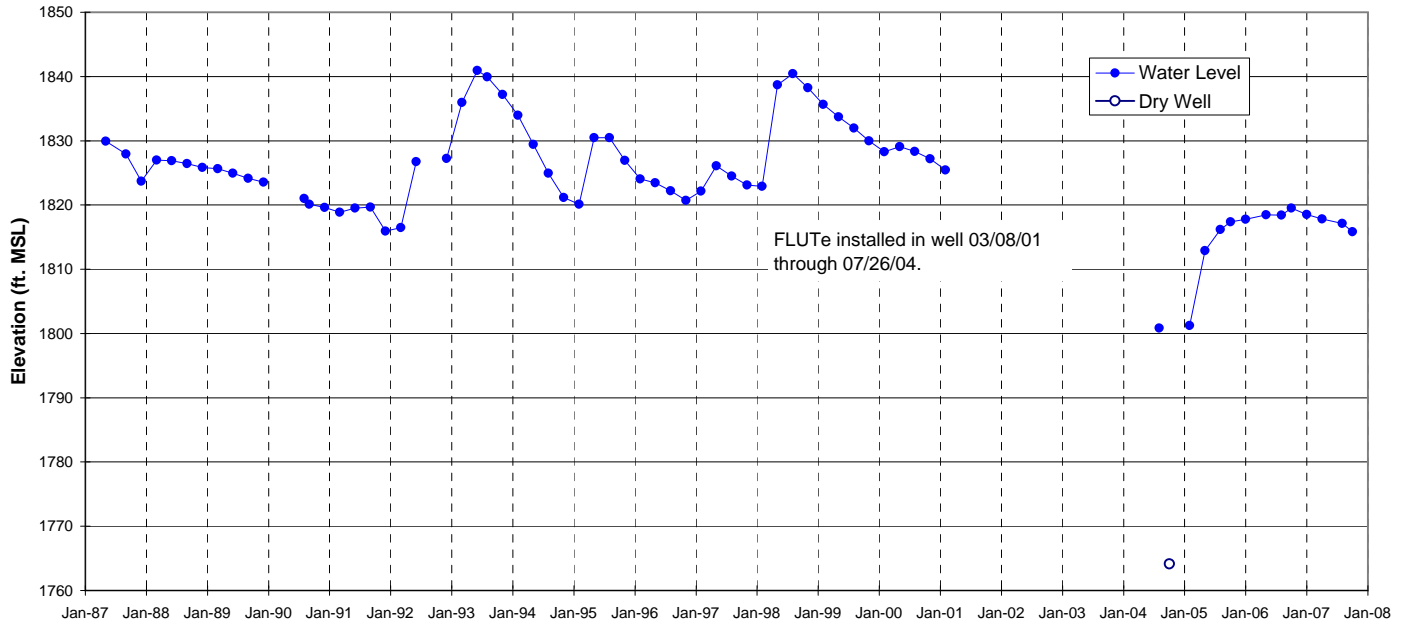
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-95  
**Figure A-222**



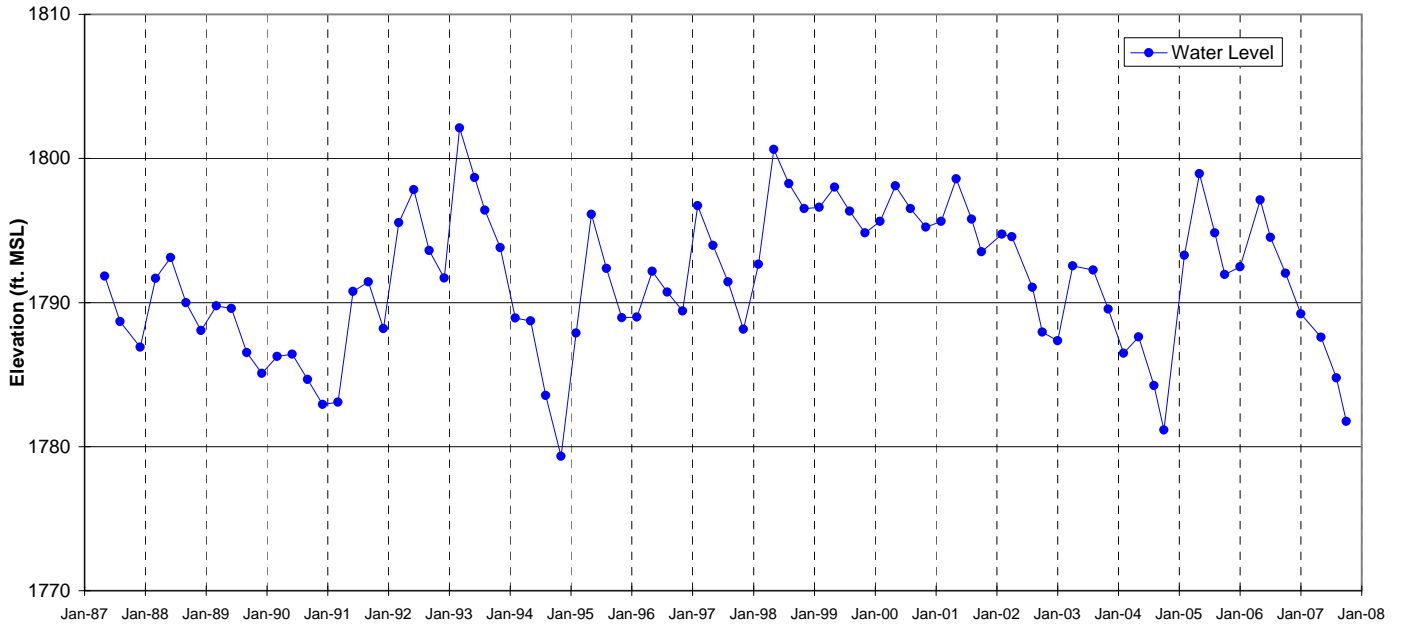
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-96  
**Figure A-223**



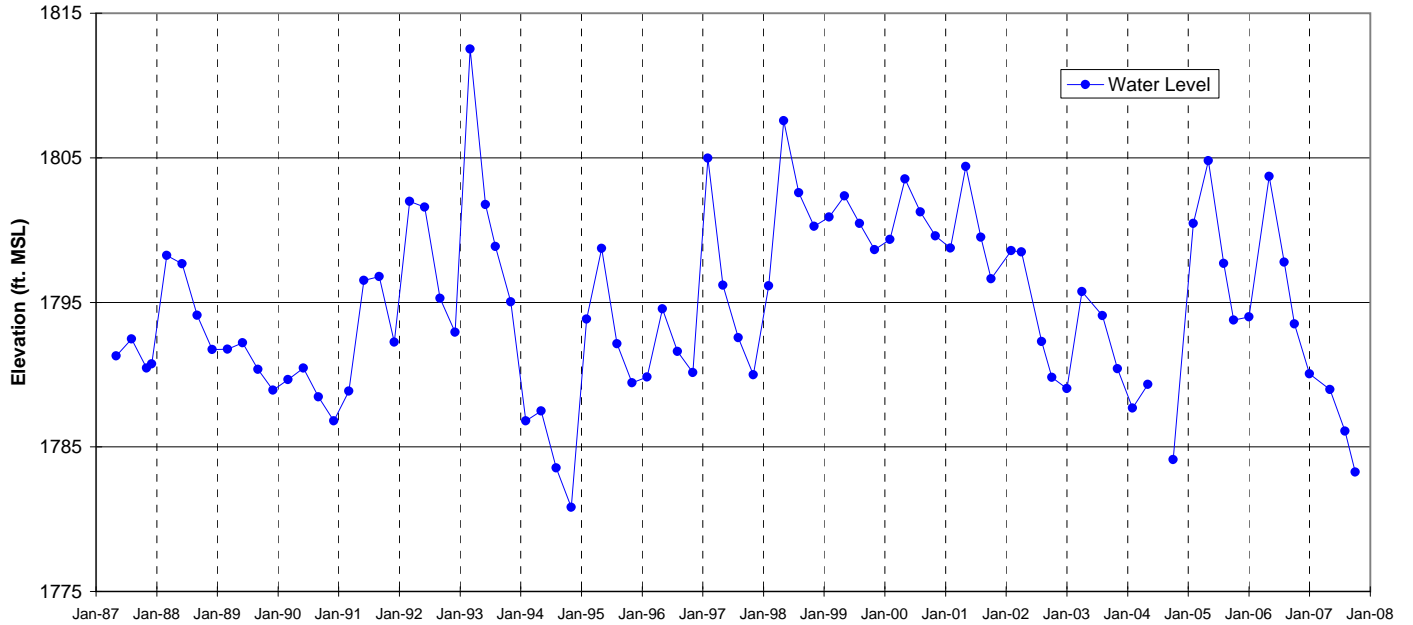
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well RD-97  
**Figure A-224**



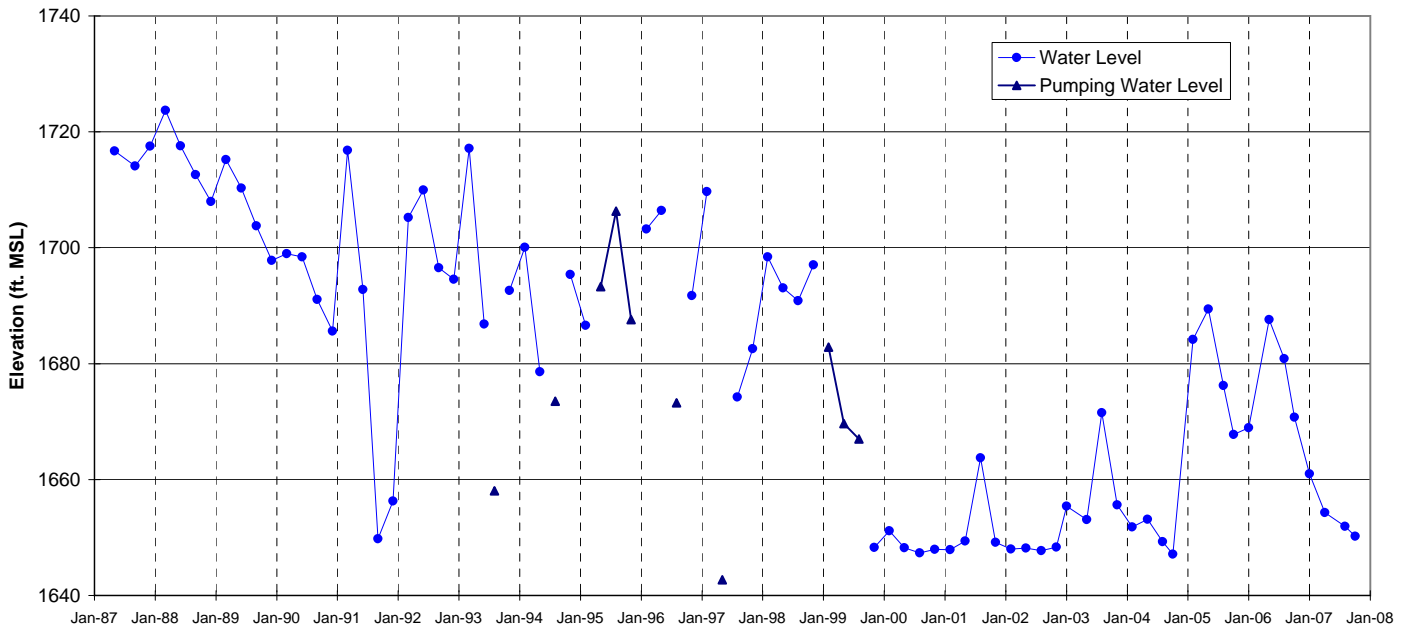
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well HAR-01  
Figure A-225



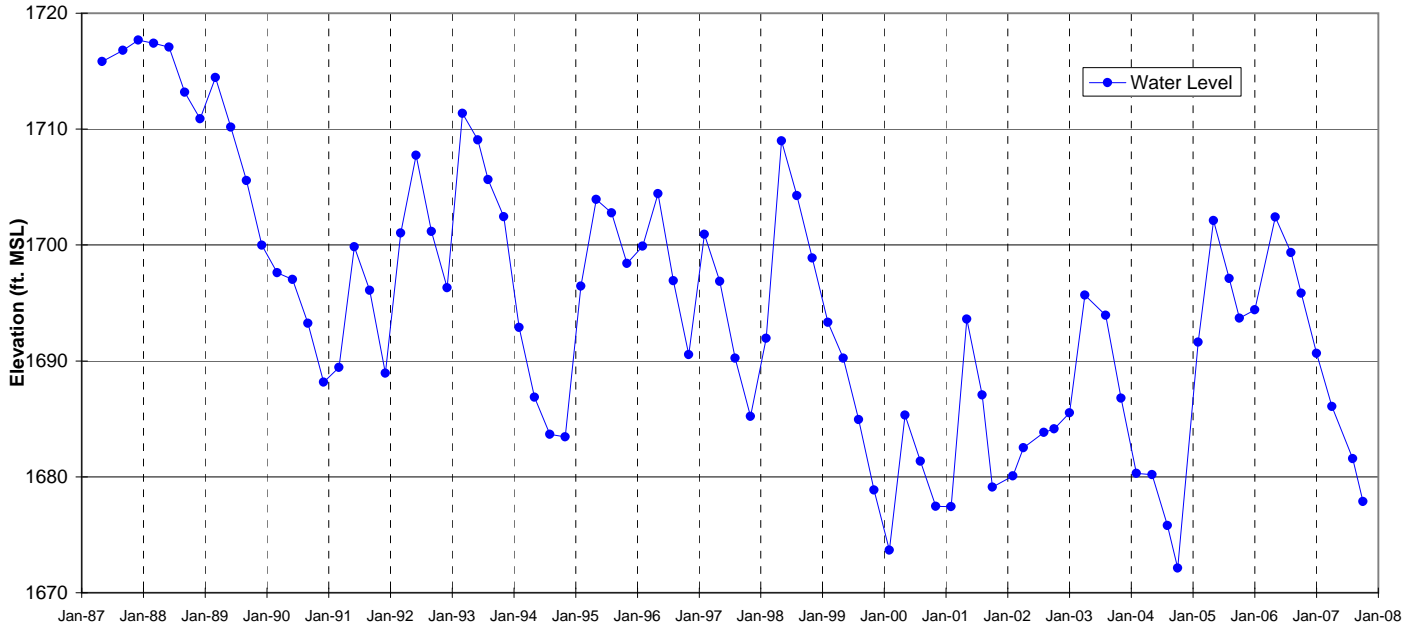
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well HAR-05  
Figure A-226



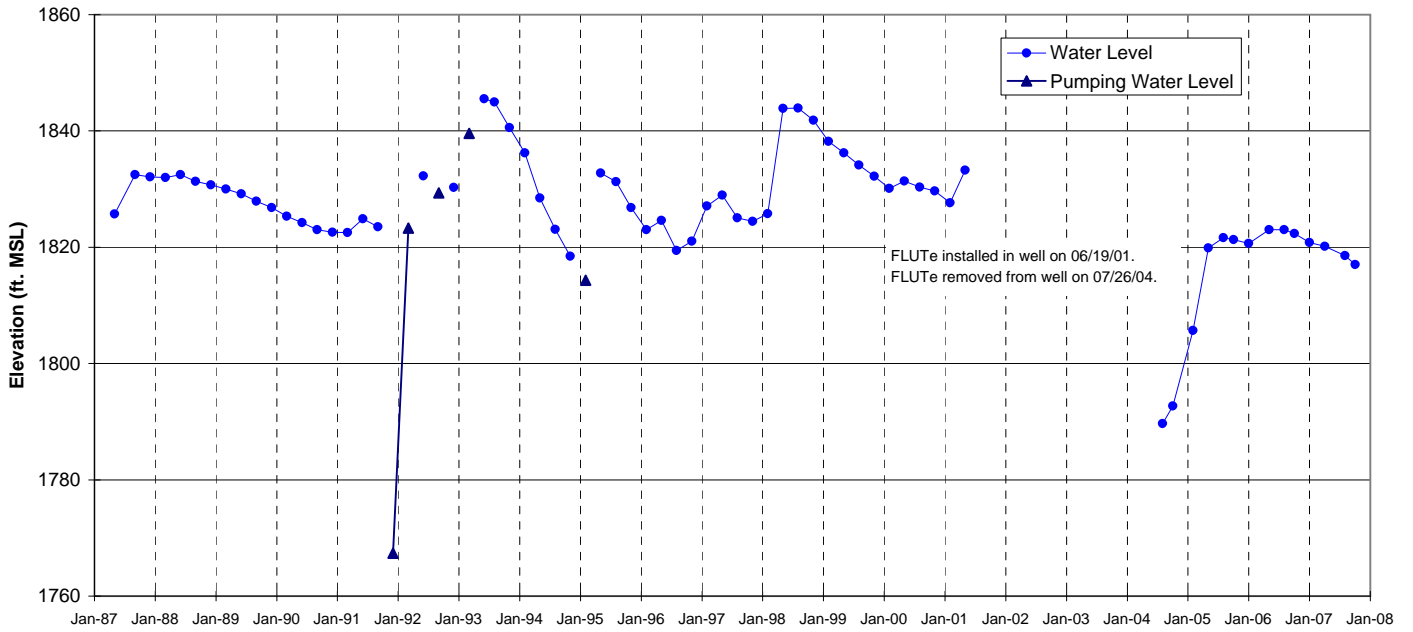
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well HAR-06  
 Figure A-227



WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well HAR-07  
 Figure A-228

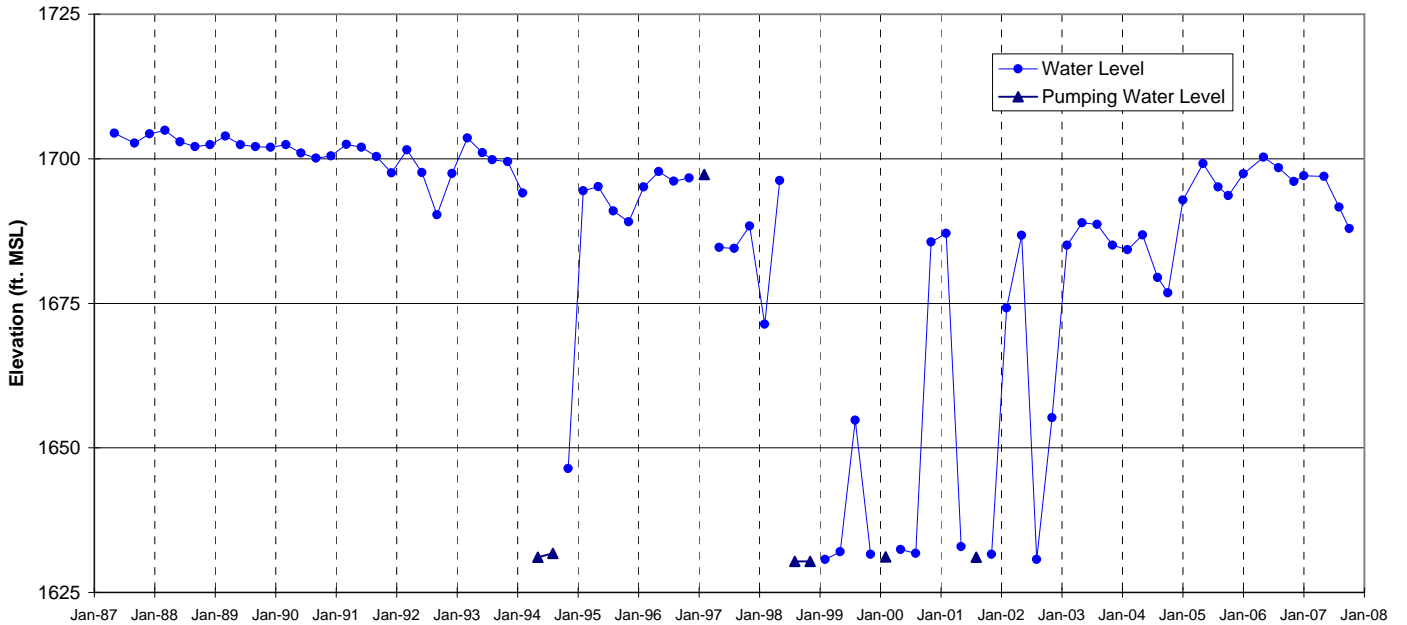


WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well HAR-08  
**Figure A-229**

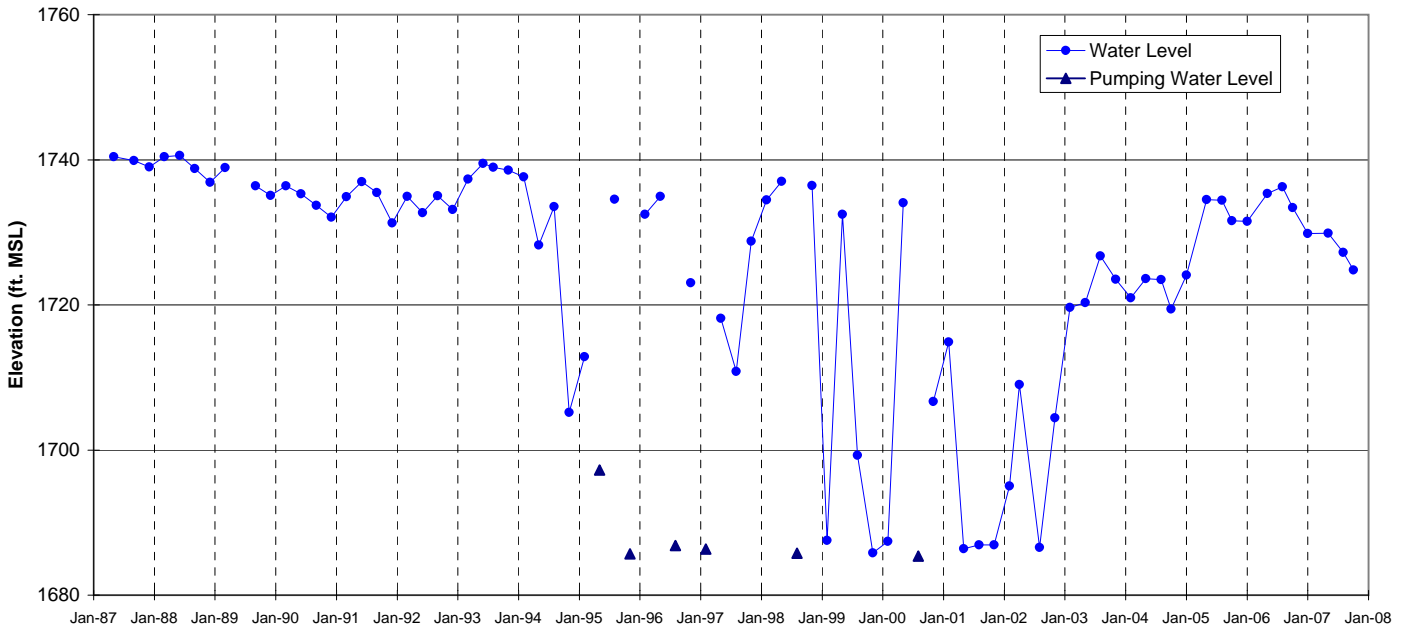


WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well HAR-16  
**Figure A-230**

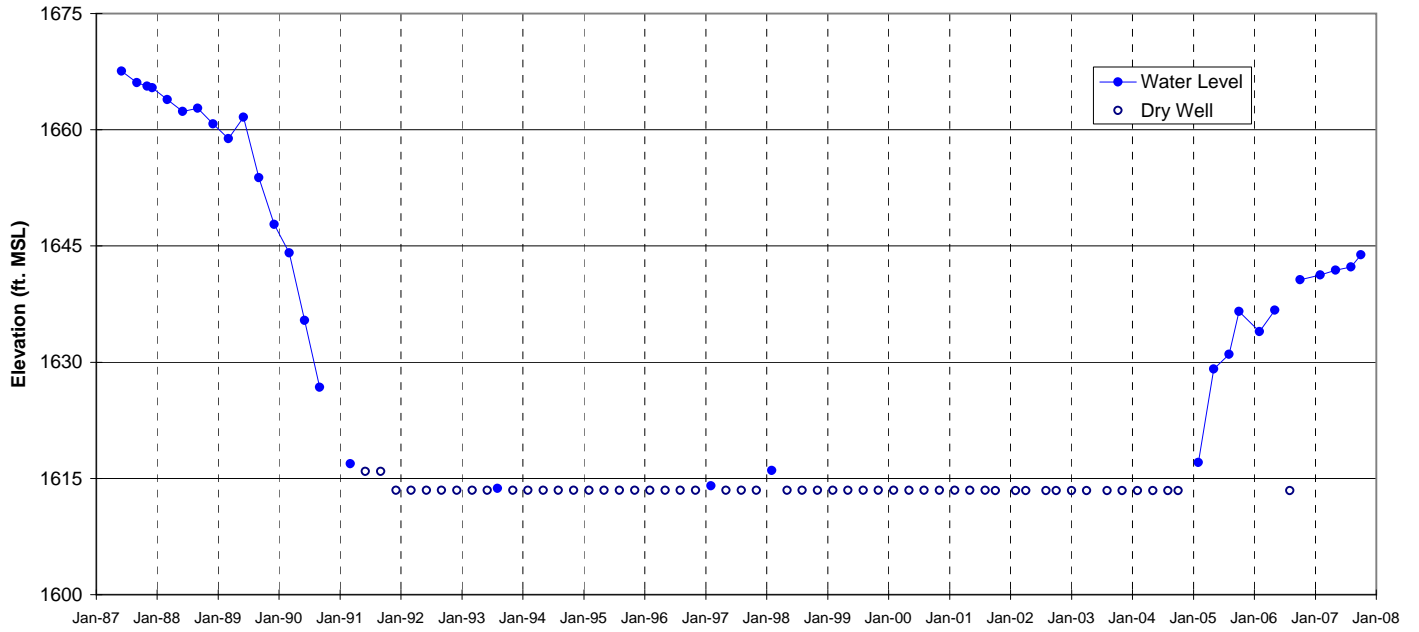




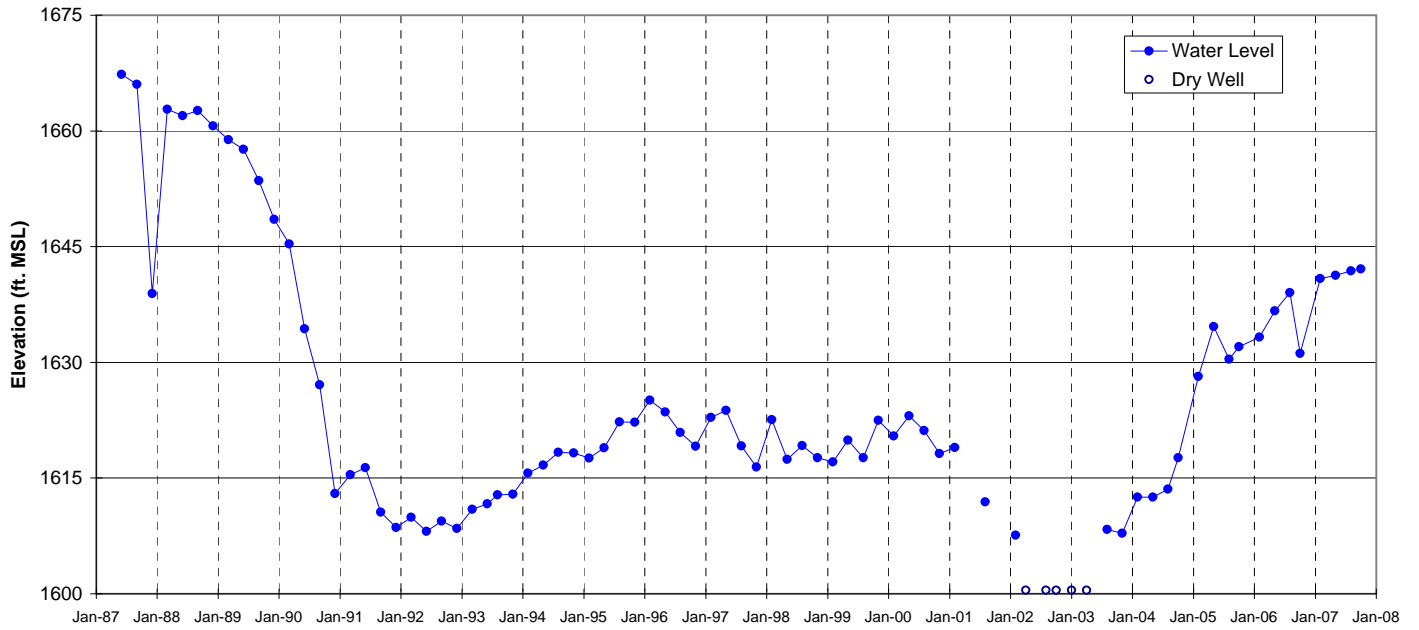
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well HAR-17  
Figure A-231



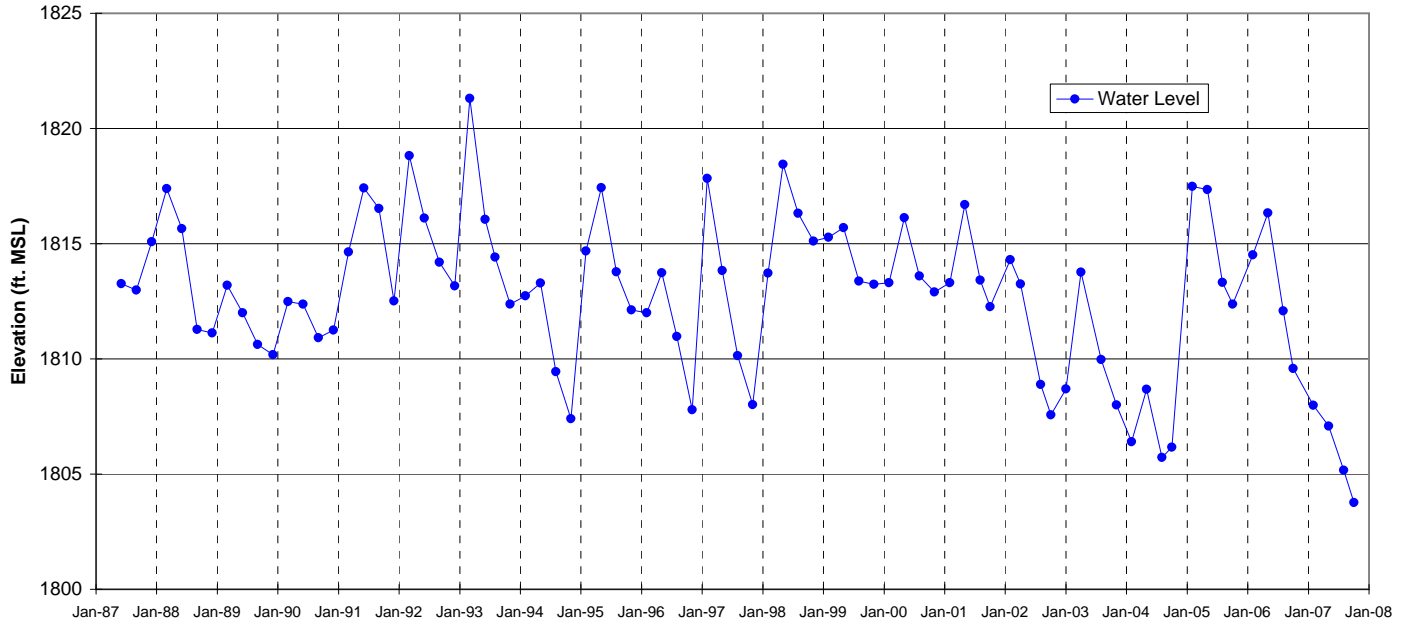
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well HAR-18  
Figure A-232



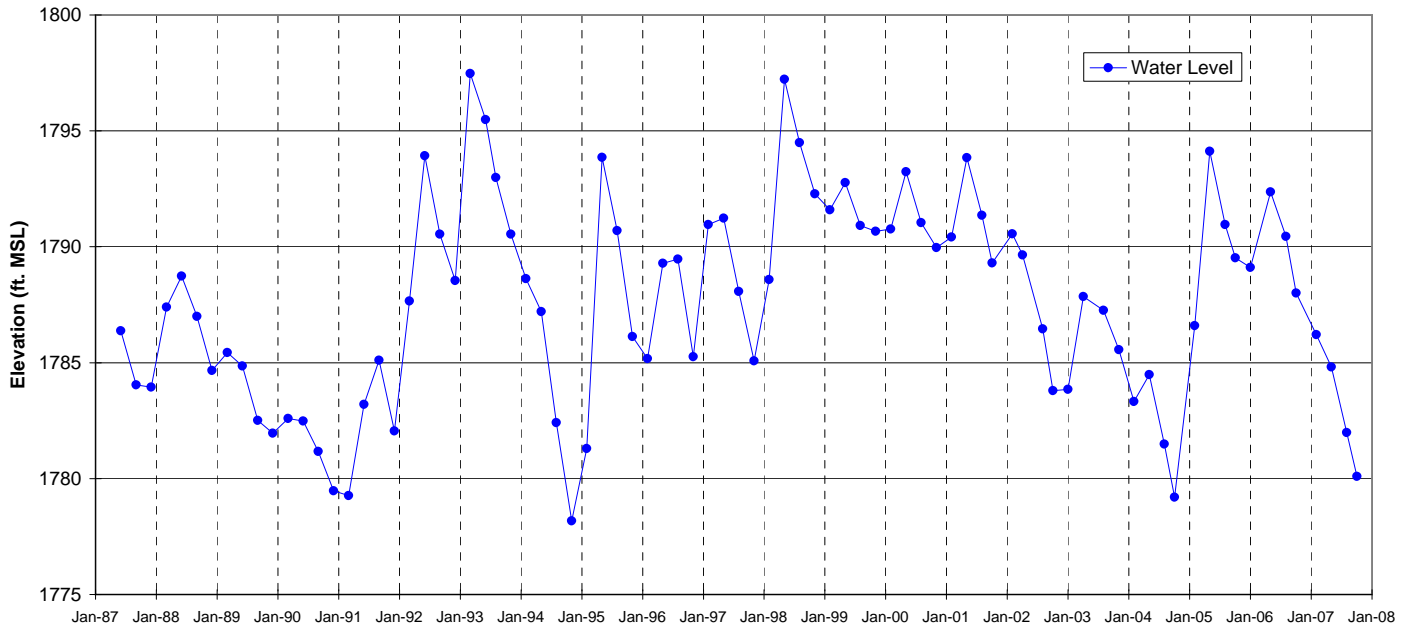
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well HAR-19  
**Figure A-233**



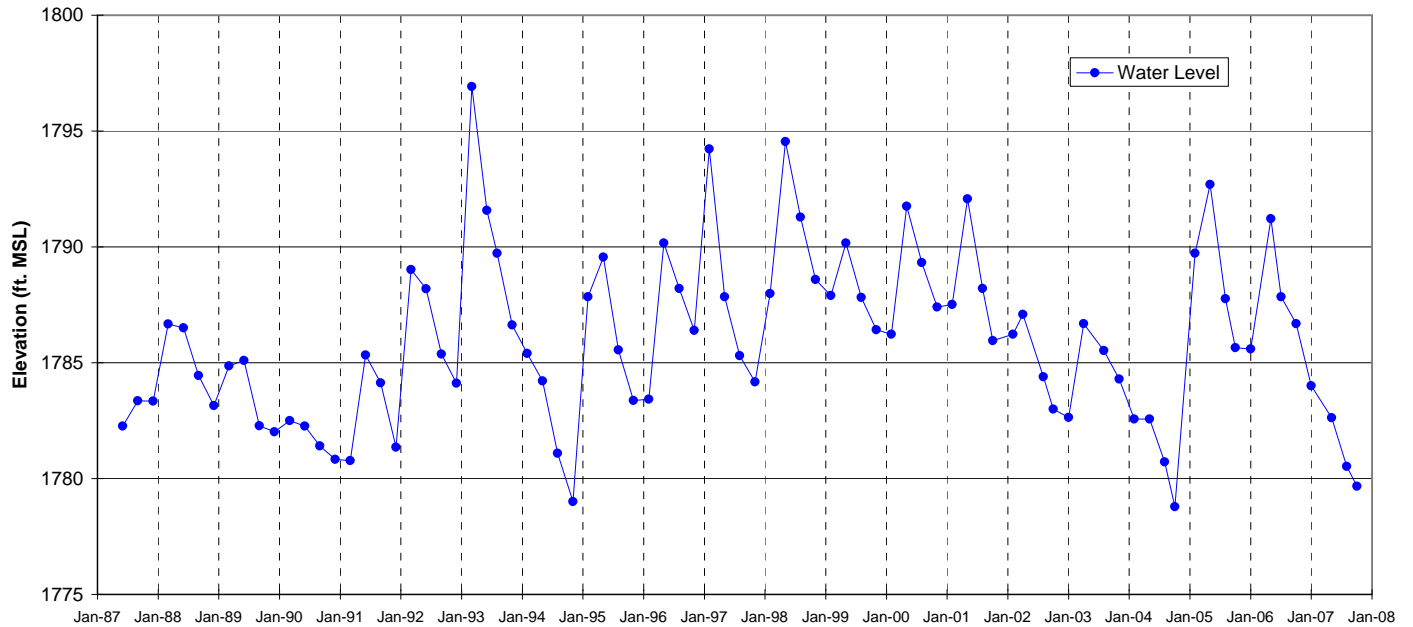
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well HAR-20  
**Figure A-234**



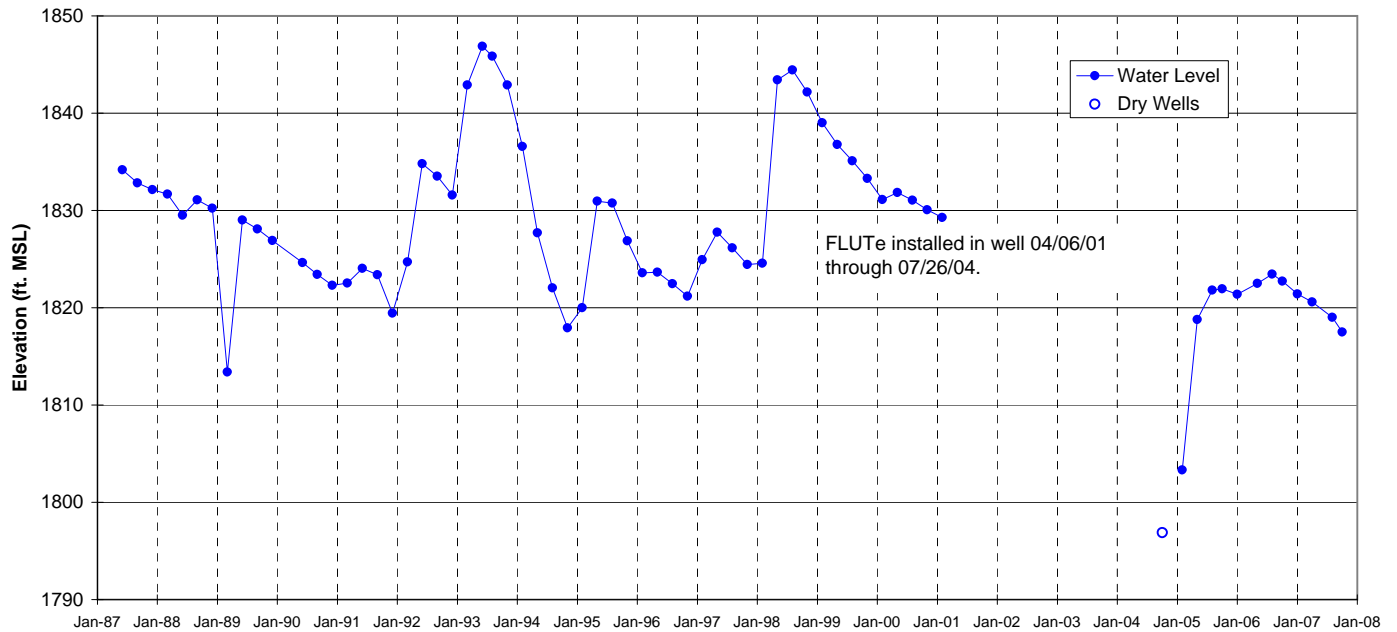
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well HAR-21  
 Figure A-235



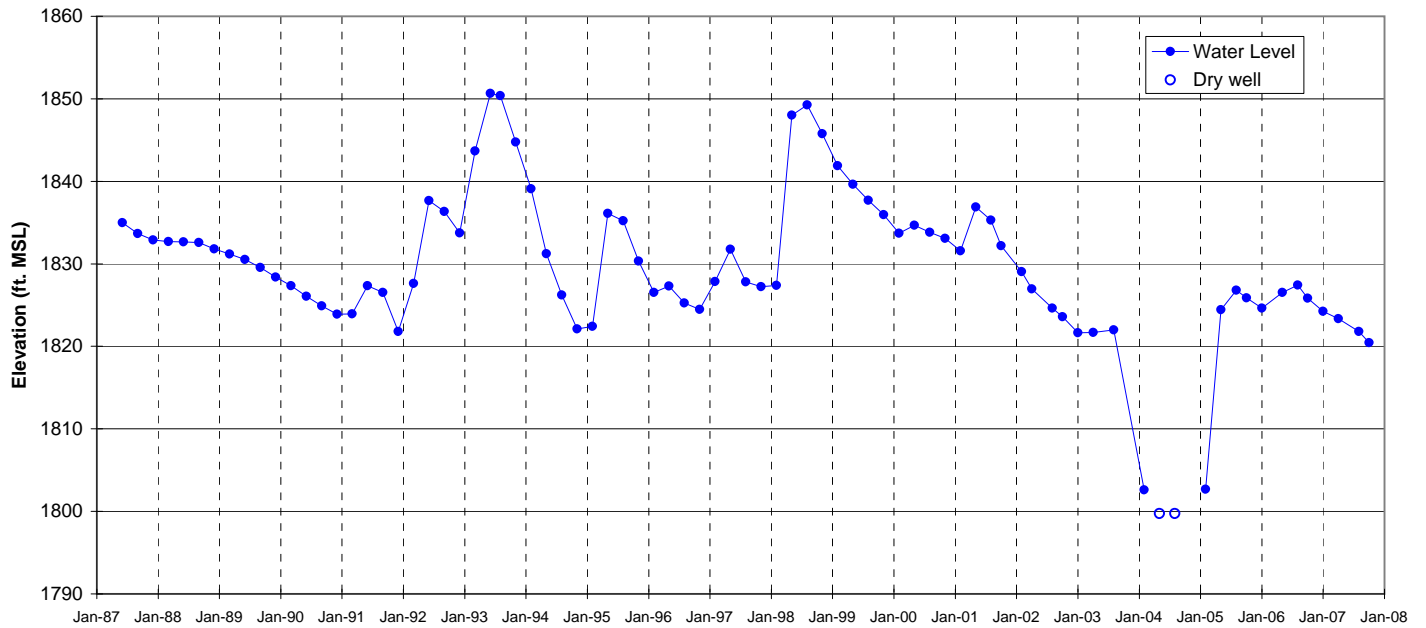
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well HAR-22  
 Figure A-236



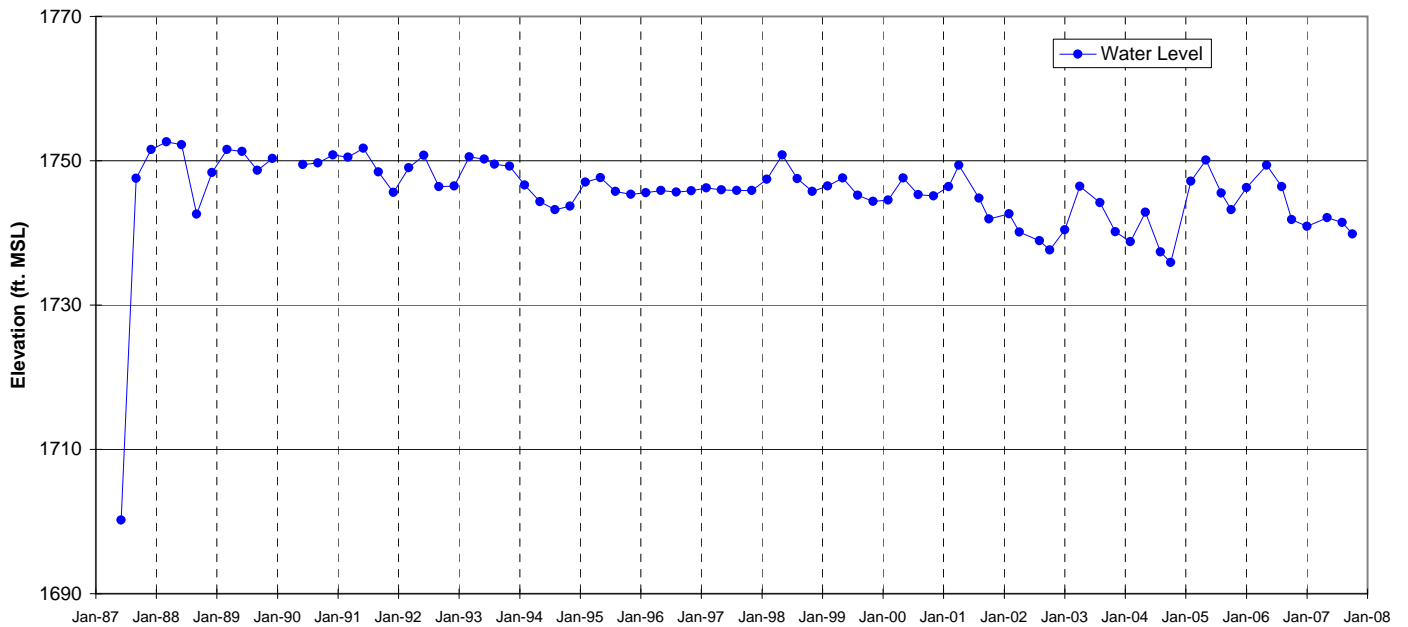
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well HAR-23  
**Figure A-237**



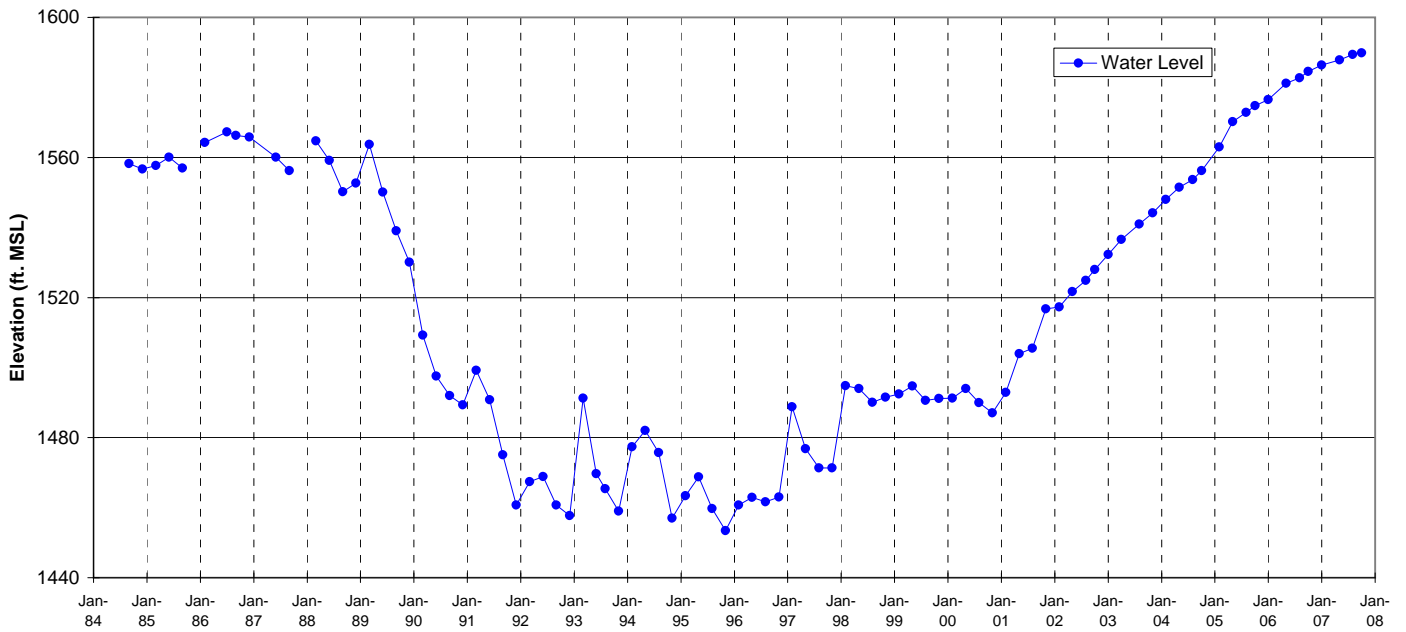
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well HAR-24  
**Figure A-238**



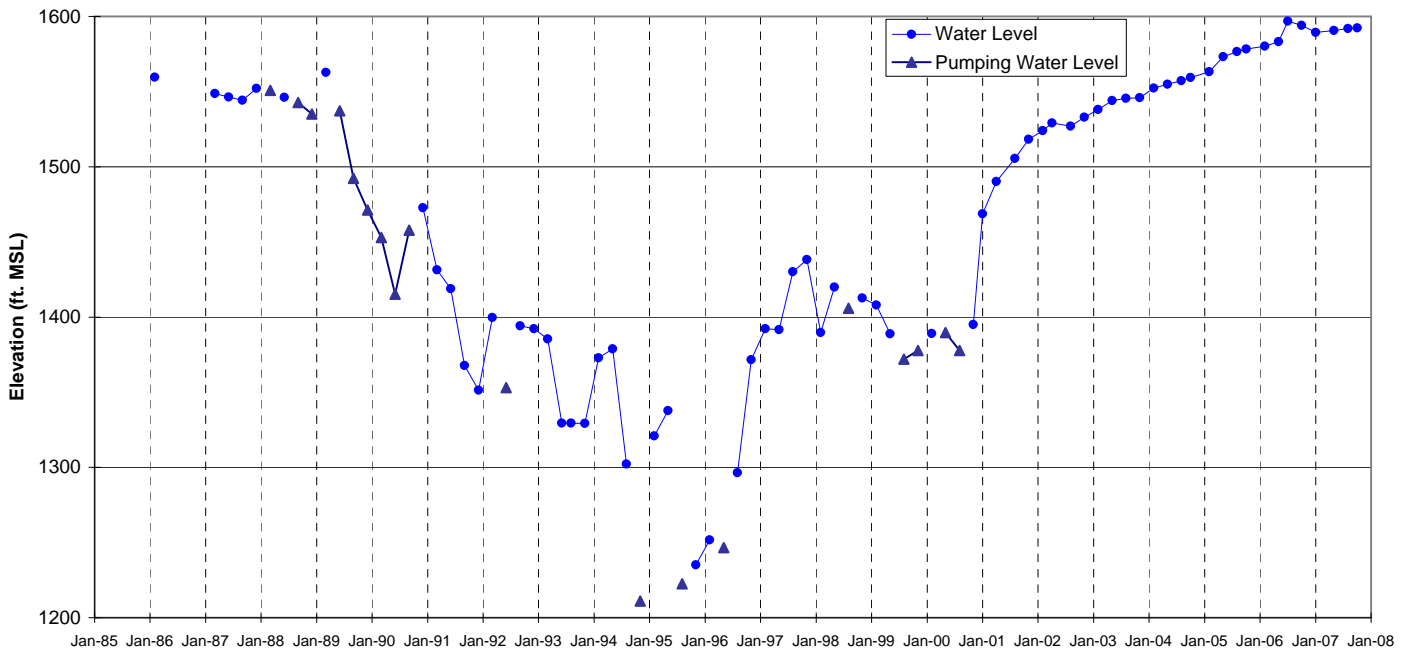
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well HAR-25  
**Figure A-239**



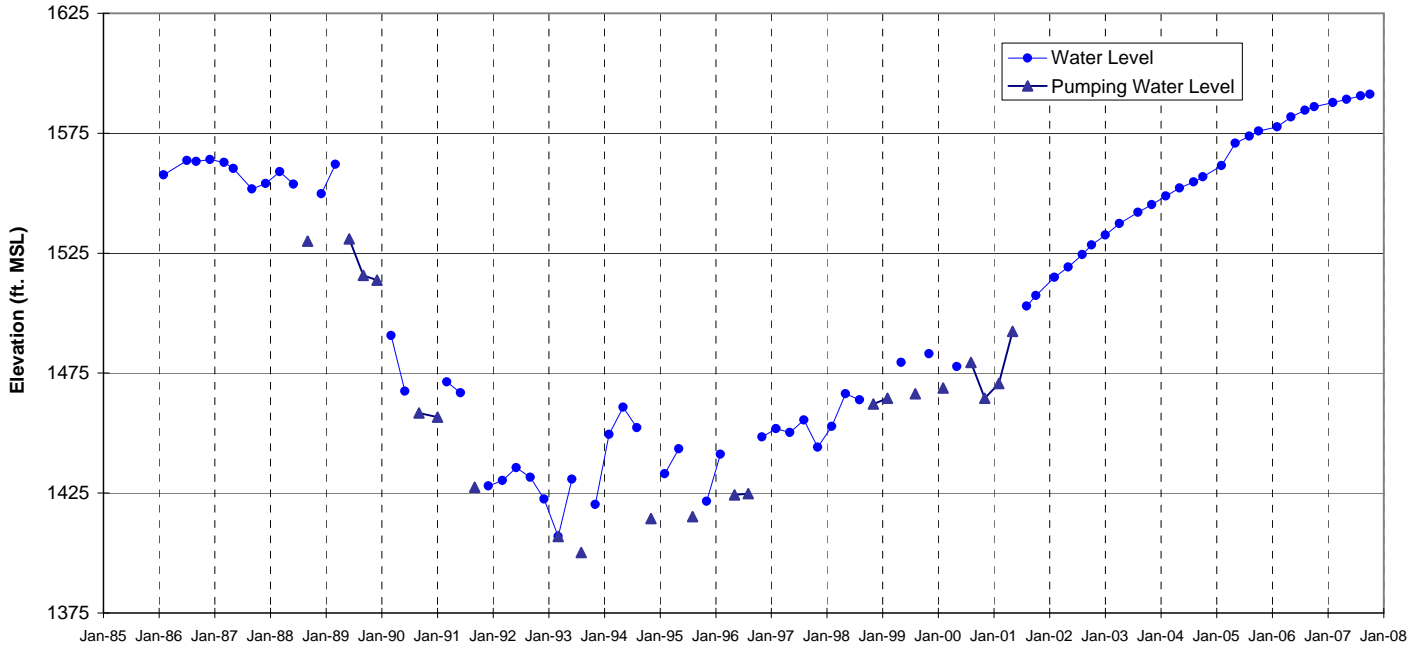
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well HAR-26  
**Figure A-240**



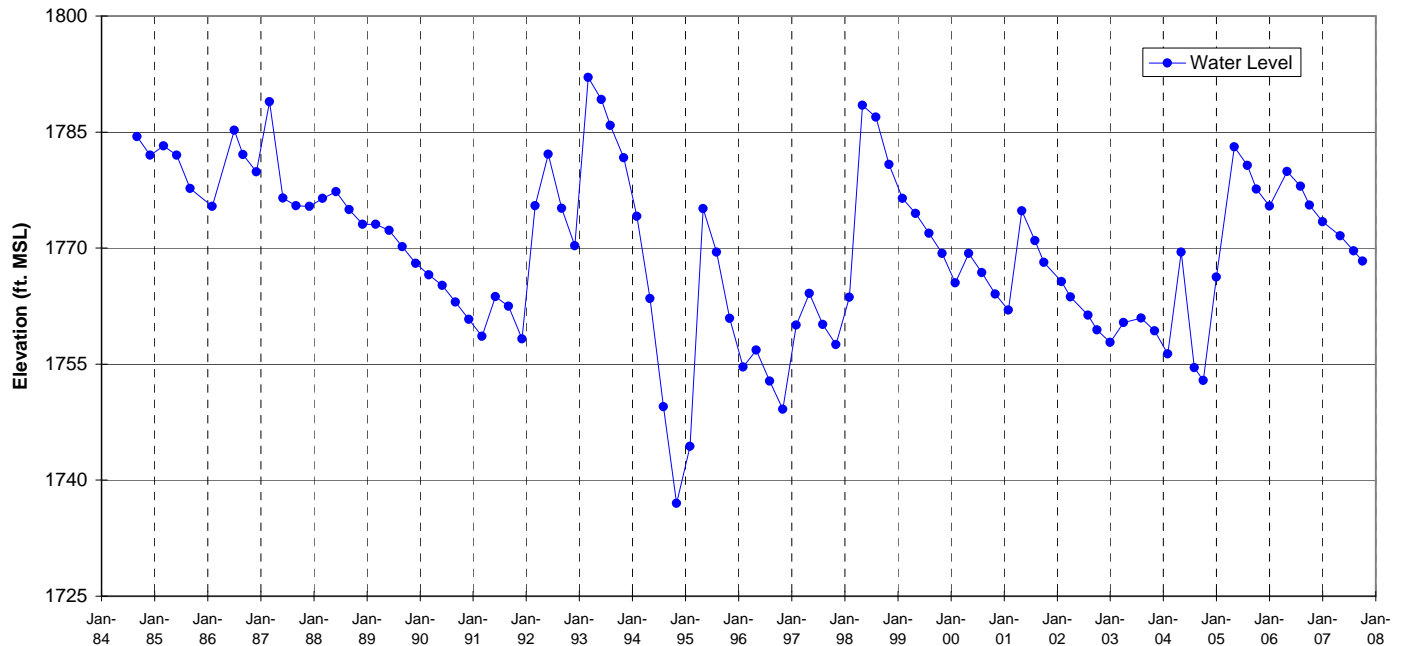
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well WS-04A  
**Figure A-241**



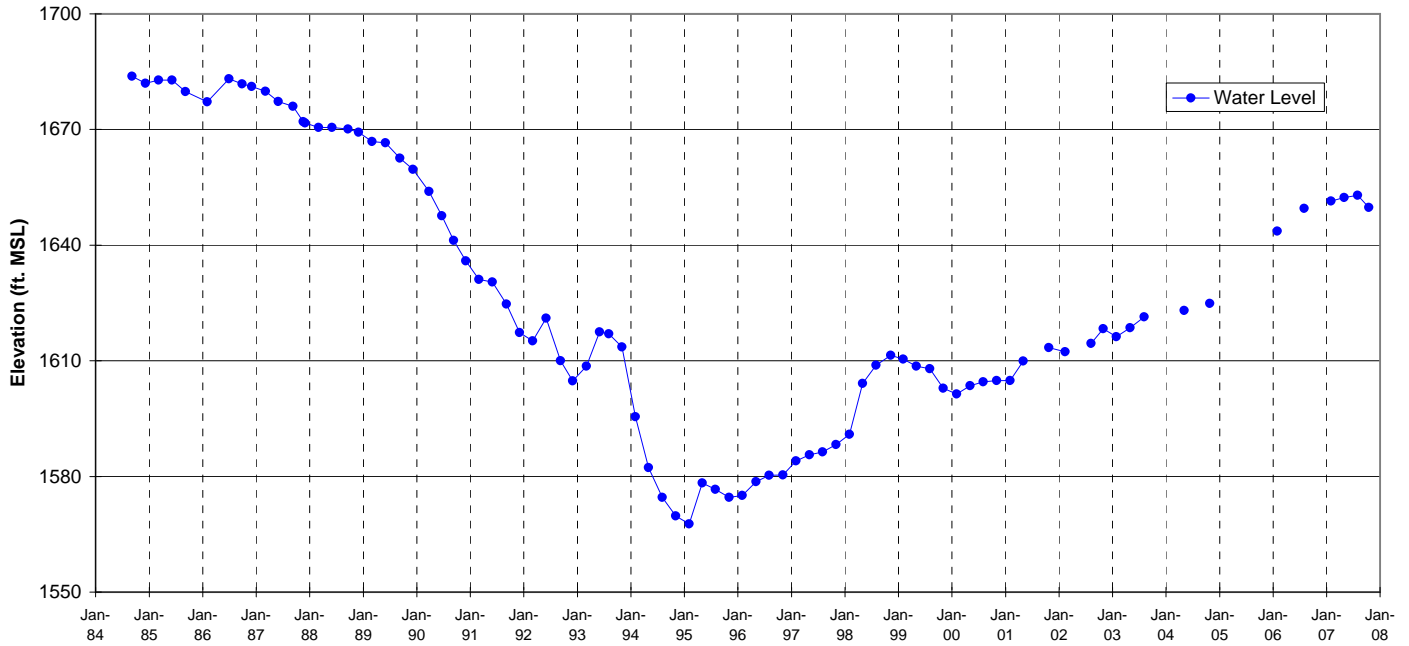
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well WS-05  
**Figure A-242**



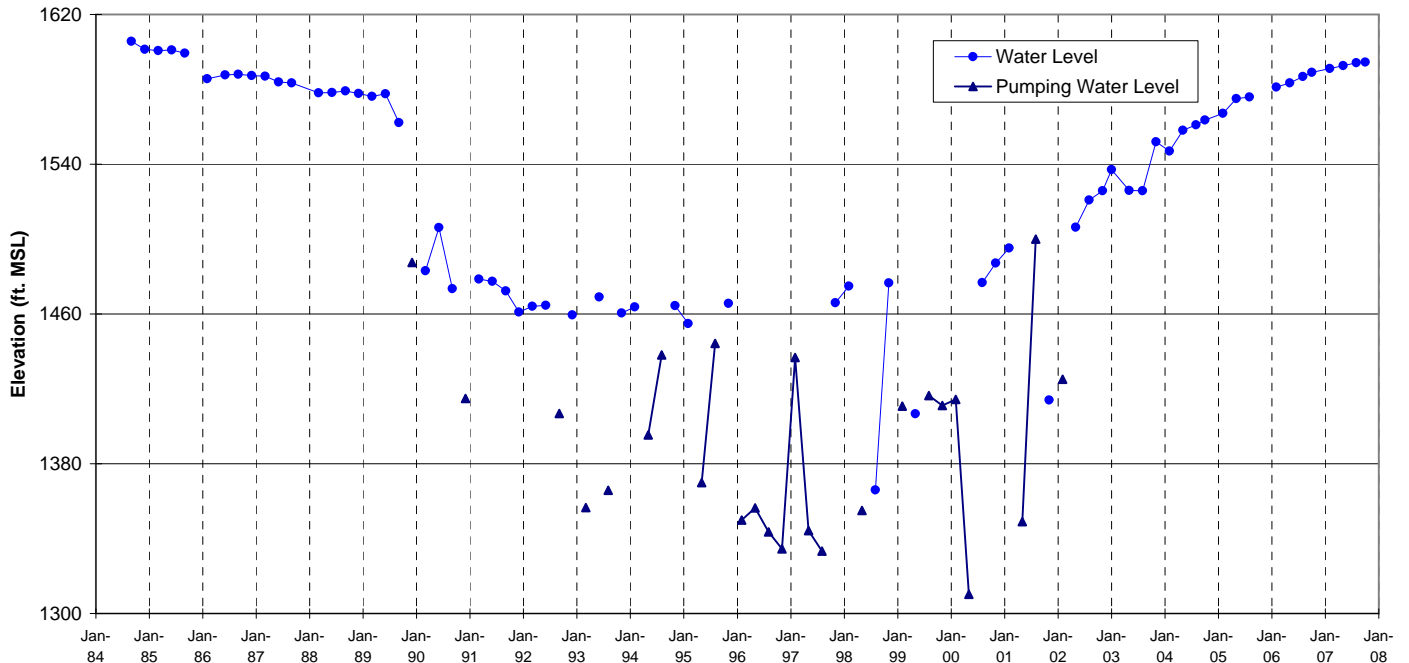
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well WS-06  
**Figure A-243**



WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well WS-07  
**Figure A-244**

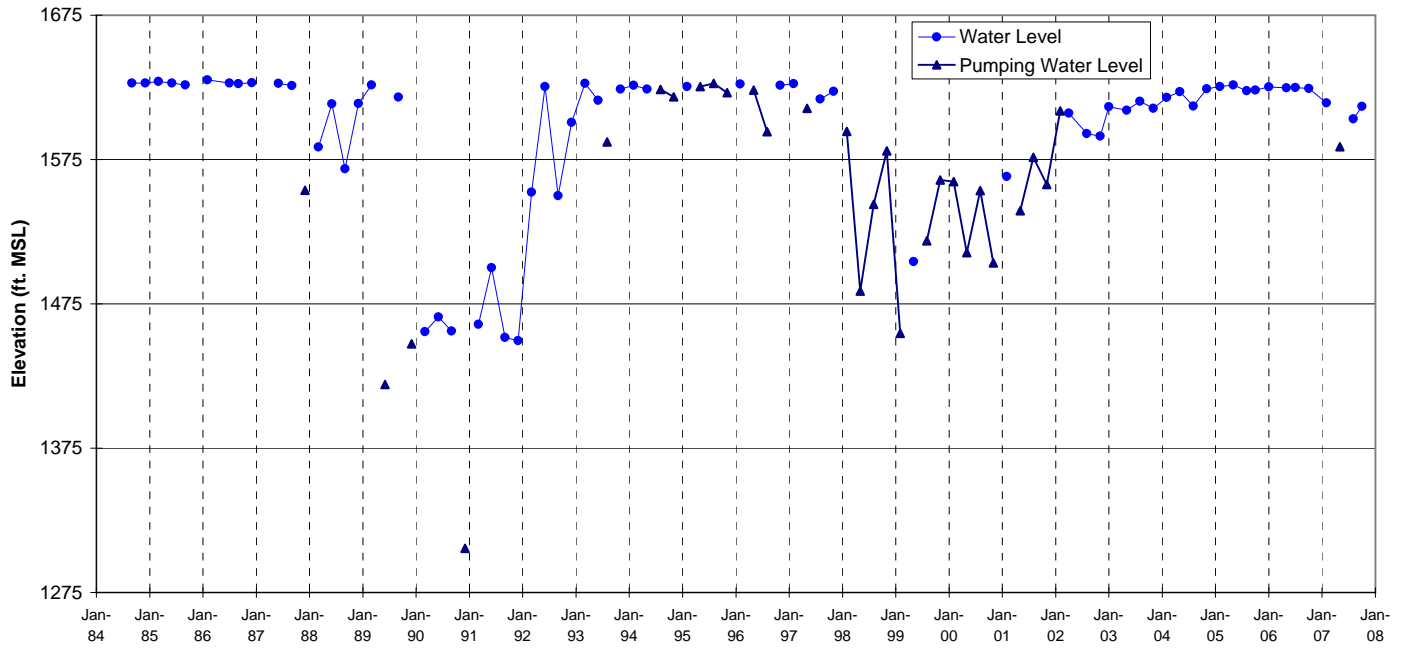


WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well WS-08  
Figure A-245

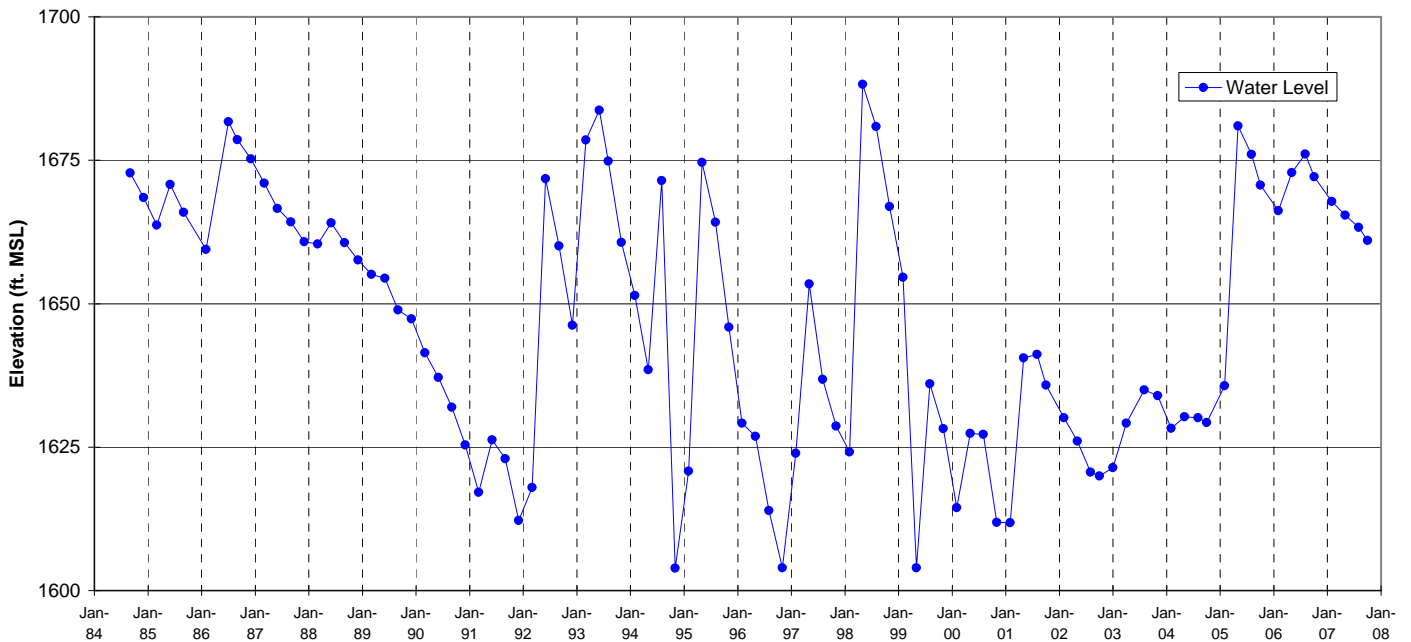


WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well WS-09  
Figure A-246

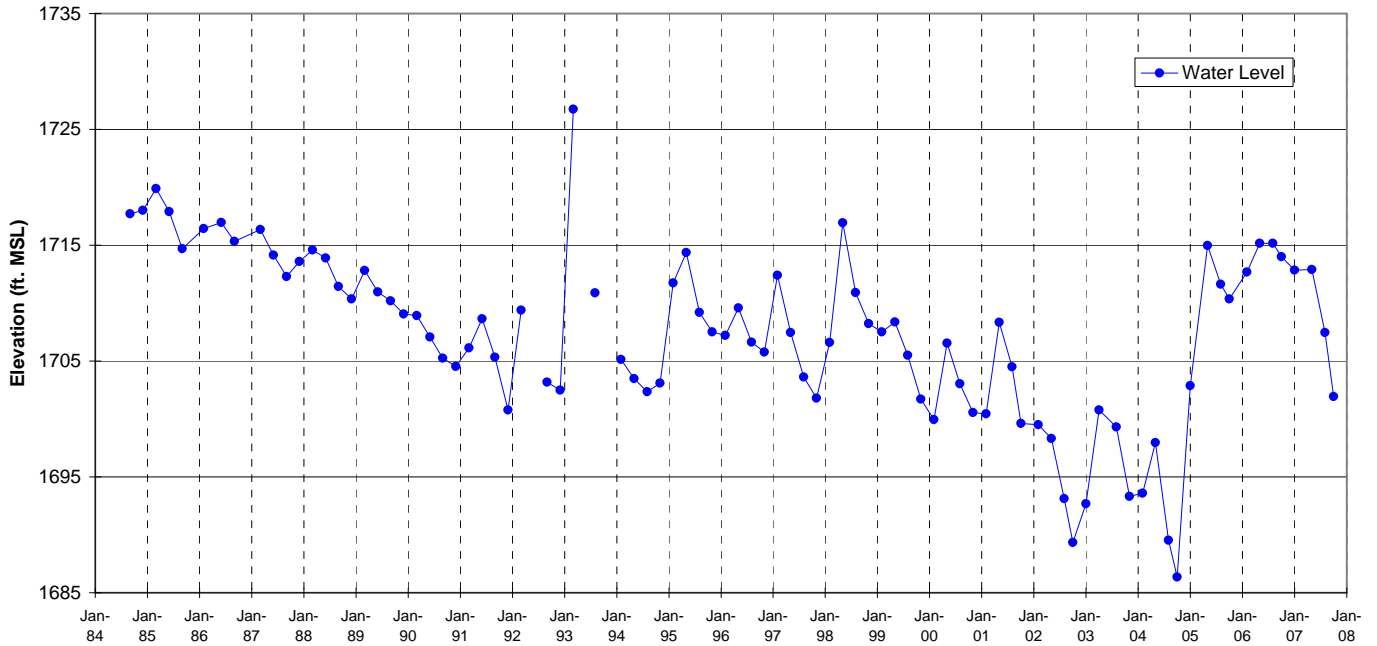




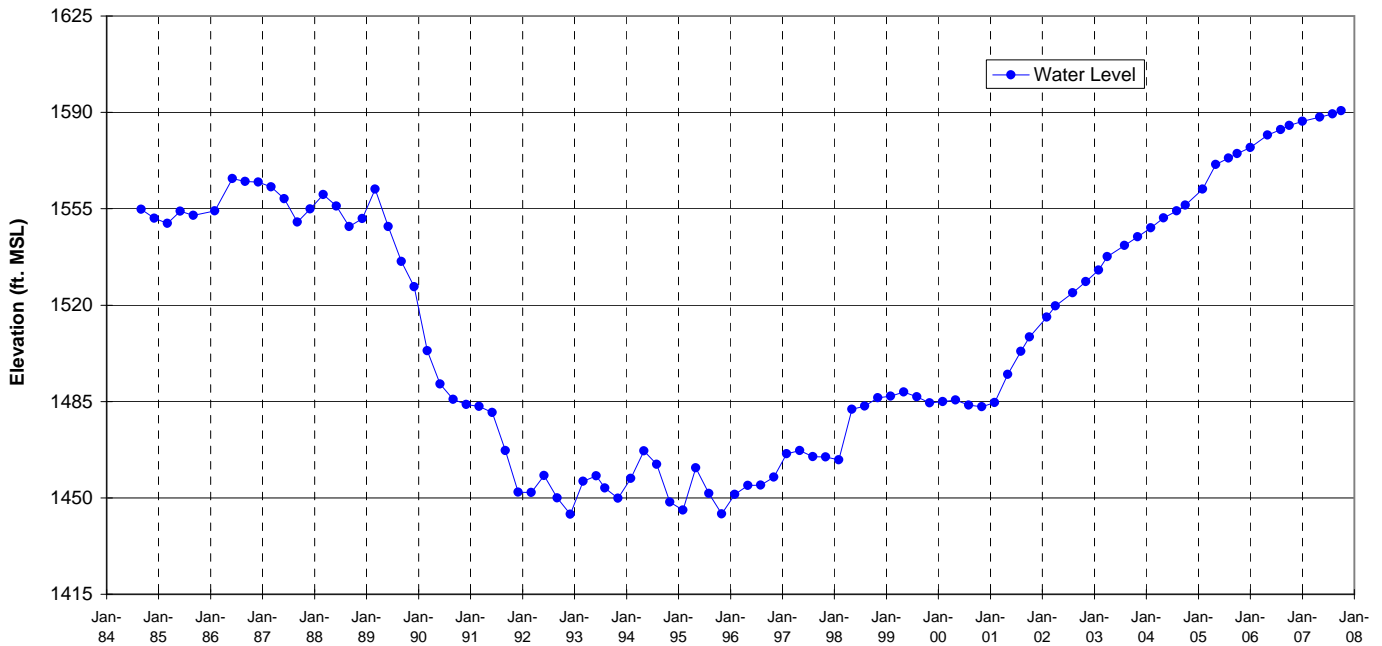
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well WS-09A  
**Figure A-247**



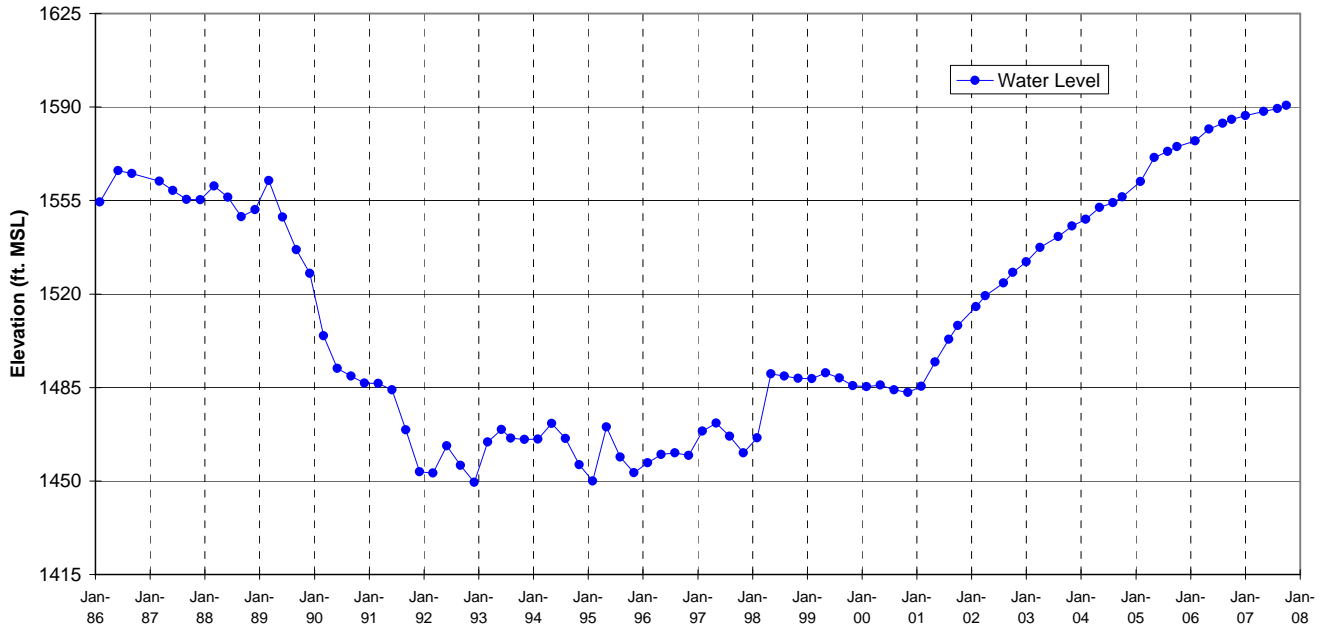
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well WS-09B  
**Figure A-248**



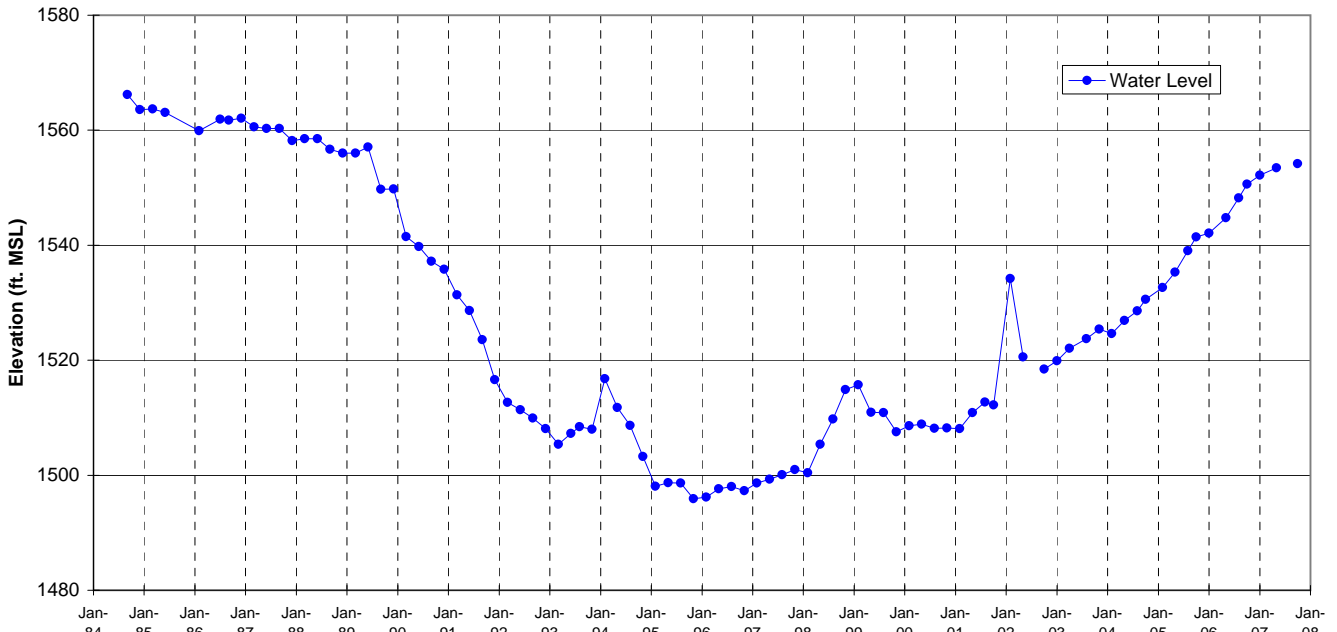
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well WS-11  
**Figure A-249**



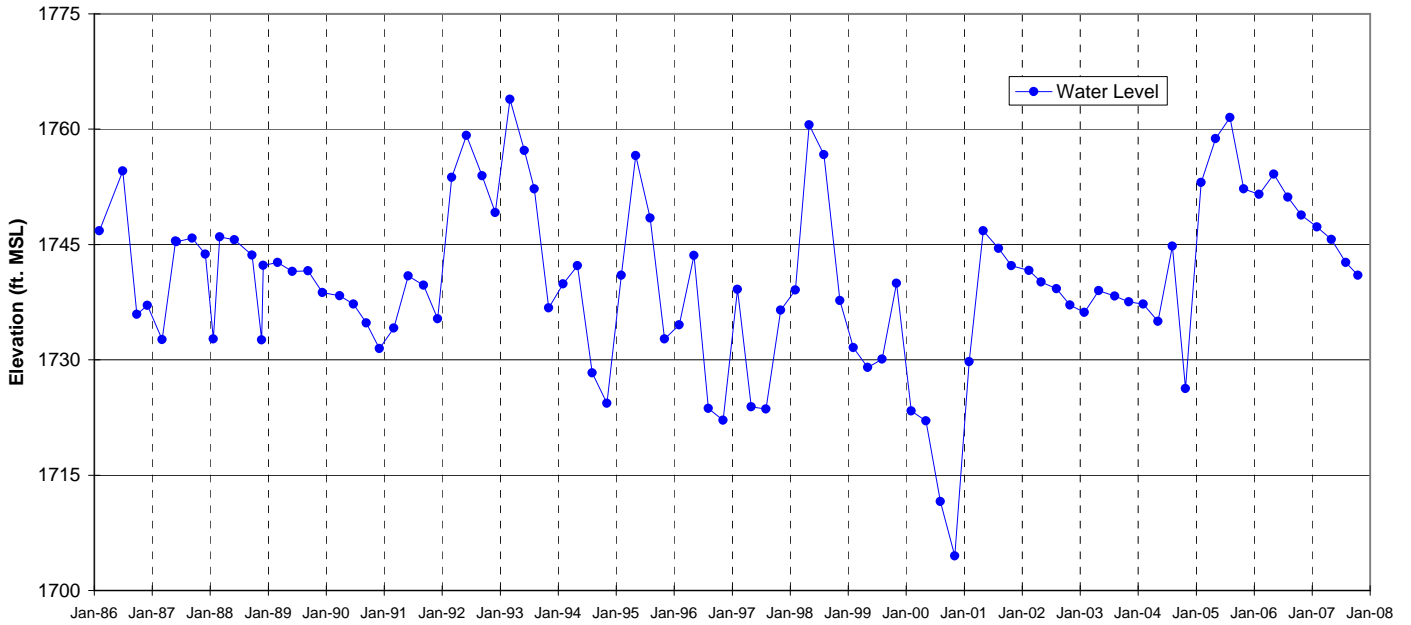
WATER LEVEL HYDROGRAPH  
Chatsworth Formation Well WS-12  
**Figure A-250**



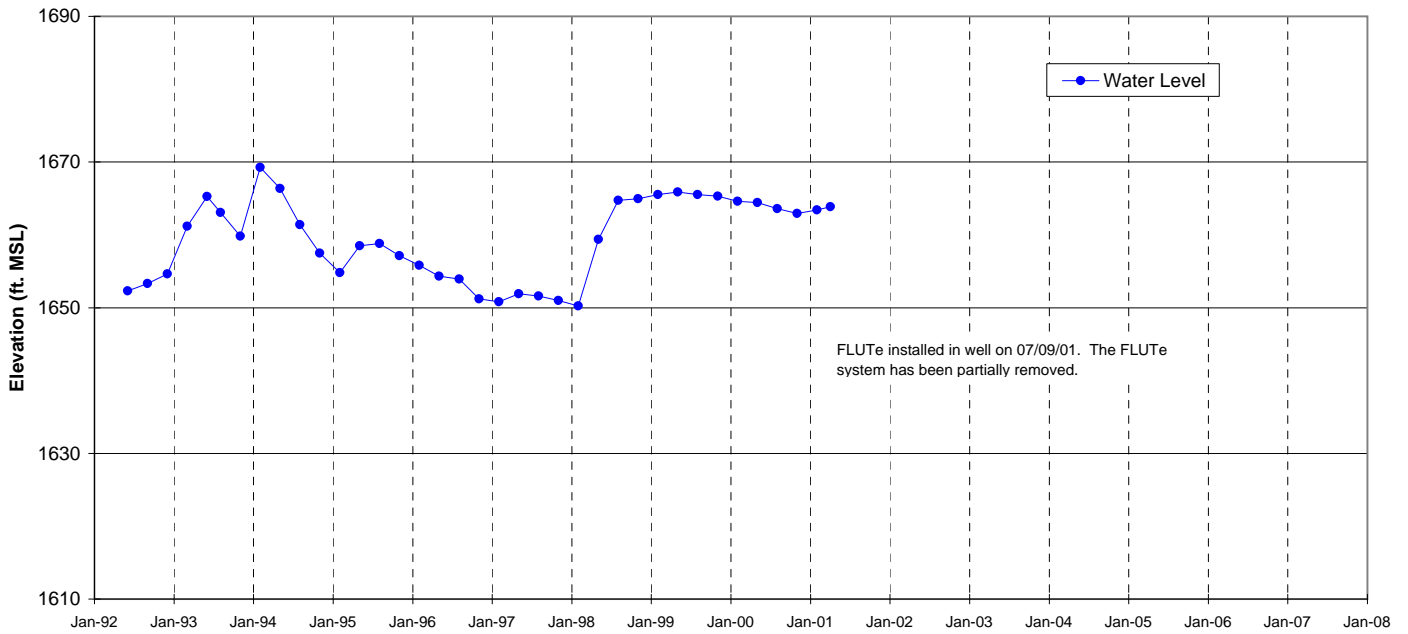
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well WS-13  
**Figure A-251**



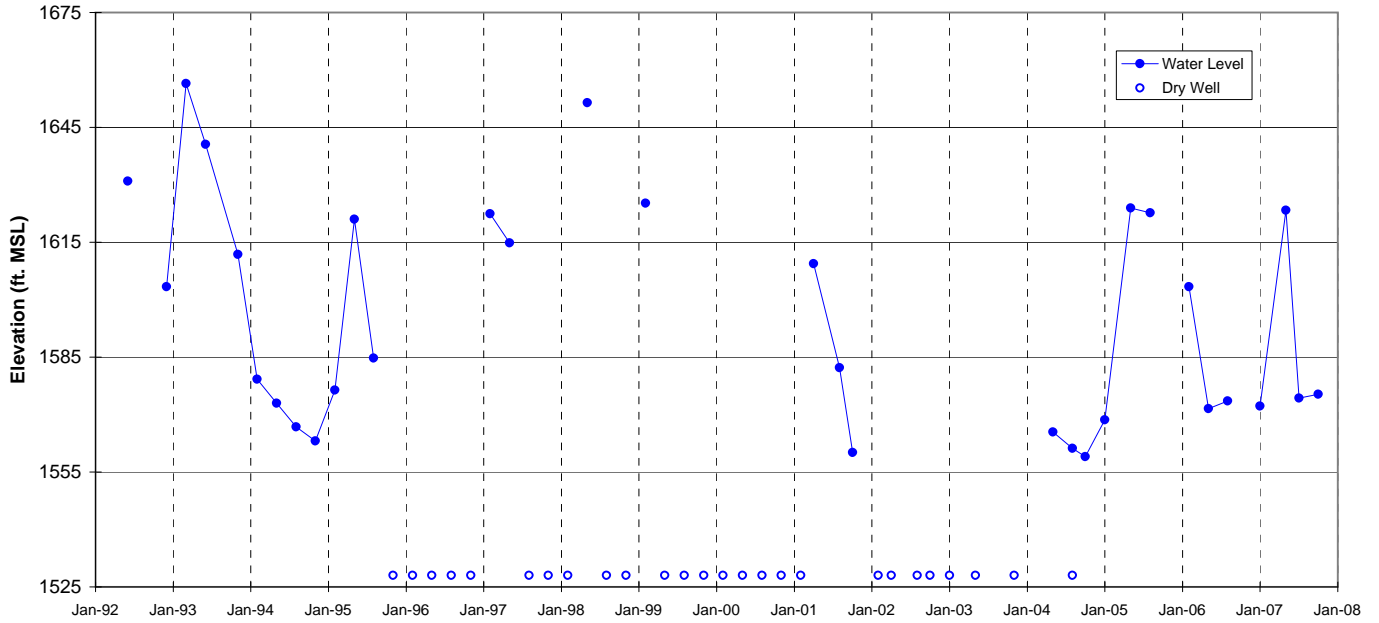
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well WS-14  
**Figure A-252**



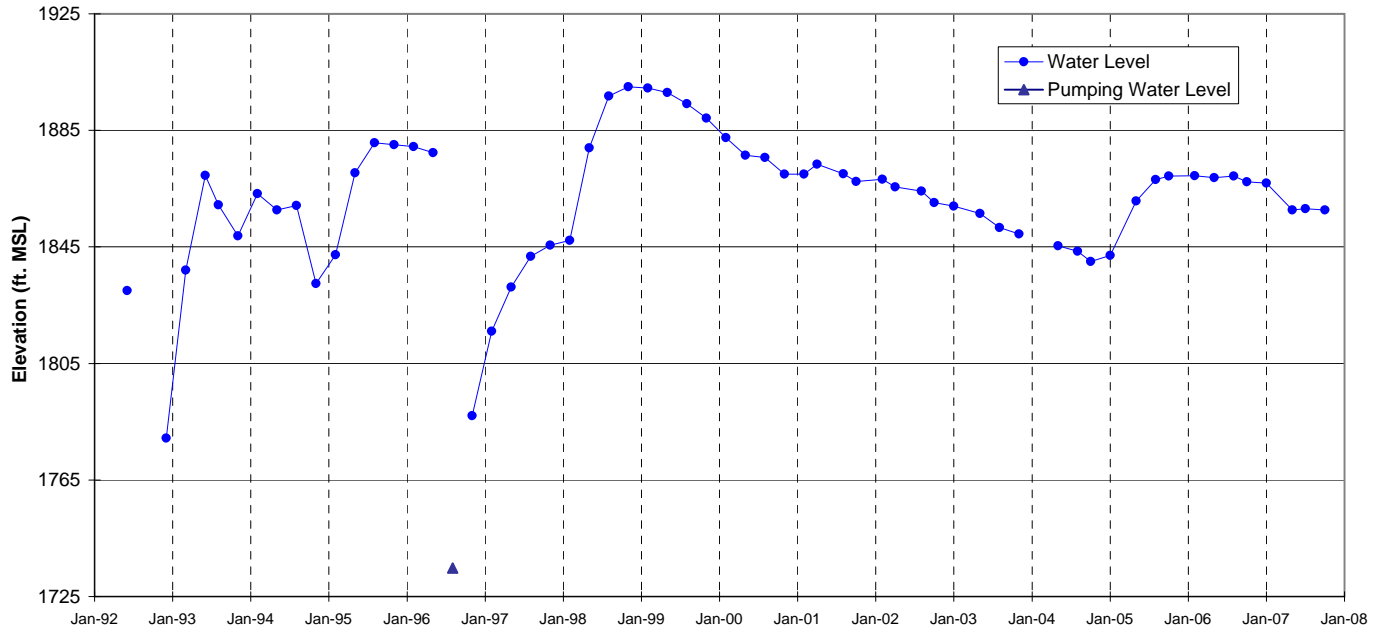
WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well WS-SP  
**Figure A-253**



WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well OS-24  
**Figure A-254**

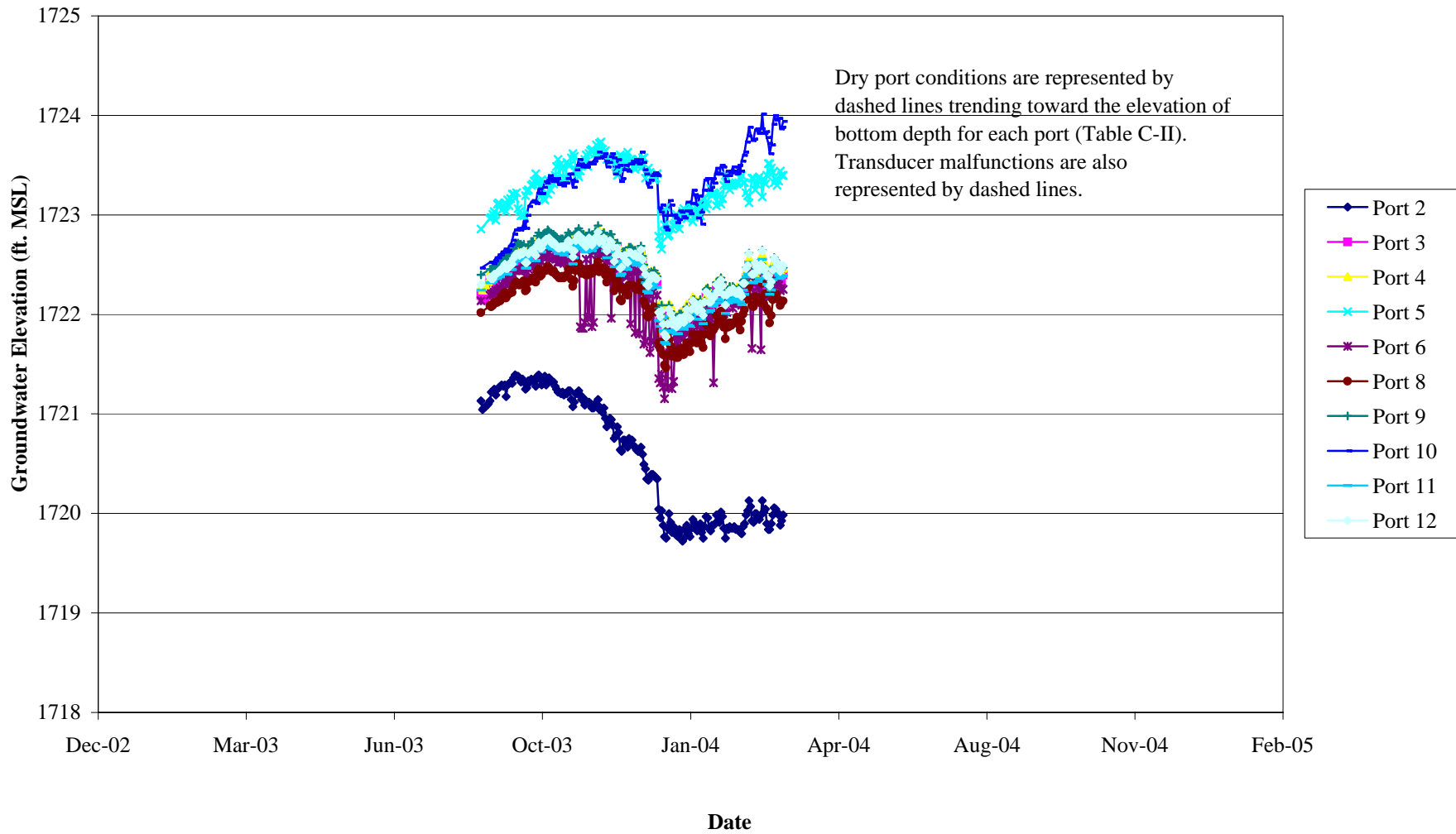


WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well OS-25  
**Figure A-255**

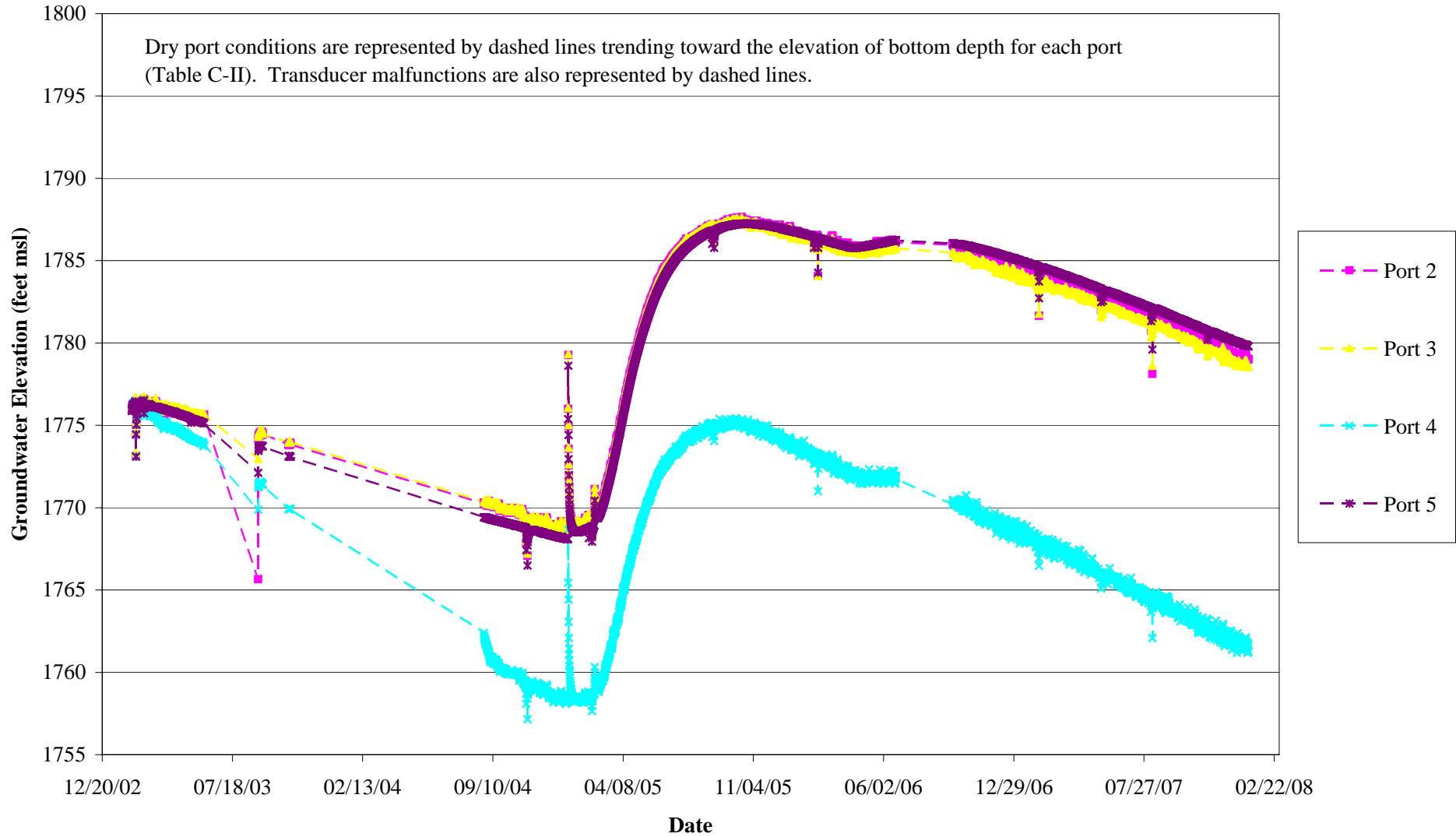


WATER LEVEL HYDROGRAPH  
 Chatsworth Formation Well OS-26  
**Figure A-256**

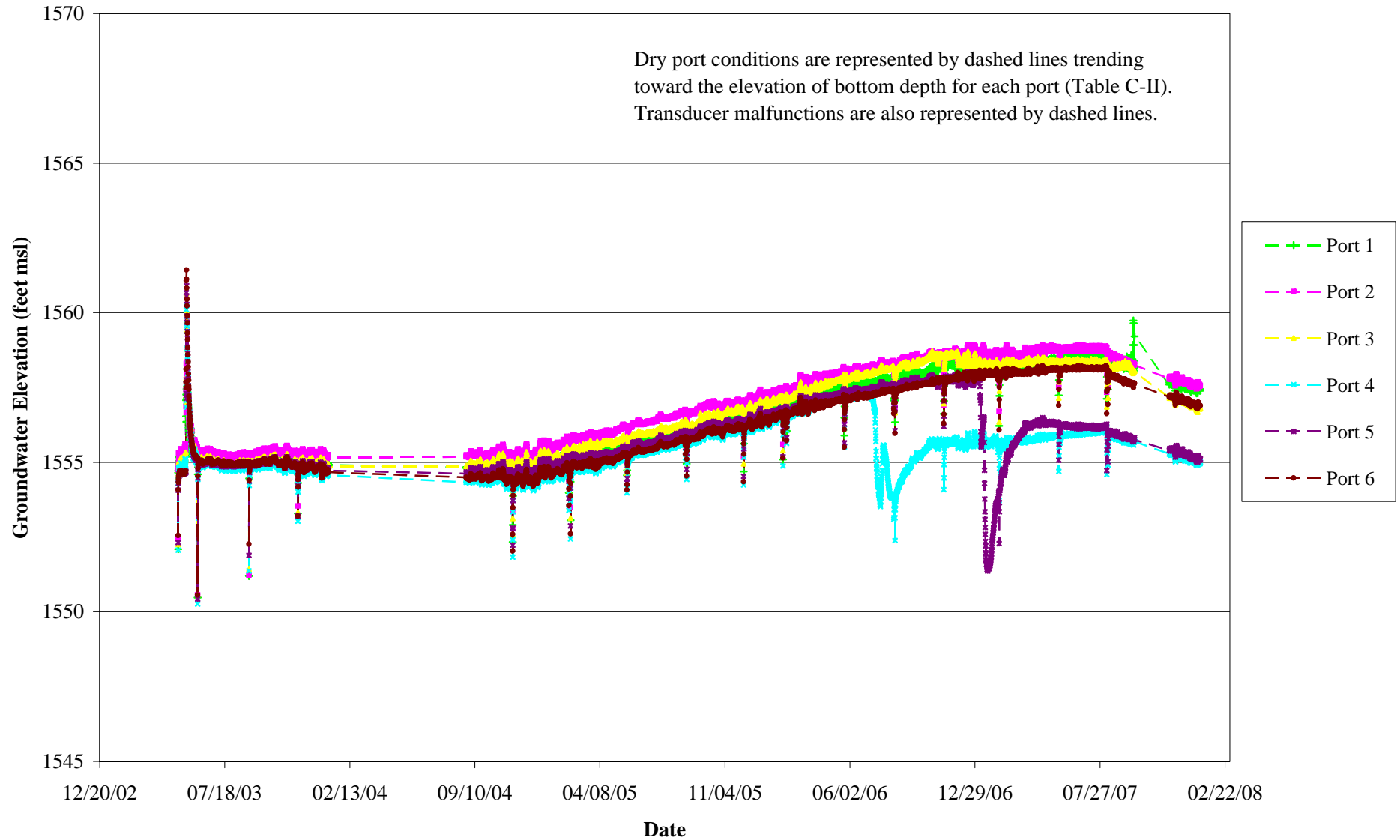
**Figure A-257**  
**Chatsworth Formation Well RD-10 FLUTe Hydrograph**



**Figure A-258**  
**Chatsworth Formation Well RD-21 FLUTe Hydrograph**

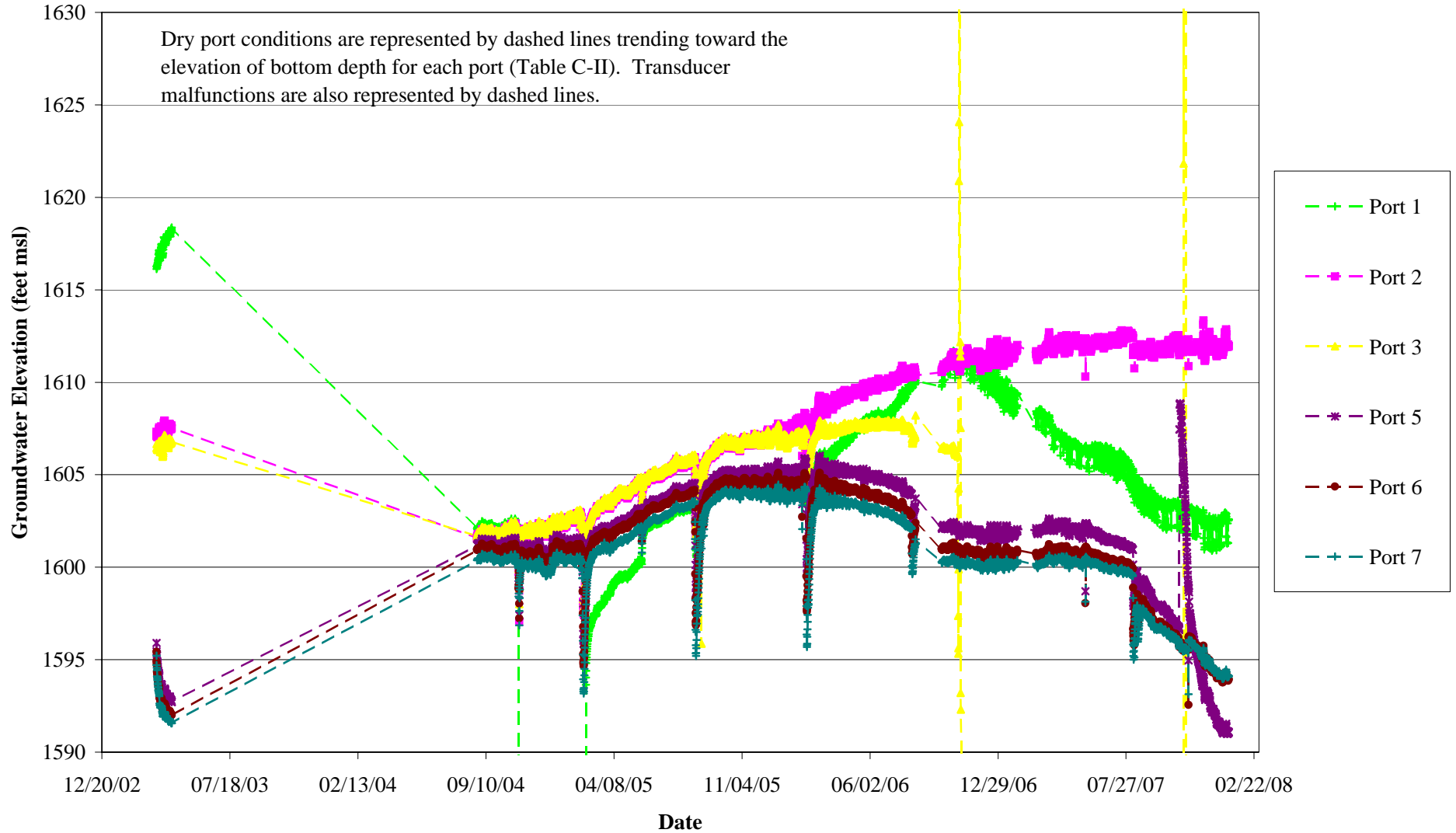


**Figure A-259**  
**Chatsworth Formation Well RD-22 FLUTe Hydrograph**

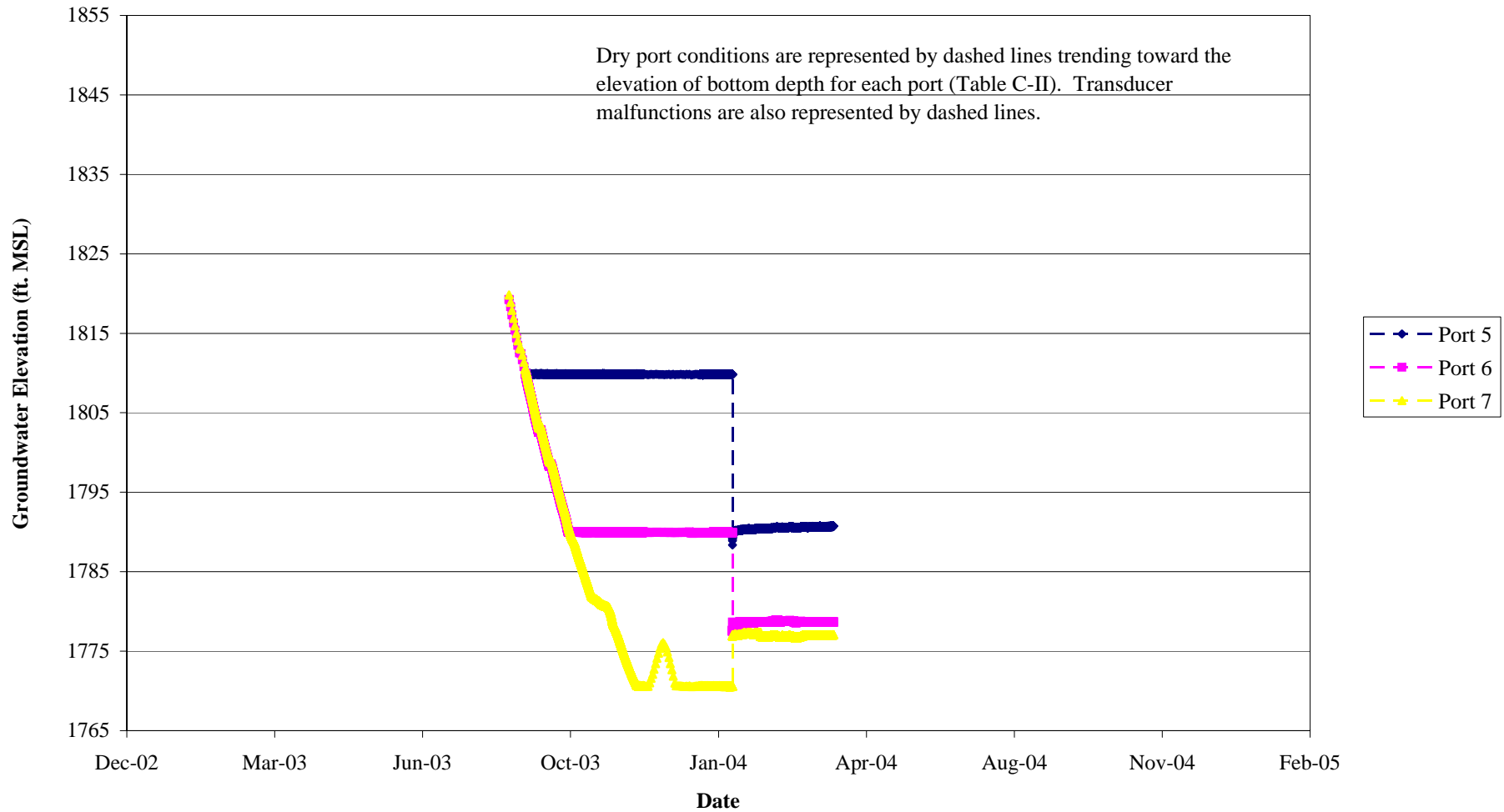




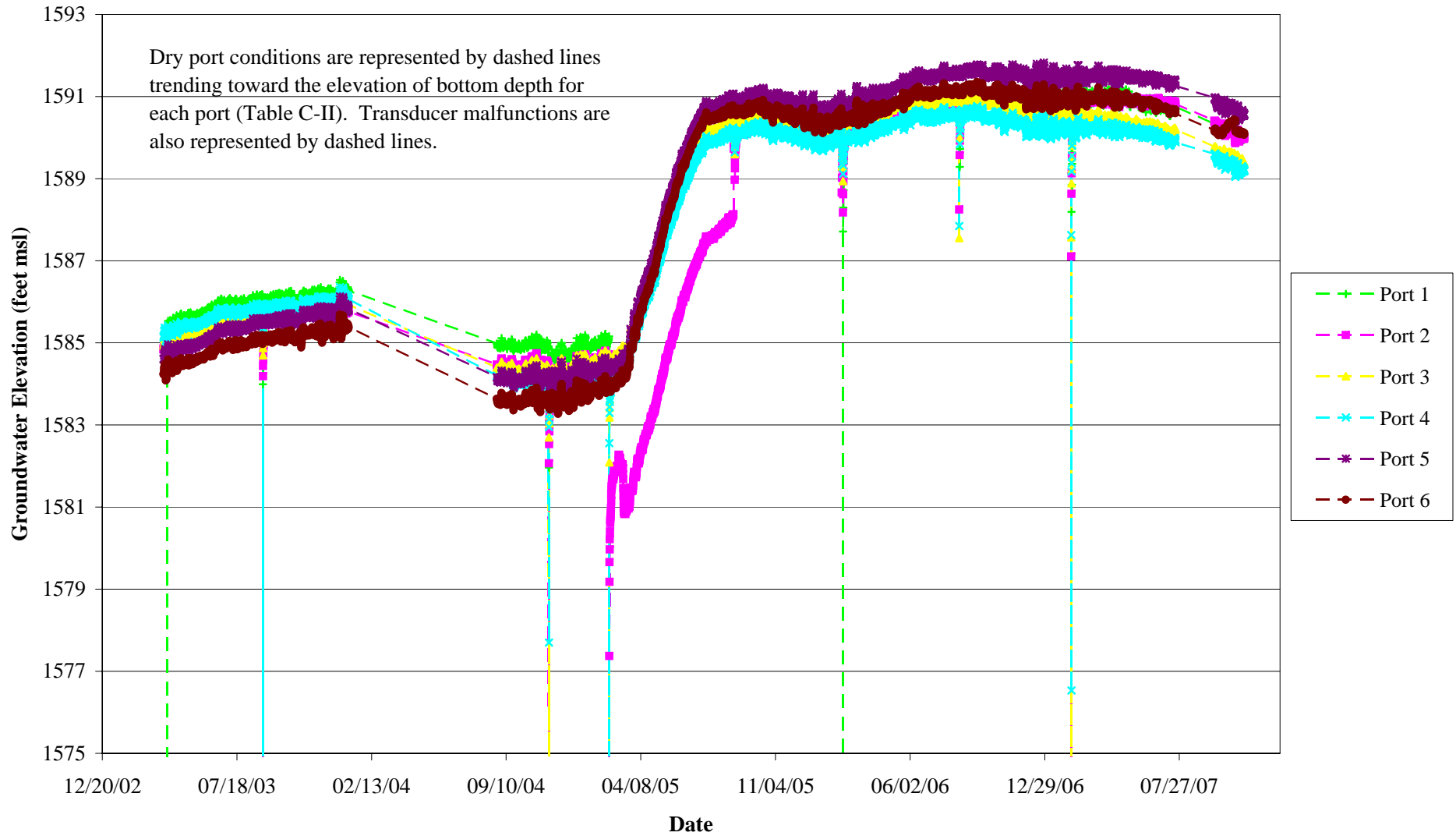
**Figure A-260**  
**Chatsworth Formation Well RD-23 FLUTe Hydrograph**



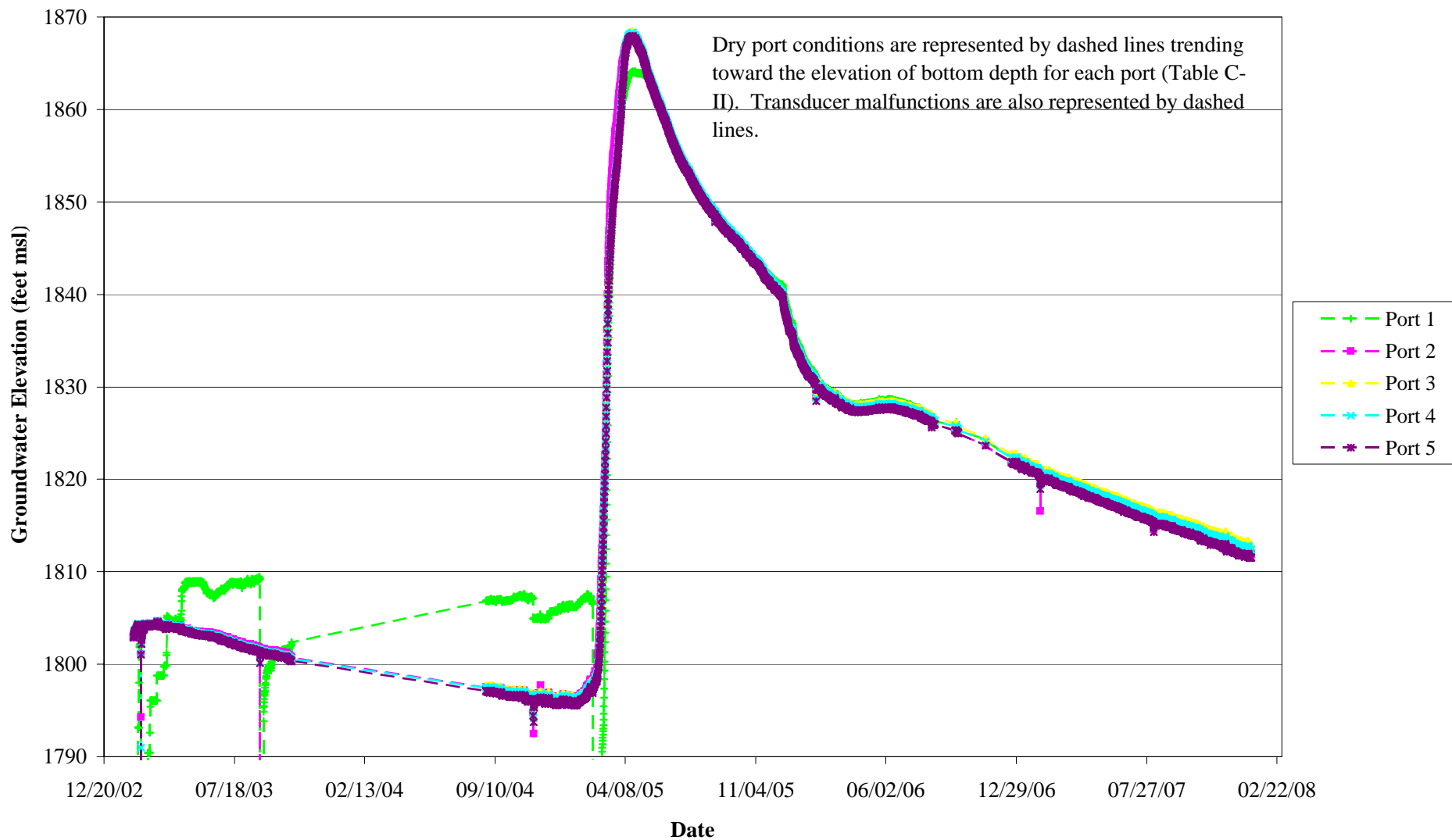
**Figure A-261**  
**Chatsworth Formation Well RD-31 FLUTe Hydrograph**



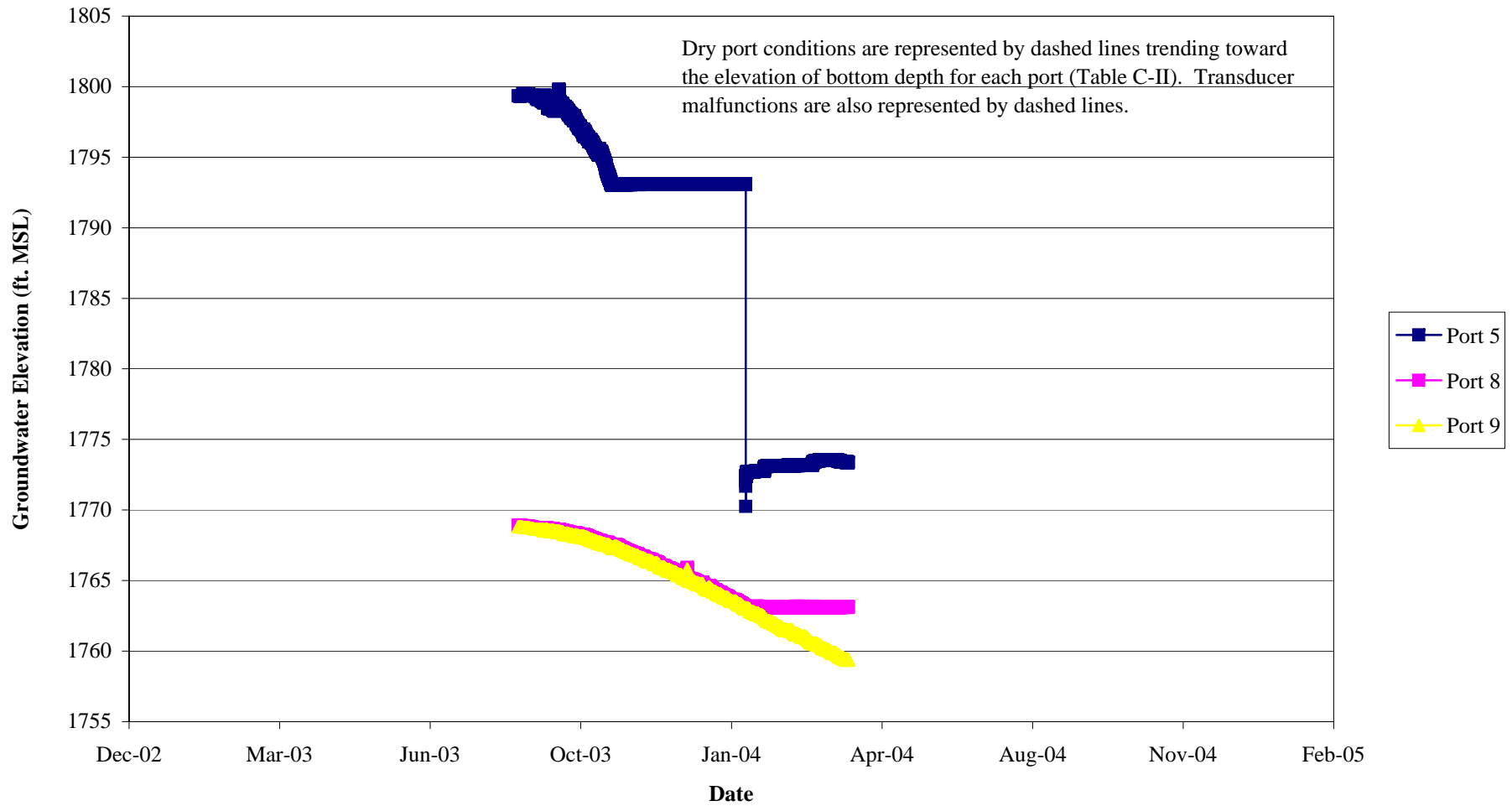
**Figure A-262**  
**Chatsworth Formation Well RD-33A FLUTE Hydrograph**



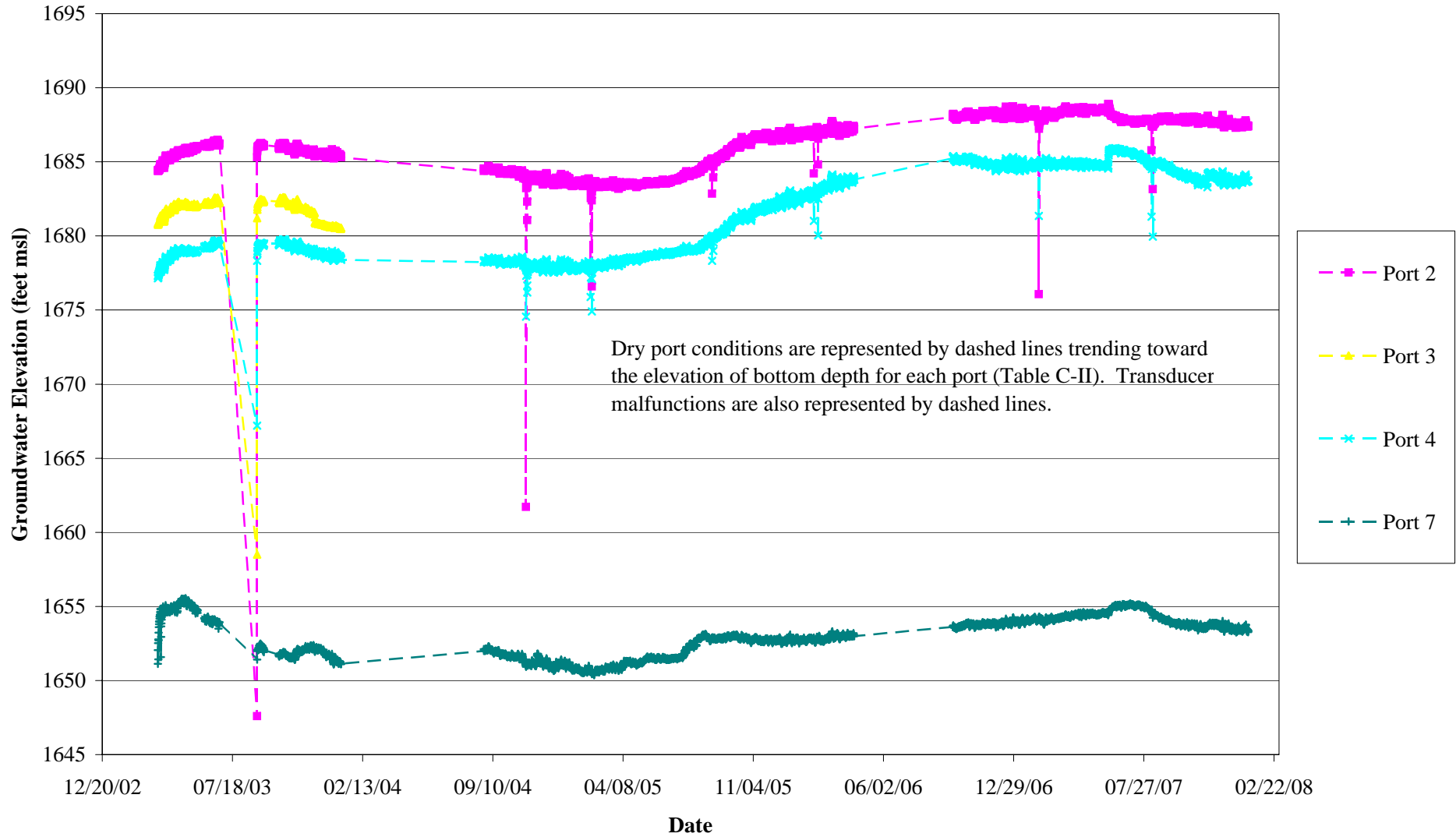
**Figure A-263**  
**Chatsworth Formation Well RD-50 FLUTe Hydrograph**



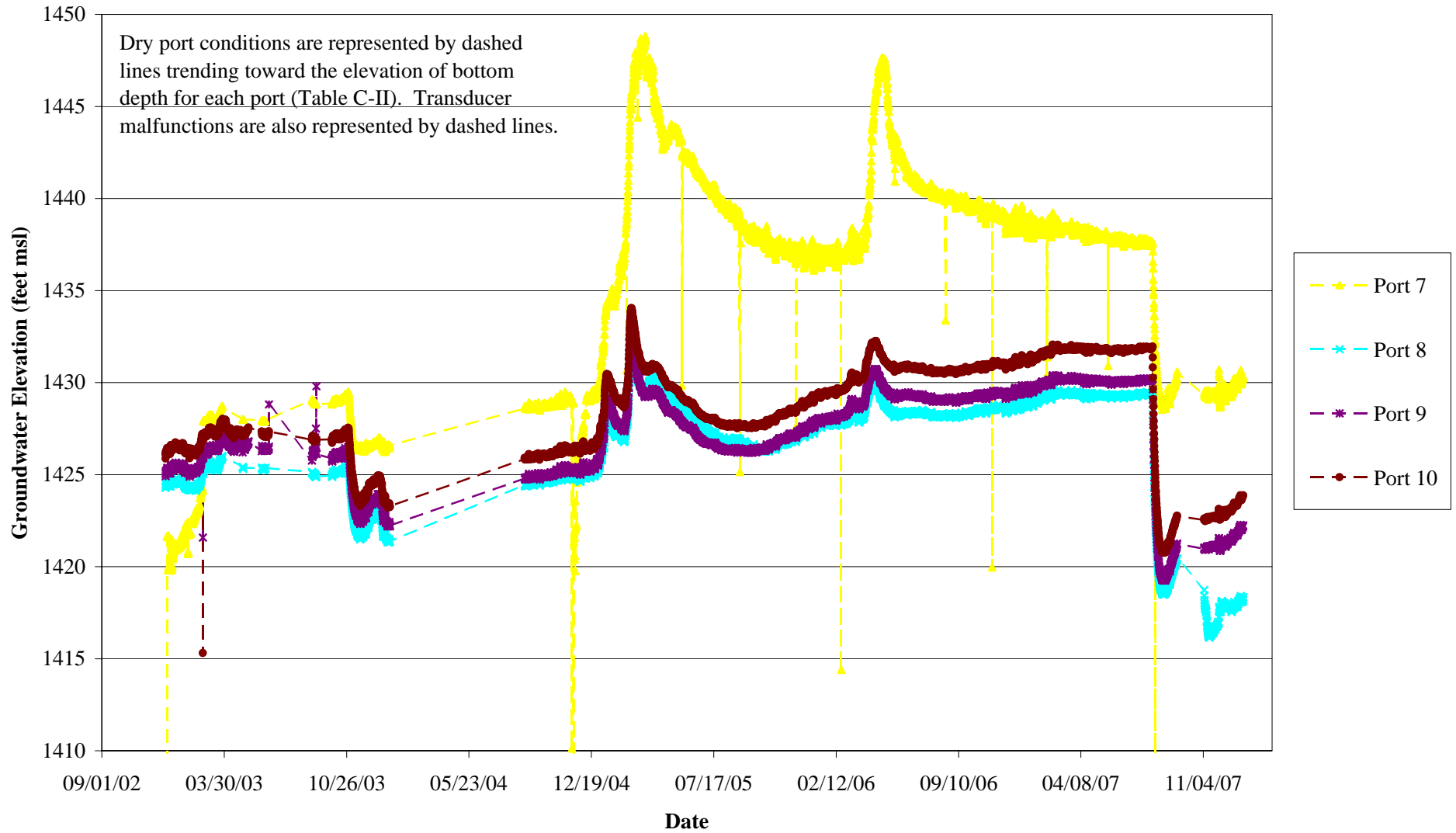
**Figure A-264**  
**Chatsworth Formation Well RD-53 FLUTe Hydrograph**



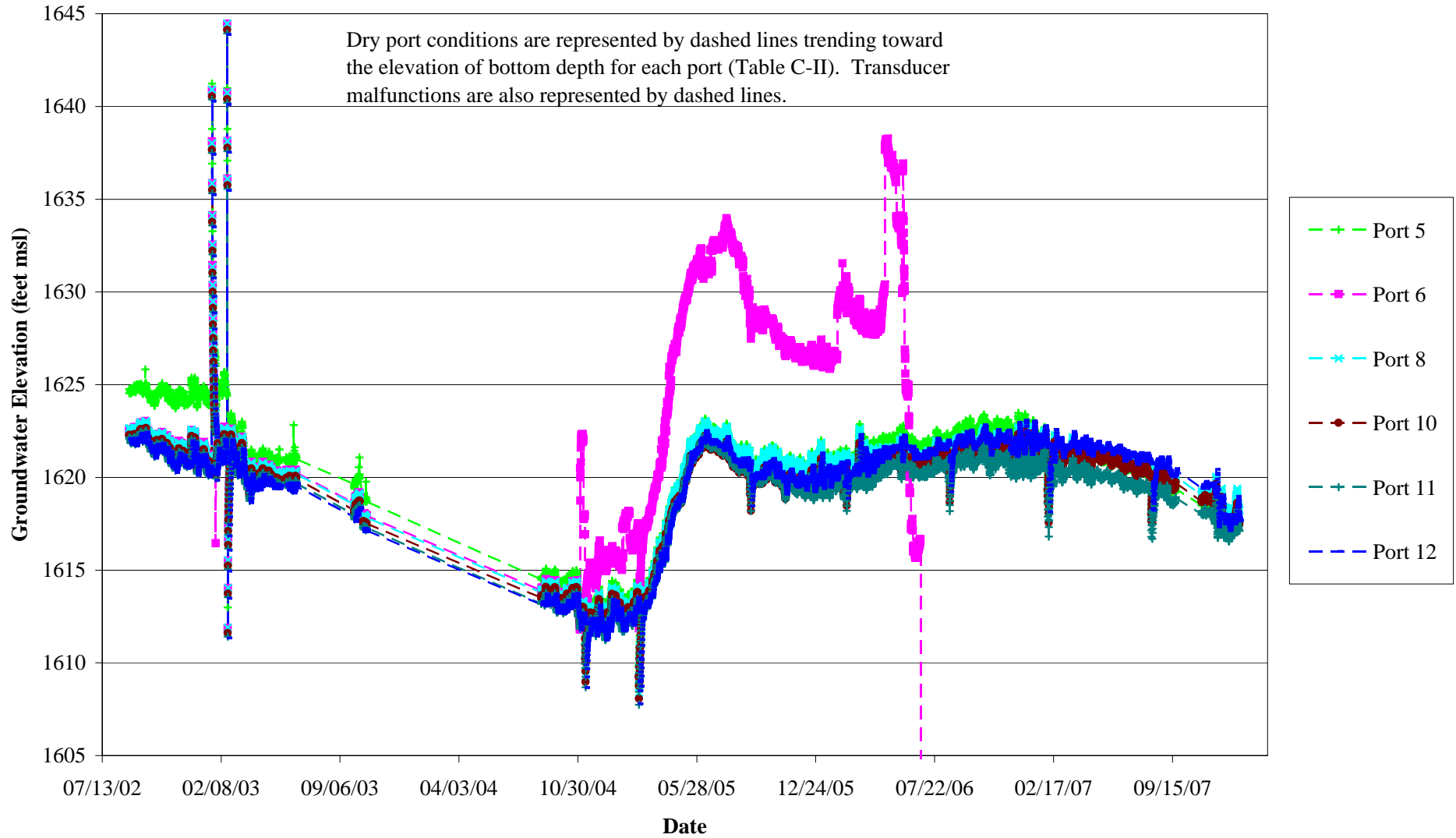
**Figure A-265**  
**Chatsworth Formation Well RD-54A FLUTE Hydrograph**



**Figure A-266**  
**Chatsworth Formation Well RD-57 FLUTe Hydrograph**

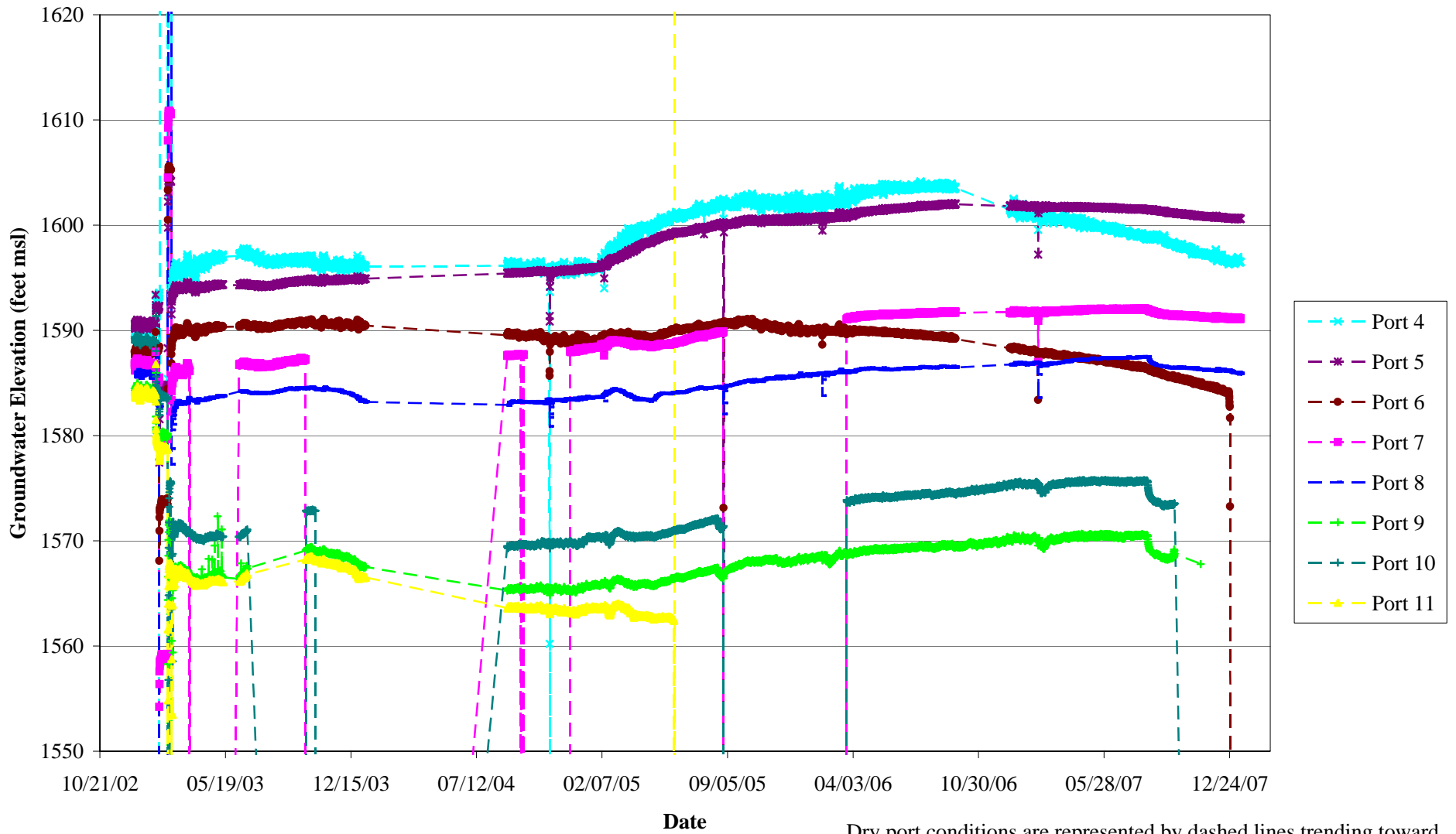


**Figure A-267**  
**Chatsworth Formation Well RD-64 FLUTe Hydrograph**



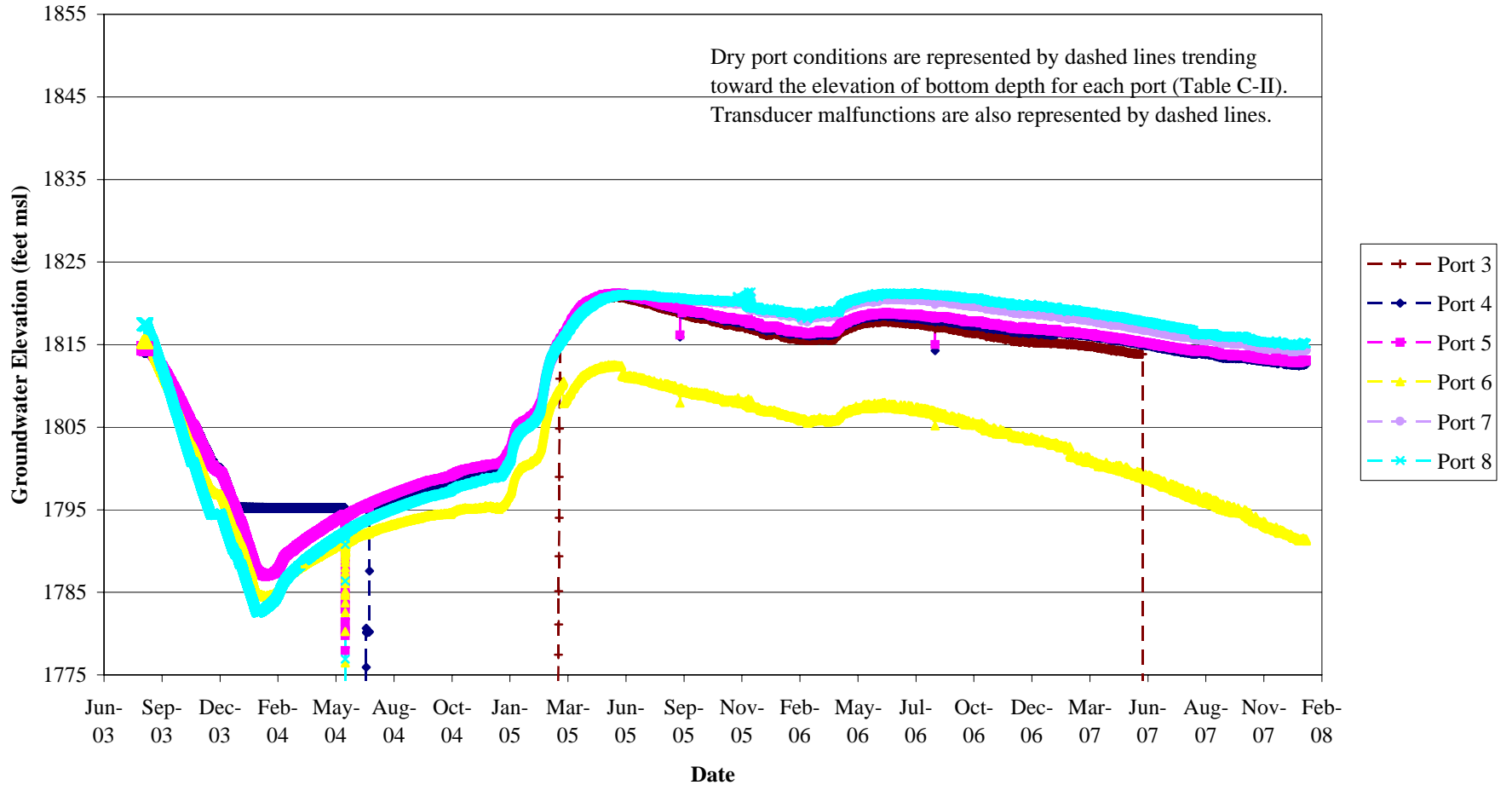


**Figure A-268**  
**Chatsworth Formation Well RD-65 FLUTe Hydrograph**

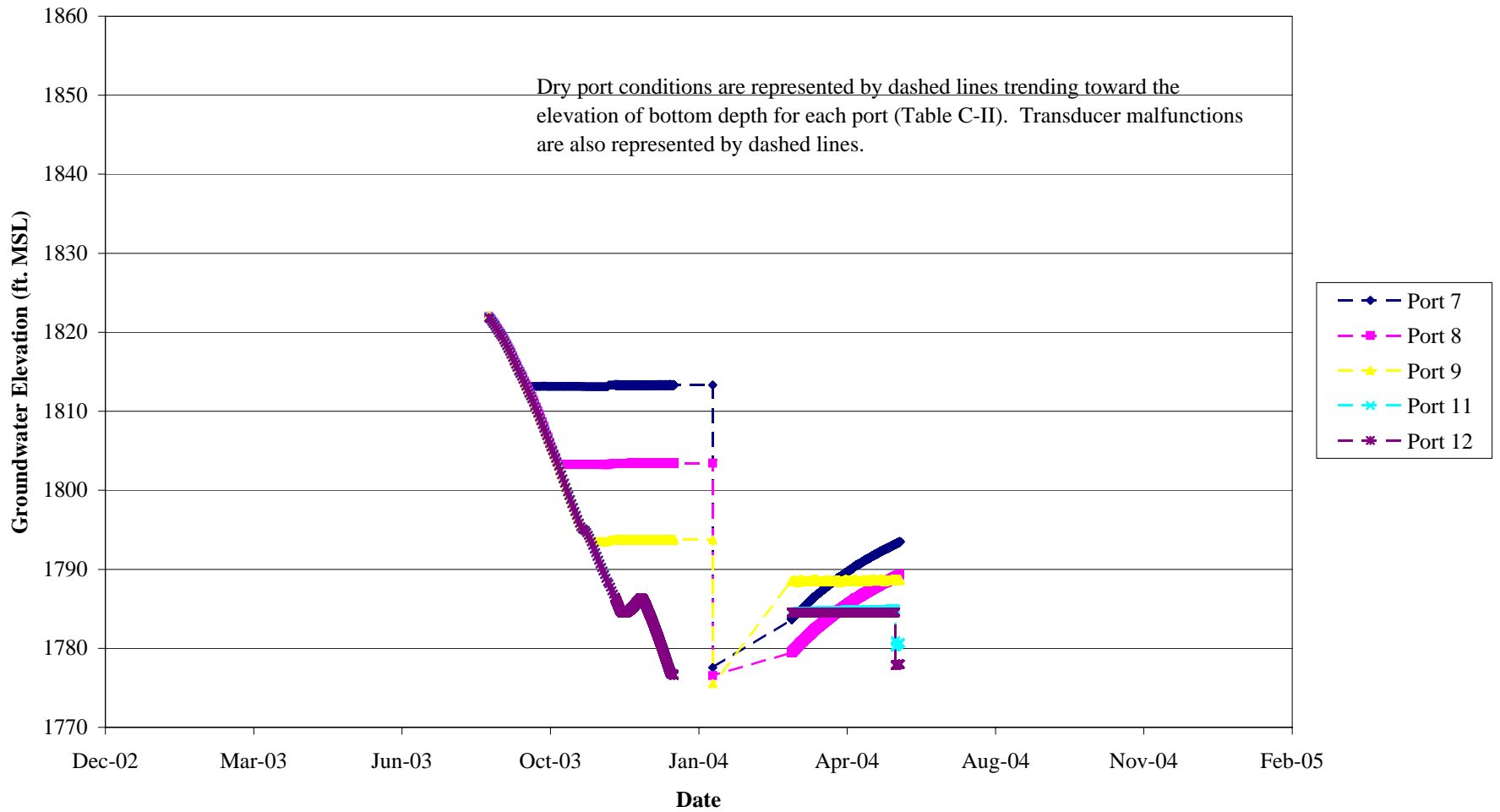


Dry port conditions are represented by dashed lines trending toward the elevation of bottom depth for each port (Table C-II).  
 Transducer malfunctions are also represented by dashed lines.

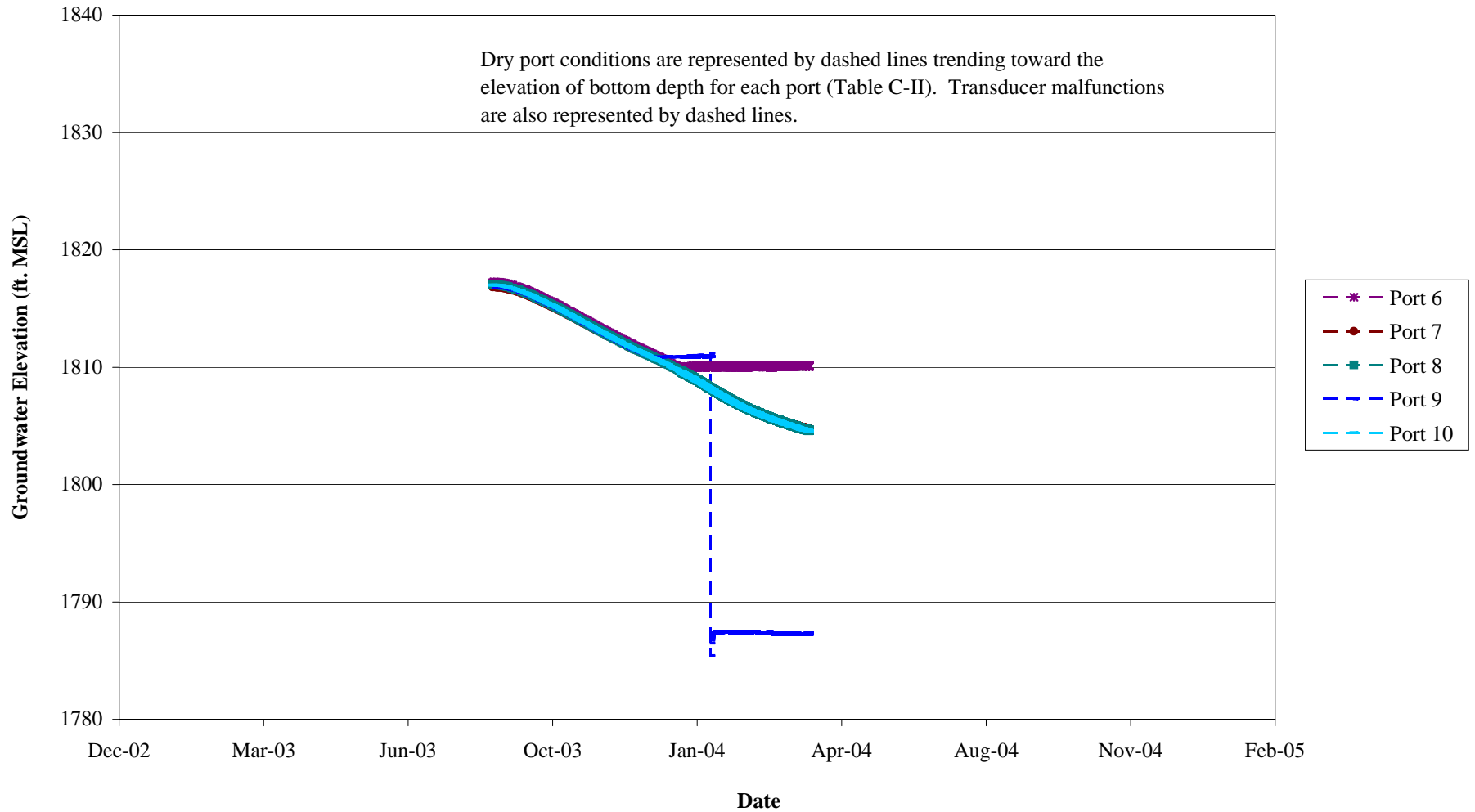
**Figure A-269**  
**Chatsworth Formation Well RD-72 FLUTe Hydrograph**



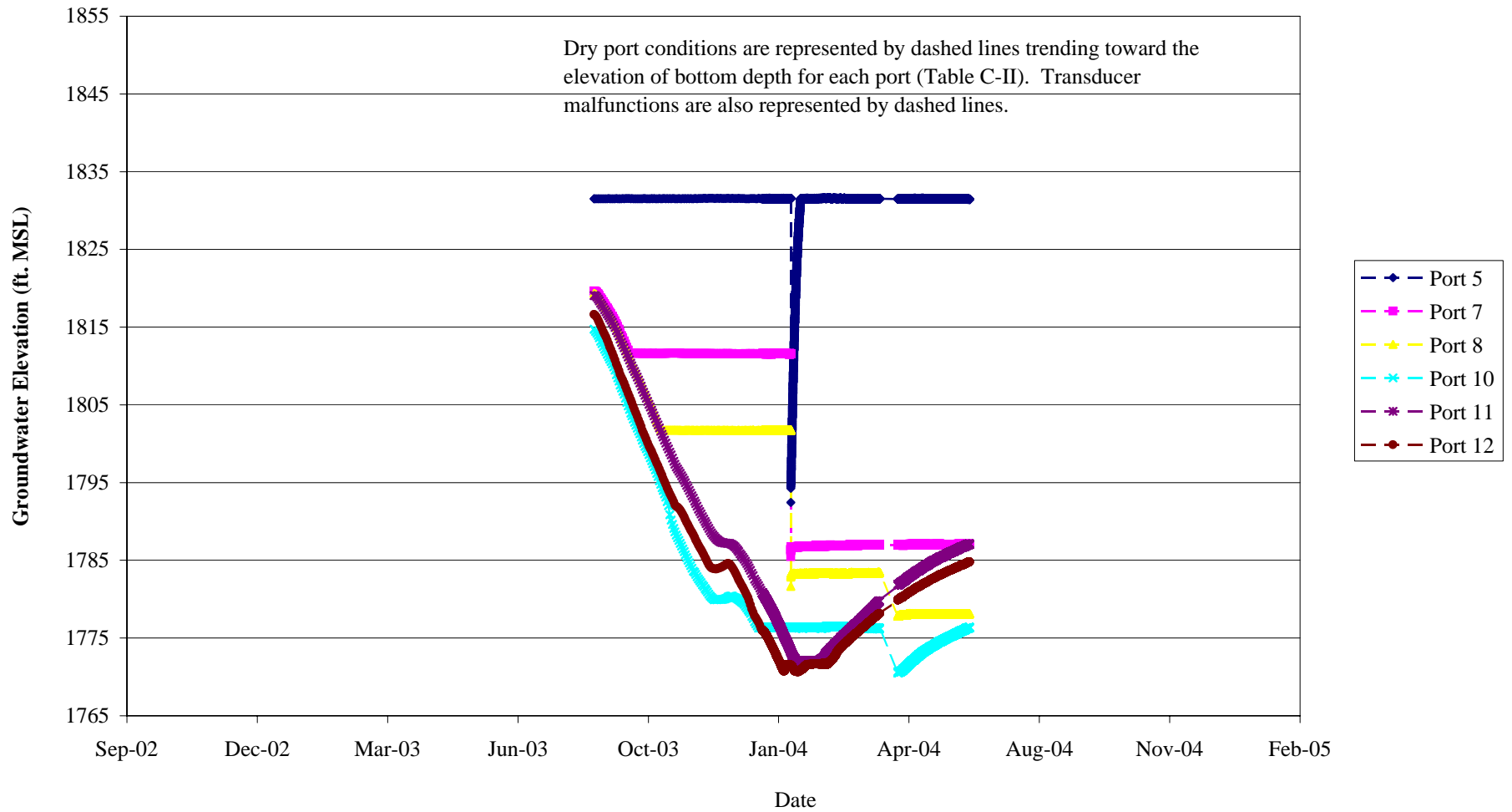
**Figure A-270**  
**Chatsworth Formation Well RD-73 FLUTe Hydrograph**



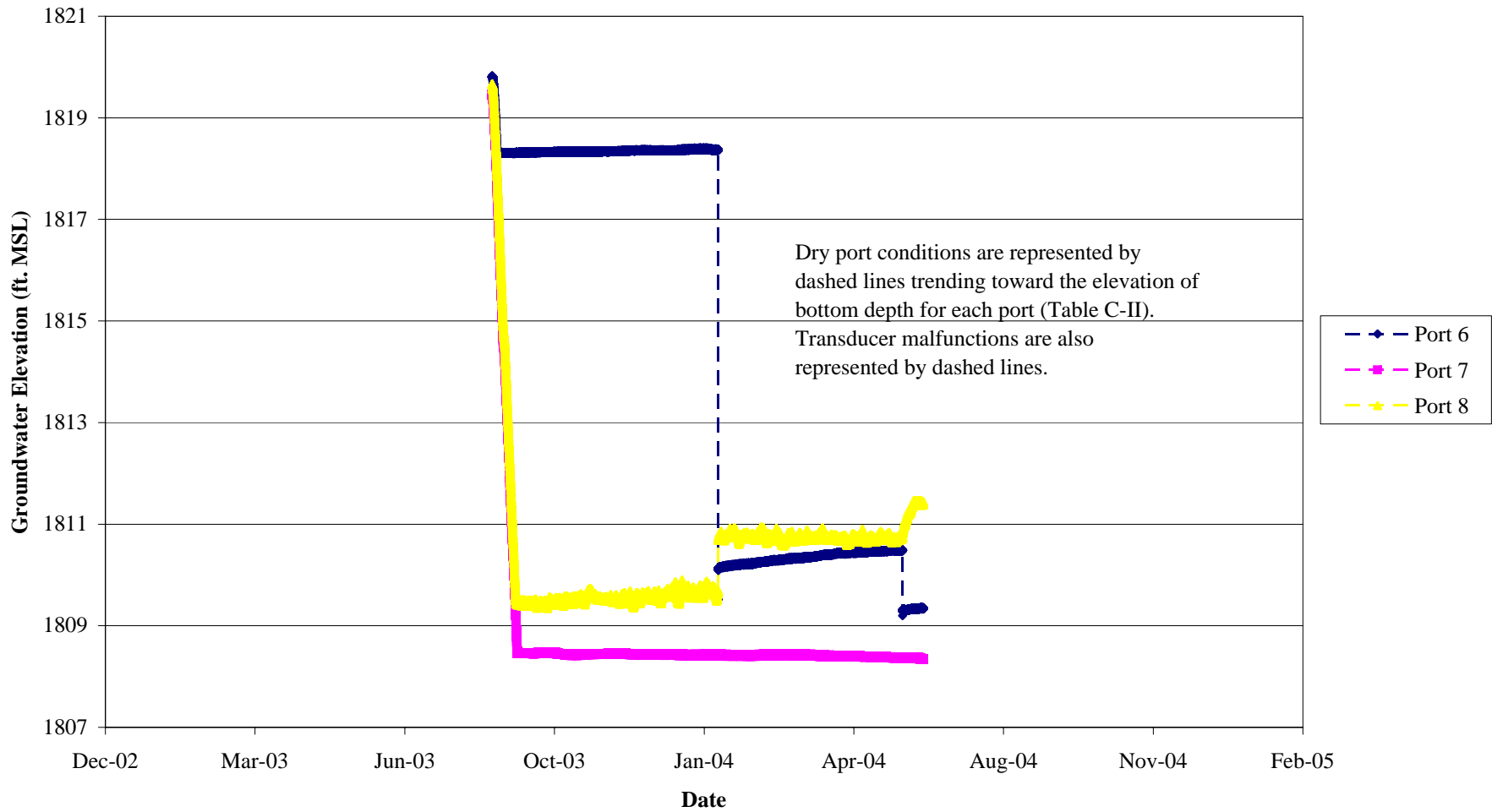
**Figure A-271**  
**Chatsworth Formation Well HAR-01 FLUTe Hydrograph**



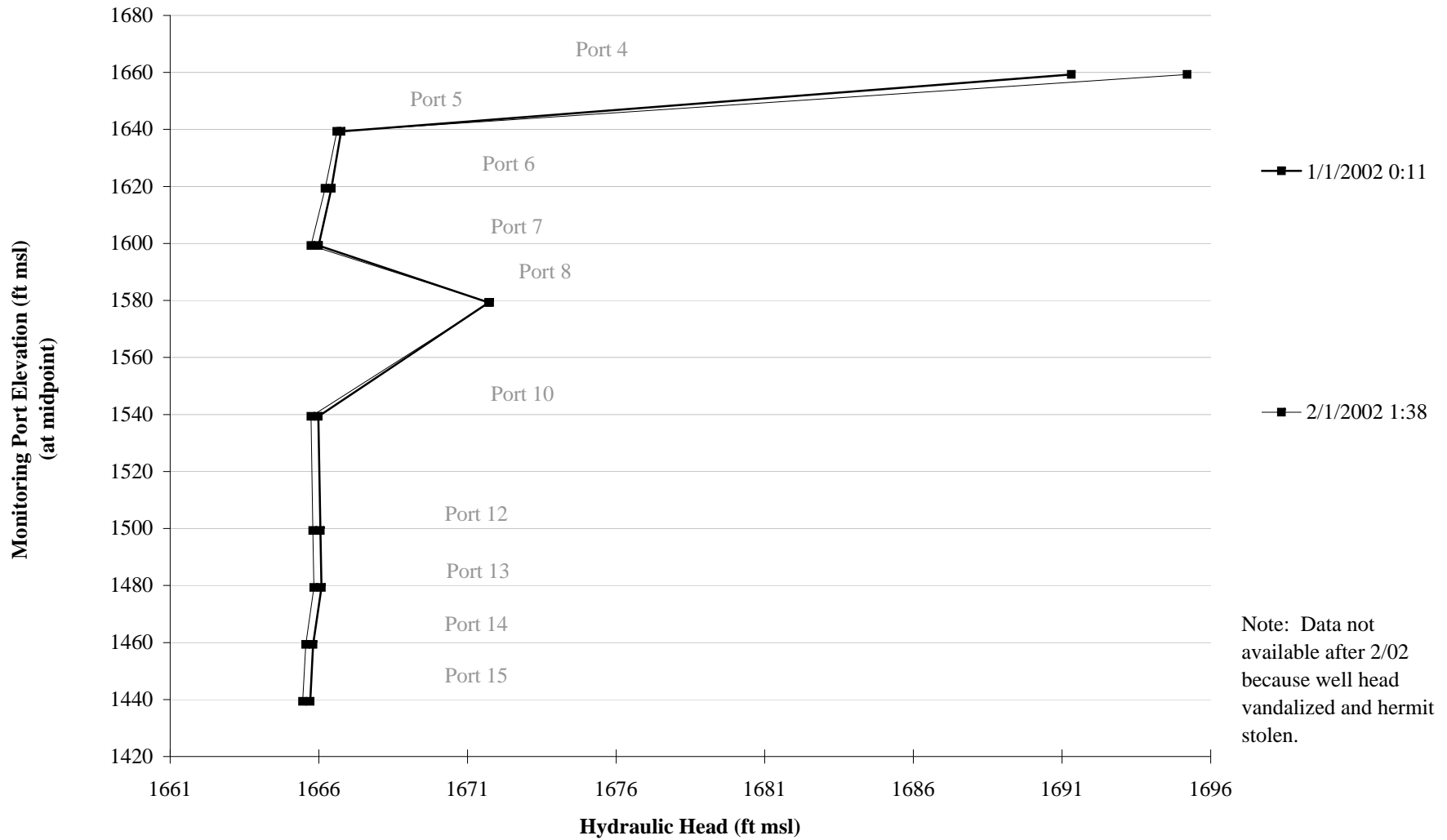
**Figure A-272**  
**Chatsworth Formation Well HAR-16 FLUTE Hydrograph**



**Figure A-273**  
**Chatsworth Formation Well HAR-24 FLUTE Hydrograph**



**Figure A-274**  
**Chatsworth Formation Well OS-24 FLUTE Transducer Measurements**



**APPENDIX B**

**Groundwater Monitoring Schedule**



**APPENDIX B  
GROUNDWATER MONITORING SCHEDULE**

**TABLE OF CONTENTS**

Groundwater Monitoring Schedule..... 1

**Tables**

B-I Summary of Sampling and Analyses for Wells, Piezometers, and Springs,  
Quarterly Groundwater Monitoring Program, 2007

## **APPENDIX B**

### **GROUNDWATER MONITORING SCHEDULE**

The groundwater monitoring program for 2007 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), the Happy Valley Interim Measures project (MWH, 2003f), the Perchlorate Characterization program (MWH, 2003e), the SMOU RFI program (Ogden, 2000), and the Area IV tritium investigation, and
- the DTSC requirement to “collect both filtered/unfiltered samples on a quarterly basis for five quarters in all groundwater monitoring wells in which metals are a contaminant of potential concern” (DTSC, 2007).

Table B-I presents a summary of the actual analytical program conducted on the quarterly groundwater samples in 2007. 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 FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis Method	Sample Type
Shallow Wells				
SH-11		05/23/07	8260B	Primary
RS-07		05/11/07	8260B	Primary
RS-11		02/28/07	8260B	Primary
RS-11		02/28/07	900.0	Primary
RS-11		02/28/07	901.1	Primary
RS-11		02/28/07	903.1	Primary
RS-11		02/28/07	904.0	Primary
RS-11		02/28/07	906.0	Primary
RS-11		02/28/07	908.0	Primary
RS-21		02/27/07	8260B	Primary
RS-21		08/07/07	8260B	Primary
RS-28		02/13/07	8260B	Primary
RS-28		02/13/07	900.0	Primary
RS-28		02/13/07	901.1	Primary
RS-28		02/13/07	903.1	Primary
RS-28		02/13/07	904.0	Primary
RS-28		02/13/07	906.0	Primary
RS-28		11/05/07	900.0	Primary
RS-28		11/05/07	903.1	Primary
RS-28		11/05/07	904.0	Primary
RS-54		02/15/07	7470A, Dissolved	Primary
RS-54		02/15/07	7470A, Total	Primary
RS-54		02/15/07	8082	Primary
RS-54		02/15/07	8260B	Primary
RS-54		02/15/07	8290	Primary
RS-54		02/15/07	8290	Split
RS-54		02/15/07	900.0	Primary
RS-54		02/15/07	901.1	Primary
RS-54		02/15/07	903.1	Primary
RS-54		02/15/07	904.0	Primary
RS-54		02/15/07	906.0	Primary
RS-54		02/15/07	907.0	Primary
RS-54		02/15/07	908.0	Primary
RS-54		02/15/07	Metals, diss (DTSC)	Primary
RS-54		02/15/07	Metals, total (DTSC)	Primary
RS-54		05/24/07	7470A, Total	Primary
RS-54		05/24/07	Metals, total (DTSC)	Primary
RS-54		11/05/07	8082	Primary
RS-54		11/05/07	8260B	Primary
RS-54		11/05/07	8270C	Primary
ES-01		05/10/07	8260B	Primary
ES-03		05/09/07	8260B	Primary
ES-06		05/14/07	8260B	Primary
ES-14		05/10/07	8260B	Primary
ES-17		02/23/07	8260B	Primary
ES-17		08/07/07	8260B	Primary
ES-21		02/20/07	7470A, Dissolved	Primary
ES-21		02/20/07	7470A, Total	Primary

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008

**TABLE B-I**

SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis Method	Sample Type
ES-21		02/20/07	8260B	Primary
ES-21		02/20/07	Metals, diss (DTSC)	Primary
ES-21		02/20/07	Metals, total (DTSC)	Primary
ES-21		05/10/07	7470A, Dissolved	Primary
ES-21		05/10/07	7470A, Total	Primary
ES-21		05/10/07	Metals, diss (DTSC)	Primary
ES-21		05/10/07	Metals, total (DTSC)	Primary
ES-21		08/07/07	7470A, Dissolved	Primary
ES-21		08/07/07	7470A, Total	Primary
ES-21		08/07/07	8260B	Primary
ES-21		08/07/07	Metals, diss (DTSC)	Primary
ES-21		08/07/07	Metals, total (DTSC)	Primary
ES-21		10/19/07	7470A, Dissolved	Primary
ES-21		10/19/07	7470A, Total	Primary
ES-21		10/19/07	Metals, diss (DTSC)	Primary
ES-21		10/19/07	Metals, total (DTSC)	Primary
ES-22		02/02/07	8260B	Primary
ES-22		08/07/07	8260B	Primary
ES-23		02/23/07	8260B	Primary
ES-23		08/08/07	8260B	Primary
ES-24		03/01/07	7470A, Dissolved	Primary
ES-24		03/01/07	7470A, Total	Primary
ES-24		03/01/07	8260B	Primary
ES-24		03/01/07	Metals, diss (DTSC)	Primary
ES-24		03/01/07	Metals, total (DTSC)	Primary
ES-24		05/14/07	7470A, Dissolved	Primary
ES-24		05/14/07	7470A, Total	Primary
ES-24		05/14/07	Metals, diss (DTSC)	Primary
ES-24		05/14/07	Metals, total (DTSC)	Primary
ES-24		08/29/07	7470A, Dissolved	Primary
ES-24		08/29/07	7470A, Total	Primary
ES-24		08/29/07	8260B	Primary
ES-24		08/29/07	Metals, diss (DTSC)	Primary
ES-24		08/29/07	Metals, total (DTSC)	Primary
ES-26		05/10/07	8260B	Primary
ES-26		08/07/07	8260B	Primary
ES-27		02/23/07	8260B	Primary
ES-27		08/07/07	8260B	Primary
ES-30		08/08/07	8260B	Primary
ES-31		02/28/07	8260B	Primary
ES-31		02/28/07	8260B	Dup
ES-31		02/28/07	900.0	Primary
ES-31		02/28/07	901.1	Primary
ES-31		02/28/07	903.1	Primary
ES-31		02/28/07	904.0	Primary
ES-31		02/28/07	906.0	Primary
ES-31		08/16/07	900.0	Primary
ES-31		08/16/07	903.1	Primary
ES-31		08/16/07	904.0	Primary

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008

**TABLE B-I**  
SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis Method	Sample Type
HAR-03		05/10/07	8260B	Primary
HAR-04		02/27/07	8260B	Primary
HAR-04		02/27/07	8260B	Dup
HAR-04		08/08/07	8260B	Primary
HAR-11		03/01/07	7470A, Dissolved	Primary
HAR-11		03/01/07	8260B	Primary
HAR-11		03/01/07	Metals, dissolved	Primary
HAR-14		05/08/07	AppIX	Primary
HAR-14		05/08/07	1625M	Dup
HAR-14		05/08/07	8290	Split
HAR-14		08/28/07	8290	Primary
HAR-14		08/28/07	8290	Dup
HAR-14		08/28/07	8290	Split
HAR-14		10/19/07	8260B	Primary
HAR-14		10/19/07	8290	Primary
HAR-15		05/08/07	AppIX	Primary
HAR-15		05/08/07	1625M	Dup
HAR-15		05/08/07	8290	Split
HAR-15		08/28/07	8290	Primary
HAR-15		08/28/07	8290	Dup
HAR-15		08/28/07	8290	Split
HAR-15		10/19/07	8260B	Primary
HAR-15		10/19/07	8290	Primary
HAR-27		03/01/07	8260B	Primary
HAR-27		03/01/07	8260B	Dup
HAR-27		08/29/07	8260B	Primary
HAR-27		08/29/07	8260B	Split
<b>Piezometers</b>				
PZ-047		05/23/07	7470A, Dissolved	Primary
PZ-047		05/23/07	Metals, dissolved	Primary
PZ-108		02/22/07	906.0	Primary
PZ-109		02/23/07	906.0	Primary
PZ-114		05/23/07	7470A, Dissolved	Primary
PZ-114		05/23/07	Metals, dissolved	Primary
PZ-114		08/24/07	7470A, Dissolved	Primary
PZ-114		08/24/07	Metals, dissolved	Primary
PZ-120		02/23/07	906.0	Primary
PZ-126		02/27/07	7470A, Dissolved	Primary
PZ-126		02/27/07	Metals, dissolved	Primary
PZ-126		05/23/07	7470A, Dissolved	Primary
PZ-126		05/23/07	Metals, dissolved	Primary
<b>Chatsworth Formation Wells</b>				
RD-01		02/15/07	COCs	Primary
RD-01		02/15/07	314.0	Primary
RD-01		05/09/07	COCs	Primary
RD-01		05/09/07	314.0	Primary
RD-01		05/09/07	314.0	Dup
RD-01		08/15/07	COCs	Primary
RD-01		08/15/07	314.0	Primary

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008

**TABLE B-I**

SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis Method	Sample Type
RD-01		10/23/07	COCs	Primary
RD-01		10/23/07	314.0	Primary
RD-01		10/23/07	8260B	Split
RD-02		02/13/07	COCs	Primary
RD-02		02/13/07	314.0	Primary
RD-02		05/21/07	COCs	Primary
RD-02		05/21/07	314.0	Primary
RD-02		05/21/07	8260B	Dup
RD-02		08/29/07	COCs	Primary
RD-02		08/29/07	314.0	Primary
RD-02		11/07/07	COCs	Primary
RD-02		11/07/07	314.0	Primary
RD-02		11/07/07	314.0	Dup
RD-02		11/07/07	8260B	Dup
RD-03		05/11/07	8260B	Primary
RD-03		08/28/07	8260B	Primary
RD-03		08/28/07	8260B	Dup
RD-04		02/13/07	COCs	Primary
RD-04		02/13/07	314.0	Primary
RD-04		02/13/07	7470A, Dissolved	Primary
RD-04		02/13/07	7470A, Total	Primary
RD-04		02/13/07	8260B	Primary
RD-04		02/13/07	Metals, diss (DTSC)	Primary
RD-04		02/13/07	Metals, total (DTSC)	Primary
RD-04		05/10/07	COCs	Primary
RD-04		05/10/07	314.0	Primary
RD-04		05/10/07	7470A, Dissolved	Primary
RD-04		05/10/07	7470A, Total	Primary
RD-04		05/10/07	Metals, diss (DTSC)	Primary
RD-04		05/10/07	Metals, total (DTSC)	Primary
RD-04		08/15/07	COCs	Primary
RD-04		08/15/07	314.0	Primary
RD-04		08/15/07	7470A, Dissolved	Primary
RD-04		08/15/07	7470A, Total	Primary
RD-04		08/15/07	Metals, diss (DTSC)	Primary
RD-04		08/15/07	Metals, total (DTSC)	Primary
RD-04		10/25/07	COCs	Primary
RD-04		10/25/07	1625M	Split
RD-04		10/25/07	314.0	Primary
RD-04		10/25/07	314.0	Split
RD-04		10/25/07	7470A, Dissolved	Primary
RD-04		10/25/07	7470A, Total	Primary
RD-04		10/25/07	Metals, diss (DTSC)	Primary
RD-04		10/25/07	Metals, total (DTSC)	Primary
RD-05A		02/08/07	8260B	Primary
RD-05A		08/10/07	8260B	Primary
RD-05B		02/13/07	8260B	Primary
RD-05B		05/17/07	8260B	Primary
RD-05B		05/17/07	8260B	Dup

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008

**TABLE B-I**

SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis Method	Sample Type
RD-05B		05/17/07	8260B	Split
RD-05B		08/16/07	8260B	Primary
RD-05B		10/31/07	8260B	Primary
RD-05B		10/31/07	8260B	Dup
RD-05C		02/08/07	8260B	Primary
RD-05C		02/08/07	8260B	Dup
RD-05C		05/17/07	8260B	Primary
RD-05C		08/10/07	8260B	Primary
RD-05C		10/30/07	8260B	Primary
RD-06		02/08/07	8260B	Primary
RD-06		05/11/07	8260B	Primary
RD-06		08/22/07	8260B	Primary
RD-06		11/01/07	8260B	Primary
RD-07	Z3	02/08/07	7470A, Dissolved	Primary
RD-07	Z3	02/08/07	8260B	Primary
RD-07	Z3	02/08/07	900.0	Primary
RD-07	Z3	02/08/07	901.1	Primary
RD-07	Z3	02/08/07	903.1	Primary
RD-07	Z3	02/08/07	904.0	Primary
RD-07	Z3	02/08/07	906.0	Primary
RD-07	Z3	02/08/07	907.0	Primary
RD-07	Z3	02/08/07	908.0	Primary
RD-07	Z3	02/08/07	Metals, dissolved	Primary
RD-07	Z3	05/21/07	7470A, Dissolved	Primary
RD-07	Z3	05/21/07	Metals, dissolved	Primary
RD-07	Z3	08/09/07	7470A, Dissolved	Primary
RD-07	Z3	08/09/07	8260B	Primary
RD-07	Z3	08/09/07	900.0	Primary
RD-07	Z3	08/09/07	903.1	Primary
RD-07	Z3	08/09/07	904.0	Primary
RD-07	Z3	08/09/07	906.0	Primary
RD-07	Z3	08/09/07	908.0	Primary
RD-07	Z3	08/09/07	Metals, dissolved	Primary
RD-07	Z3	11/06/07	7470A, Dissolved	Primary
RD-07	Z3	11/06/07	8015B (EFH)	Primary
RD-07	Z3	11/06/07	8082	Primary
RD-07	Z3	11/06/07	8270C	Primary
RD-07	Z3	11/06/07	Metals, dissolved	Primary
RD-09		02/14/07	COCs	Primary
RD-09		02/14/07	314.0	Primary
RD-09		02/14/07	7470A, Dissolved	Primary
RD-09		02/14/07	7470A, Total	Primary
RD-09		02/14/07	Metals, diss (DTSC)	Primary
RD-09		02/14/07	Metals, total (DTSC)	Primary
RD-09		05/15/07	COCs	Primary
RD-09		05/15/07	1625M	Split
RD-09		05/15/07	314.0	Primary
RD-09		05/15/07	7470A, Dissolved	Primary
RD-09		05/15/07	7470A, Total	Primary

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008

**TABLE B-I**

SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis Method	Sample Type
RD-09		05/15/07	Metals, diss (DTSC)	Primary
RD-09		05/15/07	Metals, total (DTSC)	Primary
RD-09		08/14/07	COCs	Primary
RD-09		08/14/07	1625M	Split
RD-09		08/14/07	314.0	Primary
RD-09		08/14/07	7470A, Dissolved	Primary
RD-09		08/14/07	7470A, Total	Primary
RD-09		08/14/07	Metals, diss (DTSC)	Primary
RD-09		08/14/07	Metals, total (DTSC)	Primary
RD-10		02/06/07	COCs	Primary
RD-10		02/06/07	1625M	Split
RD-10		02/06/07	314.0	Primary
RD-10		02/06/07	8260B	Dup
RD-10		02/06/07	8260B	Split
RD-10		05/09/07	COCs	Primary
RD-10		05/09/07	314.0	Primary
RD-10		08/15/07	COCs	Primary
RD-10		08/15/07	314.0	Primary
RD-10		10/23/07	COCs	Primary
RD-10		10/23/07	314.0	Primary
RD-10		10/23/07	8260B	Dup
RD-10		10/23/07	8270C	Dup
RD-10		10/23/07	8270C	Split
RD-13		02/22/07	8260B	Primary
RD-13		02/22/07	8260B	Split
RD-13		05/11/07	8260B	Primary
RD-13		05/11/07	8260B	Dup
RD-13		08/09/07	8260B	Primary
RD-13		10/26/07	8260B	Split
RD-13		10/26/07	8260B	Primary
RD-14		08/28/07	8015B (EFH)	Primary
RD-15		02/06/07	7470A, Dissolved	Primary
RD-15		02/06/07	8260B	Primary
RD-15		02/06/07	900.0	Primary
RD-15		02/06/07	901.1	Primary
RD-15		02/06/07	903.1	Primary
RD-15		02/06/07	904.0	Primary
RD-15		02/06/07	906.0	Primary
RD-15		02/06/07	908.0	Primary
RD-15		02/06/07	Metals, dissolved	Primary
RD-15		08/07/07	900.0	Primary
RD-15		08/07/07	900.0	Split
RD-15		08/07/07	903.1	Primary
RD-15		08/07/07	903.1	Split
RD-15		08/07/07	904.0	Primary
RD-15		08/07/07	904.0	Split
RD-16		02/21/07	8260B	Primary
RD-16		05/24/07	8260B	Primary
RD-16		08/10/07	8260B	Primary

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008



**TABLE B-I**

SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis Method	Sample Type
RD-16		10/30/07	8260B	Primary
RD-17		02/06/07	8260B	Primary
RD-17		02/06/07	900.0	Primary
RD-17		02/06/07	900.0	Split
RD-17		02/06/07	901.1	Primary
RD-17		02/06/07	901.1	Split
RD-17		02/06/07	903.1	Primary
RD-17		02/06/07	903.1	Split
RD-17		02/06/07	904.0	Primary
RD-17		02/06/07	904.0	Split
RD-17		02/06/07	906.0	Primary
RD-17		02/06/07	906.0	Split
RD-17		08/06/07	900.0	Primary
RD-17		08/06/07	903.1	Primary
RD-17		08/06/07	904.0	Primary
RD-18		02/28/07	8260B	Primary
RD-18		05/18/07	8260B	Primary
RD-18		08/14/07	7199, Dissolved	Primary
RD-18		08/14/07	7470A, Dissolved	Primary
RD-18		08/14/07	8260B	Primary
RD-18		08/14/07	Metals, dissolved	Primary
RD-18		10/23/07	8260B	Primary
RD-19		02/28/07	8260B	Primary
RD-19		02/28/07	8260B	Dup
RD-19		02/28/07	8260B	Split
RD-19		05/17/07	8260B	Primary
RD-19		08/08/07	8260B	Primary
RD-19		08/08/07	8260B	Dup
RD-21	Z2	02/07/07	7470A, Dissolved	Primary
RD-21	Z2	02/07/07	8260B	Primary
RD-21	Z2	02/07/07	Metals, dissolved	Primary
RD-21	Z2	02/07/07	906.0	Primary
RD-21	Z2	05/21/07	900.0	Primary
RD-21	Z2	05/21/07	901.1	Primary
RD-21	Z2	05/21/07	903.1	Primary
RD-21	Z2	05/21/07	904.0	Primary
RD-21	Z2	05/21/07	906.0	Primary
RD-21	Z2	05/21/07	908.0	Primary
RD-21	Z2	08/09/07	7470A, Dissolved	Primary
RD-21	Z2	08/09/07	8260B	Primary
RD-21	Z2	08/09/07	900.0	Primary
RD-21	Z2	08/09/07	903.1	Primary
RD-21	Z2	08/09/07	904.0	Primary
RD-21	Z2	08/09/07	908.0	Primary
RD-21	Z2	08/09/07	Metals, dissolved	Primary
RD-21	Z2	11/06/07	7470A, Dissolved	Primary
RD-21	Z2	11/06/07	Metals, dissolved	Primary
RD-22	Z2	02/07/07	7470A, Dissolved	Primary
RD-22	Z2	02/07/07	8260B	Primary

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008

**TABLE B-I**

SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis Method	Sample Type
RD-22	Z2	02/07/07	900.0	Primary
RD-22	Z2	02/07/07	901.1	Primary
RD-22	Z2	02/07/07	903.1	Primary
RD-22	Z2	02/07/07	904.0	Primary
RD-22	Z2	02/07/07	906.0	Primary
RD-22	Z2	02/07/07	Metals, dissolved	Primary
RD-22	Z2	05/21/07	8260B	Primary
RD-22	Z2	05/21/07	9014	Primary
RD-22	Z2	08/09/07	8260B	Primary
RD-22	Z2	08/09/07	900.0	Primary
RD-22	Z2	08/09/07	903.1	Primary
RD-22	Z2	08/09/07	904.0	Primary
RD-22	Z2	11/06/07	7470A, Dissolved	Primary
RD-22	Z2	11/06/07	8260B	Primary
RD-22	Z2	11/06/07	8260B	Split
RD-22	Z2	11/06/07	Metals, dissolved	Primary
RD-23	Z3	02/07/07	7470A, Dissolved	Primary
RD-23	Z3	02/07/07	8260B	Primary
RD-23	Z3	02/07/07	900.0	Primary
RD-23	Z3	02/07/07	901.1	Primary
RD-23	Z3	02/07/07	903.1	Primary
RD-23	Z3	02/07/07	904.0	Primary
RD-23	Z3	02/07/07	906.0	Primary
RD-23	Z3	02/07/07	908.0	Primary
RD-23	Z3	02/07/07	Metals, dissolved	Primary
RD-23	Z3	05/21/07	7470A, Total	Primary
RD-23	Z3	05/21/07	Metals, total	Primary
RD-23	Z3	08/09/07	7470A, Dissolved	Primary
RD-23	Z3	08/09/07	8260B	Primary
RD-23	Z3	08/09/07	900.0	Primary
RD-23	Z3	08/09/07	903.1	Primary
RD-23	Z3	08/09/07	904.0	Primary
RD-23	Z3	08/09/07	Metals, dissolved	Primary
RD-23	Z3	11/06/07	7470A, Dissolved	Primary
RD-23	Z3	11/06/07	Metals, dissolved	Primary
RD-24		05/24/07	8260B	Primary
RD-24		05/24/07	900.0	Primary
RD-24		05/24/07	901.1	Primary
RD-24		05/24/07	903.1	Primary
RD-24		05/24/07	904.0	Primary
RD-24		05/24/07	906.0	Primary
RD-24		08/08/07	8260B	Primary
RD-24		08/08/07	900.0	Primary
RD-24		08/08/07	901.1	Primary
RD-24		08/08/07	903.1	Primary
RD-24		08/08/07	904.0	Primary
RD-24		08/08/07	906.0	Primary
RD-26		02/23/07	8260B	Primary
RD-26		08/27/07	8260B	Primary

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008

**TABLE B-I**

SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis Method	Sample Type
RD-27		02/14/07	900.0	Primary
RD-27		02/14/07	900.0	Split
RD-27		02/14/07	901.1	Primary
RD-27		02/14/07	901.1	Split
RD-27		02/14/07	903.1	Primary
RD-27		02/14/07	903.1	Split
RD-27		02/14/07	904.0	Primary
RD-27		02/14/07	904.0	Split
RD-27		02/14/07	906.0	Primary
RD-27		02/14/07	906.0	Split
RD-27		02/21/07	8260B	Primary
RD-27		08/09/07	8260B	Primary
RD-27		08/09/07	900.0	Primary
RD-27		08/09/07	901.1	Primary
RD-27		08/09/07	903.1	Primary
RD-27		08/09/07	904.0	Primary
RD-27		08/09/07	906.0	Primary
RD-29		02/07/07	8260B	Primary
RD-29		02/07/07	900.0	Primary
RD-29		02/07/07	901.1	Primary
RD-29		02/07/07	903.1	Primary
RD-29		02/07/07	904.0	Primary
RD-29		02/07/07	906.0	Primary
RD-29		02/07/07	908.0	Primary
RD-29		08/08/07	900.0	Primary
RD-29		08/08/07	903.1	Primary
RD-29		08/08/07	904.0	Primary
RD-29		08/08/07	908.0	Primary
RD-30		05/24/07	8260B	Primary
RD-30		05/24/07	900.0	Primary
RD-30		05/24/07	901.1	Primary
RD-30		05/24/07	903.1	Primary
RD-30		05/24/07	904.0	Primary
RD-30		05/24/07	906.0	Primary
RD-30		08/21/07	8260B	Primary
RD-30		08/21/07	900.0	Primary
RD-30		08/21/07	901.1	Primary
RD-30		08/21/07	903.1	Primary
RD-30		08/21/07	904.0	Primary
RD-30		08/21/07	906.0	Primary
RD-32		02/20/07	8015B (GRO)	Primary
RD-32		02/20/07	8260B	Primary
RD-32		05/22/07	314.0	Primary
RD-32		05/22/07	8260B	Primary
RD-32		05/22/07	General Minerals	Primary
RD-32		08/27/07	8015B (GRO)	Primary
RD-32		08/27/07	8260B	Primary
RD-32		08/27/07	8260B	Dup
RD-32		08/27/07	8260B	Split

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008

**TABLE B-I**

SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis Method	Sample Type
RD-32		11/02/07	8260B	Primary
RD-33A	Z2	02/08/07	7470A, Dissolved	Primary
RD-33A	Z2	02/08/07	8260B	Primary
RD-33A	Z2	02/08/07	900.0	Primary
RD-33A	Z2	02/08/07	901.1	Primary
RD-33A	Z2	02/08/07	9014	Primary
RD-33A	Z2	02/08/07	903.1	Primary
RD-33A	Z2	02/08/07	904.0	Primary
RD-33A	Z2	02/08/07	906.0	Primary
RD-33A	Z2	02/08/07	Metals, dissolved	Primary
RD-33A	Z2	08/13/07	8260B	Primary
RD-33A	Z2	08/13/07	8260B	Dup
RD-33A	Z2	08/13/07	900.0	Primary
RD-33A	Z2	08/13/07	903.1	Primary
RD-33A	Z2	08/13/07	904.0	Primary
RD-33A	Z2	11/07/07	7470A, Dissolved	Primary
RD-33A	Z2	11/07/07	Metals, dissolved	Primary
RD-33B		02/07/07	8260B	Primary
RD-33B		02/07/07	900.0	Primary
RD-33B		02/07/07	901.1	Primary
RD-33B		02/07/07	9014	Primary
RD-33B		02/07/07	903.1	Primary
RD-33B		02/07/07	904.0	Primary
RD-33B		02/07/07	906.0	Primary
RD-33B		02/07/07	Metals, dissolved	Primary
RD-33B		02/07/07	7470A, Dissolved	Primary
RD-33B		05/23/07	8260B	Primary
RD-33B		08/14/07	8260B	Primary
RD-33B		08/14/07	900.0	Primary
RD-33B		08/14/07	903.1	Primary
RD-33B		08/14/07	904.0	Primary
RD-33B		08/14/07	906.0	Primary
RD-33C		02/06/07	8260B	Primary
RD-33C		02/06/07	900.0	Primary
RD-33C		02/06/07	901.1	Primary
RD-33C		02/06/07	9014	Primary
RD-33C		02/06/07	903.1	Primary
RD-33C		02/06/07	904.0	Primary
RD-33C		02/06/07	906.0	Primary
RD-33C		02/06/07	Metals, dissolved	Primary
RD-33C		02/06/07	7470A, Dissolved	Primary
RD-33C		05/23/07	8260B	Primary
RD-33C		05/23/07	8260B	Split
RD-33C		08/07/07	8260B	Primary
RD-33C		08/07/07	900.0	Primary
RD-33C		08/07/07	900.0	Split
RD-33C		08/07/07	903.1	Primary
RD-33C		08/07/07	903.1	Split
RD-33C		08/07/07	904.0	Primary

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008

**TABLE B-I**

SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis Method	Sample Type
RD-33C		08/07/07	904.0	Split
RD-33C		08/07/07	906.0	Primary
RD-33C		08/07/07	906.0	Split
RD-33C		11/01/07	8260B	Primary
RD-33C		11/01/07	8260B	Split
RD-34A		02/28/07	7470A, Dissolved	Primary
RD-34A		02/28/07	7470A, Total	Primary
RD-34A		02/28/07	8260B	Primary
RD-34A		02/28/07	900.0	Primary
RD-34A		02/28/07	901.1	Primary
RD-34A		02/28/07	9014	Primary
RD-34A		02/28/07	903.1	Primary
RD-34A		02/28/07	904.0	Primary
RD-34A		02/28/07	906.0	Primary
RD-34A		02/28/07	907.0	Primary
RD-34A		02/28/07	908.0	Primary
RD-34A		02/28/07	Metals, diss (DTSC)	Primary
RD-34A		02/28/07	Metals, total (DTSC)	Primary
RD-34A		05/23/07	7470A, Dissolved	Primary
RD-34A		05/23/07	7470A, Total	Primary
RD-34A		05/23/07	Metals, diss (DTSC)	Primary
RD-34A		05/23/07	Metals, total (DTSC)	Primary
RD-34A		08/15/07	7470A, Dissolved	Primary
RD-34A		08/15/07	7470A, Total	Primary
RD-34A		08/15/07	8260B	Primary
RD-34A		08/15/07	900.0	Primary
RD-34A		08/15/07	903.1	Primary
RD-34A		08/15/07	904.0	Primary
RD-34A		08/15/07	906.0	Primary
RD-34A		08/15/07	908.0	Primary
RD-34A		08/15/07	Metals, diss (DTSC)	Primary
RD-34A		08/15/07	Metals, total (DTSC)	Primary
RD-34A		10/31/07	7470A, Dissolved	Primary
RD-34A		10/31/07	7470A, Total	Primary
RD-34A		10/31/07	Metals, diss (DTSC)	Primary
RD-34A		10/31/07	Metals, total (DTSC)	Primary
RD-34B		08/14/07	7470A, Dissolved	Primary
RD-34B		08/14/07	8260B	Primary
RD-34B		08/14/07	9014	Primary
RD-34B		08/14/07	Metals, dissolved	Primary
RD-34B		08/14/07	900.0	Primary
RD-34B		08/14/07	901.1	Primary
RD-34B		08/14/07	903.1	Primary
RD-34B		08/14/07	904.0	Primary
RD-34B		08/14/07	906.0	Primary
RD-34B		08/14/07	908.0	Primary
RD-34C		02/07/07	7470A, Dissolved	Primary
RD-34C		02/07/07	8260B	Primary
RD-34C		02/07/07	900.0	Primary

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008

**TABLE B-I**

SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis Method	Sample Type
RD-34C		02/07/07	901.1	Primary
RD-34C		02/07/07	9014	Primary
RD-34C		02/07/07	903.1	Primary
RD-34C		02/07/07	904.0	Primary
RD-34C		02/07/07	906.0	Primary
RD-34C		02/07/07	Metals, dissolved	Primary
RD-34C		08/08/07	8260B	Primary
RD-34C		08/08/07	900.0	Primary
RD-34C		08/08/07	903.1	Primary
RD-34C		08/08/07	904.0	Primary
RD-34C		08/08/07	906.0	Primary
RD-36B		02/19/07	8015B (GRO)	Primary
RD-36B		02/19/07	8260B	Primary
RD-36B		05/22/07	314.0	Primary
RD-36B		05/22/07	General Minerals	Primary
RD-36B		08/24/07	8015B (GRO)	Primary
RD-36B		08/24/07	8260B	Primary
RD-36C		02/20/07	8015B (GRO)	Primary
RD-36C		02/20/07	8260B	Primary
RD-36C		05/23/07	314.0	Primary
RD-36C		05/23/07	General Minerals	Primary
RD-36C		08/24/07	8015B (GRO)	Primary
RD-36C		08/24/07	8260B	Primary
RD-36D		02/20/07	8015B (GRO)	Primary
RD-36D		02/20/07	8260B	Primary
RD-36D		05/22/07	314.0	Primary
RD-36D		05/22/07	General Minerals	Primary
RD-36D		08/24/07	8015B (GRO)	Primary
RD-36D		08/24/07	8260B	Primary
RD-36D		08/24/07	8260B	Dup
RD-37		02/21/07	8015B (GRO)	Primary
RD-37		02/21/07	8260B	Primary
RD-37		05/23/07	314.0	Primary
RD-37		05/23/07	8260B	Primary
RD-37		05/23/07	8260B	Dup
RD-37		05/23/07	General Minerals	Primary
RD-37		08/28/07	8015B (GRO)	Primary
RD-37		08/28/07	8260B	Primary
RD-37		11/02/07	8260B	Primary
RD-37		11/02/07	8260B	Dup
RD-37		11/02/07	8260B	Split
RD-38A		02/19/07	8015B (GRO)	Primary
RD-38A		02/19/07	8260B	Primary
RD-38A		05/24/07	314.0	Primary
RD-38A		05/24/07	General Minerals	Primary
RD-38A		08/28/07	8015B (GRO)	Primary
RD-38A		08/28/07	8260B	Primary
RD-38B		02/19/07	8015B (GRO)	Primary
RD-38B		02/19/07	8260B	Primary

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008

**TABLE B-I**

SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis Method	Sample Type
RD-38B		05/24/07	314.0	Primary
RD-38B		05/24/07	General Minerals	Primary
RD-38B		08/28/07	8015B (GRO)	Primary
RD-38B		08/28/07	8260B	Primary
RD-39A		03/02/07	8260B	Primary
RD-39B		02/22/07	8260B	Primary
RD-39B		02/22/07	8260B	Dup
RD-39B		02/22/07	8260B	Split
RD-39B		05/22/07	314.0	Primary
RD-39B		05/22/07	8260B	Primary
RD-39B		05/22/07	8260B	Dup
RD-39B		05/22/07	8260B	Split
RD-39B		05/22/07	General Minerals	Primary
RD-39B		08/29/07	8260B	Primary
RD-39B		08/29/07	8260B	Dup
RD-39B		10/30/07	8260B	Primary
RD-41A		02/14/07	COCs	Primary
RD-41A		02/14/07	314.0	Primary
RD-41A		05/16/07	COCs	Primary
RD-41A		05/16/07	314.0	Primary
RD-41A		08/20/07	COCs	Primary
RD-41A		08/20/07	314.0	Primary
RD-41A		08/20/07	8260B	Dup
RD-41A		10/29/07	COCs	Primary
RD-41A		10/29/07	314.0	Primary
RD-41A		10/29/07	8260B	Split
RD-41B		02/14/07	COCs	Primary
RD-41B		02/14/07	314.0	Primary
RD-41B		05/21/07	COCs	Primary
RD-41B		05/21/07	314.0	Primary
RD-41B		08/20/07	COCs	Primary
RD-41B		08/20/07	314.0	Primary
RD-41B		10/25/07	COCs	Primary
RD-41B		10/25/07	314.0	Primary
RD-43A		02/16/07	8260B	Primary
RD-43A		05/21/07	314.0	Primary
RD-43A		05/21/07	8260B	Primary
RD-43A		05/21/07	8260B	Split
RD-43A		05/21/07	General Minerals	Primary
RD-43A		08/23/07	8260B	Primary
RD-43A		10/31/07	8260B	Primary
RD-43A		10/31/07	8260B	Dup
RD-43A		10/31/07	8260B	Split
RD-43B		02/16/07	8260B	Primary
RD-43B		05/21/07	314.0	Primary
RD-43B		05/21/07	8260B	Primary
RD-43B		05/21/07	8260B	Dup
RD-43B		05/21/07	General Minerals	Primary
RD-43B		08/22/07	8260B	Primary

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008

**TABLE B-I**

SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis Method	Sample Type
RD-43B		10/31/07	8260B	Primary
RD-43C		02/16/07	8260B	Primary
RD-43C		02/16/07	8260B	Dup
RD-43C		05/21/07	314.0	Primary
RD-43C		05/21/07	8260B	Primary
RD-43C		05/21/07	8260B	Dup
RD-43C		05/21/07	General Minerals	Primary
RD-43C		08/23/07	8260B	Primary
RD-43C		10/31/07	8260B	Primary
RD-44		02/07/07	COCs	Primary
RD-44		02/07/07	314.0	Primary
RD-44		05/14/07	COCs	Primary
RD-44		05/14/07	314.0	Primary
RD-44		08/15/07	COCs	Primary
RD-44		08/15/07	314.0	Primary
RD-44		08/15/07	8260B	Dup
RD-44		10/24/07	COCs	Primary
RD-44		10/24/07	314.0	Primary
RD-45B		02/22/07	8260B	Primary
RD-45B		02/22/07	8260B	Dup
RD-45B		05/17/07	314.0	Primary
RD-45B		05/17/07	General Minerals	Primary
RD-45B		08/21/07	8260B	Primary
RD-45B		08/21/07	8260B	Dup
RD-45C		02/23/07	8260B	Primary
RD-45C		05/18/07	314.0	Primary
RD-45C		05/18/07	General Minerals	Primary
RD-45C		08/22/07	8260B	Primary
RD-46A		02/26/07	7470A, Dissolved	Primary
RD-46A		02/26/07	7470A, Total	Primary
RD-46A		02/26/07	8260B	Primary
RD-46A		02/26/07	Metals, diss (DTSC)	Primary
RD-46A		02/26/07	Metals, total (DTSC)	Primary
RD-46A		05/17/07	7470A, Dissolved	Primary
RD-46A		05/17/07	7470A, Total	Primary
RD-46A		05/17/07	Metals, diss (DTSC)	Primary
RD-46A		05/17/07	Metals, total (DTSC)	Primary
RD-46A		08/22/07	7470A, Dissolved	Primary
RD-46A		08/22/07	7470A, Total	Primary
RD-46A		08/22/07	8260B	Primary
RD-46A		08/22/07	Metals, diss (DTSC)	Primary
RD-46A		08/22/07	Metals, total (DTSC)	Primary
RD-46A		11/01/07	7470A, Dissolved	Primary
RD-46A		11/01/07	7470A, Total	Primary
RD-46A		11/01/07	Metals, diss (DTSC)	Primary
RD-46A		11/01/07	Metals, total (DTSC)	Primary
RD-47		02/02/07	314.0	Primary
RD-47		02/02/07	8260B	Primary
RD-47		08/03/07	8260B	Primary

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008



**TABLE B-I**

SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis Method	Sample Type
RD-48B		02/27/07	8260B	Primary
RD-48B		02/27/07	8260B	Dup
RD-48B		02/27/07	8260B	Split
RD-48B		05/17/07	8260B	Primary
RD-48B		05/17/07	8260B	Dup
RD-48B		05/17/07	8260B	Split
RD-48B		08/29/07	AppIX	Primary
RD-48B		08/29/07	1625M	Dup
RD-48B		10/31/07	8260B	Primary
RD-48C		02/27/07	8260B	Primary
RD-48C		05/16/07	8260B	Primary
RD-48C		05/16/07	8260B	Dup
RD-48C		08/23/07	8260B	Primary
RD-48C		08/23/07	8260B	Dup
RD-48C		10/30/07	8260B	Primary
RD-48C		10/30/07	8260B	Dup
RD-48C		10/30/07	8260B	Split
RD-49A		02/13/07	COCs	Primary
RD-49A		02/13/07	314.0	Primary
RD-49A		02/13/07	7470A, Dissolved	Primary
RD-49A		02/13/07	7470A, Total	Primary
RD-49A		02/13/07	Metals, diss (DTSC)	Primary
RD-49A		02/13/07	Metals, total (DTSC)	Primary
RD-49A		05/14/07	COCs	Primary
RD-49A		05/14/07	314.0	Primary
RD-49A		05/14/07	7470A, Dissolved	Primary
RD-49A		05/14/07	7470A, Total	Primary
RD-49A		05/14/07	Metals, diss (DTSC)	Primary
RD-49A		05/14/07	Metals, total (DTSC)	Primary
RD-49A		08/29/07	COCs	Primary
RD-49A		08/29/07	314.0	Primary
RD-49A		08/29/07	7470A, Total	Primary
RD-49A		08/29/07	Metals, total (DTSC)	Primary
RD-49A		11/07/07	300.0-Fluoride	Primary
RD-49A		11/07/07	300.0-Nitrate-NO3	Primary
RD-49A		11/07/07	350.3-Ammonia-N	Primary
RD-49A		11/07/07	8260B	Primary
RD-49A		11/07/07	8260SIM	Primary
RD-49A		11/07/07	8315	Primary
RD-49A		11/07/07	Metals, total (DTSC)	Primary
RD-49B		02/08/07	COCs	Primary
RD-49B		02/08/07	314.0	Primary
RD-49B		05/10/07	COCs	Primary
RD-49B		05/10/07	314.0	Primary
RD-49B		08/14/07	COCs	Primary
RD-49B		08/14/07	314.0	Primary
RD-49B		08/14/07	314.0	Dup
RD-49B		08/14/07	8260B	Dup
RD-49B		10/25/07	COCs	Primary

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008

**TABLE B-I**

SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis Method	Sample Type
RD-49B		10/25/07	314.0	Primary
RD-49B		10/25/07	8260B	Split
RD-49C		02/08/07	COCs	Primary
RD-49C		02/08/07	314.0	Primary
RD-49C		05/14/07	COCs	Primary
RD-49C		05/14/07	314.0	Primary
RD-49C		05/14/07	8260B	Dup
RD-49C		08/20/07	COCs	Primary
RD-49C		08/20/07	314.0	Primary
RD-49C		10/25/07	COCs	Primary
RD-49C		10/25/07	314.0	Primary
RD-50	Z2	02/07/07	8260B	Primary
RD-50	Z2	02/07/07	8260B	Dup
RD-50	Z2	08/10/07	8260B	Primary
RD-50	Z2	11/06/07	7470A, Dissolved	Primary
RD-50	Z2	11/06/07	Metals, dissolved	Primary
RD-51B		02/12/07	COCs	Primary
RD-51B		02/12/07	314.0	Primary
RD-51B		05/10/07	COCs	Primary
RD-51B		05/10/07	314.0	Primary
RD-51B		05/10/07	General Minerals	Primary
RD-51B		08/13/07	COCs	Primary
RD-51B		08/13/07	314.0	Primary
RD-51B		10/23/07	COCs	Primary
RD-51B		10/23/07	1625M	Dup
RD-51B		10/23/07	314.0	Primary
RD-51C		02/13/07	COCs	Primary
RD-51C		02/13/07	314.0	Primary
RD-51C		05/10/07	COCs	Primary
RD-51C		05/10/07	314.0	Primary
RD-51C		05/10/07	General Minerals	Primary
RD-51C		08/13/07	COCs	Primary
RD-51C		08/13/07	314.0	Primary
RD-51C		08/13/07	314.0	Split
RD-51C		08/13/07	8260SIM	Dup
RD-51C		08/13/07	8260SIM	Split
RD-51C		10/23/07	COCs	Primary
RD-51C		10/23/07	1625M	Dup
RD-51C		10/23/07	314.0	Primary
RD-51C		10/23/07	8260B	Dup
RD-51C		10/23/07	8260B	Split
RD-51C		10/23/07	8260SIM	Dup
RD-51C		10/23/07	8260SIM	Split
RD-52B		02/09/07	8260B	Primary
RD-52B		05/18/07	314.0	Primary
RD-52B		05/18/07	General Minerals	Primary
RD-52B		08/23/07	8260B	Primary
RD-52C		02/09/07	8260B	Primary
RD-52C		05/18/07	314.0	Primary

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008

**TABLE B-I**

SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis Method	Sample Type
RD-52C		05/18/07	8260B	Primary
RD-52C		05/18/07	8260B	Dup
RD-52C		05/18/07	General Minerals	Primary
RD-52C		08/23/07	8260B	Primary
RD-52C		11/01/07	8260B	Primary
RD-53		02/26/07	8015B (GRO)	Primary
RD-53		02/26/07	8260B	Primary
RD-53		08/22/07	8015B (GRO)	Primary
RD-53		08/22/07	8260B	Primary
RD-54A	Z2	02/07/07	7470A, Dissolved	Primary
RD-54A	Z2	02/07/07	8260B	Primary
RD-54A	Z2	02/07/07	900.0	Primary
RD-54A	Z2	02/07/07	901.1	Primary
RD-54A	Z2	02/07/07	903.1	Primary
RD-54A	Z2	02/07/07	904.0	Primary
RD-54A	Z2	02/07/07	906.0	Primary
RD-54A	Z2	02/07/07	907.0	Primary
RD-54A	Z2	02/07/07	908.0	Primary
RD-54A	Z2	02/07/07	Metals, dissolved	Primary
RD-54A	Z2	08/10/07	7470A, Dissolved	Primary
RD-54A	Z2	08/10/07	8260B	Primary
RD-54A	Z2	08/10/07	900.0	Primary
RD-54A	Z2	08/10/07	903.1	Primary
RD-54A	Z2	08/10/07	904.0	Primary
RD-54A	Z2	08/10/07	906.0	Primary
RD-54A	Z2	08/10/07	908.0	Primary
RD-54A	Z2	08/10/07	Metals, dissolved	Primary
RD-54A	Z2	11/07/07	7470A, Dissolved	Primary
RD-54A	Z2	11/07/07	Metals, dissolved	Primary
RD-54B		02/12/07	7470A, Dissolved	Primary
RD-54B		02/12/07	8260B	Primary
RD-54B		02/12/07	900.0	Primary
RD-54B		02/12/07	901.1	Primary
RD-54B		02/12/07	903.1	Primary
RD-54B		02/12/07	904.0	Primary
RD-54B		02/12/07	906.0	Primary
RD-54B		02/12/07	Metals, dissolved	Primary
RD-54B		08/14/07	7470A, Dissolved	Primary
RD-54B		08/14/07	8260B	Primary
RD-54B		08/14/07	900.0	Primary
RD-54B		08/14/07	903.1	Primary
RD-54B		08/14/07	904.0	Primary
RD-54B		08/14/07	906.0	Primary
RD-54B		08/14/07	Metals, dissolved	Primary
RD-54C		02/12/07	7470A, Dissolved	Primary
RD-54C		02/12/07	8260B	Primary
RD-54C		02/12/07	900.0	Primary
RD-54C		02/12/07	901.1	Primary
RD-54C		02/12/07	903.1	Primary

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008

**TABLE B-I**

SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis Method	Sample Type
RD-54C		02/12/07	904.0	Primary
RD-54C		02/12/07	906.0	Primary
RD-54C		02/12/07	Metals, dissolved	Primary
RD-54C		08/07/07	7470A, Dissolved	Primary
RD-54C		08/07/07	8260B	Primary
RD-54C		08/07/07	8260B	Split
RD-54C		08/07/07	900.0	Primary
RD-54C		08/07/07	903.1	Primary
RD-54C		08/07/07	904.0	Primary
RD-54C		08/07/07	906.0	Primary
RD-54C		08/07/07	Metals, dissolved	Primary
RD-54C		11/01/07	7470A, Dissolved	Primary
RD-54C		11/01/07	Metals, dissolved	Primary
RD-55A		02/12/07	COCs	Primary
RD-55A		02/12/07	314.0	Primary
RD-55A		02/12/07	7470A, Dissolved	Primary
RD-55A		02/12/07	7470A, Total	Primary
RD-55A		02/12/07	Metals, diss (DTSC)	Primary
RD-55A		02/12/07	Metals, total (DTSC)	Primary
RD-55A		05/17/07	COCs	Primary
RD-55A		05/17/07	314.0	Primary
RD-55A		05/17/07	7470A, Dissolved	Primary
RD-55A		05/17/07	7470A, Total	Primary
RD-55A		05/17/07	Metals, diss (DTSC)	Primary
RD-55A		05/17/07	Metals, total (DTSC)	Primary
RD-55A		08/14/07	COCs	Primary
RD-55A		08/14/07	314.0	Primary
RD-55A		08/14/07	7470A, Dissolved	Primary
RD-55A		08/14/07	7470A, Total	Primary
RD-55A		08/14/07	Metals, diss (DTSC)	Primary
RD-55A		08/14/07	Metals, total (DTSC)	Primary
RD-55A		10/29/07	COCs	Primary
RD-55A		10/29/07	314.0	Primary
RD-55A		10/29/07	314.0	Dup
RD-55A		10/29/07	7470A, Dissolved	Primary
RD-55A		10/29/07	7470A, Total	Primary
RD-55A		10/29/07	Metals, diss (DTSC)	Primary
RD-55A		10/29/07	Metals, total (DTSC)	Primary
RD-55B		02/13/07	COCs	Primary
RD-55B		02/13/07	314.0	Primary
RD-55B		05/17/07	COCs	Primary
RD-55B		05/17/07	314.0	Primary
RD-55B		08/14/07	COCs	Primary
RD-55B		08/14/07	314.0	Primary
RD-55B		10/29/07	COCs	Primary
RD-55B		10/29/07	314.0	Primary
RD-56B		02/09/07	8260B	Primary
RD-56B		05/23/07	8260B	Primary
RD-56B		08/21/07	8260B	Primary

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008

**TABLE B-I**

SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis Method	Sample Type
RD-56B		10/31/07	8260B	Primary
RD-57	Z7	02/08/07	7470A, Dissolved	Primary
RD-57	Z7	02/08/07	8260B	Primary
RD-57	Z7	02/08/07	900.0	Primary
RD-57	Z7	02/08/07	901.1	Primary
RD-57	Z7	02/08/07	903.1	Primary
RD-57	Z7	02/08/07	904.0	Primary
RD-57	Z7	02/08/07	906.0	Primary
RD-57	Z7	02/08/07	Metals, dissolved	Primary
RD-57	Z7	05/24/07	8260B	Primary
RD-57	Z7	05/24/07	8260B	Dup
RD-57	Z8	08/14/07	906.0	Primary
RD-57	Z8	11/07/07	7470A, Dissolved	Primary
RD-57	Z8	11/07/07	8260B	Primary
RD-57	Z8	11/07/07	Metals, dissolved	Primary
RD-58A		02/15/07	COCs	Primary
RD-58A		02/15/07	8260B	Dup
RD-58A		02/15/07	314.0	Primary
RD-58A		05/21/07	COCs	Primary
RD-58A		05/21/07	314.0	Primary
RD-58A		10/31/07	COCs	Primary
RD-58A		10/31/07	314.0	Primary
RD-58B		02/13/07	COCs	Primary
RD-58B		02/13/07	314.0	Primary
RD-58B		05/16/07	COCs	Primary
RD-58B		05/16/07	314.0	Primary
RD-58B		08/13/07	COCs	Primary
RD-58B		08/13/07	314.0	Primary
RD-58B		10/25/07	COCs	Primary
RD-58B		10/25/07	1625M	Split
RD-58B		10/25/07	314.0	Primary
RD-58B		10/25/07	314.0	Dup
RD-58C		02/09/07	8260B	Primary
RD-58C		08/20/07	8260B	Primary
RD-59A		02/28/07	7470A, Dissolved	Primary
RD-59A		02/28/07	8260B	Primary
RD-59A		02/28/07	900.0	Primary
RD-59A		02/28/07	901.1	Primary
RD-59A		02/28/07	903.1	Primary
RD-59A		02/28/07	904.0	Primary
RD-59A		02/28/07	906.0	Primary
RD-59A		02/28/07	Metals, dissolved	Primary
RD-59A		08/16/07	314.0	Primary
RD-59A		08/16/07	7470A, Dissolved	Primary
RD-59A		08/16/07	8260B	Primary
RD-59A		08/16/07	900.0	Primary
RD-59A		08/16/07	903.1	Primary
RD-59A		08/16/07	904.0	Primary
RD-59A		08/16/07	906.0	Primary

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008

**TABLE B-I**

SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier</b>	<b>Sample Port Number</b>	<b>Date Sampled</b>	<b>Analysis Method</b>	<b>Sample Type</b>
RD-59A		08/16/07	General Minerals	Primary
RD-59A		08/16/07	Metals, dissolved	Primary
RD-59A		10/25/07	7470A, Dissolved	Primary
RD-59A		10/25/07	8260B	Primary
RD-59A		10/25/07	Metals, dissolved	Primary
RD-59B		02/28/07	7470A, Dissolved	Primary
RD-59B		02/28/07	8260B	Primary
RD-59B		02/28/07	900.0	Primary
RD-59B		02/28/07	900.0	Split
RD-59B		02/28/07	901.1	Primary
RD-59B		02/28/07	901.1	Split
RD-59B		02/28/07	903.1	Primary
RD-59B		02/28/07	903.1	Split
RD-59B		02/28/07	904.0	Primary
RD-59B		02/28/07	904.0	Split
RD-59B		02/28/07	906.0	Primary
RD-59B		02/28/07	906.0	Split
RD-59B		02/28/07	Metals, dissolved	Primary
RD-59B		05/23/07	314.0	Primary
RD-59B		05/23/07	8260B	Primary
RD-59B		05/23/07	General Minerals	Primary
RD-59B		08/16/07	7470A, Dissolved	Primary
RD-59B		08/16/07	8260B	Primary
RD-59B		08/16/07	900.0	Primary
RD-59B		08/16/07	903.1	Primary
RD-59B		08/16/07	904.0	Primary
RD-59B		08/16/07	906.0	Primary
RD-59B		08/16/07	Metals, dissolved	Primary
RD-59B		10/25/07	8260B	Primary
RD-59C		02/28/07	7470A, Dissolved	Primary
RD-59C		02/28/07	8260B	Primary
RD-59C		02/28/07	900.0	Primary
RD-59C		02/28/07	901.1	Primary
RD-59C		02/28/07	903.1	Primary
RD-59C		02/28/07	904.0	Primary
RD-59C		02/28/07	906.0	Primary
RD-59C		02/28/07	Metals, dissolved	Primary
RD-59C		05/23/07	314.0	Primary
RD-59C		05/23/07	8260B	Primary
RD-59C		05/23/07	General Minerals	Primary
RD-59C		08/16/07	7470A, Dissolved	Primary
RD-59C		08/16/07	8260B	Primary
RD-59C		08/16/07	900.0	Primary
RD-59C		08/16/07	903.1	Primary
RD-59C		08/16/07	904.0	Primary
RD-59C		08/16/07	906.0	Primary
RD-59C		08/16/07	Metals, dissolved	Primary
RD-59C		10/25/07	8260B	Primary
RD-60		03/01/07	7470A, Dissolved	Primary

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008

**TABLE B-I**

SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis Method	Sample Type
RD-60		03/01/07	7470A, Total	Primary
RD-60		03/01/07	8015B (GRO)	Primary
RD-60		03/01/07	8260B	Primary
RD-60		03/01/07	Metals, diss (DTSC)	Primary
RD-60		03/01/07	Metals, total (DTSC)	Primary
RD-60		05/24/07	7470A, Dissolved	Primary
RD-60		05/24/07	7470A, Total	Primary
RD-60		05/24/07	Metals, diss (DTSC)	Primary
RD-60		05/24/07	Metals, total (DTSC)	Primary
RD-60		08/06/07	7470A, Dissolved	Primary
RD-60		08/06/07	7470A, Total	Primary
RD-60		08/06/07	8260B	Primary
RD-60		08/06/07	8260B	Split
RD-60		08/06/07	Metals, diss (DTSC)	Primary
RD-60		08/06/07	Metals, total (DTSC)	Primary
RD-60		10/30/07	7470A, Dissolved	Primary
RD-60		10/30/07	7470A, Total	Primary
RD-60		10/30/07	Metals, diss (DTSC)	Primary
RD-60		10/30/07	Metals, total (DTSC)	Primary
RD-61		02/26/07	8260B	Primary
RD-61		05/21/07	8260B	Primary
RD-61		05/21/07	8260B	Split
RD-61		08/06/07	8260B	Primary
RD-61		08/06/07	8260B	Split
RD-61		10/19/07	8260B	Split
RD-61		10/19/07	8260B	Primary
RD-62		02/26/07	8260B	Primary
RD-62		05/17/07	8260B	Primary
RD-62		08/22/07	8260B	Primary
RD-62		10/19/07	8260B	Primary
RD-63		05/24/07	8260B	Primary
RD-63		05/24/07	900.0	Primary
RD-63		05/24/07	900.0	Split
RD-63		05/24/07	901.1	Primary
RD-63		05/24/07	901.1	Split
RD-63		05/24/07	903.1	Primary
RD-63		05/24/07	903.1	Split
RD-63		05/24/07	904.0	Primary
RD-63		05/24/07	904.0	Split
RD-63		05/24/07	906.0	Primary
RD-63		05/24/07	906.0	Split
RD-63		08/21/07	8260B	Primary
RD-63		08/21/07	900.0	Primary
RD-63		08/21/07	903.1	Primary
RD-63		08/21/07	904.0	Primary
RD-63		08/21/07	906.0	Primary
RD-64	Z6	02/08/07	8260B	Primary
RD-64	Z6	02/08/07	900.0	Primary
RD-64	Z6	02/08/07	901.1	Primary

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008

**TABLE B-I**

SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis Method	Sample Type
RD-64	Z6	02/08/07	903.1	Primary
RD-64	Z6	02/08/07	904.0	Primary
RD-64	Z6	02/08/07	906.0	Primary
RD-64	Z6	02/08/07	908.0	Primary
RD-64	Z2	08/10/07	900.0	Primary
RD-64	Z2	08/10/07	903.1	Primary
RD-64	Z2	08/10/07	904.0	Primary
RD-64	Z2	08/10/07	908.0	Primary
RD-65	Z5	02/07/07	8260B	Primary
RD-66		02/16/07	8260B	Primary
RD-66		02/16/07	8260B	Dup
RD-66		02/16/07	8260B	Split
RD-66		05/22/07	314.0	Primary
RD-66		05/22/07	8260B	Primary
RD-66		05/22/07	General Minerals	Primary
RD-66		08/23/07	8260B	Primary
RD-66		10/30/07	8260B	Primary
RD-66		10/30/07	8260B	Dup
RD-66		10/30/07	8260B	Split
RD-67		02/06/07	8260B	Primary
RD-67		08/17/07	8260B	Primary
RD-68A		02/28/07	8260B	Primary
RD-68A		02/28/07	8260B	Dup
RD-68A		02/28/07	906.0	Primary
RD-68A		05/23/07	314.0	Primary
RD-68A		05/23/07	8260B	Primary
RD-68A		05/23/07	General Minerals	Primary
RD-68A		08/16/07	8260B	Primary
RD-68A		10/25/07	8260B	Primary
RD-68B		02/28/07	8260B	Primary
RD-68B		02/28/07	906.0	Primary
RD-68B		05/23/07	314.0	Primary
RD-68B		05/23/07	8260B	Primary
RD-68B		05/23/07	General Minerals	Primary
RD-68B		08/16/07	8260B	Primary
RD-68B		10/25/07	8260B	Primary
RD-68B		10/25/07	8260B	Dup
RD-68B		10/25/07	8260B	Split
RD-69		02/28/07	8260B	Primary
RD-69		08/20/07	8260B	Primary
RD-69		08/20/07	8260B	Dup
RD-70		02/26/07	8260B	Primary
RD-70		05/09/07	314.0	Primary
RD-70		05/09/07	8260B	Primary
RD-70		05/09/07	General Minerals	Primary
RD-70		08/03/07	8260B	Primary
RD-70		10/24/07	8260B	Primary
RD-71		10/26/07	314.0	Primary
RD-71		10/26/07	8260B	Primary

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008



**TABLE B-I**

SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis Method	Sample Type
RD-71		10/26/07	General Minerals	Primary
RD-73		02/15/07	300.0-Bromide	Primary
RD-73		02/15/07	314.0	Primary
RD-73		02/15/07	7470A, Dissolved	Primary
RD-73		02/15/07	7470A, Total	Primary
RD-73		02/15/07	8015B (GRO)	Primary
RD-73		02/15/07	8260B	Primary
RD-73		02/15/07	Metals, diss (DTSC)	Primary
RD-73		02/15/07	Metals, total (DTSC)	Primary
RD-73		05/14/07	300.0-Bromide	Primary
RD-73		05/14/07	314.0	Primary
RD-73		05/14/07	7470A, Dissolved	Primary
RD-73		05/14/07	7470A, Total	Primary
RD-73		05/14/07	Metals, diss (DTSC)	Primary
RD-73		05/14/07	Metals, total (DTSC)	Primary
RD-73		08/15/07	300.0-Bromide	Primary
RD-73		08/15/07	314.0	Primary
RD-73		08/15/07	314.0	Split
RD-73		08/15/07	7470A, Dissolved	Primary
RD-73		08/15/07	7470A, Total	Primary
RD-73		08/15/07	Metals, diss (DTSC)	Primary
RD-73		08/15/07	Metals, total (DTSC)	Primary
RD-73		10/23/07	300.0-Bromide	Primary
RD-73		10/23/07	314.0	Primary
RD-73		10/23/07	314.0	Split
RD-73		10/23/07	7470A, Dissolved	Primary
RD-73		10/23/07	7470A, Total	Primary
RD-73		10/23/07	Metals, diss (DTSC)	Primary
RD-73		10/23/07	Metals, total (DTSC)	Primary
RD-75		02/26/07	7470A, Dissolved	Primary
RD-75		02/26/07	Metals, dissolved	Primary
RD-75		05/24/07	314.0	Primary
RD-75		05/24/07	7470A, Dissolved	Primary
RD-75		05/24/07	General Minerals	Primary
RD-75		05/24/07	Metals, dissolved	Primary
RD-77		02/15/07	300.0-Bromide	Primary
RD-77		02/15/07	314.0	Primary
RD-77		02/15/07	7470A, Dissolved	Primary
RD-77		02/15/07	Metals, dissolved	Primary
RD-77		05/11/07	300.0-Bromide	Primary
RD-77		05/11/07	314.0	Primary
RD-77		05/11/07	General Minerals	Primary
RD-77		08/08/07	300.0-Bromide	Primary
RD-77		08/08/07	314.0	Primary
RD-77		10/19/07	300.0-Bromide	Primary
RD-77		10/19/07	314.0	Primary
RD-78		05/22/07	314.0	Primary
RD-78		05/22/07	General Minerals	Primary
RD-80		05/23/07	314.0	Primary

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008

**TABLE B-I**

SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis Method	Sample Type
RD-80		05/23/07	General Minerals	Primary
RD-81		05/18/07	314.0	Primary
RD-81		05/18/07	General Minerals	Primary
RD-82		05/15/07	314.0	Primary
RD-82		05/15/07	General Minerals	Primary
RD-83		05/21/07	314.0	Primary
RD-83		05/21/07	General Minerals	Primary
RD-84		05/24/07	314.0	Primary
RD-84		05/24/07	General Minerals	Primary
RD-85		08/23/07	7470A, Dissolved	Primary
RD-85		08/23/07	Metals, dissolved	Primary
RD-86		05/24/07	7470A, Dissolved	Primary
RD-86		05/24/07	7470A, Total	Primary
RD-86		05/24/07	Metals, diss (DTSC)	Primary
RD-86		05/24/07	Metals, total (DTSC)	Primary
RD-86		08/29/07	7199, Dissolved	Primary
RD-86		08/29/07	7199, Total	Primary
RD-86		08/29/07	7470A, Dissolved	Primary
RD-86		08/29/07	7470A, Total	Primary
RD-86		08/29/07	8015B (alcohol)	Primary
RD-86		08/29/07	8015B (EFH)	Primary
RD-86		08/29/07	8260B (alcohol)	Primary
RD-86		08/29/07	Metals, diss (DTSC)	Primary
RD-86		08/29/07	Metals, total (DTSC)	Primary
RD-86		10/23/07	7470A, Dissolved	Primary
RD-86		10/23/07	7470A, Total	Primary
RD-86		10/23/07	Metals, diss (DTSC)	Primary
RD-86		10/23/07	Metals, total (DTSC)	Primary
RD-87		02/22/07	906.0	Primary
RD-88		02/22/07	906.0	Primary
RD-90		02/23/07	906.0	Primary
RD-91		02/22/07	7470A, Dissolved	Primary
RD-91		02/22/07	906.0	Primary
RD-91		02/22/07	Metals, dissolved	Primary
RD-91		05/24/07	7470A, Dissolved	Primary
RD-91		05/24/07	Metals, dissolved	Primary
RD-91		08/14/07	7470A, Dissolved	Primary
RD-91		08/14/07	Metals, dissolved	Primary
RD-91		10/23/07	8290	Primary
RD-92		08/14/07	7470A, Dissolved	Primary
RD-92		08/14/07	Metals, dissolved	Primary
RD-93		02/22/07	906.0	Primary
RD-94		02/22/07	906.0	Primary
RD-95		02/22/07	906.0	Primary
RD-96		02/22/07	906.0	Primary
RD-97		02/22/07	906.0	Primary
HAR-06		02/22/07	7470A, Dissolved	Primary
HAR-06		02/22/07	Metals, dissolved	Primary
HAR-07		02/15/07	COCs	Primary

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008

**TABLE B-I**

SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis Method	Sample Type
HAR-07		02/15/07	314.0	Primary
HAR-07		02/15/07	7470A, Dissolved	Primary
HAR-07		02/15/07	7470A, Total	Primary
HAR-07		02/15/07	Metals, diss (DTSC)	Primary
HAR-07		02/15/07	Metals, total (DTSC)	Primary
HAR-07		05/08/07	AppIX	Primary
HAR-07		05/08/07	1625M	Dup
HAR-07		05/08/07	300.0-Fluoride	Primary
HAR-07		05/08/07	314.0	Primary
HAR-07		05/08/07	350.3-Ammonia-N	Primary
HAR-07		05/08/07	7470A, Total	Primary
HAR-07		05/08/07	8290	Split
HAR-07		05/08/07	8315	Primary
HAR-07		05/08/07	Metals, diss (DTSC)	Primary
HAR-07		05/08/07	Metals, total (DTSC)	Primary
HAR-07		08/16/07	COCs	Primary
HAR-07		08/16/07	314.0	Primary
HAR-07		08/16/07	7470A, Dissolved	Primary
HAR-07		08/16/07	7470A, Total	Primary
HAR-07		08/16/07	Metals, diss (DTSC)	Primary
HAR-07		08/16/07	Metals, total (DTSC)	Primary
HAR-07		11/06/07	COCs	Primary
HAR-07		11/06/07	314.0	Primary
HAR-07		11/06/07	7470A, Dissolved	Primary
HAR-07		11/06/07	7470A, Total	Primary
HAR-07		11/06/07	Metals, diss (DTSC)	Primary
HAR-07		11/06/07	Metals, total (DTSC)	Primary
HAR-08		02/15/07	COCs	Primary
HAR-08		02/15/07	314.0	Primary
HAR-08		05/15/07	COCs	Primary
HAR-08		05/15/07	314.0	Primary
HAR-08		08/16/07	COCs	Primary
HAR-08		08/16/07	314.0	Primary
HAR-08		10/29/07	COCs	Primary
HAR-08		10/29/07	1625M	Dup
HAR-08		10/29/07	314.0	Primary
HAR-08		10/29/07	314.0	Dup
HAR-08		10/29/07	314.0	Split
HAR-16		05/07/07	AppIX	Primary
HAR-16		05/07/07	1625M	Dup
HAR-16		05/07/07	7470A, Total	Primary
HAR-16		05/07/07	8290	Split
HAR-16		05/07/07	Metals, diss (DTSC)	Primary
HAR-16		05/07/07	Metals, total (DTSC)	Primary
HAR-16		08/28/07	7470A, Dissolved	Primary
HAR-16		08/28/07	7470A, Total	Primary
HAR-16		08/28/07	Metals, diss (DTSC)	Primary
HAR-16		08/28/07	Metals, total (DTSC)	Primary
HAR-16		10/22/07	7470A, Dissolved	Primary

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008

**TABLE B-I**

SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis Method	Sample Type
HAR-16		10/22/07	7470A, Total	Primary
HAR-16		10/22/07	8260B	Primary
HAR-16		10/22/07	8260B	Dup
HAR-16		10/22/07	Metals, diss (DTSC)	Primary
HAR-16		10/22/07	Metals, total (DTSC)	Primary
HAR-17		05/08/07	AppIX	Primary
HAR-17		05/08/07	1625M	Dup
HAR-17		05/08/07	8290	Split
HAR-17		11/07/07	8260B	Primary
HAR-18		02/22/07	COCs	Primary
HAR-18		02/22/07	314.0	Primary
HAR-18		02/22/07	7470A, Dissolved	Primary
HAR-18		02/22/07	7470A, Total	Primary
HAR-18		02/22/07	Metals, diss (DTSC)	Primary
HAR-18		02/22/07	Metals, total (DTSC)	Primary
HAR-18		05/15/07	COCs	Primary
HAR-18		05/15/07	314.0	Primary
HAR-18		05/15/07	7470A, Dissolved	Primary
HAR-18		05/15/07	7470A, Total	Primary
HAR-18		05/15/07	8260B	Split
HAR-18		05/15/07	Metals, diss (DTSC)	Primary
HAR-18		05/15/07	Metals, total (DTSC)	Primary
HAR-18		08/14/07	COCs	Primary
HAR-18		08/14/07	314.0	Primary
HAR-18		08/14/07	7470A, Dissolved	Primary
HAR-18		08/14/07	7470A, Total	Primary
HAR-18		08/14/07	Metals, diss (DTSC)	Primary
HAR-18		08/14/07	Metals, total (DTSC)	Primary
HAR-18		10/23/07	COCs	Primary
HAR-18		10/23/07	314.0	Primary
HAR-18		10/23/07	7470A, Dissolved	Primary
HAR-18		10/23/07	7470A, Total	Primary
HAR-18		10/23/07	Metals, diss (DTSC)	Primary
HAR-18		10/23/07	Metals, total (DTSC)	Primary
HAR-19		03/01/07	7470A, Dissolved	Primary
HAR-19		03/01/07	8290	Primary
HAR-19		03/01/07	8290	Split
HAR-19		03/01/07	Metals, dissolved	Primary
HAR-20		02/15/07	COCs	Primary
HAR-20		02/15/07	314.0	Primary
HAR-20		05/15/07	COCs	Primary
HAR-20		05/15/07	314.0	Primary
HAR-20		08/14/07	COCs	Primary
HAR-20		08/14/07	314.0	Primary
HAR-20		08/14/07	8260B	Dup
HAR-20		10/24/07	COCs	Primary
HAR-20		10/24/07	314.0	Primary
HAR-22		02/22/07	8260B	Primary
HAR-22		08/27/07	8260B	Primary

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008

**TABLE B-I**

SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier</b>	<b>Sample Port Number</b>	<b>Date Sampled</b>	<b>Analysis Method</b>	<b>Sample Type</b>
HAR-23		03/01/07	8260B	Primary
HAR-23		03/01/07	8260B	Dup
HAR-23		08/29/07	8260B	Primary
HAR-23		08/29/07	8260B	Dup
HAR-24		02/15/07	300.0-Bromide	Primary
HAR-24		02/15/07	314.0	Primary
HAR-24		02/15/07	8260B	Primary
HAR-24		02/15/07	8260B	Dup
HAR-24		02/15/07	8260B	Split
HAR-24		05/11/07	300.0-Bromide	Primary
HAR-24		05/11/07	314.0	Primary
HAR-24		08/08/07	300.0-Bromide	Primary
HAR-24		08/08/07	314.0	Primary
HAR-24		08/08/07	8260B	Primary
HAR-24		10/24/07	300.0-Bromide	Primary
HAR-24		10/24/07	314.0	Primary
HAR-25		02/15/07	300.0-Bromide	Primary
HAR-25		02/15/07	314.0	Primary
HAR-25		02/15/07	Metals, dissolved	Primary
HAR-25		05/11/07	300.0-Bromide	Primary
HAR-25		05/11/07	314.0	Primary
HAR-25		05/11/07	314.0	Split
HAR-25		08/08/07	300.0-Bromide	Primary
HAR-25		08/08/07	314.0	Primary
HAR-25		10/25/07	300.0-Bromide	Primary
HAR-25		10/25/07	314.0	Primary
HAR-25		10/25/07	314.0	Split
HAR-26		02/28/07	8260B	Primary
HAR-26		08/20/07	8260B	Primary
WS-04A		02/20/07	8260B	Primary
WS-04A		05/16/07	314.0	Primary
WS-04A		05/16/07	General Minerals	Primary
WS-04A		08/23/07	8260B	Primary
WS-05		02/27/07	COCs	Primary
WS-05		02/27/07	314.0	Primary
WS-05		02/27/07	8260B	Dup
WS-05		02/27/07	8260B	Split
WS-05		05/15/07	COCs	Primary
WS-05		05/15/07	314.0	Primary
WS-05		05/15/07	8260B	Dup
WS-05		08/21/07	COCs	Primary
WS-05		08/21/07	314.0	Primary
WS-05		08/21/07	8260B	Dup
WS-05		10/29/07	COCs	Primary
WS-05		10/29/07	1625M	Dup
WS-05		10/29/07	314.0	Primary
WS-05		10/29/07	8260B	Dup
WS-06		02/14/07	COCs	Primary
WS-06		02/14/07	314.0	Primary

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008

**TABLE B-I**

SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis Method	Sample Type
WS-06		05/15/07	COCs	Primary
WS-06		05/15/07	314.0	Primary
WS-06		05/15/07	8260B	Split
WS-06		08/21/07	COCs	Primary
WS-06		08/21/07	314.0	Primary
WS-06		10/24/07	COCs	Primary
WS-06		10/24/07	314.0	Primary
WS-09		02/14/07	COCs	Primary
WS-09		02/14/07	314.0	Primary
WS-09		02/14/07	7470A, Dissolved	Primary
WS-09		02/14/07	7470A, Total	Primary
WS-09		02/14/07	Metals, diss (DTSC)	Primary
WS-09		02/14/07	Metals, total (DTSC)	Primary
WS-09		05/10/07	COCs	Primary
WS-09		05/10/07	314.0	Primary
WS-09		05/10/07	7470A, Dissolved	Primary
WS-09		05/10/07	7470A, Total	Primary
WS-09		05/10/07	Metals, diss (DTSC)	Primary
WS-09		05/10/07	Metals, total (DTSC)	Primary
WS-09		08/21/07	COCs	Primary
WS-09		08/21/07	314.0	Primary
WS-09		08/21/07	7470A, Dissolved	Primary
WS-09		08/21/07	7470A, Total	Primary
WS-09		08/21/07	Metals, diss (DTSC)	Primary
WS-09		08/21/07	Metals, total (DTSC)	Primary
WS-09		10/25/07	COCs	Primary
WS-09		10/25/07	314.0	Primary
WS-09		10/25/07	7470A, Dissolved	Primary
WS-09		10/25/07	7470A, Total	Primary
WS-09		10/25/07	Metals, diss (DTSC)	Primary
WS-09		10/25/07	Metals, total (DTSC)	Primary
WS-09A		02/12/07	COCs	Primary
WS-09A		02/12/07	1625M	Split
WS-09A		02/12/07	314.0	Primary
WS-09A		02/12/07	7470A, Dissolved	Primary
WS-09A		02/12/07	7470A, Total	Primary
WS-09A		02/12/07	8260B	Primary
WS-09A		02/12/07	Metals, diss (DTSC)	Primary
WS-09A		02/12/07	Metals, total (DTSC)	Primary
WS-09A		05/09/07	COCs	Primary
WS-09A		05/09/07	314.0	Primary
WS-09A		05/09/07	7470A, Dissolved	Primary
WS-09A		05/09/07	7470A, Total	Primary
WS-09A		05/09/07	Metals, diss (DTSC)	Primary
WS-09A		05/09/07	Metals, total (DTSC)	Primary
WS-09A		08/09/07	COCs	Primary
WS-09A		08/09/07	314.0	Primary
WS-09A		08/09/07	7470A, Dissolved	Primary
WS-09A		08/09/07	7470A, Total	Primary

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008

**TABLE B-I**

SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier</b>	<b>Sample Port Number</b>	<b>Date Sampled</b>	<b>Analysis Method</b>	<b>Sample Type</b>
WS-09A		08/09/07	8270C	Dup
WS-09A		08/09/07	8270C	Split
WS-09A		08/09/07	Metals, diss (DTSC)	Primary
WS-09A		08/09/07	Metals, total (DTSC)	Primary
WS-09B		08/22/07	314.0	Primary
WS-09B		08/22/07	General Minerals	Primary
WS-12		05/21/07	314.0	Primary
WS-12		05/21/07	General Minerals	Primary
WS-13		05/22/07	314.0	Primary
WS-13		05/22/07	General Minerals	Primary
WS-14		10/29/07	314.0	Primary
WS-14		10/29/07	General Minerals	Primary
OS-02		02/28/07	8260B	Primary
OS-02		02/28/07	906.0	Primary
OS-02		05/23/07	314.0	Primary
OS-02		05/23/07	General Minerals	Primary
OS-03		05/23/07	314.0	Primary
OS-03		05/23/07	General Minerals	Primary
OS-04		02/28/07	8260B	Primary
OS-04		02/28/07	8260B	Dup
OS-04		02/28/07	906.0	Primary
OS-04		05/23/07	314.0	Primary
OS-04		05/23/07	General Minerals	Primary
OS-05		08/16/07	314.0	Primary
OS-05		08/16/07	General Minerals	Primary
OS-09		02/28/07	314.0	Primary
OS-09		02/28/07	8260B	Primary
OS-09		02/28/07	906.0	Primary
OS-09		02/28/07	Deuterium	Primary
OS-09		02/28/07	General Minerals	Primary
OS-09		02/28/07	Oxygen-18	Primary
OS-09		05/23/07	314.0	Primary
OS-09		05/23/07	Deuterium	Primary
OS-09		05/23/07	General Minerals	Primary
OS-09		05/23/07	Oxygen-18	Primary
OS-09		08/16/07	314.0	Primary
OS-09		08/16/07	314.0	Split
OS-09		08/16/07	8260B	Primary
OS-09		08/16/07	Deuterium	Primary
OS-09		08/16/07	General Minerals	Primary
OS-09		08/16/07	Oxygen-18	Primary
OS-10		05/23/07	314.0	Primary
OS-10		05/23/07	General Minerals	Primary
OS-16		11/02/07	314.0	Primary
OS-16		11/02/07	8260B	Primary
OS-16		11/02/07	General Minerals	Primary
OS-17		03/01/07	8260B	Primary
OS-17		03/01/07	8260B	Dup
OS-17		05/24/07	314.0	Primary

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008

**TABLE B-I**

SUMMARY OF SAMPLING AND ANALYSES FOR WELLS, PIEZOMETERS, AND SPRINGS  
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2007  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Well Identifier</b>	<b>Sample Port Number</b>	<b>Date Sampled</b>	<b>Analysis Method</b>	<b>Sample Type</b>
OS-17		05/24/07	General Minerals	Primary
OS-17		08/15/07	8260B	Primary
OS-26		03/02/07	8260B	Primary
OS-26		05/24/07	314.0	Primary
OS-26		05/24/07	General Minerals	Primary
OS-26		08/20/07	8260B	Primary
OS-26		08/20/07	8260B	Dup
OS-26		08/20/07	8260B	Split
OS-27		03/02/07	8260B	Primary
OS-27		05/24/07	314.0	Primary
OS-27		05/24/07	General Minerals	Primary
OS-28		03/01/07	1625M	Primary
OS-28		03/01/07	8260B	Primary
OS-28		05/24/07	314.0	Primary
OS-28		05/24/07	General Minerals	Primary
OS-28		08/15/07	1625M	Primary
OS-28		08/15/07	314.0	Primary
OS-28		08/15/07	8260B	Primary

See last page of Table B-I for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\Tables\2008-0228-HAI-SSFL\_M490\_B-I-F.xls

February 2008



**TABLE B-I**  
**NOTES AND ABBREVIATIONS**

Primary	= Primary sample.
Dup	= Duplicate sample.
Split	= Split sample.
Z	= FLUTe sample port number.

**ANALYTICAL METHODS**

120.1	= EPA method 120.1 for specific conductance.
150.1	= EPA method 150.1 for pH.
160.1	= EPA method 160.1 for total dissolved solids.
SM2320B	= EPA method SM2320B for alkalinity as CaCO <sub>3</sub> , bicarbonate, and carbonate.
1625M	= N-Nitrosodimethylamine, modified EPA method 1625.
300.0	= EPA method 300.0 for inorganics. Table B-I includes: 300.0-Bromide 300.0-Fluoride 300.0-Nitrate-NO <sub>3</sub> 300.0-Sulfate
314.0	= Perchlorate, EPA method 314.0.
350.3-Ammonia-N	= EPA method 350.3 for ammonia as nitrogen.
376.2	= EPA method 376.2 for sulfide.
504.1	= EPA method 504.1 for DBCP, EDB.
SRL 524M-TCP	= SRL method 524M-TCP for 1,2,3-Trichloropropane.
7199, Dissolved	= EPA method 7199 for hexavalent chromium. Dissolved hexavalent chromium was filtered and acidified in the field. Total hexavalent chromium was acidified in the field.
7199, Total	
7470A, Dissolved	= EPA method 7470A for mercury. Dissolved mercury was filtered and acidified in the field. Total mercury was acidified in the field.
7470A, Total	
8015B (GRO)	= EPA method 8015 revised for gasoline range organics.
8015B (EFH)	= EPA method 8015 revised for extractable fuel hydrocarbons.
8015B (alcohol)	= EPA method 8015B revised for ethanol, ethylene glycol, methanol.
8081A	= EPA method 8081A for pesticides.
8082	= EPA method 8082 for polychlorinated biphenyls (PCBs).
8141A	= EPA method 8141A for organophosphorus pesticides.
8151A	= EPA method 8151A for herbicides.
8260B	= EPA method 8260B for volatile organic compounds.
8260B (alcohol)	= EPA method 8260B for isopropyl alcohol.
8260SIM	= EPA method 8260SIM for 1,4-dioxane.
8270C	= EPA method 8270C for base/neutral and acid organic compounds.
8290	= EPA method 8290 for dioxins and furans.
8315	= EPA method 8315 for formaldehyde.
9014	= EPA method 9014 for total cyanide.
Metals, dissolved	= Metals including antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, manganese, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc using EPA method 6020; and iron using EPA method 6010B. Dissolved metals were filtered and acidified in the field. Total metals were acidified in the field.
Metals, total	
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. Total metals were acidified in the field.
Metals, total (DTSC)	
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, 8315, 300.0, and 350.3.
Deuterium	=	Mass spectrometry of stable isotope deuterium.
Oxygen-18	=	Mass spectrometry of stable isotope oxygen-18.
General Minerals	=	General minerals, including calcium, magnesium, potassium, sodium, bicarbonate, carbonate, chloride, nitrate, sulfate, total dissolved solids, pH, and specific conductance. Includes EPA methods 6010B, 300.0, 160.1, 150.1, 120.1, and method SM2320B.

**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 9014 for total cyanide
- EPA method 376.2 for sulfide
- Modified EPA method 1625 for N-nitrosodimethylamine
- EPA method 8290 for dioxins and furans
- 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 (Cs-134, Cs-137, Co-57, Co-60, Eu-152, Eu-154, Mn-54, K-40, Na-22)
- 903.1 = EPA method 903.1 for Ra-226
- 904.0 = EPA method 904.0 for Ra-228
- 905.0 = EPA method 905.0 for Sr-90
- 906.0 = EPA method 906.0 for tritium
- 907.0 = EPA method 907.0 for isotopic thorium
- 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.

Radiochemical samples are filtered and acidified in the field with the exception of tritium samples.

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 Construction Data**

**APPENDIX C  
MONITOR WELL CONSTRUCTION DATA**

**TABLE OF CONTENTS**

**Tables**

C-I Well Construction Data

C-II Construction Details of Discrete-Interval Monitoring Systems

**TABLE C-1**  
**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)				
<b>Shallow Wells</b>										
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

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\App C\2008-0228-HAI-SSFL\_M490\_C-I-F.xls

February 2008

**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-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
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 5-7/8	0 - 7 7 - 38	6-1/4 ---	0 - 7 ---	0 - 7	Open Hole	1846.66	08/09/93
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

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\App C\2008-0228-HAI-SSFL\_M490\_C-I-F.xls

February 2008

**TABLE C-1**  
**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-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
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

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\App C\2008-0228-HAI-SSFL\_M490\_C-I-F.xls

February 2008

**TABLE C-1**  
**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-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
<b>CHATSWORTH FORMATION</b>										
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		

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\App C\2008-0228-HAI-SSFL\_M490\_C-I-F.xls

February 2008



**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-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		
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 destroyed 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		

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\App C\2008-0228-HAI-SSFL\_M490\_C-I-F.xls

February 2008

**TABLE C-1**  
**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-28	IV	Well destroyed 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		
RD-31	I	543	12	0 - 30	8-1/4	0 - 30	0 - 30		1945.02	08/16/89
			6-1/2	30 - 175	---	---	---	Open Hole		08/16/89
			3-9/10	175 - 543	---	---	---	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		

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\App C\2008-0228-HAI-SSFL\_M490\_C-I-F.xls

February 2008

**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-35B	I	328	24	0 - 10	18	0 - 11	0 - 11	303 - 324	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			
			3	328 - 359	---	---	328 - 359			
RD-36A	OS	95	17-1/2	0 - 20	12-1/8	0 - 20	0 - 20	Open Hole	1913.09	01/14/94
			6-1/4	20 - 95	---	---				
RD-36B	OS	170	17-1/2	0 - 20.5	12-1/8	0 - 20.5	0 - 20.5	Open Hole	1915.26	03/13/94
			11-7/8	20.5 - 120	6-1/4	0 - 120	0 - 120			
			5-7/8	120 - 170	---	---				
RD-36C	OS	466	26	0 - 20	20	0 - 20	0 - 20	405 - 455.5	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			
RD-36D	OS	605	24-1/2	0 - 10	18	0 - 10	0 - 10	575 - 605	1920.08	09/10/97
			15	10 - 554	10	0 - 550	0 - 550			
			9-7/8	554 - 608	4	0 - 605	0 - 560			
RD-37	OS	400	17-1/2	0 - 38	12-1/8	0 - 38	0 - 38	272 - 377	1870.01	01/28/94
			11-7/8	38 - 260	4	0 - 377				
			7-7/8	260 - 400						
RD-38A	OS	120	17-1/2	0 - 20	12-1/8	0 - 20	0 - 20	Open Hole	1879.47	02/12/94
			6-1/2	20 - 120	---	---				
RD-38B	OS	370	24	0 - 6	18	0 - 6	0 - 6	Open Hole	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	---	---				
RD-39A	OS	159	17-1/2	0 - 20	12-1/8	0 - 20	0 - 20	Open Hole	1960.23	02/02/94
			6-1/2	20 - 159	---	---				
RD-39B	OS	477	24	0 - 12	16	0 - 12	0 - 12	440 - 470	1959.48	11/11/97
			15	12 - 213	10	0 - 210	0 - 213			
			9-1/2	213 - 477	4	0 - 470	0 - 424			
			6-1/2	477 - 500	---	---	477 - 500			

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\App C\2008-0228-HAI-SSFL\_M490\_C-I-F.xls

February 2008

**TABLE C-1**  
**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-40	II	300	12-1/4 6-1/4	0 - 19.5 19.5 - 300	8-1/4 ---	0 - 19.5 ---	0 - 19.5	Open Hole	1972.02	01/08/93
RD-41A	II	120	12-1/4 6-1/4	0 - 19.5 19.5 - 120	8-1/4 ---	0 - 19.5 ---	0 - 19.5	Open Hole	1774.48	01/10/93
RD-41B	II	390	17-1/2 11-7/8 5-7/8	0 - 19.5 19.5 - 340 340 - 390	12-1/8 6-1/4 ---	0 - 19.5 0 - 336 ---	0 - 19.5 0 - 340	Open Hole	1774.71	10/19/93
RD-41C	II	558	17-1/2 11-1/4 6-1/4	0 - 19.5 19.5 - 492 492 - 558	12-1/8 6-1/4 ---	0 - 19.5 0 - 491 ---	0 - 19.5 0 - 492	Open Hole	1773.73	10/05/93
RD-42	II	120	12-1/4 6-1/4	0 - 19.5 19.5 - 120	8-1/4 ---	0 - 19.5 ---	0 - 19.5	Open Hole	1945.46	01/09/93
RD-43A	OS	98	17-1/2 6-1/2	0 - 19.5 19.5 - 98	12-1/8 ---	0 - 19.5 ---	0 - 19.5	Open Hole	1680.16	09/09/94
RD-43B	OS	295	17-1/2 11-7/8 6-1/2	0 - 20 20 - 240.5 240.5 - 295	12-1/8 6-1/4 ---	0 - 20 0 - 240.5 ---	0 - 20 0 - 30.5 115.5 - 240.5	Open Hole	1680.21	10/25/94
RD-43C	OS	439.5	17-1/2 11-7/8 6-1/2	0 - 20 20 - 370 370 - 439.5	12-1/8 6-1/4 ---	0 - 20 0 - 370 ---	0 - 20 5 - 140 183 - 219 318 - 368	Open Hole	1679.31	10/10/94
RD-44	I	485	17-1/2 6-1/4	0 - 20 20 - 485	12-1/8 ---	0 - 20 ---	0 - 20	Open Hole	2035.92	03/13/93
RD-45A	I	480	17-1/2 6-1/2	0 - 19.5 19.5 - 480	12-1/8 ---	0 - 19.5 ---	0 - 19.5	Open Hole	1841.59	02/06/93
RD-45B	I	590	17-1/2 11-7/8 6-1/2	0 - 20 20 - 538 538 - 590	12-1/8 6-1/4 ---	0 - 20 0 - 538 ---	0 - 20 0 - 127 471 - 538	Open Hole	1840.09	09/11/94

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\App C\2008-0228-HAI-SSFL\_M490\_C-I-F.xls

February 2008

**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-45C	I	798	24	0 - 20	16	0 - 19	0 - 20	Open Hole	1835.74	08/26/94
			11-7/8	20 - 750	6-1/4	0 - 750	0 - 135			
			6-1/4	750 - 798	---	---	483 - 540 590 - 750			
RD-46A	I	140	12-1/4	0 - 29.5	8-1/4	0 - 29.5	0 - 29.5	Open Hole	1806.13	01/13/93
			6-1/4	29.5 - 140	---	---				
RD-46B	I	328	24	0 - 20	18	0 - 20	0 - 20	293 - 325	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			
			3	328 - 366	---	---	328 - 366			
RD-47	I	710	17-1/2	0 - 19	12-1/8	0 - 19	0 - 19	Open Hole	2045.72	04/01/93
			6-1/2	19.0 - 710	---	---				
RD-48A	UL-S	110	12-1/4	0 - 20	8-1/4	0 - 20	0 - 20	Open Hole	1736.54	03/15/93
			6-1/2	20 - 110	---	---				
RD-48B	UL-S	248	17-1/2	0 - 29.5	12-1/8	0 - 29.5	0 - 29.5	Open Hole	1735.40	05/26/93
			11-1/4	29.5 - 200	6-1/4	0 - 200	0 - 198.5			
			6-1/4	200 - 248	---	---				
RD-48C	UL-S	438	17-1/2	0 - 30	12-1/8	0 - 30	0 - 30	Open Hole	1734.95	05/16/93
			11-1/4	30 - 371	6-1/4	0 - 371	0 - 371			
			6-1/4	371 - 438	---	---				
RD-49A	II	50	12-3/4	0 - 18.5	8-1/4	0 - 18.5	0 - 18.5	Open Hole	1867.25	06/08/93
			6-1/4	18.5 - 50	---	---				
RD-49B	II	298	17-1/2	0 - 20	12-1/8	0 - 20	0 - 20	Open Hole	1867.95	06/14/93
			11-7/8	20 - 250	6-1/4	0 - 250	0 - 250			
			5-7/8	250 - 298	---	---				
RD-49C	II	558	17-1/2	0 - 19	12-1/8	0 - 19	0 - 19	Open Hole	1869.45	07/07/93
			11-7/8	19 - 500	6-1/4	0 - 491	0 - 491			
			6-1/4	500 - 558	---	---				
RD-50	IV	195	12-3/4	0 - 18.5	8-1/4	0 - 18.5	0 - 18.5	Open Hole	1914.88	05/28/93
			6-1/4	18.5 - 195	---	---				

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\App C\2008-0228-HAI-SSFL\_M490\_C-I-F.xls

February 2008

**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-51A	II	250	24	0 - 50	12-1/8	0 - 50	0 - 50	Open Hole	1832.51	07/11/91
			11-3/4	50 - 160	6-1/4	0 - 160	0 - 160			
			5-1/2	160 - 250	---	---				
RD-51B	II	370	24	0 - 48	12-1/8	0 - 48	0 - 48	Open Hole	1832.68	07/11/91
			11-3/4	48 - 300	6-1/4	0 - 300	0 - 300			
			5-1/2	300 - 370	---	---				
RD-51C	II	602	14	0 - 13.5	12-1/8	0 - 13.5	0 - 13.5	Open Hole	1831.65	07/09/91
			11-3/4	13.5 - 510	6-1/4	0 - 510	0 - 510			
			5-1/2	510 - 602	---	---				
RD-52A	I	137	12-1/4	0 - 19.5	8-1/4	0 - 19.5	0 - 19.5	Open Hole	1755.09	01/25/93
			6-1/2	19.5 - 137	---	---				
RD-52B	I	318	17-1/2	0 - 24	12-1/8	0 - 24	0 - 24	Open Hole	1712.15	12/06/93
			11-1/4	24 - 200	6-1/4	0 - 200	0 - 199			
			5-7/8	200 - 318	---	---				
RD-52C	I	678	17-1/2	0 - 20	12-1/8	0 - 20	0 - 20	Open Hole	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	---	---				
RD-53	I	159	14	0 - 20	12-1/8	0 - 20	0 - 20	Open Hole	1909.19	05/15/91
			12	20 - 77	6-1/4	0 - 77	0 - 77			
			5-1/2	77 - 159	---	---				
RD-54A	IV	278	17-1/2	0 - 19	12-1/8	0 - 19	0 - 19	Open Hole	1841.72	08/07/93
			11-1/4	19 - 119	6-1/4	0 - 119	0 - 119			
			5-7/8	119 - 278	---	---				
RD-54B	IV	437	17-1/2	0 - 19	12-1/8	0 - 19	0 - 19	Open Hole	1842.54	08/31/93
			11-1/4	19 - 379	6-1/4	0 - 379	0 - 379			
			5-7/8	379 - 437	---	---				
RD-54C	IV	638	17-1/2	0 - 20	12-1/8	0 - 20	0 - 20	Open Hole	1843.77	07/27/93
			11-1/4	20 - 558	6-1/4	0 - 557	0 - 557			
			6-1/4	558 - 638	---	---				

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\App C\2008-0228-HAI-SSFL\_M490\_C-I-F.xls

February 2008

**TABLE C-1**  
**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-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		
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		

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\App C\2008-0228-HAI-SSFL\_M490\_C-I-F.xls

February 2008

**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-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		
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		

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\App C\2008-0228-HAI-SSFL\_M490\_C-I-F.xls

February 2008



**TABLE C-1**  
**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-76	I	153	12-3/4	0 - 30	8	0 - 30	0 - 30	133 - 153	1772.27	12/03/03
			6	30 - 153	4	0 - 153	---			
			5-1/2	153-185	---	---	Fill 153-185			
RD-77	I	170	12-3/4	0 - 46	8	0 - 46	0 - 46	Open Hole	1918.48	12/03/03
			4-4/5	46 - 170	---	---				
RD-78	I	333	12-3/4	0 - 40	8	0 - 40	0 - 40	Open Hole	1819.84	12/09/03
			5-1/2	40 - 333	---	---				
RD-80	I	224	12-3/4	0 - 19	8	0 - 19	0 - 19	Open Hole	1740.18	12/01/03
			4-4/5	19 - 224	---	---				
RD-81	I	205	12-3/4	0 - 20	8	0 - 20	0 - 20	Open Hole	1705.77	06/14/04
			6	20 - 205	---	---				
RD-82	II	197	12-3/4	0 - 20	8	0 - 20	0 - 20	Open Hole	1676.73	06/09/04
			6	20 - 197	---	---				
RD-83	II	143	12-3/4	0 - 20	8	0 - 20	0 - 20	Open Hole	1661.18	06/16/04
			6	20 - 143	---	---				
RD-84	I	171	10	0 - 40	5	0 - 40	0 - 40	Open Hole	1907.83	12/15/03
			4	40 - 171	---	---				
RD-85	IV	90	13-3/8	0 - 20	8	0 - 20	0 - 20	Open Hole	1849.09	08/04/04
			5	20 - 90	---	---				
RD-86	IV	80	13-3/8	0 - 20	8	0 - 20	0 - 20	Open Hole	1830.51	08/09/04
			5	20 - 80	---	---				
RD-87	IV	60	13-3/8	0 - 20	8	0 - 20	0 - 20	Open Hole	1789.09	08/11/04
			5	20 - 60	---	---				
RD-88	IV	30	13-3/8	0 - 20	8	0 - 20	0 - 20	Open Hole	1774.62	08/16/04
			5	20 - 30	---	---				
RD-89	IV	50	13	0 - 30	8	0 - 30	0 - 30	Open Hole	1814.18	05/18/05
			3.8	30 - 50	---	---				
RD-90	IV	125	12-3/4	0 - 20	8	0 - 20	0 - 20	Open Hole	1784.75	03/11/04
			6	20 - 125	---	---				
RD-91	IV	140	12-3/4	0 - 20	8	0 - 20	0 - 20	Open Hole	1818.04	03/12/04
			6	20 - 140	---	---				

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\App C\2008-0228-HAI-SSFL\_M490\_C-I-F.xls

February 2008

**TABLE C-1**  
**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-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 of IV	35	13	0 - 20.5	8	0 - 20.5	0 - 20.5		1744.38	05/15/05
			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	8.625	0 - 20	0 - 20		1805.14	05/03/06
			4	20 - 90	---	---		Open Hole		
RD-97	UL, NW of IV	74.5	13	0 - 20	8.625	0 - 20	0 - 20		1792.22	04/28/06
			4	20 - 74.5	---	---		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		
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

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\App C\2008-0228-HAI-SSFL\_M490\_C-I-F.xls

February 2008

**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-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	Open Hole	1705.98	1956
			12	408 - 1768	---	---				
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	Open Hole	1878.23	1957
			12-3/4	40 - 1272	---	---				
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	Open Hole	1874.13	05/16/87
			8	30 - 110	---	---				
HAR-05	II	180	15	0 - 30	10-1/8	0 - 30	0 - 30	Open Hole	1812.65	05/16/87
			8	30 - 180	---	---				
HAR-06	II	160	15	0 - 30	10-1/8	0 - 30	0 - 30	Open Hole	1815.03	05/16/87
			8	30 - 160	---	---				
HAR-07	II	100	15	0 - 30	10-1/8	0 - 30	0 - 30	Open Hole	1728.38	05/20/87
			8	30 - 100	---	---				
HAR-08	II	130	15	0 - 30	10-1/8	0 - 30	0 - 30	Open Hole	1730.75	05/20/87
			8	30 - 130	---	---				
HAR-16	I	120	15	0 - 30	10-1/8	0 - 30	0 - 30	Open Hole	1872.31	05/20/87
			8	30 - 120	---	---				
HAR-17	II	100	15	0 - 30	10-1/8	0 - 30	0 - 30	Open Hole	1711.59	05/20/87
			8	30 - 100	---	---				
HAR-18	III	80	15	0 - 30	10-1/8	0 - 30	0 - 30	Open Hole	1749.41	05/20/87
			8	30 - 80	---	---				
HAR-19	II	220	15	0 - 30	10-1/8	0 - 30	0 - 30	Open Hole	1833.42	06/17/87
			8	30 - 220	---	---				
HAR-20	II	230	15	0 - 30	10-1/8	0 - 30	0 - 30	Open Hole	1830.47	06/16/87
			8	30 - 230	---	---				

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\App C\2008-0228-HAI-SSFL\_M490\_C-I-F.xls

February 2008

**TABLE C-1**  
**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-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			
<b>PRIVATE OFF-SITE WELLS AND SPRINGS</b>											
OS-01	OS	288	Unknown	Unknown	10	0 - 52	Unknown		1310.34	Unknown	
	(converted to RD-68B)				---	---		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 cable tools		8-1/4	0 - 59	0 - 30	30 - 60	1298.15	06/12/50	
					---	---		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	Well Construction Data Unresolved or Not Available									
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	Well Construction Data Unresolved or Not Available									
OS-13(S)	OS	Well Construction Data Unresolved or Not Available									
OS-15	OS	218	Drilled with cable tools		8-1/4	0 - 40	0 - 40		1404.86	08/27/60	
					---	---		Open Hole			
OS-16	OS	Well Construction Data Unresolved or Not Available							1785.05		

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\App C\2008-0228-HAI-SSFL\_M490\_C-I-F.xls

February 2008

**TABLE C-1**  
**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-17	OS	475	Drilled with cable tools		---	0 - 25			1564.07	04/64
OS-21	OS	Well Construction Data Unresolved or Not Available							1900.39	
OS-24	OS	515	10 6	0 - 40 40 - 515	6-1/4 ---	0 - 40	0 - 40		1947.30	12/02/87
OS-25	OS	515	10 6	0 - 36 36 - 515	6-1/4 ---	0 - 36	0 - 36		2043.58	12/10/87
OS-26	OS	515	10 6	0 - 40 40 - 515	6-1/4 ---	0 - 40	0 - 40		2080.58	11/16/87
OS-27	OS	477	10-1/4 6-1/8	0 - 30 30 - 477	10 6	0 - 5.5 0 - 30	0 - 30		2043.90	05/16/95
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.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\App C\2008-0228-HAI-SSFL\_M490\_C-I-F.xls

February 2008

**TABLE C-1**  
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 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.

Haley & Aldrich, Inc.

G:\Projects\26472\M490 2007 Annual\App C\2008-0228-HAI-SSFL\_M490\_C-II-F.xls

February 2008

**TABLE C-II**  
**CONSTRUCTION DETAILS OF 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.

Haley & Aldrich, Inc.

G:\Projects\26472\M490 2007 Annual\App C\2008-0228-HAI-SSFL\_M490\_C-II-F.xls



**TABLE C-II**  
**CONSTRUCTION DETAILS OF 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.

Haley & Aldrich, Inc.

G:\Projects\26472\M490 2007 Annual\App C\2008-0228-HAI-SSFL\_M490\_C-II-F.xls

February 2008

**TABLE C-II**  
**CONSTRUCTION DETAILS OF 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.

Haley & Aldrich, Inc.

G:\Projects\26472\M490 2007 Annual\App C\2008-0228-HAI-SSFL\_M490\_C-II-F.xls

February 2008

**TABLE C-II**  
**CONSTRUCTION DETAILS OF 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.

Haley & Aldrich, Inc.

G:\Projects\26472\M490 2007 Annual\App C\2008-0228-HAI-SSFL\_M490\_C-II-F.xls

February 2008

**TABLE C-II**

CONSTRUCTION DETAILS OF 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.

Haley & Aldrich, Inc.

G:\Projects\26472\M490 2007 Annual\App C\2008-0228-HAI-SSFL\_M490\_C-II-F.xls

February 2008

**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).

**APPENDIX D**

**QUALITY ASSURANCE ASSESSMENT**

## TABLE OF CONTENTS

	<b>Page</b>
<b>1. OVERVIEW</b>	<b>1</b>
<b>2. INTRODUCTION</b>	<b>2</b>
2.1 Quality Assurance/Quality Control (QA/QC) Procedures	2
<b>3. QA/QC EVALUATION</b>	<b>4</b>
3.1 Field Data	4
3.1.1 Pre-Sampling Water Levels	4
3.1.2 Groundwater Sample Collection	4
3.1.3 QA/QC Sample Collection	4
3.1.4 Water Quality Parameter Measurements	5
3.2 Analytical Data	5
3.2.1 Comparison with Historical Water Quality Data	5
3.2.2 Lab Performance Comparison	5
3.2.3 Field Duplicate Sample Precision	5
3.2.4 Data Representativeness, Reproducibility, and Completeness	5
3.2.5 Contract-Required Minimum Detectable Activity	6
3.2.6 Data Usability Summary	7
3.2.6.1 Chain of Custody Procedures	7
3.2.6.2 Preservation/Holding Time Compliance	8
3.2.6.3 Blank Sample Analyses	8
3.2.6.4 Surrogate Recovery Limit Exceedance	9
3.2.6.5 Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analyses	10
3.2.6.6 Matrix Spike/Matrix Spike Duplicate (MS/MSD) Sample Analyses	10
3.2.6.7 Data Qualification of Samples by MECX	10
3.2.6.8 Sample Data Reporting	11
3.2.6.9 Data Qualifiers	11
3.2.6.10 Summary	11

**TABLE OF CONTENTS**  
**(Continued)**

**LIST OF TABLES**

<b>Table No.</b>	<b>Title</b>
D-I	Summary of 2007 Split Sample Results
D-II	Summary of 2007 Duplicate Sample Results
D-III	Summary 2007 Data Qualification Due to Preservation/Holding Time Exceedance
D-IV	Summary 2007 Data Qualification Due to Blank Sample Contamination
D-V	Summary of 2007 Data Qualification Due to Surrogate Recovery Exceedance
D-VI	Summary of 2007 Data Qualification Due to LCS/LCSD, MS/MSD Recovery Exceedance
D-VII	Summary of 2007 Data Qualification of Samples by MECX



## **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 2007 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
TestAmerica-Irvine	TA-Irvine	Irvine, California
Severn Trent Laboratories-Sacramento	STL-SA	Sacramento, California
TestAmerica-Sacramento (formerly STL-SA)	TA-SA	Sacramento, California
Severn Trent Laboratories - Knoxville	STL-Knoxville	Knoxville, Tennessee
TestAmerica -Knoxville (formerly STL-Knoxville)	TA-Knoxville	Knoxville, Tennessee
TestAmerica -Phoenix	TA- Phoenix	Phoenix, Arizona
TestAmerica-Richland	TA-Richland	Richland, Washington
Lancaster Laboratories	Lancaster	Lancaster, Pennsylvania
Pacific Analytical	Pacific	Carlsbad, California
Eberline Services	Eberline	Richmond, California
Vista Analytical Laboratory	Vista	El Dorado Hills, California
Weck Laboratories	Weck	City of Industry, California
SGS Environmental Services, Inc.	SGS	Wilmington, North Carolina
G.G. Hatch Laboratories	GGHatch	Ottawa, Ontario, Canada

TestAmerica of Irvine, California served as the primary laboratory for all analyses except for the following:

Primary Lab	Analytes	Quarter(s)
Pacific	N-Nitrosodimethylamine	1,2,3,4
Eberline	Radiochemistry	1,2,3,4
GGHatch	Oxygen-18 and deuterium	1,2,3
Vista	Dioxins/Furans	1,2
TA-Knoxville	Dioxins/Furans	3,4
Lancaster	VOCs	RD-02, RD-24, RD-30, RD-41B, and RD-63 during the second quarter
	VOCs	3,4
	Perchlorate	4

Split samples were analyzed by the laboratories listed below.

Split Lab	Analytes	Quarter(s)
STL-SA	VOCs	1,2
TA-Irvine	VOCs	3,4
Lancaster	VOCs	HAR-18 and WS-06 during the second quarter
TA-Phoenix	1,4-Dioxane	3,4
TA-Richland	Radiochemistry	1,2,3
SGS	Dioxins/Furans	1
STL-Knoxville	Dioxins/Furans	2
Vista	Dioxins/Furans	3
Weck	N-Nitrosodimethylamine	1,2,3,4
STL-SA	Perchlorate	2
TA-SA	Perchlorate	3
TA-Irvine	Perchlorate	4

Haley & Aldrich field and analytical data reviews are summarized below.

Completeness values presented in this summary were calculated using the following equation:

$$C = \left[ 1 - \frac{\text{number of incomplete results}}{\text{total number requested}} \right] \times 100$$

### 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. One well equipped with a FLUTE system was not monitored because the datalogger had been removed.

Water Level Monitoring	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Number of locations scheduled	279	277	273	274
Number of locations monitored	276	274	272	273
Completeness value	99%	99%	>99%	>99%

##### 3.1.2 Groundwater Sample Collection

During each quarterly sampling event, the number of wells and piezometers scheduled for sampling ranged from 149 to 208. Of the locations scheduled for sampling, the percentage sampled each quarter ranged from 52% to 64%. 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 ranged from 97% to 100%.

##### 3.1.3 QA/QC Sample Collection

Duplicate samples, split samples, field blanks, and trip blanks comprise the QA/QC sample collection program. The QA/QC target for duplicate samples is 10% of sampled wells. Split samples are scheduled to be collected from wells requiring verification sampling and from randomly selected wells, and typically comprise 5% of all sampled wells. Field blanks are scheduled to be collected each day that volatile organic samples are collected. Trip blanks are to be included with each shipment of VOC samples.

Results of QA/QC sample collection during 2007 are summarized below.

QA/QC Sample Type	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Percent of samples duplicated	16%	16%	17%	27%
Percent of samples split	11%	17%	13%	27%
Field blank completeness value	95%	93%	95%	93%
Trip blank completeness value	91%	83%	95%	100%

Due to QA/QC requirements for the NDMA decision tree and the perchlorate decision tree, the percentages of duplicate and split samples collected were higher than the targeted 10% and 5%, respectively.

### 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 21 wells, one or more field parameters were not measured three times prior to sampling during the year. The completeness value for field parameters measured at least three times prior to sample collection ranged from 90% to 99%.

## 3.2 Analytical Data

### 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 conducted during the fourth quarter are summarized in Section 2.2.5.

### 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 method detection limit (MDL) times the dilution factor. RPD values calculated for the 2007 split sample analyses ranged from 0% to 63%.

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

$X_1$  = primary concentration observed;

$X_2$  = split concentration observed; and

$X_{ave}$  = average concentration =  $(X_1 + X_2) / 2$

### 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 the 2007 duplicate samples ranged from 0% to 55%.

### 3.2.4 Data Representativeness, Reproducibility, and Completeness

Data representativeness, reproducibility, and completeness of 2007 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 TCE concentrations exceeding 3,000  $\mu\text{g/L}$  were segregated during storage and shipment.

DTSC inspected SSFL groundwater monitoring activities during the second quarter and reported the following violations:

- Some sampling equipment was not properly decontaminated.
- Some sampling flow rates were not adequately monitored and controlled.
- Criteria for field parameter stabilization prior to obtaining samples were not consistently followed.
- Some samples were not immediately transferred to ice-chests with sufficient ice.

These violations were corrected prior to the third quarter monitoring event.

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 except for the following:

- A groundwater sample was collected for the analysis of mercury at well HAR-25, but was not included on the chain of custody during the first quarter 2007.
- Groundwater samples collected from well RD-21 for radiological analyses were broken during shipping during the first quarter 2007. These samples were re-collected and analyzed during the second quarter 2007.
- Analysis of nitrate was required for groundwater samples collected at well HAR-07 as part of the CFOU RFI investigation, but was not scheduled during the second quarter 2007. Groundwater samples for the analysis of nitrate were collected in subsequent quarters.
- Some samples collected from wells with historic TCE concentrations above 3,000  $\mu\text{g/L}$  were not segregated during shipment in the fourth quarter.

### **3.2.5 Contract-Required Minimum Detectable Activity**

Project laboratory analysis technical specifications, including Minimum Detectable Activities (MDAs), have been developed to insure collection of high quality data and to be consistent with EPA Drinking Water regulations (Federal Register, 2000). Some data do not meet the MDA requirements (see below). 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 laboratory was able to meet the contract-required MDAs for most radiochemicals. The contract-required MDAs are equal to or less than detection limits prescribed for drinking water by the EPA Drinking Water regulations (Federal Register, 2000). The contract-required MDAs were not met for some samples analyzed for gross alpha, gross beta, tritium, gamma-emitting radioisotopes (e.g., potassium-40), and isotopic thorium and uranium. In most cases, the positive result determined for the radioisotope exceeded both the required and obtained 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 Organic Data Review" (EPA540/R-99/008, October 1999), "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.

The following items/criteria applicable to the QA/QC data and sample analysis data listed above were reviewed:

- Chain of Custody Procedures
- 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 Chain of Custody Procedures**

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 number of samples were subcontracted to additional laboratories by TestAmerica-Irvine.

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 external chain of custody documents are provided with each laboratory report.

### 3.2.6.2 Preservation/Holding Time Compliance

Maximum recommended holding times as prescribed by the EPA, "Test Methods for Evaluating Solid Waste", SW-846, 3<sup>rd</sup> Edition, Update III, 1996 were applied to the evaluation of each project sample. Holding time compliance was measured from the time of sample collection to the time of sample preparation or analysis.

Preservation criteria for VOC analysis recommend that samples that have not been maintained at  $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$  and preserved to a pH of 2 or below should be analyzed within seven days of sample collection. VOC samples that meet the preservation criteria should be analyzed within 14 days of sample collection. VOC samples should not contain headspace.

Some VOC, inorganic, general mineral, and metal analyses exceeded the holding time limits and/or preservation criteria. For samples with holding time violations or preservation violations, non-detect results were qualified with a "UJ" and detects were qualified with a "J" indicating that the results were estimated (Table D-III).

### 3.2.6.3 Blank Sample Analyses

Trip blank samples were provided by TestAmerica and Lancaster Laboratories, and accompanied the project sample containers to and from the project site to assess possible field and/or container contamination. Trip blank samples were analyzed for VOCs only by TestAmerica and Lancaster.

Method blank samples were prepared by the analytical laboratories and analyzed concurrently with the project samples to assess possible laboratory contamination.

Field blank samples were prepared at the well locations using ASTM Type II water provided by the laboratories.

Several target analytes were detected in some field blank samples, trip blank samples, and in method blank samples prepared and analyzed with the project samples. Table D-IV provides a list of the target analytes detected in the project trip blanks, field blanks, or method blank samples which required corrective action; the associated project samples; and the recommended corrective action for the presentation of the sample analysis results. Target analytes detected in blank samples that did not require corrective action are not included in the table.

In accordance with cited EPA guidelines, sample results of analyses should be reported as detected unless the concentration of the analyte in the project sample is less than or equal to the amount in any blank multiplied by a method-specific factor:

- For VOCs, the factor is 10 times (10X) for the common laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane),



and 5 times (5X) the blank sample concentration for other target analytes.

- For SVOCs, the factor is 5X for common laboratory contaminants such as phthalate esters and 10X for other target analytes.
- For dioxins/furans, fuel hydrocarbons, and general mineral analytes, the factor is 5X.
- For metal analytes, the factor is 10X.

Blank samples are not always analyzed at the same dilution as the associated samples. For diluted samples, concentrations should be divided by the dilution factor when applying the 5X or 10X rules, such that a comparison of the total amount of analyte is actually made. Sample results that were qualified with a "U" flag as a result of detection in blank samples are listed in Table D-IV.

Some general minerals, SVOCs, VOCs, metals, and dioxins were detected in some method blank samples prepared and analyzed concurrently with the project samples. These results were flagged with "B" by the laboratory indicating that the concentration of the analyte within the sample was less than the method-specific factor times the amount of the general mineral, SVOC, VOC, metal, or dioxin detected in the associated method blank. For these samples, the reported analyte result was also flagged with a "U" indicating that the concentration of the analyte detected in the sample was most likely due to laboratory contamination and was not indicative of the field sample conditions (Table D-IV).

#### 3.2.6.4 Surrogate Recovery Limit Exceedance

To confirm the efficiency of the purge and trap sample preparation procedure by EPA Methods 8260B and 8260SIM, and the extraction and concentration process by EPA Method 8270C, surrogate compounds were added to each sample prior to analysis. The surrogate compound recovery calculated in percentage is presented on each laboratory report for the project sample analyses. The calculated recovery of surrogate compounds for each sample fell within method specific acceptance criteria except for specific SVOCs and VOCs in some samples (Table D-V).

If surrogate recoveries were less than the lower acceptance limit, but greater than 10%, the reported non-detects in the associated samples were qualified with a "UJ" as estimated non-detect. If surrogate recoveries were less than 10%, the reported non-detects in the associated samples were qualified with an "R" indicating that the results were rejected because the presence or absence of the analyte could not be verified. Where the surrogate recovery exceeded the limits for positive results, the results in the associated samples were qualified with a "J" indicating that the results were estimated.

### 3.2.6.5 Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analyses

Analytical precision and accuracy were evaluated based on Laboratory Control Sample and Laboratory Control Sample Duplicate (LCS/LCSD) analyses performed concurrently with the project samples. LCS/LCSD analyses are prepared by the addition of a known amount of each target analyte into laboratory pure water using a traceable reference material independent of the instrument calibration materials. LCS/LCSD samples were analyzed to confirm the precision and accuracy of the analytical system calibration.

The percent recovery calculated for each target analyte fell within laboratory specific criteria indicating that the analyses were conducted with acceptable analytical accuracy and precision with some exceptions (Table D-VI).

During the year, LCS/LCSD percent recoveries were beyond the percent recovery criteria ranges for some general minerals and SVOCs in some LCS/LCSD samples. These non-detected results were qualified with an "R" indicating that the results were rejected because the presence or absence of the analyte could not be verified.

### 3.2.6.6 Matrix Spike/Matrix Spike Duplicate (MS/MSD) Sample Analyses

Analytical precision and accuracy were evaluated based on the Matrix Spike and Matrix Spike Duplicate (MS/MSD) analyses performed on project samples from each sample delivery group (SDG). After the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability of the analytical systems to identify these analytes within the sample matrix. Due to limitation of sample volume, some SDGs contained reports of MS/MSD analyses performed on sample matrices from non-project related samples. However, the analysis of these samples concurrently with the project samples provides valuable information on the accuracy of the analyses performed.

The percent recovery calculated for each target analyte fell within laboratory specific criteria with exceptions for some general minerals, metals, cyanide, and VOCs in some MS/MSD samples (Table D-VI). The results in the associated samples were qualified with a "J" indicating that the results were estimated if the percent recovery exceeded the acceptance limits for positive results. If the percent recoveries for non-detects exceeded the lower limits, then the results were qualified with a "UJ" as estimated non-detect.

### 3.2.6.7 Data Qualification of Samples by MECX

Level IV validation of specific samples was performed by MECX, LP of Aurora, Colorado. Results requiring a change in the data qualifier are summarized in Table D-VII.

#### 3.2.6.8 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 compounds detected at concentrations below the reporting limit but above the MDL were flagged with a "J" as estimated values. No corrective action is recommended.

#### 3.2.6.9 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 data qualifiers recommended above in accordance with the EPA guidelines 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.

#### 3.2.6.10 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 few exceptions noted above. Based on this review, the data usability is 100%, with the few exceptions noted above.

TABLE D-I

SUMMARY OF 2007 SPLIT SAMPLE RESULTS  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well ID	Date	Method	Constituent	Sample Result (ug/L)		RPD
				Primary	Split	
<b>Shallow Wells</b>						
HAR-14	05/08/07	8290	1,2,3,6,7,8-Hexachlorodibenzofuran (pg/L)	0.386 U	0.44 J	---
	08/28/07	8290	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (pg/L)	0.40 U	1.98 J	---
			Octachlorodibenzo-p-dioxin (pg/L)	2.0 U	11.9 J	---
HAR-15	05/08/07	8290	Octachlorodibenzo-p-dioxin (pg/L)	10.2 J	7.5 U	---
			1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (pg/L)	1.62 U	1.2 J	---
	08/28/07	8290	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (pg/L)	0.44 J	2.43 U	---
HAR-27	08/29/07	8260B	1,1-Dichloroethane	0.1 U	0.52 J	---
			Chloromethane	0.1 J	0.4 U	---
			cis-1,2-Dichloroethene	3.4	3.3	3
			trans-1,2-Dichloroethene	2.1	2	5
			Trichloroethene	0.1 J	0.26 U	---
OS-09	08/16/07	8260B	Vinyl chloride	0.9	0.89	NA
RS-54	02/15/07	8290	Dioxins and Furans	None detected	None detected	---
<b>Chatsworth Formation Wells</b>						
HAR-07	05/08/07	8290	Dioxins and Furans	None detected	None detected	---
HAR-08	10/29/07	314.0	Perchlorate	0.70 U	0.65 U	---
HAR-16	05/07/07	8290	Dioxins and Furans	None detected	None detected	---
HAR-17	05/08/07	8290	Dioxins and Furans	None detected	None detected	---
HAR-18	05/15/07	8260B	1,1,1-Trichloroethane	6 U	4 J	---
			1,1,2-Trichloro-1,2,2-trifluoroethane	550	520	NA
			1,1-Dichloroethane	6.4 J	7	NA
			1,1-Dichloroethene	130	150	NA
			Acetone	90 U	13 J	---
			Chloroform	6.6 U	1 J	---
			cis-1,2-Dichloroethene	1400	1100	24
			Tetrachloroethene	6.4 U	2 J	---
			trans-1,2-Dichloroethene	28	27	NA
			Trichloroethene	1400	1300	7
			Trichlorofluoromethane	6.8 U	1	---
			Vinyl chloride	98	120	NA
HAR-19	03/01/07	8290	2,3,4,7,8-Pentachlorodibenzofuran (pg/L)	0.874 U	0.826 J	---
			Octachlorodibenzo-p-dioxin (pg/L)	2.61 UJ	4.13 J	---
HAR-24	02/15/07	8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	8.2	7.8	NA
			Benzene	0.28 U	0.29 J	---
			Chloroform	1.4	1.6 J	NA
			cis-1,2-Dichloroethene	1.2	1.7 J	NA
			Trichloroethene	100	110	10
HAR-25	05/11/07	314.0	Perchlorate	31	41.9	30
	10/25/07	314.0	Perchlorate	24.5	42	53
OS-09	08/16/07	314.0	Perchlorate	0.65 U	0.68 U	---
OS-26	08/20/07	8260B	VOCs	None detected	None detected	---
RD-01	10/23/07	8260B	1,1-Dichloroethene	4 J	2.9	32
			cis-1,2-Dichloroethene	950 J	930	2
			Methylene chloride	2 U	4.5 J	---
			Toluene	0.7 U	0.65 J	---
			trans-1,2-Dichloroethene	35 J	33	6
			Trichloroethene	970 J	890	9
			Vinyl chloride	44	42	5
RD-04	10/25/07	314.0	Perchlorate	0.70 U	0.65 U	---
		1625M	n-Nitrosodimethylamine (NDMA)	0.01 U	0.01 U	---
RD-05B	05/17/07	8260B	VOCs	None detected	None detected	---
RD-09	05/15/07	1625M	n-Nitrosodimethylamine (NDMA)	0.01 U	0.01 U	---
	08/14/07	1625M	n-Nitrosodimethylamine (NDMA)	0.01 U	0.01 U	---

See last page of table for notes and abbreviations.

Haley &amp; Aldrich, Inc.

G:\Projects\26472\Reports\M-490 2007 Annual\App D\2008-0228-HAI-SSFL\_M490\_D-I-F.xls

February 2008

TABLE D-I

SUMMARY OF 2007 SPLIT SAMPLE RESULTS  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well ID	Date	Method	Constituent	Sample Result (ug/L)		RPD	
				Primary	Split		
RD-10	02/06/07	1625M	n-Nitrosodimethylamine (NDMA)	0.01 U	0.01 U	---	
		8260B	cis-1,2-Dichloroethene	7.5	8.3 J	10	
			trans-1,2-Dichloroethene	0.39 J	0.54 J	NA	
			Trichloroethene	14	13 J	7	
	10/23/07	8270C	SVOCs	None detected	None detected	---	
RD-13	02/22/07	8260B	Trichloroethene	0.68 J	0.31 U	---	
	10/26/07	8260B	Trichloroethene	0.3 J	0.45 U	---	
RD-15	08/07/07	900.0	Gross Alpha (pCi/L)	3.54 U +/- 3.2	7.31 +/- 2.9	---	
		900.0	Gross Beta (pCi/L)	8.24 +/- 2.4	9.79 +/- 3.1	NA	
		903.1	Ra-226 (pCi/L)	1.44 +/- 0.64	0.993 J +/- 0.29	NA	
		904.0	Ra-228 (pCi/L)	1.18 +/- 0.26	1.14 +/- 0.34	NA	
RD-17	02/06/07	900.0	Gross Alpha (pCi/L)	2.72 J +/- 1.5	6.95 +/- 2.9	NA	
		900.0	Gross Beta (pCi/L)	6.32 +/- 1.7	7.82 +/- 2.9	NA	
		901.1	Gamma-emitting radionuclides (pCi/L)	None detected	None detected	---	
		903.1	Ra-226 (pCi/L)	1.04 +/- 0.53	1.15 +/- 0.31	NA	
		904.0	Ra-228 (pCi/L)	0.676 J +/- 0.25	1.48 +/- 0.35	NA	
		906.0	Tritium (pCi/L)	-8.88 U +/- 50	24.5 U +/- 81	---	
RD-19	02/28/07	8260B	VOCs	None detected	None detected	---	
RD-22(Z2)	11/06/07	8260B	Acetone	3.1 J,F	4.5 U	---	
			Benzene	0.1 J,F	0.28 U	---	
			Carbon disulfide	0.1 J,L	0.48 U	---	
			Chlorobenzene	1.3 F	0.36 U	---	
			Toluene	0.1 J,F	0.36 U	---	
RD-27	02/14/07	900.0	Gross Alpha (pCi/L)	2.33 J +/- 1.3	5.69 +/- 2.3	NA	
		900.0	Gross Beta (pCi/L)	6.81 +/- 1.8	7.95 +/- 2.4	NA	
		901.1	Gamma-emitting radionuclides (pCi/L)	None detected	None detected	---	
		903.1	Ra-226 (pCi/L)	1.96 +/- 0.6	1.27 +/- 0.32	NA	
		904.0	Ra-228 (pCi/L)	2.4 +/- 0.54	2.89 +/- 0.52	19	
		906.0	Tritium (pCi/L)	-38.6 U +/- 57	-11 U +/- 74	---	
RD-32	08/27/07	8260B	VOCs	None detected	None detected	---	
RD-33C	05/23/07	8260B	VOCs	None detected	None detected	---	
			900.0	Gross Alpha (pCi/L)	3.01 +/- 2.0	1.34 U +/- 1.5	---
			900.0	Gross Beta (pCi/L)	4.97 +/- 1.8	4.94 +/- 2.1	NA
			903.1	Ra-226 (pCi/L)	1.93 +/- 0.66	2.07 +/- 0.52	NA
			904.0	Ra-228 (pCi/L)	2.13 +/- 0.25	2.09 +/- 0.47	NA
			906.0	Tritium (pCi/L)	10.2 U +/- 59	1.37 U +/- 70	---
	11/01/07	8260B	VOCs	None detected	None detected	---	
RD-37	11/02/07	8260B	Carbon disulfide	0.55	0.48 U	---	
RD-39B	02/22/07	8260B	Acetone	4.5 U	2.0 J	---	
	05/22/07	8260B	VOCs	None detected	None detected	---	
RD-41A	10/29/07	8260B	Carbon disulfide	0.4 J,L	0.48 U	---	
			Chloroethane	0.1 J	0.4 U	---	
			Chloromethane	0.1 J	0.4 U	---	
			cis-1,2-Dichloroethene	4.3	4	7	
			trans-1,2-Dichloroethene	1.2	1	NA	
			Trichloroethene	3.4	3.4	0	
			Vinyl chloride	0.8	0.58	NA	
RD-43A	05/21/07	8260B	VOCs	None detected	None detected	---	
	10/31/07	8260B	Carbon disulfide	0.3 J,L	0.48 U	---	
			Chloromethane	0.1 J	0.4 U	---	

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M-490 2007 Annual\App D\2008-0228-HAI-SSFL\_M490\_D-I-F.xls

February 2008

TABLE D-I

SUMMARY OF 2007 SPLIT SAMPLE RESULTS  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well ID	Date	Method	Constituent	Sample Result (ug/L)		RPD
				Primary	Split	
RD-48B	02/27/07	8260B	Trichloroethene	2.9	2.7	7
	05/17/07	8260B	Trichloroethene	0.48 J	0.46 J	NA
RD-48C	10/30/07	8260B	Carbon disulfide	0.5 J,L	0.58 J,L	NA
RD-49B	10/25/07	8260B	1,1-Dichloroethene	0.8 J	0.64 J	NA
			Carbon disulfide	1 U	0.51 J,L	---
			cis-1,2-Dichloroethene	280	230	20
			trans-1,2-Dichloroethene	15 J	14	7
			Trichloroethene	240	250	4
			Vinyl chloride	4	3.7	8
RD-51C	08/13/07	8260B-SIM	1,4-Dioxane	1 U	0.52 J	---
		314.0	Perchlorate	0.65 U	0.68 U	---
	10/23/07	8260B	Carbon disulfide	0.3 J,L	0.48 U	---
			Trichloroethene	0.1 U	0.28 J	---
		8260B-SIM	1,4-Dioxane	1 U	0.36 U	---
RD-54C	08/07/07	8260B	Chloroethane	0.1 J	0.4 U	---
RD-58B	10/25/07	1625M	n-Nitrosodimethylamine (NDMA)	0.01 U	0.01 U	---
RD-59B	02/28/07	900.0	Gross Alpha (pCi/L)	-0.443 U +/- 1.2	2.77 J +/- 1.7	---
		900.0	Gross Beta (pCi/L)	3.77 J +/- 1.5	4.65 +/- 2.1	NA
		901.1	Gamma-emitting radionuclides (pCi/L)	None detected	None detected	---
		903.1	Ra-226 (pCi/L)	0.58 U +/- 0.48	0.532 J +/- 0.19	---
		904.0	Ra-228 (pCi/L)	1.2 +/- 0.32	1.18 +/- 0.32	NA
		906.0	Tritium (pCi/L)	9.38 U +/- 55	-28 U +/- 73	---
RD-60	08/06/07	8260B	1,1,2-Trichloroethane	0.8 U	0.34 J	---
			1,1-Dichloroethane	2 J	2.2	NA
			1,1-Dichloroethene	2 J	1.5	NA
			1,2-Dichloroethane	0.5 U	3.9	---
			cis-1,2-Dichloroethene	19	15	24
			Trichloroethene	440	420	5
RD-61	05/21/07	8260B	VOCs	None detected	None detected	---
	08/06/07	8260B	VOCs	None detected	None detected	---
	10/19/07	8260B	Carbon disulfide	0.3 J,L	1.4 J,L	NA
RD-63	05/24/07	900.0	Gross Alpha (pCi/L)	10.4 +/- 3.8	10.7 +/- 3.6	NA
		900.0	Gross Beta (pCi/L)	11.7 +/- 3	11.5 +/- 3.4	NA
		901.1	Gamma-emitting radionuclides (pCi/L)	None detected	None detected	---
		903.1	Ra-226 (pCi/L)	1.87 +/- 0.62	1.72 +/- 0.46	NA
		904.0	Ra-228 (pCi/L)	1.3 +/- 0.39	1.72 +/- 0.44	NA
		906.0	Tritium (pCi/L)	51.4 U +/- 49	-9.7 U +/- 69	---
RD-66	02/16/07	8260B	VOCs	None detected	None detected	---
	10/30/07	8260B	VOCs	None detected	None detected	---
RD-68B	10/25/07	8260B	cis-1,2-Dichloroethene	0.1 J	0.32 U	---
RD-73	08/15/07	314.0	Perchlorate	63	58.5	7
	10/23/07	314.0	Perchlorate	34.4	41	18
WS-05	02/27/07	8260B	cis-1,2-Dichloroethene	1.8	2.3	24
			Trichloroethene	1.3	0.79 J	NA
WS-06	05/15/07	8260B	cis-1,2-Dichloroethene	55 J	95	53
			trans-1,2-Dichloroethene	4	7	55
			Trichloroethene	2.6	5	63
			Vinyl chloride	1.3	4	NA
WS-09A	02/12/07	1625M	n-Nitrosodimethylamine (NDMA)	0.01 U	0.01 U	---
	08/09/07	8270C	SVOCs	None detected	None detected	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M-490 2007 Annual\App D\2008-0228-HAI-SSFL\_M490\_D-I-F.xls

February 2008

**TABLE D-I**  
**NOTES AND ABBREVIATIONS**

1. 1625M = EPA method 1625M for n-Nitrosodimethylamine (NDMA).
2. 314.0 = EPA method 314.0 for perchlorate.
3. 8260B = EPA method 8260B for volatile organic compounds (VOCs).
4. 8260B-SIM = EPA method 8260B-SIM for 1,4-dioxane.
5. 8290 = EPA method 8290 for dioxins and furans.
6. 900.0 = EPA method 900.0 for gross alpha and beta.
7. 901.1 = EPA method 901.1 for gamma-emitting radionuclides.
8. 903.1 = EPA method 903.1 for Radium-226.
9. 904.0 = EPA method 904.0 for Radium-228.
10. 906.0 = EPA method 906.0 for tritium.
  
11. ug/L = Micrograms per liter.
12. pCi/L = PicoCuries per liter.
13. pg/L = Picograms per liter.
  
14. RPD = Replicate percent difference. RPDs were calculated only if the detected concentration exceeded the product of five times the method detection limit times the dilution factor.  

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

$$X_1 = \text{primary concentration observed;}$$

$$X_2 = \text{split concentration observed; and}$$

$$X_{ave} = \text{average concentration} = \frac{(X_1 + X_2)}{2}$$
15. NA = Not applicable. An RPD calculation is not valid since at least one of the laboratories reported a detected concentration less than the product of five times the method detection limit times the dilution factor.
16. (---) = Not applicable. Constituent not detected in one or both samples.
17. 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). For radionuclides, result is less than contract-required MDA and greater than or equal to MDA.
18. L = Laboratory contaminant.
19. U = Not detected; numerical value represents the Method Detection Limit for that analyte. For radionuclides not detected above the MDA, numerical value represents the activity for that radionuclide.
20. UJ = Not detected. Estimated detection limit as a result of analytical quality control deficiencies.
21. Primary lab = TestAmerica of Irvine, California.  
 For NDMA, Pacific Analytical of Carlsbad, California served as the primary lab.  
 For radiochemistry, Eberline Services of Richmond, California served as the primary lab.  
  
 For dioxins and furans, Vista Analytical of El Dorado Hills, California served as the primary lab during the first and second quarters. TestAmerica of Knoxville, Tennessee served as the primary lab for dioxins and furans during the third and fourth quarters.  
  
 For VOCs, TestAmerica served as the primary lab during first and second quarters. Lancaster Laboratories of Lancaster, Pennsylvania served as the primary lab during the third and fourth quarters.

22. Split lab = TestAmerica of Richland, Washington served as the split lab for radionuclides. Weck Laboratories of City of Industry, California served as the split lab for NDMA. TestAmerica of Sacramento, California served as the split lab for perchlorate during the first, second, and third quarters. TestAmerica of Irvine, California served as the split lab for perchlorate during the fourth quarter. TestAmerica of Phoenix, Arizona served as the split lab for 1,4-dioxane.

For dioxins and furans, SGS Environmental Services, Inc. of Wilmington, NC served as the split lab for during the first quarter. TestAmerica of Knoxville, Tennessee served as the split lab for dioxins and furans during the second quarter. Vista Analytical of El Dorado Hills, California served as the split lab for dioxins and furans during the third quarter.

For VOCs, Severn Trent Laboratories of Sacramento, California served as the split lab during the first quarter. Severn Trent Laboratories of Sacramento, California and Lancaster Laboratories of Lancaster, Pennsylvania served as the split labs for VOCs during the second quarter. TestAmerica of Irvine, California served as the split lab for VOCs during the third and fourth quarters.

23. Radionuclide results that are less than the procedure background value are shown as negative values.



**TABLE D-II**

SUMMARY OF 2007 DUPLICATE SAMPLE RESULTS  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well ID	Date	Method	Constituent	Sample Result (ug/L)		RPD
				Primary	Duplicate	
<b>Shallow Wells</b>						
ES-31	02/28/07	8260B	Trichloroethene	0.26 U	0.27 J	NA
HAR-04	02/27/07	8260B	1,1,1-Trichloroethane	9.9	11	11
			1,1-Dichloroethene	0.42 U	0.48 J	---
			cis-1,2-Dichloroethene	22	24	9
			Tetrachloroethene	0.49 J	0.53 J	NA
			trans-1,2-Dichloroethene	1	0.62 J	NA
			Trichloroethene	1600	1400	13
HAR-14	05/08/07	1625M	n-Nitrosodimethylamine (NDMA)	0.3559	0.3396	5
	08/28/07	8290	1,2,3,4,6,7,8-Heptachlorodibenzofuran (pg/L)	0.27 U	0.47 J	---
			1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (pg/L)	0.40 U	2.1 J	---
HAR-15	08/28/07	8290	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (pg/L)	0.44 J	0.40 J	NA
HAR-27	03/01/07	8260B	Acetone	4.7 J,L	4.8 J,L	NA
			cis-1,2-Dichloroethene	3.6	3.2	12
			trans-1,2-Dichloroethene	2.5	1.9	27
			Vinyl chloride	1.5	1.4	NA
<b>Chatsworth Formation Wells</b>						
HAR-07	05/08/07	1625M	n-Nitrosodimethylamine (NDMA)	0.0514	0.0498	3
HAR-08	10/29/07	314.0	Perchlorate	0.70 U	0.70 U	---
		1625M	n-Nitrosodimethylamine (NDMA)	0.0173	0.0175	1
HAR-16	05/07/07	1625M	n-Nitrosodimethylamine (NDMA)	10.3181	5.8519	55
	10/22/07	8260B	1,1-Dichloroethene	17 J	19 J	NA
			cis-1,2-Dichloroethene	110	110	NA
			Tetrachloroethene	9 J	9 J	NA
			Trichloroethene	10000	11000	NA
			Trichlorofluoromethane	20	21	NA
HAR-17	05/08/07	1625M	n-Nitrosodimethylamine (NDMA)	0.0461	0.0425	8
HAR-20	08/14/07	8260B	1,1-Dichloroethene	1 J	1 J	NA
			cis-1,2-Dichloroethene	250	260	4
			trans-1,2-Dichloroethene	19	19	0
			Trichloroethene	490	490	0
			Vinyl chloride	1	1	0
HAR-23	03/01/07	8260B	Trichloroethene	1.5	1.2	NA
	08/29/07	8260B	cis-1,2-Dichloroethene	0.2 J	0.2 J	NA
HAR-24	02/15/07	8260B	Trichloroethene	2.2	2.1	5
			1,1,2-Trichloro-1,2,2-trifluoroethane	8.2	6.9	NA
			Chloroform	1.4	1.4	0
			cis-1,2-Dichloroethene	1.2	1.1	NA
OS-04	02/28/07	8260B	Trichloroethene	100	94	6
			VOCs	None detected	None detected	---
			VOCs	None detected	None detected	---
			VOCs	None detected	None detected	---
			VOCs	None detected	None detected	---
RD-01	05/09/07	314.0	Perchlorate	0.65 U	0.65 U	---
RD-02	05/21/07	8260B	1,1-Dichloroethene	1 J	1 J	NA
			cis-1,2-Dichloroethene	270	270	0
			trans-1,2-Dichloroethene	15	15	0
			Trichloroethene	230	230	0
			Vinyl chloride	2	2	NA

See last page of table for notes and abbreviations.

Haley &amp; Aldrich, Inc.

G:\Projects\26472\Reports\M-490 2007 Annual\App D\2008-0228-HAI-SSFL\_M490\_D-II-F.xls

February 2008

TABLE D-II

SUMMARY OF 2007 DUPLICATE SAMPLE RESULTS  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well ID	Date	Method	Constituent	Sample Result (ug/L)		RPD
				Primary	Duplicate	
RD-02	11/07/07	314.0	Perchlorate	0.70 U	0.70 U	---
			1,1-Dichloroethene	1 J	1 J	NA
			cis-1,2-Dichloroethene	250	240	NA
			trans-1,2-Dichloroethene	20	19	5
			Trichloroethene	240	240	0
			Vinyl chloride	3	3	0
RD-03	08/28/07	8260B	Carbon disulfide	0.4 J,L	0.4 J,L	NA
			cis-1,2-Dichloroethene	0.4 J	0.4 J	NA
			trans-1,2-Dichloroethene	0.1 U	0.1 J	---
RD-04	02/13/07	8260B	1,1-Dichloroethene	8.4 U	0.68 J	---
			Acetone	90 U	7.6 J,L	---
			cis-1,2-Dichloroethene	96	94	NA
			Methylene chloride	30 J,L	0.95 U	---
			trans-1,2-Dichloroethene	5.4 U	2	---
			Trichloroethene	2100	1800	15
RD-05B	05/17/07	8260B	VOCs	None detected	None detected	---
	10/31/07	8260B	Carbon disulfide	0.4 J,L	0.7	NA
RD-05C	02/08/07	8260B	VOCs	None detected	None detected	---
RD-10	02/06/07	8260B	cis-1,2-Dichloroethene	7.5	7.4	1
			trans-1,2-Dichloroethene	0.39 J	0.51 J	NA
			Trichloroethene	14	14	0
	10/23/07	8260B	cis-1,2-Dichloroethene	8	8	0
			Trichloroethene	12	12	0
			8270C	SVOCs	None detected	None detected
RD-13	05/11/07	8260B	Trichloroethene	0.27 J	0.26 U	---
RD-19	02/28/07	8260B	VOCs	None detected	None detected	---
	08/08/07	8260B	VOCs	None detected	None detected	---
RD-32	08/27/07	8260B	VOCs	None detected	None detected	---
RD-33A(Z2)	08/13/07	8260B	1,1-Dichloroethane	0.4 J	0.4 J	NA
			1,1-Dichloroethene	0.8	0.9	12
			Benzene	0.3 J,F	0.4 J,F	NA
			Chlorobenzene	0.2 J,F	0.2 J,F	NA
			cis-1,2-Dichloroethene	3.8	4.4	15
			Toluene	0.3 J,F	0.2 J,F	NA
			trans-1,2-Dichloroethene	0.5 J	0.6	18
			Trichloroethene	0.2 J	0.1 J	NA
RD-36D	08/24/07	8260B	Carbon disulfide	0.1 J,L	0.1 J,L	NA
			cis-1,2-Dichloroethene	0.1 J	0.1 J	NA
			Trichloroethene	0.4 J	0.4 J	NA
RD-37	05/23/07	8260B	VOCs	None detected	None detected	---
	11/02/07	8260B	Carbon disulfide	0.55	0.67	20
RD-39B	02/22/07	8260B	VOCs	None detected	None detected	---
	05/22/07	8260B	VOCs	None detected	None detected	---
	08/29/07	8260B	VOCs	None detected	None detected	---
RD-41A	08/20/07	8260B	Acetone	3 U	3.6 J	---
			cis-1,2-Dichloroethene	4.0 J	4.1 J	2
			trans-1,2-Dichloroethene	0.8 J	0.8 J	0
			Trichloroethene	4.8 J	4.5 J	6
			Vinyl chloride	0.3 J	0.3 J	NA

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M-490 2007 Annual\App D\2008-0228-HAI-SSFL\_M490\_D-II-F.xls

February 2008

TABLE D-II

SUMMARY OF 2007 DUPLICATE SAMPLE RESULTS  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well ID	Date	Method	Constituent	Sample Result (ug/L)		RPD		
				Primary	Duplicate			
RD-43A	10/31/07	8260B	Carbon disulfide	0.3 J,L	0.2 J,L	NA		
			Chloromethane	0.1 J	0.1 U	---		
RD-43B	05/21/07	8260B	VOCs	None detected	None detected	---		
RD-43C	02/16/07	8260B	VOCs	None detected	None detected	---		
	05/21/07	8260B	VOCs	None detected	None detected	---		
RD-44	08/15/07	8260B	VOCs	None detected	None detected	---		
RD-45B	02/22/07	8260B	cis-1,2-Dichloroethene	21	22	5		
			trans-1,2-Dichloroethene	1.7	1.8	6		
			Trichloroethene	1.2	1.2	NA		
	08/21/07	8260B	cis-1,2-Dichloroethene	31 J	32 J	NA		
			trans-1,2-Dichloroethene	2 J	2 J	NA		
			Trichloroethene	2 J	2 J	NA		
RD-48B	02/27/07	8260B	Trichloroethene	2.9	2.9	0		
	05/17/07	8260B	Trichloroethene	0.48 J	1	NA		
	08/29/07	1625M	n-Nitrosodimethylamine (NDMA)	0.01 U	0.01 U	---		
RD-48C	05/16/07	8260B	VOCs	None detected	None detected	---		
	08/23/07	8260B	Carbon disulfide	0.4 J,L	0.4 J,L	NA		
			Methylene chloride	0.3 J	0.2 J	NA		
	10/30/07	8260B	Carbon disulfide	0.5 J,L	0.5 J,L	NA		
			Trichloroethene	0.18 J	0.13 J	NA		
RD-49B	08/14/07	8260B	1,1-Dichloroethene	1 J	1 J	NA		
			cis-1,2-Dichloroethene	270	280	4		
			trans-1,2-Dichloroethene	18	19	5		
			Trichloroethene	300	310	3		
			Vinyl chloride	6	7	15		
				314.0	Perchlorate	0.65 U	0.65 U	---
RD-49C	05/14/07	8260B	cis-1,2-Dichloroethene	96	98	2		
			trans-1,2-Dichloroethene	5.2	5.9	13		
			Trichloroethene	16	16	0		
			Vinyl chloride	1.8	1.8	0		
RD-50(Z2)	02/07/07	8260B	Acetone	4.6 J,F	4.5 U	---		
			Benzene	0.50 F	0.49 J,F	NA		
			cis-1,2-Dichloroethene	1.9	0.86 J	NA		
			Toluene	11 F	10 F	10		
			Trichloroethene	0.68 J	0.41 J	NA		
RD-51B	10/23/07	1625M	n-Nitrosodimethylamine (NDMA)	0.01 U	0.01 U	---		
RD-51C	08/13/07	8260B-SIM	1,4-Dioxane	1 U	1 U	---		
	10/23/07	1625M	n-Nitrosodimethylamine (NDMA)	0.01 U	0.01 U	---		
		8260B-SIM	1,4-Dioxane	1 U	1 U	---		
		8260B	Carbon disulfide	0.3 J,L	0.2 J,L	NA		
RD-52C	05/18/07	8260B	VOCs	None detected	None detected	---		
RD-55A	10/29/07	314.0	Perchlorate	0.70 U	0.70 U	---		
RD-57	05/24/07	8260B	VOCs	None detected	None detected	---		
RD-58A	02/15/07	8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	6	16	NA		
			Chloroform	0.47 J	0.41 J	NA		
			cis-1,2-Dichloroethene	85	110	26		
			trans-1,2-Dichloroethene	0.40 J	0.50 J	NA		
			Trichloroethene	390	400	3		
RD-58B	10/25/07	314.0	Perchlorate	0.70 U	0.70 U	---		

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

February 2008

G:\Projects\26472\Reports\M-490 2007 Annual\App D\2008-0228-HAI-SSFL\_M490\_D-II-F.xls

**TABLE D-II**

SUMMARY OF 2007 DUPLICATE SAMPLE RESULTS  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well ID	Date	Method	Constituent	Sample Result (ug/L)		RPD
				Primary	Duplicate	
RD-66	02/16/07	8260B	VOCs	None detected	None detected	---
	10/30/07	8260B	VOCs	None detected	None detected	---
RD-68A	02/28/07	8260B	VOCs	None detected	None detected	---
RD-68B	10/25/07	8260B	cis-1,2-Dichloroethene	0.1 J	0.1 J	NA
RD-69	08/20/07	8260B	VOCs	None detected	None detected	---
WS-05	02/27/07	8260B	cis-1,2-Dichloroethene	1.8	2	11
			Trichloroethene	1.3	0.91 J	NA
	05/15/07	8260B	cis-1,2-Dichloroethene	2.3	2.2	4
			Trichloroethene	0.81 J	0.77 J	NA
	08/21/07	8260B	cis-1,2-Dichloroethene	2.0 J	2.0 J	0
			trans-1,2-Dichloroethene	0.2 J	0.2 J	NA
			Trichloroethene	0.8 J	0.8 J	0
			Vinyl chloride	0.1 J	0.1 J	NA
	10/29/07	1625M	n-Nitrosodimethylamine (NDMA)	0.01 U	0.01 U	---
		8260B	cis-1,2-Dichloroethene	2.1	2	5
WS-09A	02/12/07	8260B	trans-1,2-Dichloroethene	0.2 J	0.2 J	NA
			Trichloroethene	0.7	0.7	0
			Vinyl chloride	0.1 J	0.1	NA
			1,1-Dichloroethene	1.9	1.9	NA
			cis-1,2-Dichloroethene	860	830	4
	08/09/07	8270C	trans-1,2-Dichloroethene	22	22	0
			Trichloroethene	670	660	2
			Vinyl chloride	4.6	4.7	2
	08/09/07	8270C	SVOCs	None detected	None detected	---

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M-490 2007 Annual\App D\2008-0228-HAI-SSFL\_M490\_D-II-F.xls

February 2008

**TABLE D-II**  
**NOTES AND ABBREVIATIONS**

- 
1. 1625M = EPA method 1625M for n-Nitrosodimethylamine (NDMA).
  2. 314.0 = EPA method 314.0 for perchlorate.
  3. 8260B = EPA method 8260B for volatile organic compounds (VOCs).
  4. 8290 = EPA method 8290 for dioxins and furans.
  5. 8260B-SIM = EPA method 8260B-SIM for 1,4-dioxane.
  6. pg/L = Picograms per liter.
  7. ug/L = Micrograms per liter.
  8. RPD = Replicate percent difference. RPDs were calculated only if the detected concentration exceeded the product of five times the method detection limit times the dilution factor.  
 =  $\left| \frac{(X_1 - X_2)}{X_{ave}} \right| \times 100$   
 $X_1$  = primary concentration observed;  
 $X_2$  = split concentration observed; and  
 $X_{ave}$  = average concentration =  $\frac{(X_1 + X_2)}{2}$
  9. NA = Not applicable. An RPD calculation is not valid since at least one of the laboratories reported a detectable concentration less than the product of five times the method detection limit times the dilution factor.
  10. (---) = Not applicable. Constituent not detected in one or both samples.
  11. 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.
  12. 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).
  13. L = Laboratory contaminant.
  14. U = Not detected; numerical value represents the Method Detection Limit for that analyte.
  15. Z = FLUTE sample port number.
  16. Primary and duplicate VOC samples were analyzed  
 by TestAmerica of Irvine, California during the first quarter;  
 by TestAmerica of Irvine, California during the second quarter except for samples from RD-02, RD-24, RD-30, RD-41B, and RD-63 which were analyzed by Lancaster Laboratories of Lancaster, Pennsylvania;  
 by Lancaster Laboratories of Lancaster, Pennsylvania during the third and fourth quarters.  
 Primary and duplicate NDMA samples were analyzed by Pacific Analytical of Carlsbad, California.  
 Primary and duplicate SVOC, and 1,4-dioxane samples were analyzed by TestAmerica of Irvine, California.  
 Primary and duplicate perchlorate samples were analyzed by TestAmerica of Irvine, California during the first, second, and third quarters and by Lancaster Laboratories of Lancaster, Pennsylvania during the fourth quarter.  
 Primary and duplicate 8290 samples were analyzed by TestAmerica of Knoxville, Tennessee.

**TABLE D-III**  
SUMMARY OF 2007 DATA QUALIFICATION DUE TO PRESERVATION / HOLDING TIME EXCEEDANCE  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Lab Report	Preservation and/or Holding Time Exceeded?	Affected Field Samples	Date Sampled	Method	Target Analyte(s)	Concentration	Units	Corrective Action: VOC Qualification
<b>Volatile Organic Compounds</b>								
IQE0815	Preservation (Headspace Present)	HAR-14	05/08/07	8260B	Chloroform	2	ug/L	J
G7B150230	Preservation (Temperature Exceedance)	RD-10	02/06/07	8260B	1,1,1-Trichloroethane	0.41 U	ug/L	UJ
					1,1,2,2-Tetrachloroethane	0.37 U	ug/L	UJ
					1,1,2-Trichloro-1,2,2-trifluoroethane	1 U	ug/L	UJ
					1,1,2-Trichloroethane	0.31 U	ug/L	UJ
					1,1-Dichloroethane	0.1 U	ug/L	UJ
					1,1-Dichloroethene	0.36 U	ug/L	UJ
					1,2-Dichlorobenzene	0.14 U	ug/L	UJ
					1,2-Dichloroethane	0.22 U	ug/L	UJ
					1,2-Dichloropropane	0.15 U	ug/L	UJ
					1,3-Dichlorobenzene	0.11 U	ug/L	UJ
					1,4-Dichlorobenzene	0.13 U	ug/L	UJ
					2-Hexanone	1 U	ug/L	UJ
					Acetone	1 U	ug/L	UJ
					Benzene	0.13 U	ug/L	UJ
					Bromodichloromethane	0.14 U	ug/L	UJ
					Bromoform	0.1 U	ug/L	UJ
					Bromomethane	0.08 U	ug/L	UJ
					Carbon disulfide	1 U	ug/L	UJ
					Carbon tetrachloride	0.15 U	ug/L	UJ
					Chlorobenzene	0.12 U	ug/L	UJ
					Chloroethane	0.34 U	ug/L	UJ
					Chloroform	0.12 U	ug/L	UJ
					Chloromethane	0.25 U	ug/L	UJ
					cis-1,2-Dichloroethene	8.3	ug/L	J
					cis-1,3-Dichloropropene	0.22 U	ug/L	UJ
					Dibromochloromethane	0.4 U	ug/L	UJ

See last page of table for notes and explanations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M-490 2007 Annual\App D\2008-0228-HAI-SSFL\_M490\_D-III-F.xls

February 2008

**TABLE D-III**  
SUMMARY OF 2007 DATA QUALIFICATION DUE TO PRESERVATION / HOLDING TIME EXCEEDANCE  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Lab Report	Preservation and/or Holding Time Exceeded?	Affected Field Samples	Date Sampled	Method	Target Analyte(s)	Concentration	Units	Corrective Action: VOC Qualification
<b>Volatile Organic Compounds</b>								
G7B150230	Preservation (Temperature Exceedance)	RD-10	02/06/07	8260B	Ethylbenzene	0.27 U	ug/L	UJ
					Methyl ethyl ketone	1 U	ug/L	UJ
					Methyl isobutyl ketone (MIBK)	1 U	ug/L	UJ
					Methylene chloride	0.35 U	ug/L	UJ
					m-Xylene & p-Xylene	0.18 U	ug/L	UJ
					o-Xylene	0.1 U	ug/L	UJ
					Tetrachloroethene	0.38 U	ug/L	UJ
					Toluene	0.25 U	ug/L	UJ
					trans-1,3-Dichloropropene	0.3 U	ug/L	UJ
					Trichloroethene	13	ug/L	J
					Trichlorofluoromethane	0.23 U	ug/L	UJ
					Vinyl chloride	0.12 U	ug/L	UJ
IQB2147	Preservation (Headspace Present)	RD-36C	02/20/07	8260B	Acetone	4.5 U	ug/L	UJ
	Preservation (Headspace Present)	RD-36D	02/20/07	8260B	Acetone	4.5 U	ug/L	UJ
<b>Inorganics / General Minerals</b>								
IQC0163	HT	OS-09	02/28/07	150.1	pH	8.66	pH units	J
IQE1317	HT	RD-77	05/11/07	150.1	pH	6.69	pH units	J
IQE2484	HT	OS-02, OS-03, OS-04	05/23/07	150.1	pH	8.33, 7.92, 7.39	pH units	J
IQE0960	HT	RD-01, WS-09A	05/09/07	8315A	Formaldehyde	23 U	ug/L	UJ

See last page of table for notes and explanations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M-490 2007 Annual\App D\2008-0228-HAI-SSFL\_M490\_D-III-F.xls

February 2008

**TABLE D-III**  
SUMMARY OF 2007 DATA QUALIFICATION DUE TO PRESERVATION / HOLDING TIME EXCEEDANCE  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Lab Report	Preservation and/or Holding Time Exceeded?	Affected Field Samples	Date Sampled	Method	Target Analyte(s)	Concentration	Corrective Action: Inorganic Qualification
<i>Inorganics / General Minerals</i>							
IQE0964	HT	RD-10	05/09/07	8315A	Formaldehyde	23 U ug/L	UJ
IQE1139	HT	RD-04, WS-09	05/10/07	8315A	Formaldehyde	23 U ug/L	UJ
IQE1142	HT	RD-49B, RD-51B, RD-51C	05/10/07	8315A	Formaldehyde	23 U ug/L	UJ
IQE1612	HT	HAR-18, RD-09, WS-05, WS-06	05/15/07	8315A	Formaldehyde	23 U ug/L	UJ
IQE1613	HT	HAR-08, HAR-20, RD-49A	05/14/07-05/15/07	8315A	Formaldehyde	23 U ug/L	UJ
IQJ2475	HT	RD-10, RD-51B, RD-51C	10/23/07	8315A	Formaldehyde	23 U ug/L	UJ
IQJ2476	HT	RD-01	10/23/07	8315A	Formaldehyde	23 U ug/L	UJ
IQJ2594	HT	HAR-20, RD-44	10/24/07	8315A	Formaldehyde	23 U ug/L	UJ
IQJ2595	HT	WS-06	10/24/07	8315A	Formaldehyde	23 U ug/L	UJ
IQJ2735	HT	RD-41B, RD-49B, RD-49C, RD-58B	10/25/07	8315A	Formaldehyde	160, 160, 150, 160 ug/L	J
IQJ2736	HT	RD-04, WS-09	10/25/07	8315A	Formaldehyde	140, 130 ug/L	J
IQJ2981	HT	RD-41A	10/29/07	8315A	Formaldehyde	91 ug/L	J
IQE2042	HT	RD-45C, RD-52B, RD-52C	05/18/07	300	Nitrate	0.25 U ug/L	UJ
IQE2484	HT	OS-09	05/23/07	300	Nitrate	0.25 U ug/L	UJ

See last page of table for notes and explanations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M-490 2007 Annual\App D\2008-0228-HAI-SSFL\_M490\_D-III-F.xls

February 2008



**TABLE D-III**

SUMMARY OF 2007 DATA QUALIFICATION DUE TO PRESERVATION / HOLDING TIME EXCEEDANCE  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Lab Report	Preservation and/or Holding Time Exceeded?	Affected Field Samples	Date Sampled	Method	Target Analyte(s)	Concentration	Corrective Action: Metal Qualification
<b>Metals</b>							
IQC2812	HT	RD-46A	02/26/07	7470A	Mercury	0.000073 U mg/L	UJ
IQC2859	HT	RD-34A(total)	02/28/07	7470A	Mercury	0.000073 U mg/L	UJ
IQF1656	HT	RD-23	05/21/07	7470A	Mercury, total	0.000073 U mg/L	UJ

See last page of table for notes and explanations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M-490 2007 Annual\App D\2008-0228-HAI-SSFL\_M490\_D-III-F.xls

February 2008

**TABLE D-III****NOTES AND ABBREVIATIONS:**

---

1. ug/L = Micrograms per liter.
2. mg/L = Milligrams per liter.
3. J = Estimated value as a result of holding time and/or preservation exceedance.
4. U = Not detected; numerical value represents the Method Detection Limit for that analyte.
5. UJ = Not detected. Estimated detection limit as a result of holding time and/or preservation exceedance.
6. HT = Holding time.
7. Total = Total metals. Total metal samples were not filtered, and were preserved in the field.
8. If preservation and/or holding time was exceeded, qualify associated target analyte positive results as "J" and non-detected analytes as "UJ".  
If preservation and/or holding time was grossly exceeded, qualify associated target analyte positive results as "J" and non-detected analytes as "R".

**TABLE D-IV**  
SUMMARY OF 2007 DATA QUALIFICATION DUE TO BLANK SAMPLE CONTAMINATION  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Blank Sample Identification	Blank Sample Type	Sample Date	Lab Report	Target Analyte(s) Detected in the Blank	Concentration	Corrective Action: Flag Associated Field Sample results with a "U" if less than or equal to this value	Affected Field Samples
<b>General Minerals (mg/L)</b>							
7B15084-BLK1	Method	02/07/07	IQB0659	Ammonia	0.0791 J	0.3955	RD-44
C7B0913-BLK1	Method	02/07/07-02/08/07	IQB0659, IQB0826	Formaldehyde	30.0 B,J	150	RD-44, RD-49B, RD-49C
C7B1610-BLK1	Method	02/14/07-02/15/07	IQB1484, IQB1485, IQB1676, IQB1678	Formaldehyde	34.8 B,J	174	HAR-07, HAR-08, HAR-20, RD-01, RD-09, RD-41A, RD-41B, RD-58A, WS-09, WS-06
7B22140-BLK1	Method	02/15/07	IQB1676, IQB1678	Ammonia	0.0783 J	0.3915	HAR-08, HAR-20, RD-01, RD-58A
7C01122-BLK1	Method	02/22/07	IQB2445	Ammonia	0.0848 J	0.424	HAR-18
7C07095-BLK1	Method	02/27/07	IQB2970	Ammonia	0.0716 J	0.358	WS-05
7C05114-BLK1	Method	02/28/07	IQC0163	Potassium	0.172 J	17.2	OS-09
7E16081-BLK1	Method	05/08/07 - 05/10/07	IQE0816, IQE0960, IQE1139, IQE1142	Ammonia-N	0.0876 J	0.438	HAR-07, RD-01, RD-04, RD-49B, RD-51B, RD-51C, WS-09, WS-09A
C7E1819-BLK1	Method	05/16/07 - 05/17/07	IQE1761, IQE1906	Formaldehyde	42.8 B,J	214	RD-41A, RD-55A, RD-55B, RD-58B
7H20131-BLK1	Method	08/09/07	IQH0950	Ammonia-N	0.104 J	0.52	WS-09A
7H30102-BLK1	Method	08/29/07	IQH2807	Sulfide	0.0248 J	0.124	RD-48B
CK0213-BLK1	Method	10/31/07	IQJ3226	Formaldehyde	155	775	RD-58A
<b>Semi-Volatile Organic Compounds (ug/L)</b>							
7B14107-BLK1	Method	02/13/07	IQB1122, IQB1274	Di-n-butyl phthalate	3.92 J	39.2	RD-51C, RD-55A
W7E0406-BLK1	Method	05/07/07 - 05/08/07	IQE0656, IQE0815, IQE0816	Bis(2-ethylhexyl)phthalate	0.440 J	4.4	HAR-07, HAR-15, HAR-16, HAR-17
W7H0559-BLK1	Method	08/09/07	IQH0950	Bis(2-ethylhexyl)phthalate	1.57 J	15.7	WS-09A(split)
W7I0006-BLK1	Method	08/29/07	IQH2807	Diethyl phthalate	4.63 B,J	46.3	RD-48B
				Di-n-butyl phthalate	1.16 B,J	11.6	RD-48B
				Bis(2-ethylhexyl)phthalate	0.61 B,J	6.1	RD-48B
				Benzyl alcohol	0.59 B,J	2.95	RD-48B
W7J1087-BLK1	Method	10/23/07	IQJ2475	Bis(2-ethylhexyl)phthalate	0.40 J	4	RD-10(split)
W7J1087-BLK1	Method	10/23/07	IQJ2475	Diethyl phthalate	0.49 J	4.9	RD-10(split)

See last page of table for notes and explanations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M-490 2007 Annual\App D\2008-0228-HAI-SSFL\_M490\_D-IV-F.xls

February 2008

**TABLE D-IV**  
SUMMARY OF 2007 DATA QUALIFICATION DUE TO BLANK SAMPLE CONTAMINATION  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Blank Sample Identification	Blank Sample Type	Sample Date	Lab Report	Target Analyte(s) Detected in the Blank	Concentration	Corrective Action: Flag Associated Field Sample results with a "U" if less than or equal to this value	Affected Field Samples
<b>Volatile Organic Compounds (ug/L)</b>							
7B12017-BLK1	Method	02/07/07	IQB0680	Methylene chloride	1.16 J	11.6	RD-65(Z5) (field)
RD-51B_021207_78_T	Trip	02/12/07	IQB1122	Acetone	4.5 J	45	RD-51B
7B16024-BLK1	Method	02/12/07-02/14/07	IQB1156, IQB1274, IQB1484	Methylene chloride	2.83 J	28.3	RD-49A(prim*, field), RD-51C(prim, trip), RD-54B, RD-54C, RD-58B, WS-09(prim*, trip)
WS-09_021407_78_T	Trip	02/14/07	IQB1484	Methylene chloride	2.6 B,J	26	WS-06 (field)
7B22024-BLK1	Method	02/08/07, 02/15/07, 02/16/07, 02/19/07	IQB0826, IQB1678, IQB1866, IQB2033	Methylene chloride	1.44 J	14.4	HAR-07(prim, field, trip), RD-36B(prim, field, trip), RD-38A(trip), RD-43C(field), RD-49B(field), RD-66(trip),
7B27027-BLK1	Method	02/22/07	IQB2456, IQB2459	Trichloroethene	0.310 J	3.1	RD-13(trip), RD-39B(prim, dup)
7C01027-BLK1	Method	02/23/07, 02/27/07	IQB2670, IQB2997	Methylene chloride	1.36 J	13.6	RD-26(prim, trip), RD-45C(trip), RD-48B(dup)
ES-17_022307_78_T	Trip	02/23/07	IQB2667	Methylene chloride	2.3 J	23	ES-17
7C07022-BLK1	Method	03/01/07	IQC0166	Methylene chloride	1.08 J	10.8	HAR-27(dup)
7E10021-BLK1	Method	05/09/07	IQE0960	Methylene chloride	1.50 J	15	RD-01(prim, field, trip)
7E16021-BLK1	Method	05/15/07	IQE1612, IQE1613	Methylene chloride	2.15 J	21.5	HAR-08, HAR-18*, HAR-20, RD-09, WS-05(prim, dup), WS-06(trip)
SH-11_052307_78_T	Trip	05/23/07	IQE2500	Acetone	5.0 J	50	SH-11
RD-16_052407_78_T	Trip	05/24/07	IQE2629	Acetone	6.2 J	62	RD-57(Z7)
RD-70_050907_78_T	Trip	05/09/07	IQE0966	Methylene chloride	1.4 J	14	RD-70
WS-06_051507_78_T	Trip	05/15/07	IQE1612	Methylene chloride	2.1 B,J	21	WS-06
RD-61_080607_78_L	Trip	08/03/07, 08/06/07 - 08/07/07	1050841, 1050842	Carbon disulfide	0.1 J	0.5	RD-33C, RD-47(prim, field), RD-54C, RD-61, RD-70
RD-61_080607_78_T	Trip	08/06/07	IQH0482	1,4-Dichlorobenzene	0.44 B,J	2.2	RD-60(split)
7H10009-BLK1	Method	08/07/07	IQH0680	1,4-Dichlorobenzene	0.5 J	2.5	RD-54C(split, trip), RD-61(trip)
RD-33B_081407_78_L	Trip	08/14/07	1051600	Carbon disulfide	0.1 J	0.5	RD-33B
RD-05B_081607_78_L	Trip	08/16/07, 08/20/07, 08/21/07	1052675, 1052676, 1052679, 1052680	Carbon disulfide	0.1 J	0.5	RD-05B, HAR-26, RD-30, RD-56B, RD-69(prim, dup)

See last page of table for notes and explanations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M-490 2007 Annual\App D\2008-0228-HAI-SSFL\_M490\_D-IV-F.xls

February 2008

**TABLE D-IV**  
SUMMARY OF 2007 DATA QUALIFICATION DUE TO BLANK SAMPLE CONTAMINATION  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Blank Sample Identification	Blank Sample Type	Sample Date	Lab Report	Target Analyte(s) Detected in the Blank	Concentration	Corrective Action: Flag Associated Field Sample results with a "U" if less than or equal to this value	Affected Field Samples
<b>Volatile Organic Compounds (ug/L)</b>							
RD-05B_081607_78_L	Trip	08/16/07, 08/20/07, 08/21/07	1052676, 1052680	Methylene chloride	0.4 J	4	OS-26(prim), RD-05B, RD-56B, RD-69(prim)
RD-41A_082007_78_L	Trip	08/20/07	1052678	Carbon disulfide	0.5 J	2.5	RD-41A(prim, dup)
RD-63_082107_78_L	Trip	08/20/07, 08/21/07	1052675, 1052678	Methylene chloride	0.4 J	4	RD-63, RD-41A
WS-05_082107_78_L	Trip	08/21/07	1052677	Methylene chloride	0.3 J	3	WS-05(field)
7H31026-BLK1	Method	08/27/07, 08/29/07	IQH2520, IQH2814	Methylene chloride	1.92 J	19.2	HAR-27(split), RD-32(split, trip)
HAR-27_082907_78_L	Trip	08/29/07	1053881	Carbon disulfide	0.8	4	RD-39B(prim, dup)
7J27013-BLK1	Method	10/19/07	IQJ2220	Methylene chloride	0.990 J	9.9	RD-61(trip)
RD-49B_102507_78_T	Trip	10/25/07	IQJ2739	Trichloroethene	0.47 J	4.7	RD-68B(split)
RD-13_102607_78_T	Trip	10/26/07	IQJ2838	Methylene chloride	1.1 J	11	RD-13(split)
7K05011-BLK1	Method	10/30/07	IQJ3104	Trichloroethene	0.28 J	1.4	RD-48C
7K07016-BLK1	Method	10/31/07, 11/02/07	IQK0007, IQK0199	Methylene chloride	1.86 J	18.6	RD-37(trip), RD-43A(trip)
RD-33C_110107_78_L	Trip	11/01/07	1063971	Carbon disulfide	0.2	1	RD-06, RD-33C
RD-52C_110107_19_L	Field	11/01/07	1063972	Carbon disulfide	0.1	0.5	RD-52C
<b>Metals (mg/L)</b>							
7B09075-BLK1	Method	02/07/07	IQB0680	Zinc	0.00274 J	0.0274	RD-22(Z2)
7B13142-BLK1	Method	02/12/07	IQB1156	Copper	0.000477 J	0.00477	RD-54B, RD-54C
7C01101-BLK1	Method	02/27/07	IQB2998	Copper	0.000920 J	0.0092	PZ-126
7C02083-BLK1	Method	02/28/07, 03/01/07	IQC0174, IQC0254, IQC0261	Copper	0.000881 J	0.00881	HAR-11, HAR-19, RD-59A, RD-59B, RD-59C
		02/28/07, 03/01/07	IQC0003, IQC0254	Manganese	0.000683 J	0.00683	HAR-19, RD-34A
		02/28/07, 03/01/07	IQC0003, IQC0174, IQC0254, IQC0261	Zinc	0.00739 J	0.0739	HAR-11, HAR-19, RD-34A, RD-59A, RD-59B, RD-59C
7C14094-BLK1	Method	02/22/07	IQC1271	Zinc	0.00502 J	0.0502	HAR-06

See last page of table for notes and explanations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M-490 2007 Annual\App D\2008-0228-HAI-SSFL\_M490\_D-IV-F.xls

February 2008

**TABLE D-IV**  
SUMMARY OF 2007 DATA QUALIFICATION DUE TO BLANK SAMPLE CONTAMINATION  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Blank Sample Identification	Blank Sample Type	Sample Date	Lab Report	Target Analyte(s) Detected in the Blank	Concentration	Corrective Action: Flag Associated Field Sample results with a "U" if less than or equal to this value	Affected Field Samples
<b>Metals (mg/L)</b>							
7C28105-BLK1	Method	02/12/07, 02/14/07, 02/15/07, 02/22/07, 02/26/07, 02/28/07, 03/01/07	IQC2829, IQC2831, IQC2845, IQC2851, IQC2854, IQC2856, IQC2859	Boron	0.0296 J	0.296	HAR-07(total), HAR-18(total), RD-34A(total), RD-46A(total), RD-55A(total), RD-60(total), WS-09(total)
7C28106-BLK1	Method	02/12/07- 02/15/07, 02/20/07, 02/22/07, 02/26/07, 02/28/07	IQC2829, IQC2830, IQC2831, IQC2838, IQC2842, IQC2845, IQC2846, IQC2851, IQC2854, IQC2858, IQC2859	Selenium	0.000615 J	0.006	ES-21(total), HAR-07(total), HAR-18(total), RD-09(total), RD-34A(total), RD-46A(total), RD-49A(total), RD-55A(total), RD-73(total), RS-54(total), WS-09A(total)
7C30091-BLK1	Method	02/12/07, 02/13/07, 03/01/07	IQC2832, IQC2838, IQC2857	Boron	0.0326 J	0.326	ES-24(total), RD-04(total), WS-09A(total)
7E16115-BLK1	Method	05/10/07, 05/15/07	IQE1147, IQE1615	Molybdenum, dissolved	0.000180 J	0.0018	ES-21, HAR-18, RD-09
7E29070-BLK1	Method	05/17/07	IQE1913, IQE1914	Aluminum, total	0.0465 J	0.465	RD-46A, RD-55A
7E24151-BLK1	Method	05/23/07	IQE2484	Potassium, dissolved	0.176 J	1.76	OS-02, OS-09, OS-10
7F05100-BLK1	Method	05/24/07	IQE2626, IQE2627	Boron, total	0.0396 J	0.396	RD-60, RD-86
7H30151-BLK1	Method	08/28/07	IQH2648	Molybdenum	0.000152 J	0.00152	HAR-16 (total)
7H27130-BLK1	Method	08/23/07	IQH2217	Zinc	0.00265 J	0.0265	RD-85
7H28112-BLK1	Method	08/22/07	IQH2100	Aluminum	0.0409 J	0.409	RD-46A (total)

See last page of table for notes and explanations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M-490 2007 Annual\App D\2008-0228-HAI-SSFL\_M490\_D-IV-F.xls

February 2008

**TABLE D-IV**  
SUMMARY OF 2007 DATA QUALIFICATION DUE TO BLANK SAMPLE CONTAMINATION  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Blank Sample Identification	Blank Sample Type	Sample Date	Lab Report	Target Analyte(s) Detected in the Blank	Concentration	Corrective Action: Flag Associated Field Sample results with a "U" if less than or equal to this value	Affected Field Samples
<b>Metals (mg/L)</b>							
7H17121-BLK1	Method	08/14/07-08/16/07	IQH1346, IQH1349, IQH1350, IQH1481, IQH1483, IQH1634, IQH1635	Lead	0.000196 J	0.00196	HAR-07 (dissolved), HAR-18 (dissolved), RD-04 (dissolved), RD-09 (dissolved), RD-18, RD-34A (dissolved), RD-55A (dissolved), RD-59A, RD-59B, RD-59C, RD-92
7H17121-BLK1	Method	08/14/07-08/16/07	IQH1346, IQH1348, IQH1349, IQH1350, IQH1481, IQH1483, IQH1635	Copper	0.00104 J	0.0104	HAR-18 (dissolved), RD-04 (dissolved), RD-09 (dissolved), RD-18, RD-34A (dissolved), RD-34B, RD-54B, RD-55A (dissolved), RD-59A, RD-73 (dissolved), RD-91, RD-92
7H16153-BLK1	Method	08/14/07	IQH1350	Boron	0.0274 J	0.274	HAR-18 (total)
7K08145-BLK1	Method	11/06/07-11/07/07	IQK0561, IQK0736	Chromium	0.00128 J	0.0128	HAR-07 (total), RD-49A (total)
<b>Dioxins (pg/L)</b>							
JW8831AA	Method	05/08/07	H7E140143	Octachlorodibenzo-p-dioxin	1.8 J	9.0	HAR-15
7249139-BLK	Method	08/28/07	H7H310109	Octachlorodibenzo-p-dioxin	1.2 J	6.0	HAR-14(prim, dup, field), HAR-15(prim, dup, field)
H7J250000-425B	Method	10/19/07	H7J250112	Octachlorodibenzo-p-dioxin	11 J	55	HAR-14, HAR-15
H7J250000-425B	Method	10/19/07	H7J250112	Octachlorodibenzofuran	13 J	65	HAR-14

See last page of table for notes and explanations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M-490 2007 Annual\App D\2008-0228-HAI-SSFL\_M490\_D-IV-F.xls

February 2008

**TABLE D-IV**  
**NOTES AND ABBREVIATIONS**

---

1. mg/L = Milligrams per liter.
2. ug/L = Micrograms per liter.
3. pg/L = Picograms per liter.
4. Prim = Primary sample.
5. Dup = Duplicate sample.
6. Field = Field equipment blank.
7. Method = Method blank.
8. Trip = Trip blank.
9. B = Analyte was detected in the associated method blank.
10. 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).
11. U = Not detected; numerical value represents the Method Detection Limit for that analyte.
12. Z = FLUTe sample port number.
13. \* = Reported result is less than 5X or 10X than the associated method blank when taking into account the dilution factor.
14. Total = Total metals. Total metal samples were not filtered, but were preserved in the field.
15. Dissolved = Dissolved metals. Dissolved metal samples were filtered and preserved in the field using a 0.45 micron filter.



**TABLE D-V**

SUMMARY OF 2007 DATA QUALIFICATION DUE TO SURROGATE RECOVERY EXCEEDANCE  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Lab Report	Affected Field Samples	Date Sampled	Method	Surrogate	%Surrogate Criteria	%Recovery	Target Analyte(s)	Concentration (ug/L)	Corrective Action: SVOC Qualification		
<i>Semi-Volatile Organic Compounds (ug/L)</i>											
IQB1676	HAR-08	02/15/07	8270C	2,4,6-Tribromophenol	40-120	---	1,2,4-Trichlorobenzene	2.4 U	R		
				2-Fluorobiphenyl	45-120	0	1,2-Dichlorobenzene	2.9 U	R		
				2-Fluorophenol	30-120	0	1,2-Diphenylhydrazine/Azobenzene	1.9 U	R		
				Nitrobenzene-d5	40-120	0	1,3-Dichlorobenzene	2.9 U	R		
				Phenol-d6	35-120	0	1,3-Dinitrobenzene	2.9 U	R		
				Terphenyl-d14	45-120	---	1,4-Dichlorobenzene	2.4 U	R		
							2,4,6-Trichlorophenol			2.9 U	R
							2,4-Dichlorophenol			1.9 U	R
							2,4-Dimethylphenol			3.4 U	R
							2,4-Dinitrophenol			4.4 U	R
							2,4-Dinitrotoluene			1.9 U	R
							2,6-Dinitrotoluene			1.9 U	R
							2-Chloronaphthalene			1.9 U	R
							2-Chlorophenol			1.9 U	R
							2-Nitrophenol			3.4 U	R
							3,3'-Dichlorobenzidine			2.9 U	R
							4,6-Dinitro-2-methylphenol			3.9 U	R
							4-Bromophenyl phenyl ether			2.4 U	R
							4-Chloro-3-methylphenol			1.9 U	R
							4-Chlorophenyl phenyl ether			1.9 U	R
							4-Nitrophenol			5.3 U	R
							Acenaphthene			1.9 U	R
							Acenaphthylene			1.9 U	R
							Anthracene			1.9 U	R
							Benzidine			8.3 U	R
							Benzo(a)anthracene			1.9 U	R
							Benzo(a)pyrene			1.9 U	R
							Benzo(b)fluoranthene			1.9 U	R
			Benzo(ghi)perylene			2.9 U	R				
			Benzo(k)fluoranthene			1.9 U	R				
			bis(2-Chloroethoxy)methane			1.9 U	R				

**TABLE D-V**  
SUMMARY OF 2007 DATA QUALIFICATION DUE TO SURROGATE RECOVERY EXCEEDANCE  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Lab Report	Affected Field Samples	Date Sampled	Method	Surrogate	%Surrogate Criteria	%Recovery	Target Compound(s)	Concentration (ug/L)	Corrective Action: SVOC Qualification
<b>Semi-Volatile Organic Compounds (ug/L)</b>									
IQB1676	HAR-08	02/15/07	8270C	2,4,6-Tribromophenol	40-120	---	bis(2-Chloroethyl) ether	2.4 U	R
				2-Fluorobiphenyl	45-120	0	bis(2-Chloroisopropyl) ether	2.4 U	R
				2-Fluorophenol	30-120	0	bis(2-Ethylhexyl) phthalate	3.9 U	R
				Nitrobenzene-d5	40-120	0	Butyl benzyl phthalate	3.9 U	R
				Phenol-d6	35-120	0	Chrysene	1.9 U	R
				Terphenyl-d14	45-120	---	Dibenzo(a,h)anthracene	2.9 U	R
							Diethyl phthalate	1.9 U	R
							Dimethyl phthalate	1.9 U	R
							Di-n-butyl phthalate	1.9 U	R
							di-n-Octyl phthalate	1.9 U	R
							Fluoranthene	1.9 U	R
							Fluorene	1.9 U	R
							Hexachlorobenzene	2.4 U	R
							Hexachlorobutadiene	3.4 U	R
							Hexachloroethane	2.9 U	R
							Indeno(1,2,3-cd)pyrene	2.9 U	R
							Isophorone	1.9 U	R
							Naphthalene	2.4 U	R
							Nitrobenzene	2.4 U	R
							N-Nitrosodimethylamine	2.4 U	R
							N-Nitrosodi-n-propylamine	2.4 U	R
			N-Nitrosodiphenylamine	1.9 U	R				
			Pentachlorophenol	3.4 U	R				
			Phenanthrene	1.9 U	R				
			Phenol	1.9 U	R				
IQH1215	RD-51B	08/13/07	8270C	Phenol-d6	35-120	20	1,2,4-Trichlorobenzene	2.4 U	UJ
				2-Fluorophenol	30-120	17	1,2-Dichlorobenzene	2.8 U	UJ
				2,4,6-Tribromophenol	40-120	20	1,2-Diphenylhydrazine/Azobenzene	1.9 U	UJ
				Nitrobenzene-d5	40-120	25	1,3-Dichlorobenzene	2.8 U	UJ
				2-Fluorobiphenyl	45-120	28	1,3-Dinitrobenzene	2.8 U	UJ
				Terphenyl-d14	45-120	25	1,4-Dichlorobenzene	2.4 U	UJ

**TABLE D-V**  
 SUMMARY OF 2007 DATA QUALIFICATION DUE TO SURROGATE RECOVERY EXCEEDANCE  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Lab Report	Affected Field Samples	Date Sampled	Method	Surrogate	%Surrogate Criteria	%Recovery	Target Compound(s)	Concentration (ug/L)	Corrective Action: SVOC Qualification
<i>Semi-Volatile Organic Compounds (ug/L)</i>									
IQH1215	RD-51B	08/13/07	8270C	Phenol-d6	35-120	20	2,4,6-Trichlorophenol	2.8 U	UJ
				2-Fluorophenol	30-120	17	2,4-Dichlorophenol	1.9 U	UJ
				2,4,6-Tribromophenol	40-120	20	2,4-Dimethylphenol	3.3 U	UJ
				Nitrobenzene-d5	40-120	25	2,4-Dinitrophenol	4.2 U	UJ
				2-Fluorobiphenyl	45-120	28	2,4-Dinitrotoluene	1.9 U	UJ
				Terphenyl-d14	45-120	25	2,6-Dinitrotoluene	1.9 U	UJ
							2-Chloronaphthalene	1.9 U	UJ
							2-Chlorophenol	1.9 U	UJ
							2-Nitrophenol	3.3 U	UJ
							3,3-Dichlorobenzidine	2.8 U	UJ
							4,6-Dinitro-2-Methylphenol	3.8 U	UJ
							4-Bromophenyl phenyl ether	2.4 U	UJ
							4-Chloro-3-Methylphenol	1.9 U	UJ
							4-Chlorophenyl phenyl ether	1.9 U	UJ
							4-Nitrophenol	5.2 U	UJ
							Acenaphthene	1.9 U	UJ
							Acenaphthylene	1.9 U	UJ
							Anthracene	1.9 U	UJ
							Benzo(a)anthracene	1.9 U	UJ
							Benzo(a)pyrene	1.9 U	UJ
							Benzo(b)fluoranthene	1.9 U	UJ
							Benzo(g,h,i)perylene	2.8 U	UJ
							Benzo(k)fluoranthene	1.9 U	UJ
							bis(2-Chloroethoxy)methane	1.9 U	UJ
							bis(2-chloroethyl)ether	2.4 U	UJ
							bis(2-chloroisopropyl)ether	2.4 U	UJ
							bis(2-ethylhexyl)phthalate	3.8 U	UJ
							Butyl benzyl phthalate	3.8 U	UJ
							Chrysene	1.9 U	UJ
							Dibenz(a,h)anthracene	2.8 U	UJ
							Diethyl phthalate	1.9 U	UJ

**TABLE D-V**  
 SUMMARY OF 2007 DATA QUALIFICATION DUE TO SURROGATE RECOVERY EXCEEDANCE  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Lab Report	Affected Field Samples	Date Sampled	Method	Surrogate	%Surrogate Criteria	%Recovery	Target Compound(s)	Concentration (ug/L)	Corrective Action: SVOC Qualification
<b>Semi-Volatile Organic Compounds (ug/L)</b>									
IQH1215	RD-51B	08/13/07	8270C	Phenol-d6	35-120	20	Dimethyl phthalate	1.9 U	UJ
				2-Fluorophenol	30-120	17	Di-n-butyl phthalate	1.9 U	UJ
				2,4,6-Tribromophenol	40-120	20	Di-n-octyl phthalate	1.9 U	UJ
				Nitrobenzene-d5	40-120	25	Fluoranthene	1.9 U	UJ
				2-Fluorobiphenyl	45-120	28	Fluorene	1.9 U	UJ
				Terphenyl-d14	45-120	25	Hexachlorobenzene	2.4 U	UJ
							Hexachlorobutadiene	3.3 U	UJ
							Hexachloroethane	2.8 U	UJ
							Indeno(1,2,3-cd)pyrene	2.8 U	UJ
							Isophorone	1.9 U	UJ
							Naphthalene	2.4 U	UJ
							Nitrobenzene	2.4 U	UJ
							n-Nitrosodimethylamine	2.4 U	UJ
							n-Nitroso-di-n-propylamine	2.4 U	UJ
							n-Nitrosodiphenylamine	1.9 U	UJ
							Pentachlorophenol	3.3 U	UJ
							Phenanthrene	1.9 U	UJ
			Phenol	1.9 U	UJ				
<b>Volatile Organic Compounds (ug/L)</b>									
1061986	HAR-14 (trip)	10/19/07	8260B	Toluene-d8	77-110	74	1,1,1-Trichloroethane	0.1 U	UJ
							1,1,2,2-Tetrachloroethane	0.1 U	UJ
							1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	UJ
							1,1,2-Trichloroethane	0.1 U	UJ
							1,1-Dichloroethane	0.1 U	UJ
							1,1-Dichloroethene	0.1 U	UJ
							1,2-Dichlorobenzene	0.1 U	UJ
							1,2-Dichloroethane	0.1 U	UJ

**TABLE D-V**

SUMMARY OF 2007 DATA QUALIFICATION DUE TO SURROGATE RECOVERY EXCEEDANCE  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Lab Report	Affected Field Samples	Date Sampled	Method	Surrogate	%Surrogate Criteria	%Recovery	Target Compound(s)	Concentration (ug/L)	Corrective Action: VOC Qualification
<i>Volatile Organic Compounds (ug/L)</i>									
1061986	HAR-14 (trip)	10/19/07	8260B	Toluene-d8	77-110	74	1,2-Dichloropropane	0.1 U	UJ
							1,3-Dichlorobenzene	0.1 U	UJ
							1,4-Dichlorobenzene	0.1 U	UJ
							2-Butanone	1 U	UJ
							2-Hexanone	1 U	UJ
							4-Methyl-2-Pentanone	1 U	UJ
							Acetone	3 U	UJ
							Benzene	0.1 U	UJ
							Bromodichloromethane	0.1 U	UJ
							Bromoform	0.1 U	UJ
							Bromomethane	0.1 U	UJ
							Carbon Disulfide	0.1 U	UJ
							Carbon Tetrachloride	0.1 U	UJ
							Chlorobenzene	0.1 U	UJ
							Chloroethane	0.1 U	UJ
							Chloroform	0.1 U	UJ
							Chloromethane	0.1 U	UJ
							cis-1,2-Dichloroethene	0.1 U	UJ
							cis-1,3-Dichloropropene	0.1 U	UJ
							Dibromochloromethane	0.1 U	UJ
							Ethylbenzene	0.1 U	UJ
							Methylene chloride	0.2 U	UJ
							m-Xylene & p-Xylene	0.1 U	UJ
							o-Xylene	0.1 U	UJ
							Tetrachloroethene	0.1 U	UJ
							Toluene	0.1 U	UJ
							trans-1,2-Dichloroethene	0.1 U	UJ
							trans-1,3-Dichloropropene	0.1 U	UJ
							Trichloroethene	0.1 U	UJ
							Trichlorofluoromethane	0.1 U	UJ
							Vinyl Chloride	0.1 U	UJ

**TABLE D-V**

SUMMARY OF 2007 DATA QUALIFICATION DUE TO SURROGATE RECOVERY EXCEEDANCE  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Lab Report	Affected Field Samples	Date Sampled	Method	Surrogate	%Surrogate Criteria	%Recovery	Target Compound(s)	Concentration (ug/L)	Corrective Action: VOC Qualification
<i>Volatile Organic Compounds (ug/L)</i>									
1061986	RD-61	10/19/07	8260B	Toluene-d8	77-110	74	1,1,1-Trichloroethane	0.1 U	UJ
							1,1,2,2-Tetrachloroethane	0.1 U	UJ
							1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	UJ
							1,1,2-Trichloroethane	0.1 U	UJ
							1,1-Dichloroethane	0.1 U	UJ
							1,1-Dichloroethene	0.1 U	UJ
							1,2-Dichlorobenzene	0.1 U	UJ
							1,2-Dichloroethane	0.1 U	UJ
							1,2-Dichloropropane	0.1 U	UJ
							1,3-Dichlorobenzene	0.1 U	UJ
							1,4-Dichlorobenzene	0.1 U	UJ
							2-Butanone	1 U	UJ
							2-Hexanone	2 U	UJ
							4-Methyl-2-Pentanone	3 U	UJ
							Acetone	3 U	UJ
							Benzene	0.1 U	UJ
							Bromodichloromethane	0.1 U	UJ
							Bromoform	0.1 U	UJ
							Bromomethane	0.1 U	UJ
							Carbon Tetrachloride	0.1 U	UJ
							Chlorobenzene	0.1 U	UJ
							Chloroethane	0.1 U	UJ
							Chloroform	0.1 U	UJ
							Chloromethane	0.1 U	UJ
							cis-1,2-Dichloroethene	0.1 U	UJ
							cis-1,3-Dichloropropene	0.1 U	UJ
							Dibromochloromethane	0.1 U	UJ
							Ethylbenzene	0.1 U	UJ
							Methylene chloride	0.2 U	UJ
							m-Xylene & p-Xylene	0.1 U	UJ
							o-Xylene	0.1 U	UJ

**TABLE D-V**

SUMMARY OF 2007 DATA QUALIFICATION DUE TO SURROGATE RECOVERY EXCEEDANCE  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Lab Report	Affected Field Samples	Date Sampled	Method	Surrogate	%Surrogate Criteria	%Recovery	Target Compound(s)	Concentration (ug/L)	Corrective Action: VOC Qualification
<i>Volatile Organic Compounds (ug/L)</i>									
1061986	RD-61	10/19/07	8260B	Toluene-d8	77-110	74	Tetrachloroethene	0.1 U	UJ
							Toluene	0.1 U	UJ
							trans-1,2-Dichloroethene	0.1 U	UJ
							trans-1,3-Dichloropropene	0.1 U	UJ
							Trichloroethene	0.1 U	UJ
							Trichlorofluoromethane	0.1 U	UJ
							Vinyl Chloride	0.1 U	UJ
1061986	RD-62	10/19/07	8260B	Toluene-d8	77-110	74	1,1,1-Trichloroethane	0.1 U	UJ
							1,1,2,2-Tetrachloroethane	0.1 U	UJ
							1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	UJ
							1,1,2-Trichloroethane	0.1 U	UJ
							1,1-Dichloroethane	0.1 U	UJ
							1,1-Dichloroethene	0.1 U	UJ
							1,2-Dichlorobenzene	0.1 U	UJ
							1,2-Dichloroethane	0.1 U	UJ
							1,2-Dichloropropane	0.1 U	UJ
							1,3-Dichlorobenzene	0.1 U	UJ
							1,4-Dichlorobenzene	0.1 U	UJ
							2-Butanone	1 U	UJ
							2-Hexanone	1 U	UJ
							4-Methyl-2-Pentanone	1 U	UJ
							Acetone	3 U	UJ
							Benzene	0.1 U	UJ
							Bromodichloromethane	0.1 U	UJ
							Bromoform	0.1 U	UJ
							Bromomethane	0.1 U	UJ
							Carbon Tetrachloride	0.1 U	UJ
							Chlorobenzene	0.1 U	UJ
							Chloroethane	0.1 U	UJ
							Chloroform	0.1 U	UJ
							Chloromethane	0.1 U	UJ

**TABLE D-V**  
 SUMMARY OF 2007 DATA QUALIFICATION DUE TO SURROGATE RECOVERY EXCEEDANCE  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Lab Report	Affected Field Samples	Date Sampled	Method	Surrogate	%Surrogate Criteria	%Recovery	Target Compound(s)	Concentration (ug/L)	Corrective Action: VOC Qualification
<i>Volatile Organic Compounds (ug/L)</i>									
1061986	RD-62	10/19/07	8260B	Toluene-d8	77-110	74	cis-1,2-Dichloroethene	0.1 U	UJ
							cis-1,3-Dichloropropene	0.1 U	UJ
							Dibromochloromethane	0.1 U	UJ
							Ethylbenzene	0.1 U	UJ
							Methylene chloride	0.2 U	UJ
							m-Xylene & p-Xylene	0.1 U	UJ
							o-Xylene	0.1 U	UJ
							Tetrachloroethene	0.1 U	UJ
							Toluene	0.1 U	UJ
							trans-1,2-Dichloroethene	0.1 U	UJ
							trans-1,3-Dichloropropene	0.1 U	UJ
							Trichloroethene	0.1 U	UJ
							Trichlorofluoromethane	0.1 U	UJ
							Vinyl Chloride	0.1 U	UJ
1061986	RD-62 (trip)	10/19/07	8260B	Toluene-d8	77-110	74	1,1,1-Trichloroethane	0.1 U	UJ
							1,1,2,2-Tetrachloroethane	0.1 U	UJ
							1,1,2-Trichloro-1,2,2-trifluoroethane	0.2 U	UJ
							1,1,2-Trichloroethane	0.1 U	UJ
							1,1-Dichloroethane	0.1 U	UJ
							1,1-Dichloroethene	0.1 U	UJ
							1,2-Dichlorobenzene	0.1 U	UJ
							1,2-Dichloroethane	0.1 U	UJ
							1,2-Dichloropropane	0.1 U	UJ
							1,3-Dichlorobenzene	0.1 U	UJ
							1,4-Dichlorobenzene	0.1 U	UJ
							2-Butanone	1 U	UJ
							2-Hexanone	1 U	UJ
							4-Methyl-2-Pentanone	1 U	UJ
							Acetone	3 U	UJ
							Benzene	0.1 U	UJ
							Bromodichloromethane	0.1 U	UJ



**TABLE D-V**

SUMMARY OF 2007 DATA QUALIFICATION DUE TO SURROGATE RECOVERY EXCEEDANCE  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Lab Report	Affected Field Samples	Date Sampled	Method	Surrogate	%Surrogate Criteria	%Recovery	Target Compound(s)	Concentration (ug/L)	Corrective Action: VOC Qualification
<i>Volatile Organic Compounds (ug/L)</i>									
1061986	RD-62 (trip)	10/09/07	8260B	Toluene-d8	77-110	74	Bromoform	0.1 U	UJ
							Bromomethane	0.1 U	UJ
							Carbon Disulfide	0.1 U	UJ
							Carbon Tetrachloride	0.1 U	UJ
							Chlorobenzene	0.1 U	UJ
							Chloroethane	0.1 U	UJ
							Chloroform	0.1 U	UJ
							Chloromethane	0.1 U	UJ
							cis-1,2-Dichloroethene	0.1 U	UJ
							cis-1,3-Dichloropropene	0.1 U	UJ
							Dibromochloromethane	0.1 U	UJ
							Ethylbenzene	0.1 U	UJ
							Methylene chloride	0.2 U	UJ
							m-Xylene & p-Xylene	0.1 U	UJ
							o-Xylene	0.1 U	UJ
							Tetrachloroethene	0.1 U	UJ
							Toluene	0.1 U	UJ
							trans-1,2-Dichloroethene	0.1 U	UJ
							trans-1,3-Dichloropropene	0.1 U	UJ
							Trichloroethene	0.1 U	UJ
							Trichlorofluoromethane	0.1 U	UJ
							Vinyl Chloride	0.1 U	UJ
IQJ2476	HAR-18	10/23/07	8260B-SIM	Dibromofluoromethane	80-120	124	1,4-Dioxane	11	J

**TABLE D-V**  
**NOTES AND ABBREVIATIONS**

---

1. ug/L = Micrograms per liter.
2. R = Rejected result.
3. U = Not detected; numerical value represents the Method Detection Limit for that compound.
4. UJ = Not detected. Estimated detection limit as a result of analytical quality control deficiencies.
5. SVOC Qualification = If 2 or more surrogates in either semi-volatile fraction (base/neutral or acid fraction) have % recoveries greater than the upper acceptance limit, the associated target analyte is qualified "J" for positive results and not qualified for non-detects. If 2 or more surrogates in either semi-volatile fraction (base/neutral or acid fraction) have % recoveries >10% but less than the lower acceptance limit, the associated target analyte is qualified "J" for positive results and "UJ" for non-detects. In the case where 2 or more surrogates are out in either fraction, one with a recovery greater than the upper acceptance limit and one with a recovery >10% but less than the lower acceptance limit, the associated target analyte is qualified "J" for positive results and "UJ" for non-detects. If any surrogate in either semi-volatile fraction (base/neutral or acid fraction) show less than 10% recovery, associated target analyte positive results, within that fraction, are qualified "J" and non-detects are qualified "R".
6. VOC Qualification = If the surrogate percent recovery is greater than the upper acceptance limit, associated target analyte positive results are qualified "J" and non-detects should not be qualified. If the surrogate percent recovery is less than the lower acceptance limit associated target analyte positive results are qualified "J" and non-detects are qualified "UJ". If the surrogate percent recovery is less than 10% associated target analyte positive results are qualified "J" and non-detects are qualified "R".

**TABLE D-VI**  
 SUMMARY OF 2007 DATA QUALIFICATION DUE TO LCS/LCSD, MS/MSD RECOVERY EXCEEDANCE  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>General Minerals</b>								
<b>MS/MSD or LCS/LCSD Sample Identification</b>	<b>Sample Type</b>	<b>Lab Report</b>	<b>Target Analyte(s) Outside of Recovery Limits</b>	<b>% Recovery Criteria</b>	<b>% Recovery</b>	<b>Affected Field Samples</b>	<b>Date Sampled</b>	<b>Corrective Action: Inorganics Qualification</b>
C7B2312-BS1	LCS	IQB2445	Formaldehyde	75-150	157	HAR-18	02/22/07	R
7E14054-MSD1	MSD	IQE0965	Sulfate	80-120	70	RD-70	05/09/07	J
C7H1703-BS1	LCS	IQH1474, IQH1479, IQH1632, IQH1633	Formaldehyde	74-150	198	HAR-07, HAR-08, RD-01, RD-04, RD-10, RD-44	08/15/07 - 8/16/07	R
7J25044-MS1/MSD1	MSD	IQJ2594, IQJ2595	Nitrate	80-120	58, 50	HAR-20, RD-44, WS-06	10/24/07	UJ
<b>Metals and Cyanide</b>								
<b>MS/MSD Sample Identification</b>	<b>Sample Type</b>	<b>Lab Report</b>	<b>Target Analyte(s) Outside of Recovery Limits</b>	<b>% Recovery Criteria</b>	<b>% Recovery</b>	<b>Affected Field Samples</b>	<b>Date Sampled</b>	<b>Corrective Action: Metals and Cyanide Qualification</b>
7E10097-MS1	MS	IQE0656	Manganese, total	75-125	129	HAR-16	05/07/07	J
7E10145-MS1/MSD1	MS/MSD	IQE0656, IQE0815, IQE0816	Cyanide, total	70-115	51, 56	HAR-07, HAR-14, HAR-15, HAR-16, HAR-17	05/07/07-05/08/07	UJ
7I10110-MS1	MS	IQH2908	Zinc	75-125	148	RD-86 (total)	08/29/07	J
7H30151-MSD1	MSD	IQH2648, IQH2812	Copper	75-125	195	ES-24 (total), HAR-16 (total)	08/28/07, 8/29/07	J
7H28112-MSD1	MSD	IQH2100	Iron	75-125	127	RD-46A (total)	08/22/07	J
7H14118-MS1/MSD1	MS/MSD	IQH0483	Tin	75-125	69, 70	RD-60 (dissolved)	08/06/07	UJ
7K01140-MS1	MS	IQJ2983, IQJ3102, IQK0008	Zinc	80-120	72	RD-34A (total), RD-55A (total), RD-60 (total)	10/29/07 - 10/31/07	J
<b>Semi-Volatile Organic Compounds (SVOCs)</b>								
<b>MS/MSD or LCS/LCSD Sample Identification</b>	<b>Sample Type</b>	<b>Lab Report</b>	<b>Target Analyte(s) Outside of Recovery Limits</b>	<b>% Recovery Criteria</b>	<b>% Recovery</b>	<b>Affected Field Samples</b>	<b>Date Sampled</b>	<b>Corrective Action: SVOC Qualification</b>
7B19073-BS1/BSD1	LCS/LCSD	IQB1484, IQB1485	Benzidine	25-160	---	RD-09, RD-41A, RD-41B, WS-06, WS-09	02/14/07	R
7B19073-BSD1	LCSD	IQB1484, IQB1485	3,3-Dichlorobenzidine	50-135	44	RD-09, RD-41A, RD-41B, WS-06, WS-10	02/14/07	R
7B22130-BS1/BSD1	LCS/LCSD	IQB1676, IQB1678	Benzidine	25-160	---	HAR-07, HAR-20, RD-01, RD-58A	02/15/07	R
7E16139-BS1	LCS	IQE1139, IQE1142	Benzidine	25-160	---	RD-04, RD-49B, RD-51B, RD-51C, WS-09	05/10/07	R

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M-490 2007 Annual\App D\2008-0228-HAI-SSFL\_M490\_D-VI-F.xls

**TABLE D-VI**  
 SUMMARY OF 2007 DATA QUALIFICATION DUE TO LCS/LCSD, MS/MSD RECOVERY EXCEEDANCE  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Semi-Volatile Organic Compounds (SVOCs)</b>								
<b>MS/MSD or LCS/LCSD Sample Identification</b>	<b>Sample Type</b>	<b>Lab Report</b>	<b>Target Analyte(s) Outside of Recovery Limits</b>	<b>% Recovery Criteria</b>	<b>% Recovery</b>	<b>Affected Field Samples</b>	<b>Date Sampled</b>	<b>Corrective Action: SVOC Qualification</b>
7E18059-BS1	LCS	IQE1469, IQE1612, IQE1613	Benzidine	25-160	---	HAR-08, HAR-18, HAR-20, RD-09, RD-44, RD-49A, RD-49C, WS-05, WS-06	05/14/07 - 05/15/07	R
7E22058-BSD1	LCSD	IQE1761, IQE1906	Benzidine	25-160	---	RD-41A, RD-55A, RD-58B	05/16/07 - 05/17/07	R
7H15094-BSD1	LCS	IQH1215, IQH1341, IQH1344	Benzidine	25-160	---	HAR-18, HAR-20, RD-09, RD-49B, RD-51B, RD-51C, RD-55A, RD-55B, RD-58B	08/13/07- 08/14/07	R
7H19031-BS1	LCS	IQH1474, IQH1479	Benzidine	25-160	---	RD-01, RD-04, RD-10, RD-44	08/15/07	R
7J24092-BS1	LCS	IQJ2475, IQJ2476	Benzidine	25-160	---	HAR-18, RD-01, RD-10(prim, dup, field), RD-51B, RD-51C	10/23/07	R
7J27035-BS1/BSD1	LCS	IQJ2594, IQJ2595	Benzidine	25-160	20, (---)	HAR-20, RD-44, WS-06	10/24/07	R
7J31109-BS1/BSD1	LCS	IQJ2736	Benzidine	25-160	(---), 15	RD-04, WS-09	10/25/07	R
7K04022-BS1	LCS	IQJ3226	Benzidine	25-160	22	RD-58A	10/31/07	R
<b>Volatile Organic Compounds (VOCs)</b>								
<b>MS/MSD or LCS/LCSD Sample Identification</b>	<b>Sample Type</b>	<b>Lab Report</b>	<b>Target Analyte(s) Outside of Recovery Limits</b>	<b>% Recovery Criteria</b>	<b>% Recovery</b>	<b>Affected Field Samples</b>	<b>Date Sampled</b>	<b>Corrective Action: VOC Qualification</b>
7E16002-MS1/MSD1	MS/MSD	IQE1612	cis-1,2-Dichloroethene	65-130	158, 137	WS-06	05/15/07	J
C072391AB-MS	MS	1052676, 1052677, 1052678	cis-1,2-Dichloroethene	83-124	179	HAR-08, RD-41A(prim, dup), RD-45B(prim, dup), RD-49C, WS-05(prim, dup), WS-06	08/16/07, 08/21/07	J
		1052676, 1052677, 1052678	trans-1,2-Dichloroethene	83-120	169	HAR-08, RD-41A(prim, dup), WS-06	08/16/07, 08/21/07	J
		1052676, 1052677, 1052678	Trichloroethene	79-131	57	HAR-08, RD-41A(prim,dup), RD-45B(prim, dup), RD-49C, WS-05(prim, dup), WS-06	08/16/07, 08/21/07	J
		1052676, 1052677, 1052678	Vinyl chloride	62-141	153	HAR-08, RD-49C, WS-06	08/16/07, 08/21/07	J

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M-490 2007 Annual\App D\2008-0228-HAI-SSFL\_M490\_D-VI-F.xls

**TABLE D-VI**  
 SUMMARY OF 2007 DATA QUALIFICATION DUE TO LCS/LCSD, MS/MSD RECOVERY EXCEEDANCE  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

<b>Volatile Organic Compounds (VOCs)</b>								
<b>MS/MSD or LCS/LSCD Sample Identification</b>	<b>Sample Type</b>	<b>Lab Report</b>	<b>Target Analyte(s) Outside of Recovery Limits</b>	<b>% Recovery Criteria</b>	<b>% Recovery</b>	<b>Affected Field Samples</b>	<b>Date Sampled</b>	<b>Corrective Action: VOC Qualification</b>
C07341AA-MS	MS	1061986	Chloroform	94-127	148	HAR-14	10/19/07	J
			Trichloroethene	79-131	132	HAR-14, HAR-15	10/19/07	J
L073042AA-MS	MS	1062444, 1062671, 1062891	trans-1,2-Dichloroethene	82-133	77	HAR-18, HAR-20, RD-01, RD-41B, RD-49B	10/23/07 - 10/25/07	J
		1062447, 1062452	trans-1,2-Dichloroethene	82-133	77	HAR-16 (prim, dup, field), RD-10(prim, dup)	10/22/07	UJ
		1064222	Trichlorofluoromethane	67-150	154	RS-54	11/05/07	J

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M-490 2007 Annual\App D\2008-0228-HAI-SSFL\_M490\_D-VI-F.xls

**TABLE D-VI**  
**NOTES AND ABBREVIATIONS**

---

1. LCS = Laboratory control standard.
2. LCSD = Laboratory control standard duplicate.
3. MS = Matrix spike.
4. MSD = Matrix spike duplicate.
5. 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).
6. UJ = Not detected. Estimated detection limit as a result of quality control recoveries exceeding the acceptance limit range.
7. R = The analyte result was rejected; presence or absence of the analyte cannot be verified.
8. --- = Sample recovery was below method control limits; no % recovery reported.
9. General Minerals Qualification = If % Recovery (% Rec) is less than the lower acceptance limit and >10%, the associated target analyte is qualified "J" for positive results and "UJ" for non-detects. If the % Rec is <10%, positive results are qualified "J" and non-detects are qualified "R". If % Rec is greater than the 120%, the associated target analyte is qualified "J" for positive results. If % Rec is greater than 150%, the associated target analyte is qualifier "R", and not qualified for non-detects.
10. Metals/Cyanide Qualification = LCS: If the % Recovery is <50%, qualify results >MDL as "J" and non-detects as "R". If the % Recovery is 50-79%, qualify results >MDL as "J" and non-detects as "UJ". If the % Recovery is >120%, qualify results > MDL as "J" and non-detects should not be qualified. If the % Recovery is >150%, qualify all results as "R".  
  
MS/MSD: If the sample concentration is 4X > MS spike level and the LCS results are valid, then ignore out of range % Recovery in the MS; no action required. If the % Recovery is <30%, qualify results >MDL as "J" and non-detects as "R". If the % Recovery is 30-74%, qualify results >MDL as "J" and non-detects as "UJ". If the % Recovery is >125%, qualify results >MDL as "J" and non-detects should not be qualified. Only qualify project samples based on MS/MSD non-compliance if the MS/MSD is an actual project sample.
11. SVOC / VOC Qualification = If the LCS % Recovery 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 % Recovery 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 % Recovery 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 % Recovery 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 % Recovery is less than 10%, associated target analyte positive results are qualified "J" and non-detects are qualified "R".

**TABLE D-VII**  
SUMMARY OF 2007 DATA QUALIFICATION OF SAMPLES BY MECX  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Date	Sample Type	Analyte	Data Validation Issues	Qualified Result	Project and Lab Qualifier Codes	Units	Corrective Action: MECX Validation Qualifier/ Result Value Change	Lab
<b>Shallow Wells</b>									
HAR-14	05/08/07	Split	OCDD	Reported concentration is less than 5X the concentration found in the associated method blank. Sample qualified as an estimated non-detect and raised to the reporting limit of 95 pg/L.	2.1	QBJ	pg/L	95 UJ	TA-Knox
RS-54	02/15/07	Primary	OCDD	Estimated maximum possible concentration (EMPC) did not meet identification criteria.	2.61	U	pg/L	UJ	Vista
		Split	OCDD	Method blank contamination.	5.77		pg/L	UJ	SGS
<b>Chatsworth Formation Wells</b>									
HAR-16	05/07/07	Split	OCDD	Reported concentration is less than 5X the concentration found in the associated method blank. Sample qualified as an estimated non-detect and raised to the reporting limit of 95 pg/L.	2.8	QBJ	pg/L	95 UJ	TA-Knox
HAR-19	03/01/07	Split	OCDD	Any detect below the laboratory lower calibration level was qualified as estimated.	4.13		pg/L	J	SGS
			2,3,7,8-TCDF	Method blank contamination.	2.41		pg/L	UJ	SGS
			2,3,4,7,8-PeCDF	Any detect below the laboratory lower calibration level was qualified as estimated.	8.26		pg/L	J	SGS
			Total TCDFs	Method blank contamination.	2.41		pg/L	UJ	SGS
RD-05B	10/31/07	Dup	Carbon disulfide	The sample result was edited to report two significant figures rather than one.	0.7		ug/L	0.67	Lan
RD-05C	10/30/07	Primary	Carbon disulfide	The sample result was edited to report two significant figures rather than one.	0.7		ug/L	0.70	Lan

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M-490 2007 Annual\App D\2008-0228-HAI-SSFL\_M490\_D-VII-F.xls

February 2008

**TABLE D-VII**  
SUMMARY OF 2007 DATA QUALIFICATION OF SAMPLES BY MECX  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Date	Sample Type	Analyte	Data Validation Issues	Qualified Result	Project and Lab Qualifier Codes	Units	Corrective Action: MECX Validation Qualifier/ Result Value Change	Lab
RD-36B	05/22/07	Primary	Perchlorate	Rejected in favor of the more technically sound reanalysis.	0.76	J	ug/L	R	TA
		Primary - Reanalysis	Perchlorate	Continuing calibration verification outside acceptance criteria.	0.65	U	ug/L	UJ	TA
RD-37	11/02/07	Primary	Carbon disulfide	The sample result was edited to report two significant figures rather than one.	0.6		ug/L	0.55	Lan
		Dup	Carbon disulfide	The sample result was edited to report two significant figures rather than one.	0.7		ug/L	0.67	Lan
RD-43C	10/31/07	Primary	Carbon disulfide	The sample result was edited to report two significant figures rather than one.	0.6		ug/L	0.62	Lan
RD-48B	08/29/07	Primary	OCDF	Estimated maximum possible concentration (EMPC) did not meet identification criteria.	5.9	J	pg/L	UJ	TA-Knox
			1,2-dibromo-3-chloropropane	The detect in the site sample was not confirmed on the secondary column analysis. Result identified as a false positive.	0.0041	J	ug/L	0.0023 U	TA
RD48C	10/30/07	Primary	Trichloroethene	The sample result was edited to report two significant figures rather than one.	0.2	J	ug/L	0.18 J	Lan
		Dup	Trichloroethene	The sample result was edited to report two significant figures rather than one.	0.1	J	ug/L	0.13 J	Lan
RD-70	10/24/07	Primary	Carbon disulfide	The sample result was edited to report two significant figures rather than one.	0.6		ug/L	0.59	Lan
RD-71	10/26/07	Primary	Carbon disulfide	The sample result was edited to report two significant figures rather than one.	0.6		ug/L	0.63	Lan

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M-490 2007 Annual\App D\2008-0228-HAI-SSFL\_M490\_D-VII-F.xls

February 2008



**TABLE D-VII**  
**NOTES AND ABBREVIATIONS**

---

1.	LAN	= Lancaster Laboratories of Lancaster, Pennsylvania.
2.	MECX	= MECX, LP of Aurora, Colorado.
3.	SGS	= SGS Environmental Services, Inc. of Wilmington, NC.
4.	TA	= TestAmerica of Irvine, California.
5.	TA-Knox	= TestAmerica of Knoxville, Tennessee.
6.	Vista	= Vista Analytical Laboratory, Inc. of El Dorado Hills, California, formerly Alta Analytical Laboratory.
7.	pg/L	= Picograms per liter.
8.	ug/L	= Micrograms per liter.
9.	J	= Estimated value. For Project and Lab Qualifiers, J indicates the analyte was detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). For OCDF, J indicates the analyte was detected at a level less than the minimum level and greater than or equal to the estimated detection limit. For MECX, J indicates that the organic analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample or that the associated value for the inorganic analyte is an estimated quantity.
10.	U	= Not detected; numerical value represents the Method Detection Limit for that analyte except where EMPC (estimated maximum possible concentration) is indicated.
11.	UJ	= Not detected; estimated method detection limit.
12.	R	= The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.
13.	Primary	= Primary sample.
14.	Dup	= Duplicate sample.
15.	Split	= Split sample.
16.	2,3,7,8-TCDF	= 2,3,7,8-Tetrachlorodibenzofuran
	2,3,4,7,8-PeCDF	= 2,3,4,7,8-Pentachlorodibenzofuran
	OCDD	= 1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin
	Total TCDF	= Tetrachlorodibenzofuran

Note: Results validated by MECX that did not require qualification are not listed in this table.

## **APPENDIX E**

### **Results of Radiological Analyses**

**APPENDIX E  
RESULTS OF RADIOLOGICAL ANALYSES**

**TABLE OF CONTENTS**

RESULTS OF RADIOLOGICAL ANALYSES.....1

**LIST OF TABLES**

<b>Table No.</b>	<b>Title</b>
E-I	RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
E-II	RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
E-III	RESULTS OF ANALYSES FOR MAN-MADE, BETA/GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
E-IV	RESULTS OF ANALYSES FOR NATURALLY OCCURRING GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER
E-V	RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER

## **APPENDIX E**

### **RESULTS OF RADIOLOGICAL ANALYSES**

This appendix contains a compilation of all 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/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.

The radiochemistry results are generally presented as the activity detected within an overall error range ( $\pm$ ). Any activity detected is reported by the laboratory. 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 each of these cases, radioactivity is not considered to be present at detectable concentrations.

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Piezometers</b>										
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
<b>Shallow Wells</b>										
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
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
				Activity	Error	MDA			
<b>Shallow Wells</b>									
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
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
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	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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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	24 R	10	11	Filtered		CEP
RS-08		Reanalysis of Primary	11/08/93	Gross alpha	19	10	11	Filtered		LAS
RS-08		Primary	11/08/93	Gross beta	9.1 R	6.7	11	Filtered		CEP
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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-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
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-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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
				Activity	Error	MDA			
<b>Shallow Wells</b>									
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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
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-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-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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
				Activity	Error	MDA			
<b>Shallow Wells</b>									
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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
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-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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
				Activity	Error	MDA			
<b>Shallow Wells</b>									
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
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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
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		BC
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		BC
HAR-14		Primary	09/12/89	Gross beta	9	0.2	---	Unfiltered		UST

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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
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	70	14	2	Filtered		CEP
HAR-15	Reanalysis of Primary		03/16/93	Gross alpha	8	5	2	Filtered		CEP
HAR-15	Primary		03/16/93	Gross beta	38	8	3	Filtered		CEP
HAR-15	Reanalysis of Primary		03/16/93	Gross beta	45	9	3	Filtered	Correspondence suggests that sample may be unfiltered.	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	70 R	16	10	Filtered		CEP
HAR-15	Reanalysis of Primary		11/04/93	Gross alpha	14.8	6.4	6.7	Filtered		LAS
HAR-15	Primary		11/04/93	Gross beta	34.9 R	8.6	11	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	11.8	2.3	---	Unfiltered, Decanted		BC
HAR-30	Split		07/22/89	Gross alpha	5	2	---	Unfiltered		FGL
HAR-30	Primary		07/22/89	Gross beta	8.4	0.7	---	Filtered		BC
HAR-30	Primary		07/22/89	Gross beta	7.4	0.6	---	Unfiltered, Decanted		BC
HAR-30	Split		07/22/89	Gross beta	3 U	4	---	Unfiltered		FGL
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
				Activity	Error	MDA			
<b>Shallow Wells</b>									
HAR-30	Primary	06/29/90	Gross beta	10.5	1.4	---	Filtered		BC
HAR-30	Primary	06/29/90	Gross beta	6.17	2.92	---	Filtered		UST
<b>Chatsworth Formation Wells</b>									
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	5.1 U	7.6	---	Unfiltered		BC
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	06/04/89	Gross beta	4.3	1.4	---	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
RD-05B	Primary	06/07/89	Gross alpha	9.8	2.5	---	Unfiltered		BC

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
				Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>									
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
RD-06	Primary	06/07/93	Gross beta	8	7	3	Filtered		CEP

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
RD-07		Primary	08/05/98	Gross alpha	9.43 U	8.9	13.3	Filtered		TN

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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		Date Sampled	Radionuclide	Result (pCi/L)			Sample Handling	Sample Comments	Lab
	Port	Sample Type			Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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	Z13	Primary	08/20/02	Gross alpha	4.94	3.5	3.94	Filtered		ES
RD-07	Z13	Primary	08/20/02	Gross beta	5.9	1.6	2.16	Filtered		ES
RD-07	Z3	Primary	01/29/03	Gross alpha	14.4	3.5	2.34	Filtered		ES
RD-07	Z3	Primary	01/29/03	Gross beta	15.5	3.1	4.07	Filtered		ES
RD-07	Z3	Primary	02/10/03	Gross alpha	14.4	3.5	2.34	Filtered		ES
RD-07	Z3	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	Z4	Primary	08/25/04	Gross alpha	3.04	2	1.8	Filtered		ES
RD-07	Z4	Primary	08/25/04	Gross beta	8.63	3	3.34	Filtered		ES
RD-07	Z5	Primary	08/25/04	Gross alpha	3.03	2.1	2.22	Filtered		ES
RD-07	Z5	Primary	08/25/04	Gross beta	8.02	2.6	2.62	Filtered		ES
RD-07	Z6	Primary	08/25/04	Gross alpha	4.22	2.5	2.04	Filtered		ES
RD-07	Z6	Primary	08/25/04	Gross beta	7.83	2.8	2.6	Filtered		ES
RD-07	Z7	Primary	08/25/04	Gross alpha	3.36	2	1.91	Filtered		ES
RD-07	Z7	Primary	08/25/04	Gross beta	7.9	2.5	2.41	Filtered		ES
RD-07	Z8	Primary	08/25/04	Gross alpha	4.96	2.5	2.52	Filtered		ES
RD-07	Z8	Primary	08/25/04	Gross beta	7.99	2.3	2.1	Filtered		ES
RD-07	Z9	Primary	08/25/04	Gross alpha	6.61	2.7	1.65	Filtered		ES
RD-07	Z9	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	Z3	Primary	02/17/05	Gross alpha	4.7	2.4	2.26	Filtered		ES
RD-07	Z3	Primary	02/17/05	Gross beta	-3.15 U	2.8	4.88	Filtered		ES

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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		Date Sampled	Radionuclide	Result (pCi/L)			Sample Handling	Sample Comments	Lab
	Port	Sample Type			Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-07	Z3	Primary	08/31/05	Gross alpha	9.55	2.8	1.51	Filtered		ES
RD-07	Z3	Primary	08/31/05	Gross beta	5.92	1.8	1.74	Filtered		ES
RD-07	Z3	Primary	02/16/06	Gross alpha	22.8	6.5	2.79	Filtered		ES
RD-07	Z3	Primary	02/16/06	Gross beta	15.6	4	2.9	Filtered		ES
RD-07	Z3	Primary	08/16/06	Gross alpha	36.3	8.4	2.91	Filtered		ES
RD-07	Z3	Primary	08/16/06	Gross beta	19.8	4.5	2.63	Filtered		ES
RD-07	Z3	Primary	02/08/07	Gross alpha	39.4	13	7.24	Filtered		ES
RD-07	Z3	Primary	02/08/07	Gross beta	22	7.2	7.49	Filtered		ES
RD-07	Z3	Primary	08/09/07	Gross alpha	40	14	7.81	Filtered		ES
RD-07	Z3	Primary	08/09/07	Gross beta	17.2	7.5	9.92	Filtered		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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
				Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>									
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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		Date Sampled	Radionuclide	Result (pCi/L)			Sample Handling	Sample Comments	Lab
	Port	Sample Type			Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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 beta	10.9	2.52	3.19	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		Split	02/16/06	Gross beta	10.9	2	3.19	Filtered		STL

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
				Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>									
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-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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008



**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		Date Sampled	Radionuclide	Result (pCi/L)			Sample Handling	Sample Comments	Lab
	Port	Sample Type			Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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-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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
				Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>									
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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 U	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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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		Duplicate	02/16/95	Gross alpha	46	12	8.8	Filtered		LAS
RD-20		Reanalysis of Duplicate	02/16/95	Gross alpha	6.5 U	5.5	7.5	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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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		Date Sampled	Radionuclide	Result (pCi/L)			Sample Handling	Sample Comments	Lab
	Port	Sample Type			Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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	Z2	Primary	02/25/03	Gross alpha	2.78 U	2.5	3.04	Filtered		ES
RD-21	Z2	Primary	02/25/03	Gross beta	7.72	3.6	5.25	Filtered		ES
RD-21	Z2	Primary	11/04/04	Gross alpha	0.726 U	1.7	2.8	Filtered		ES
RD-21	Z2	Primary	11/04/04	Gross beta	5.09	2.8	3.87	Filtered		ES
RD-21	Z2	Primary	02/16/05	Gross alpha	4.89	3.3	3.83	Filtered		ES
RD-21	Z2	Primary	02/16/05	Gross beta	4.19 U	3.2	4.86	Filtered		ES
RD-21	Z2	Primary	09/01/05	Gross alpha	4.37	1.7	1.5	Filtered		ES
RD-21	Z2	Primary	09/01/05	Gross beta	6.7	2.2	2.45	Filtered		ES
RD-21	Z2	Primary	02/16/06	Gross alpha	-0.928 U	4.1	7.56	Filtered		ES
RD-21	Z2	Primary	02/16/06	Gross beta	6.03	3.9	5.73	Filtered		ES
RD-21	Z2	Primary	08/16/06	Gross alpha	5.86	2.3	2.18	Filtered		ES
RD-21	Z2	Primary	08/16/06	Gross beta	6.86	2.2	2.41	Filtered		ES
RD-21	Z2	Primary	05/21/07	Gross alpha	13.2	7.8	9.72	Filtered		ES
RD-21	Z2	Primary	05/21/07	Gross beta	5.84	3.2	4.69	Filtered		ES
RD-21	Z2	Primary	08/09/07	Gross alpha	13.5	4.7	4.52	Filtered		ES
RD-21	Z2	Primary	08/09/07	Gross beta	6.41	3.2	4.76	Filtered		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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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		Date Sampled	Radionuclide	Result (pCi/L)			Sample Handling	Sample Comments	Lab
	Port	Sample Type			Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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		Date Sampled	Radionuclide	Result (pCi/L)			Sample Handling	Sample Comments	Lab
	Port	Sample Type			Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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	Z2	Primary	02/24/03	Gross alpha	2.97 J	1.4	1.55	Filtered		ES
RD-22	Z2	Primary	02/24/03	Gross beta	9.22	1.9	2.55	Filtered		ES
RD-22	Z2	Primary	11/12/04	Gross alpha	3.41	2.4	2.95	Filtered		ES
RD-22	Z2	Primary	11/12/04	Gross beta	6.82	3.1	4.22	Filtered		ES
RD-22	Z2	Primary	02/17/05	Gross alpha	3.55 U	2.9	3.76	Filtered		ES
RD-22	Z2	Primary	02/17/05	Gross beta	-2.82 U	4.6	8.01	Filtered		ES
RD-22	Z2	Primary	08/31/05	Gross alpha	5.18	2.1	2.09	Filtered		ES
RD-22	Z2	Primary	08/31/05	Gross beta	7.87	2.5	2.83	Filtered		ES
RD-22	Z2	Primary	02/15/06	Gross alpha	-2.11 U	4	7.01	Filtered		ES
RD-22	Z2	Primary	02/15/06	Gross beta	8.51	3.6	4.7	Filtered		ES
RD-22	Z2	Primary	08/16/06	Gross alpha	3.28	1.8	2.09	Filtered		ES
RD-22	Z2	Primary	08/16/06	Gross beta	6.19	2.4	3.26	Filtered		ES
RD-22	Z2	Primary	02/07/07	Gross alpha	1.58 U	2	3.13	Filtered		ES
RD-22	Z2	Primary	02/07/07	Gross beta	7.04	2.5	3.12	Filtered		ES
RD-22	Z2	Primary	08/09/07	Gross alpha	5 U	3.8	5.34	Filtered		ES
RD-22	Z2	Primary	08/09/07	Gross beta	5.99 U	5.8	9.11	Filtered		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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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		Date Sampled	Radionuclide	Result (pCi/L)			Sample Handling	Sample Comments	Lab
	Port	Sample Type			Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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	Z1	Primary	02/26/03	Gross alpha	4.42	1.3	0.96	Filtered		ES
RD-23	Z1	Primary	02/26/03	Gross beta	6.18	1.8	2.61	Filtered		ES
RD-23	Z2	Primary	11/03/04	Gross alpha	1.47 U	1.6	1.98	Filtered		ES
RD-23	Z2	Primary	11/03/04	Gross beta	5.19	2.3	2.85	Filtered		ES
RD-23	Z2	Primary	02/14/05	Gross alpha	2.82 J	1.8	2.1	Filtered		ES

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-23	Z2	Primary	02/14/05	Gross beta	4.2	2	2.76	Filtered		ES
RD-23	Z3	Primary	09/12/05	Gross alpha	3.61	1.2	0.583	Filtered		ES
RD-23	Z3	Primary	09/12/05	Gross beta	2.05 J	1.2	1.72	Filtered		ES
RD-23	Z3	Primary	02/17/06	Gross alpha	1.8 U	2.1	3.37	Filtered		ES
RD-23	Z3	Primary	02/17/06	Gross beta	4.91	1.7	1.92	Filtered		ES
RD-23	Z3	Primary	08/17/06	Gross alpha	0.793 U	1.5	2.12	Filtered		ES
RD-23	Z3	Primary	08/17/06	Gross beta	3.2 J	1.4	2	Filtered		ES
RD-23	Z3	Primary	02/07/07	Gross alpha	1.7 U	1.9	2.76	Filtered		ES
RD-23	Z3	Primary	02/07/07	Gross beta	3.17 U	2.3	3.43	Filtered		ES
RD-23	Z3	Primary	08/09/07	Gross alpha	2.97 U	2.4	3.41	Filtered		ES
RD-23	Z3	Primary	08/09/07	Gross beta	4.21	1.9	2.77	Filtered		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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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		Date Sampled	Radionuclide	Result (pCi/L)			Sample Handling	Sample Comments	Lab
	Port	Sample Type			Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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		Split	11/14/03	Gross alpha	11.6	4.56	3.11	Filtered		STL
RD-24		Split	11/14/03	Gross beta	13.3	4.16	5.91	Filtered		STL
RD-24		Primary	11/14/03	Gross alpha	5.06	3.4	2.92	Filtered		ES
RD-24		Primary	11/14/03	Gross beta	9.29	3.4	3.66	Filtered		ES
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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-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	3	---	Unfiltered		TMA
RD-25		Split	09/12/89	Gross alpha	0 U	4	---	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 U	4	---	Filtered		TMA
RD-25		Split	09/12/89	Gross beta	3	2	4	Filtered		TMA
RD-25		Split	09/12/89	Gross beta	6	2	---	Unfiltered		TMA
RD-25		Split	09/12/89	Gross beta	5	5	---	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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
				Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>									
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
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	Primary	02/23/04	Gross beta	9.34	4.1	5.32	Filtered		ES
RD-25	Split	02/23/04	Gross alpha	5.81	2.88	2.11	Filtered		STL
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
				Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>									
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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		Split	11/14/03	Gross alpha	4.91	2.29	1.95	Filtered		STL
RD-27		Split	11/14/03	Gross beta	7.05	2.35	3.7	Filtered		STL
RD-27		Primary	11/14/03	Gross alpha	1.68 U	1.7	2.12	Filtered		ES
RD-27		Primary	11/14/03	Gross beta	6.79	2.3	2.56	Filtered		ES
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-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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
				Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>									
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
				Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>									
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
RD-28	Primary	02/23/04	Gross alpha	14.4	7	5.58	Filtered		ES
RD-28	Primary	02/23/04	Gross beta	11.3	5.7	7.48	Filtered		ES
RD-28	Split	02/23/04	Gross alpha	21.3	7.8	3.33	Filtered		STL
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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		Date Sampled	Radionuclide	Result (pCi/L)			Sample Handling	Sample Comments	Lab
	Port	Sample Type			Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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		Primary	08/08/07	Gross beta	15.5	5.7	6.57	Filtered		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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
				Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>									
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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-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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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		Date Sampled	Radionuclide	Result (pCi/L)			Sample Handling	Sample Comments	Lab
	Port	Sample Type			Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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	Z4	Primary	01/30/03	Gross alpha	3.42	2.1	2.24	Filtered		ES
RD-33A	Z4	Primary	01/30/03	Gross beta	5.38	2.3	3.32	Filtered		ES
RD-33A	Z2	Primary	11/15/04	Gross alpha	1.75 J	1.2	1.46	Filtered		ES
RD-33A	Z2	Primary	11/15/04	Gross beta	5.52	1.8	1.82	Filtered		ES
RD-33A	Z3	Primary	02/17/05	Gross alpha	4.16	2.2	2.28	Filtered		ES
RD-33A	Z3	Primary	02/17/05	Gross beta	6.98	2.3	2.4	Filtered		ES
RD-33A	Z3	Primary	09/01/05	Gross alpha	4.31	1.9	1.36	Filtered		ES
RD-33A	Z3	Primary	09/01/05	Gross beta	4.76	1.7	1.94	Filtered		ES
RD-33A	Z2	Primary	02/17/06	Gross alpha	2.53 J	1.3	1.33	Filtered		ES
RD-33A	Z2	Primary	02/17/06	Gross beta	2.7 J	1.3	1.84	Filtered		ES
RD-33A	Z3	Primary	08/18/06	Gross alpha	4.54	1.7	1.47	Filtered		ES
RD-33A	Z3	Primary	08/18/06	Gross beta	5.58	1.5	1.4	Filtered		ES
RD-33A	Z2	Primary	02/08/07	Gross alpha	5.35	2.7	2.64	Filtered		ES
RD-33A	Z2	Primary	02/08/07	Gross beta	7.39	2.6	2.72	Filtered		ES
RD-33A	Z2	Primary	08/13/07	Gross alpha	6.2	3.2	2.99	Filtered		ES
RD-33A	Z2	Primary	08/13/07	Gross beta	4.05	2.2	2.91	Filtered		ES

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-33B		Primary	12/12/91	Gross alpha	2.87 U	2.16	4	Filtered		IT
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
				Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>									
RD-33B	Primary	02/11/03	Gross beta	4.94	1.1	1.66	Filtered		ES
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	Primary	08/22/05	Gross beta	5.04	1.5	1.63	Filtered		ES
RD-33B	Split	08/22/05	Gross alpha	2.48 J	1.4	1.73	Filtered		STL
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	Primary	08/14/07	Gross beta	3.22 J	1.8	2.87	Filtered		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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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		Date Sampled	Radionuclide	Result (pCi/L)			Sample Handling	Sample Comments	Lab
	Port	Sample Type			Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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-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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
				Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>									
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
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-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
RD-34B	Primary	06/23/93	Gross beta	13	4	3	Filtered		CEP

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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		Date Sampled	Radionuclide	Result (pCi/L)			Sample Handling	Sample Comments	Lab
	Port	Sample Type			Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
RD-34B		Primary	08/09/06	Gross alpha	-0.562 U	2.4	4.39	Filtered		ES

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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-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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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		Primary	02/21/06	Gross beta	5.86	2.5	3.37	Filtered		ES
RD-34C		Split	02/21/06	Gross alpha	0.605 U	0.667	1.18	Filtered		STL
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-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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

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)			Sample Handling	Sample Comments	Lab
				Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>									
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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		Date Sampled	Radionuclide	Result (pCi/L)			Sample Handling	Sample Comments	Lab
	Port	Sample Type			Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-54A		Primary	02/27/02	Gross beta	1.82 U	0.7	2.14	Filtered		DL
RD-54A	Z2	Primary	02/18/03	Gross alpha	5.39	1.8	2.06	Filtered		ES
RD-54A	Z2	Primary	02/18/03	Gross beta	9.08	2.6	4.04	Filtered		ES
RD-54A	Z2	Primary	11/03/04	Gross alpha	2.34 U	2.1	2.35	Filtered		ES
RD-54A	Z2	Primary	11/03/04	Gross beta	9.87	3	2.85	Filtered		ES
RD-54A	Z2	Primary	02/16/05	Gross alpha	9.98	3.6	1.88	Filtered		ES
RD-54A	Z2	Primary	02/16/05	Gross beta	6.14	2.5	3.06	Filtered		ES
RD-54A	Z2	Primary	08/31/05	Gross alpha	16.3	4.9	1.87	Filtered		ES
RD-54A	Z2	Primary	08/31/05	Gross beta	8.33	2.8	2.88	Filtered		ES
RD-54A	Z2	Primary	02/16/06	Gross alpha	7.44	3.4	3.68	Filtered		ES
RD-54A	Z2	Primary	02/16/06	Gross beta	3.75 U	2.8	4.08	Filtered		ES
RD-54A	Z2	Primary	08/17/06	Gross alpha	12.1	4.2	4.08	Filtered		ES
RD-54A	Z2	Primary	08/17/06	Gross beta	10.8	3.1	3.1	Filtered		ES
RD-54A	Z2	Primary	02/07/07	Gross alpha	9.54	5.4	5.79	Filtered		ES
RD-54A	Z2	Primary	02/07/07	Gross beta	7.14	4	5.5	Filtered		ES
RD-54A	Z2	Primary	08/10/07	Gross alpha	20	8.8	8.03	Filtered		ES
RD-54A	Z2	Primary	08/10/07	Gross beta	12.9	4.4	4.79	Filtered		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.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
				Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>									
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-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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008



**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		Date Sampled	Radionuclide	Result (pCi/L)			Sample Handling	Sample Comments	Lab
	Port	Sample Type			Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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		Primary	02/17/05	Gross beta	-0.849 U	1.7	3.02	Filtered		ES
RD-54C		Split	02/17/05	Gross alpha	0.516 U	1.3	2.95	Filtered		STL
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-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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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		Date Sampled	Radionuclide	Result (pCi/L)			Sample Handling	Sample Comments	Lab
	Port	Sample Type			Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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	Z8	Primary	01/29/03	Gross alpha	2.68 J	1.7	2.02	Filtered		ES
RD-57	Z8	Primary	01/29/03	Gross beta	4.31	2.6	4.01	Filtered		ES
RD-57	Z8	Primary	04/30/03	Gross alpha	3.06	1.9	2.18	Filtered		ES
RD-57	Z8	Primary	04/30/03	Gross beta	6.07	2.2	2.63	Filtered		ES
RD-57	Z7	Primary	03/08/05	Gross alpha	2.66 J	1.6	1.52	Filtered		ES
RD-57	Z7	Primary	03/08/05	Gross beta	4.01	1.8	2.32	Filtered		ES
RD-57	Z7	Primary	09/01/05	Gross alpha	6.54	2	1.02	Filtered		ES
RD-57	Z7	Primary	09/01/05	Gross beta	6	1.9	2.18	Filtered		ES
RD-57	Z7	Primary	02/20/06	Gross alpha	3.21	2	2.65	Filtered		ES
RD-57	Z7	Primary	02/20/06	Gross beta	3.17 J	1.5	2.13	Filtered		ES
RD-57	Z7	Primary	08/18/06	Gross alpha	3.57	2.3	3.36	Filtered		ES
RD-57	Z7	Primary	08/18/06	Gross beta	8.34	2.3	2.27	Filtered		ES
RD-57	Z7	Primary	02/08/07	Gross alpha	5.1	1.7	1.19	Filtered		ES
RD-57	Z7	Primary	02/08/07	Gross beta	5.7	1.7	1.62	Filtered		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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
				Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>									
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
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	Split	05/15/03	Gross alpha	3.53	1.94	2.54	Filtered		STL
RD-59A	Split	05/15/03	Gross beta	14	3.88	5.48	Filtered		STL
RD-59A	Primary	05/15/03	Gross alpha	3.55	2	2.54	Filtered		ES
RD-59A	Primary	05/15/03	Gross beta	7.58	2.8	3.36	Filtered		ES
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-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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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		Date Sampled	Radionuclide	Result (pCi/L)			Sample Handling	Sample Comments	Lab
	Port	Sample Type			Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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		Primary	02/28/07	Gross beta	3.77 J	1.5	1.91	Filtered		ES
RD-59B		Split	02/28/07	Gross alpha	2.77 J	1.7	1.93	Filtered		STL
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-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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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		Date Sampled	Radionuclide	Result (pCi/L)			Sample Handling	Sample Comments	Lab
	Port	Sample Type			Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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-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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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		Date Sampled	Radionuclide	Result (pCi/L)			Sample Handling	Sample Comments	Lab
	Port	Sample Type			Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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-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	Z6	Primary	01/29/03	Gross alpha	3.9	2.2	2.28	Filtered		ES
RD-64	Z6	Primary	01/29/03	Gross beta	6.68	2.1	2.81	Filtered		ES
RD-64	Z6	Primary	11/12/04	Gross alpha	3.25	2.2	1.93	Filtered		ES
RD-64	Z6	Primary	11/12/04	Gross beta	6.85	2.3	2.56	Filtered		ES
RD-64	Z6	Primary	02/14/05	Gross alpha	5.62	3	3.15	Filtered		ES
RD-64	Z6	Primary	02/14/05	Gross beta	7.75	3	3.68	Filtered		ES
RD-64	Z6	Primary	08/31/05	Gross alpha	6.16	2.2	1.55	Filtered		ES
RD-64	Z6	Primary	08/31/05	Gross beta	6.57	1.9	1.9	Filtered		ES
RD-64	Z6	Primary	02/16/06	Gross alpha	-0.557 U	1.5	2.55	Filtered		ES
RD-64	Z6	Primary	02/16/06	Gross beta	1.36 U	1.5	2.56	Filtered		ES
RD-64	Z6	Primary	08/17/06	Gross alpha	7.25	2.4	2.15	Filtered		ES
RD-64	Z6	Primary	08/17/06	Gross beta	7.93	2.6	3.15	Filtered		ES
RD-64	Z6	Primary	02/08/07	Gross alpha	5.13	2.2	2.36	Filtered		ES
RD-64	Z6	Primary	02/08/07	Gross beta	5.44	1.9	2.45	Filtered		ES
RD-64	Z2	Primary	08/10/07	Gross alpha	14.6	4.4	3.11	Filtered		ES
RD-64	Z2	Primary	08/10/07	Gross beta	6.91	2.2	2.53	Filtered		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
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 alpha	9.97	4.4	3.1	Filtered		ES
RD-85		Primary	08/13/04	Gross beta	8.07	3.4	4.41	Filtered		ES

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
				Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>									
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	Primary	05/24/05	Gross beta	4.24 U	4.3	6.92	Filtered		ES
RD-89	Duplicate	05/24/05	Gross alpha	11.7	5.6	4.75	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
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	Primary	05/23/05	Gross beta	3.4 U	4.7	8.02	Filtered		ES

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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		Date Sampled	Radionuclide	Result (pCi/L)			Sample Handling	Sample Comments	Lab
	Port	Sample Type			Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-93		Duplicate	05/23/05	Gross alpha	11.1	6.3	7.32	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	16.2	6.2	3.77	Unfiltered		ES
RD-96		Primary	05/09/06	Gross beta	16.2	5.1	5.39	Unfiltered		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 beta	8.16	5.2	7.95	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	40.5	11	8.9	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 beta	7.04	4	5.6	Filtered		ES
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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-09A		Split	06/01/89	Gross alpha	-1 U	3.4	---	Unfiltered		BC
WS-09A		Split	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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
<b>Private Off-site Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Private Off-site Wells</b>										
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	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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Private Off-site Wells</b>										
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	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
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	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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<i>Private Off-site Wells</i>										
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	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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Private Off-site Wells</b>										
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
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		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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Private Off-site Wells</b>										
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	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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Private Off-site Wells</b>										
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
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
<b>Municipal Water Supply</b>										
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**TABLE E-1**

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY  
 IN GROUNDWATER  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identification	Sample		Date Sampled	Radionuclide	Result (pCi/L)			Sample Handling	Sample Comments	Lab
	Port	Sample Type			Activity	Error	MDA			
<b><i>Municipal Water Supply</i></b>										
Facility Water		Primary	08/10/04	Gross alpha	0.39 U	1	1.67	Unfiltered		ES
Facility Water		Primary	08/10/04	Gross beta	2.64 J	1.4	2.03	Unfiltered		ES
<b><i>Facility Fire Hydrant</i></b>										
Hydrant Water		Primary	03/16/04	Gross alpha	-0.161 U	0.8	1.6	Unfiltered		ES
Hydrant Water		Primary	03/16/04	Gross beta	3.62 J	1.6	2.06	Unfiltered		ES
<b><i>Effluent</i></b>										
RD-63 Effluent		Primary	10/06/94	Gross alpha	4.7	4.1	---	Filtered	Pilot extraction effluent.	LAS
RD-63 Effluent		Primary	10/06/94	Gross beta	9.4	4.1	---	Filtered	Pilot extraction effluent.	LAS

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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
BL	=	Barringer Laboratories, Inc.
CEP	=	Controls for Environmental Pollution
DL	=	Davi Laboratories
ES	=	Eberline Services
FGL	=	FGL Environmental
IT	=	International Technologies, Inc.
LAS	=	LAS Laboratories
STL	=	Severn Trent Laboratories
TEL	=	Teledyne Isotopes
TMA	=	Thermoanalytical Inc.
TN	=	Thermo Nutech
TR	=	Thermo Retec
UST	=	United States Testing

Primary	=	Primary sample.
Duplicate	=	Duplicate sample.
Split	=	Split sample.
Reanalysis of Primary	=	Reanalysis of primary sample.
Reanalysis of Duplicate	=	Reanalysis of duplicate sample.
Reanalysis of Split	=	Reanalysis of sample split.
Z	=	FLUTe sample port number.
---	=	Data do not exist.
J	=	Result is less than contract-required minimum detectable activity (MDA) and greater than or equal to the MDA.
R	=	Rejected.
U	=	The result is less than the MDA (Minimum Detectable Activity).
pCi/L	=	PicoCuries per liter.

**NOTES:**

All samples analyzed according to EPA method 900.0, Gross Alpha and Gross Beta Radioactivity.

Results are presented as the activity plus or minus error. 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.

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Piezometers</b>										
PZ-108		Primary	02/22/07	Tritium	-61 U	52	89.3	Unfiltered		ES
PZ-109		Primary	02/23/07	Tritium	-47.6 U	52	89.6	Unfiltered		ES
PZ-120		Primary	02/23/07	Tritium	-46.2 U	54	91.3	Unfiltered		ES
<b>Shallow Wells</b>										
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
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
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
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	02/17/05	Tritium	0 U	150	256	Unfiltered		ES
RS-11		Primary	02/21/06	Tritium	25.1 U	100	166	Unfiltered		ES
RS-11		Primary	02/28/07	Tritium	25.8 U	55	90.8	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-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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
RS-16		Primary	02/23/05	Tritium	-3.78 U	110	193	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	02/23/05	Tritium	-42.3 U	110	188	Unfiltered		ES
RS-18		Primary	08/26/05	Tritium	9.23 U	150	265	Unfiltered		ES
RS-18		Primary	02/20/06	Tritium	69.5 U	100	168	Unfiltered		ES
RS-25		Primary	02/25/03	Tritium	45.9 U	110	186	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
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	05/20/05	Tritium	-72.7 U	100	172	Unfiltered		ES

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
RS-28		Primary	02/17/06	Tritium	111 U	100	168	Unfiltered		ES
RS-28		Primary	02/13/07	Tritium	-12 U	57	95.2	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	02/16/05	Tritium	504	140	198	Unfiltered		ES
RS-54		Primary	09/06/05	Tritium	18.8 U	100	175	Unfiltered		ES
RS-54		Primary	02/23/06	Tritium	105 U	100	168	Unfiltered		ES
RS-54		Split	02/23/06	Tritium	48.1 U	154	327	Unfiltered		STL
RS-54		Primary	02/15/07	Tritium	90.4 U	58	92.1	Unfiltered		ES
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-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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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	03/10/05	Tritium	0 U	100	171	Unfiltered		ES
ES-31		Primary	02/21/06	Tritium	20 U	120	164	Unfiltered		ES
ES-31		Primary	02/28/07	Tritium	4.75 U	55	92	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-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
<b>Chatsworth Formation Wells</b>										
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		Split	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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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	Z13	Primary	08/20/02	Tritium	-10.6 U	120	203	Unfiltered		ES
RD-07	Z3	Primary	01/29/03	Tritium	0 U	110	182	Unfiltered		ES
RD-07	Z3	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	Z4	Primary	08/25/04	Tritium	-65.3 U	100	173	Unfiltered		ES
RD-07	Z5	Primary	08/25/04	Tritium	-82 U	97	169	Unfiltered		ES
RD-07	Z6	Primary	08/25/04	Tritium	-44.7 U	99	171	Unfiltered		ES
RD-07	Z7	Primary	08/25/04	Tritium	22 U	100	174	Unfiltered		ES
RD-07	Z8	Primary	08/25/04	Tritium	-88 U	98	171	Unfiltered		ES
RD-07	Z9	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	Z3	Primary	02/17/05	Tritium	41.8 U	150	255	Unfiltered		ES
RD-07	Z3	Primary	08/31/05	Tritium	23.6 U	160	271	Unfiltered		ES
RD-07	Z3	Primary	02/16/06	Tritium	59 U	90	162	Unfiltered		ES
RD-07	Z3	Primary	08/16/06	Tritium	-24.7 U	95	160	Unfiltered		ES
RD-07	Z3	Primary	02/08/07	Tritium	22.8 U	52	85.7	Unfiltered		ES
RD-07	Z3	Primary	08/09/07	Tritium	-56.7 U	58	98.6	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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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-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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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-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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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	Z2	Primary	02/25/03	Tritium	86.9 U	120	192	Unfiltered		ES
RD-21	Z2	Primary	11/04/04	Tritium	51.1 U	96	159	Unfiltered		ES
RD-21	Z2	Primary	02/16/05	Tritium	-3.49 U	150	256	Unfiltered		ES
RD-21	Z2	Primary	02/16/06	Tritium	85.1 U	110	164	Unfiltered		ES
RD-21	Z2	Primary	02/08/07	Tritium	24.8 U	51	85	Unfiltered		ES
RD-21	Z2	Primary	05/21/07	Tritium	-13.6 U	49	82.2	Unfiltered		ES
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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	Z2	Primary	02/24/03	Tritium	16.5 U	110	192	Unfiltered		ES
RD-22	Z2	Primary	11/12/04	Tritium	-24.9 U	130	231	Unfiltered		ES
RD-22	Z2	Primary	02/17/05	Tritium	-24.2 U	150	253	Unfiltered		ES
RD-22	Z2	Primary	08/31/05	Tritium	50.9 U	160	266	Unfiltered		ES
RD-22	Z2	Primary	02/15/06	Tritium	40.4 U	99	165	Unfiltered		ES
RD-22	Z2	Primary	02/07/07	Tritium	36.1 U	51	85	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
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	Z1	Primary	02/26/03	Tritium	116 U	120	188	Unfiltered		ES
RD-23	Z2	Primary	11/03/04	Tritium	-29.3 U	93	159	Unfiltered		ES
RD-23	Z2	Primary	02/14/05	Tritium	0 U	150	258	Unfiltered		ES
RD-23	Z3	Primary	02/17/06	Tritium	148 U	94	163	Unfiltered		ES
RD-23	Z3	Primary	02/07/07	Tritium	13.4 U	50	84	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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
RD-24		Split	11/14/03	Tritium	237	65	82.4	Unfiltered		STL
RD-24		Primary	11/14/03	Tritium	185 U	120	194	Unfiltered		ES
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-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		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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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		Split	11/14/03	Tritium	9.54 U	48.9	85	Unfiltered		STL
RD-27		Primary	11/14/03	Tritium	-11.2 U	110	194	Unfiltered		ES
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-28		Primary	09/13/89	Tritium	665	149	---	Unfiltered		UST
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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-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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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 S	82	264	Unfiltered		DL
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-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	-50 U	200	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	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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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	Z4	Primary	01/30/03	Tritium	8.31 U	120	196	Unfiltered		ES
RD-33A	Z2	Primary	11/15/04	Tritium	-56.6 U	130	230	Unfiltered		ES
RD-33A	Z3	Primary	02/17/05	Tritium	-31.7 U	150	258	Unfiltered		ES
RD-33A	Z2	Primary	02/17/06	Tritium	13.1 U	110	165	Unfiltered		ES
RD-33A	Z2	Primary	02/08/07	Tritium	-43.2 U	53	89	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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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-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		Split	11/13/03	Tritium	-23.3 U	46.7	82.2	Unfiltered		STL
RD-33C		Primary	11/13/03	Tritium	107 U	110	188	Unfiltered		ES
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-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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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-34B		Primary	12/05/91	Tritium	336 U	234	500	Unfiltered		IT
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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	205	12	6.6	Unfiltered	Analysis conducted using electrolytic enrichment	LAS
RD-34B		Primary	02/07/95	Tritium	220 U	220	260	Unfiltered		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		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-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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
RD-34C		Primary	08/08/07	Tritium	-70.2 U	58	99.5	Unfiltered		ES
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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	Z2	Primary	02/18/03	Tritium	10.7 U	110	194	Unfiltered		ES
RD-54A	Z2	Primary	08/26/03	Tritium	25.3 U	110	190	Unfiltered		ES
RD-54A	Z2	Primary	11/03/04	Tritium	64.5 U	96	160	Unfiltered		ES
RD-54A	Z2	Primary	02/16/05	Tritium	14 U	150	256	Unfiltered		ES
RD-54A	Z2	Primary	08/31/05	Tritium	205 U	170	268	Unfiltered		ES
RD-54A	Z2	Primary	02/16/06	Tritium	270	100	165	Unfiltered		ES
RD-54A	Z2	Primary	08/17/06	Tritium	161 J	100	161	Unfiltered		ES
RD-54A	Z2	Primary	02/07/07	Tritium	244	61	85.2	Unfiltered		ES
RD-54A	Z2	Primary	08/10/07	Tritium	47.8 U	58	96.3	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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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-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
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-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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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	Z8	Primary	01/29/03	Tritium	-57.7 U	110	187	Unfiltered		ES
RD-57	Z8	Primary	04/30/03	Tritium	18.8 U	99	167	Unfiltered		ES
RD-57	Z8	Primary	08/27/03	Tritium	-24.8 U	110	186	Unfiltered		ES
RD-57	Z7	Primary	11/18/04	Tritium	-35.6 U	130	231	Unfiltered		ES
RD-57	Z7	Primary	03/08/05	Tritium	-43.5 U	100	170	Unfiltered		ES
RD-57	Z7	Primary	09/01/05	Tritium	-68.6 U	100	174	Unfiltered		ES
RD-57	Z7	Primary	02/20/06	Tritium	120 U	100	164	Unfiltered		ES
RD-57	Z7	Primary	08/18/06	Tritium	-43.1 U	100	175	Unfiltered		ES
RD-57	Z7	Primary	02/08/07	Tritium	-30.2 U	56	93.8	Unfiltered		ES
RD-57	Z8	Primary	08/14/07	Tritium	17.3 U	51	84.3	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		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 S	115	238	Unfiltered		DL
RD-59A		Primary	02/28/02	Tritium	536 S	115	350	Unfiltered		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		Split	05/15/03	Tritium	-12.3 U	51.5	110	Unfiltered		STL
RD-59A		Primary	05/15/03	Tritium	29.7 U	100	171	Unfiltered		ES
RD-59A		Split	08/08/03	Tritium	17.1 U	49	86.9	Unfiltered		STL
RD-59A		Primary	08/08/03	Tritium	-33.7 U	110	190	Unfiltered		ES
RD-59A		Split	11/14/03	Tritium	-8.74 U	46.3	83.2	Unfiltered		STL

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-59A		Primary	11/14/03	Tritium	-82.5 U	110	199	Unfiltered		ES
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
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-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-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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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-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-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	Z6	Primary	01/29/03	Tritium	21.3 U	110	182	Unfiltered		ES
RD-64	Z6	Primary	11/12/04	Tritium	17.7 U	130	230	Unfiltered		ES
RD-64	Z6	Primary	02/14/05	Tritium	24.5 U	150	256	Unfiltered		ES
RD-64	Z6	Primary	02/16/06	Tritium	161 U	95	165	Unfiltered		ES
RD-64	Z6	Primary	02/08/07	Tritium	118 J	53	83.6	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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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		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	08/13/04	Tritium	-32 U	99	170	Unfiltered		ES
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		Duplicate	08/18/04	Tritium	15400	1600	173	Unfiltered		ES
RD-87		Primary	08/18/04	Tritium	14900	1500	167	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	42'	Primary	08/12/04	Tritium	89600	9000	188	Unfiltered		ES
RD-90	80'	Primary	08/12/04	Tritium	90900	9100	187	Unfiltered		ES
RD-90	115'	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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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
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-09A		Primary	09/12/89	Tritium	-53.4 U	127	---	Unfiltered		UST
WS-09A		Split	09/12/89	Tritium	1000 U	---	1000	Unfiltered		TMA

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Private Off-site Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Private Off-site Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Private Off-site Wells</b>										
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
<b>Municipal Water Supply</b>										
Calleguas		Primary	12/14/90	Tritium	117 U	230	500	Unfiltered		IT
Calleguas		Primary	03/12/92	Tritium	500 U	---	500	Unfiltered		CEP
Facility Water		Primary	08/10/04	Tritium	79.7 U	100	167	Unfiltered		ES
<b>Seeps/Springs</b>										
B/010 DRAINAGE SEEP		Primary	01/26/05	Tritium	321	180	283	Unfiltered		ES
B10-D1-S1		Primary	02/08/05	Tritium	-140 U	160	279	Unfiltered		ES
B10-D1-S2		Primary	02/08/05	Tritium	-63.8 U	160	275	Unfiltered		ES
B10-D1-S3		Primary	02/08/05	Tritium	68.1 U	170	278	Unfiltered		ES
RMHF-D1-S1		Primary	02/08/05	Tritium	-141 U	160	280	Unfiltered		ES
<b>Facility Fire Hydrant</b>										
Hydrant Water		Primary	03/16/04	Tritium	-64.8 U	110	183	Unfiltered		ES
<b>Effluent</b>										
RD-63 Effluent		Primary	10/06/94	Tritium	60 U	150	---	Unfiltered	Pilot extraction effluent.	LAS

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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.

CEP = Controls for Environmental Pollution

DL = Davi Laboratories

ES = Eberline Services

IT = International Technologies, Inc.

LAS = LAS Laboratories

PA = Paragon Analytics

STL = Severn Trent Laboratories

TEL = Teledyne Isotopes

TMA = Thermoanalytical Inc.

TN = Thermo Nutech

TR = Thermo Retec

UST = United States Testing

Primary = Primary sample.

Duplicate = Duplicate sample.

Split = Split sample.

Reanalysis of Primary = Reanalysis of primary sample.

Z = FLUTe sample port number.

--- = Data do not exist.

J = Result is less than contract-required minimum detectable activity (MDA) and greater than or equal to the MDA.

S = Suspect result.

U = The result is less than the MDA (Minimum Detectable Activity) reported by the laboratory.

pCi/L = picoCuries per liter.

**NOTES:**

Samples analyzed for tritium by EPA Method 906.0.

Results are presented as the activity plus or minus error. 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.

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Piezometers</b>										
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
<b>Shallow Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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
RS-11		Primary	02/28/07	Sodium-22	0.981 U	---	0.981	Filtered		ES
RS-16		Primary	03/09/92	Cesium-137	0 U	---	---	Filtered		CEP
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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
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-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-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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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
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-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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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
HAR-14		Primary	09/12/89	Cobalt-60	0.85 U	4.32	---	Unfiltered		UST
<b>Chatsworth Formation Wells</b>										
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
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	Z3	Primary	01/29/03	Cesium-134	2.48 U	---	2.48	Filtered		ES
RD-07	Z3	Primary	01/29/03	Cesium-137	1.47 U	---	1.47	Filtered		ES
RD-07	Z3	Primary	01/29/03	Cobalt-57	0.797 U	---	0.797	Filtered		ES
RD-07	Z3	Primary	01/29/03	Cobalt-60	1.38 U	---	1.38	Filtered		ES
RD-07	Z3	Primary	02/17/05	Cesium-134	1.5 U	---	1.5	Filtered		ES
RD-07	Z3	Primary	02/17/05	Cesium-137	1.21 U	---	1.21	Filtered		ES
RD-07	Z3	Primary	02/17/05	Cobalt-57	0.956 U	---	0.956	Filtered		ES
RD-07	Z3	Primary	02/17/05	Cobalt-60	1.47 U	---	1.47	Filtered		ES

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-07	Z3	Primary	02/17/05	Europium-152	3.13 U	---	3.13	Filtered		ES
RD-07	Z3	Primary	02/17/05	Europium-154	4.08 U	---	4.08	Filtered		ES
RD-07	Z3	Primary	02/17/05	Manganese-54	1.22 U	---	1.22	Filtered		ES
RD-07	Z3	Primary	02/17/05	Sodium-22	1.39 U	---	1.39	Filtered		ES
RD-07	Z3	Primary	02/16/06	Cesium-134	1.7 U	---	1.7	Filtered		ES
RD-07	Z3	Primary	02/16/06	Cesium-137	1.57 U	---	1.57	Filtered		ES
RD-07	Z3	Primary	02/16/06	Cobalt-57	1.29 U	---	1.29	Filtered		ES
RD-07	Z3	Primary	02/16/06	Cobalt-60	1.56 U	---	1.56	Filtered		ES
RD-07	Z3	Primary	02/16/06	Europium-152	4.25 U	---	4.25	Filtered		ES
RD-07	Z3	Primary	02/16/06	Europium-154	4.84 U	---	4.84	Filtered		ES
RD-07	Z3	Primary	02/16/06	Manganese-54	1.52 U	---	1.52	Filtered		ES
RD-07	Z3	Primary	02/16/06	Sodium-22	1.67 U	---	1.67	Filtered		ES
RD-07	Z3	Primary	02/08/07	Cesium-134	1.27 U	---	1.27	Filtered		ES
RD-07	Z3	Primary	02/08/07	Cesium-137	0.991 U	---	0.991	Filtered		ES
RD-07	Z3	Primary	02/08/07	Cobalt-57	0.703 U	---	0.703	Filtered		ES
RD-07	Z3	Primary	02/08/07	Cobalt-60	1.07 U	---	1.07	Filtered		ES
RD-07	Z3	Primary	02/08/07	Europium-152	2.84 U	---	2.84	Filtered		ES
RD-07	Z3	Primary	02/08/07	Europium-154	3.2 U	---	3.2	Filtered		ES
RD-07	Z3	Primary	02/08/07	Manganese-54	0.952 U	---	0.952	Filtered		ES
RD-07	Z3	Primary	02/08/07	Sodium-22	1.09 U	---	1.09	Filtered		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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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		TEL
RD-15		Split	03/11/92	Cesium-137	0 U	---	---	Filtered		CEP
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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-16		Primary	10/25/89	Cesium-137	-0.218 U	1.64	---	Filtered		UST
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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-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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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	Z2	Primary	02/25/03	Cesium-134	4.68 U	---	4.68	Filtered		ES
RD-21	Z2	Primary	02/25/03	Cesium-137	2.24 U	---	2.24	Filtered		ES
RD-21	Z2	Primary	02/25/03	Cobalt-57	1.34 U	---	1.34	Filtered		ES
RD-21	Z2	Primary	02/25/03	Cobalt-60	2.21 U	---	2.21	Filtered		ES
RD-21	Z2	Primary	11/04/04	Cesium-134	2.2 U	---	2.2	Filtered		ES
RD-21	Z2	Primary	11/04/04	Cesium-137	1.82 U	---	1.82	Filtered		ES
RD-21	Z2	Primary	11/04/04	Cobalt-57	1.33 U	---	1.33	Filtered		ES
RD-21	Z2	Primary	11/04/04	Cobalt-60	1.79 U	---	1.79	Filtered		ES
RD-21	Z2	Primary	11/04/04	Europium-152	4.89 U	---	4.89	Filtered		ES

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-21	Z2	Primary	11/04/04	Europium-154	5.08 U	---	5.08	Filtered		ES
RD-21	Z2	Primary	11/04/04	Manganese-54	2.05 U	---	2.05	Filtered		ES
RD-21	Z2	Primary	11/04/04	Sodium-22	1.76 U	---	1.76	Filtered		ES
RD-21	Z2	Primary	02/16/05	Cesium-134	1.88 U	---	1.88	Filtered		ES
RD-21	Z2	Primary	02/16/05	Cesium-137	1.5 U	---	1.5	Filtered		ES
RD-21	Z2	Primary	02/16/05	Cobalt-57	0.922 U	---	0.922	Filtered		ES
RD-21	Z2	Primary	02/16/05	Cobalt-60	1.38 U	---	1.38	Filtered		ES
RD-21	Z2	Primary	02/16/05	Europium-152	4.04 U	---	4.04	Filtered		ES
RD-21	Z2	Primary	02/16/05	Europium-154	4.05 U	---	4.05	Filtered		ES
RD-21	Z2	Primary	02/16/05	Manganese-54	1.41 U	---	1.41	Filtered		ES
RD-21	Z2	Primary	02/16/05	Sodium-22	1.37 U	---	1.37	Filtered		ES
RD-21	Z2	Primary	02/16/06	Cesium-134	1.41 U	---	1.41	Filtered		ES
RD-21	Z2	Primary	02/16/06	Cesium-137	0.888 U	---	0.888	Filtered		ES
RD-21	Z2	Primary	02/16/06	Cobalt-57	0.592 U	---	0.592	Filtered		ES
RD-21	Z2	Primary	02/16/06	Cobalt-60	0.939 U	---	0.939	Filtered		ES
RD-21	Z2	Primary	02/16/06	Europium-152	2.05 U	---	2.05	Filtered		ES
RD-21	Z2	Primary	02/16/06	Europium-154	2.32 U	---	2.32	Filtered		ES
RD-21	Z2	Primary	02/16/06	Manganese-54	0.814 U	---	0.814	Filtered		ES
RD-21	Z2	Primary	02/16/06	Sodium-22	0.8 U	---	0.8	Filtered		ES
RD-21	Z2	Primary	05/21/07	Cesium-134	0.716 U	---	0.716	Filtered		ES
RD-21	Z2	Primary	05/21/07	Cesium-137	0.54 U	---	0.54	Filtered		ES
RD-21	Z2	Primary	05/21/07	Cobalt-57	0.335 U	---	0.335	Filtered		ES
RD-21	Z2	Primary	05/21/07	Cobalt-60	0.611 U	---	0.611	Filtered		ES
RD-21	Z2	Primary	05/21/07	Europium-152	1.61 U	---	1.61	Filtered		ES
RD-21	Z2	Primary	05/21/07	Europium-154	1.6 U	---	1.6	Filtered		ES
RD-21	Z2	Primary	05/21/07	Manganese-54	0.521 U	---	0.521	Filtered		ES
RD-21	Z2	Primary	05/21/07	Sodium-22	0.549 U	---	0.549	Filtered		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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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	Z2	Primary	02/24/03	Cesium-134	1.6 U	---	1.6	Filtered		ES
RD-22	Z2	Primary	02/24/03	Cesium-137	1.26 U	---	1.26	Filtered		ES
RD-22	Z2	Primary	02/24/03	Cobalt-57	0.756 U	---	0.756	Filtered		ES
RD-22	Z2	Primary	02/24/03	Cobalt-60	1.35 U	---	1.35	Filtered		ES
RD-22	Z2	Primary	11/12/04	Cesium-134	1.45 U	---	1.45	Filtered		ES
RD-22	Z2	Primary	11/12/04	Cesium-137	0.98 U	---	0.98	Filtered		ES
RD-22	Z2	Primary	11/12/04	Cobalt-57	0.641 U	---	0.641	Filtered		ES
RD-22	Z2	Primary	11/12/04	Cobalt-60	1.11 U	---	1.11	Filtered		ES
RD-22	Z2	Primary	11/12/04	Europium-152	2.61 U	---	2.61	Filtered		ES
RD-22	Z2	Primary	11/12/04	Europium-154	3.15 U	---	3.15	Filtered		ES
RD-22	Z2	Primary	11/12/04	Manganese-54	1.08 U	---	1.08	Filtered		ES
RD-22	Z2	Primary	11/12/04	Sodium-22	1.09 U	---	1.09	Filtered		ES
RD-22	Z2	Primary	02/17/05	Cesium-134	1.58 U	---	1.58	Filtered		ES
RD-22	Z2	Primary	02/17/05	Cesium-137	1.33 U	---	1.33	Filtered		ES
RD-22	Z2	Primary	02/17/05	Cobalt-57	0.56 U	---	0.56	Filtered		ES
RD-22	Z2	Primary	02/17/05	Cobalt-60	1.44 U	---	1.44	Filtered		ES
RD-22	Z2	Primary	02/17/05	Europium-152	3.44 U	---	3.44	Filtered		ES
RD-22	Z2	Primary	02/17/05	Europium-154	4.3 U	---	4.3	Filtered		ES
RD-22	Z2	Primary	02/17/05	Manganese-54	1.28 U	---	1.28	Filtered		ES
RD-22	Z2	Primary	02/17/05	Sodium-22	1.46 U	---	1.46	Filtered		ES
RD-22	Z2	Primary	02/15/06	Cesium-134	1.3 U	---	1.3	Filtered		ES
RD-22	Z2	Primary	02/15/06	Cesium-137	1.03 U	---	1.03	Filtered		ES
RD-22	Z2	Primary	02/15/06	Cobalt-57	0.72 U	---	0.72	Filtered		ES
RD-22	Z2	Primary	02/15/06	Cobalt-60	1.18 U	---	1.18	Filtered		ES
RD-22	Z2	Primary	02/15/06	Europium-152	2.62 U	---	2.62	Filtered		ES
RD-22	Z2	Primary	02/15/06	Europium-154	3.28 U	---	3.28	Filtered		ES
RD-22	Z2	Primary	02/15/06	Manganese-54	1.18 U	---	1.18	Filtered		ES
RD-22	Z2	Primary	02/15/06	Sodium-22	1.14 U	---	1.14	Filtered		ES
RD-22	Z2	Primary	02/07/07	Cesium-134	1.43 U	---	1.43	Filtered		ES
RD-22	Z2	Primary	02/07/07	Cesium-137	2.09 U	---	2.09	Filtered		ES
RD-22	Z2	Primary	02/07/07	Cobalt-57	0.756 U	---	0.756	Filtered		ES
RD-22	Z2	Primary	02/07/07	Cobalt-60	1.24 U	---	1.24	Filtered		ES
RD-22	Z2	Primary	02/07/07	Europium-152	3.09 U	---	3.09	Filtered		ES
RD-22	Z2	Primary	02/07/07	Europium-154	3.49 U	---	3.49	Filtered		ES
RD-22	Z2	Primary	02/07/07	Manganese-54	1.12 U	---	1.12	Filtered		ES
RD-22	Z2	Primary	02/07/07	Sodium-22	1.19 U	---	1.19	Filtered		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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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	Z1	Primary	02/26/03	Cesium-134	3.19 U	---	3.19	Filtered		ES
RD-23	Z1	Primary	02/26/03	Cesium-137	2.8 U	---	2.8	Filtered		ES
RD-23	Z1	Primary	02/26/03	Cobalt-57	1.74 U	---	1.74	Filtered		ES
RD-23	Z1	Primary	02/26/03	Cobalt-60	2.97 U	---	2.97	Filtered		ES
RD-23	Z2	Primary	11/03/04	Cesium-134	2.72 U	---	2.72	Filtered		ES
RD-23	Z2	Primary	11/03/04	Cesium-137	2.13 U	---	2.13	Filtered		ES
RD-23	Z2	Primary	11/03/04	Cobalt-57	1.46 U	---	1.46	Filtered		ES
RD-23	Z2	Primary	11/03/04	Cobalt-60	2.37 U	---	2.37	Filtered		ES
RD-23	Z2	Primary	11/03/04	Europium-152	5.07 U	---	5.07	Filtered		ES
RD-23	Z2	Primary	11/03/04	Europium-154	6.27 U	---	6.27	Filtered		ES
RD-23	Z2	Primary	11/03/04	Manganese-54	2.41 U	---	2.41	Filtered		ES
RD-23	Z2	Primary	11/03/04	Sodium-22	2.17 U	---	2.17	Filtered		ES
RD-23	Z2	Primary	02/14/05	Cesium-134	1.33 U	---	1.33	Filtered		ES
RD-23	Z2	Primary	02/14/05	Cesium-137	1.17 U	---	1.17	Filtered		ES
RD-23	Z2	Primary	02/14/05	Cobalt-57	0.825 U	---	0.825	Filtered		ES
RD-23	Z2	Primary	02/14/05	Cobalt-60	1.32 U	---	1.32	Filtered		ES
RD-23	Z2	Primary	02/14/05	Europium-152	3.1 U	---	3.1	Filtered		ES
RD-23	Z2	Primary	02/14/05	Europium-154	3.48 U	---	3.48	Filtered		ES
RD-23	Z2	Primary	02/14/05	Manganese-54	1.17 U	---	1.17	Filtered		ES
RD-23	Z2	Primary	02/14/05	Sodium-22	1.18 U	---	1.18	Filtered		ES
RD-23	Z3	Primary	02/17/06	Cesium-134	3.09 U	---	3.09	Filtered		ES
RD-23	Z3	Primary	02/17/06	Cesium-137	1.53 U	---	1.53	Filtered		ES
RD-23	Z3	Primary	02/17/06	Cobalt-57	1.43 U	---	1.43	Filtered		ES
RD-23	Z3	Primary	02/17/06	Cobalt-60	1.58 U	---	1.58	Filtered		ES
RD-23	Z3	Primary	02/17/06	Europium-152	4.2 U	---	4.2	Filtered		ES
RD-23	Z3	Primary	02/17/06	Europium-154	4.76 U	---	4.76	Filtered		ES

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-23	Z3	Primary	02/17/06	Manganese-54	1.66 U	---	1.66	Filtered		ES
RD-23	Z3	Primary	02/17/06	Sodium-22	1.64 U	---	1.64	Filtered		ES
RD-23	Z3	Primary	02/07/07	Cesium-134	0.718 U	---	0.718	Filtered		ES
RD-23	Z3	Primary	02/07/07	Cesium-137	0.544 U	---	0.544	Filtered		ES
RD-23	Z3	Primary	02/07/07	Cobalt-57	0.329 U	---	0.329	Filtered		ES
RD-23	Z3	Primary	02/07/07	Cobalt-60	0.642 U	---	0.642	Filtered		ES
RD-23	Z3	Primary	02/07/07	Europium-152	1.52 U	---	1.52	Filtered		ES
RD-23	Z3	Primary	02/07/07	Europium-154	1.7 U	---	1.7	Filtered		ES
RD-23	Z3	Primary	02/07/07	Manganese-54	0.535 U	---	0.535	Filtered		ES
RD-23	Z3	Primary	02/07/07	Sodium-22	0.577 U	---	0.577	Filtered		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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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		Split	11/14/03	Cesium-134	0.434 U	1.78	3.07	Filtered		STL
RD-24		Split	11/14/03	Cesium-137	-0.402 U	1.57	2.67	Filtered		STL
RD-24		Split	11/14/03	Cobalt-57	-1.32 U	7.52	12.5	Filtered		STL
RD-24		Split	11/14/03	Cobalt-60	1.22 U	1.85	3.31	Filtered		STL
RD-24		Primary	11/14/03	Cesium-134	9.2 U	---	9.2	Filtered		ES
RD-24		Primary	11/14/03	Cesium-137	6.76 U	---	6.76	Filtered		ES

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-24		Primary	11/14/03	Cobalt-57	3.93 U	---	3.93	Filtered		ES
RD-24		Primary	11/14/03	Cobalt-60	7.69 U	---	7.69	Filtered		ES
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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		Primary	08/08/07	Cesium-137	1.27 U	---	1.27	Filtered		ES
RD-24		Primary	08/08/07	Cobalt-57	0.605 U	---	0.605	Filtered		ES
RD-24		Primary	08/08/07	Cobalt-60	0.789 U	---	0.789	Filtered		ES
RD-24		Primary	08/08/07	Europium-152	2.34 U	---	2.34	Filtered		ES
RD-24		Primary	08/08/07	Europium-154	2.21 U	---	2.21	Filtered		ES
RD-24		Primary	08/08/07	Manganese-54	0.778 U	---	0.778	Filtered		ES
RD-24		Primary	08/08/07	Sodium-22	0.755 U	---	0.755	Filtered		ES
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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		Primary	02/23/04	Cesium-137	3.79 U	---	3.79	Filtered		ES
RD-25		Primary	02/23/04	Cobalt-57	2.02 U	---	2.02	Filtered		ES
RD-25		Primary	02/23/04	Cobalt-60	4.09 U	---	4.09	Filtered		ES
RD-25		Split	02/23/04	Cesium-134	-0.174 U	1.63	2.74	Filtered		STL
RD-25		Split	02/23/04	Cesium-137	-0.932 U	1.45	2.4	Filtered		STL
RD-25		Split	02/23/04	Cobalt-57	-6.35 U	6.91	11.3	Filtered		STL
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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		Split	11/14/03	Cesium-134	0.4 U	1.94	3.3	Filtered		STL
RD-27		Split	11/14/03	Cesium-137	-0.532 U	1.63	2.73	Filtered		STL
RD-27		Split	11/14/03	Cobalt-57	-4.02 U	7.2	11.7	Filtered		STL
RD-27		Split	11/14/03	Cobalt-60	1.31 U	1.6	2.95	Filtered		STL
RD-27		Primary	11/14/03	Cesium-134	17.8 U	---	17.8	Filtered		ES
RD-27		Primary	11/14/03	Cesium-137	13.1 U	---	13.1	Filtered		ES
RD-27		Primary	11/14/03	Cobalt-57	7.16 U	---	7.16	Filtered		ES
RD-27		Primary	11/14/03	Cobalt-60	14 U	---	14	Filtered		ES
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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-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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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		Primary	02/23/04	Cesium-137	8.05 U	---	8.05	Filtered		ES
RD-28		Primary	02/23/04	Cobalt-57	4.73 U	---	4.73	Filtered		ES
RD-28		Primary	02/23/04	Cobalt-60	8.56 U	---	8.56	Filtered		ES
RD-28		Split	02/23/04	Cesium-134	1.15 U	1.69	2.97	Filtered		STL
RD-28		Split	02/23/04	Cesium-137	1.03 U	1.48	2.59	Filtered		STL
RD-28		Split	02/23/04	Cobalt-57	-3.41 U	6.16	10.3	Filtered		STL
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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-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
RD-30		Primary	08/09/94	Cesium-137	1.3 U	---	7.4	Filtered		LAS

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
RD-30		Primary	05/05/00	Cobalt-60	12.7 U	---	12.7	Filtered		TR

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
RD-30		Split	08/29/05	Europium-152	5.29 U	4.1	8.34	Filtered		STL

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
RD-30		Primary	08/21/07	Sodium-22	0.669 U	---	0.669	Filtered		ES

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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	Z4	Primary	01/30/03	Cesium-134	2.26 U	---	2.26	Filtered		ES
RD-33A	Z4	Primary	01/30/03	Cesium-137	1.98 U	---	1.98	Filtered		ES
RD-33A	Z4	Primary	01/30/03	Cobalt-57	1.4 U	---	1.4	Filtered		ES
RD-33A	Z4	Primary	01/30/03	Cobalt-60	1.98 U	---	1.98	Filtered		ES
RD-33A	Z2	Primary	11/15/04	Cesium-134	4.05 U	---	4.05	Filtered		ES
RD-33A	Z2	Primary	11/15/04	Cesium-137	3.14 U	---	3.14	Filtered		ES
RD-33A	Z2	Primary	11/15/04	Cobalt-57	1.89 U	---	1.89	Filtered		ES
RD-33A	Z2	Primary	11/15/04	Cobalt-60	3.5 U	---	3.5	Filtered		ES
RD-33A	Z2	Primary	11/15/04	Europium-152	7.47 U	---	7.47	Filtered		ES
RD-33A	Z2	Primary	11/15/04	Europium-154	9.55 U	---	9.55	Filtered		ES
RD-33A	Z2	Primary	11/15/04	Manganese-54	3.39 U	---	3.39	Filtered		ES
RD-33A	Z2	Primary	11/15/04	Sodium-22	3.28 U	---	3.28	Filtered		ES
RD-33A	Z3	Primary	02/17/05	Cesium-134	1.4 U	---	1.4	Filtered		ES
RD-33A	Z3	Primary	02/17/05	Cesium-137	1.23 U	---	1.23	Filtered		ES
RD-33A	Z3	Primary	02/17/05	Cobalt-57	0.83 U	---	0.83	Filtered		ES

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-33A	Z3	Primary	02/17/05	Cobalt-60	1.22 U	---	1.22	Filtered		ES
RD-33A	Z3	Primary	02/17/05	Europium-152	3.32 U	---	3.32	Filtered		ES
RD-33A	Z3	Primary	02/17/05	Europium-154	3.61 U	---	3.61	Filtered		ES
RD-33A	Z3	Primary	02/17/05	Manganese-54	1.22 U	---	1.22	Filtered		ES
RD-33A	Z3	Primary	02/17/05	Sodium-22	1.23 U	---	1.23	Filtered		ES
RD-33A	Z2	Primary	02/17/06	Cesium-134	1.28 U	---	1.28	Filtered		ES
RD-33A	Z2	Primary	02/17/06	Cesium-137	1.16 U	---	1.16	Filtered		ES
RD-33A	Z2	Primary	02/17/06	Cobalt-57	0.7 U	---	0.7	Filtered		ES
RD-33A	Z2	Primary	02/17/06	Cobalt-60	1.05 U	---	1.05	Filtered		ES
RD-33A	Z2	Primary	02/17/06	Europium-152	2.8 U	---	2.8	Filtered		ES
RD-33A	Z2	Primary	02/17/06	Europium-154	3.32 U	---	3.32	Filtered		ES
RD-33A	Z2	Primary	02/17/06	Manganese-54	1.05 U	---	1.05	Filtered		ES
RD-33A	Z2	Primary	02/17/06	Sodium-22	1.15 U	---	1.15	Filtered		ES
RD-33A	Z2	Primary	02/08/07	Cesium-134	1.01 U	---	1.01	Filtered		ES
RD-33A	Z2	Primary	02/08/07	Cesium-137	0.882 U	---	0.882	Filtered		ES
RD-33A	Z2	Primary	02/08/07	Cobalt-57	0.614 U	---	0.614	Filtered		ES
RD-33A	Z2	Primary	02/08/07	Cobalt-60	0.971 U	---	0.971	Filtered		ES
RD-33A	Z2	Primary	02/08/07	Europium-152	2.26 U	---	2.26	Filtered		ES
RD-33A	Z2	Primary	02/08/07	Europium-154	2.4 U	---	2.4	Filtered		ES
RD-33A	Z2	Primary	02/08/07	Manganese-54	0.841 U	---	0.841	Filtered		ES
RD-33A	Z2	Primary	02/08/07	Sodium-22	0.848 U	---	0.848	Filtered		ES
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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-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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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		LAS
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-34A		Primary	02/15/07	Sodium-22	1.06 U	---	1.06	Filtered		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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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		Primary	08/14/07	Cesium-137	0.6 U	---	0.6	Filtered		ES
RD-34B		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		Primary	08/14/07	Europium-152	1.75 U	---	1.75	Filtered		ES
RD-34B		Primary	08/14/07	Europium-154	1.64 U	---	1.64	Filtered		ES
RD-34B		Primary	08/14/07	Manganese-54	0.618 U	---	0.618	Filtered		ES
RD-34B		Primary	08/14/07	Sodium-22	0.558 U	---	0.558	Filtered		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		TEL
RD-34C		Split	03/10/92	Cesium-137	0 U	---	---	Filtered		CEP
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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		Primary	02/21/06	Cesium-137	1.5 U	---	1.5	Filtered		ES
RD-34C		Primary	02/21/06	Cobalt-57	1.41 U	---	1.41	Filtered		ES
RD-34C		Primary	02/21/06	Cobalt-60	1.58 U	---	1.58	Filtered		ES
RD-34C		Primary	02/21/06	Europium-152	4.25 U	---	4.25	Filtered		ES
RD-34C		Primary	02/21/06	Europium-154	4.62 U	---	4.62	Filtered		ES
RD-34C		Primary	02/21/06	Manganese-54	1.59 U	---	1.59	Filtered		ES
RD-34C		Primary	02/21/06	Sodium-22	1.59 U	---	1.59	Filtered		ES
RD-34C		Split	02/21/06	Cesium-134	-0.14 U	1	1.42	Filtered		STL
RD-34C		Split	02/21/06	Cesium-137	-0.62 U	2	2.63	Filtered		STL
RD-34C		Split	02/21/06	Cobalt-57	0.0327 U	4	6.87	Filtered		STL
RD-34C		Split	02/21/06	Cobalt-60	-0.323 U	1	1.81	Filtered		STL
RD-34C		Split	02/21/06	Europium-152	0.035 U	2	3.85	Filtered		STL
RD-34C		Split	02/21/06	Europium-154	-0.0593 U	2	4.27	Filtered		STL
RD-34C		Split	02/21/06	Manganese-54	0.46 U	1	1.56	Filtered		STL
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-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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-54A	Z2	Primary	02/18/03	Cesium-134	2.52 U	---	2.52	Filtered		ES
RD-54A	Z2	Primary	02/18/03	Cesium-137	2.07 U	---	2.07	Filtered		ES
RD-54A	Z2	Primary	02/18/03	Cobalt-57	1.34 U	---	1.34	Filtered		ES
RD-54A	Z2	Primary	02/18/03	Cobalt-60	2.51 U	---	2.51	Filtered		ES
RD-54A	Z2	Primary	11/03/04	Cesium-134	3.08 U	---	3.08	Filtered		ES
RD-54A	Z2	Primary	11/03/04	Cesium-137	2.46 U	---	2.46	Filtered		ES
RD-54A	Z2	Primary	11/03/04	Cobalt-57	1.83 U	---	1.83	Filtered		ES
RD-54A	Z2	Primary	11/03/04	Cobalt-60	2.6 U	---	2.6	Filtered		ES
RD-54A	Z2	Primary	11/03/04	Europium-152	6.75 U	---	6.75	Filtered		ES
RD-54A	Z2	Primary	11/03/04	Europium-154	7.51 U	---	7.51	Filtered		ES
RD-54A	Z2	Primary	11/03/04	Manganese-54	2.4 U	---	2.4	Filtered		ES
RD-54A	Z2	Primary	11/03/04	Sodium-22	2.6 U	---	2.6	Filtered		ES
RD-54A	Z2	Primary	02/16/05	Cesium-134	1.4 U	---	1.4	Filtered		ES
RD-54A	Z2	Primary	02/16/05	Cesium-137	1.18 U	---	1.18	Filtered		ES
RD-54A	Z2	Primary	02/16/05	Cobalt-57	0.918 U	---	0.918	Filtered		ES
RD-54A	Z2	Primary	02/16/05	Cobalt-60	1.33 U	---	1.33	Filtered		ES
RD-54A	Z2	Primary	02/16/05	Europium-152	3.06 U	---	3.06	Filtered		ES
RD-54A	Z2	Primary	02/16/05	Europium-154	4.02 U	---	4.02	Filtered		ES
RD-54A	Z2	Primary	02/16/05	Manganese-54	1.22 U	---	1.22	Filtered		ES
RD-54A	Z2	Primary	02/16/05	Sodium-22	1.37 U	---	1.37	Filtered		ES
RD-54A	Z2	Primary	02/16/06	Cesium-134	1.08 U	---	1.08	Filtered		ES
RD-54A	Z2	Primary	02/16/06	Cesium-137	0.951 U	---	0.951	Filtered		ES
RD-54A	Z2	Primary	02/16/06	Cobalt-57	0.678 U	---	0.678	Filtered		ES
RD-54A	Z2	Primary	02/16/06	Cobalt-60	0.919 U	---	0.919	Filtered		ES
RD-54A	Z2	Primary	02/16/06	Europium-152	2.26 U	---	2.26	Filtered		ES
RD-54A	Z2	Primary	02/16/06	Europium-154	2.79 U	---	2.79	Filtered		ES
RD-54A	Z2	Primary	02/16/06	Manganese-54	0.969 U	---	0.969	Filtered		ES
RD-54A	Z2	Primary	02/16/06	Sodium-22	0.963 U	---	0.963	Filtered		ES
RD-54A	Z2	Primary	02/07/07	Cesium-134	2.08 U	---	2.08	Filtered		ES
RD-54A	Z2	Primary	02/07/07	Cesium-137	1 U	---	1	Filtered		ES
RD-54A	Z2	Primary	02/07/07	Cobalt-57	0.644 U	---	0.644	Filtered		ES
RD-54A	Z2	Primary	02/07/07	Cobalt-60	1.06 U	---	1.06	Filtered		ES
RD-54A	Z2	Primary	02/07/07	Europium-152	2.88 U	---	2.88	Filtered		ES
RD-54A	Z2	Primary	02/07/07	Europium-154	3.05 U	---	3.05	Filtered		ES
RD-54A	Z2	Primary	02/07/07	Manganese-54	0.959 U	---	0.959	Filtered		ES
RD-54A	Z2	Primary	02/07/07	Sodium-22	1.04 U	---	1.04	Filtered		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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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-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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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		Primary	02/17/05	Cesium-137	1.45 U	---	1.45	Filtered		ES
RD-54C		Primary	02/17/05	Cobalt-57	0.928 U	---	0.928	Filtered		ES
RD-54C		Primary	02/17/05	Cobalt-60	1.67 U	---	1.67	Filtered		ES
RD-54C		Primary	02/17/05	Europium-152	3.43 U	---	3.43	Filtered		ES
RD-54C		Primary	02/17/05	Europium-154	4.61 U	---	4.61	Filtered		ES
RD-54C		Primary	02/17/05	Manganese-54	1.43 U	---	1.43	Filtered		ES
RD-54C		Primary	02/17/05	Sodium-22	1.58 U	---	1.58	Filtered		ES

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-54C		Split	02/17/05	Cesium-134	-0.202 U	0.85	1.44	Filtered		STL
RD-54C		Split	02/17/05	Cesium-137	0.857 U	0.76	1.34	Filtered		STL
RD-54C		Split	02/17/05	Cobalt-57	-4.38 U	3.4	5.55	Filtered		STL
RD-54C		Split	02/17/05	Cobalt-60	0.637 U	0.83	1.51	Filtered		STL
RD-54C		Split	02/17/05	Europium-152	-1.07 U	1.9	3.15	Filtered		STL
RD-54C		Split	02/17/05	Europium-154	1.17 U	2.4	4.28	Filtered		STL
RD-54C		Split	02/17/05	Manganese-54	-0.0764 U	0.8	1.36	Filtered		STL
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
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-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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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	Z8	Primary	01/29/03	Cesium-134	2.11 U	---	2.11	Filtered		ES
RD-57	Z8	Primary	01/29/03	Cesium-137	1.59 U	---	1.59	Filtered		ES
RD-57	Z8	Primary	01/29/03	Cobalt-57	1.16 U	---	1.16	Filtered		ES
RD-57	Z8	Primary	01/29/03	Cobalt-60	2.12 U	---	2.12	Filtered		ES
RD-57	Z8	Primary	04/30/03	Cesium-134	3.63 U	---	3.63	Filtered		ES
RD-57	Z8	Primary	04/30/03	Cesium-137	1.25 U	---	1.25	Filtered		ES
RD-57	Z8	Primary	04/30/03	Cobalt-57	0.901 U	---	0.901	Filtered		ES
RD-57	Z8	Primary	04/30/03	Cobalt-60	1.58 U	---	1.58	Filtered		ES
RD-57	Z7	Primary	03/08/05	Cesium-134	1.53 U	---	1.53	Filtered		ES
RD-57	Z7	Primary	03/08/05	Cesium-137	1.32 U	---	1.32	Filtered		ES
RD-57	Z7	Primary	03/08/05	Cobalt-57	0.908 U	---	0.908	Filtered		ES
RD-57	Z7	Primary	03/08/05	Cobalt-60	1.4 U	---	1.4	Filtered		ES
RD-57	Z7	Primary	03/08/05	Europium-152	3.46 U	---	3.46	Filtered		ES
RD-57	Z7	Primary	03/08/05	Europium-154	4.2 U	---	4.2	Filtered		ES
RD-57	Z7	Primary	03/08/05	Manganese-54	1.38 U	---	1.38	Filtered		ES
RD-57	Z7	Primary	03/08/05	Sodium-22	1.44 U	---	1.44	Filtered		ES
RD-57	Z7	Primary	02/20/06	Cesium-134	1.14 U	---	1.14	Filtered		ES
RD-57	Z7	Primary	02/20/06	Cesium-137	0.942 U	---	0.942	Filtered		ES
RD-57	Z7	Primary	02/20/06	Cobalt-57	0.704 U	---	0.704	Filtered		ES
RD-57	Z7	Primary	02/20/06	Cobalt-60	1.02 U	---	1.02	Filtered		ES
RD-57	Z7	Primary	02/20/06	Europium-152	2.4 U	---	2.4	Filtered		ES
RD-57	Z7	Primary	02/20/06	Europium-154	3.15 U	---	3.15	Filtered		ES
RD-57	Z7	Primary	02/20/06	Manganese-54	0.939 U	---	0.939	Filtered		ES
RD-57	Z7	Primary	02/20/06	Sodium-22	1.09 U	---	1.09	Filtered		ES
RD-57	Z7	Primary	02/08/07	Cesium-134	1.35 U	---	1.35	Filtered		ES
RD-57	Z7	Primary	02/08/07	Cesium-137	1.04 U	---	1.04	Filtered		ES
RD-57	Z7	Primary	02/08/07	Cobalt-57	0.706 U	---	0.706	Filtered		ES
RD-57	Z7	Primary	02/08/07	Cobalt-60	1.07 U	---	1.07	Filtered		ES
RD-57	Z7	Primary	02/08/07	Europium-152	2.93 U	---	2.93	Filtered		ES
RD-57	Z7	Primary	02/08/07	Europium-154	3.3 U	---	3.3	Filtered		ES
RD-57	Z7	Primary	02/08/07	Manganese-54	1.01 U	---	1.01	Filtered		ES
RD-57	Z7	Primary	02/08/07	Sodium-22	1.12 U	---	1.12	Filtered		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
RD-59A		Primary	02/06/95	Cesium-134	-4.1 U	3.4	8.5	Filtered		LAS
RD-59A		Duplicate	02/06/95	Cesium-134	7.3 U	---	7.3	Filtered		LAS
RD-59A		Duplicate	02/06/95	Cesium-134	1.7 U	3.7	7.3	Filtered		LAS
RD-59A		Primary	02/06/95	Cesium-137	0.6 U	7.5	10	Filtered		LAS
RD-59A		Duplicate	02/06/95	Cesium-137	11 U	---	11	Filtered		LAS

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-59A		Duplicate	02/06/95	Cesium-137	-0.6 U	1.7	11	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		Duplicate	02/06/95	Cobalt-57	-1.6 U	2.9	5.1	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		Duplicate	02/06/95	Cobalt-60	-0.7 U	4.7	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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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-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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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		Primary	02/28/07	Cesium-134	1.06 U	---	1.06	Filtered		ES
RD-59B		Primary	02/28/07	Cesium-137	0.947 U	---	0.947	Filtered		ES
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-59B		Primary	02/28/07	Europium-152	2.53 U	---	2.53	Filtered		ES
RD-59B		Primary	02/28/07	Europium-154	2.73 U	---	2.73	Filtered		ES
RD-59B		Primary	02/28/07	Manganese-54	0.97 U	---	0.97	Filtered		ES
RD-59B		Primary	02/28/07	Sodium-22	0.93 U	---	0.93	Filtered		ES
RD-59B		Split	02/28/07	Beryllium-7	1.91 U	7.2	12.4	Filtered		STL
RD-59B		Split	02/28/07	Cesium-134	-0.171 U	0.8	1.36	Filtered		STL
RD-59B		Split	02/28/07	Cesium-137	-0.499 U	0.74	1.24	Filtered		STL
RD-59B		Split	02/28/07	Cobalt-60	-0.457 U	0.7	1.15	Filtered		STL
RD-59B		Split	02/28/07	Europium-152	-0.871 U	1.9	3.08	Filtered		STL
RD-59B		Split	02/28/07	Europium-154	-0.326 U	2.1	3.61	Filtered		STL
RD-59B		Split	02/28/07	Manganese-54	0.264 U	0.73	1.27	Filtered		STL
RD-59B		Split	02/28/07	Sodium-22	-0.0745 U	0.76	1.31	Filtered		STL
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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-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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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-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	Z6	Primary	01/29/03	Cesium-134	1.14 U	---	1.14	Filtered		ES

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-64	Z6	Primary	01/29/03	Cesium-137	0.879 U	---	0.879	Filtered		ES
RD-64	Z6	Primary	01/29/03	Cobalt-57	0.668 U	---	0.668	Filtered		ES
RD-64	Z6	Primary	01/29/03	Cobalt-60	0.834 U	---	0.834	Filtered		ES
RD-64	Z6	Primary	02/14/05	Cesium-134	1.73 U	---	1.73	Filtered		ES
RD-64	Z6	Primary	02/14/05	Cesium-137	1.3 U	---	1.3	Filtered		ES
RD-64	Z6	Primary	02/14/05	Cobalt-57	0.569 U	---	0.569	Filtered		ES
RD-64	Z6	Primary	02/14/05	Cobalt-60	1.55 U	---	1.55	Filtered		ES
RD-64	Z6	Primary	02/14/05	Europium-152	3.42 U	---	3.42	Filtered		ES
RD-64	Z6	Primary	02/14/05	Europium-154	4.24 U	---	4.24	Filtered		ES
RD-64	Z6	Primary	02/14/05	Manganese-54	1.38 U	---	1.38	Filtered		ES
RD-64	Z6	Primary	02/14/05	Sodium-22	1.45 U	---	1.45	Filtered		ES
RD-64	Z6	Primary	02/16/06	Cesium-134	3.79 U	---	3.79	Filtered		ES
RD-64	Z6	Primary	02/16/06	Cesium-137	1.57 U	---	1.57	Filtered		ES
RD-64	Z6	Primary	02/16/06	Cobalt-57	1.5 U	---	1.5	Filtered		ES
RD-64	Z6	Primary	02/16/06	Cobalt-60	1.63 U	---	1.63	Filtered		ES
RD-64	Z6	Primary	02/16/06	Europium-152	4.31 U	---	4.31	Filtered		ES
RD-64	Z6	Primary	02/16/06	Europium-154	4.83 U	---	4.83	Filtered		ES
RD-64	Z6	Primary	02/16/06	Manganese-54	1.68 U	---	1.68	Filtered		ES
RD-64	Z6	Primary	02/16/06	Sodium-22	1.67 U	---	1.67	Filtered		ES
RD-64	Z6	Primary	02/08/07	Cesium-134	1.26 U	---	1.26	Filtered		ES
RD-64	Z6	Primary	02/08/07	Cesium-137	0.984 U	---	0.984	Filtered		ES
RD-64	Z6	Primary	02/08/07	Cobalt-57	0.59 U	---	0.59	Filtered		ES
RD-64	Z6	Primary	02/08/07	Cobalt-60	1 U	---	1	Filtered		ES
RD-64	Z6	Primary	02/08/07	Europium-152	2.67 U	---	2.67	Filtered		ES
RD-64	Z6	Primary	02/08/07	Europium-154	3.04 U	---	3.04	Filtered		ES
RD-64	Z6	Primary	02/08/07	Manganese-54	0.969 U	---	0.969	Filtered		ES
RD-64	Z6	Primary	02/08/07	Sodium-22	1.04 U	---	1.04	Filtered		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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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		Primary	05/24/05	Cesium-137	1.99 U	---	1.99	Filtered		ES
RD-89		Primary	05/24/05	Cobalt-57	1.28 U	---	1.28	Filtered		ES
RD-89		Primary	05/24/05	Cobalt-60	2.02 U	---	2.02	Filtered		ES
RD-89		Primary	05/24/05	Europium-152	4.66 U	---	4.66	Filtered		ES
RD-89		Primary	05/24/05	Europium-154	6.05 U	---	6.05	Filtered		ES
RD-89		Primary	05/24/05	Manganese-54	1.86 U	---	1.86	Filtered		ES
RD-89		Primary	05/24/05	Sodium-22	2.06 U	---	2.06	Filtered		ES
RD-89		Duplicate	05/24/05	Cesium-134	2.31 U	---	2.31	Filtered		ES
RD-89		Duplicate	05/24/05	Cesium-137	1.85 U	---	1.85	Filtered		ES
RD-89		Duplicate	05/24/05	Cobalt-57	0.829 U	---	0.829	Filtered		ES
RD-89		Duplicate	05/24/05	Cobalt-60	2.2 U	---	2.2	Filtered		ES
RD-89		Duplicate	05/24/05	Europium-152	5.02 U	---	5.02	Filtered		ES
RD-89		Duplicate	05/24/05	Europium-154	6.09 U	---	6.09	Filtered		ES
RD-89		Duplicate	05/24/05	Manganese-54	1.97 U	---	1.97	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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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		Primary	05/23/05	Cesium-137	1.49 U	---	1.49	Filtered		ES
RD-93		Primary	05/23/05	Cobalt-57	1.08 U	---	1.08	Filtered		ES
RD-93		Primary	05/23/05	Cobalt-60	1.29 U	---	1.29	Filtered		ES
RD-93		Primary	05/23/05	Europium-152	4.34 U	---	4.34	Filtered		ES
RD-93		Primary	05/23/05	Europium-154	4.19 U	---	4.19	Filtered		ES
RD-93		Primary	05/23/05	Manganese-54	1.35 U	---	1.35	Filtered		ES
RD-93		Primary	05/23/05	Sodium-22	1.42 U	---	1.42	Filtered		ES
RD-93		Duplicate	05/23/05	Cesium-134	1.96 U	---	1.96	Filtered		ES
RD-93		Duplicate	05/23/05	Cesium-137	1.86 U	---	1.86	Filtered		ES
RD-93		Duplicate	05/23/05	Cobalt-57	1.25 U	---	1.25	Filtered		ES
RD-93		Duplicate	05/23/05	Cobalt-60	1.86 U	---	1.86	Filtered		ES
RD-93		Duplicate	05/23/05	Europium-152	4.59 U	---	4.59	Filtered		ES
RD-93		Duplicate	05/23/05	Europium-154	5.96 U	---	5.96	Filtered		ES
RD-93		Duplicate	05/23/05	Manganese-54	1.78 U	---	1.78	Filtered		ES

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
RD-96		Primary	05/09/06	Cesium-134	1.48 U	---	1.48	Unfiltered		ES
RD-96		Primary	05/09/06	Cesium-137	1.3 U	---	1.3	Unfiltered		ES
RD-96		Primary	05/09/06	Cobalt-57	0.67 U	---	0.67	Unfiltered		ES
RD-96		Primary	05/09/06	Cobalt-60	1.47 U	---	1.47	Unfiltered		ES
RD-96		Primary	05/09/06	Europium-152	3.03 U	---	3.03	Unfiltered		ES
RD-96		Primary	05/09/06	Europium-154	3.51 U	---	3.51	Unfiltered		ES
RD-96		Primary	05/09/06	Manganese-54	1.16 U	---	1.16	Unfiltered		ES
RD-96		Primary	05/09/06	Sodium-22	1.18 U	---	1.18	Unfiltered		ES
RD-96		Primary	05/09/06	Cesium-134	2.03 U	---	2.03	Filtered		ES
RD-96		Primary	05/09/06	Cesium-137	1.81 U	---	1.81	Filtered		ES
RD-96		Primary	05/09/06	Cobalt-57	1.39 U	---	1.39	Filtered		ES
RD-96		Primary	05/09/06	Cobalt-60	1.84 U	---	1.84	Filtered		ES
RD-96		Primary	05/09/06	Europium-152	5 U	---	5	Filtered		ES
RD-96		Primary	05/09/06	Europium-154	5.43 U	---	5.43	Filtered		ES
RD-96		Primary	05/09/06	Manganese-54	1.66 U	---	1.66	Filtered		ES
RD-96		Primary	05/09/06	Sodium-22	1.83 U	---	1.83	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	1.08 U	---	1.08	Unfiltered		ES
RD-97		Primary	05/09/06	Cobalt-57	0.706 U	---	0.706	Unfiltered		ES
RD-97		Primary	05/09/06	Cobalt-60	1.12 U	---	1.12	Unfiltered		ES
RD-97		Primary	05/09/06	Europium-152	2.57 U	---	2.57	Unfiltered		ES
RD-97		Primary	05/09/06	Europium-154	2.87 U	---	2.87	Unfiltered		ES
RD-97		Primary	05/09/06	Manganese-54	1.03 U	---	1.03	Unfiltered		ES
RD-97		Primary	05/09/06	Sodium-22	0.969 U	---	0.969	Unfiltered		ES
RD-97		Primary	05/09/06	Cesium-134	2.07 U	---	2.07	Filtered		ES

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-97		Primary	05/09/06	Cesium-137	1.14 U	---	1.14	Filtered		ES
RD-97		Primary	05/09/06	Cobalt-57	0.725 U	---	0.725	Filtered		ES
RD-97		Primary	05/09/06	Cobalt-60	1.22 U	---	1.22	Filtered		ES
RD-97		Primary	05/09/06	Europium-152	2.68 U	---	2.68	Filtered		ES
RD-97		Primary	05/09/06	Europium-154	2.94 U	---	2.94	Filtered		ES
RD-97		Primary	05/09/06	Manganese-54	0.922 U	---	0.922	Filtered		ES
RD-97		Primary	05/09/06	Sodium-22	0.991 U	---	0.991	Filtered		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
WS-13		Primary	11/01/89	Cesium-137	1.57 U	4.11	---	Unfiltered		UST
<b>Private Off-site Wells</b>										
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<i>Private Off-site Wells</i>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Private Off-site Wells</b>										
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
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
<b>Municipal Water Supply</b>										
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
Facility Water		Primary	08/10/04	Cesium-134	8.06 U	---	8.06	Unfiltered		ES
Facility Water		Primary	08/10/04	Cesium-137	7.14 U	---	7.14	Unfiltered		ES
Facility Water		Primary	08/10/04	Cobalt-57	3.69 U	---	3.69	Unfiltered		ES
Facility Water		Primary	08/10/04	Cobalt-60	7.29 U	---	7.29	Unfiltered		ES
<b>Facility Fire Hydrant</b>										
Hydrant Water		Primary	03/16/04	Cesium-134	9.49 U	---	9.49	Unfiltered		ES
Hydrant Water		Primary	03/16/04	Cesium-137	8.23 U	---	8.23	Unfiltered		ES
Hydrant Water		Primary	03/16/04	Cobalt-57	5.92 U	---	5.92	Unfiltered		ES
Hydrant Water		Primary	03/16/04	Cobalt-60	9.26 U	---	9.26	Unfiltered		ES

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008



**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.

CEP = Controls for Environmental Pollution

DL = Davi Laboratories

ES = Eberline Services

IT = International Technologies, Inc.

LAS = LAS Laboratories

STL = Severn Trent Laboratories

TEL = Teledyne Isotopes

TMA = Thermoanalytical Inc.

TN = Thermo Nutech

TR = Thermo Retec

UST = United States Testing

Primary = Primary sample.

Duplicate = Duplicate sample.

Split = Split sample.

Reanalysis of Primary = Reanalysis of primary sample.

Z = Flute port number.

--- = Data do not exist.

J = Result is less than contract-required minimum detectable activity (MDA) and greater than or equal to the MDA.

U = The result is less than the minimum detectable activity (MDA).

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 versions of each EPA method at the time of analysis.

Man-made gamma-emitting radionuclides include antimony-125, beryllium-7, cobalt-57, cobalt-60, cesium-134, cesium-137, europium-152, europium-154, manganese-54, ruthenium-106, silver-110m and sodium-22.

Results are presented as the activity plus or minus error. 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.

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Piezometers</b>										
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
<b>Shallow Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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-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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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
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-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-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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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
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-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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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
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
ES-31		Primary	02/06/99	Actinium-228	67.2 U	---	67.2	Filtered		TN

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
RD-07		Primary	02/22/02	Uranium-235	5 U	3	5	Filtered		DL
RD-07	Z3	Primary	01/29/03	Actinium-228	6.45 U	---	6.45	Filtered		ES
RD-07	Z3	Primary	01/29/03	Bismuth-212	9.4 U	---	9.4	Filtered		ES
RD-07	Z3	Primary	01/29/03	Bismuth-214	2.78 U	---	2.78	Filtered		ES
RD-07	Z3	Primary	01/29/03	Lead-210	99.1 U	---	99.1	Filtered		ES
RD-07	Z3	Primary	01/29/03	Lead-212	1.77 U	---	1.77	Filtered		ES
RD-07	Z3	Primary	01/29/03	Lead-214	2.6 U	---	2.6	Filtered		ES
RD-07	Z3	Primary	01/29/03	Potassium-40	37.7 U	---	37.7	Filtered		ES
RD-07	Z3	Primary	01/29/03	Radium-226	19.1 U	---	19.1	Filtered		ES
RD-07	Z3	Primary	01/29/03	Thorium-234	20.9 U	---	20.9	Filtered		ES
RD-07	Z3	Primary	01/29/03	Uranium-235	6.09 U	---	6.09	Filtered		ES
RD-07	Z3	Primary	02/17/05	Potassium-40	39.3 U	---	39.3	Filtered		ES
RD-07	Z3	Primary	02/16/06	Potassium-40	45.8 U	---	45.8	Filtered		ES
RD-07	Z3	Primary	02/08/07	Potassium-40	27.3 U	---	27.3	Filtered		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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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-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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
RD-21		Primary	02/16/96	Lead-212	4.5 U	9.9	14	Filtered		LAS

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
RD-21		Primary	03/15/00	Potassium-40	440 U	---	440	Filtered		TR

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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	Z2	Primary	02/25/03	Actinium-228	10.2 U	---	10.2	Filtered		ES
RD-21	Z2	Primary	02/25/03	Bismuth-212	14.4 U	---	14.4	Filtered		ES
RD-21	Z2	Primary	02/25/03	Bismuth-214	4.6 U	---	4.6	Filtered		ES
RD-21	Z2	Primary	02/25/03	Lead-210	182 U	---	182	Filtered		ES
RD-21	Z2	Primary	02/25/03	Lead-212	2.94 U	---	2.94	Filtered		ES
RD-21	Z2	Primary	02/25/03	Lead-214	4.22 U	---	4.22	Filtered		ES
RD-21	Z2	Primary	02/25/03	Potassium-40	62.2 U	---	62.2	Filtered		ES
RD-21	Z2	Primary	02/25/03	Radium-226	31.1 U	---	31.1	Filtered		ES
RD-21	Z2	Primary	02/25/03	Thorium-234	33.9 U	---	33.9	Filtered		ES
RD-21	Z2	Primary	02/25/03	Uranium-235	10.3 U	---	10.3	Filtered		ES
RD-21	Z2	Primary	11/04/04	Potassium-40	36 U	---	36	Filtered		ES
RD-21	Z2	Primary	02/16/05	Potassium-40	26.3 U	---	26.3	Filtered		ES
RD-21	Z2	Primary	02/16/06	Potassium-40	21.6 U	---	21.6	Filtered		ES
RD-21	Z2	Primary	05/21/07	Potassium-40	7.14 U	---	7.14	Filtered		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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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	Z2	Primary	02/24/03	Actinium-228	5.7 U	---	5.7	Filtered		ES
RD-22	Z2	Primary	02/24/03	Bismuth-212	10 U	---	10	Filtered		ES
RD-22	Z2	Primary	02/24/03	Bismuth-214	2.67 U	---	2.67	Filtered		ES
RD-22	Z2	Primary	02/24/03	Lead-210	249 U	---	249	Filtered		ES
RD-22	Z2	Primary	02/24/03	Lead-212	1.83 U	---	1.83	Filtered		ES
RD-22	Z2	Primary	02/24/03	Lead-214	2.41 U	---	2.41	Filtered		ES
RD-22	Z2	Primary	02/24/03	Potassium-40	16.5 U	---	16.5	Filtered		ES
RD-22	Z2	Primary	02/24/03	Radium-226	19.5 U	---	19.5	Filtered		ES
RD-22	Z2	Primary	02/24/03	Thorium-234	36.4 U	---	36.4	Filtered		ES
RD-22	Z2	Primary	02/24/03	Uranium-235	5.73 U	---	5.73	Filtered		ES
RD-22	Z2	Primary	11/12/04	Potassium-40	13.6 U	---	13.6	Filtered		ES
RD-22	Z2	Primary	02/17/05	Potassium-40	14.9 U	---	14.9	Filtered		ES
RD-22	Z2	Primary	02/15/06	Potassium-40	18.3 U	---	18.3	Filtered		ES
RD-22	Z2	Primary	02/07/07	Potassium-40	24.4 U	---	24.4	Filtered		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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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	Z1	Primary	02/26/03	Actinium-228	12.4 U	---	12.4	Filtered		ES
RD-23	Z1	Primary	02/26/03	Bismuth-212	20.9 U	---	20.9	Filtered		ES
RD-23	Z1	Primary	02/26/03	Bismuth-214	5.48 U	---	5.48	Filtered		ES
RD-23	Z1	Primary	02/26/03	Lead-210	197 U	---	197	Filtered		ES
RD-23	Z1	Primary	02/26/03	Lead-212	4.05 U	---	4.05	Filtered		ES
RD-23	Z1	Primary	02/26/03	Lead-214	5.26 U	---	5.26	Filtered		ES
RD-23	Z1	Primary	02/26/03	Potassium-40	116 U	---	116	Filtered		ES
RD-23	Z1	Primary	02/26/03	Radium-226	41.6 U	---	41.6	Filtered		ES
RD-23	Z1	Primary	02/26/03	Thorium-234	61.6 U	---	61.6	Filtered		ES
RD-23	Z1	Primary	02/26/03	Uranium-235	15.5 U	---	15.5	Filtered		ES
RD-23	Z2	Primary	11/03/04	Potassium-40	35.8 U	---	35.8	Filtered		ES
RD-23	Z2	Primary	02/14/05	Potassium-40	23.9 U	---	23.9	Filtered		ES
RD-23	Z3	Primary	02/17/06	Potassium-40	50.5 U	---	50.5	Filtered		ES
RD-23	Z3	Primary	02/07/07	Potassium-40	6.96 U	---	6.96	Filtered		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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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		Split	11/14/03	Actinium-228	-3.74 U	11.8	13	Filtered		STL
RD-24		Split	11/14/03	Bismuth-212	-0.48 U	22.7	38.8	Filtered		STL

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-24		Split	11/14/03	Bismuth-214	4.74 U	7.96	6.86	Filtered		STL
RD-24		Split	11/14/03	Lead-212	1.04 U	4.29	3.39	Filtered		STL
RD-24		Split	11/14/03	Lead-214	-3.52 U	5.68	5.78	Filtered		STL
RD-24		Split	11/14/03	Potassium-40	-95.4 U	59.9	88.8	Filtered		STL
RD-24		Split	11/14/03	Thallium-208	1.65 U	3.64	2.74	Filtered		STL
RD-24		Split	11/14/03	Thorium-234	124 U	236	417	Filtered		STL
RD-24		Primary	11/14/03	Actinium-228	33.3 U	---	33.3	Filtered		ES
RD-24		Primary	11/14/03	Bismuth-212	50 U	---	50	Filtered		ES
RD-24		Primary	11/14/03	Bismuth-214	23.2 U	---	23.2	Filtered		ES
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		Primary	11/14/03	Lead-214	26.7 U	---	26.7	Filtered		ES
RD-24		Primary	11/14/03	Potassium-40	145 U	---	145	Filtered		ES
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		Primary	11/14/03	Thorium-234	189 U	---	189	Filtered		ES
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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		Primary	02/23/04	Bismuth-212	30.2 U	---	30.2	Filtered		ES
RD-25		Primary	02/23/04	Bismuth-214	27.2 U	---	27.2	Filtered		ES
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		Primary	02/23/04	Lead-214	23.2 U	---	23.2	Filtered		ES
RD-25		Primary	02/23/04	Potassium-40	49 U	---	49	Filtered		ES
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		Primary	02/23/04	Thorium-234	102 U	---	102	Filtered		ES
RD-25		Primary	02/23/04	Uranium-235	17.8 U	---	17.8	Filtered		ES
RD-25		Split	02/23/04	Actinium-228	10.7	5.59	10.1	Filtered		STL
RD-25		Split	02/23/04	Bismuth-212	-6.13 U	20.1	33.6	Filtered		STL
RD-25		Split	02/23/04	Bismuth-214	2.04 U	4.84	5.76	Filtered		STL
RD-25		Split	02/23/04	Lead-212	0.336 U	3.4	3.21	Filtered		STL
RD-25		Split	02/23/04	Lead-214	3.76 U	2.86	4.9	Filtered		STL
RD-25		Split	02/23/04	Potassium-40	70.4	46	21.1	Filtered		STL
RD-25		Split	02/23/04	Thallium-208	1.95 U	1.53	2.71	Filtered		STL
RD-25		Split	02/23/04	Thorium-234	211 U	225	402	Filtered		STL
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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		Split	11/14/03	Actinium-228	0.533 U	12	12.8	Filtered		STL
RD-27		Split	11/14/03	Bismuth-212	19.7 U	23.1	40.4	Filtered		STL
RD-27		Split	11/14/03	Bismuth-214	6.2 U	6.84	6.27	Filtered		STL
RD-27		Split	11/14/03	Lead-212	-1.89 U	4.24	4.15	Filtered		STL
RD-27		Split	11/14/03	Lead-214	0.587 U	5.38	5.41	Filtered		STL
RD-27		Split	11/14/03	Potassium-40	-29.1 U	53.2	77.1	Filtered		STL
RD-27		Split	11/14/03	Thallium-208	-0.815 U	3.29	3.13	Filtered		STL
RD-27		Split	11/14/03	Thorium-234	198 U	268	475	Filtered		STL
RD-27		Primary	11/14/03	Actinium-228	71.6 U	---	71.6	Filtered		ES
RD-27		Primary	11/14/03	Bismuth-212	112 U	---	112	Filtered		ES
RD-27		Primary	11/14/03	Bismuth-214	32.4 U	---	32.4	Filtered		ES
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		Primary	11/14/03	Lead-214	27.6 U	---	27.6	Filtered		ES
RD-27		Primary	11/14/03	Potassium-40	429 U	---	429	Filtered		ES
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		Primary	11/14/03	Thorium-234	227 U	---	227	Filtered		ES
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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-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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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		Primary	02/23/04	Bismuth-212	65.1 U	---	65.1	Filtered		ES
RD-28		Primary	02/23/04	Bismuth-214	39.3 U	---	39.3	Filtered		ES
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		Primary	02/23/04	Lead-214	30.8 U	---	30.8	Filtered		ES
RD-28		Primary	02/23/04	Potassium-40	133 U	---	133	Filtered		ES
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		Primary	02/23/04	Thorium-234	179 U	---	179	Filtered		ES
RD-28		Primary	02/23/04	Uranium-235	41.3 U	---	41.3	Filtered		ES
RD-28		Split	02/23/04	Actinium-228	-5.16 U	9.82	11	Filtered		STL
RD-28		Split	02/23/04	Bismuth-212	25.7 U	20.9	37.3	Filtered		STL
RD-28		Split	02/23/04	Bismuth-214	-0.951 U	4.97	5.88	Filtered		STL
RD-28		Split	02/23/04	Lead-212	1.7 U	3.15	3.03	Filtered		STL

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-28		Split	02/23/04	Lead-214	-8.79 U	5.53	4.75	Filtered		STL
RD-28		Split	02/23/04	Potassium-40	-75.4 U	51.4	76.2	Filtered		STL
RD-28		Split	02/23/04	Thallium-208	-1.33 U	2.87	2.93	Filtered		STL
RD-28		Split	02/23/04	Thorium-234	271 U	237	427	Filtered		STL
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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-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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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-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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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	Z4	Primary	01/30/03	Actinium-228	9.02 U	---	9.02	Filtered		ES
RD-33A	Z4	Primary	01/30/03	Bismuth-212	15 U	---	15	Filtered		ES
RD-33A	Z4	Primary	01/30/03	Bismuth-214	4.01 U	---	4.01	Filtered		ES
RD-33A	Z4	Primary	01/30/03	Lead-210	452 U	---	452	Filtered		ES
RD-33A	Z4	Primary	01/30/03	Lead-212	2.8 U	---	2.8	Filtered		ES
RD-33A	Z4	Primary	01/30/03	Lead-214	3.91 U	---	3.91	Filtered		ES
RD-33A	Z4	Primary	01/30/03	Potassium-40	41.5 U	---	41.5	Filtered		ES
RD-33A	Z4	Primary	01/30/03	Radium-226	31.4 U	---	31.4	Filtered		ES
RD-33A	Z4	Primary	01/30/03	Thorium-234	62.6 U	---	62.6	Filtered		ES
RD-33A	Z4	Primary	01/30/03	Uranium-235	12.2 U	---	12.2	Filtered		ES
RD-33A	Z2	Primary	11/15/04	Potassium-40	52.2 U	---	52.2	Filtered		ES
RD-33A	Z3	Primary	02/17/05	Potassium-40	41.5 U	---	41.5	Filtered		ES
RD-33A	Z2	Primary	02/17/06	Potassium-40	18.7 U	---	18.7	Filtered		ES
RD-33A	Z2	Primary	02/08/07	Potassium-40	16.3 U	---	16.3	Filtered		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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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-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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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-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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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-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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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-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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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-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
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		LAS
RD-44		Primary	08/24/97	Bismuth-212	35 U	48	58	Filtered		LAS

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-44		Primary	08/24/97	Bismuth-214	33	16	20	Filtered		LAS
RD-44		Primary	08/24/97	Lead-210	-20 U	110	170	Filtered		LAS
RD-44		Primary	08/24/97	Lead-212	7.2 U	9.5	13	Filtered		LAS
RD-44		Primary	08/24/97	Lead-214	14 U	12	19	Filtered		LAS
RD-44		Primary	08/24/97	Potassium-40	-5 U	76	130	Filtered		LAS
RD-44		Primary	08/24/97	Thallium-208	2.5 U	6.5	9.3	Filtered		LAS
RD-44		Primary	08/24/97	Thorium-234	-18 U	69	140	Filtered		LAS
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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	Z2	Primary	02/18/03	Actinium-228	9.26 U	---	9.26	Filtered		ES

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-54A	Z2	Primary	02/18/03	Bismuth-212	15.8 U	---	15.8	Filtered		ES
RD-54A	Z2	Primary	02/18/03	Bismuth-214	4.41 U	---	4.41	Filtered		ES
RD-54A	Z2	Primary	02/18/03	Lead-210	436 U	---	436	Filtered		ES
RD-54A	Z2	Primary	02/18/03	Lead-212	3.07 U	---	3.07	Filtered		ES
RD-54A	Z2	Primary	02/18/03	Lead-214	4.11 U	---	4.11	Filtered		ES
RD-54A	Z2	Primary	02/18/03	Potassium-40	49.7 U	---	49.7	Filtered		ES
RD-54A	Z2	Primary	02/18/03	Radium-226	30.7 U	---	30.7	Filtered		ES
RD-54A	Z2	Primary	02/18/03	Thorium-234	60.6 U	---	60.6	Filtered		ES
RD-54A	Z2	Primary	02/18/03	Uranium-235	12 U	---	12	Filtered		ES
RD-54A	Z2	Primary	11/03/04	Potassium-40	48.2 U	---	48.2	Filtered		ES
RD-54A	Z2	Primary	02/16/05	Potassium-40	27.4 U	---	27.4	Filtered		ES
RD-54A	Z2	Primary	02/16/06	Potassium-40	28.9 U	---	28.9	Filtered		ES
RD-54A	Z2	Primary	02/07/07	Potassium-40	28.3 U	---	28.3	Filtered		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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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-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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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-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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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	Z8	Primary	01/29/03	Actinium-228	7.2 U	---	7.2	Filtered		ES
RD-57	Z8	Primary	01/29/03	Bismuth-212	12.2 U	---	12.2	Filtered		ES
RD-57	Z8	Primary	01/29/03	Bismuth-214	3.35 U	---	3.35	Filtered		ES
RD-57	Z8	Primary	01/29/03	Lead-210	317 U	---	317	Filtered		ES
RD-57	Z8	Primary	01/29/03	Lead-212	2.41 U	---	2.41	Filtered		ES
RD-57	Z8	Primary	01/29/03	Lead-214	3.21 U	---	3.21	Filtered		ES
RD-57	Z8	Primary	01/29/03	Potassium-40	40 U	---	40	Filtered		ES
RD-57	Z8	Primary	01/29/03	Radium-226	23.4 U	---	23.4	Filtered		ES
RD-57	Z8	Primary	01/29/03	Thorium-234	43.7 U	---	43.7	Filtered		ES
RD-57	Z8	Primary	01/29/03	Uranium-235	8.96 U	---	8.96	Filtered		ES
RD-57	Z8	Primary	04/30/03	Actinium-228	5.26 U	---	5.26	Filtered		ES
RD-57	Z8	Primary	04/30/03	Bismuth-212	8.85 U	---	8.85	Filtered		ES
RD-57	Z8	Primary	04/30/03	Bismuth-214	2.6 U	---	2.6	Filtered		ES
RD-57	Z8	Primary	04/30/03	Lead-210	301 U	---	301	Filtered		ES
RD-57	Z8	Primary	04/30/03	Lead-212	1.86 U	---	1.86	Filtered		ES
RD-57	Z8	Primary	04/30/03	Lead-214	2.48 U	---	2.48	Filtered		ES
RD-57	Z8	Primary	04/30/03	Potassium-40	30.9 U	---	30.9	Filtered		ES
RD-57	Z8	Primary	04/30/03	Radium-226	18.1 U	---	18.1	Filtered		ES
RD-57	Z8	Primary	04/30/03	Thorium-234	36.4 U	---	36.4	Filtered		ES
RD-57	Z8	Primary	04/30/03	Uranium-235	6.22 U	---	6.22	Filtered		ES
RD-57	Z7	Primary	03/08/05	Potassium-40	25.9 U	---	25.9	Filtered		ES
RD-57	Z7	Primary	02/20/06	Potassium-40	19 U	---	19	Filtered		ES
RD-57	Z7	Primary	02/08/07	Potassium-40	25.2 U	---	25.2	Filtered		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	8 U	12	18	Filtered		LAS
RD-59A		Duplicate	02/06/95	Lead-212	6 U	11	15	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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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-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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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-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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<i>Chatsworth Formation Wells</i>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b><i>Chatsworth Formation Wells</i></b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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-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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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	Z6	Primary	01/29/03	Actinium-228	3.38 U	---	3.38	Filtered		ES
RD-64	Z6	Primary	01/29/03	Bismuth-212	6.65 U	---	6.65	Filtered		ES
RD-64	Z6	Primary	01/29/03	Bismuth-214	1.77 U	---	1.77	Filtered		ES
RD-64	Z6	Primary	01/29/03	Lead-210	79.1 U	---	79.1	Filtered		ES
RD-64	Z6	Primary	01/29/03	Lead-212	1.44 U	---	1.44	Filtered		ES
RD-64	Z6	Primary	01/29/03	Lead-214	1.83 U	---	1.83	Filtered		ES
RD-64	Z6	Primary	01/29/03	Potassium-40	9.26 U	---	9.26	Filtered		ES
RD-64	Z6	Primary	01/29/03	Radium-226	14.6 U	---	14.6	Filtered		ES
RD-64	Z6	Primary	01/29/03	Thorium-234	28.5 U	---	28.5	Filtered		ES
RD-64	Z6	Primary	01/29/03	Uranium-235	5.37 U	---	5.37	Filtered		ES
RD-64	Z6	Primary	02/14/05	Potassium-40	13.6 U	---	13.6	Filtered		ES
RD-64	Z6	Primary	02/16/06	Potassium-40	51.2 U	---	51.2	Filtered		ES
RD-64	Z6	Primary	02/08/07	Potassium-40	21.5 U	---	21.5	Filtered		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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-68B		Primary	07/10/97	Lead-210	20 U	110	170	Filtered		LAS
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-85		Primary	08/13/04	Lead-212	14.5 U	---	14.5	Filtered		ES
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-89		Primary	05/24/05	Potassium-40	37 U	---	37	Filtered		ES
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-91		Primary	04/15/04	Thallium-208	9.22 U	---	9.22	Filtered		ES
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	26.9 U	---	26.9	Unfiltered		ES
RD-96		Primary	05/09/06	Potassium-40	54.9 U	---	54.9	Filtered		ES
RD-97		Primary	05/09/06	Potassium-40	33.3 U	---	33.3	Unfiltered		ES
RD-97		Primary	05/09/06	Potassium-40	29.8 U	---	29.8	Filtered		ES
<b>Private Off-site Wells</b>										
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<i>Private Off-site Wells</i>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Private Off-site Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Private Off-site Wells</b>										
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
<b>Municipal Water Supply</b>										
Facility Water		Primary	08/10/04	Actinium-228	31.1 U	---	31.1	Unfiltered		ES
Facility Water		Primary	08/10/04	Bismuth-212	57.8 U	---	57.8	Unfiltered		ES
Facility Water		Primary	08/10/04	Bismuth-214	13.4 U	---	13.4	Unfiltered		ES
Facility Water		Primary	08/10/04	Lead-210	457 U	---	457	Unfiltered		ES
Facility Water		Primary	08/10/04	Lead-212	11.5 U	---	11.5	Unfiltered		ES
Facility Water		Primary	08/10/04	Lead-214	12.5 U	---	12.5	Unfiltered		ES
Facility Water		Primary	08/10/04	Potassium-40	76.9 U	---	76.9	Unfiltered		ES
Facility Water		Primary	08/10/04	Radium-226	109 U	---	109	Unfiltered		ES
Facility Water		Primary	08/10/04	Thallium-208	7.04 U	---	7.04	Unfiltered		ES
Facility Water		Primary	08/10/04	Thorium-234	188 U	---	188	Unfiltered		ES
Facility Water		Primary	08/10/04	Uranium-235	34.9 U	---	34.9	Unfiltered		ES
<b>Facility Fire Hydrant</b>										
Hydrant Water		Primary	03/16/04	Actinium-228	37.7 U	---	37.7	Unfiltered		ES
Hydrant Water		Primary	03/16/04	Bismuth-212	67.1 U	---	67.1	Unfiltered		ES
Hydrant Water		Primary	03/16/04	Bismuth-214	16.4 U	---	16.4	Unfiltered		ES
Hydrant Water		Primary	03/16/04	Lead-210	1800 U	---	1800	Unfiltered		ES
Hydrant Water		Primary	03/16/04	Lead-212	12.2 U	---	12.2	Unfiltered		ES
Hydrant Water		Primary	03/16/04	Lead-214	14.7 U	---	14.7	Unfiltered		ES
Hydrant Water		Primary	03/16/04	Potassium-40	178 U	---	178	Unfiltered		ES
Hydrant Water		Primary	03/16/04	Radium-226	128 U	---	128	Unfiltered		ES

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b><i>Facility Fire Hydrant</i></b>										
Hydrant Water		Primary	03/16/04	Thallium-208	8.48 U	---	8.48	Unfiltered		ES
Hydrant Water		Primary	03/16/04	Thorium-234	256 U	---	256	Unfiltered		ES
Hydrant Water		Primary	03/16/04	Uranium-235	47.9 U	---	47.9	Unfiltered		ES

**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

ES = Eberline Services

LAS = LAS Laboratories

STL = Severn Trent Laboratories

TN = Thermo Nutech

TR = Thermo Retec

U = The result is less than the minimum detectable activity (MDA).

pCi/L = picoCuries per liter.

**NOTES:**

Radium-226 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 and uranium-235 analyzed by EPA methods 903.1 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, bismuth-212, bismuth-214, lead-210, lead-212, lead-214, potassium-40, radium-226, thallium-208, thorium-234, and uranium-235.

Results are presented as the activity plus or minus error. 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.



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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
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-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-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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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	Thorium-228	-0.014 U	0.058	0.11	Filtered		LAS
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-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	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	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	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	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	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	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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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	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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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-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-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	05/20/05	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-54		Primary	05/07/94	Uranium-233/234	26.4	2.4	0.15	Filtered		LAS
RS-54		Primary	05/07/94	Uranium-235	2.15	0.59	0.17	Filtered		LAS
RS-54		Primary	05/07/94	Uranium-238	26.5	2.4	0.11	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	Uranium-233/234	15.9	1.2	0.11	Filtered		LAS

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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	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	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	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	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	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
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 B	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 B	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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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
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
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
HAR-15		Primary	06/08/93	Radium-226	0.6 U	---	0.6	Filtered		CEP

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Shallow Wells</b>										
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
<b>Chatsworth Formation Wells</b>										
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	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.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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 B	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 B	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	Z3	Primary	01/29/03	Thorium-228	0.058 J	0.02	0.018	Filtered		ES
RD-07	Z3	Primary	01/29/03	Thorium-230	0.029 U	0.047	0.108	Filtered		ES
RD-07	Z3	Primary	01/29/03	Thorium-232	0.004 U	0.008	0.013	Filtered		ES
RD-07	Z3	Primary	01/29/03	Uranium-233/234	14.7	0.51	0.064	Filtered		ES
RD-07	Z3	Primary	01/29/03	Uranium-235	0.551	0.084	0.024	Filtered		ES
RD-07	Z3	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	Z4	Primary	08/25/04	Radium-226	0.259 J	0.039	0.021	Filtered		ES
RD-07	Z4	Primary	08/25/04	Radium-228	0.539 U	0.24	0.584	Filtered		ES
RD-07	Z4	Primary	08/25/04	Thorium-228	0.021 U	0.028	0.044	Filtered		ES
RD-07	Z4	Primary	08/25/04	Thorium-230	-0.014 U	0.056	0.11	Filtered		ES
RD-07	Z4	Primary	08/25/04	Thorium-232	-0.011 U	0.014	0.034	Filtered		ES
RD-07	Z5	Primary	08/25/04	Radium-226	0.169 J	0.033	0.023	Filtered		ES
RD-07	Z5	Primary	08/25/04	Radium-228	0.493 U	0.27	0.66	Filtered		ES
RD-07	Z5	Primary	08/25/04	Thorium-228	0.008 U	0.024	0.044	Filtered		ES
RD-07	Z5	Primary	08/25/04	Thorium-230	0.083 U	0.071	0.109	Filtered		ES
RD-07	Z5	Primary	08/25/04	Thorium-232	-0.004 U	0.016	0.038	Filtered		ES
RD-07	Z6	Primary	08/25/04	Radium-226	0.729 J	0.069	0.026	Filtered		ES
RD-07	Z6	Primary	08/25/04	Radium-228	1.36	0.33	0.718	Filtered		ES
RD-07	Z6	Primary	08/25/04	Thorium-228	0 U	0.021	0.042	Filtered		ES
RD-07	Z6	Primary	08/25/04	Thorium-230	-0.014 U	0.055	0.108	Filtered		ES

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b><i>Chatsworth Formation Wells</i></b>										
RD-07	Z6	Primary	08/25/04	Thorium-232	-0.01 U	0.014	0.033	Filtered		ES
RD-07	Z7	Primary	08/25/04	Radium-226	0.302 J	0.046	0.027	Filtered		ES
RD-07	Z7	Primary	08/25/04	Radium-228	0.772 J	0.35	0.629	Filtered		ES
RD-07	Z7	Primary	08/25/04	Thorium-228	0.004 U	0.03	0.05	Filtered		ES
RD-07	Z7	Primary	08/25/04	Thorium-230	0.007 U	0.052	0.103	Filtered		ES
RD-07	Z7	Primary	08/25/04	Thorium-232	-0.011 U	0.015	0.036	Filtered		ES
RD-07	Z8	Primary	08/25/04	Radium-226	0.399 J	0.051	0.025	Filtered		ES
RD-07	Z8	Primary	08/25/04	Radium-228	0.797 J	0.28	0.677	Filtered		ES
RD-07	Z8	Primary	08/25/04	Thorium-228	0.019 U	0.023	0.036	Filtered		ES
RD-07	Z8	Primary	08/25/04	Thorium-230	0.068 U	0.061	0.103	Filtered		ES
RD-07	Z8	Primary	08/25/04	Thorium-232	-0.008 U	0.015	0.036	Filtered		ES
RD-07	Z9	Primary	08/25/04	Radium-226	0.302 J	0.044	0.025	Filtered		ES
RD-07	Z9	Primary	08/25/04	Radium-228	0.949 J	0.31	0.718	Filtered		ES
RD-07	Z9	Primary	08/25/04	Thorium-228	0.048 J	0.037	0.045	Filtered		ES
RD-07	Z9	Primary	08/25/04	Thorium-230	0.029 U	0.058	0.096	Filtered		ES
RD-07	Z9	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	Z3	Primary	02/17/05	Radium-226	0.085 U	0.32	0.589	Filtered		ES
RD-07	Z3	Primary	02/17/05	Radium-228	0.36 U	0.24	0.62	Filtered		ES
RD-07	Z3	Primary	02/17/05	Thorium-228	-0.007 U	0.022	0.04	Filtered		ES
RD-07	Z3	Primary	02/17/05	Thorium-230	0.18	0.073	0.097	Filtered		ES
RD-07	Z3	Primary	02/17/05	Thorium-232	0.018 U	0.022	0.034	Filtered		ES
RD-07	Z3	Primary	02/17/05	Uranium-233/234	5.26	0.42	0.052	Filtered		ES
RD-07	Z3	Primary	02/17/05	Uranium-235	0.187 J	0.057	0.036	Filtered		ES
RD-07	Z3	Primary	02/17/05	Uranium-238	4.22	0.35	0.052	Filtered		ES
RD-07	Z3	Primary	08/31/05	Radium-226	0.205 U	0.35	0.601	Filtered		ES
RD-07	Z3	Primary	08/31/05	Radium-228	0.404 U	0.22	0.55	Filtered		ES

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-07	Z3	Primary	02/16/06	Radium-226	0.219 U	0.42	0.739	Filtered		ES
RD-07	Z3	Primary	02/16/06	Radium-228	0.088 U	0.76	0.424	Filtered		ES
RD-07	Z3	Primary	02/16/06	Thorium-228	-0.006 U	0.023	0.046	Filtered		ES
RD-07	Z3	Primary	02/16/06	Thorium-230	-0.04 U	0.046	0.103	Filtered		ES
RD-07	Z3	Primary	02/16/06	Thorium-232	-0.011 U	0.011	0.035	Filtered		ES
RD-07	Z3	Primary	02/16/06	Uranium-233/234	22.2	1.3	0.076	Filtered		ES
RD-07	Z3	Primary	02/16/06	Uranium-235	0.948 J	0.12	0.023	Filtered		ES
RD-07	Z3	Primary	02/16/06	Uranium-238	17.5	1.1	0.074	Filtered		ES
RD-07	Z3	Primary	08/16/06	Radium-226	-0.007 U	0.41	0.832	Filtered		ES
RD-07	Z3	Primary	08/16/06	Radium-228	0.218 U	0.61	0.43	Filtered		ES
RD-07	Z3	Primary	08/16/06	Uranium-233/234	27.8	1.6	0.086	Filtered		ES
RD-07	Z3	Primary	08/16/06	Uranium-235	1.77	0.16	0.021	Filtered		ES
RD-07	Z3	Primary	08/16/06	Uranium-238	22	1.3	0.081	Filtered		ES
RD-07	Z3	Primary	02/08/07	Radium-226	0.428 U	0.46	0.739	Filtered		ES
RD-07	Z3	Primary	02/08/07	Radium-228	1.35	1.2	0.475	Filtered		ES
RD-07	Z3	Primary	02/08/07	Thorium-228	0.009 U	0.036	0.062	Filtered		ES
RD-07	Z3	Primary	02/08/07	Thorium-230	-0.023 U	0.05	0.103	Filtered		ES
RD-07	Z3	Primary	02/08/07	Thorium-232	-0.005 U	0.014	0.028	Filtered		ES
RD-07	Z3	Primary	02/08/07	Uranium-234	30	1.8	0.094	Filtered		ES
RD-07	Z3	Primary	02/08/07	Uranium-235	1.22	0.15	0.027	Filtered		ES
RD-07	Z3	Primary	02/08/07	Uranium-238	24	1.5	0.091	Filtered		ES
RD-07	Z3	Primary	08/09/07	Radium-226	0.076 U	0.41	0.801	Filtered		ES
RD-07	Z3	Primary	08/09/07	Radium-228	1.2	0.22	0.472	Filtered		ES
RD-07	Z3	Primary	08/09/07	Uranium-233/234	26	1.8	0.131	Filtered		ES
RD-07	Z3	Primary	08/09/07	Uranium-235	1.14	0.2	0.054	Filtered		ES
RD-07	Z3	Primary	08/09/07	Uranium-238	20.8	1.5	0.125	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	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	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	0.469	0.137	---	Unfiltered		UST
RD-14		Primary	10/31/89	Radium-228	0.585	0.16	---	Filtered		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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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-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
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-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

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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	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	Z2	Primary	11/04/04	Radium-226	1.33	0.41	0.408	Filtered		ES
RD-21	Z2	Primary	11/04/04	Radium-228	-0.23 U	0.33	0.679	Filtered		ES
RD-21	Z2	Primary	11/04/04	Uranium-233/234	5.6	0.4	0.049	Filtered		ES
RD-21	Z2	Primary	11/04/04	Uranium-235	0.285 J	0.065	0.027	Filtered		ES
RD-21	Z2	Primary	11/04/04	Uranium-238	4.88	0.36	0.049	Filtered		ES
RD-21	Z2	Primary	02/16/05	Radium-226	0.243 U	0.38	0.654	Filtered		ES
RD-21	Z2	Primary	02/16/05	Radium-228	0.312 U	0.21	0.539	Filtered		ES
RD-21	Z2	Primary	02/16/05	Uranium-233/234	5.78	0.42	0.051	Filtered		ES
RD-21	Z2	Primary	02/16/05	Uranium-235	0.267 J	0.062	0.029	Filtered		ES
RD-21	Z2	Primary	02/16/05	Uranium-238	4.67	0.36	0.048	Filtered		ES
RD-21	Z2	Primary	09/01/05	Radium-226	0.393 U	0.4	0.647	Filtered		ES
RD-21	Z2	Primary	09/01/05	Radium-228	0.418 U	0.23	0.597	Filtered		ES
RD-21	Z2	Primary	09/01/05	Uranium-233/234	5.7	0.43	0.055	Filtered		ES
RD-21	Z2	Primary	09/01/05	Uranium-235	0.269 J	0.068	0.032	Filtered		ES
RD-21	Z2	Primary	09/01/05	Uranium-238	4.64	0.36	0.052	Filtered		ES
RD-21	Z2	Primary	02/16/06	Radium-226	0.346 U	0.45	0.755	Filtered		ES
RD-21	Z2	Primary	02/16/06	Radium-228	-0.029 U	0.4	0.39	Filtered		ES
RD-21	Z2	Primary	02/16/06	Uranium-233/234	5.32	0.4	0.05	Filtered		ES
RD-21	Z2	Primary	02/16/06	Uranium-235	0.224 J	0.064	0.03	Filtered		ES
RD-21	Z2	Primary	02/16/06	Uranium-238	4.61	0.36	0.05	Filtered		ES
RD-21	Z2	Primary	08/16/06	Radium-226	0.092 U	0.42	0.758	Filtered		ES
RD-21	Z2	Primary	08/16/06	Radium-228	0.684 J	0.2	0.453	Filtered		ES
RD-21	Z2	Primary	08/16/06	Uranium-233/234	8.4	0.57	0.058	Filtered		ES
RD-21	Z2	Primary	08/16/06	Uranium-235	0.367 J	0.074	0.027	Filtered		ES
RD-21	Z2	Primary	08/16/06	Uranium-238	7.98	0.54	0.052	Filtered		ES
RD-21	Z2	Primary	05/21/07	Radium-226	0.332 U	0.4	0.664	Filtered		ES

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-21	Z2	Primary	05/21/07	Radium-228	0.25 U	0.46	0.396	Filtered		ES
RD-21	Z2	Primary	05/21/07	Uranium-234	5.86	0.45	0.058	Filtered		ES
RD-21	Z2	Primary	05/21/07	Uranium-235	0.29 J	0.071	0.033	Filtered		ES
RD-21	Z2	Primary	05/21/07	Uranium-238	5.17	0.4	0.058	Filtered		ES
RD-21	Z2	Primary	08/09/07	Radium-226	0.753 U	0.6	0.926	Filtered		ES
RD-21	Z2	Primary	08/09/07	Radium-228	0.459 J	0.18	0.433	Filtered		ES
RD-21	Z2	Primary	08/09/07	Uranium-233/234	6.23	0.45	0.051	Filtered		ES
RD-21	Z2	Primary	08/09/07	Uranium-235	0.257 J	0.059	0.028	Filtered		ES
RD-21	Z2	Primary	08/09/07	Uranium-238	5.56	0.41	0.046	Filtered		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	Z2	Primary	11/12/04	Radium-226	1.81	0.44	0.382	Filtered		ES
RD-22	Z2	Primary	11/12/04	Radium-228	2.36	0.32	0.565	Filtered		ES
RD-22	Z2	Primary	02/17/05	Radium-226	1.27	0.52	0.601	Filtered		ES
RD-22	Z2	Primary	02/17/05	Radium-228	3.34	0.37	0.564	Filtered		ES
RD-22	Z2	Primary	08/31/05	Radium-226	1.15	0.46	0.662	Filtered		ES
RD-22	Z2	Primary	08/31/05	Radium-228	2.87	0.35	0.582	Filtered		ES
RD-22	Z2	Primary	02/15/06	Radium-226	1.52	0.48	0.45	Filtered		ES
RD-22	Z2	Primary	02/15/06	Radium-228	2.86	0.41	0.586	Filtered		ES
RD-22	Z2	Primary	08/16/06	Radium-226	1.11	0.57	0.753	Filtered		ES
RD-22	Z2	Primary	08/16/06	Radium-228	2.7	0.3	0.503	Filtered		ES
RD-22	Z2	Primary	02/07/07	Radium-226	1.31	0.62	0.819	Filtered		ES
RD-22	Z2	Primary	02/07/07	Radium-228	2.07	0.77	0.334	Filtered		ES
RD-22	Z2	Primary	08/09/07	Radium-226	1.49	0.62	0.766	Filtered		ES
RD-22	Z2	Primary	08/09/07	Radium-228	2.38	0.28	0.483	Filtered		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	02/08/99	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	Z2	Primary	11/03/04	Radium-226	1.23	0.4	0.415	Filtered		ES
RD-23	Z2	Primary	11/03/04	Radium-228	0.824 J	0.26	0.612	Filtered		ES
RD-23	Z2	Primary	02/14/05	Radium-226	0.512 J	0.35	0.479	Filtered		ES
RD-23	Z2	Primary	02/14/05	Radium-228	1.04	0.29	0.648	Filtered		ES
RD-23	Z3	Primary	09/12/05	Radium-226	0.759 J	0.47	0.675	Filtered		ES
RD-23	Z3	Primary	09/12/05	Radium-228	0.68 J	0.37	0.568	Filtered		ES
RD-23	Z3	Primary	02/17/06	Radium-226	1.24	0.55	0.709	Filtered		ES
RD-23	Z3	Primary	02/17/06	Radium-228	0.857 J	0.17	0.384	Filtered		ES
RD-23	Z3	Primary	08/17/06	Radium-226	0.687 J	0.46	0.62	Filtered		ES
RD-23	Z3	Primary	08/17/06	Radium-228	0.662 J	0.21	0.477	Filtered		ES
RD-23	Z3	Primary	02/07/07	Radium-226	1.06	0.57	0.757	Filtered		ES
RD-23	Z3	Primary	02/07/07	Radium-228	0.624 J	0.16	0.363	Filtered		ES

See last page of table for notes and abbreviations.  
 Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-23	Z3	Primary	02/07/07	Uranium-234	0.677 J	0.1	0.032	Filtered		ES
RD-23	Z3	Primary	02/07/07	Uranium-235	0.02 U	0.016	0.031	Filtered		ES
RD-23	Z3	Primary	02/07/07	Uranium-238	0.525 J	0.093	0.032	Filtered		ES
RD-23	Z3	Primary	08/09/07	Radium-226	1.16	0.61	0.707	Filtered		ES
RD-23	Z3	Primary	08/09/07	Radium-228	0.844 J	0.23	0.503	Filtered		ES
RD-24		Primary	10/25/01	Uranium-235	0.2 U	0.1	5	Filtered		DL
RD-24		Split	11/14/03	Radium-226	1.15	0.338	0.255	Filtered		STL
RD-24		Split	11/14/03	Radium-228	2.93 J	0.884	0.778	Filtered		STL
RD-24		Primary	11/14/03	Radium-226	0.654 J	0.075	0.029	Filtered		ES
RD-24		Primary	11/14/03	Radium-228	1.61	0.27	0.522	Filtered		ES
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-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	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	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		Primary	02/23/04	Radium-228	1.4	0.19	0.356	Filtered		ES
RD-25		Split	02/23/04	Radium-226	0.575 J	0.222	0.181	Filtered		STL
RD-25		Split	02/23/04	Radium-228	1.03 J	0.503	0.759	Filtered		STL
RD-27		Primary	08/27/97	Uranium-235	1 U	28	43	Unfiltered		LAS
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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		Primary	08/09/07	Radium-228	2.52	0.34	0.6	Filtered		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	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	08/28/97	Uranium-233/234	15.5	1.1	0.095	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
RD-28		Primary	08/28/97	Uranium-238	14.7	1.1	0.063	Filtered		LAS
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-238	12	0.71	0.097	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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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		Primary	02/23/04	Radium-228	0.83 J	0.18	0.411	Filtered		ES
RD-28		Primary	02/23/04	Thorium-228	0.012 U	0.017	0.032	Filtered		ES
RD-28		Primary	02/23/04	Thorium-230	0.025 U	0.033	0.051	Filtered		ES
RD-28		Primary	02/23/04	Thorium-232	0 U	0.008	0.032	Filtered		ES
RD-28		Primary	02/23/04	Uranium-233/234	11.1	0.72	0.069	Filtered		ES
RD-28		Primary	02/23/04	Uranium-235	0.64 J	0.1	0.026	Filtered		ES
RD-28		Primary	02/23/04	Uranium-238	11.2	0.73	0.068	Filtered		ES
RD-28		Split	02/23/04	Radium-226	0.6 J	0.265	0.254	Filtered		STL
RD-28		Split	02/23/04	Radium-228	0.985 J	0.507	0.764	Filtered		STL
RD-28		Split	02/23/04	Thorium-228	0.109 U	0.328	0.846	Filtered		STL
RD-28		Split	02/23/04	Thorium-230	0.185 U	0.315	0.589	Filtered		STL
RD-28		Split	02/23/04	Thorium-232	-0.0441 U	0.04	0.623	Filtered		STL
RD-28		Split	02/23/04	Uranium-233/234	13.9	2.71	0.189	Filtered		STL
RD-28		Split	02/23/04	Uranium-235	0.534 J	0.282	0.0904	Filtered		STL
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-29		Primary	12/08/89	Total uranium, Dissolved	30.8	8.58	---	Filtered		UST
RD-29		Primary	12/08/89	Total uranium, Total	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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
RD-29		Primary	08/08/07	Uranium-233/234	10.8	0.69	0.058	Filtered		ES
RD-29		Primary	08/08/07	Uranium-235	0.45 J	0.074	0.022	Filtered		ES
RD-29		Primary	08/08/07	Uranium-238	9.82	0.63	0.054	Filtered		ES
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-238	5.54	0.6	0.11	Filtered		LAS
RD-30		Primary	08/27/97	Uranium-235	7 U	20	30	Unfiltered		LAS
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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-33A		Primary	05/10/94	Strontium-90	-0.07 U	0.64	0.8	Filtered		LAS
RD-33A		Primary	05/10/94	Uranium-235	17 U	25	35	Unfiltered		LAS
RD-33A		Primary	08/27/97	Uranium-235	20 U	30	44	Unfiltered		LAS
RD-33A	Z2	Primary	11/15/04	Radium-226	0.247 U	0.26	0.41	Filtered		ES
RD-33A	Z2	Primary	11/15/04	Radium-228	1.65	0.29	0.54	Filtered		ES
RD-33A	Z3	Primary	02/17/05	Radium-226	0.78 J	0.47	0.657	Filtered		ES
RD-33A	Z3	Primary	02/17/05	Radium-228	2.19	0.32	0.584	Filtered		ES
RD-33A	Z3	Primary	09/01/05	Radium-226	0.604 J	0.3	0.373	Filtered		ES
RD-33A	Z3	Primary	09/01/05	Radium-228	2.69	0.42	0.8	Filtered		ES
RD-33A	Z2	Primary	02/17/06	Radium-226	1.29	0.55	0.649	Filtered		ES
RD-33A	Z2	Primary	02/17/06	Radium-228	1.89	0.25	0.447	Filtered		ES
RD-33A	Z3	Primary	08/18/06	Radium-226	0.549 U	0.51	0.803	Filtered		ES
RD-33A	Z3	Primary	08/18/06	Radium-228	2.16	0.26	0.461	Filtered		ES
RD-33A	Z2	Primary	02/08/07	Radium-226	0.539 U	0.46	0.719	Filtered		ES
RD-33A	Z2	Primary	02/08/07	Radium-228	1.14	0.48	0.39	Filtered		ES
RD-33A	Z2	Primary	08/13/07	Radium-226	0.262 U	0.34	0.568	Filtered		ES
RD-33A	Z2	Primary	08/13/07	Radium-228	1.93	0.24	0.43	Filtered		ES
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	-11 U	19	34	Unfiltered		LAS
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		Primary	08/22/05	Radium-228	1.26	0.25	0.527	Filtered		ES
RD-33B		Split	08/22/05	Radium-226	0.949 J	0.26	0.155	Filtered		STL
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		Primary	08/14/07	Radium-228	0.978 J	0.23	0.494	Filtered		ES
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	-18 U	15	34	Unfiltered		LAS

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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-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
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	4.6	0.6	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-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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-34A		Primary	11/18/93	Americium-241	15.7 U	---	15.7	Filtered		LAS
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	0.34	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	0.6	Filtered		LAS
RD-34A		Primary	11/18/93	Uranium-238	11.7	1.8	0.6	Filtered		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	-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	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	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	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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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 BJ	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-34B		Primary	05/10/94	Strontium-90	-0.09 U	0.66	0.82	Filtered		ES
RD-34B		Primary	05/10/94	Uranium-235	-15 U	14	40	Unfiltered		LAS
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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		Primary	08/14/07	Uranium-235	0.029 J	0.022	0.027	Filtered		ES
RD-34B		Primary	08/14/07	Uranium-238	0.51 J	0.082	0.028	Filtered		ES
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	0 U	26	37	Unfiltered		LAS
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
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-228	1.64	0.426	0.53	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		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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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-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	Radon-222	358	31	---	Unfiltered		TN
RD-47		Primary	08/24/97	Radon-222	698	47	---	Unfiltered		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-238	3.24	0.65	0.17	Filtered		LAS
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	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	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 B	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 B	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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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	Z2	Primary	02/18/03	Thorium-228	0.052 U	0.048	0.067	Filtered		ES
RD-54A	Z2	Primary	02/18/03	Thorium-230	0.091 U	0.1	0.235	Filtered		ES
RD-54A	Z2	Primary	02/18/03	Thorium-232	-0.004 U	0.016	0.038	Filtered		ES
RD-54A	Z2	Primary	02/18/03	Uranium-233/234	7.13	0.5	0.105	Filtered		ES
RD-54A	Z2	Primary	02/18/03	Uranium-235	0.389	0.12	0.068	Filtered		ES
RD-54A	Z2	Primary	02/18/03	Uranium-238	6.18	0.45	0.098	Filtered		ES
RD-54A	Z2	Primary	11/03/04	Radium-226	0.687 J	0.32	0.395	Filtered		ES
RD-54A	Z2	Primary	11/03/04	Radium-228	1.62	0.29	0.597	Filtered		ES
RD-54A	Z2	Primary	11/03/04	Thorium-228	0.016 U	0.026	0.04	Filtered		ES
RD-54A	Z2	Primary	11/03/04	Thorium-230	-0.003 U	0.052	0.1	Filtered		ES
RD-54A	Z2	Primary	11/03/04	Thorium-232	-0.003 U	0.013	0.025	Filtered		ES
RD-54A	Z2	Primary	02/16/05	Radium-226	1.27	0.55	0.689	Filtered		ES
RD-54A	Z2	Primary	02/16/05	Radium-228	1.96	0.33	0.602	Filtered		ES
RD-54A	Z2	Primary	02/16/05	Thorium-228	0.01 U	0.02	0.033	Filtered		ES
RD-54A	Z2	Primary	02/16/05	Thorium-230	0.129	0.068	0.107	Filtered		ES
RD-54A	Z2	Primary	02/16/05	Thorium-232	0.034 J	0.027	0.026	Filtered		ES
RD-54A	Z2	Primary	02/16/05	Uranium-233/234	5.06	0.38	0.046	Filtered		ES
RD-54A	Z2	Primary	02/16/05	Uranium-235	0.172 J	0.053	0.028	Filtered		ES
RD-54A	Z2	Primary	02/16/05	Uranium-238	4.12	0.32	0.044	Filtered		ES
RD-54A	Z2	Primary	08/31/05	Radium-226	0.636 J	0.41	0.581	Filtered		ES
RD-54A	Z2	Primary	08/31/05	Radium-228	2.52	0.35	0.646	Filtered		ES
RD-54A	Z2	Primary	08/31/05	Uranium-233/234	10.5	0.7	0.065	Filtered		ES
RD-54A	Z2	Primary	08/31/05	Uranium-235	0.454 J	0.089	0.03	Filtered		ES
RD-54A	Z2	Primary	08/31/05	Uranium-238	9.3	0.63	0.061	Filtered		ES
RD-54A	Z2	Primary	02/16/06	Radium-226	1.84	0.61	0.632	Filtered		ES
RD-54A	Z2	Primary	02/16/06	Radium-228	0.178 U	0.8	0.385	Filtered		ES
RD-54A	Z2	Primary	02/16/06	Thorium-228	0.061 U	0.051	0.068	Filtered		ES
RD-54A	Z2	Primary	02/16/06	Thorium-230	0.036 U	0.061	0.11	Filtered		ES
RD-54A	Z2	Primary	02/16/06	Thorium-232	-0.01 U	0.01	0.039	Filtered		ES
RD-54A	Z2	Primary	02/16/06	Uranium-233/234	10.6	0.72	0.071	Filtered		ES
RD-54A	Z2	Primary	02/16/06	Uranium-235	0.455 J	0.091	0.033	Filtered		ES
RD-54A	Z2	Primary	02/16/06	Uranium-238	9.47	0.66	0.066	Filtered		ES
RD-54A	Z2	Primary	08/17/06	Radium-226	1.01	0.61	0.872	Filtered		ES
RD-54A	Z2	Primary	08/17/06	Radium-228	1.16	0.2	0.424	Filtered		ES
RD-54A	Z2	Primary	02/07/07	Radium-226	1.29	0.63	0.825	Filtered		ES
RD-54A	Z2	Primary	02/07/07	Radium-228	1.07	0.27	0.328	Filtered		ES
RD-54A	Z2	Primary	02/07/07	Thorium-228	0.038 U	0.038	0.058	Filtered		ES
RD-54A	Z2	Primary	02/07/07	Thorium-230	-0.034 U	0.053	0.103	Filtered		ES
RD-54A	Z2	Primary	02/07/07	Thorium-232	0 U	0.015	0.029	Filtered		ES
RD-54A	Z2	Primary	08/10/07	Radium-226	1.46	0.6	0.701	Filtered		ES

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-54A	Z2	Primary	08/10/07	Radium-228	1.39	0.23	0.462	Filtered		ES
RD-54A	Z2	Primary	08/10/07	Uranium-233/234	8	0.68	0.084	Filtered		ES
RD-54A	Z2	Primary	08/10/07	Uranium-235	0.312 J	0.093	0.058	Filtered		ES
RD-54A	Z2	Primary	08/10/07	Uranium-238	6.9	0.61	0.077	Filtered		ES
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
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-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		Primary	02/17/05	Radium-228	0.303 U	0.25	0.579	Filtered		ES
RD-54C		Split	02/17/05	Radium-226	0.0999 J	0.059	0.0633	Filtered		STL
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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-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-238	0.93	0.29	0.094	Filtered		LAS
RD-57		Primary	08/27/97	Uranium-235	-19 U	15	45	Unfiltered		LAS
RD-57	Z7	Primary	03/08/05	Radium-226	-0.083 U	0.34	0.64	Filtered		ES
RD-57	Z7	Primary	03/08/05	Radium-228	1.05	0.21	0.433	Filtered		ES
RD-57	Z7	Primary	09/01/05	Radium-226	0.836 J	0.4	0.563	Filtered		ES
RD-57	Z7	Primary	09/01/05	Radium-228	1.11	0.23	0.496	Filtered		ES
RD-57	Z7	Primary	02/20/06	Radium-226	0.803 U	0.57	0.833	Filtered		ES
RD-57	Z7	Primary	02/20/06	Radium-228	1.75	0.28	0.522	Filtered		ES
RD-57	Z7	Primary	08/18/06	Radium-226	0.71 U	0.59	0.911	Filtered		ES
RD-57	Z7	Primary	08/18/06	Radium-228	1.04	0.22	0.461	Filtered		ES
RD-57	Z7	Primary	02/08/07	Radium-226	1.01	0.52	0.714	Filtered		ES
RD-57	Z7	Primary	02/08/07	Radium-228	1.08	0.19	0.397	Filtered		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	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
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-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	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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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		Primary	02/28/07	Radium-228	1.2	0.32	0.407	Filtered		ES
RD-59B		Split	02/28/07	Radium-226	0.532 J	0.19	0.157	Filtered		STL
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-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	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-63		Primary	11/06/96	Uranium-233/234	3.66	0.4	---	Filtered		LAS
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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	Z6	Primary	01/29/03	Uranium-233/234	2.43	0.2	0.044	Filtered		ES
RD-64	Z6	Primary	01/29/03	Uranium-235	0.096	0.044	0.033	Filtered		ES
RD-64	Z6	Primary	01/29/03	Uranium-238	2.04	0.18	0.04	Filtered		ES
RD-64	Z6	Primary	11/12/04	Radium-226	0.347 U	0.26	0.384	Filtered		ES
RD-64	Z6	Primary	11/12/04	Radium-228	1.68	0.29	0.564	Filtered		ES
RD-64	Z6	Primary	11/12/04	Uranium-233/234	2.46	0.23	0.042	Filtered		ES
RD-64	Z6	Primary	11/12/04	Uranium-235	0.087 J	0.038	0.029	Filtered		ES
RD-64	Z6	Primary	11/12/04	Uranium-238	1.86	0.19	0.034	Filtered		ES
RD-64	Z6	Primary	02/14/05	Radium-226	1.5	0.57	0.671	Filtered		ES
RD-64	Z6	Primary	02/14/05	Radium-228	1.85	0.3	0.601	Filtered		ES
RD-64	Z6	Primary	02/14/05	Uranium-233/234	2.7	0.24	0.044	Filtered		ES
RD-64	Z6	Primary	02/14/05	Uranium-235	0.09 J	0.037	0.029	Filtered		ES
RD-64	Z6	Primary	02/14/05	Uranium-238	1.8	0.18	0.038	Filtered		ES
RD-64	Z6	Primary	08/31/05	Radium-226	1.32	0.52	0.633	Filtered		ES
RD-64	Z6	Primary	08/31/05	Radium-228	1.84	0.31	0.615	Filtered		ES
RD-64	Z6	Primary	08/31/05	Uranium-233/234	3.39	0.26	0.04	Filtered		ES
RD-64	Z6	Primary	08/31/05	Uranium-235	0.121 J	0.04	0.022	Filtered		ES
RD-64	Z6	Primary	08/31/05	Uranium-238	2.59	0.21	0.032	Filtered		ES
RD-64	Z6	Primary	02/16/06	Radium-226	1.54	0.6	0.757	Filtered		ES
RD-64	Z6	Primary	02/16/06	Radium-228	1.5	0.2	0.379	Filtered		ES
RD-64	Z6	Primary	02/16/06	Uranium-233/234	3.01	0.26	0.046	Filtered		ES
RD-64	Z6	Primary	02/16/06	Uranium-235	0.124 J	0.046	0.03	Filtered		ES
RD-64	Z6	Primary	02/16/06	Uranium-238	2.31	0.21	0.035	Filtered		ES
RD-64	Z6	Primary	08/17/06	Radium-226	1.42	0.65	0.791	Filtered		ES
RD-64	Z6	Primary	08/17/06	Radium-228	1.46	0.24	0.488	Filtered		ES
RD-64	Z6	Primary	08/17/06	Uranium-233/234	3.57	0.29	0.042	Filtered		ES
RD-64	Z6	Primary	08/17/06	Uranium-235	0.149 J	0.051	0.027	Filtered		ES
RD-64	Z6	Primary	08/17/06	Uranium-238	2.79	0.24	0.036	Filtered		ES
RD-64	Z6	Primary	02/08/07	Radium-226	1.62	0.66	0.815	Filtered		ES
RD-64	Z6	Primary	02/08/07	Radium-228	1.2	0.35	0.381	Filtered		ES
RD-64	Z6	Primary	02/08/07	Uranium-234	3.45	0.3	0.047	Filtered		ES
RD-64	Z6	Primary	02/08/07	Uranium-235	0.154 J	0.049	0.03	Filtered		ES
RD-64	Z6	Primary	02/08/07	Uranium-238	2.62	0.24	0.044	Filtered		ES
RD-64	Z2	Primary	08/10/07	Radium-226	1.24	0.56	0.654	Filtered		ES
RD-64	Z2	Primary	08/10/07	Radium-228	1.33	0.26	0.547	Filtered		ES

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008



**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
RD-64	Z2	Primary	08/10/07	Uranium-233/234	3.11	0.26	0.033	Filtered		ES
RD-64	Z2	Primary	08/10/07	Uranium-235	0.075 J	0.036	0.027	Filtered		ES
RD-64	Z2	Primary	08/10/07	Uranium-238	2.45	0.22	0.028	Filtered		ES
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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b>Chatsworth Formation Wells</b>										
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
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
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-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		Primary	11/01/89	Uranium-235	0.0697	0.024	---	Filtered		UST
WS-13		Primary	11/01/89	Uranium-238	1.31	0.159	---	Filtered		UST
<b>Private Off-site Wells</b>										
OS-01		Primary	08/15/94	Strontium-90	-0.33 U	0.75	1.3	Filtered		LAS
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<i>Private Off-site Wells</i>										
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	1.07	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	1.94	0.767	---	Unfiltered		UST
OS-16		Primary	11/01/89	Radium-228	0.0357	0.021	---	Unfiltered		UST
OS-16		Primary	11/01/89	Radium-228	1.94	0.767	---	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	0.084	0.029	---	Filtered		UST
OS-16		Primary	11/01/89	Uranium-235	0.0541	0.023	---	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
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

See last page of table for notes and abbreviations.  
Haley & Aldrich, Inc.

February 2008

**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)			Sample Handling	Sample Comments	Lab
					Activity	Error	MDA			
<b><i>Private Off-site Wells</i></b>										
OS-21		Primary	11/01/89	Uranium-238	1.06	0.137	---	Filtered		UST

**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

DL = Davi Laboratories

ES = Eberline Services

IT = International Technologies, Inc.

LAS = LAS Laboratories

STL = Severn Trent Laboratories

TN = Thermo Nutech

TR = Thermo Retec

UST = United States Testing

Z = FLUTe port number.

--- = Data do not exist.

B = Radionuclide detected in associated method blank.

J = Result is less than contract-required minimum detectable activity (MDA) and greater than or equal to the MDA.

U = The result is less than the MDA (Minimum Detectable Activity).

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.

Radium-226 and uranium-235 analyzed by EPA methods 903.1 and 908.0 or equivalent or superior in-house laboratory procedures are included in this table. Results of radium-226 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 239/240, polonium-210, strontium-90, technetium-99, thorium-228, thorium-230, thorium-232, total uranium, uranium-233/234.

Results are presented as the activity plus or minus error. 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.

**APPENDIX F**

**Constituents of Concern and Perchlorate  
Concentration versus Time Plots**

**APPENDIX F**

**CONSTITUENTS OF CONCERN AND PERCHLORATE  
CONCENTRATION VERSUS TIME PLOTS**

**TABLE OF CONTENTS**

CONSTITUENTS OF CONCERN AND PERCHLORATE CONCENTRATION  
VERSUS TIME PLOTS .....F-1

**FIGURES (provided electronically on CD)**

<b>Constituent</b>	<b>Figures</b>		
1,1,1-Trichloroethane (1,1,1-TCA)	F-1	through	F-17
1,1,2-Trichloroethane (1,1,2-TCA)	F-18	through	F-34
1,1-Dichloroethene (1,1-DCE)	F-35	through	F-51
1,1-Dichloroethane (1,1-DCA)	F-52	through	F-68
1,2-Dichloroethane (1,2-DCA)	F-69	through	F-85
1,4-Dioxane	F-86	through	F-102
Benzene	F-103	through	F-119
Carbon Tetrachloride	F-120	through	F-136
Chloroform	F-137	through	F-153
cis-1,2-Dichloroethene (cis-1,2-DCE)	F-154	through	F-170
Ethylbenzene	F-171	through	F-187
Fluoride	F-188	through	F-203
Methylene chloride	F-204	through	F-220
Nitrate as NO <sub>3</sub>	F-221	through	F-236
Nitrobenzene	F-237	through	F-252
N-Nitrosodimethylamine (NDMA)	F-253	through	F-268
Perchlorate	F-269	through	F-285
Tetrachloroethene (PCE)	F-286	through	F-302
Toluene	F-303	through	F-319
trans-1,2-Dichloroethene (trans-1,2-DCE)	F-320	through	F-336
Trichloroethene (TCE)	F-337	through	F-353
Vinyl Chloride	F-354	through	F-370

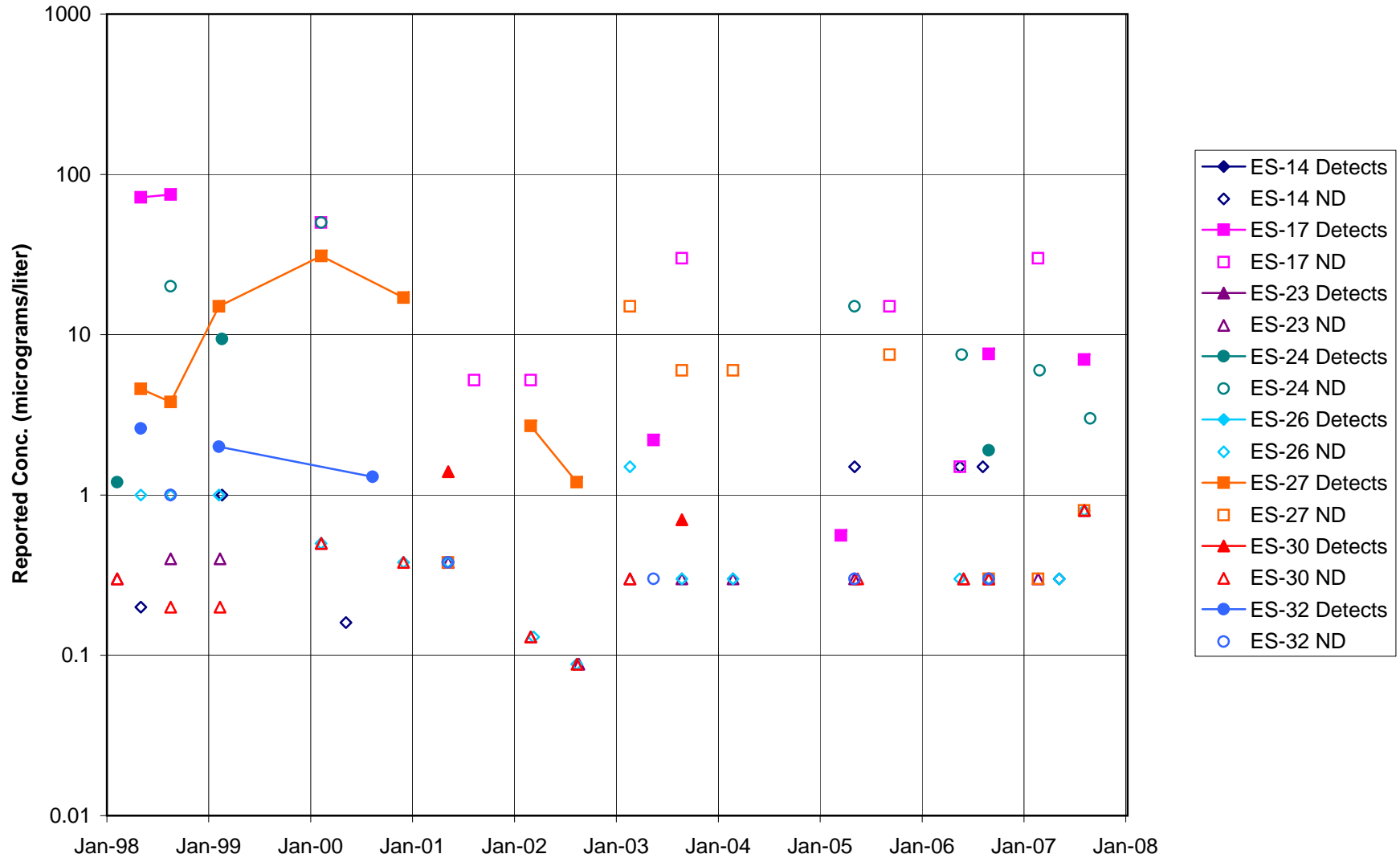
## **APPENDIX F**

### **CONSTITUENTS OF CONCERN AND PERCHLORATE CONCENTRATION VERSUS TIME PLOTS**

Concentration versus time plots presented in this Appendix include results from 1998 to present for the principal constituents of concern and perchlorate at permitted wells. Plots for select constituents (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 2007 in this report, for 2000, 2001, 2002, 2003, 2004, 2005, and 2006 in Haley & Aldrich (2001, 2002a, 2002b, 2003a, 2003b, 2004, 2005, 2006, 2007a), and for samples collected through 1999 in Groundwater Resources Consultants (2000). Results that have been identified as laboratory, field, or equipment contaminants were not included in the plots. Only primary sample results are presented in the plots. N-Nitrosodimethylamine (NDMA) results analyzed by both EPA method 8270C and low-level EPA method 1625M are included 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**

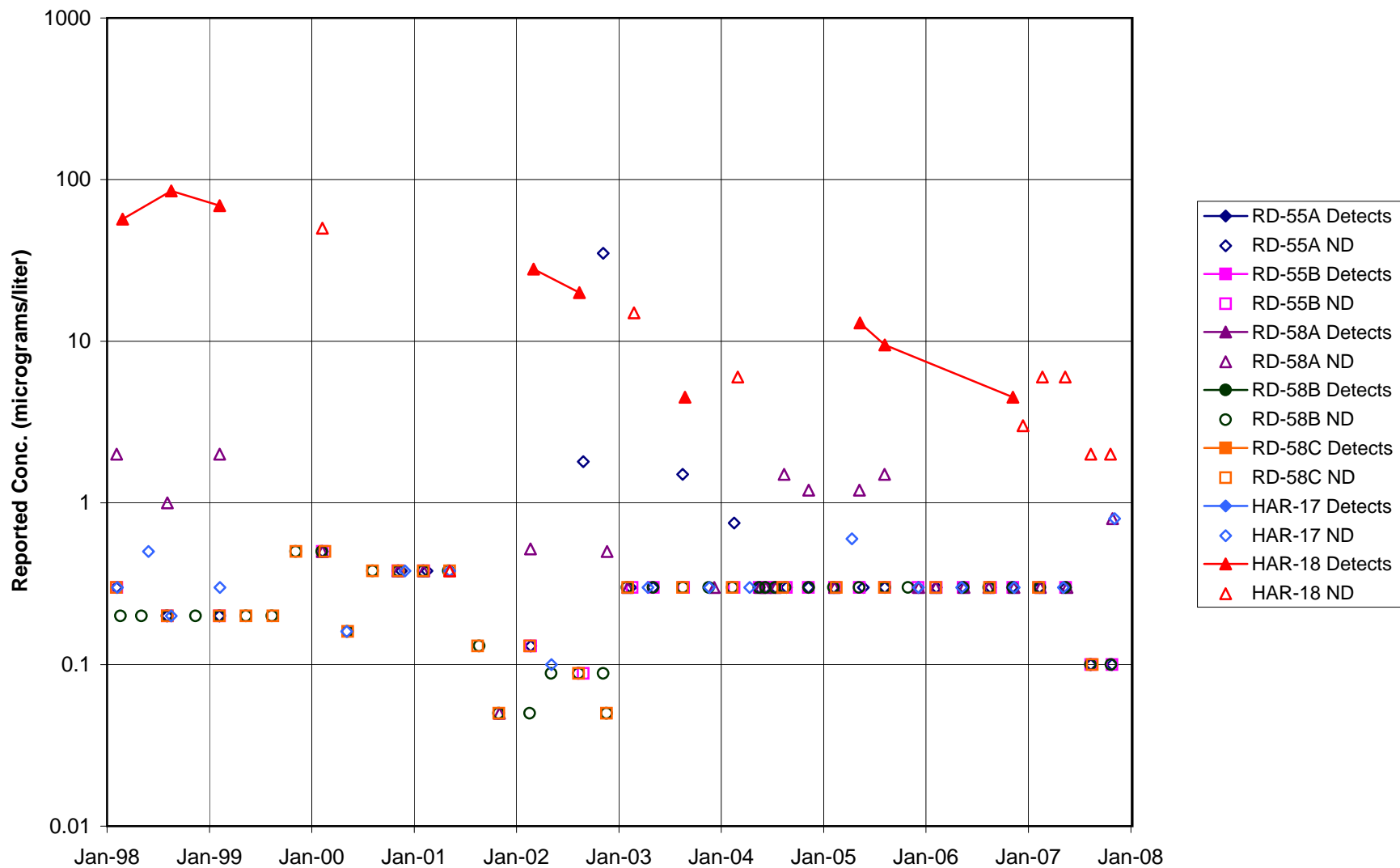


FIGURE F-3. 1,1,1-TCA in MAIN GATE AREA WELLS - 1

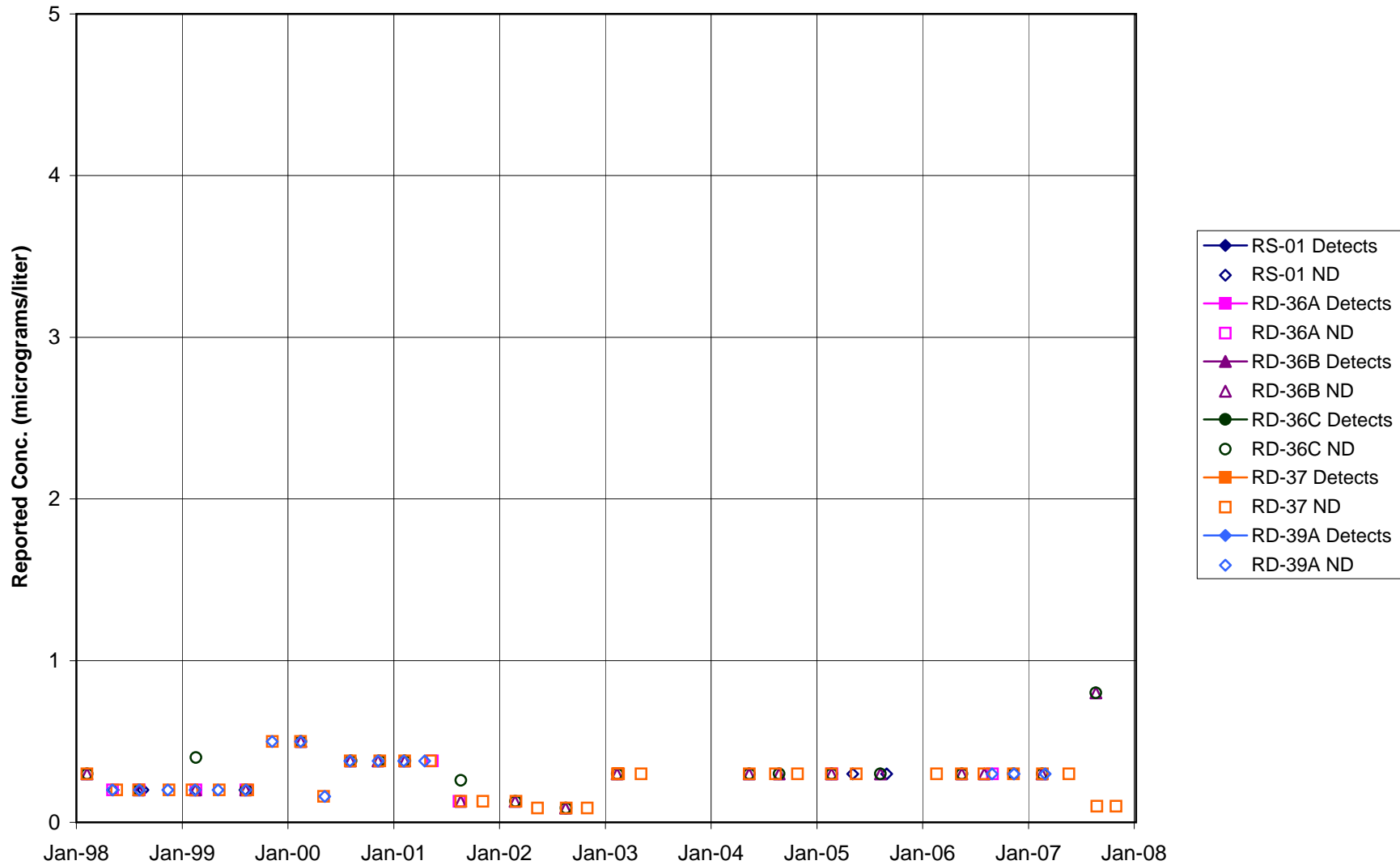


FIGURE F-4. 1,1,1-TCA in MAIN GATE AREA WELLS - 2

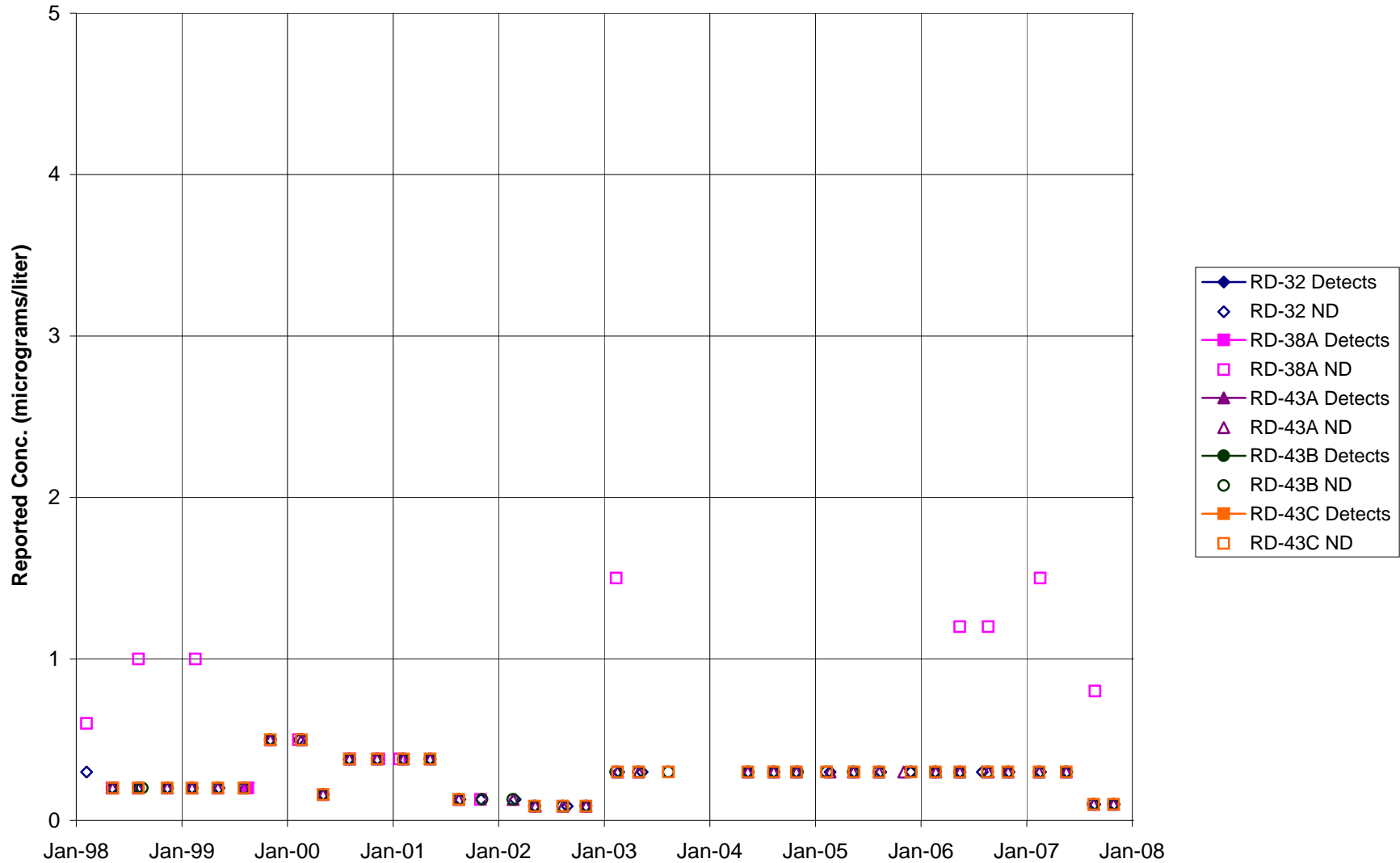


FIGURE F-5. 1,1,1-TCA in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1

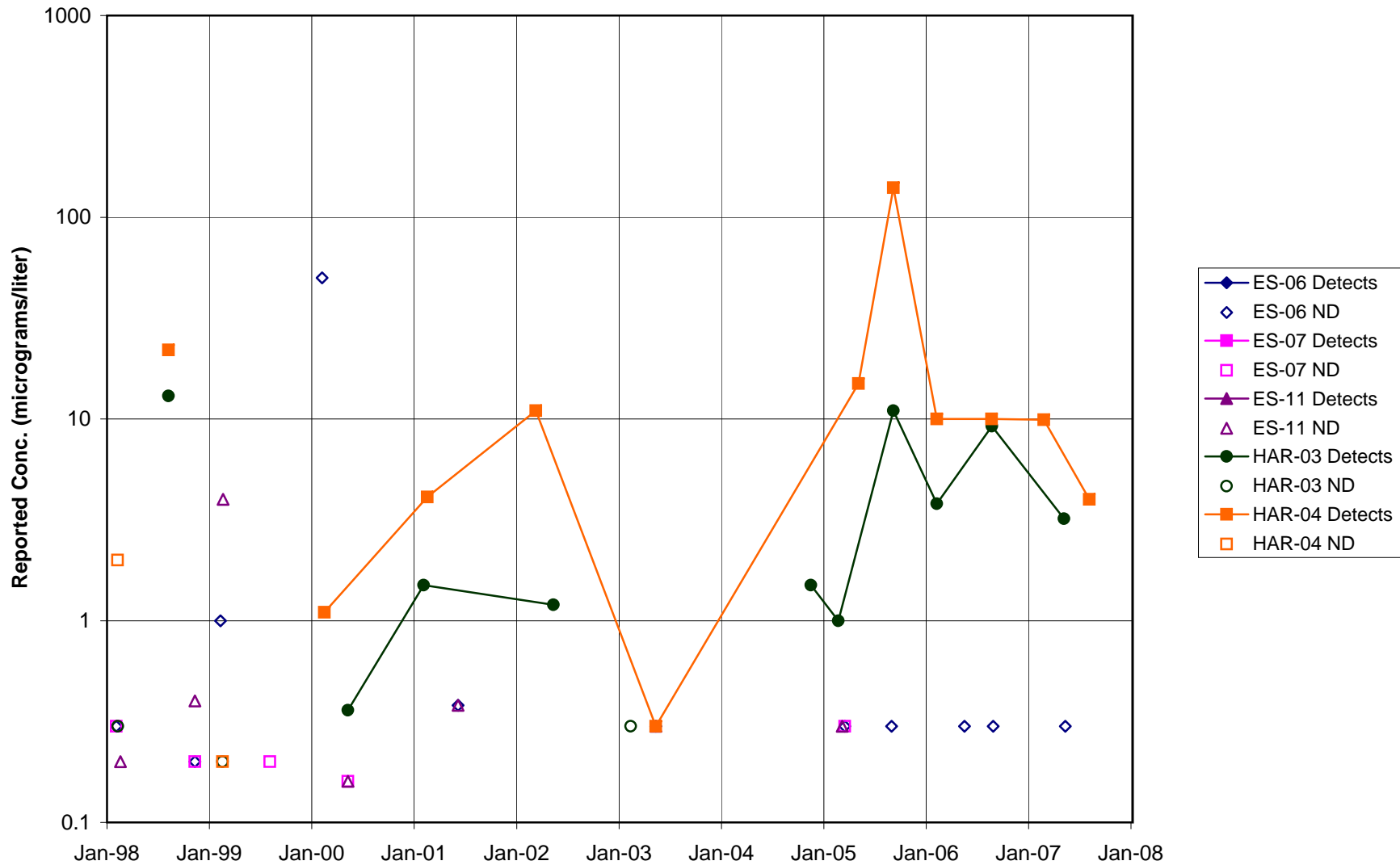


FIGURE F-6. 1,1,1-TCA in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 2

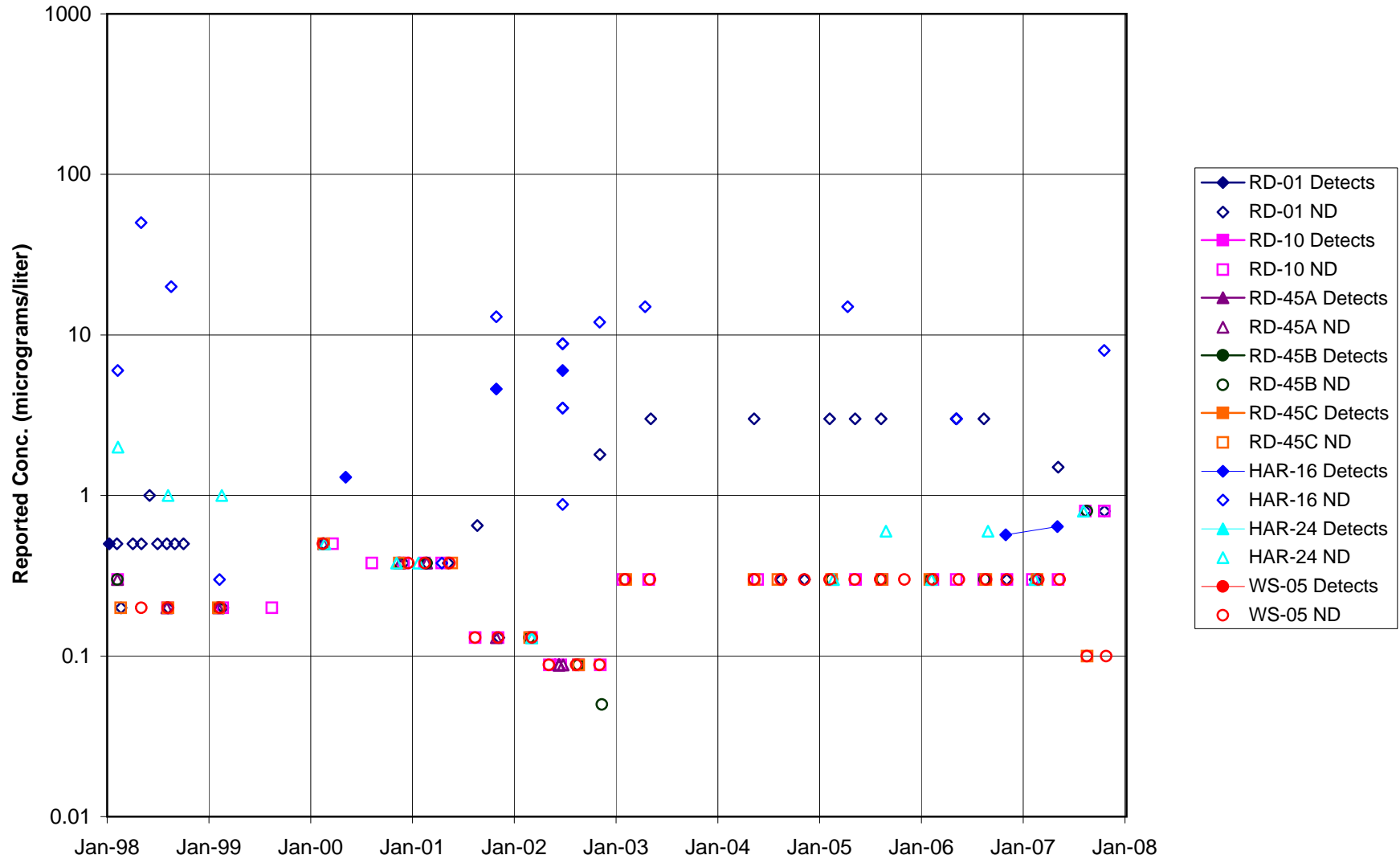


FIGURE F-7. 1,1,1-TCA in CTL-III / PERIMETER POND AREA WELLS

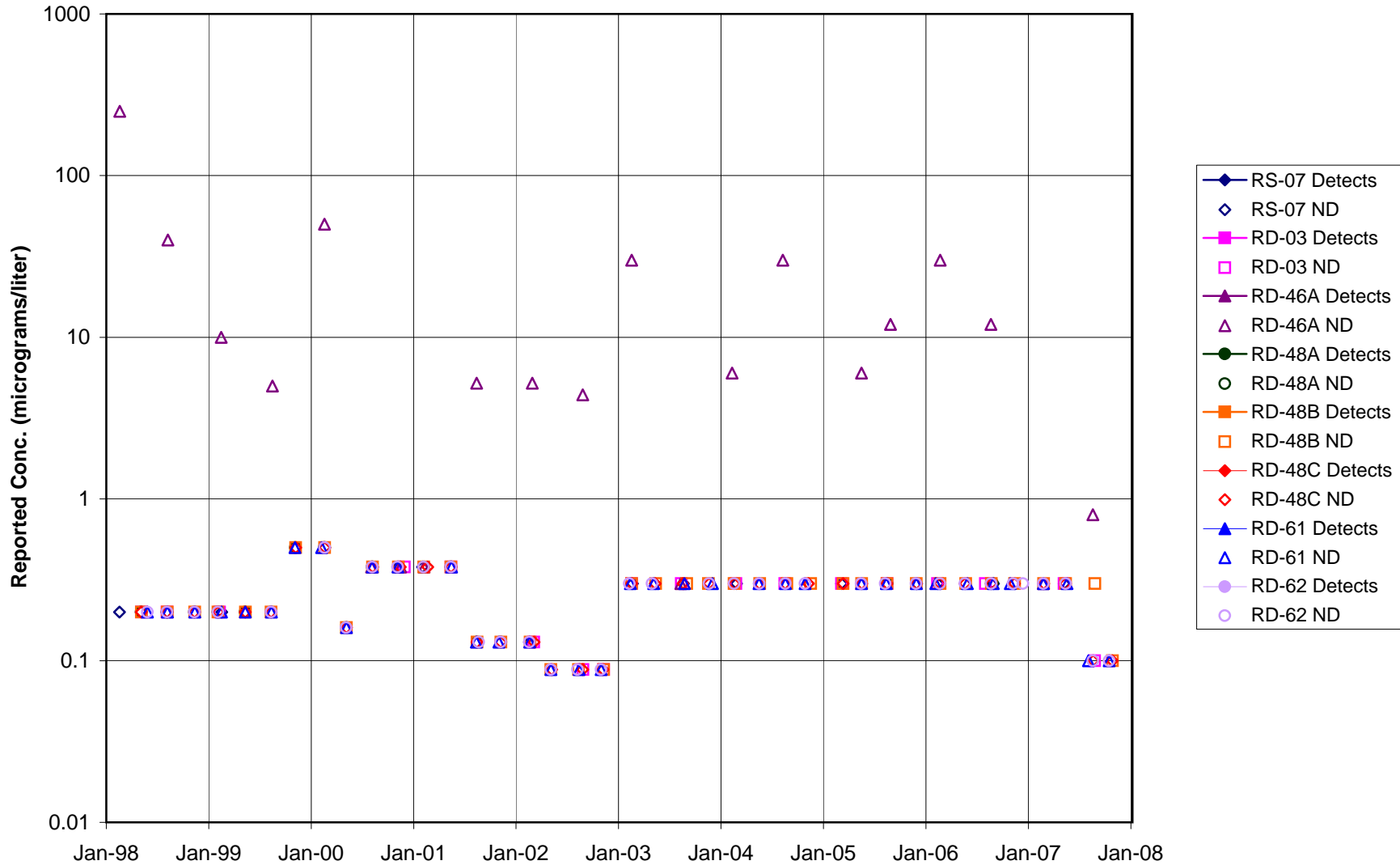


FIGURE F-8. 1,1,1-TCA in BOWL AREA WELLS

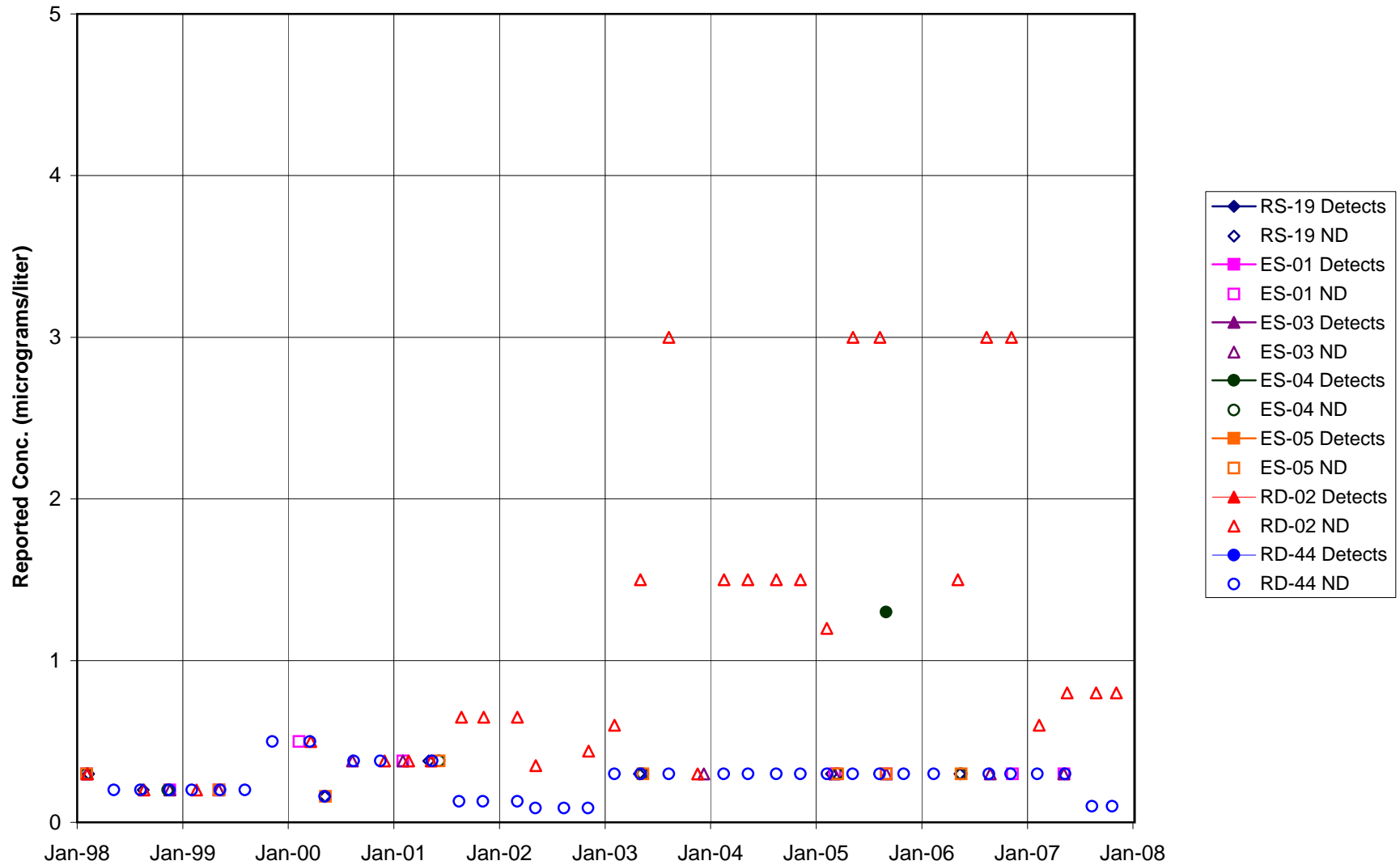
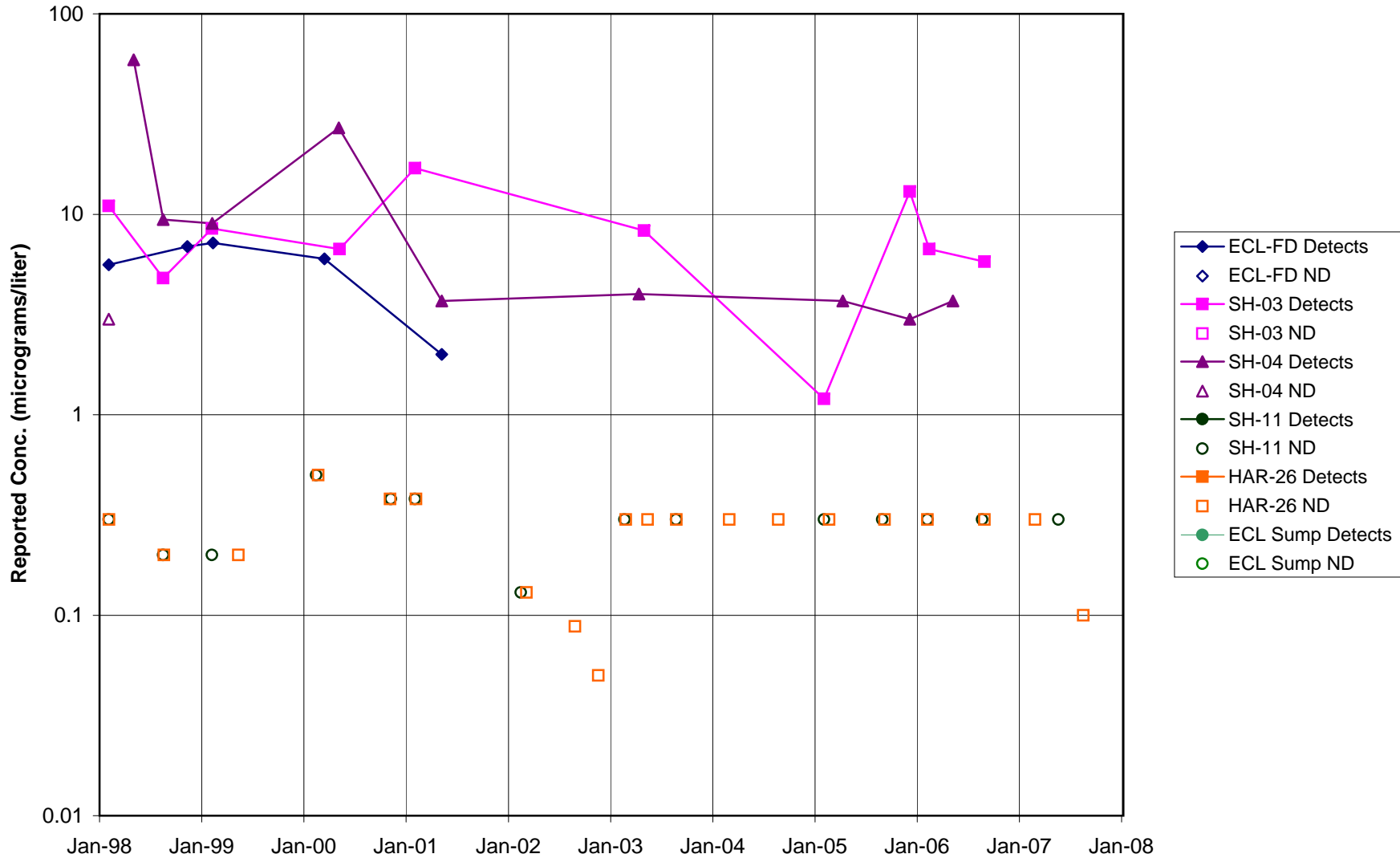




FIGURE F-9. 1,1,1-TCA in ECL AREA WELLS



**FIGURE F-10. 1,1,1-TCA in FORMER LOX PLANT AREA WELLS**

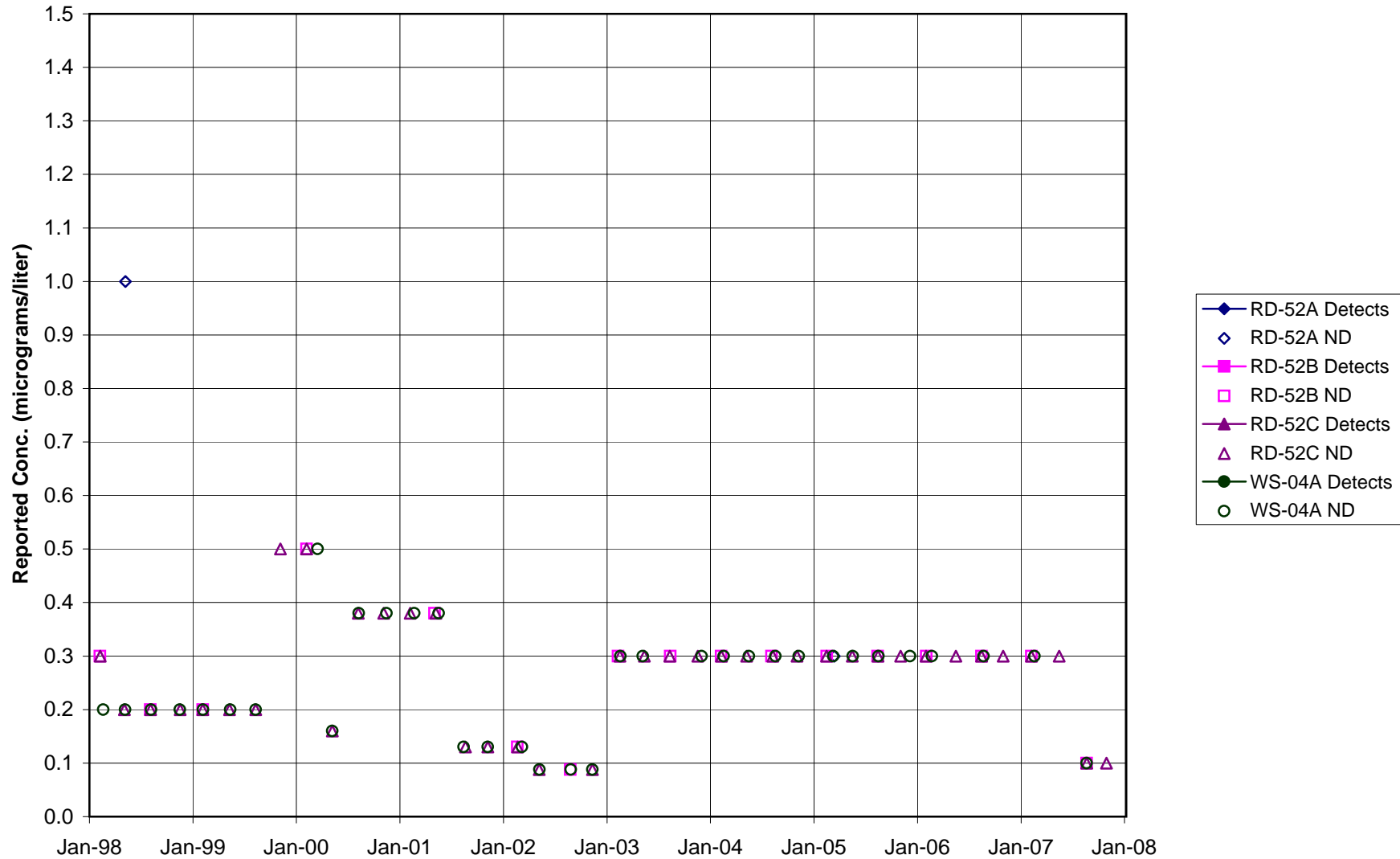


FIGURE F-11. 1,1,1-TCA in RD-09 AREA WELLS

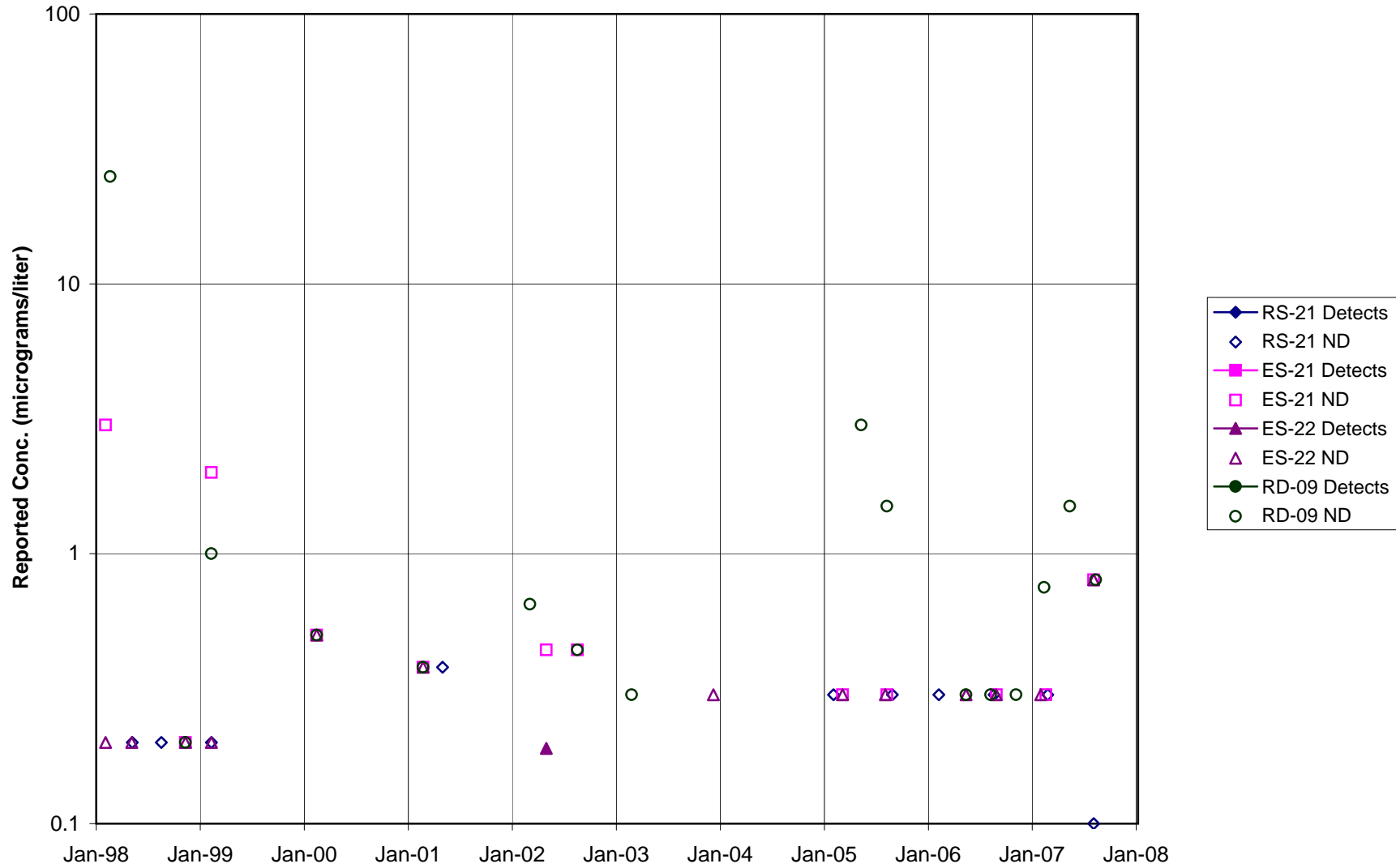


FIGURE F-12. 1,1,1-TCA in HELIPORT, B/204 AREA WELLS

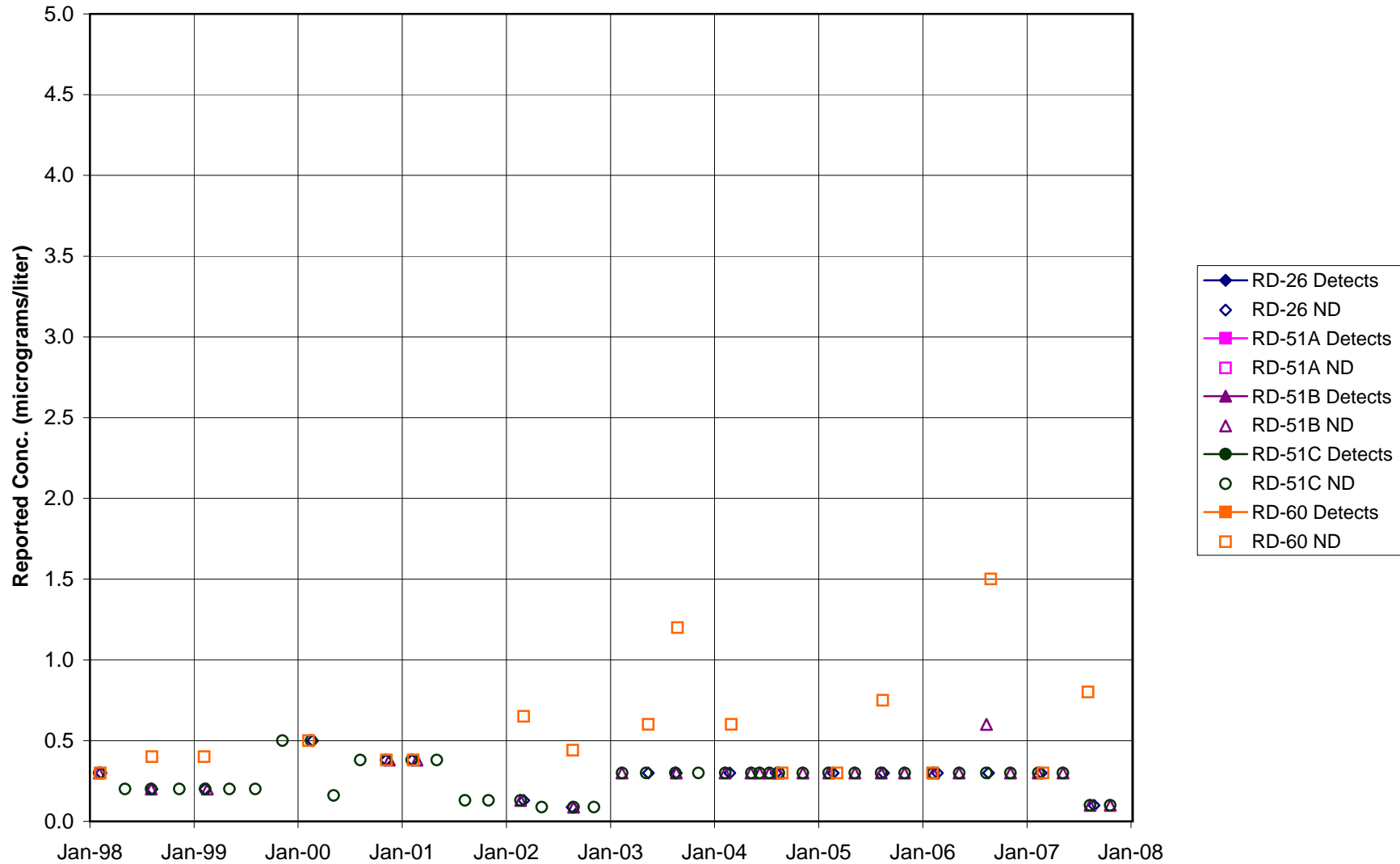


FIGURE F-13. 1,1,1-TCA in ALFA / BRAVO AREA WELLS

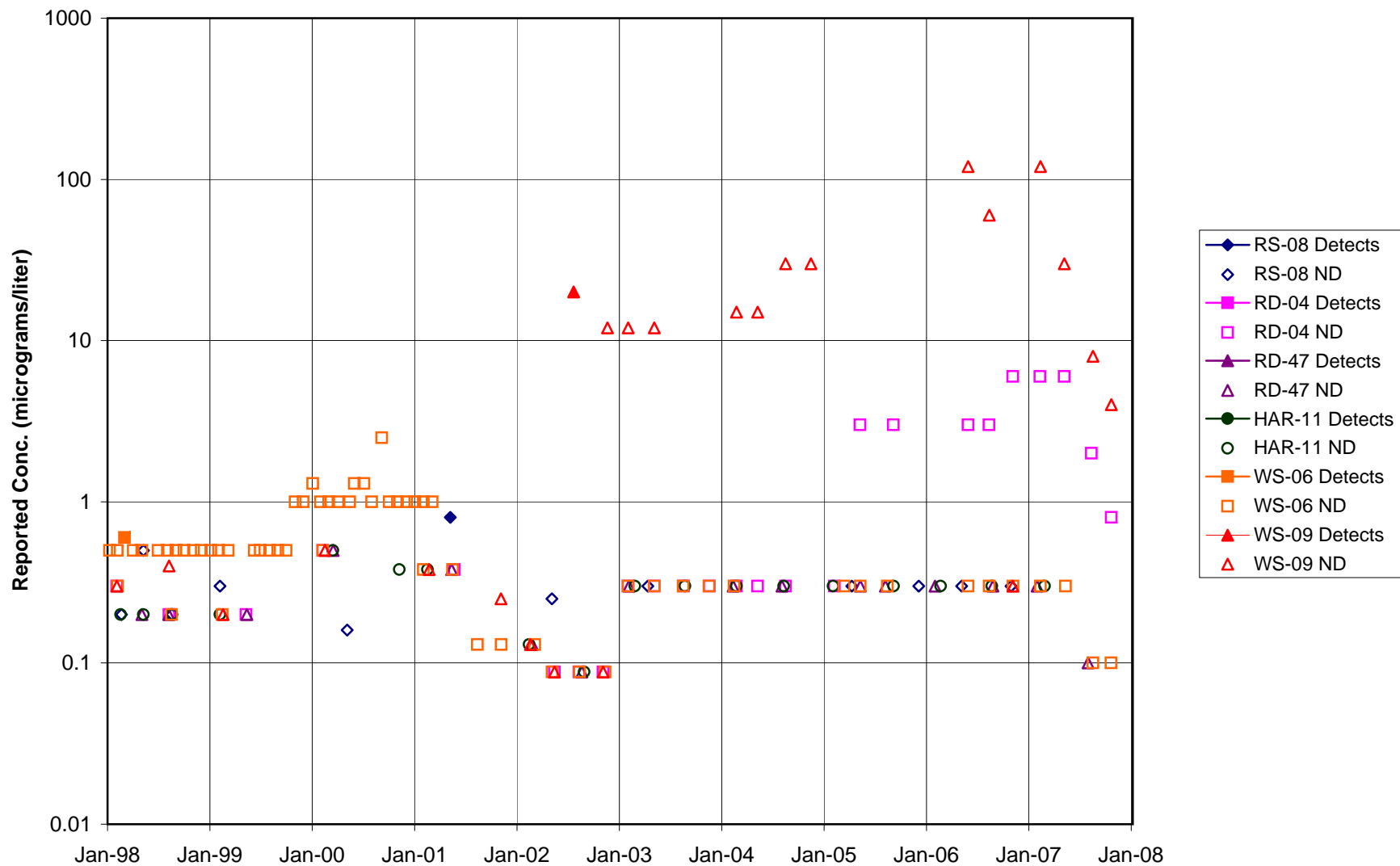


FIGURE F-14. 1,1,1-TCA in SPA AREA WELLS

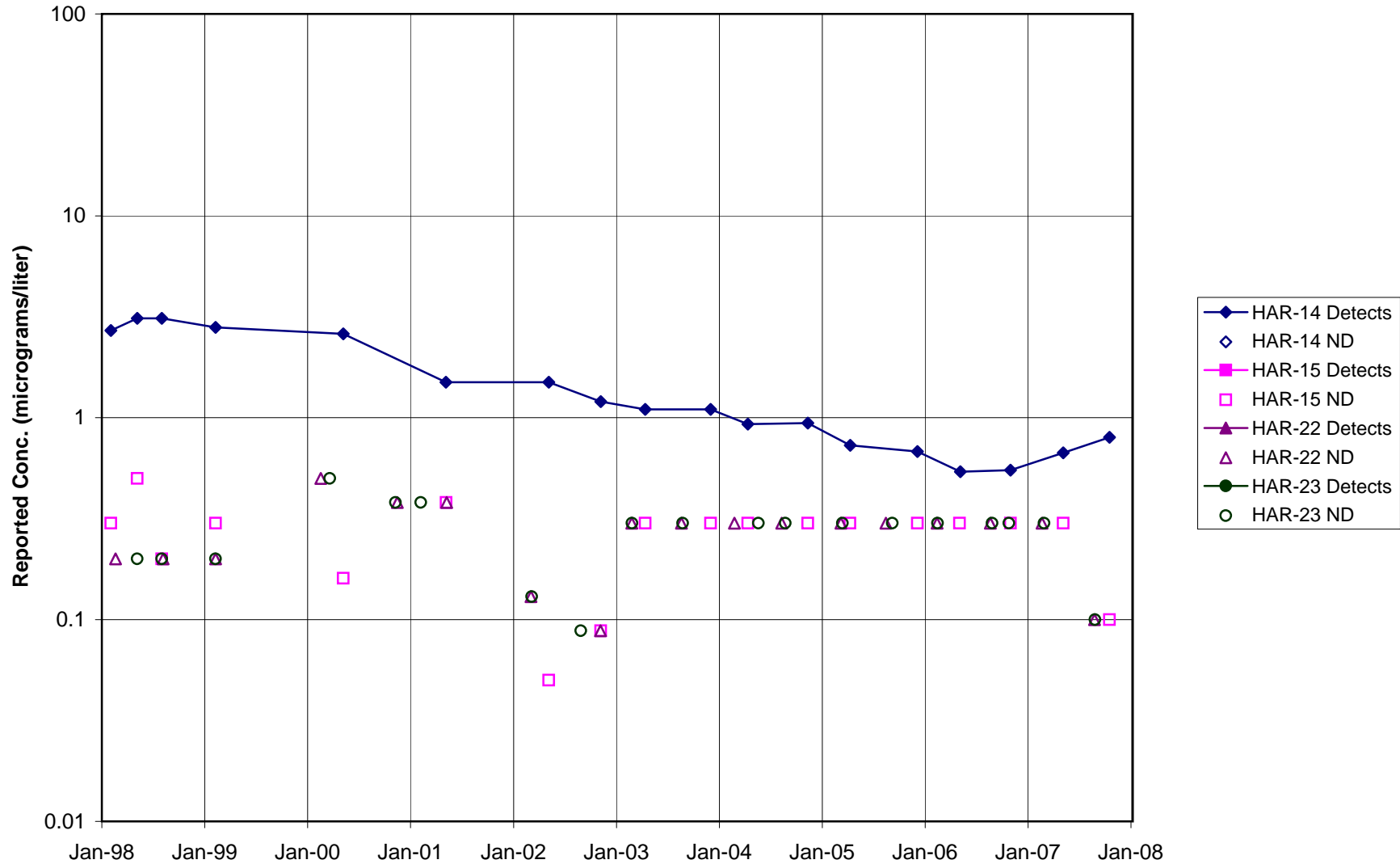


FIGURE F-15. 1,1,1-TCA in COCA / PLF AREA WELLS

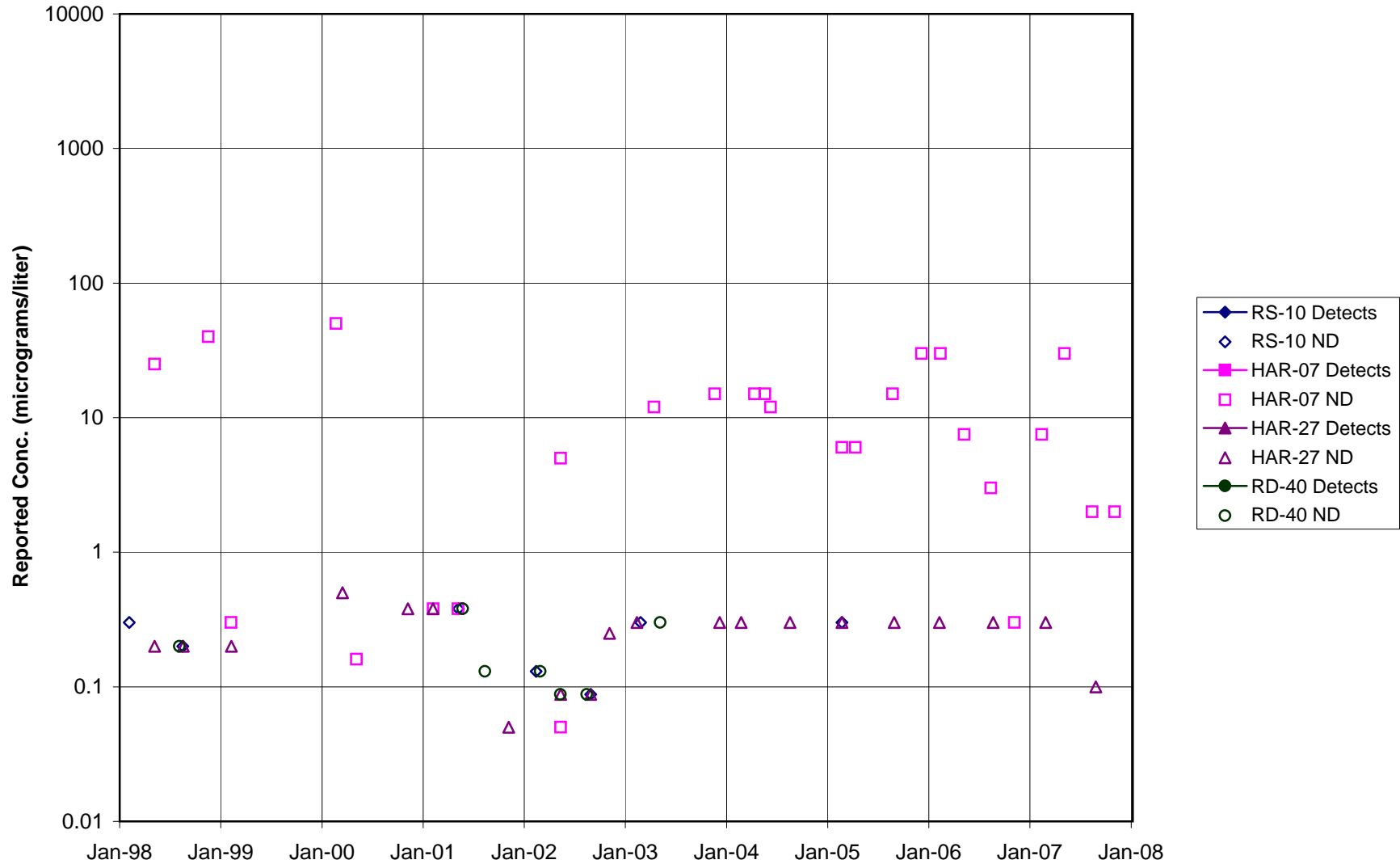
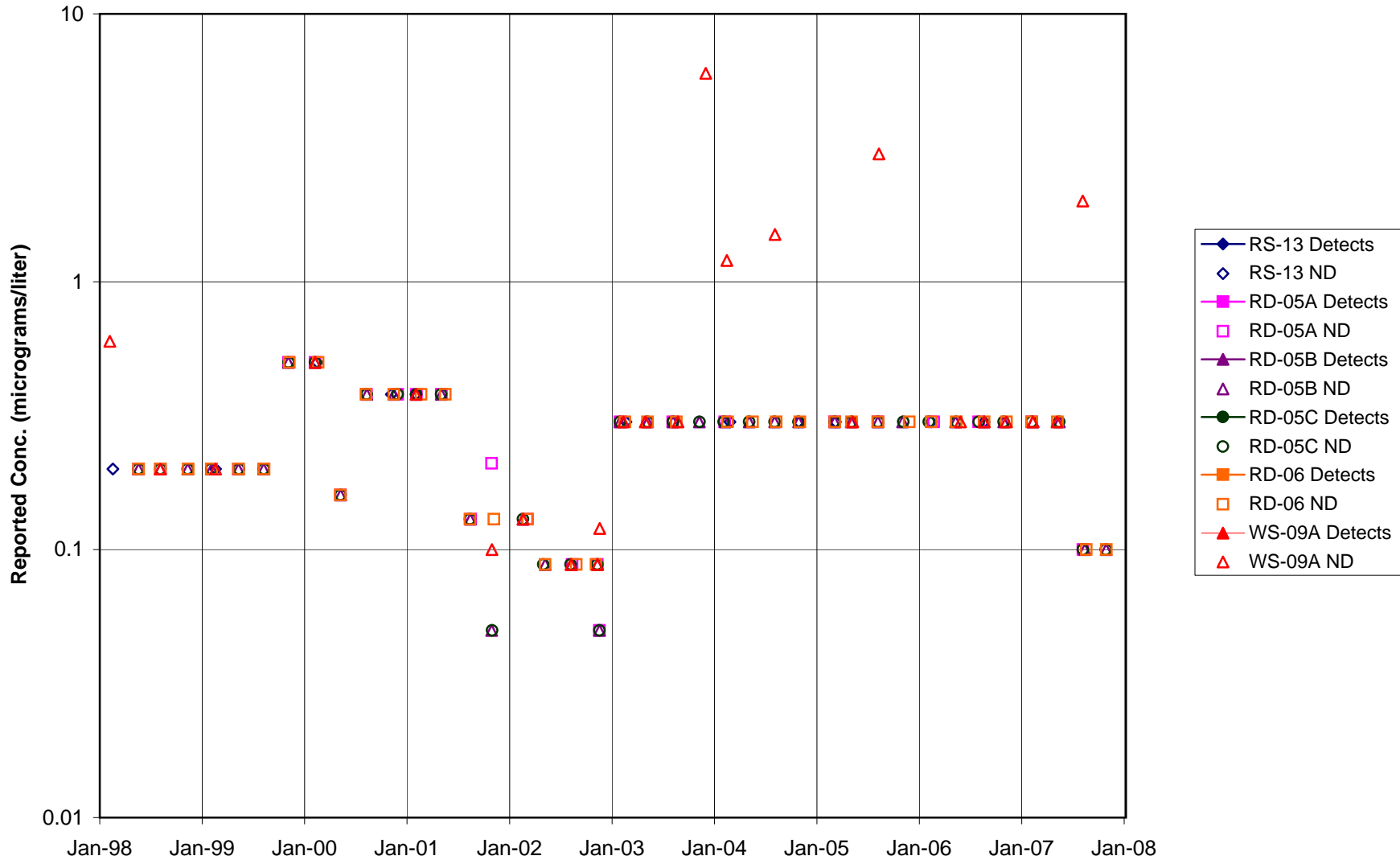


FIGURE F-16. 1,1,1-TCA in DELTA / BUFFER ZONE AREA WELLS





**FIGURE F-17. 1,1,1-TCA in AREA IV WELLS**

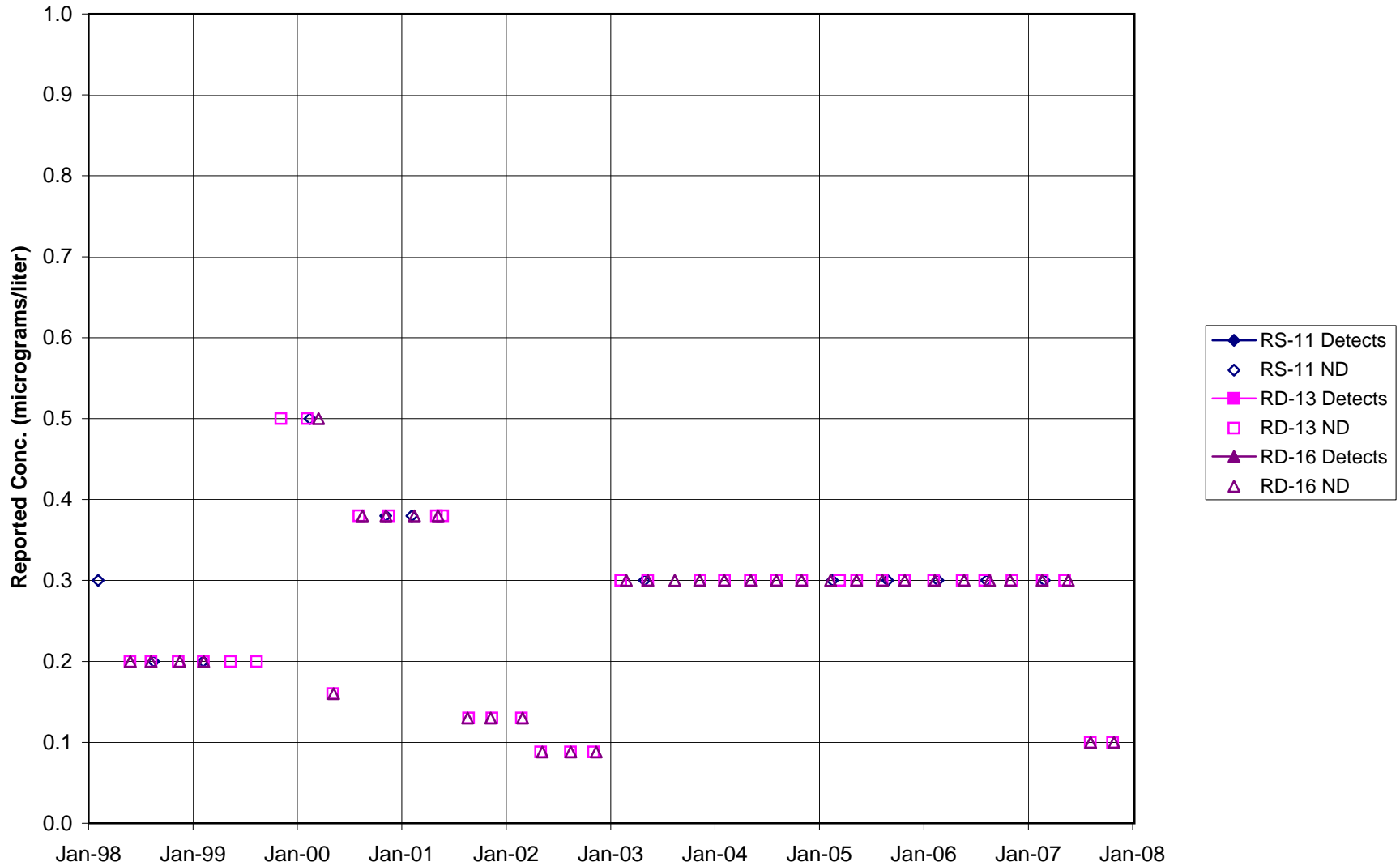
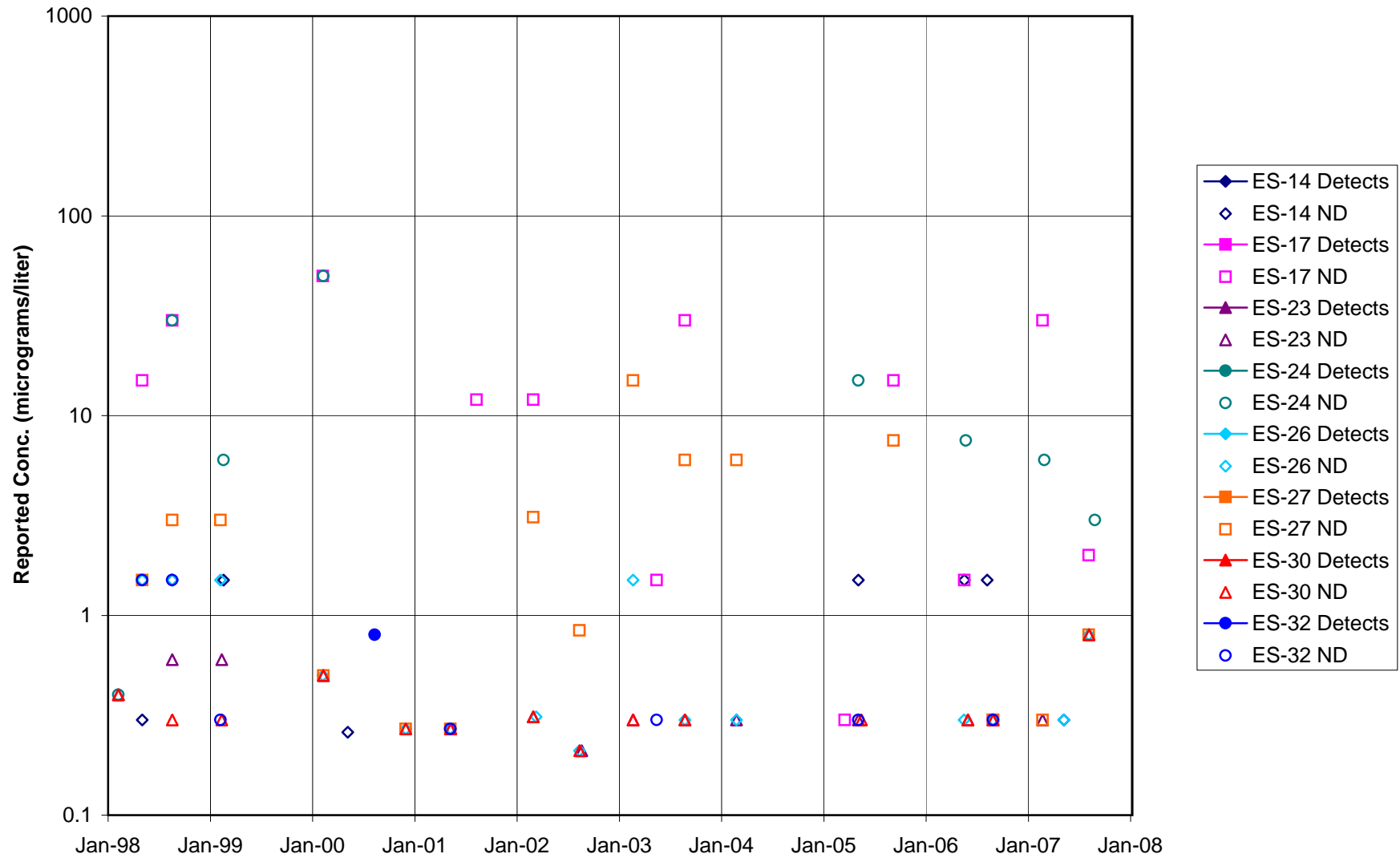


FIGURE F-18. 1,1,2-TCA in STL-IV AREA SHALLOW WELLS



**FIGURE F-19. 1,1,2-TCA in STL-IV AREA CHATSWORTH FORMATION WELLS**

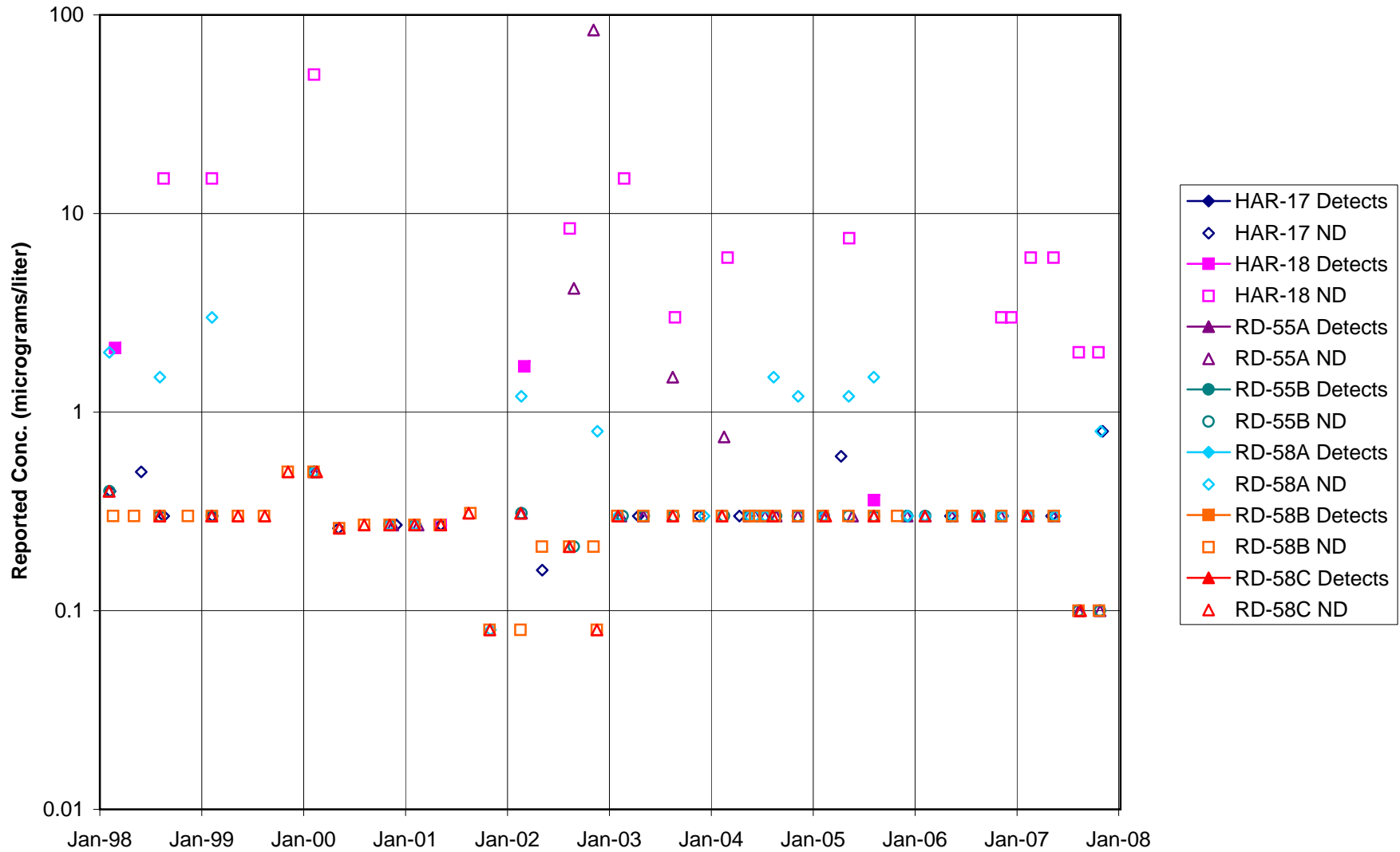


FIGURE F-20. 1,1,2-TCA in MAIN GATE AREA WELLS - 1

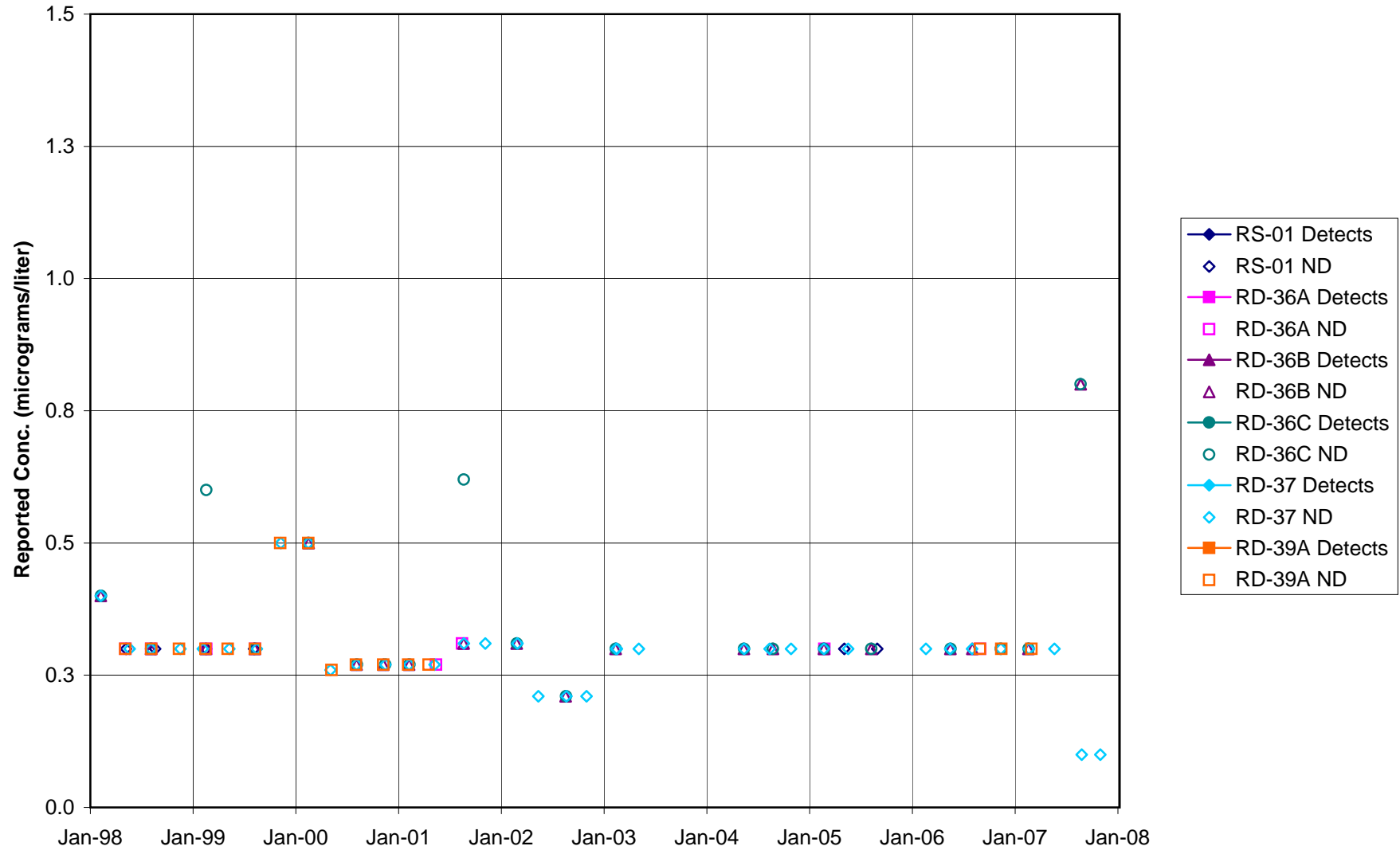


FIGURE F-21. 1,1,2-TCA in MAIN GATE AREA WELLS - 2

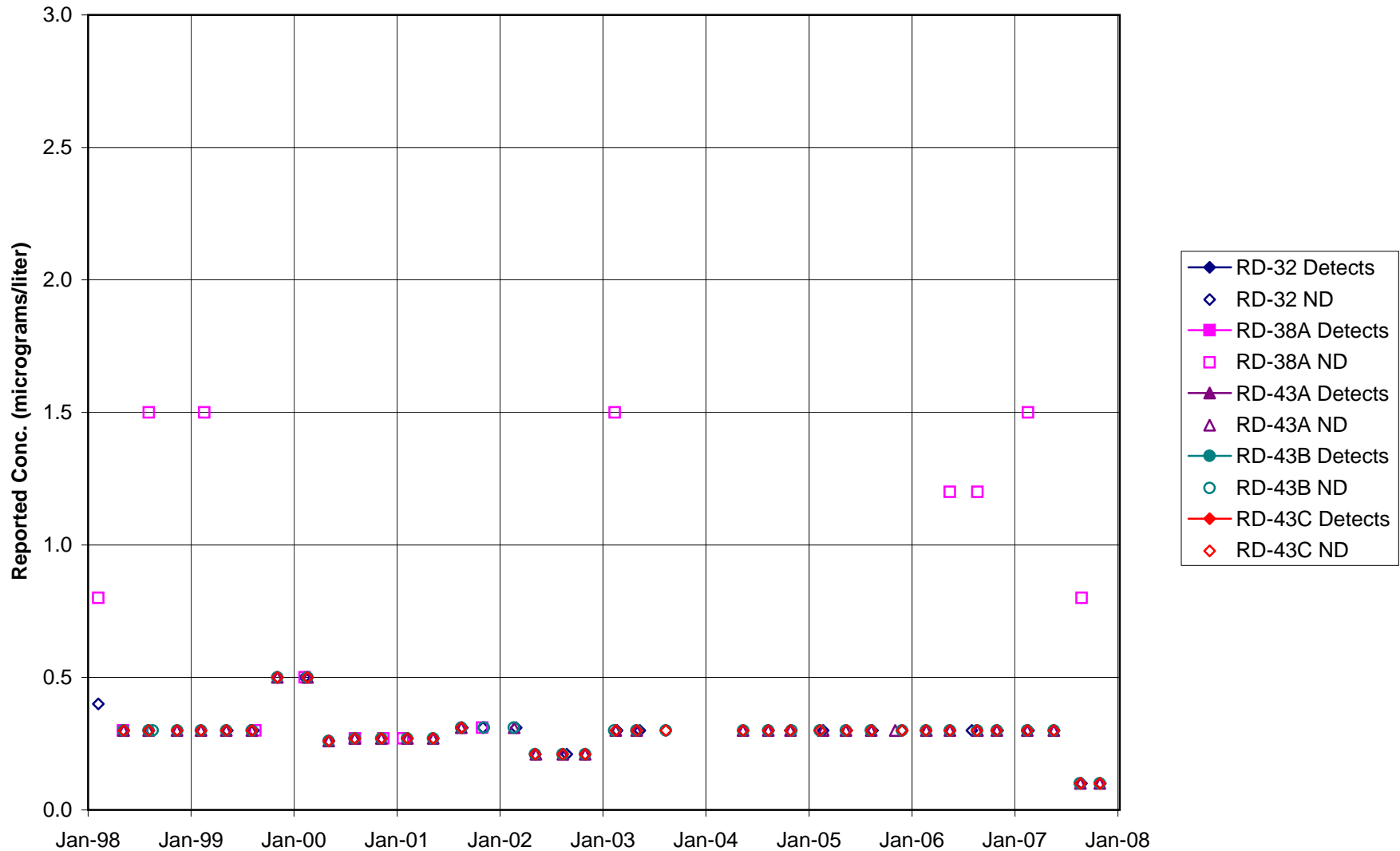


FIGURE F-22. 1,1,2-TCA in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1

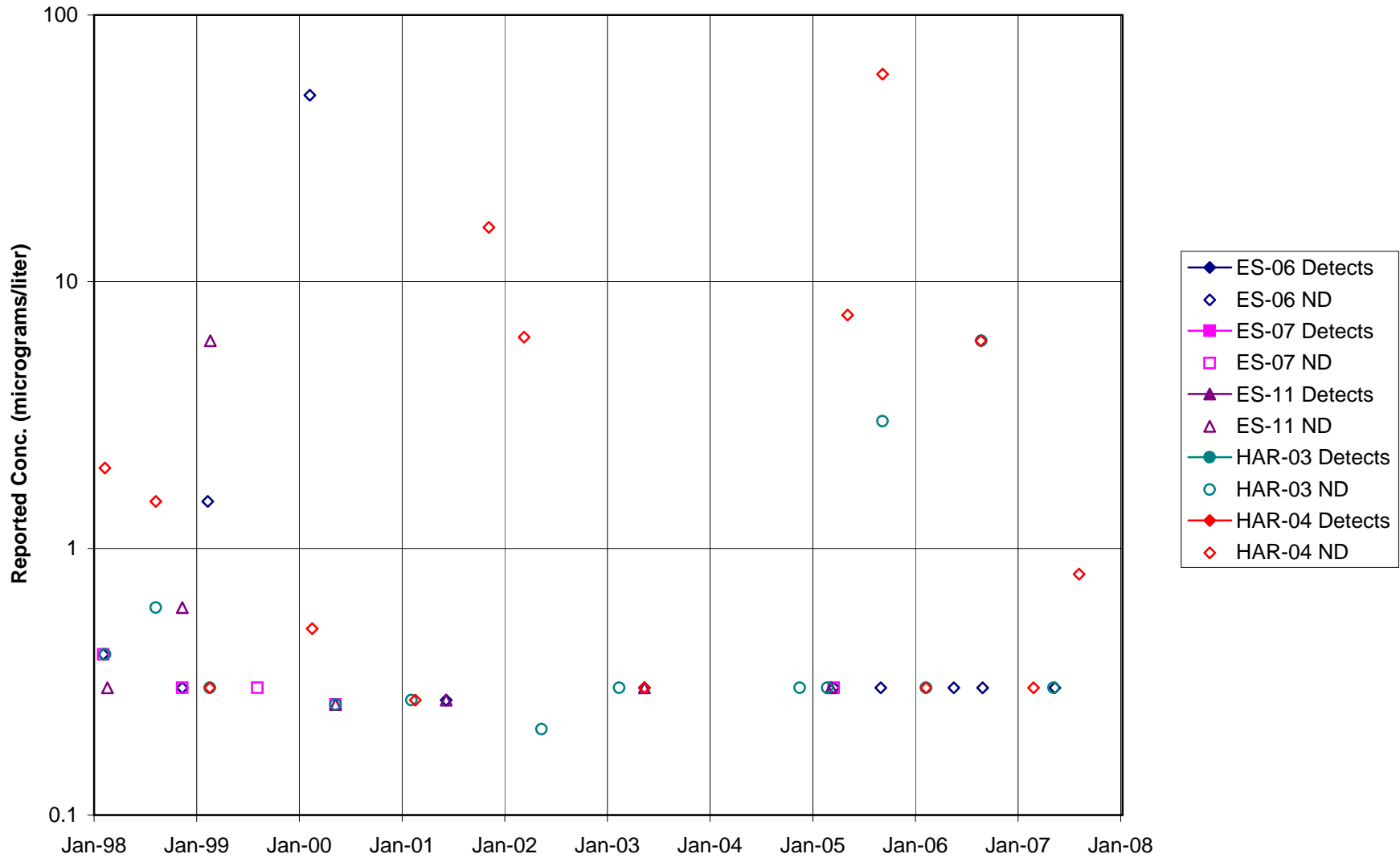


FIGURE F-23. 1,1,2-TCA in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 2

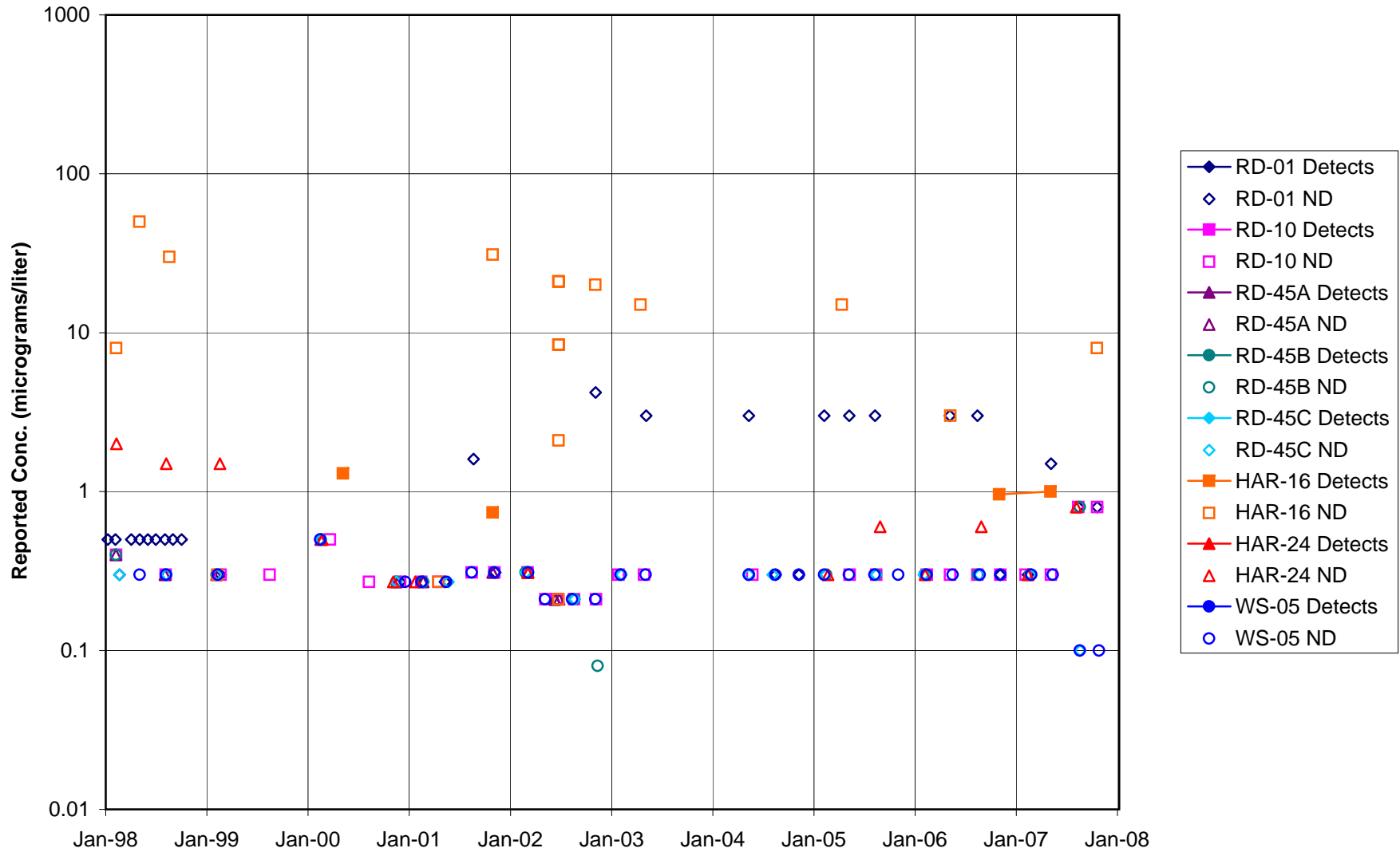


FIGURE F-24. 1,1,2-TCA in CTL-III / PERIMETER POND AREA WELLS

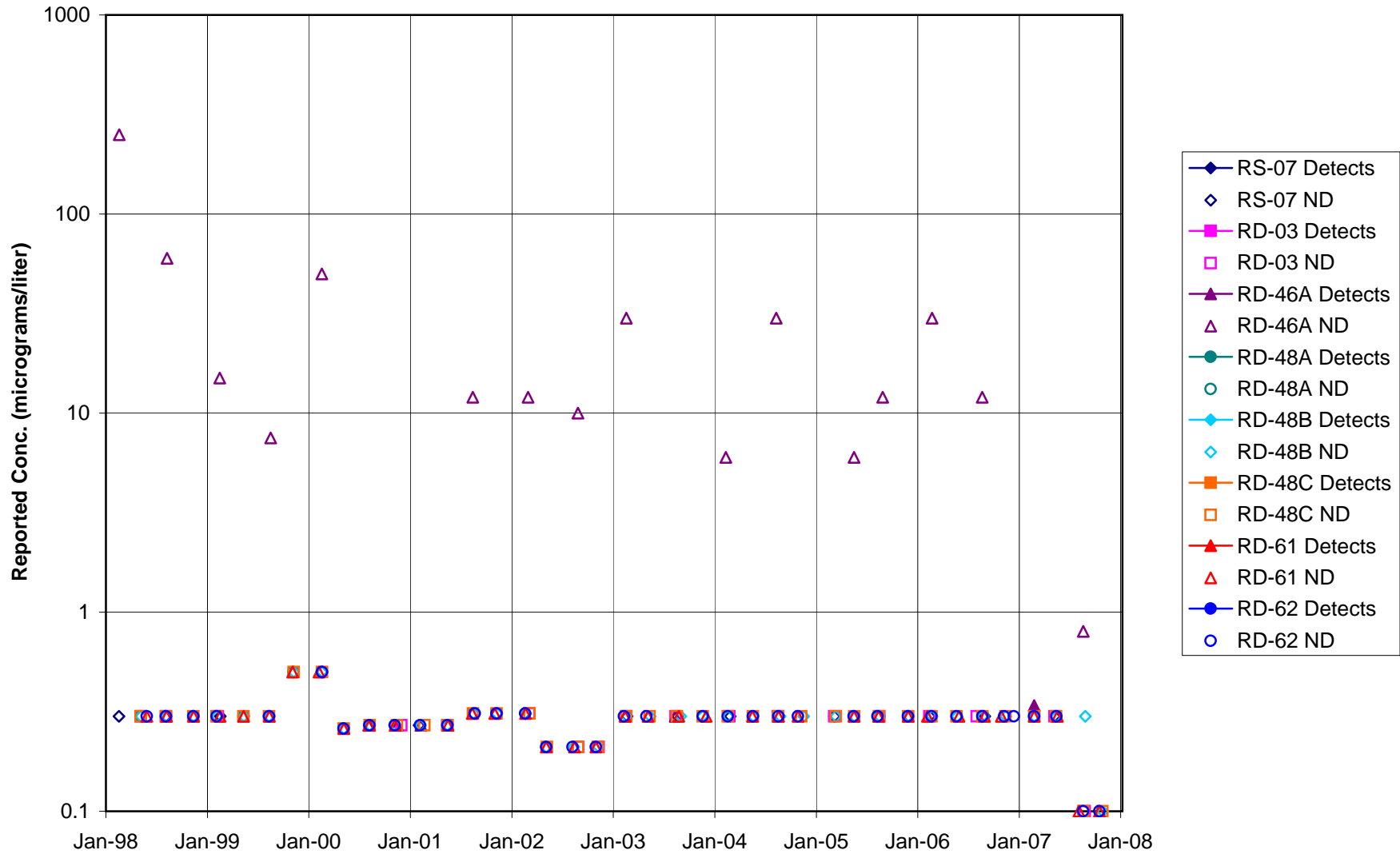




FIGURE F-25. 1,1,2-TCA in BOWL AREA WELLS

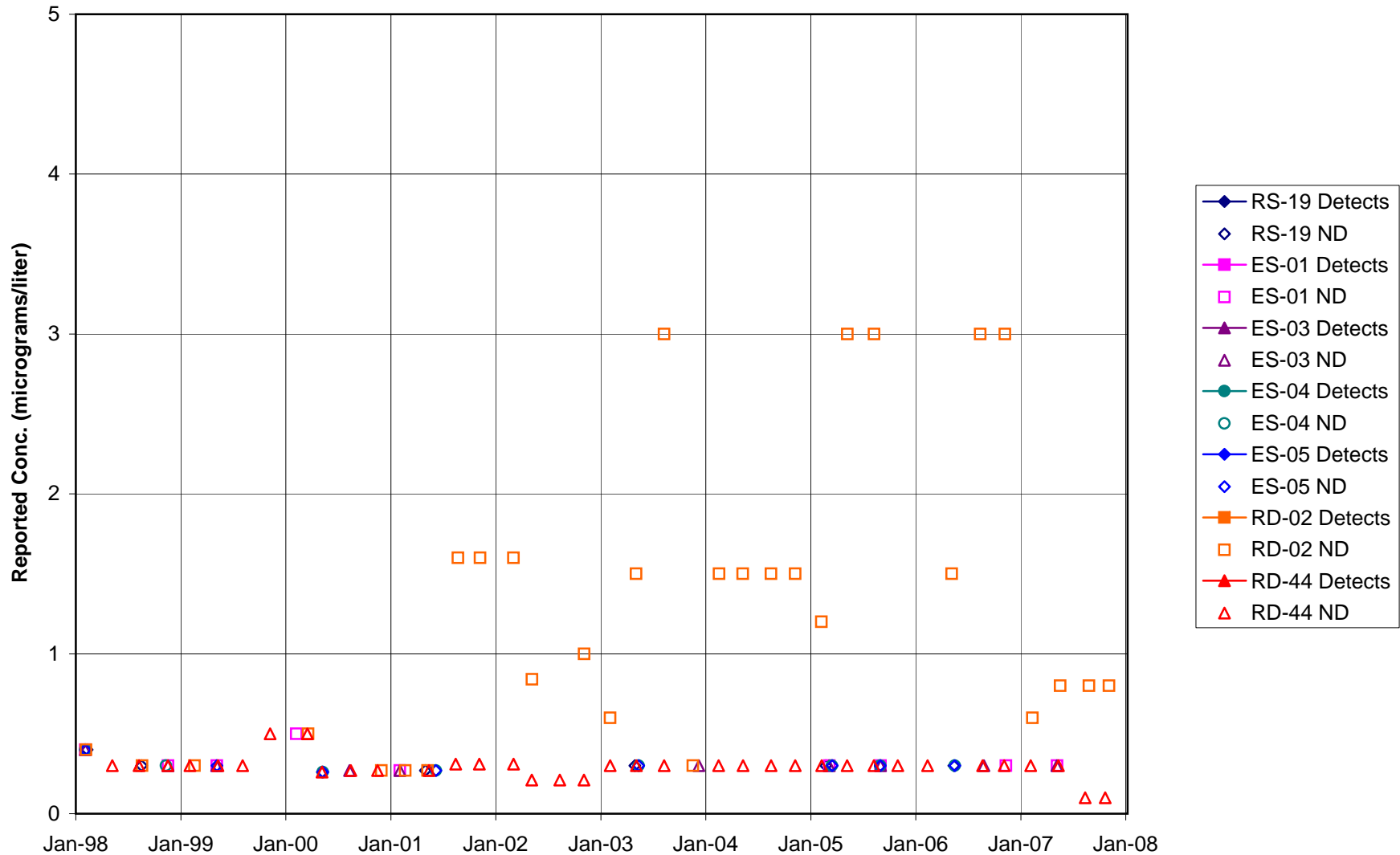


FIGURE F-26. 1,1,2-TCA in ECL AREA WELLS



**FIGURE F-27. 1,1,2-TCA in FORMER LOX PLANT AREA WELLS**

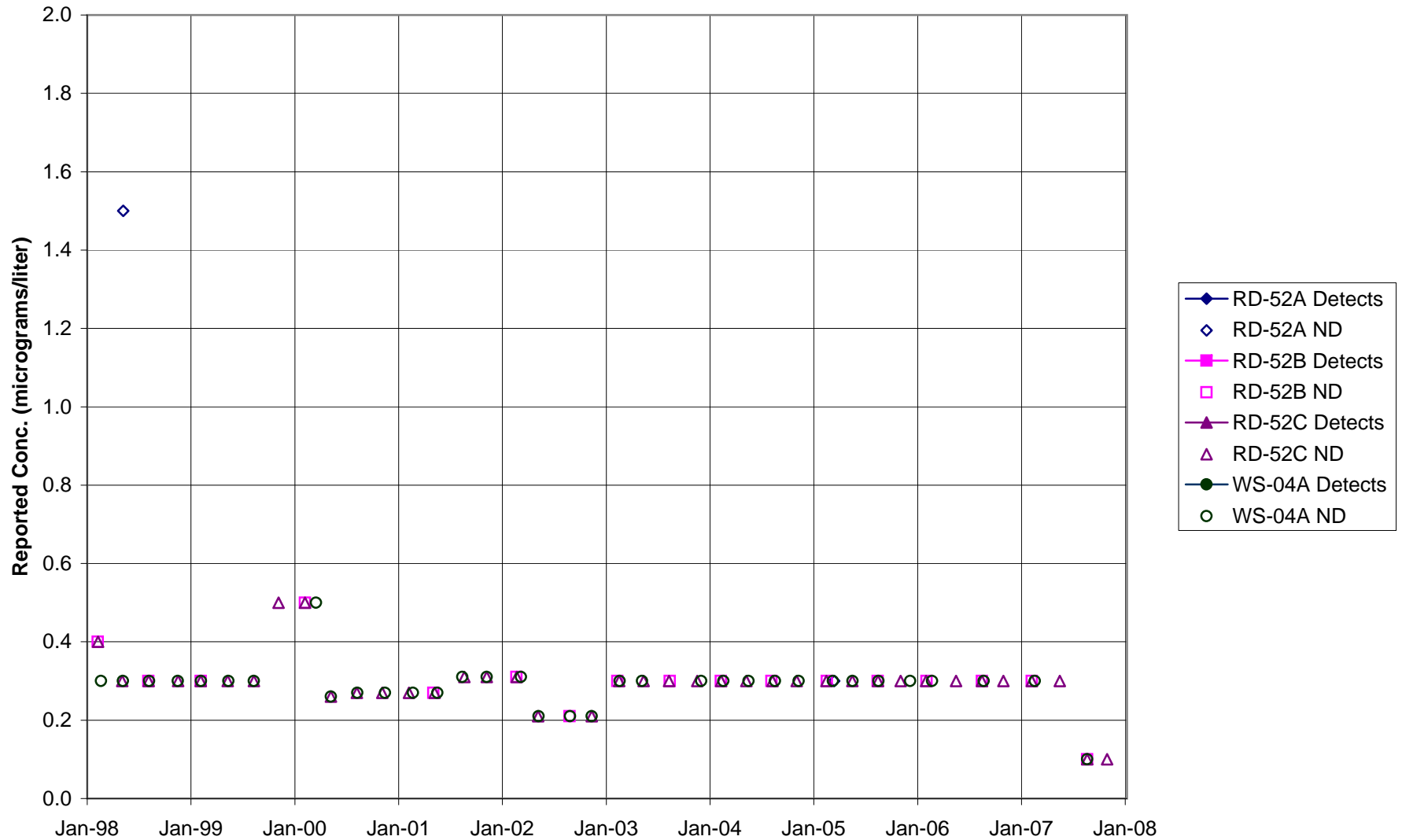


FIGURE F-28. 1,1,2-TCA in RD-09 AREA WELLS

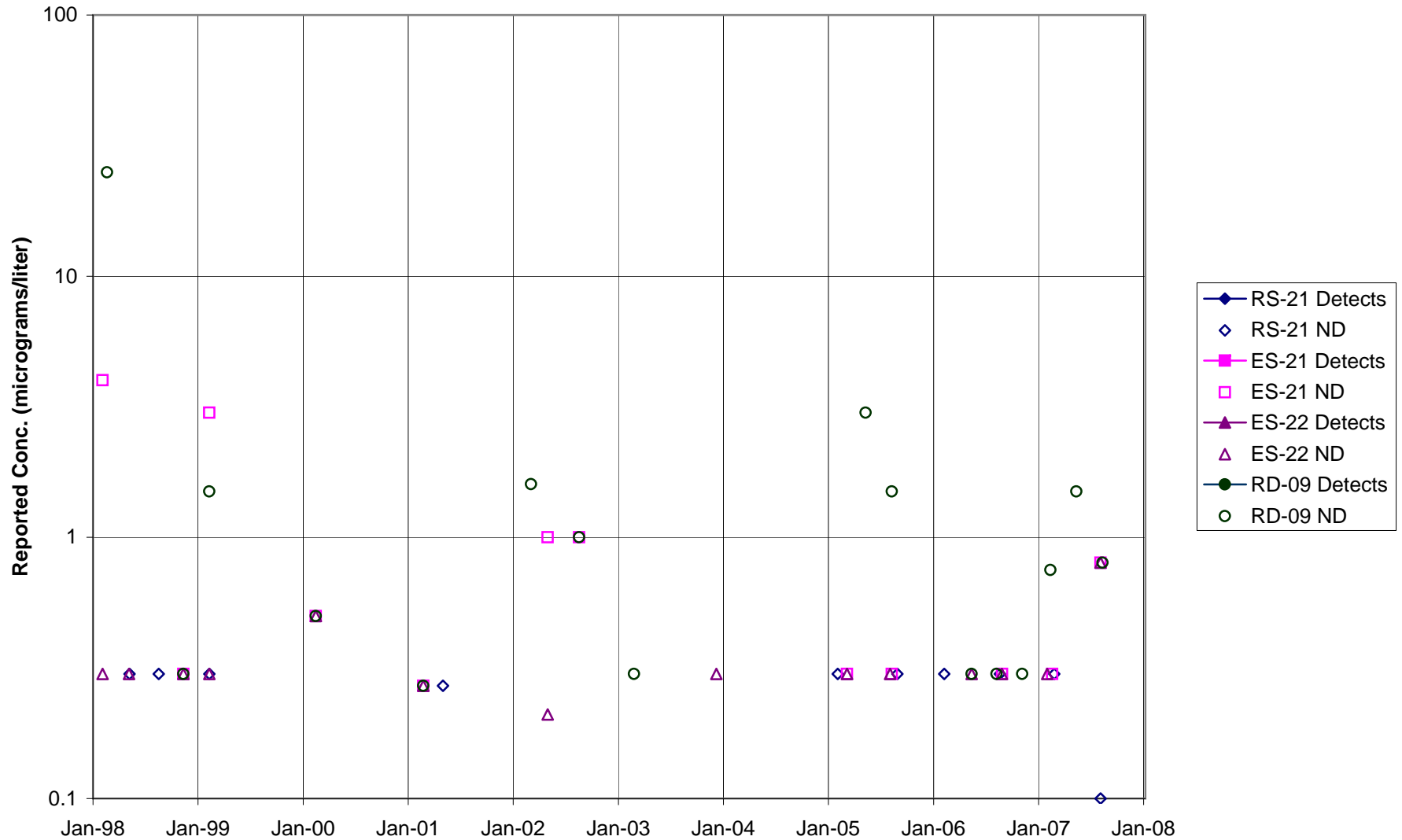
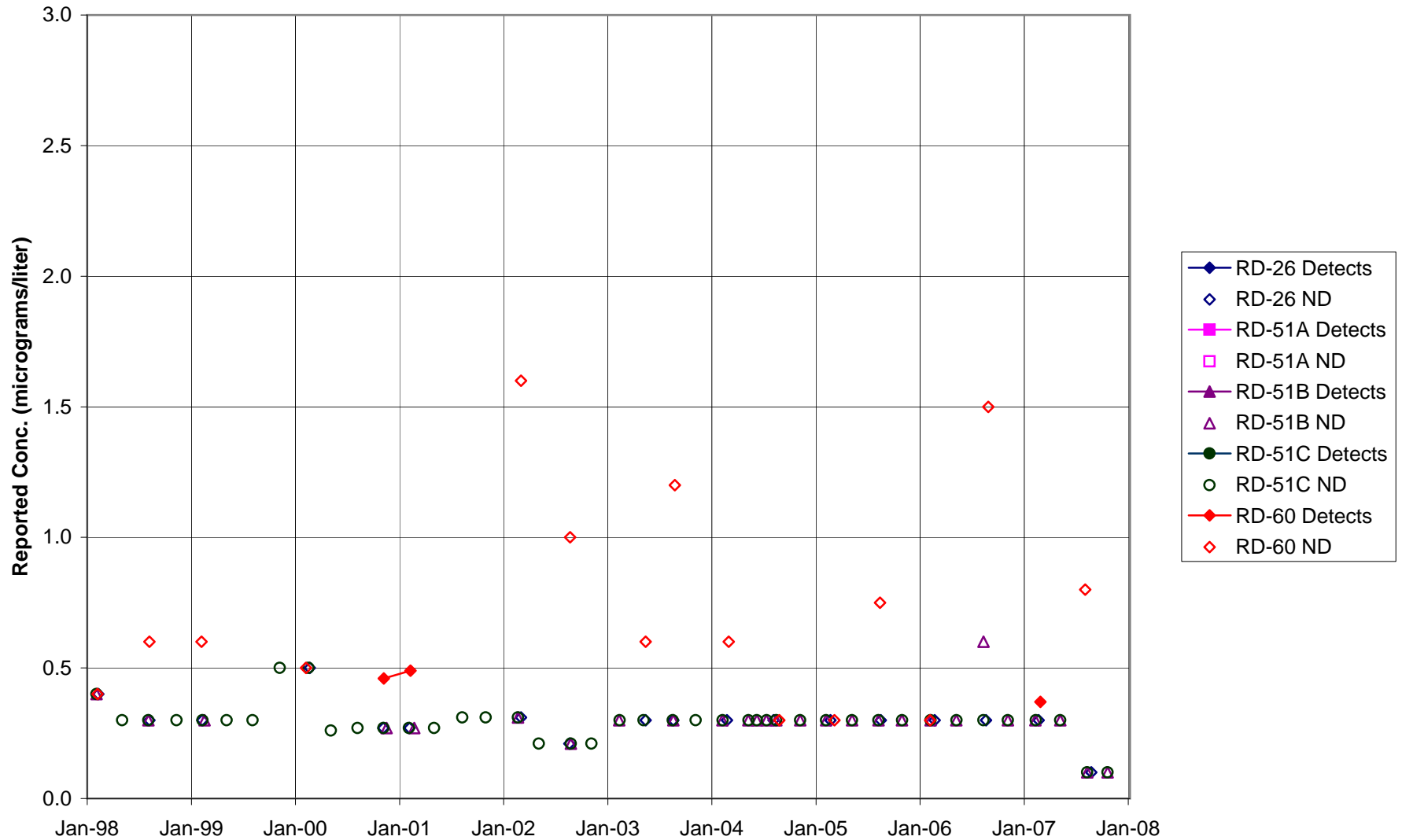


FIGURE F-29. 1,1,2-TCA in HELIPORT, B/204 AREA WELLS



**FIGURE F-30. 1,1,2-TCA in ALFA / BRAVO AREA WELLS**

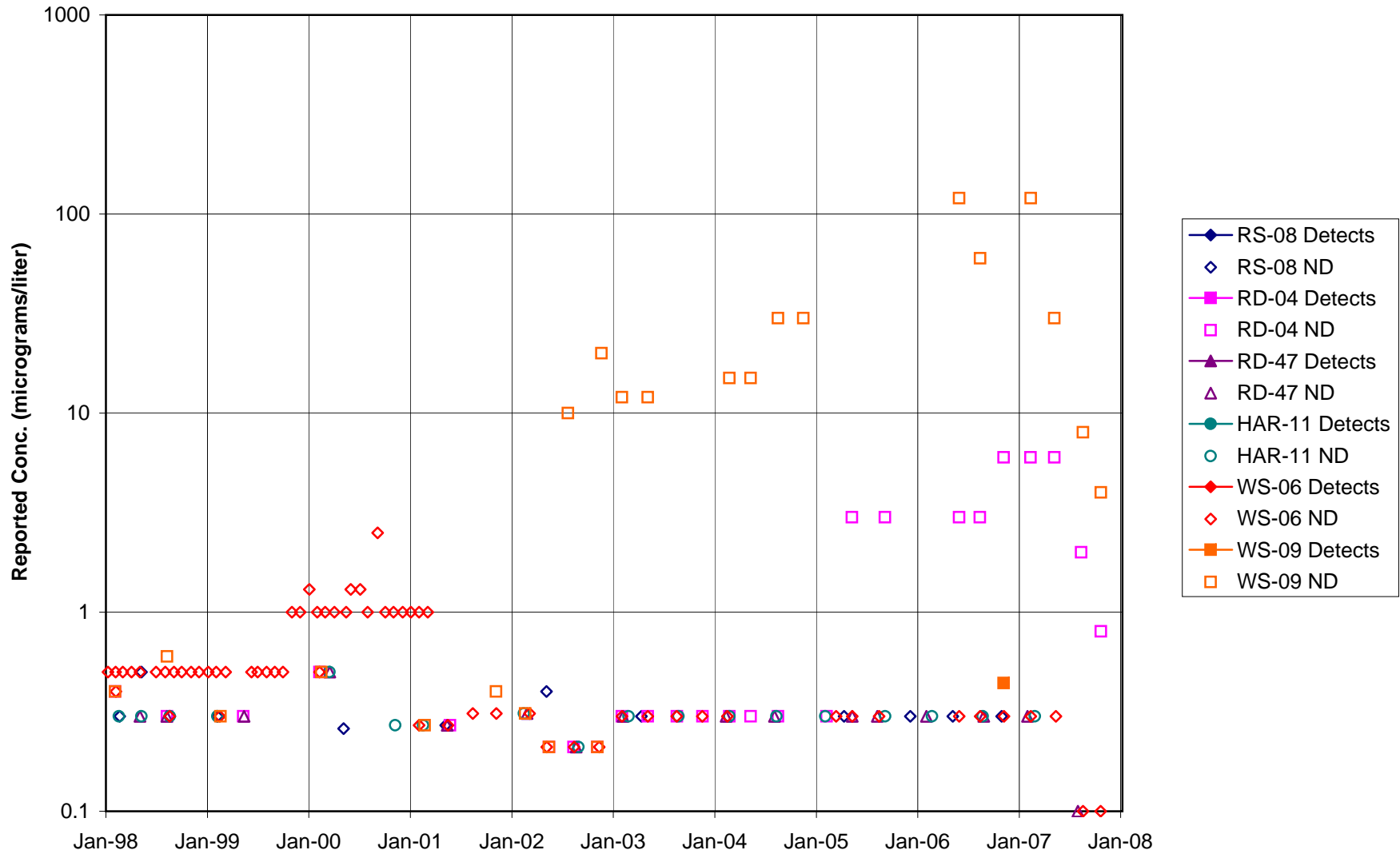
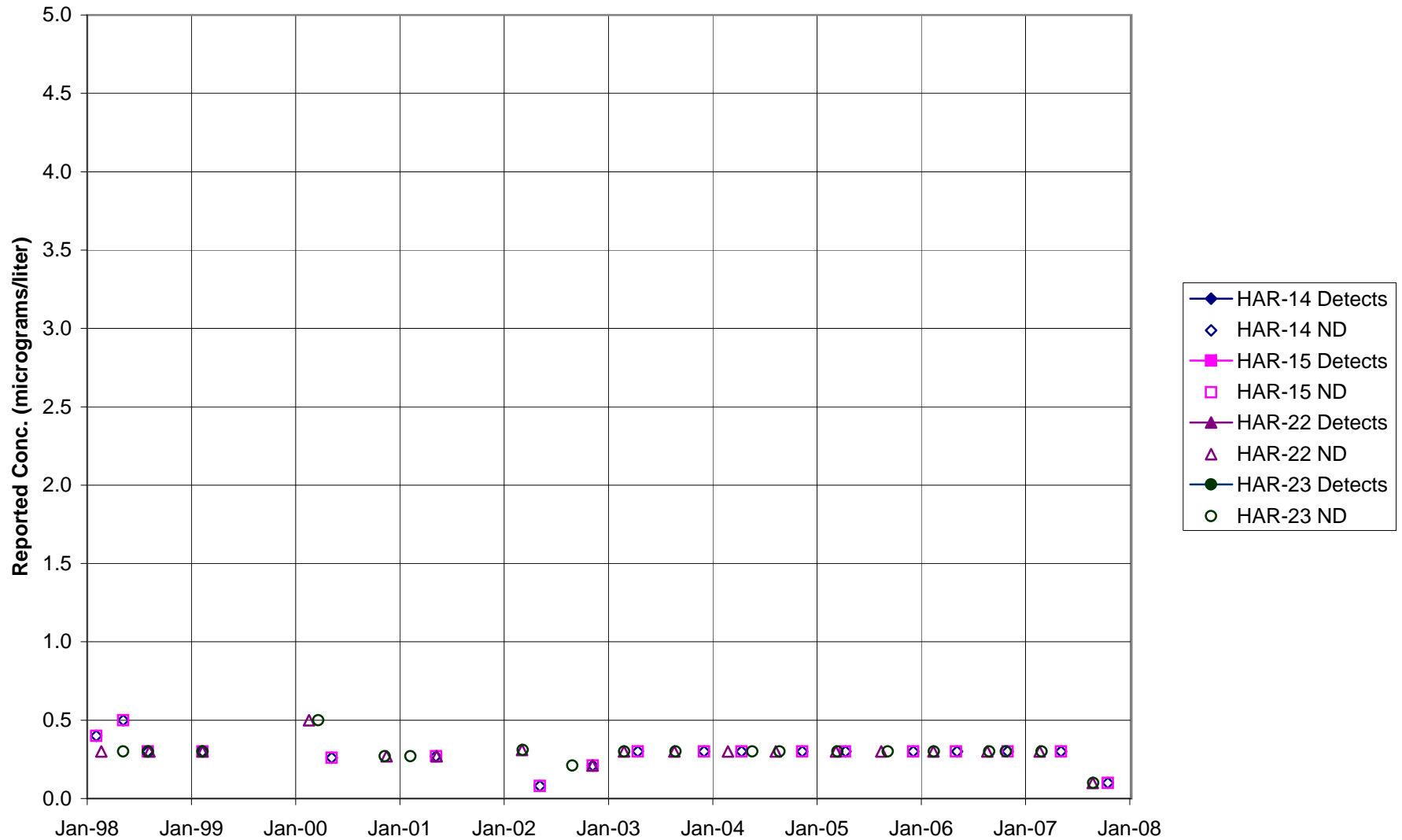
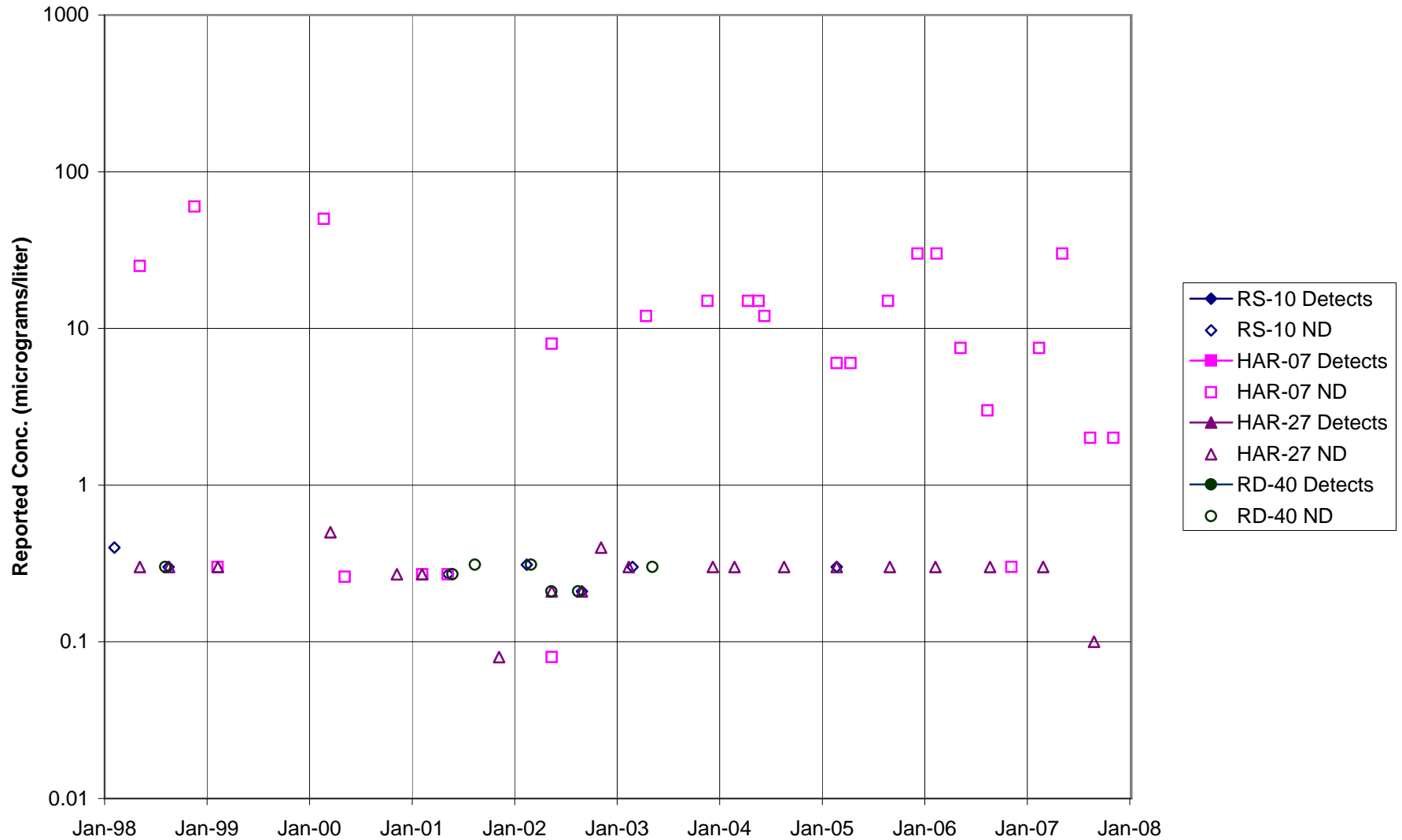


FIGURE F-31. 1,1,2-TCA in SPA AREA WELLS



**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**

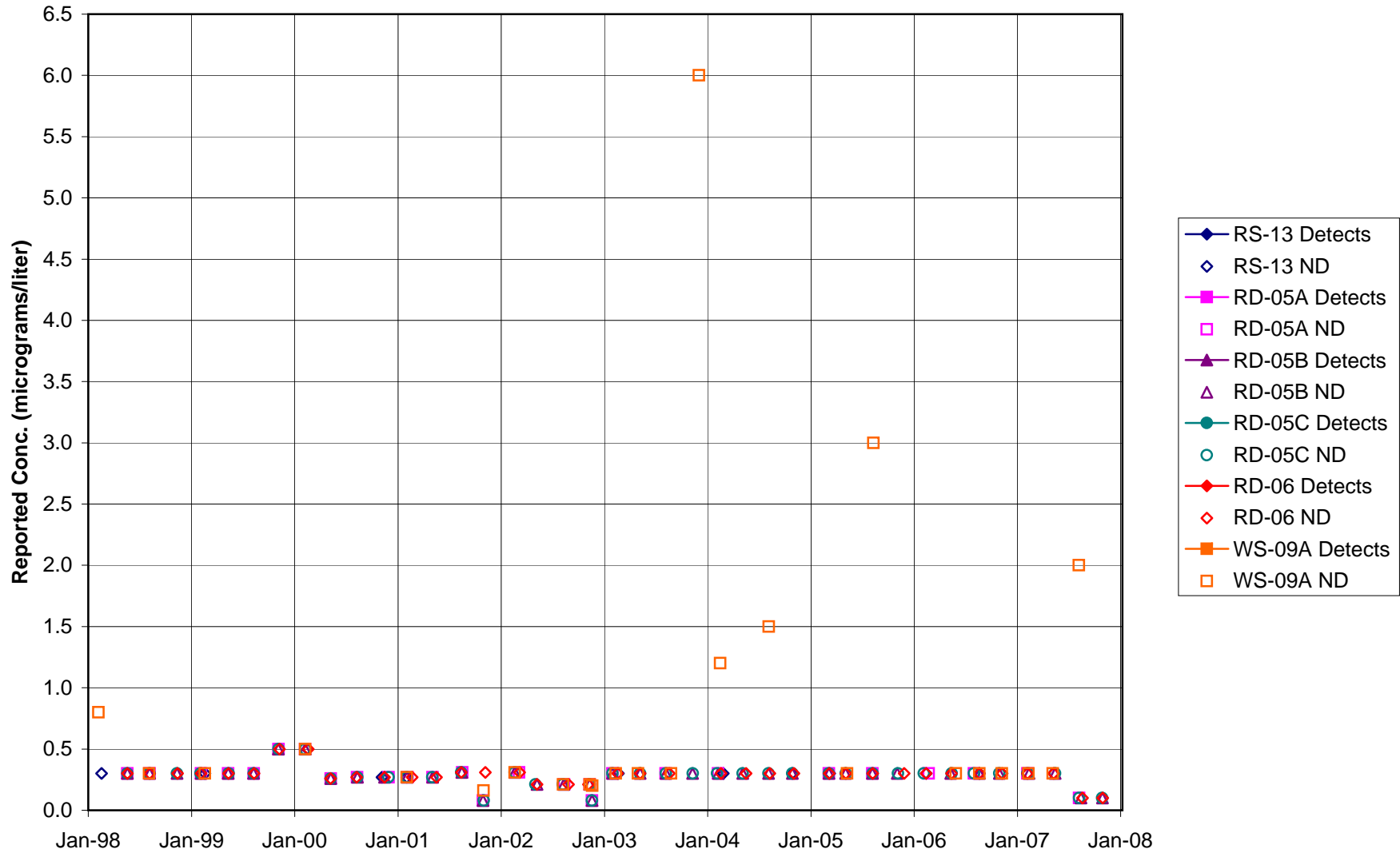


FIGURE F-34. 1,1,2-TCA in AREA IV WELLS

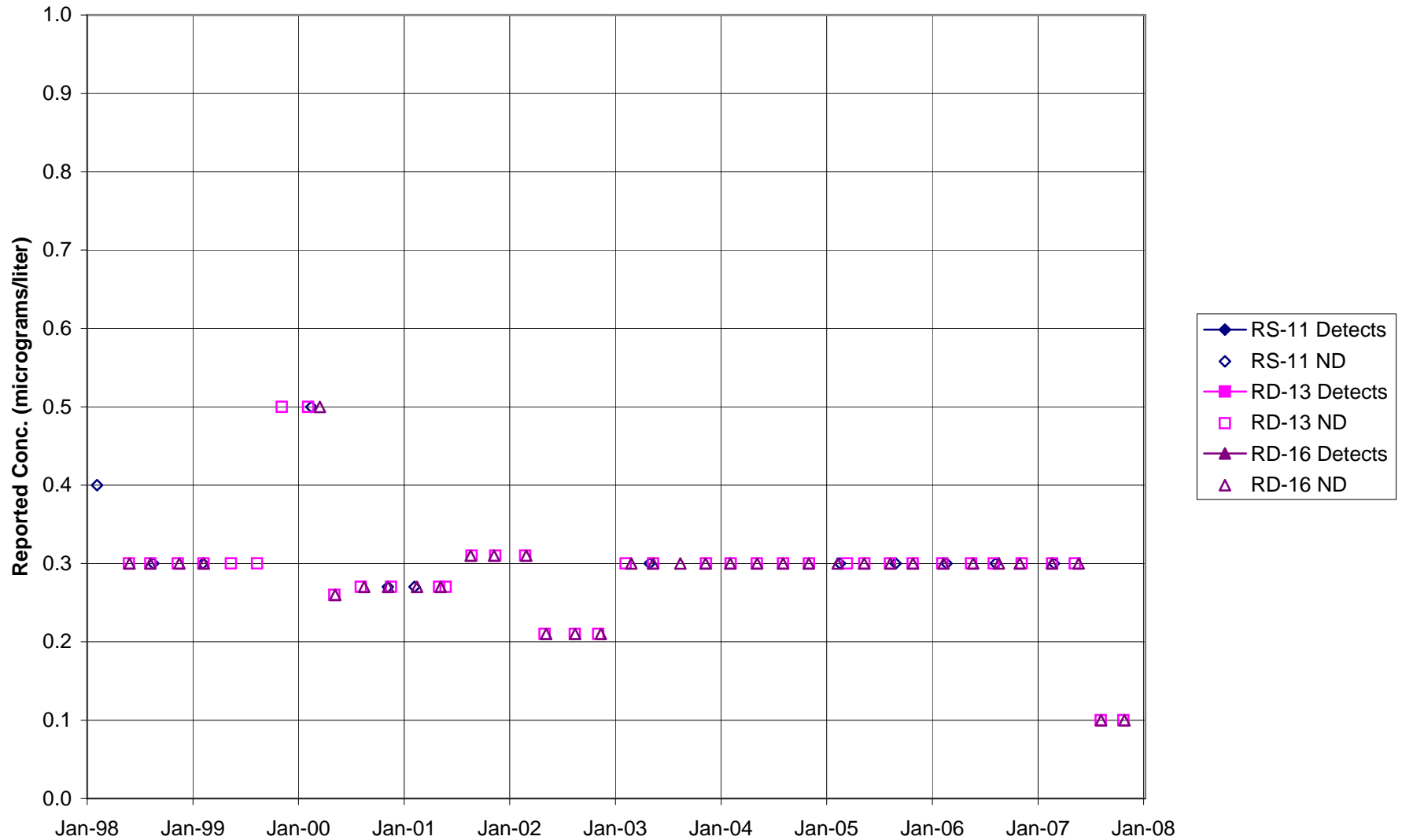


FIGURE F-35. 1,1-DCE in STL-IV AREA SHALLOW WELLS

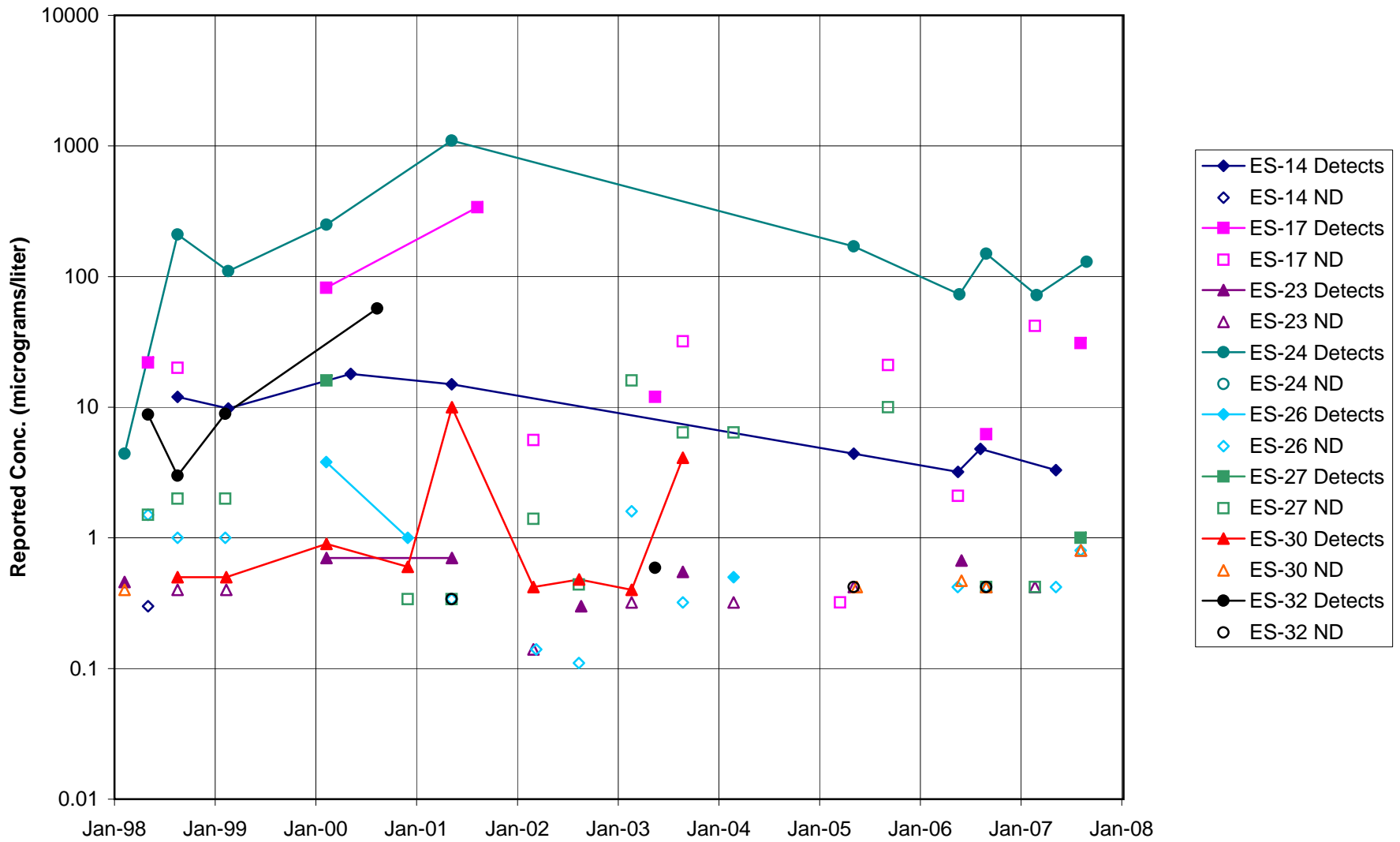


FIGURE F-36. 1,1-DCE in STL-IV AREA CHATSWORTH FORMATION WELLS

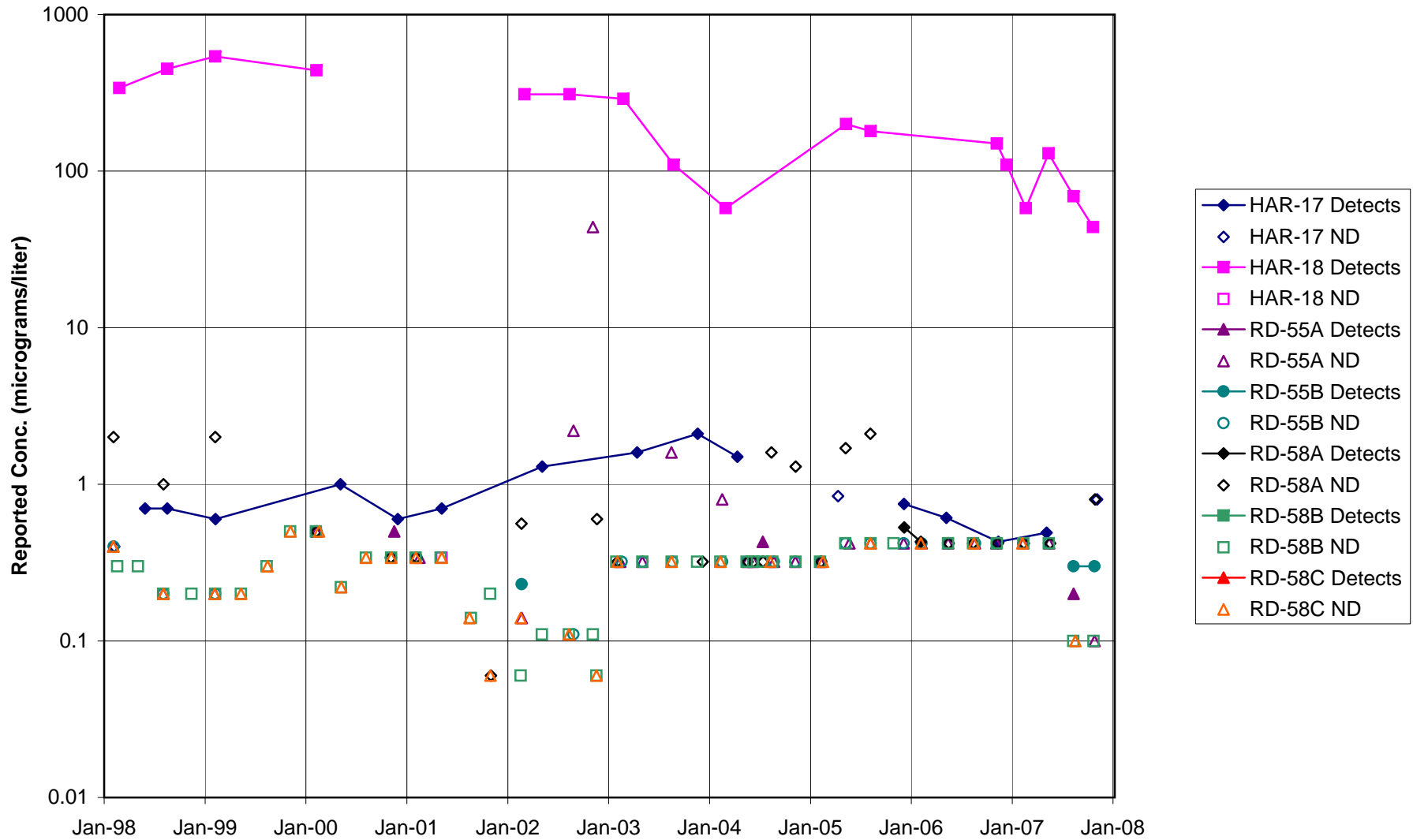


FIGURE F-37. 1,1-DCE in MAIN GATE AREA WELLS - 1

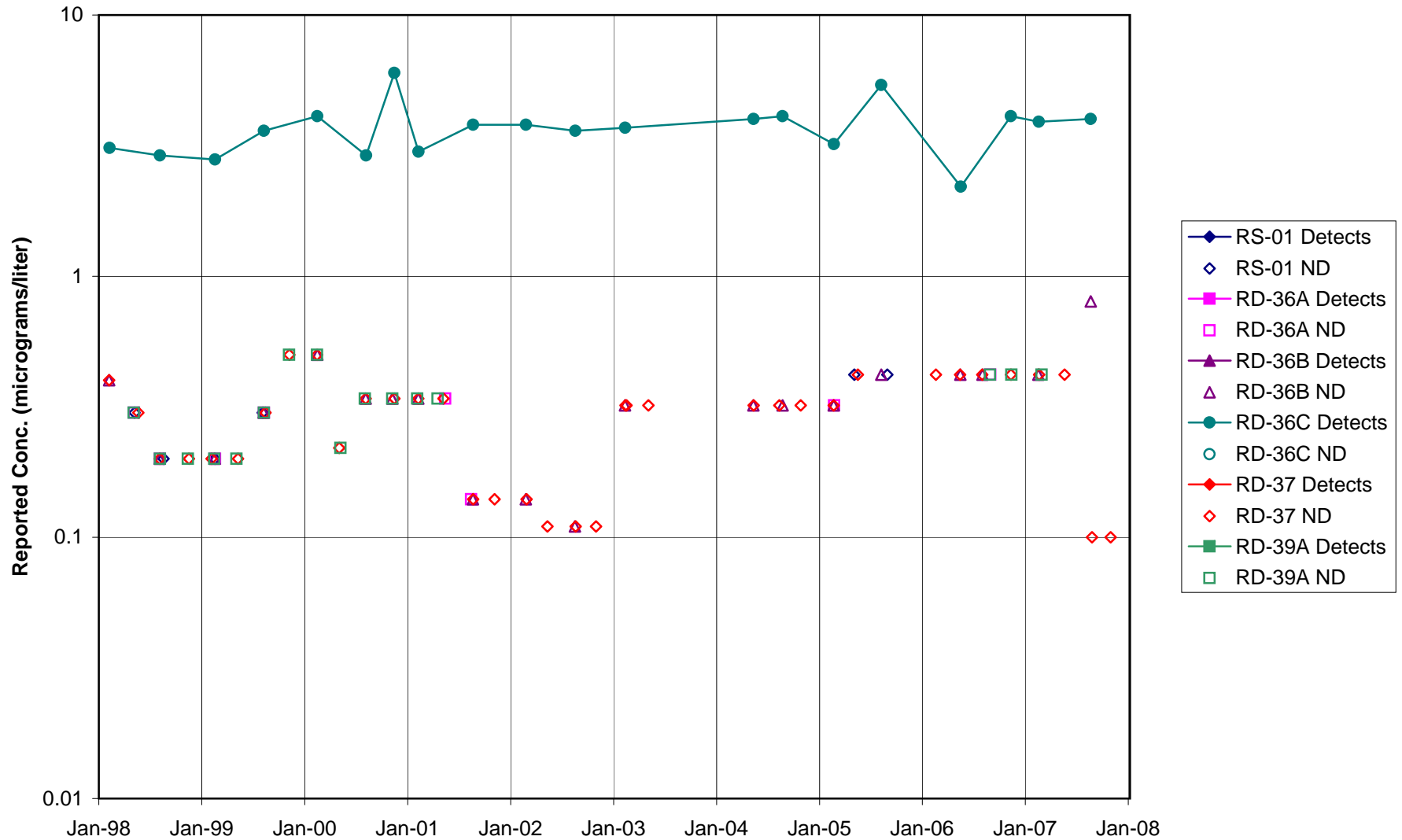
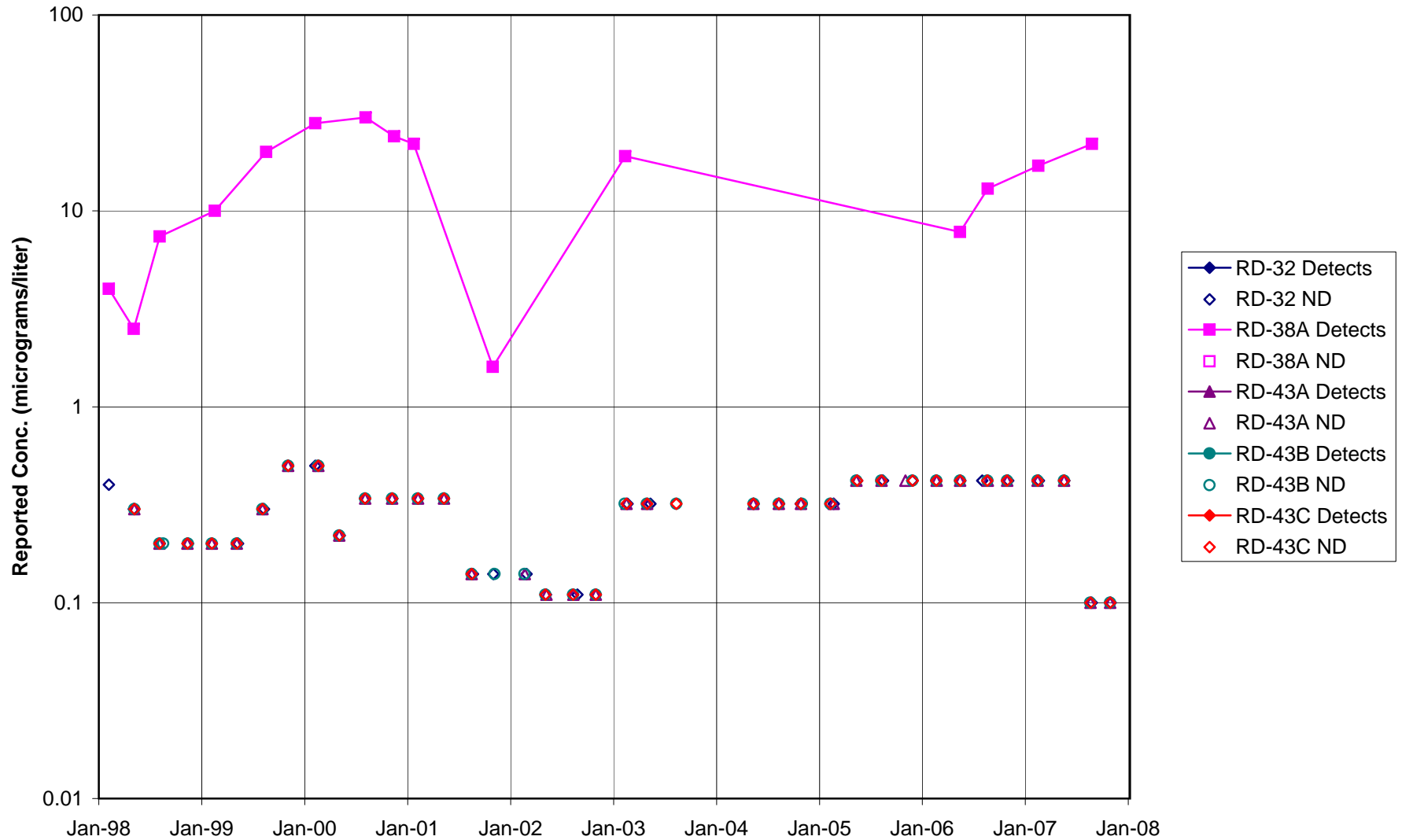
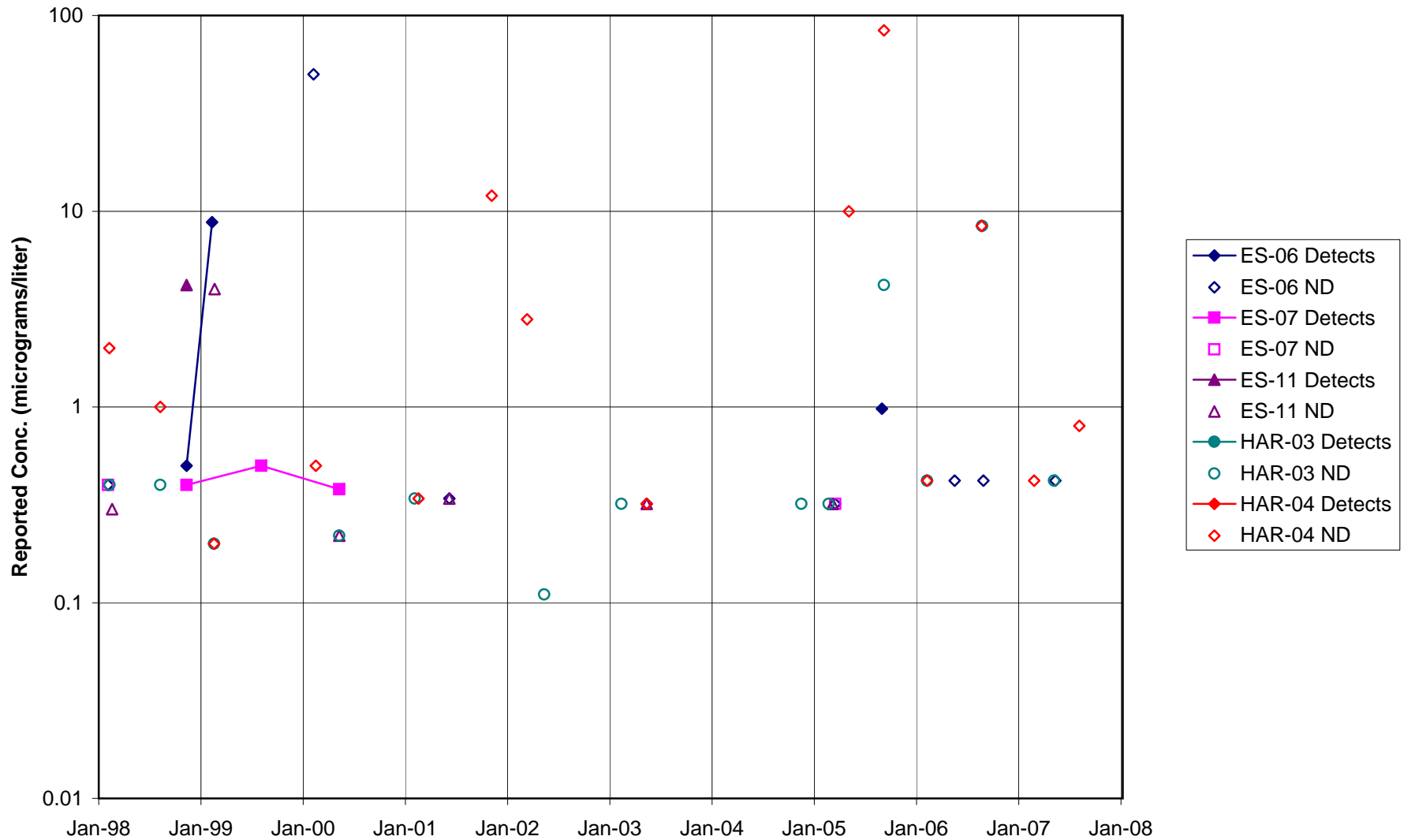


FIGURE F-38. 1,1-DCE in MAIN GATE AREA WELLS - 2



**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**

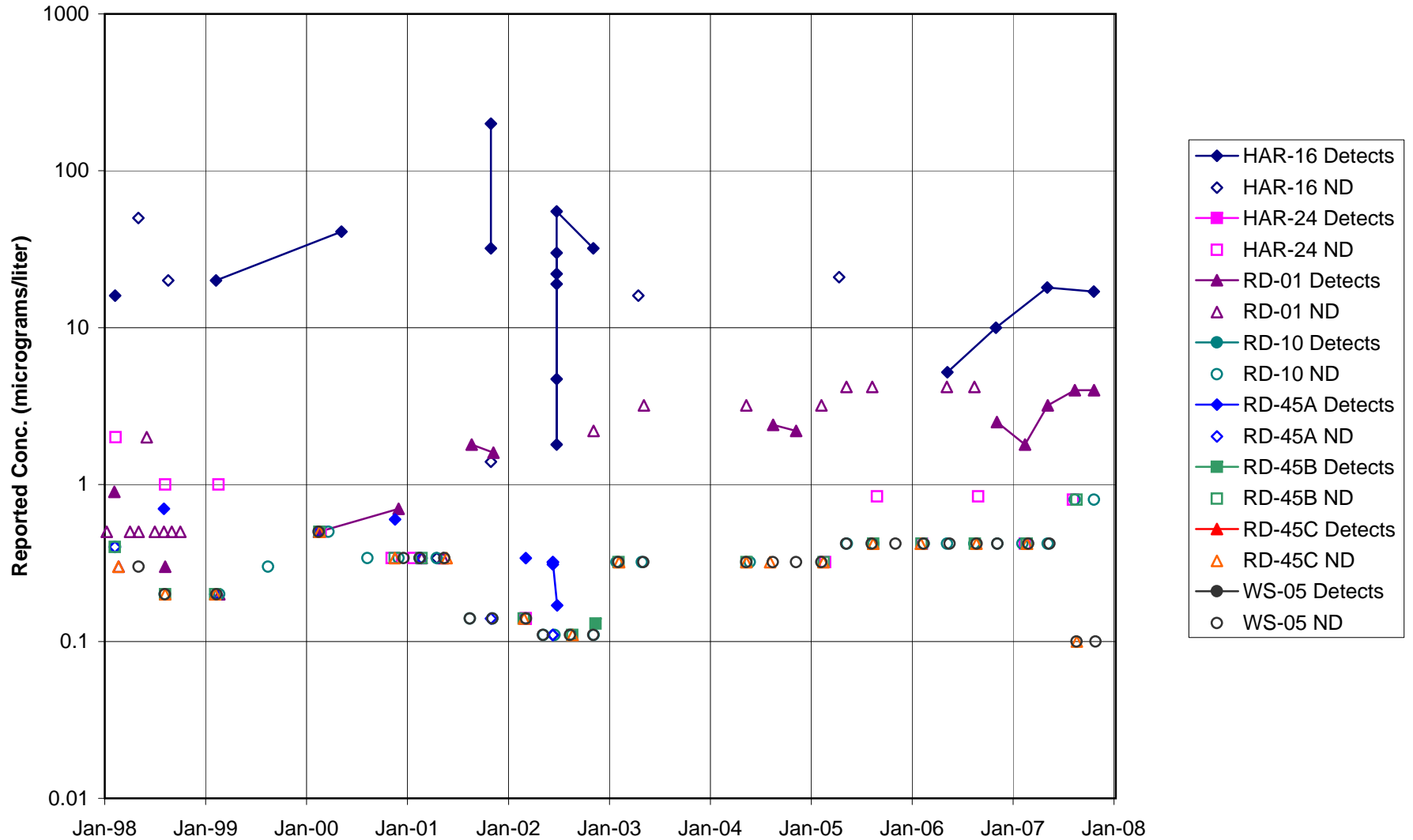




FIGURE F-41. 1,1-DCE in CTL-III / PERIMETER POND AREA WELLS

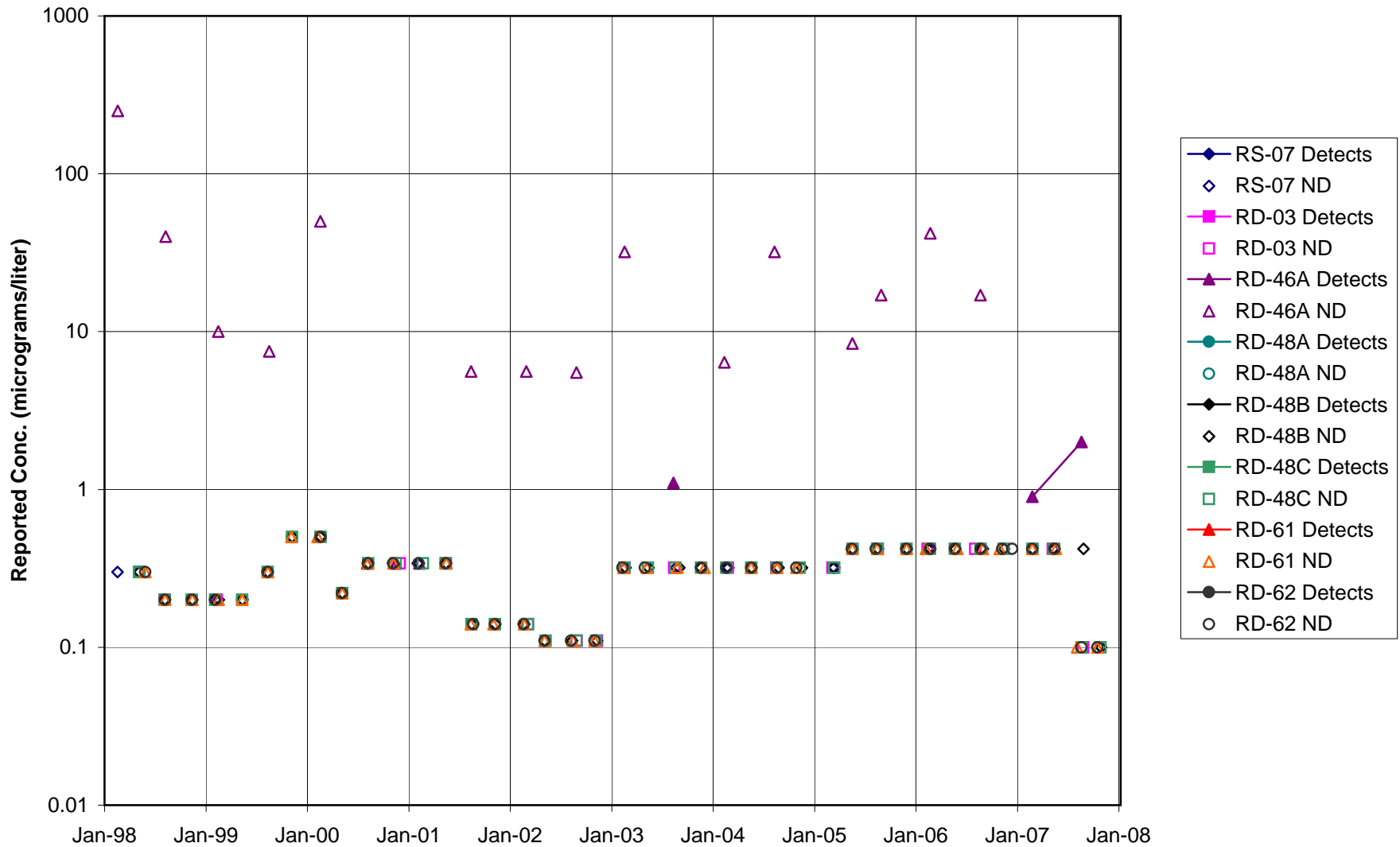


FIGURE F-42. 1,1-DCE in BOWL AREA WELLS

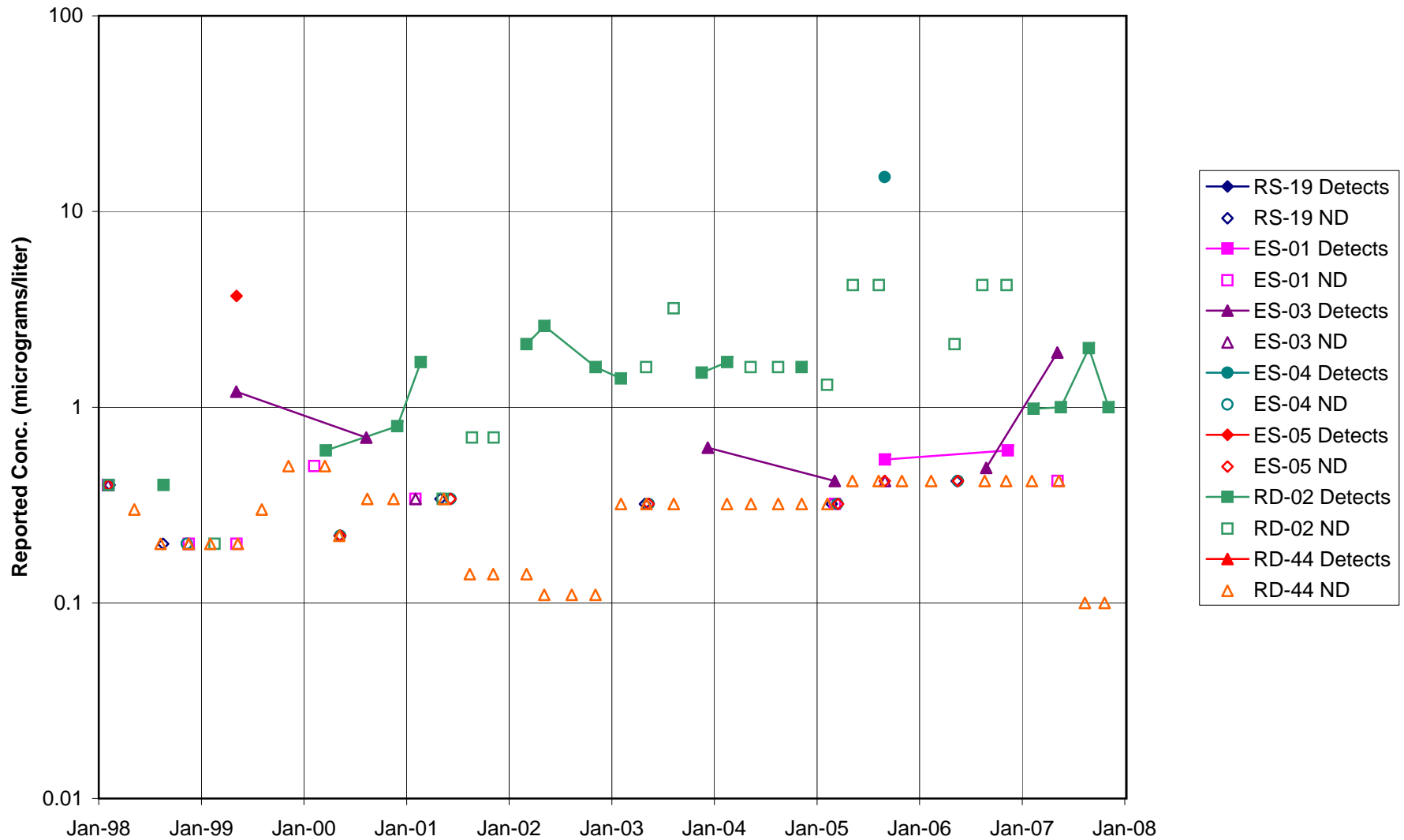


FIGURE F-43. 1,1-DCE in ECL AREA WELLS

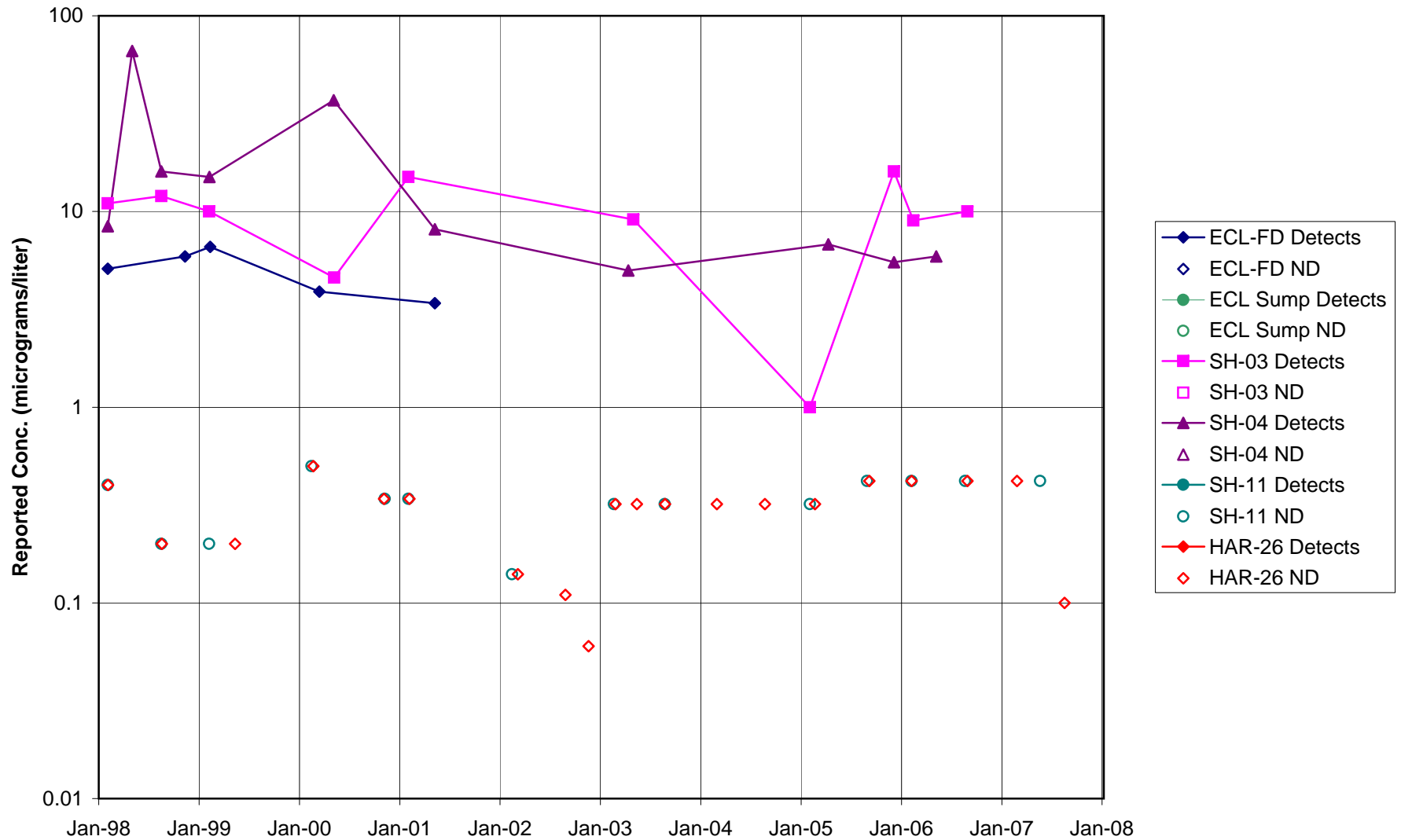


FIGURE F-44. 1,1-DCE in FORMER LOX PLANT AREA WELLS

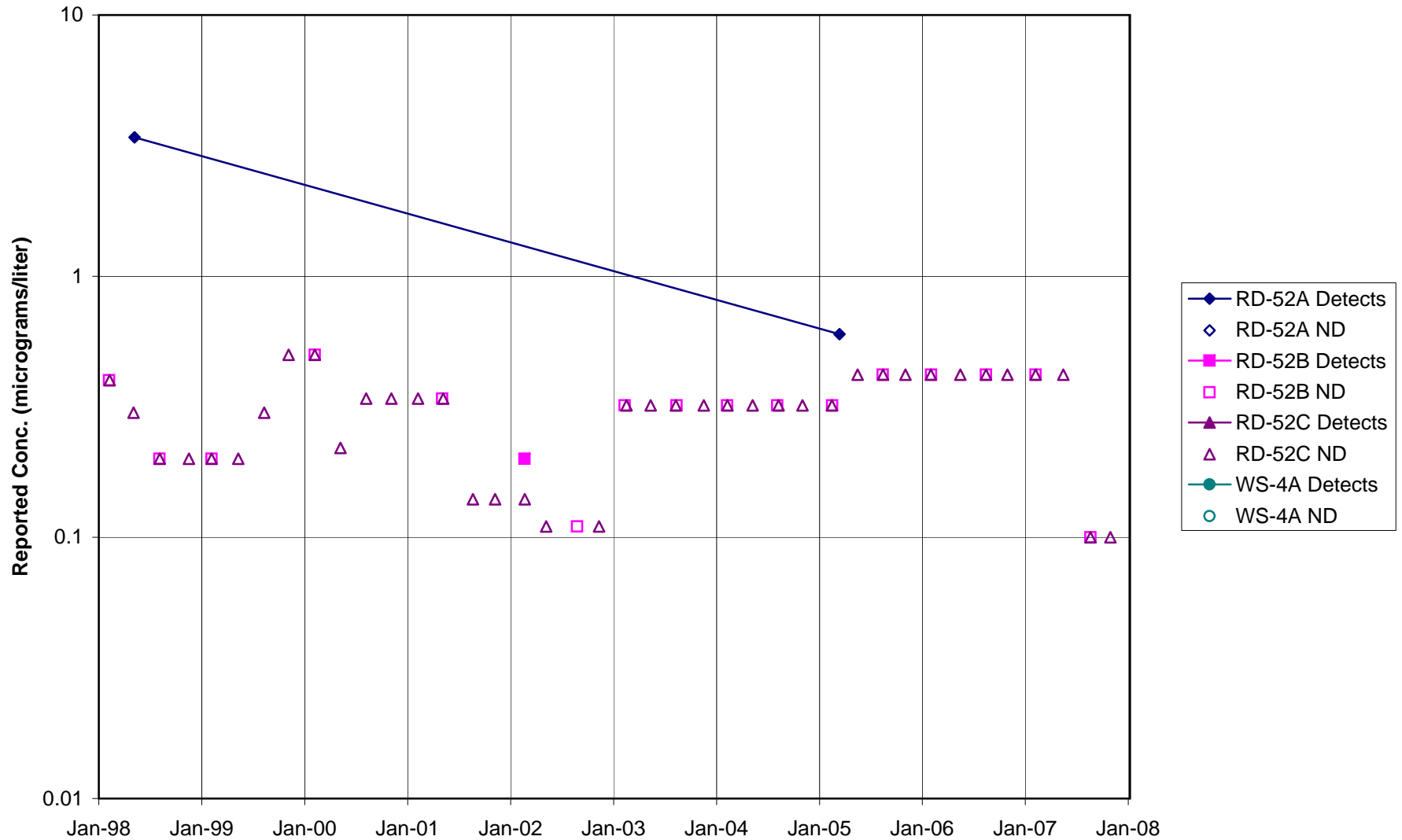


FIGURE F-45. 1,1-DCE in RD-09 AREA WELLS

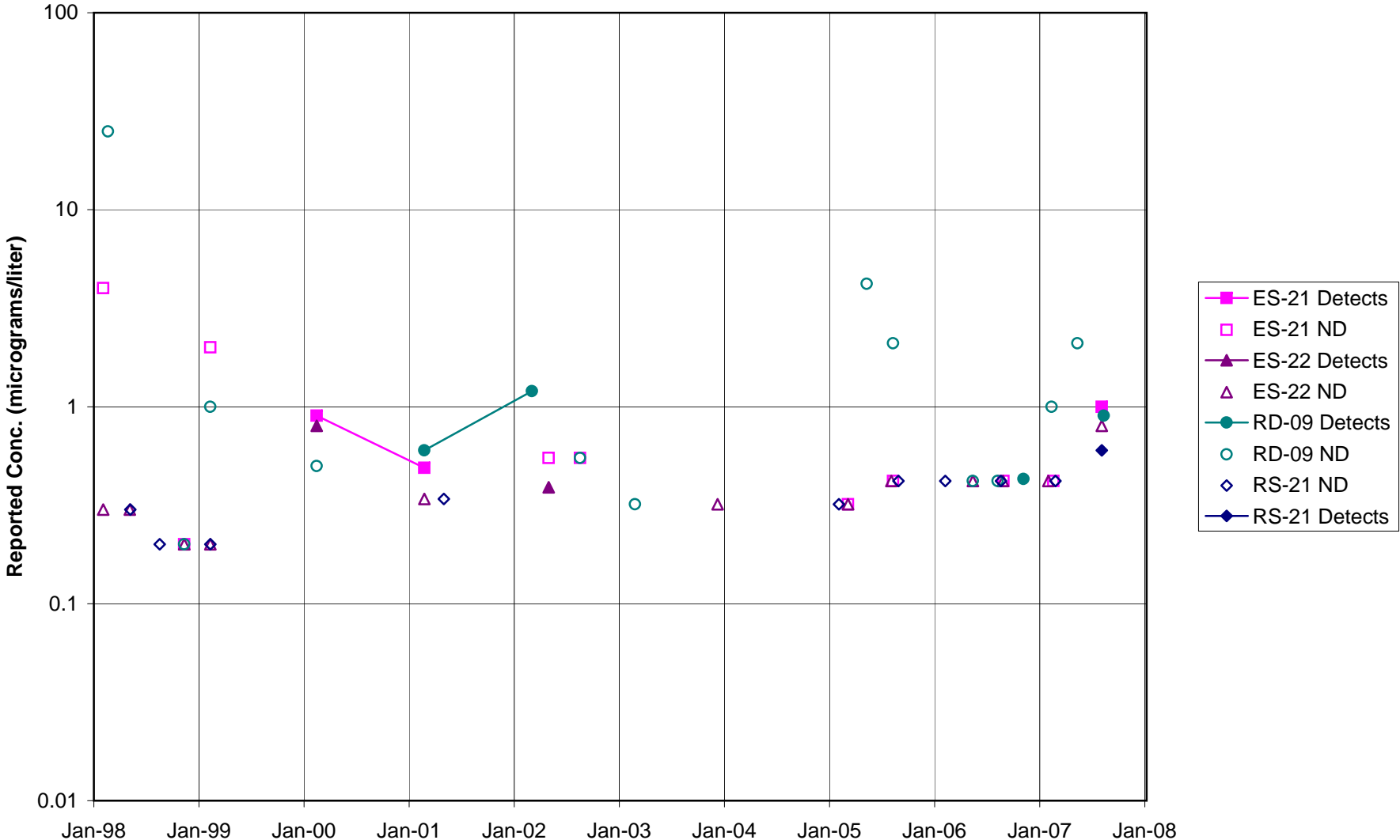


FIGURE F-46. 1,1-DCE in HELIPORT, B/204 AREA WELLS

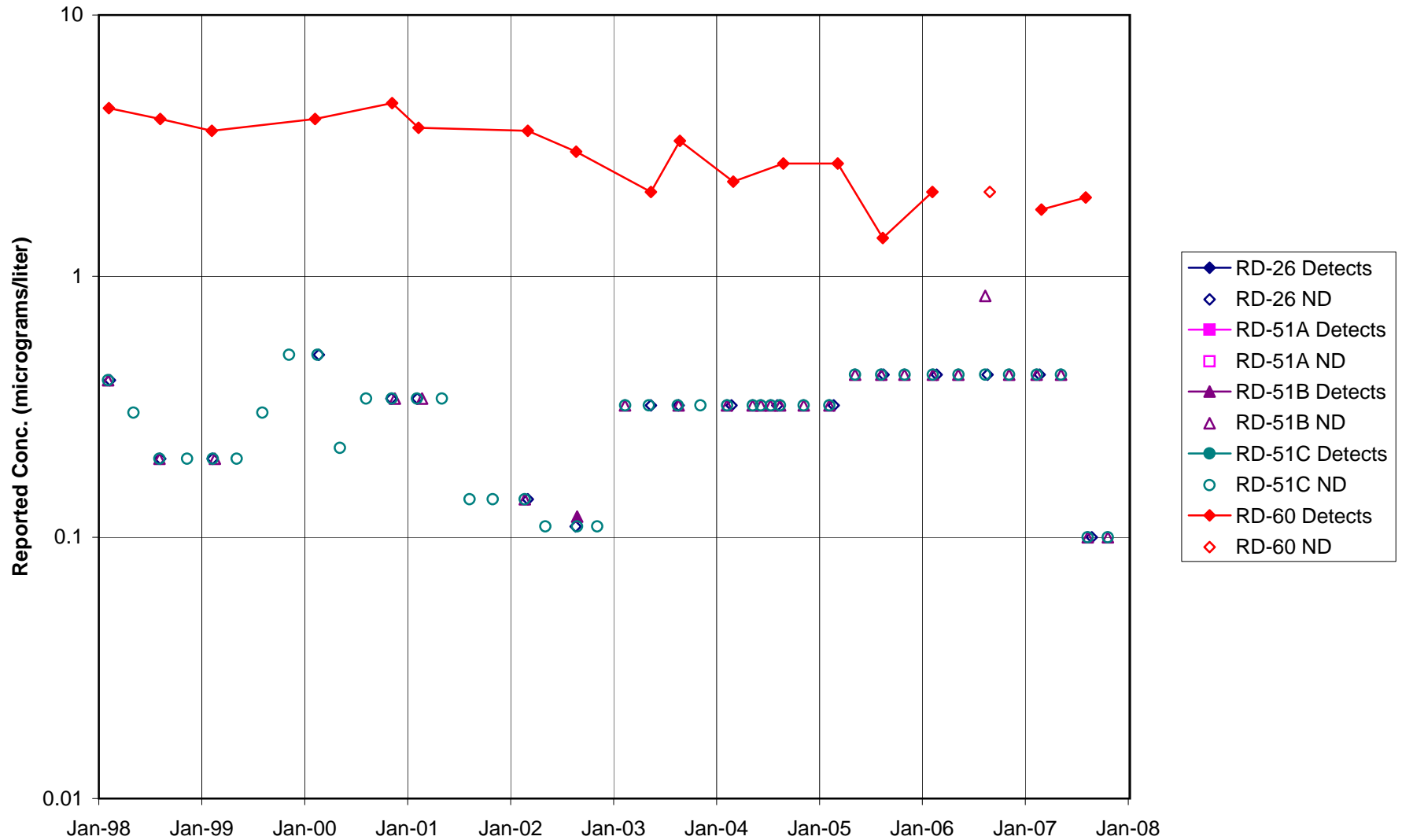




FIGURE F-48. 1,1-DCE in SPA AREA WELLS

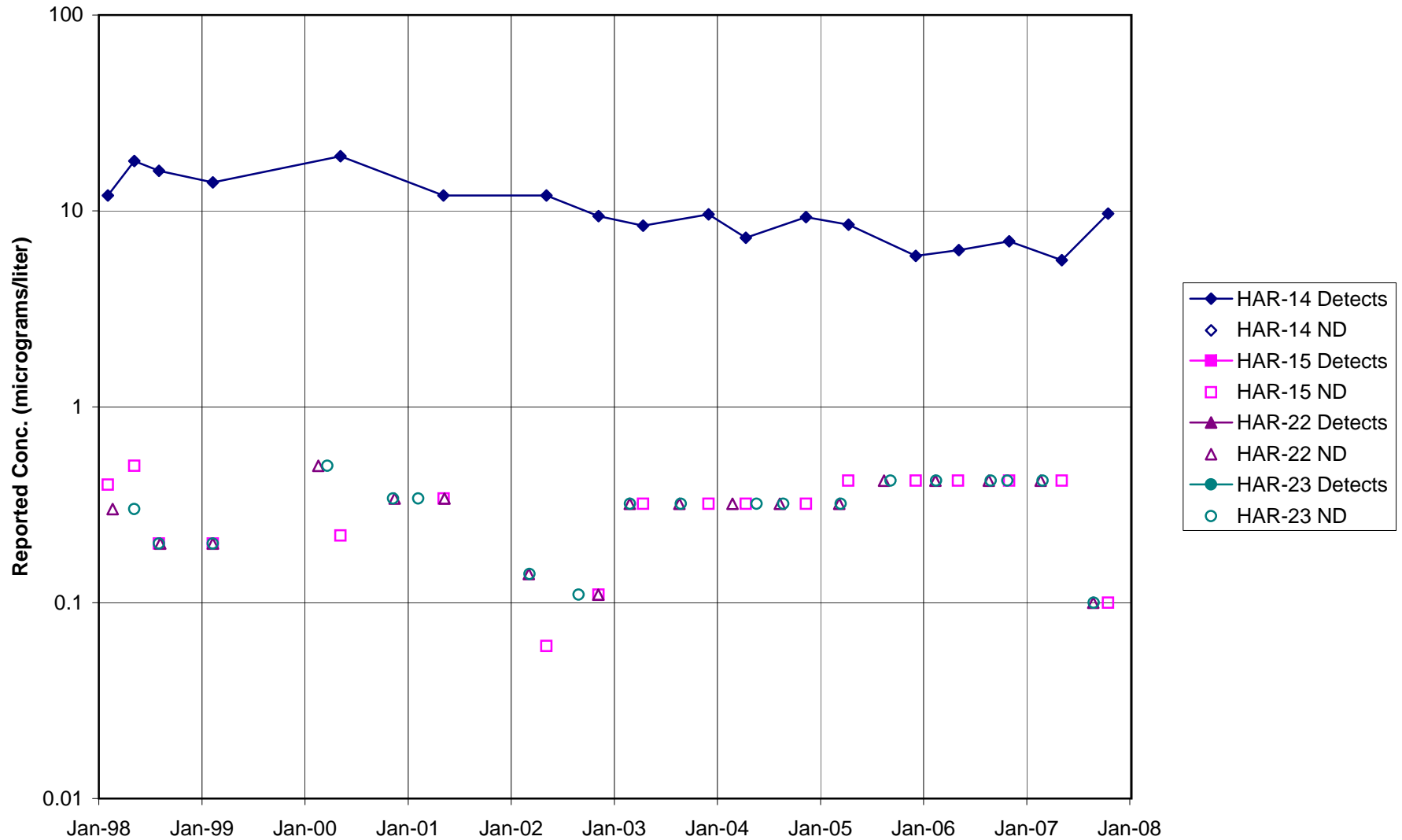




FIGURE F-49. 1,1-DCE in COCA / PLF AREA WELLS

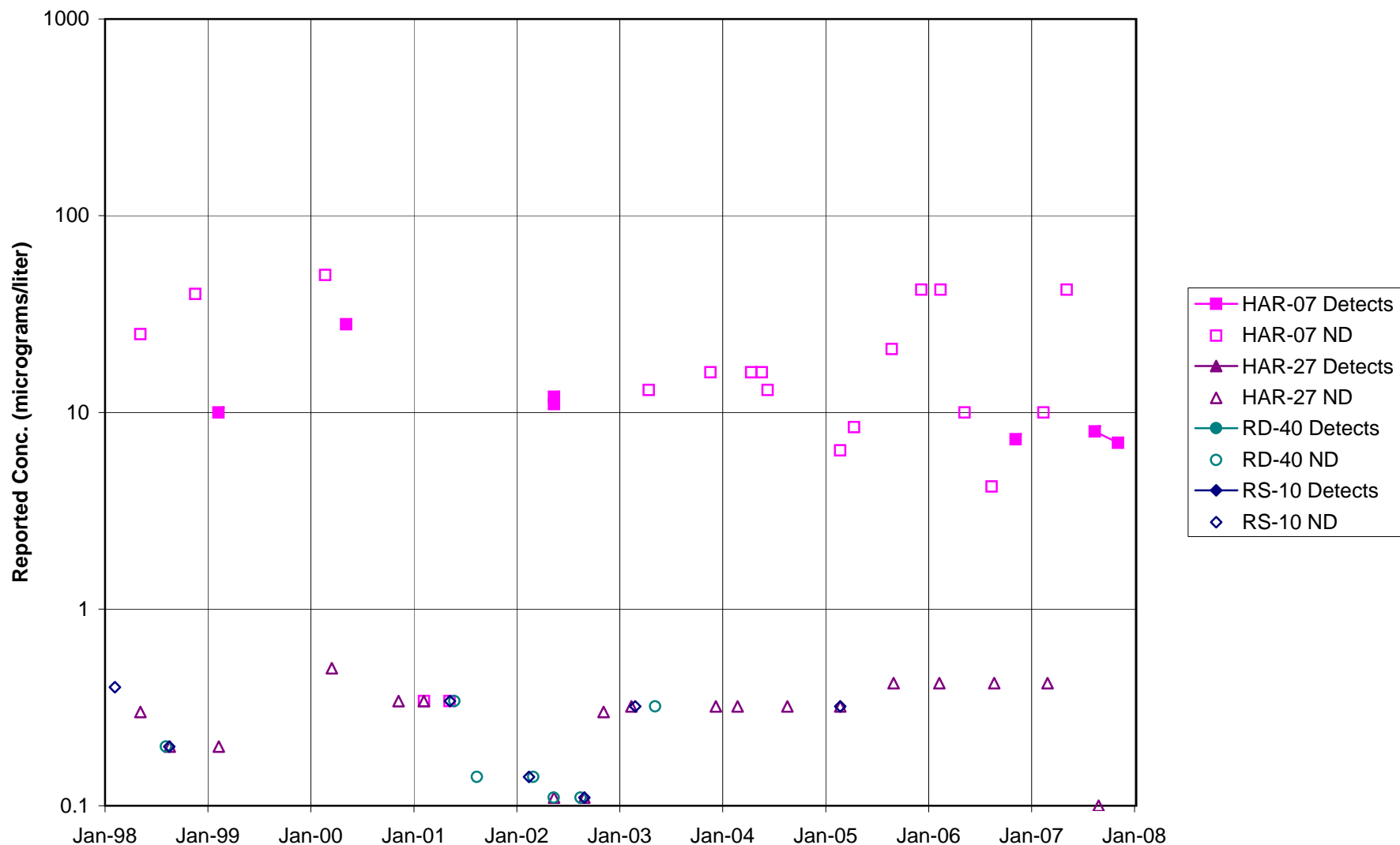


FIGURE F-50. 1,1-DCE in DELTA / BUFFER ZONE AREA WELLS

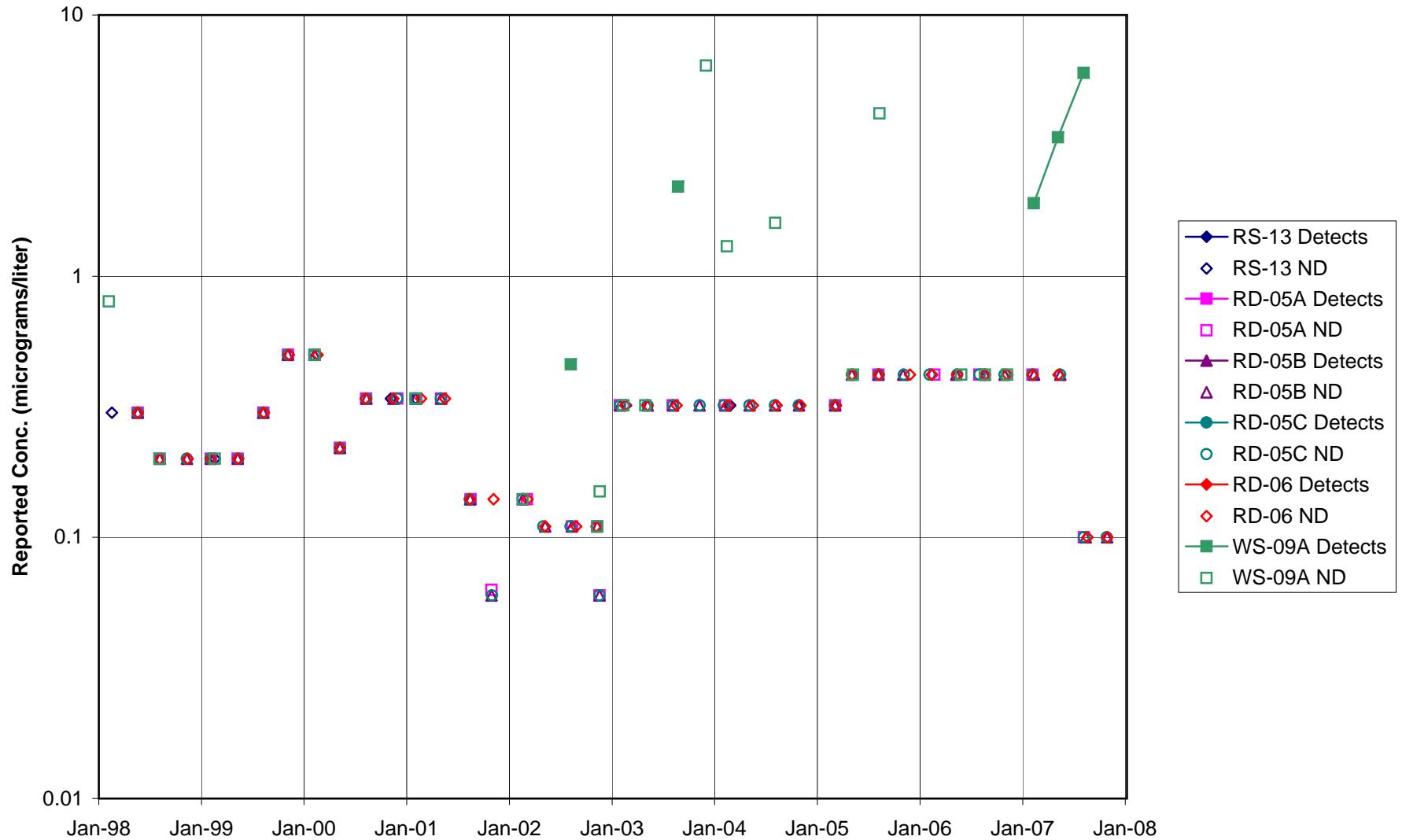


FIGURE F-51. 1,1-DCE in AREA IV WELLS

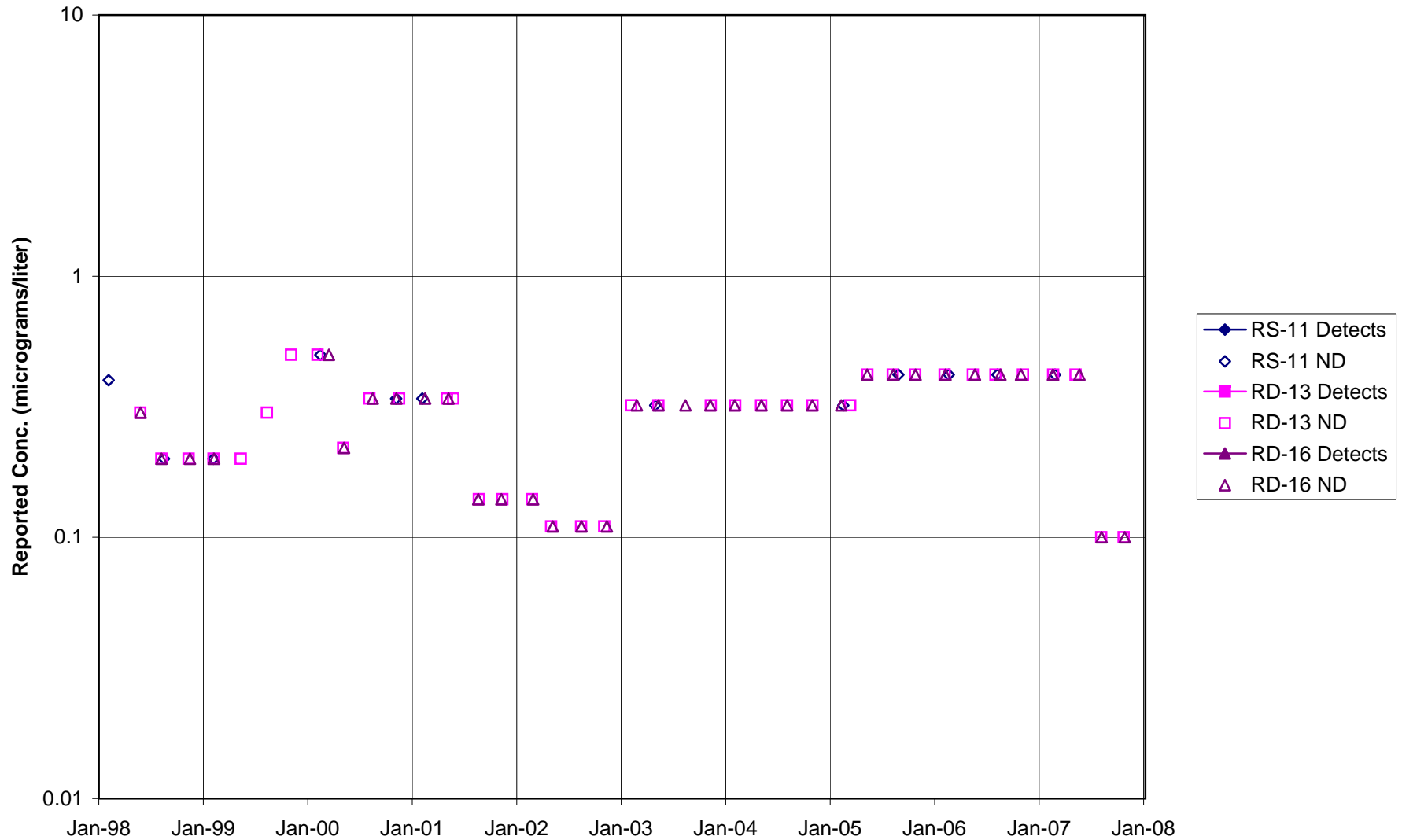


FIGURE F-52. 1,1-DCA IN STL-IV AREA SHALLOW WELLS

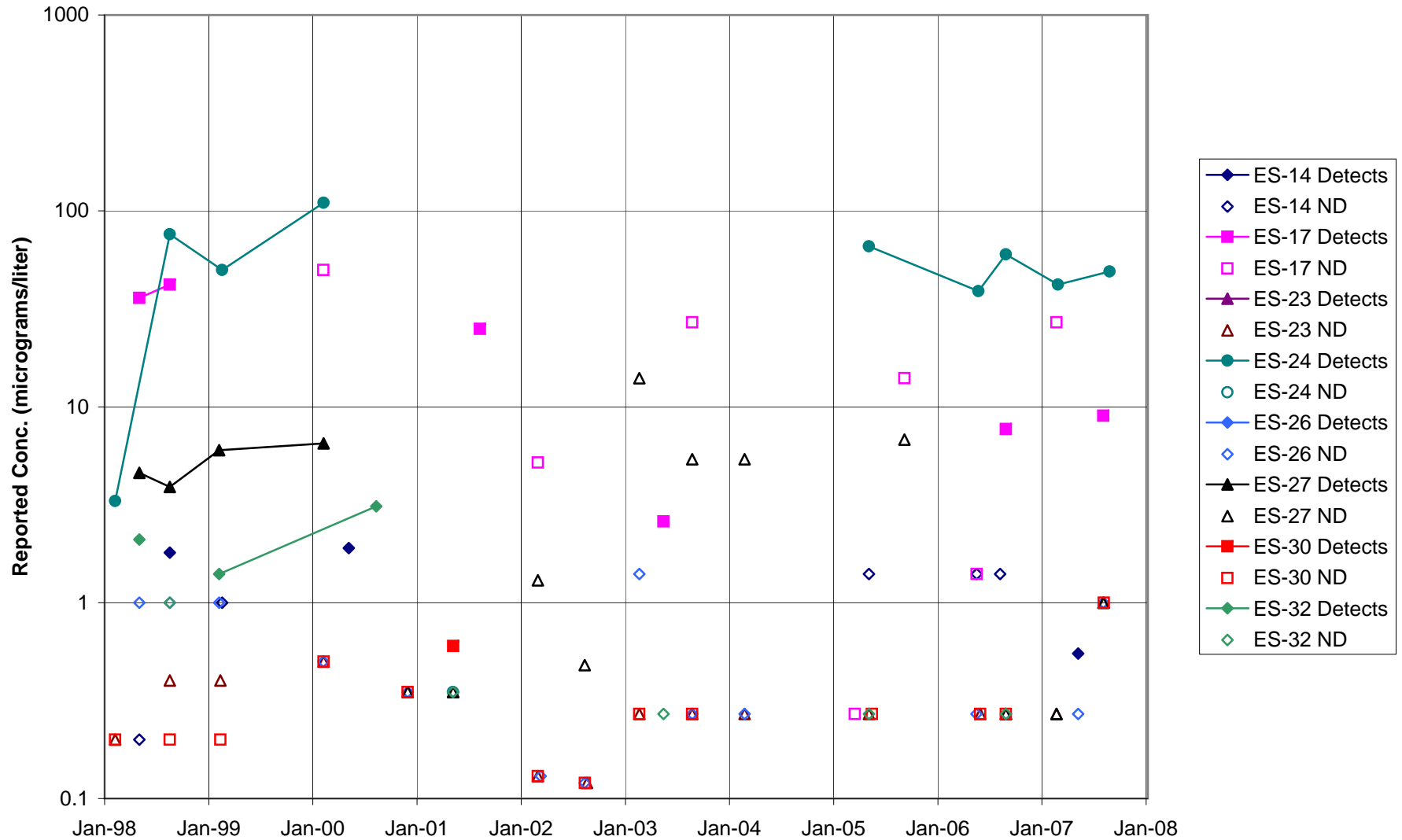


FIGURE F-53. 1,1-DCA IN STL-IV AREA CHATSWORTH FORMATION WELLS

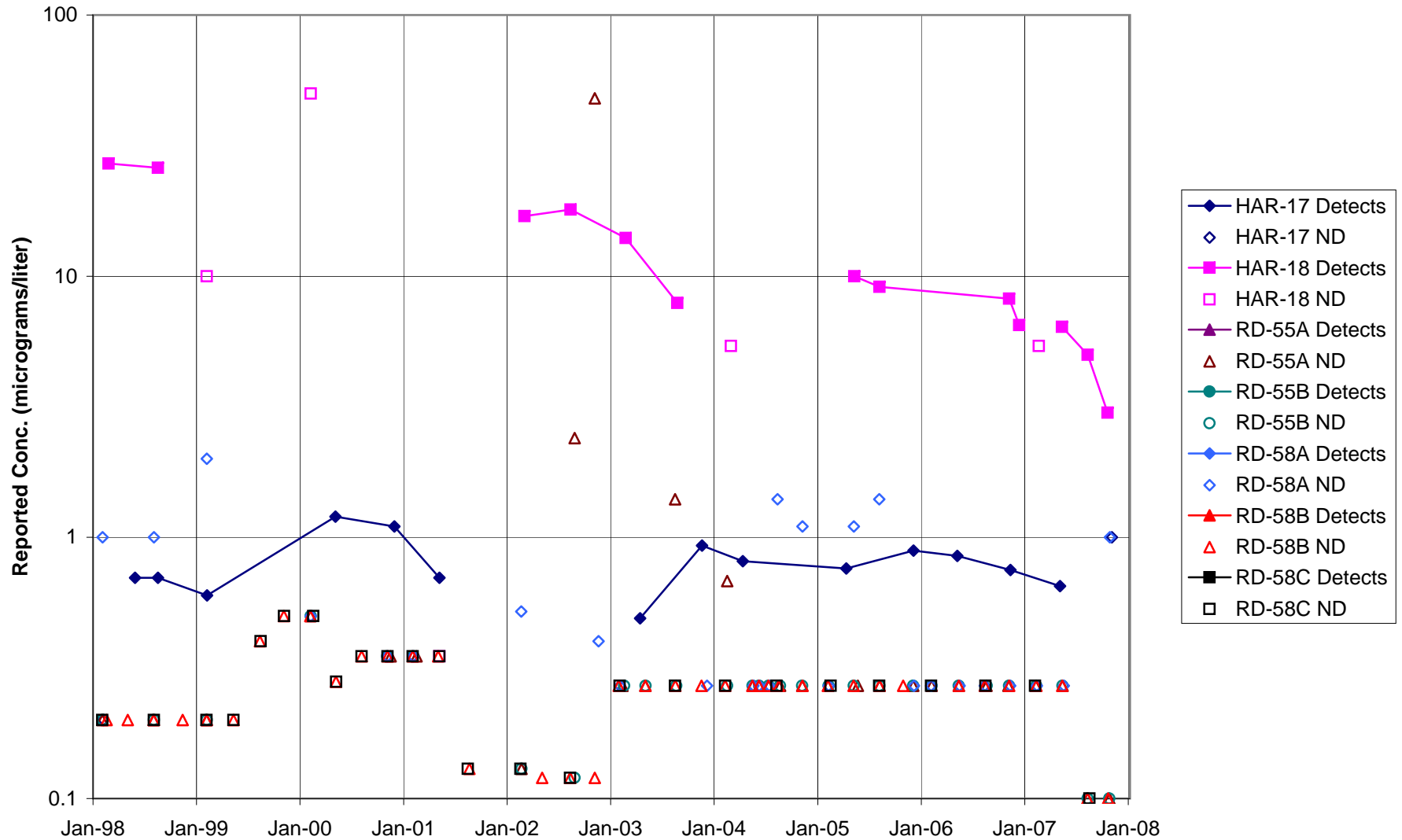


FIGURE F-54. 1,1-DCA IN MAIN GATE AREA WELLS - 1

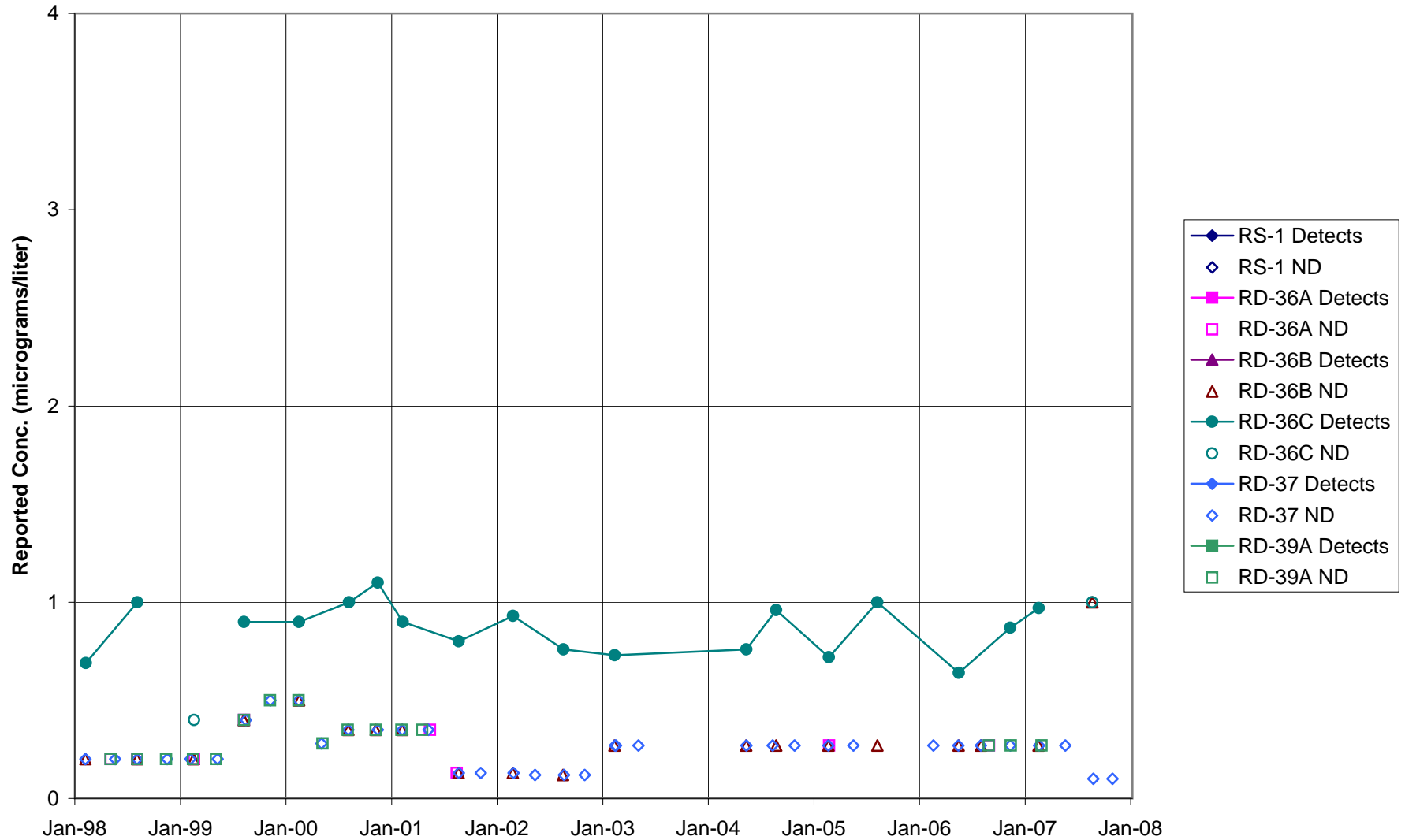


FIGURE F-55. 1,1-DCA IN MAIN GATE AREA WELLS - 2

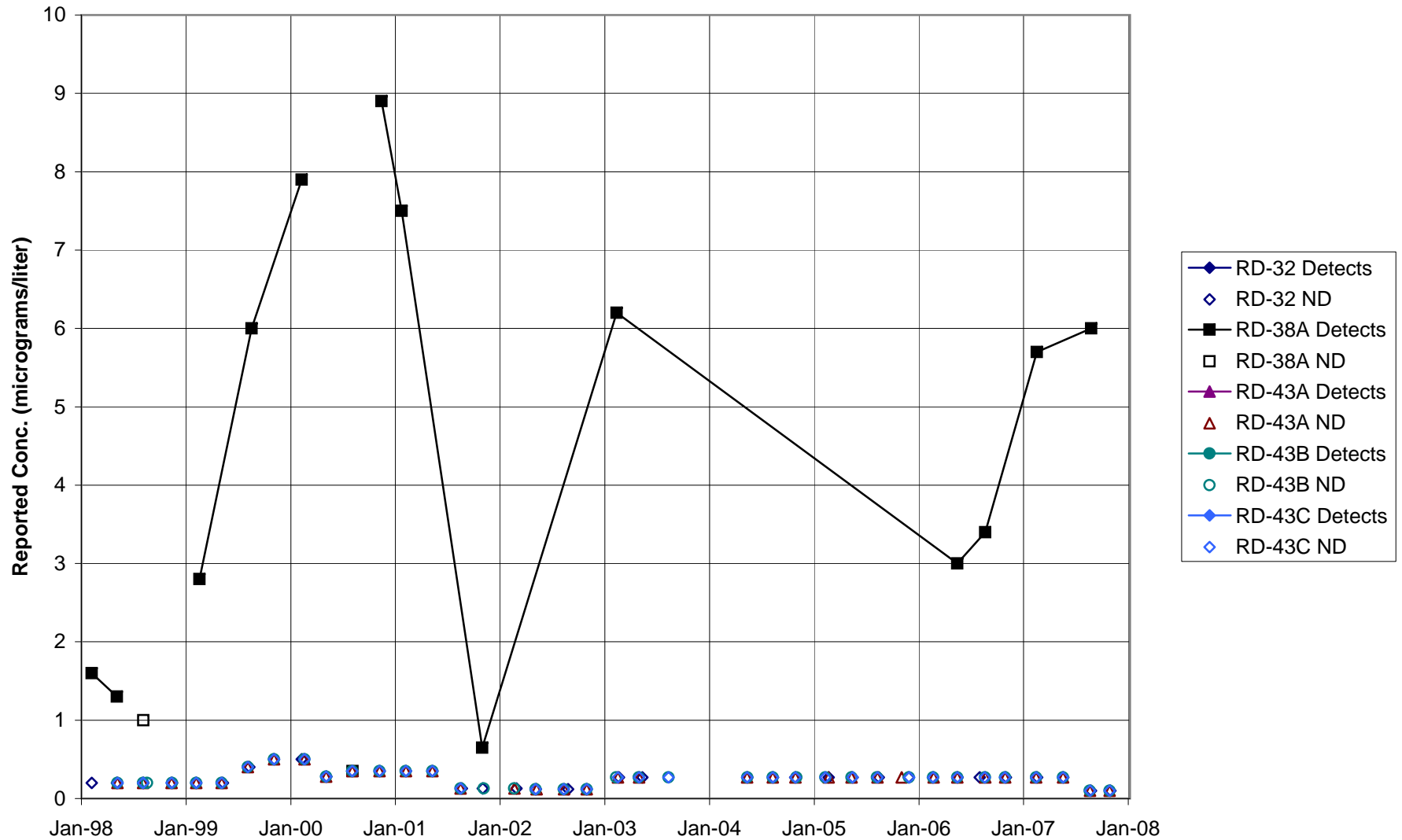


FIGURE F-56. 1,1-DCA IN APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1

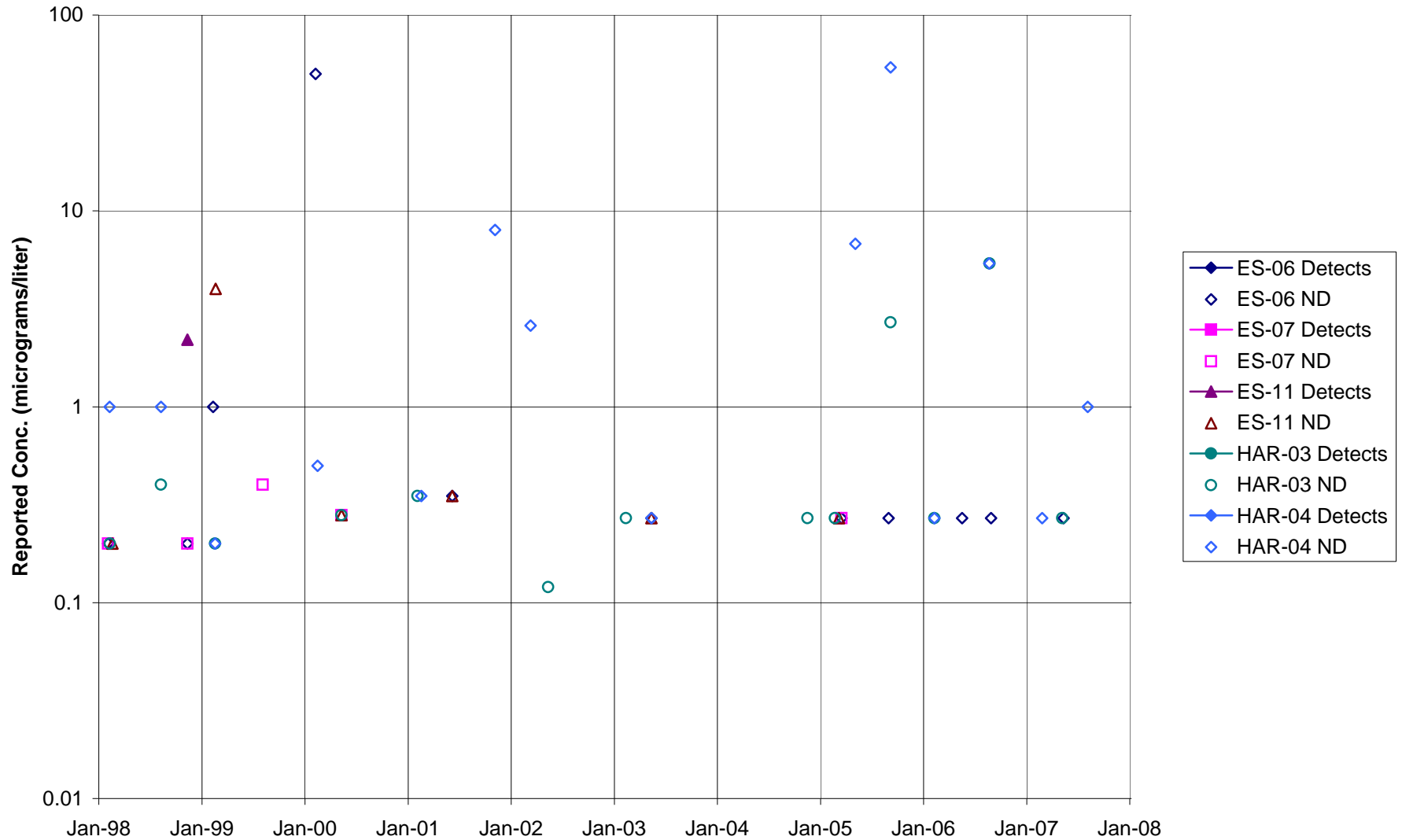




FIGURE F-57. 1,1-DCA IN APTF, CANYON, & HAPPY VALLEY AREA WELLS - 2

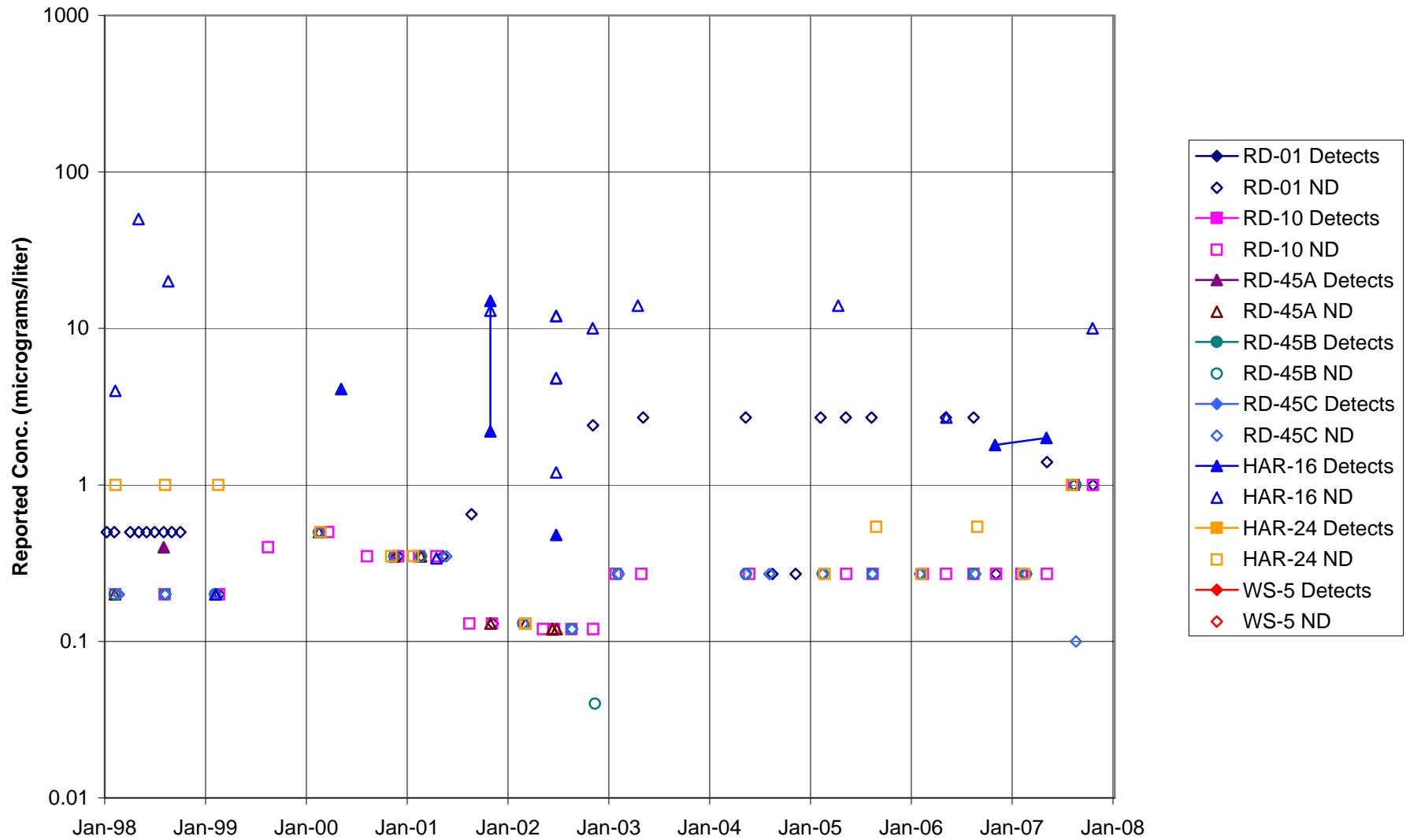


FIGURE F-58. 1,1-DCA IN CTL-III / PERIMETER POND AREA WELLS

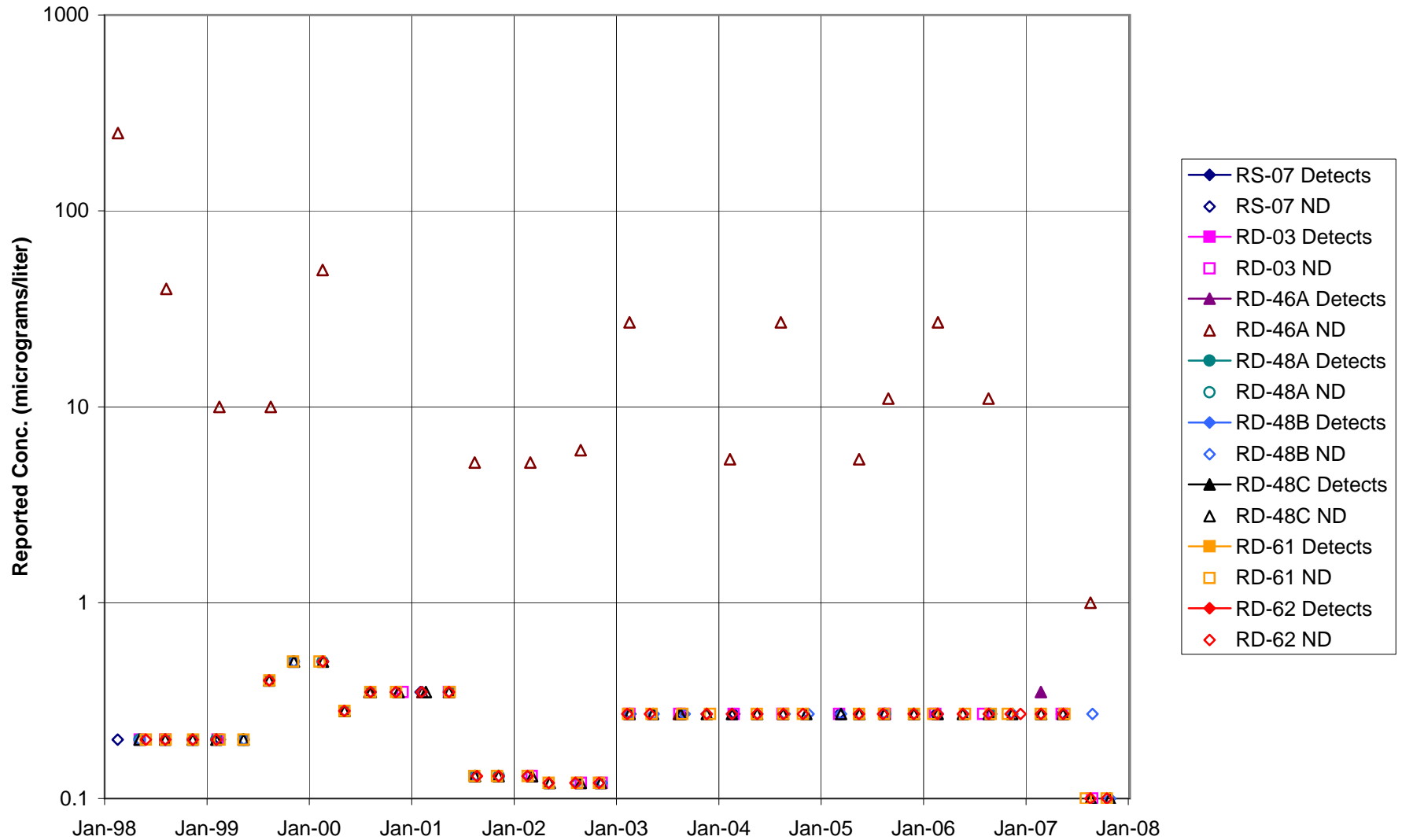


FIGURE F-59. 1,1-DCA IN BOWL AREA WELLS

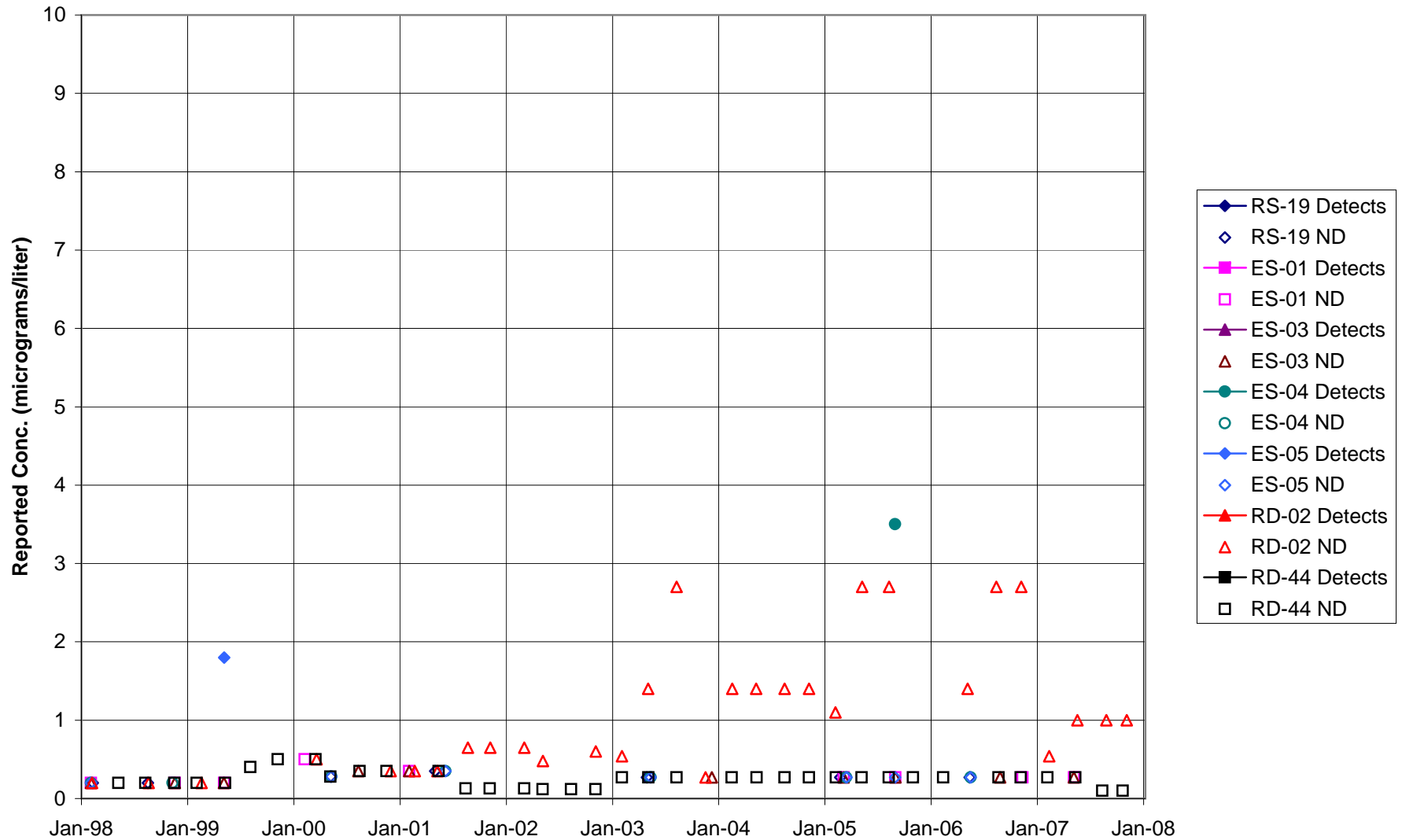


FIGURE F-60. 1,1-DCA IN ECL AREA WELLS

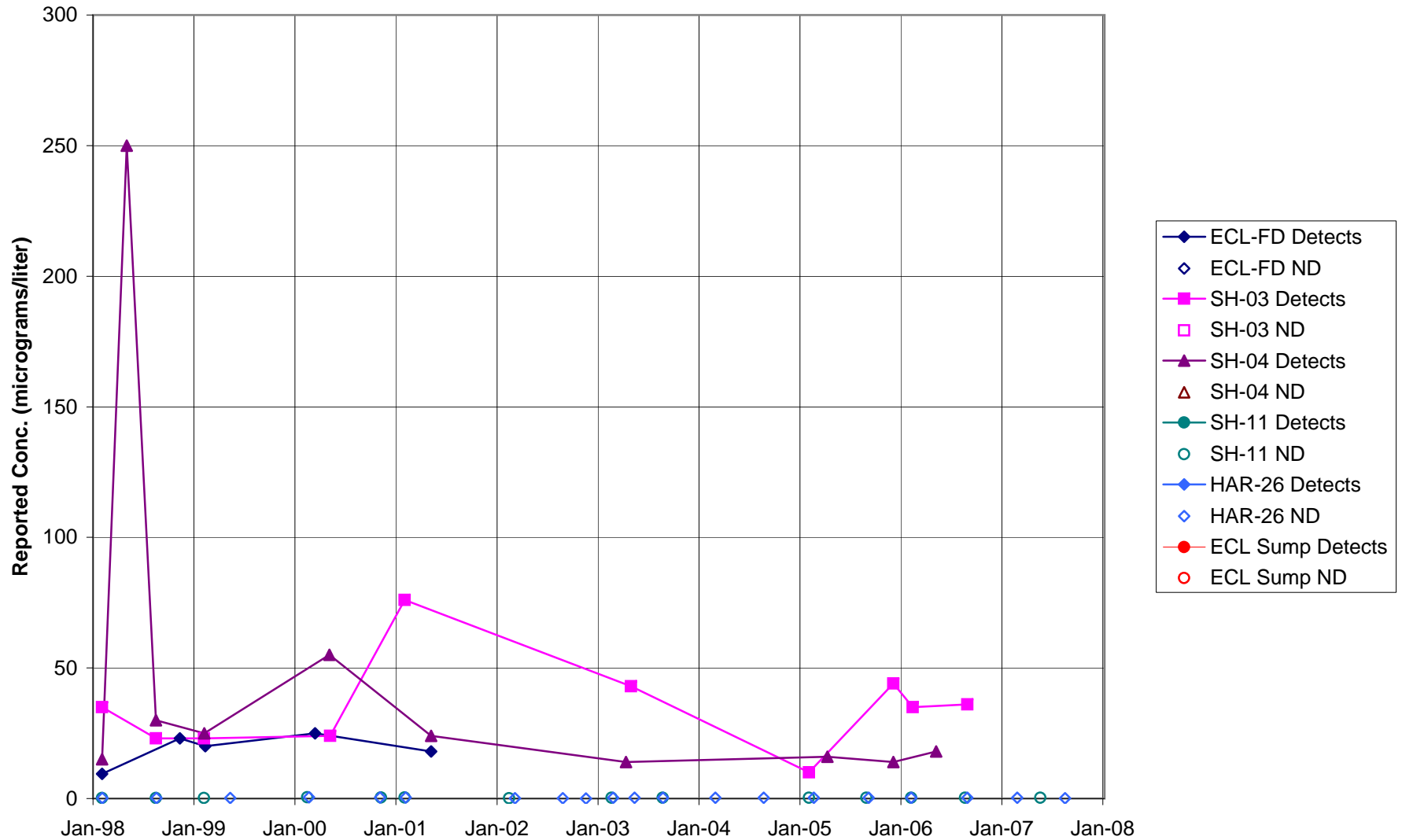
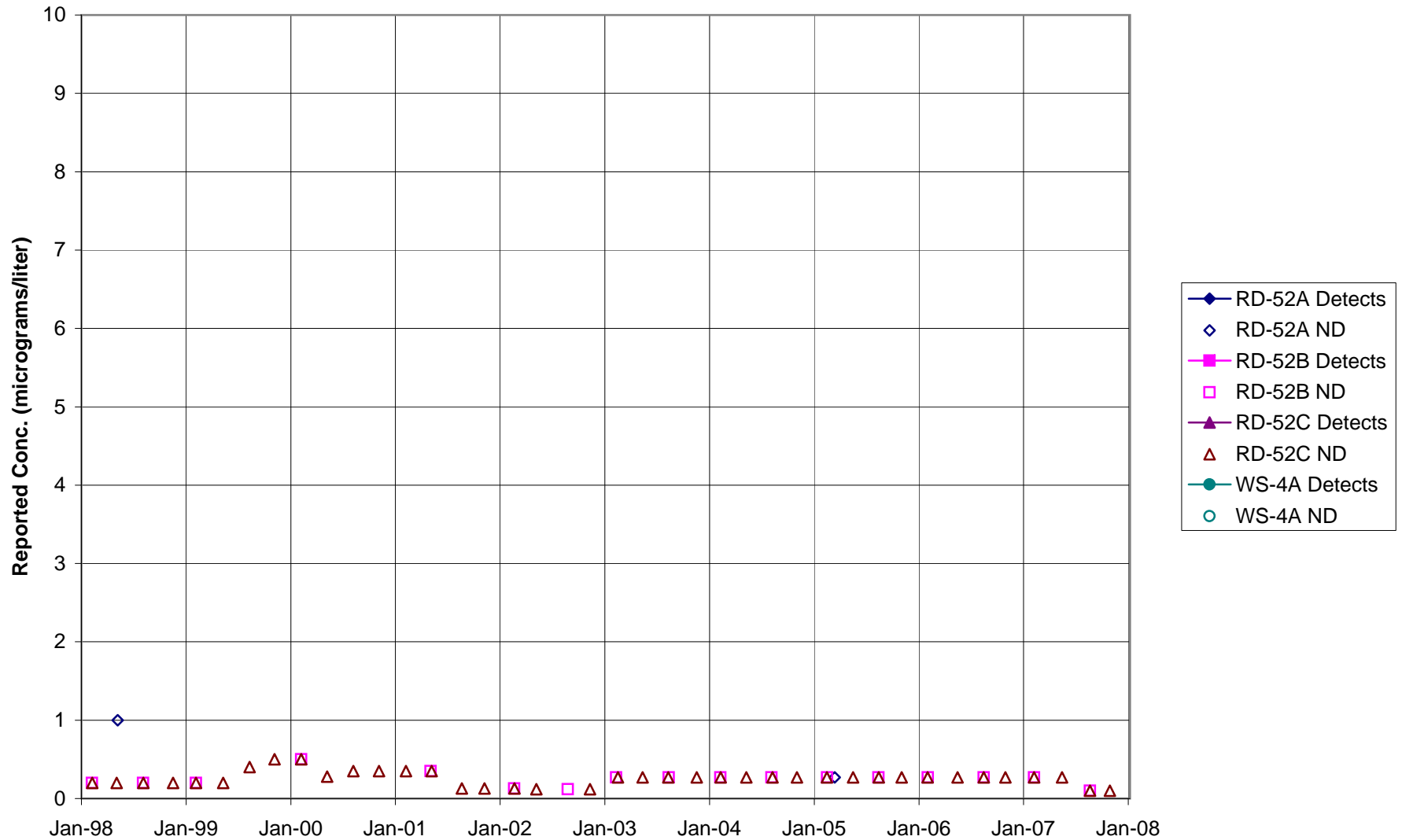
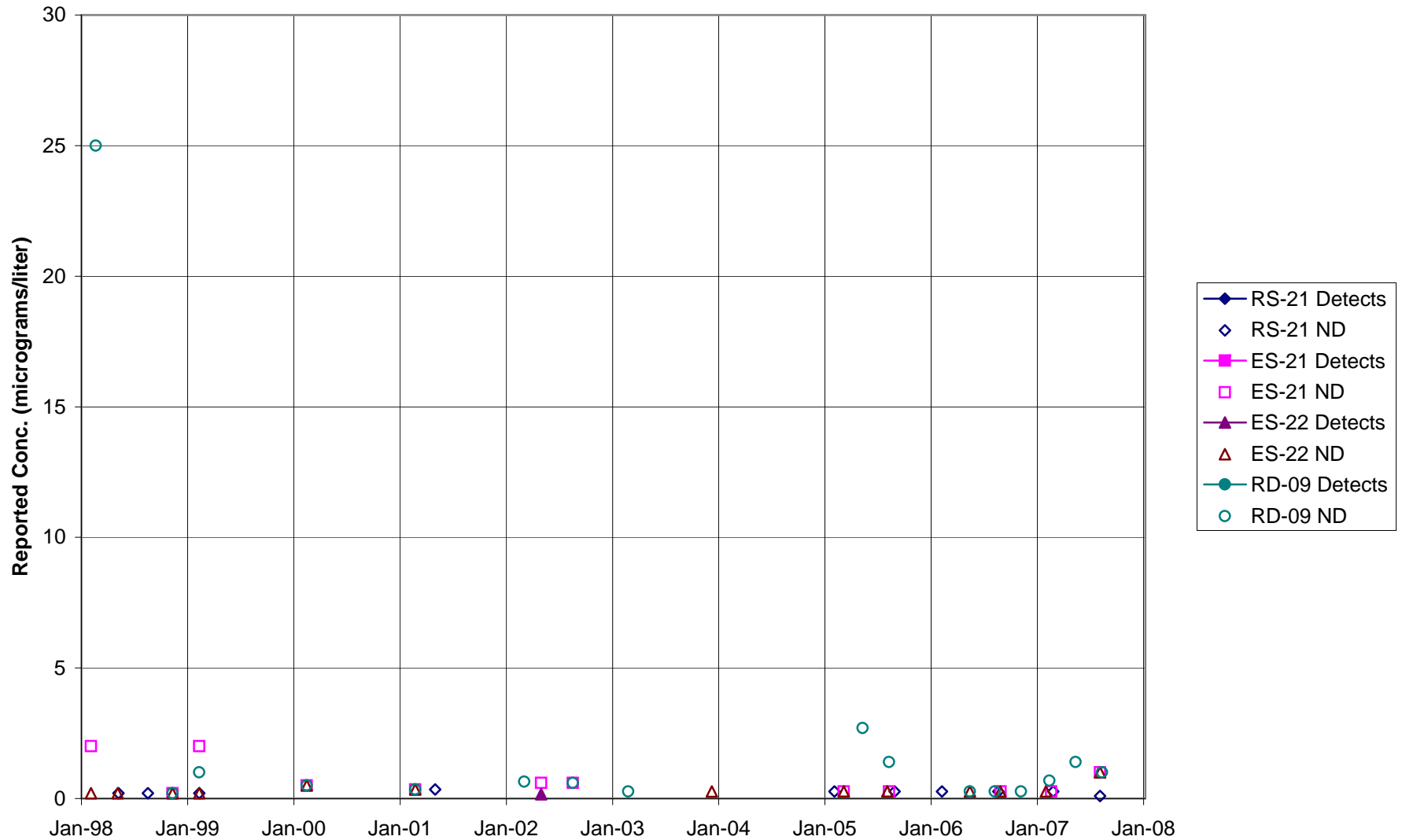


FIGURE F-61. 1,1-DCA IN FORMER LOX PLANT AREA WELLS



**FIGURE F-62. 1,1-DCA IN RD-09 AREA WELLS**



**FIGURE F-63. 1,1-DCA IN HELIPORT, B/204 AREA WELLS**

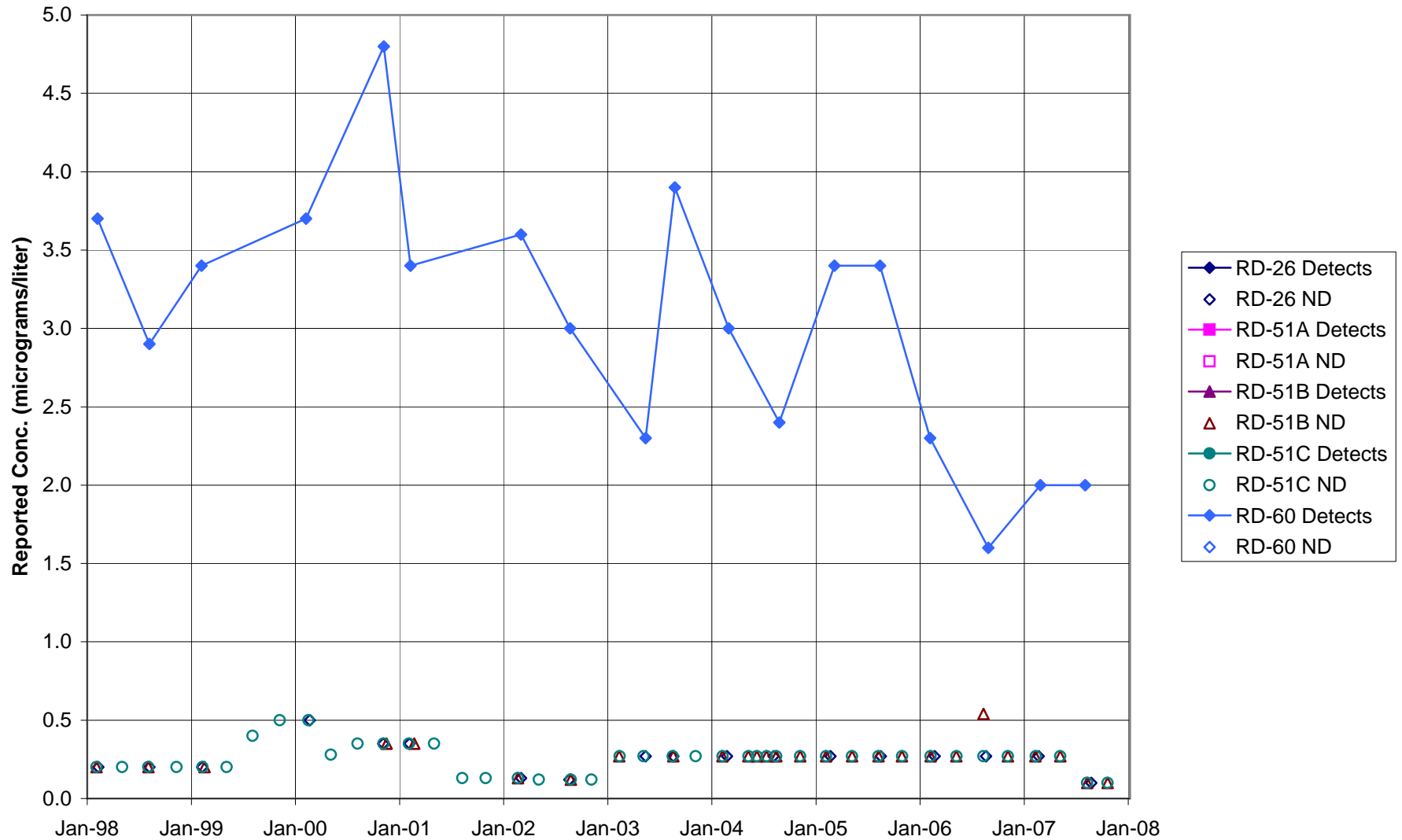


FIGURE F-64. 1,1-DCA IN ALFA / BRAVO AREA WELLS

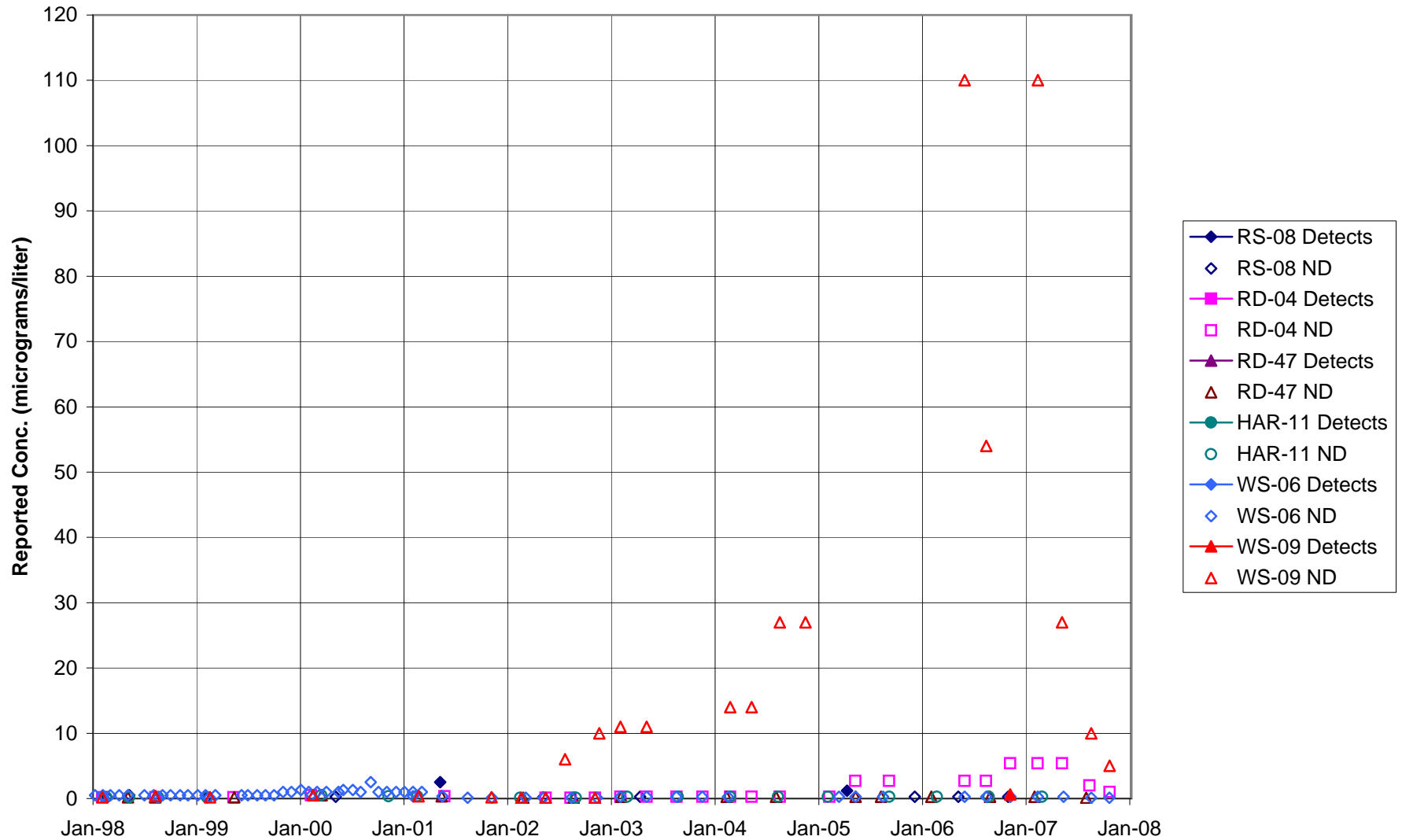




FIGURE F-65. 1,1-DCA IN SPA AREA WELLS

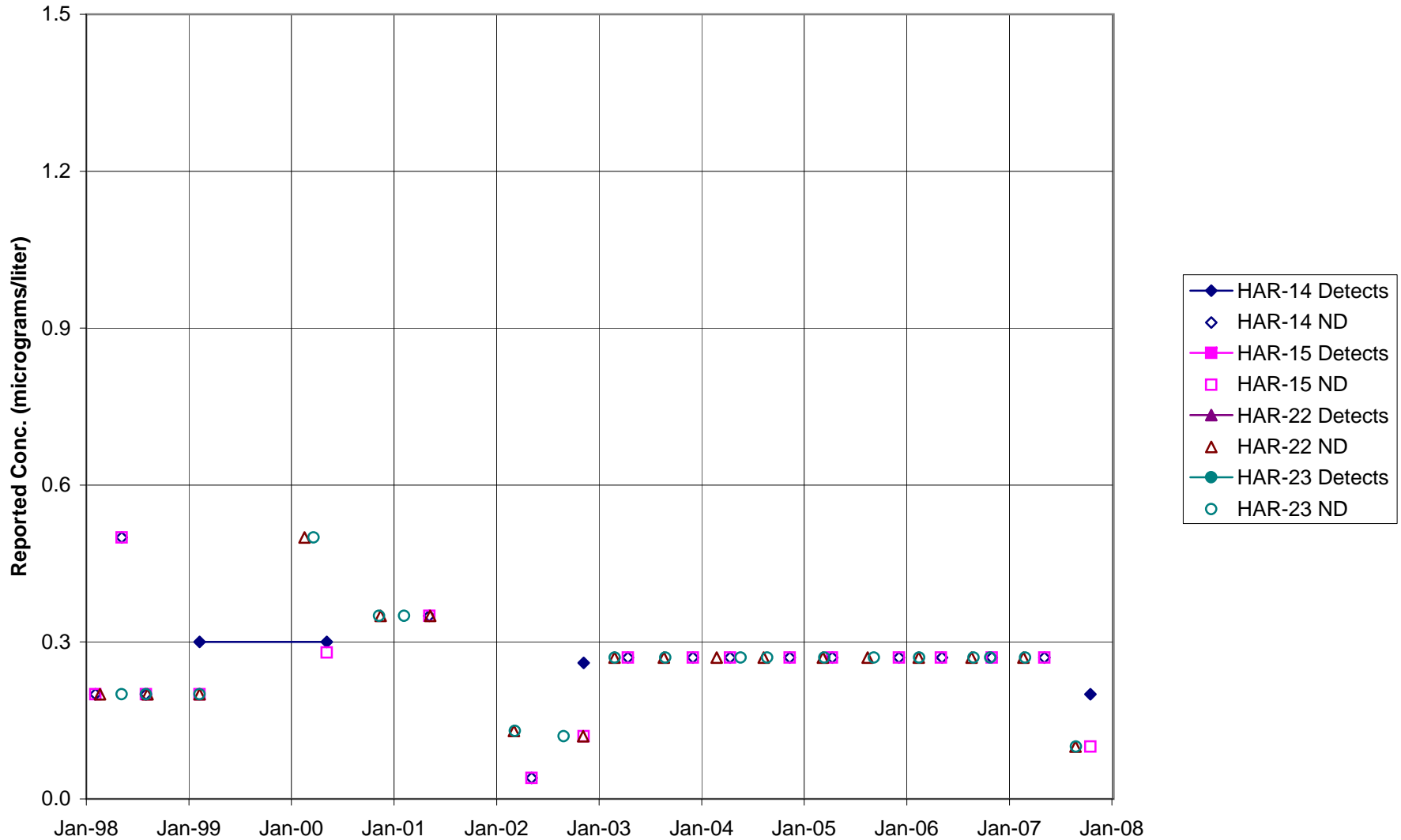
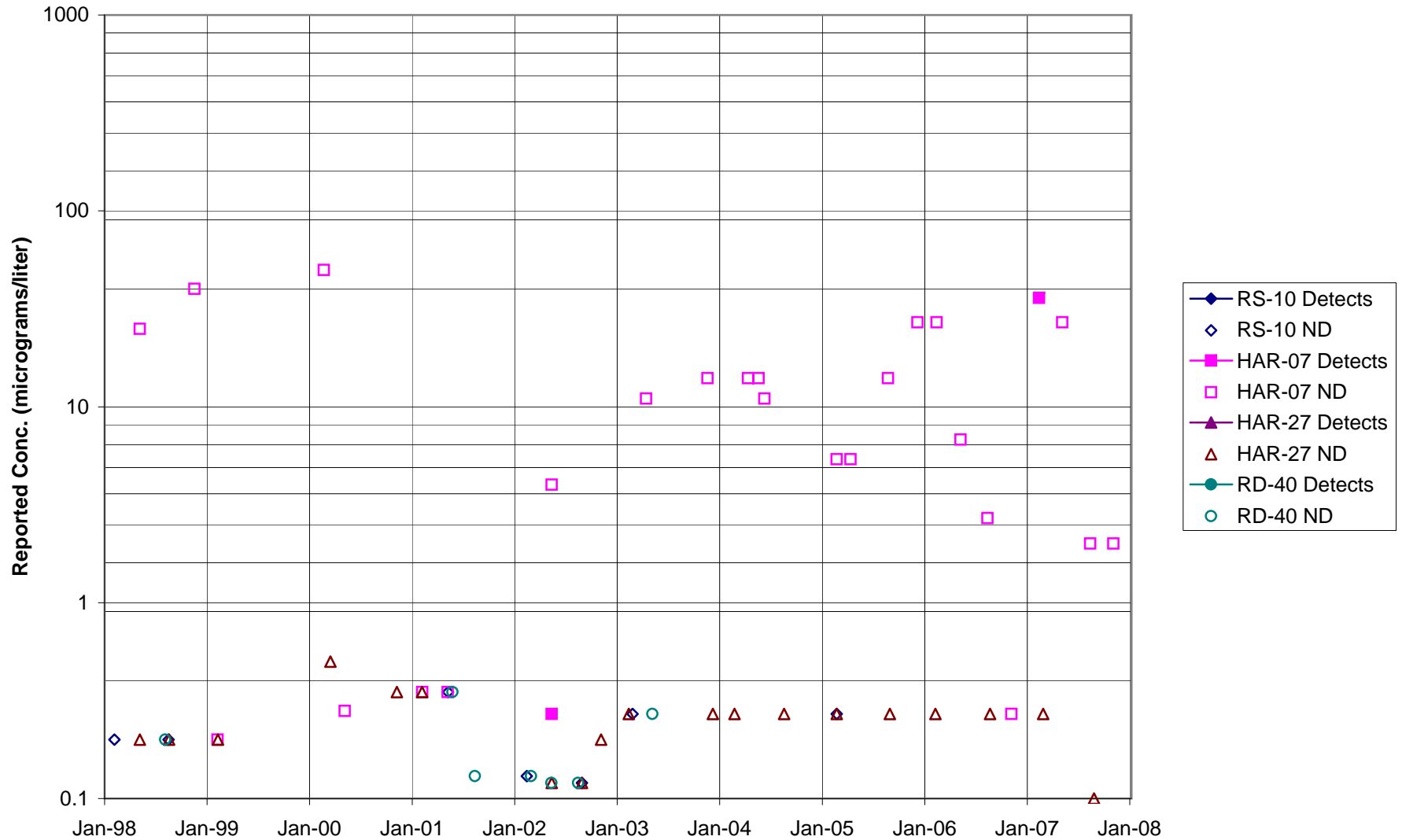


FIGURE F-66. 1,1-DCA IN COCA / PLF AREA WELLS



**FIGURE F-67. 1,1-DCA IN DELTA / BUFFER ZONE AREA WELLS**

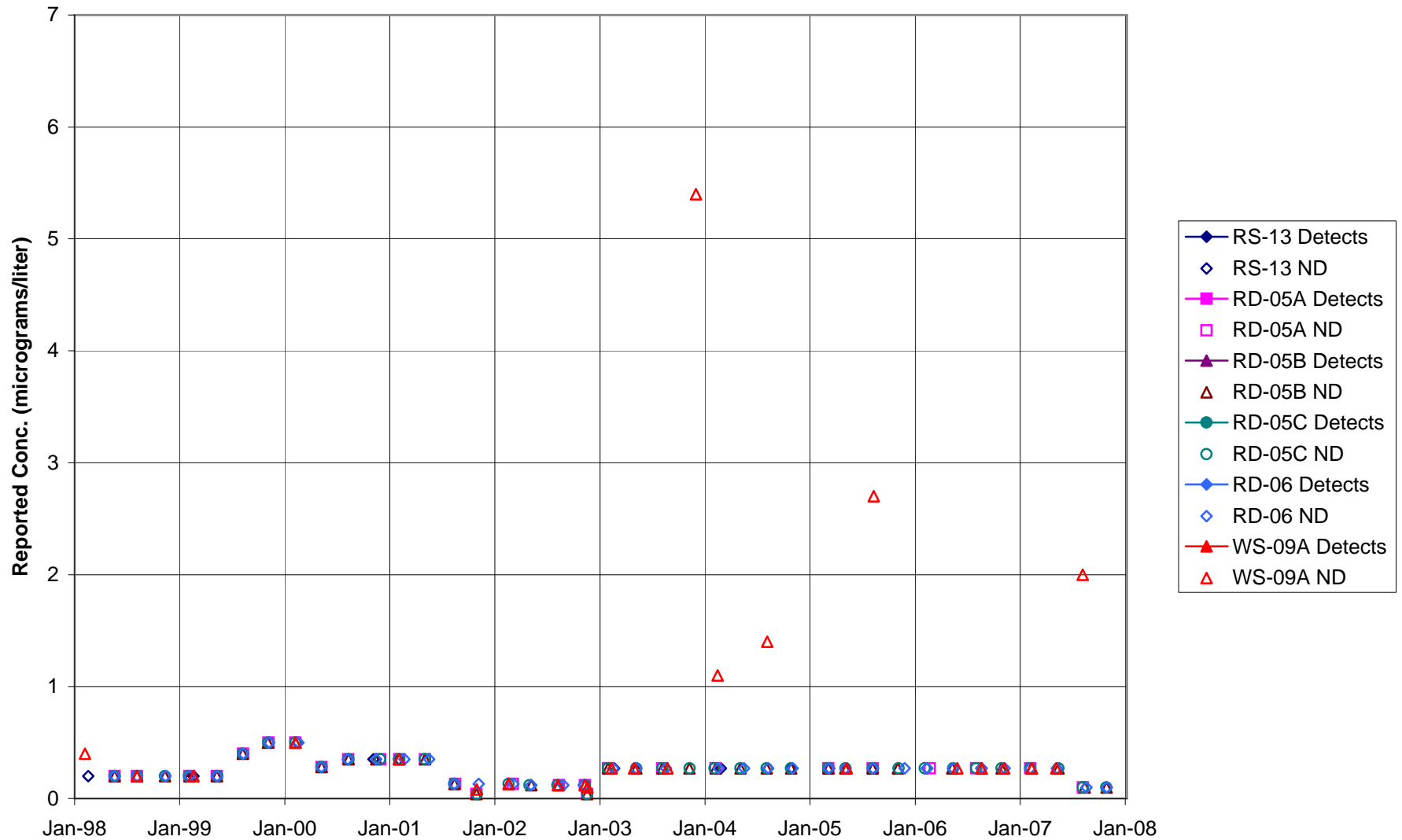
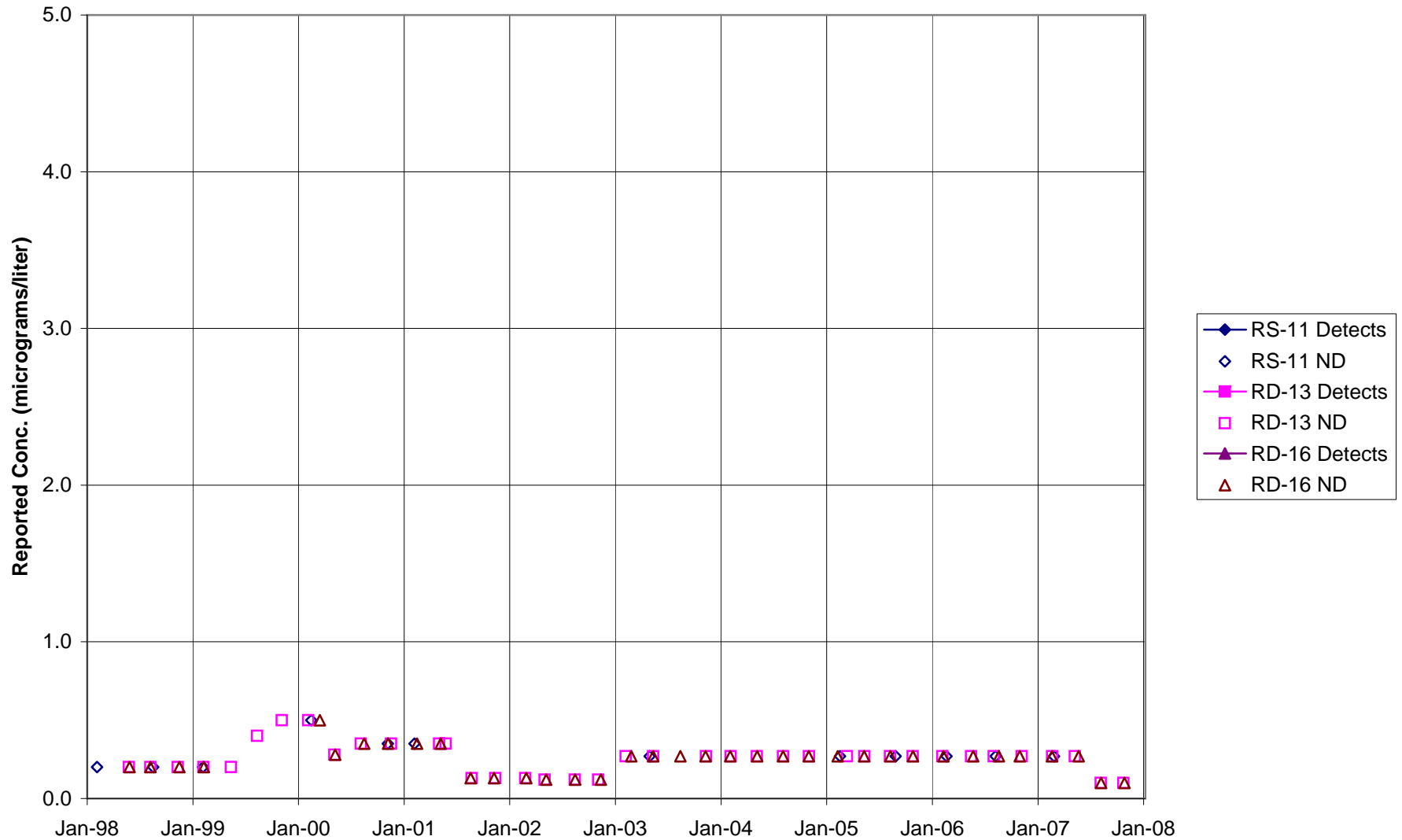


FIGURE F-68. 1,1-DCA IN AREA IV WELLS



**FIGURE F-69. 1,2-DCA in STL-IV AREA SHALLOW WELLS**

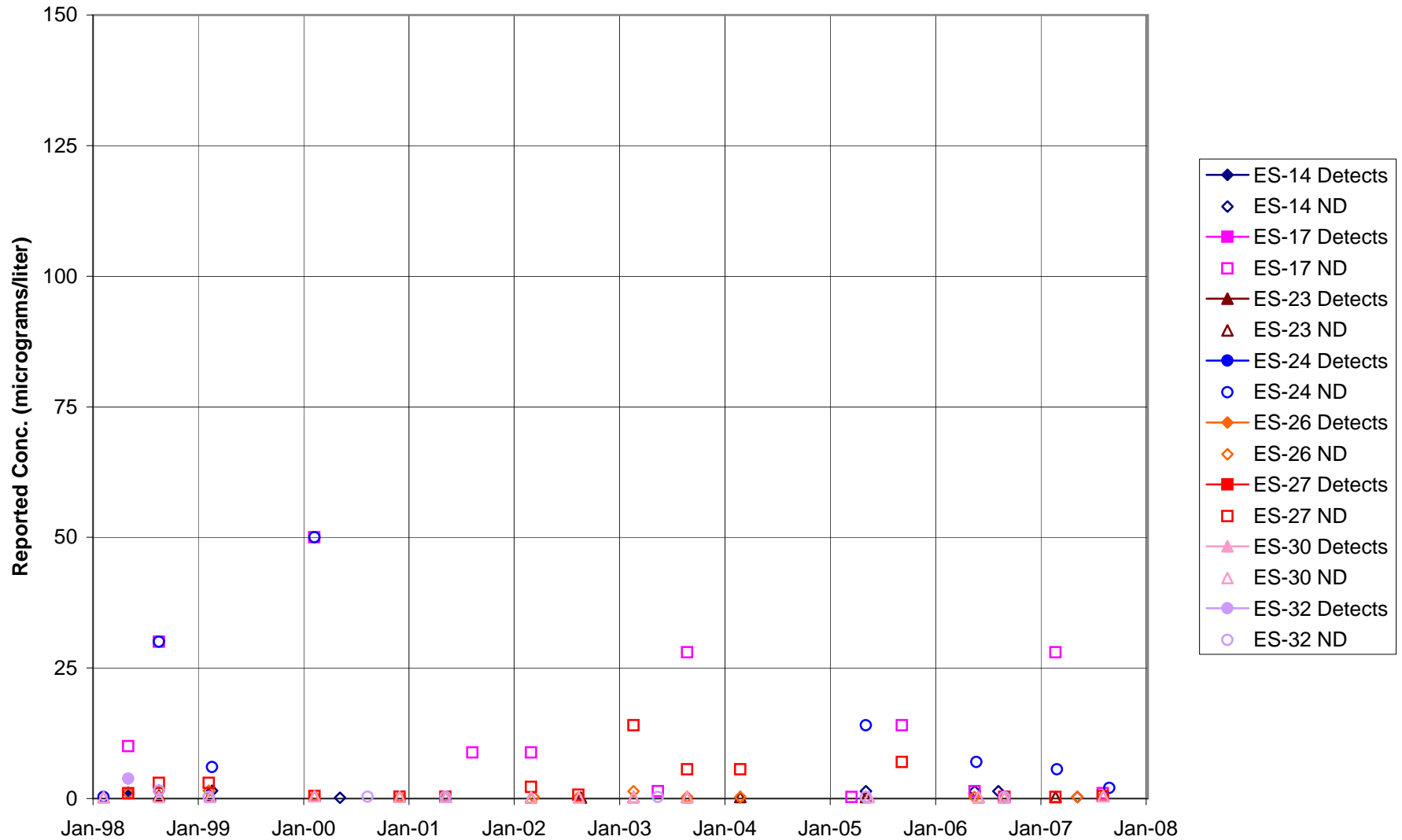


FIGURE F-70. 1,2-DCA in STL-IV AREA CHATSWORTH FORMATION WELLS

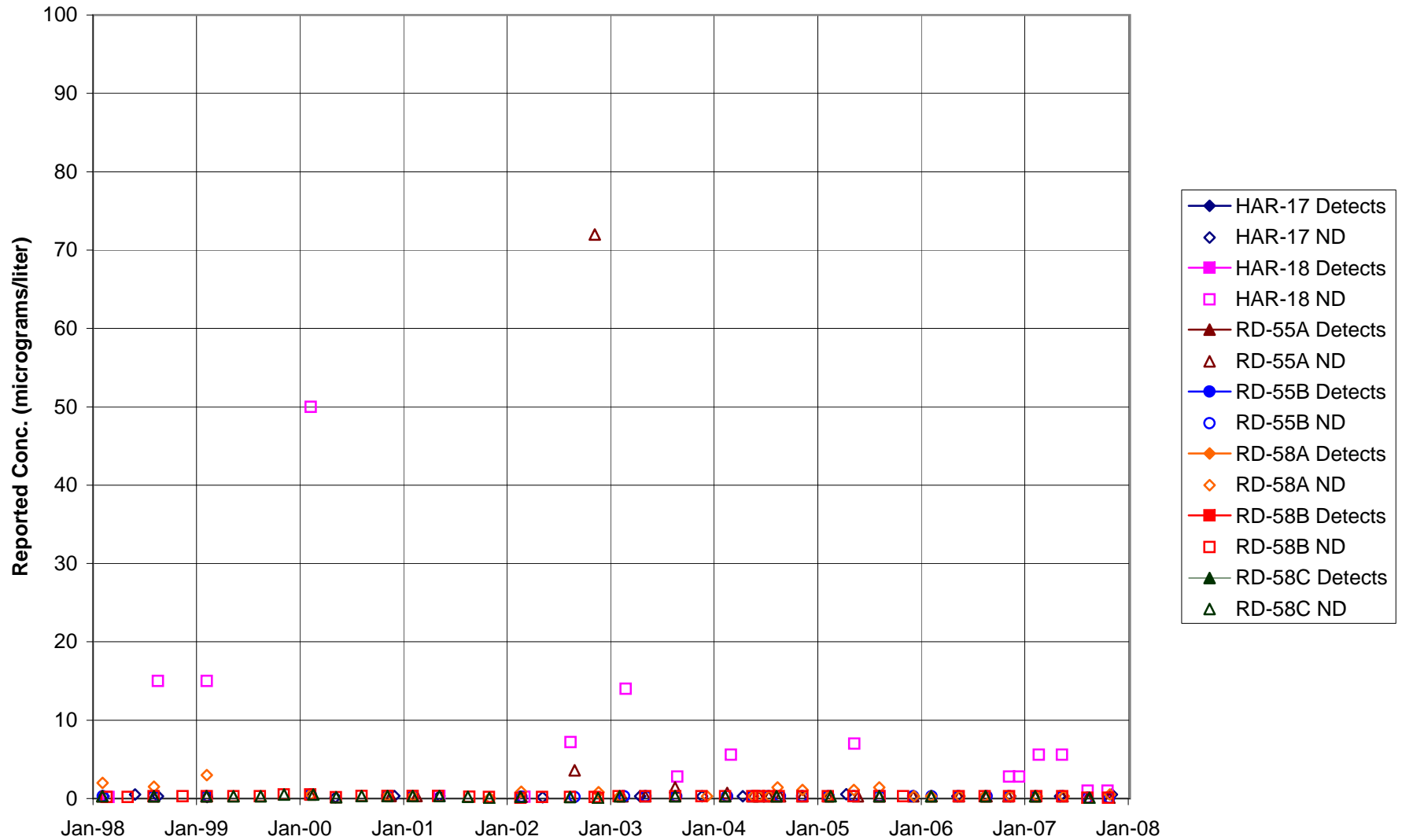


FIGURE F-71. 1,2-DCA in MAIN GATE AREA WELLS - 1

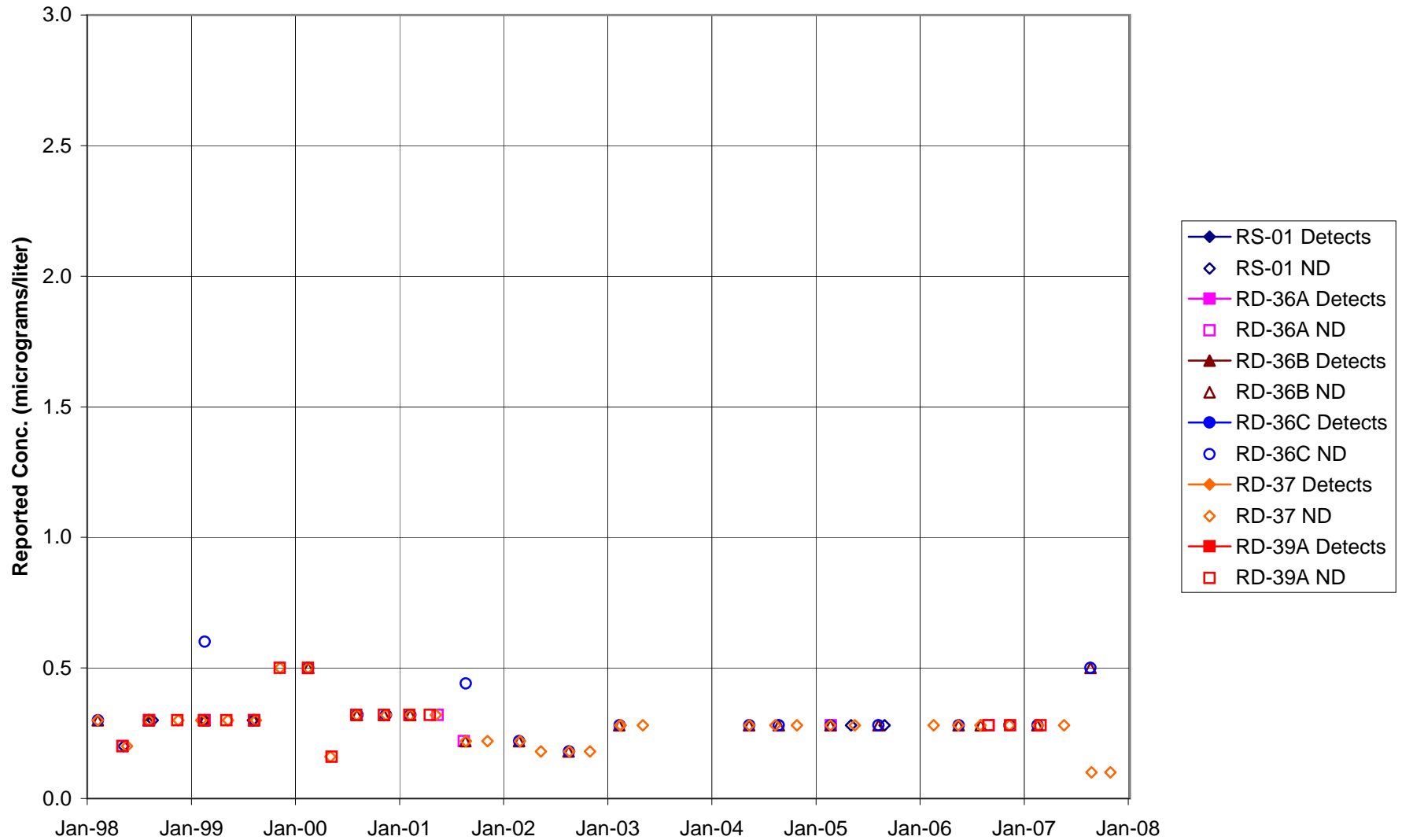
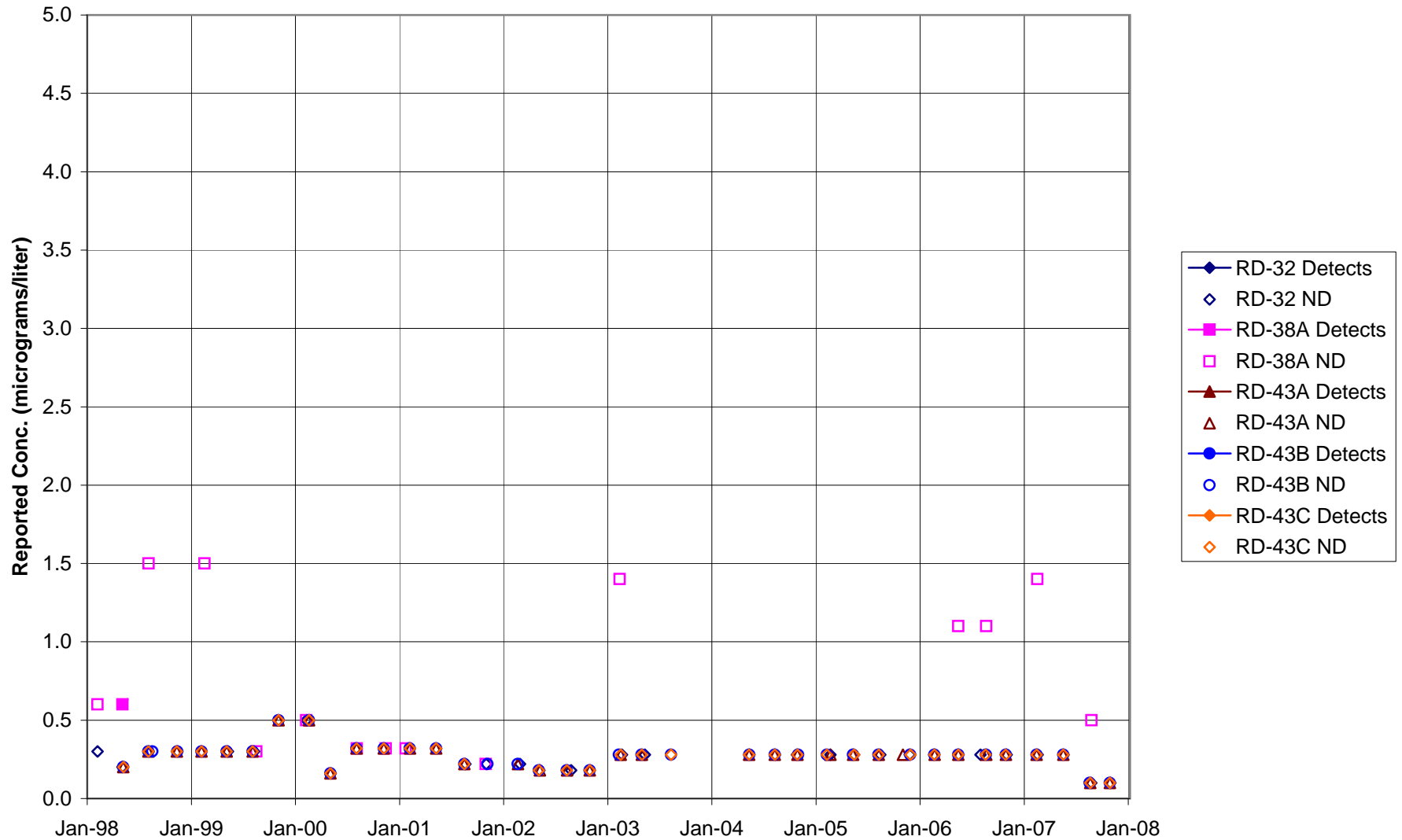
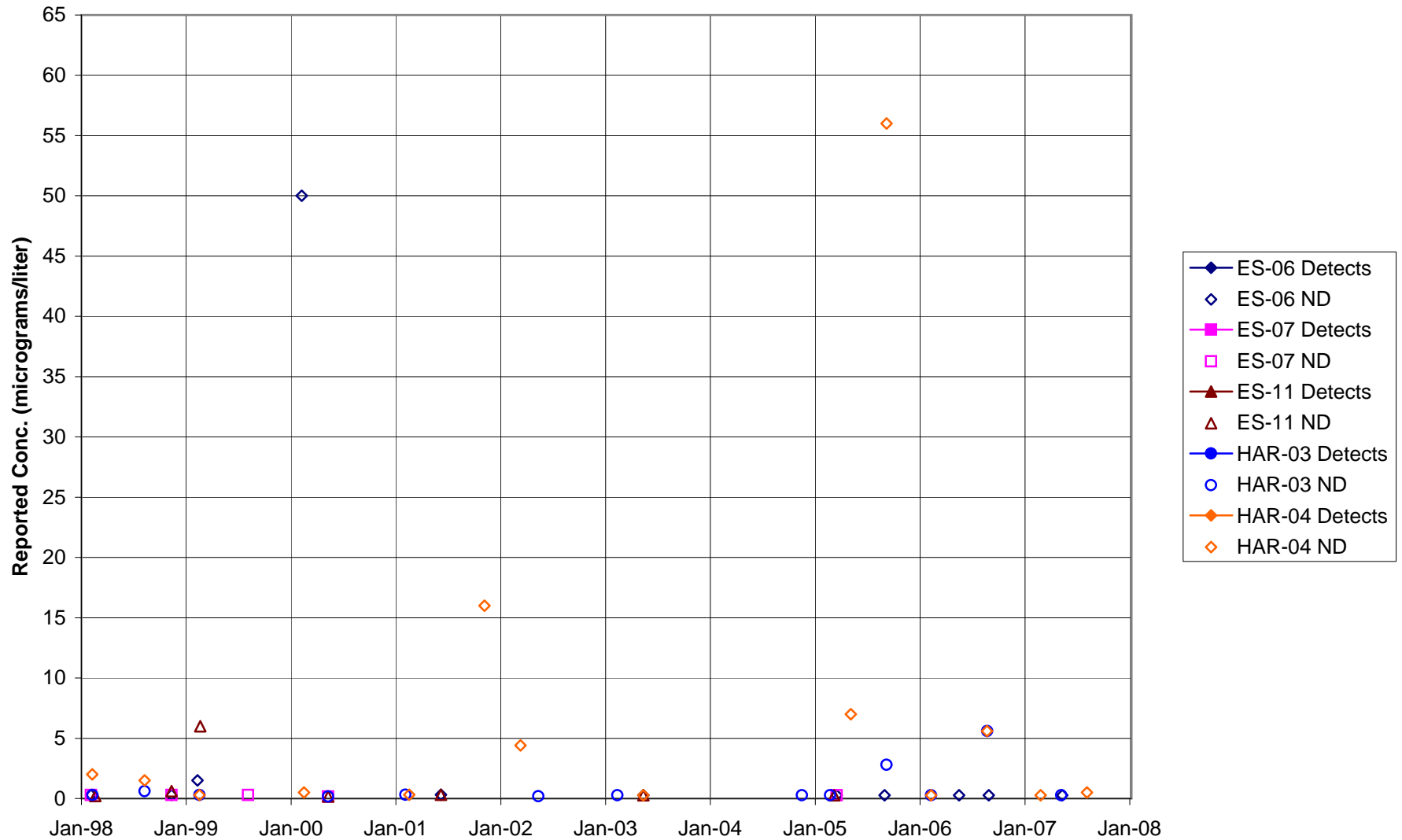


FIGURE F-72. 1,2-DCA in MAIN GATE AREA WELLS - 2





**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**

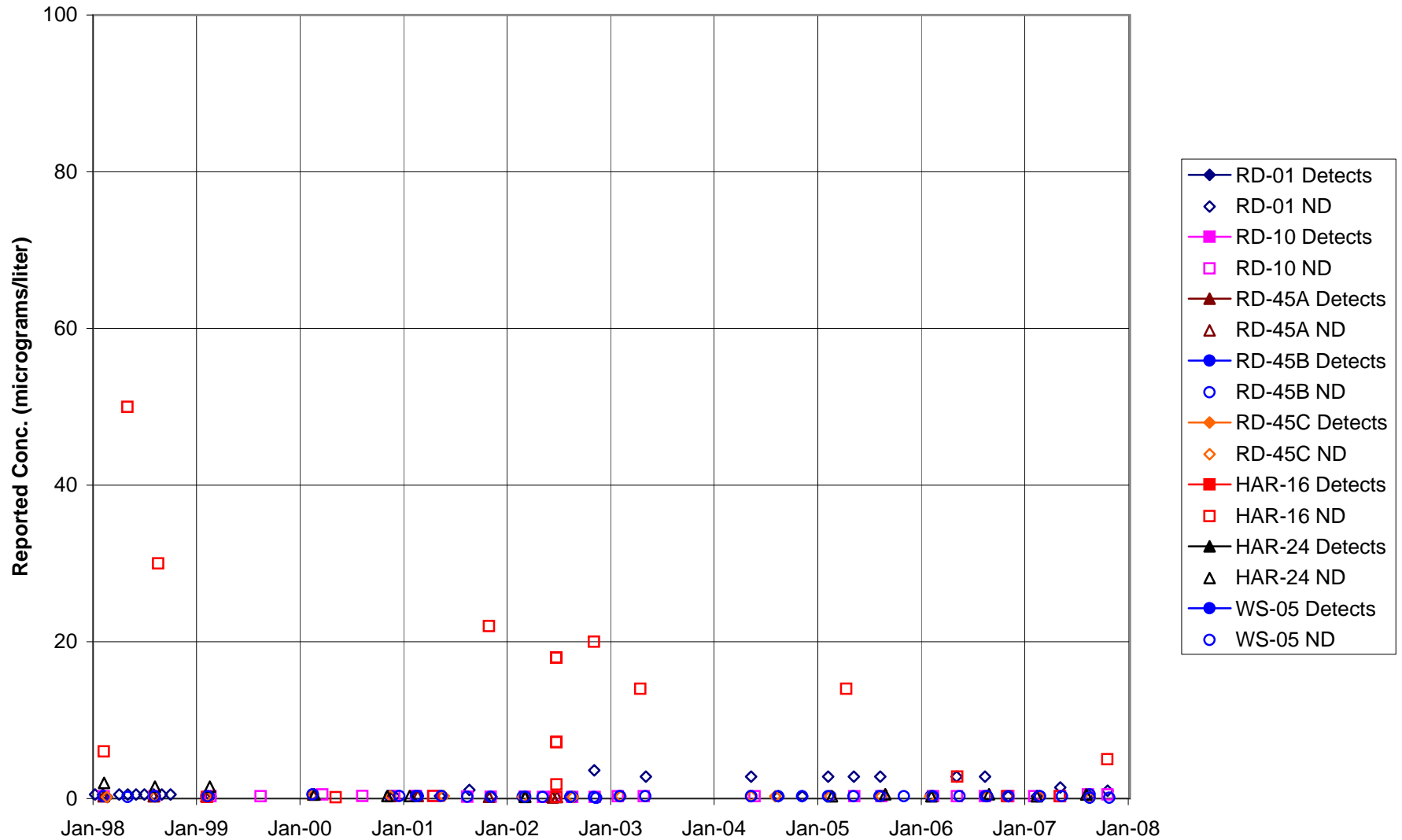


FIGURE F-75. 1,2-DCA in CTL-III / PERIMETER POND AREA WELLS

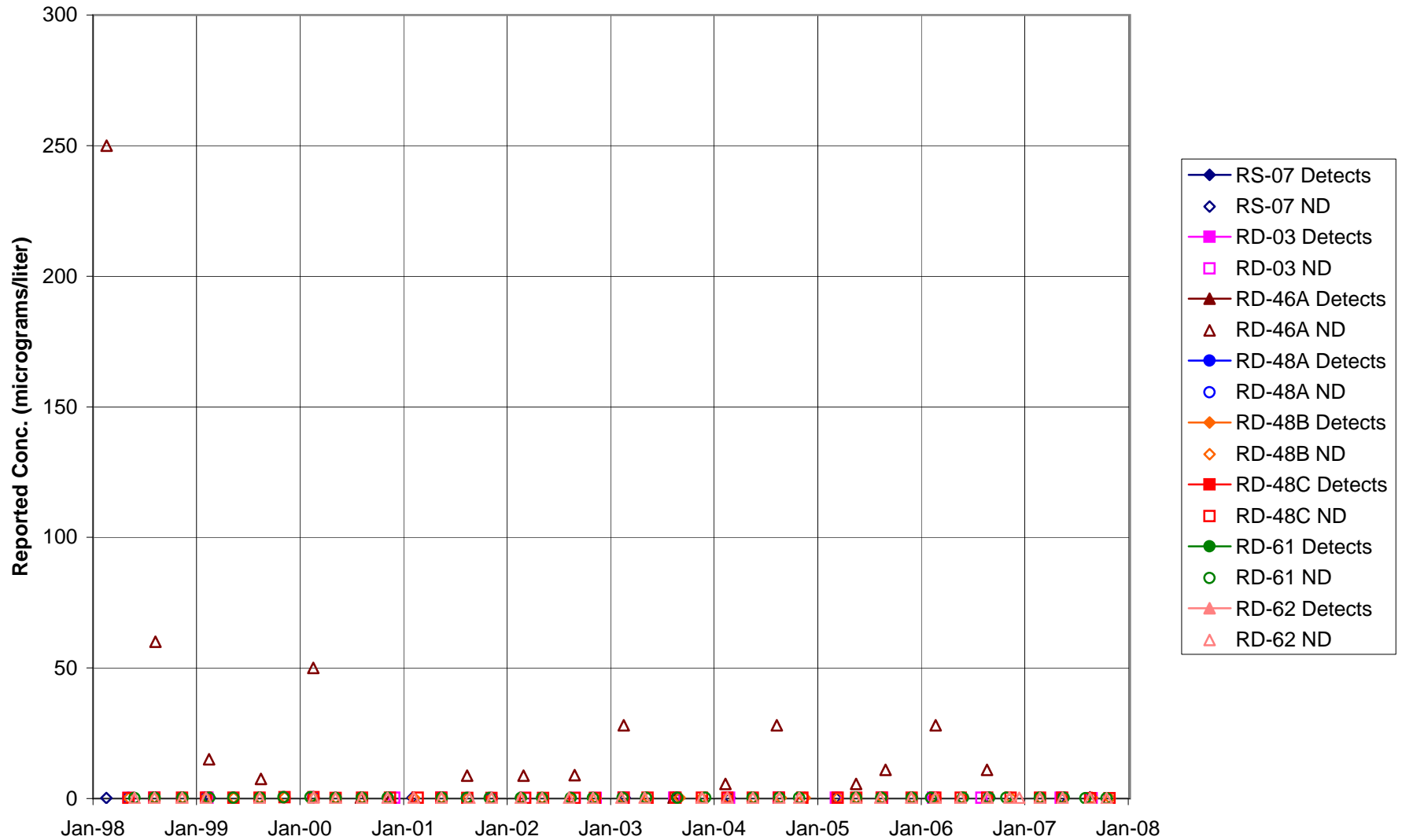


FIGURE F-76. 1,2-DCA in BOWL AREA WELLS

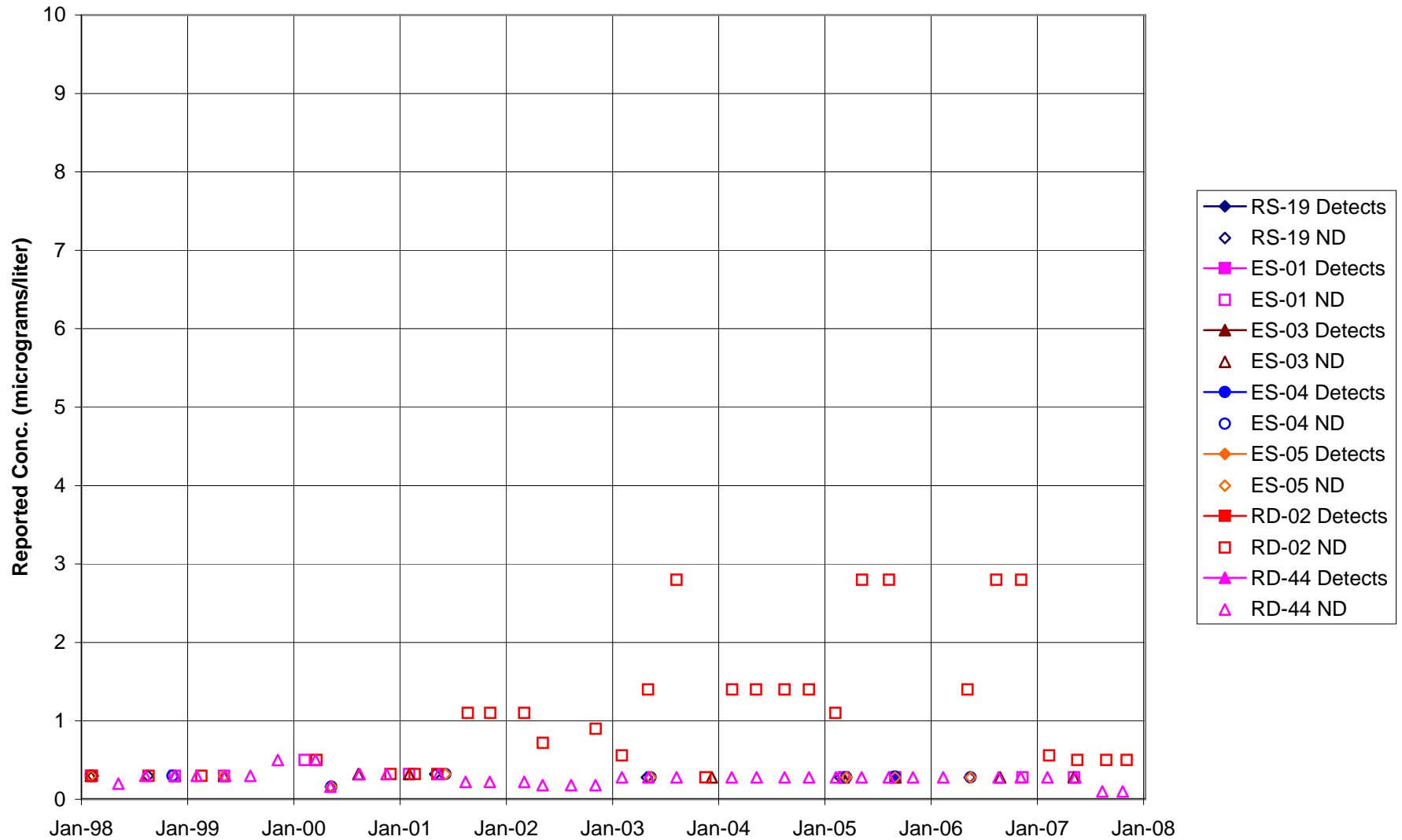
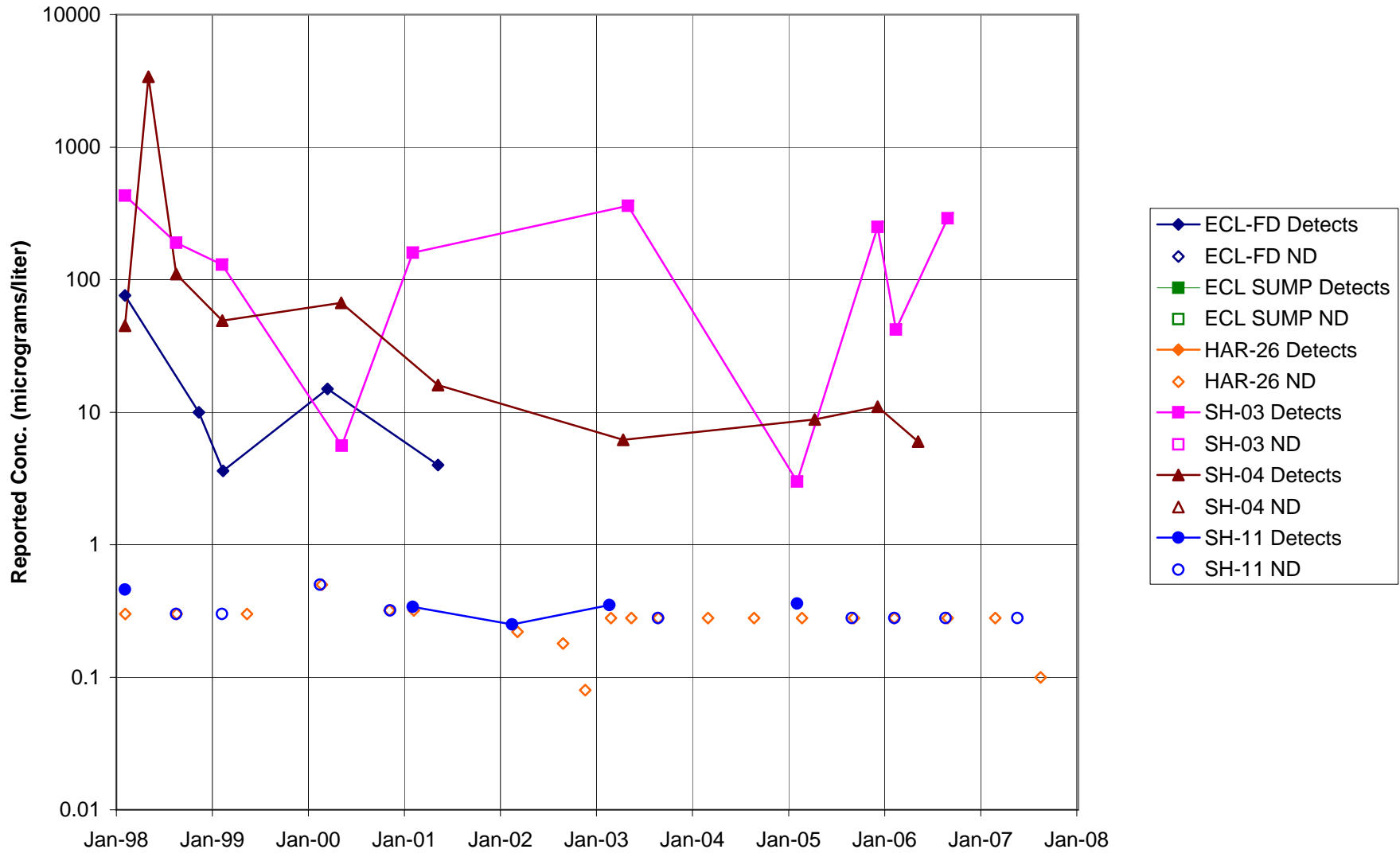
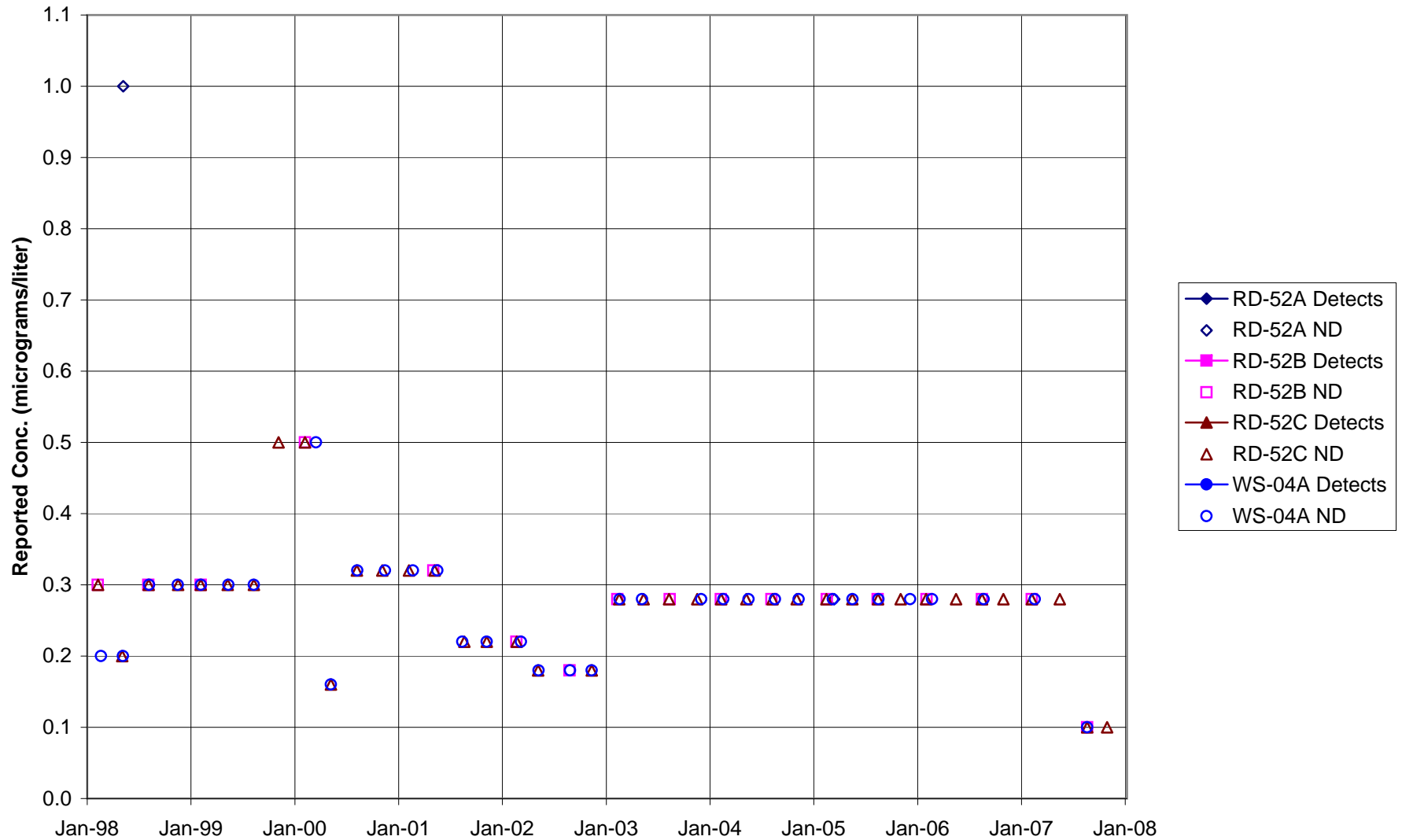


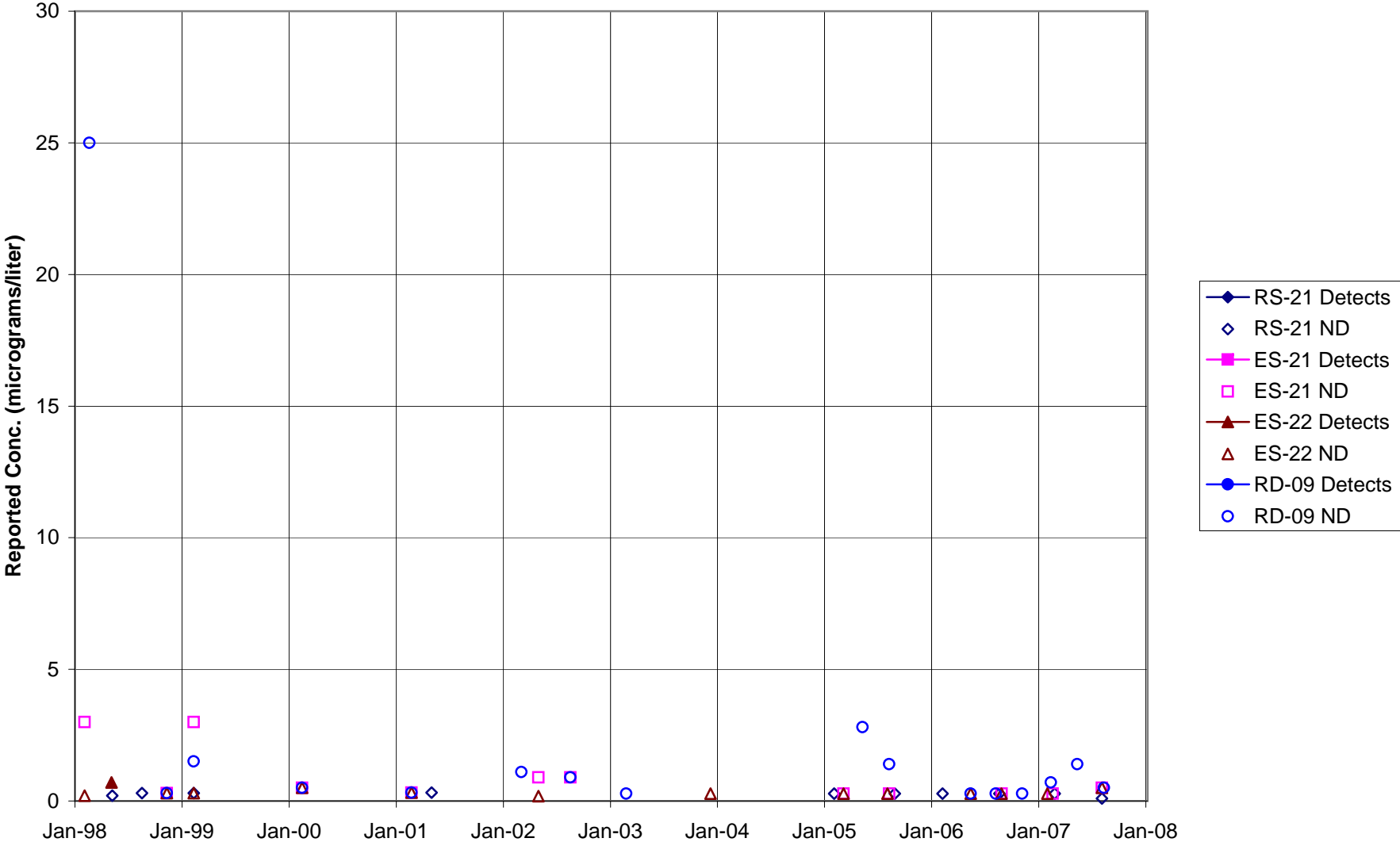
FIGURE F-77. 1,2-DCA in ECL AREA WELLS



**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**

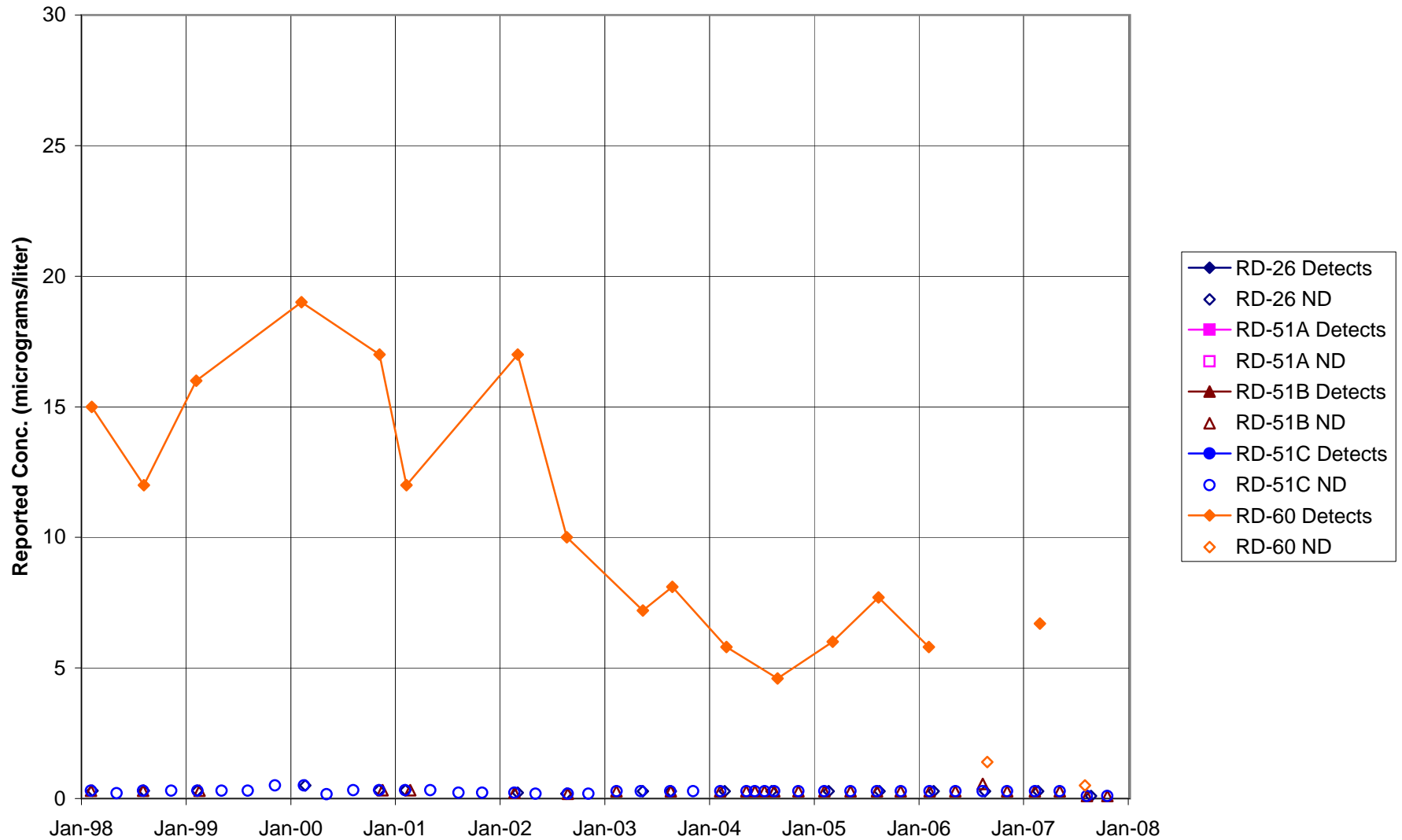




FIGURE F-81. 1,2-DCA in ALFA / BRAVO AREA WELLS

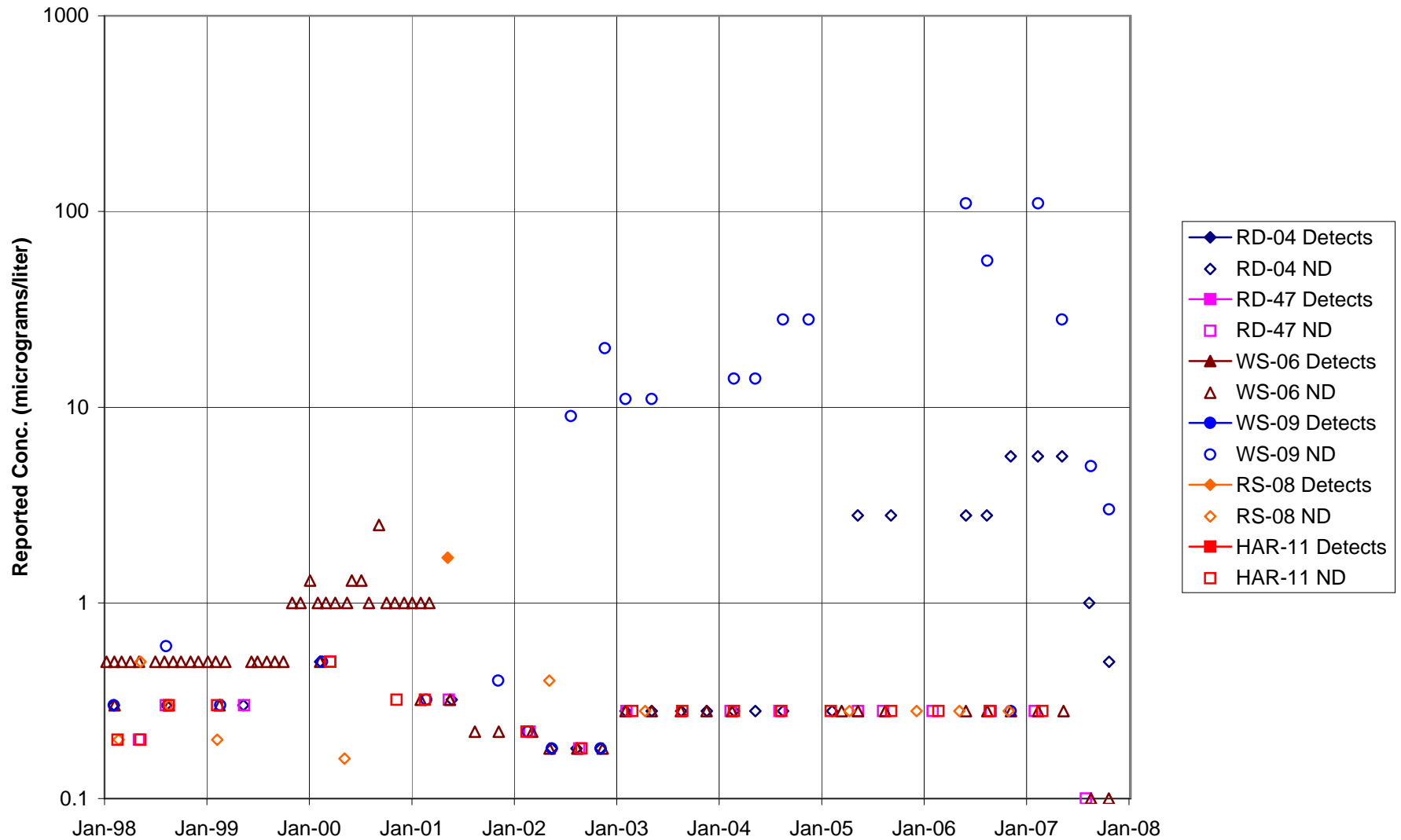


FIGURE F-82. 1,2-DCA in SPA AREA WELLS

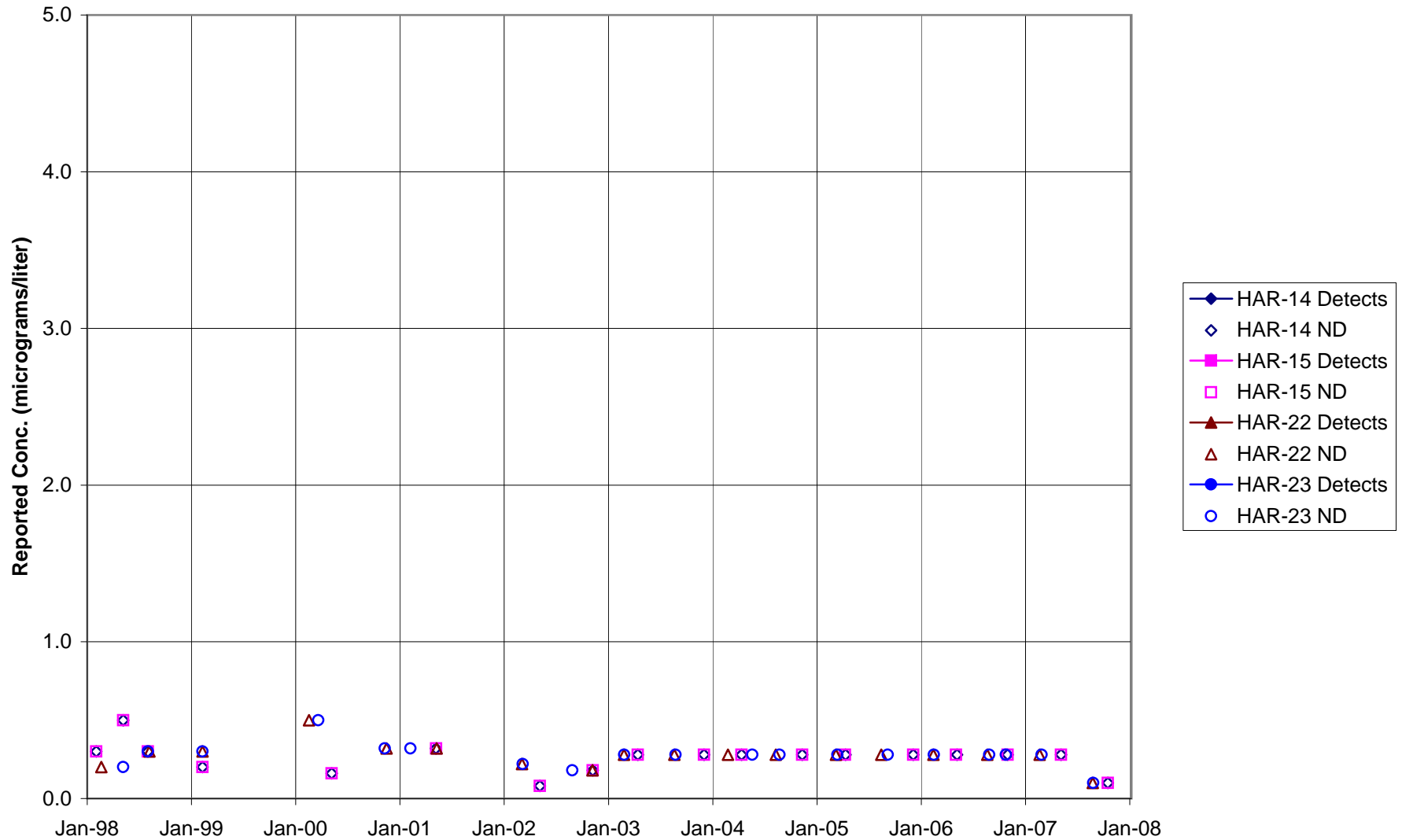
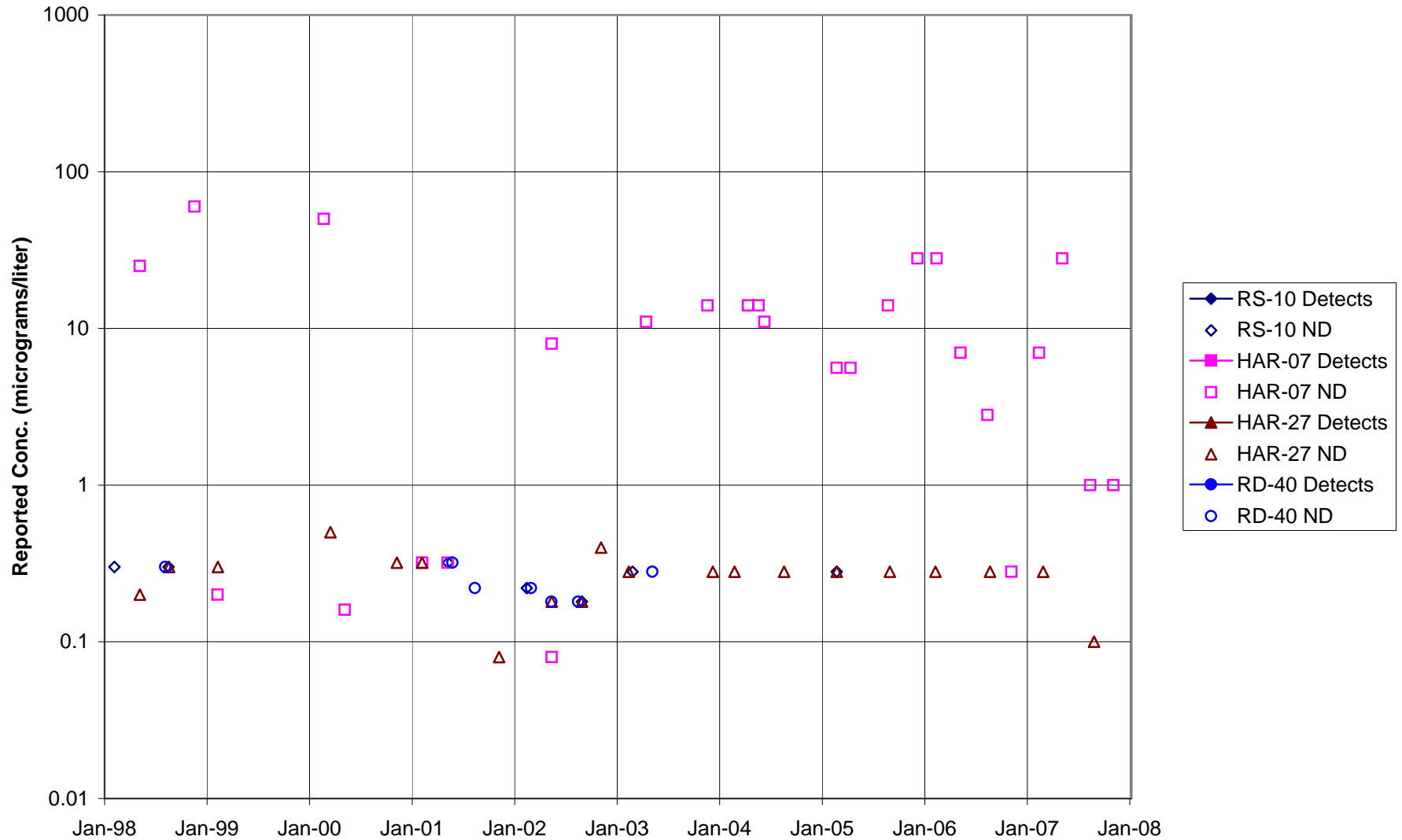


FIGURE F-83. 1,2-DCA in COCA / PLF AREA WELLS



**FIGURE F-84. 1,2-DCA in DELTA / BUFFER ZONE AREA WELLS**

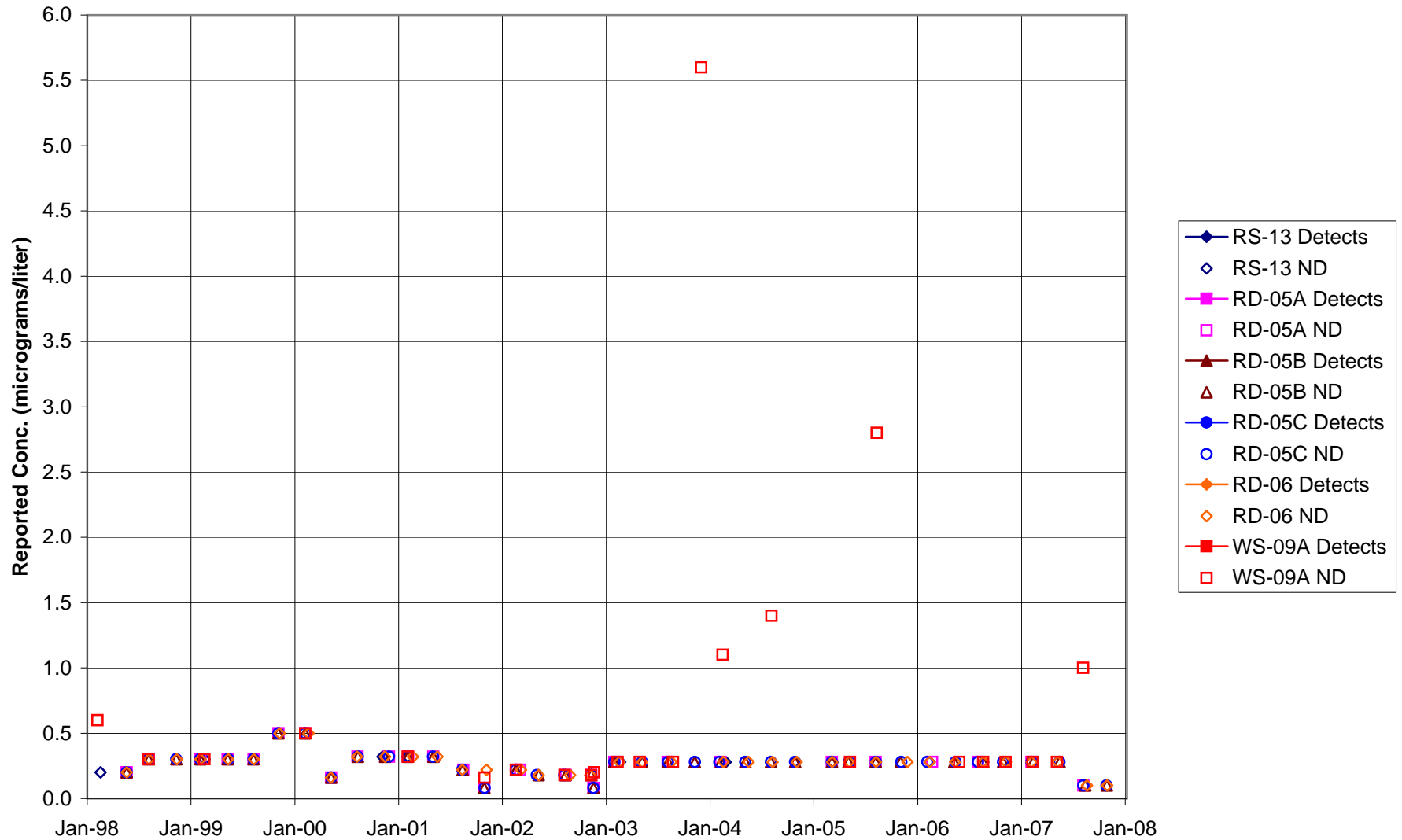


FIGURE F-85. 1,2-DCA in AREA IV WELLS

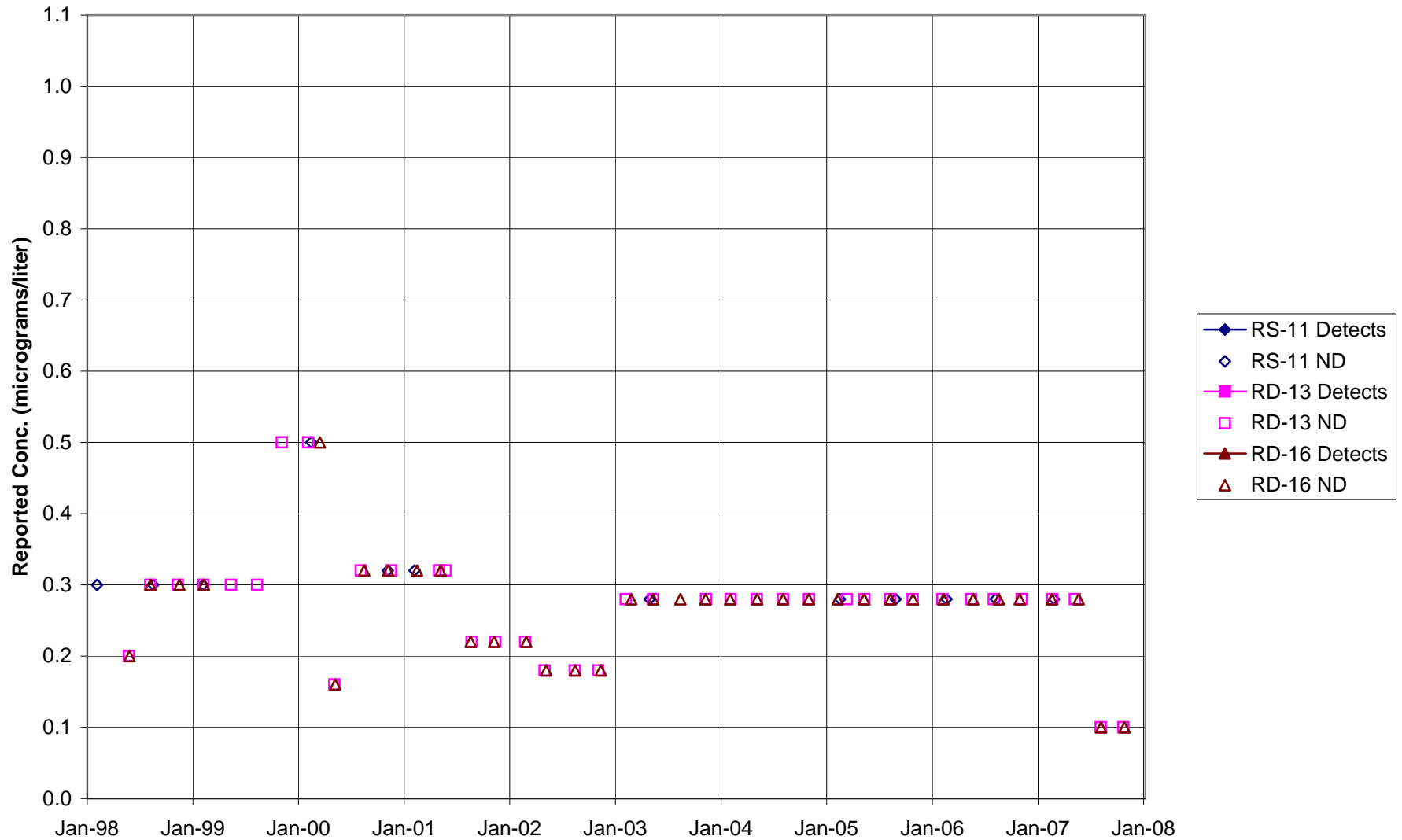


FIGURE F-86. 1,4-DIOXANE in STL-IV AREA SHALLOW WELLS

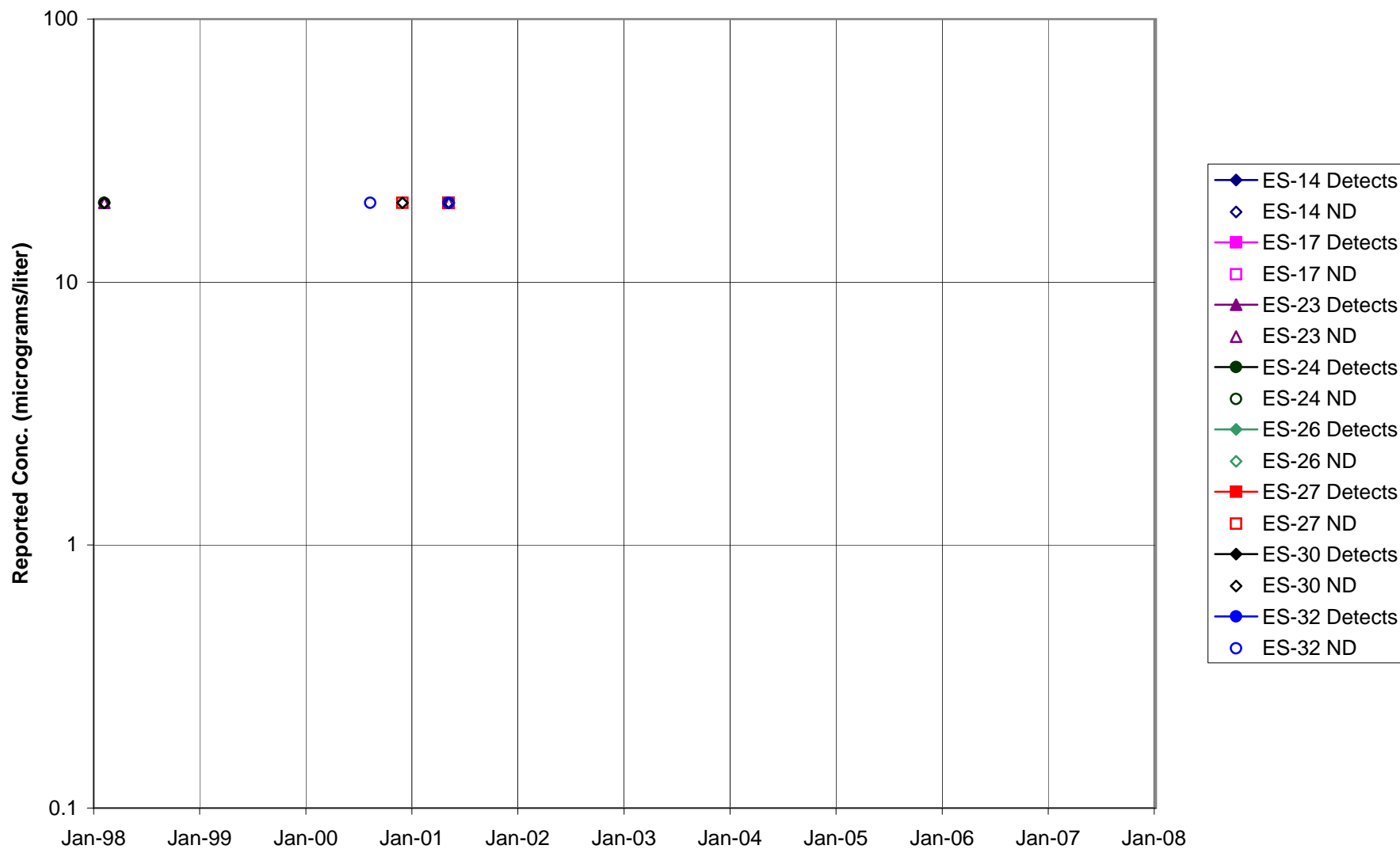


FIGURE F-87. 1,4-DIOXANE in STL-IV AREA CHATSWORTH FORMATION WELLS

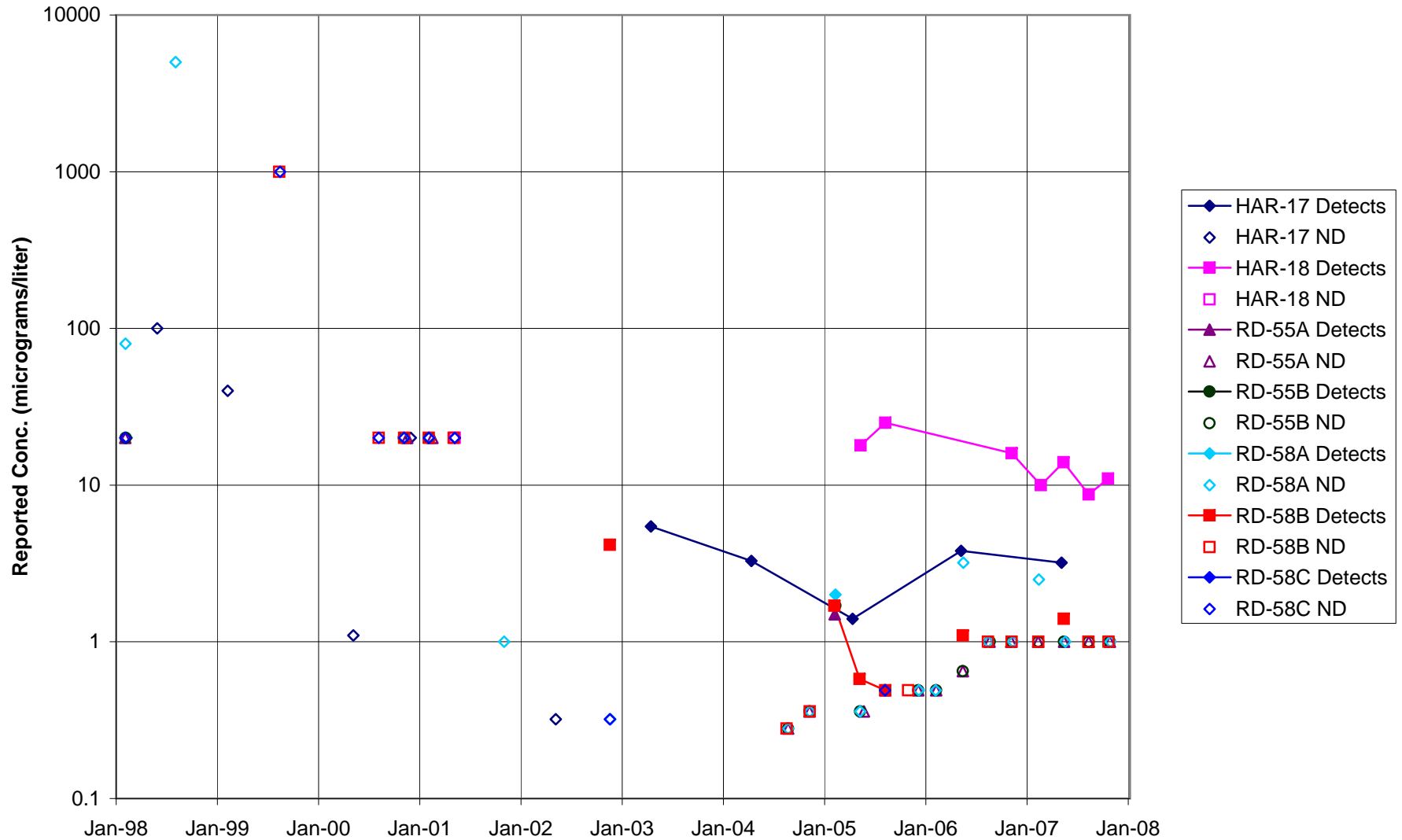


FIGURE F-88. 1,4-DIOXANE in MAIN GATE AREA WELLS - 1

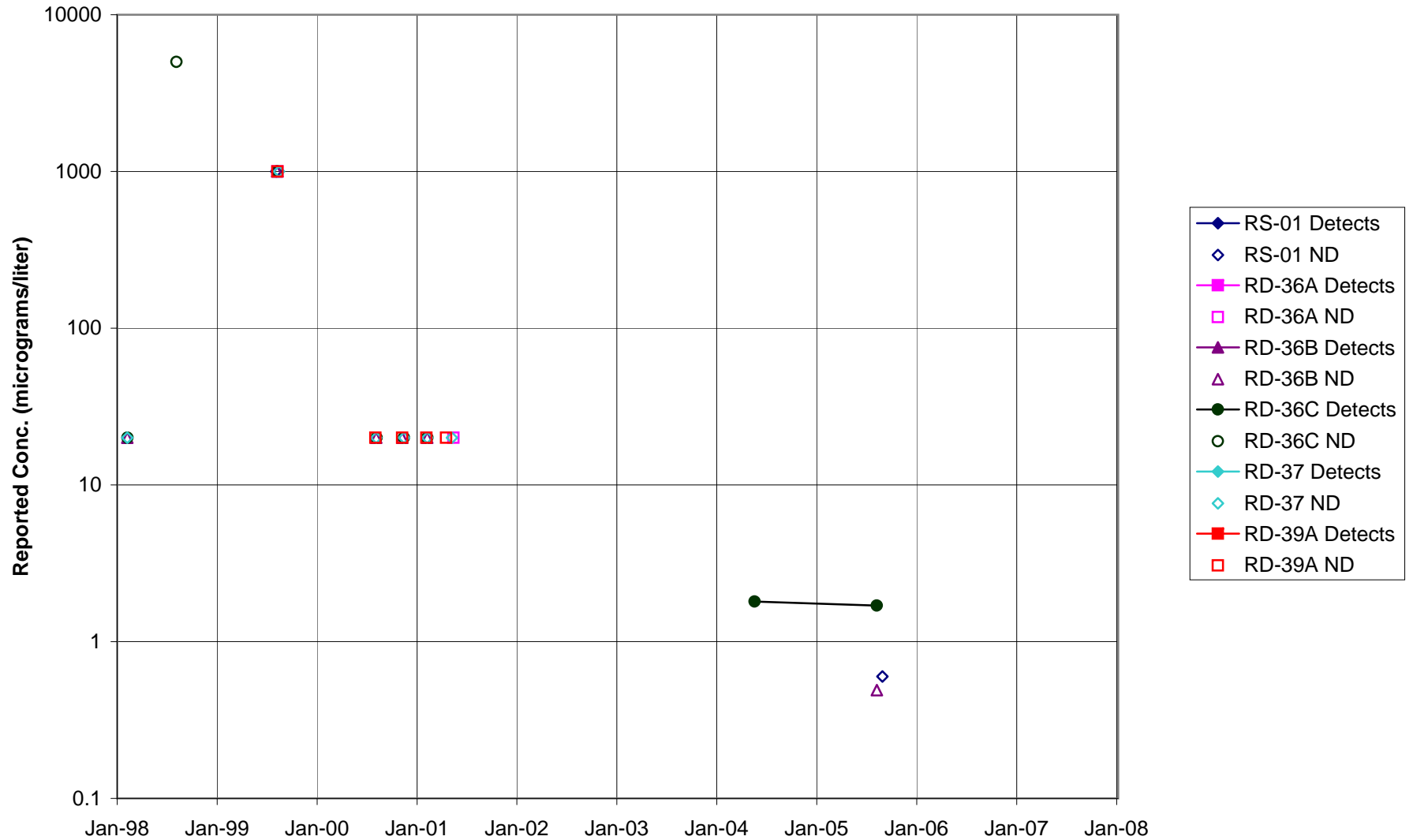




FIGURE F-89. 1,4-DIOXANE in MAIN GATE AREA WELLS - 2

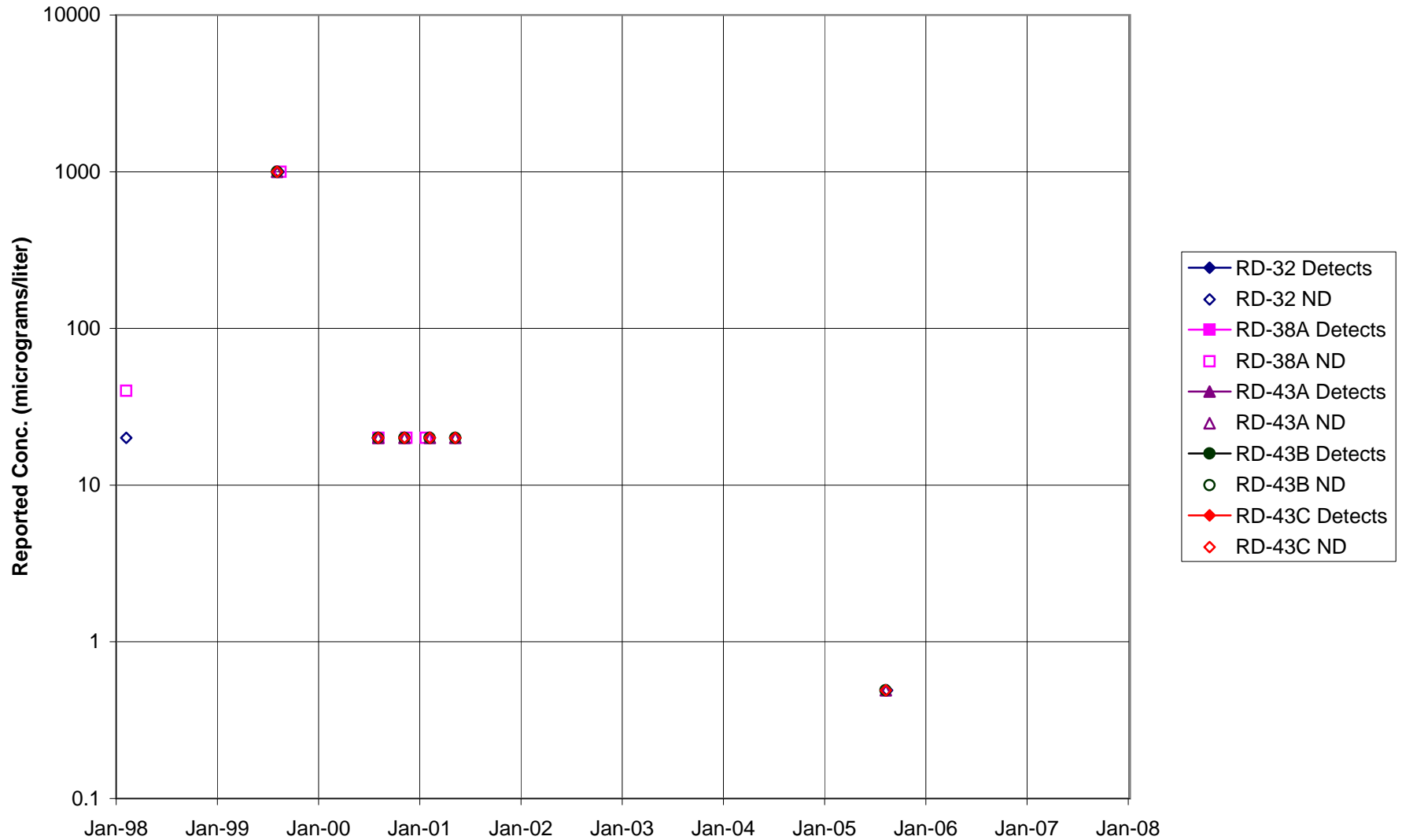


FIGURE F-90. 1,4-DIOXANE in APTF, CANYON & HAPPY VALLEY AREA WELLS - 1

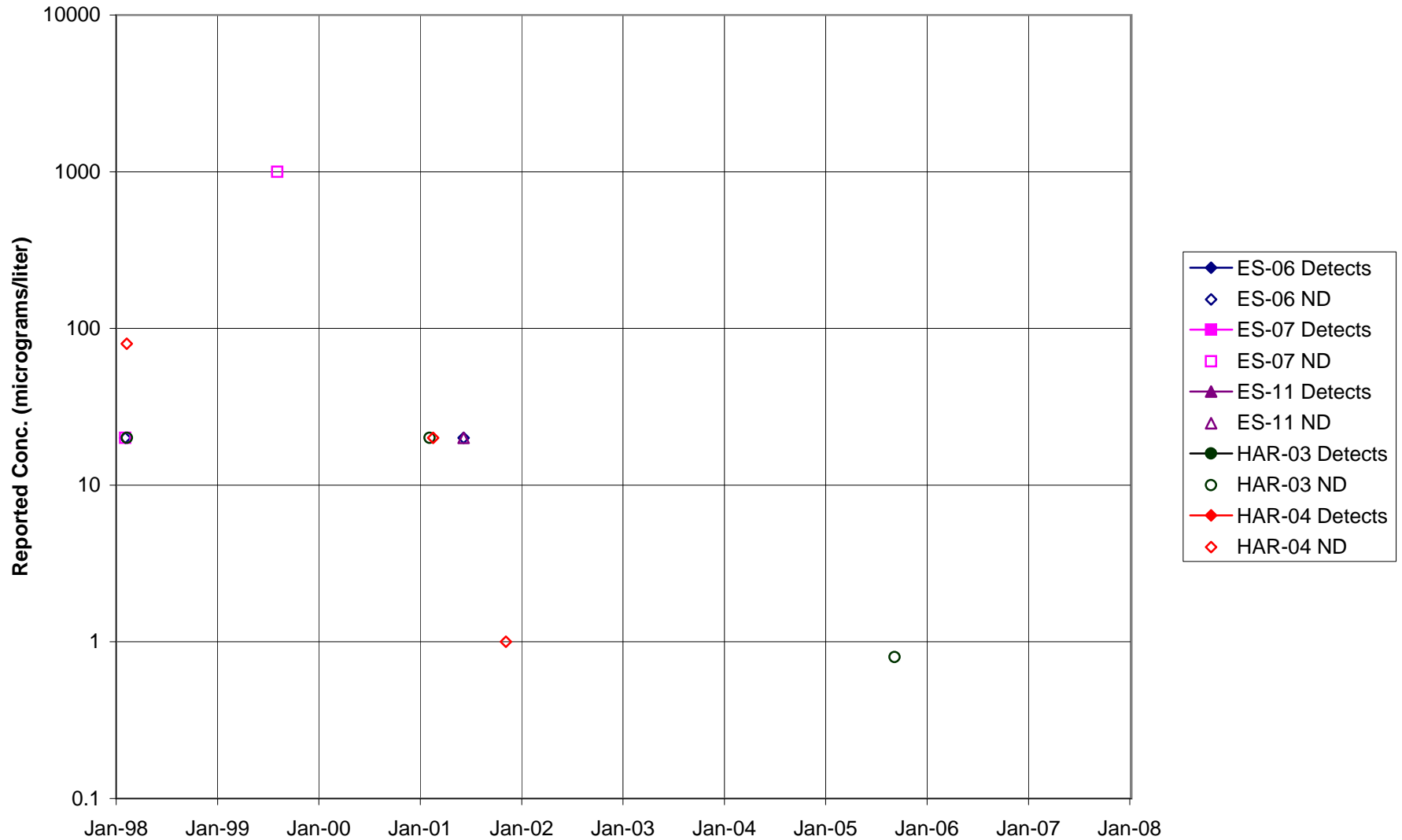
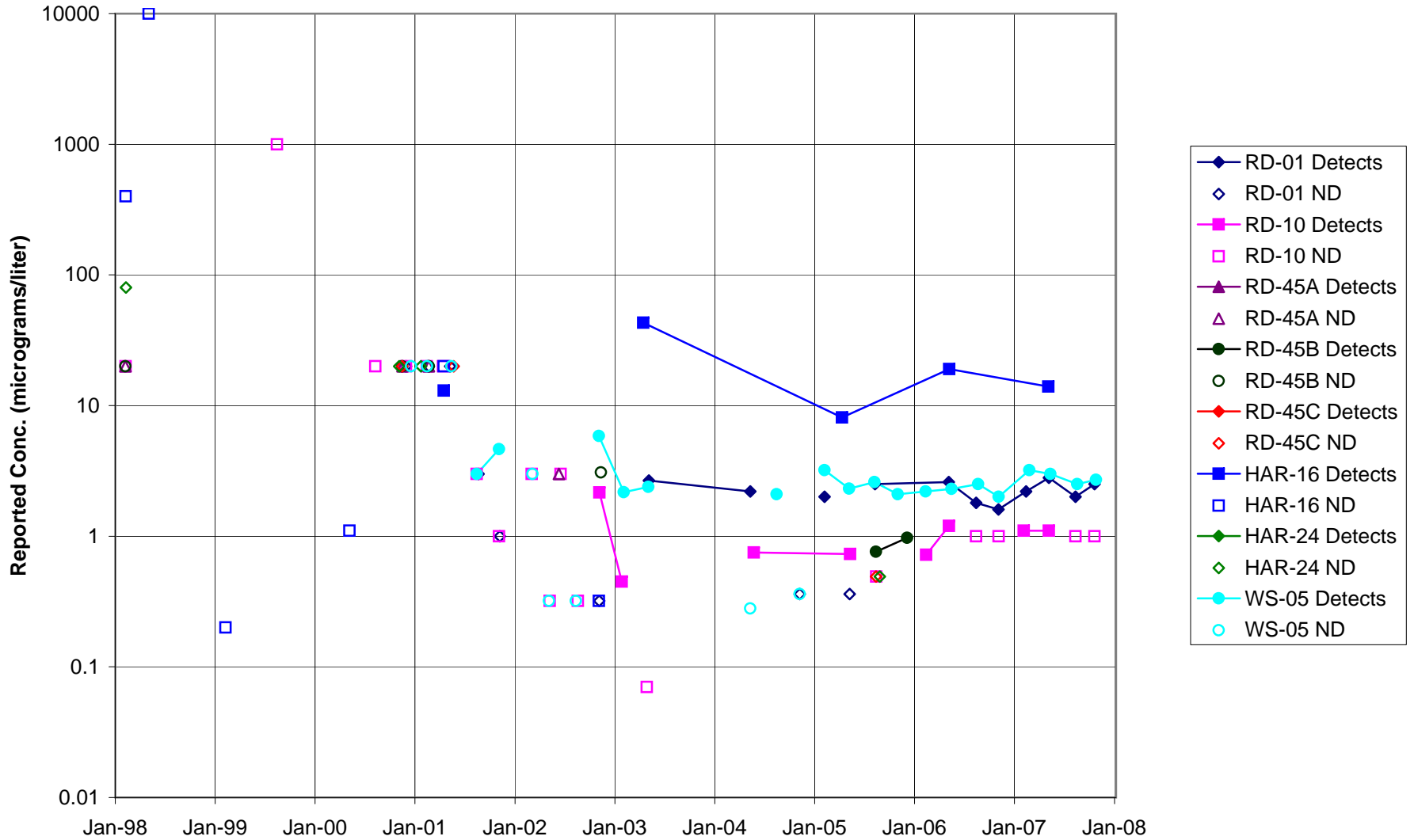
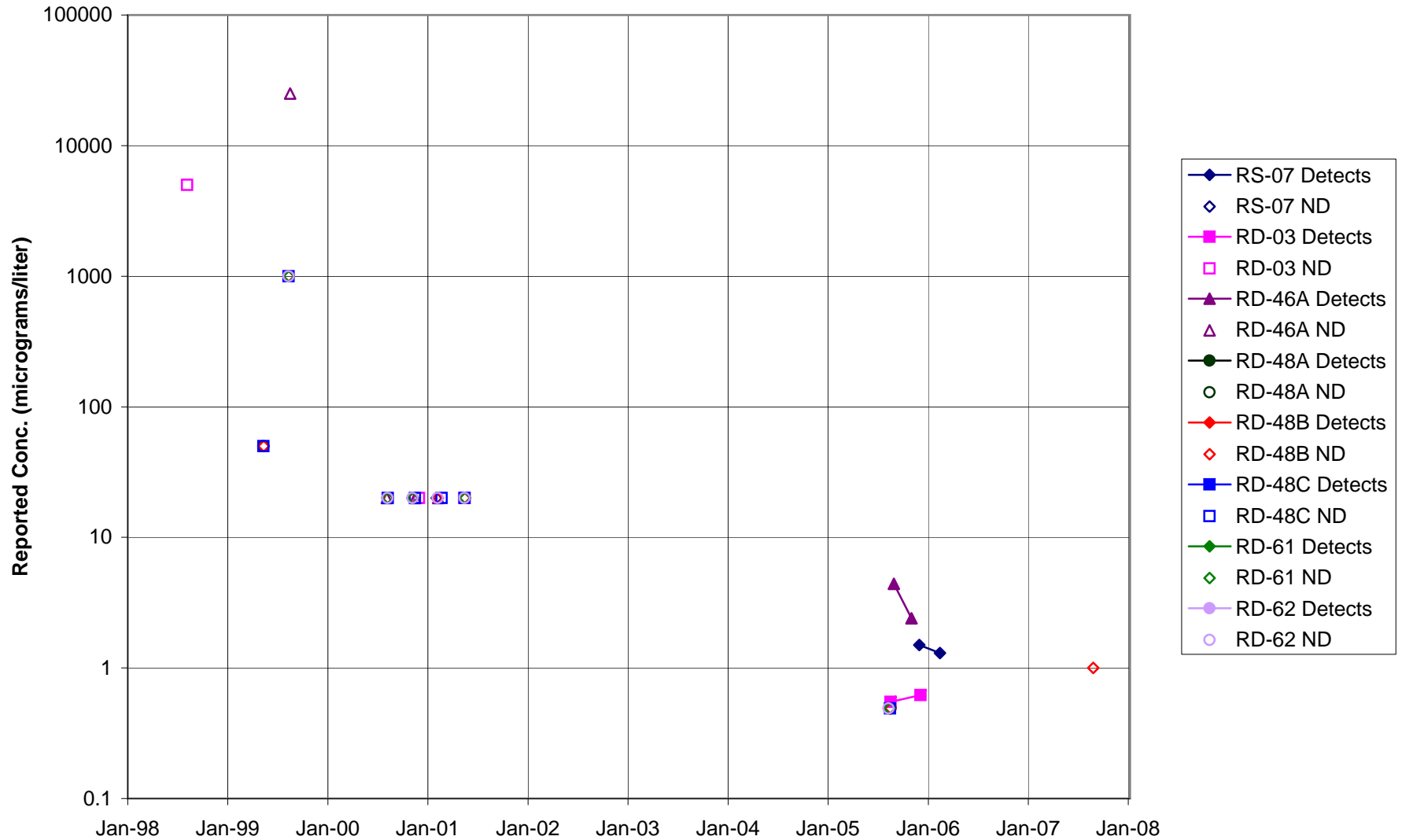


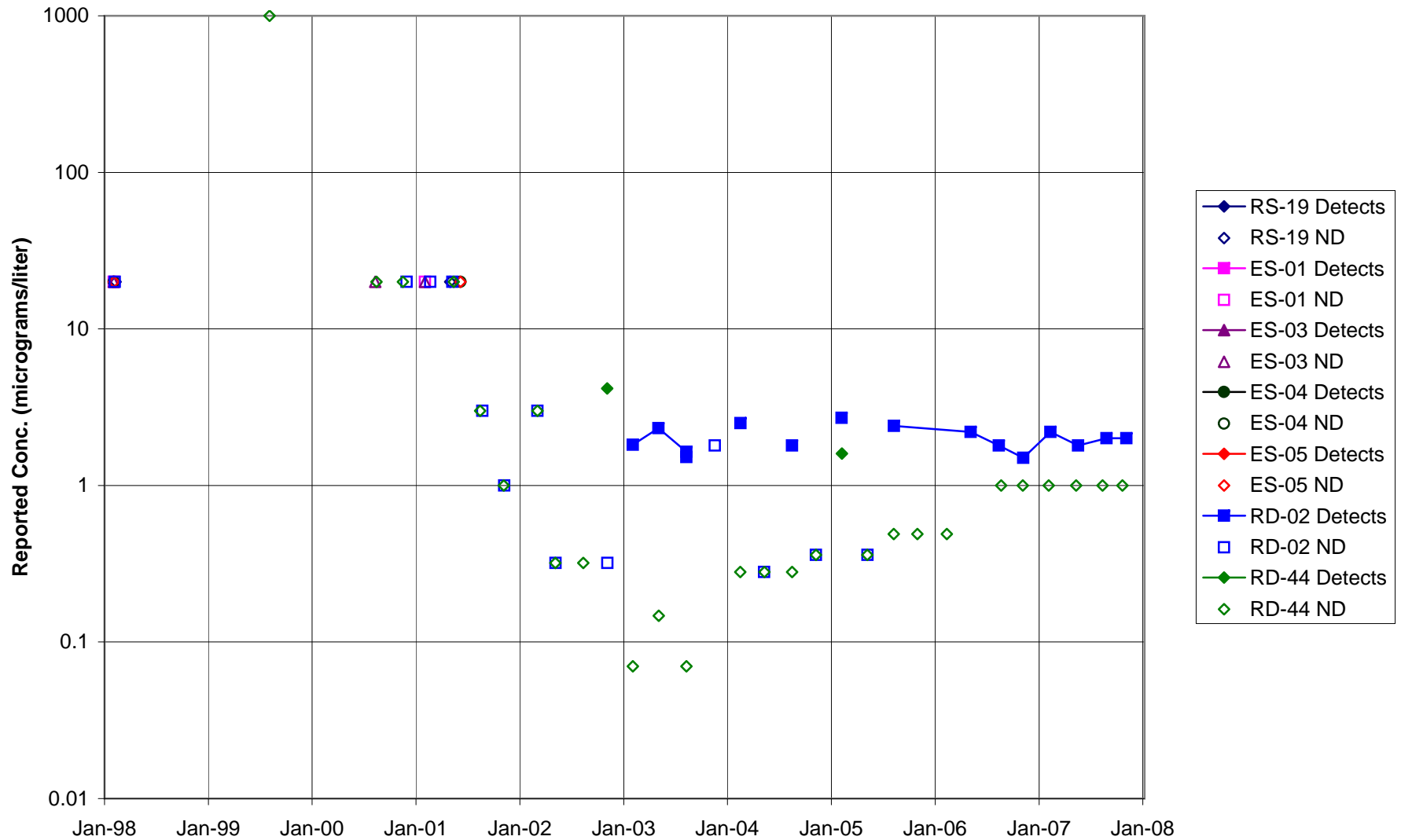
FIGURE F-91. 1,4-DIOXANE in APTF, CANYON & HAPPY VALLEY AREA WELLS - 2



**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**

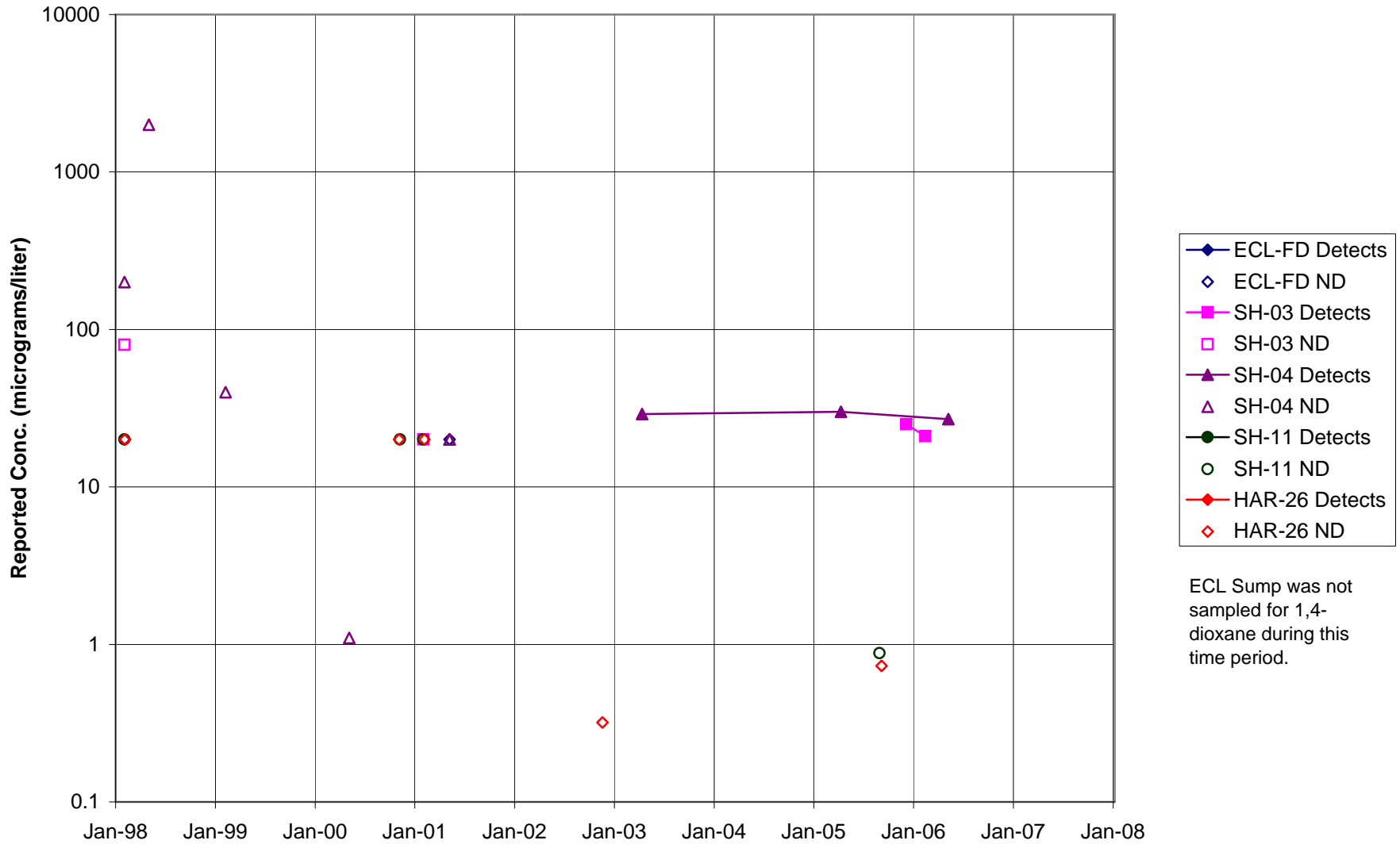


FIGURE F-95. 1,4-DIOXANE IN FORMER LOX PLANT AREA WELLS

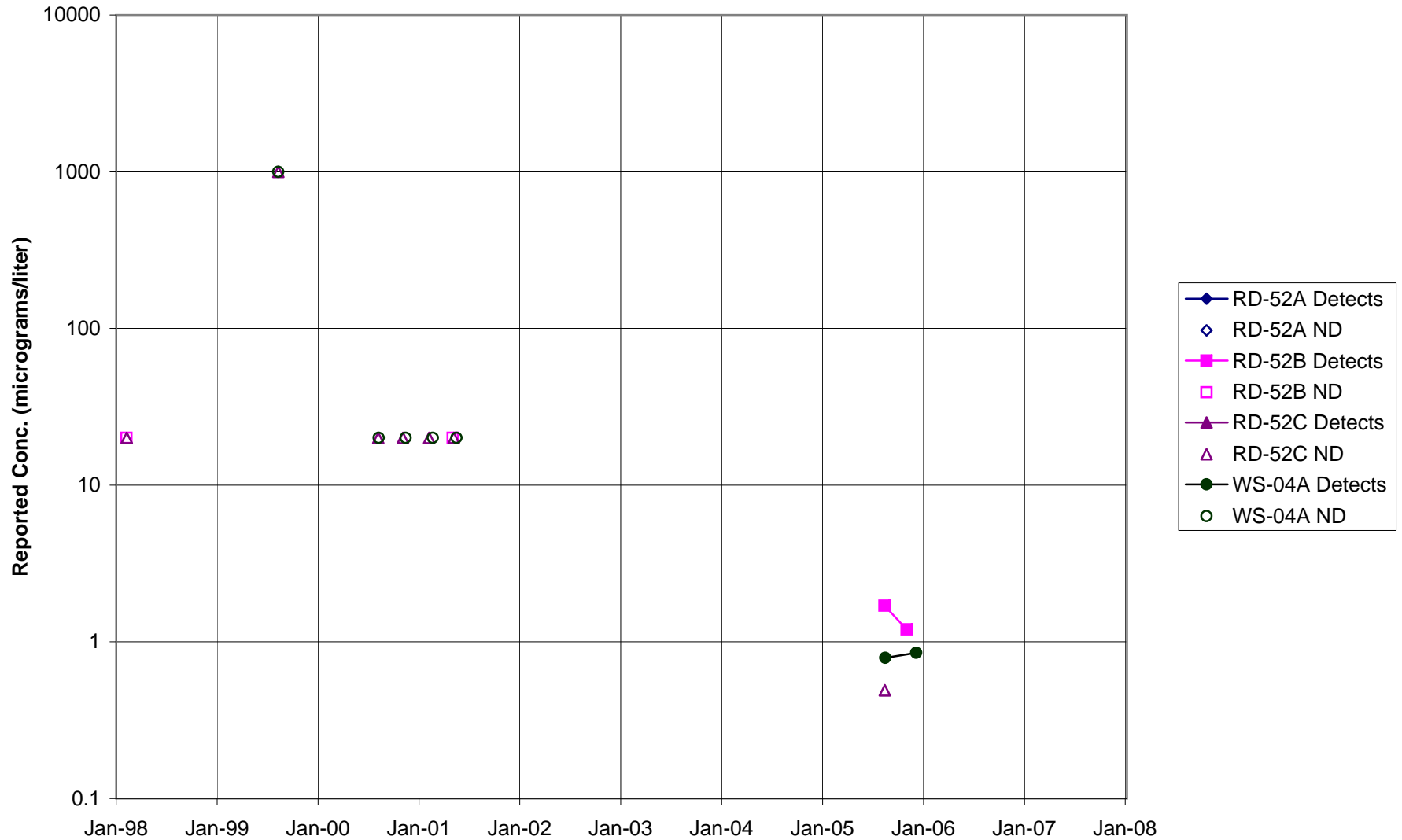
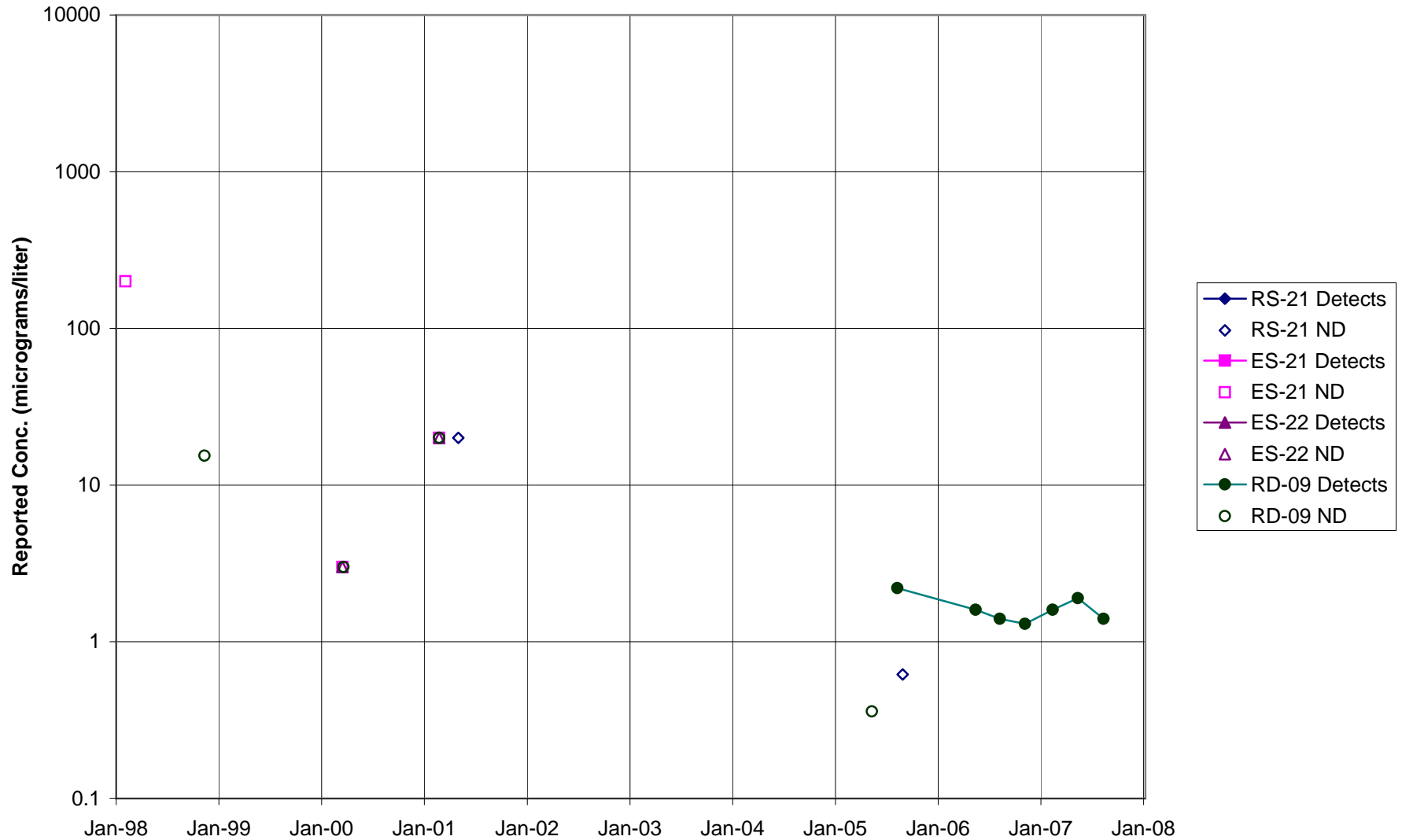


FIGURE F-96. 1,4-DIOXANE in RD-09 AREA WELLS





**FIGURE F-97. 1,4-DIOXANE IN THE HELIPORT, B/204 AREA WELLS**

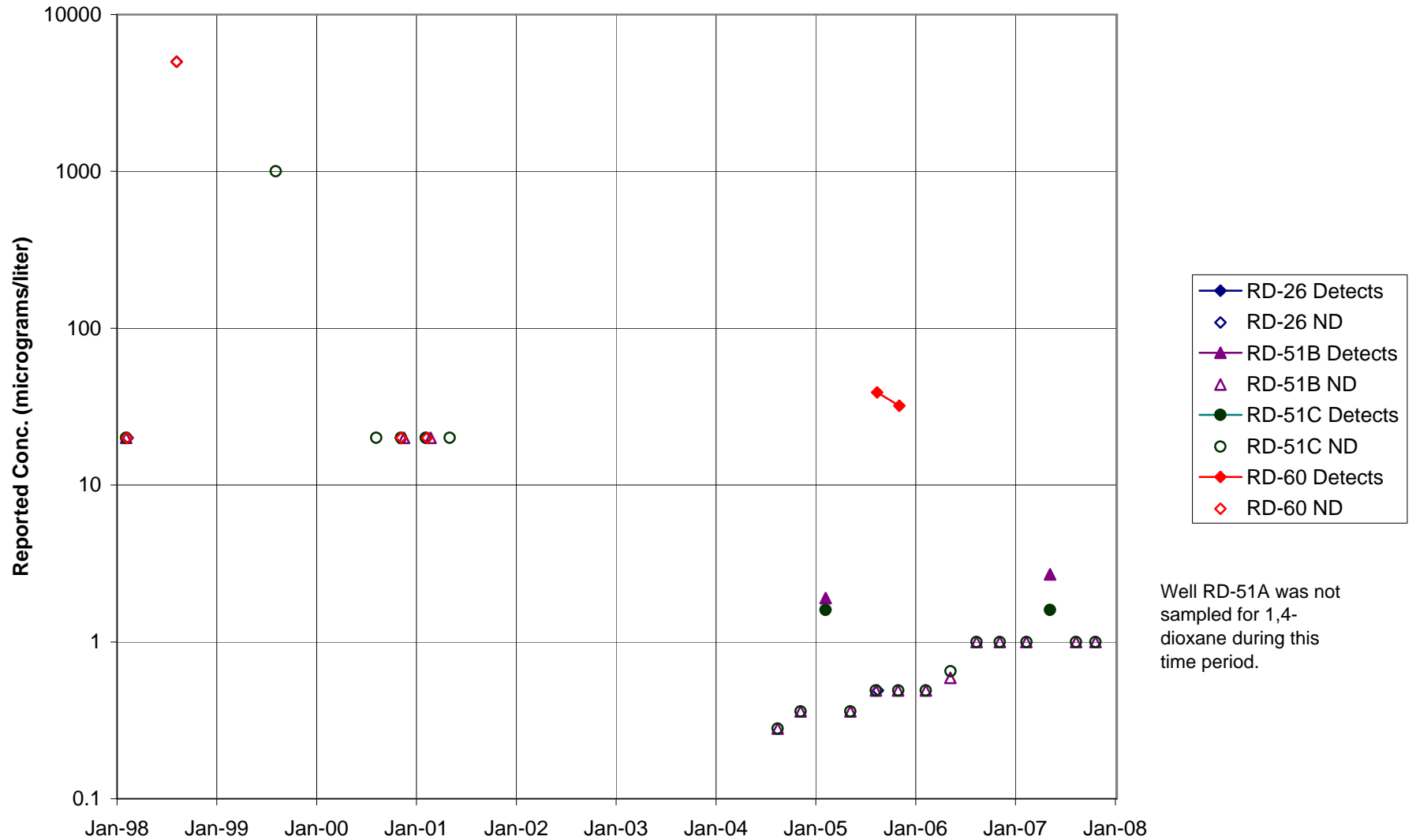
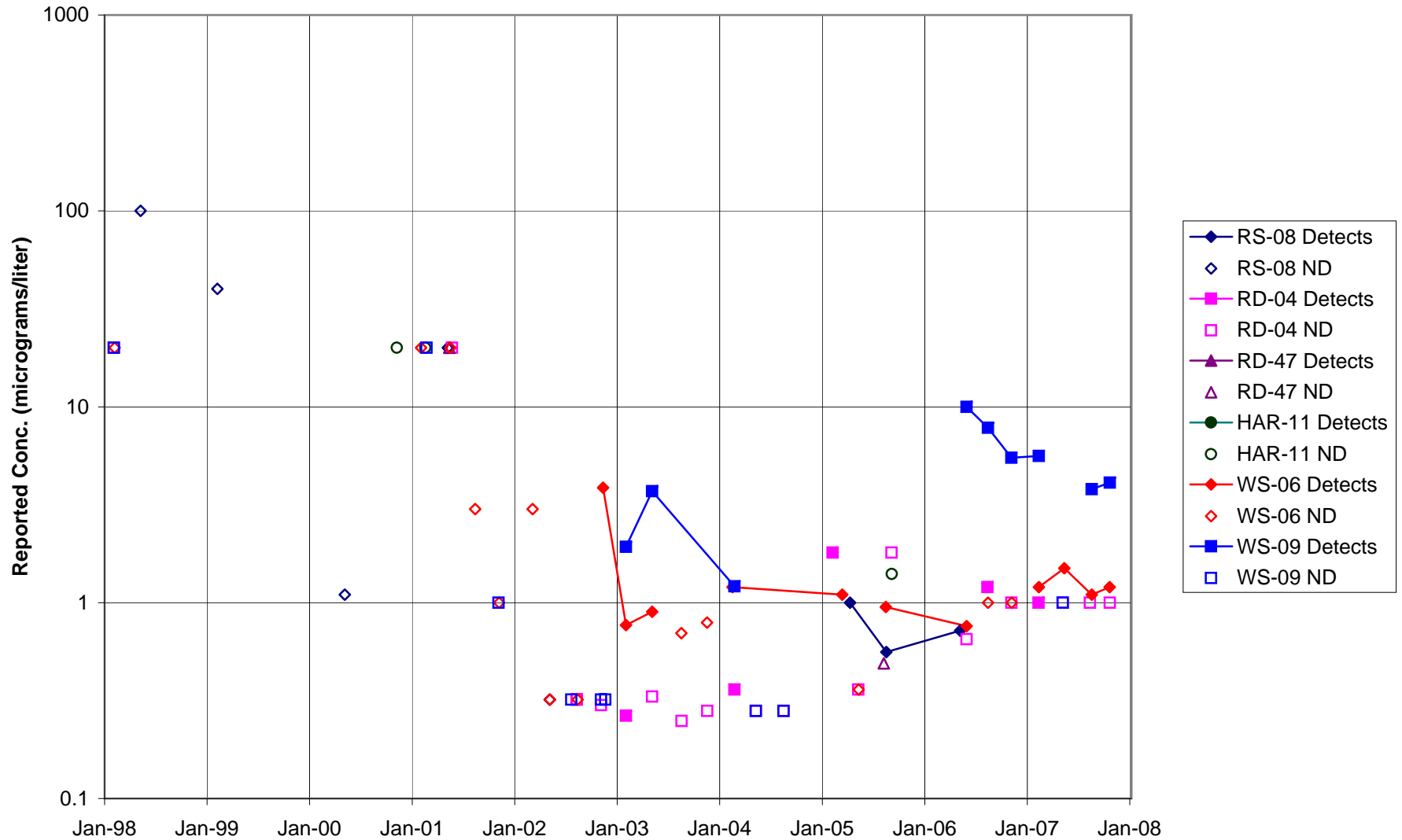


FIGURE F-98. 1,4-DIOXANE in ALFA / BRAVO AREA WELLS



**FIGURE F-99. 1,4-DIOXANE in SPA AREA WELLS**

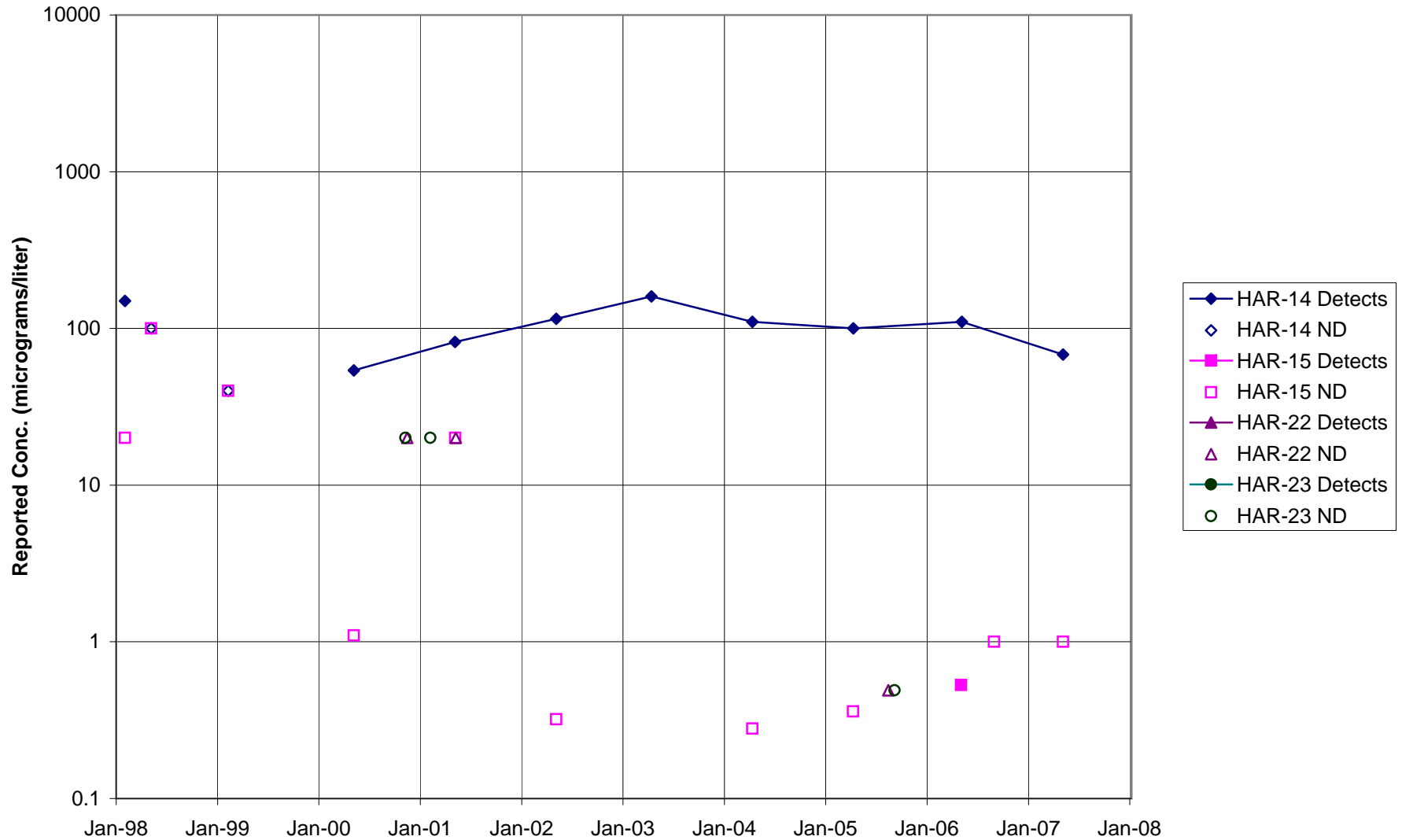


FIGURE F-100. 1,4-DIOXANE IN COCA / PLF AREA WELLS

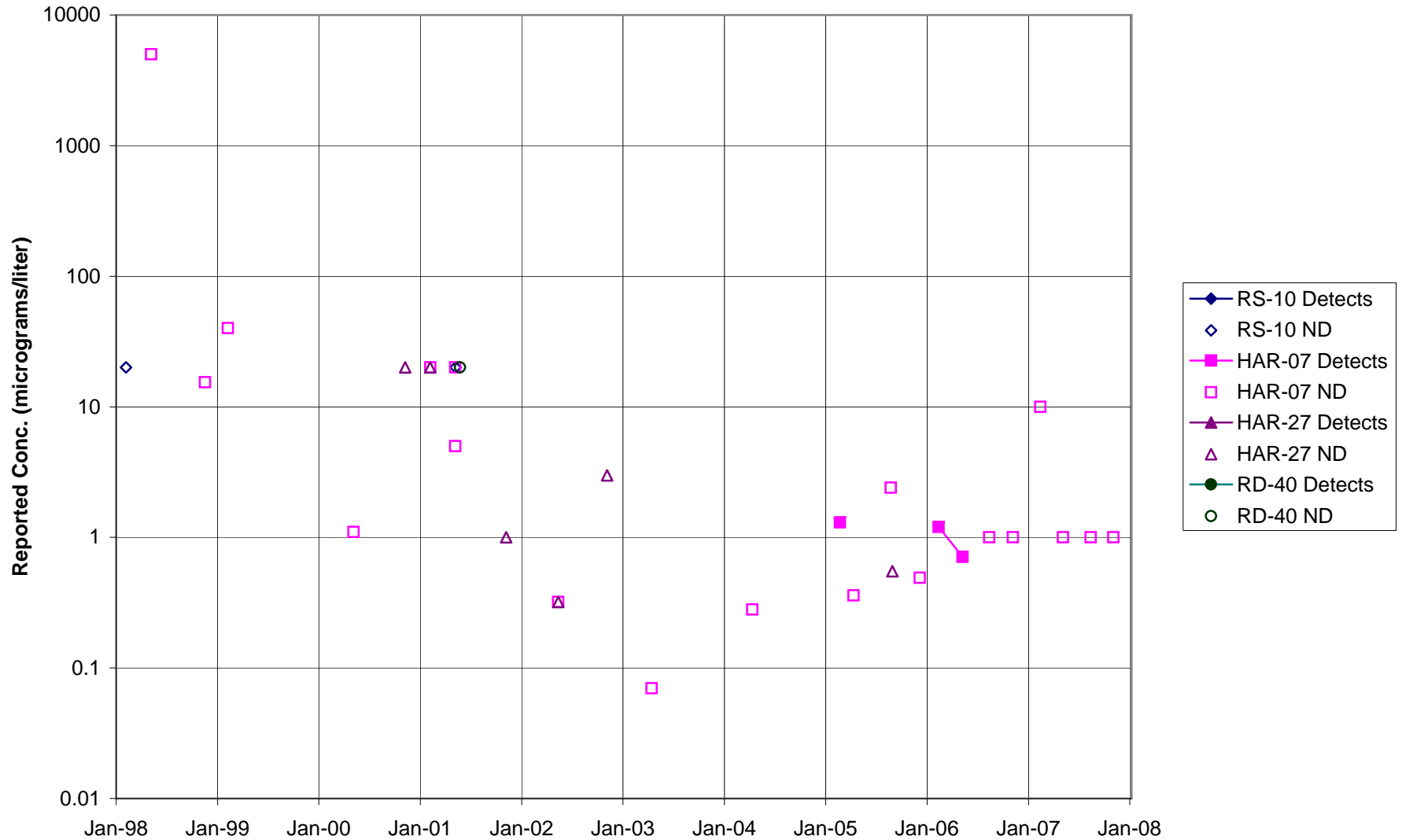


FIGURE F-101. 1,4-DIOXANE in DELTA / BUFFER ZONE AREA WELLS

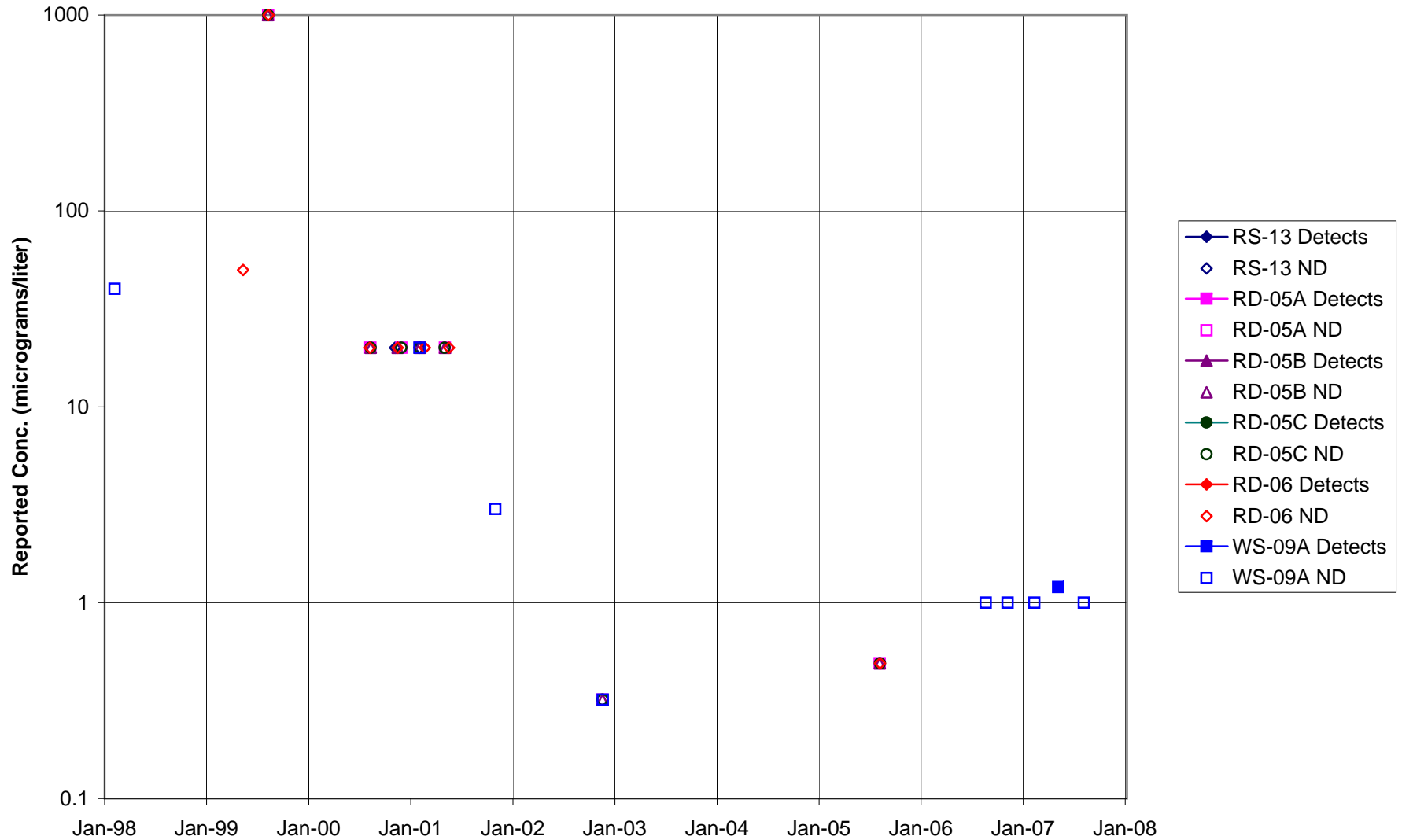
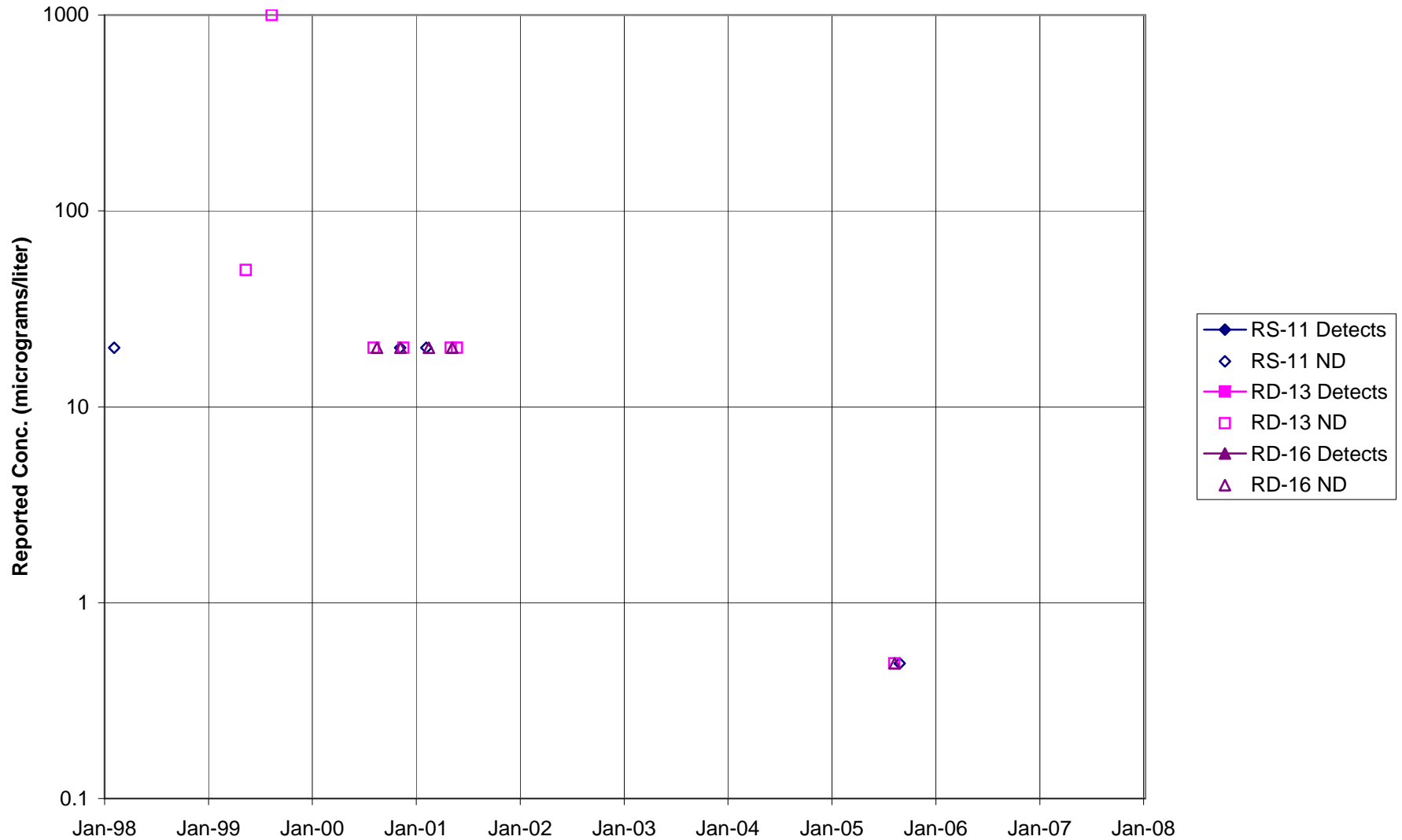
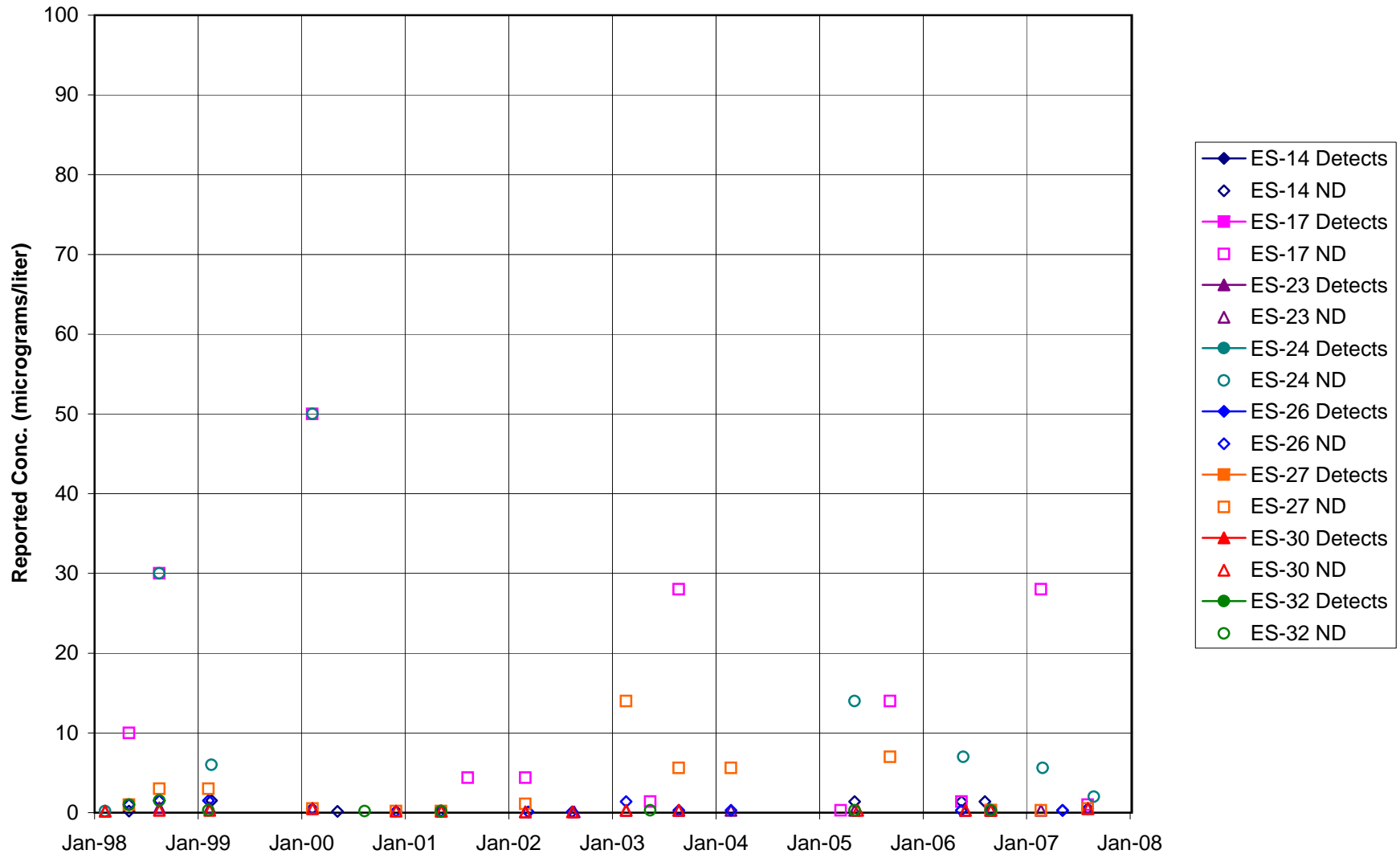


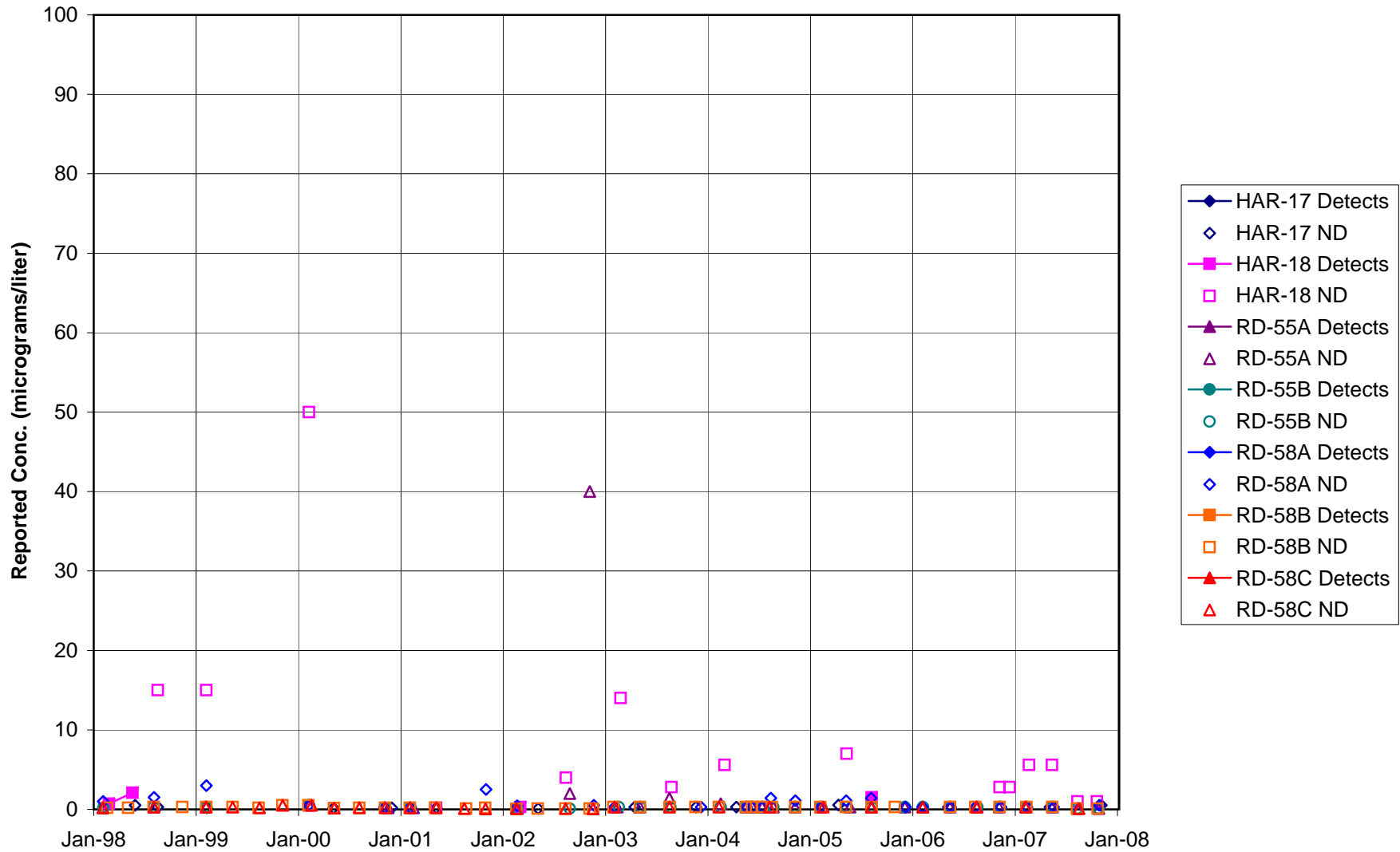
FIGURE F-102. 1,4-DIOXANE IN AREA IV WELLS



**FIGURE F-103. BENZENE in STL-IV AREA SHALLOW WELLS**

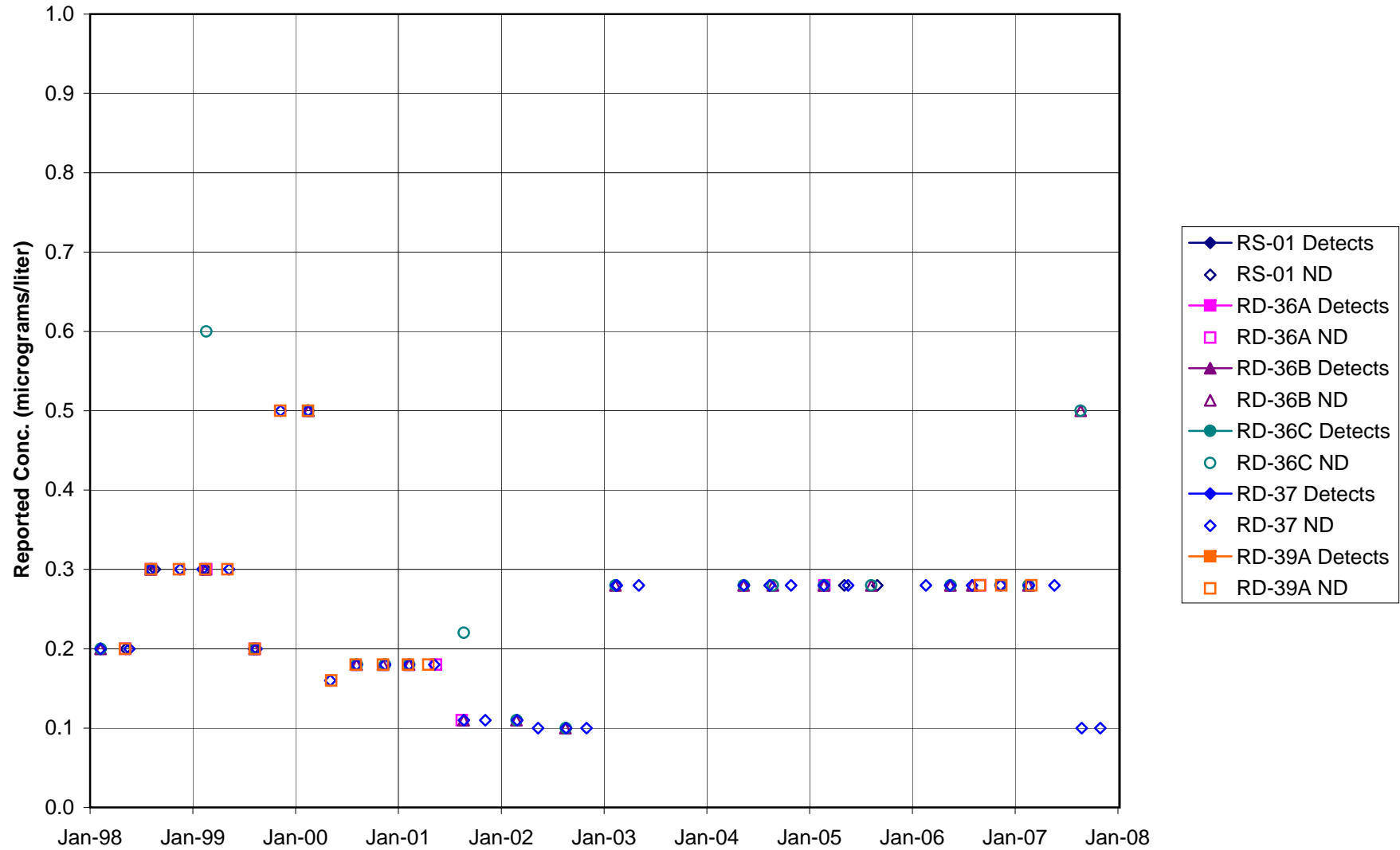


**FIGURE F-104. BENZENE in STL-IV AREA CHATSWORTH FORMATION WELLS**

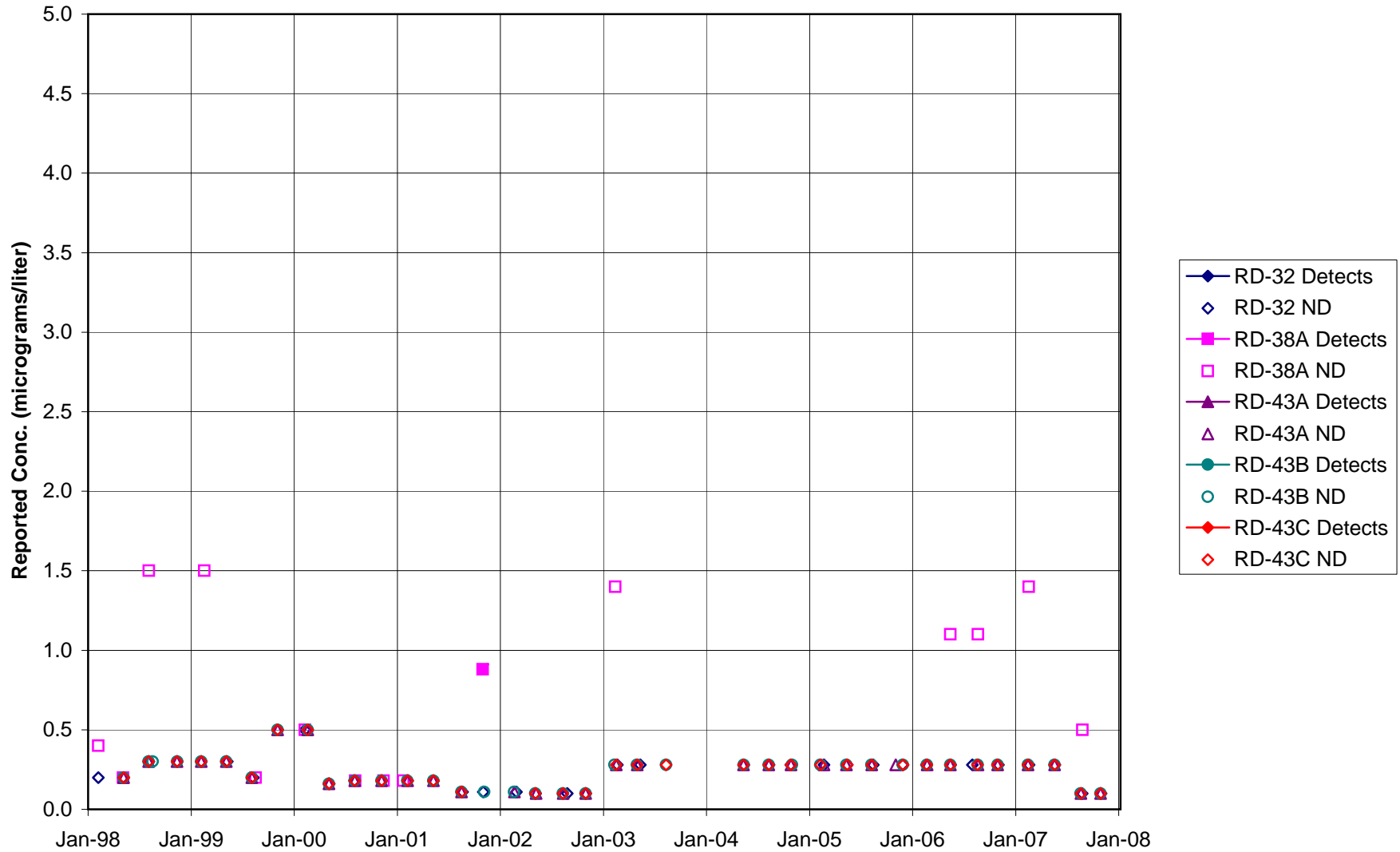




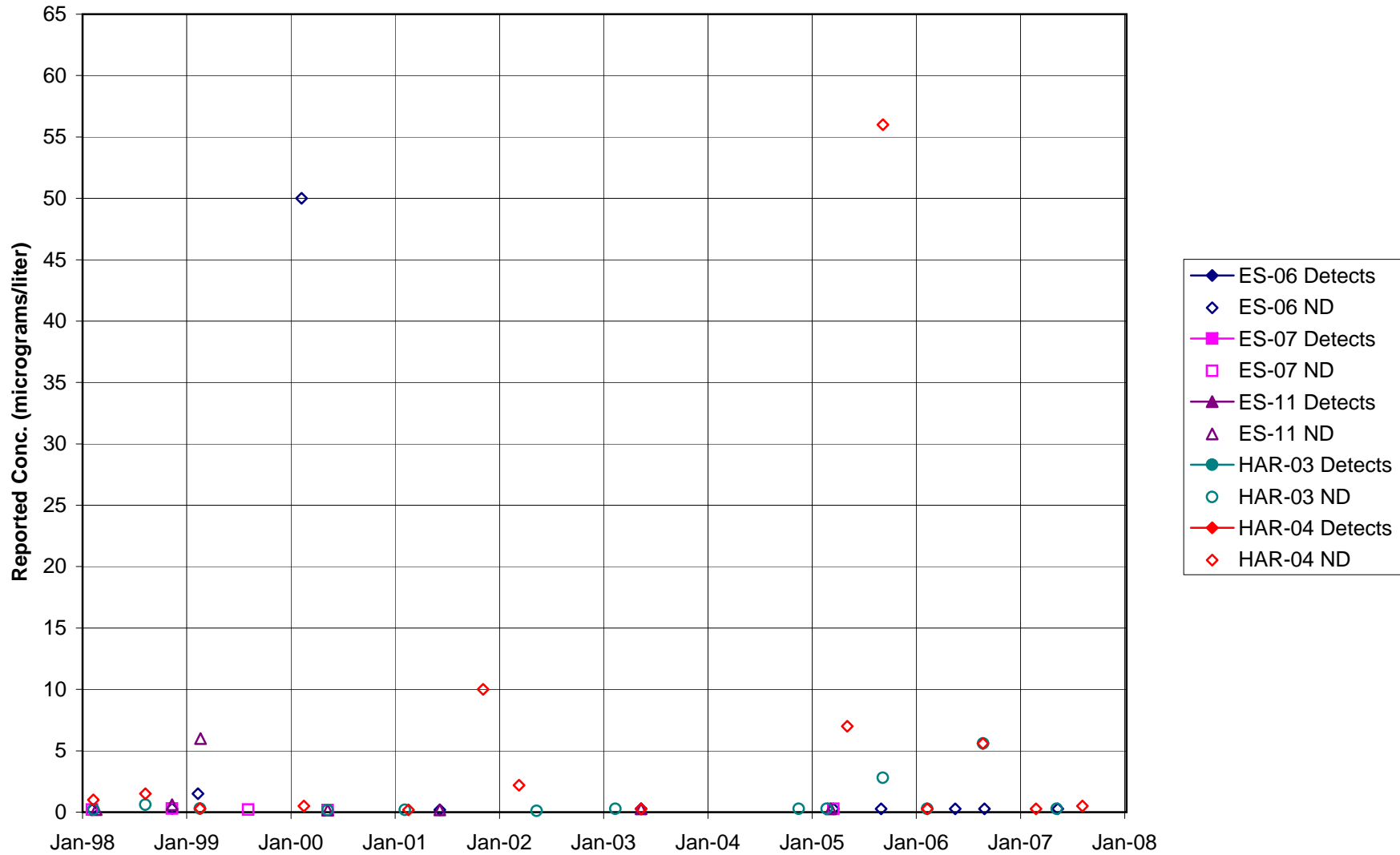
**FIGURE F-105. BENZENE in MAIN GATE AREA WELLS - 1**



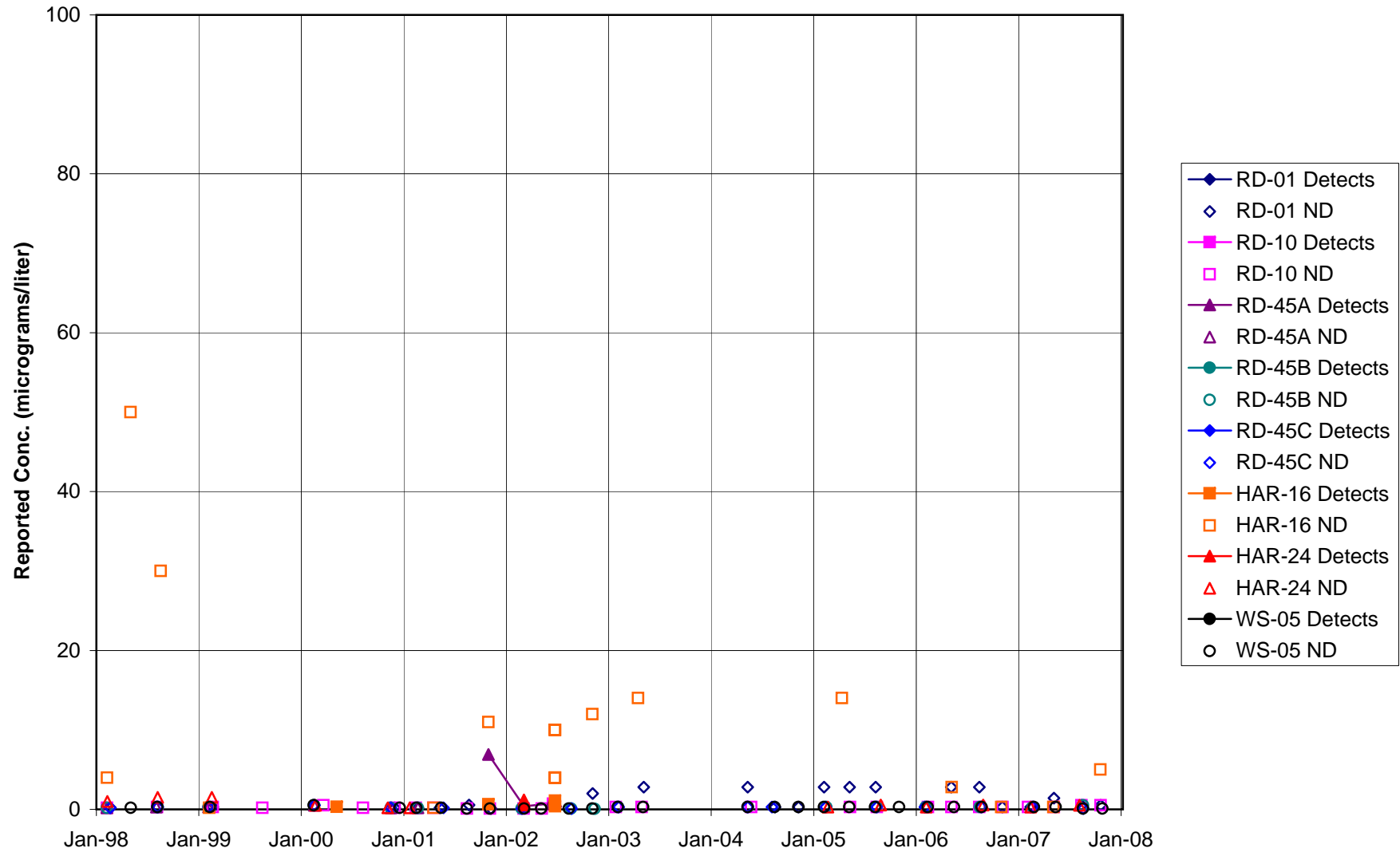
**FIGURE F-106. BENZENE in MAIN GATE AREA WELLS - 2**



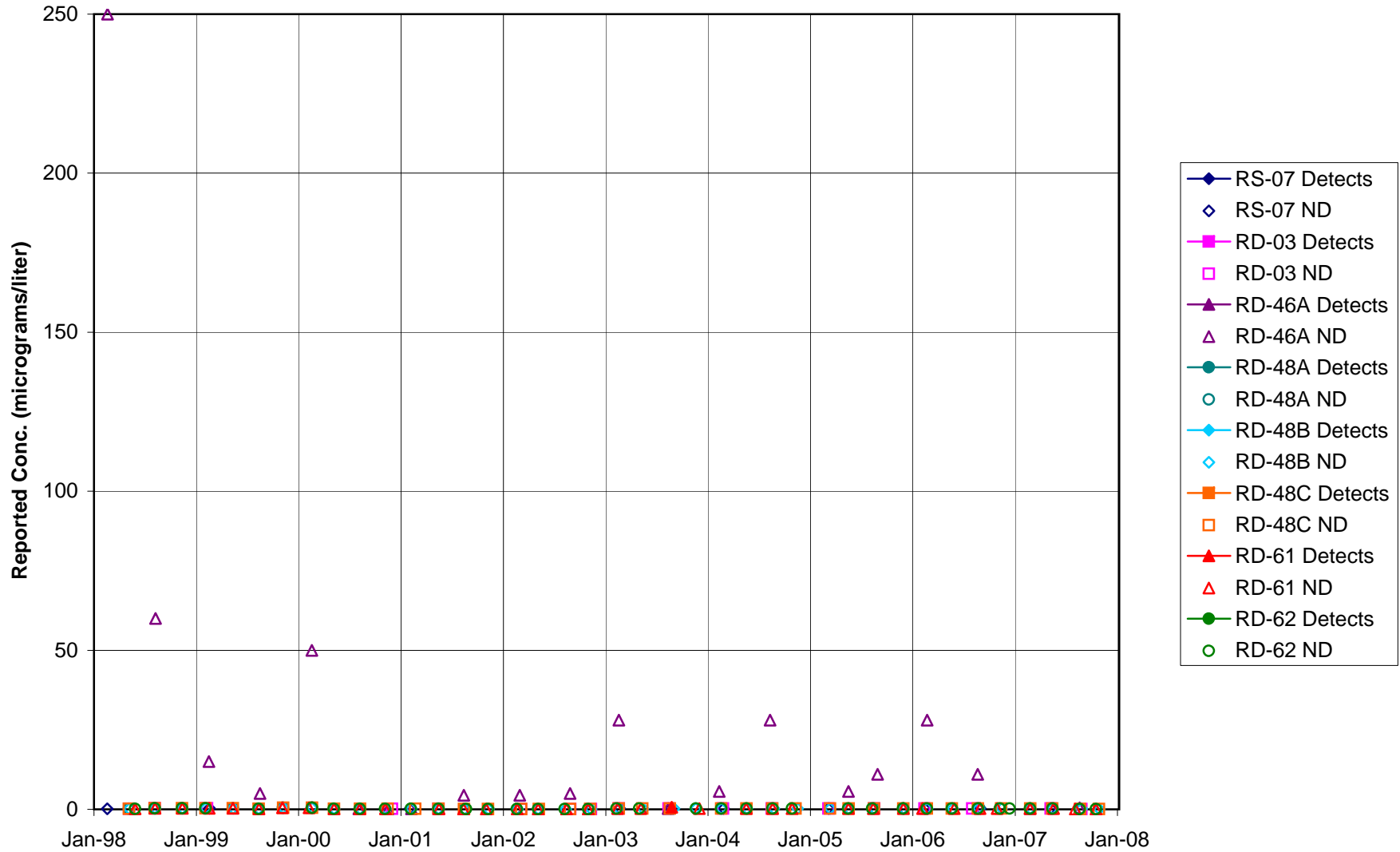
**FIGURE F-107. BENZENE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1**



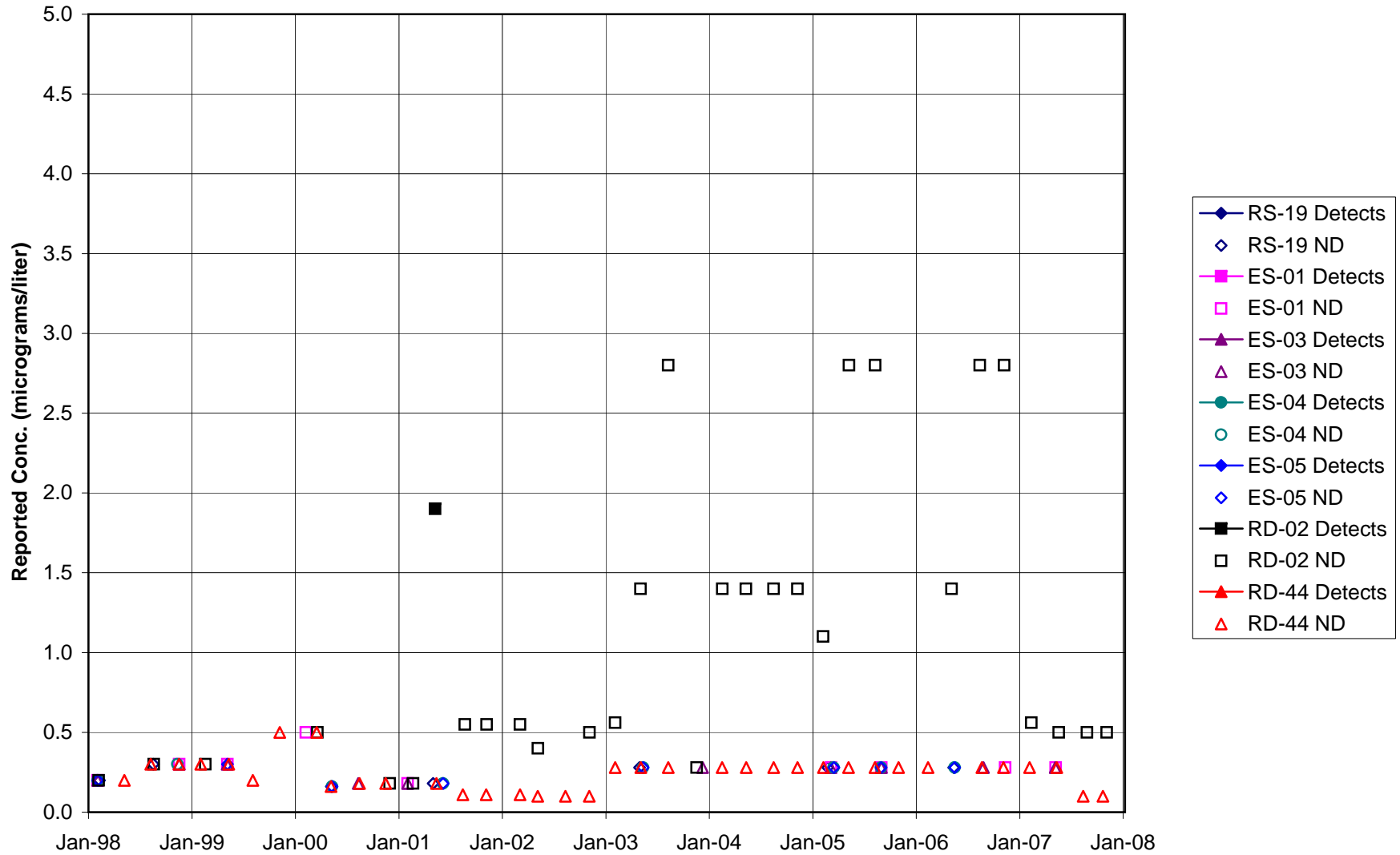
**FIGURE F-108. BENZENE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 2**



**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**

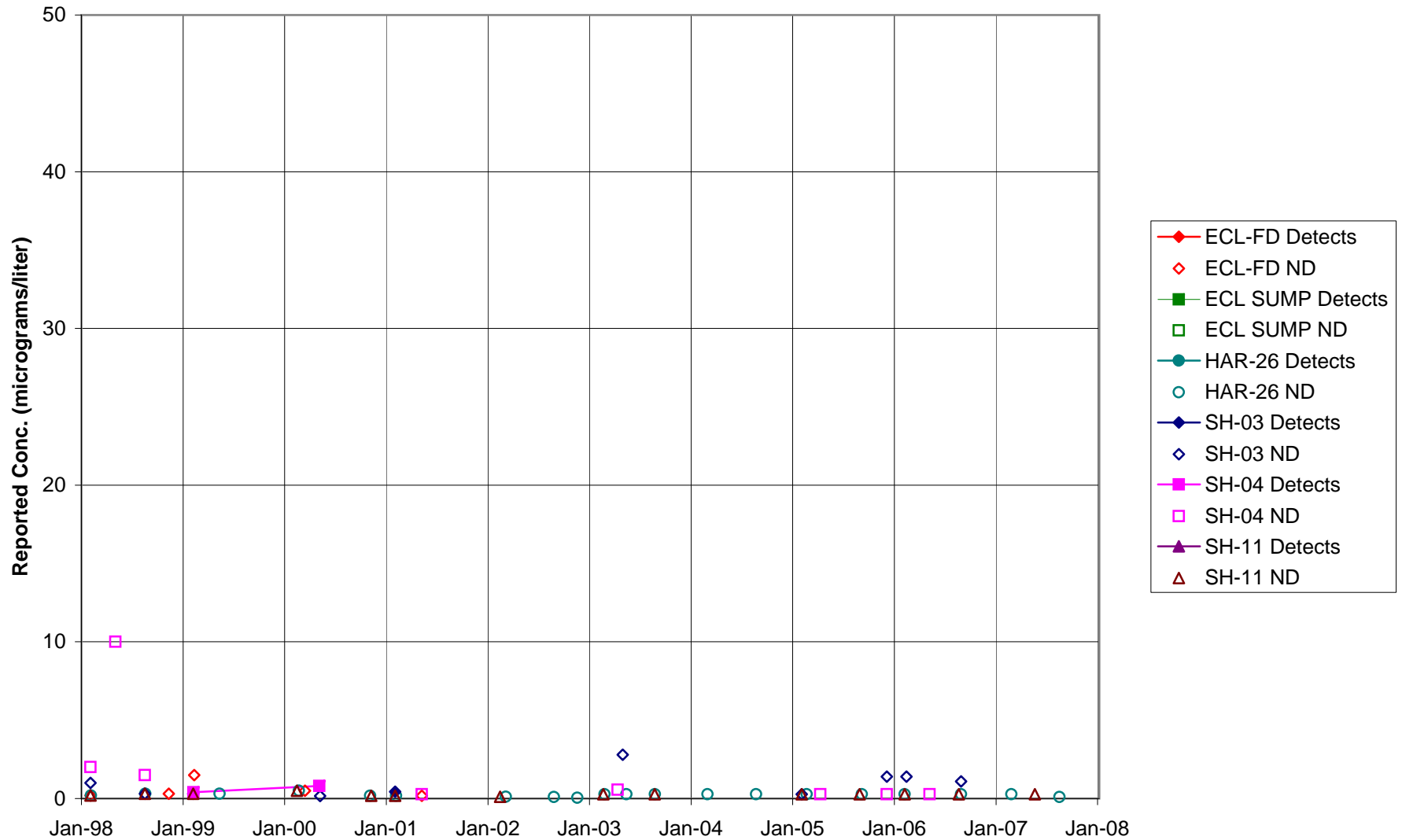
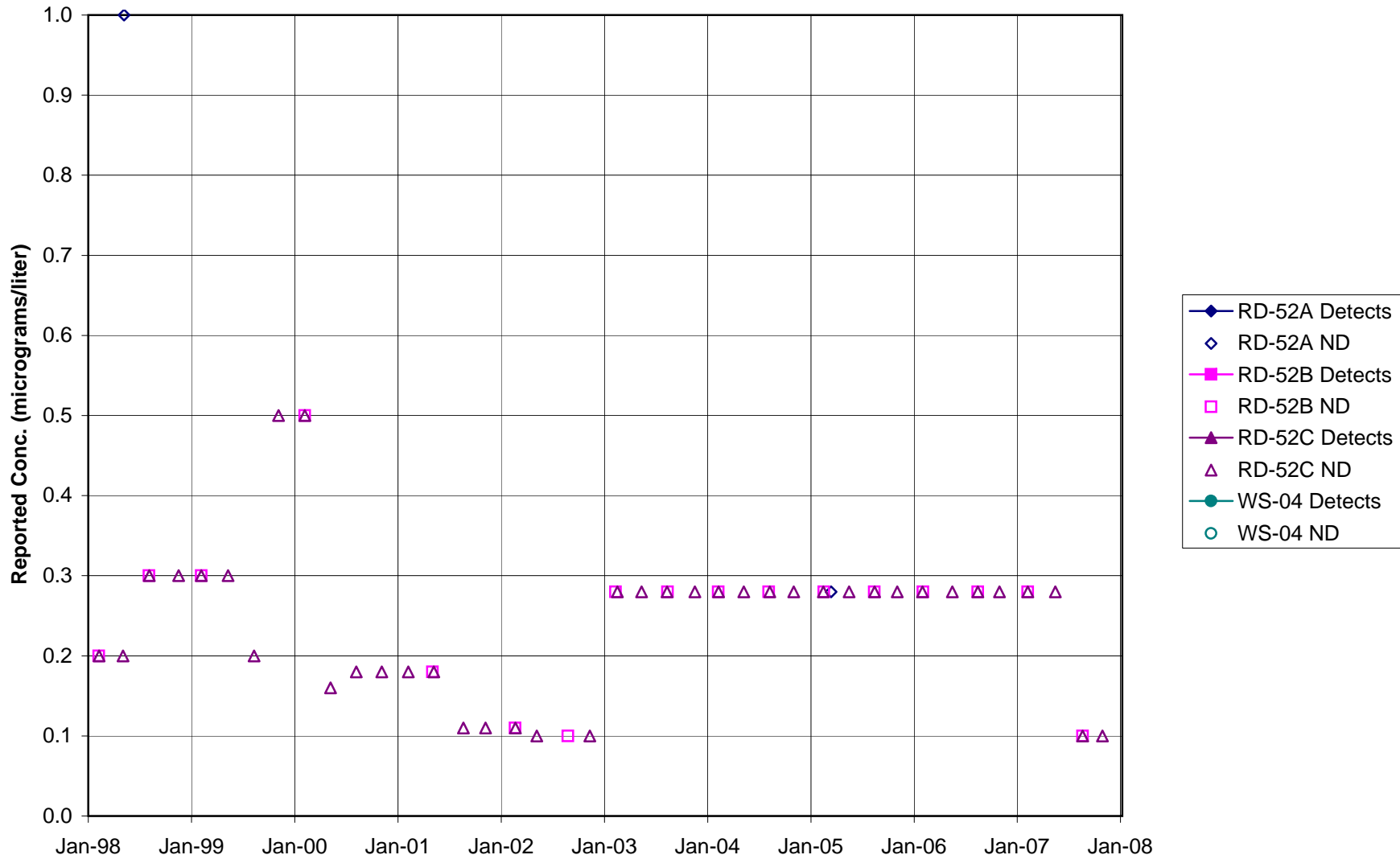
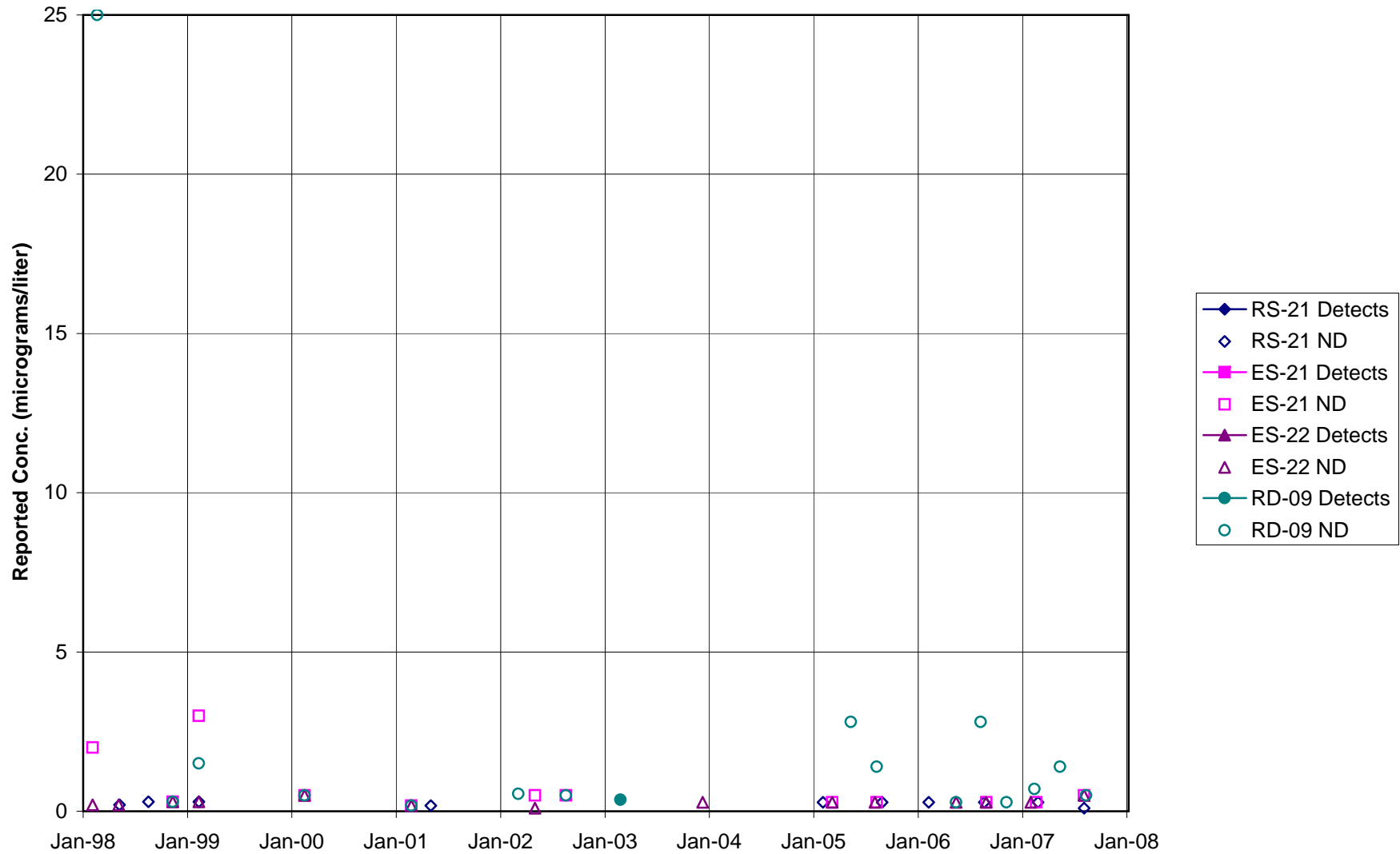


FIGURE F-112. BENZENE in FORMER LOX PLANT AREA WELLS

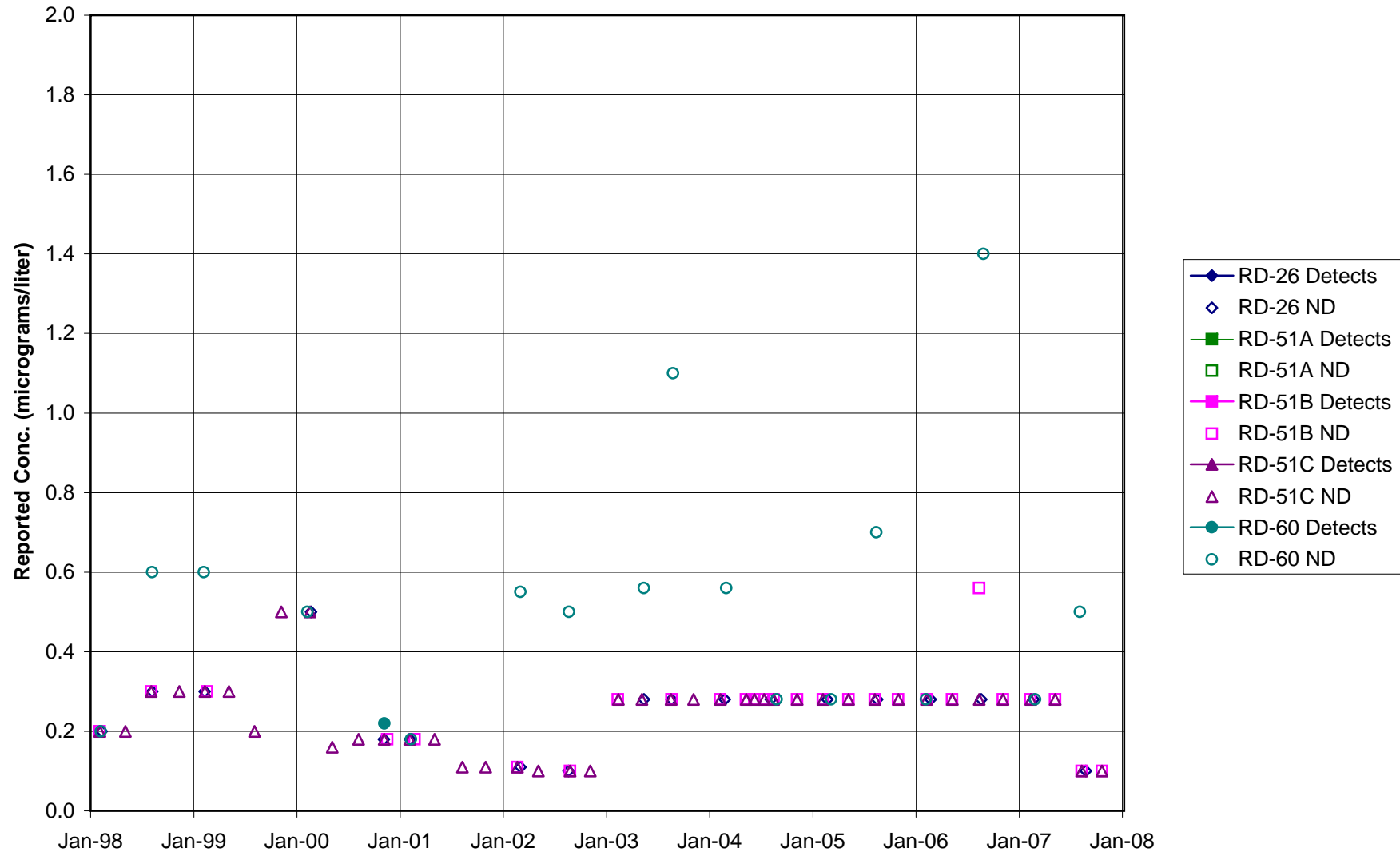




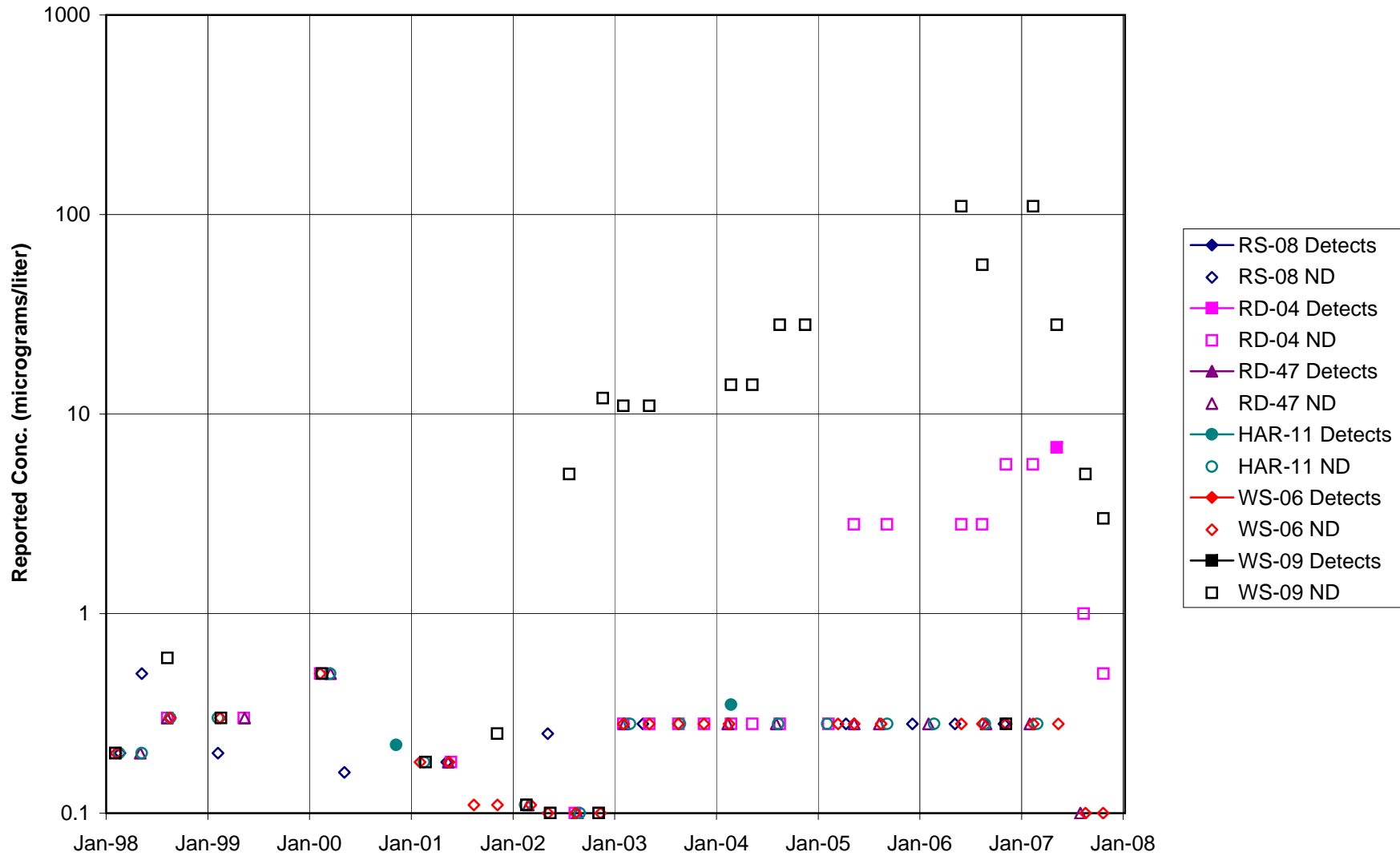
**FIGURE F-113. BENZENE in RD- 09 AREA WELLS**



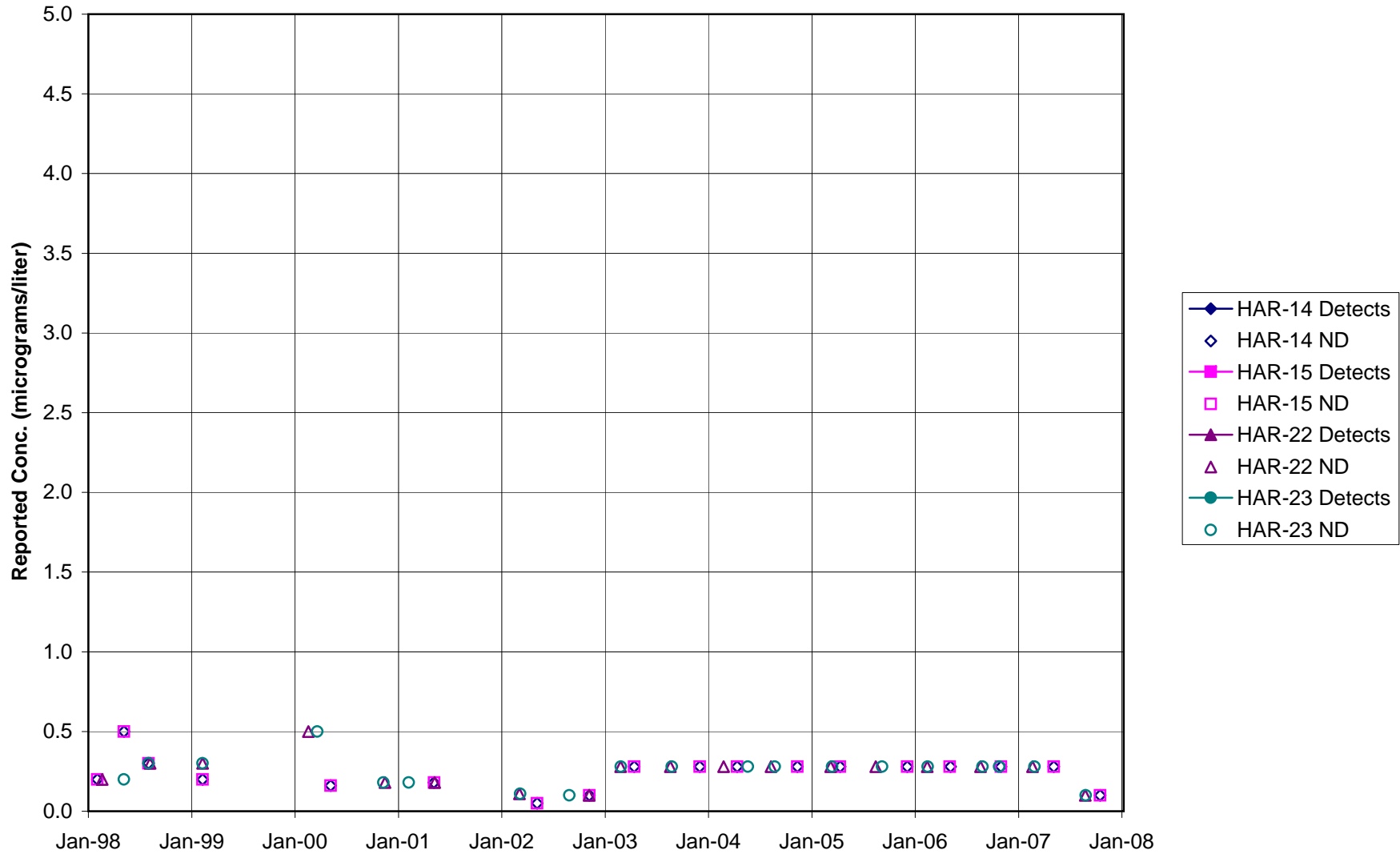
**FIGURE F-114. BENZENE in HELIPORT, B/204 AREA WELLS**



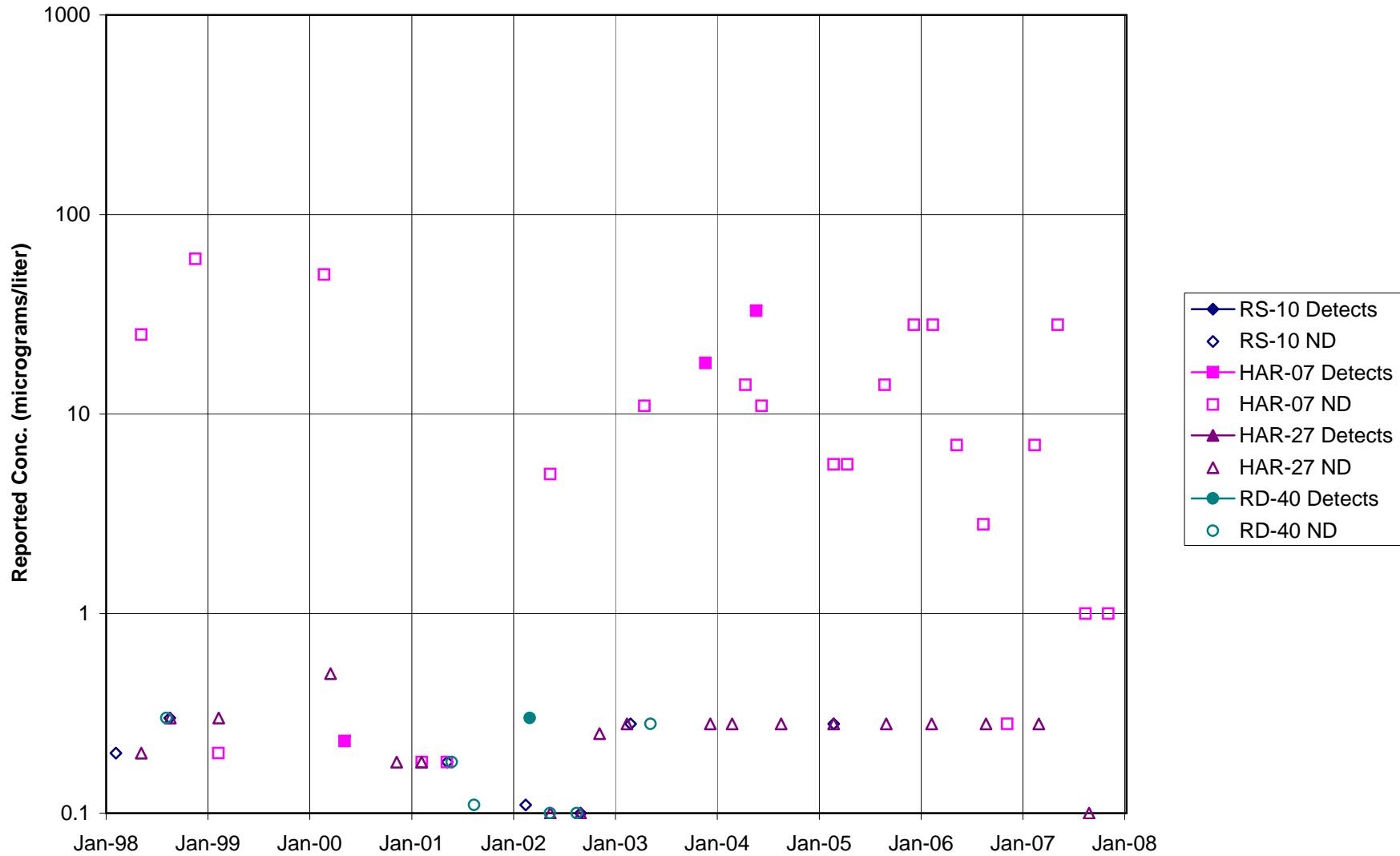
**FIGURE F-115. BENZENE in ALFA / BRAVO AREA WELLS**



**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**

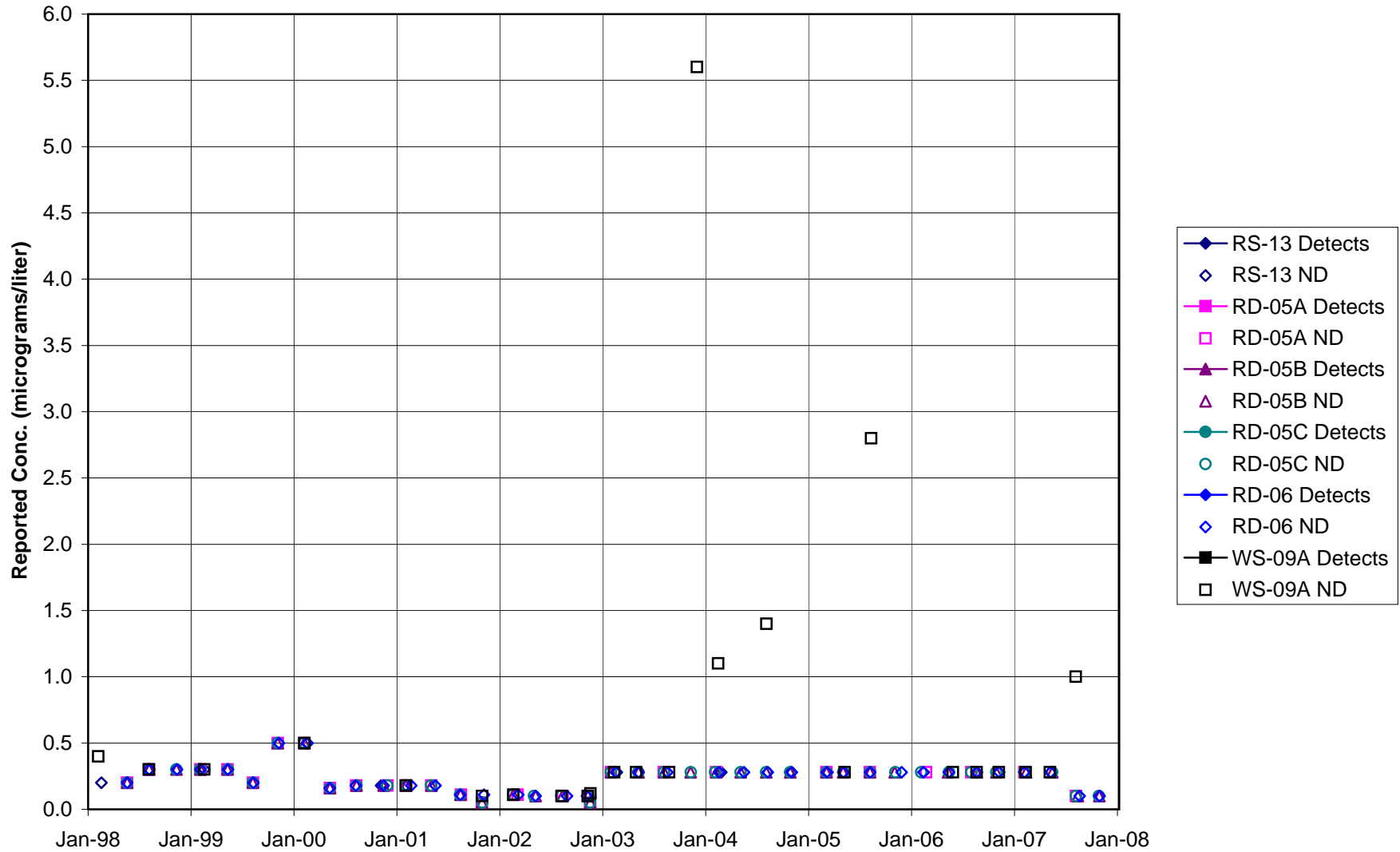
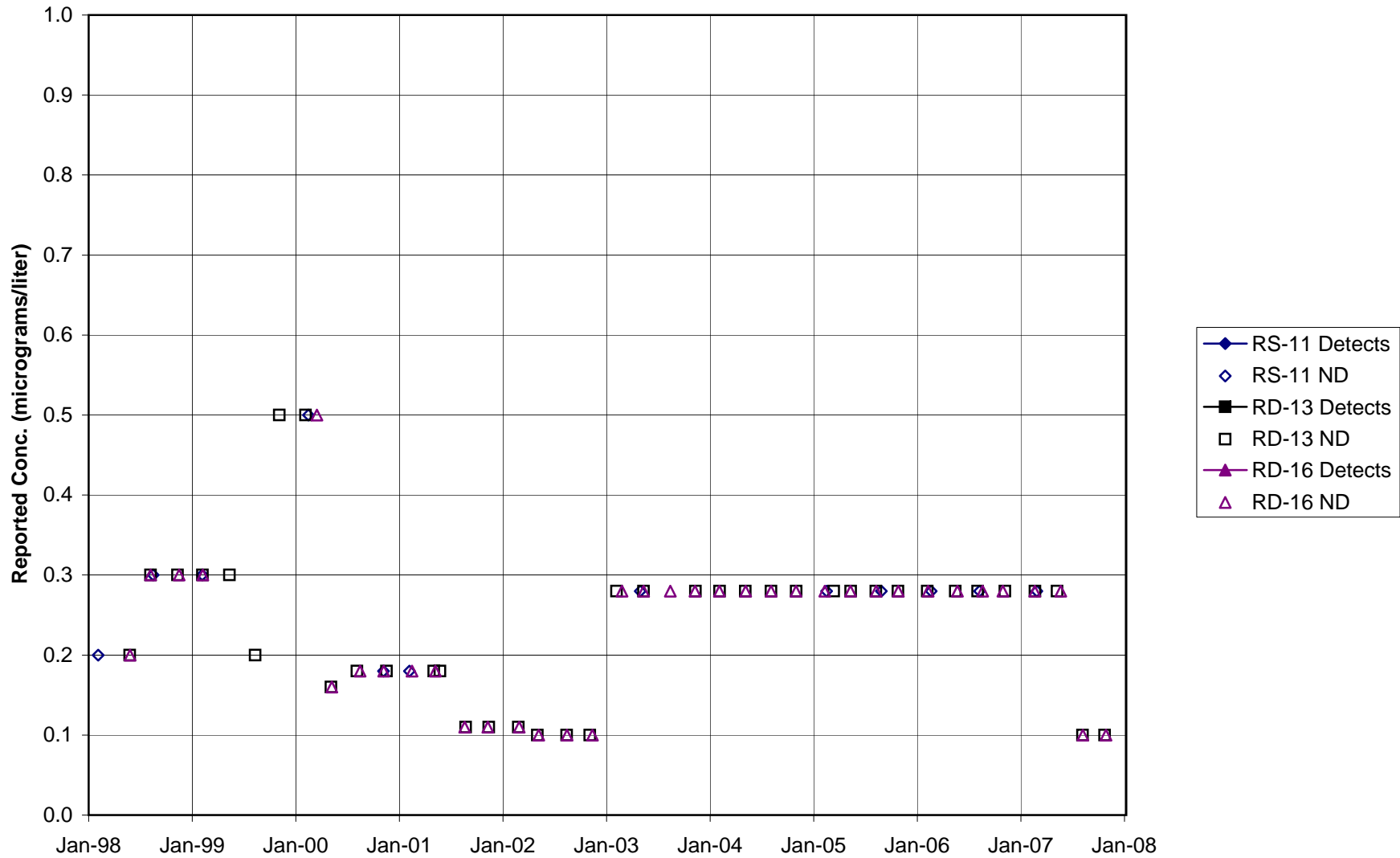
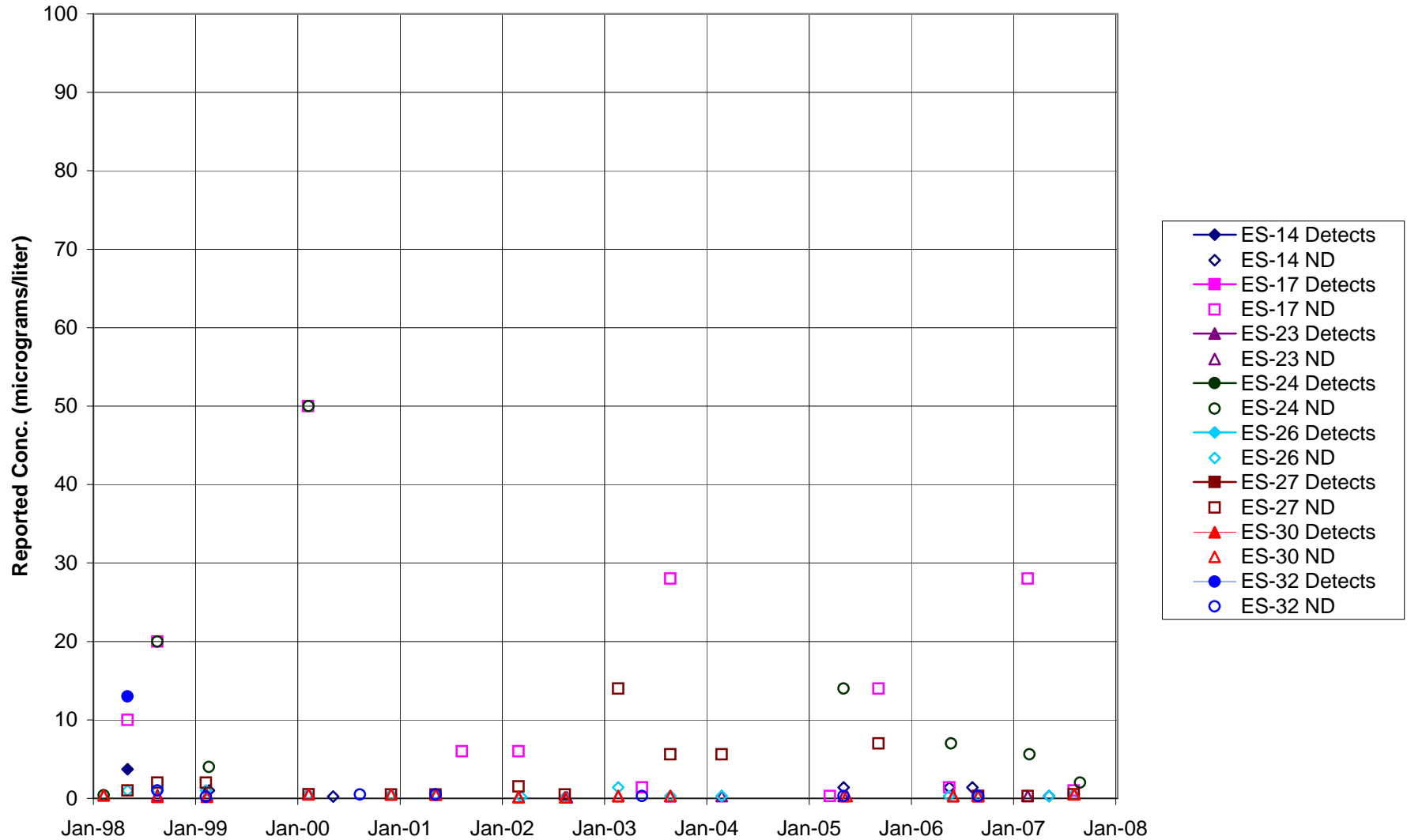


FIGURE F-119. BENZENE in AREA IV AREA WELLS

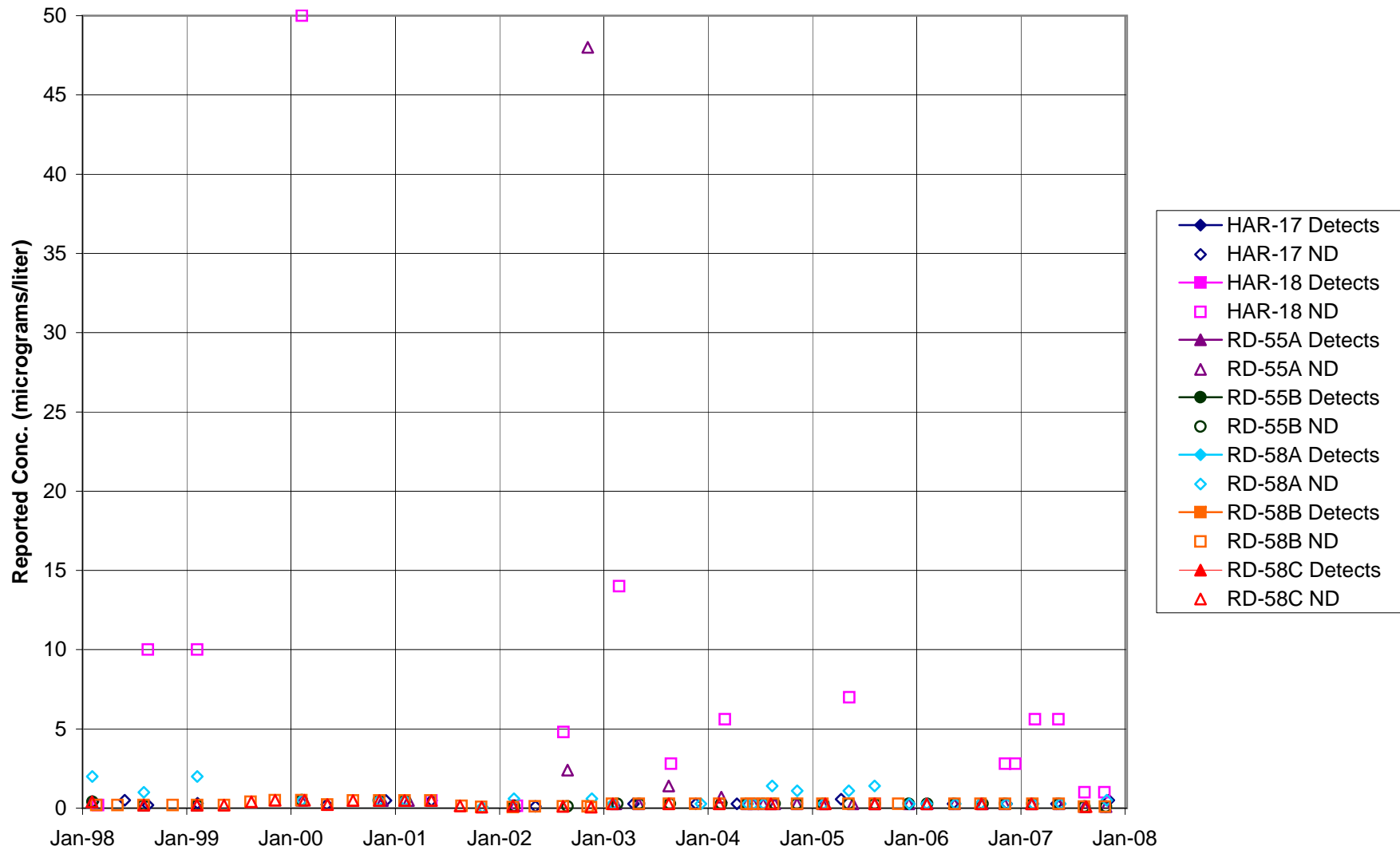


**FIGURE F-120. CARBON TETRACHLORIDE in STL-IV AREA SHALLOW WELLS**

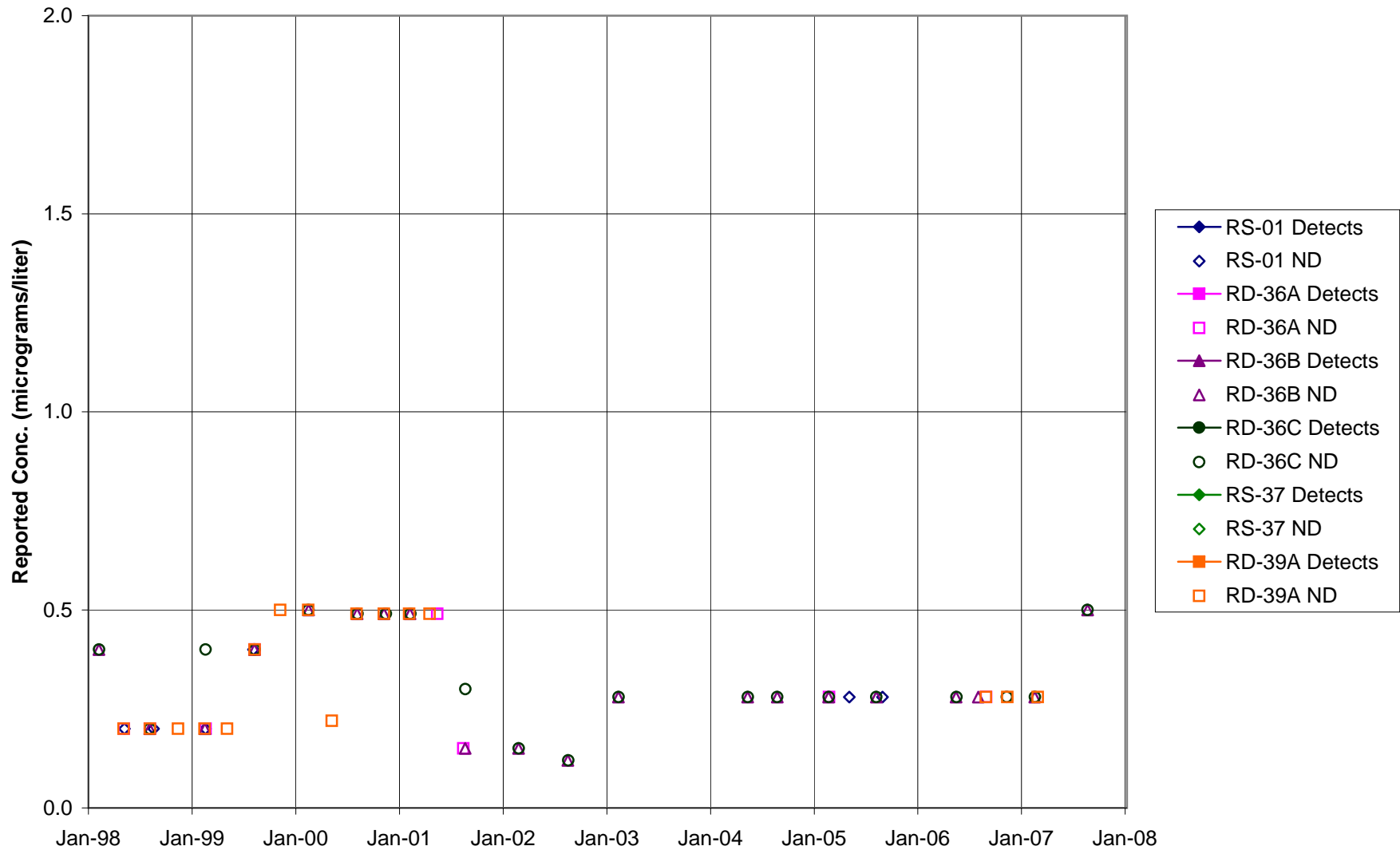




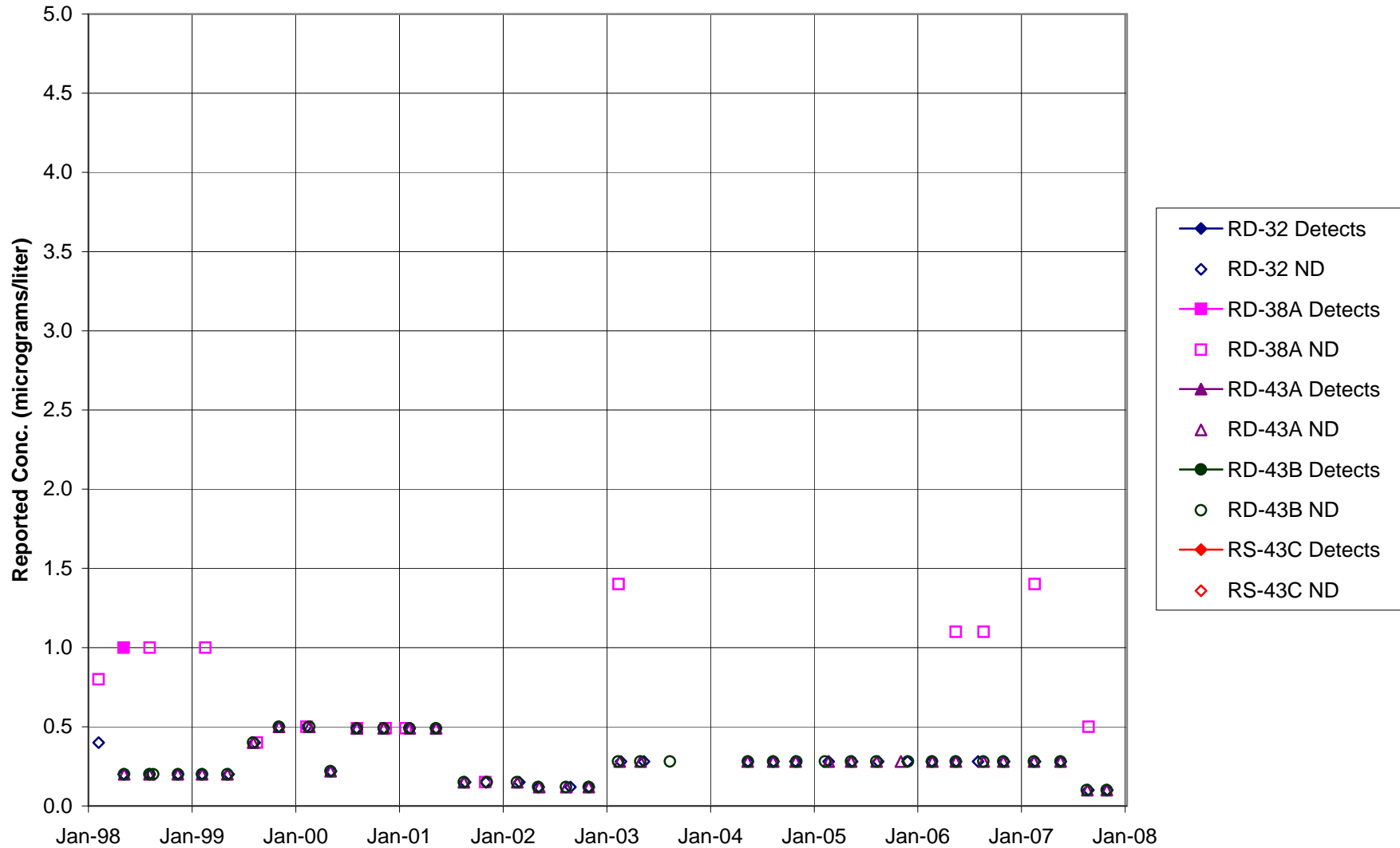
**FIGURE F-121. CARBON TETRACHLORIDE in STL-IV AREA CHATSWORTH FORMATION WELLS**



**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**

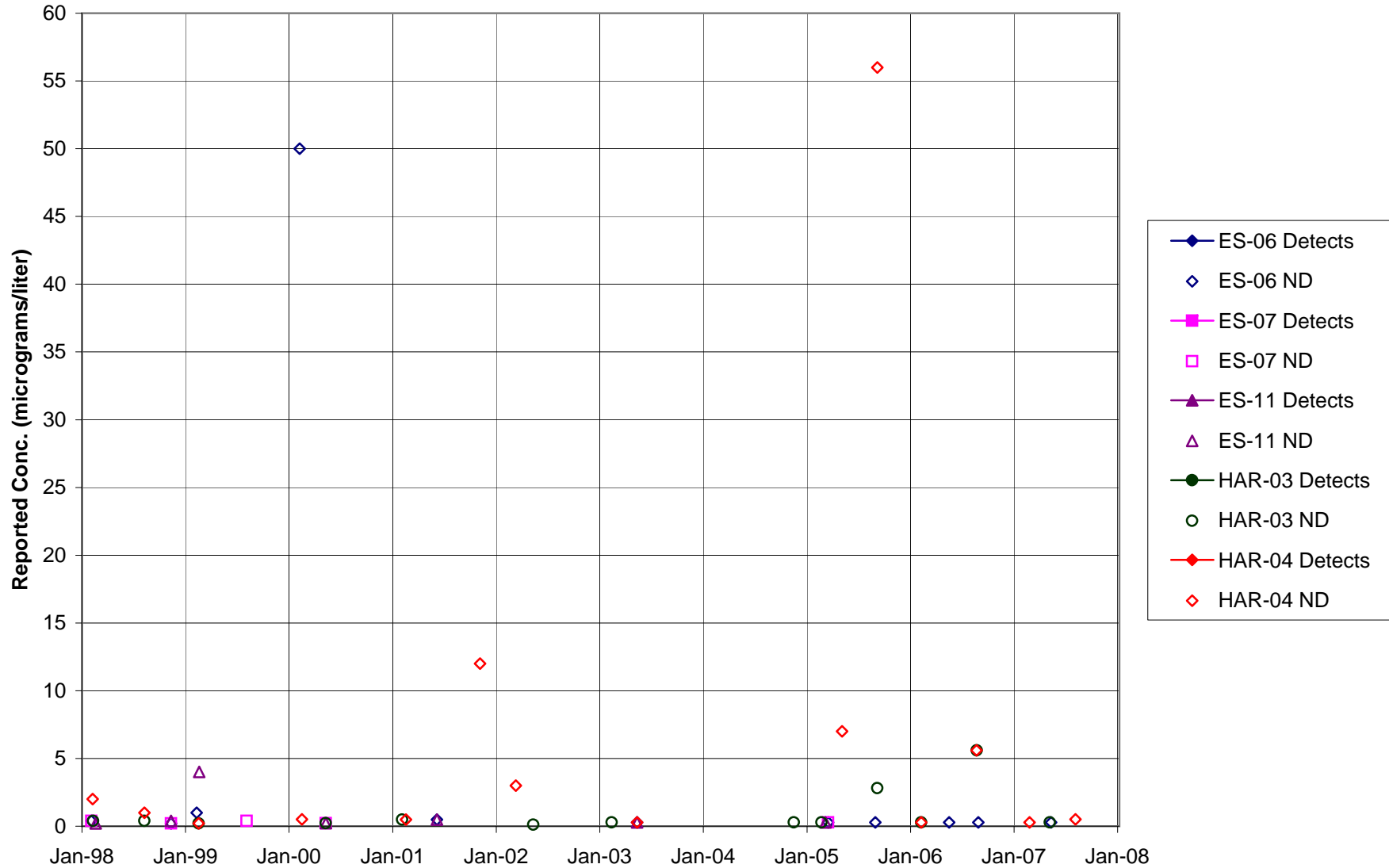
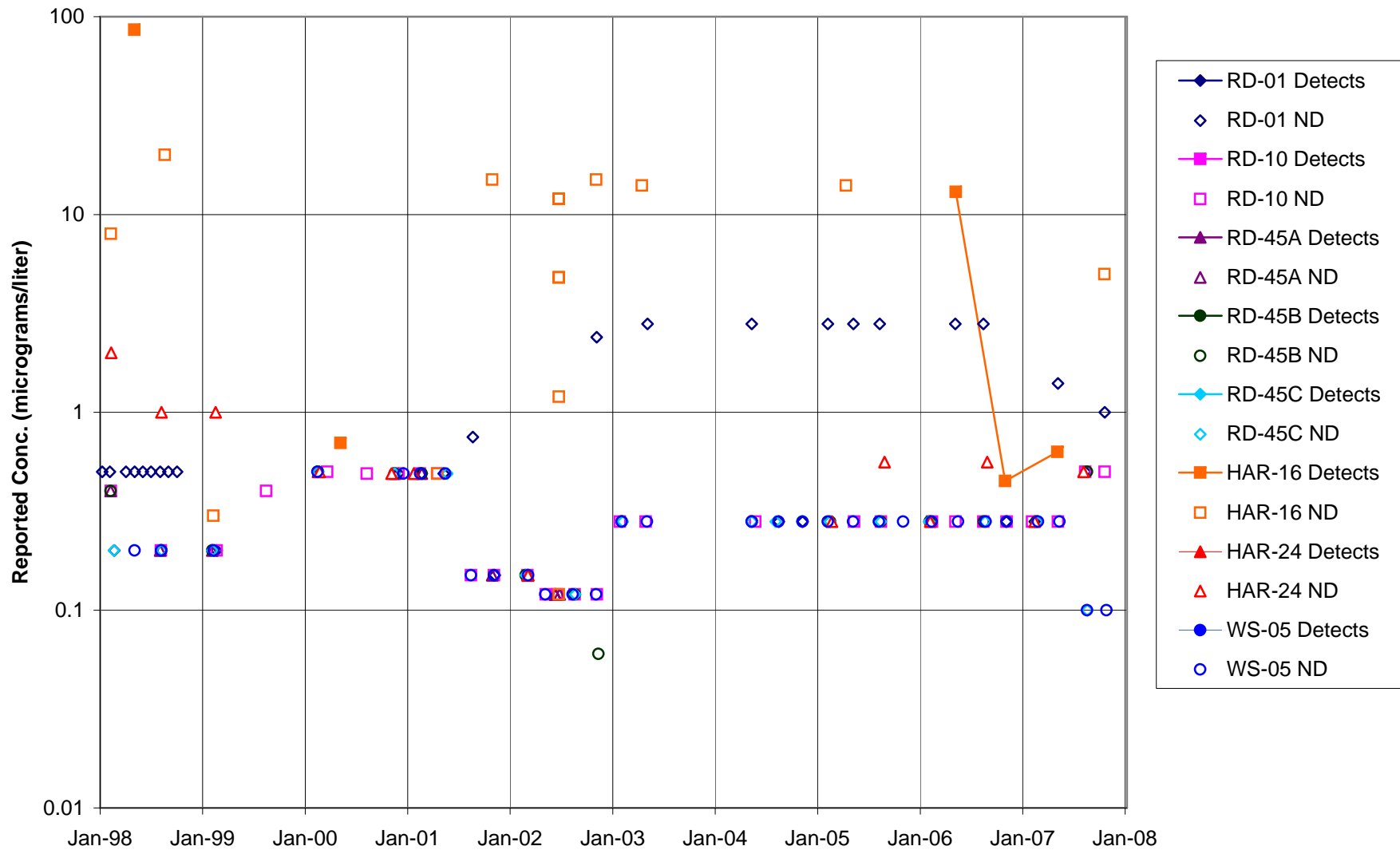
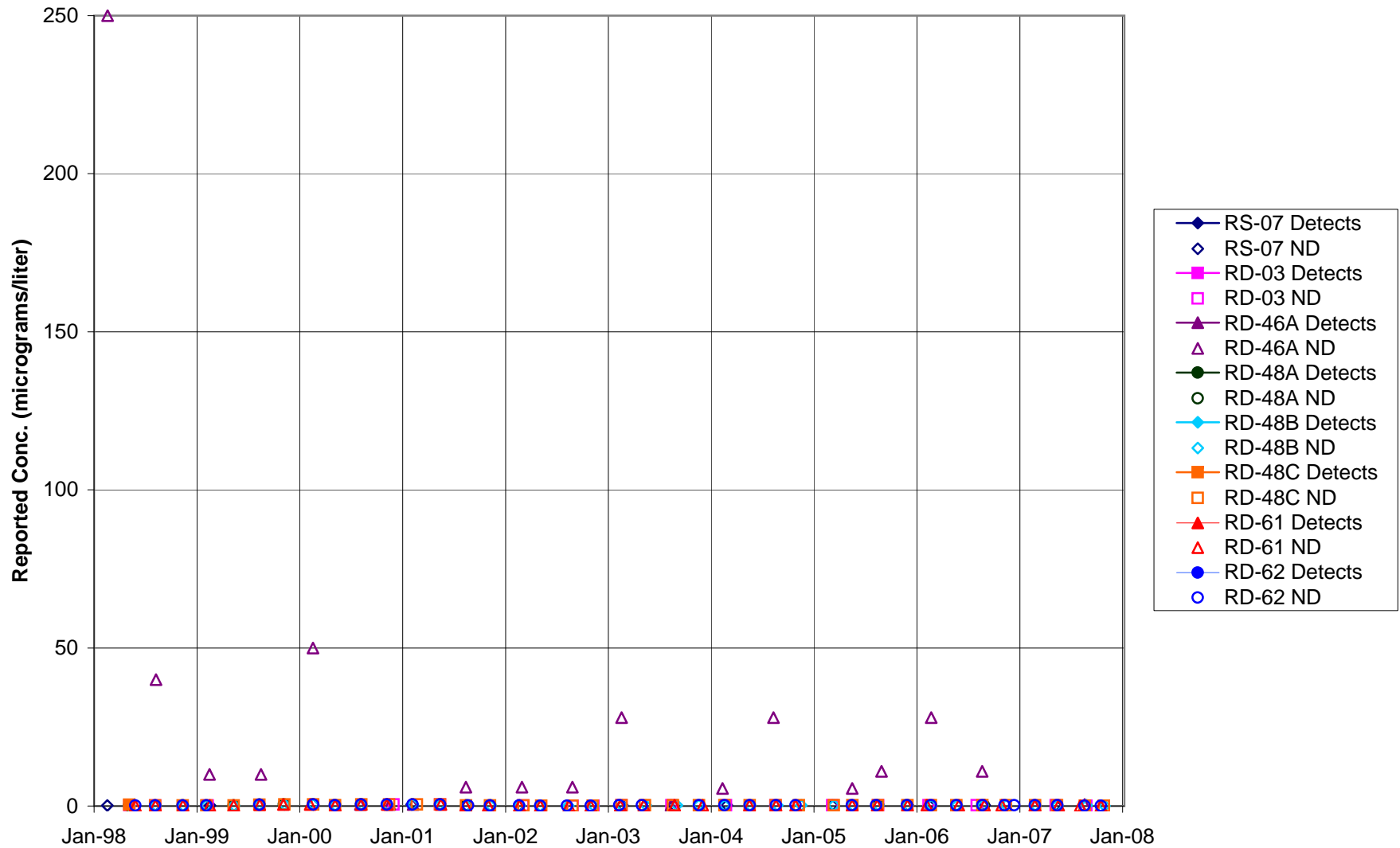


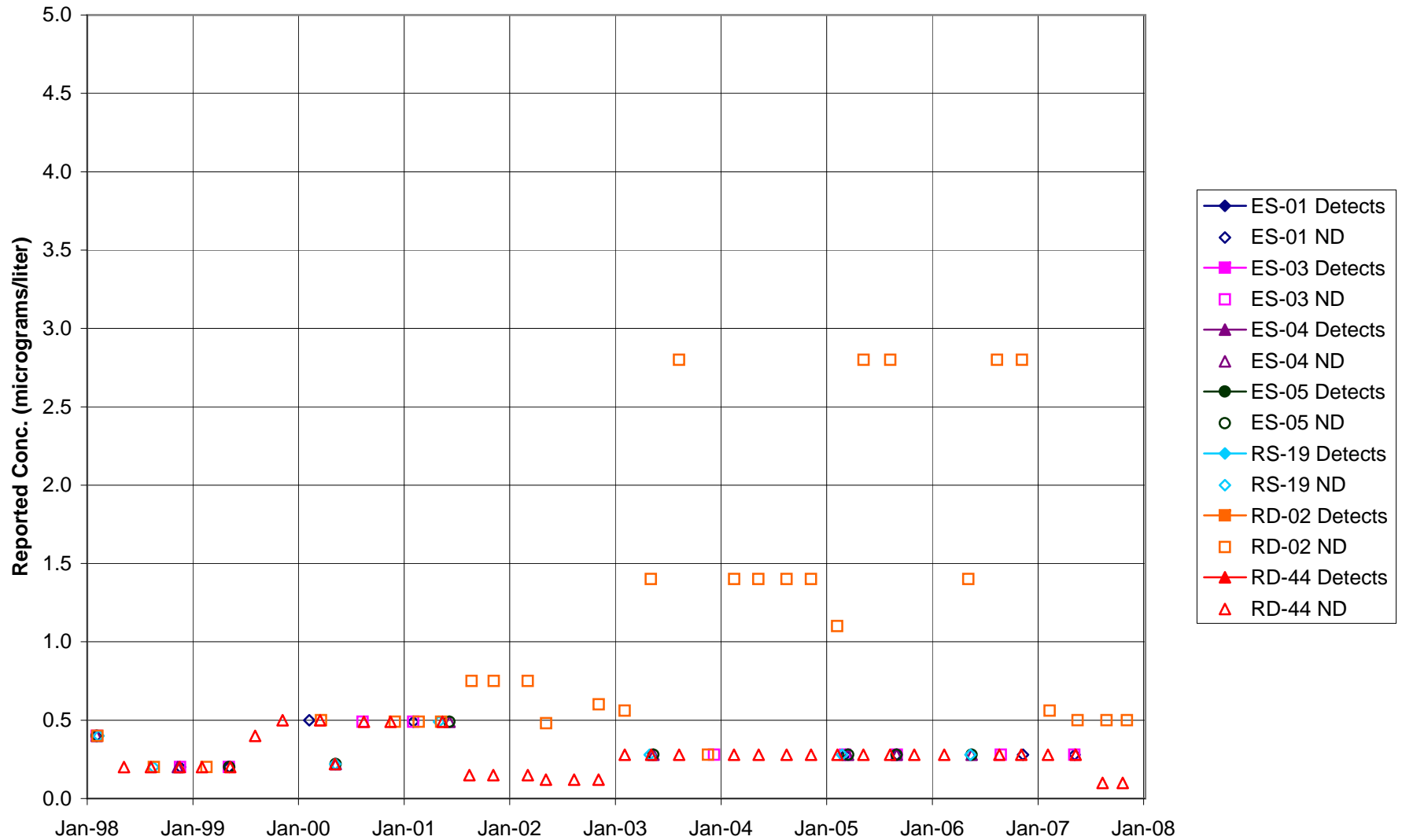
FIGURE F-125. CARBON TETRACHLORIDE in APTF, CANYON, & HAPPY VALLEY WELLS - 2



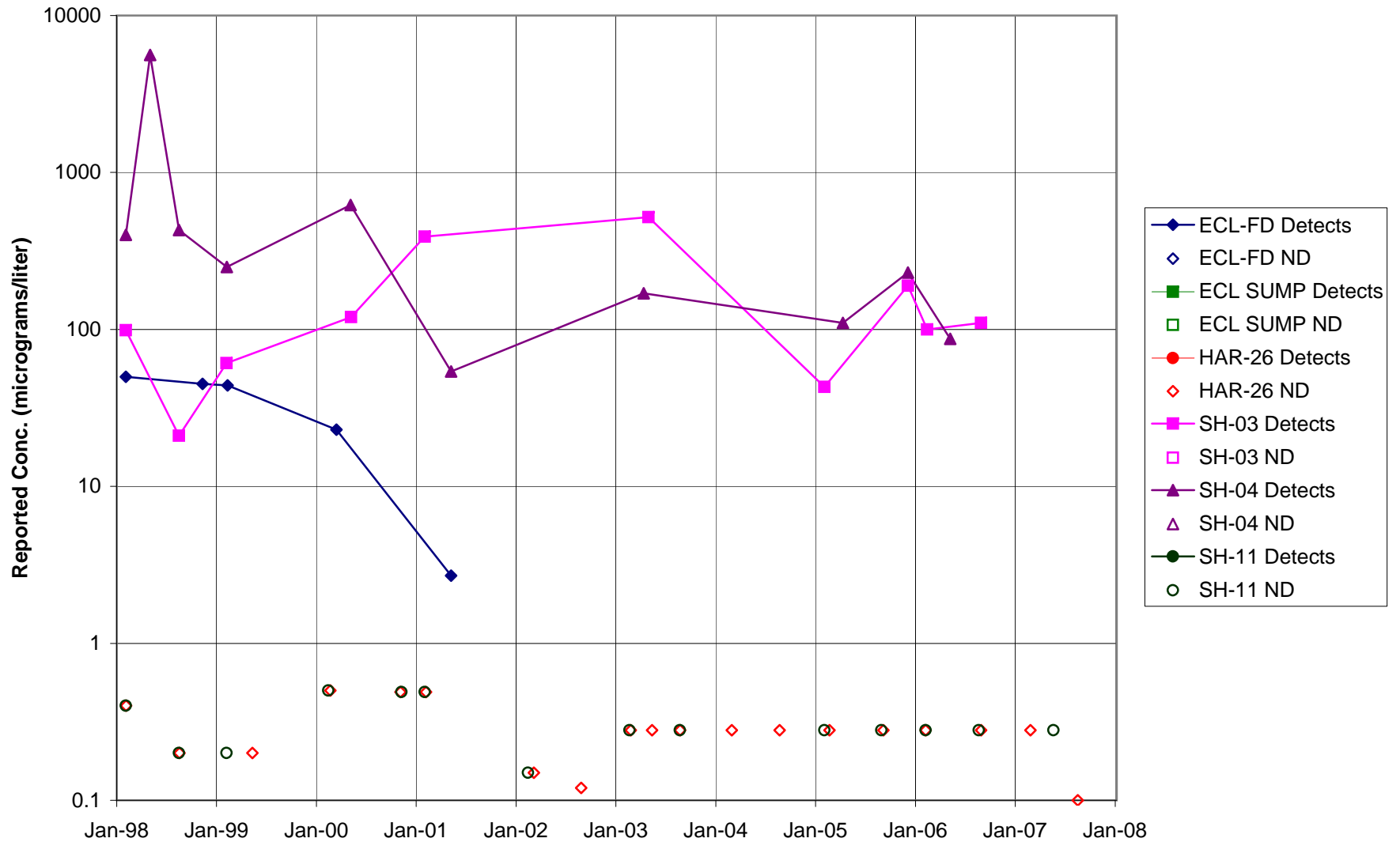
**FIGURE F-126. CARBON TETRACHLORIDE in CTL-III / PERIMETER POND AREA WELLS**



**FIGURE F-127. CARBON TETRACHLORIDE in BOWL AREA WELLS**

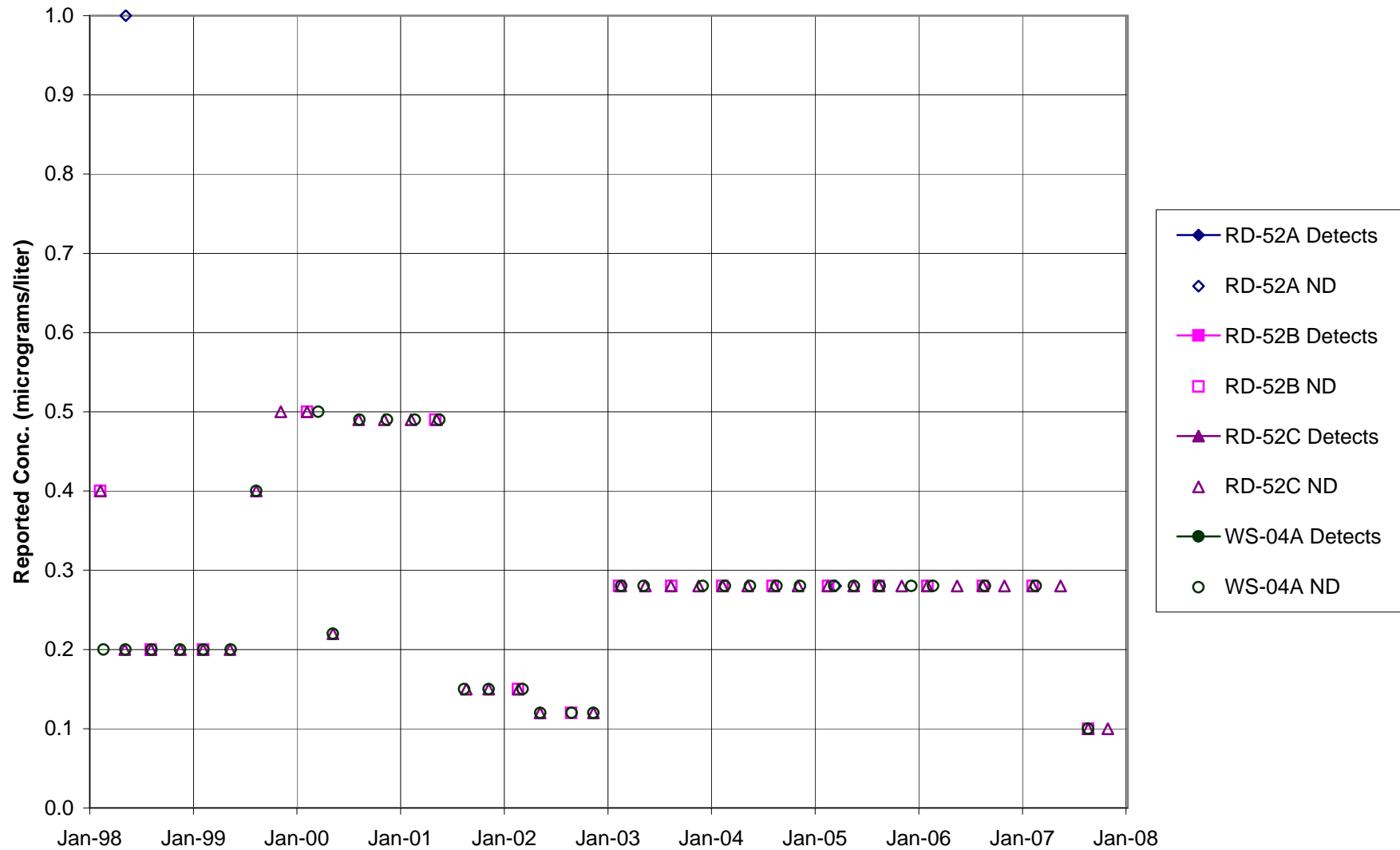


**FIGURE F-128. CARBON TETRACHLORIDE in ECL AREA WELLS**

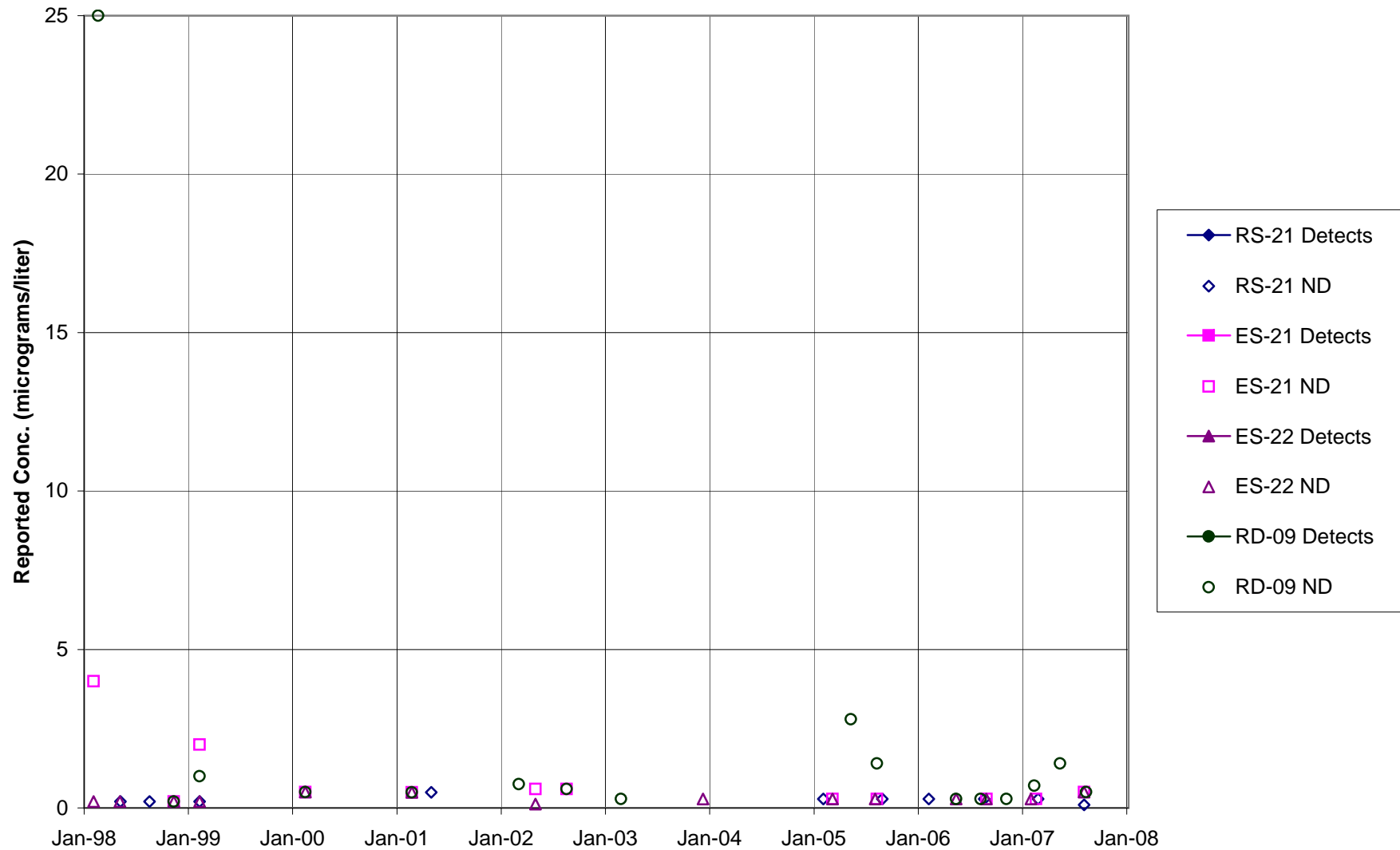




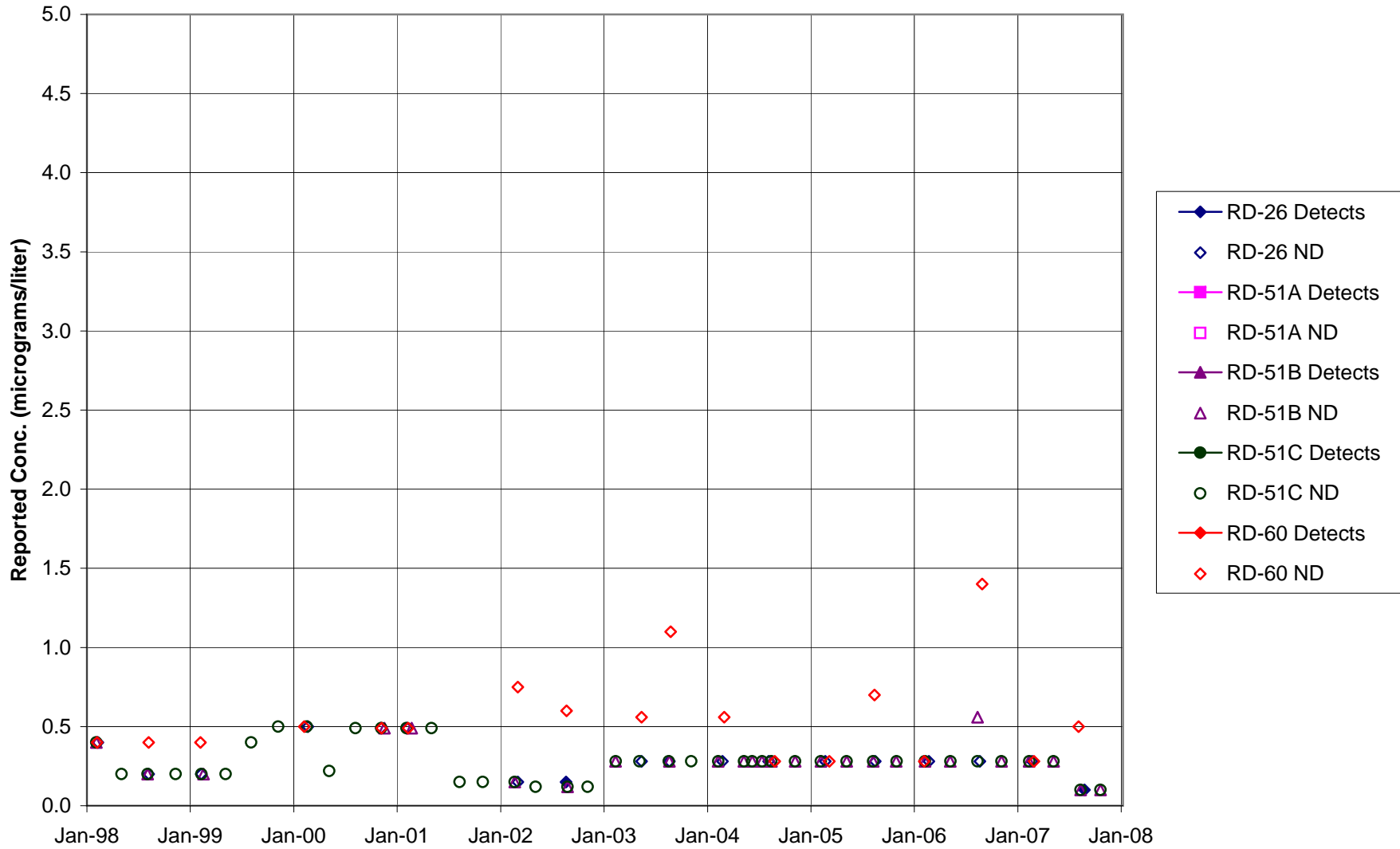
**FIGURE F-129. CARBON TETRACHLORIDE in FORMER LOX PLANT AREA WELLS**



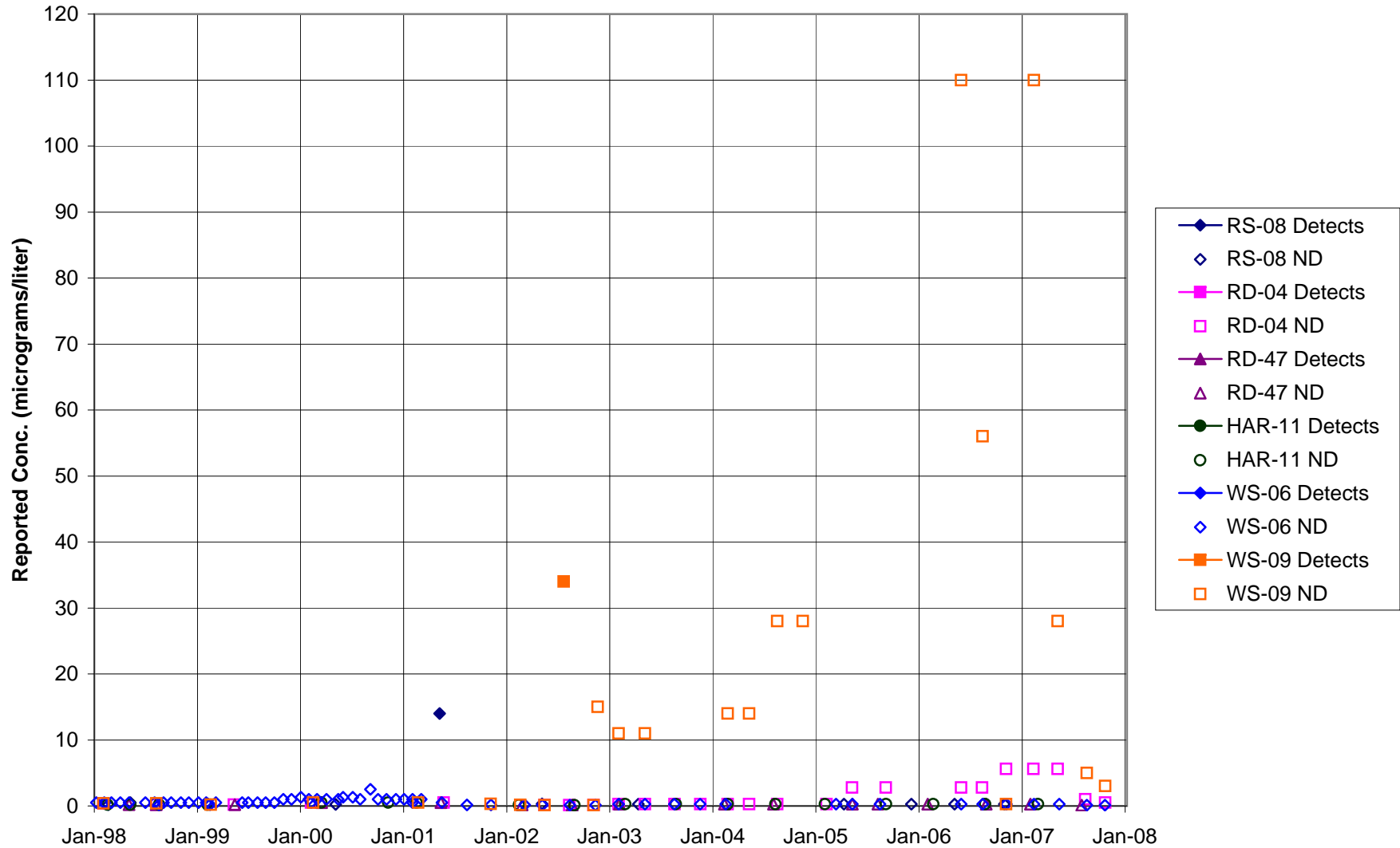
**FIGURE F-130. CARBON TETRACHLORIDE in RD-09 AREA WELLS**



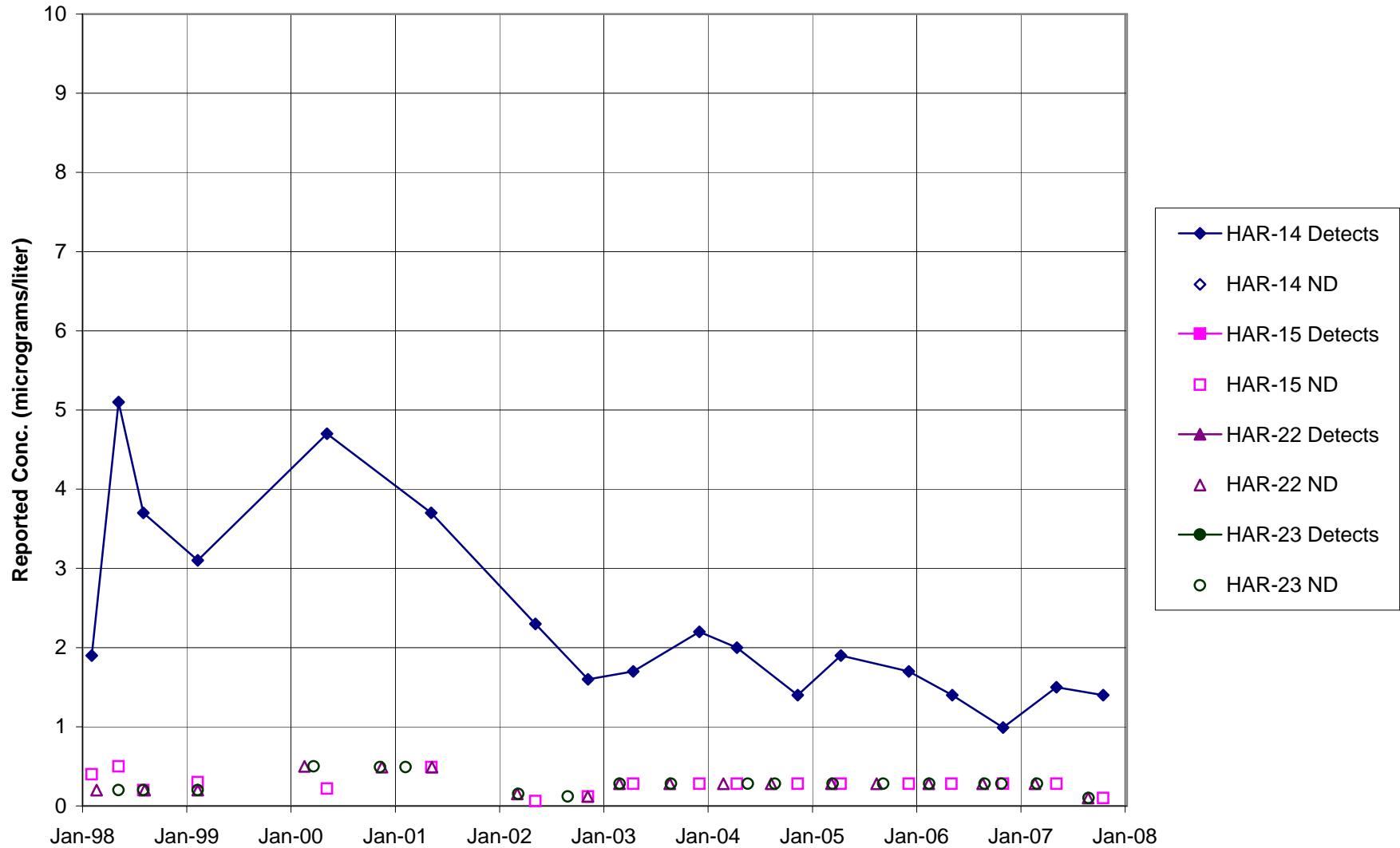
**FIGURE F-131. CARBON TETRACHLORIDE in HELIPORT, B/204 WELLS**



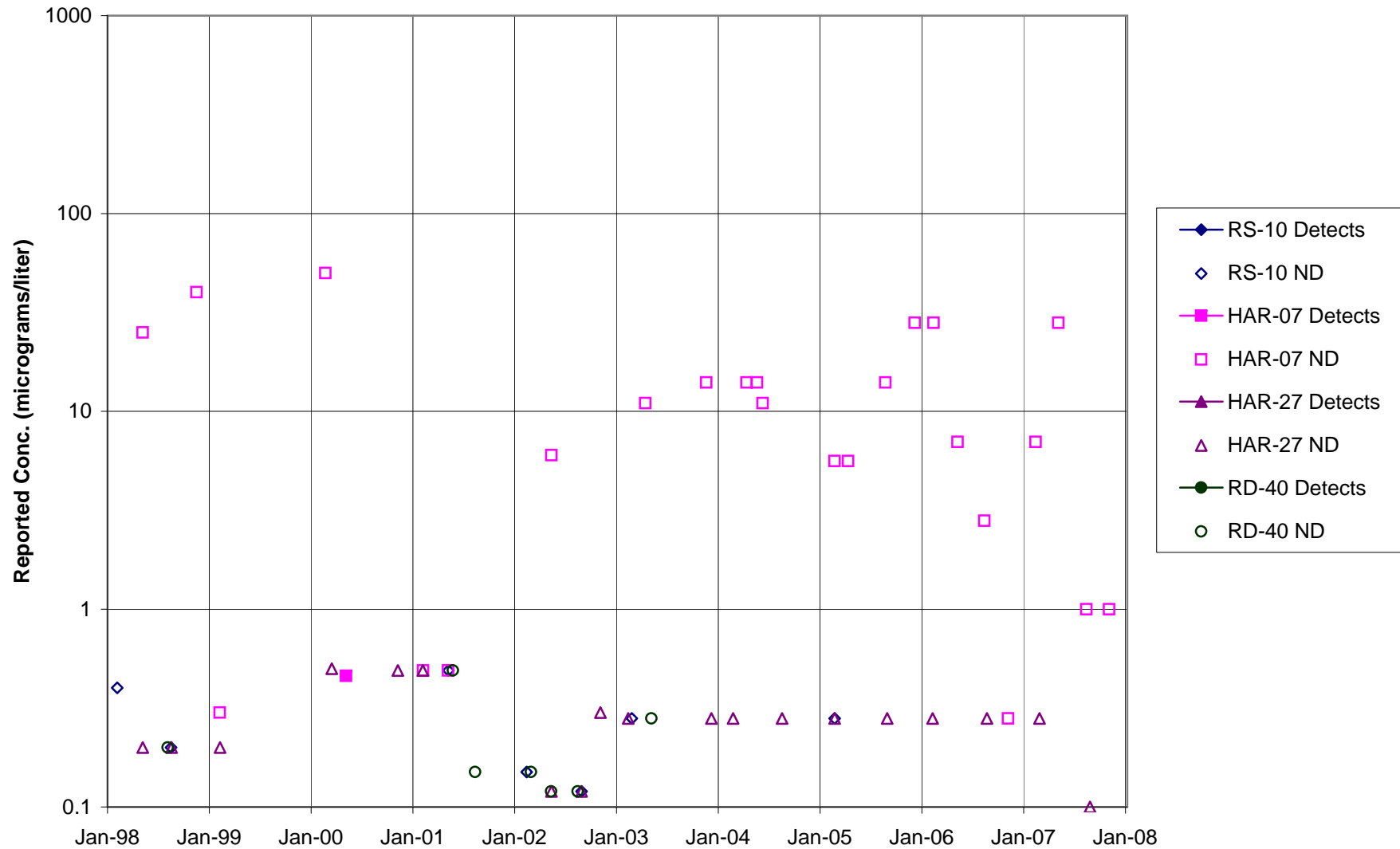
**FIGURE F-132. CARBON TETRACHLORIDE in ALFA / BRAVO AREA WELLS**



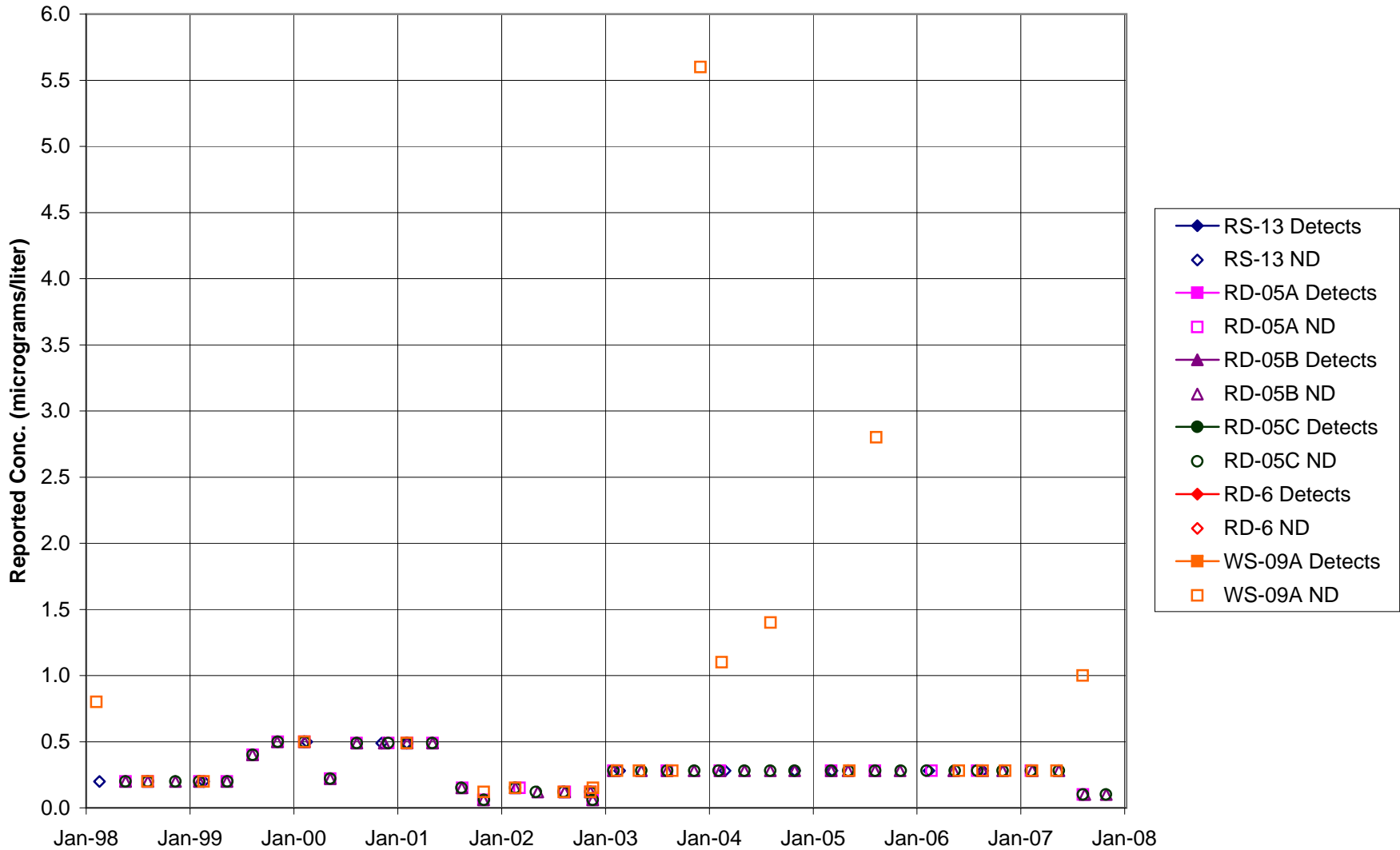
**FIGURE F-133. CARBON TETRACHLORIDE in SPA AREA WELLS**



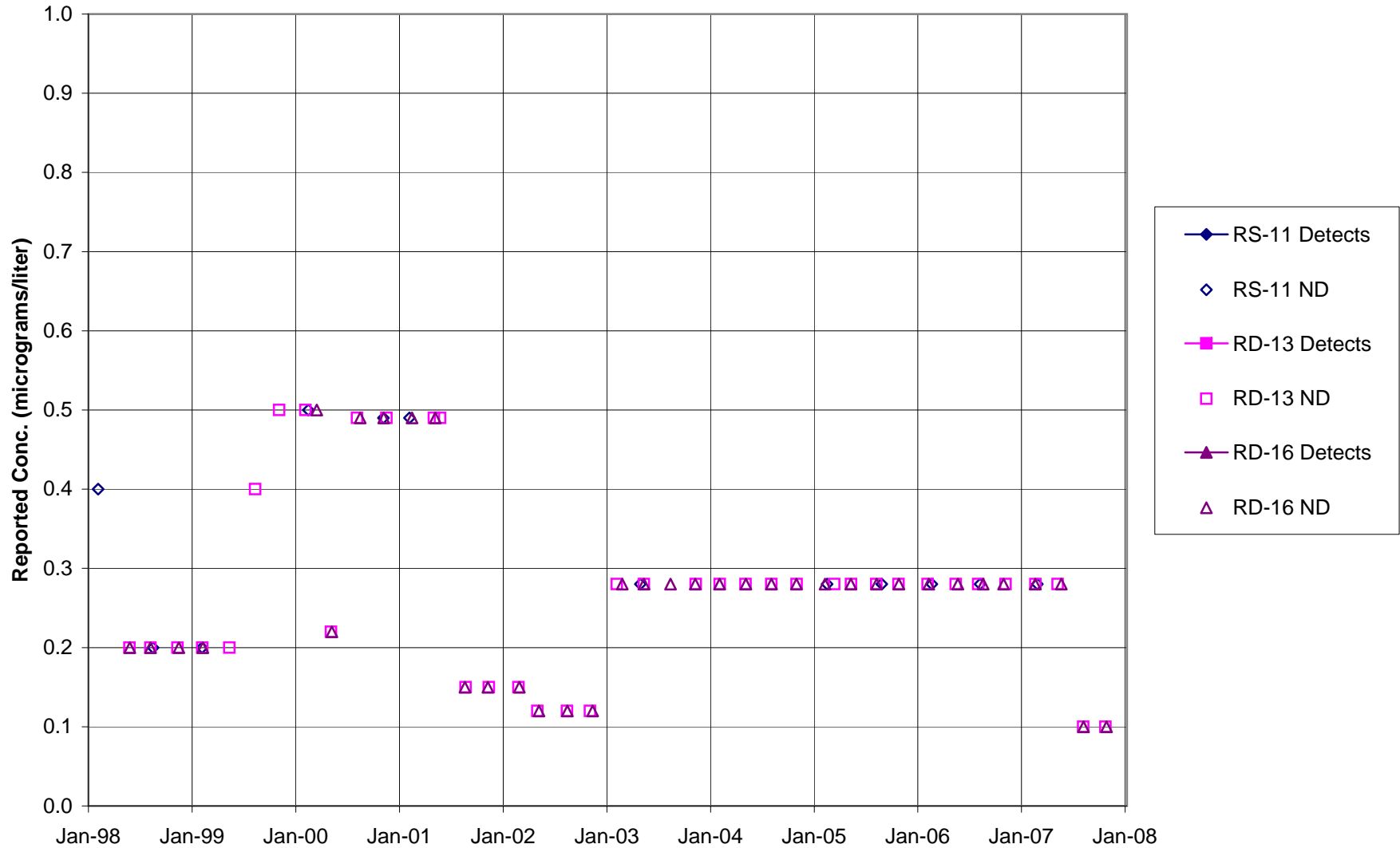
**FIGURE F-134. CARBON TETRACHLORIDE in COCA / PLF AREA WELLS**



**FIGURE F-135. CARBON TETRACHLORIDE in DELTA / BUFFER ZONE AREA WELLS**

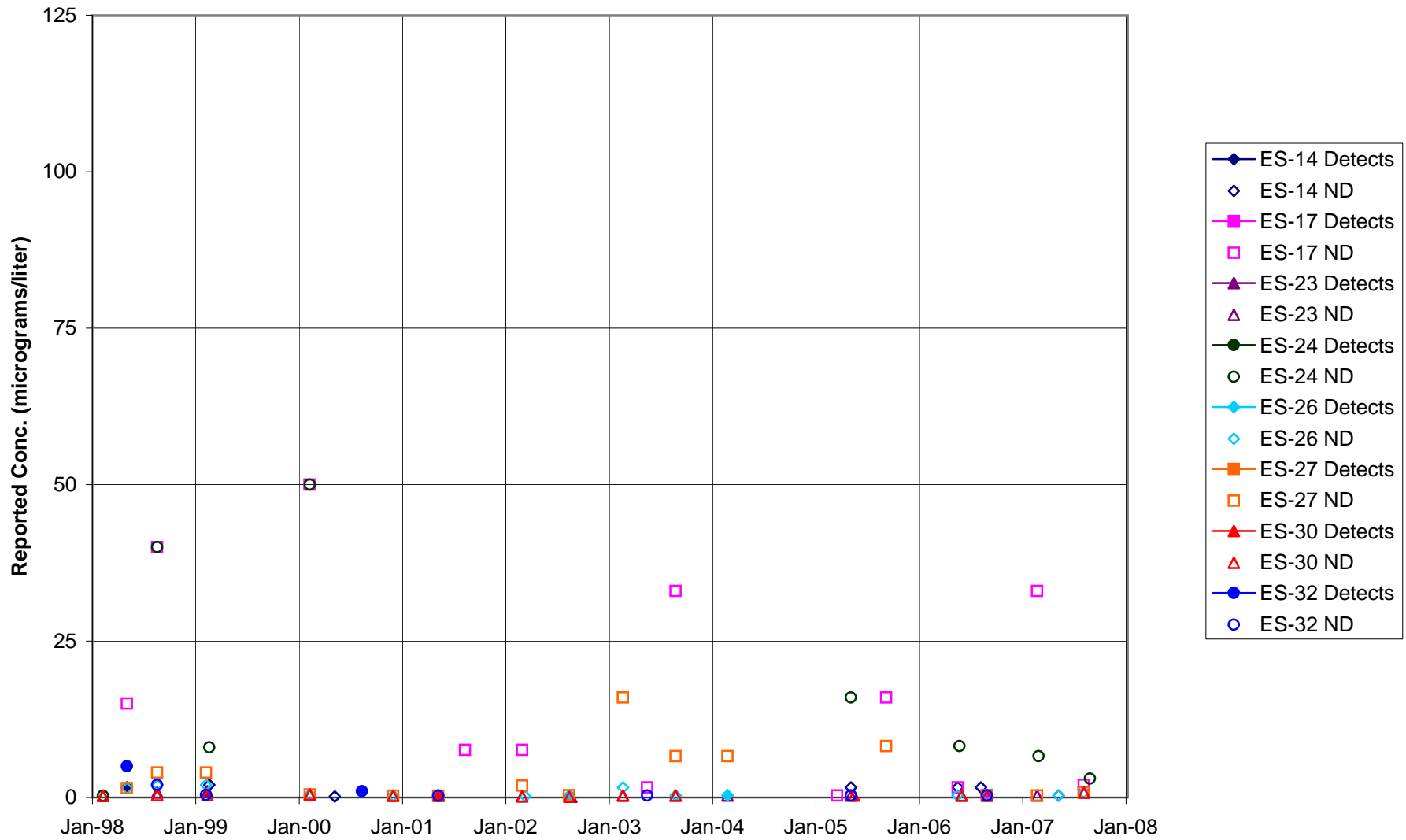


**FIGURE F-136. CARBON TETRACHLORIDE in AREA-IV WELLS**





**FIGURE F-137. CHLOROFORM in STL-IV AREA SHALLOW WELLS**



**FIGURE F-138. CHLOROFORM in STL-IV AREA CHATSWORTH FORMATION WELLS**

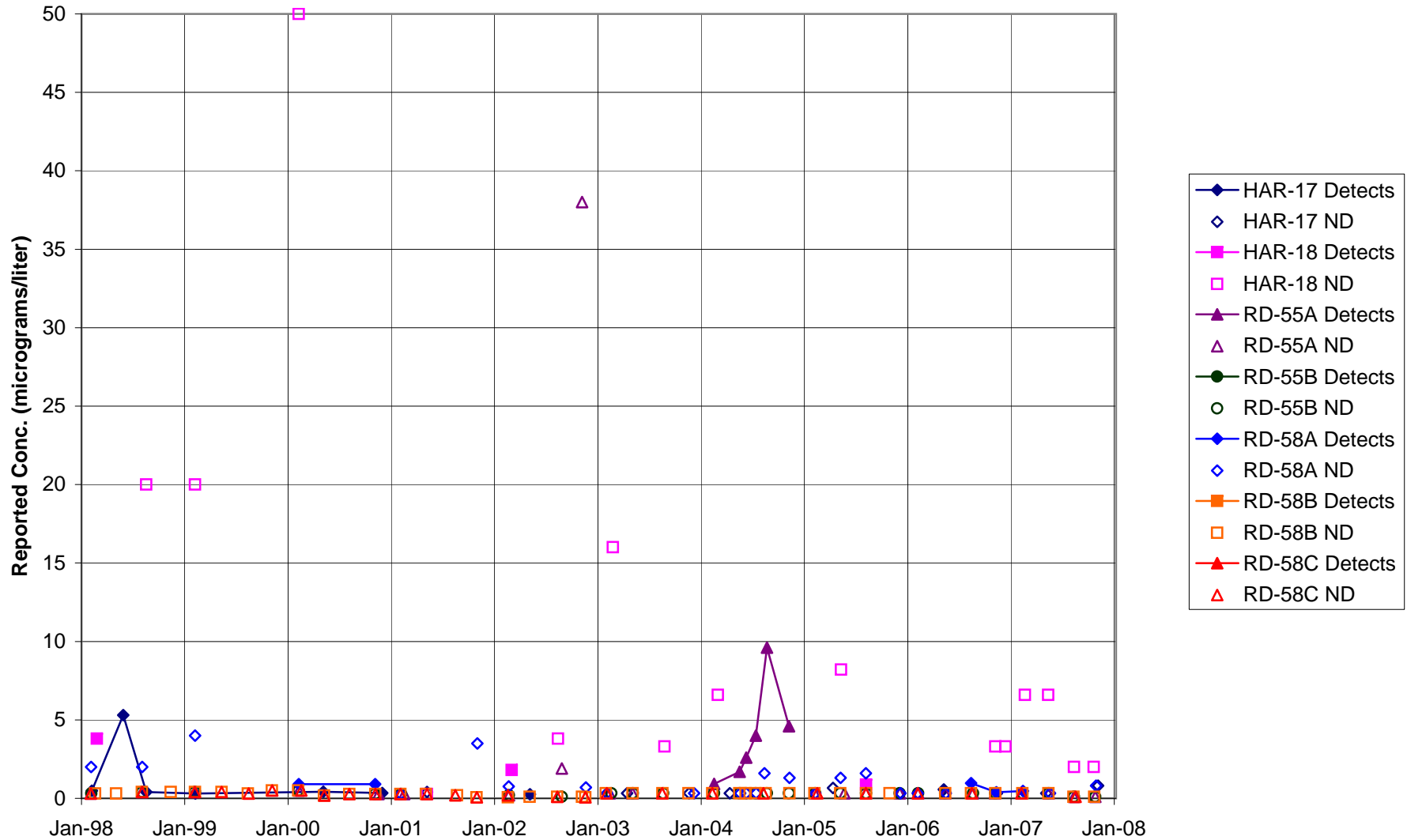


FIGURE F-139. CHLOROFORM in MAIN GATE AREA WELLS - 1

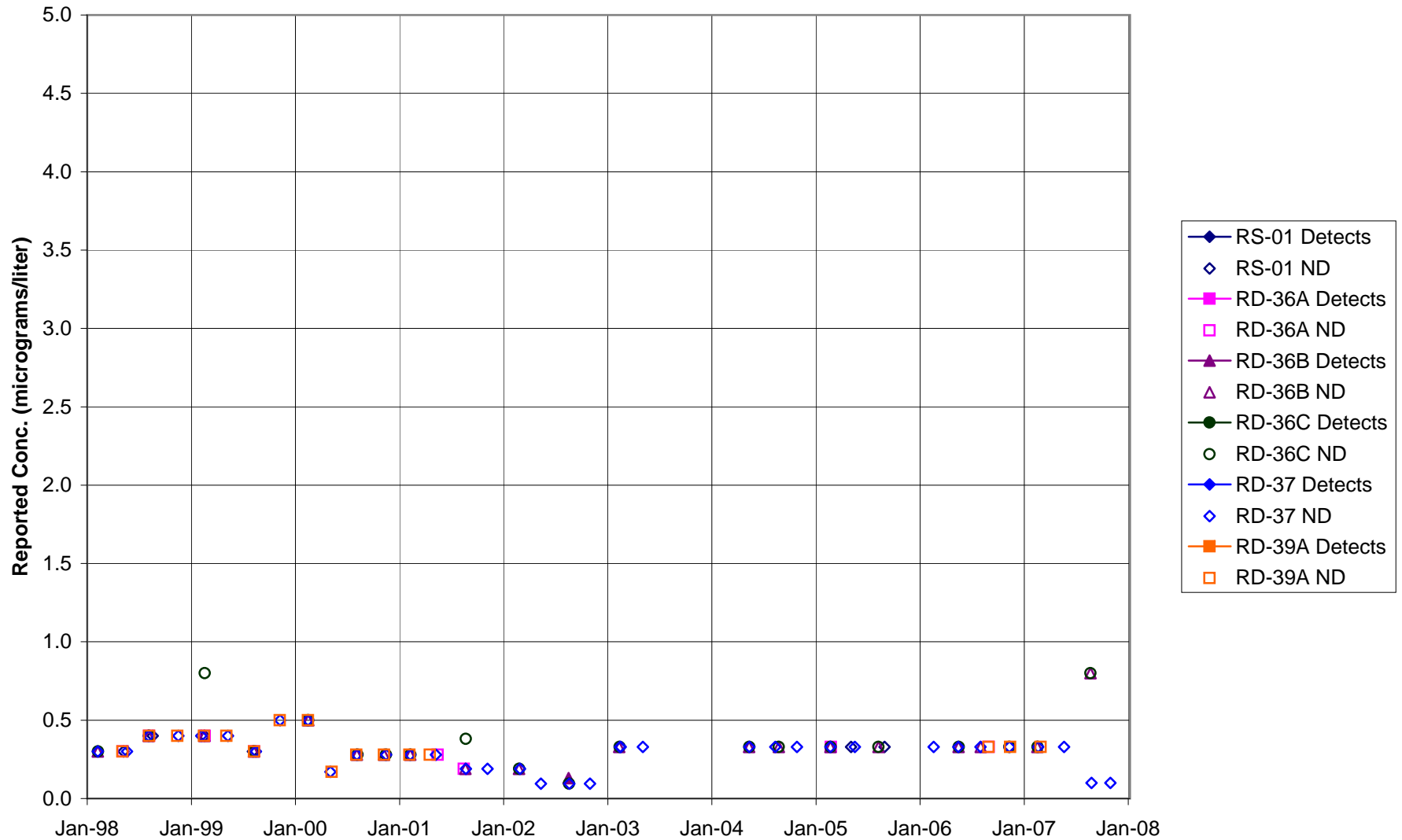
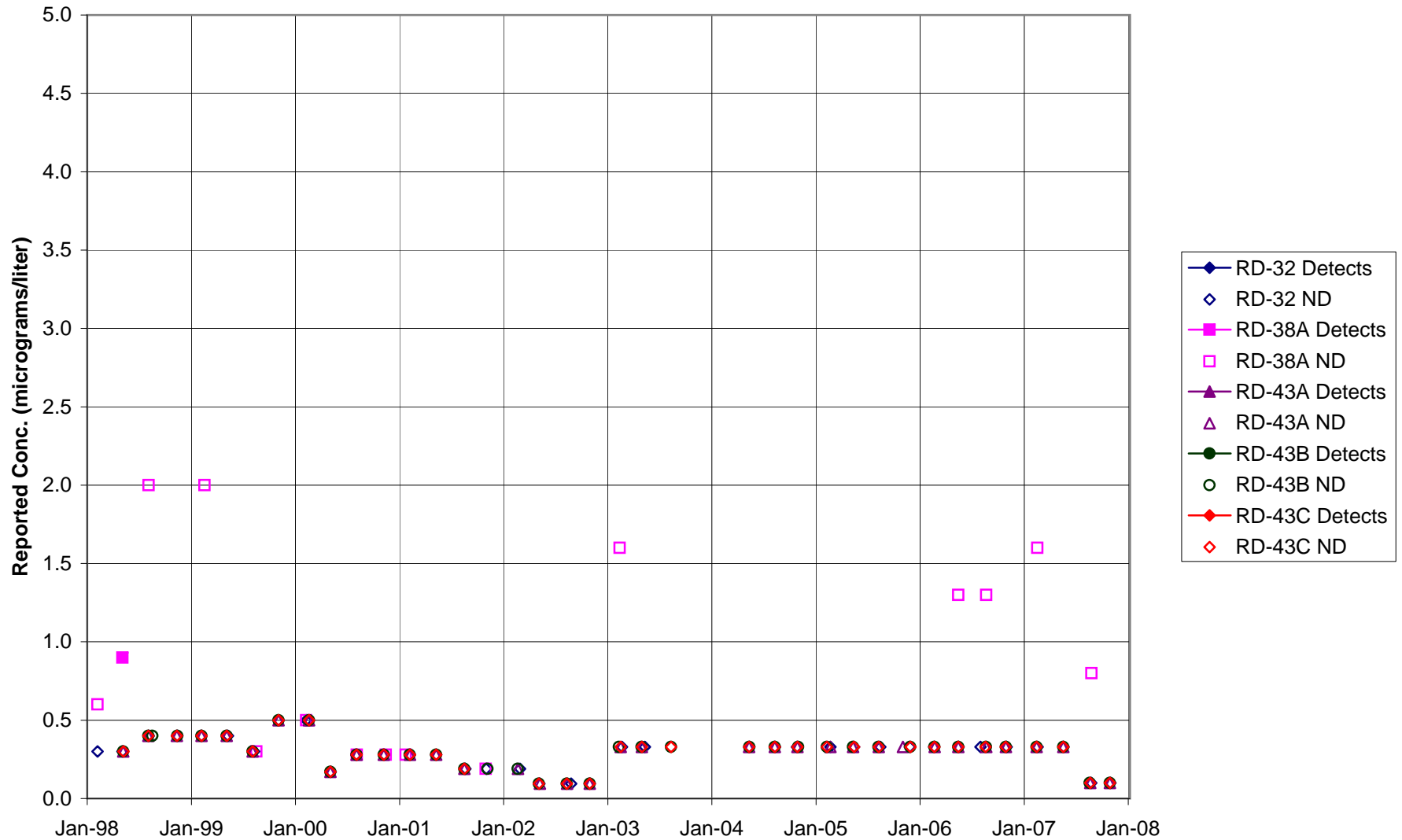
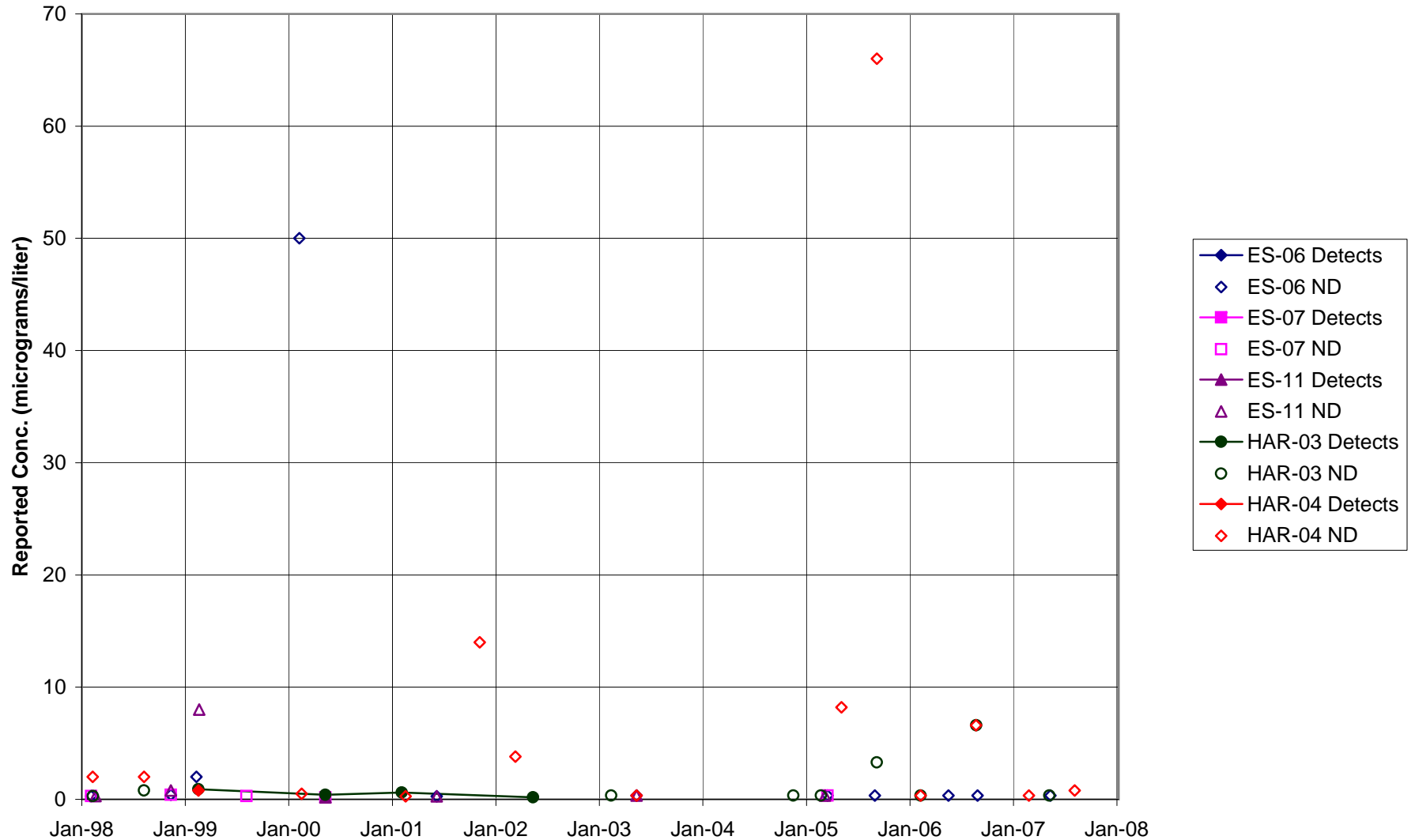


FIGURE F-140. CHLOROFORM in MAIN GATE AREA WELLS - 2



**FIGURE F-141. CHLOROFORM in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1**



**FIGURE F-142. CHLOROFORM in APTF,CANYON, & HAPPY VALLEY AREA WELLS - 2**

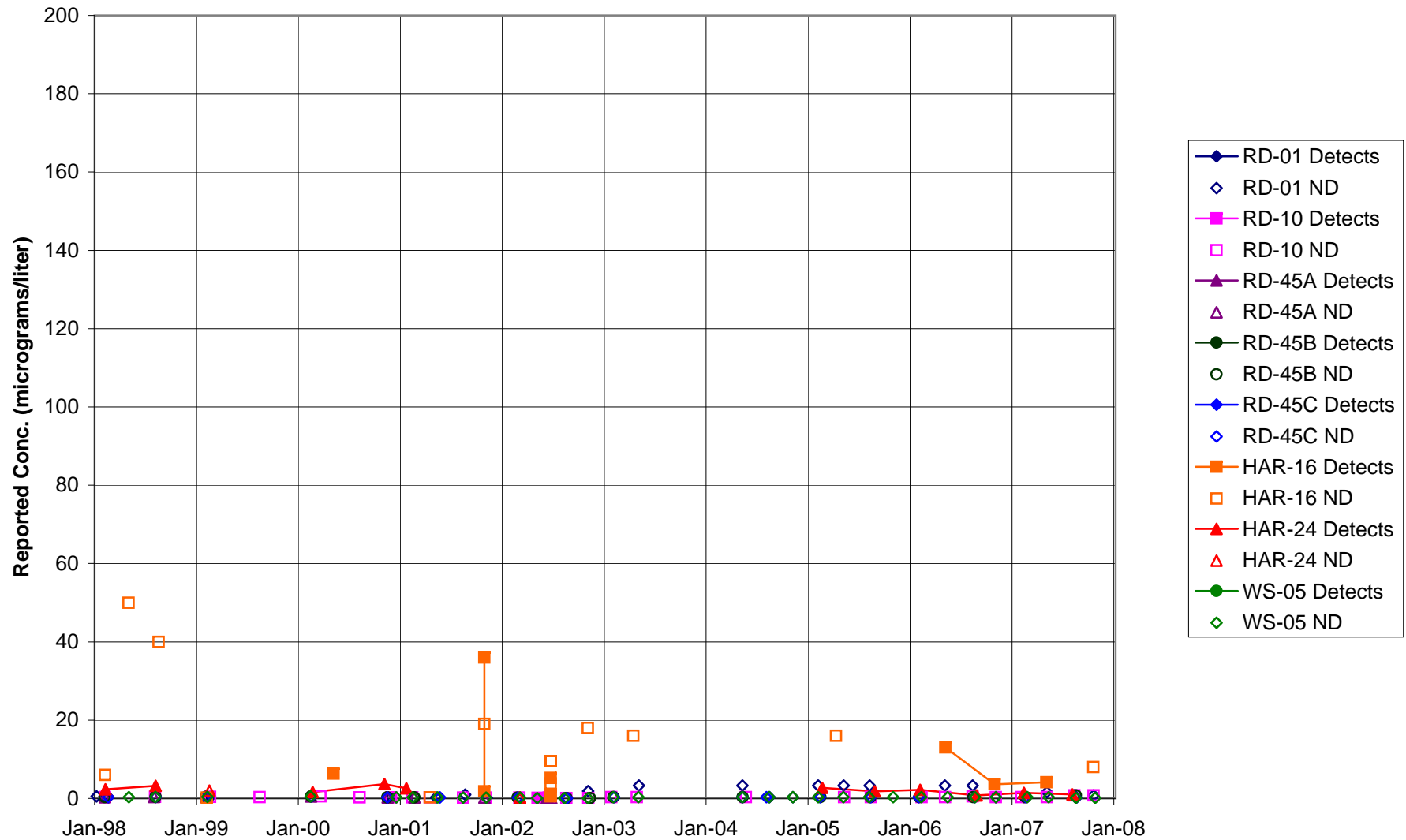
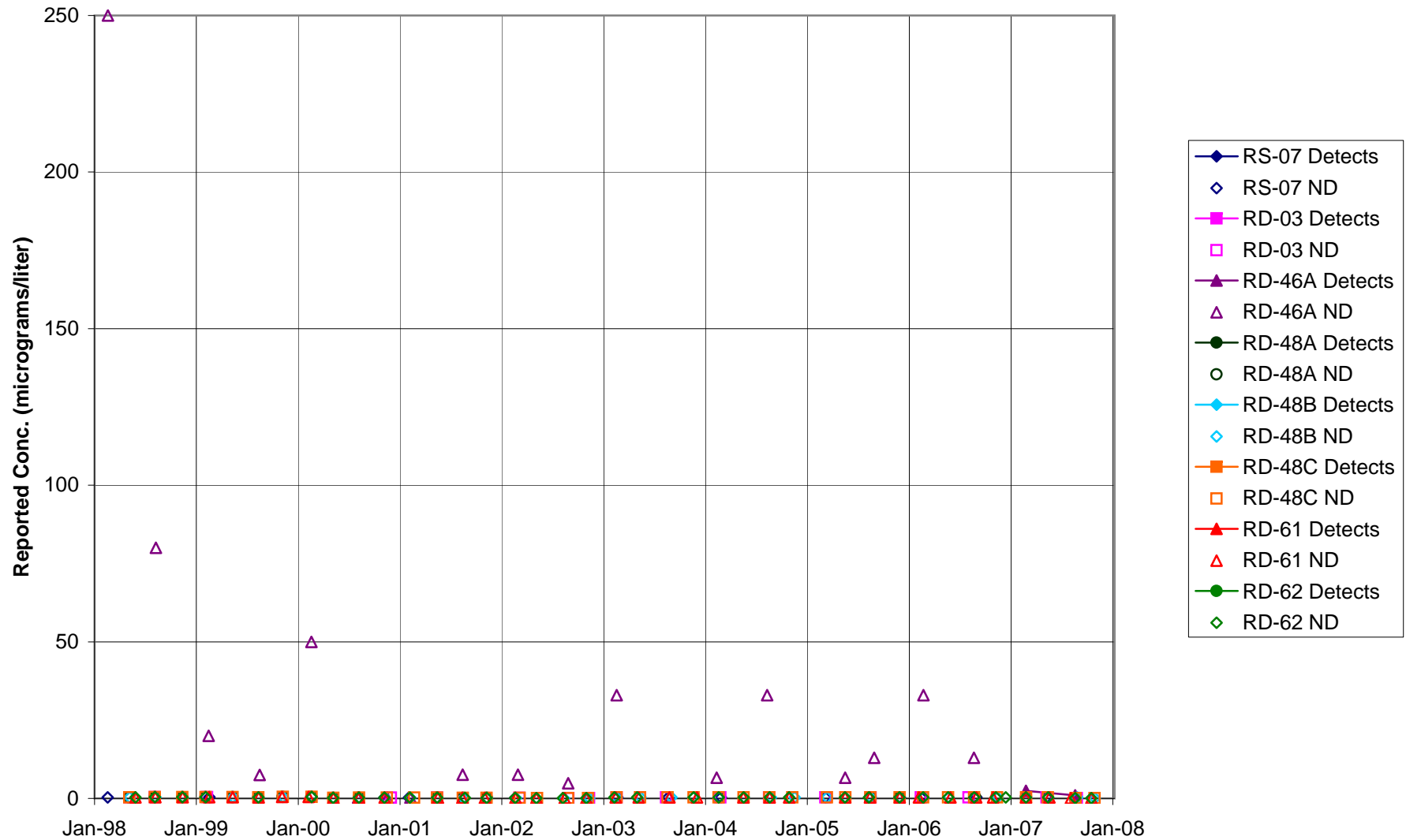
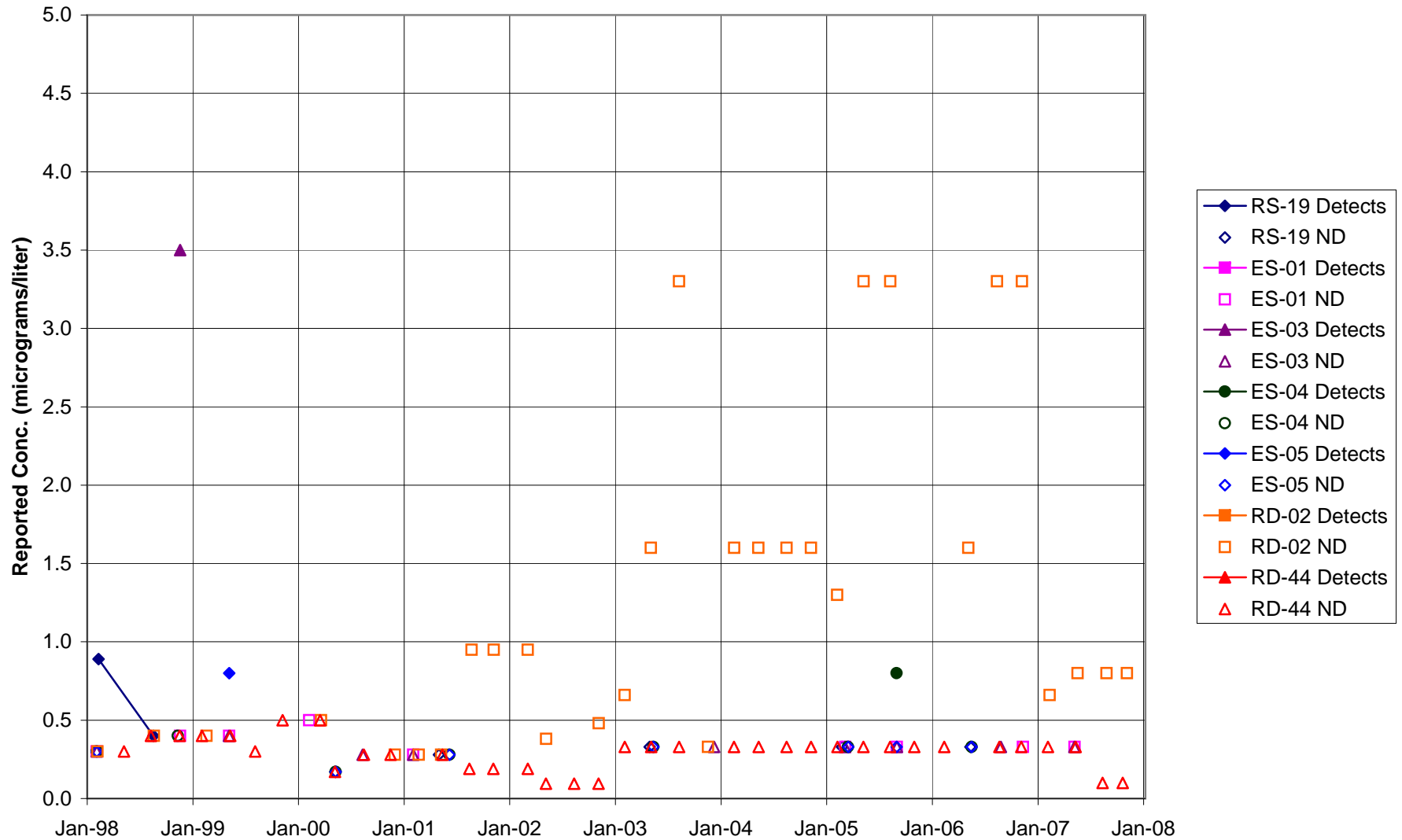


FIGURE F-143. CHLOROFORM in CTL-III / PERIMETER POND AREA WELLS



**FIGURE F-144. CHLOROFORM in BOWL AREA WELLS**





**FIGURE F-145. CHLOROFORM in ECL AREA WELLS**

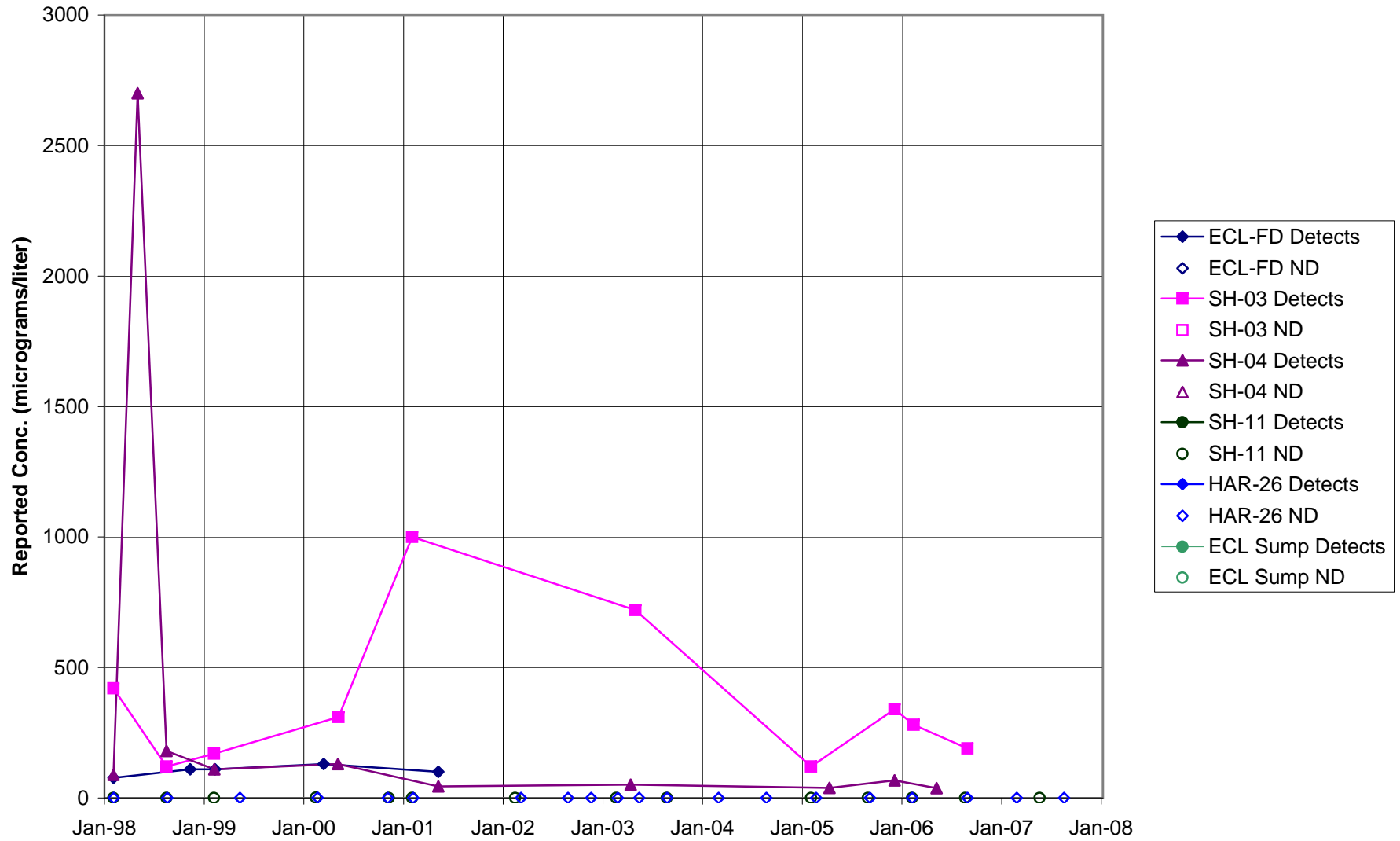
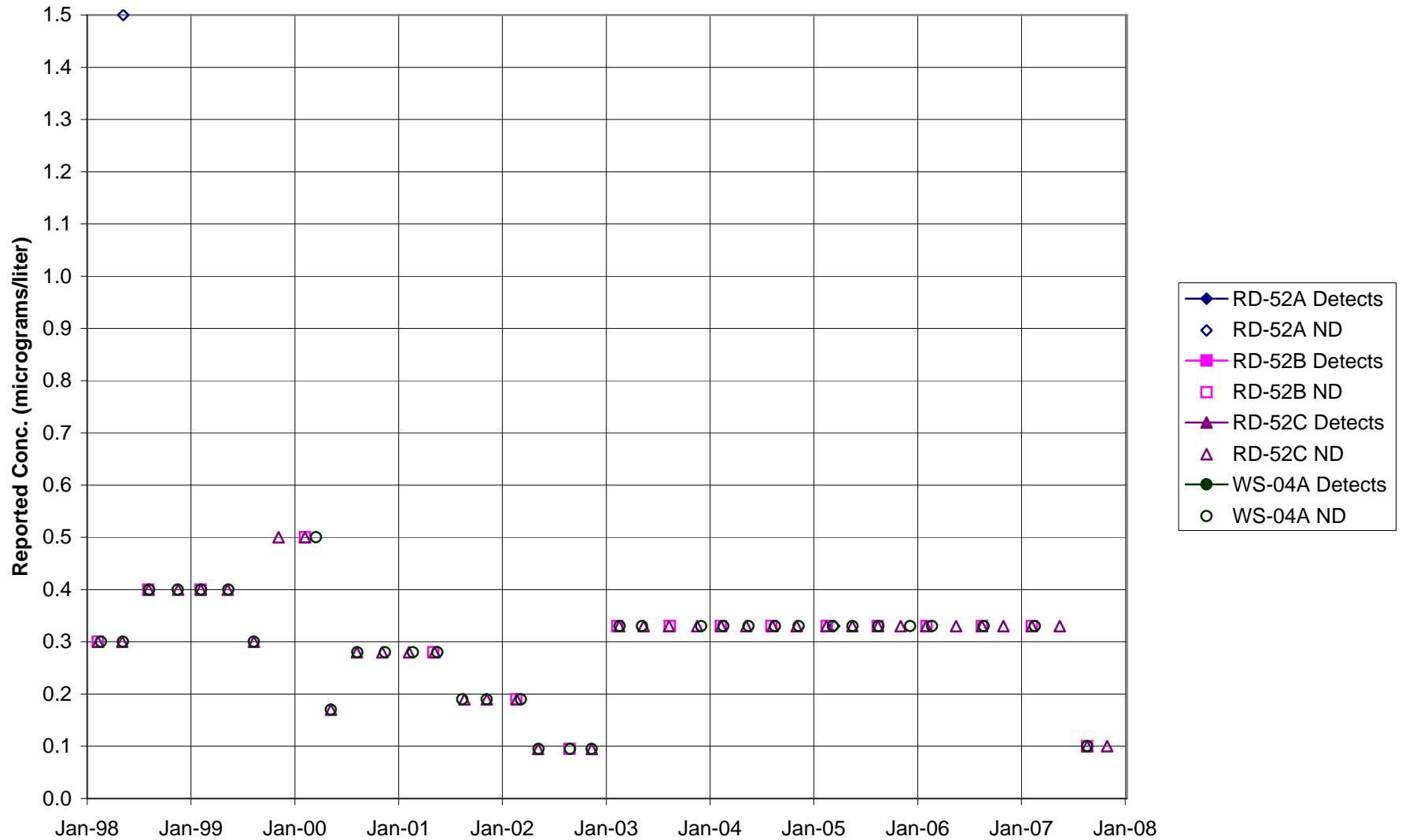
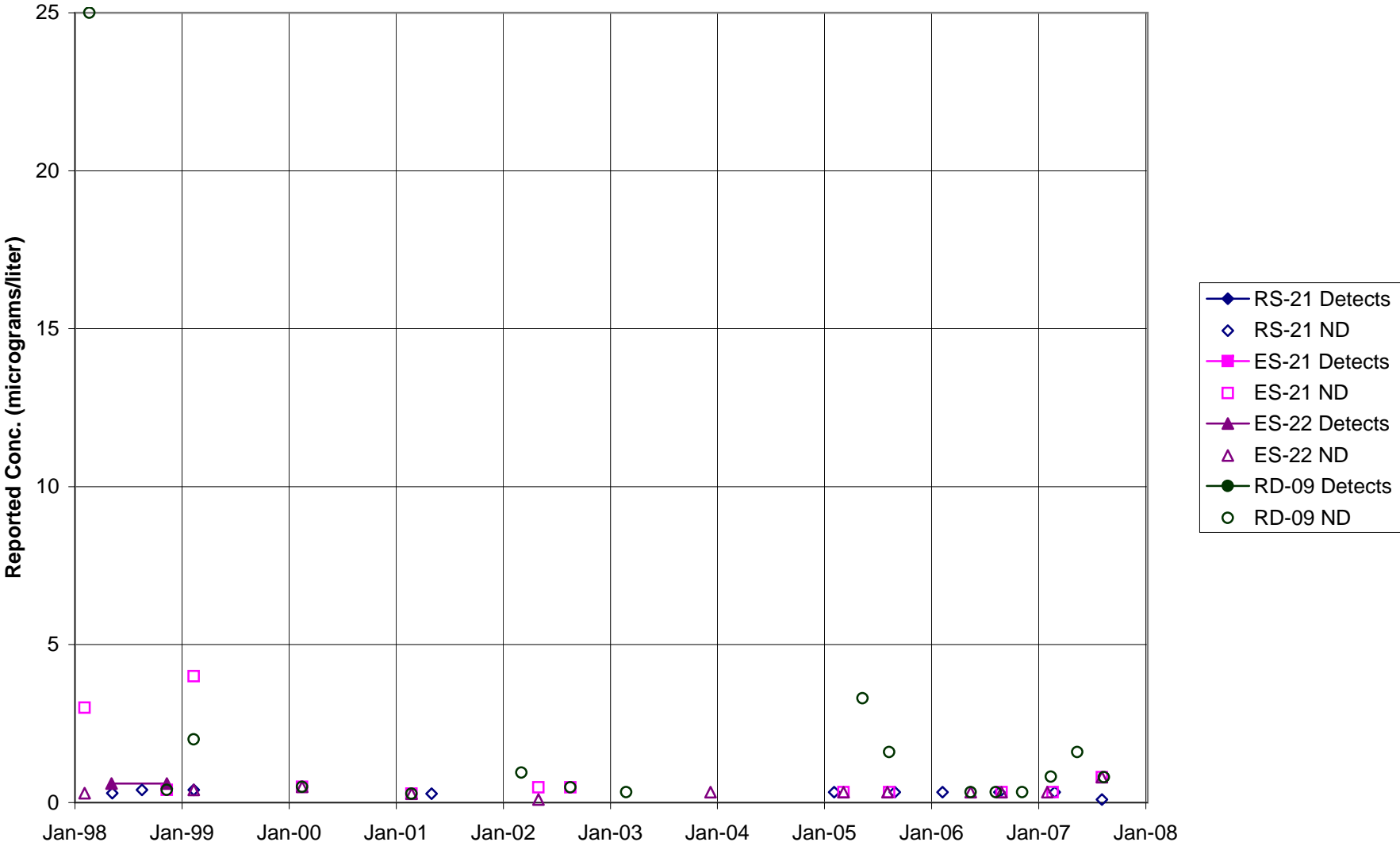


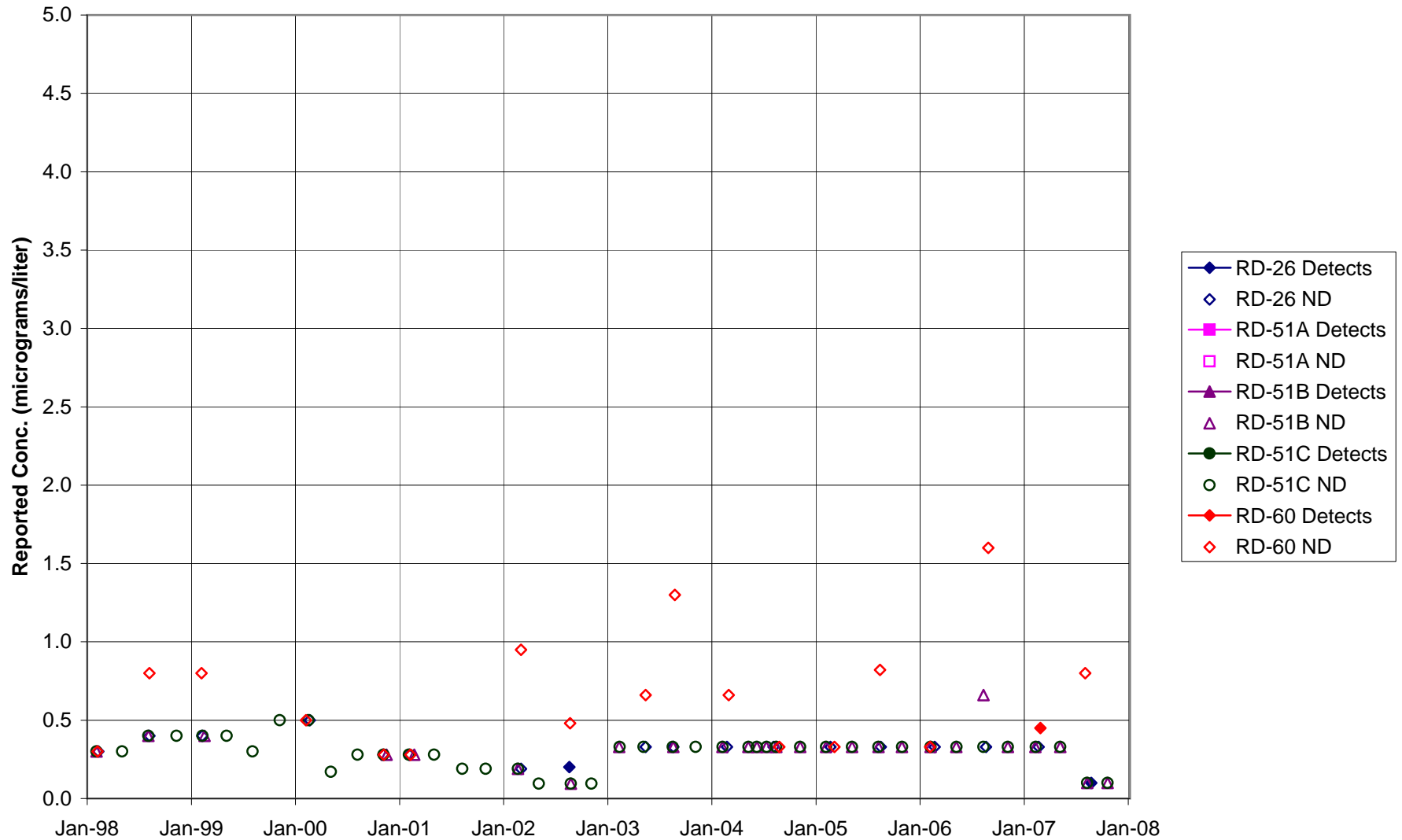
FIGURE F-146. CHLOROFORM in FORMER LOX PLANT AREA WELLS



**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**

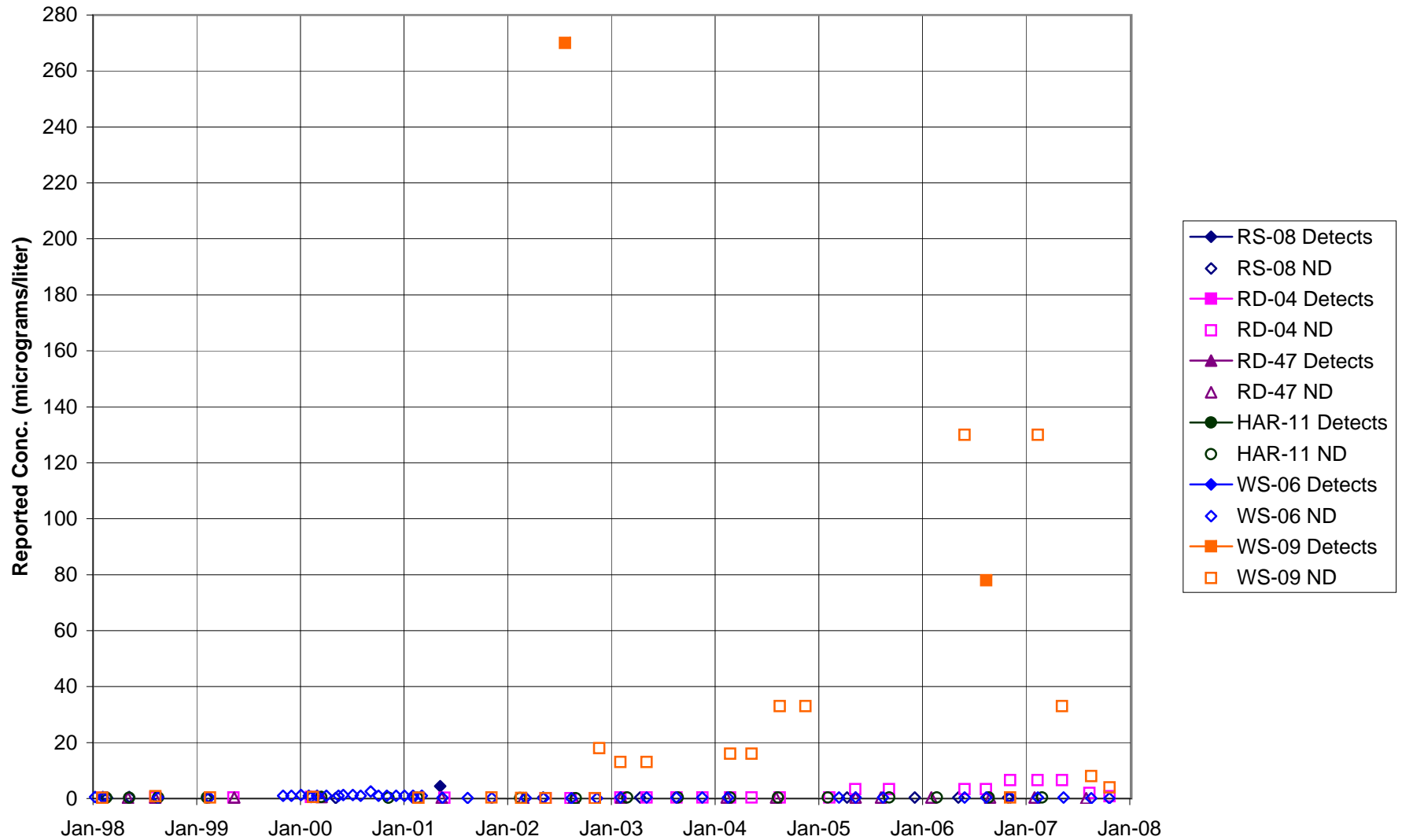
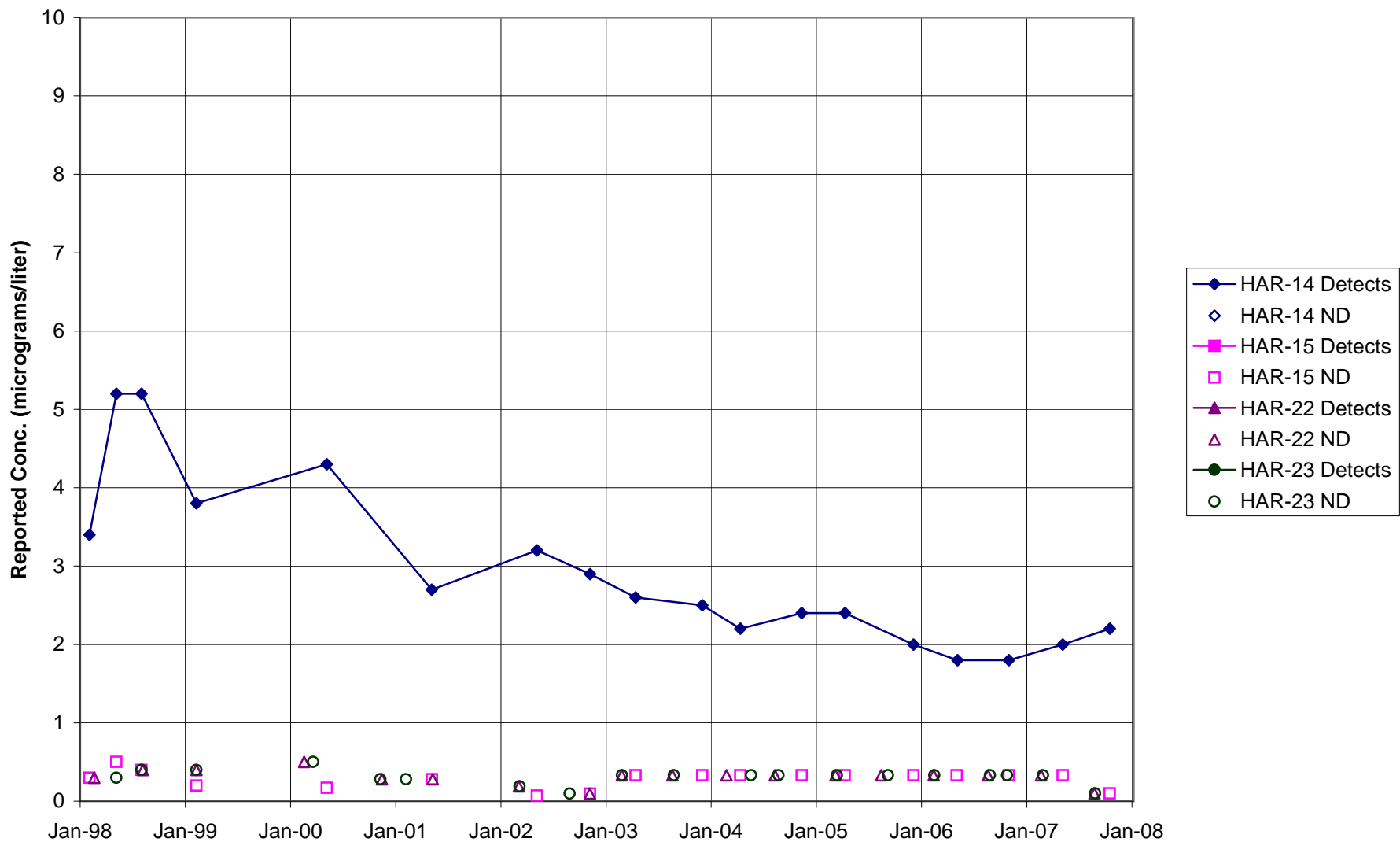


FIGURE F-150. CHLOROFORM in SPA AREA WELLS



**FIGURE F-151. CHLOROFORM in COCA / PLF AREA WELLS**

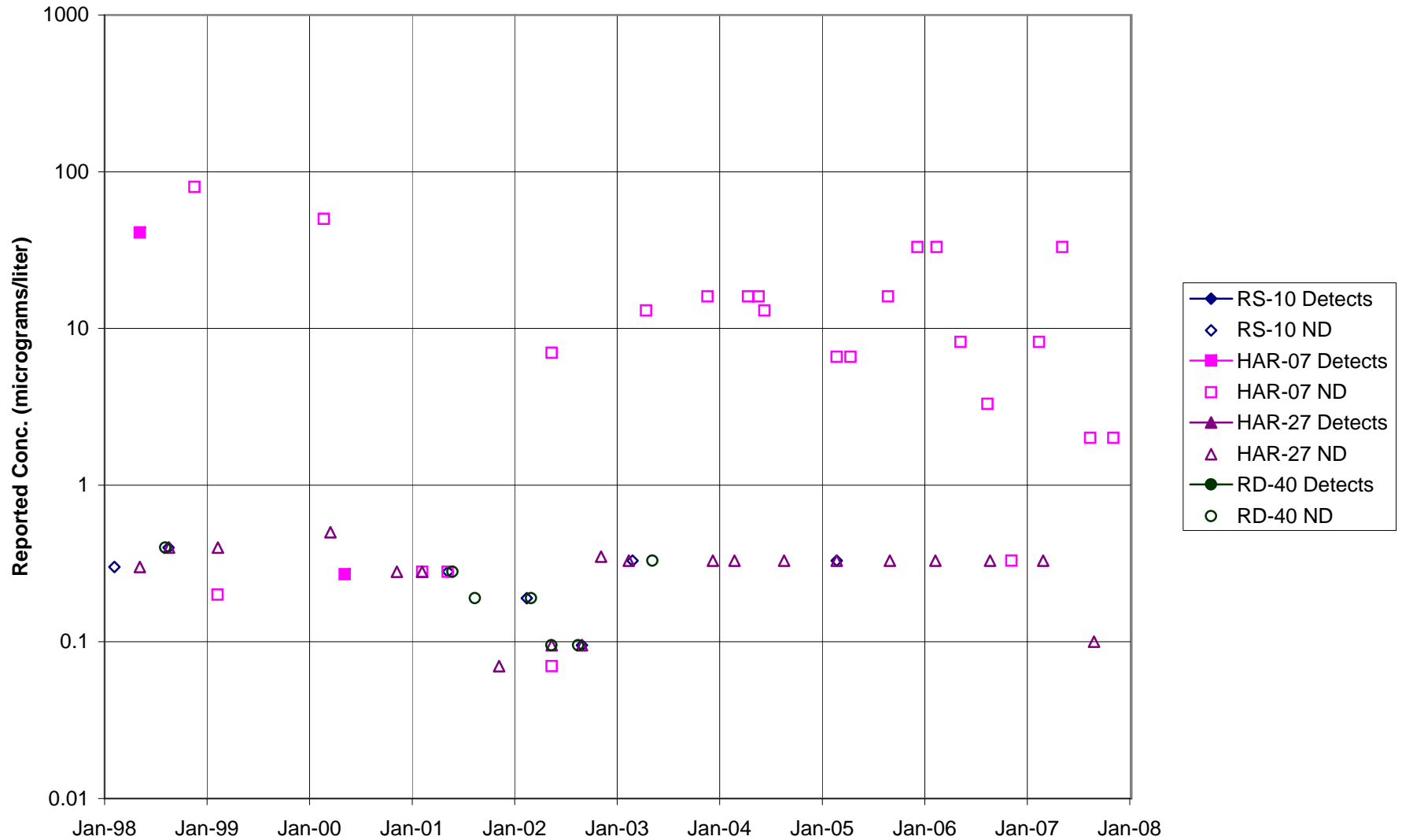


FIGURE F-152. CHLOROFORM in DELTA / BUFFER ZONE AREA WELLS

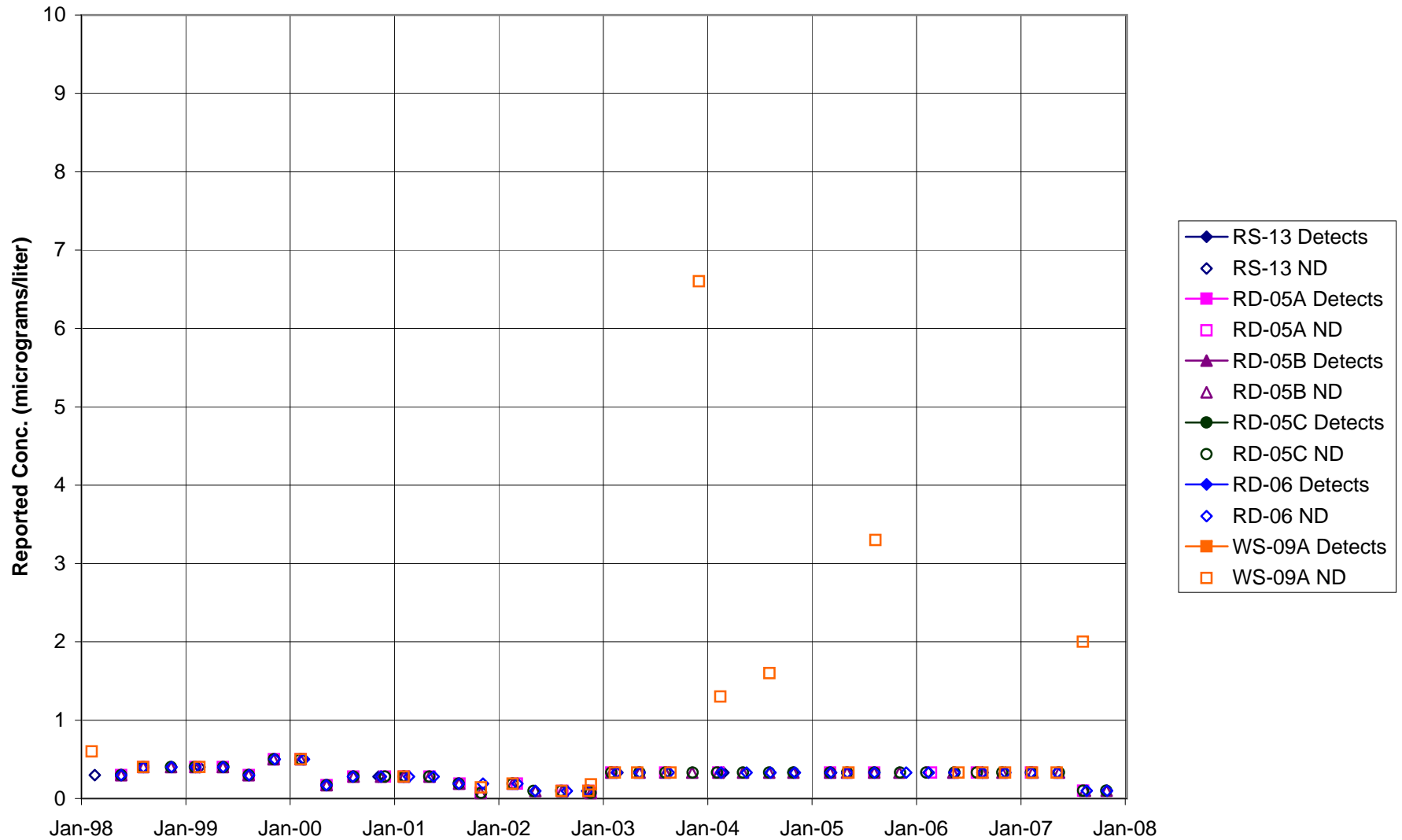




FIGURE F-153. CHLOROFORM in AREA IV WELLS

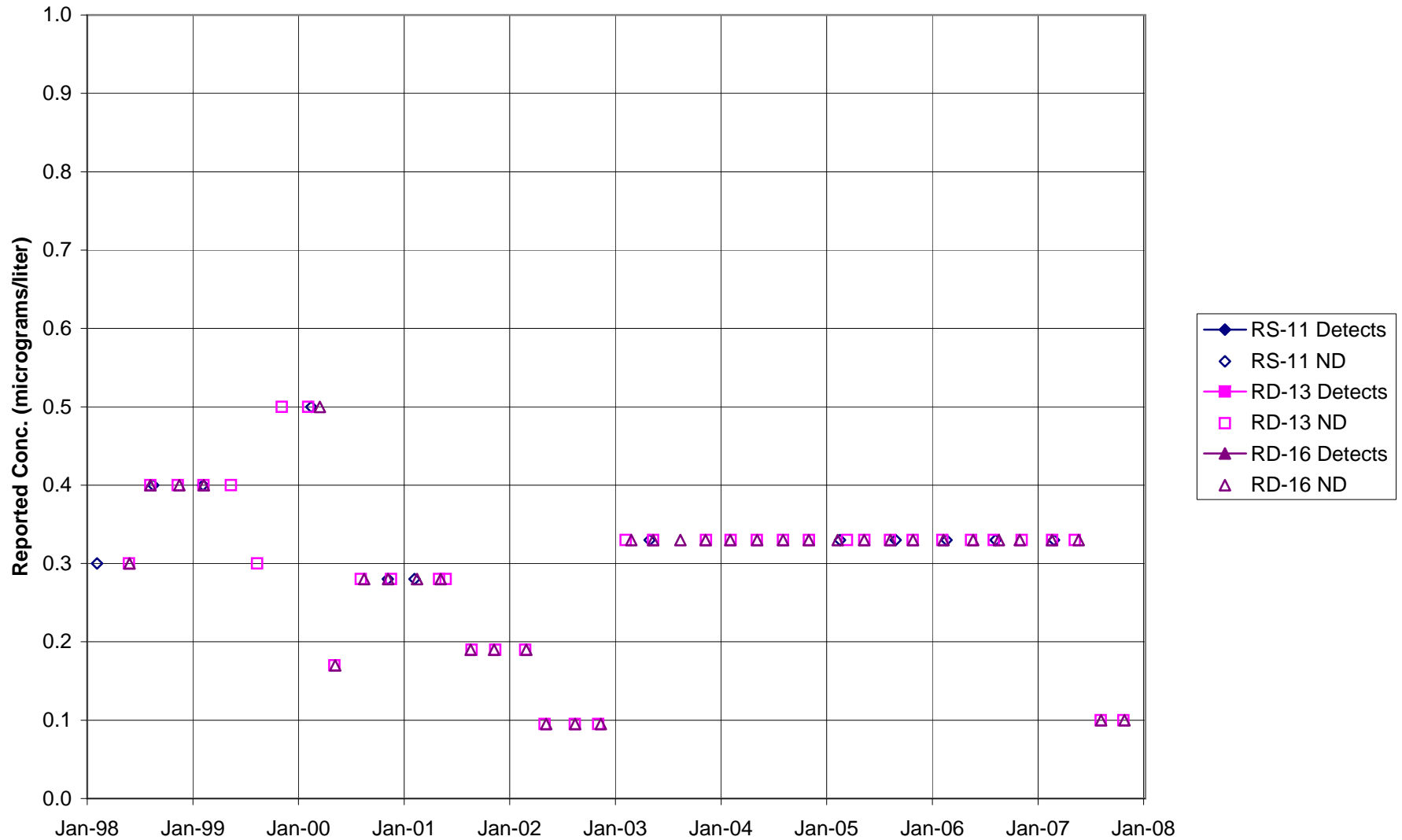
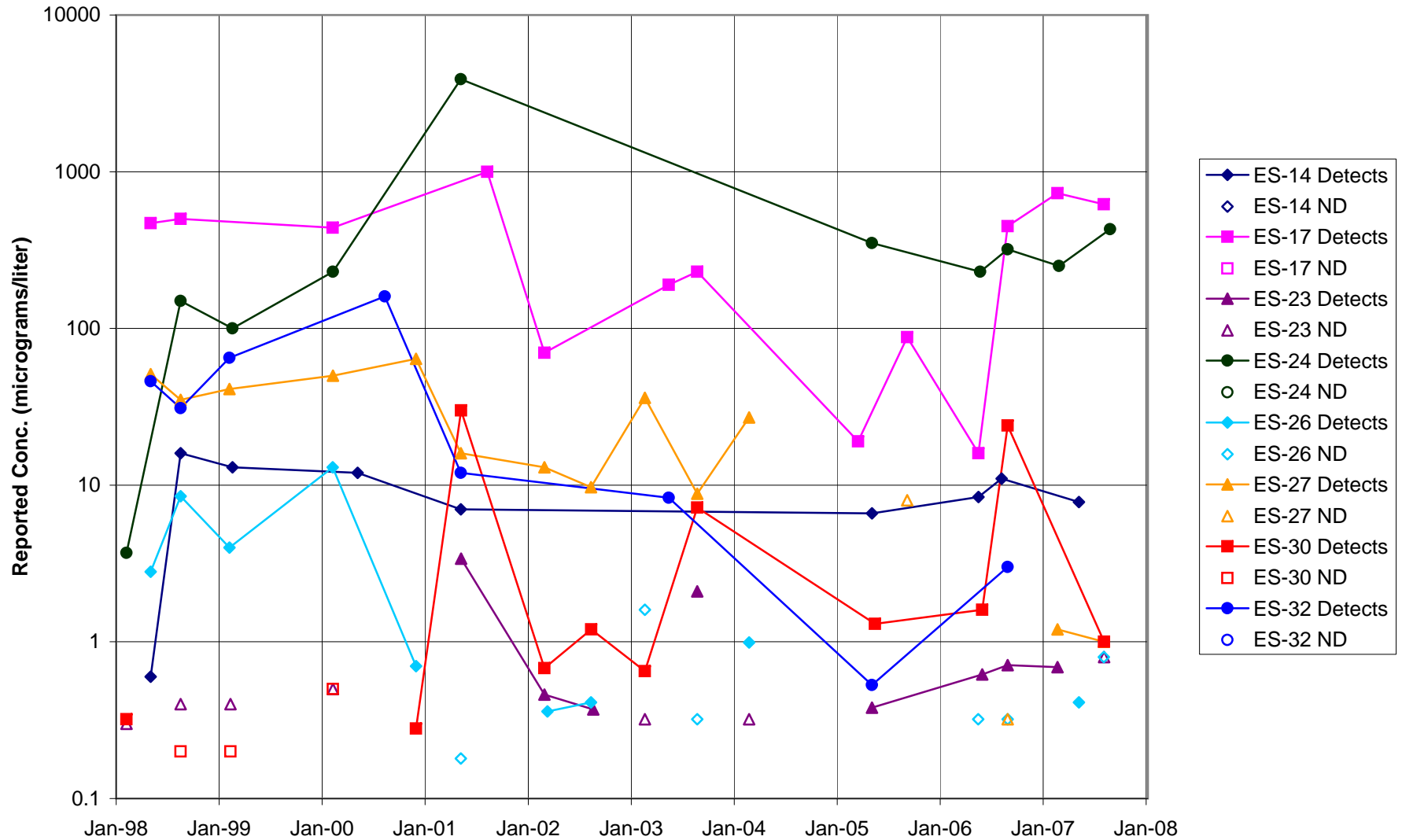


FIGURE F-154. CIS-1,2-DCE in STL-IV AREA SHALLOW WELLS



**FIGURE F-155. CIS-1,2-DCE in STL-IV AREA CHATSWORTH FORMATION WELLS**

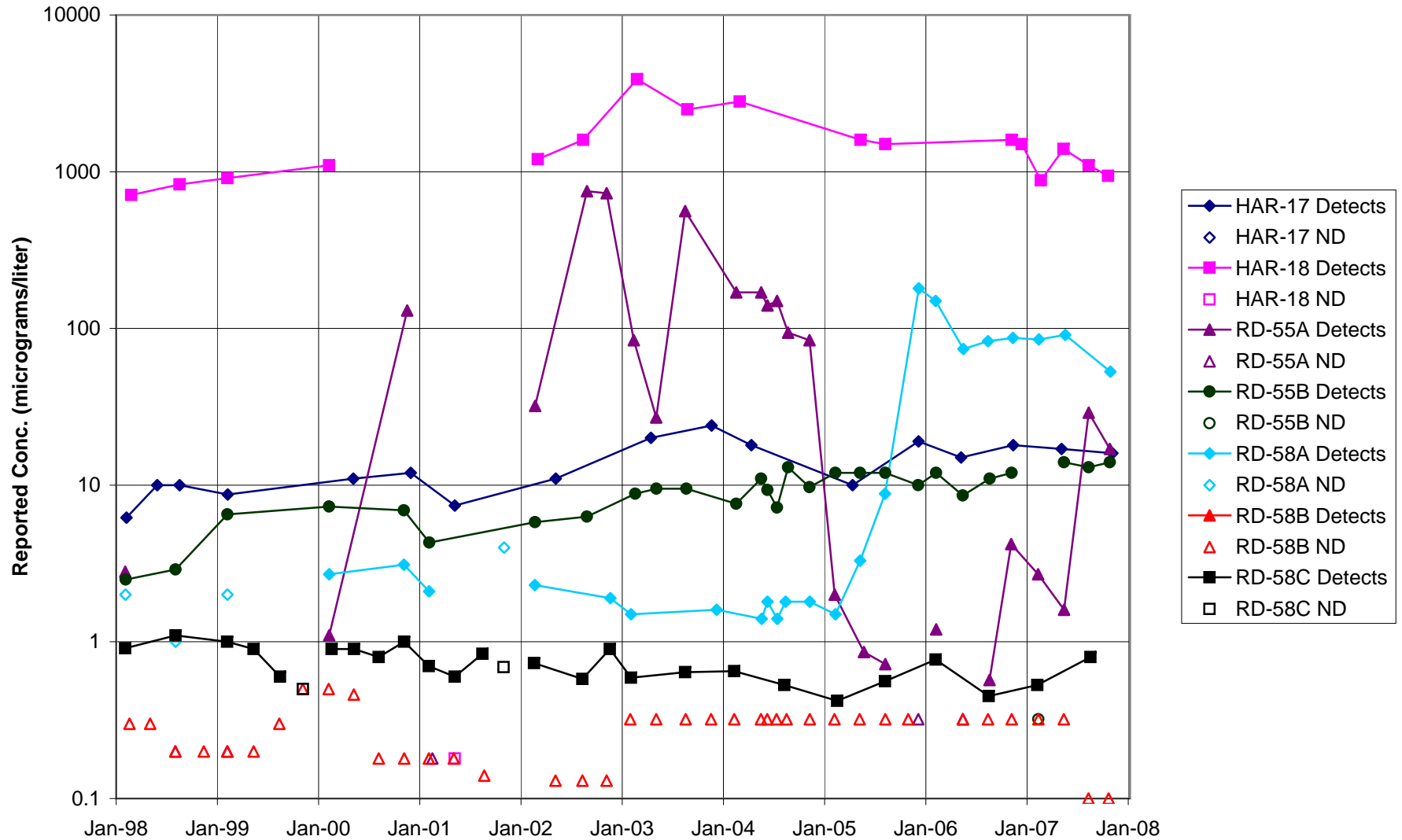


FIGURE F-156. CIS-1,2-DCE in MAIN GATE AREA WELLS - 1

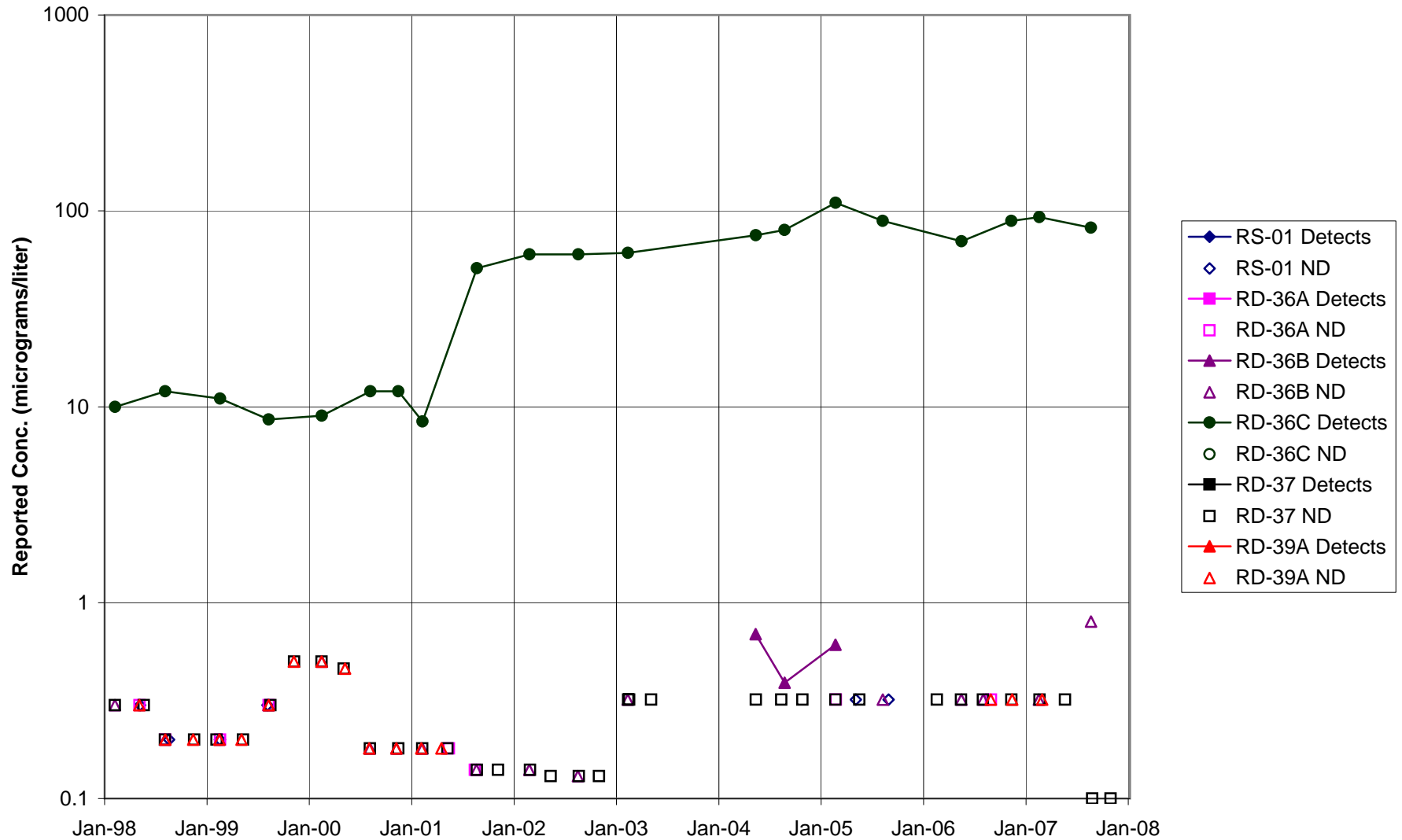


FIGURE F-157. CIS-1,2-DCE in MAIN GATE AREA WELLS - 2

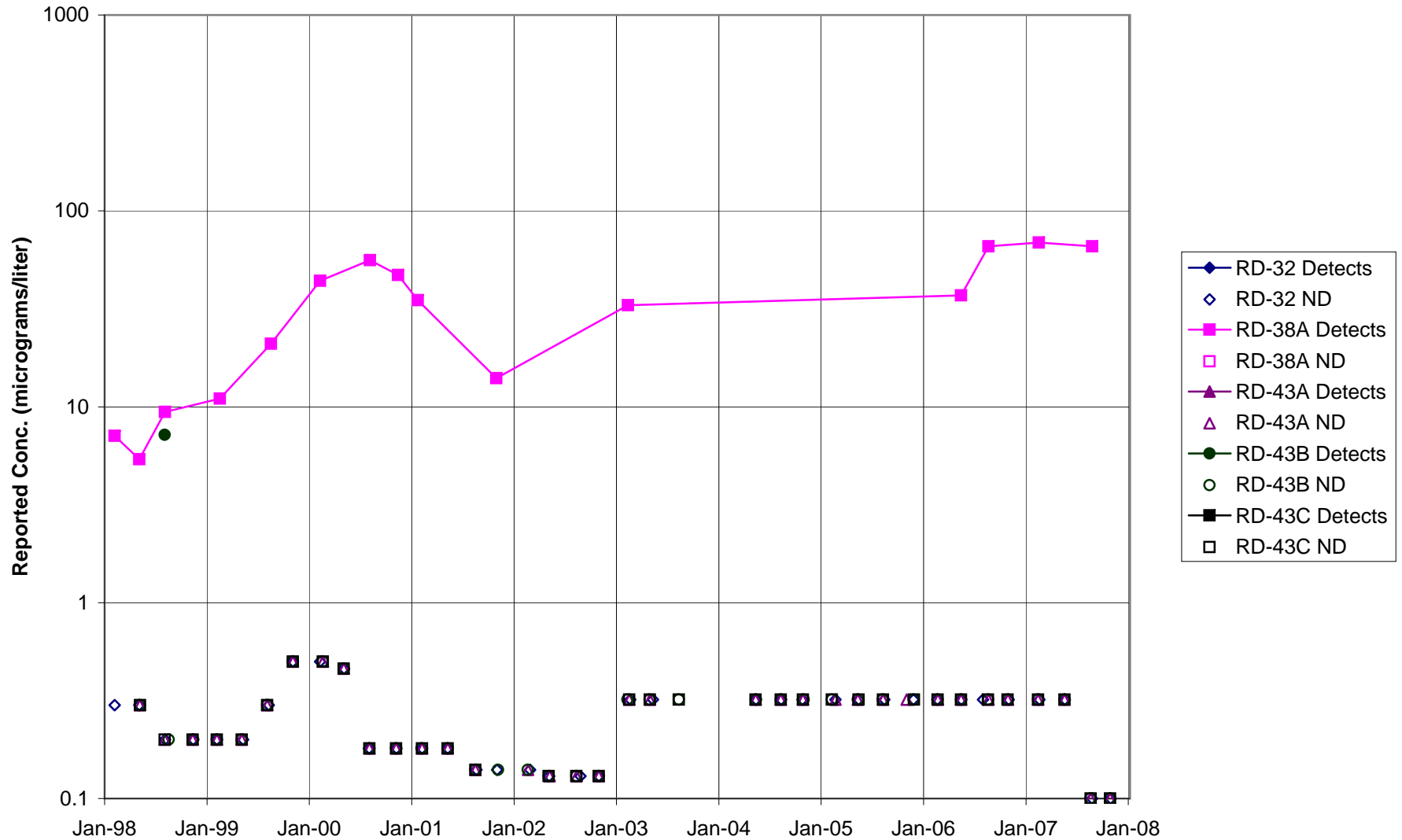


FIGURE F-158. CIS-1,2-DCE in APTF, CANYON & HAPPY VALLEY AREA WELLS -1

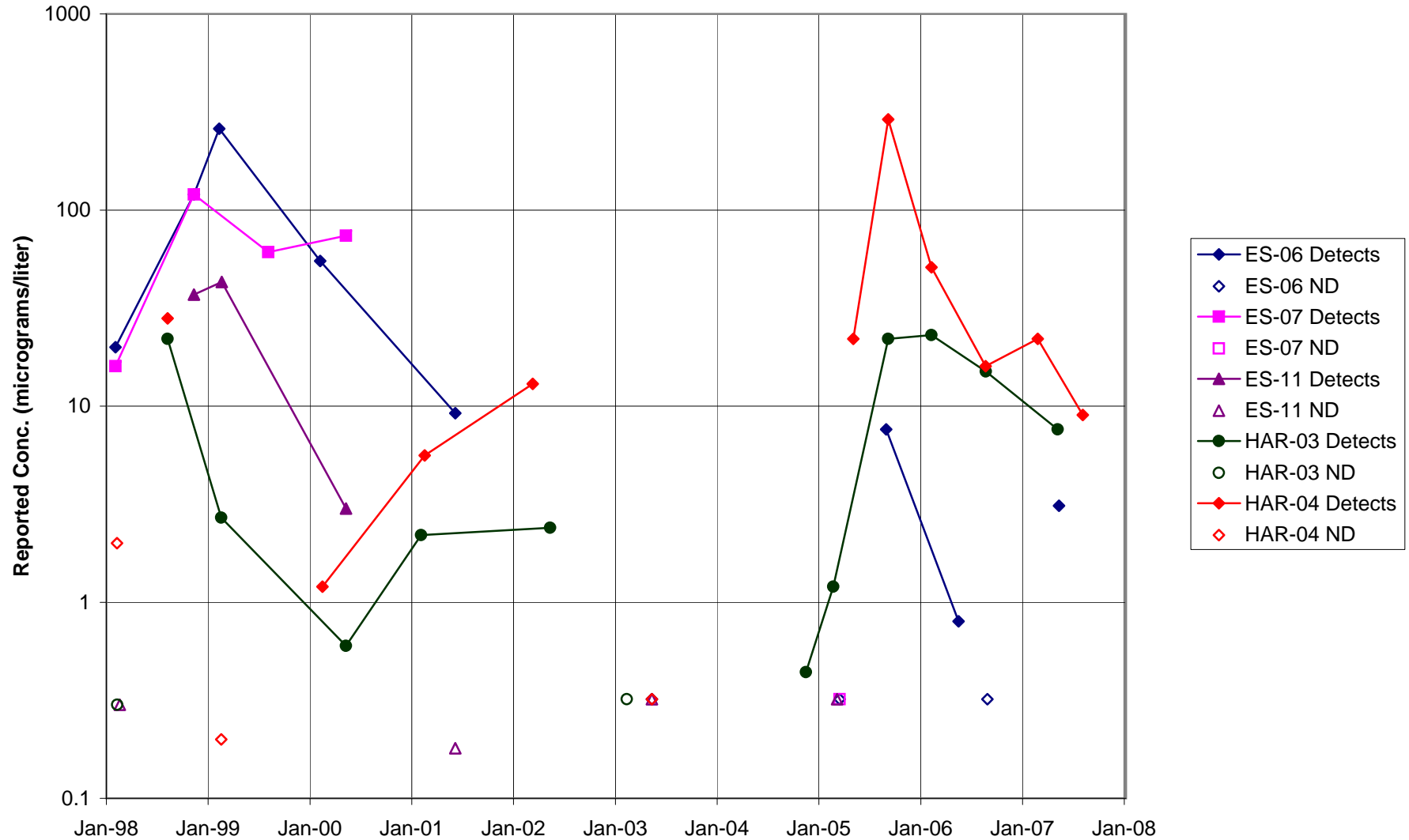
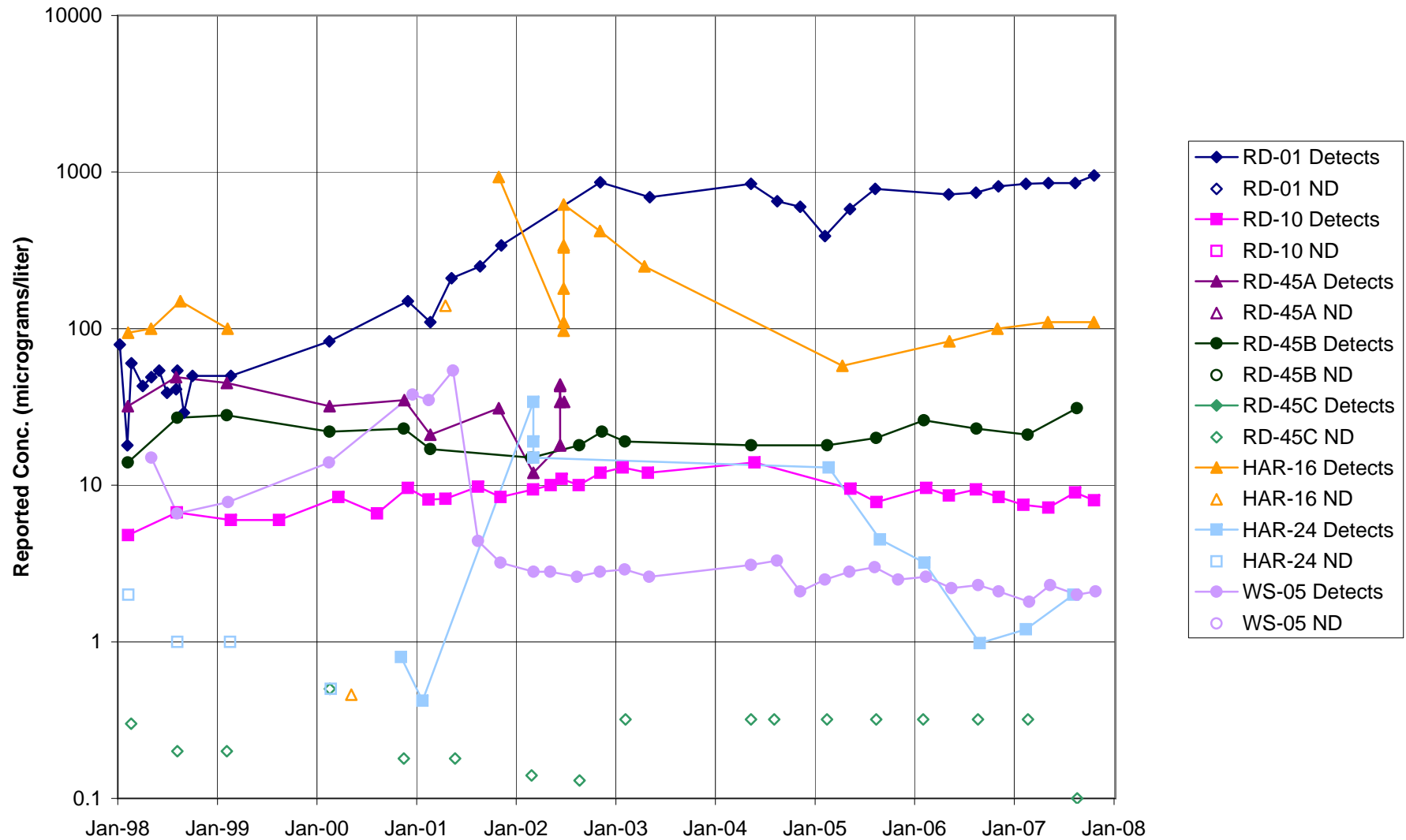


FIGURE F-159. CIS-1,2-DCE in APTF, CANYON & HAPPY VALLEY AREA WELLS - 2



**FIGURE F-160. CIS-1,2-DCE in CTL-III / PERIMETER POND AREA WELLS**

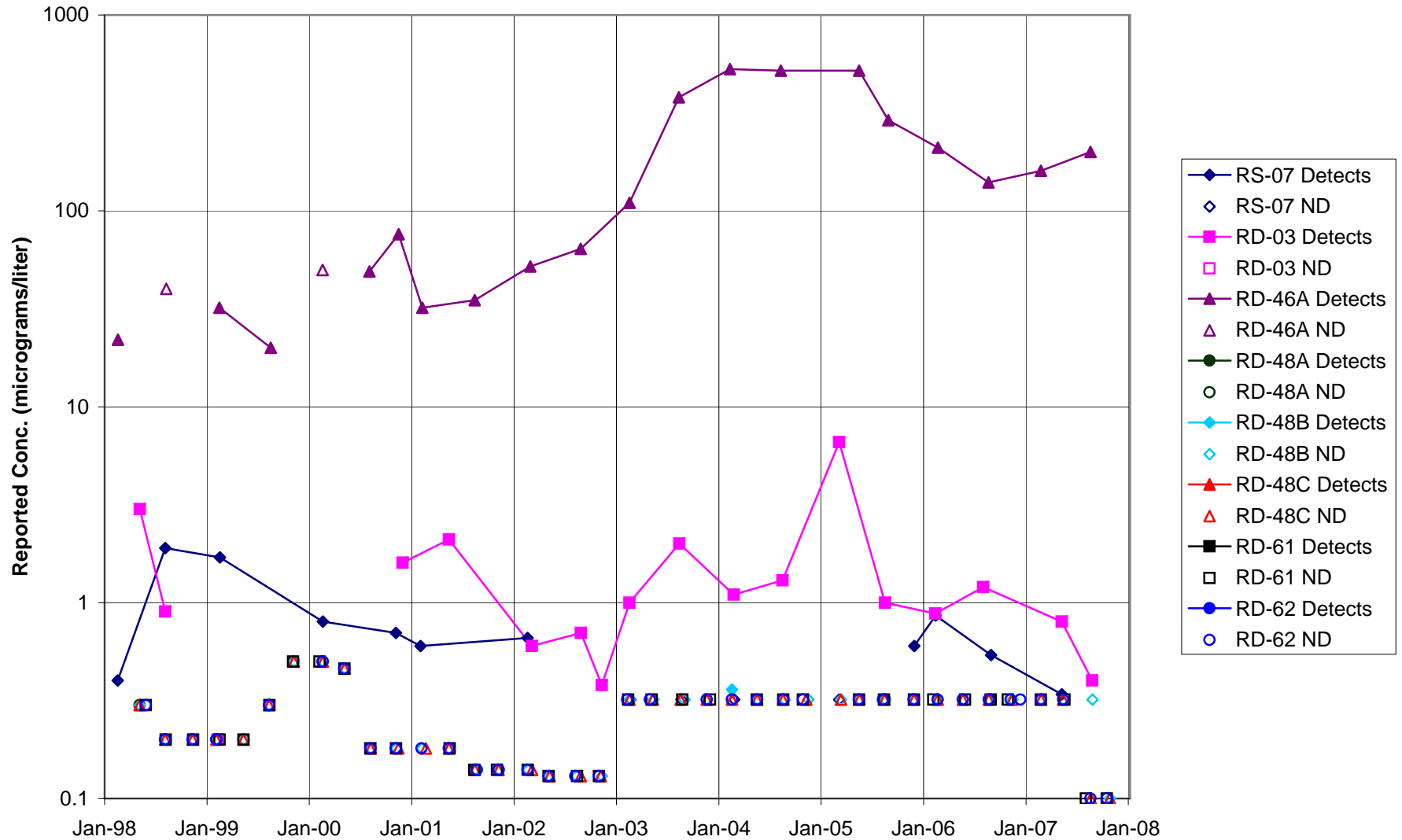




FIGURE F-161. CIS-1,2-DCE in BOWL AREA WELLS

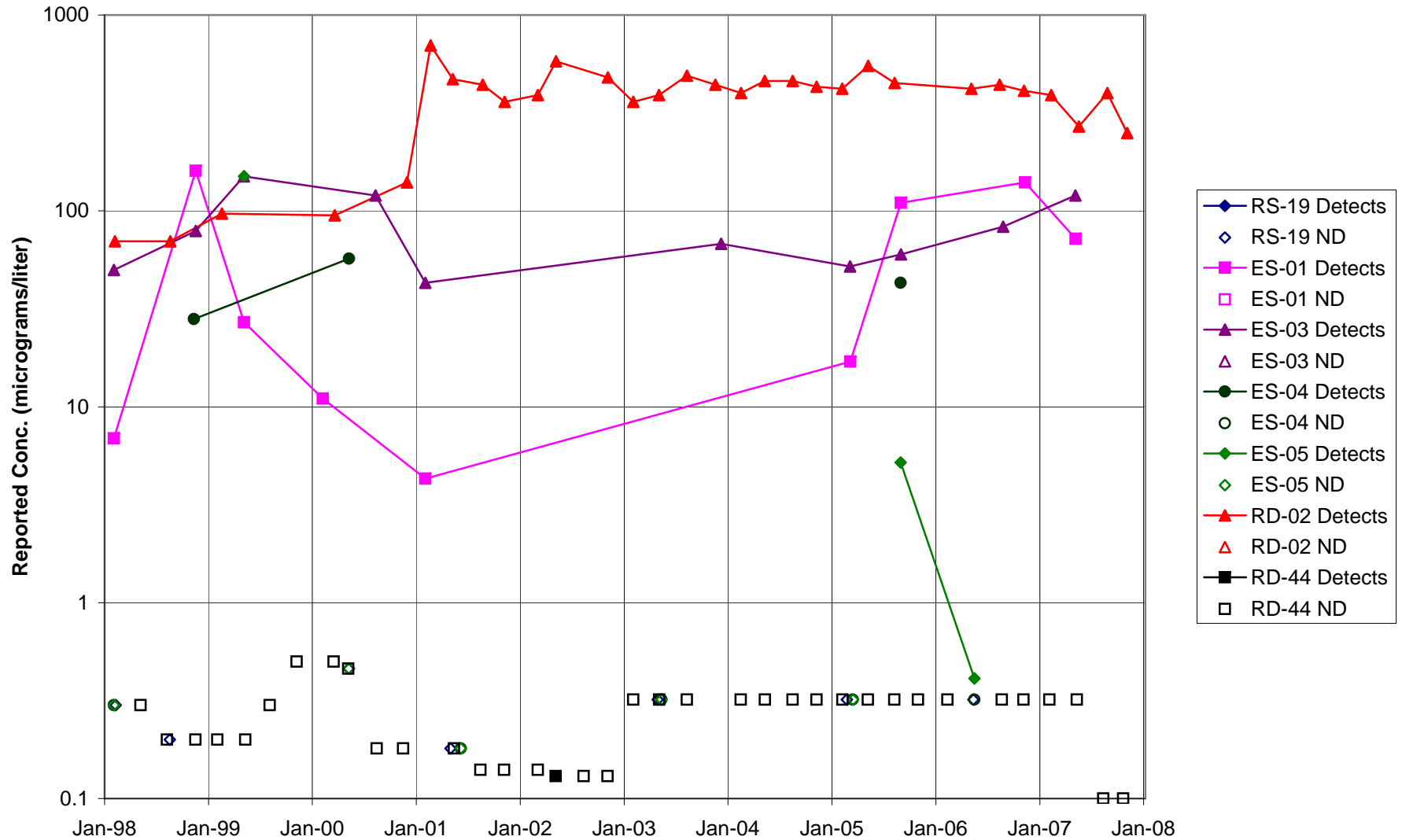


FIGURE F-162. CIS-1,2-DCE in ECL AREA WELLS

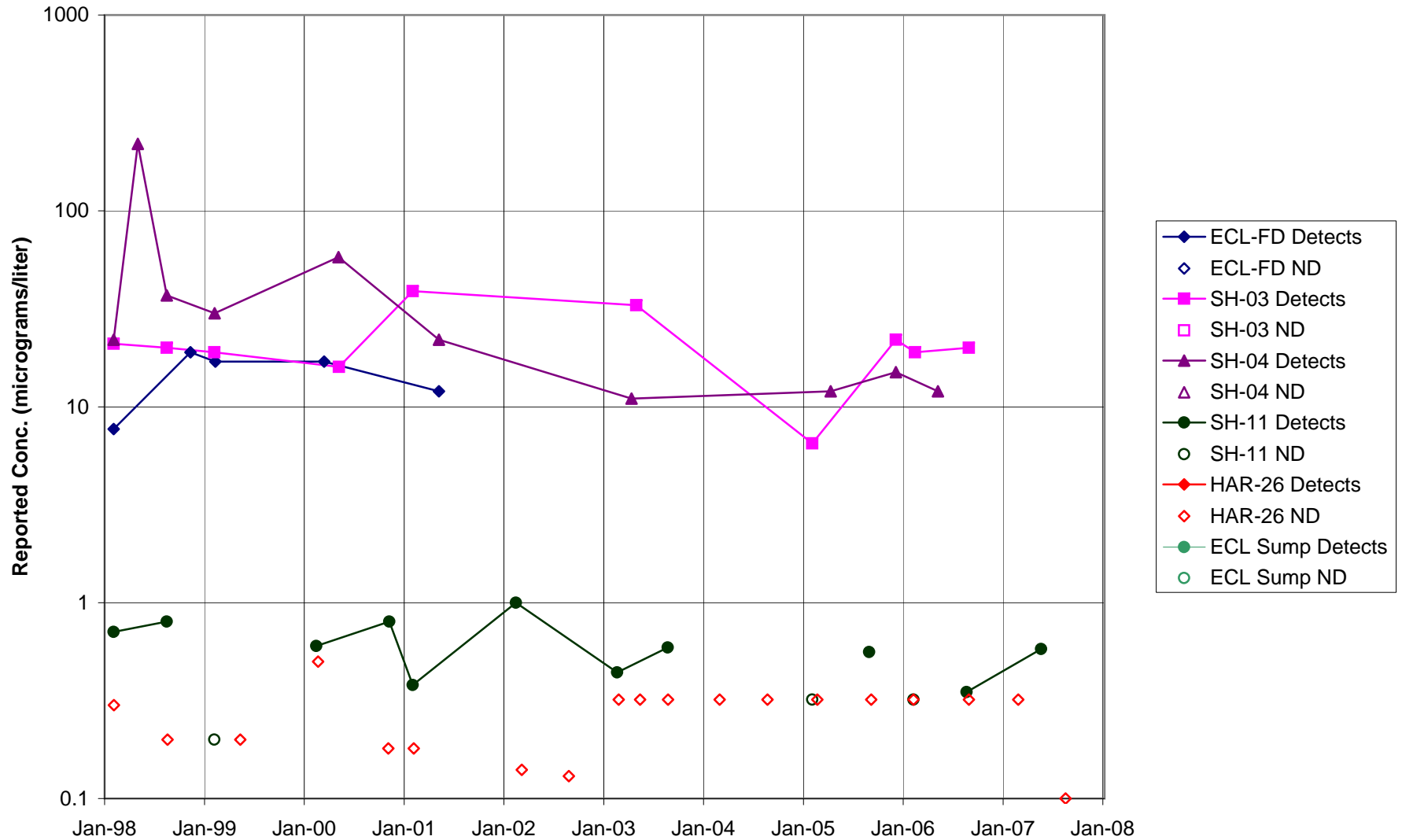


FIGURE F-163. CIS-1,2-DCE in FORMER LOX PLANT AREA WELLS

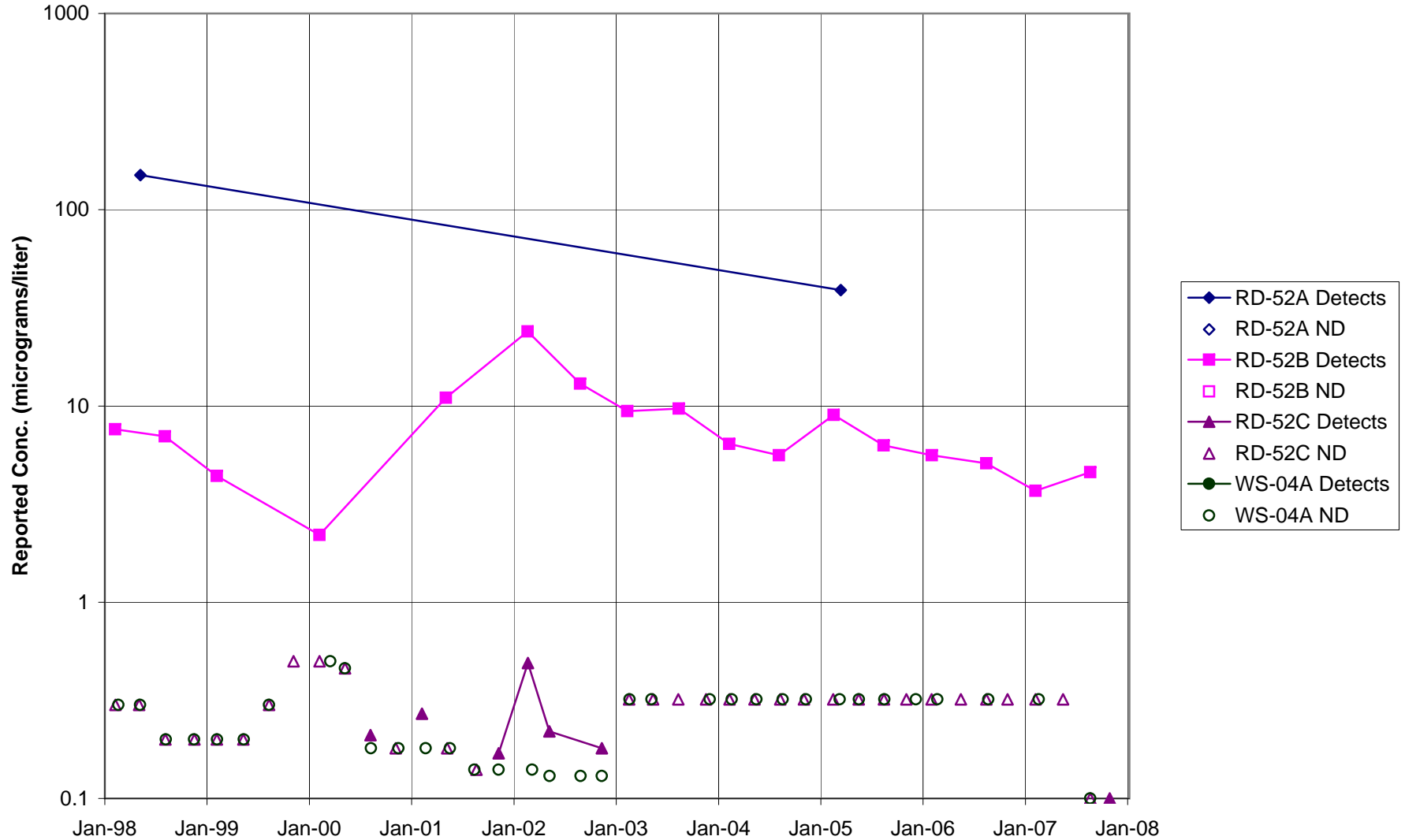


FIGURE F-164. CIS-1,2-DCE in RD-09 AREA WELLS

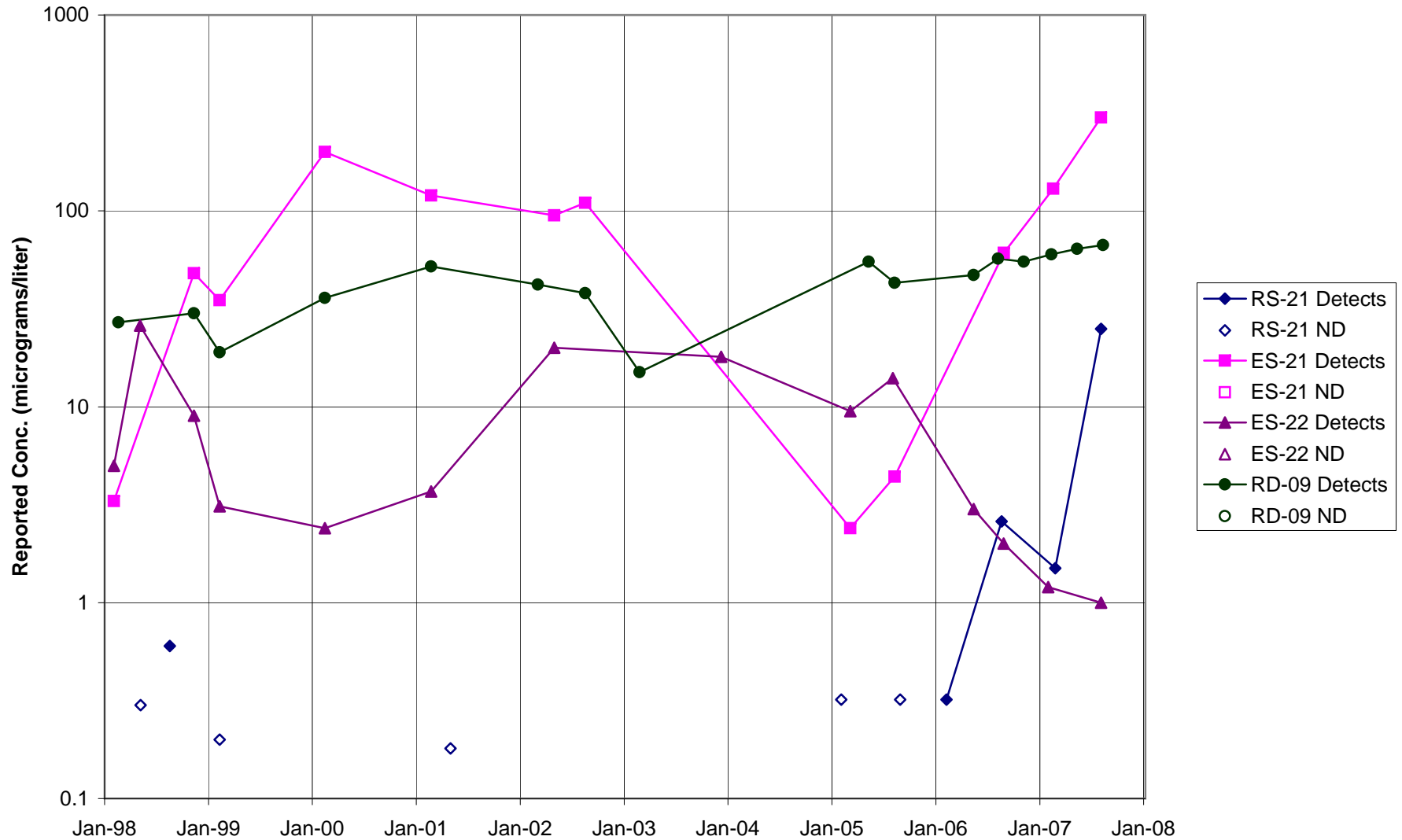


FIGURE F-165. CIS-1,2-DCE in HELIPORT, B/204 AREA WELLS

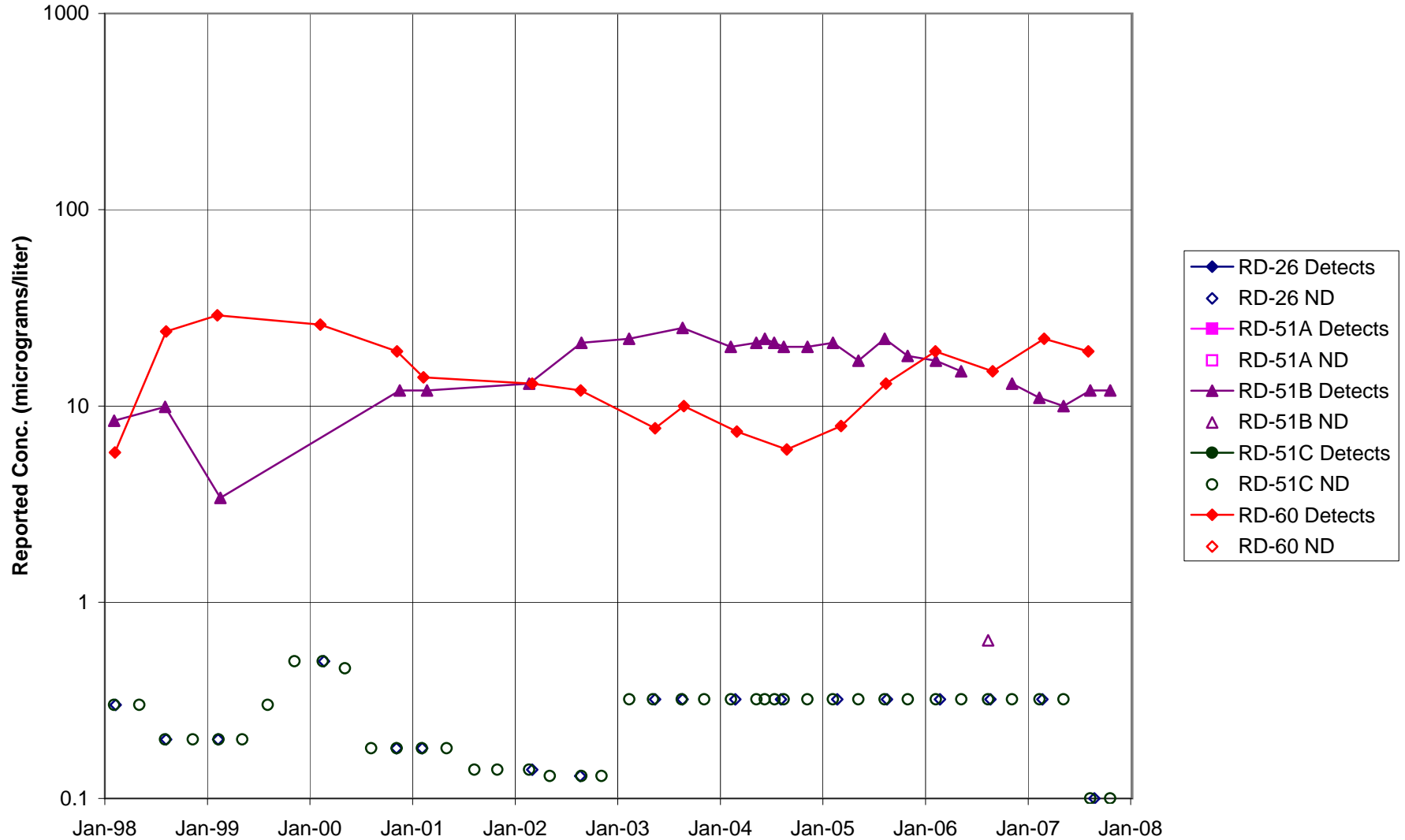


FIGURE F-166. CIS-1,2-DCE in ALFA / BRAVO AREA WELLS

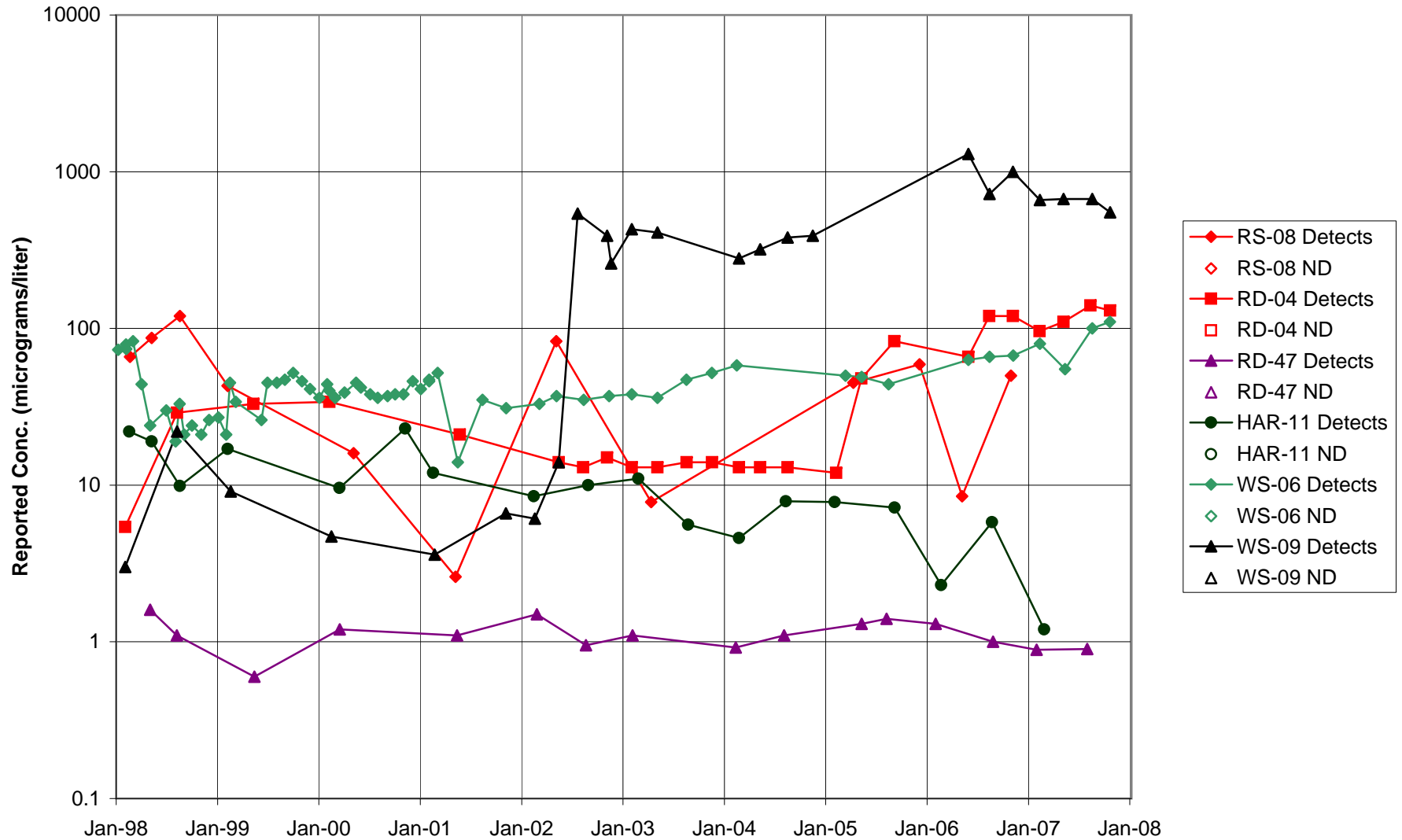


FIGURE F-167. CIS-1,2-DCE in SPA AREA WELLS

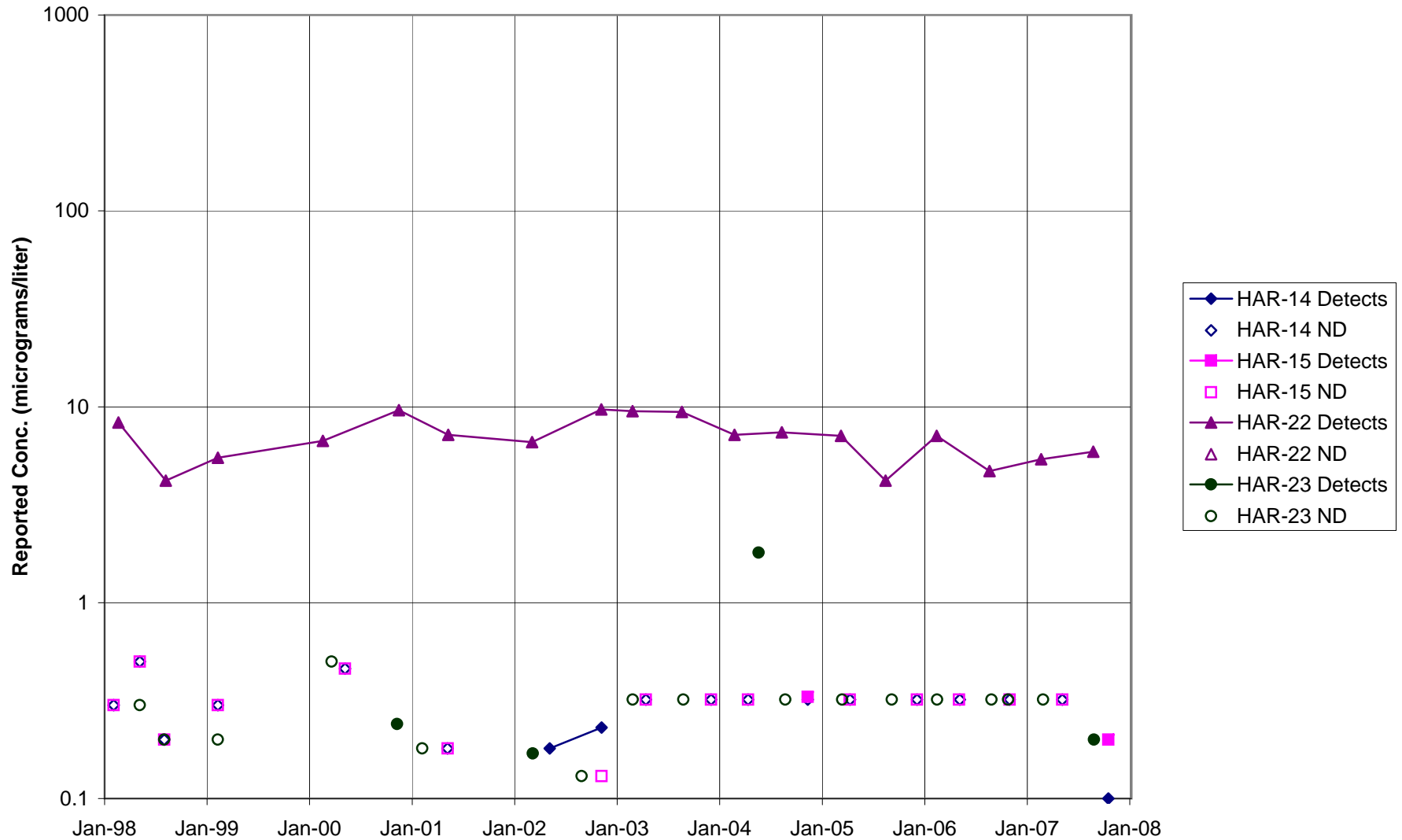


FIGURE F-168. CIS-1,2-DCE in COCA / PLF AREA WELLS

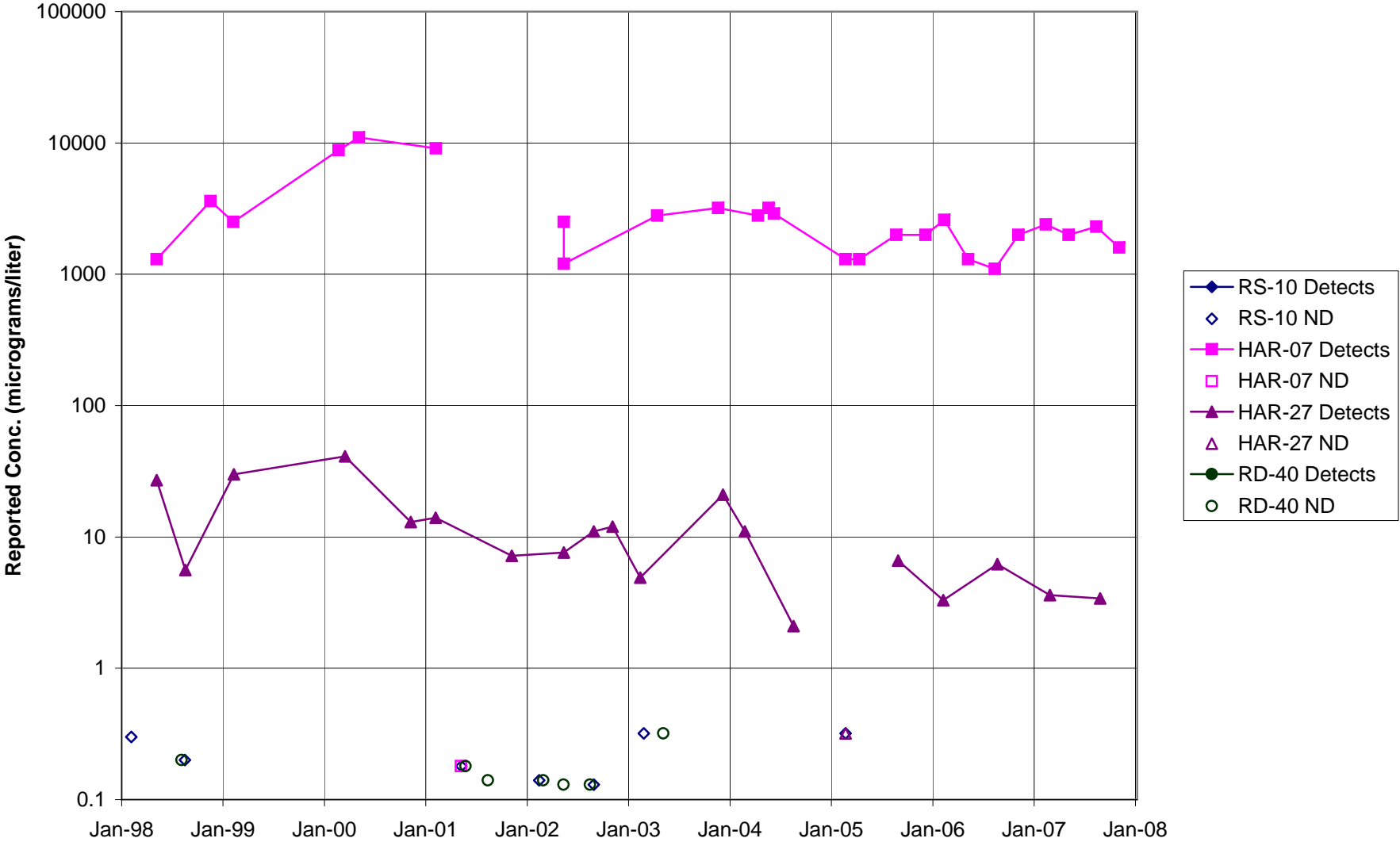
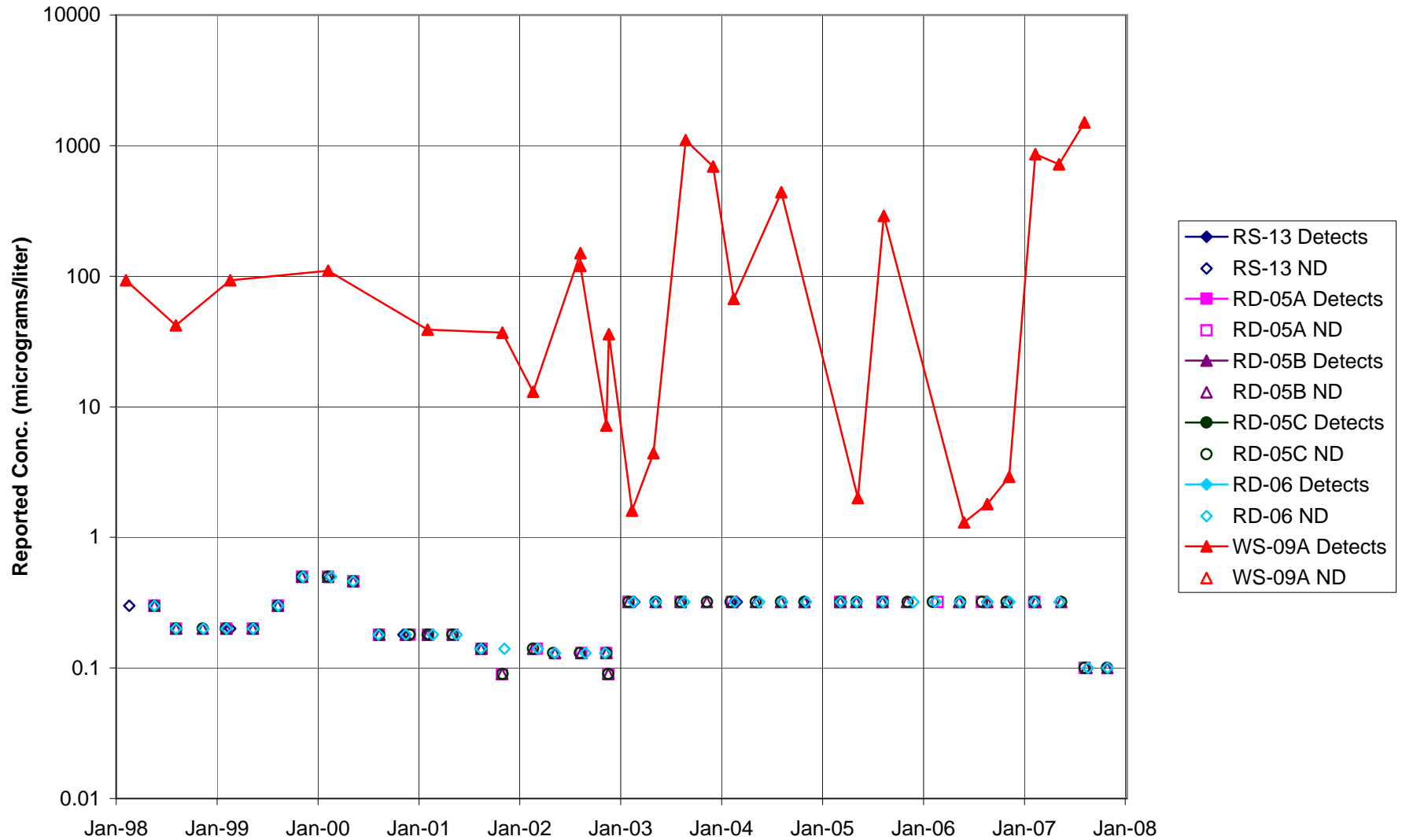




FIGURE F-169. CIS-1,2-DCE in DELTA / BUFFER ZONE AREA WELLS



**FIGURE F-170. CIS-1,2-DCE in AREA IV WELLS**

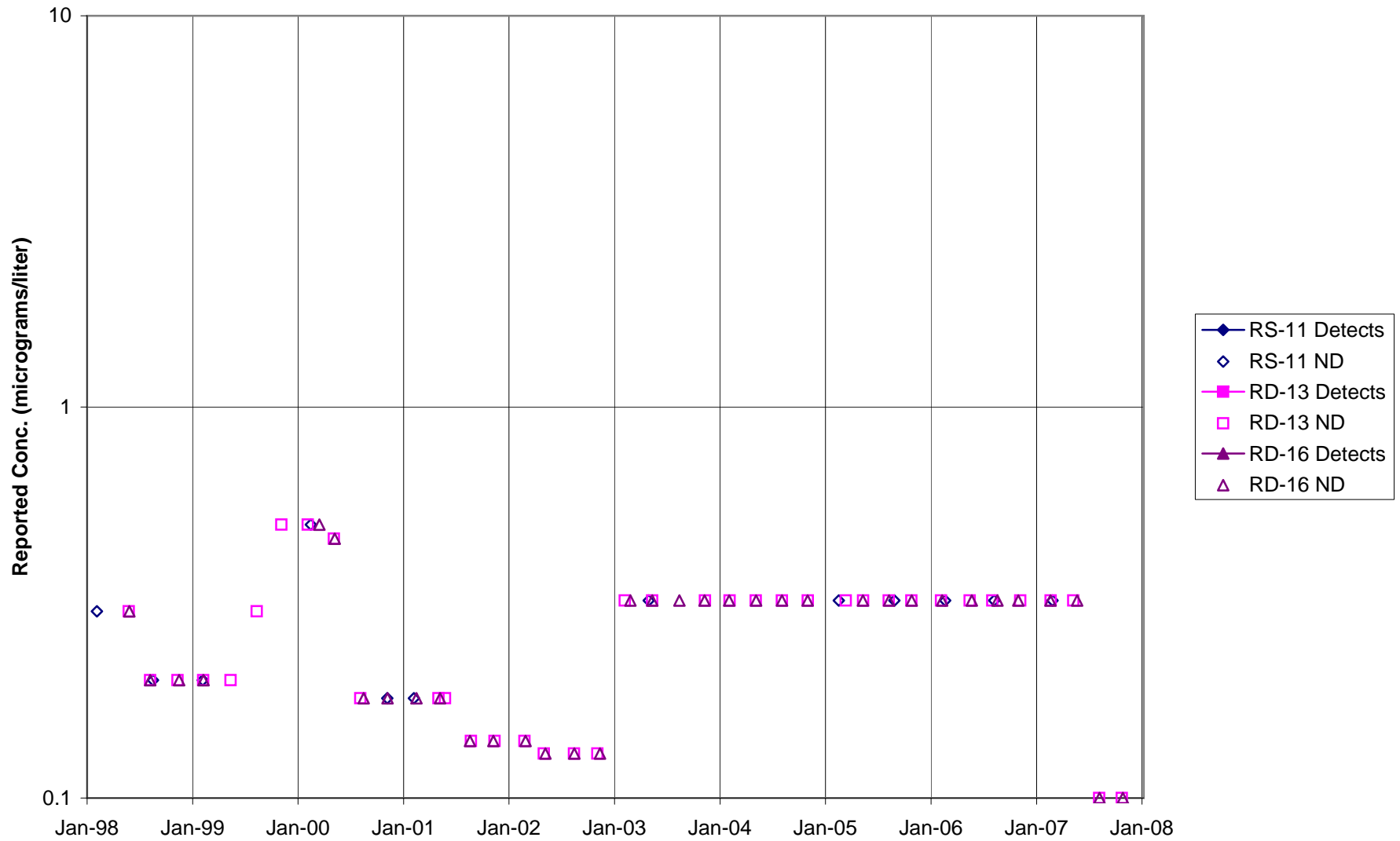
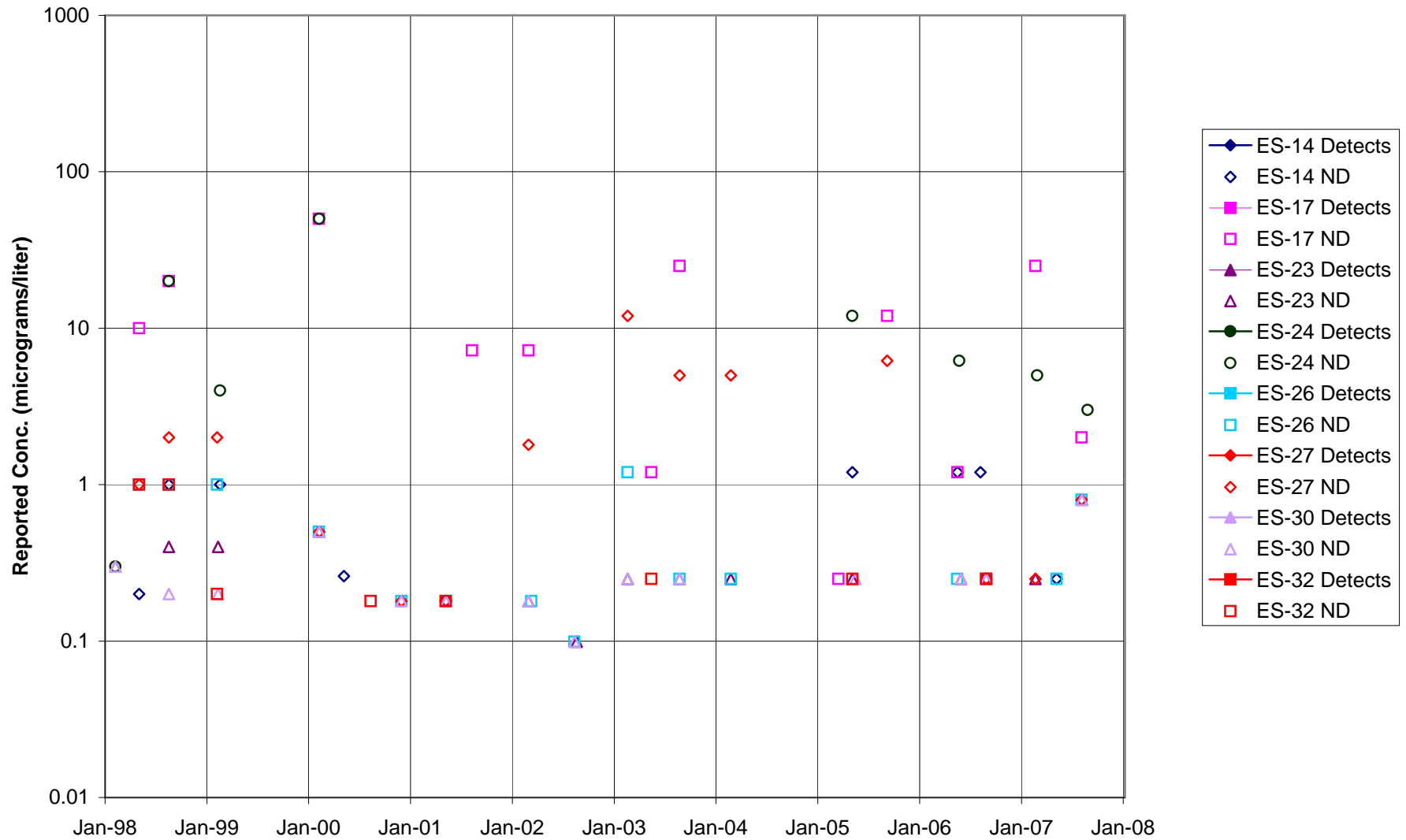
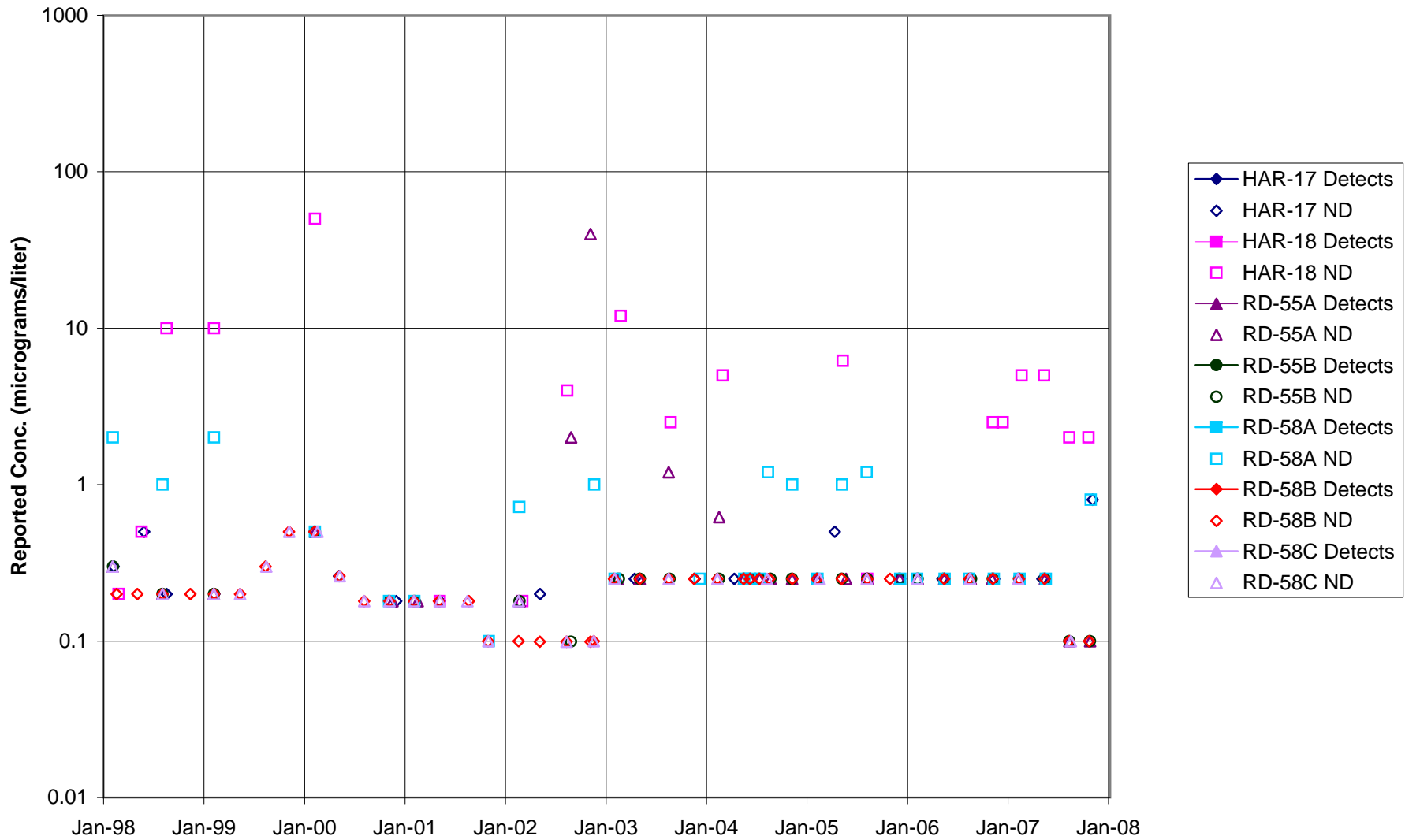


FIGURE F-171. ETHYLBENZENE IN STL-IV AREA SHALLOW WELLS



**FIGURE F-172. ETHYLBENZENE IN STL-IV AREA CHATSWORTH FORMATION WELLS**



**FIGURE F-173. ETHYLBENZENE IN MAIN GATE AREA WELLS - 1**

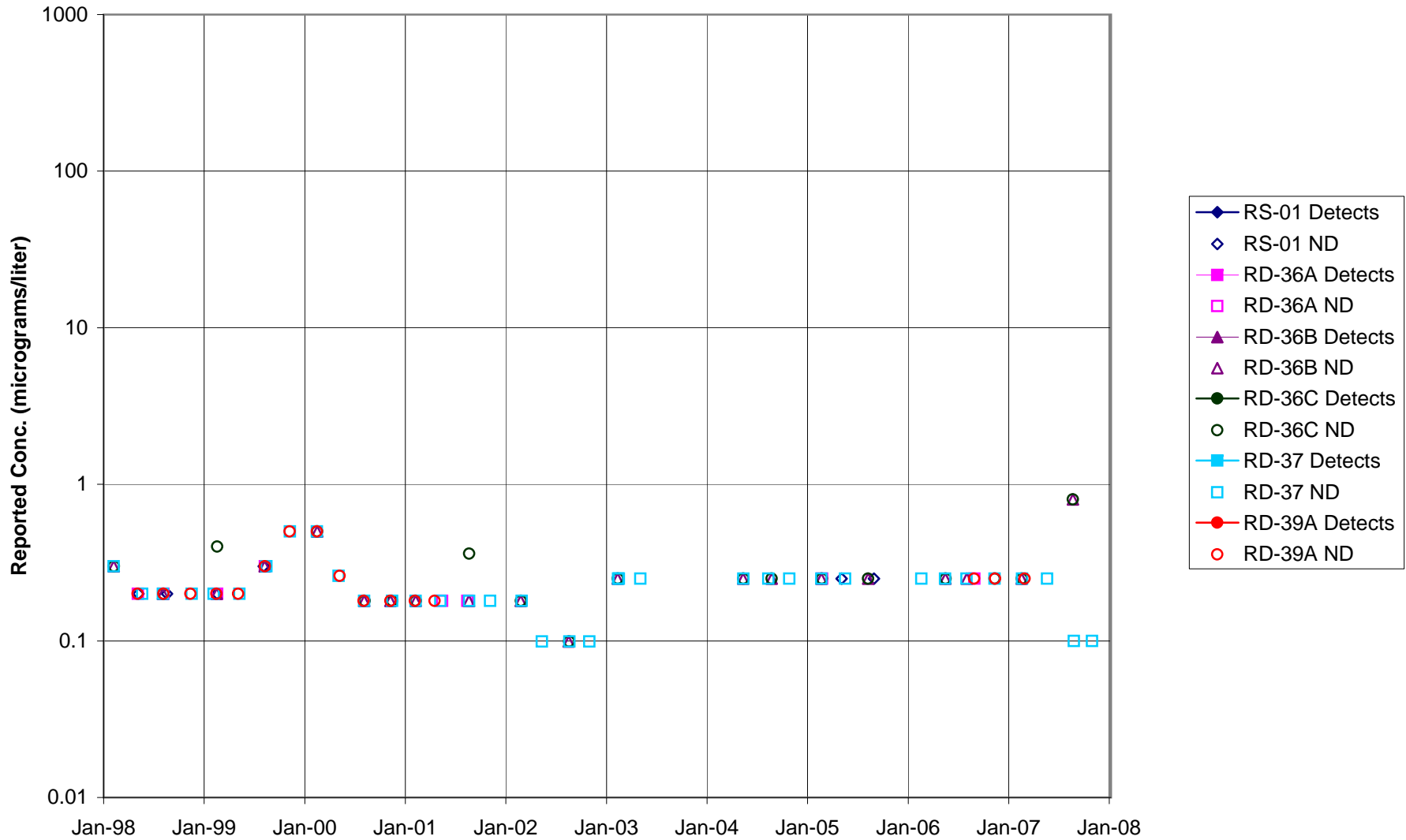
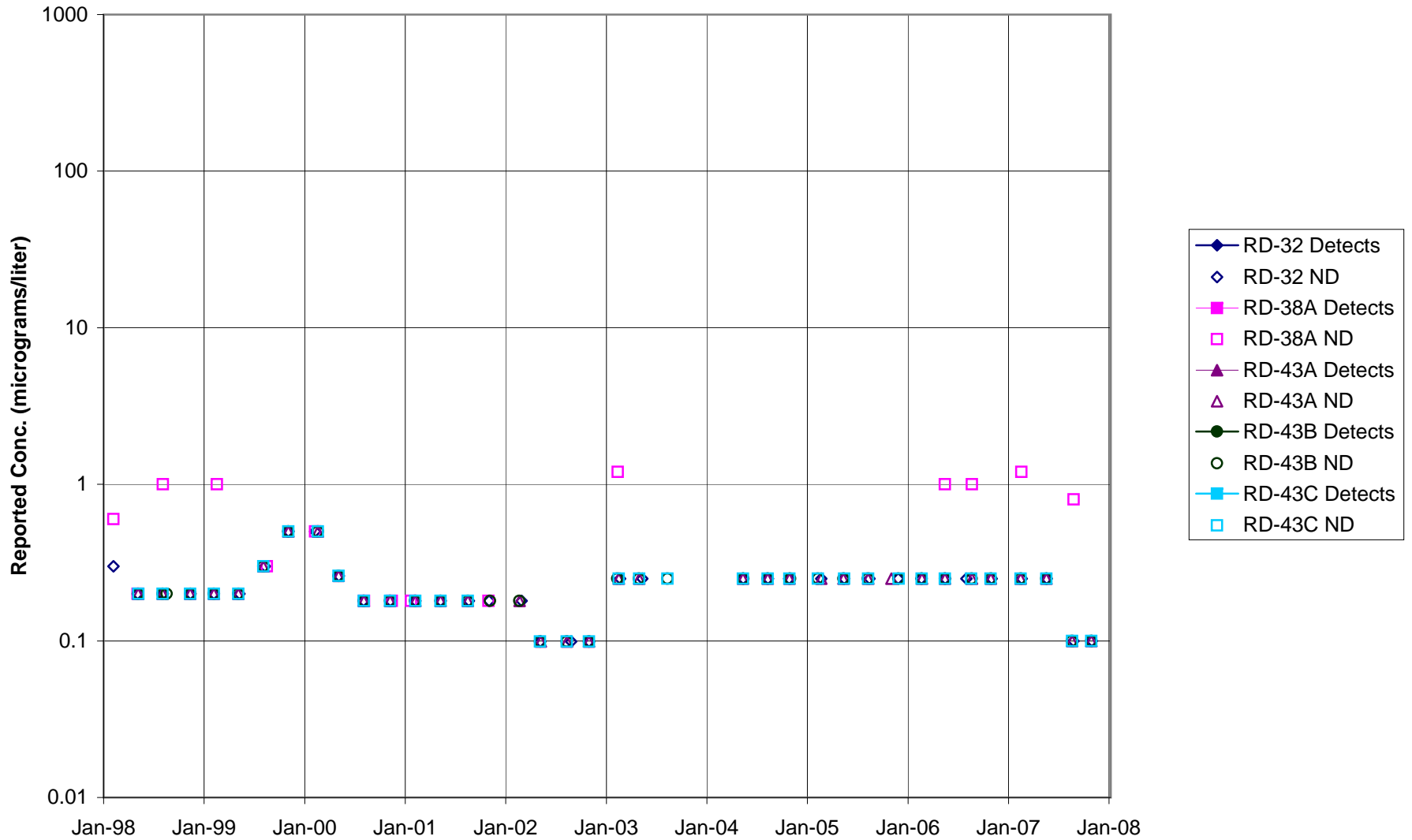
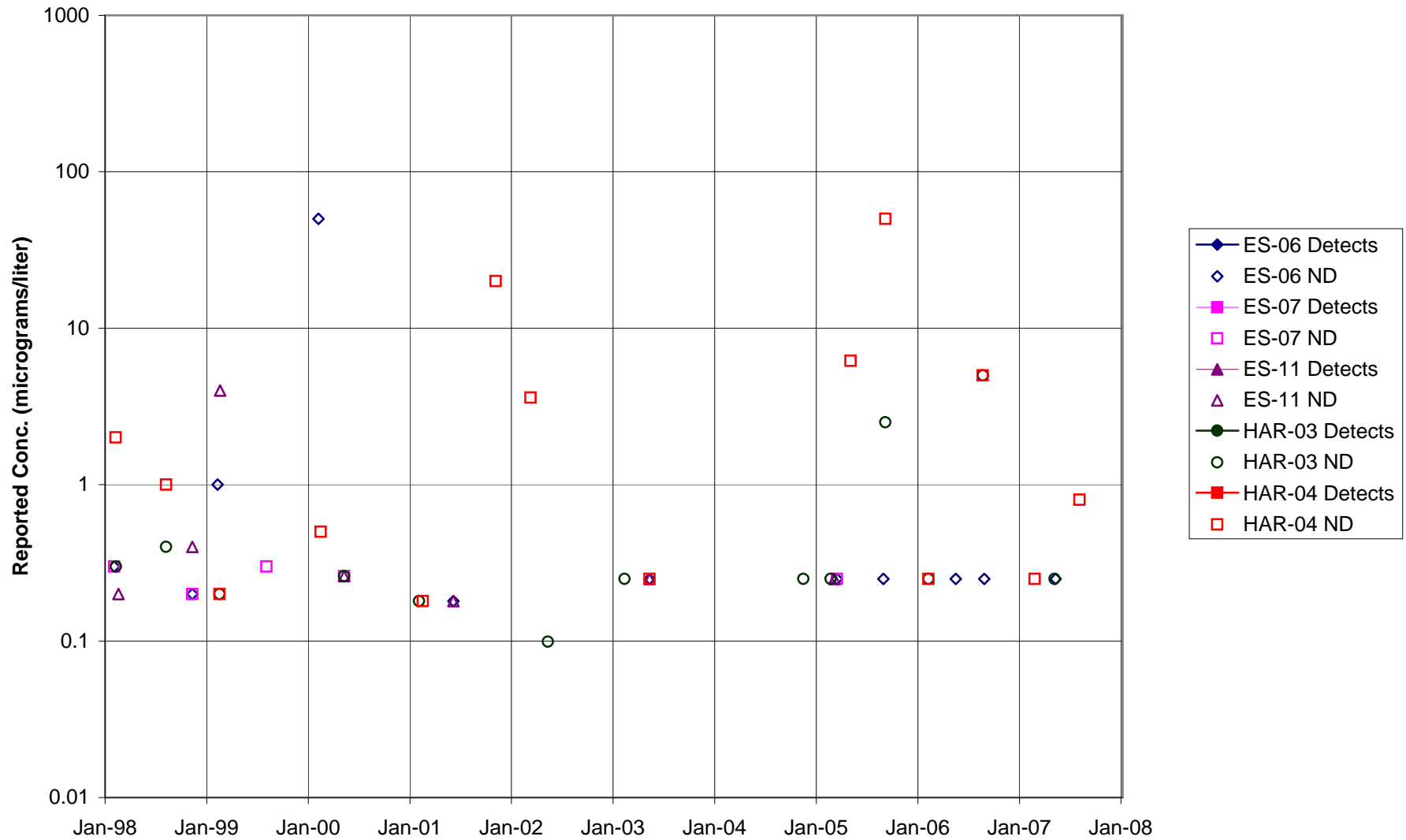


FIGURE F-174. ETHYLBENZENE IN MAIN GATE AREA WELLS - 2



**FIGURE F-175. ETHYLBENZENE IN APTF, CANYON & HAPPY VALLEY AREA WELLS - 1**

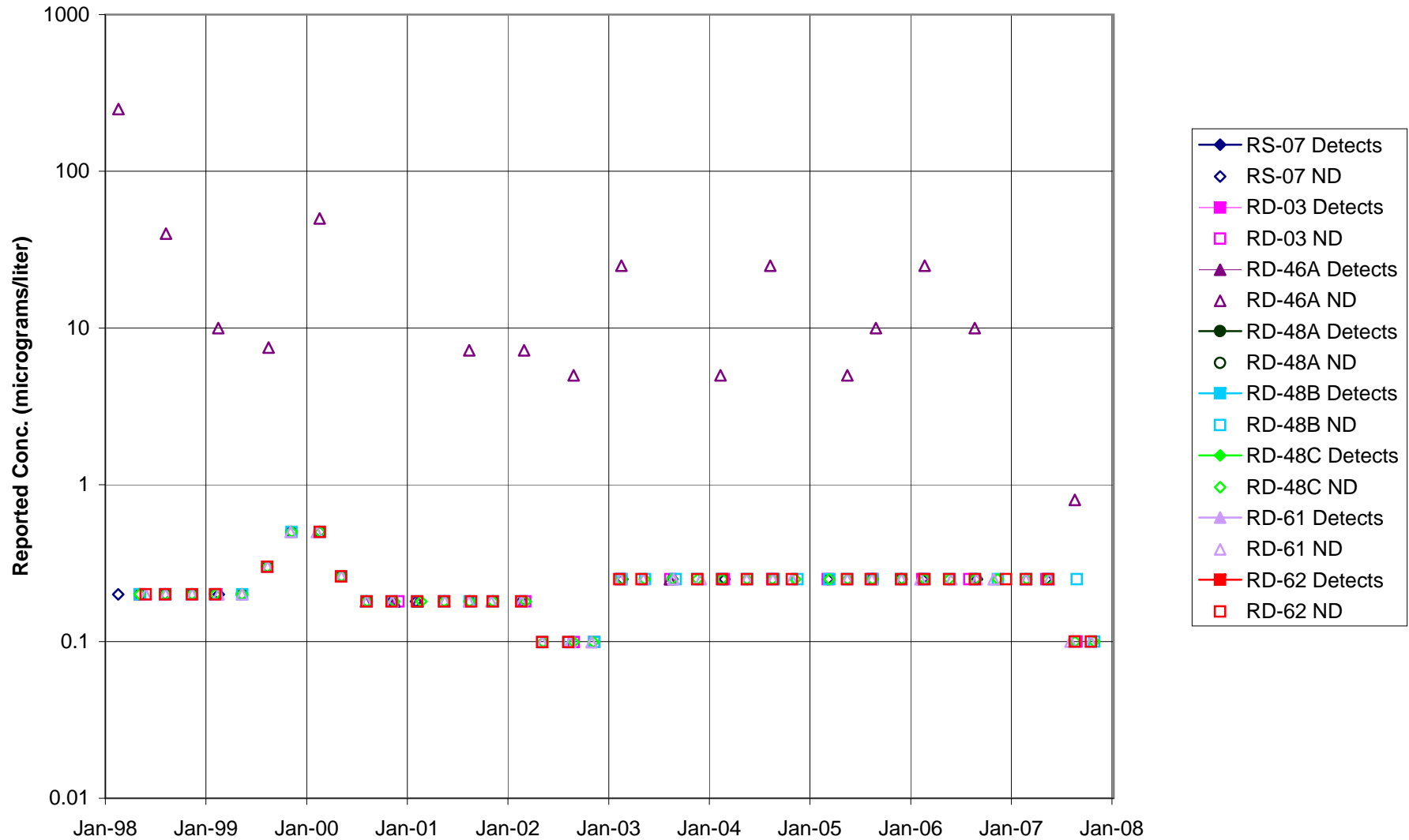


**FIGURE F-176. ETHYLBENZENE IN APTF, CANYON & HAPPY VALLEY AREA WELLS - 2**





FIGURE F-177. ETHYLBENZENE IN CTL-III / PERIMETER POND AREA WELLS



**FIGURE F-178. ETHYLBENZENE IN BOWL AREA WELLS**

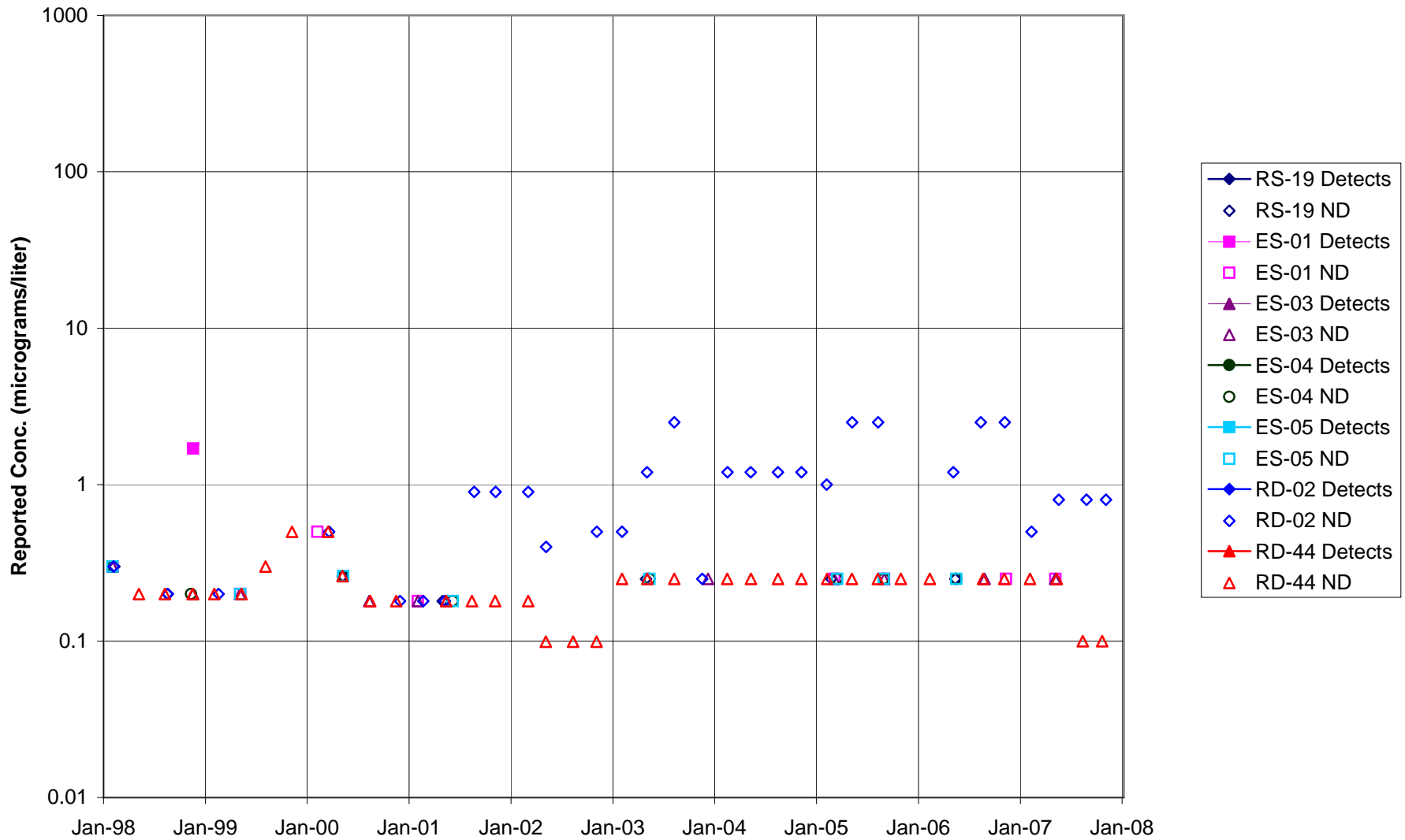


FIGURE F-179. ETHYLBENZENE IN ECL AREA WELLS

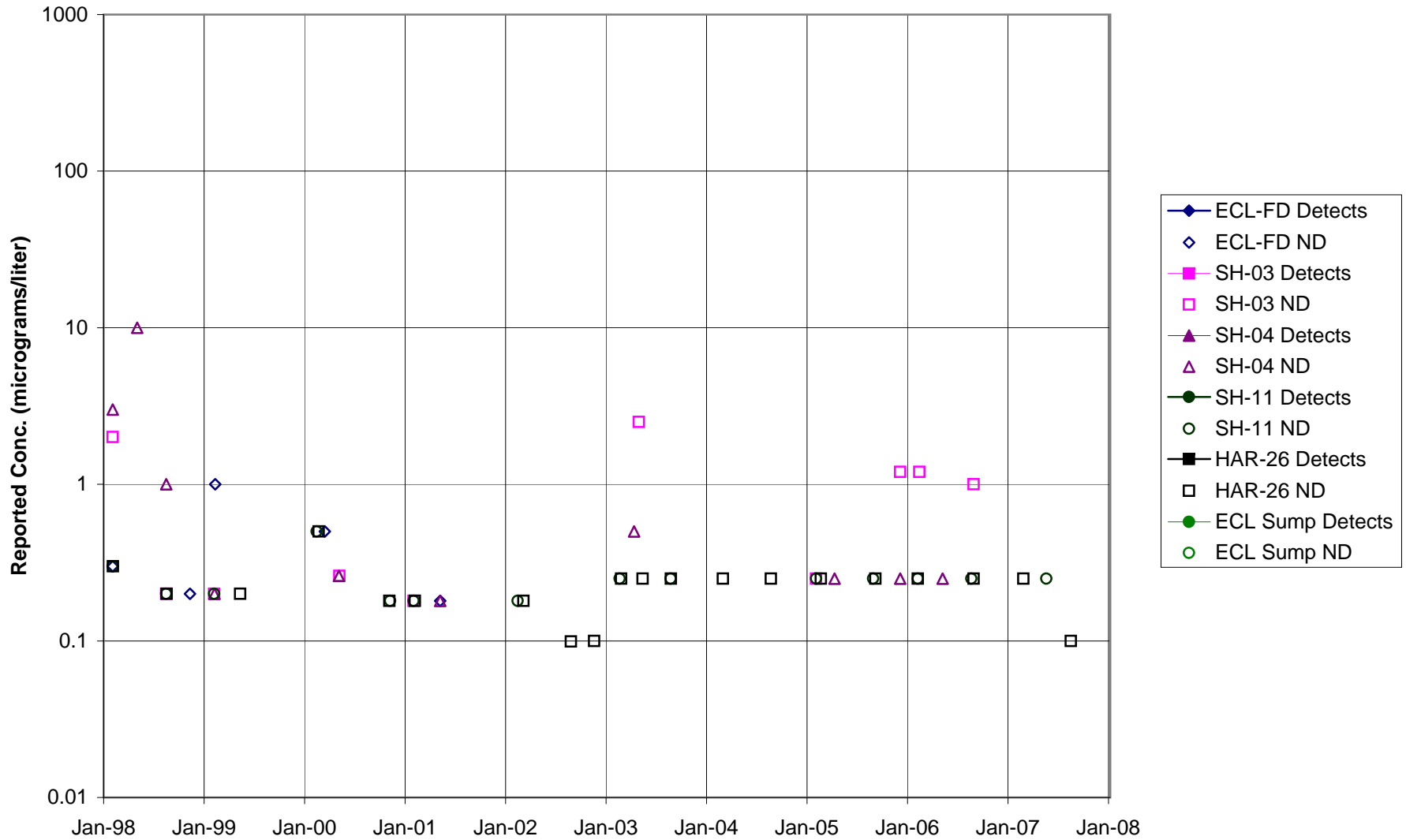
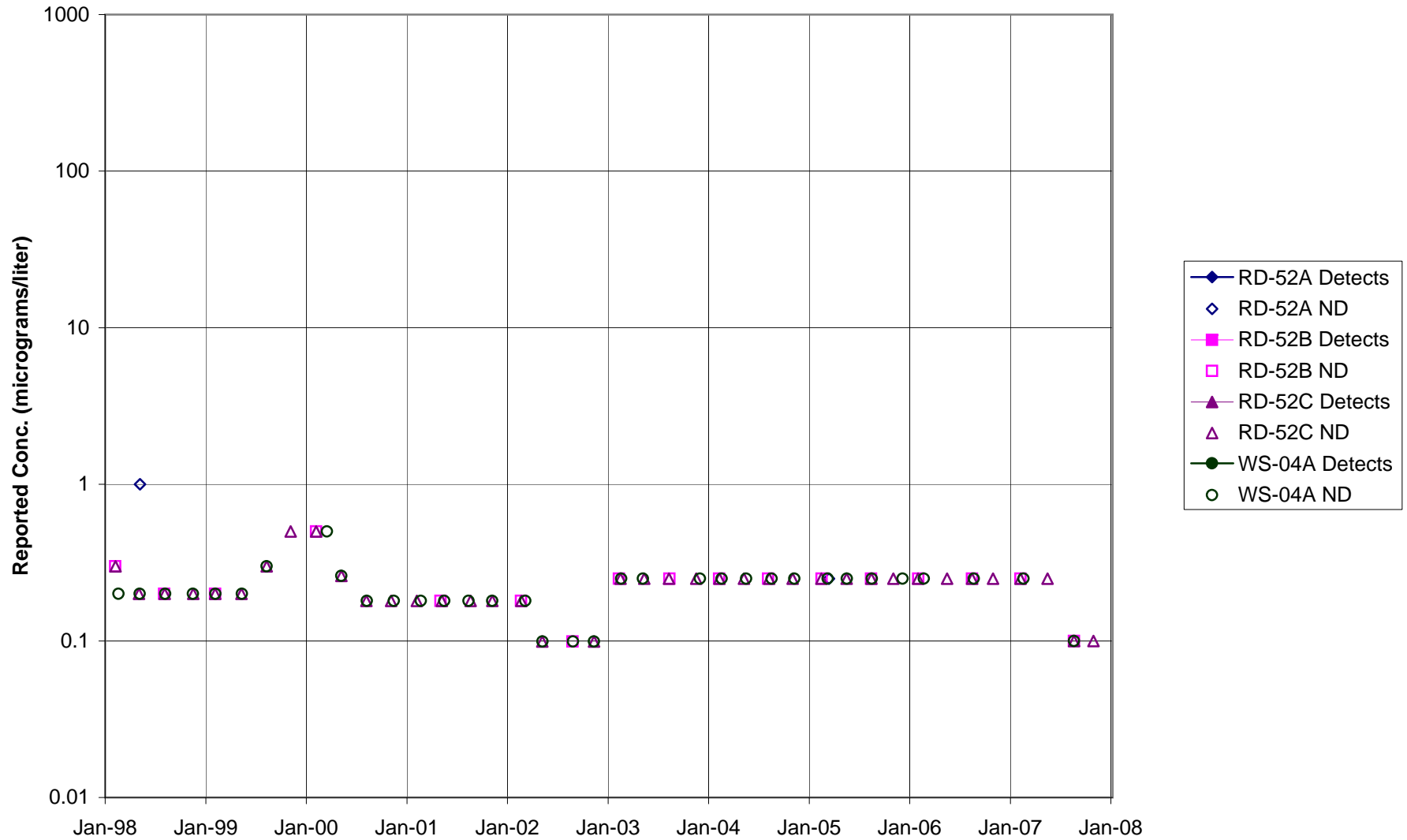


FIGURE F-180. ETHYLBENZENE IN FORMER LOX PLANT AREA WELLS



**FIGURE F-181. ETHYLBENZENE IN RD-09 AREA WELLS**

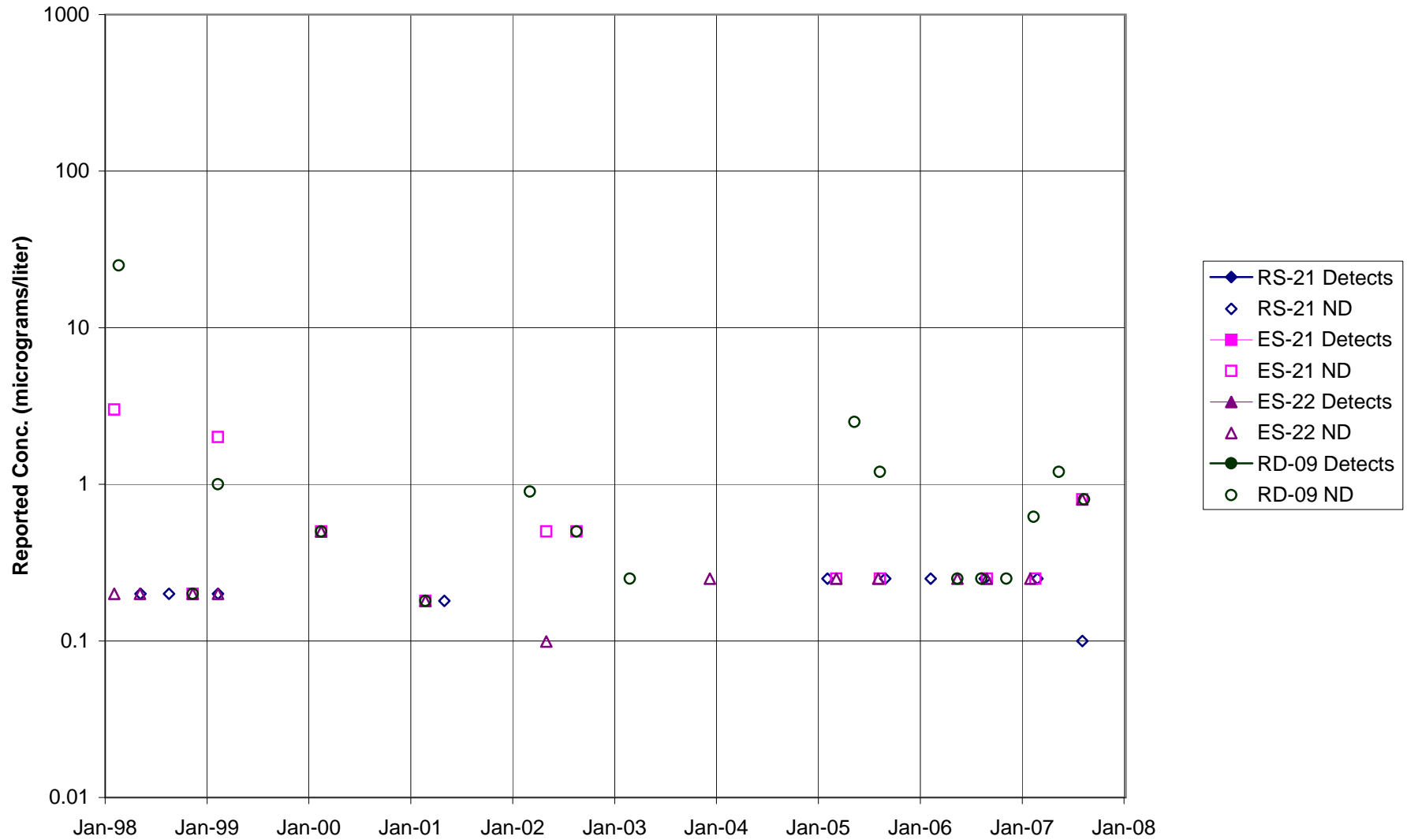
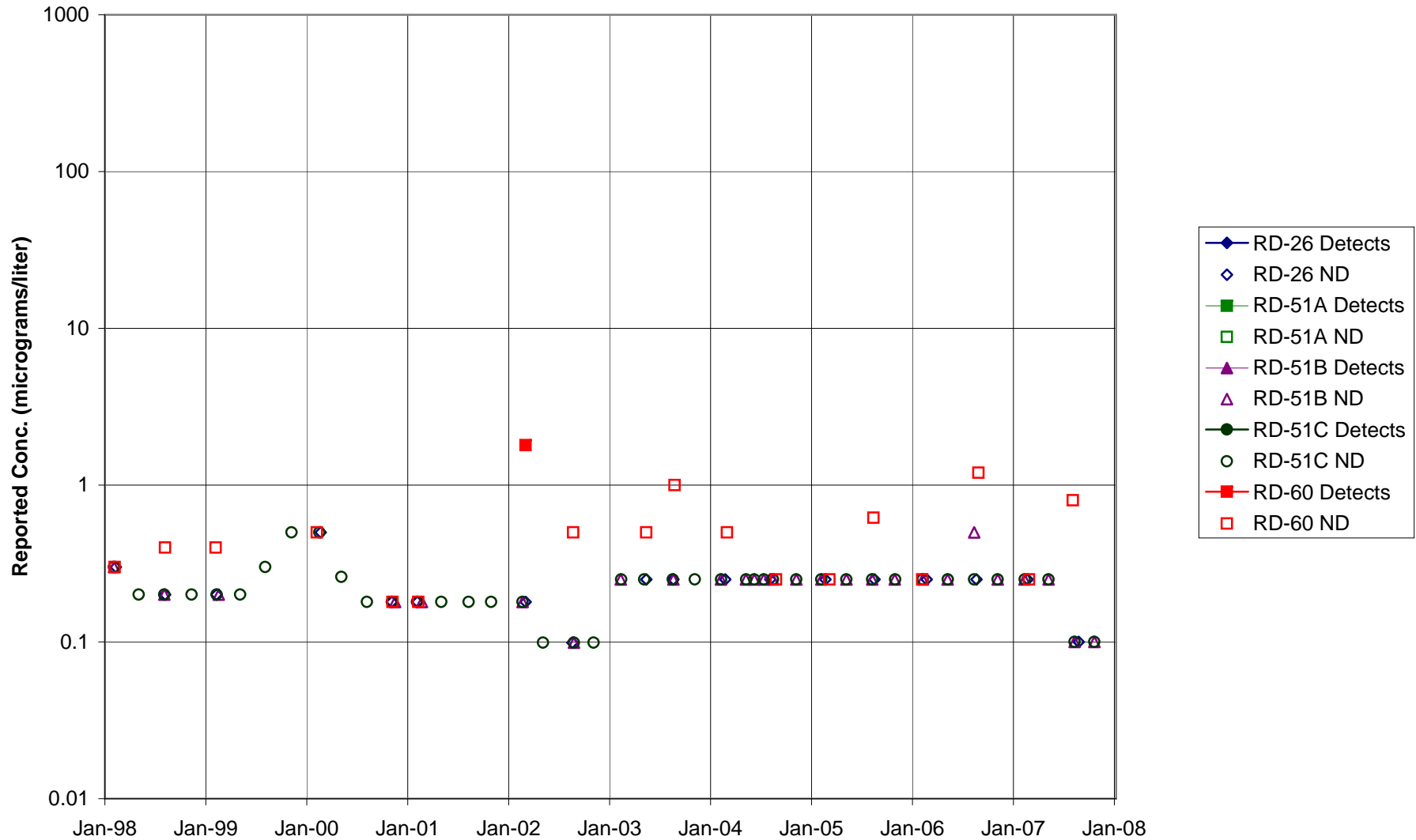


FIGURE F-182. ETHYLBENZENE IN HELIPORT, B/204 AREA WELLS



**FIGURE F-183. ETHYLBENZENE IN ALFA / BRAVO AREA WELLS**

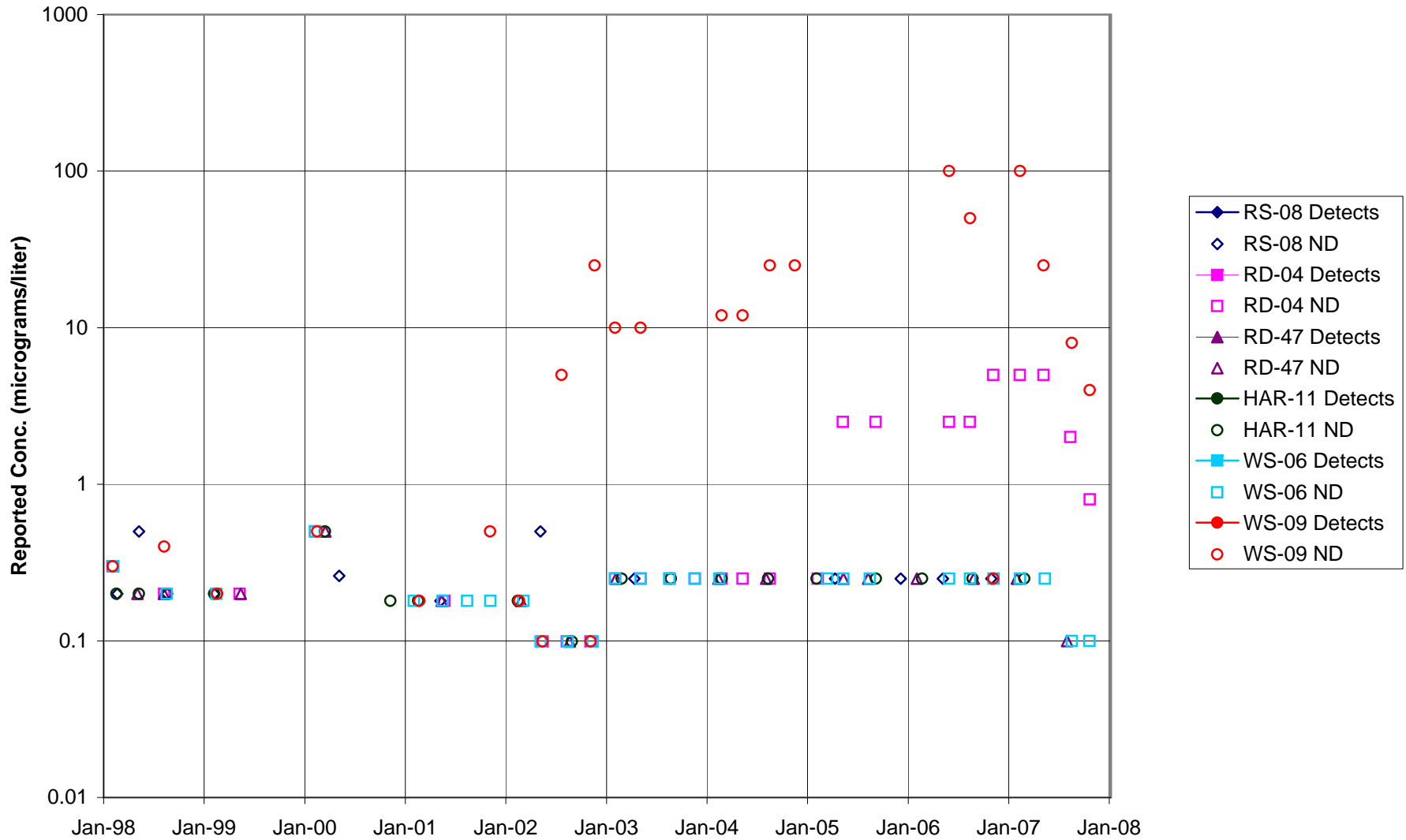
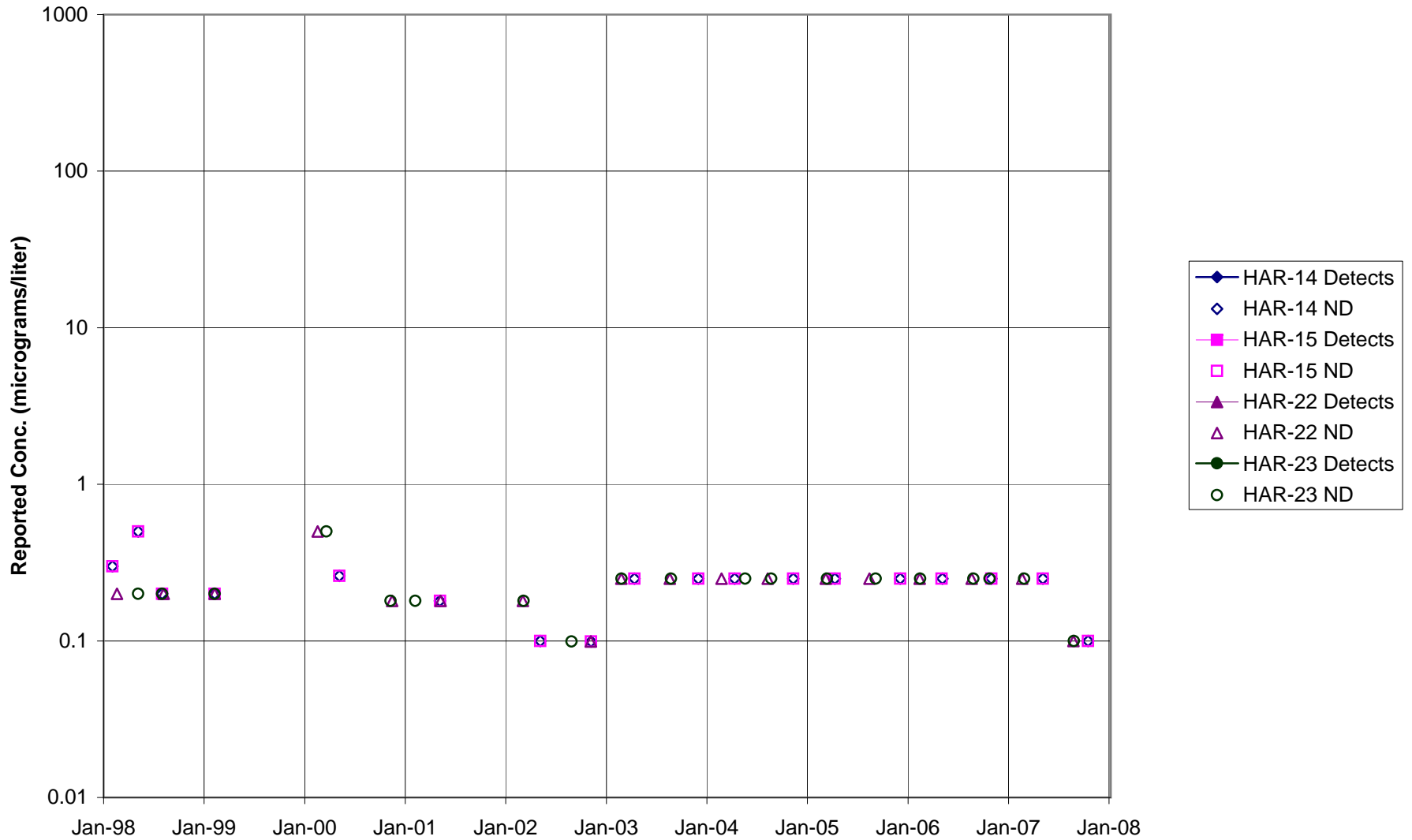


FIGURE F-184. ETHYLBENZENE IN SPA AREA WELLS





**FIGURE F-185. ETHYLBENZENE in COCA / PLF AREA WELLS**



FIGURE F-186. ETHYLBENZENE IN DELTA / BUFFER ZONE AREA WELLS

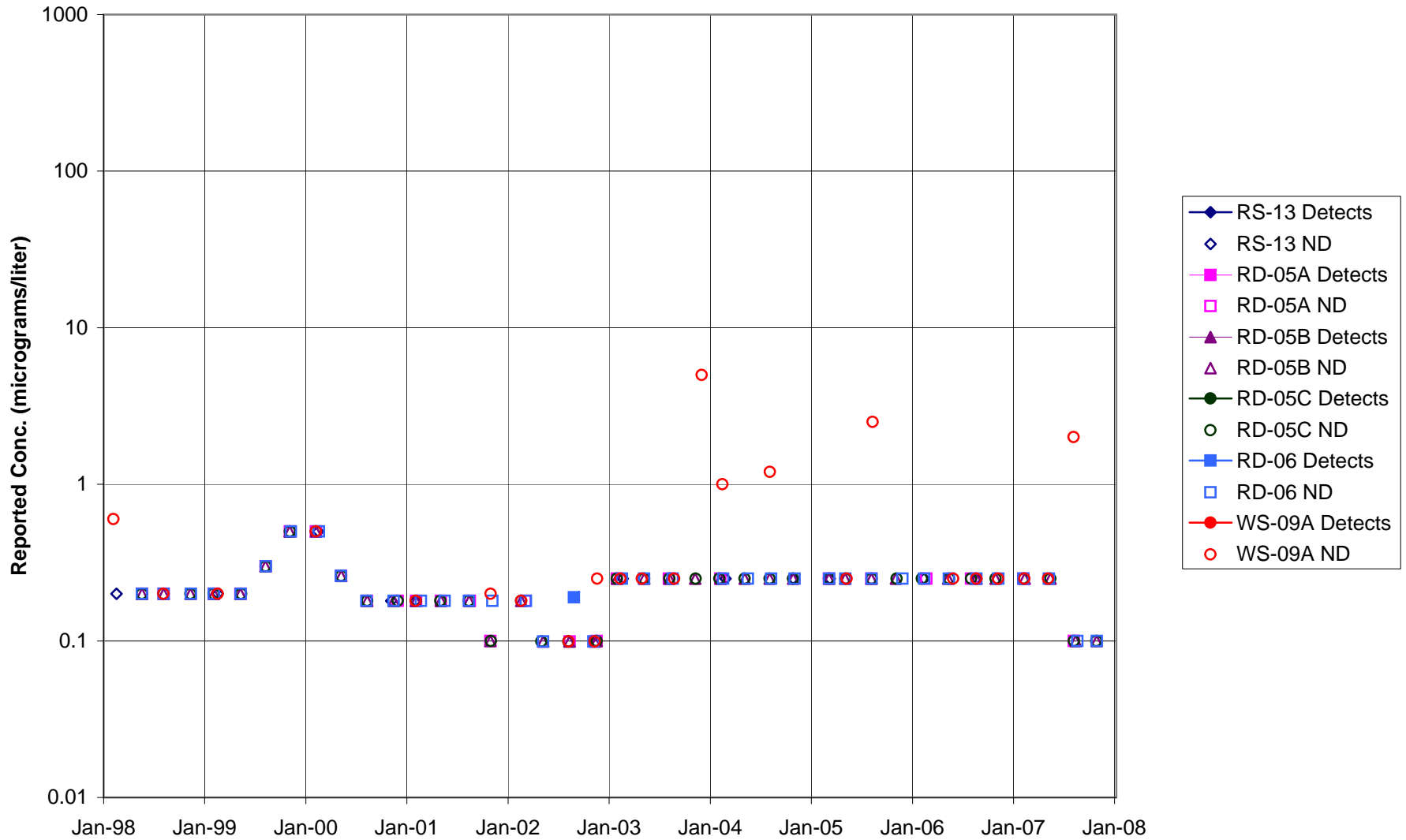
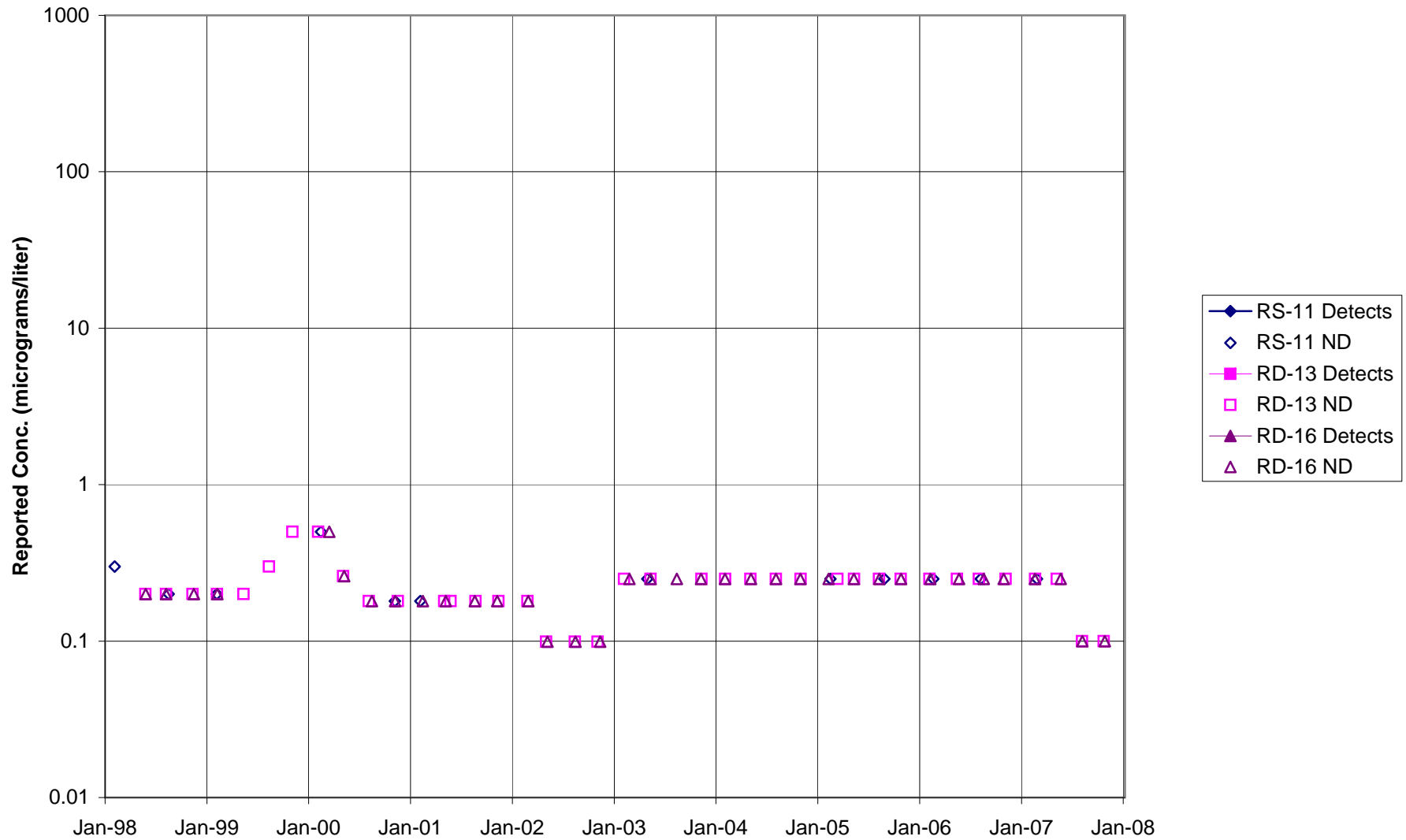
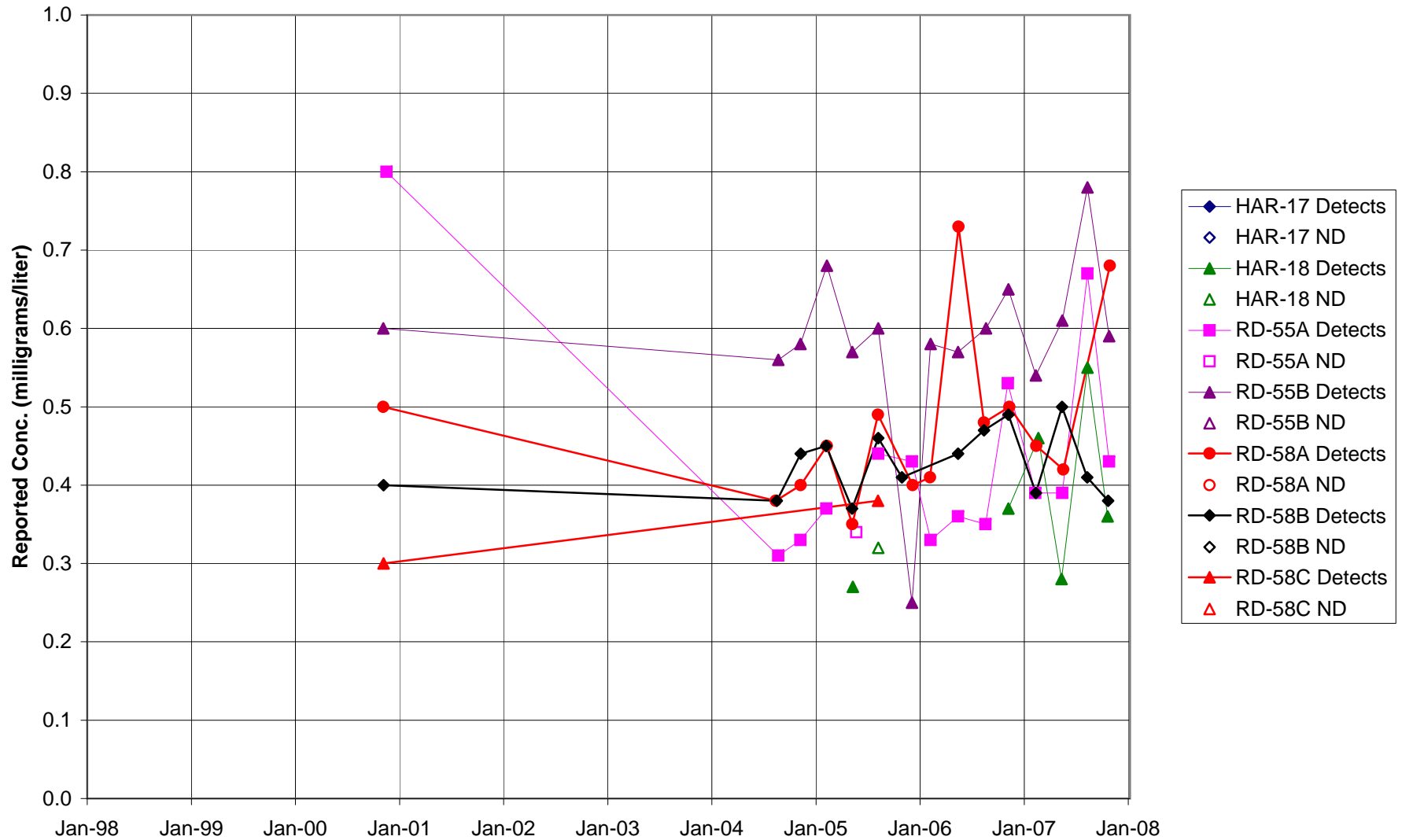


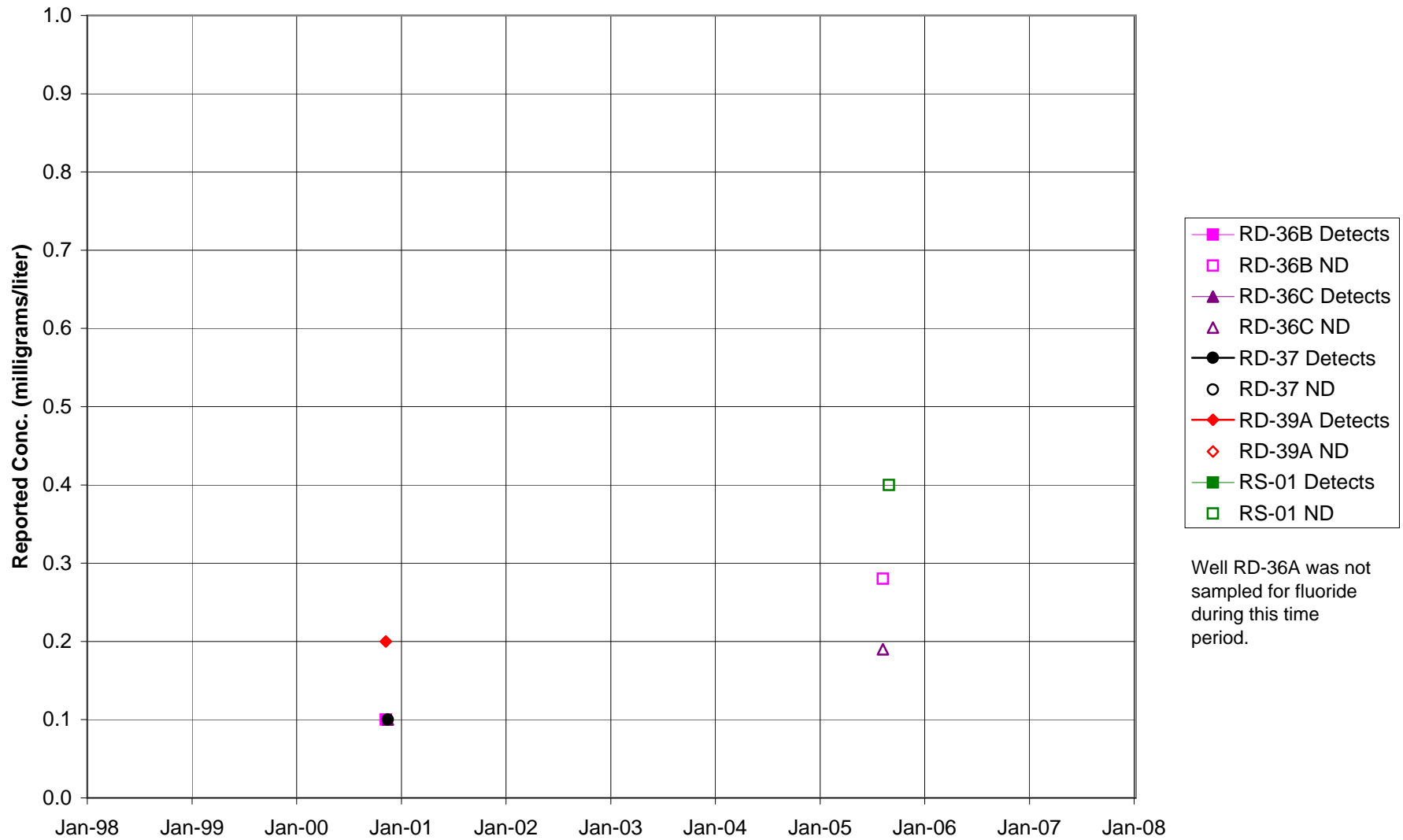
FIGURE F-187. ETHYLBENZENE IN AREA IV WELLS



**FIGURE F-188. FLUORIDE in STL-IV AREA CHATSWORTH FORMATION WELLS**



**FIGURE F-189. FLUORIDE in MAIN GATE AREA WELLS - 1**



**FIGURE F-190. FLUORIDE in MAIN GATE AREA WELLS - 2**



FIGURE F-191. FLUORIDE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1

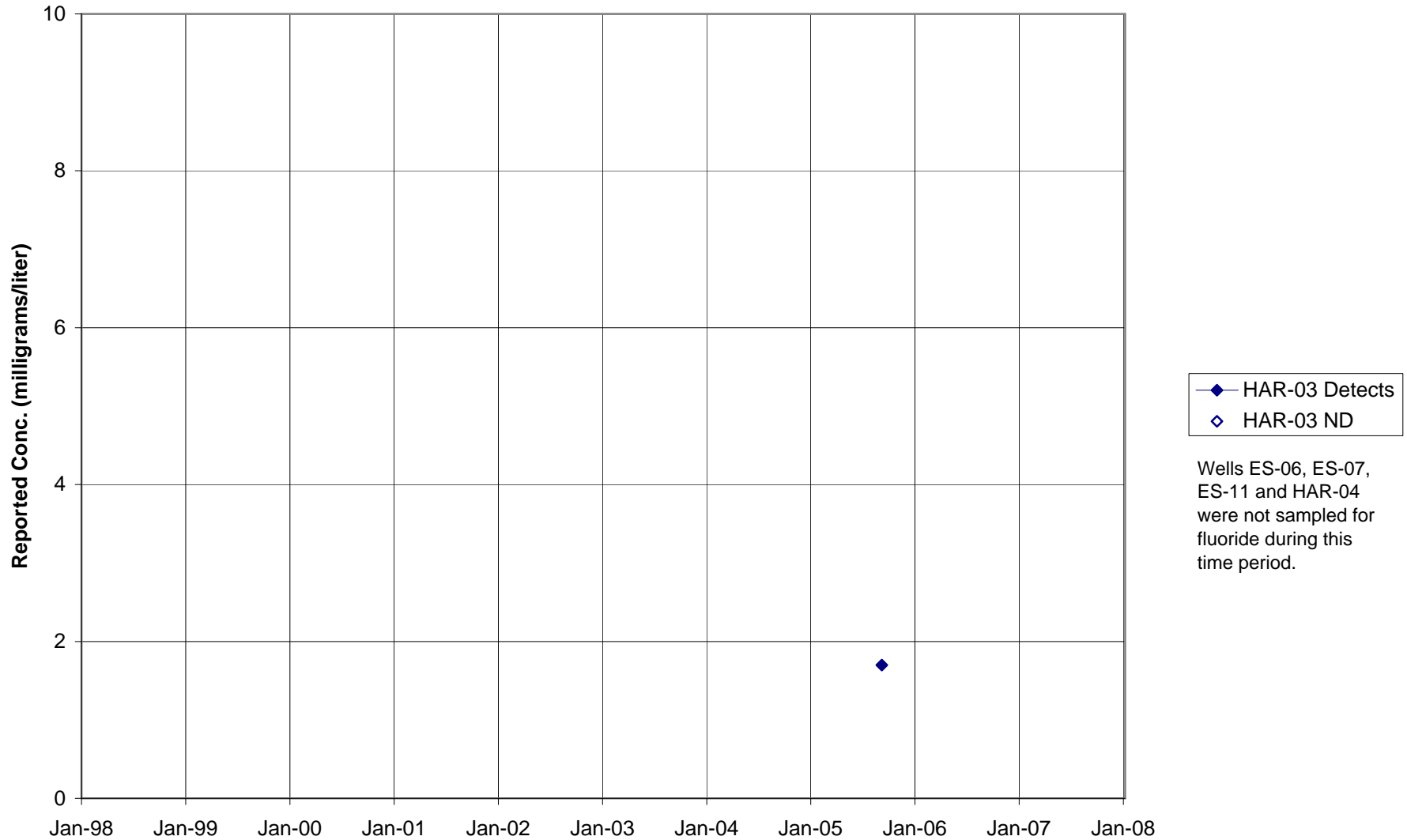
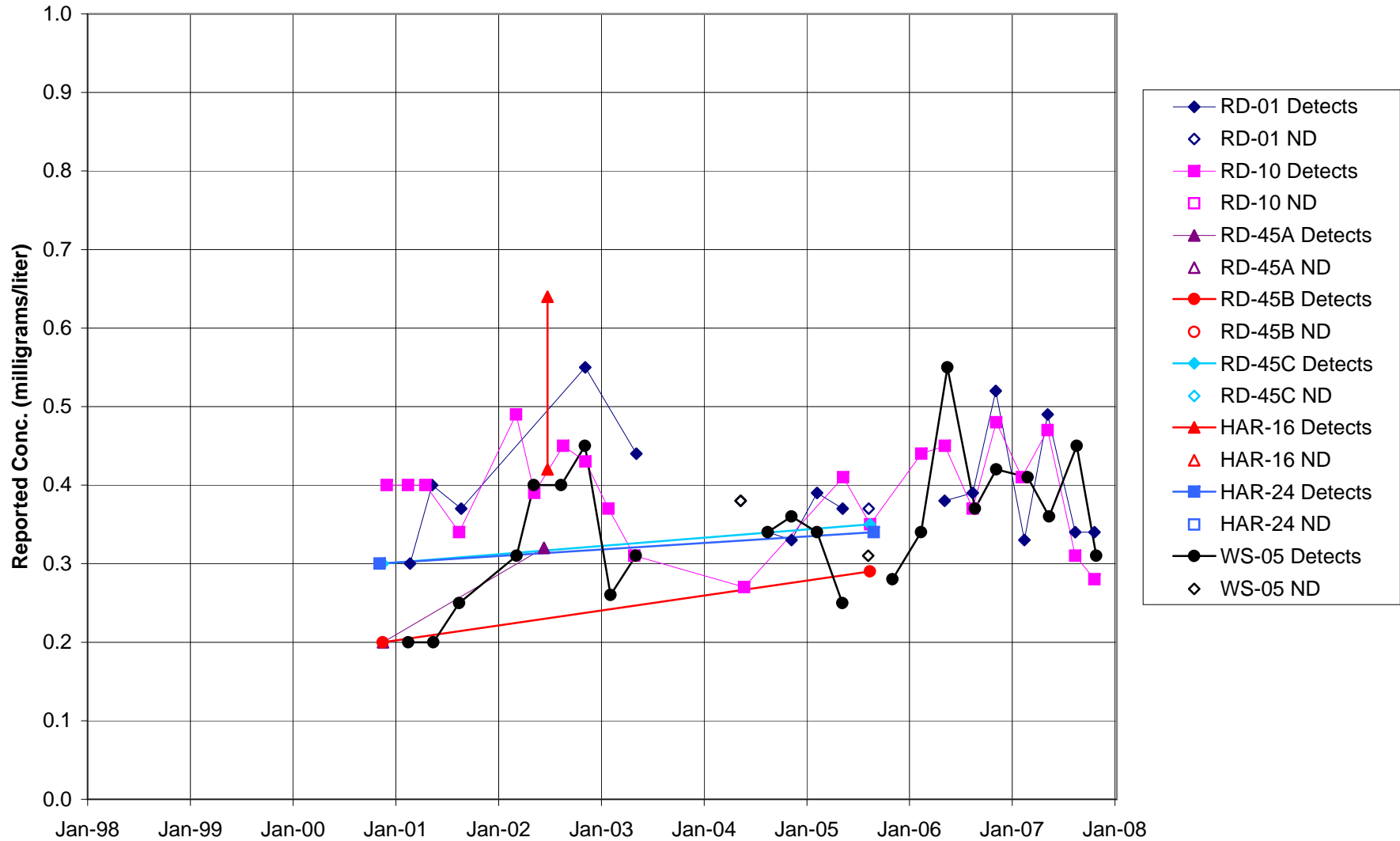
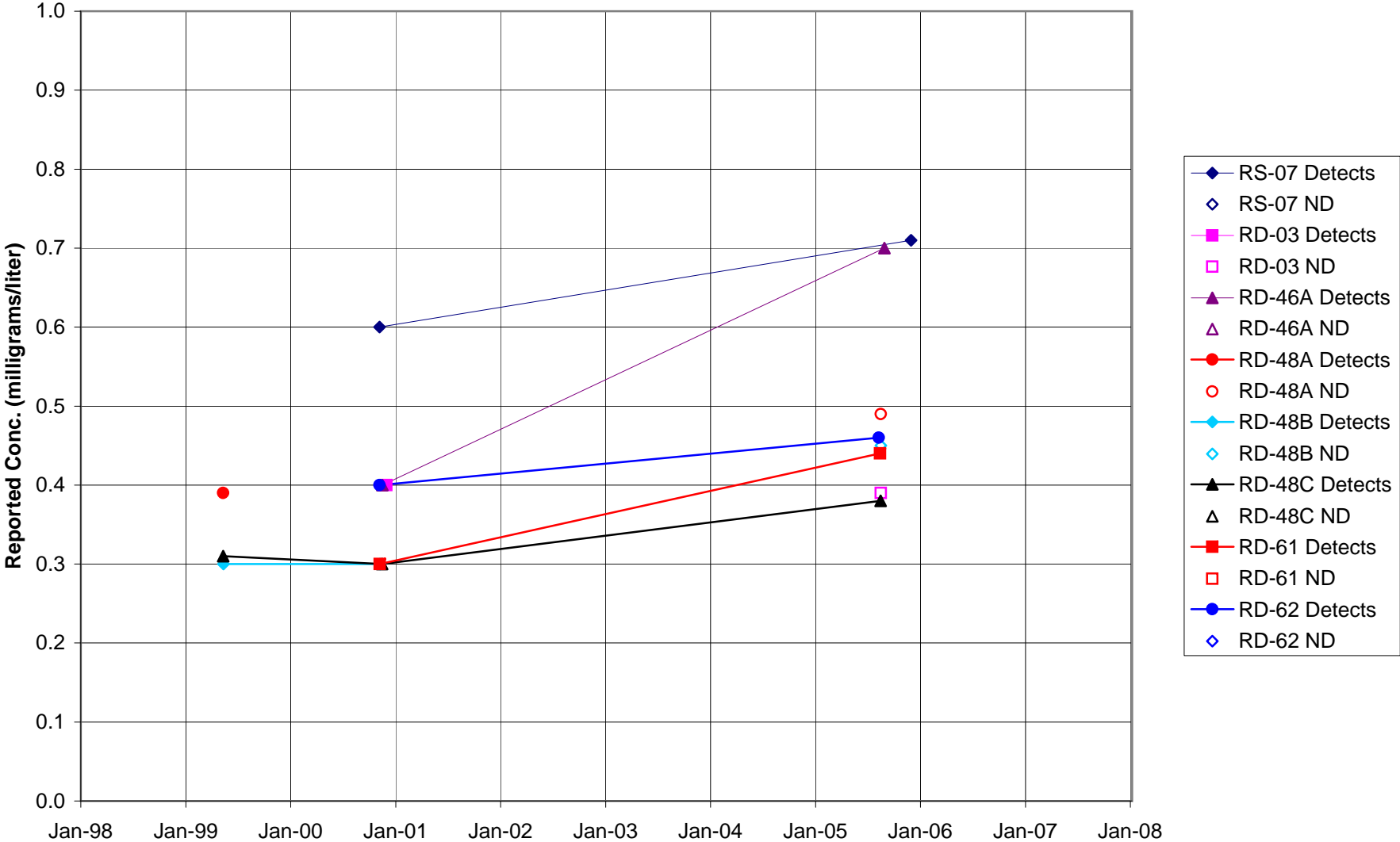


FIGURE F-192. FLUORIDE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 2

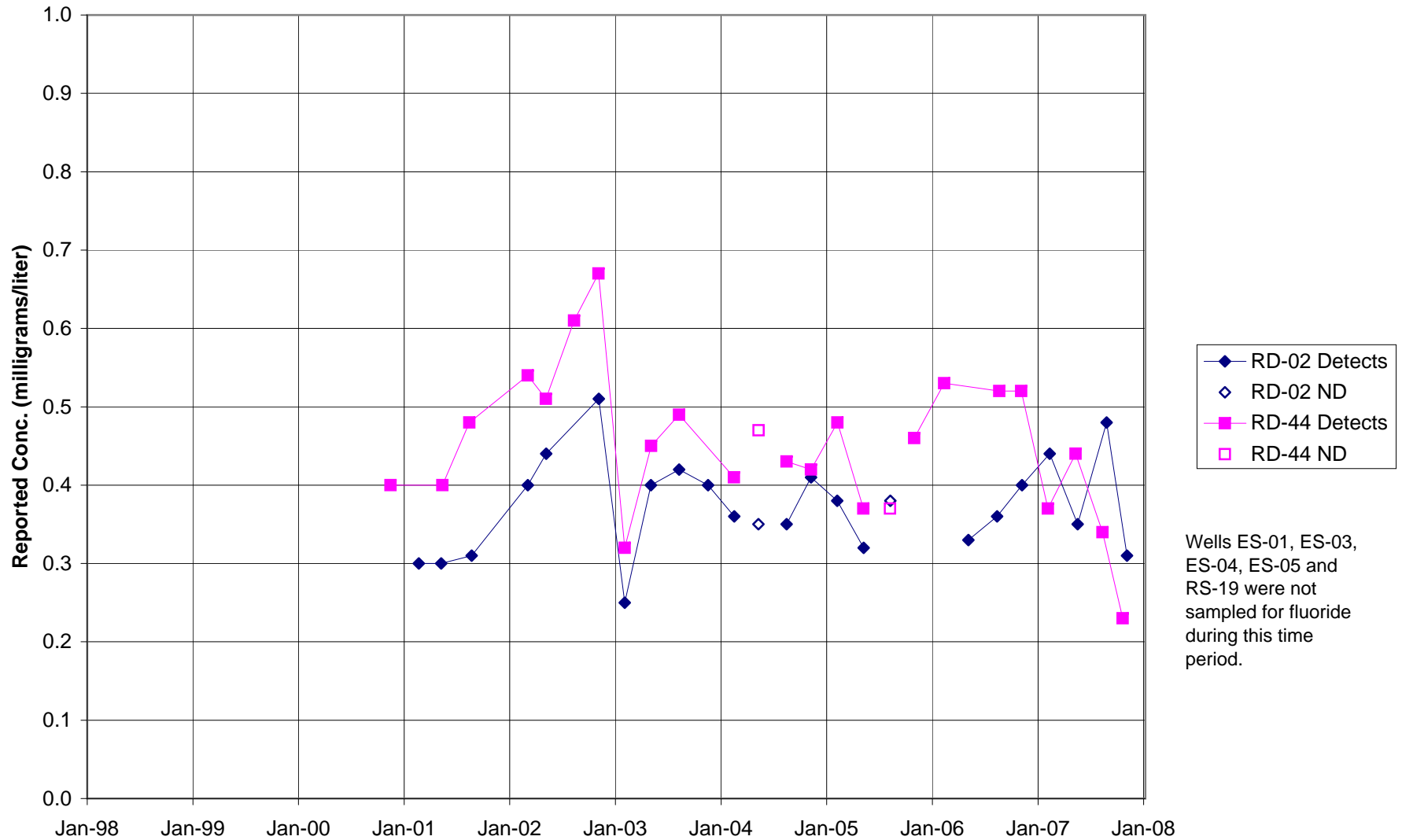




**FIGURE F-193. FLUORIDE in CTL-III / PERIMETER POND AREA WELLS**



**FIGURE F-194. FLUORIDE in BOWL AREA WELLS**



**FIGURE F-195. FLUORIDE in ECL AREA WELLS**

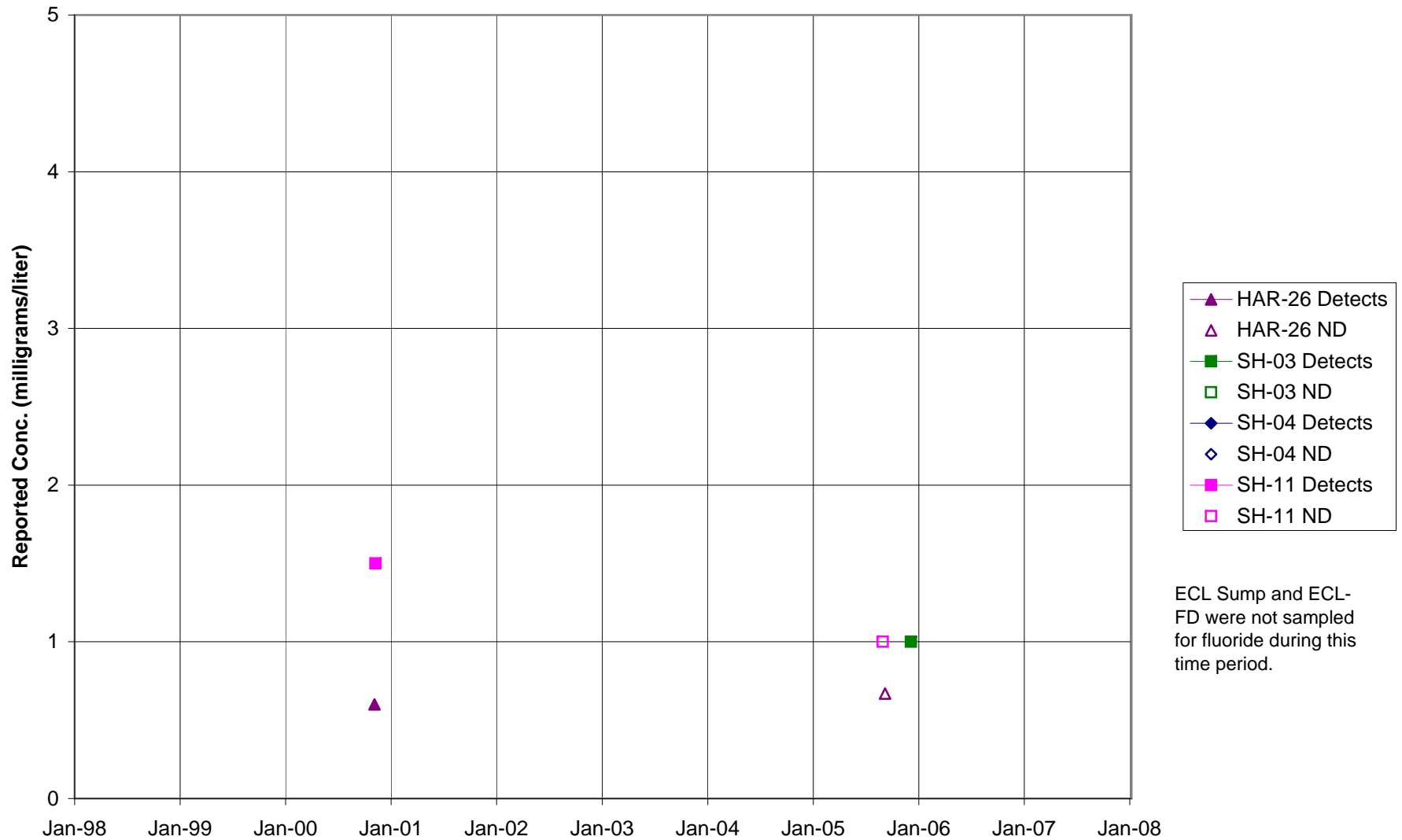


FIGURE F-196. FLUORIDE in FORMER LOX PLANT AREA WELLS

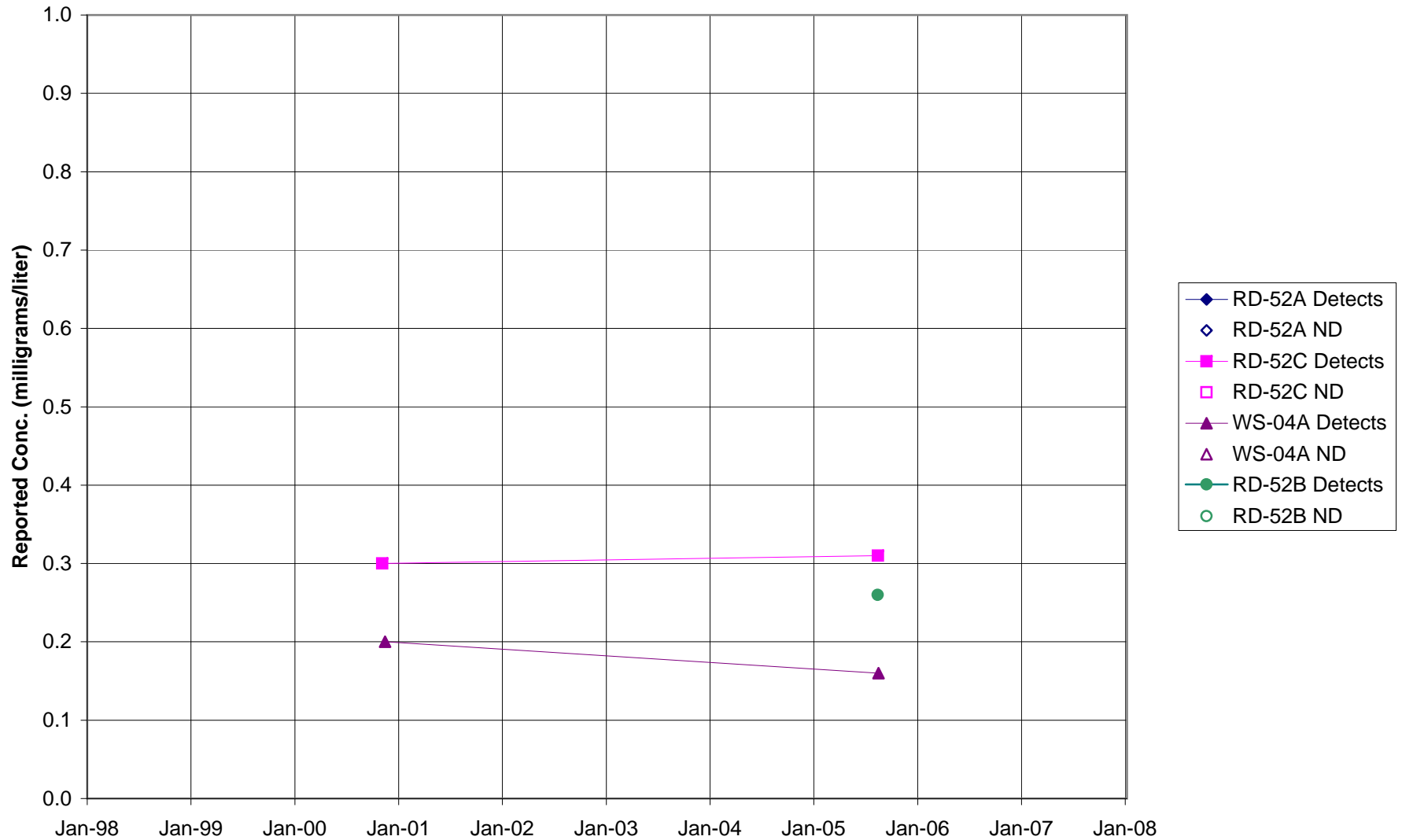
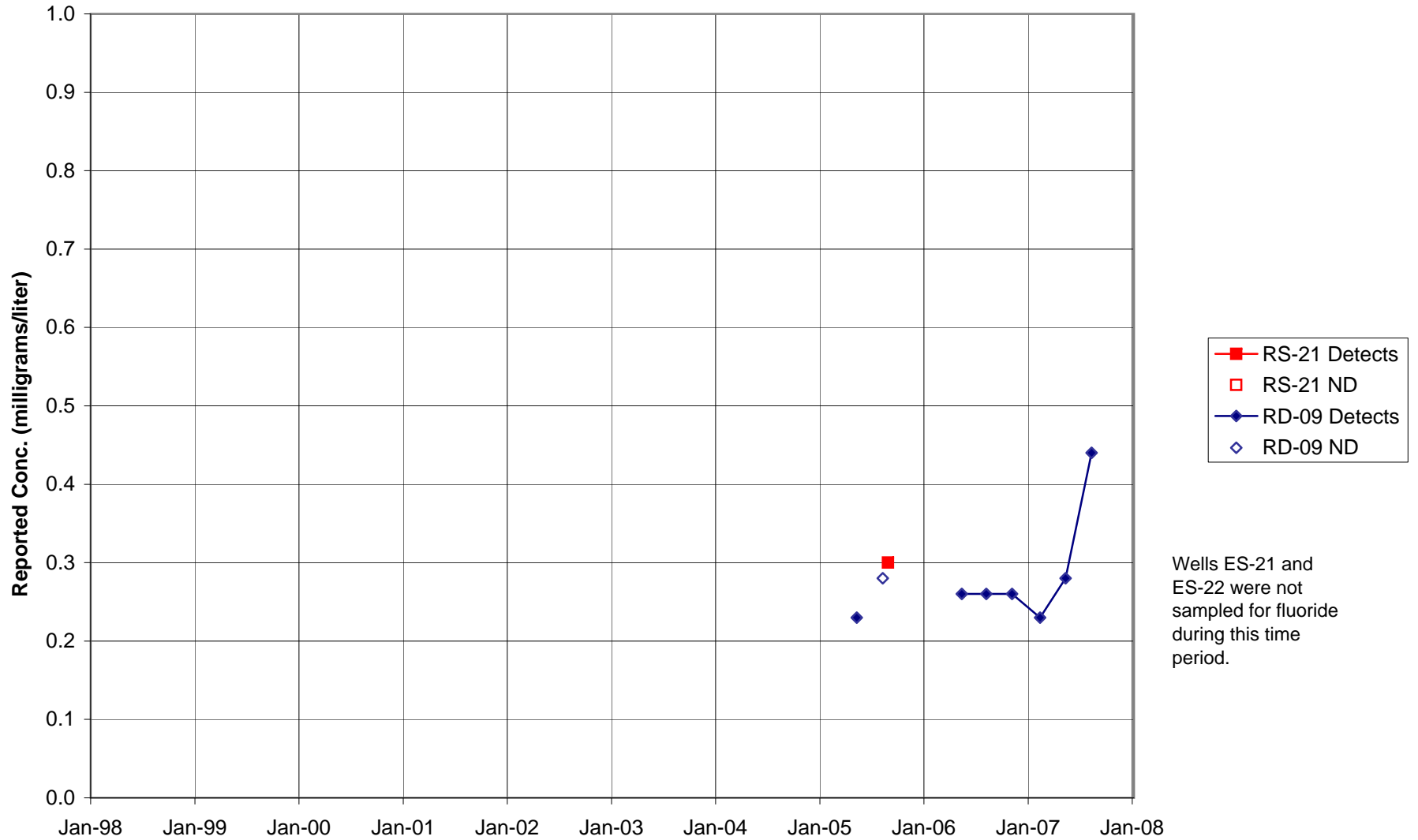
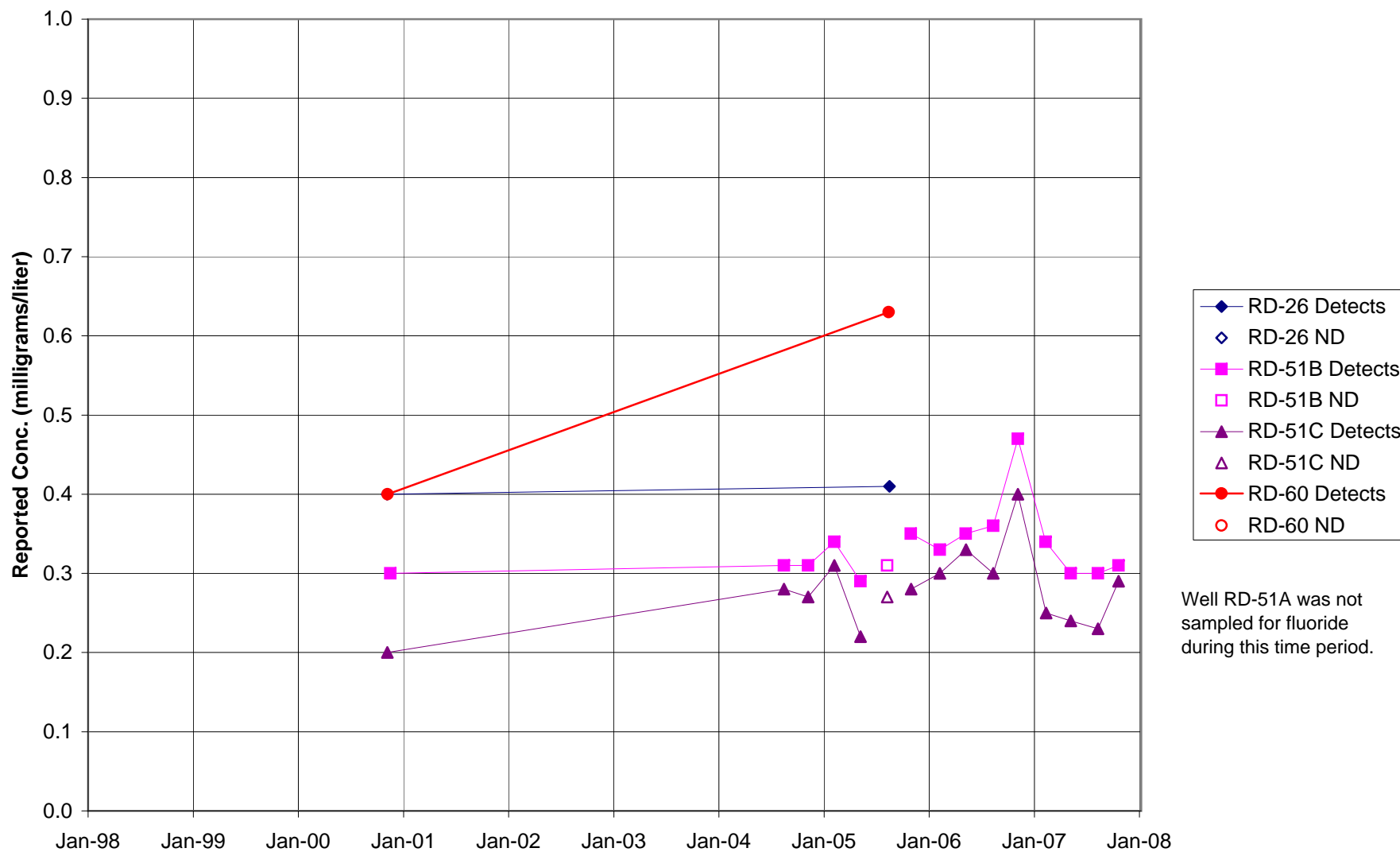


FIGURE F-197. FLUORIDE in RD-09 AREA WELLS

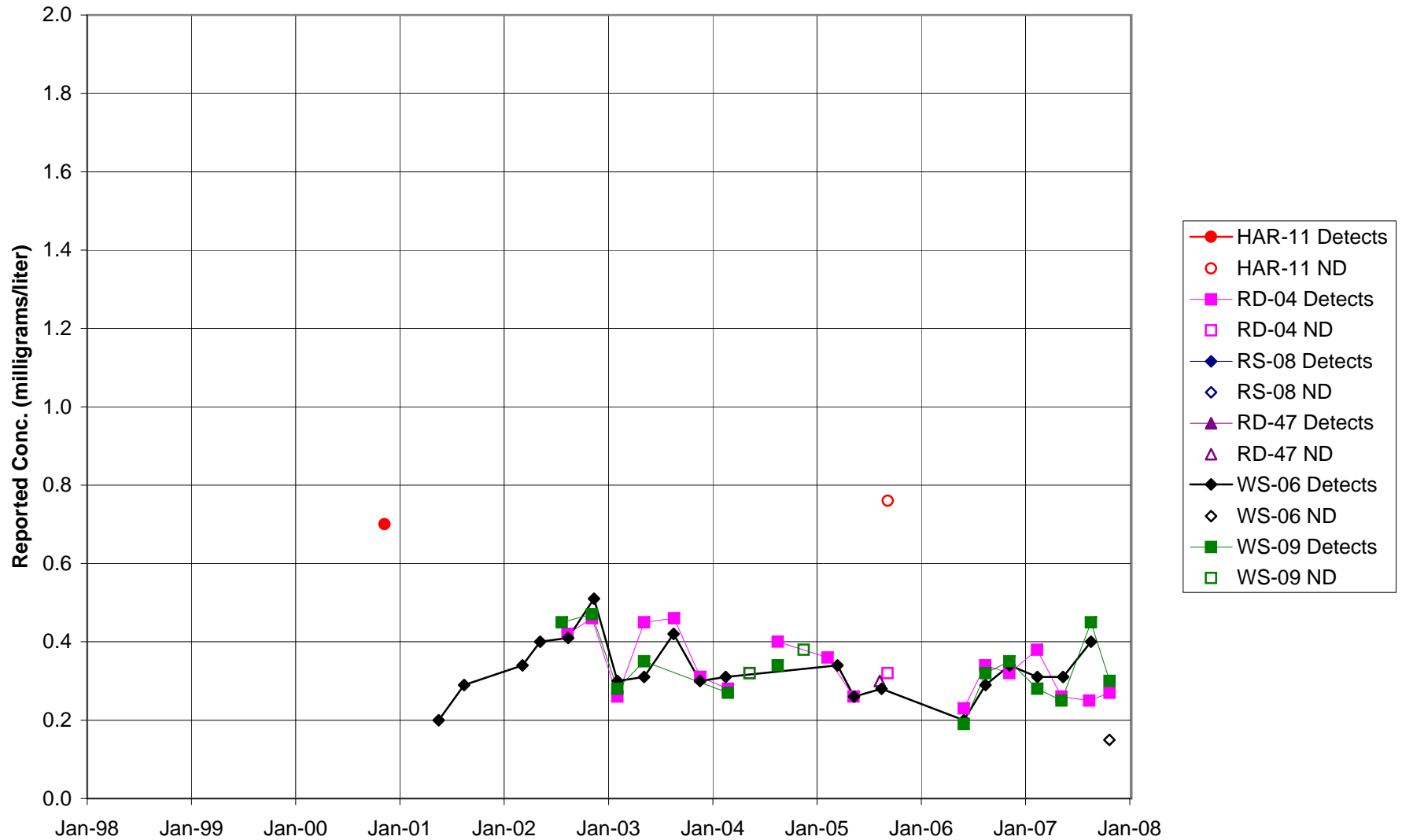


**FIGURE F-198. FLUORIDE in HELIPORT, B/204 AREA WELLS**

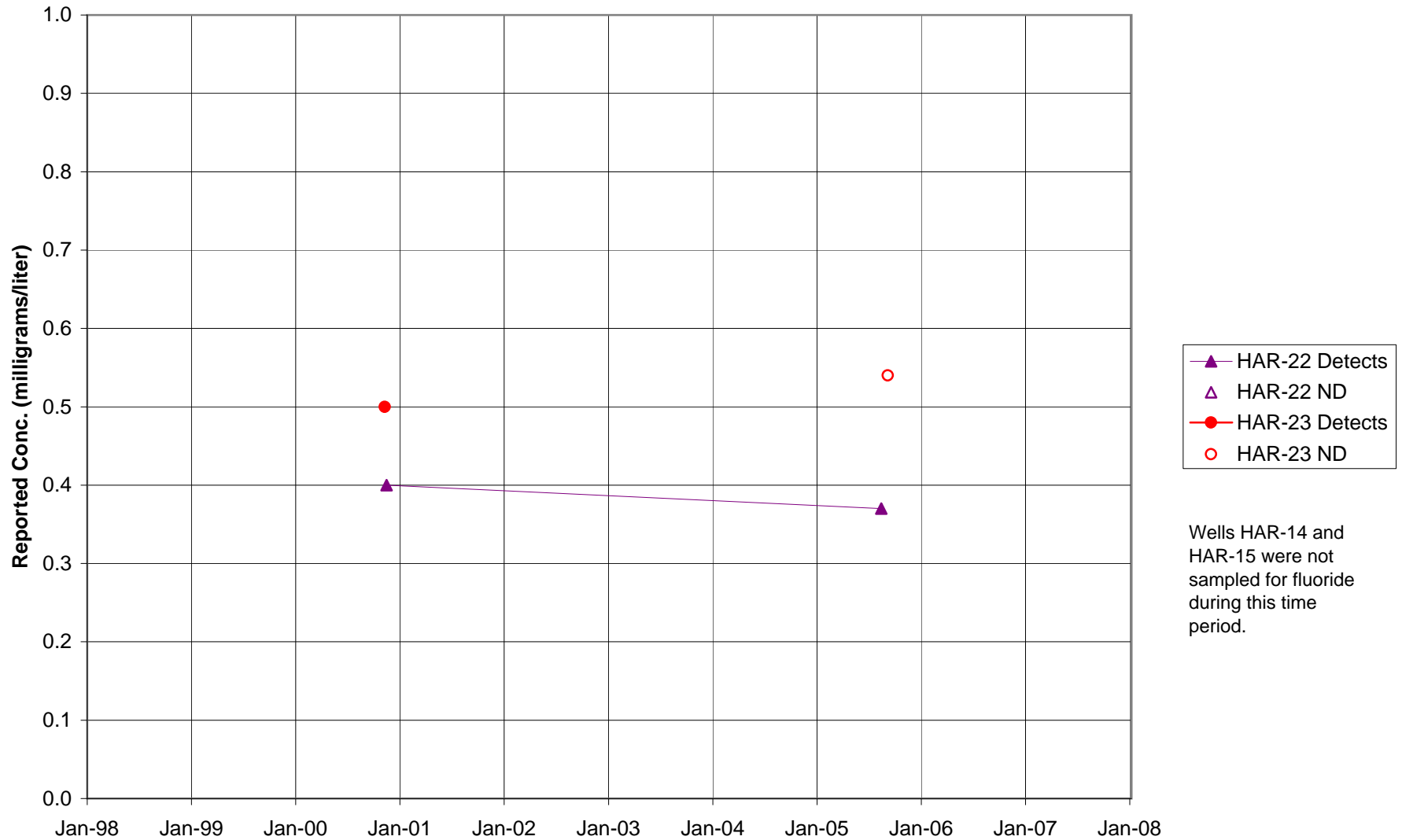


Well RD-51A was not sampled for fluoride during this time period.

FIGURE F-199. FLUORIDE in ALFA / BRAVO AREA WELLS

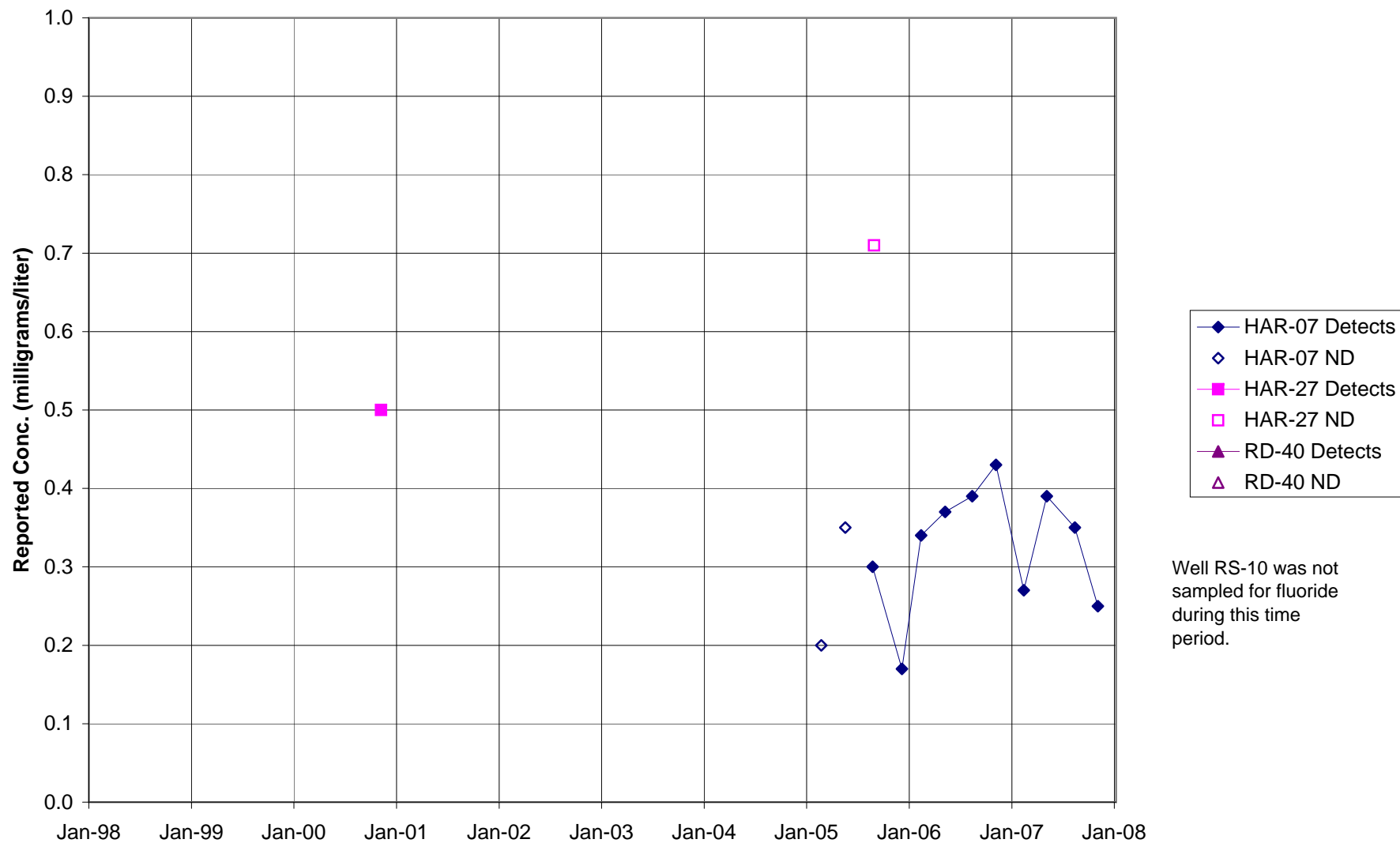


**FIGURE F-200. FLUORIDE in SPA AREA WELLS**





**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

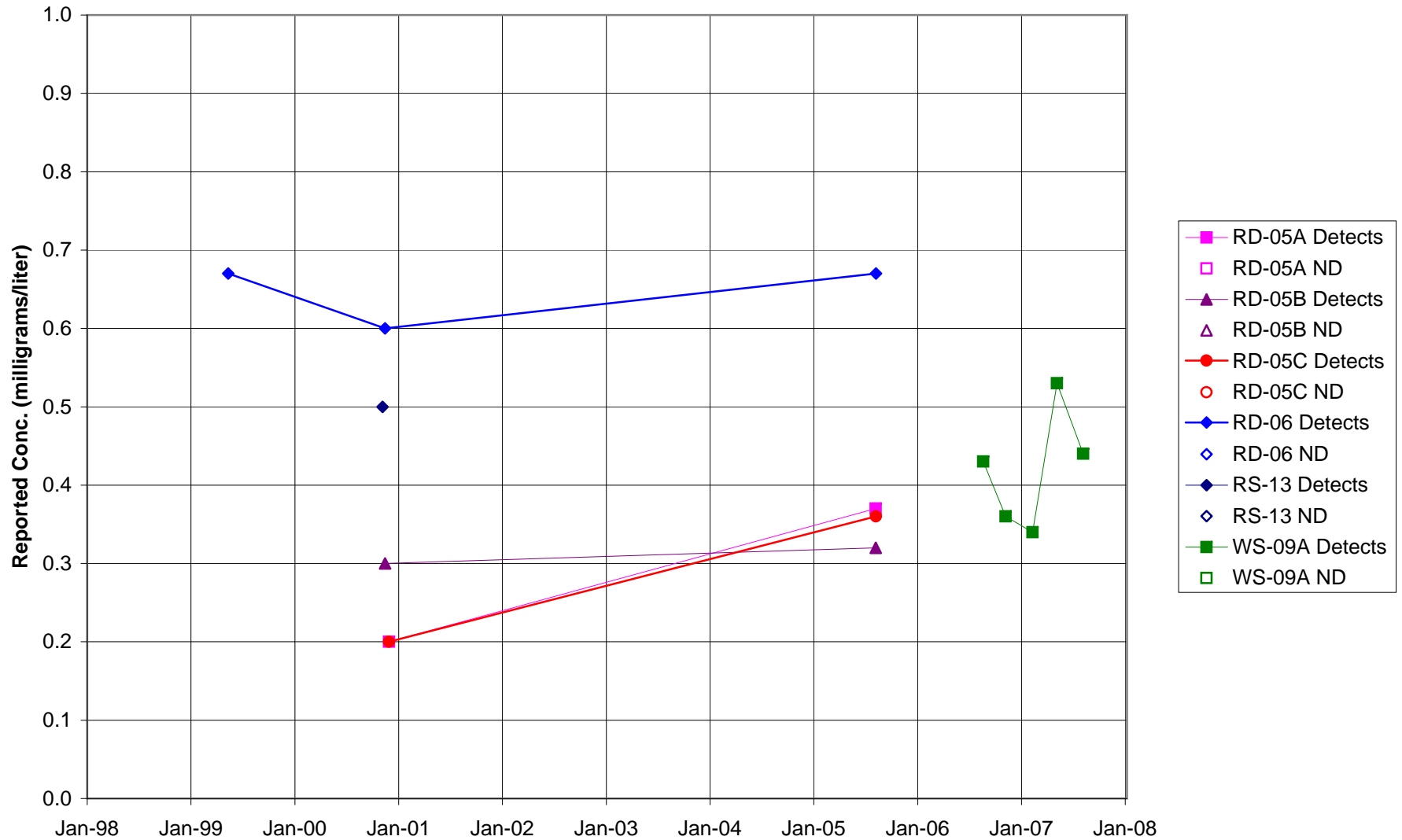
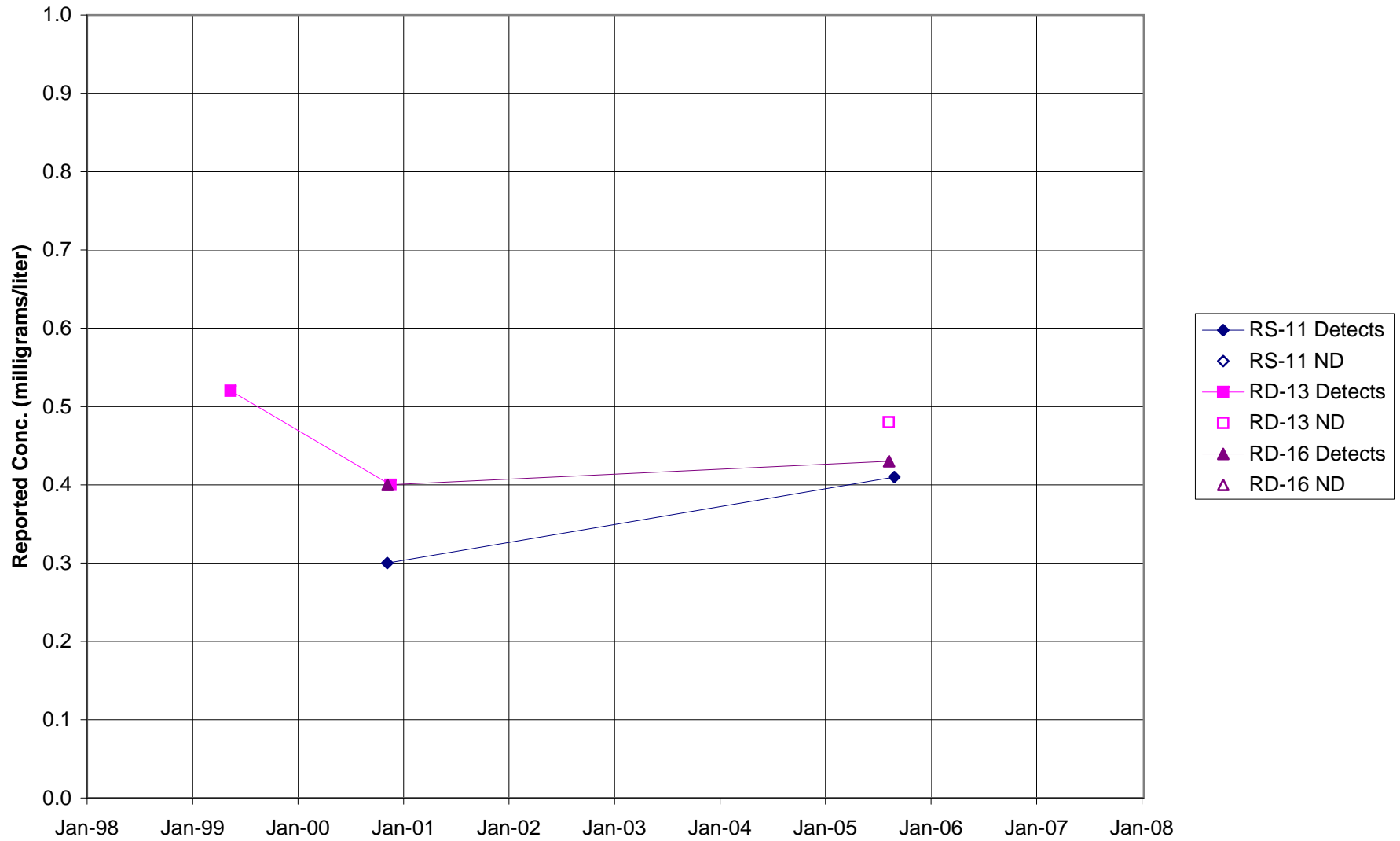
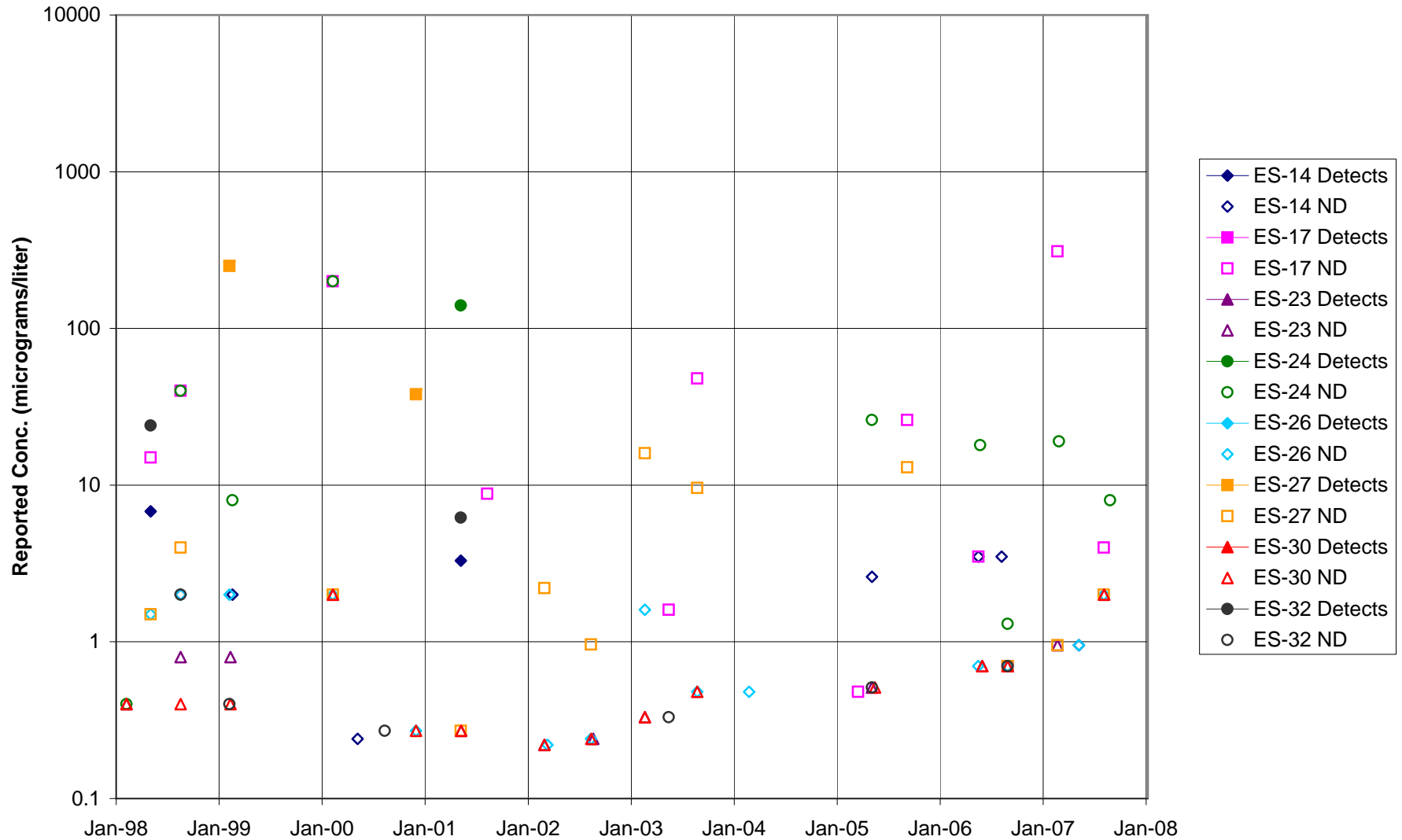


FIGURE F-203. FLUORIDE in AREA IV WELLS



**FIGURE F-204. METHYLENE CHLORIDE in STL-IV AREA SHALLOW WELLS**



**FIGURE F-205. METHYLENE CHLORIDE in STL-IV AREA CHATSWORTH FORMATION WELLS**

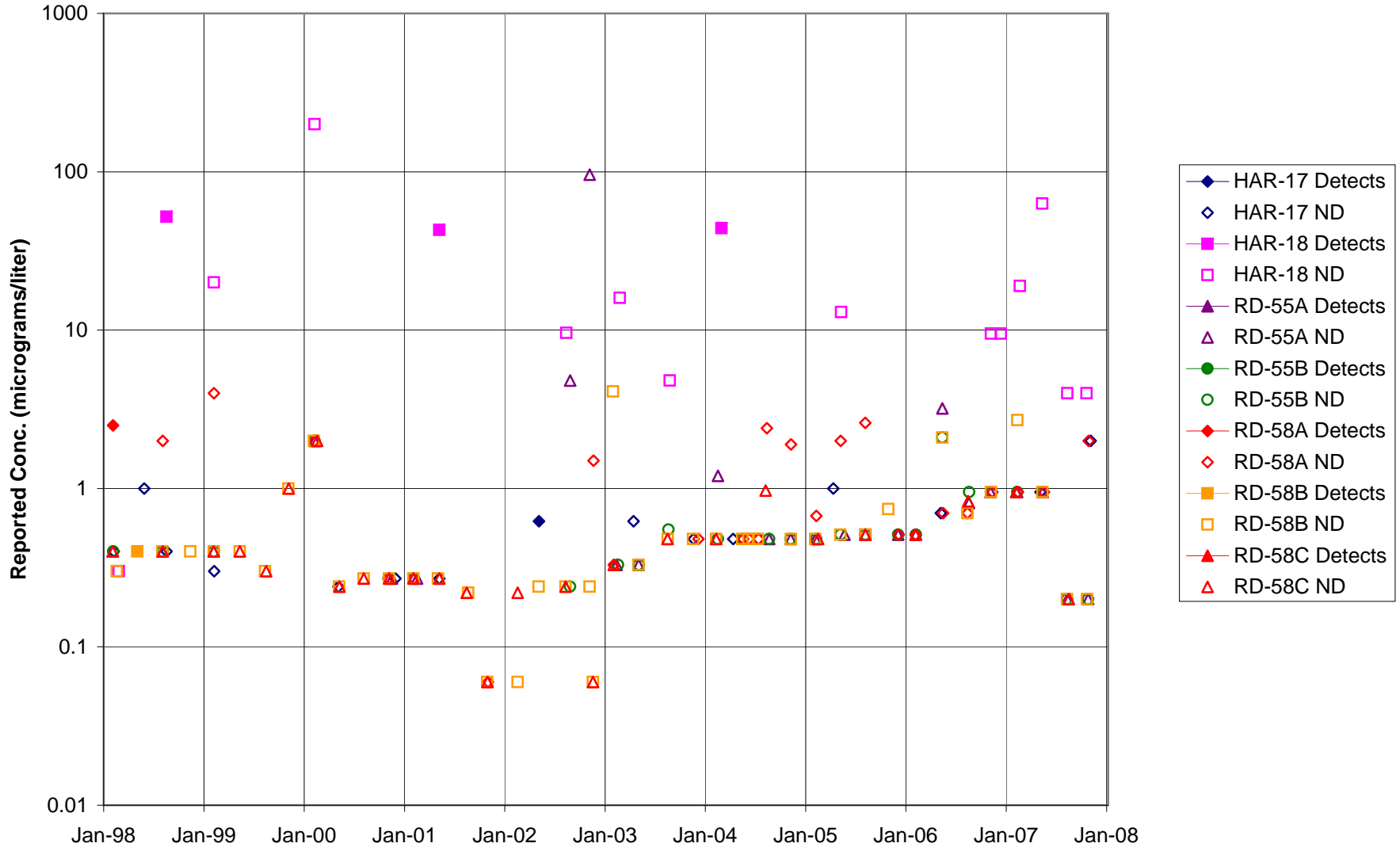


FIGURE F-206. METHYLENE CHLORIDE in MAIN GATE AREA WELLS - 1

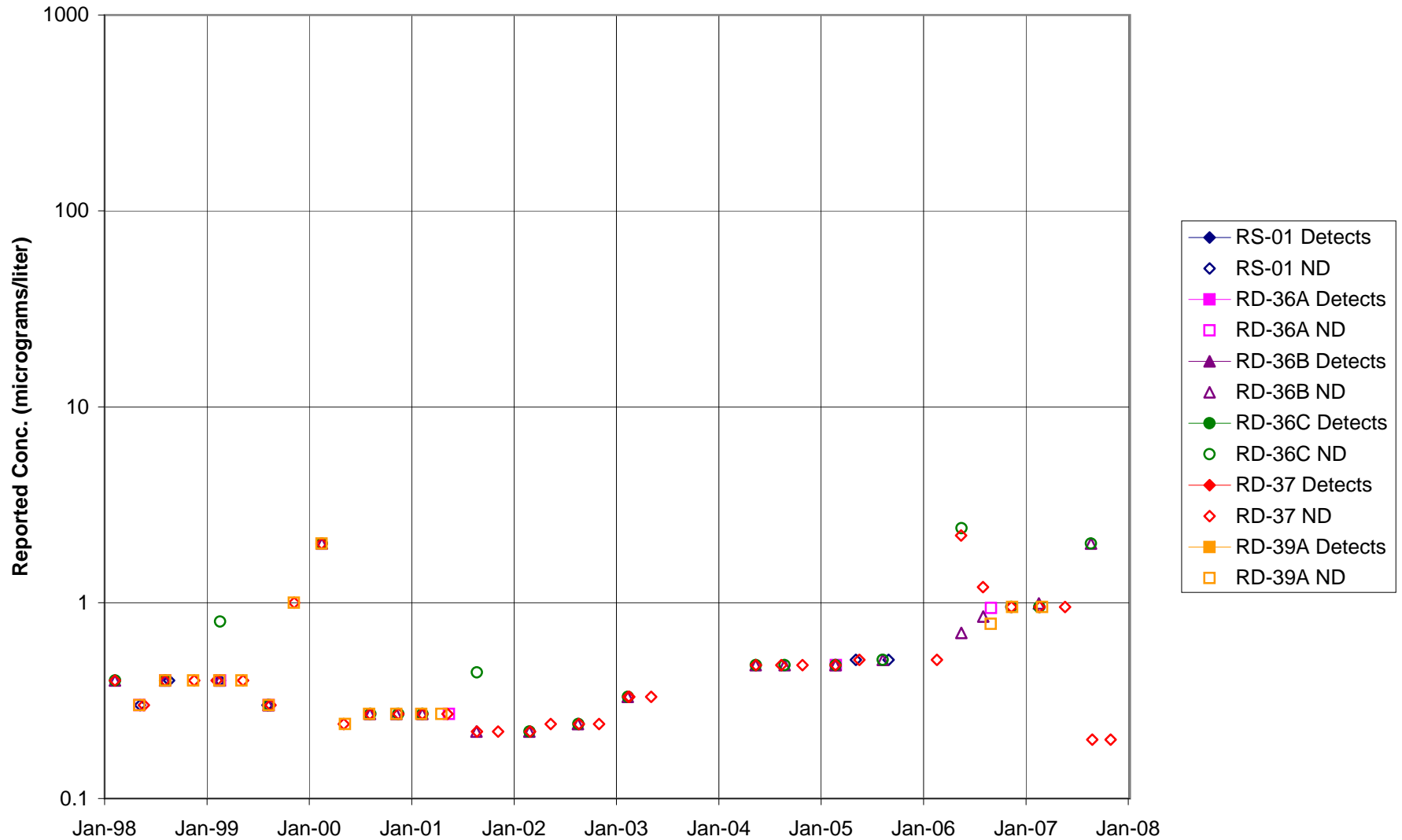
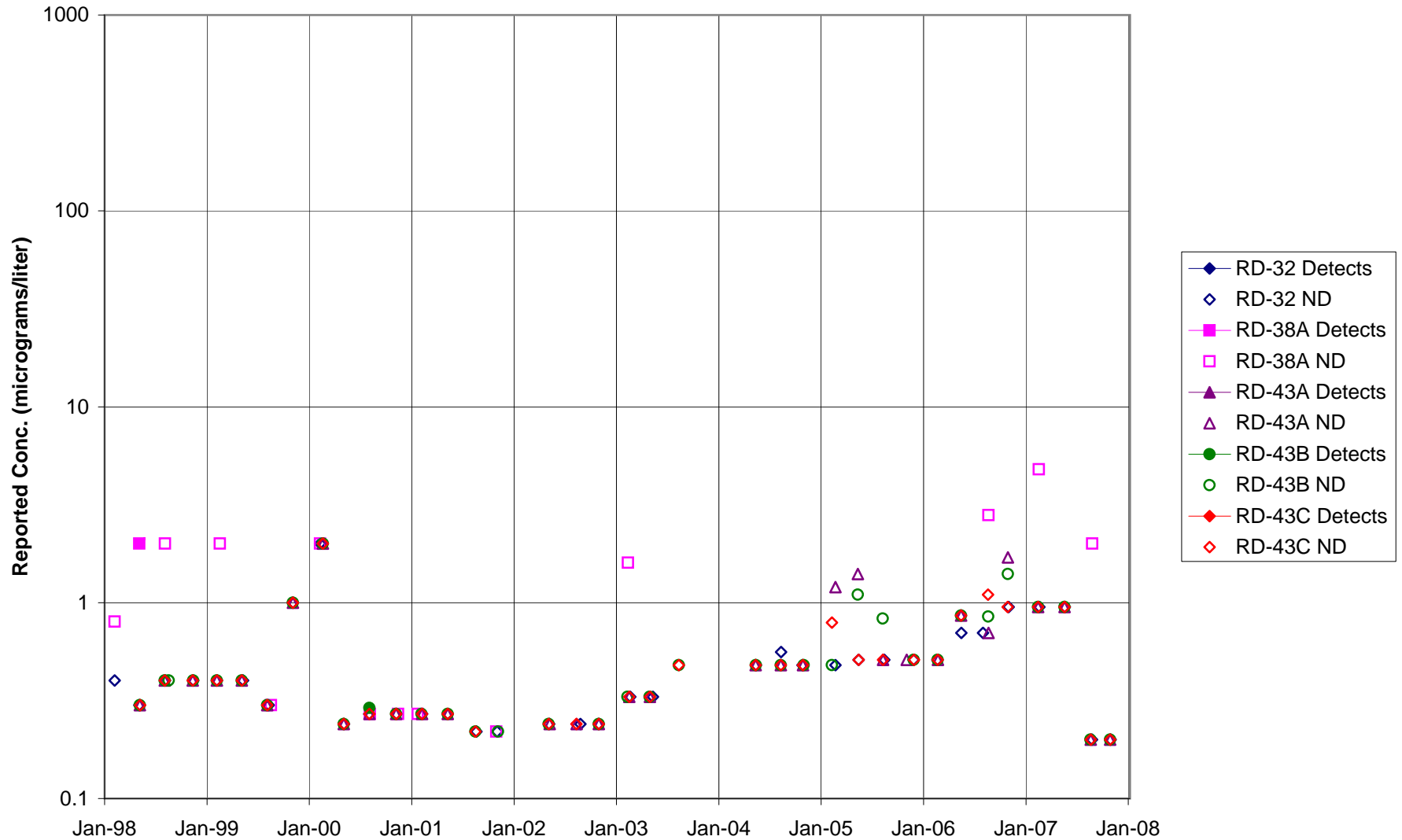
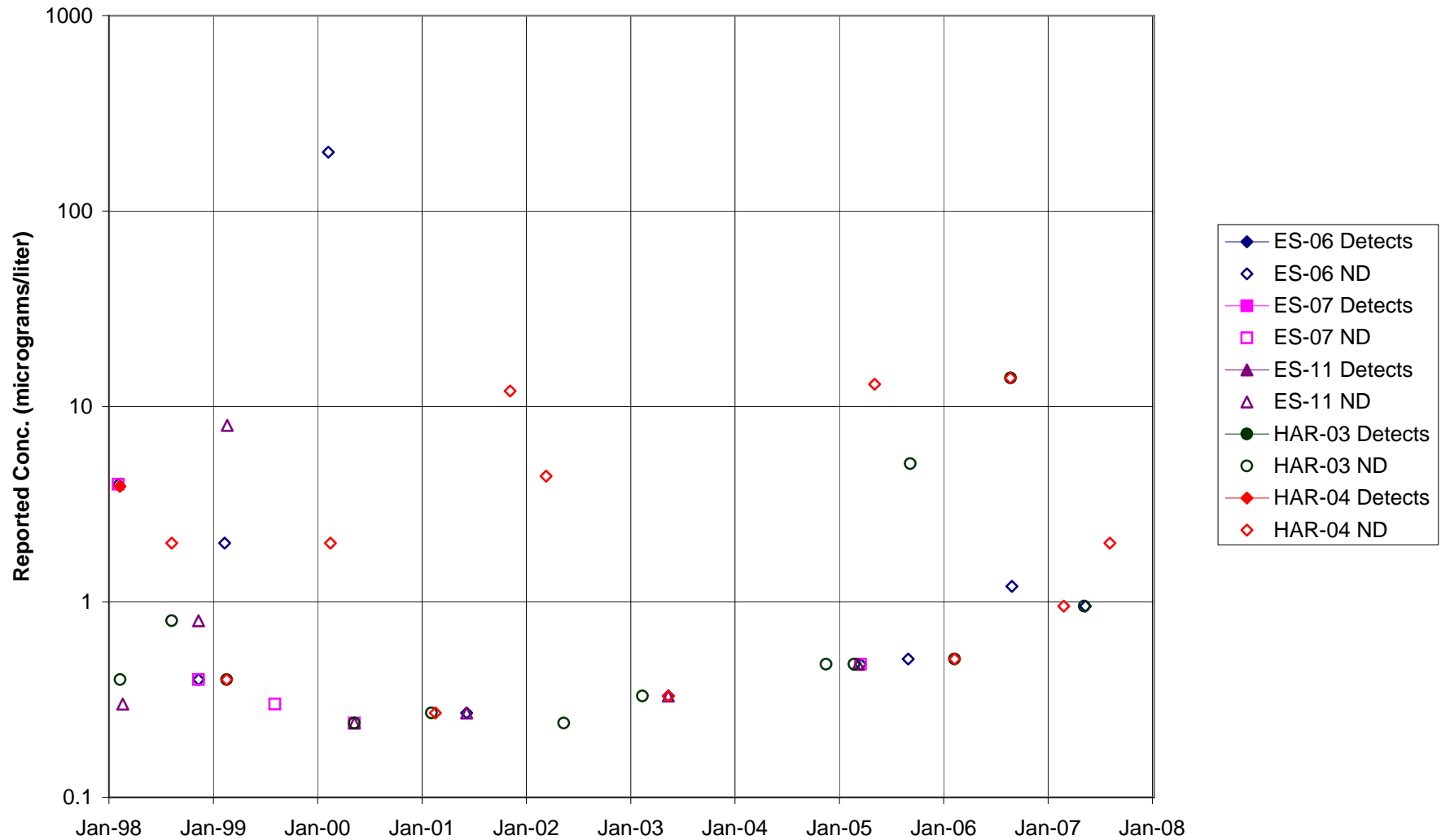


FIGURE F-207. METHYLENE CHLORIDE in MAIN GATE AREA WELLS - 2

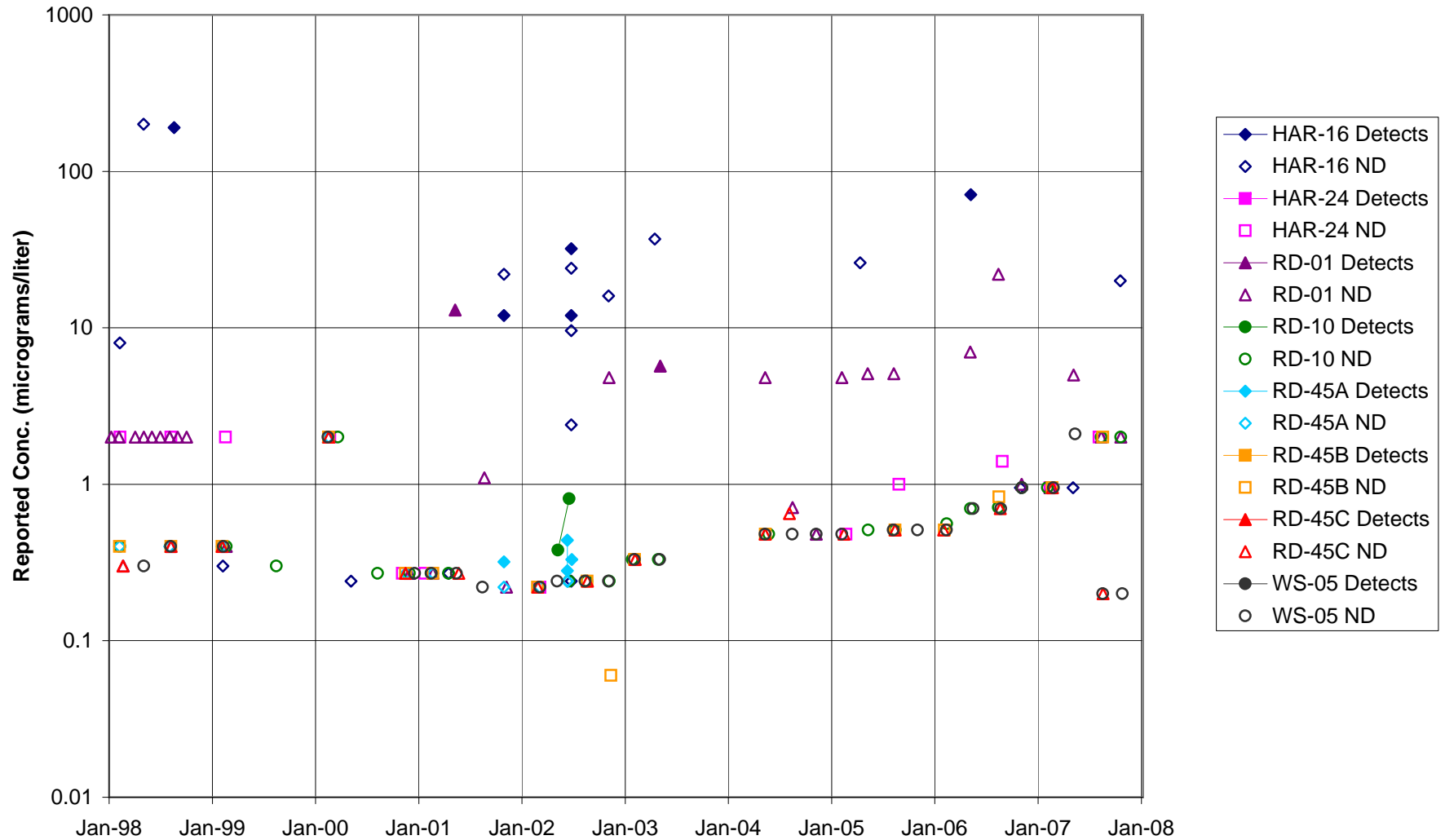


**FIGURE F-208. METHYLENE CHLORIDE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1**

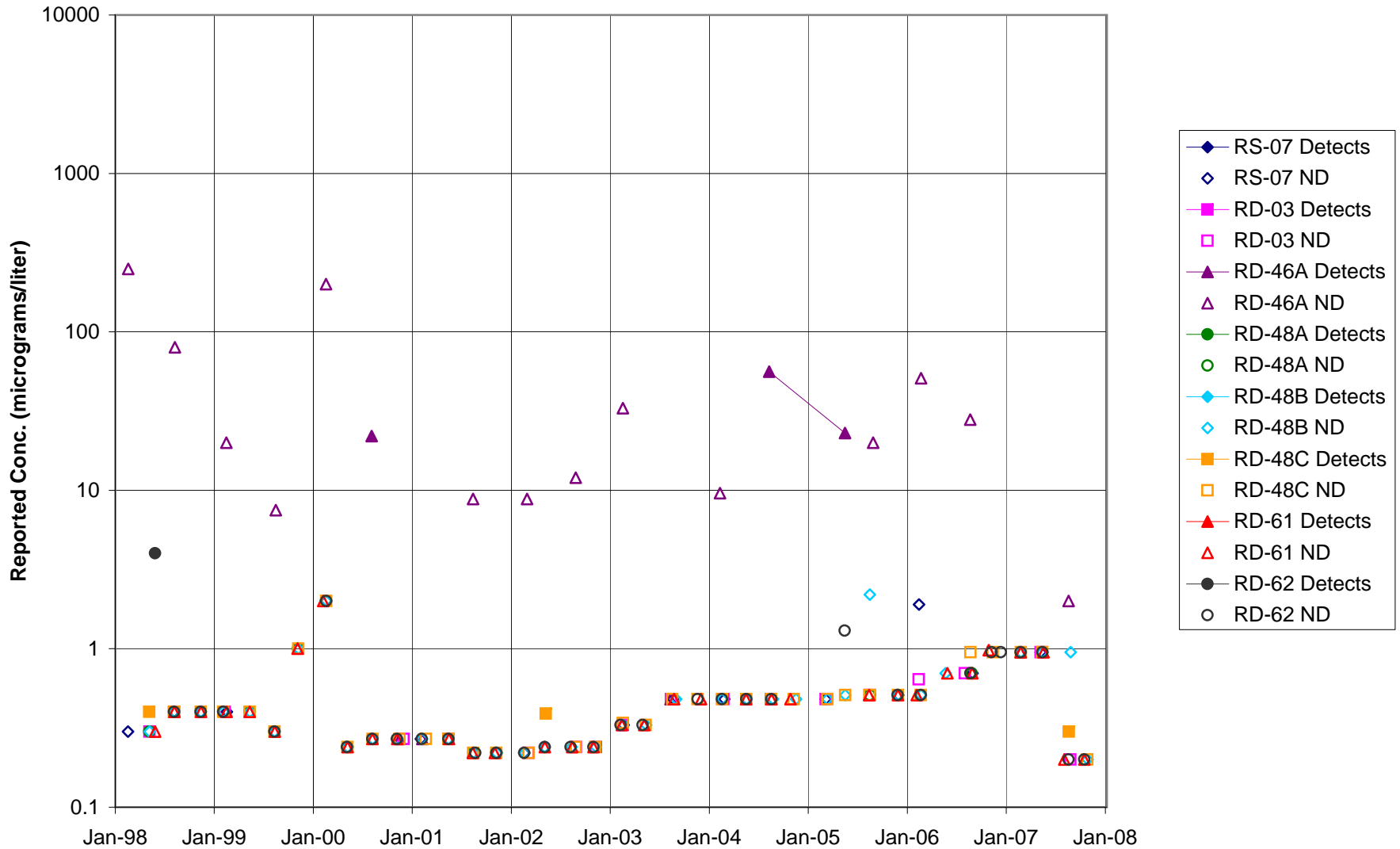




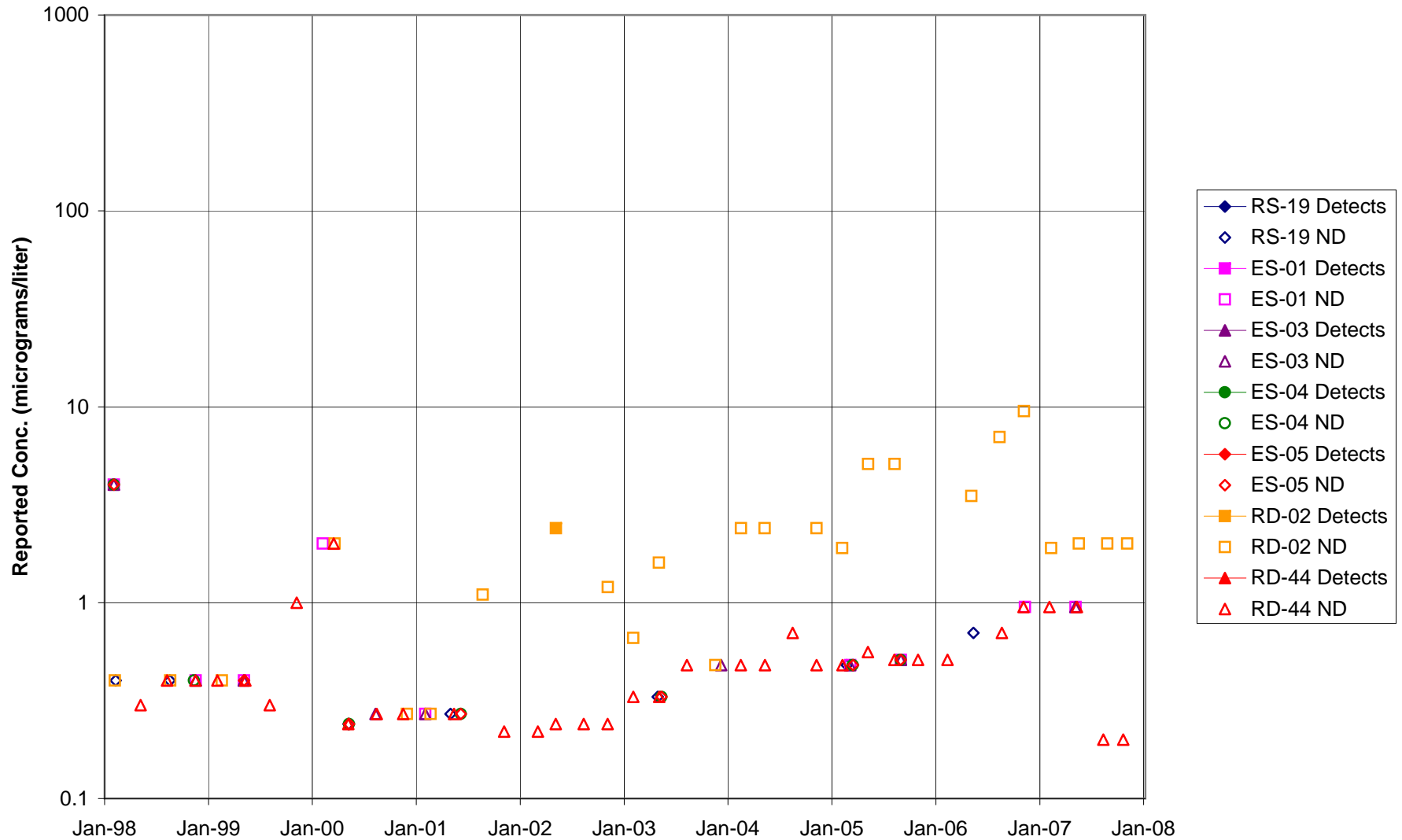
**FIGURE F-209. METHYLENE CHLORIDE in APTF, CANYON, & HAPPY VALLEY AREA  
WELLS - 2**



**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**

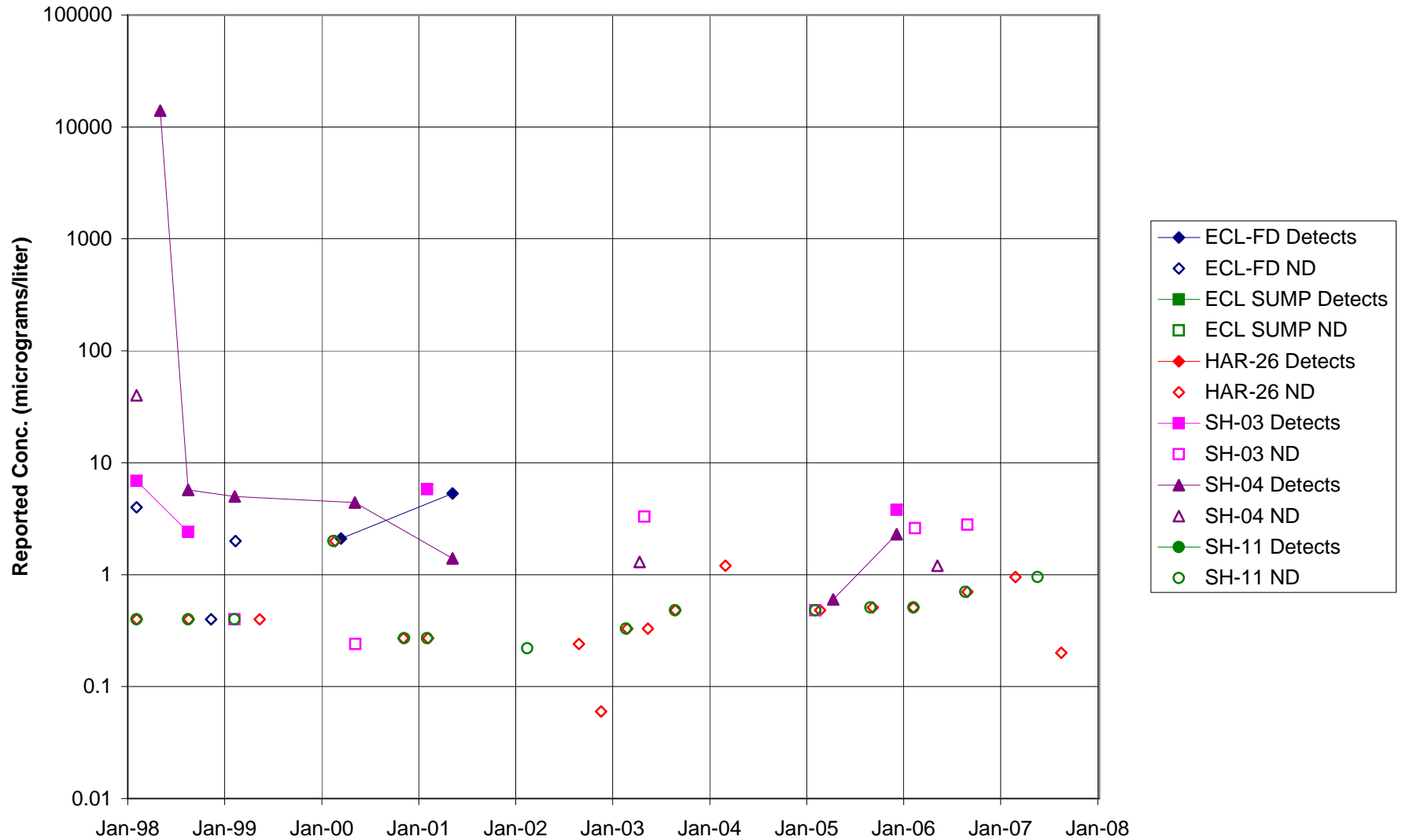
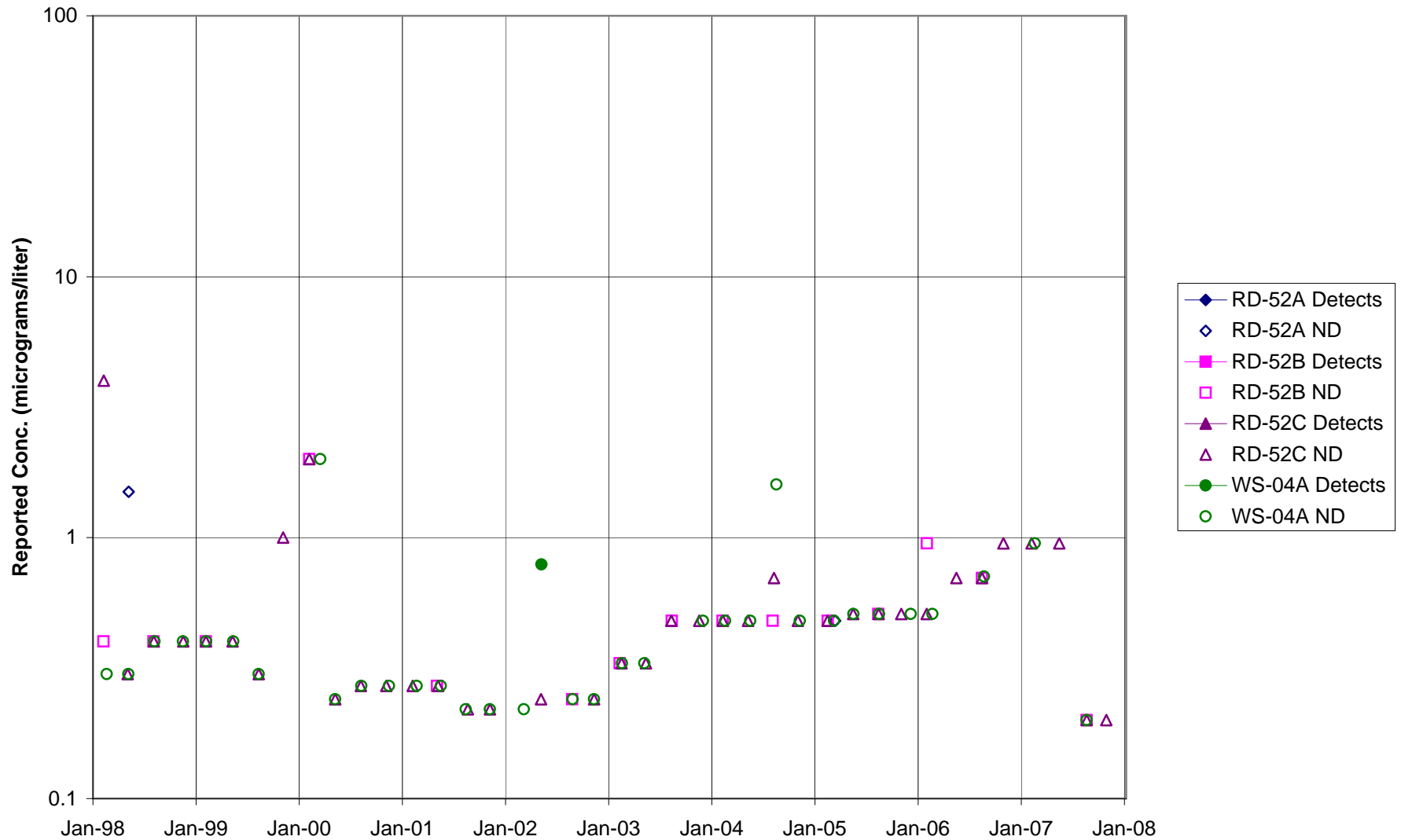


FIGURE F-213. METHYLENE CHLORIDE in FORMER LOX PLANT AREA WELLS



**FIGURE F-214. METHYLENE CHLORIDE in RD-09 AREA WELLS**

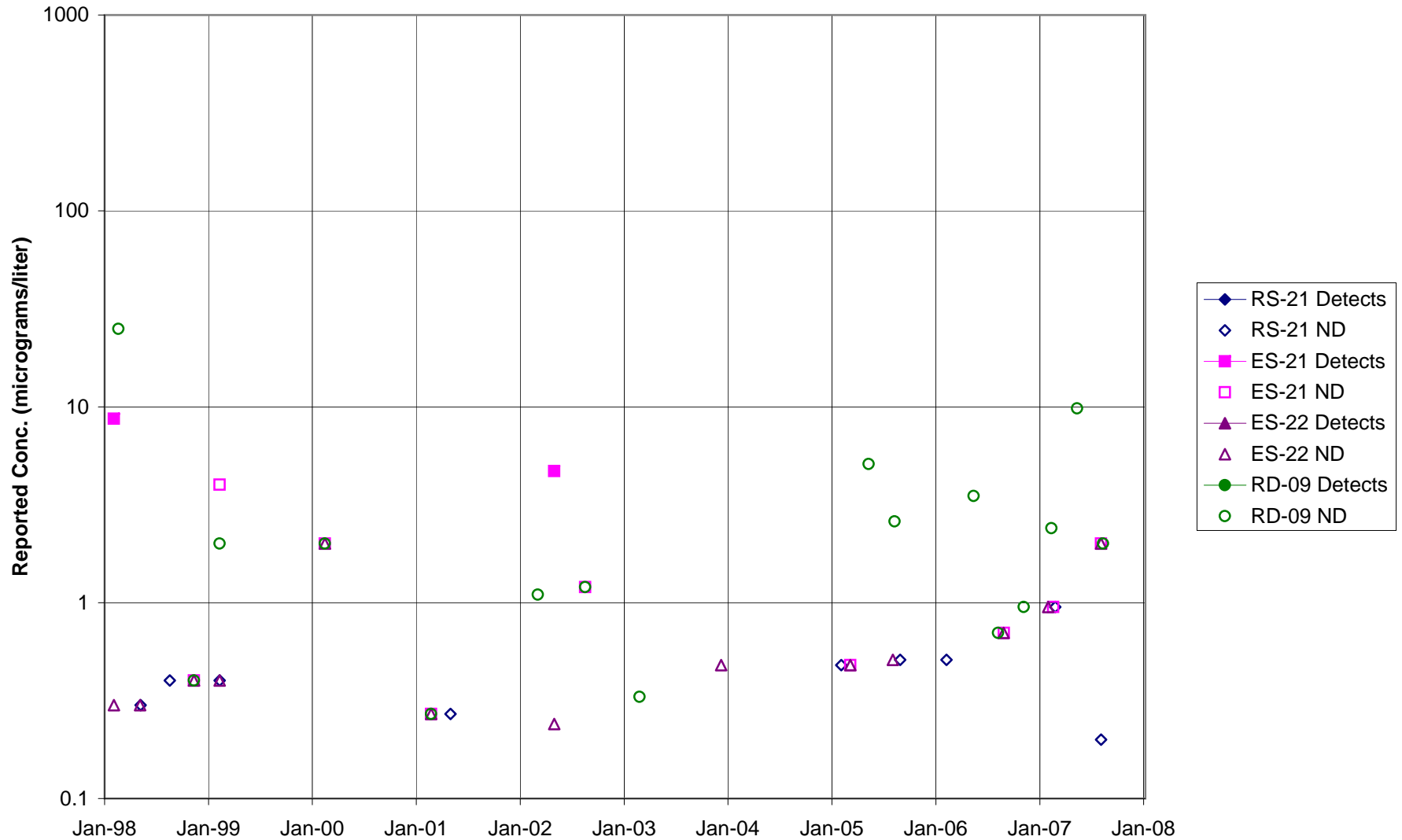


FIGURE F-215. METHYLENE CHLORIDE in HELIPORT, B/204 AREA WELLS

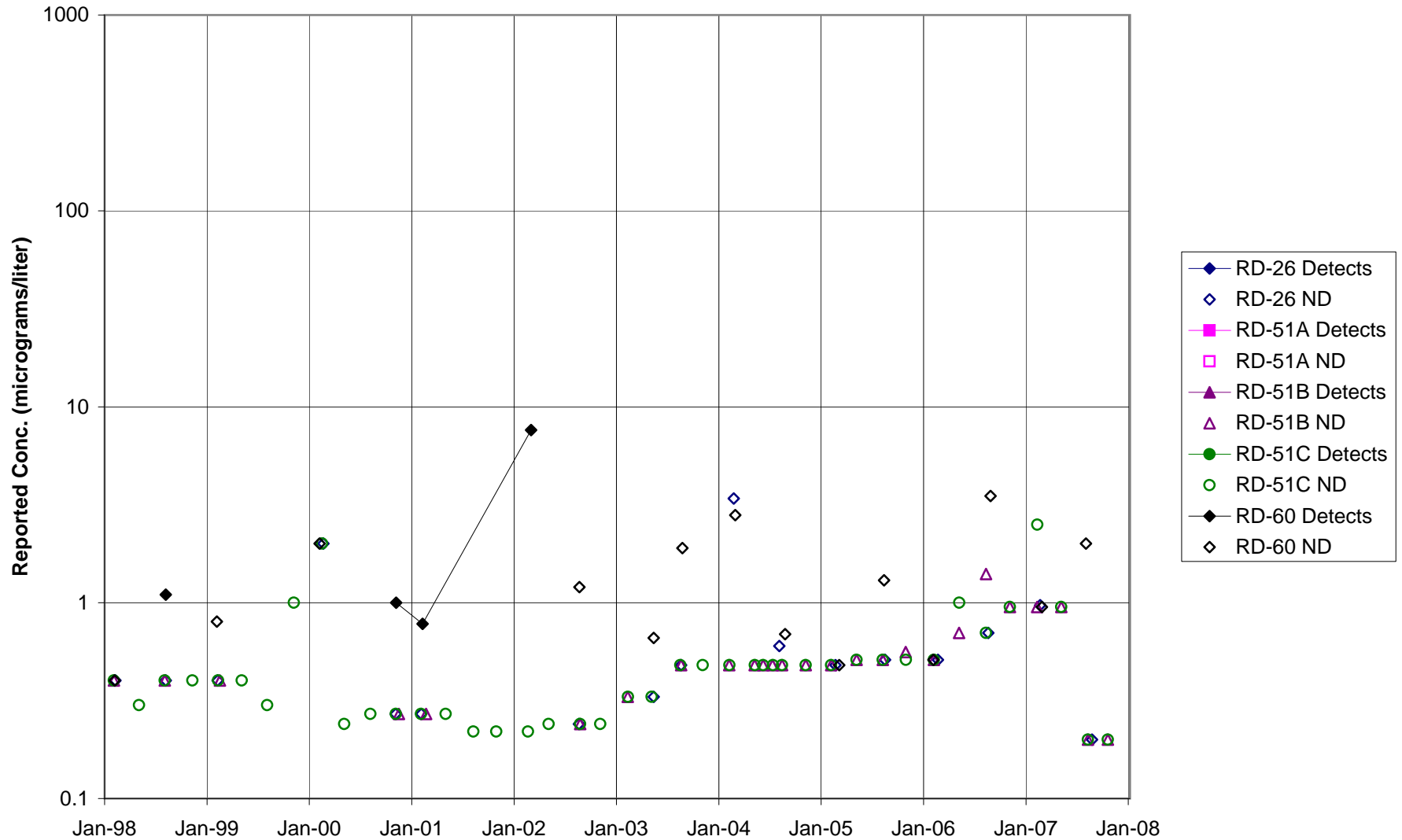


FIGURE F-216. METHYLENE CHLORIDE in ALFA / BRAVO AREA WELLS

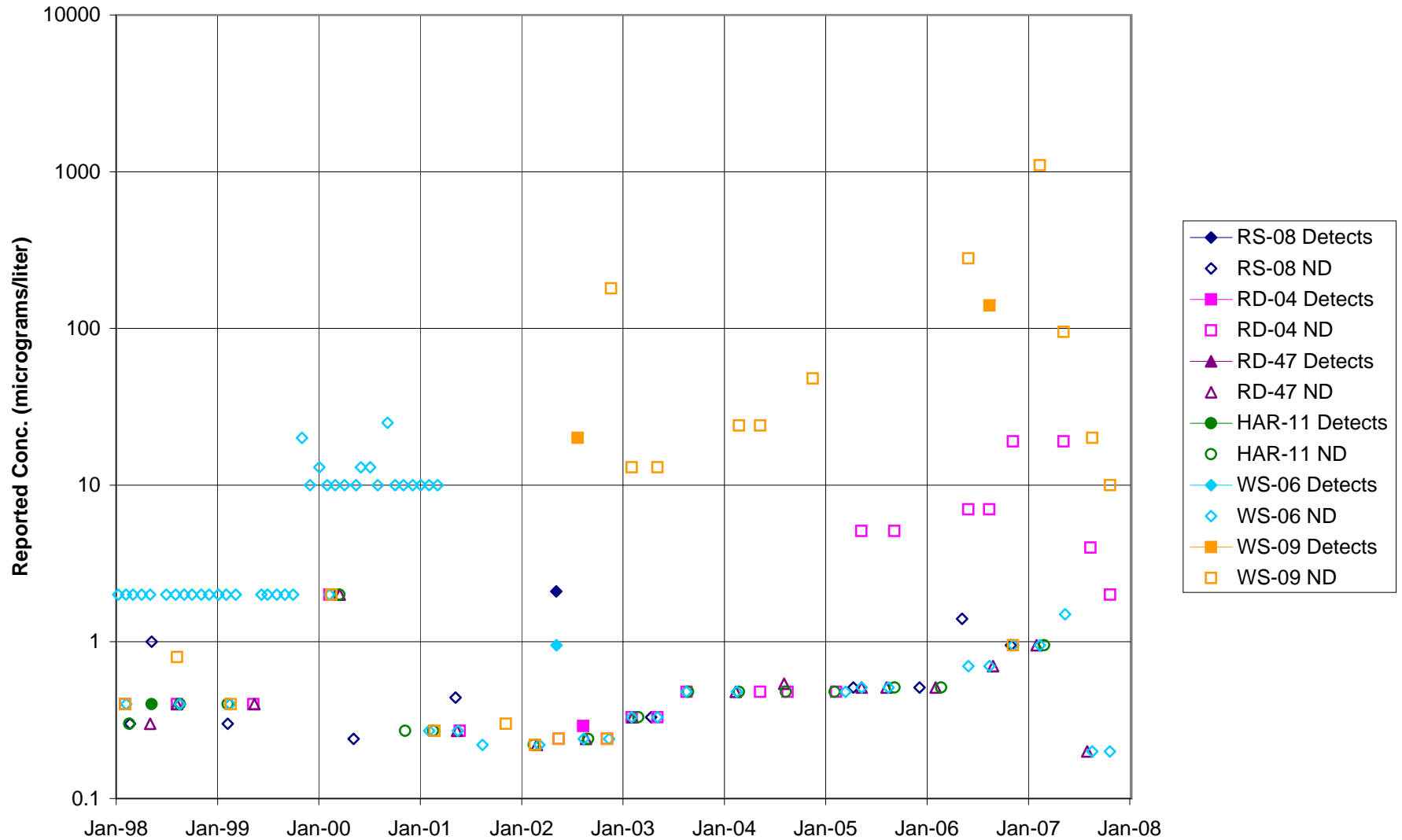
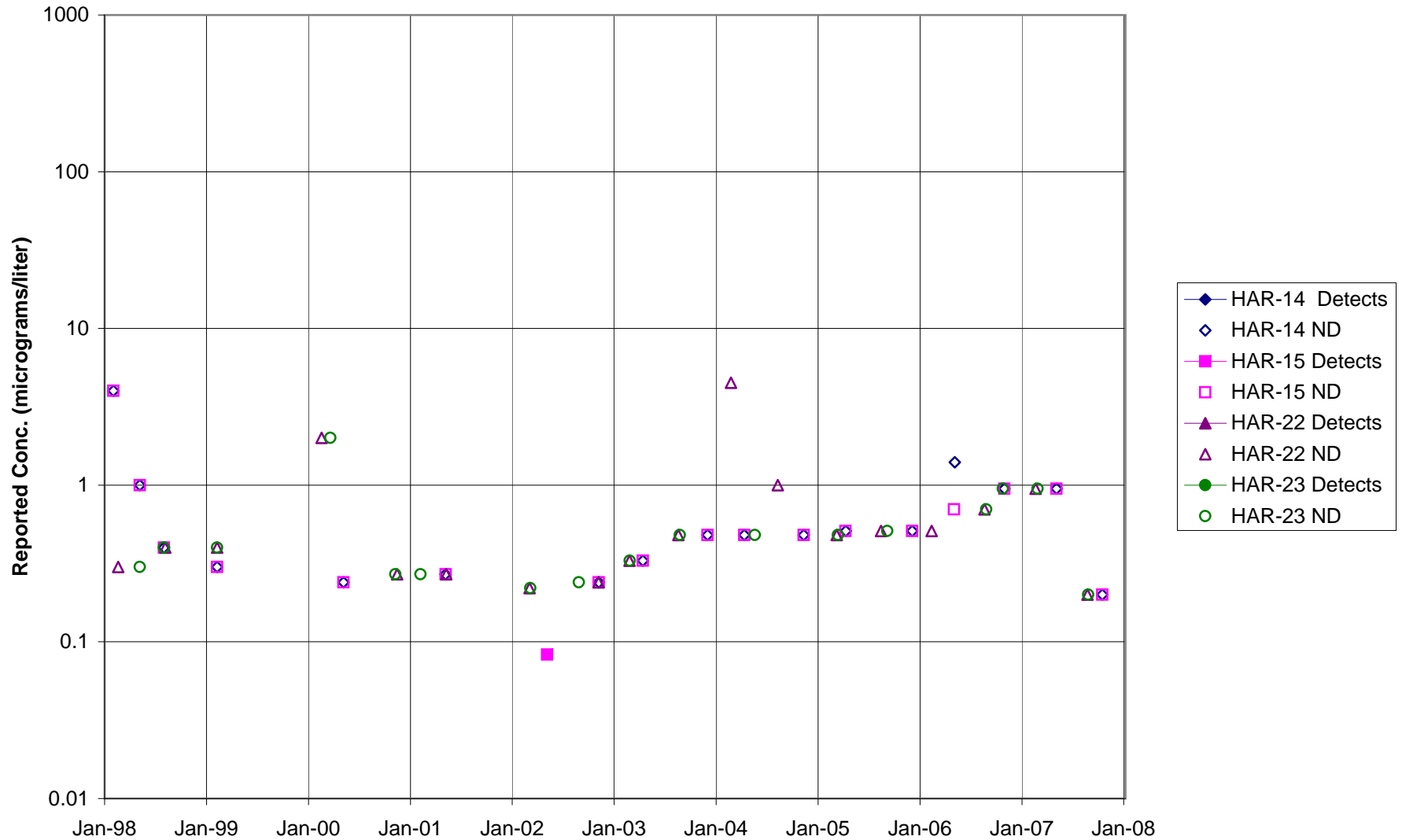
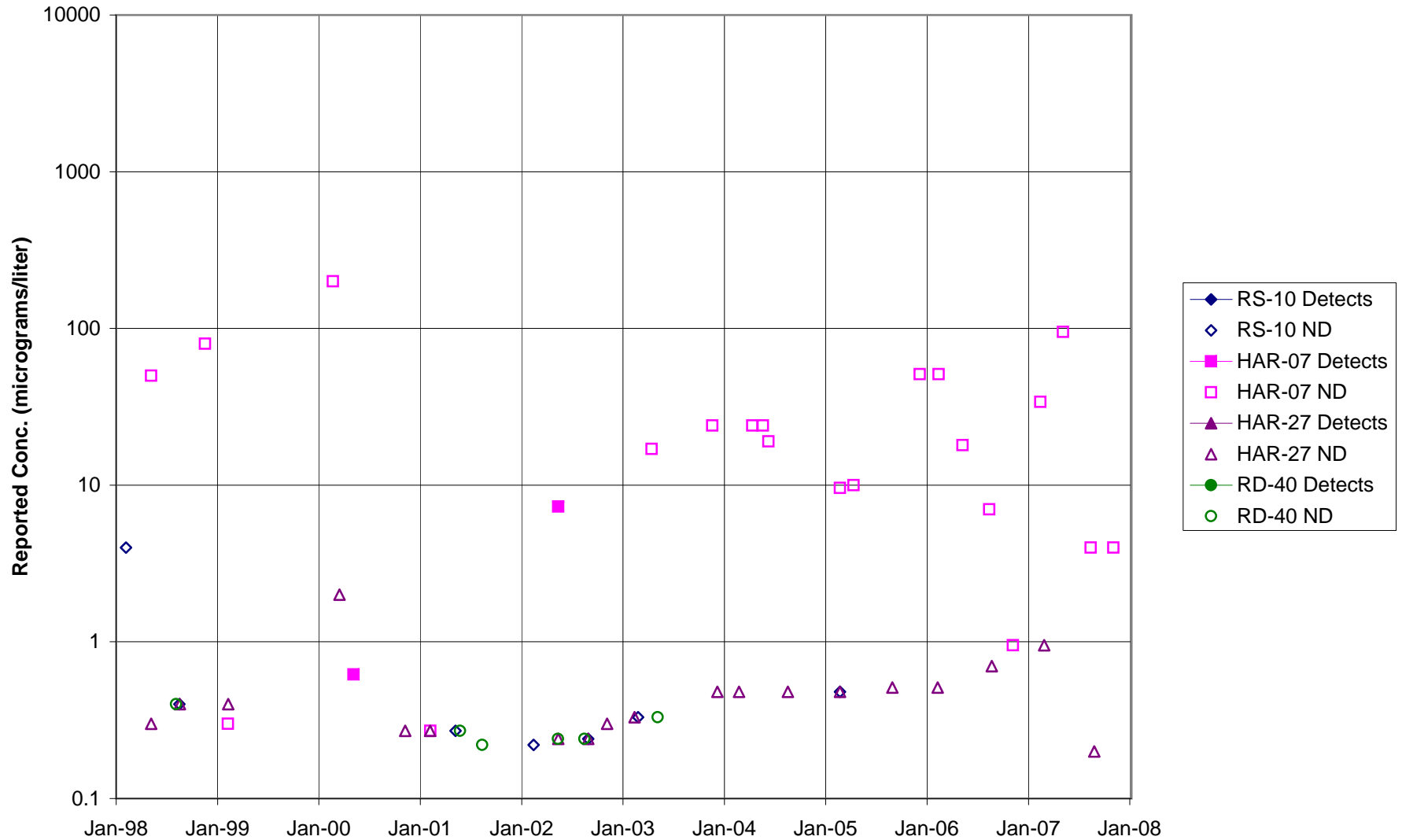




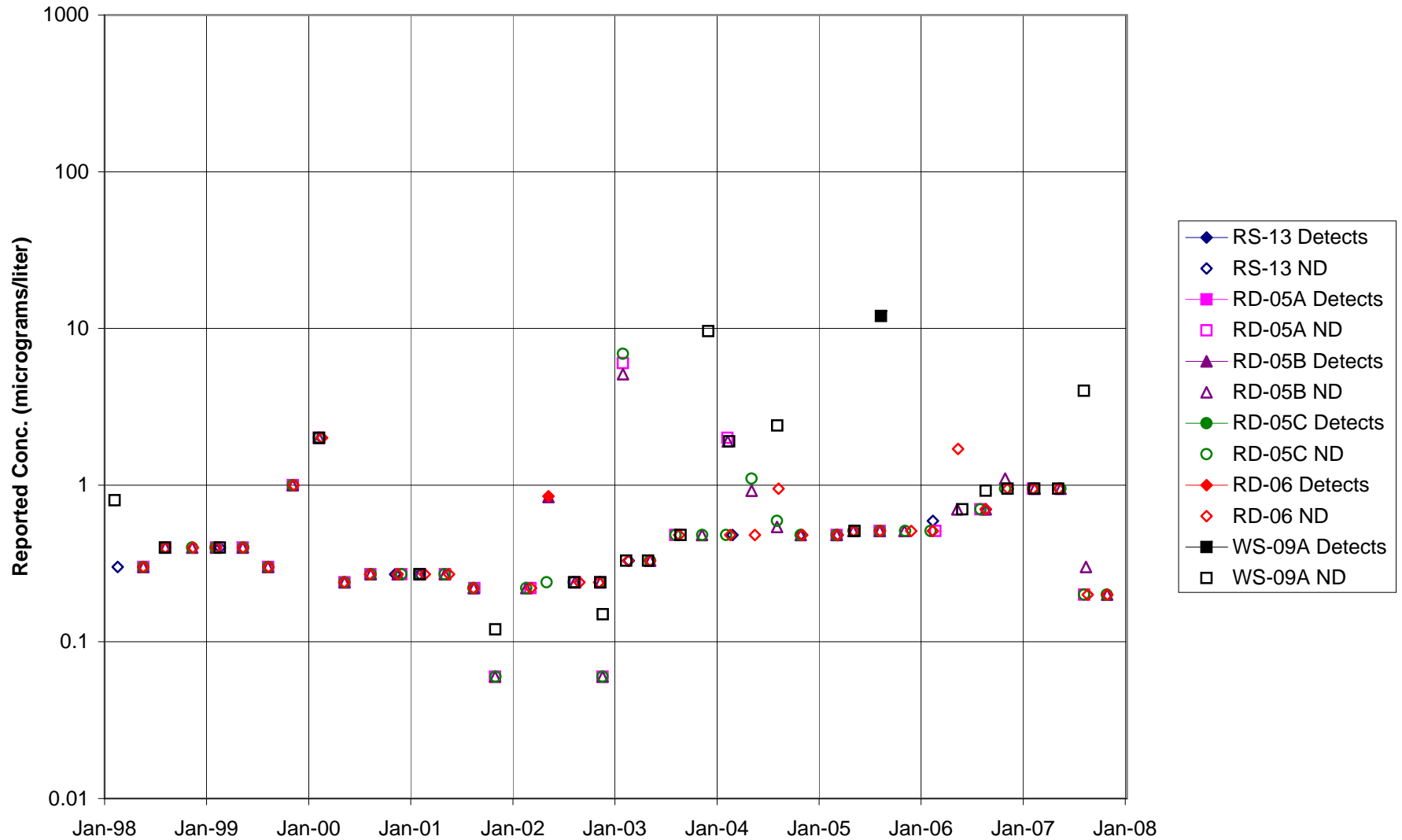
FIGURE F-217. METHYLENE CHLORIDE in SPA AREA WELLS



**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**

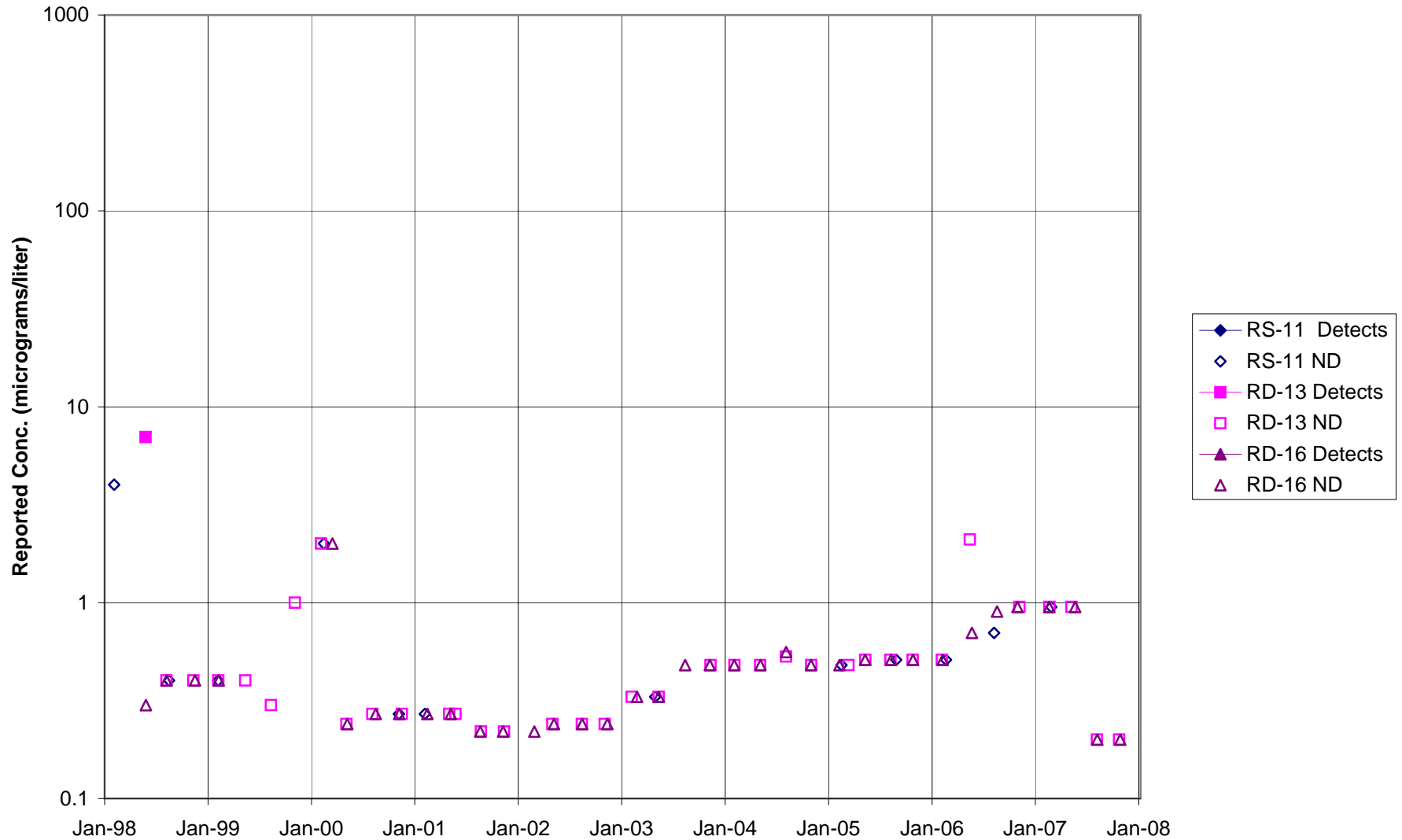




FIGURE F-222. NITRATE (as NO<sub>3</sub>) in MAIN GATE AREA WELLS - 1

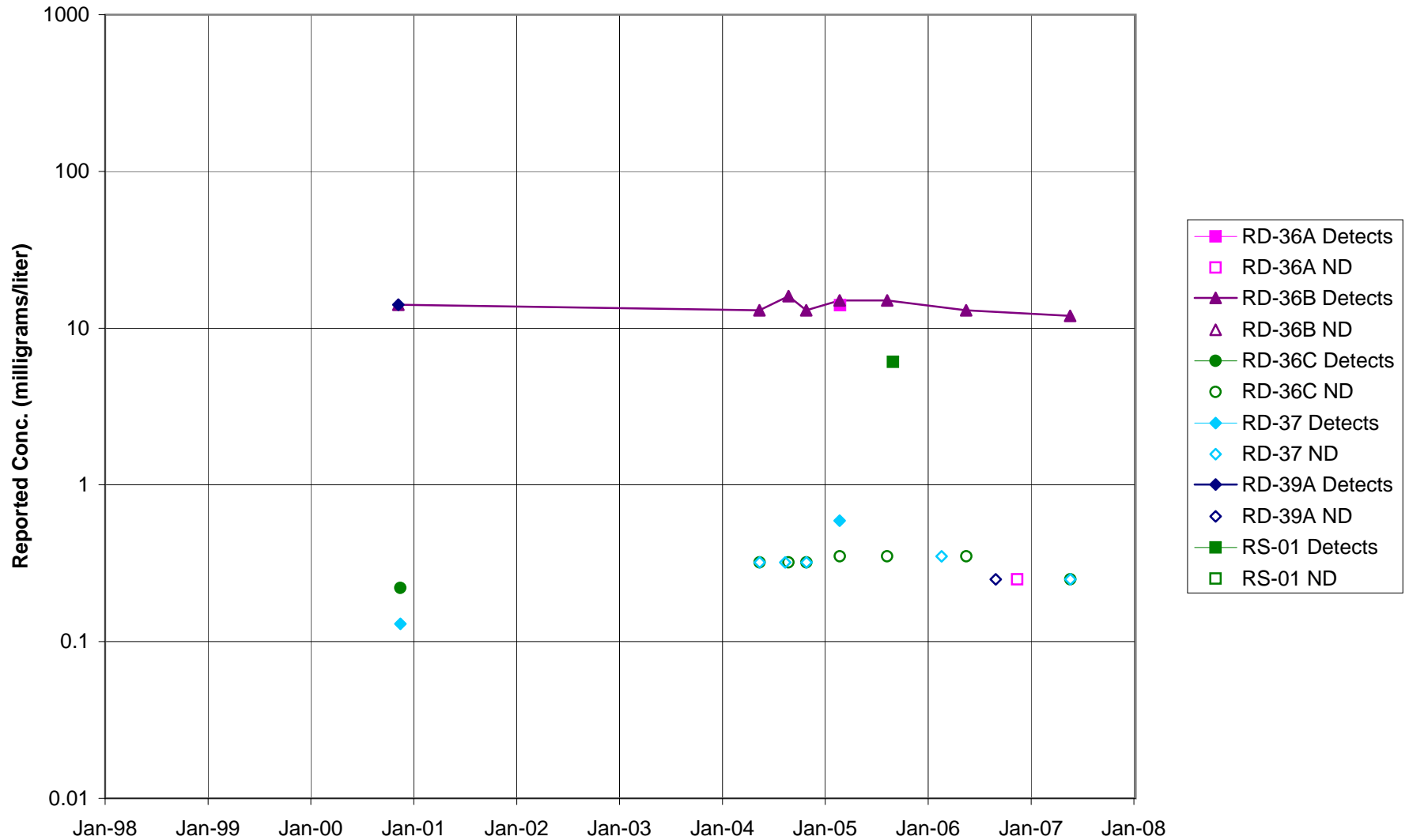
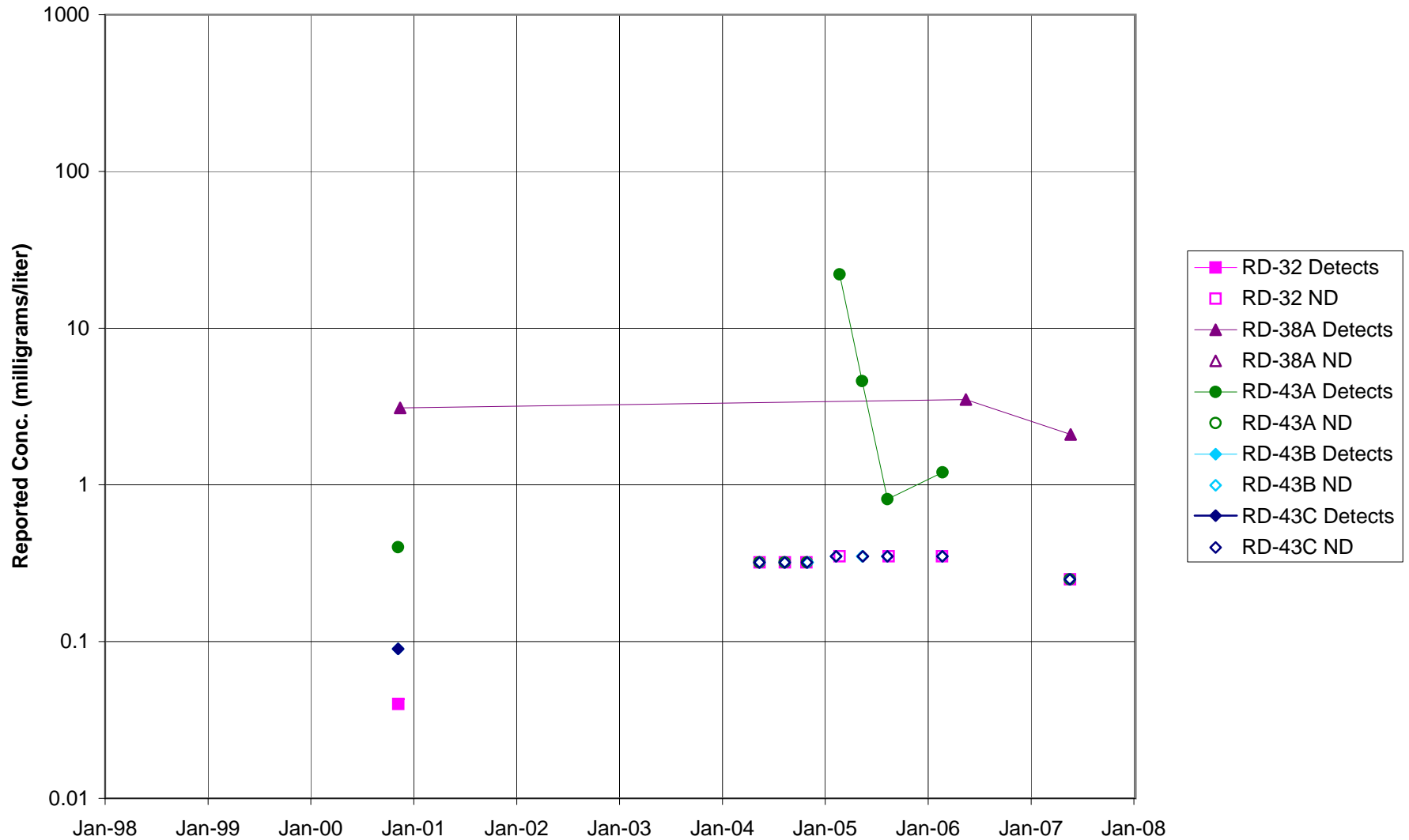
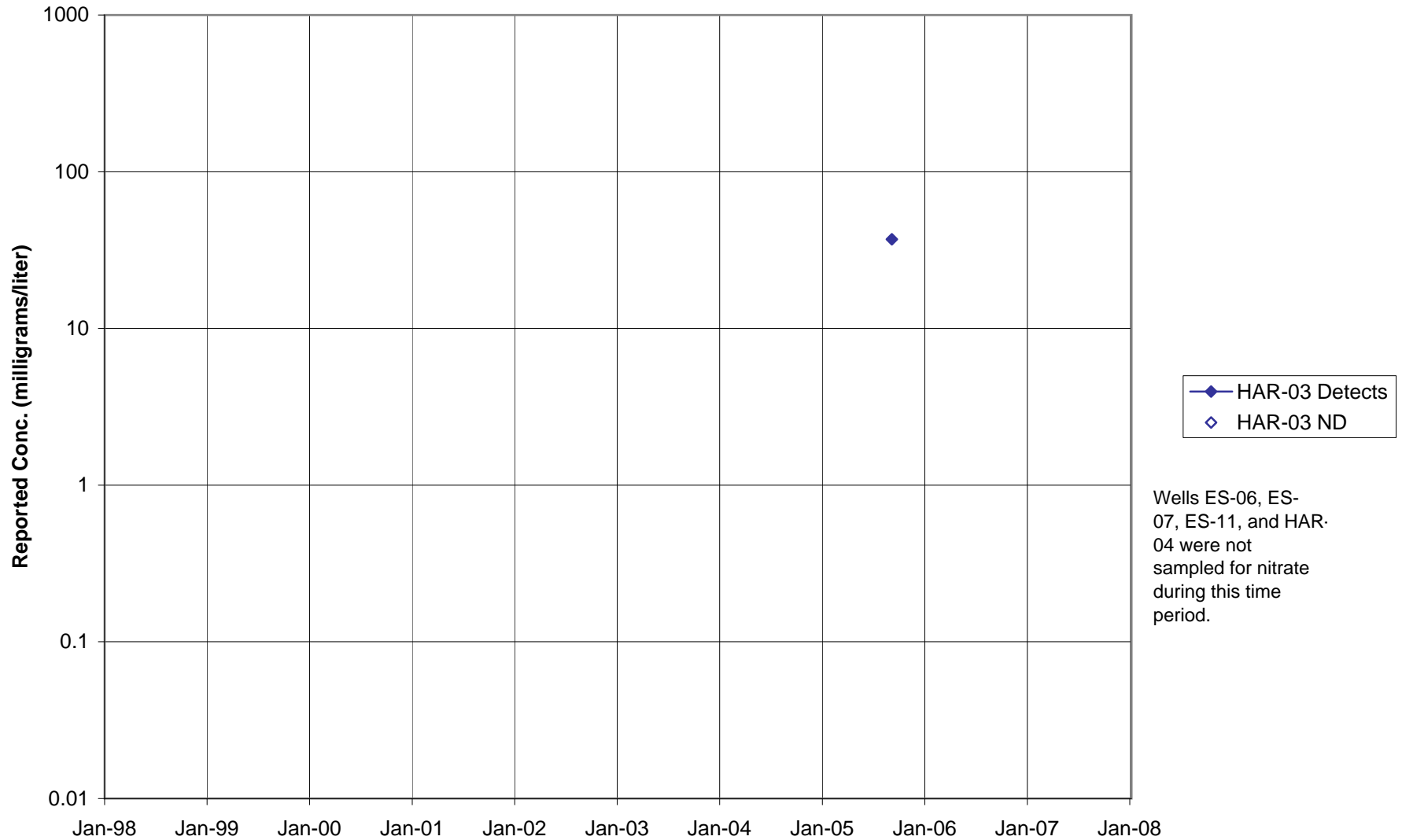


FIGURE F-223. NITRATE (as NO<sub>3</sub>) in MAIN GATE AREA WELLS - 2



**FIGURE F-224. NITRATE (as NO<sub>3</sub>) in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1**





**FIGURE F-225. NITRATE (as NO<sub>3</sub>) in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 2**

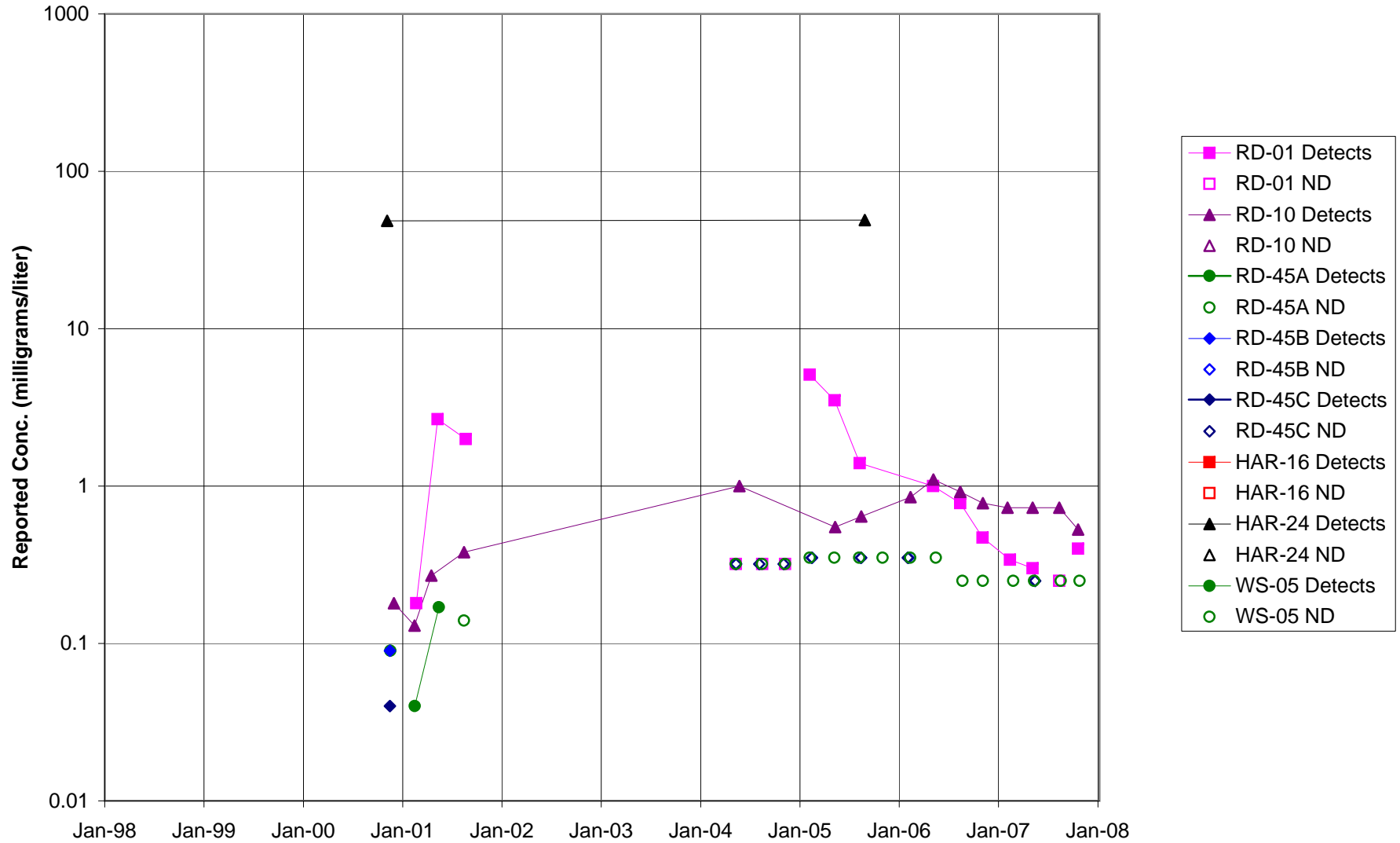
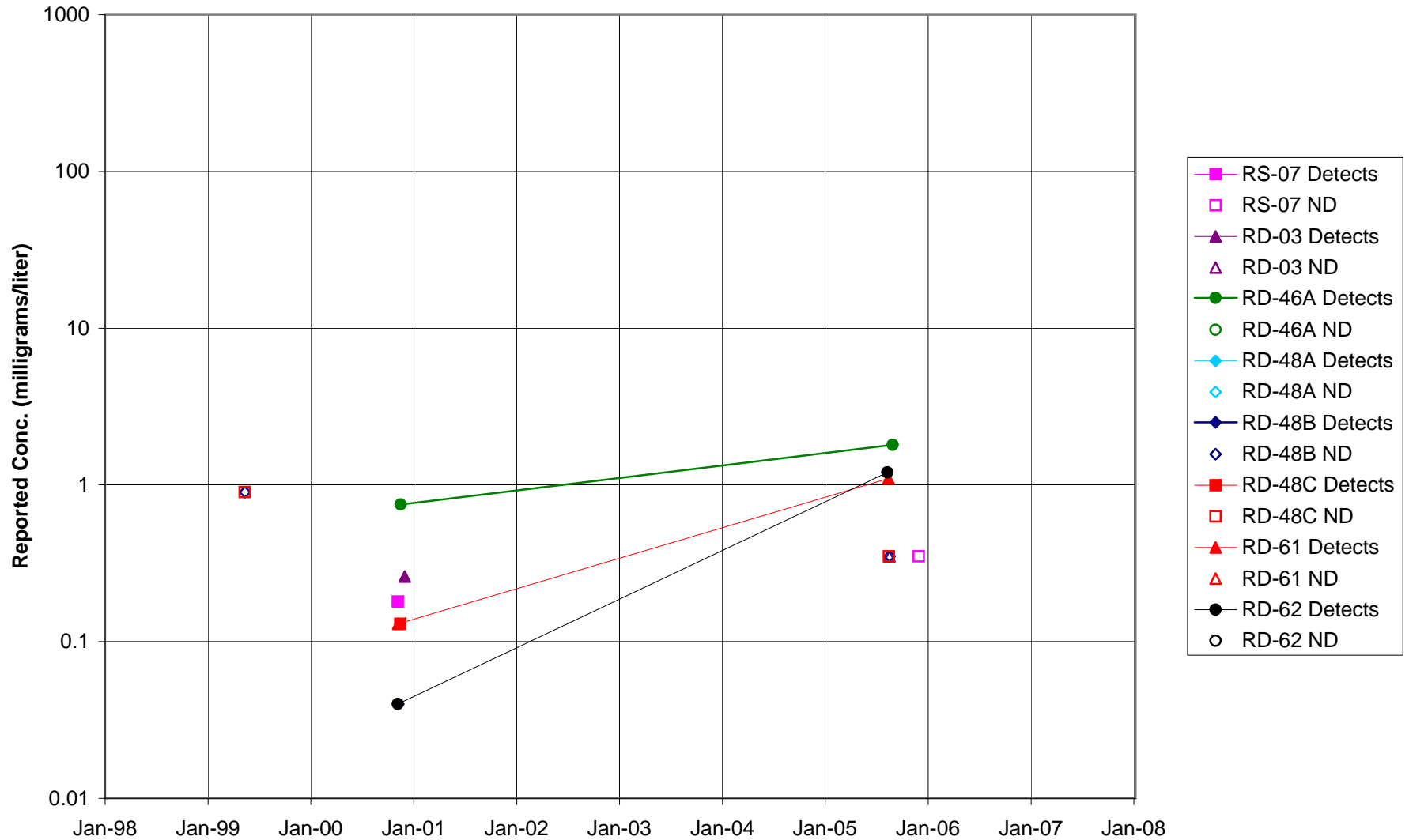
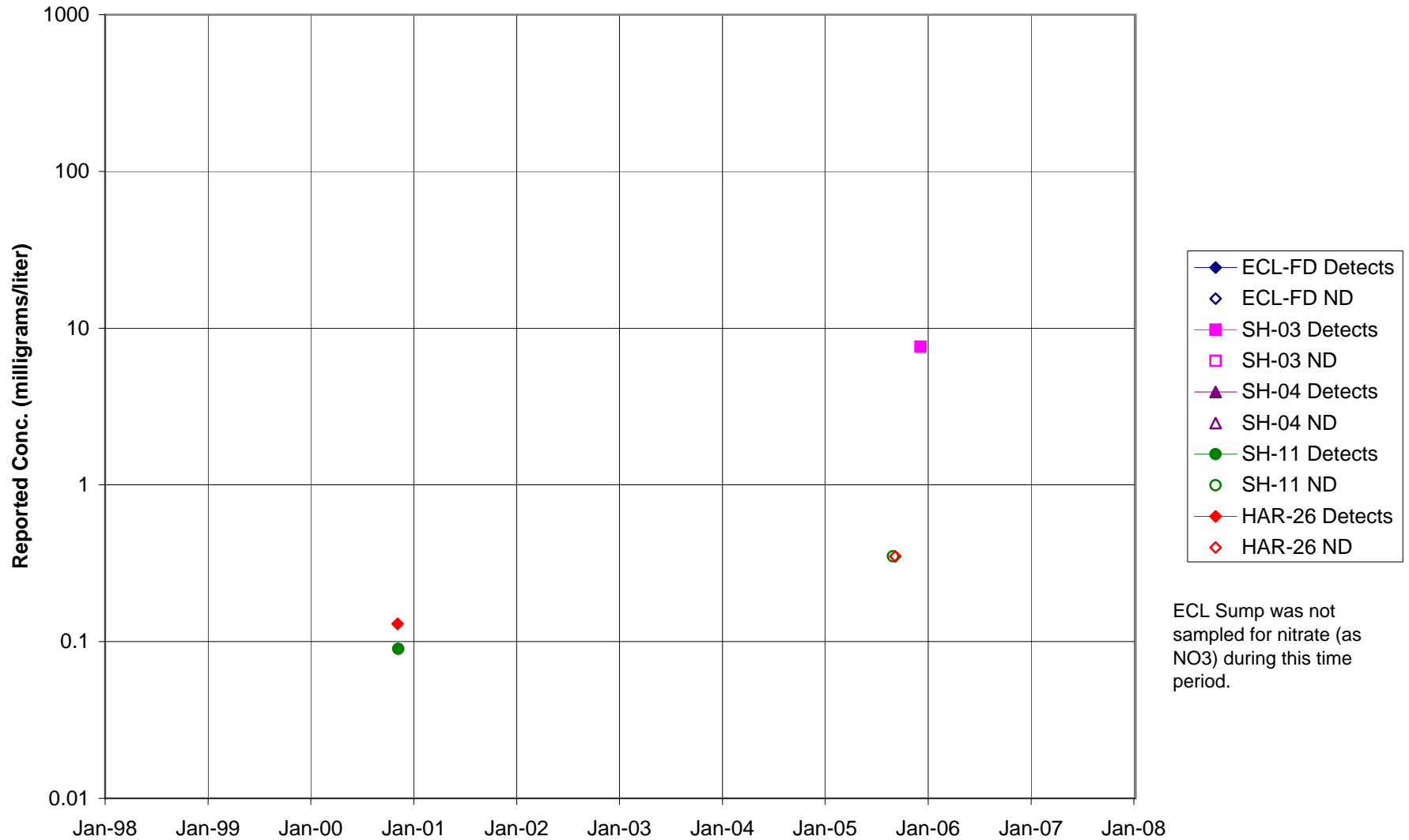


FIGURE F-226. NITRATE (as NO<sub>3</sub>) in CTL-III / PERIMETER POND AREA WELLS

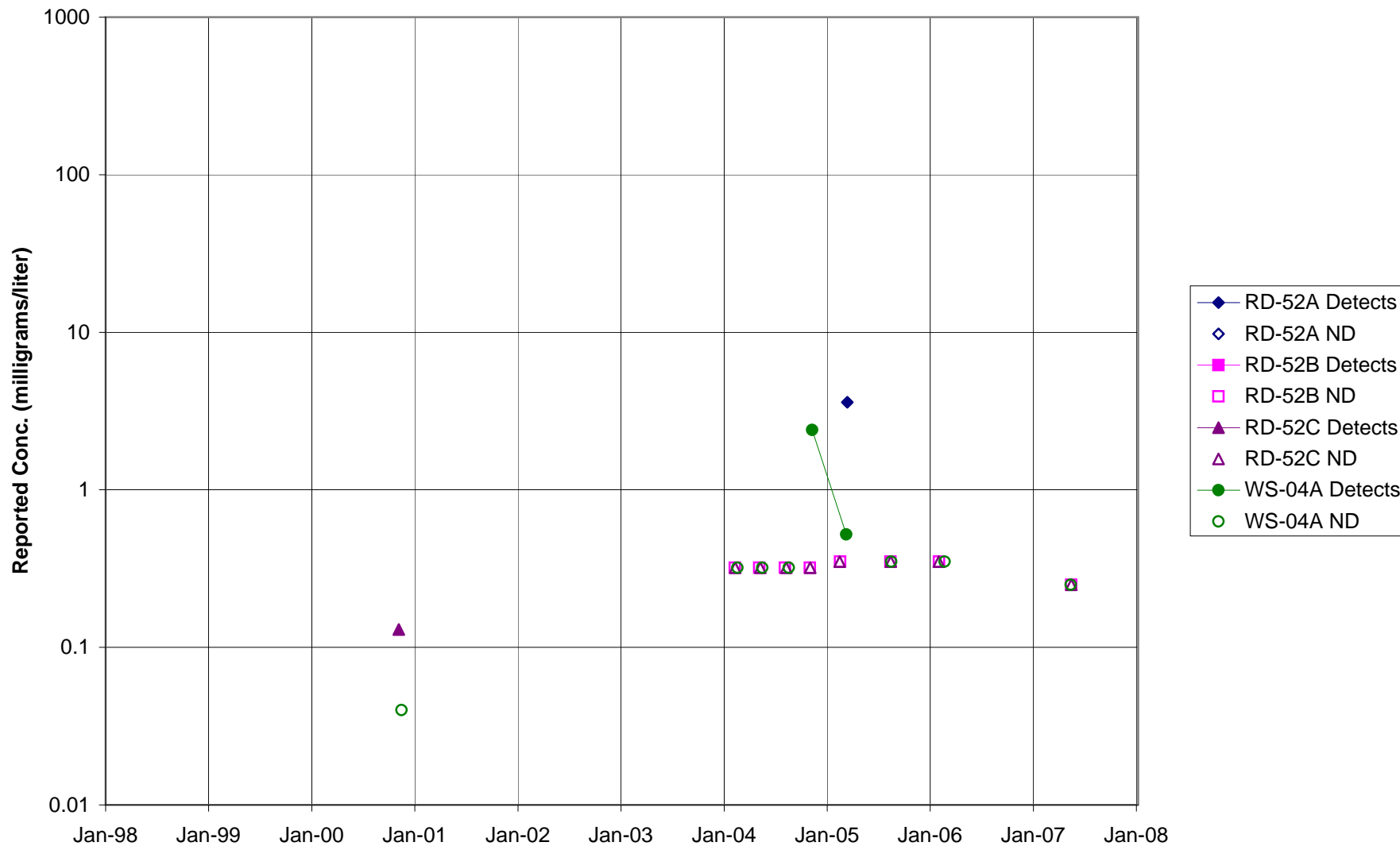




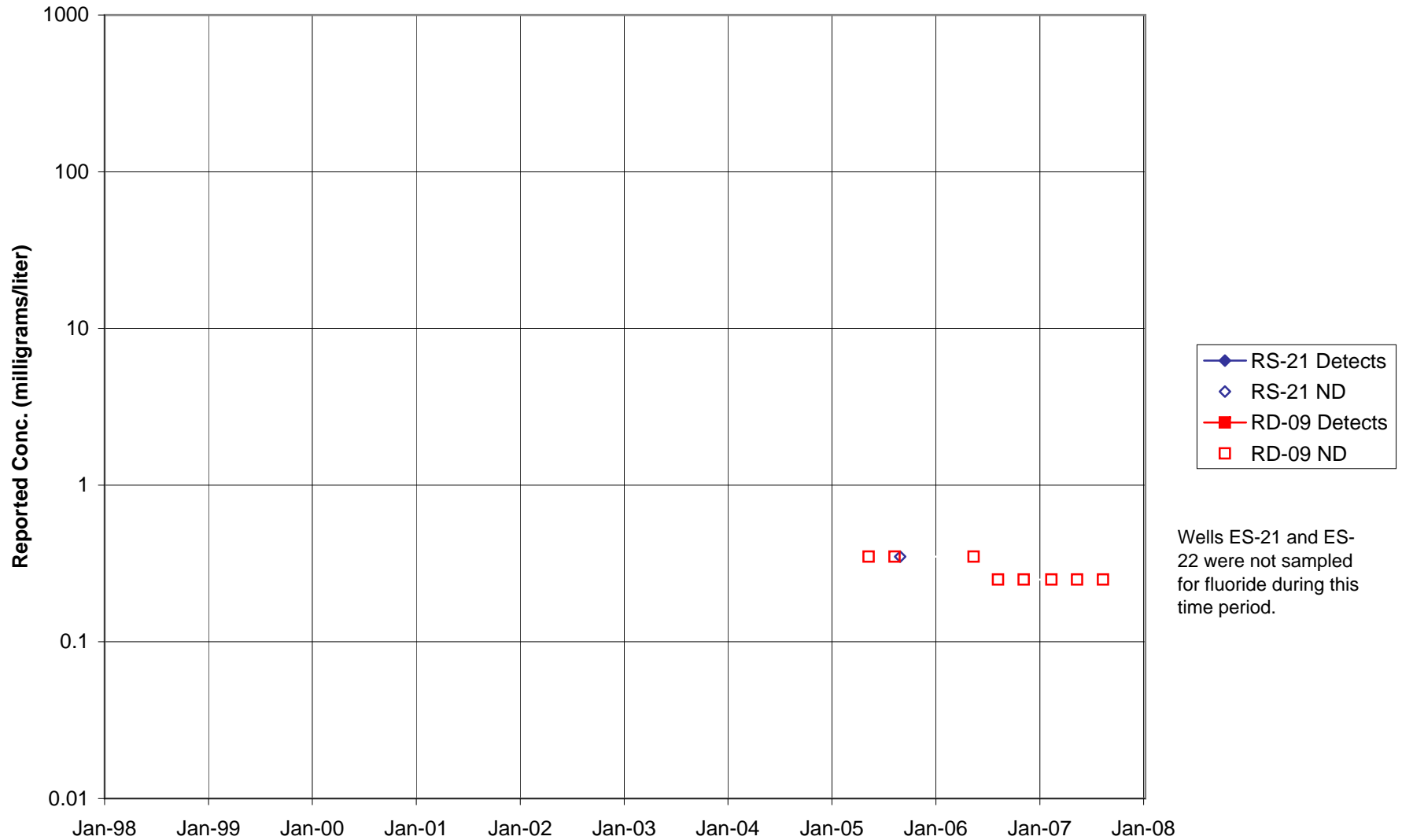
**FIGURE F-228. NITRATE (as NO<sub>3</sub>) in ECL AREA WELLS**



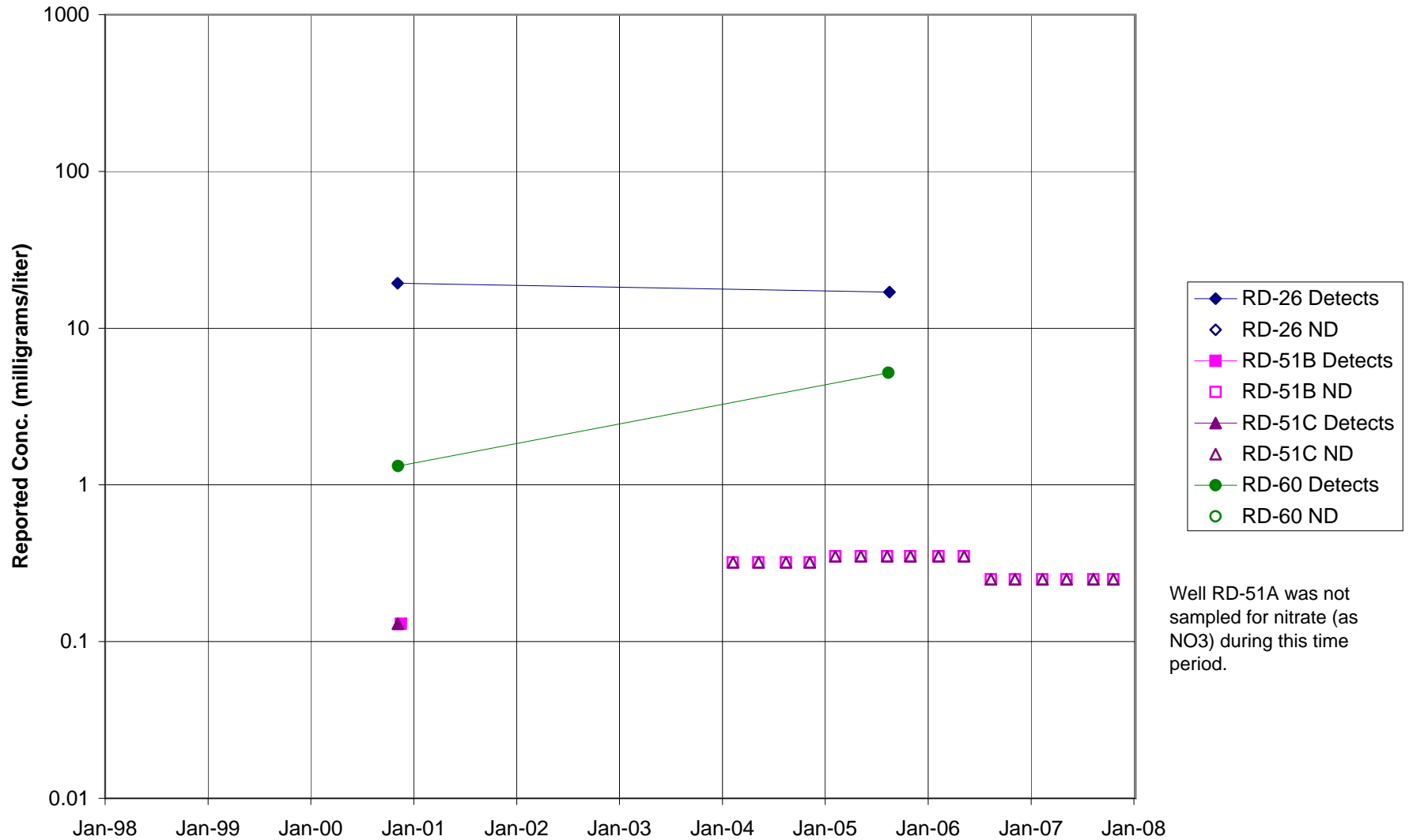
**FIGURE F-229. NITRATE (as NO<sub>3</sub>) in FORMER LOX PLANT AREA WELLS**



**FIGURE F-230. NITRATE (as NO3) in RD-09 AREA WELLS**



**FIGURE F-231. NITRATE (as NO<sub>3</sub>) in HELIPORT, B/204 AREA WELLS**



Well RD-51A was not sampled for nitrate (as NO<sub>3</sub>) during this time period.

**FIGURE F-232. NITRATE (as NO<sub>3</sub>) in ALFA / BRAVO AREA WELLS**

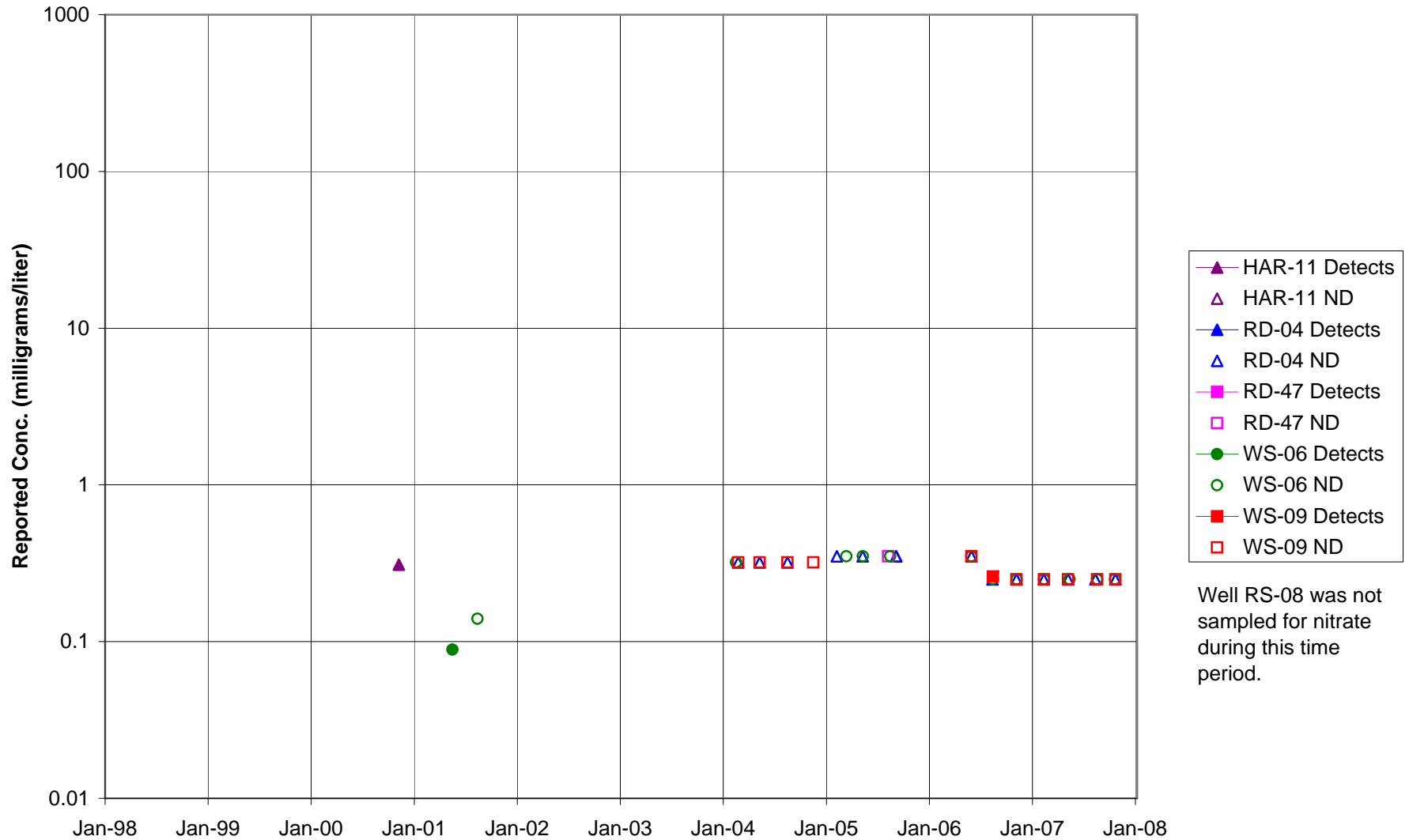




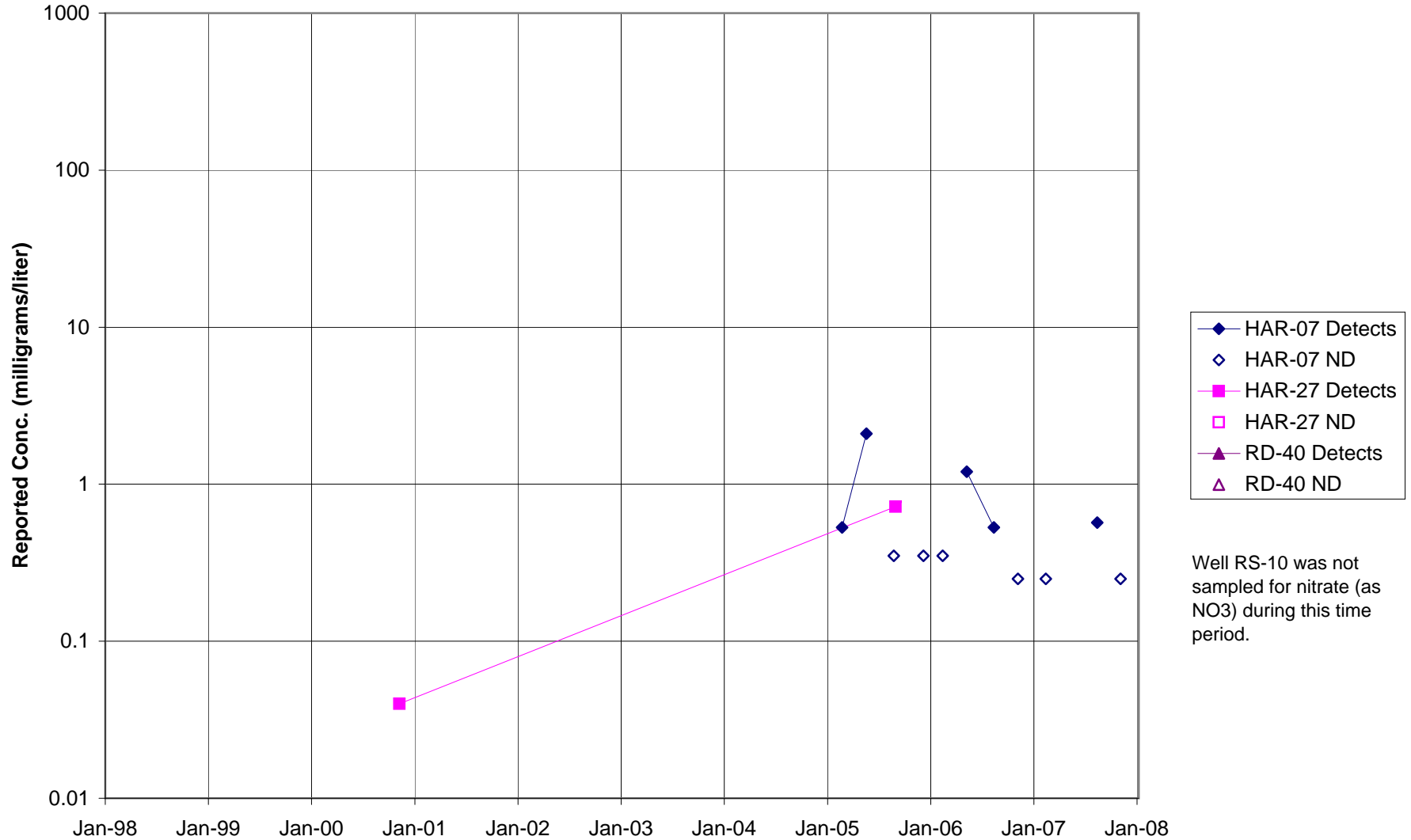
FIGURE F-233. NITRATE (as NO<sub>3</sub>) in SPA AREA WELLS



- ▲ HAR-22 Detects
- △ HAR-22 ND
- HAR-23 Detects
- HAR-23 ND

Wells HAR-14 and HAR-15 were not sampled for nitrate during this time period

**FIGURE F-234. NITRATE (as NO<sub>3</sub>) in COCA / PLF AREA WELLS**



Well RS-10 was not sampled for nitrate (as NO<sub>3</sub>) during this time period.

**FIGURE F-235. NITRATE (as NO<sub>3</sub>) in DELTA / BUFFER ZONE WELLS**

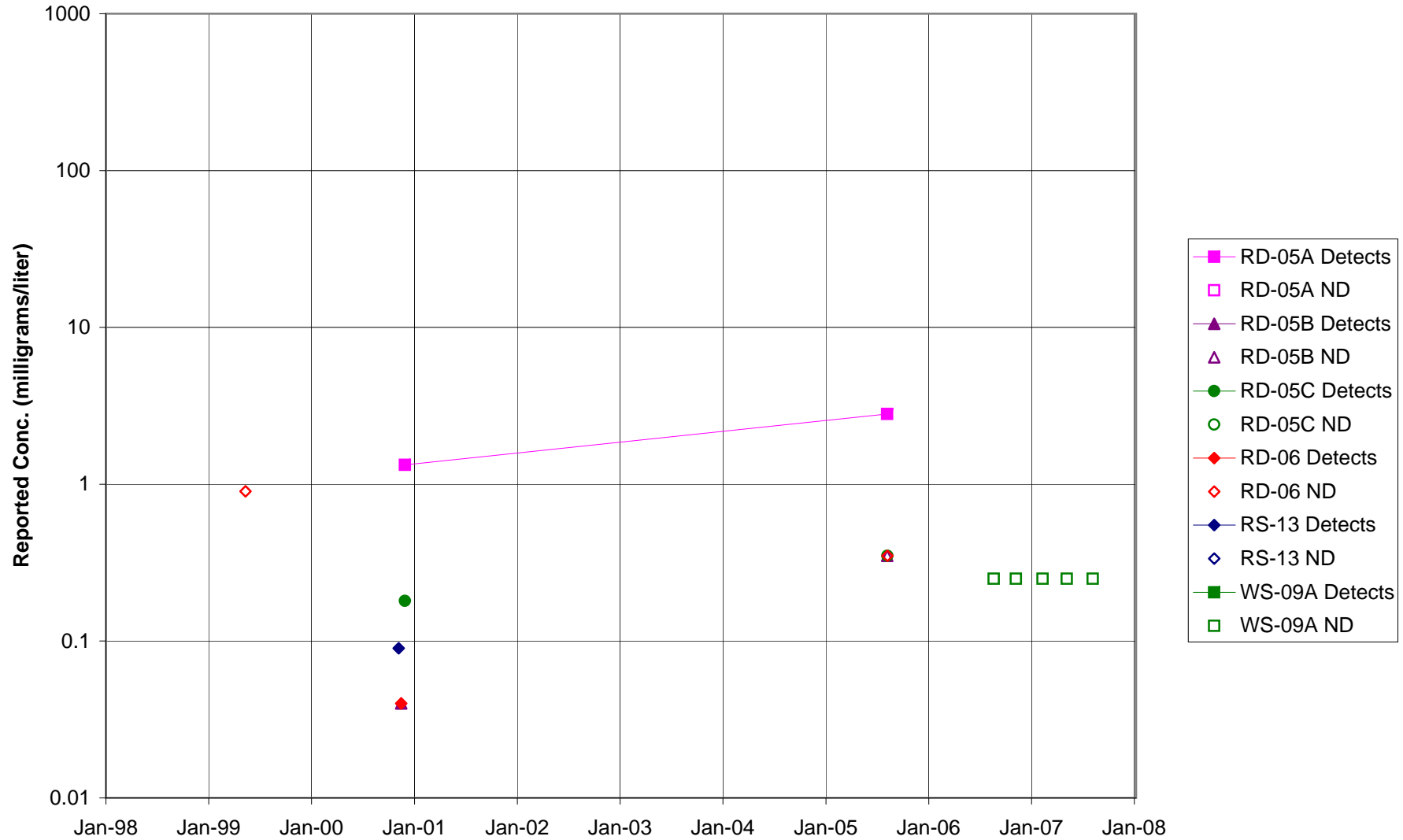
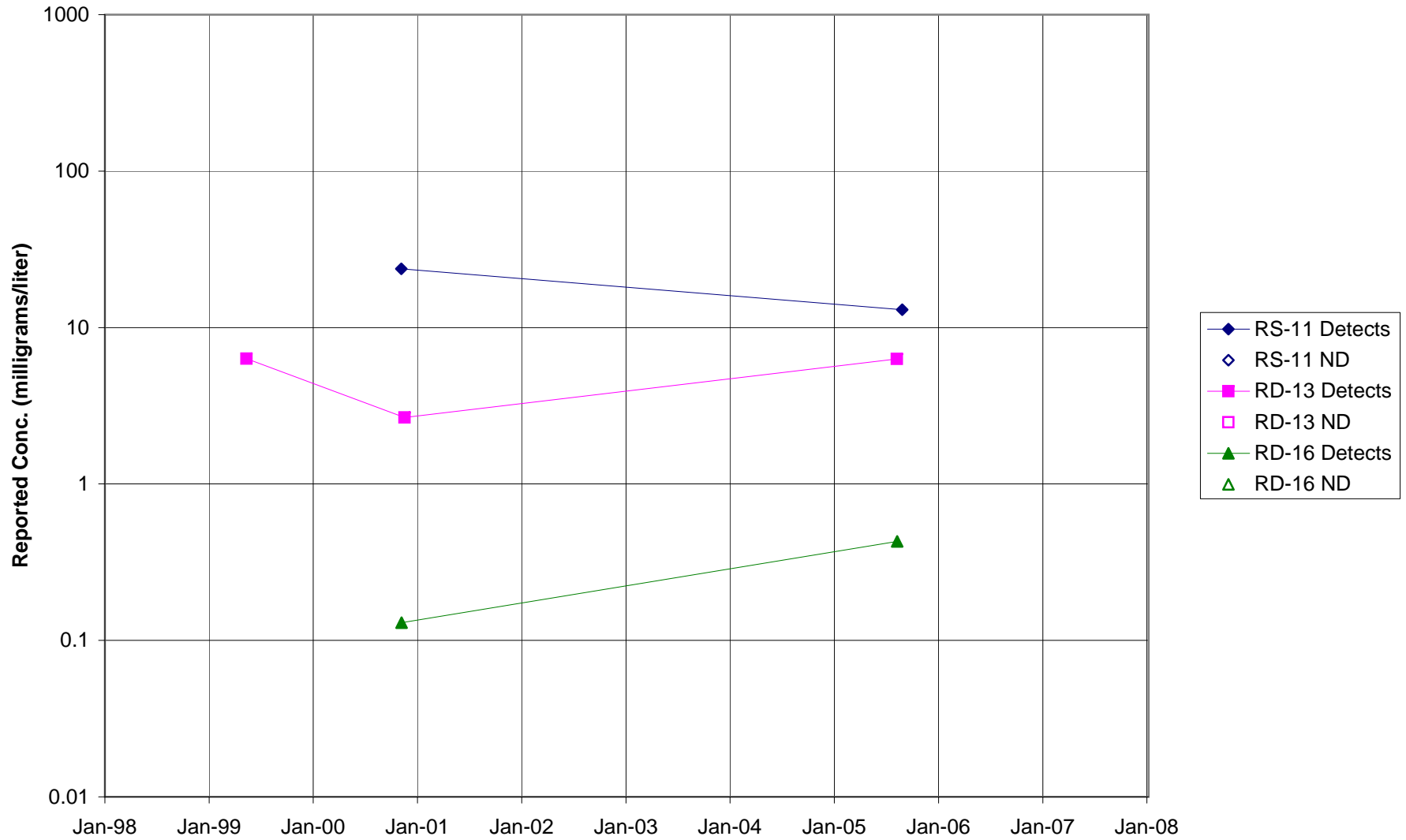


FIGURE F-236. NITRATE (as NO<sub>3</sub>) AREA IV WELLS



**FIGURE F-237. NITROBENZENE in STL-IV AREA CHATSWORTH FORMATION WELLS**

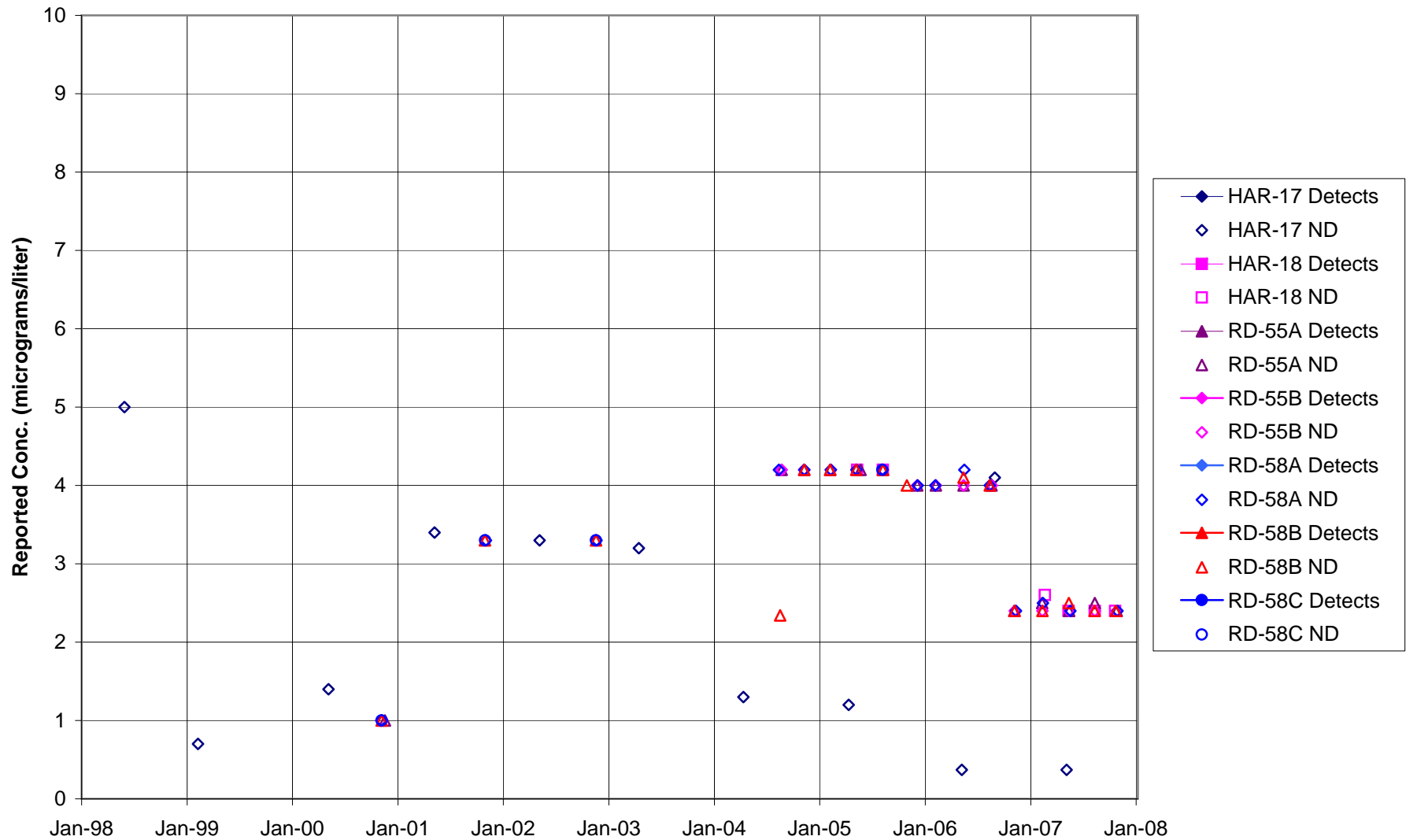


FIGURE F-238. NITROBENZENE in MAIN GATE AREA WELLS - 1

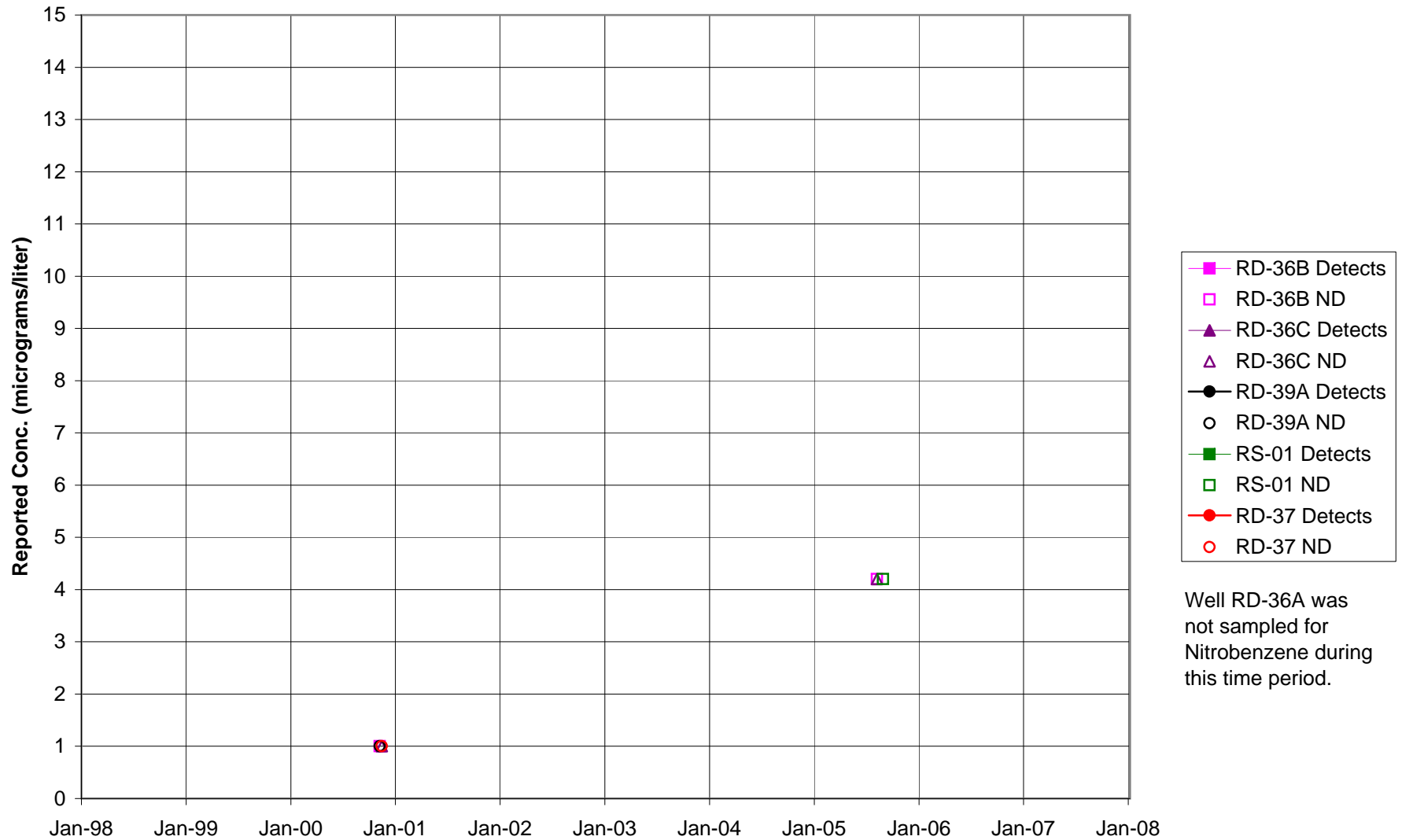
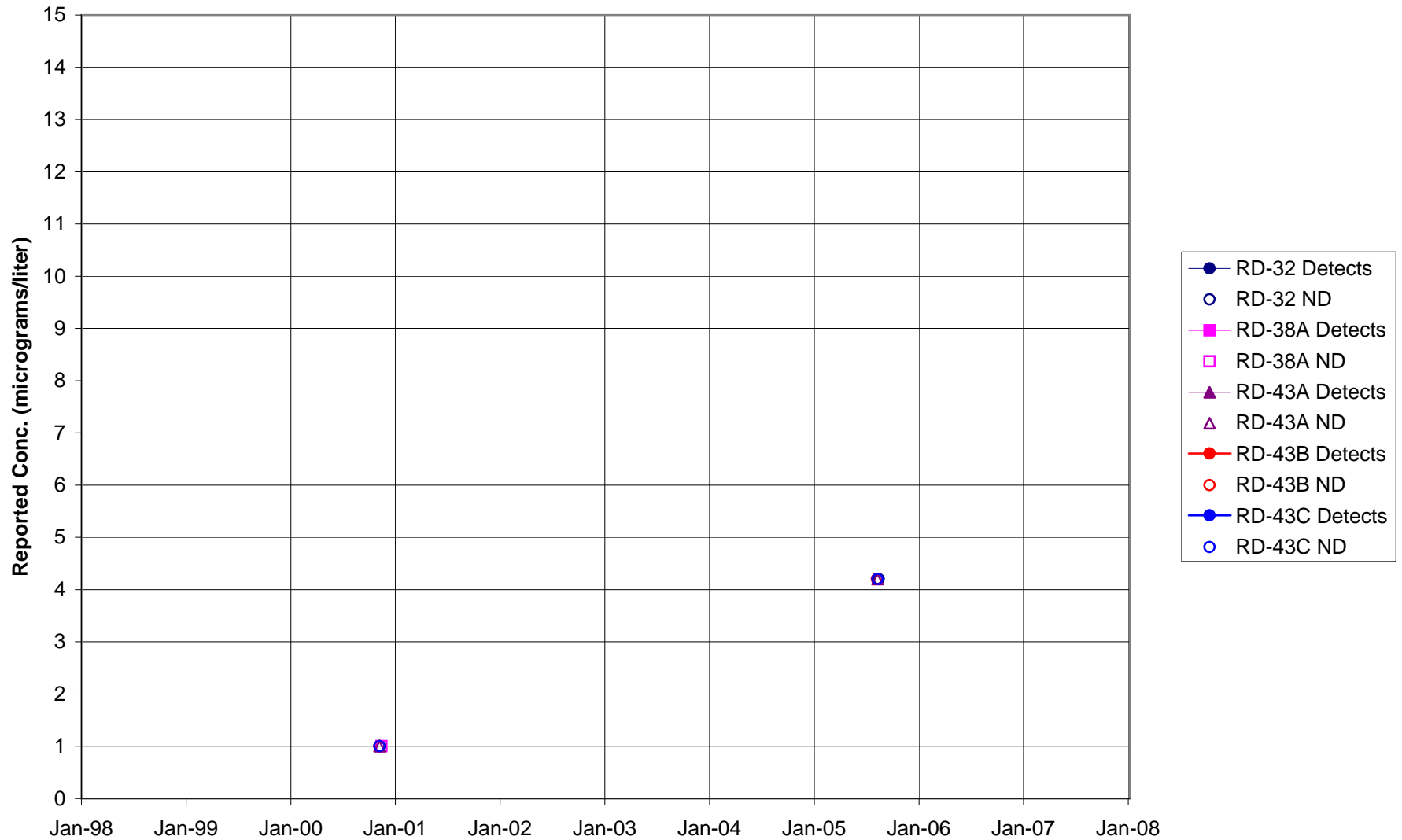
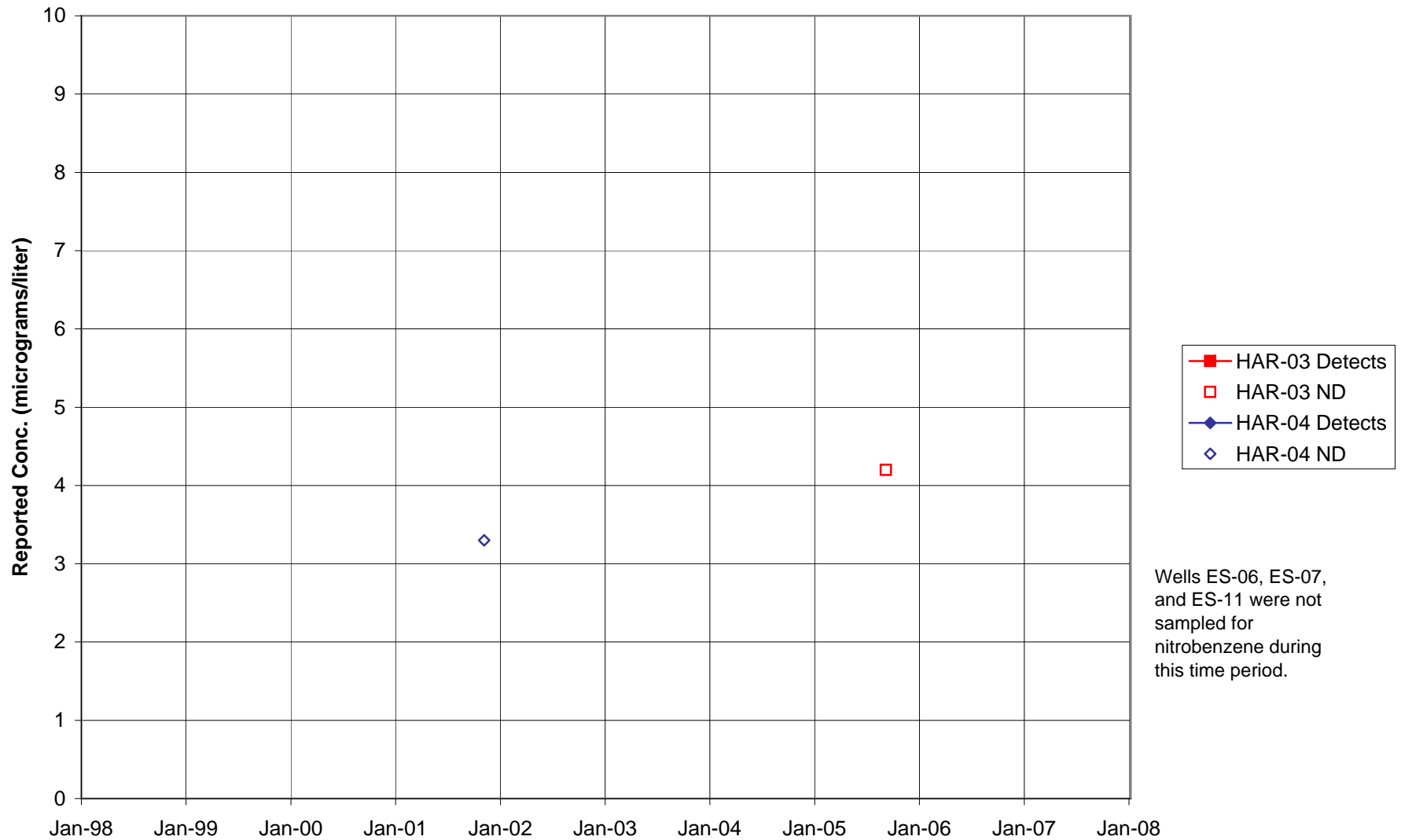


FIGURE F-239. NITROBENZENE in MAIN GATE AREA WELLS - 2

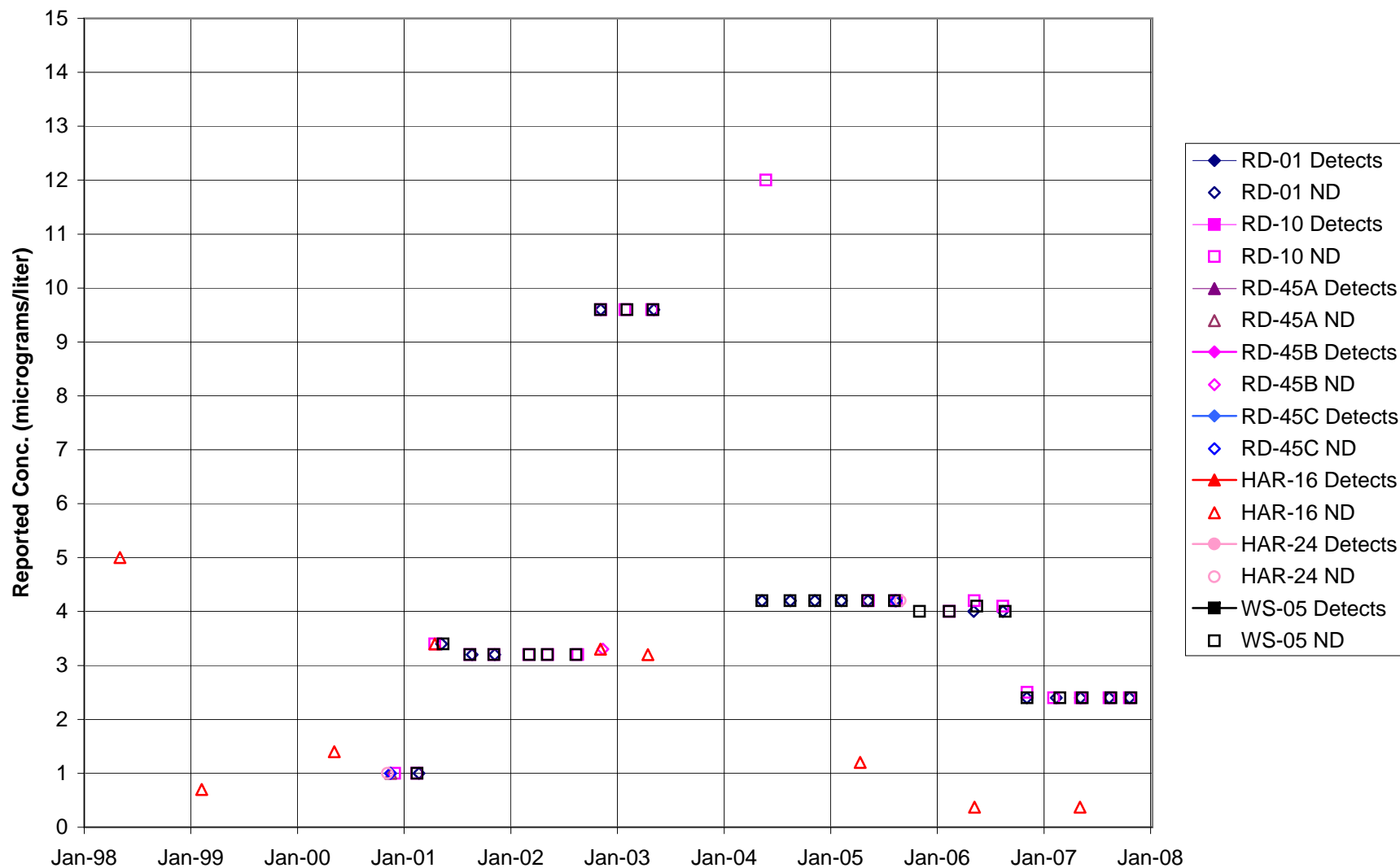


**FIGURE F-240. NITROBENZENE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1**

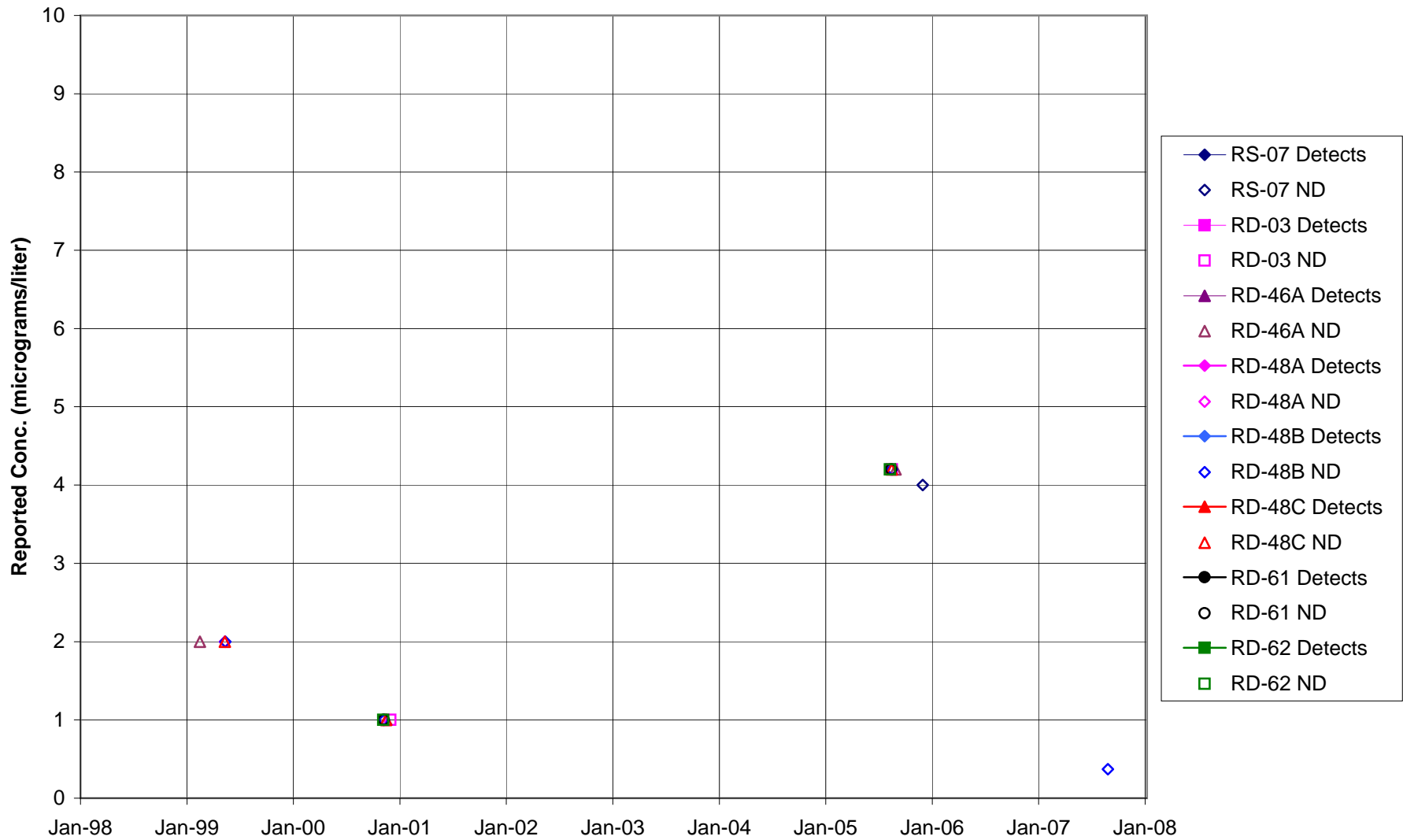




**FIGURE F-241. NITROBENZENE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 2**



**FIGURE F-242. NITROBENZENE in CTL-III / PERIMETER POND AREA WELLS**





**FIGURE F-244. NITROBENZENE in ECL AREA WELLS**

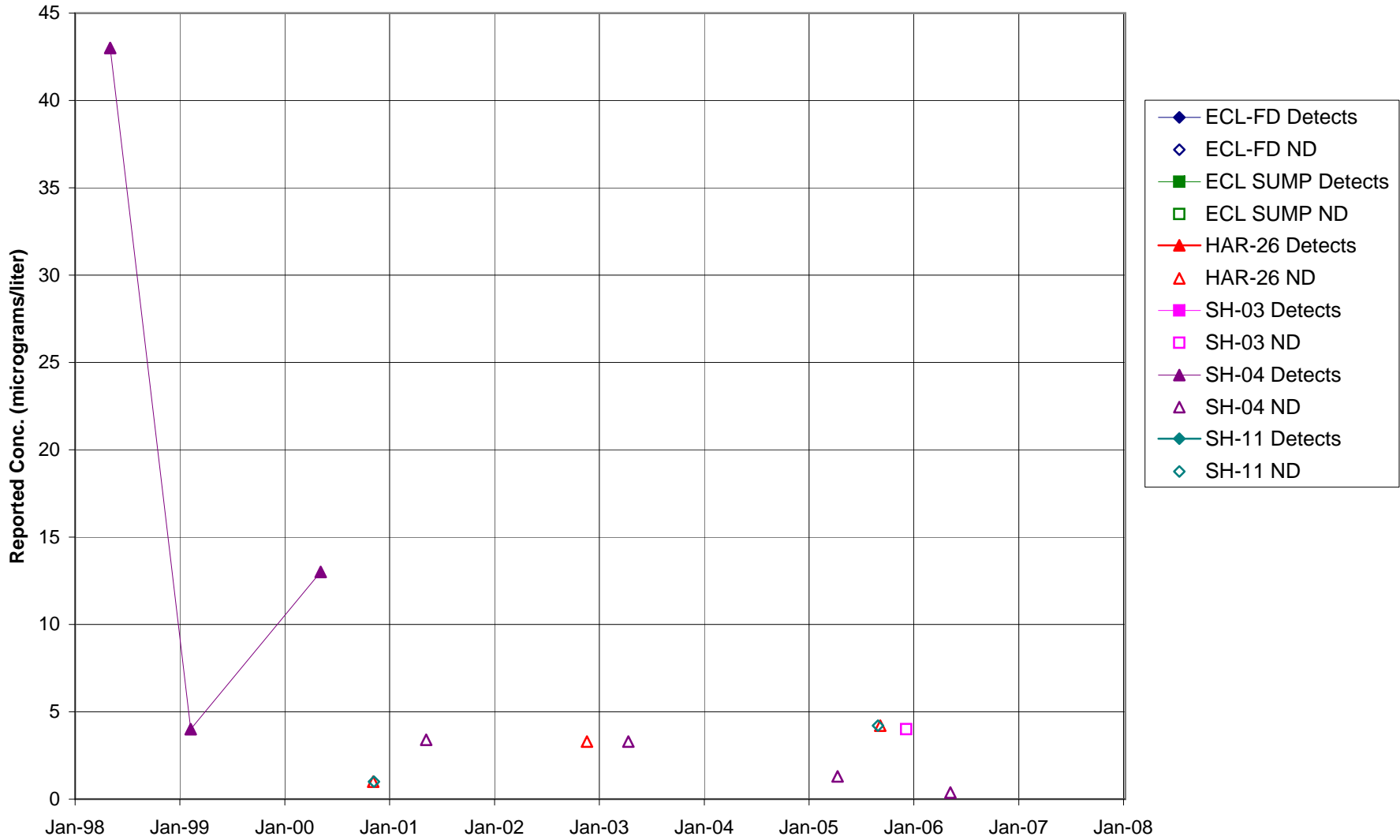


FIGURE F-245. NITROBENZENE in FORMER LOX PLANT AREA WELLS

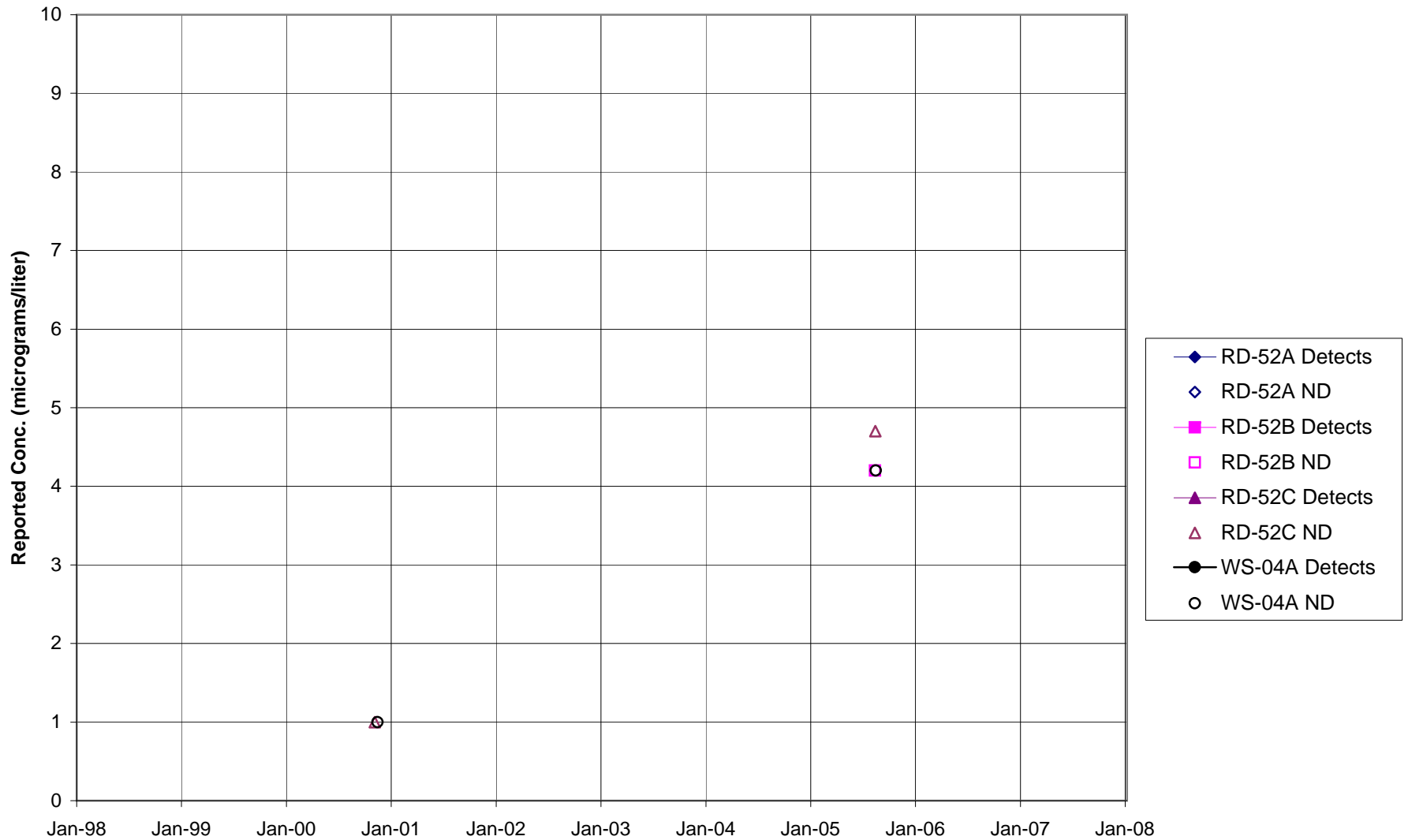
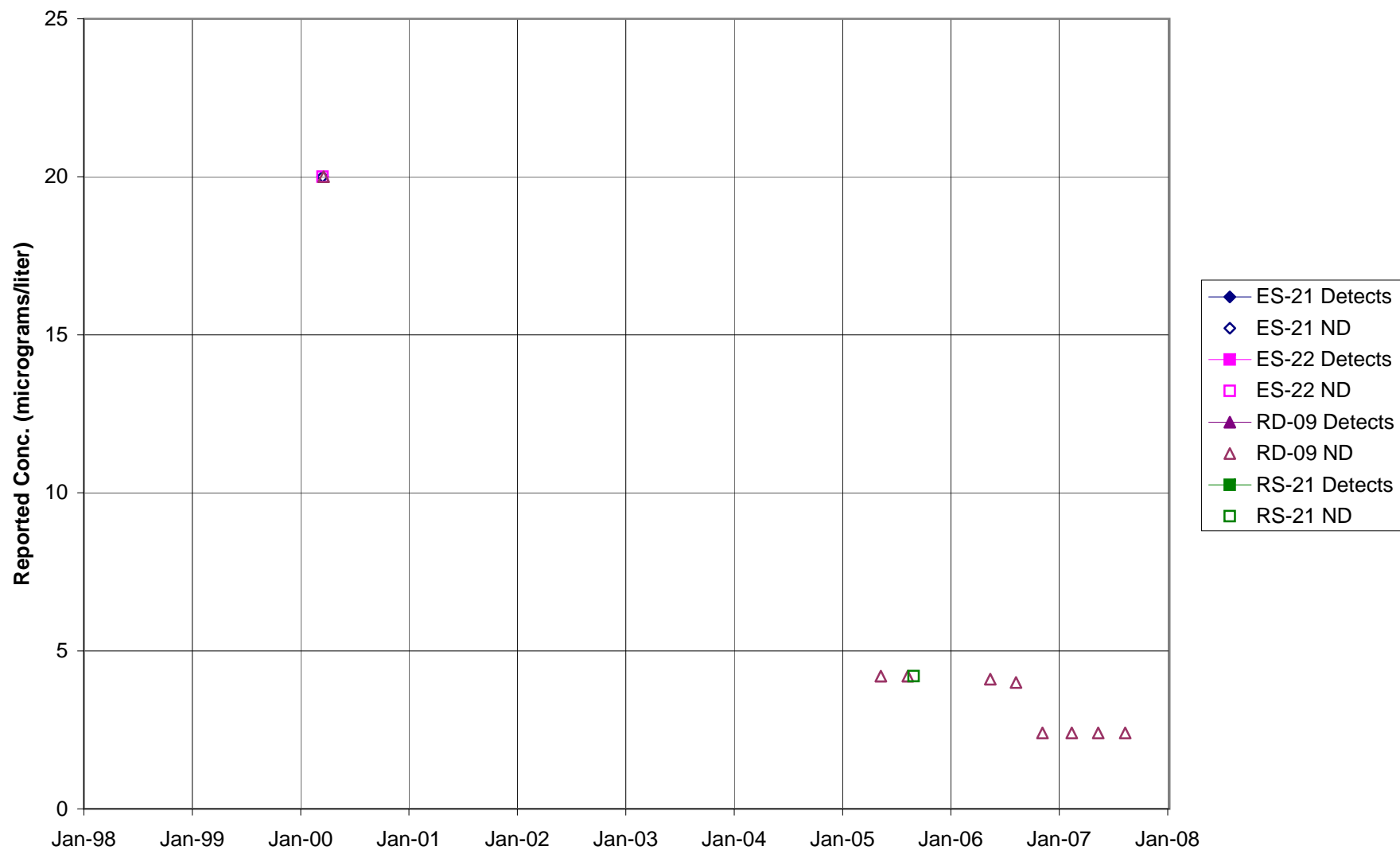
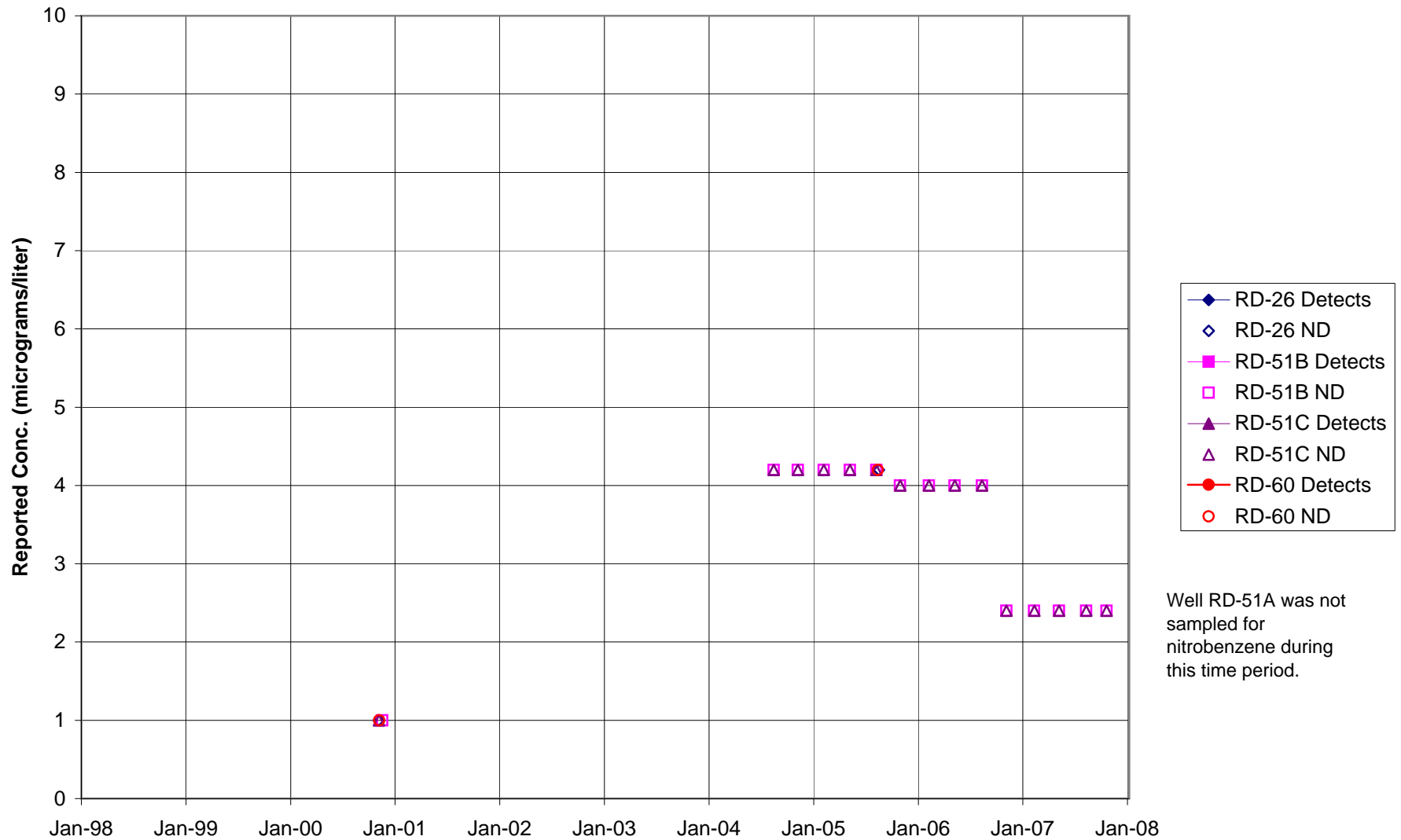


FIGURE F-246. NITROBENZENE in RD-09 AREA WELLS



**FIGURE F-247. NITROBENZENE in HELIPORT, B/204 AREA WELLS**



**FIGURE F-248. NITROBENZENE in ALFA / BRAVO AREA WELLS**

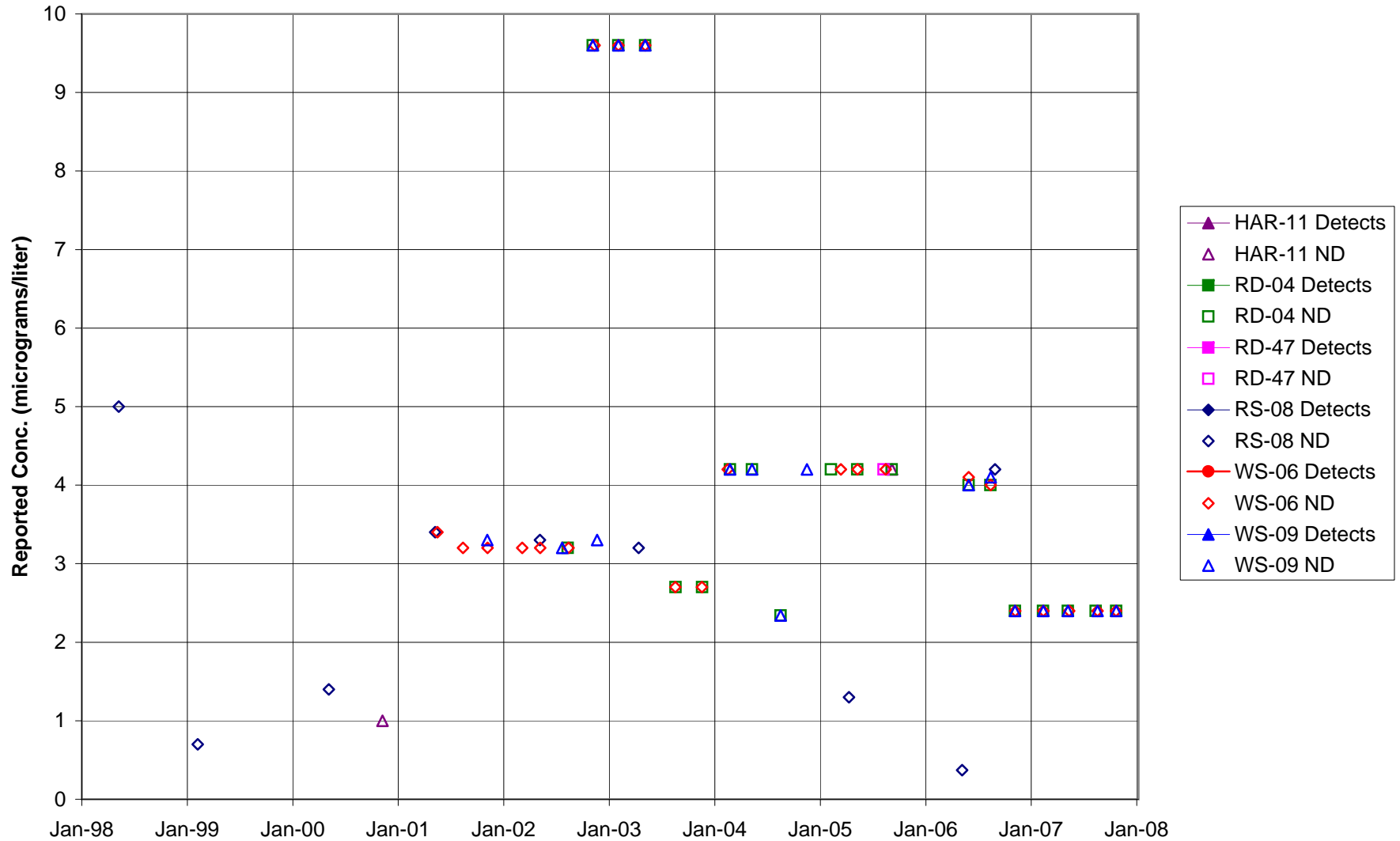




FIGURE F-249. NITROBENZENE in SPA AREA WELLS

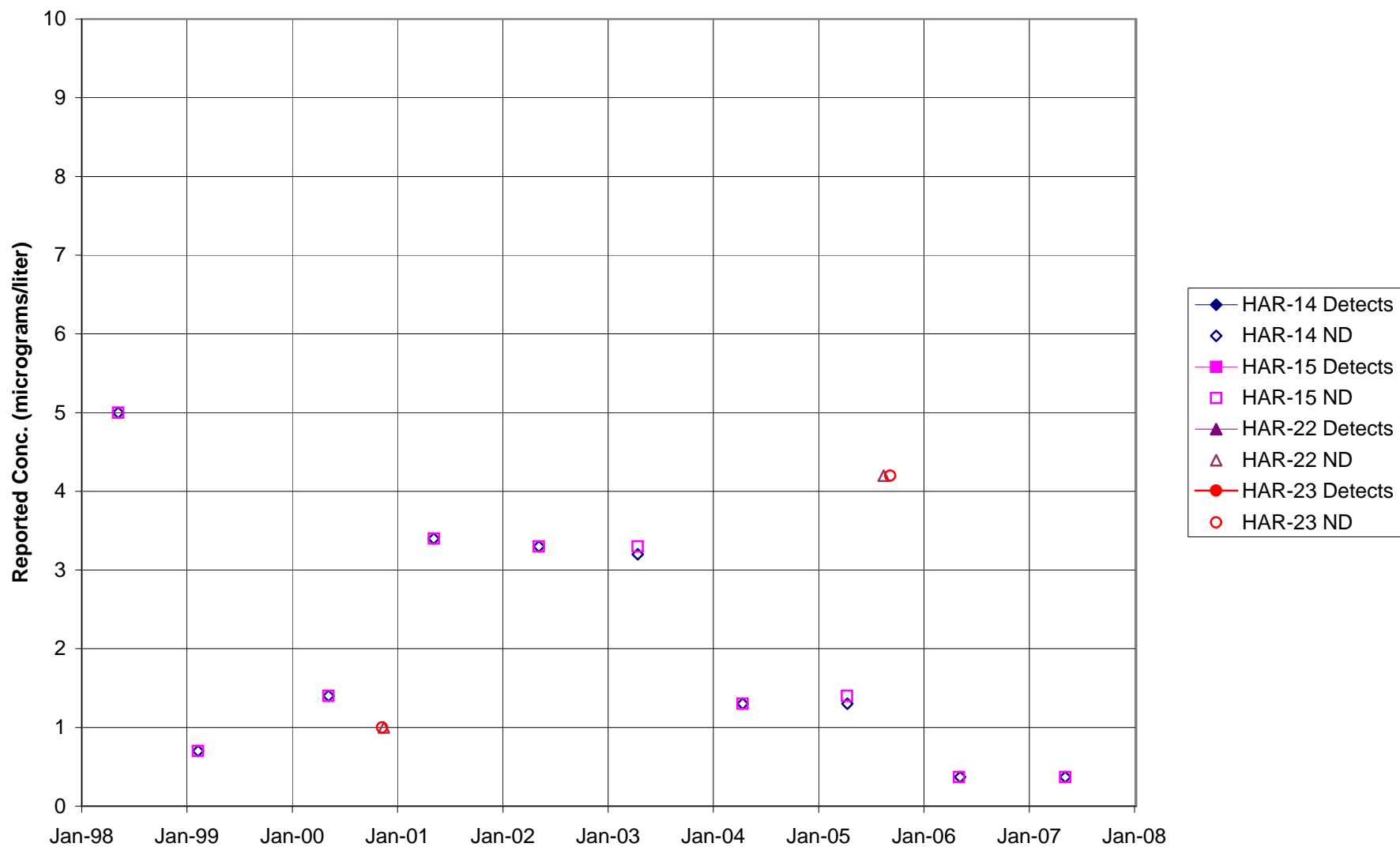
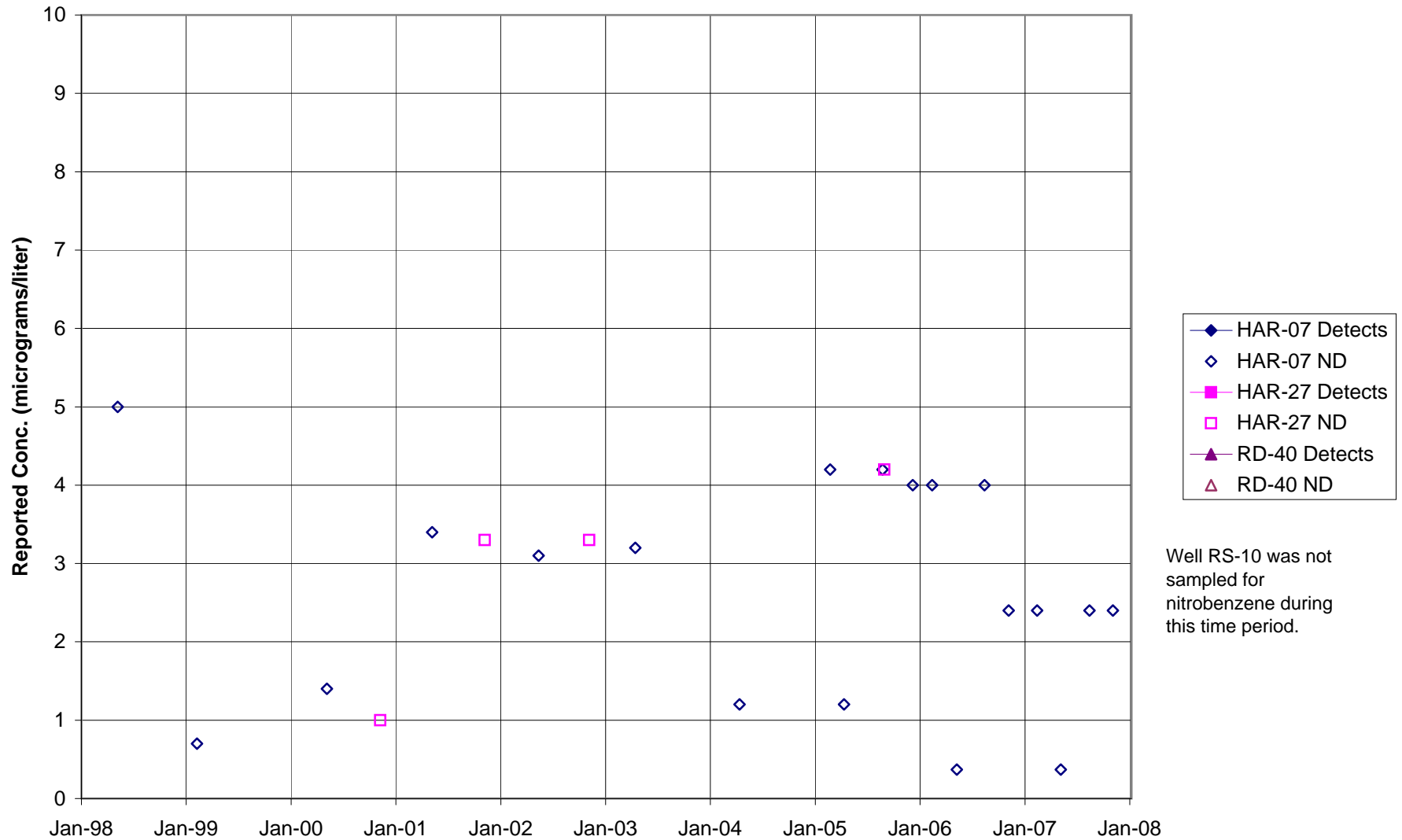


FIGURE F-250. NITROBENZENE in COCA / PLF AREA WELLS



Well RS-10 was not sampled for nitrobenzene during this time period.

**FIGURE F-251. NITROBENZENE in DELTA / BUFFER ZONE AREA WELLS**

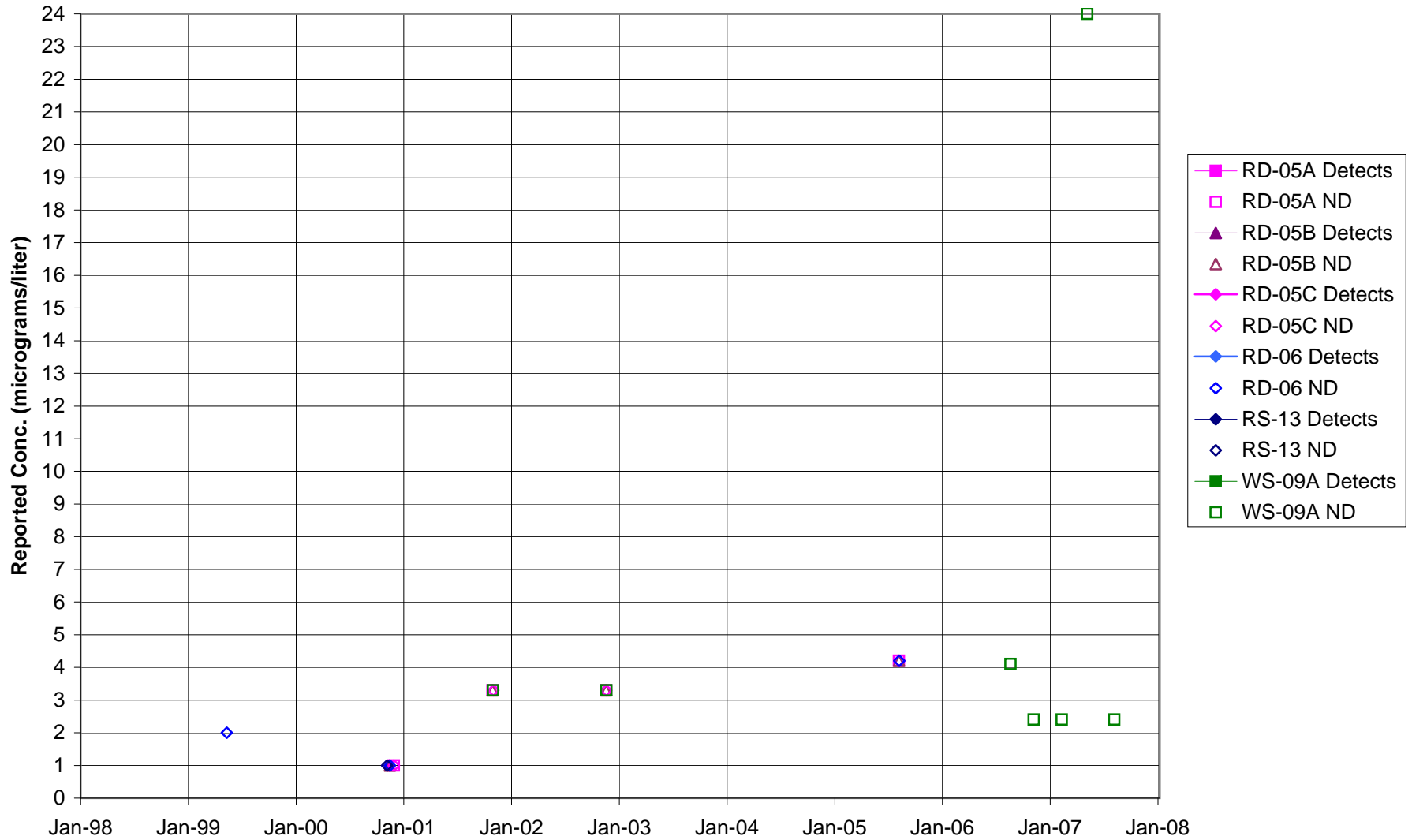


FIGURE F-252. NITROBENZENE in AREA IV WELLS

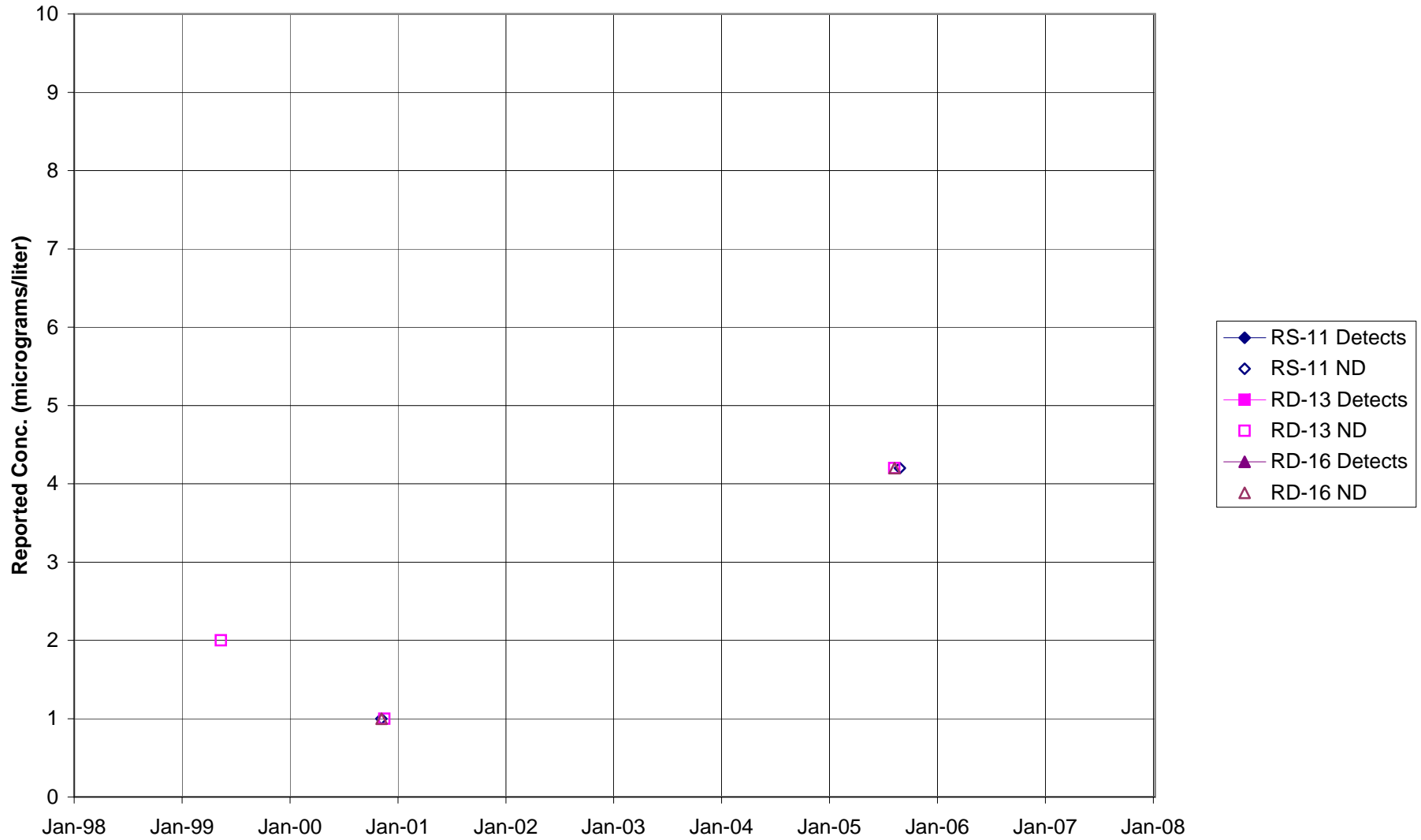




FIGURE F-254. NDMA in MAIN GATE AREA WELLS - 1

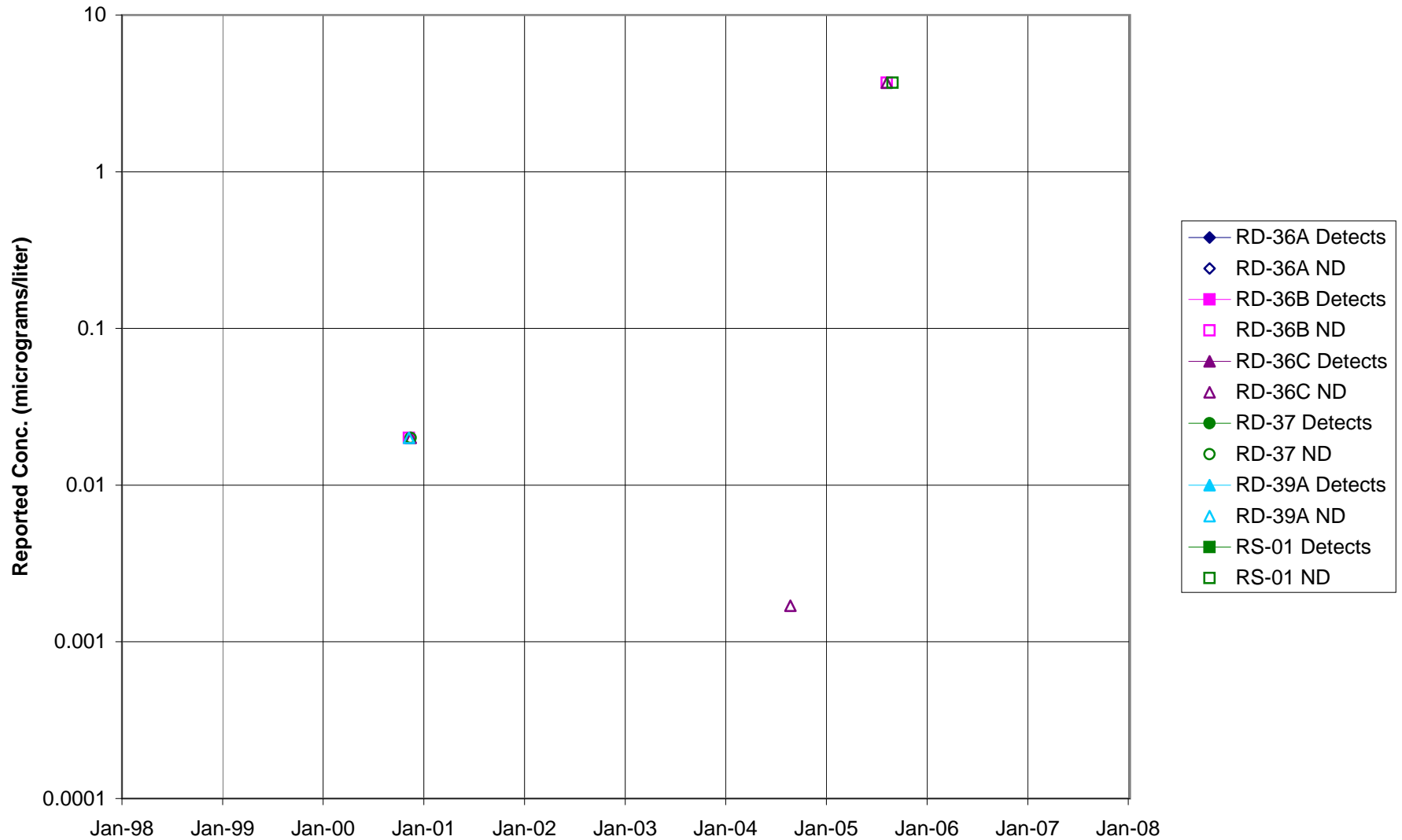


FIGURE F-255. NDMA in MAIN GATE AREA WELLS - 2

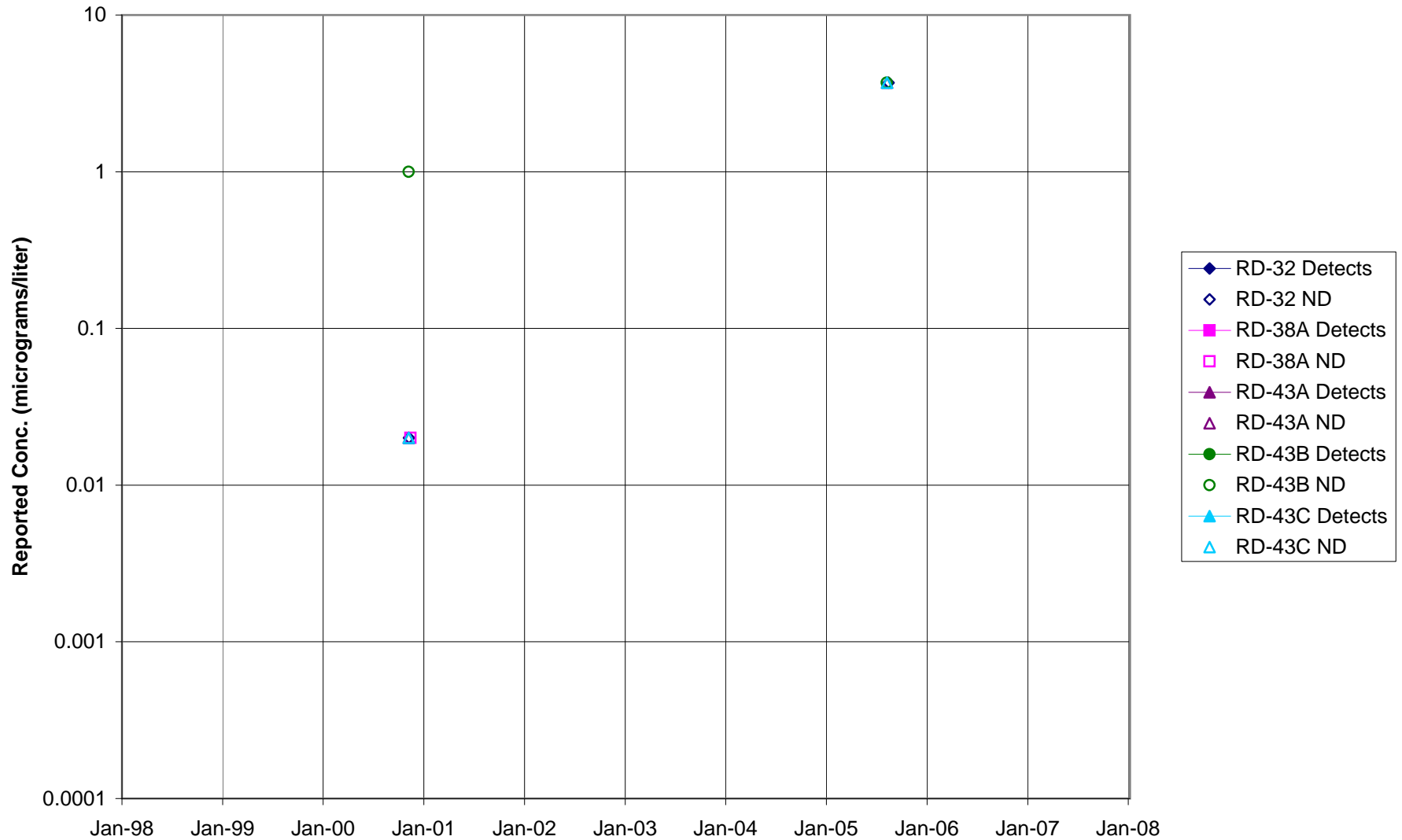


FIGURE F-256. NDMA in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1

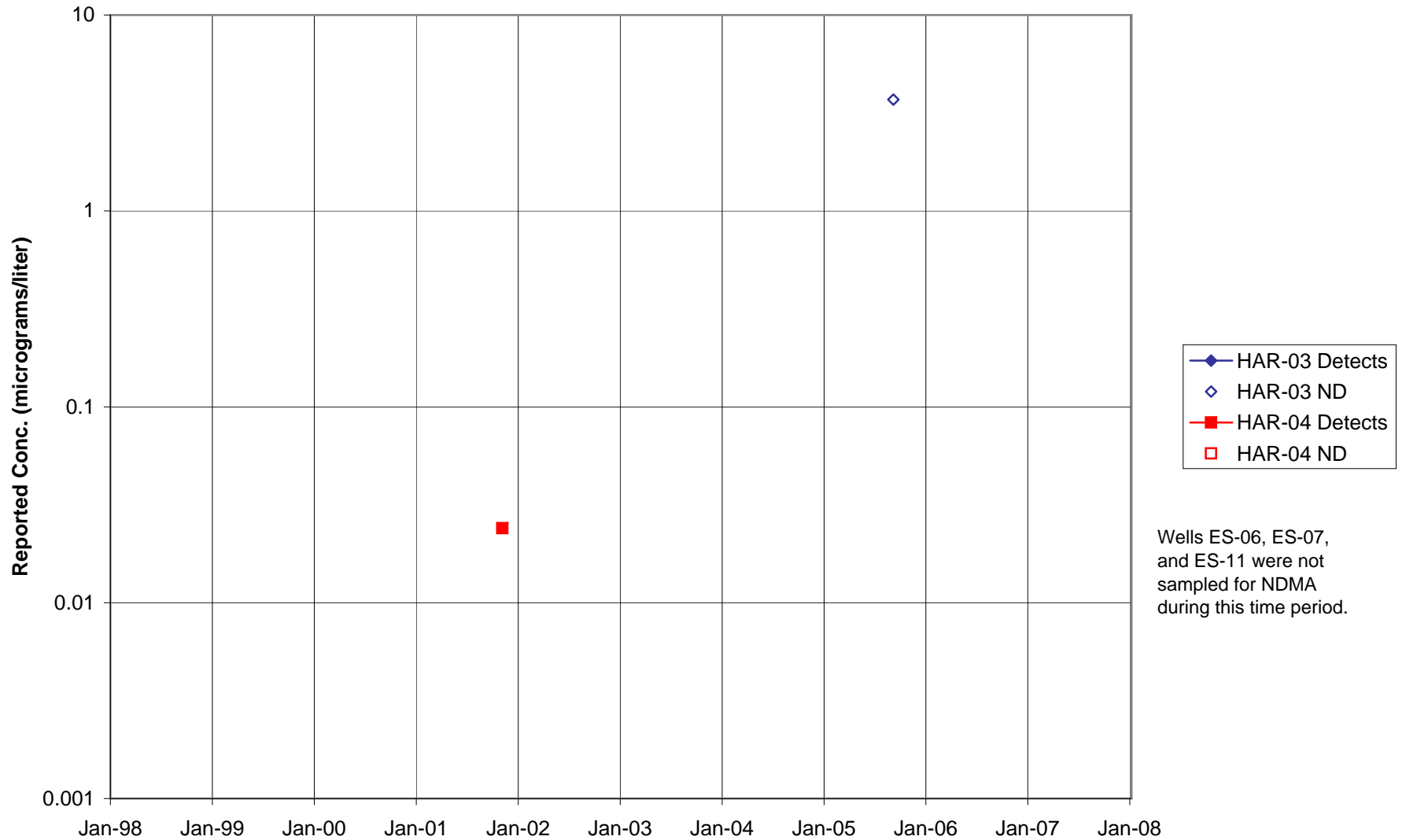




FIGURE F-257. NDMA in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 2

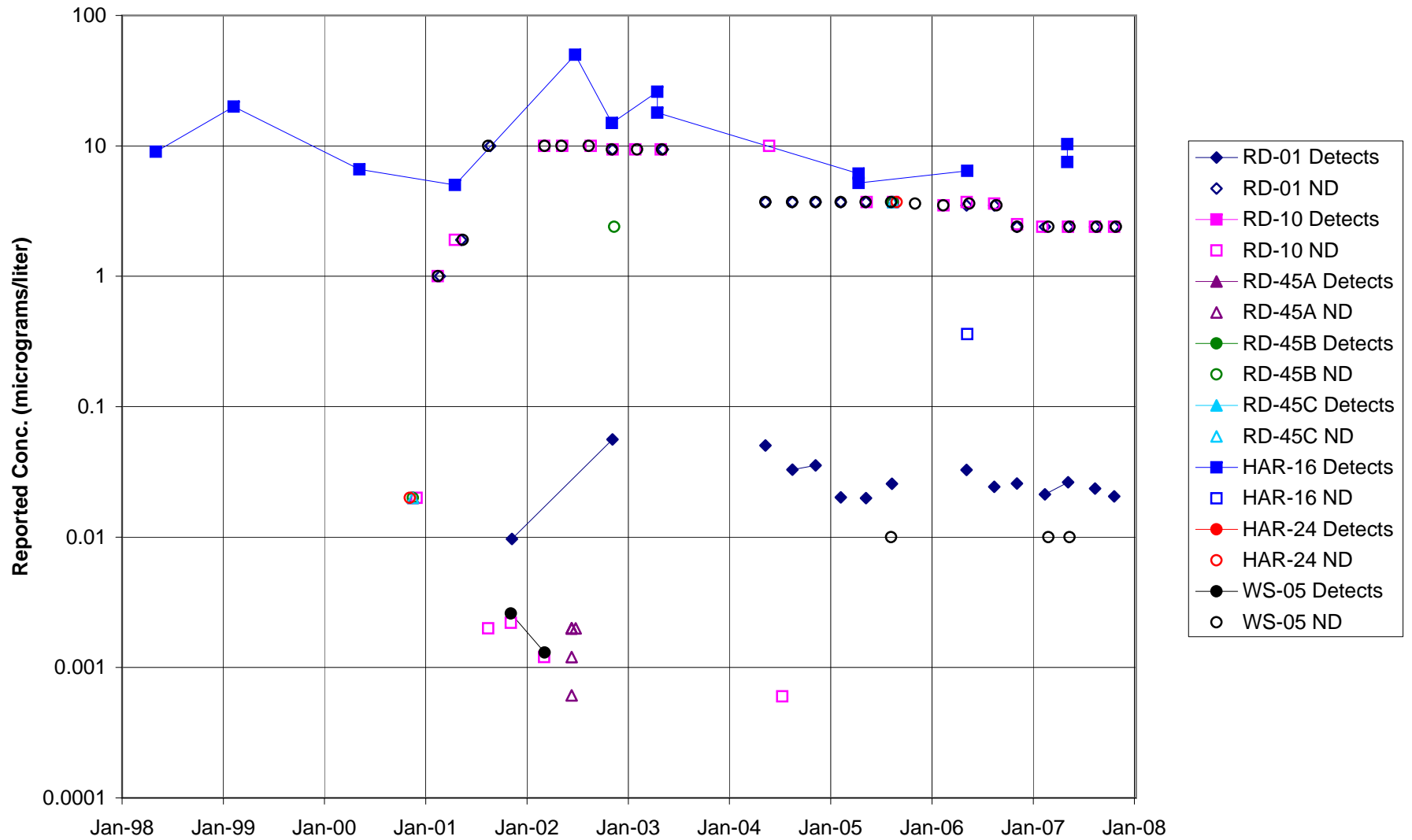


FIGURE F-258. NDMA in CTL-III / PERIMETER POND AREA WELLS

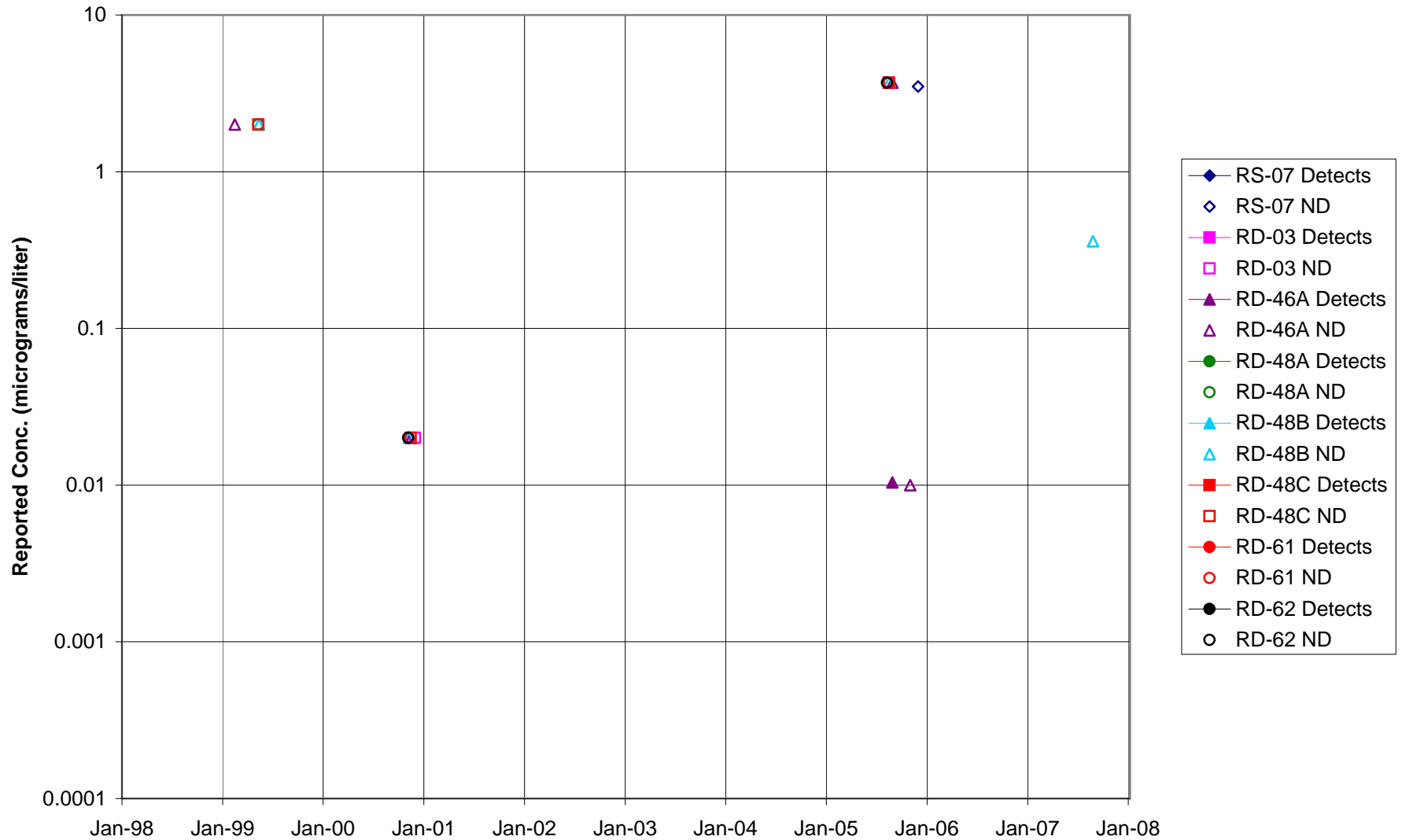




FIGURE F-260. NDMA in ECL AREA WELLS

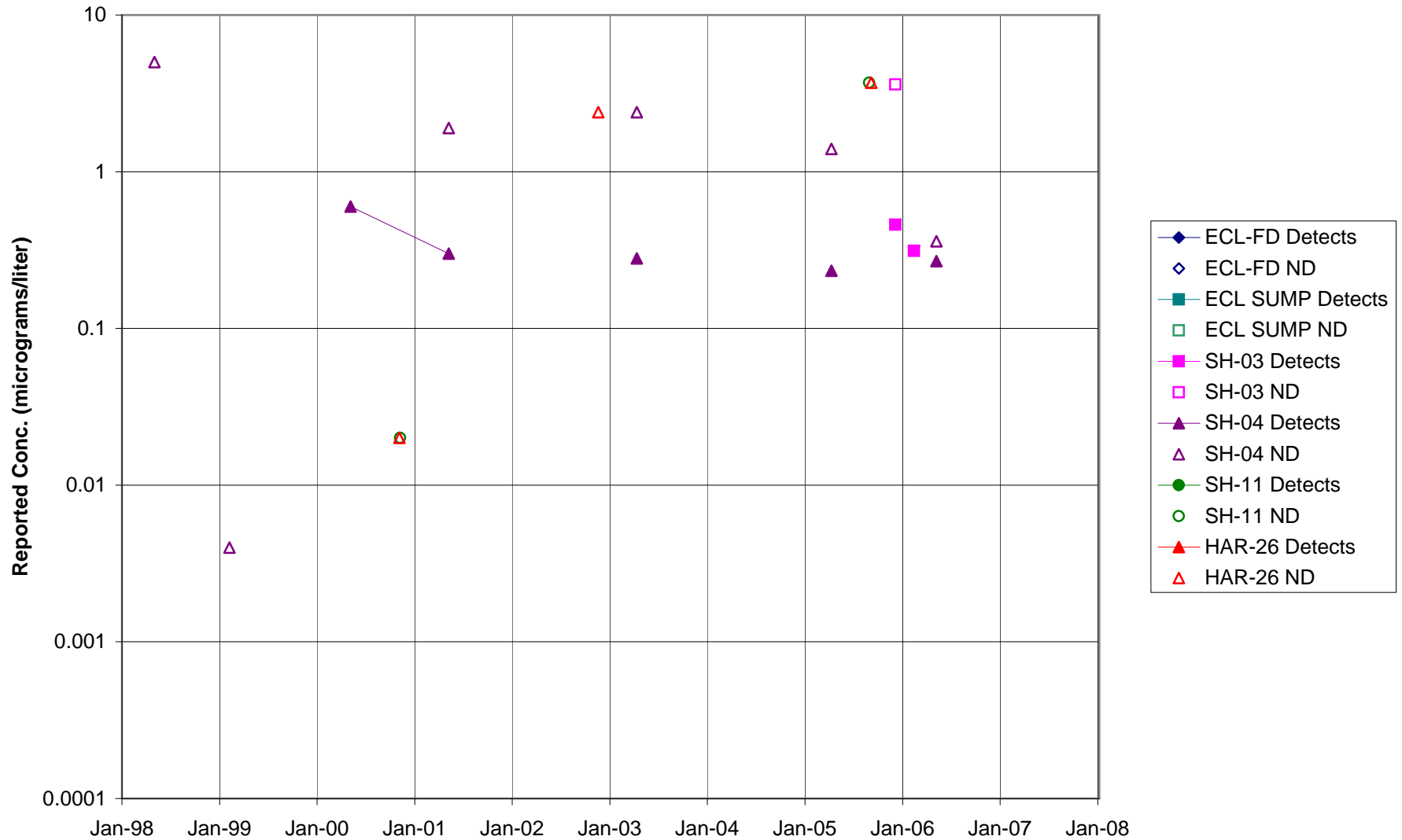


FIGURE F-261. NDMA in FORMER LOX PLANT AREA WELLS

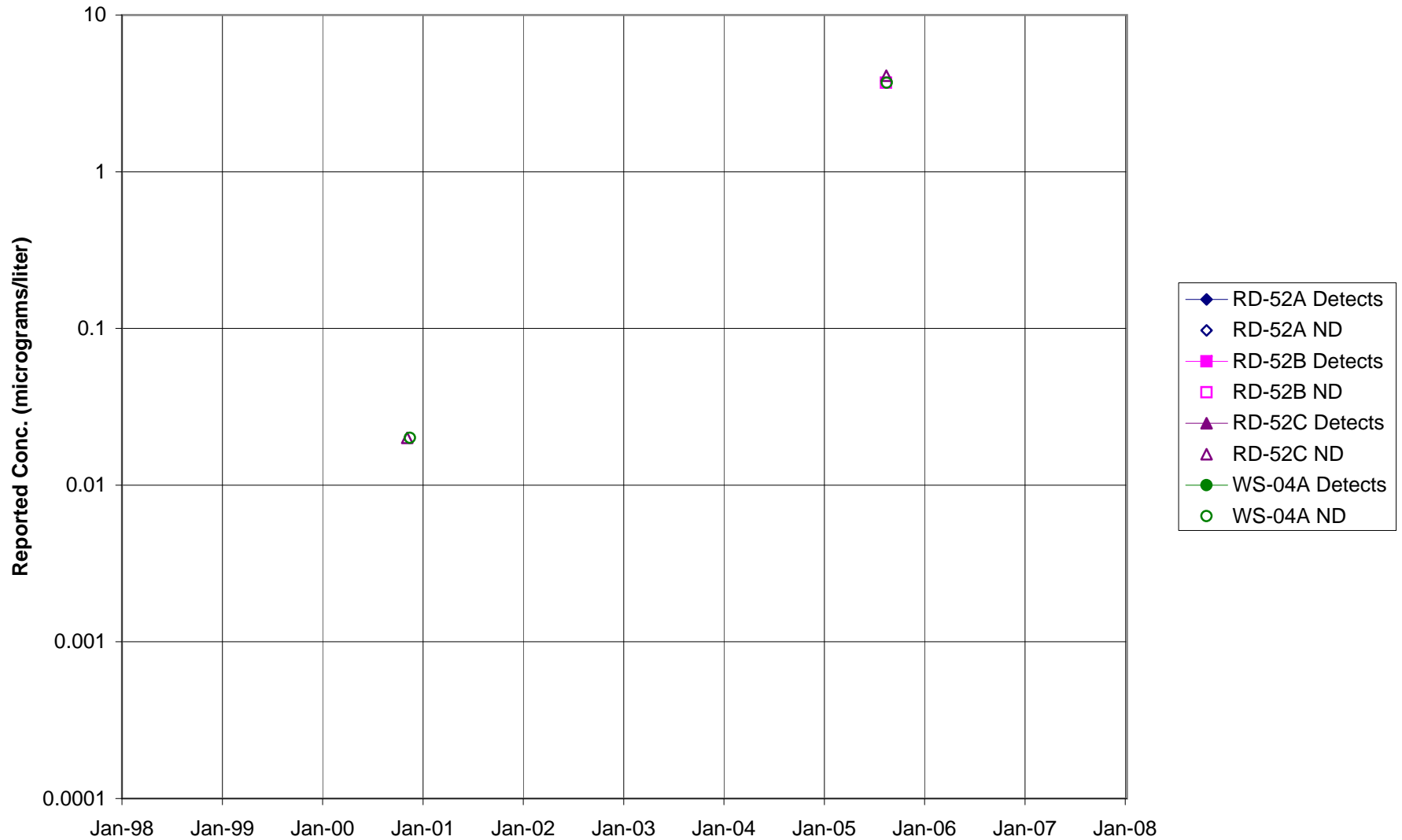
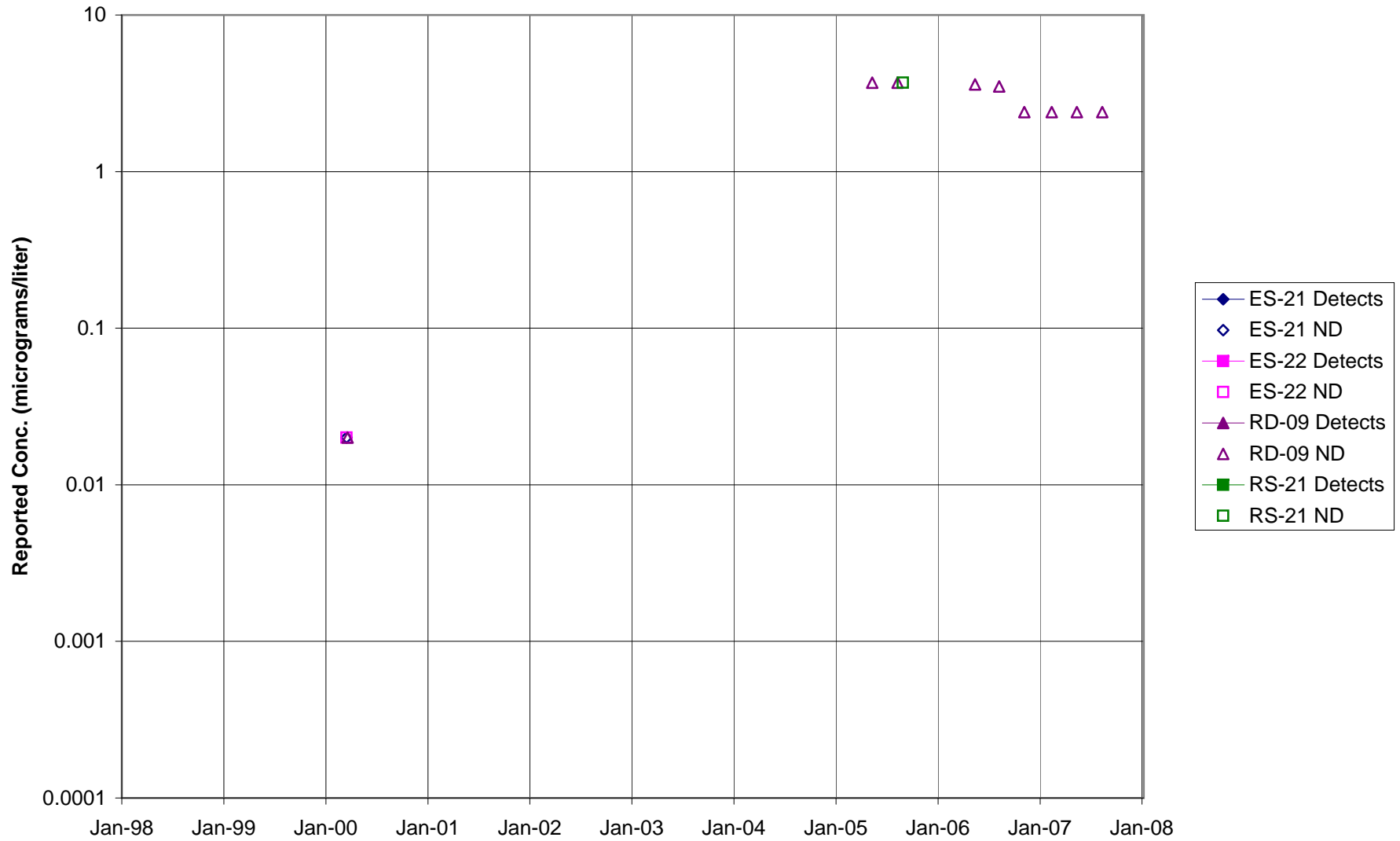


FIGURE F-262. NDMA in RD-09 AREA WELLS



**FIGURE F-263. NDMA in HELIPORT, B/204 AREA WELLS**

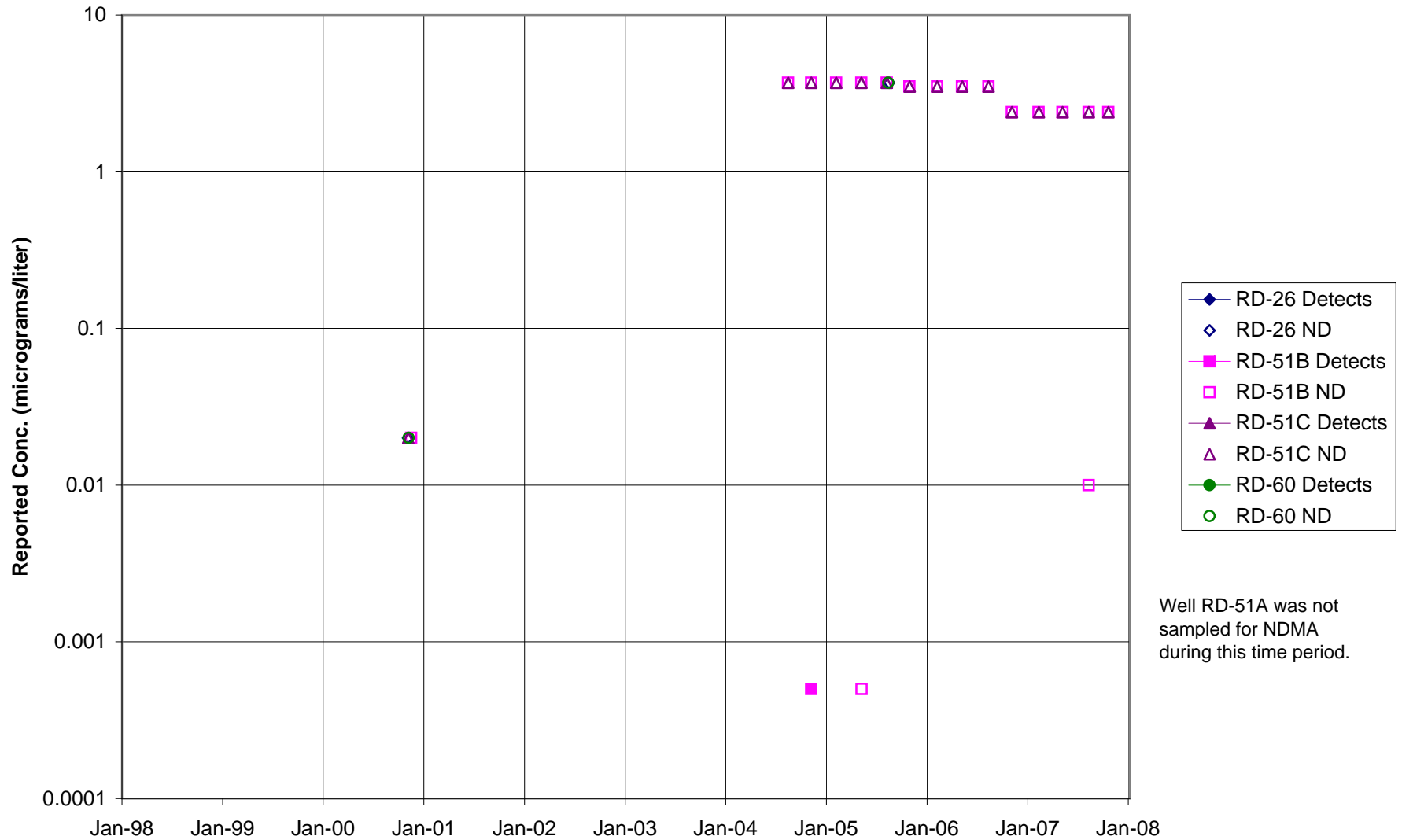


FIGURE F-264. NDMA in ALFA / BRAVO AREA WELLS

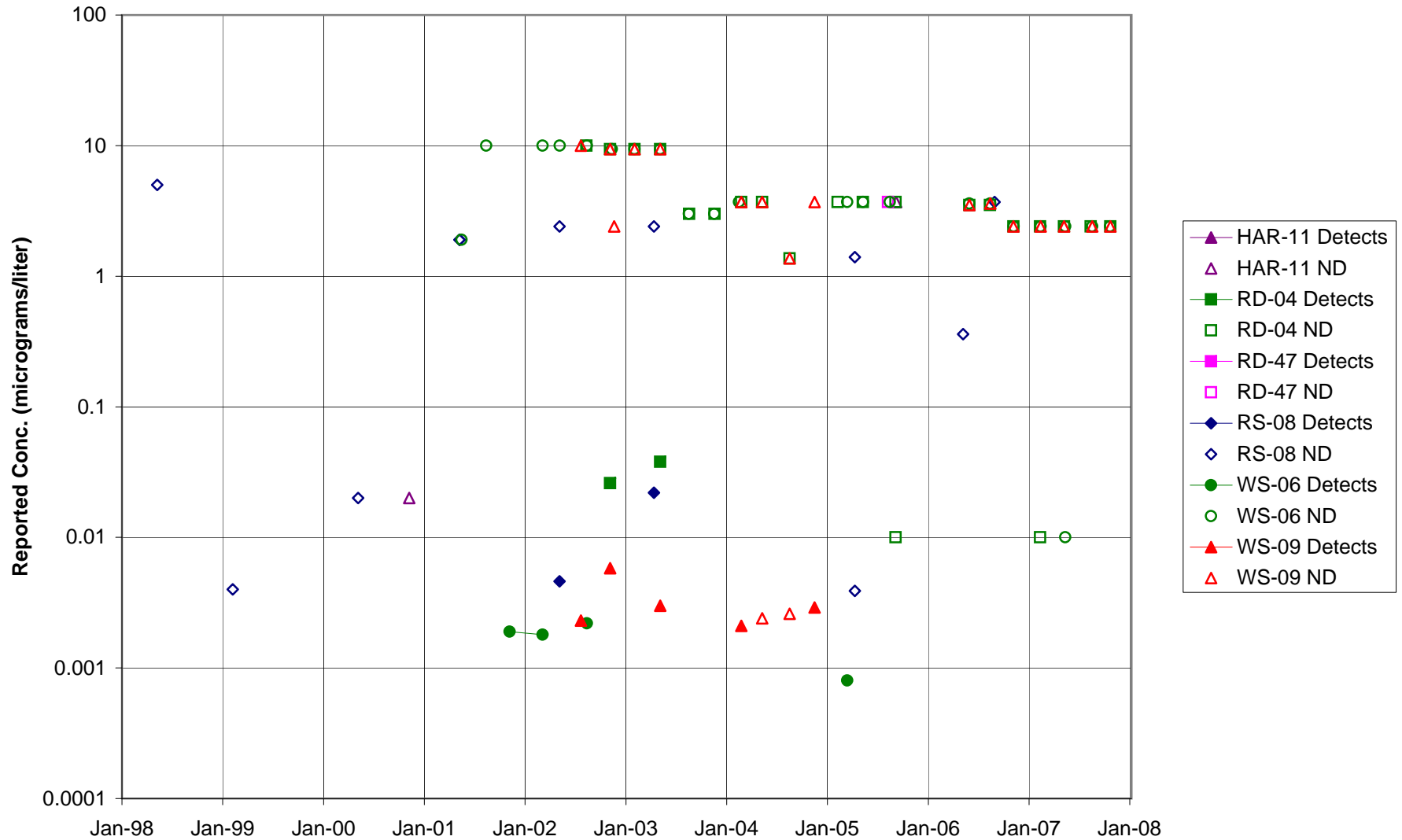




FIGURE F-265. NDMA in SPA AREA WELLS

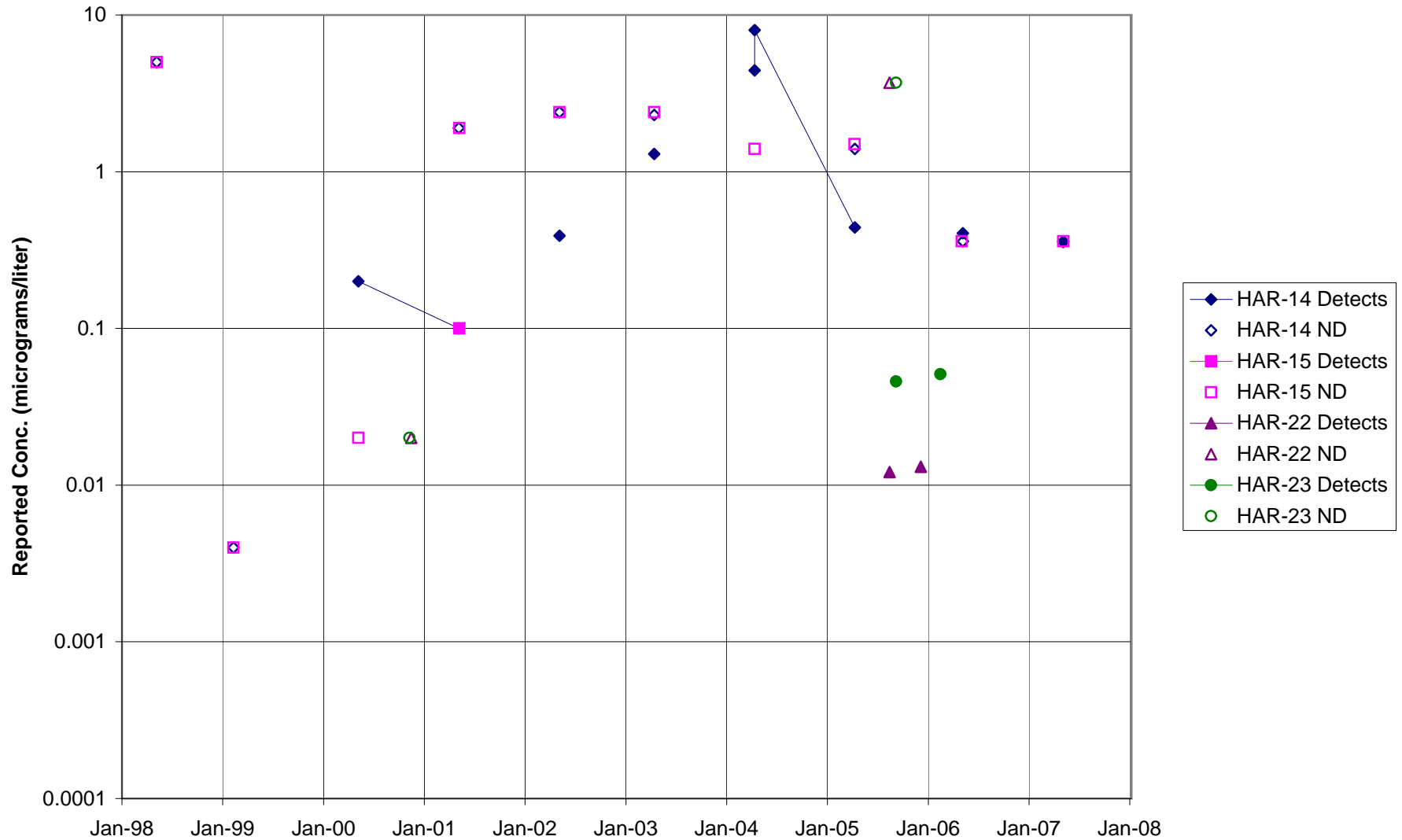


FIGURE F-266. NDMA in COCA / PLF AREA WELLS

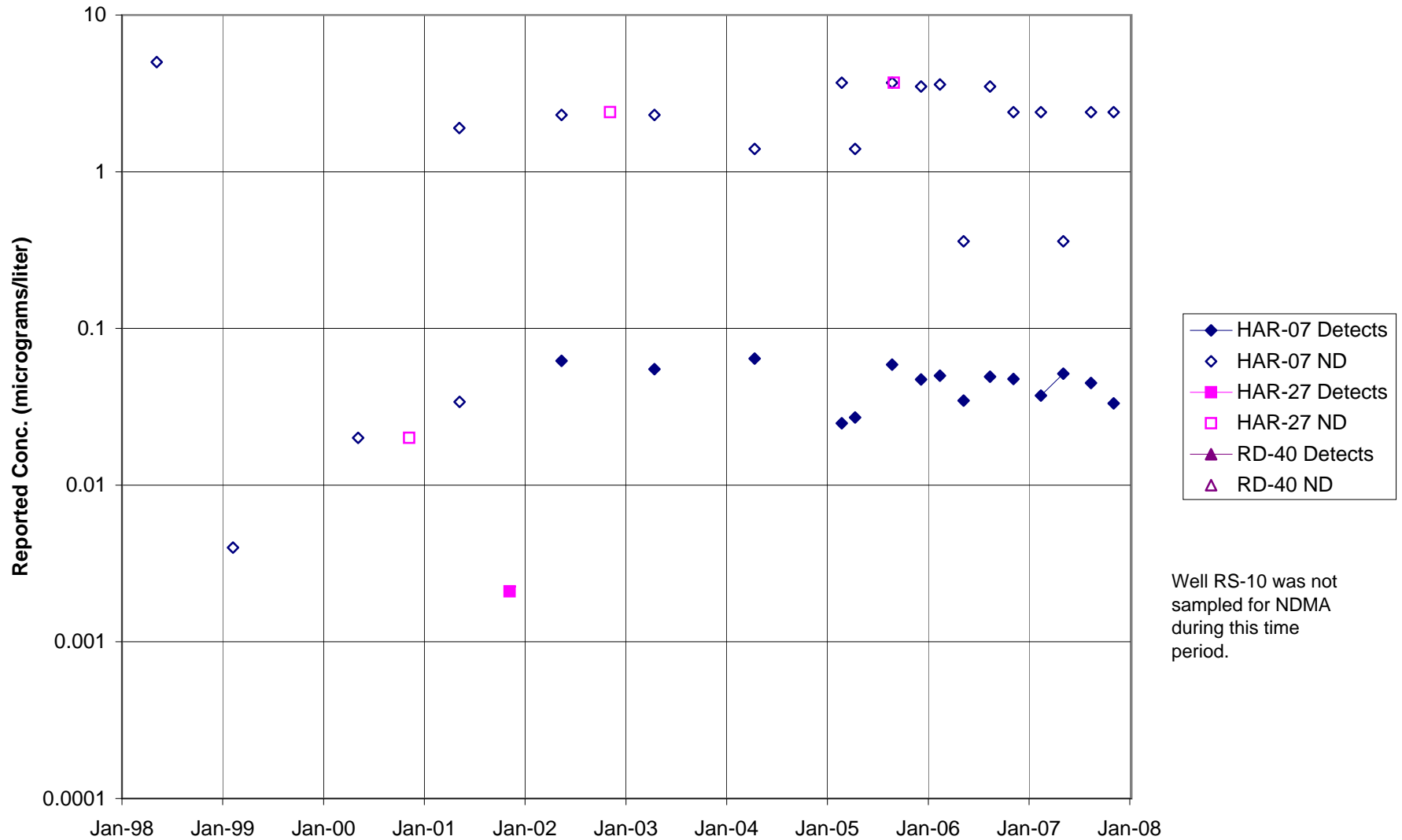


FIGURE F-267. NDMA in DELTA / BUFFER ZONE AREA WELLS

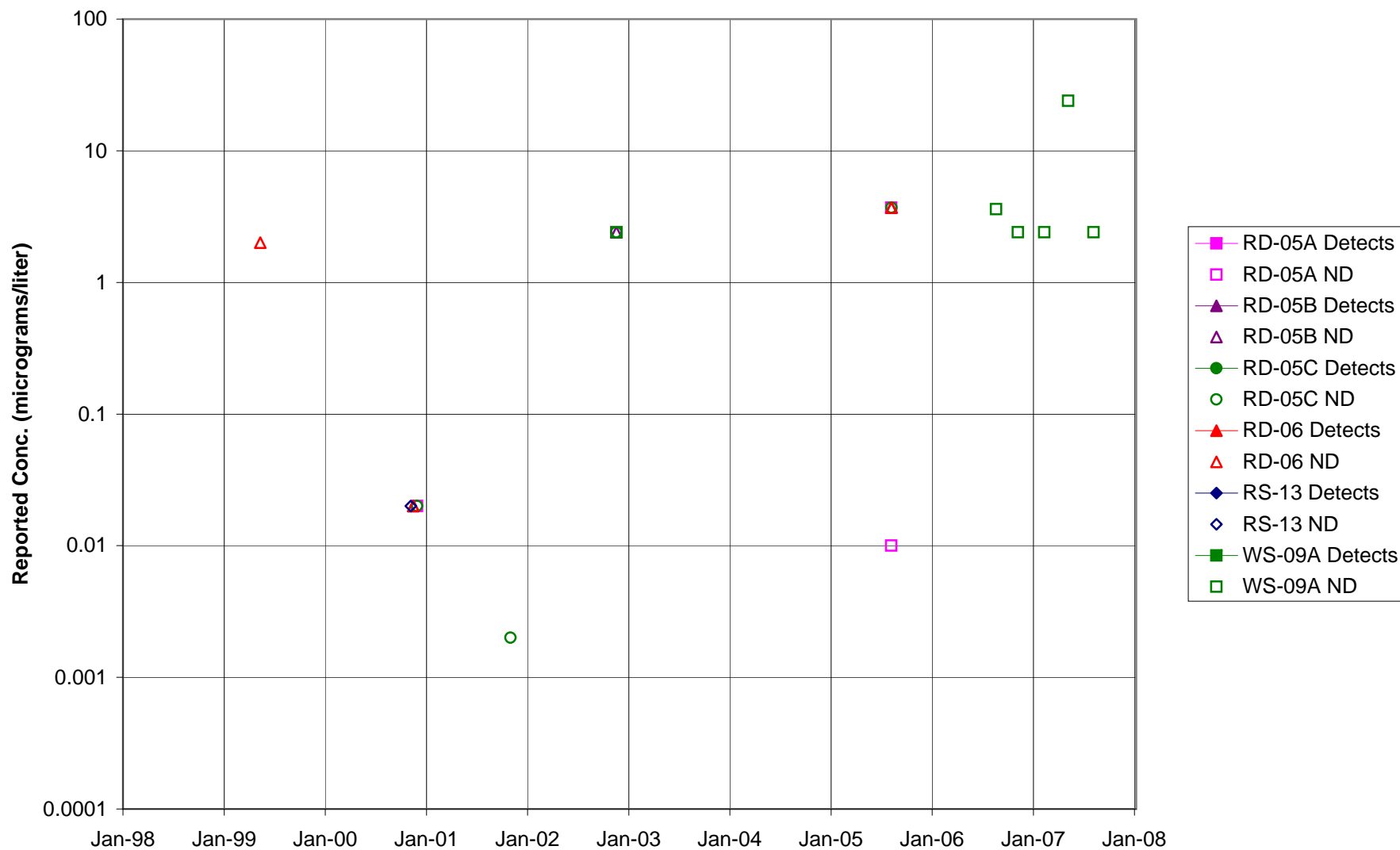


FIGURE F-268. NDMA in AREA IV WELLS

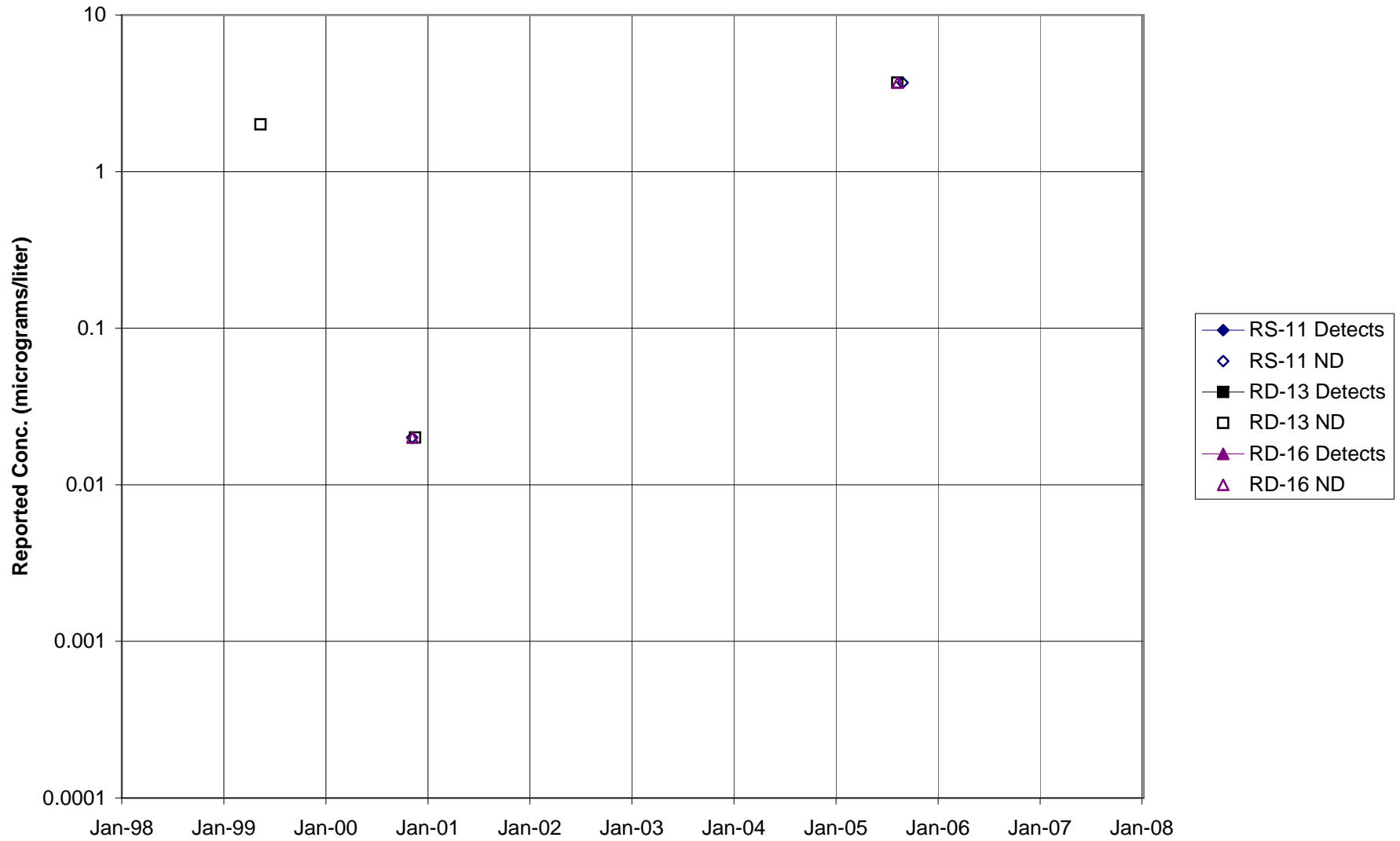
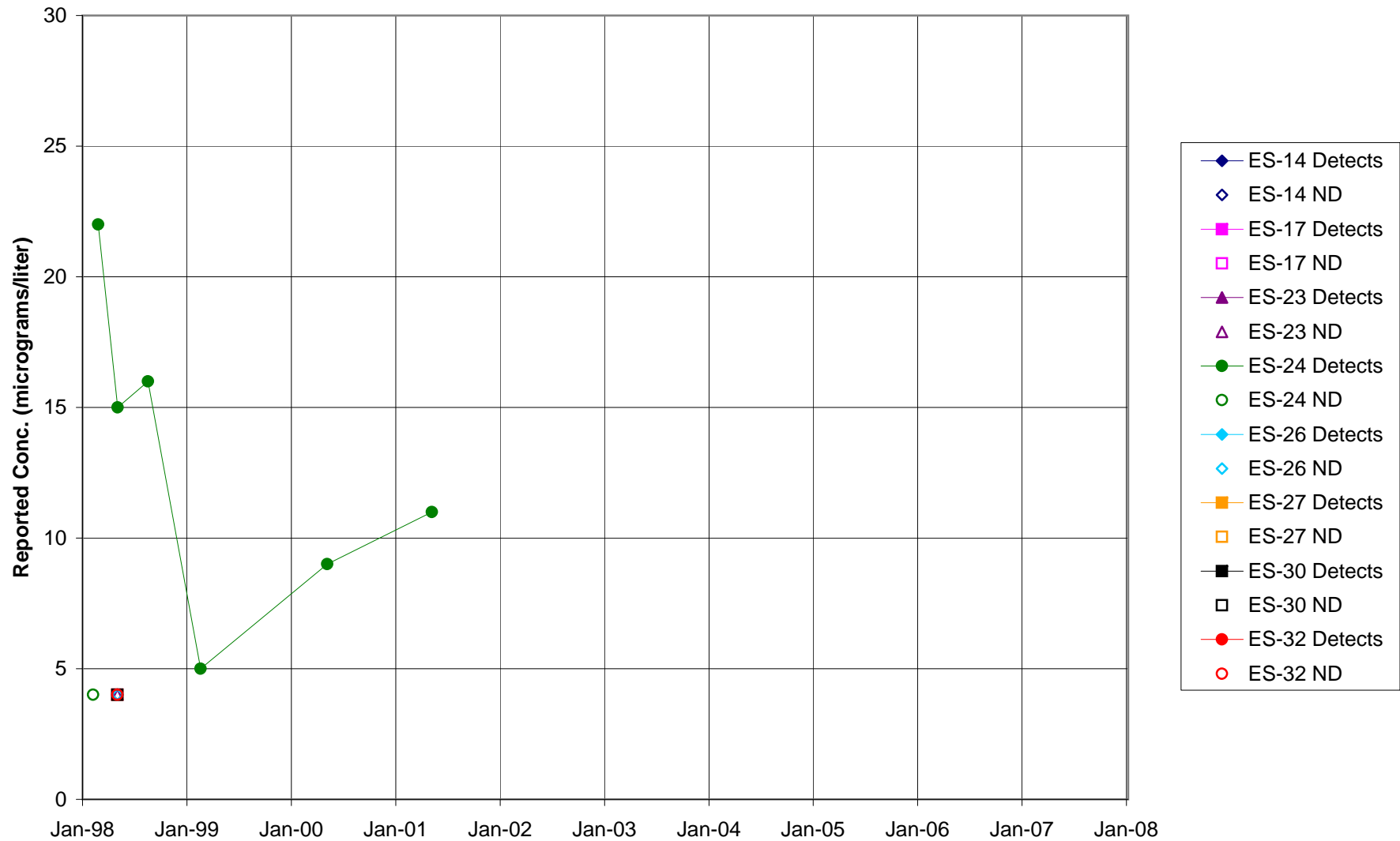


FIGURE F-269. PERCHLORATE in STL-IV AREA SHALLOW WELLS



**FIGURE F-270. PERCHLORATE in STL-IV AREA CHATSWORTH FORMATION WELLS**

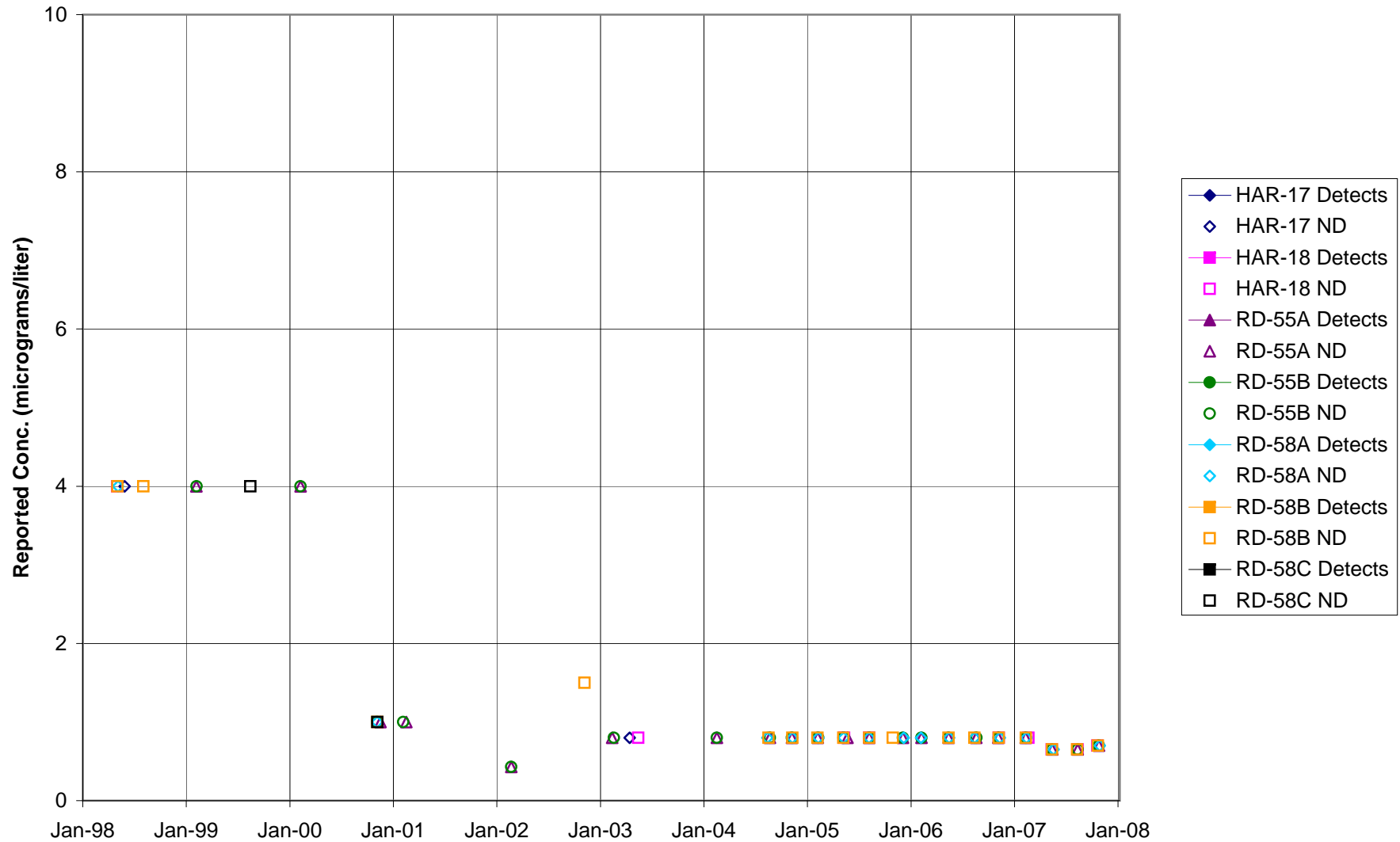


FIGURE F-271. PERCHLORATE in MAIN GATE AREA WELLS - 1

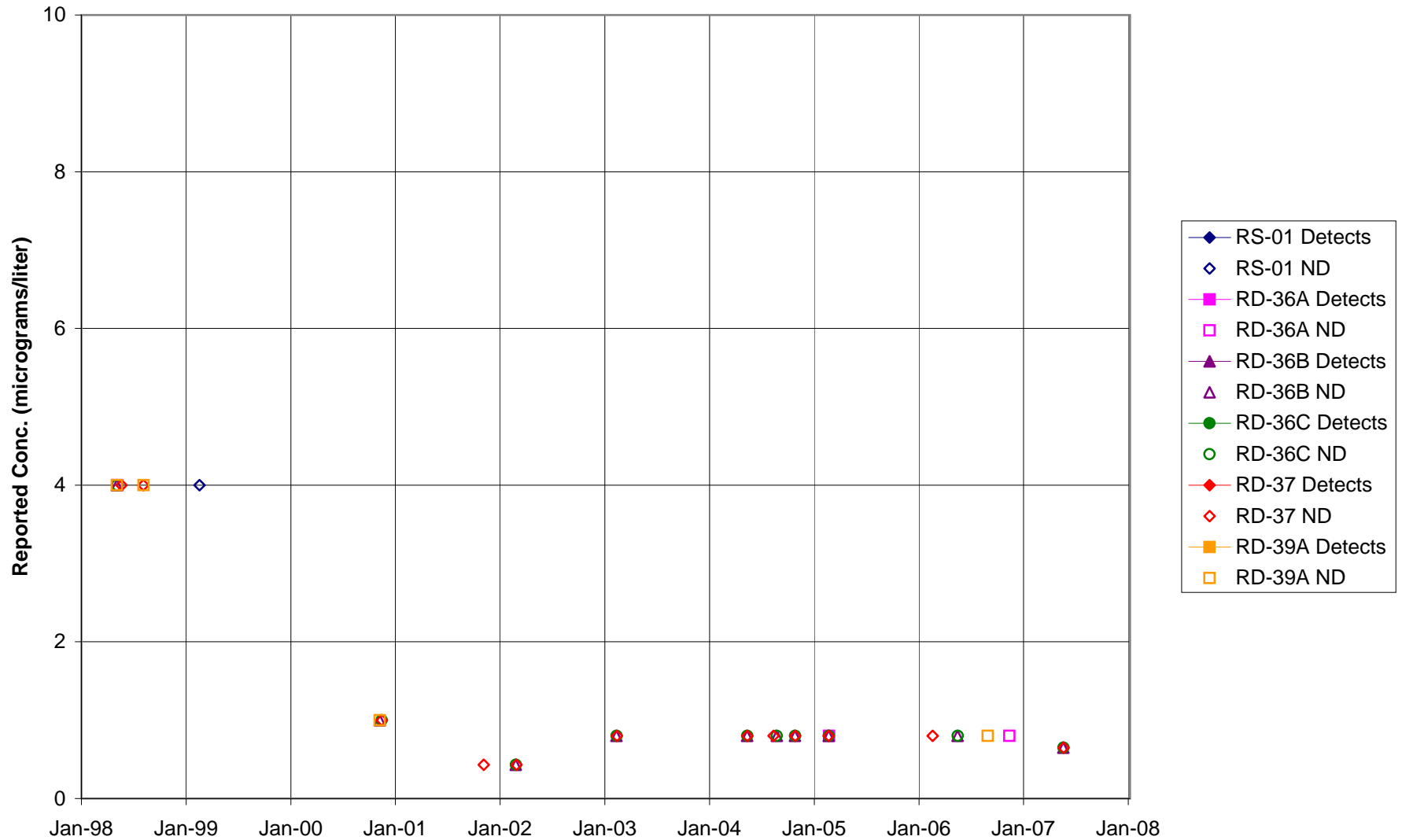
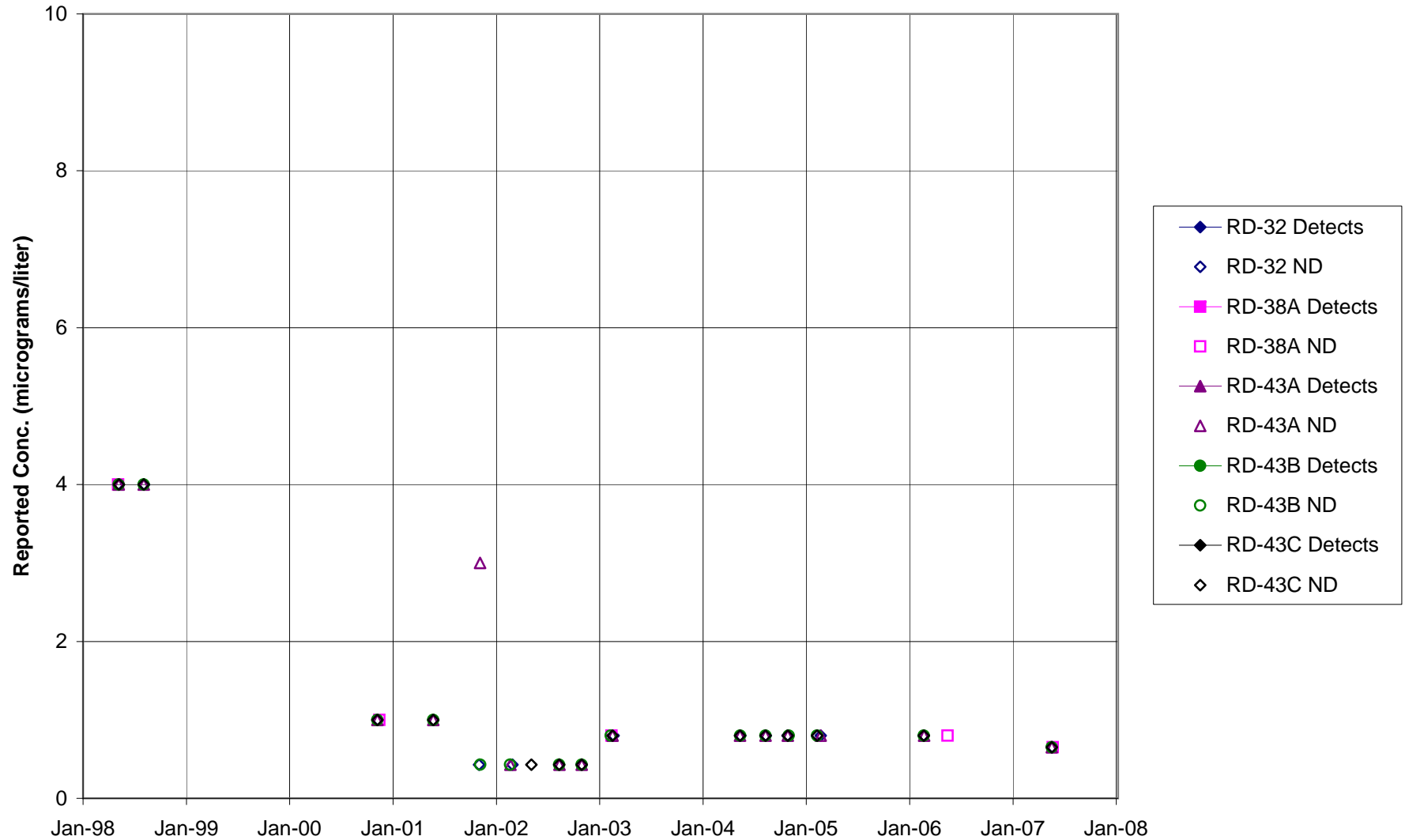


FIGURE F-272. PERCHLORATE in MAIN GATE AREA WELLS - 2





**FIGURE F-273. PERCHLORATE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1**

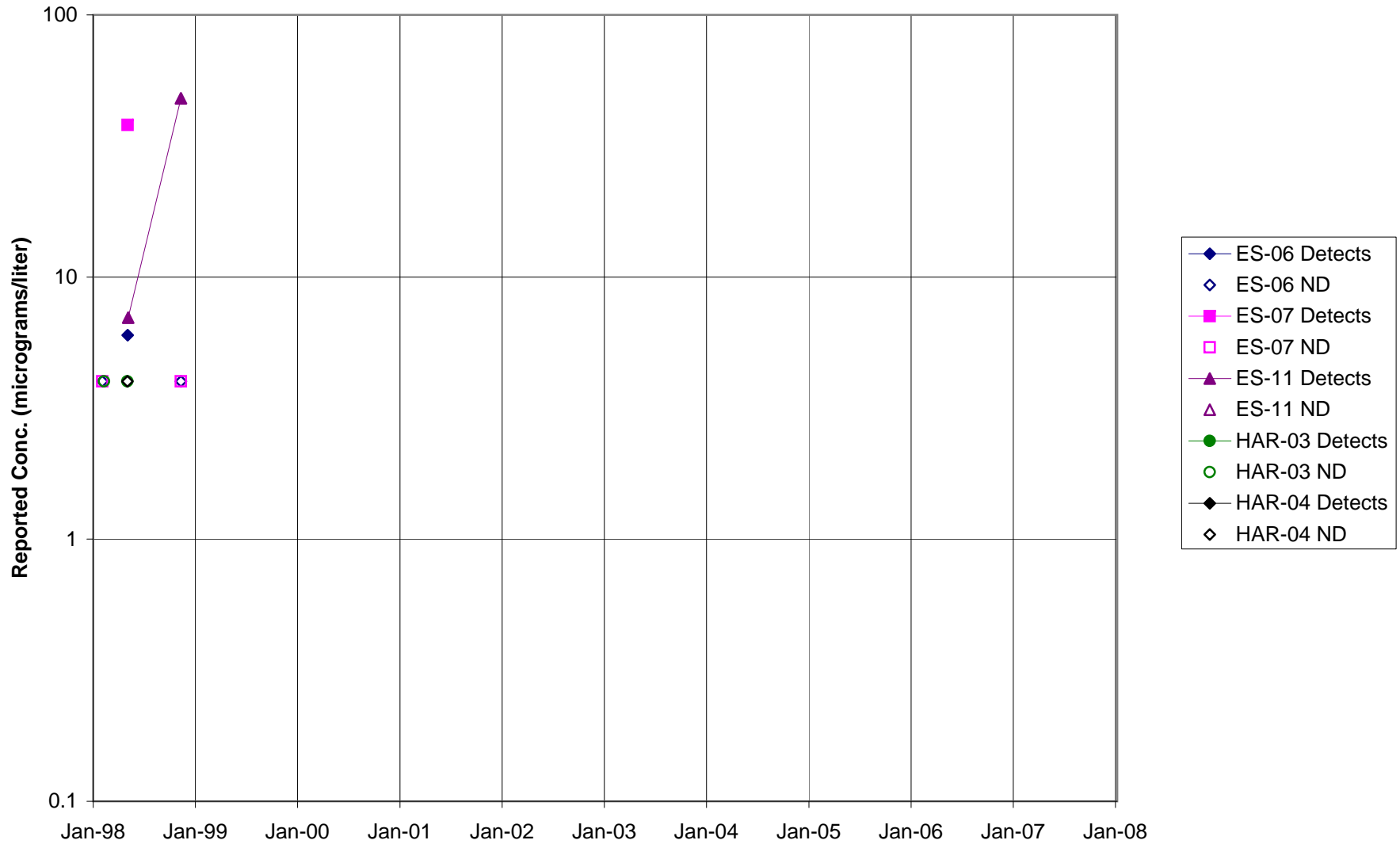


FIGURE F-274. PERCHLORATE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 2

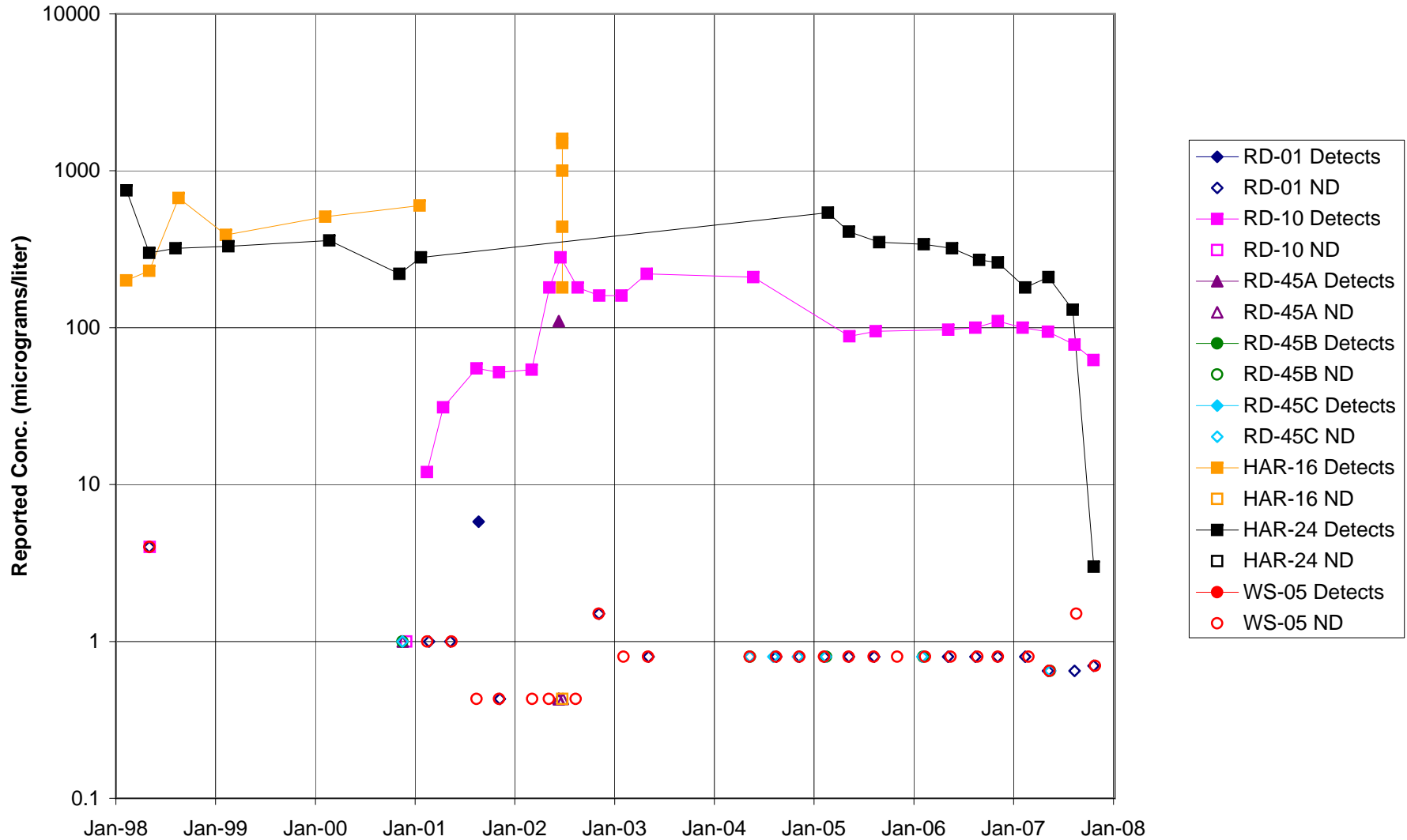


FIGURE F-275. PERCHLORATE in CTL-III / PERIMETER POND AREA WELLS

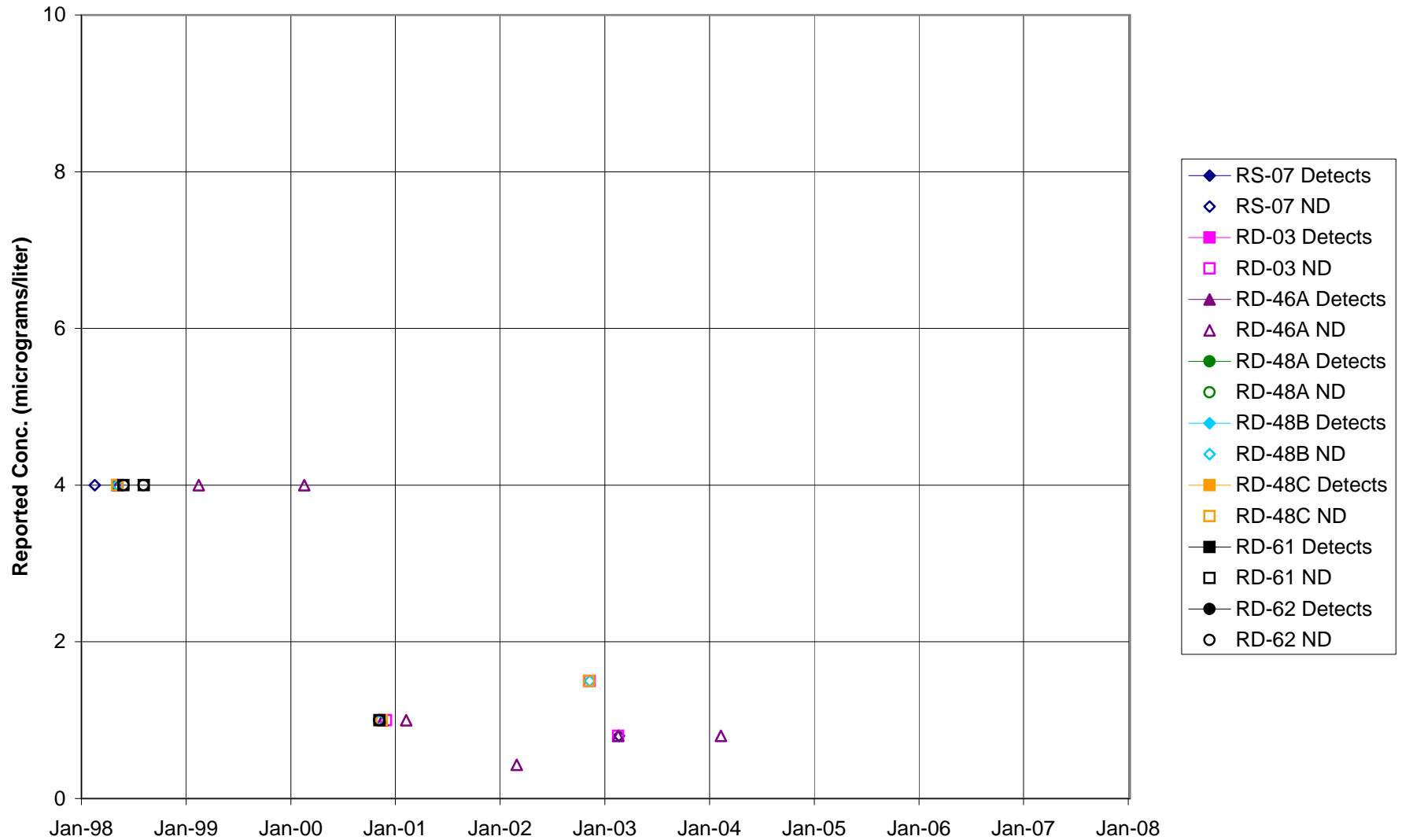
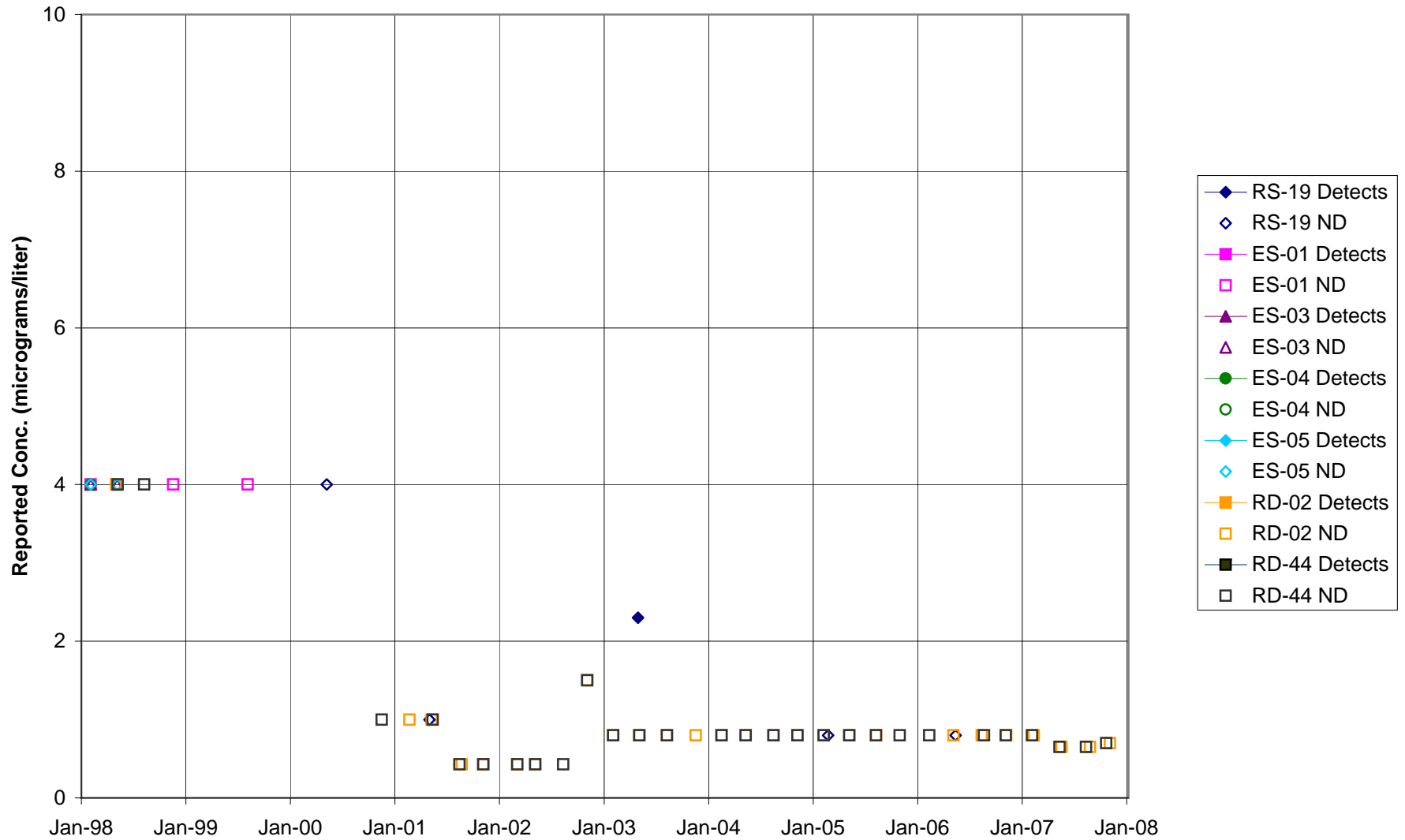


FIGURE F-276. PERCHLORATE in BOWL AREA WELLS



**FIGURE F-277. PERCHLORATE in ECL AREA WELLS**

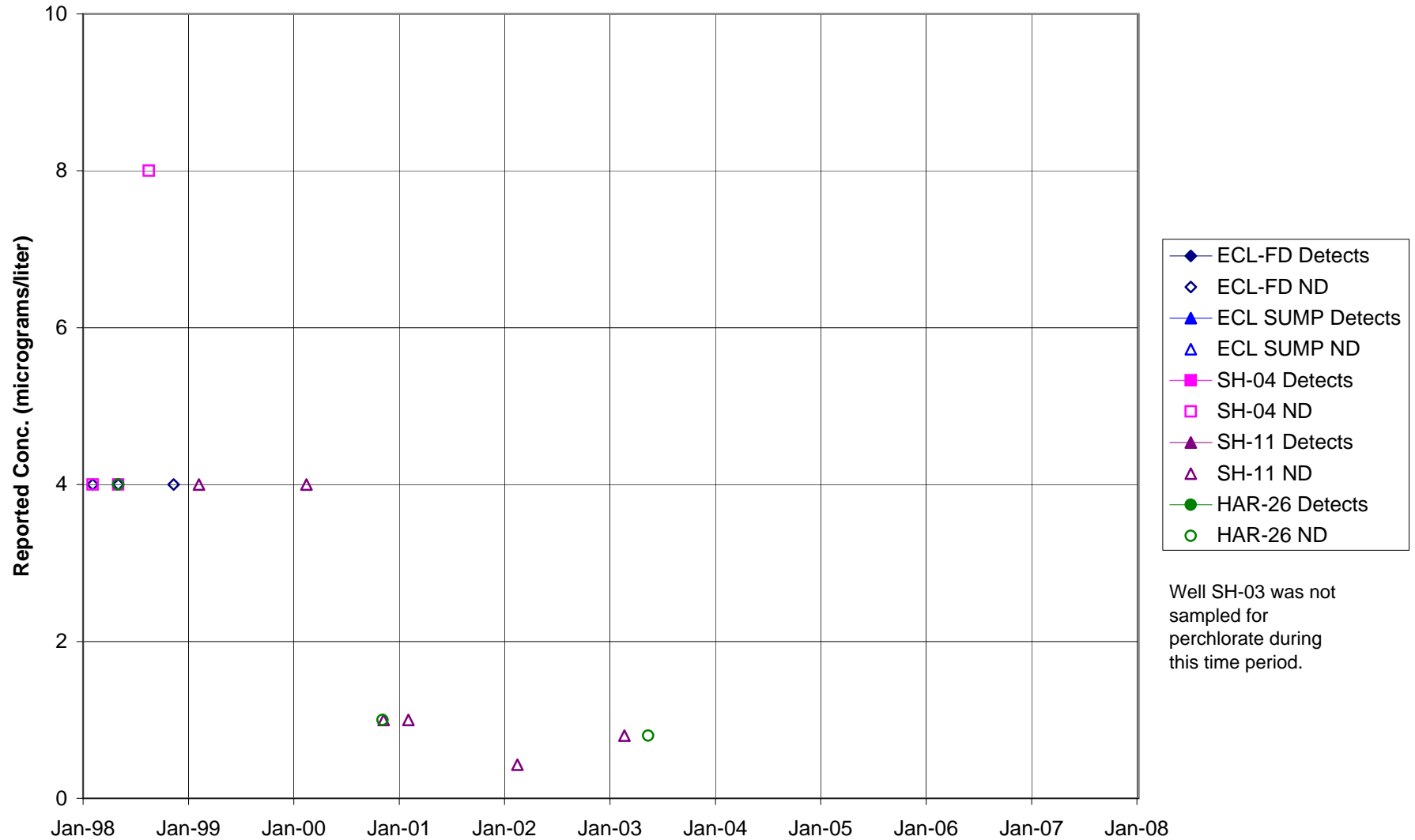


FIGURE F-278. PERCHLORATE in FORMER LOX PLANT AREA WELLS

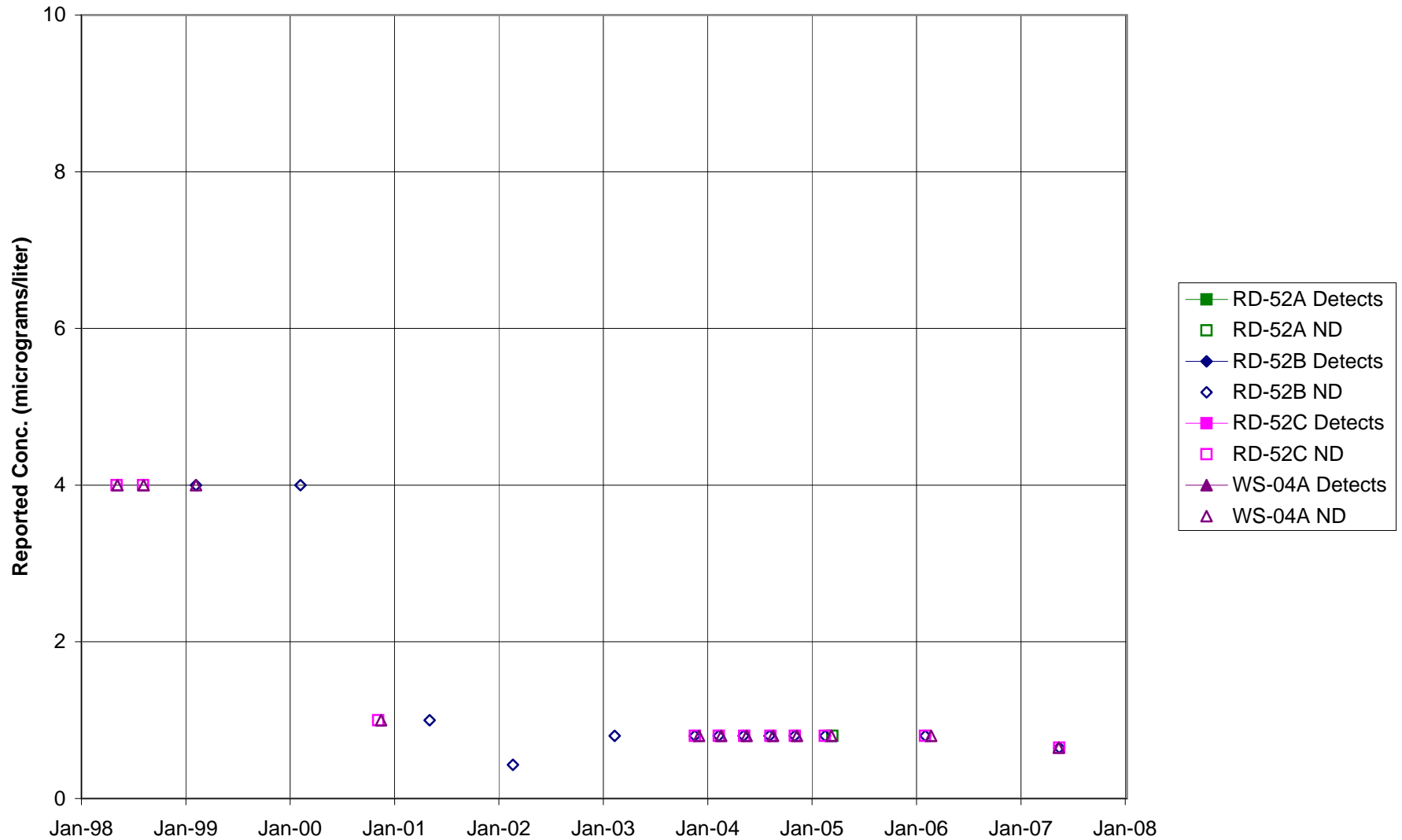


FIGURE F-279. PERCHLORATE in RD-09 AREA WELLS

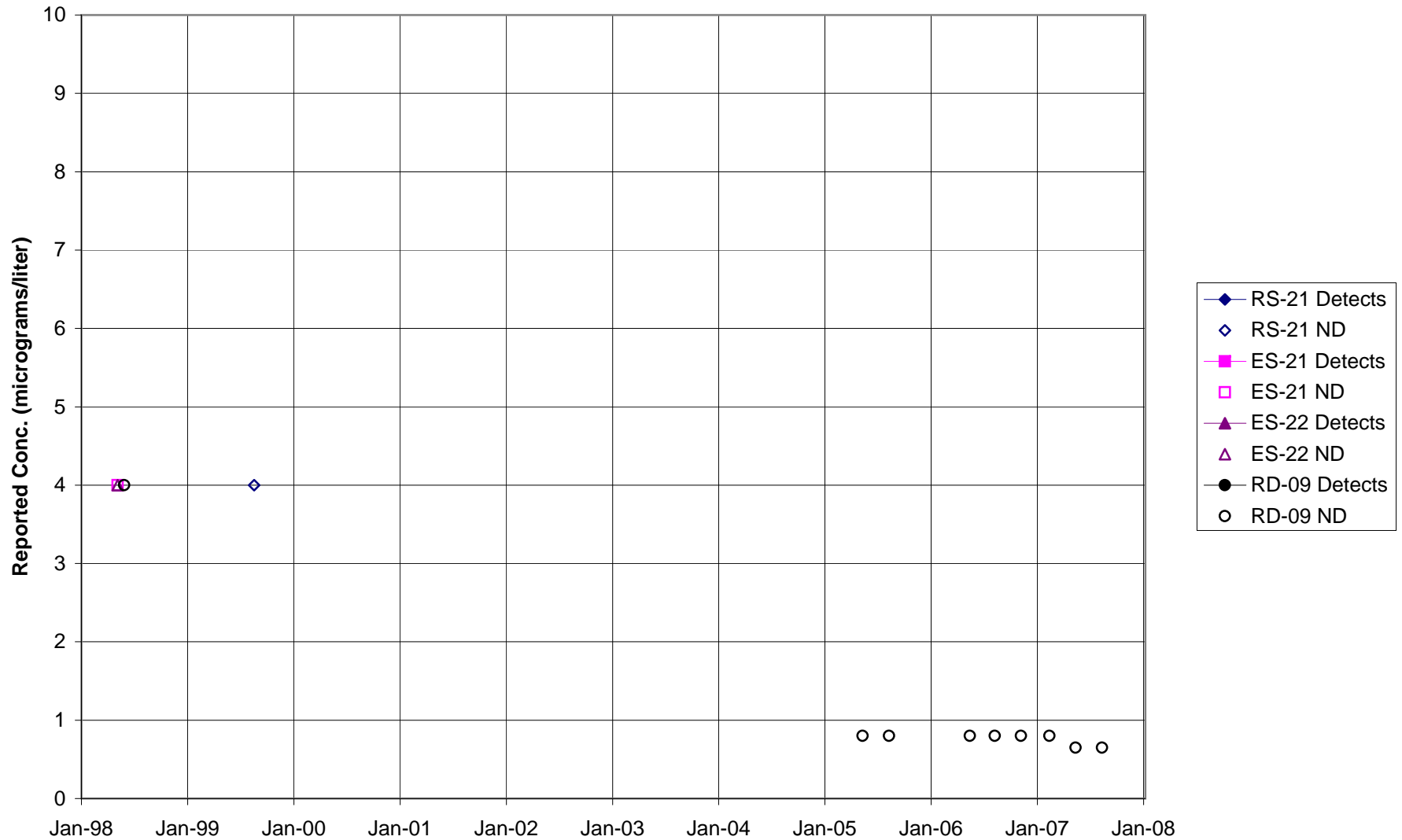


FIGURE F-280. PERCHLORATE in HELIPORT, B/204 AREA WELLS

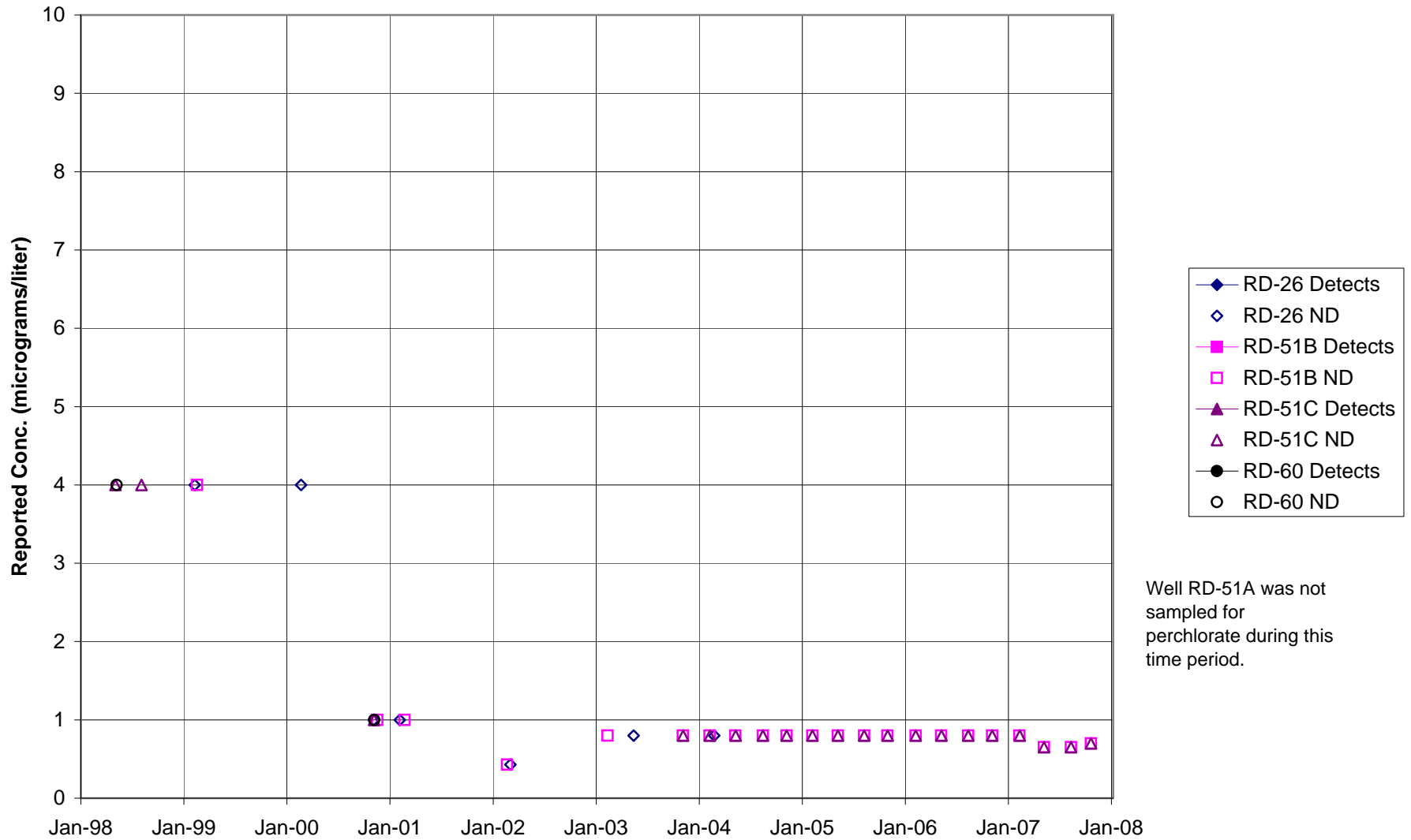




FIGURE F-281. PERCHLORATE in ALFA / BRAVO AREA WELLS

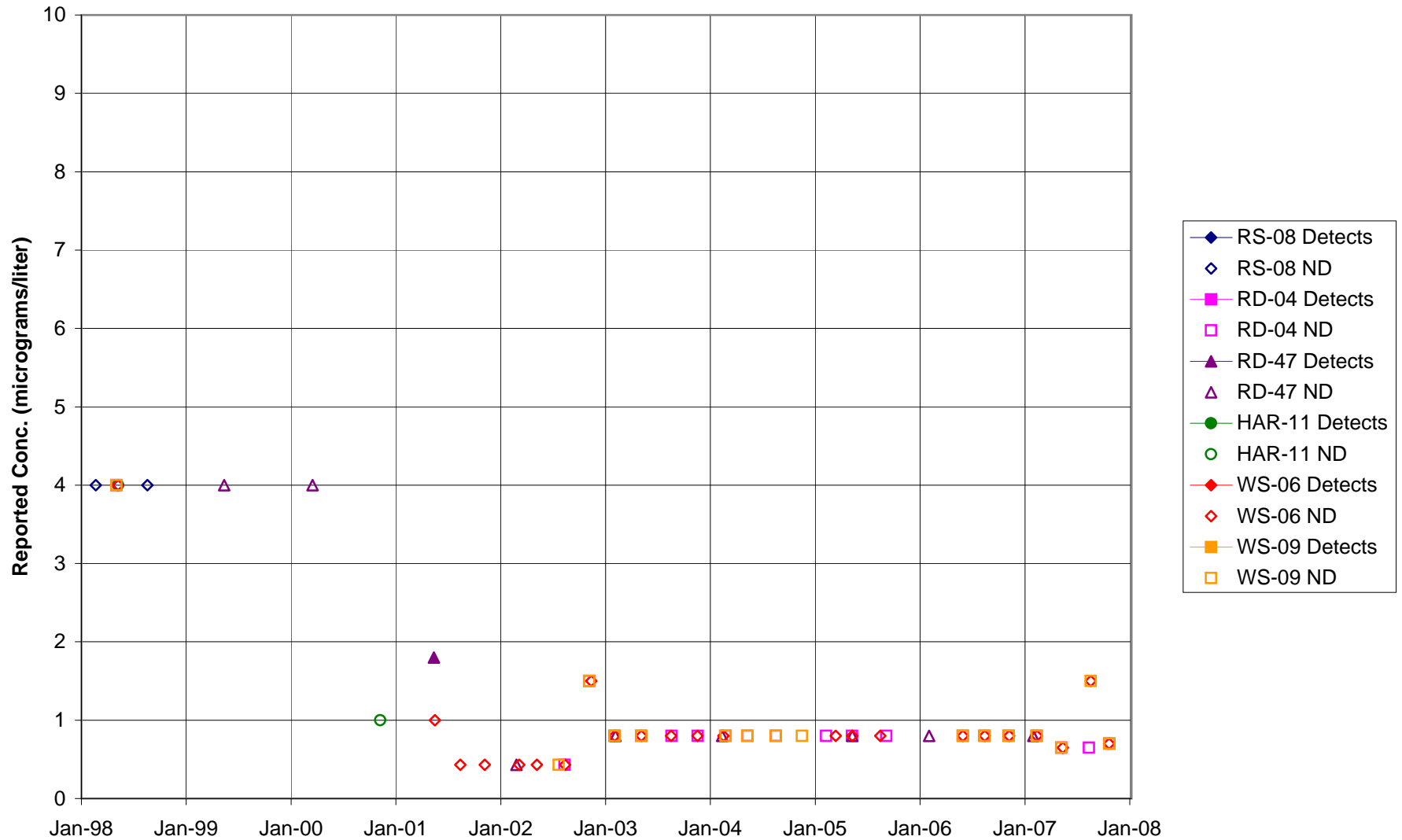
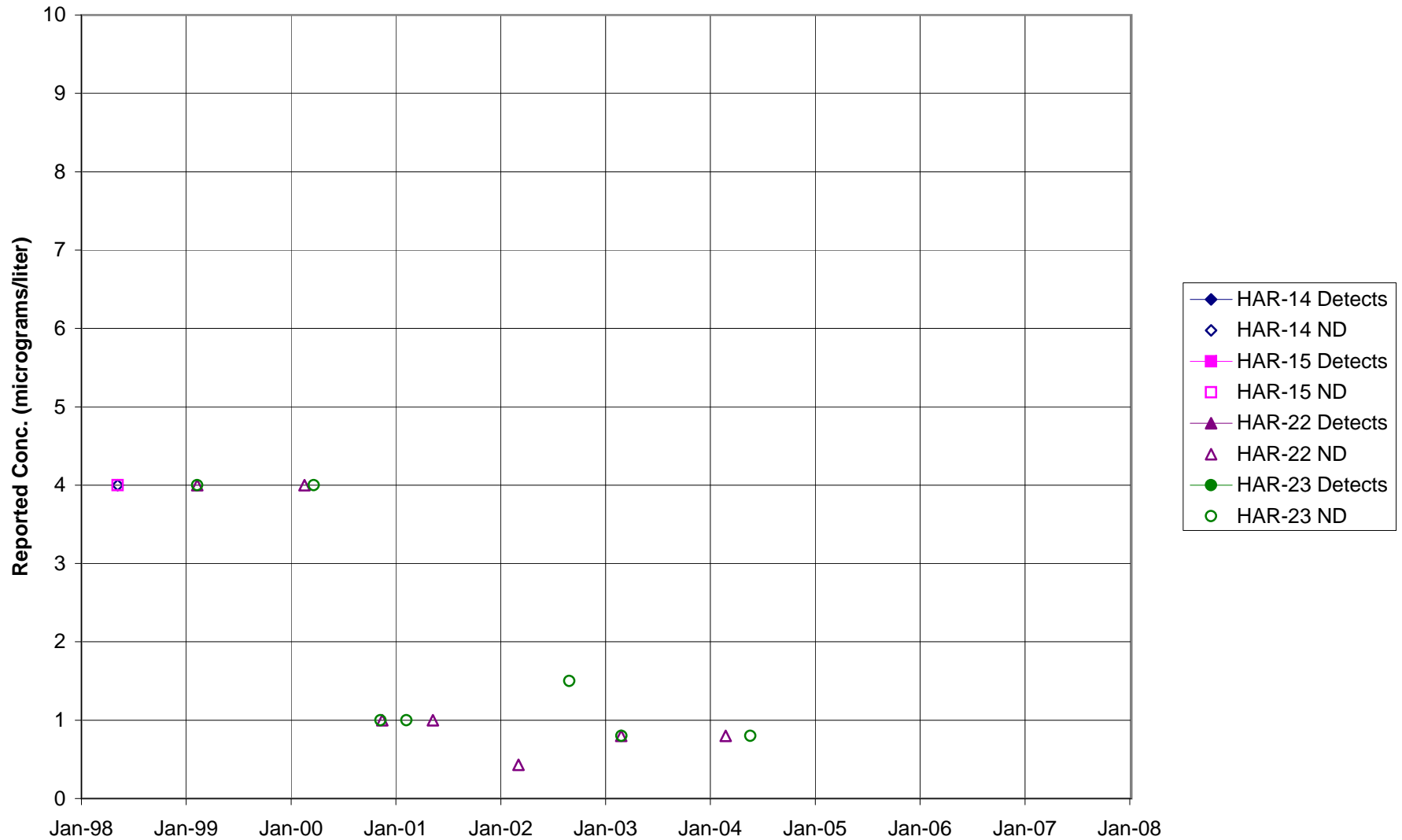


FIGURE F-282. PERCHLORATE in SPA AREA WELLS





**FIGURE F-284. PERCHLORATE in DELTA / BUFFER ZONE AREA WELLS**

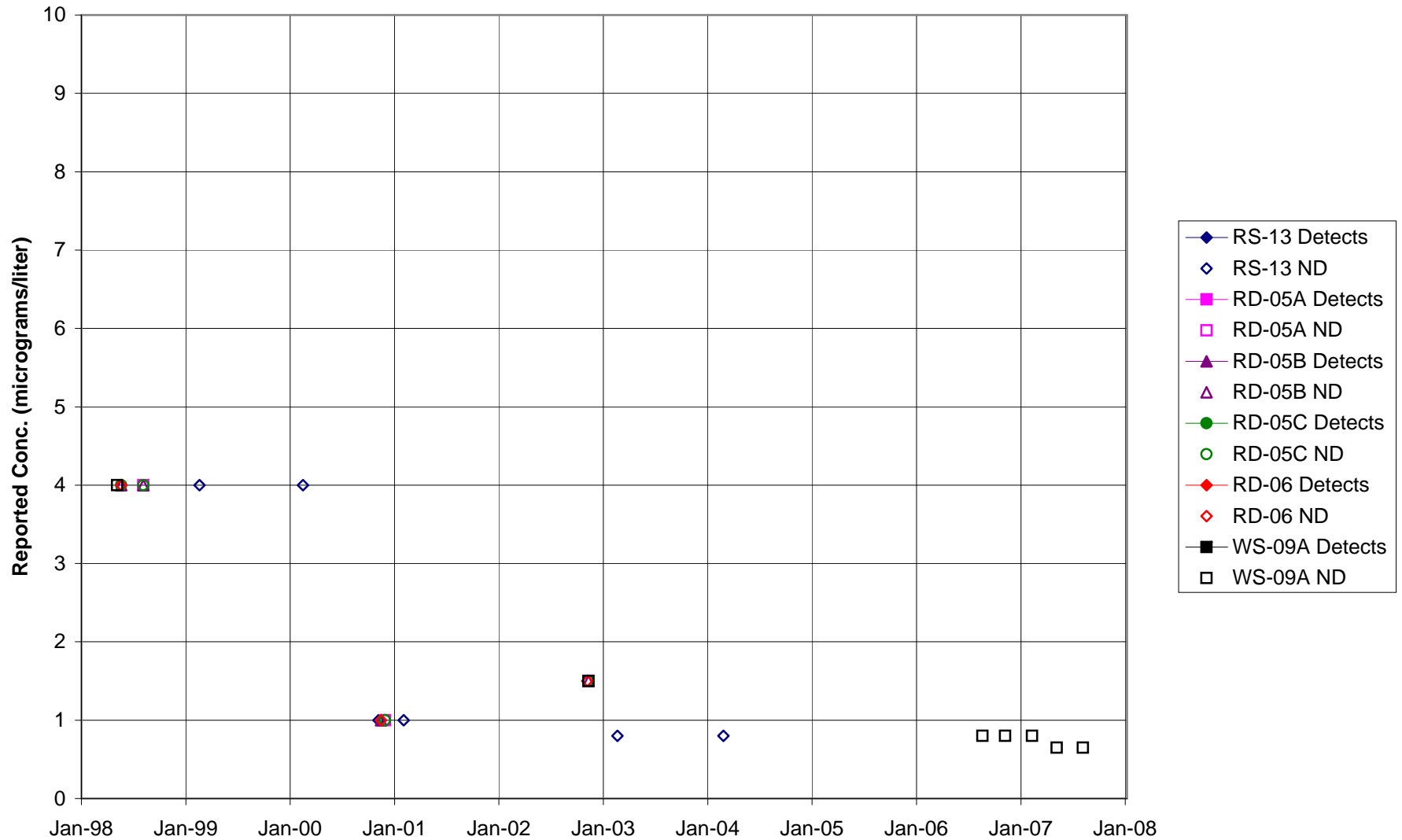


FIGURE F-285. PERCHLORATE in AREA IV WELLS

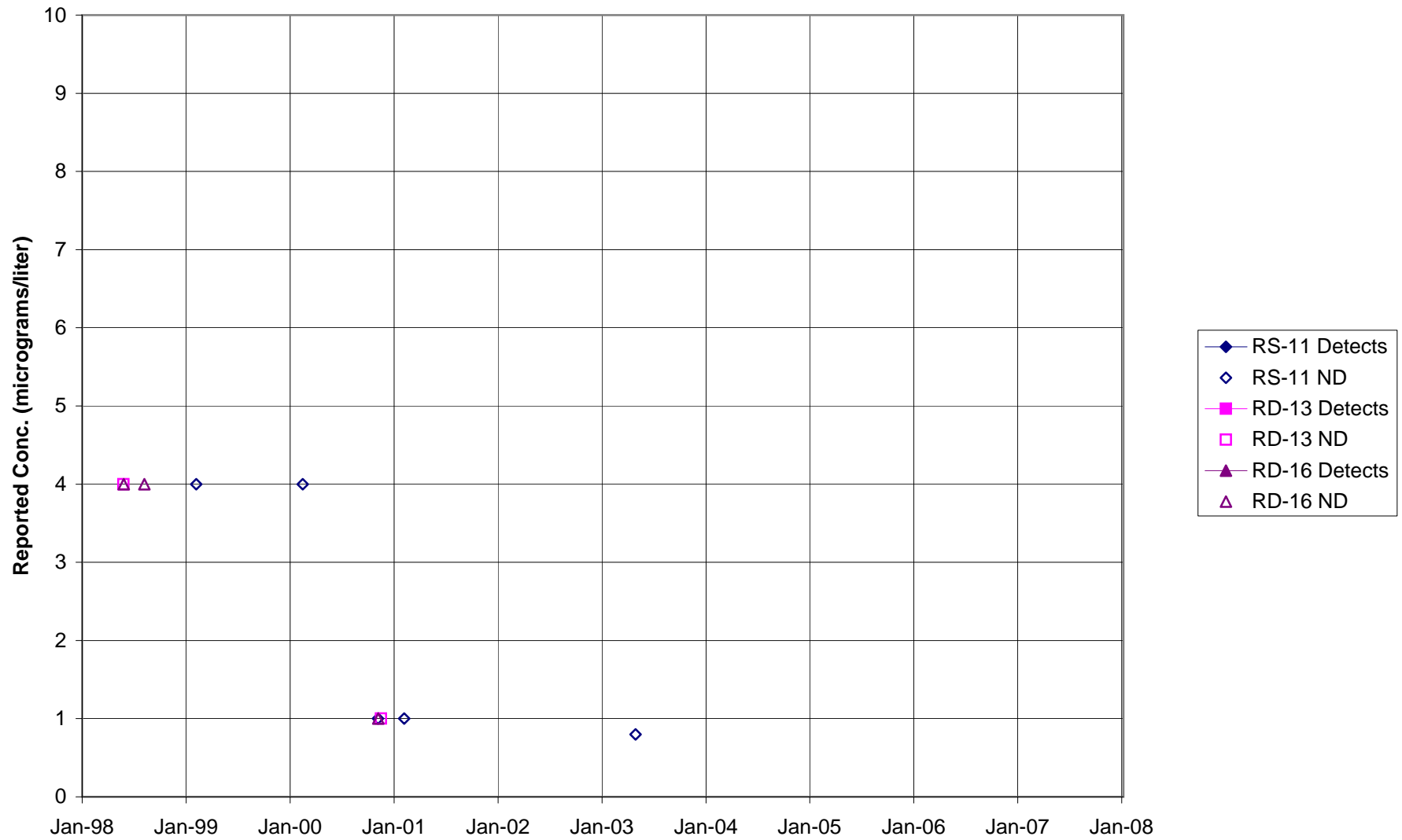
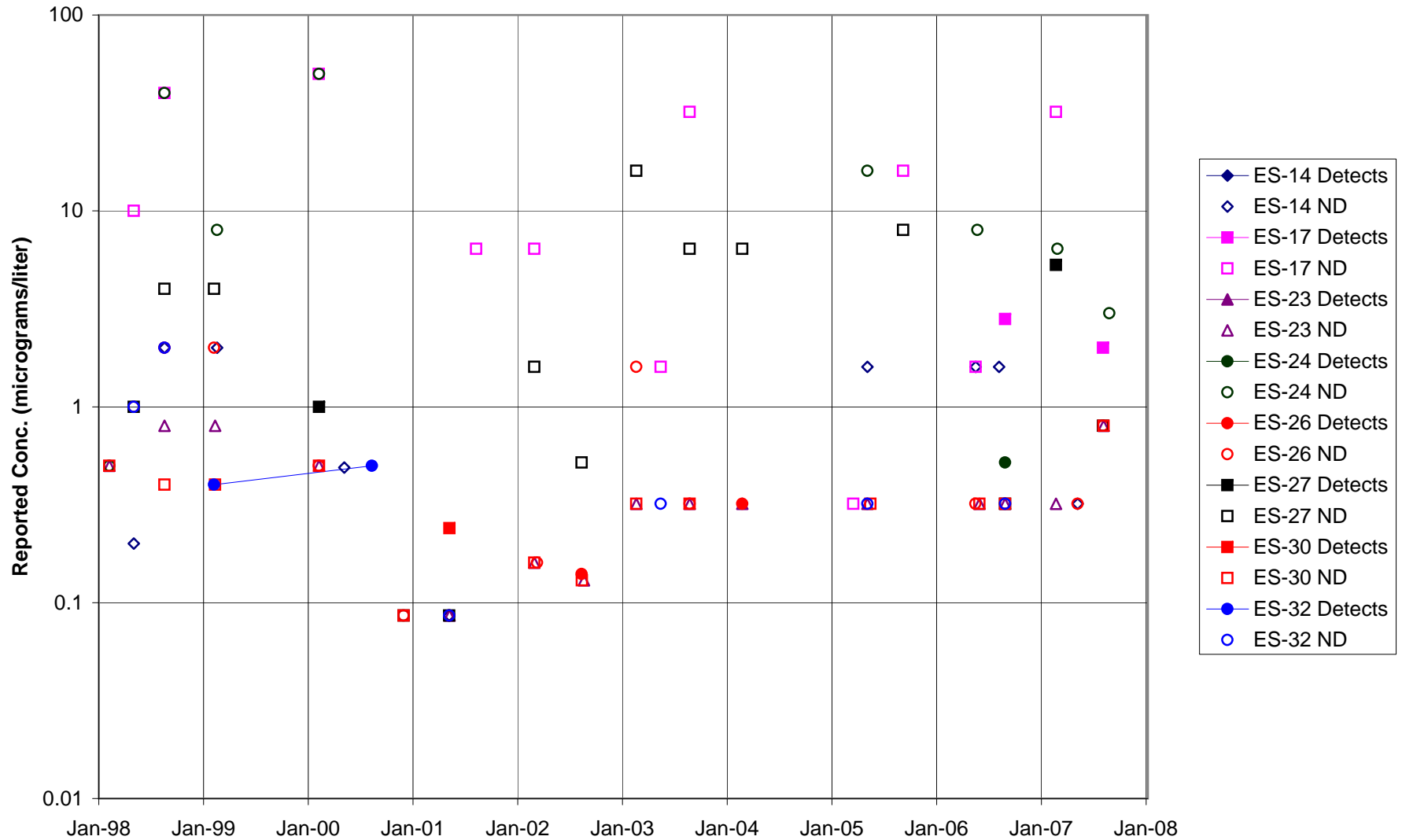


FIGURE F-286. PCE in STL-IV AREA SHALLOW WELLS



**FIGURE F-287. PCE in STL-IV AREA CHATSWORTH FORMATION WELLS**

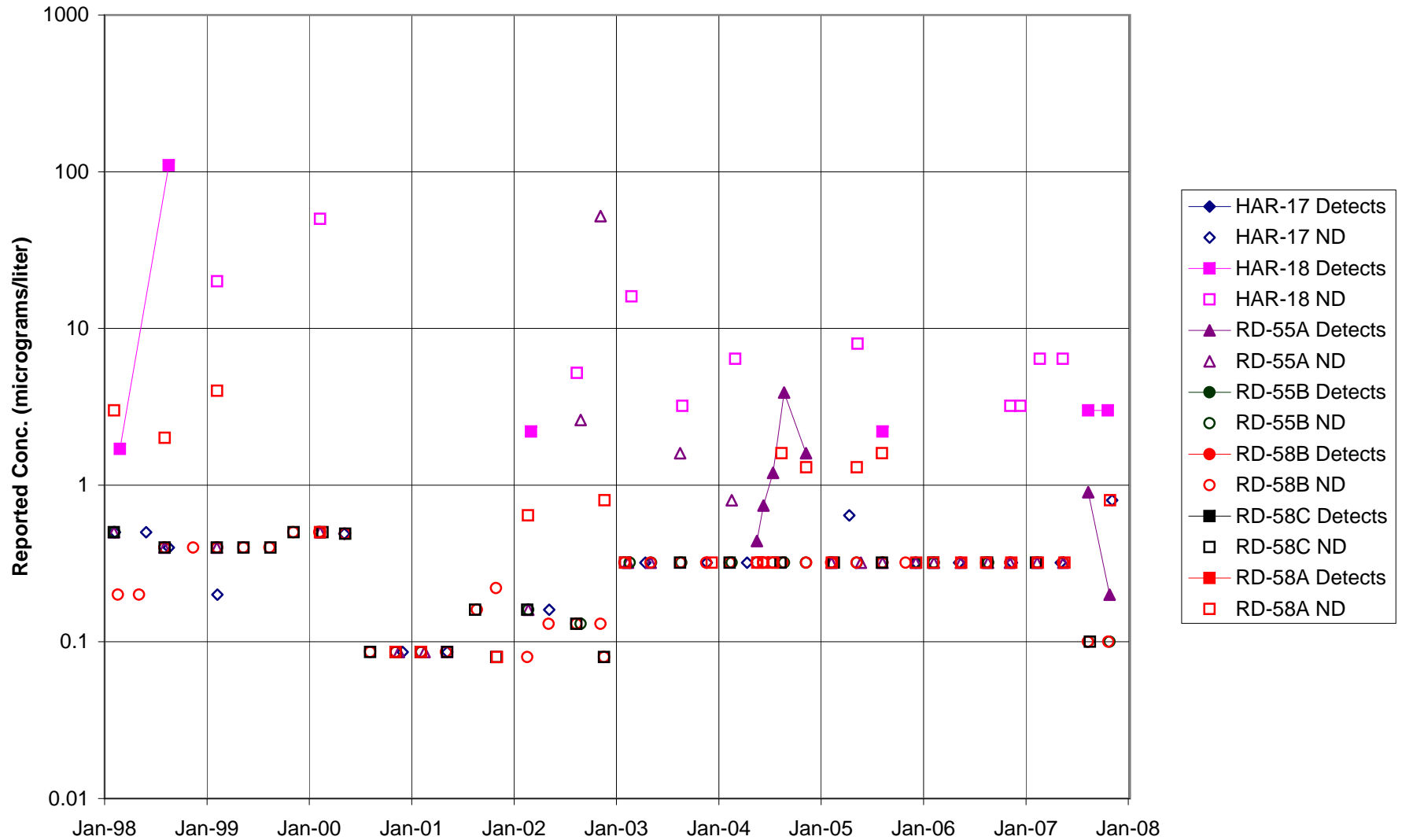


FIGURE F-288. PCE in MAIN GATE AREA WELLS - 1

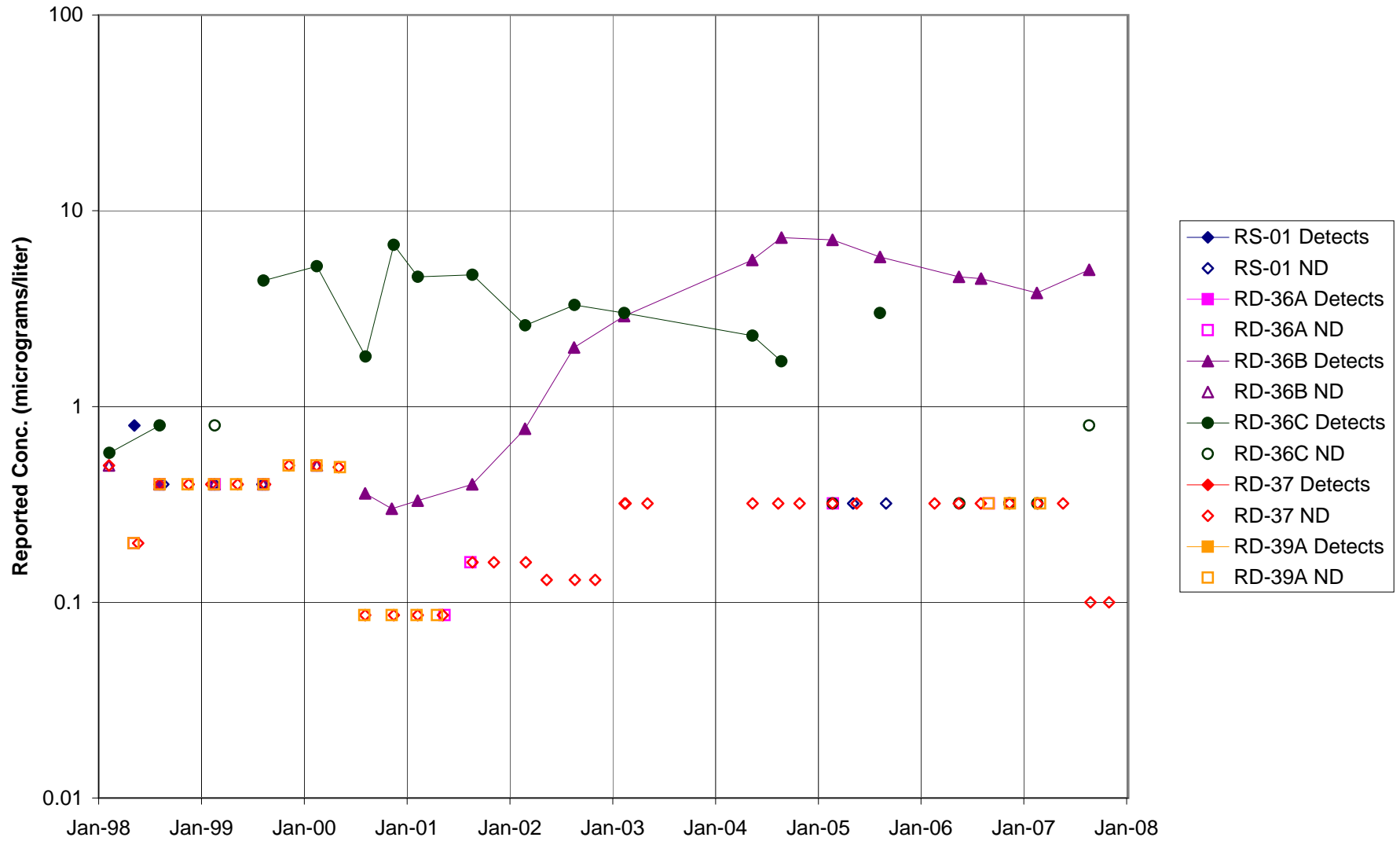




FIGURE F-289. PCE in MAIN GATE AREA WELLS - 2

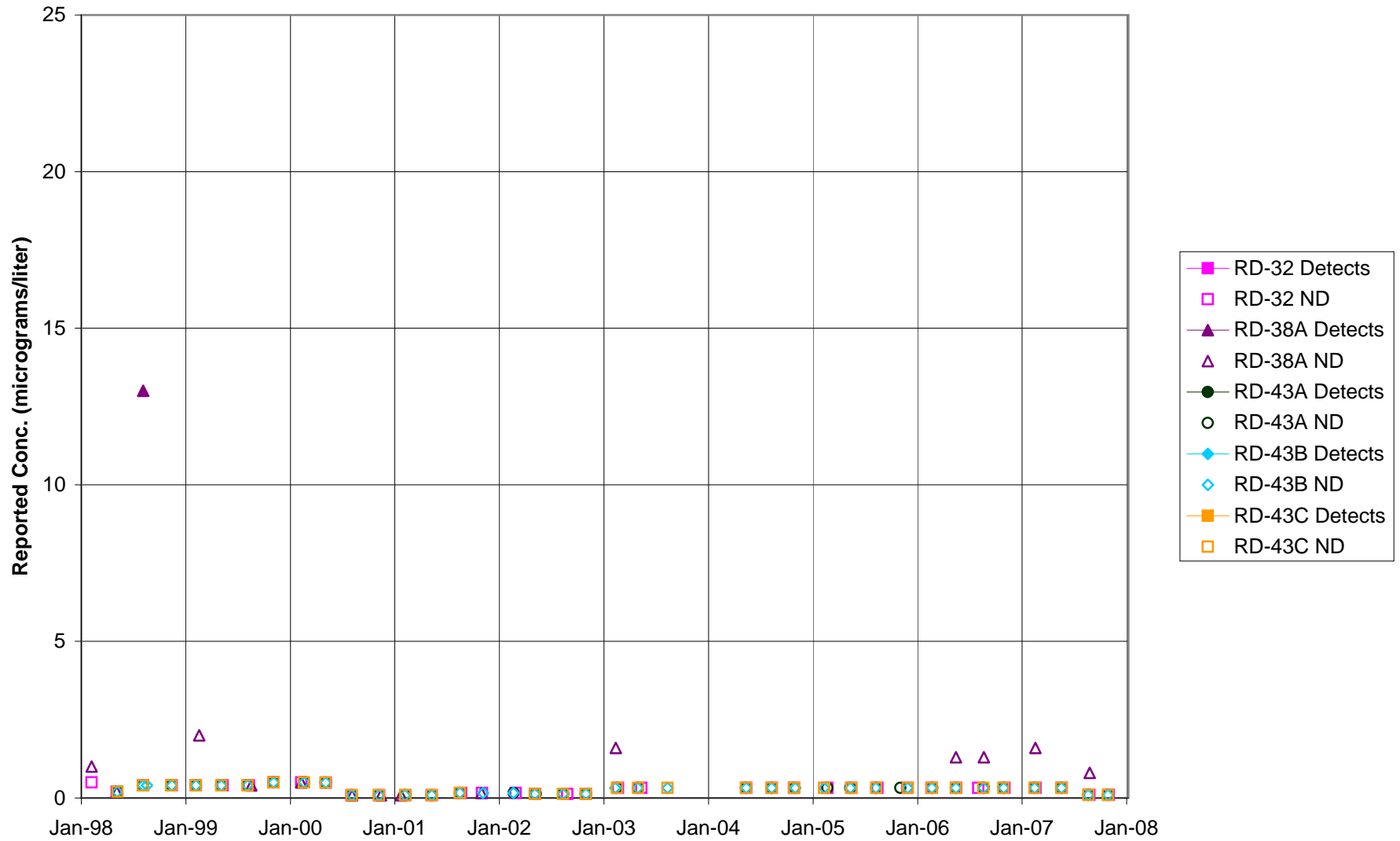


FIGURE F-290. PCE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1

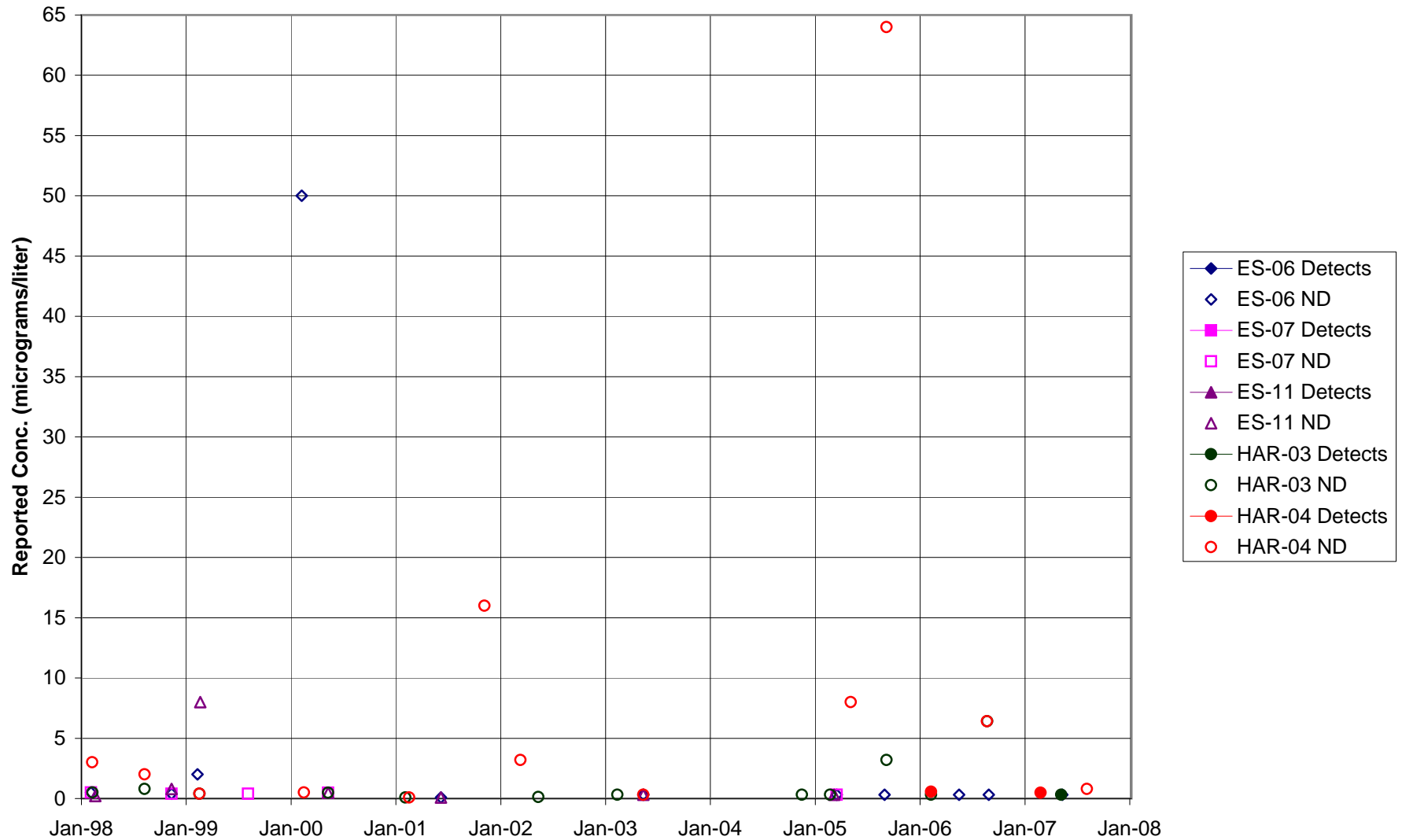
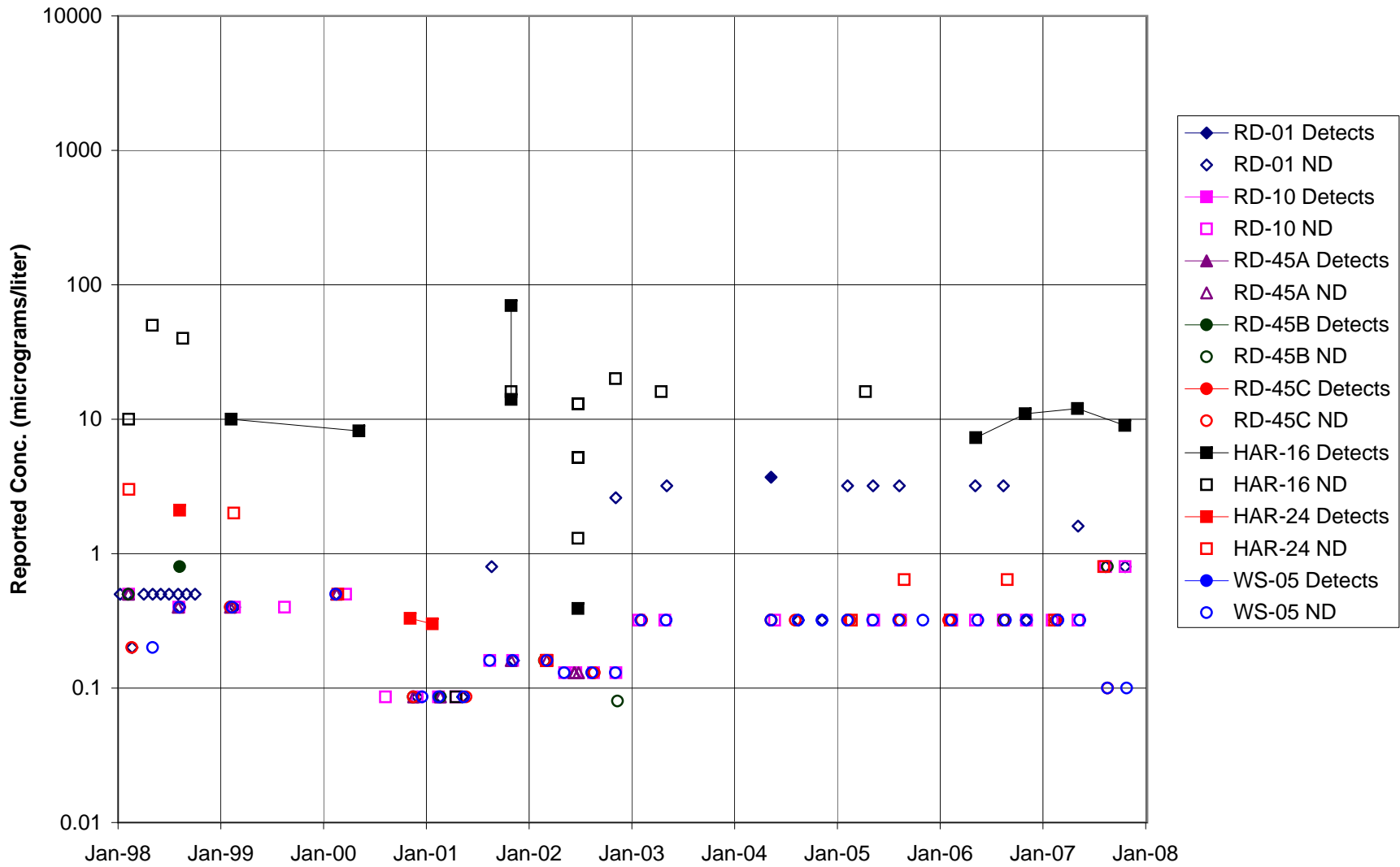


FIGURE F-291. PCE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 2



**FIGURE F-292. PCE in CTL-III / PERIMETER POND AREA WELLS**

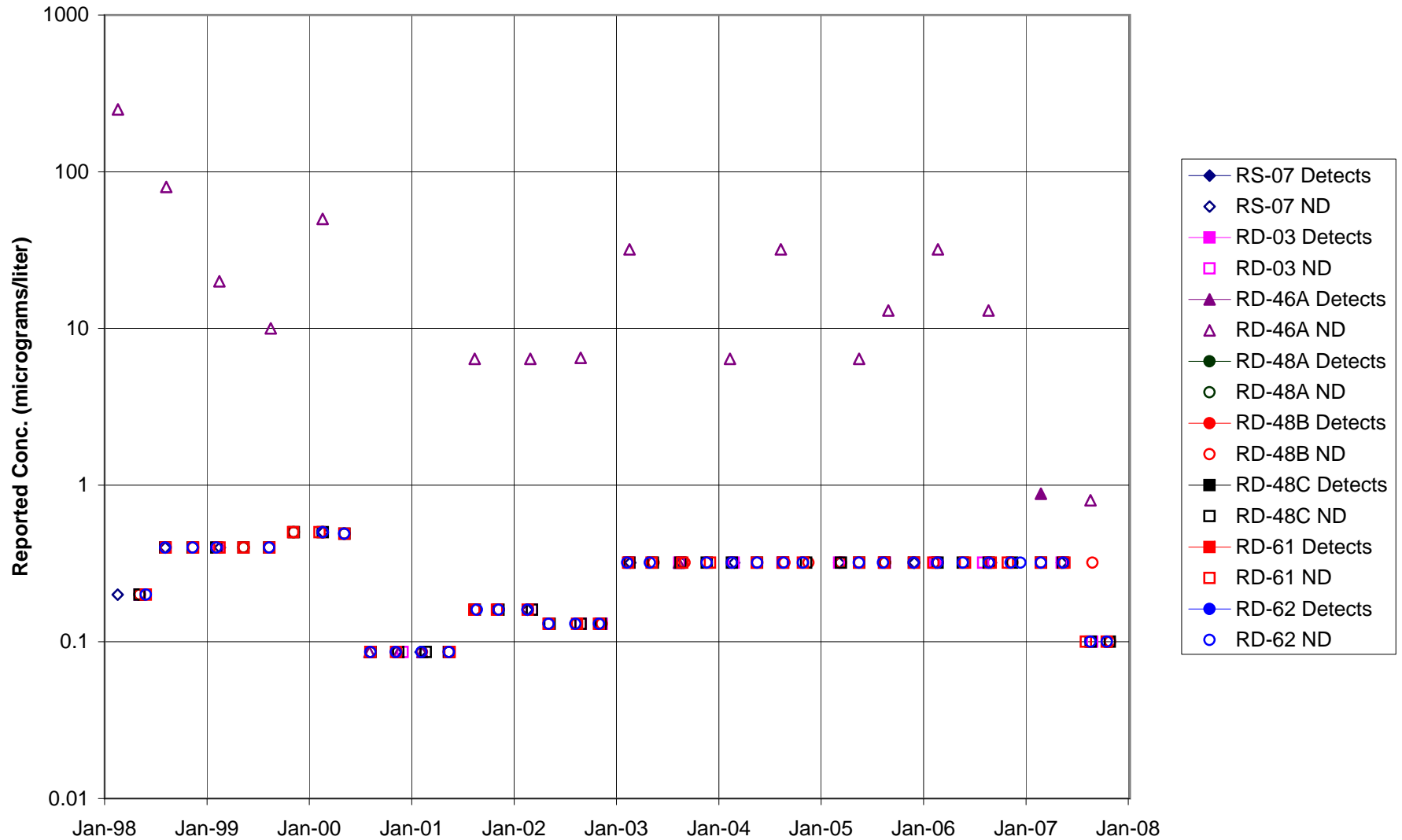


FIGURE F-293. PCE in BOWL AREA WELLS

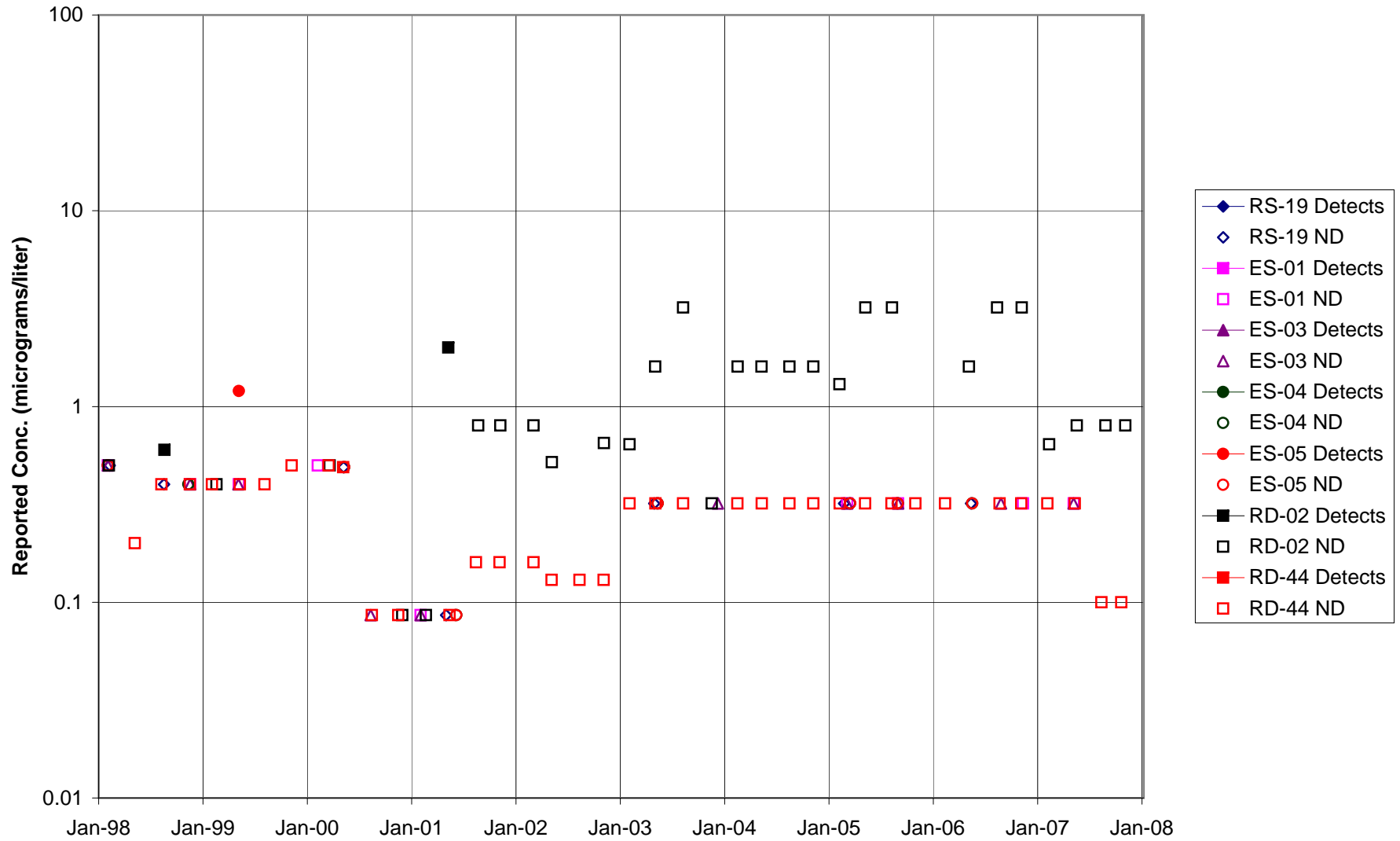


FIGURE F-294. PCE in ECL AREA WELLS

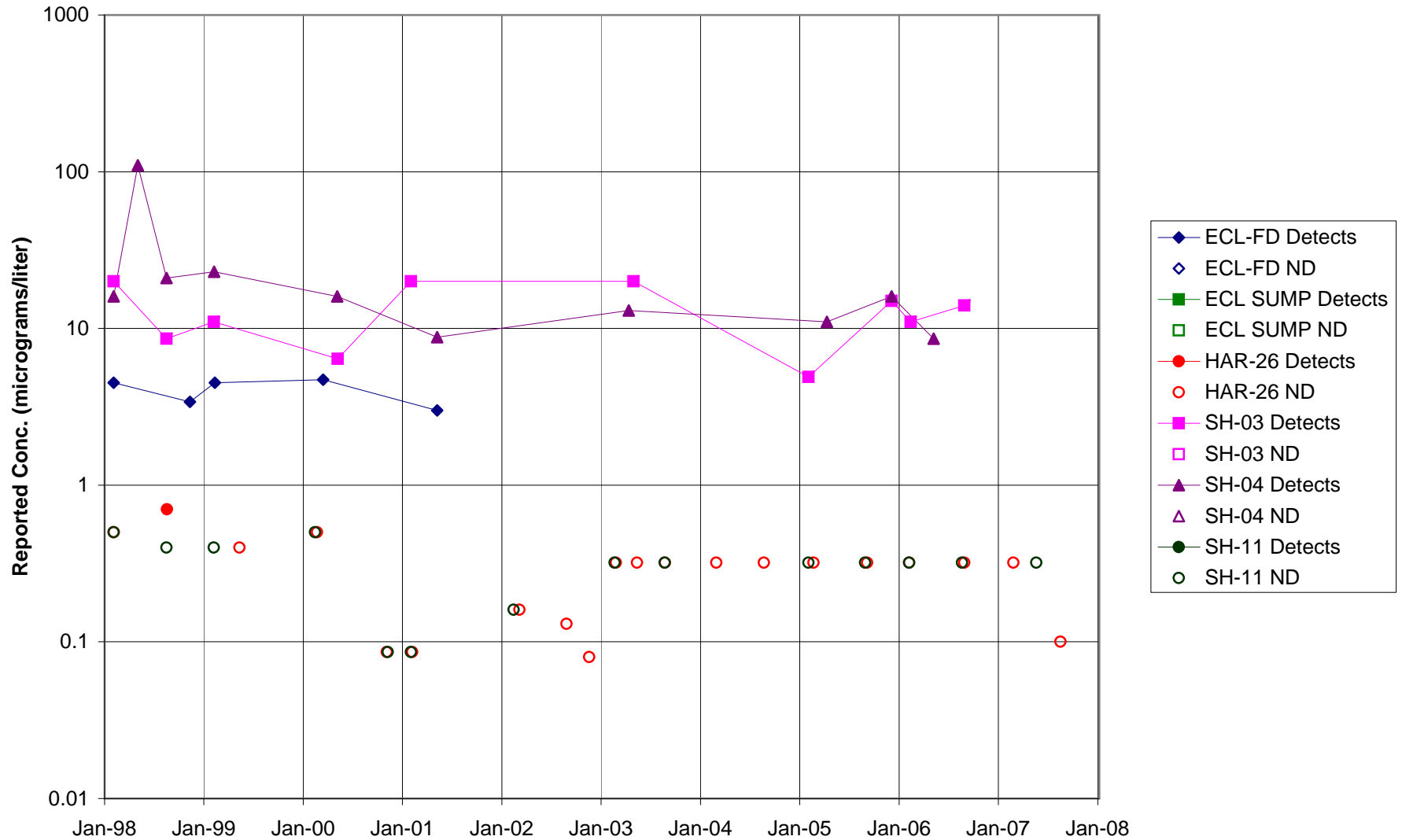


FIGURE F-295. PCE in FORMER LOX PLANT AREA WELLS

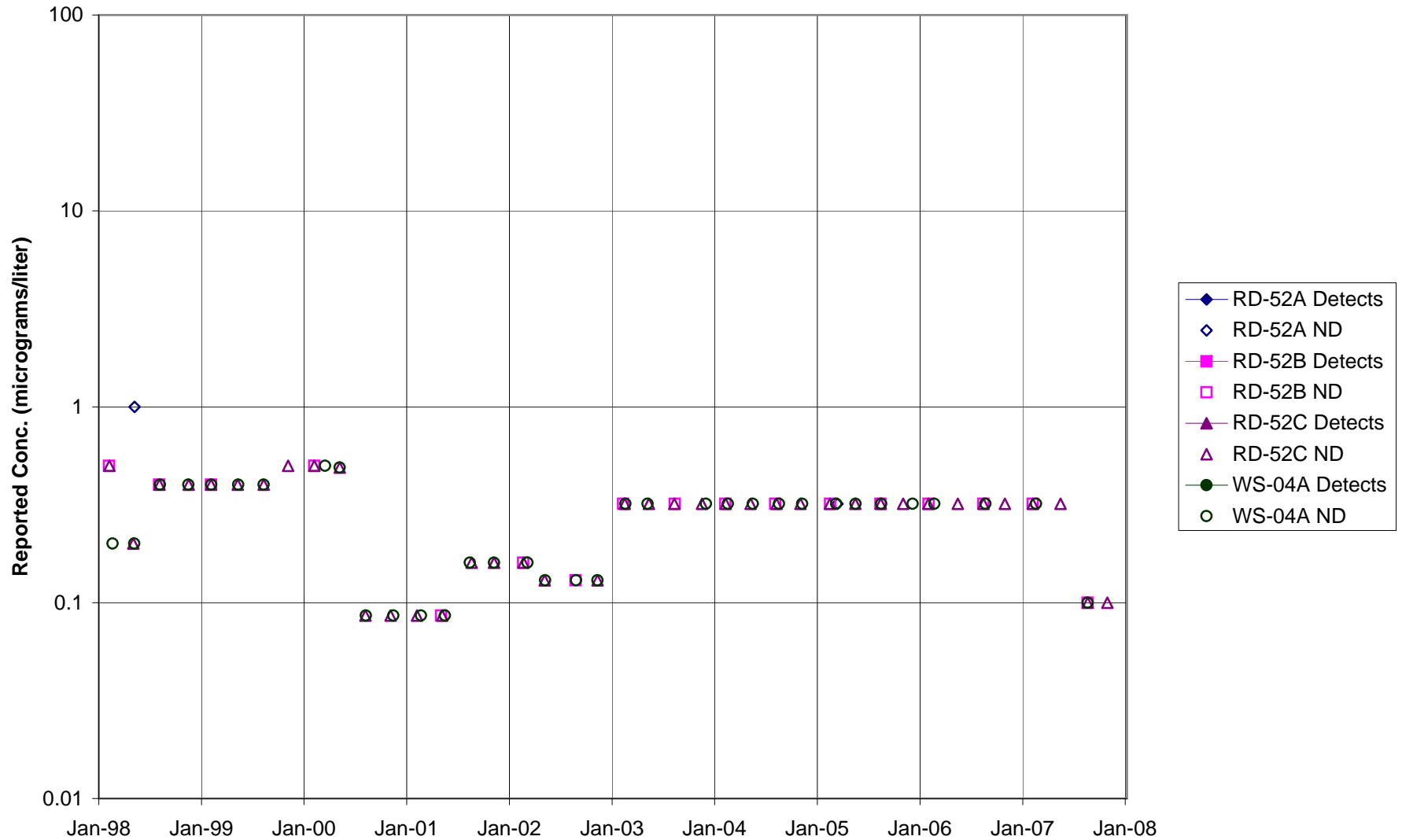


FIGURE F-296. PCE in RD-09 AREA WELLS

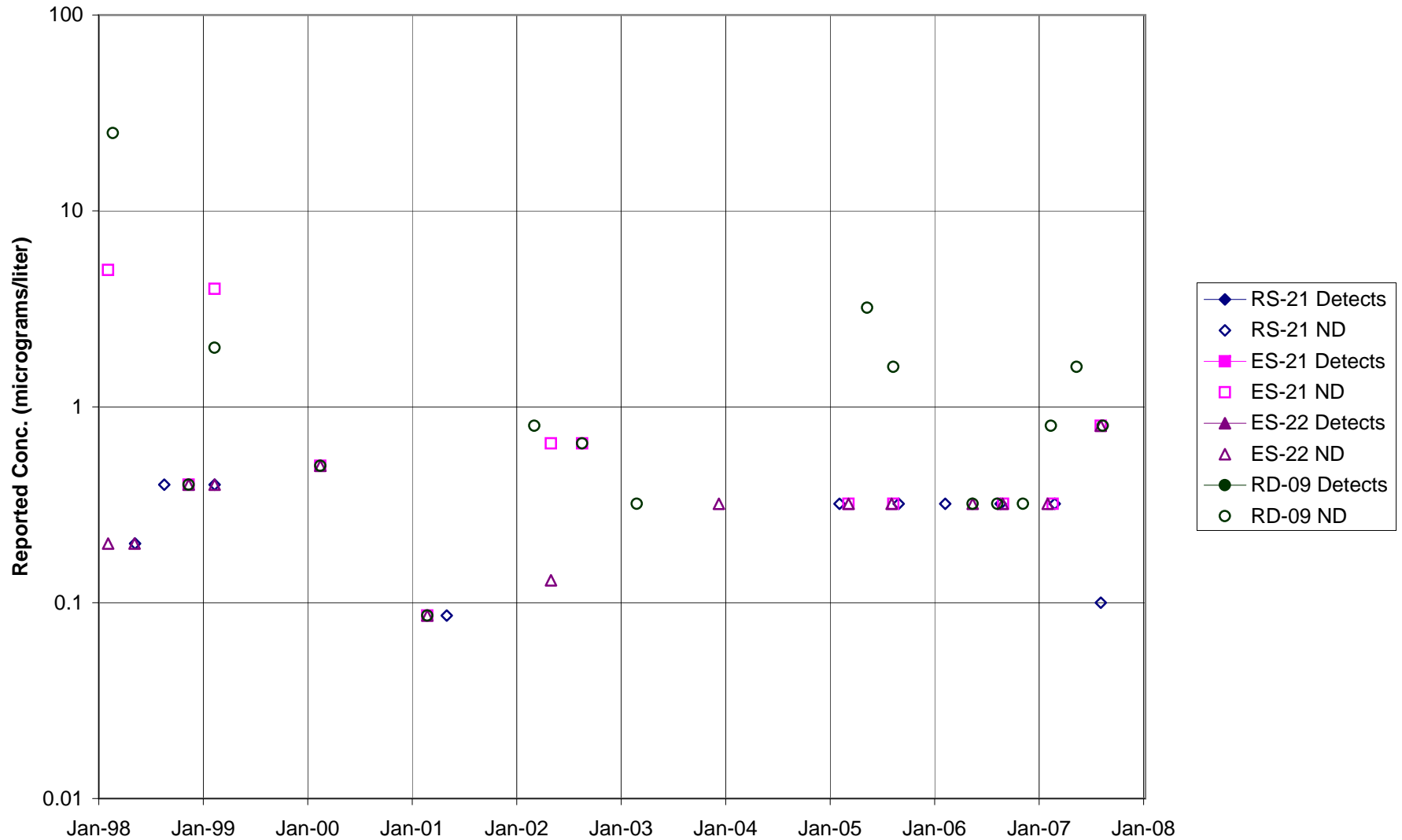




FIGURE F-297. PCE in HELIPORT, B/204 AREA WELLS

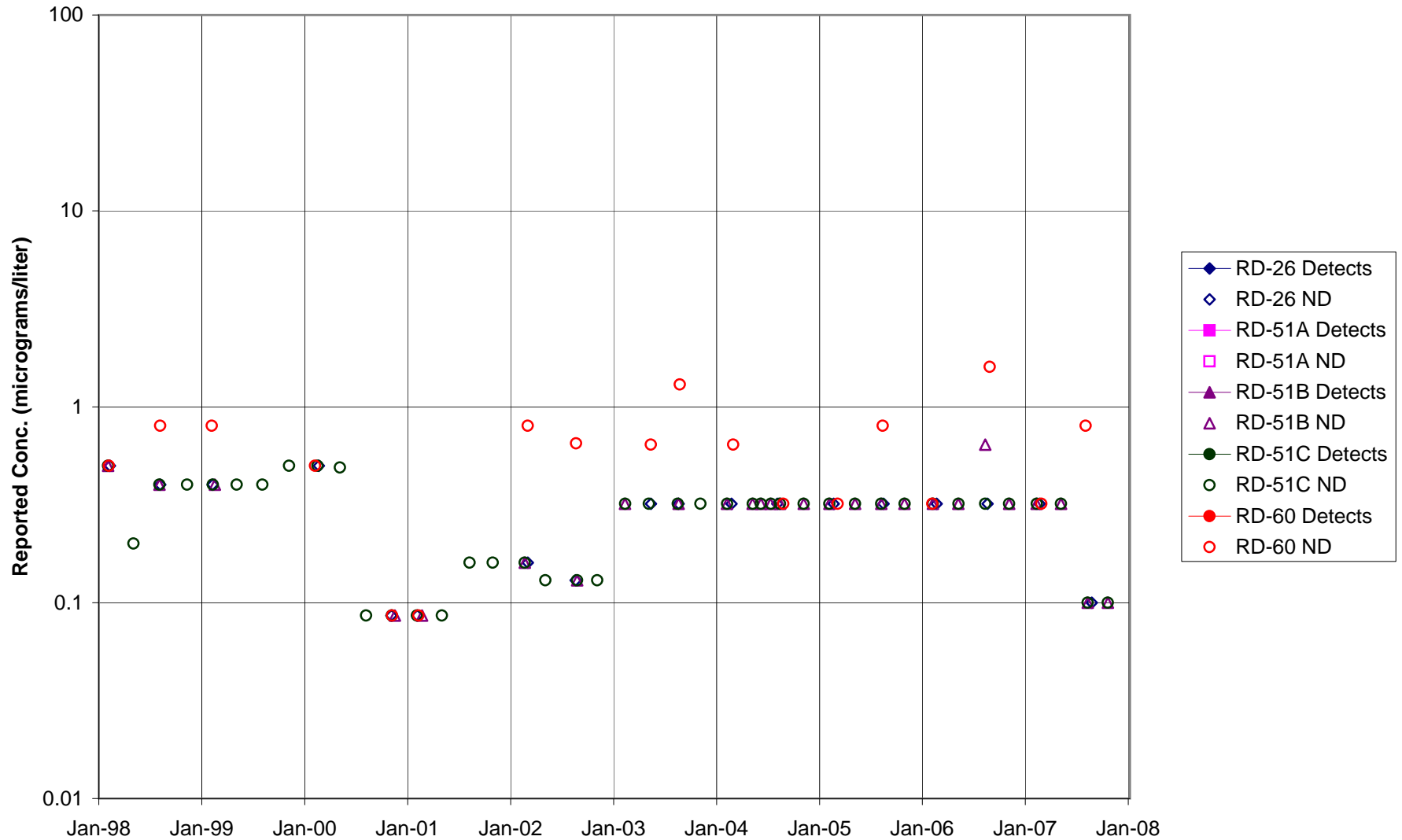


FIGURE F-298. PCE in ALFA / BRAVO AREA WELLS

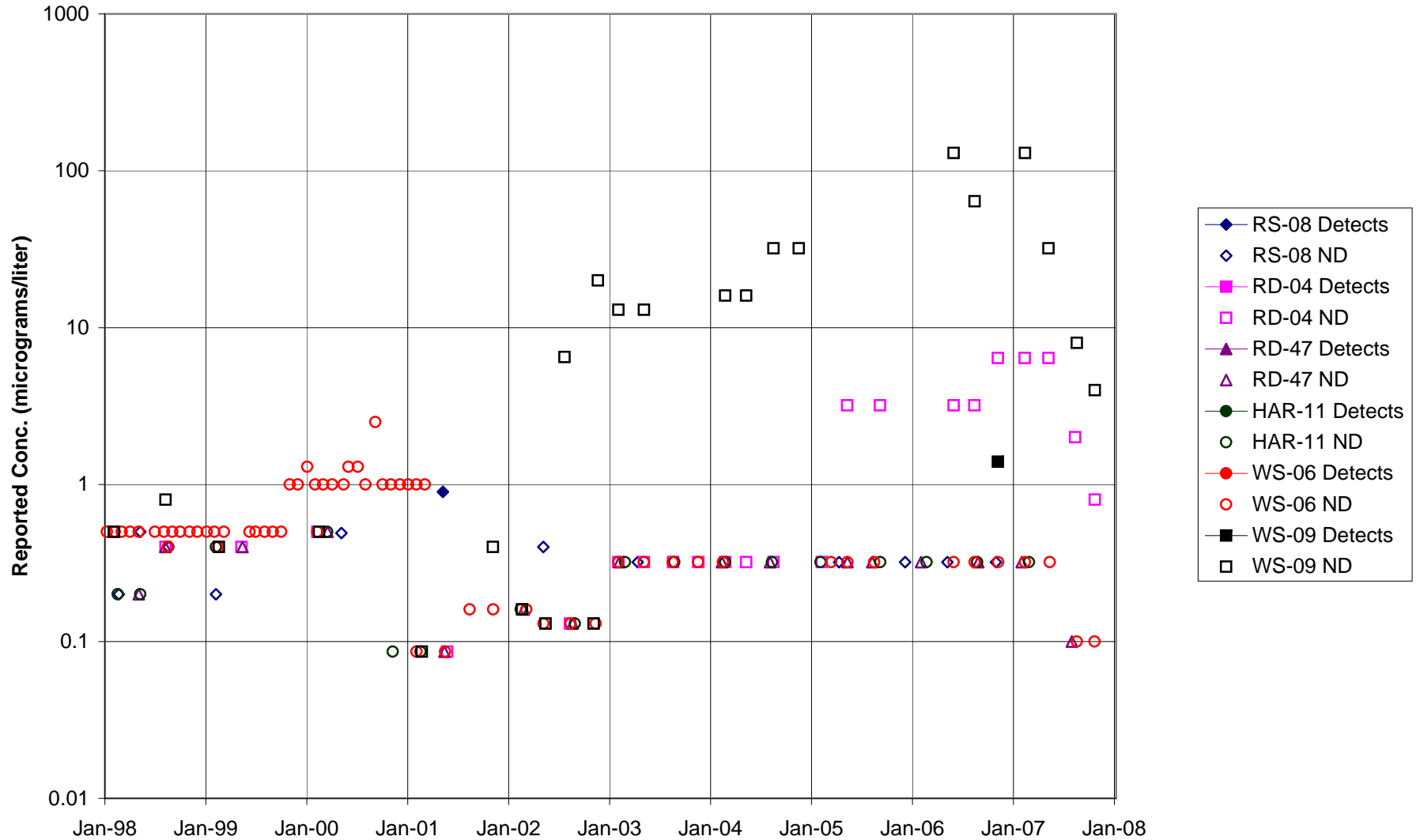


FIGURE F-299. PCE in SPA AREA WELLS

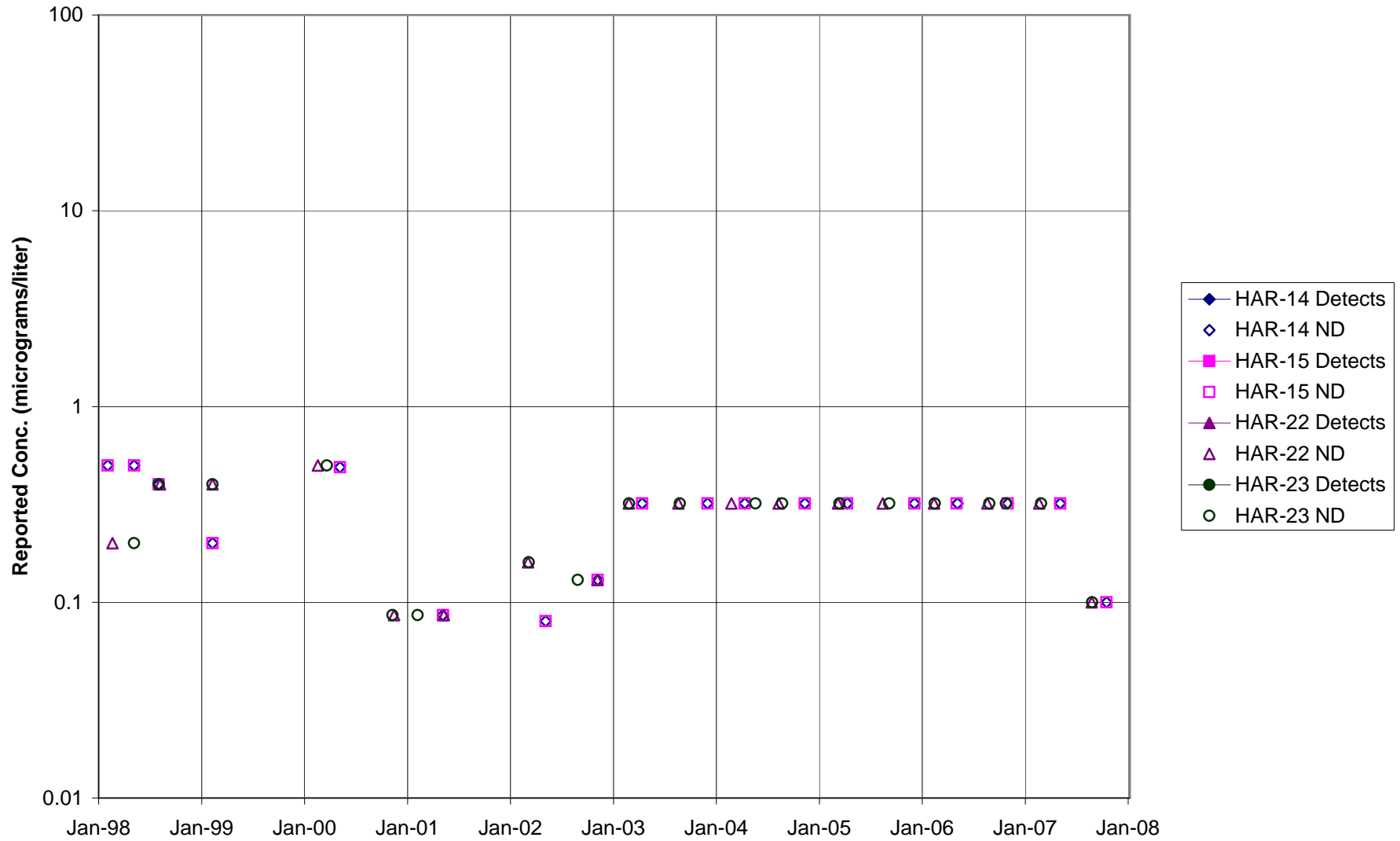


FIGURE F-300. PCE in COCA / PLF AREA WELLS

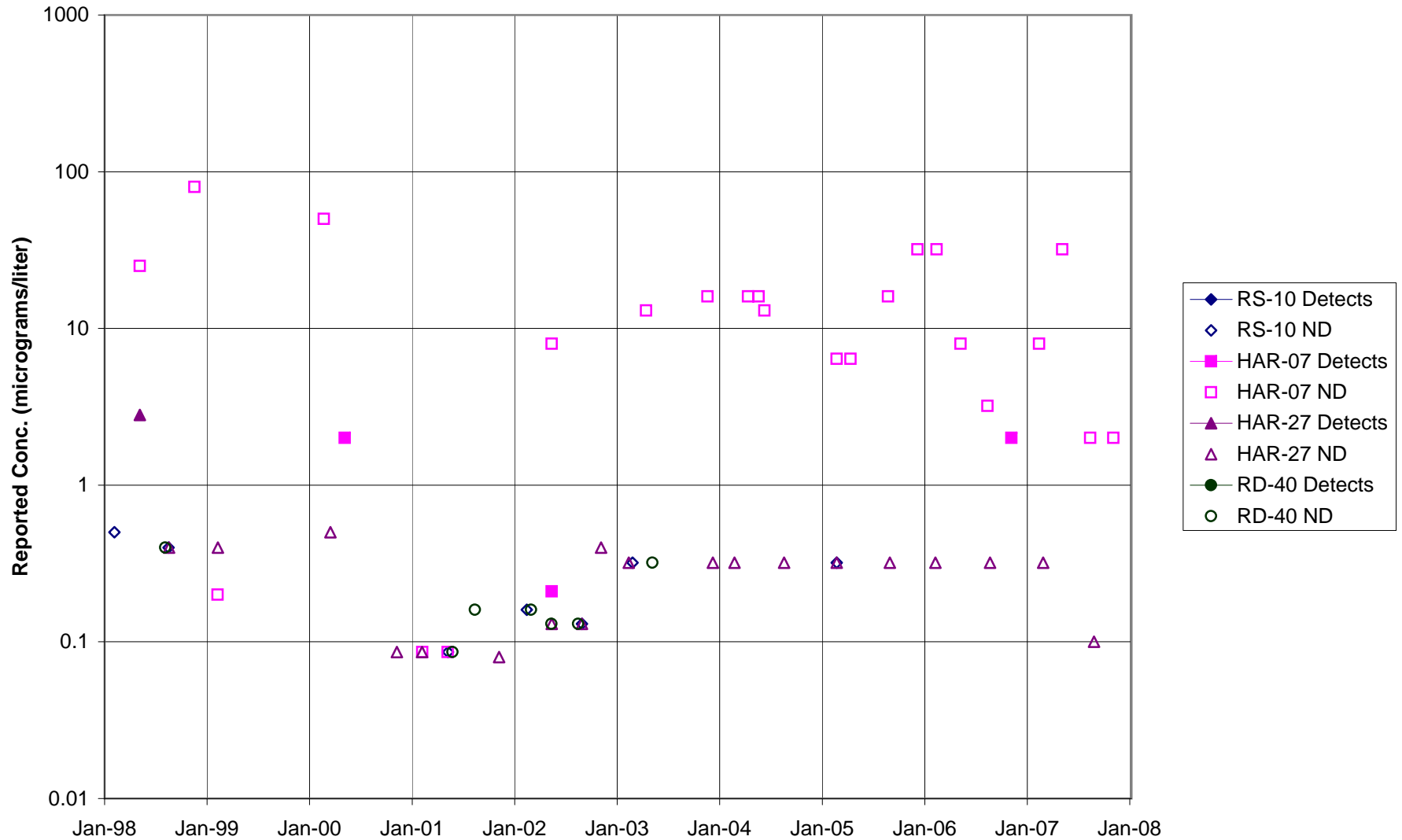


FIGURE F-301. PCE in DELTA / BUFFER ZONE AREA WELLS

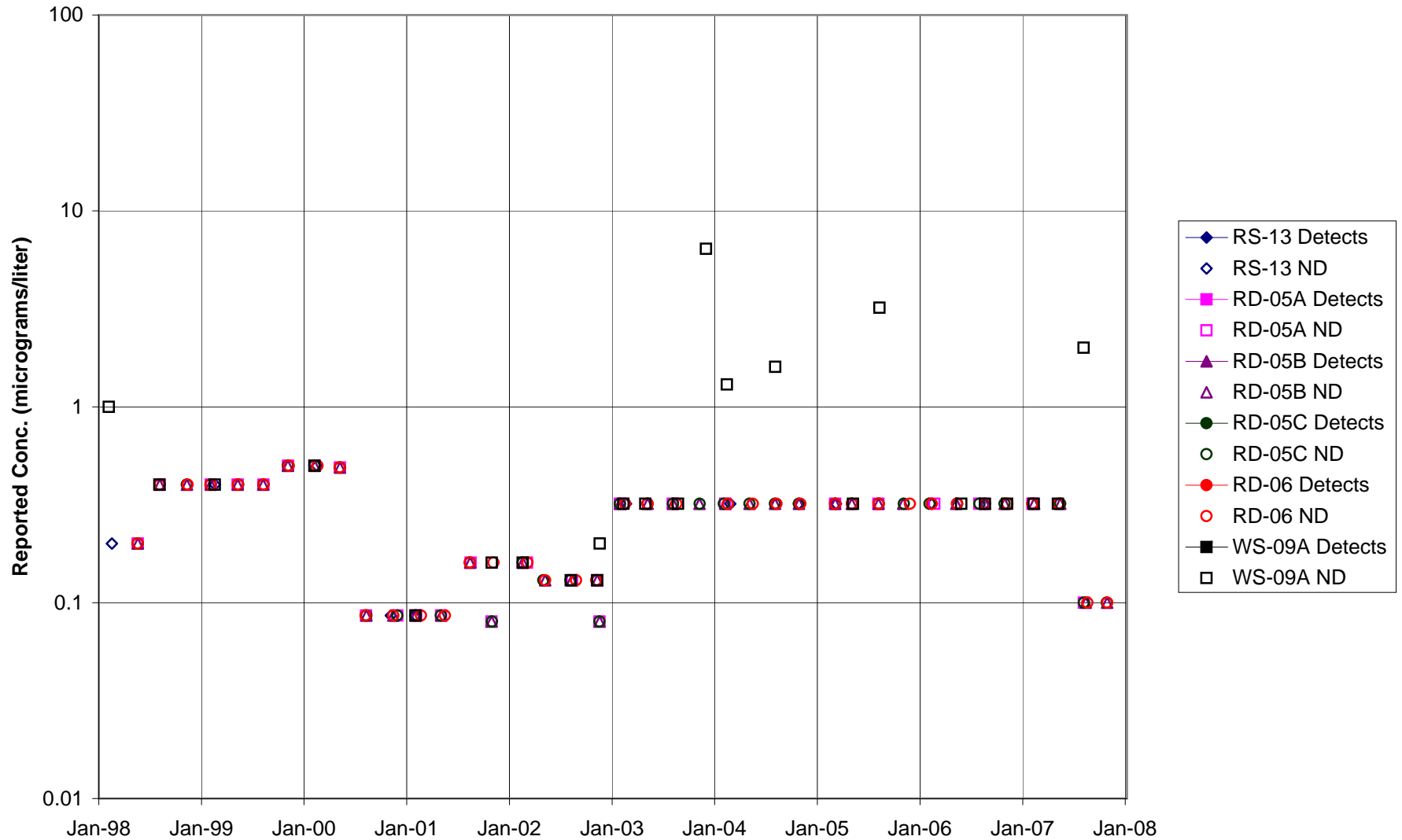


FIGURE F-302. PCE in AREA IV WELLS



FIGURE F-303. TOLUENE in STL-IV AREA SHALLOW WELLS

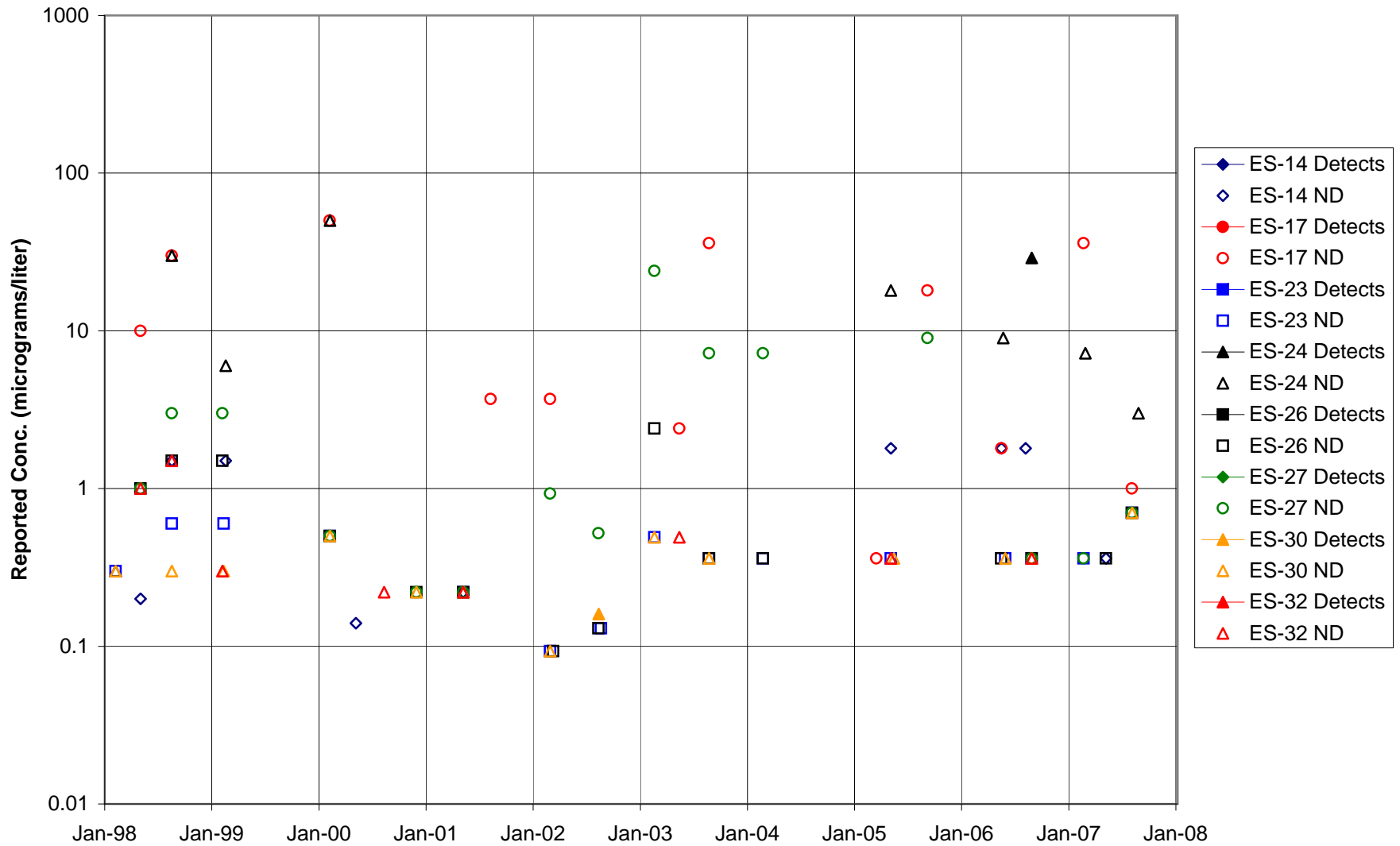


FIGURE F-304. TOLUENE in STL-IV AREA CHATSWORTH FORMATION WELLS

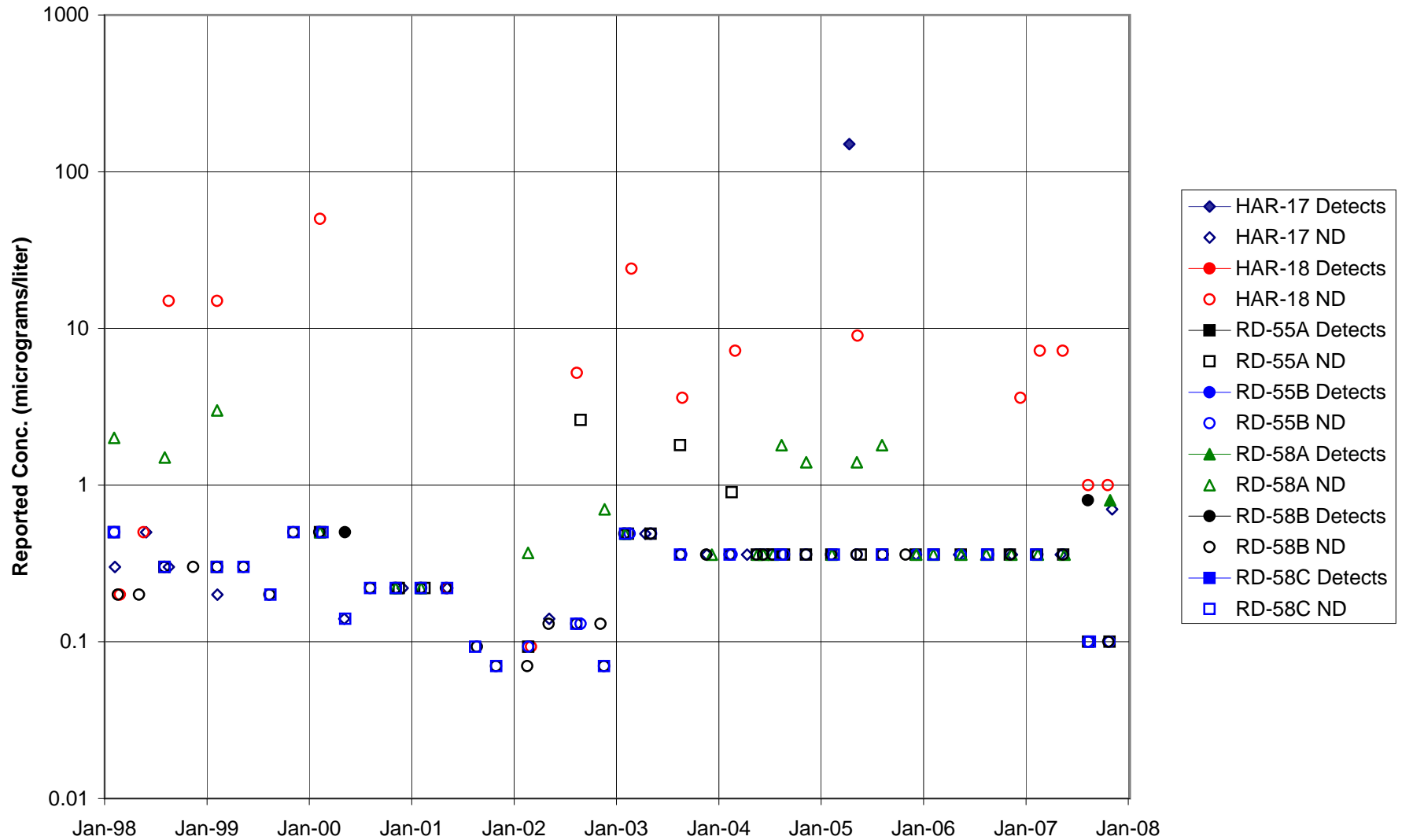
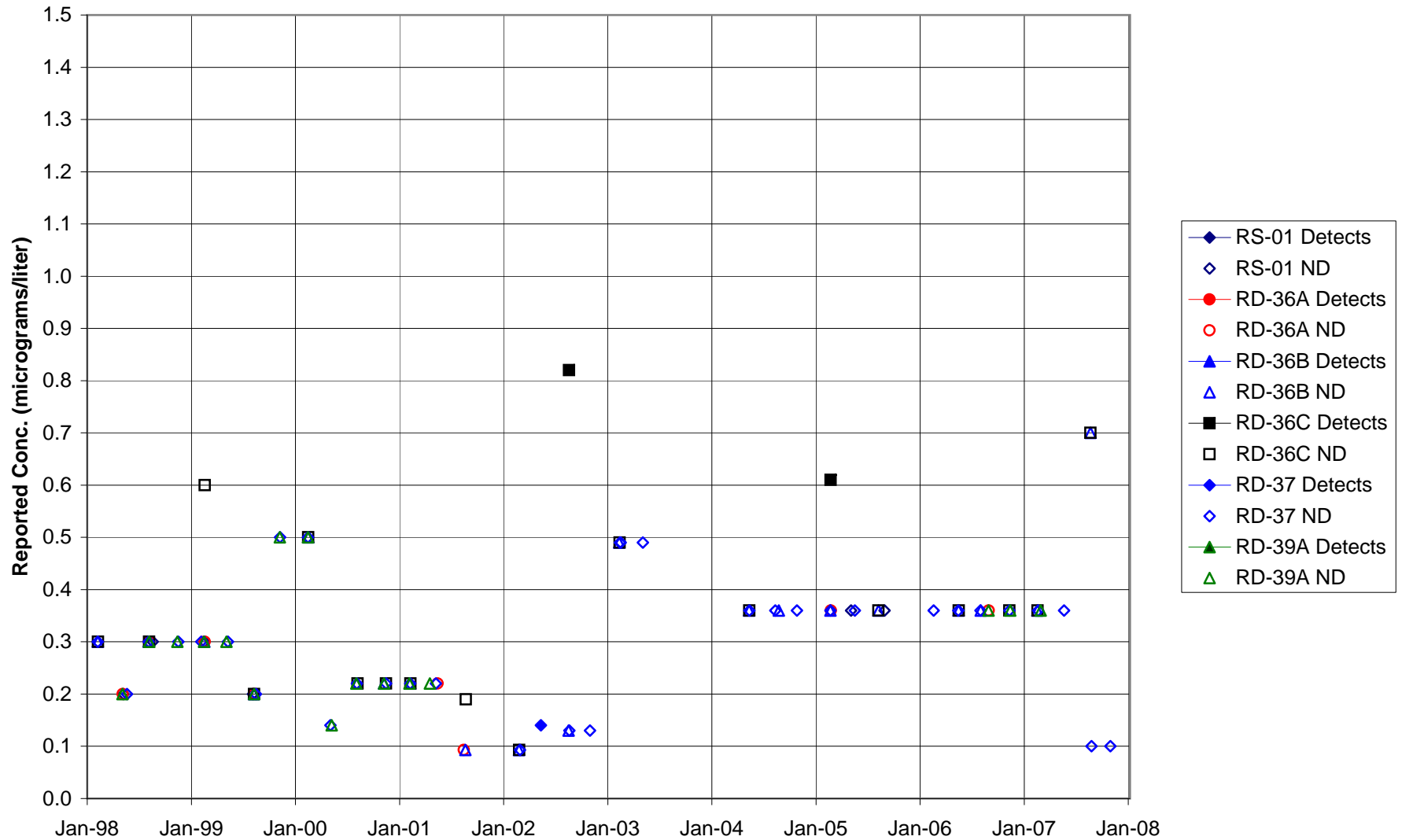




FIGURE F-305. TOLUENE in MAIN GATE AREA WELLS - 1



**FIGURE F-306. TOLUENE in MAIN GATE AREA WELLS - 2**

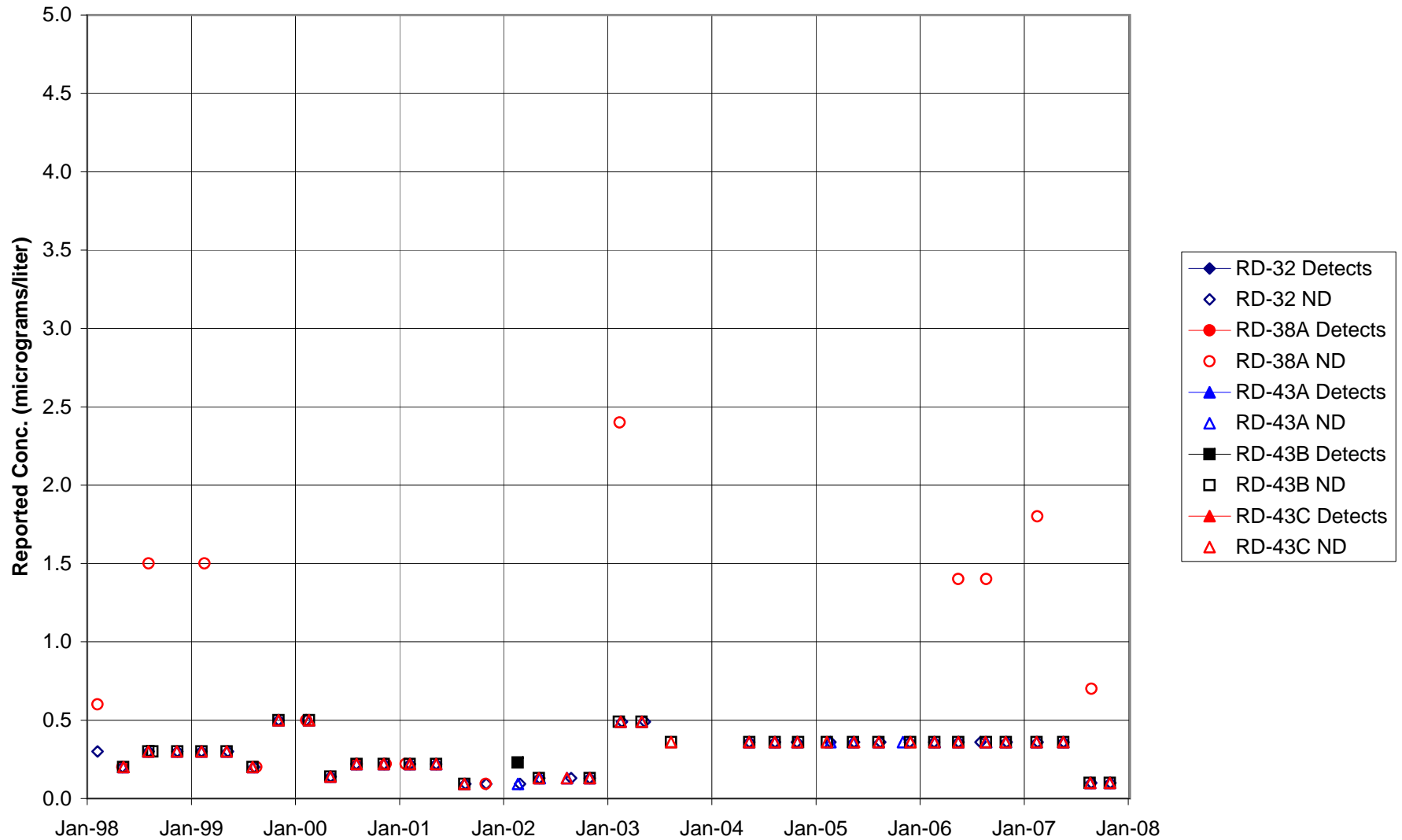


FIGURE F-307. TOLUENE in APTF, CANYON, & HAPPY VALLEY WELLS - 1

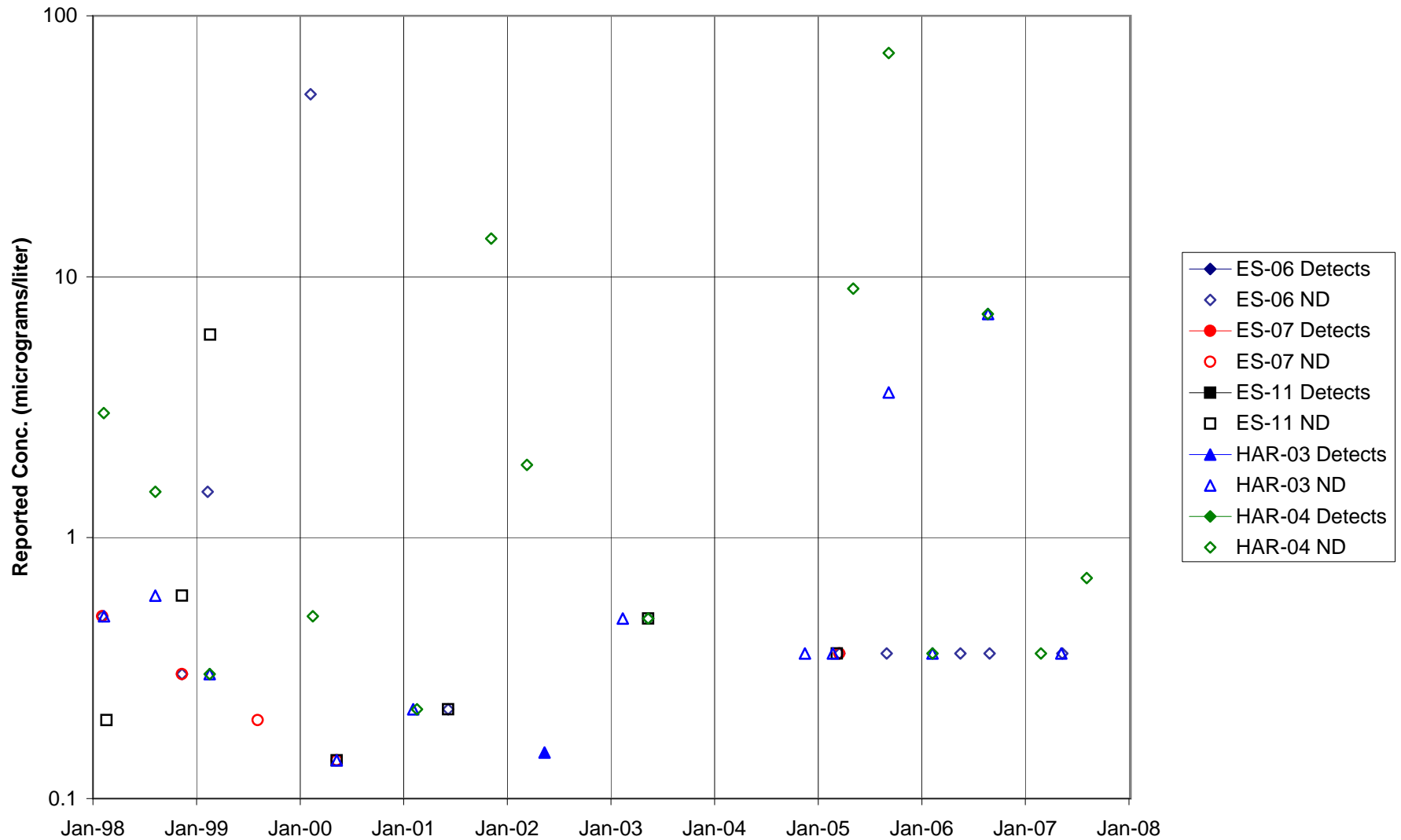
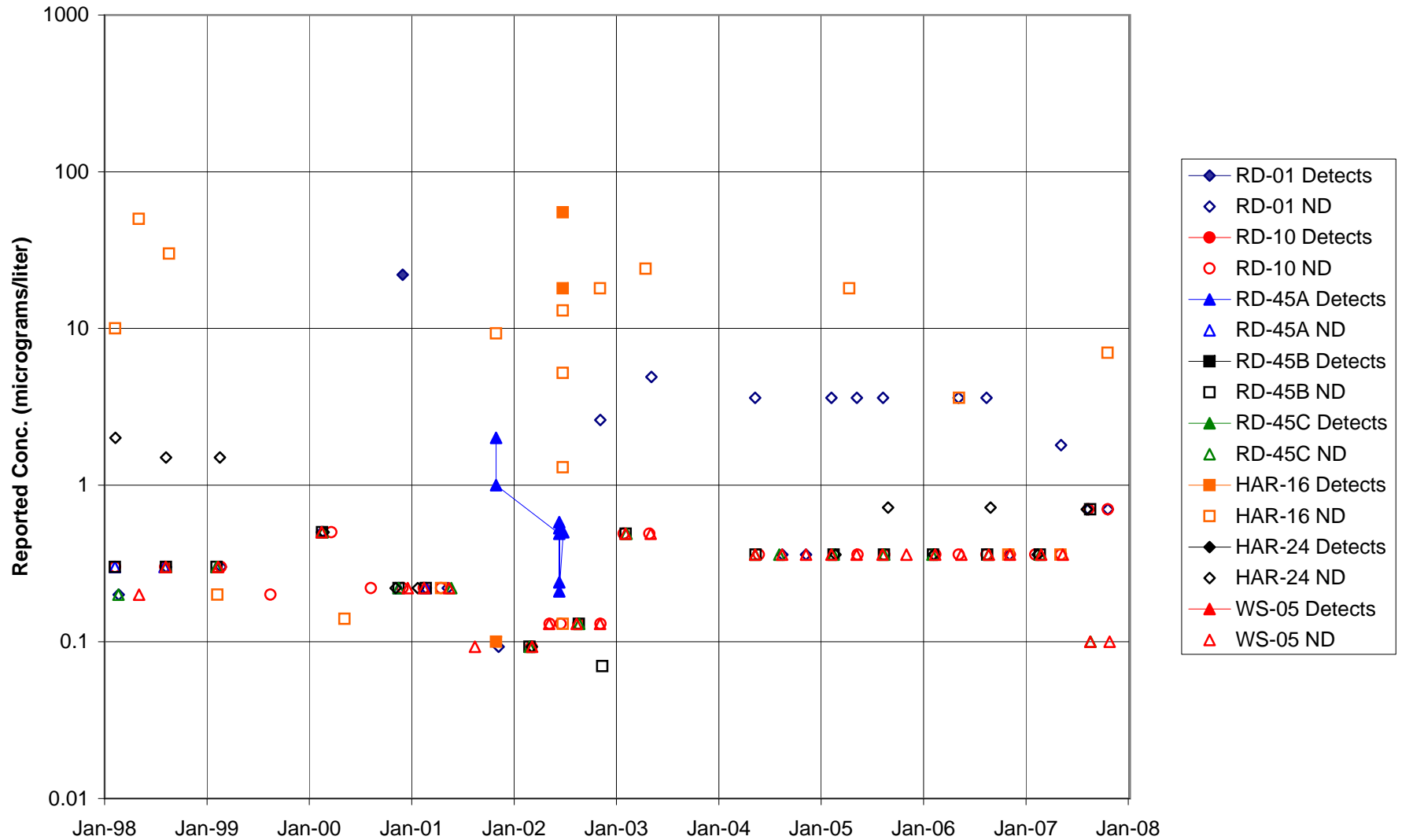


FIGURE F-308. TOLUENE in APTF, CANYON, & HAPPY VALLEY WELLS - 2



**FIGURE F-309. TOLUENE in CTL-III / PERIMETER POND AREA WELLS**

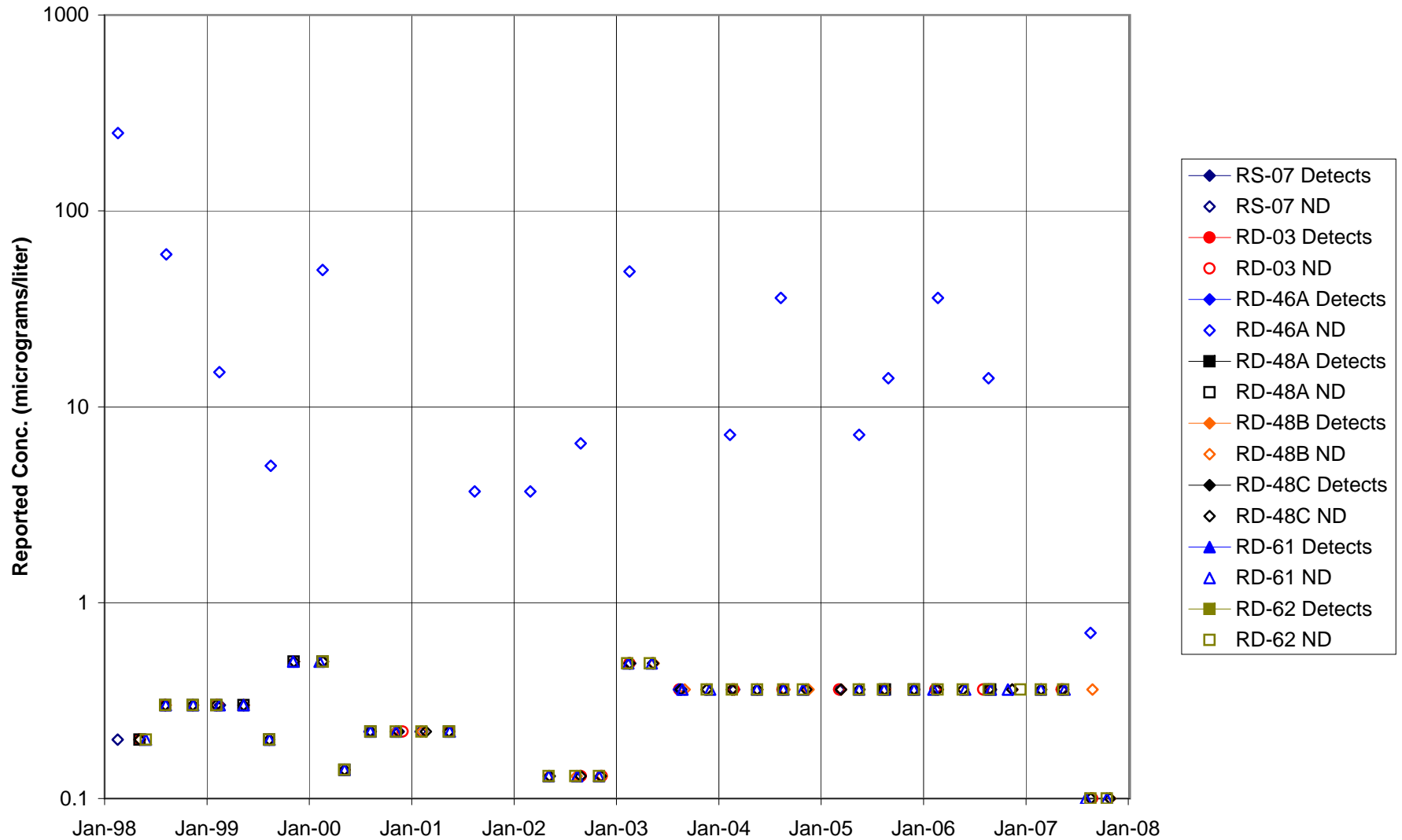


FIGURE F-310. TOLUENE in BOWL AREA WELLS

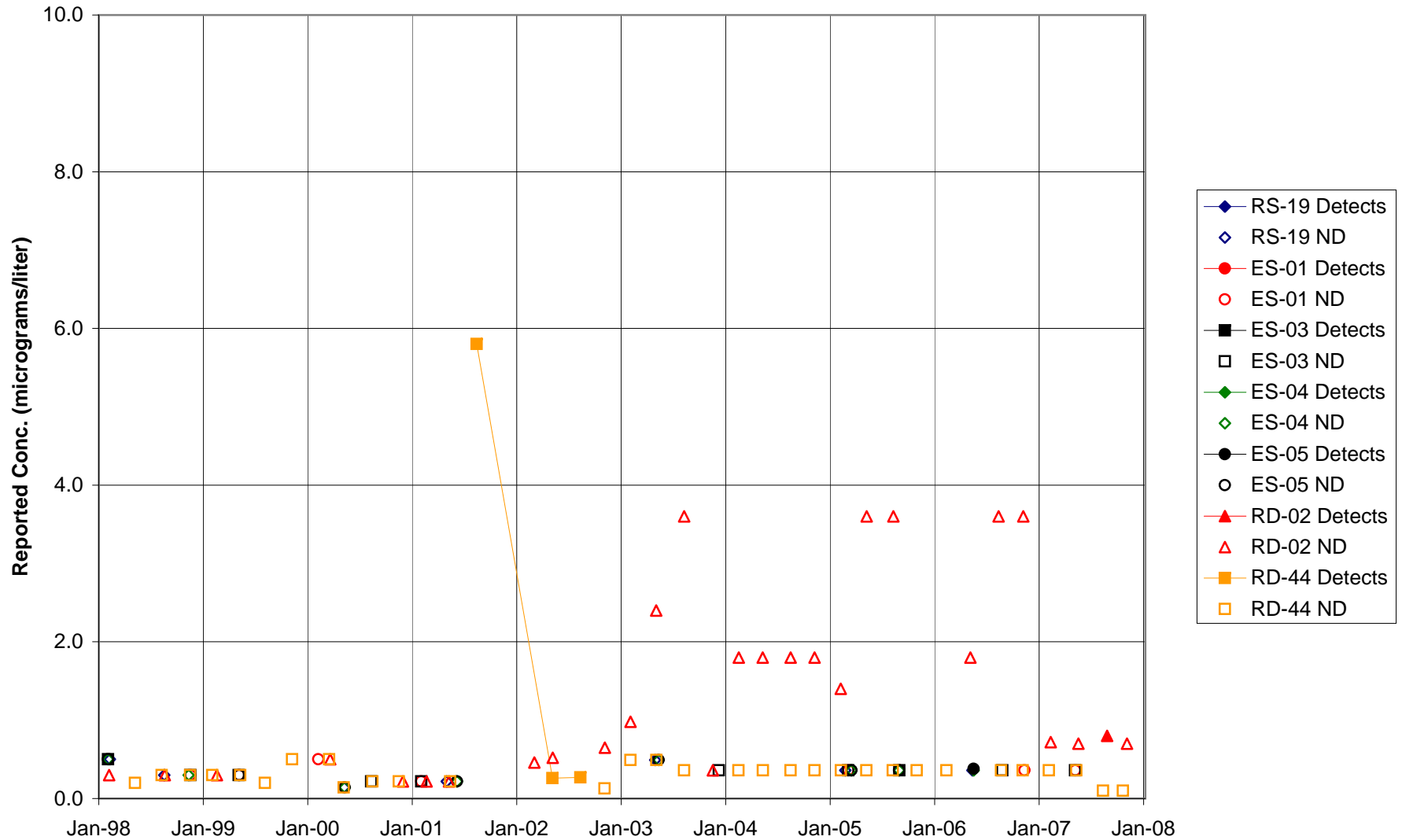


FIGURE F-311. TOLUENE in ECL AREA WELLS

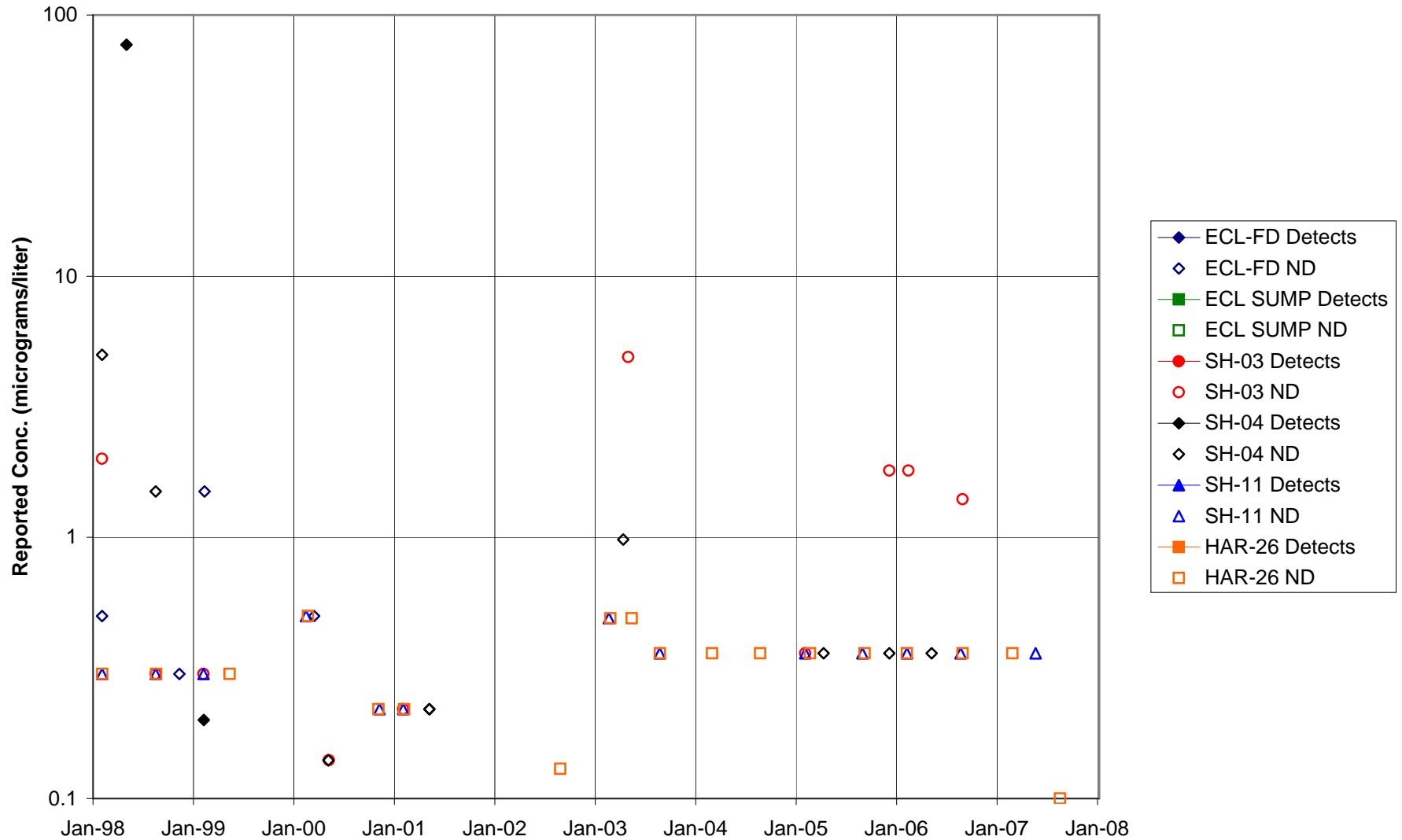


FIGURE F-312. TOLUENE in RD-09 AREA WELLS

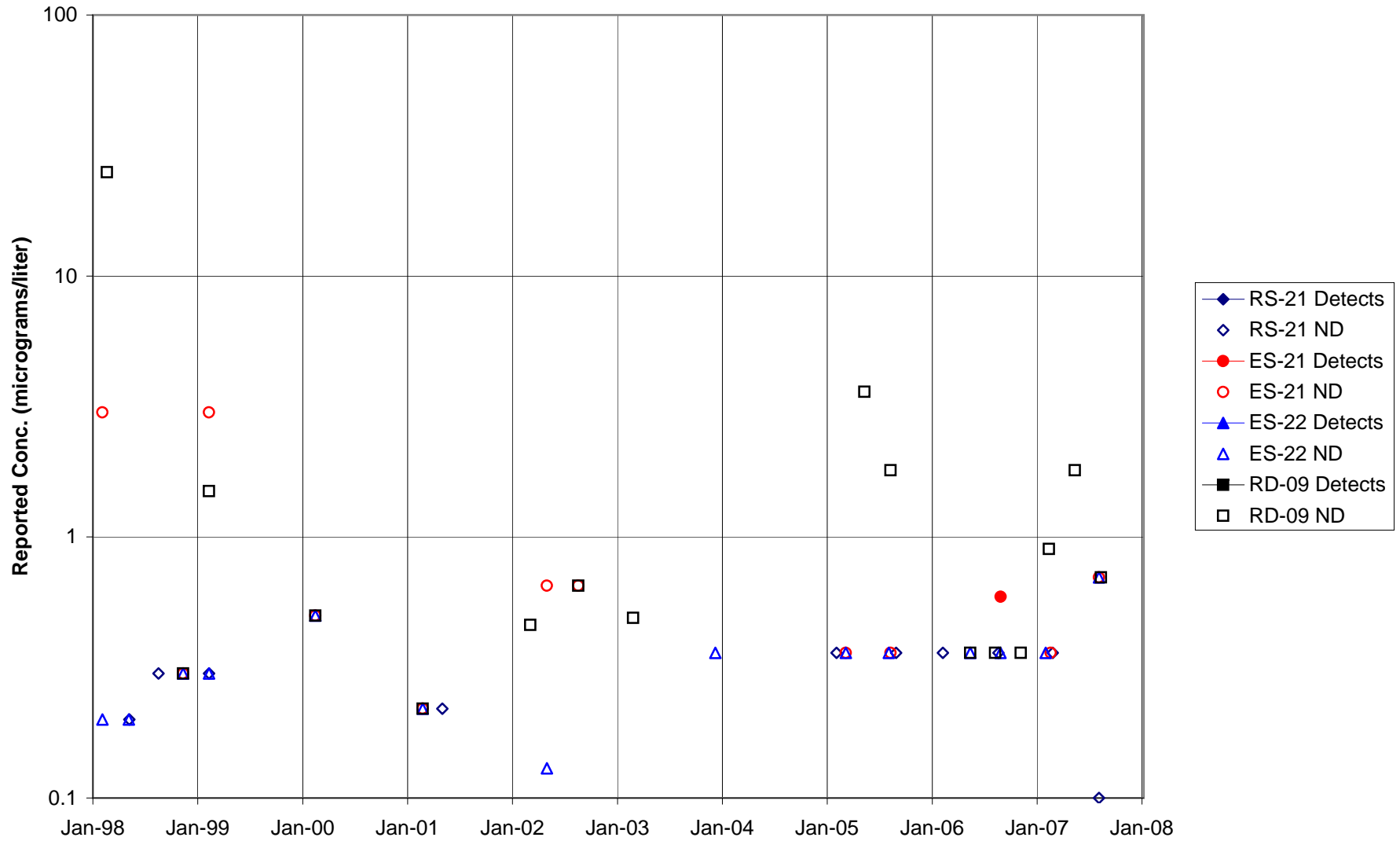
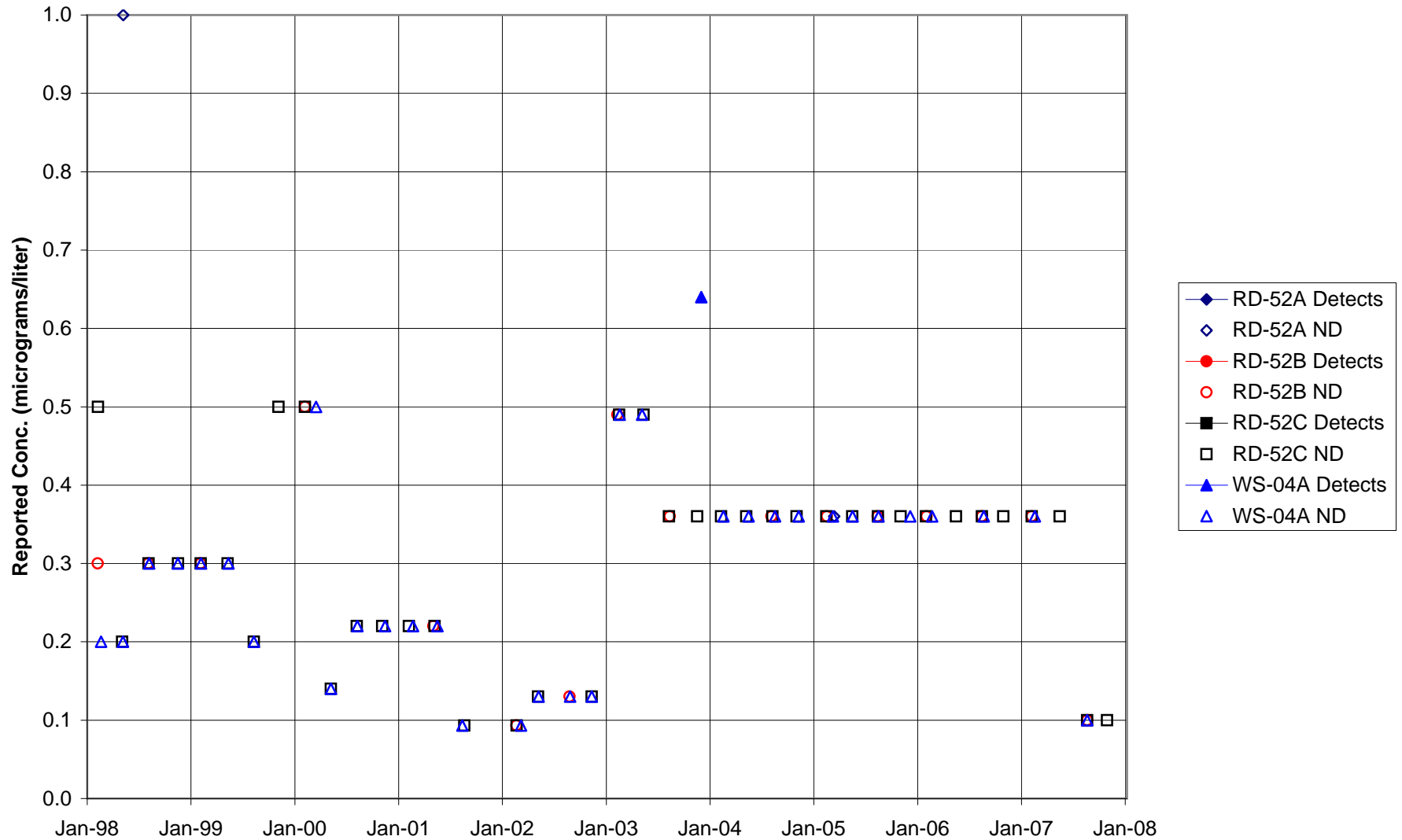
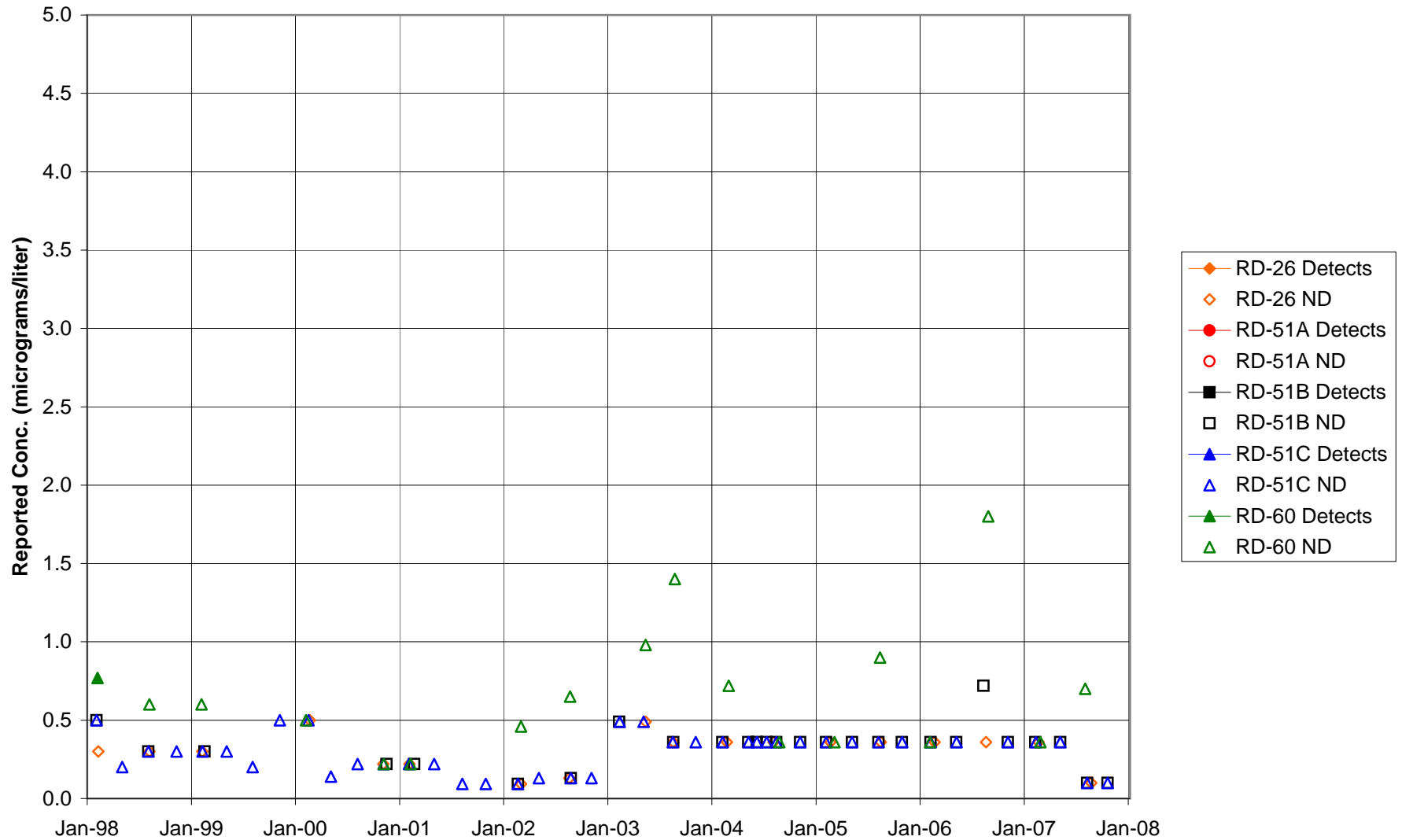




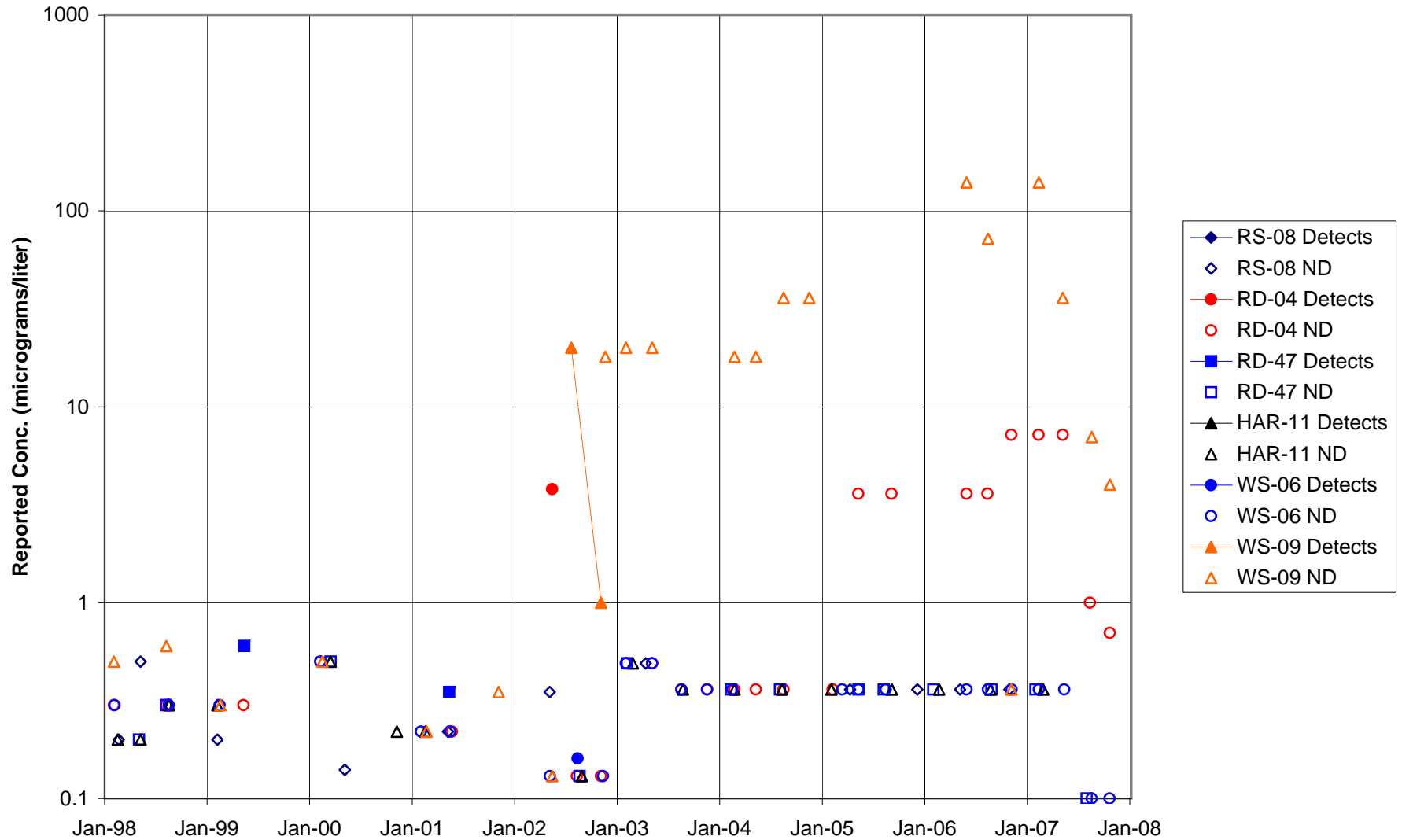
FIGURE F-313. TOLUENE in FORMER LOX PLANT AREA WELLS



**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**

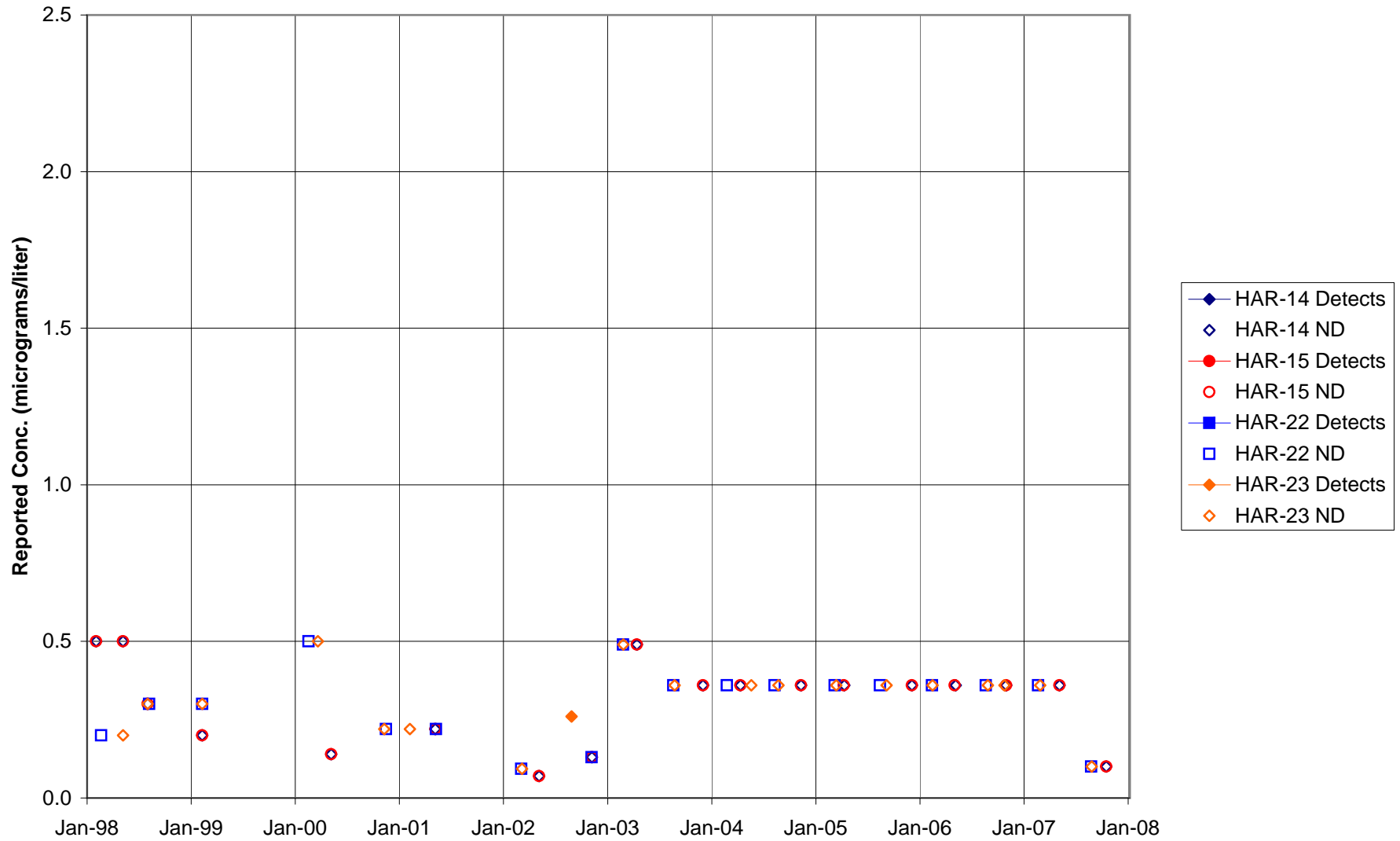


FIGURE F-317. TOLUENE in COCA / PLF AREA WELLS

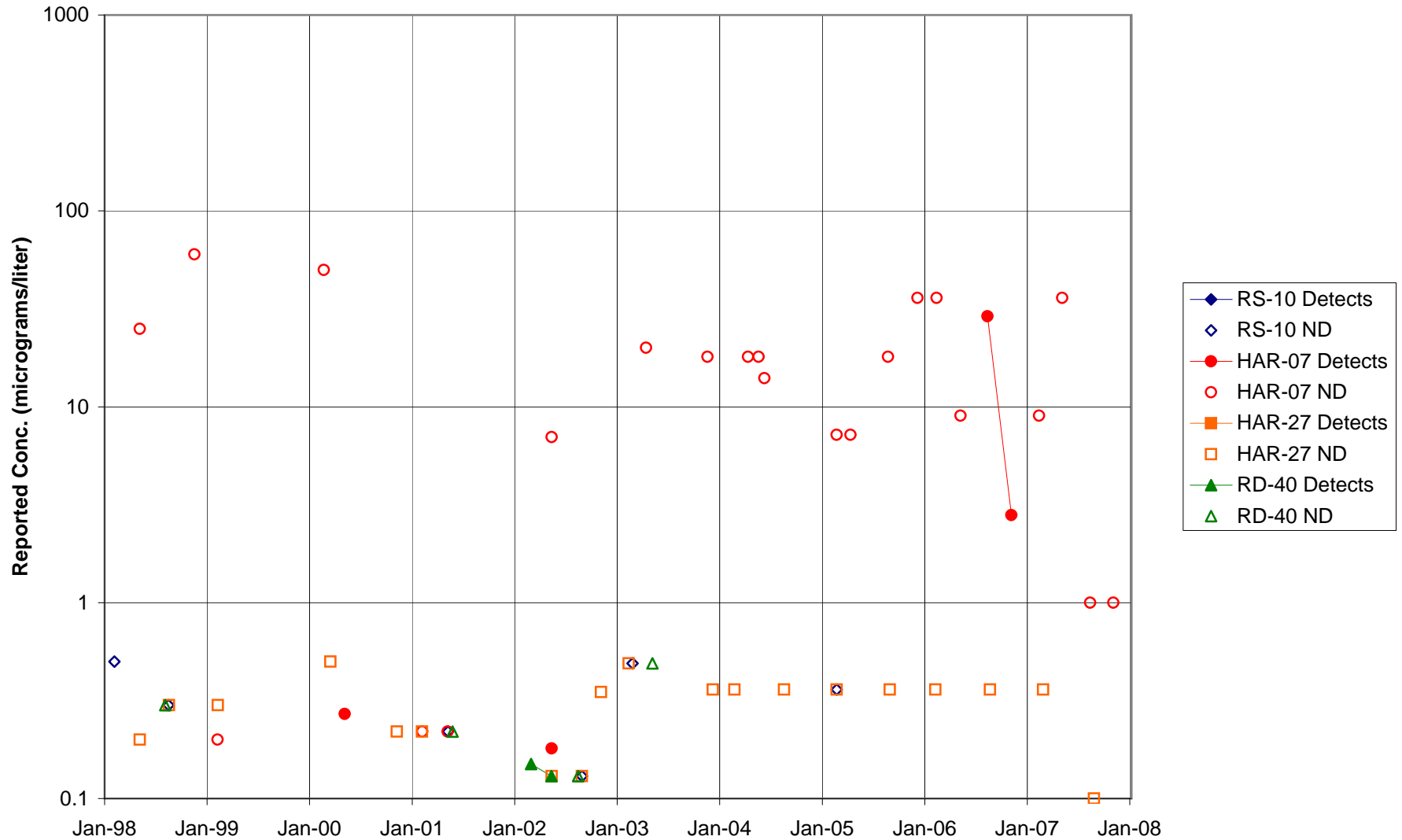


FIGURE F-318. TOLUENE in DELTA / BUFFER ZONE AREA WELLS

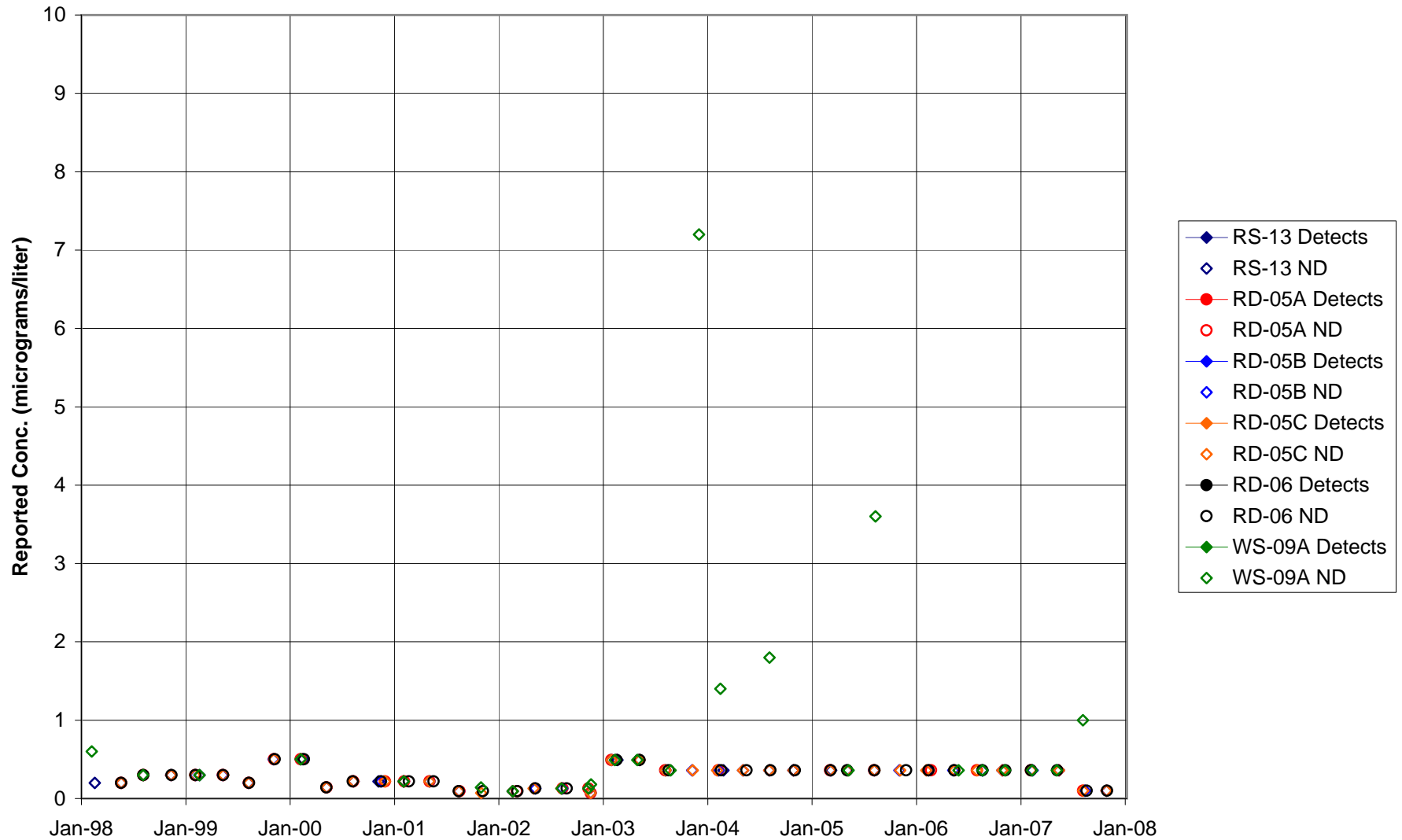


FIGURE F-319. TOLUENE in AREA IV WELLS

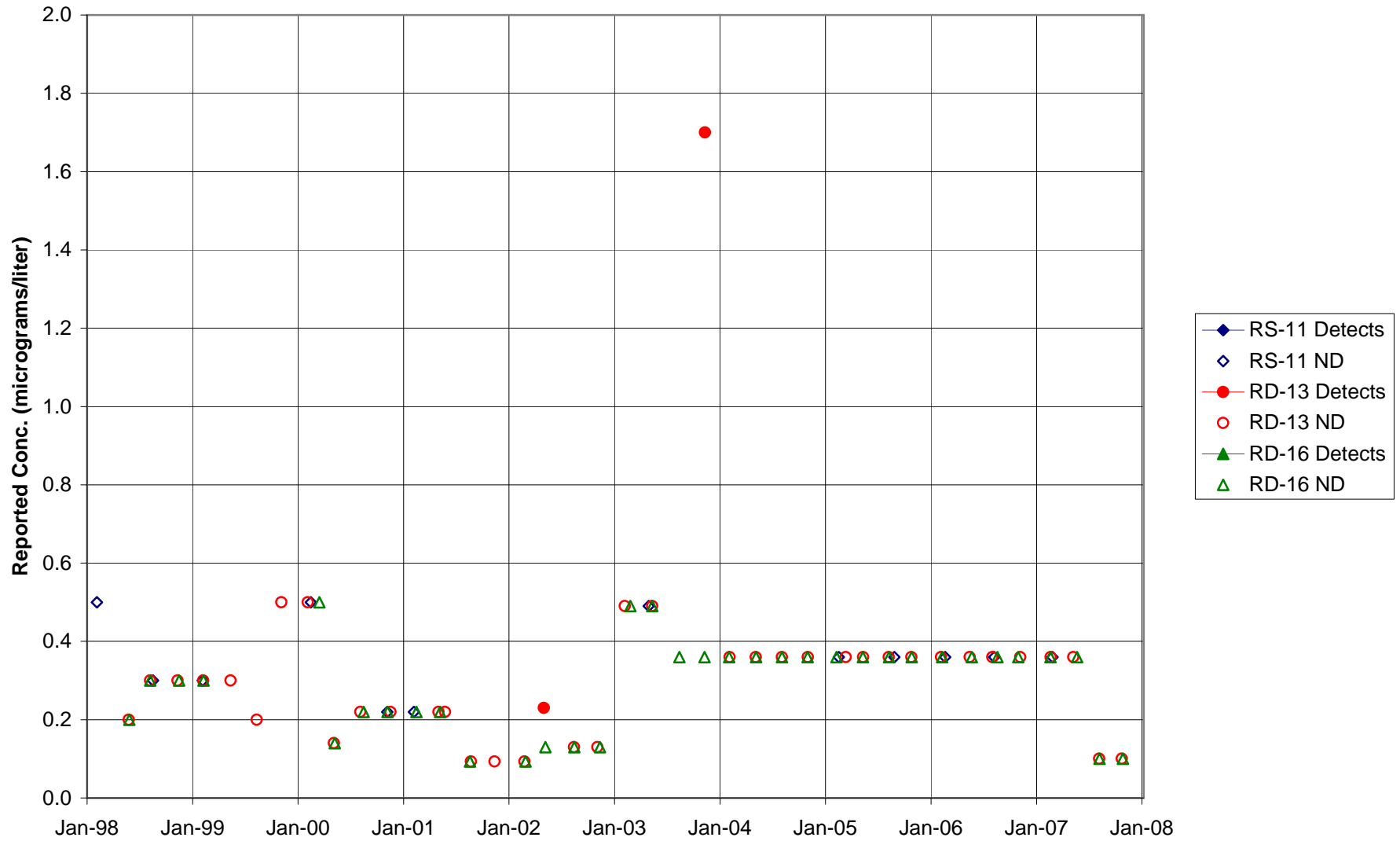
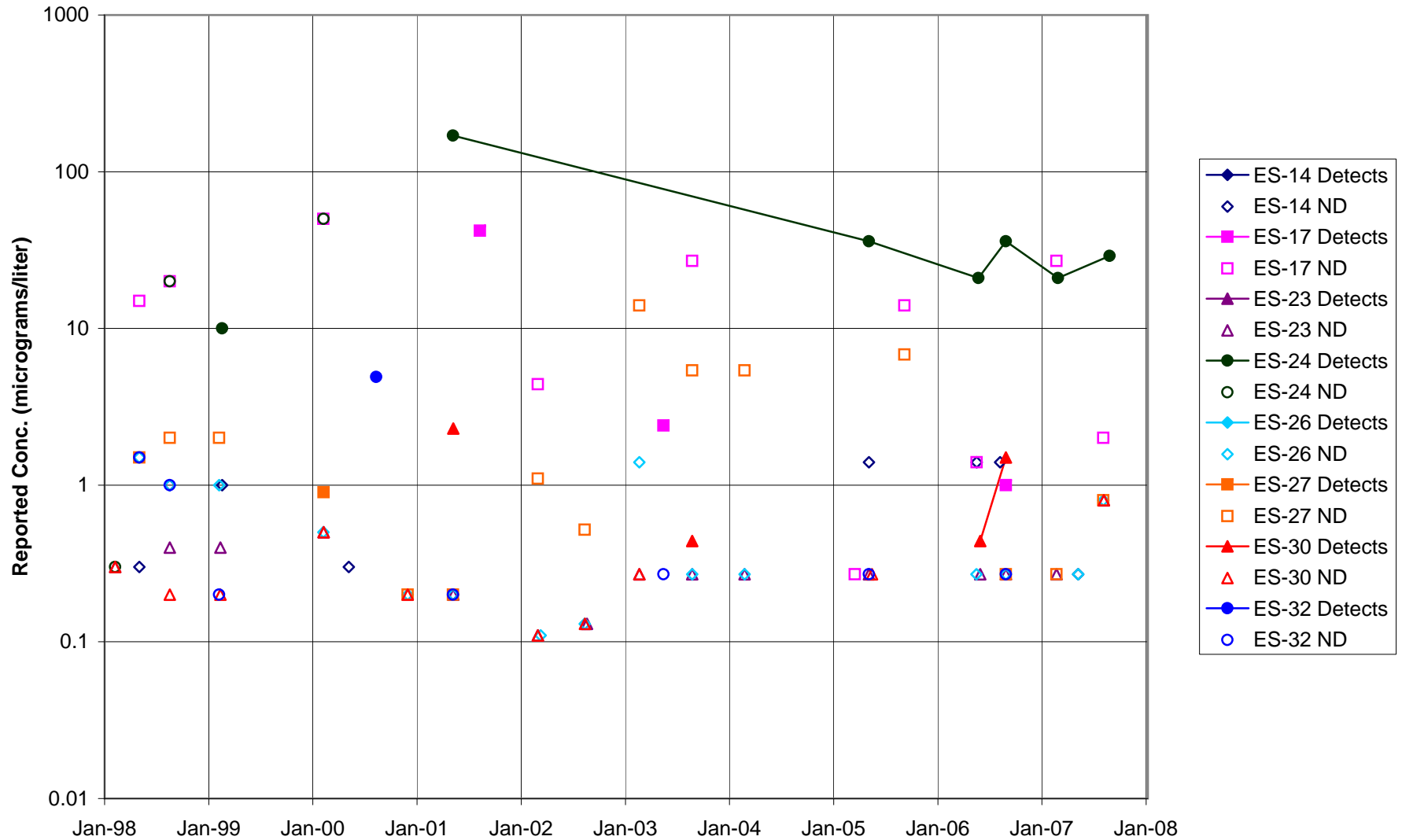


FIGURE F-320. TRANS-1,2-DCE in STL-IV AREA SHALLOW WELLS





**FIGURE F-321. TRANS-1,2-DCE in STL-IV AREA CHATSWORTH FORMATION WELLS**

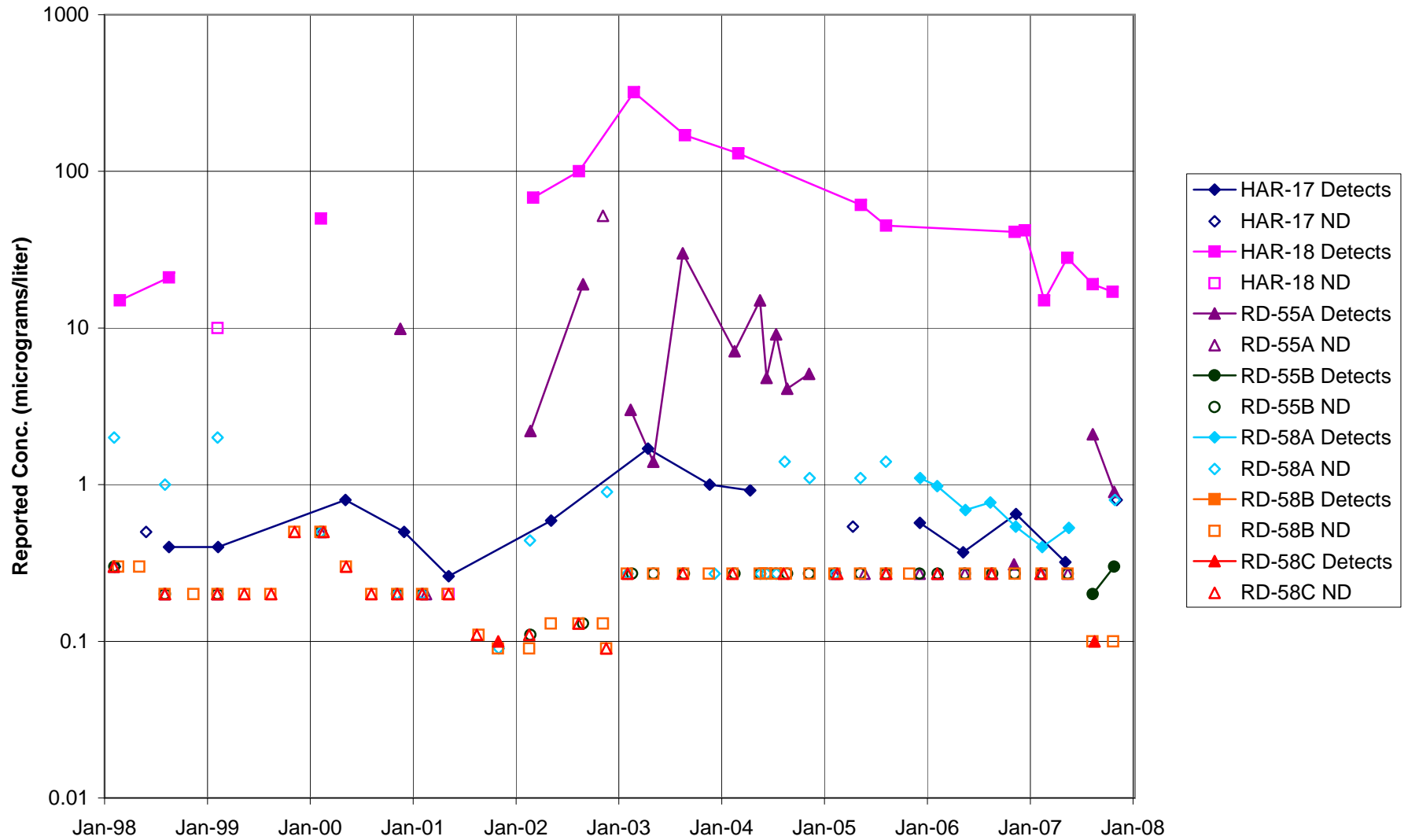


FIGURE F-322. TRANS-1,2-DCE in MAIN GATE AREA WELLS - 1

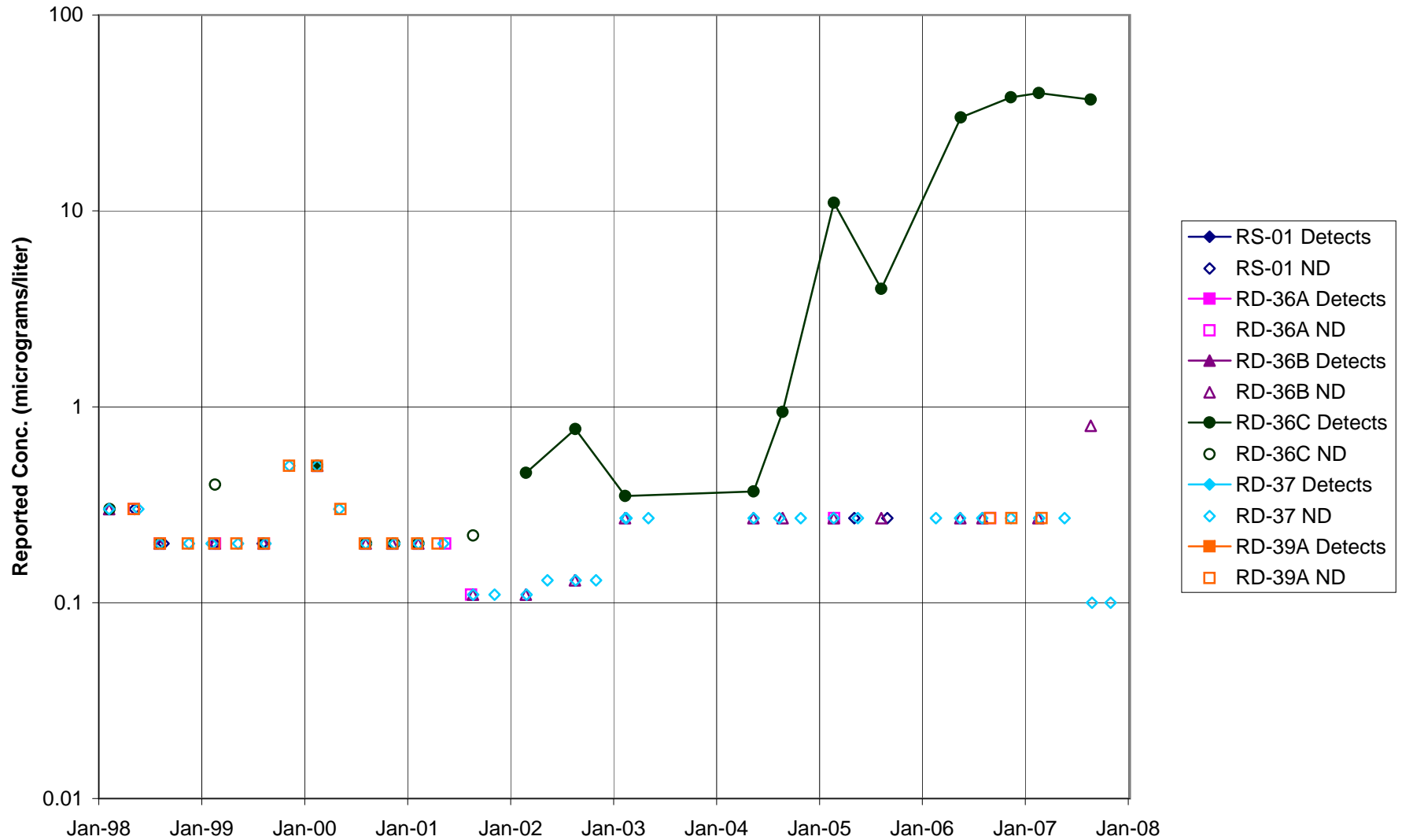
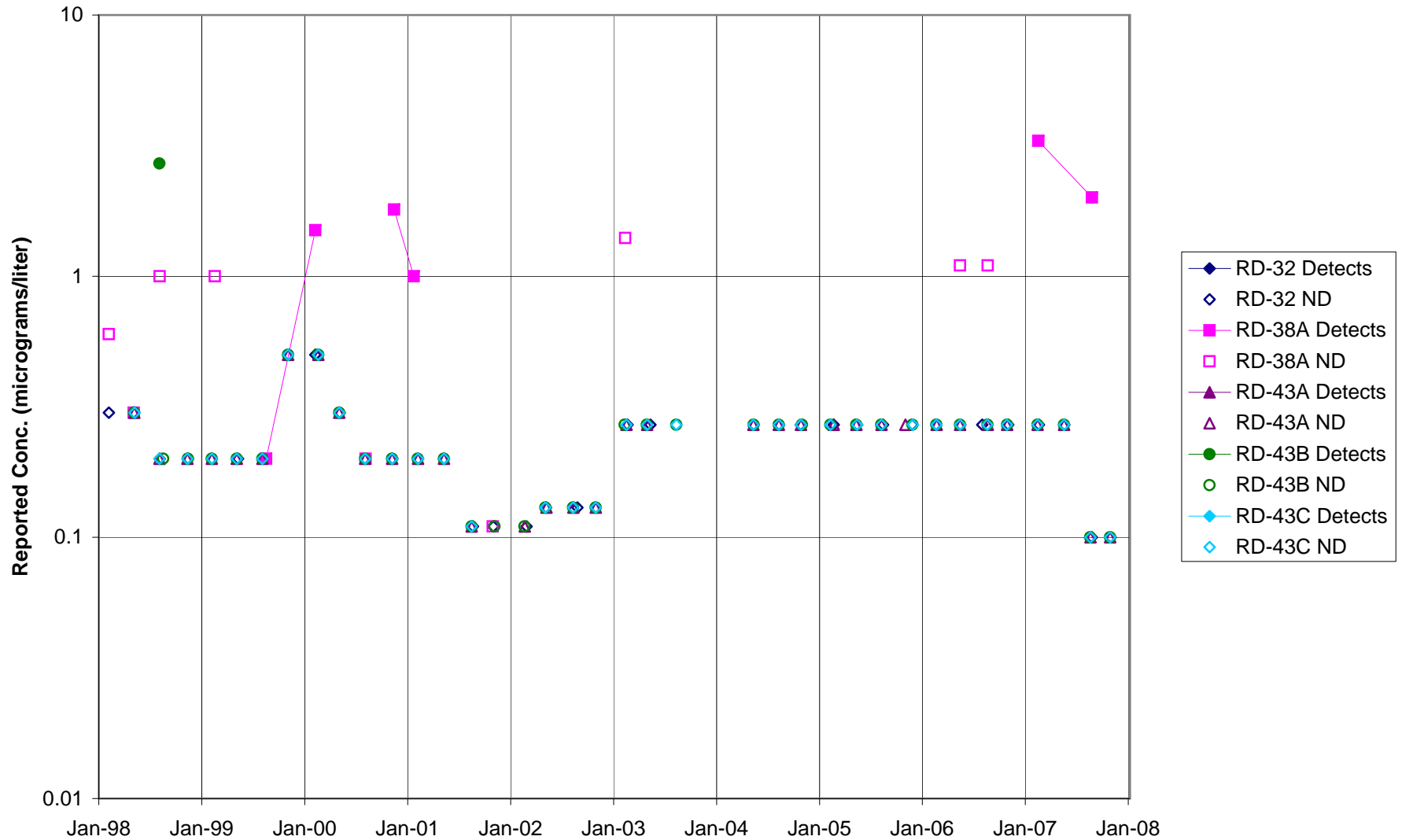
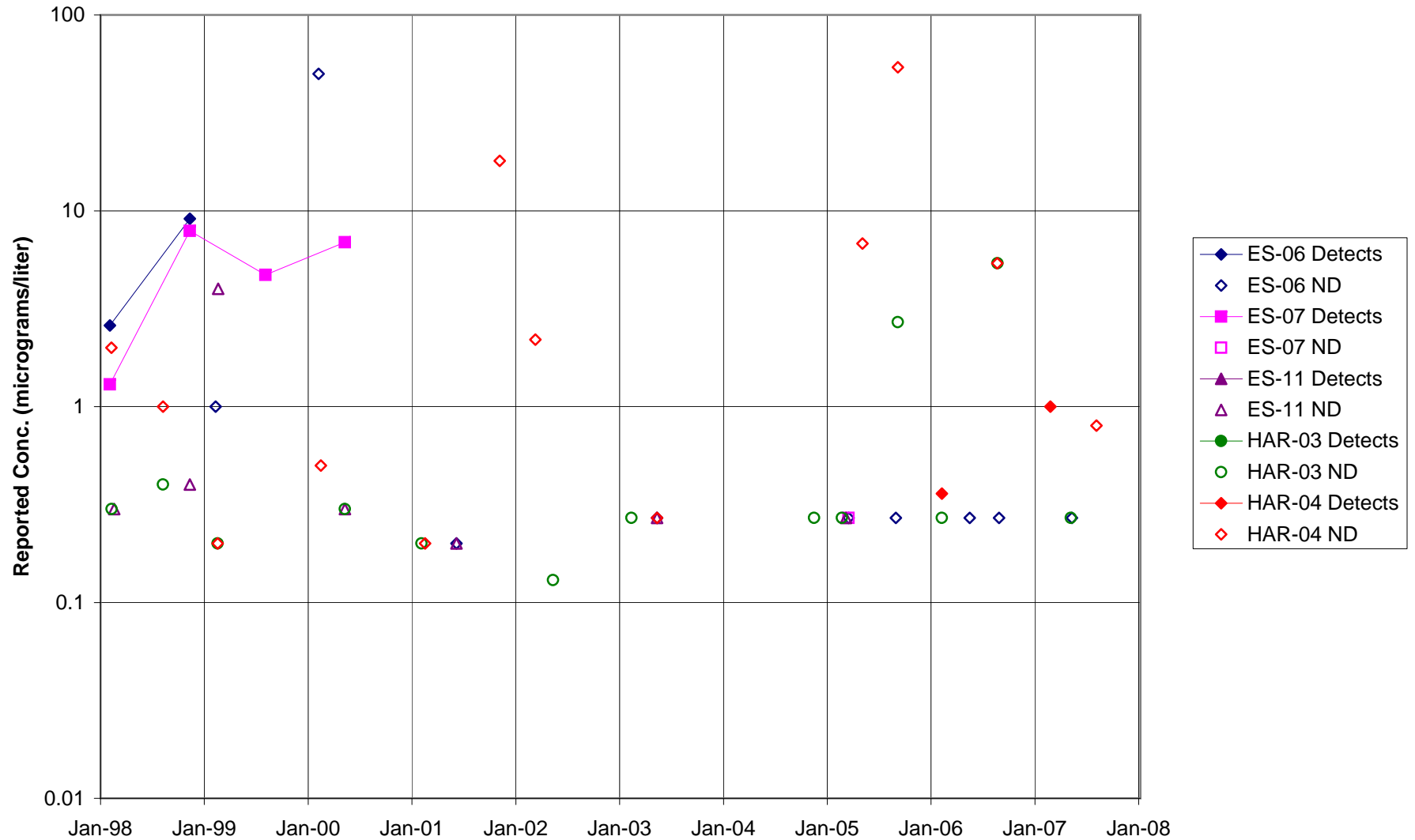


FIGURE F-323. TRANS-1,2-DCE in MAIN GATE AREA WELLS - 2



**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**

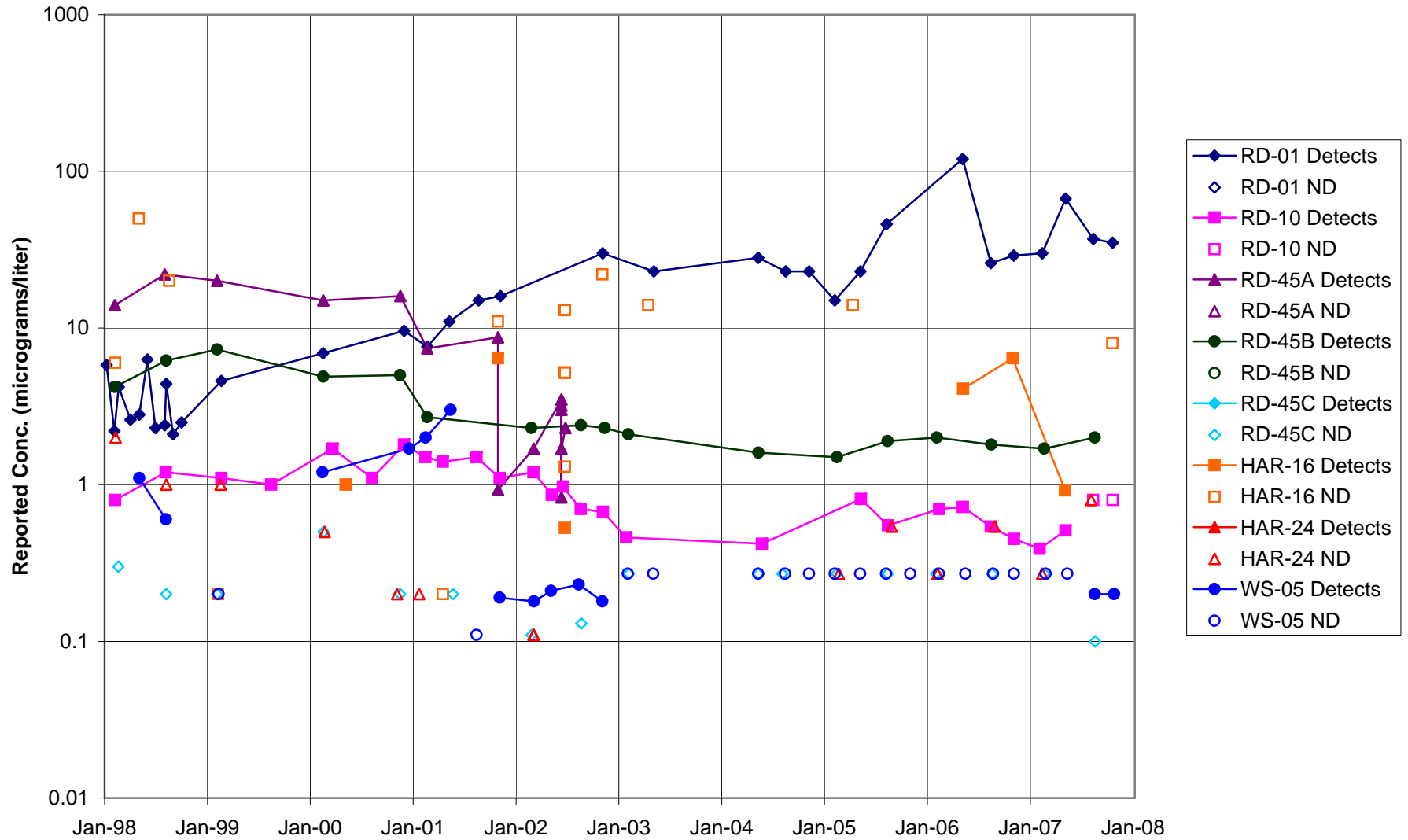


FIGURE F-326. TRANS-1,2-DCE in CTL-III / PERIMETER POND AREA WELLS

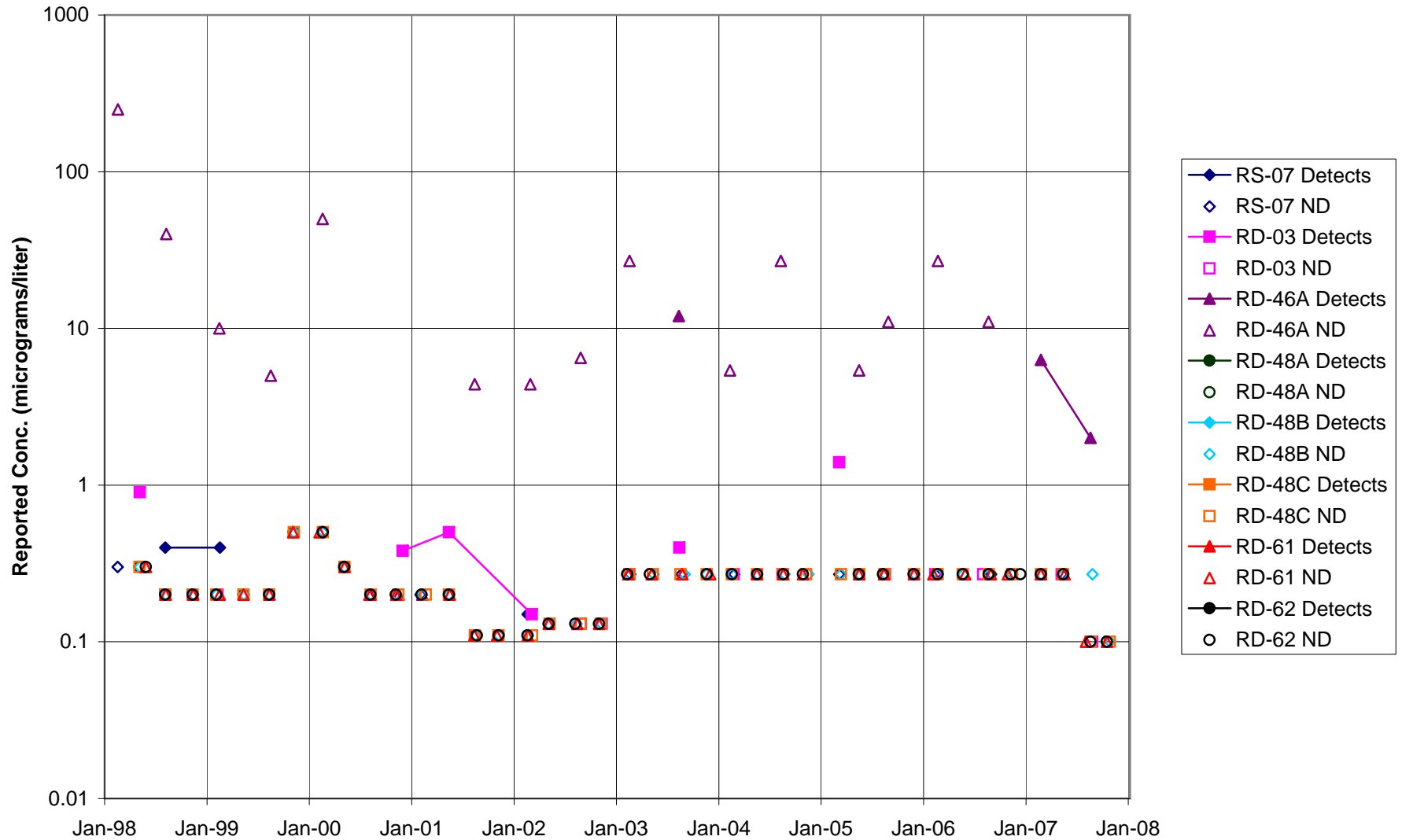


FIGURE F-327. TRANS-1,2-DCE in BOWL AREA WELLS

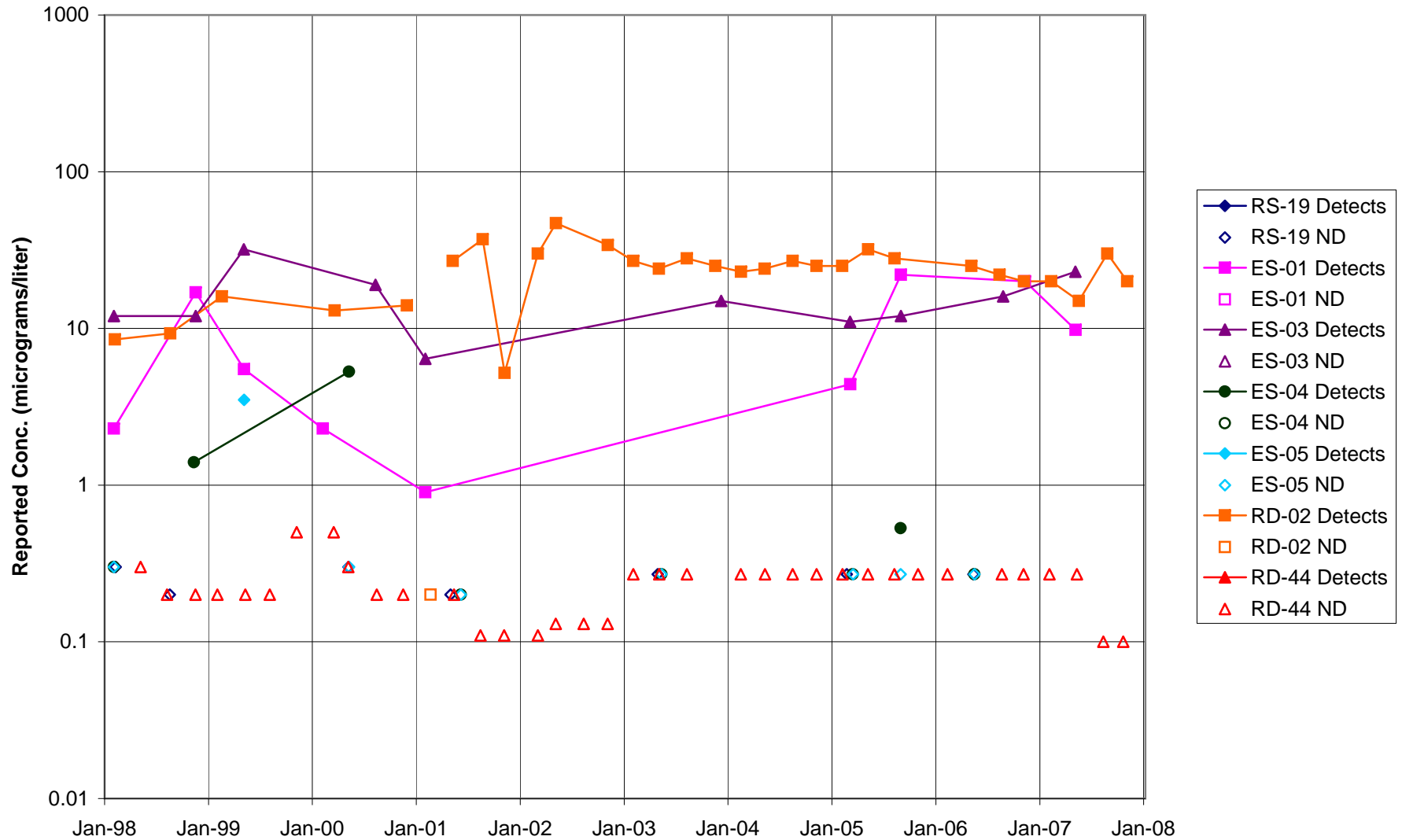


FIGURE F-328. TRANS-1,2-DCE in ECL AREA WELLS





**FIGURE F-329. TRANS-1,2-DCE in FORMER LOX PLANT AREA WELLS**

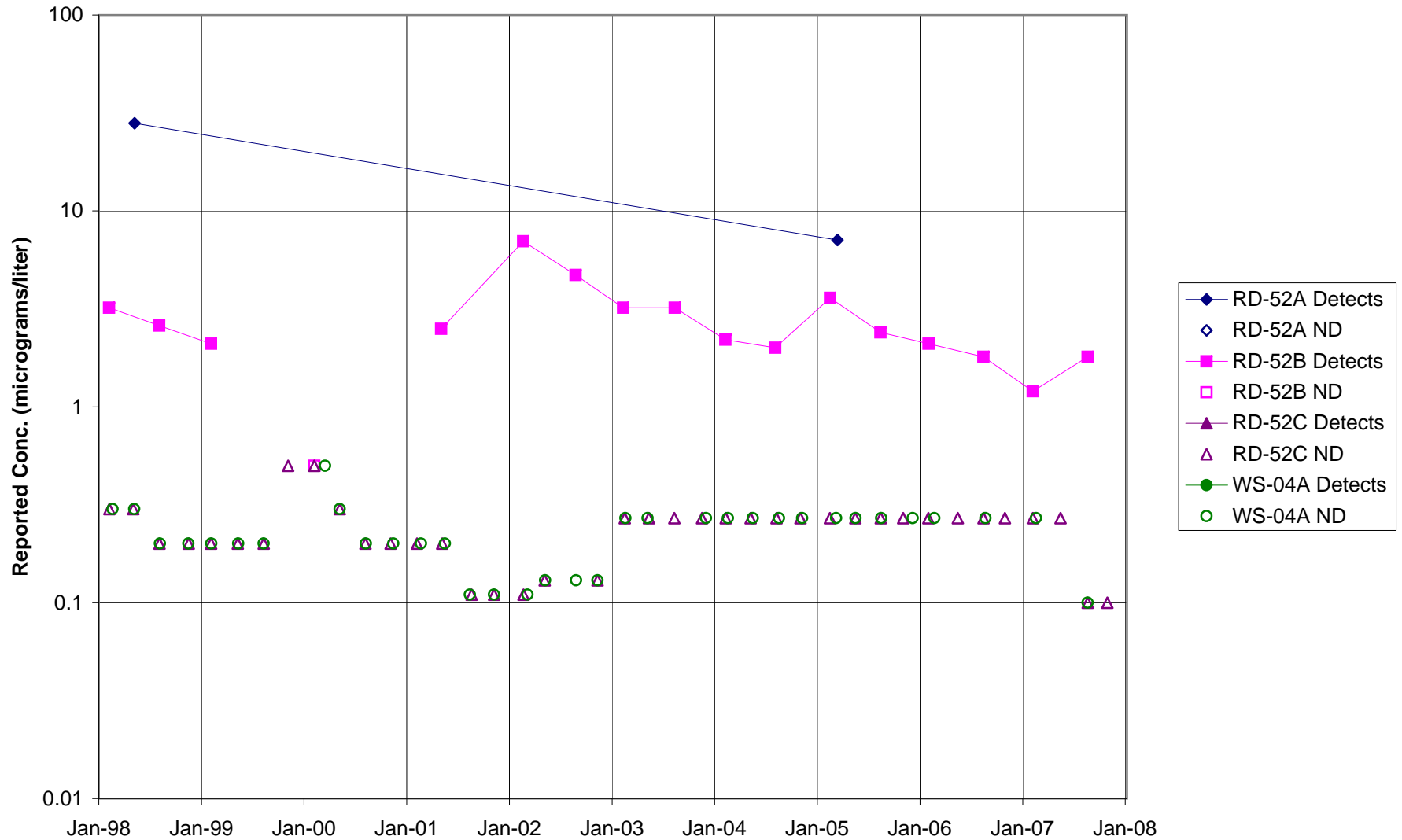


FIGURE F-330. TRANS-1,2-DCE in RD-09 AREA WELLS

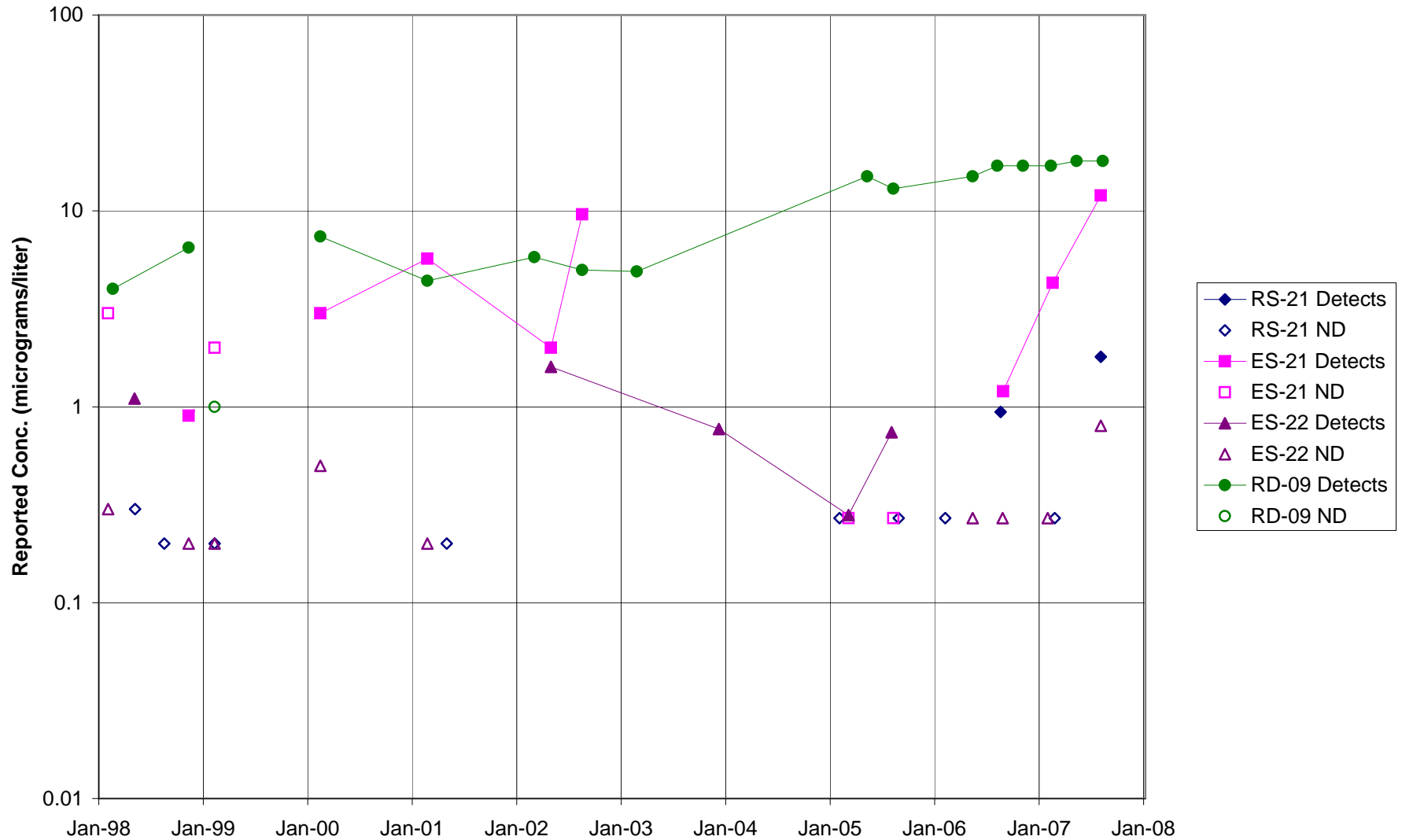


FIGURE F-331. TRANS-1,2-DCE in HELIPOINT, B/204 AREA WELLS

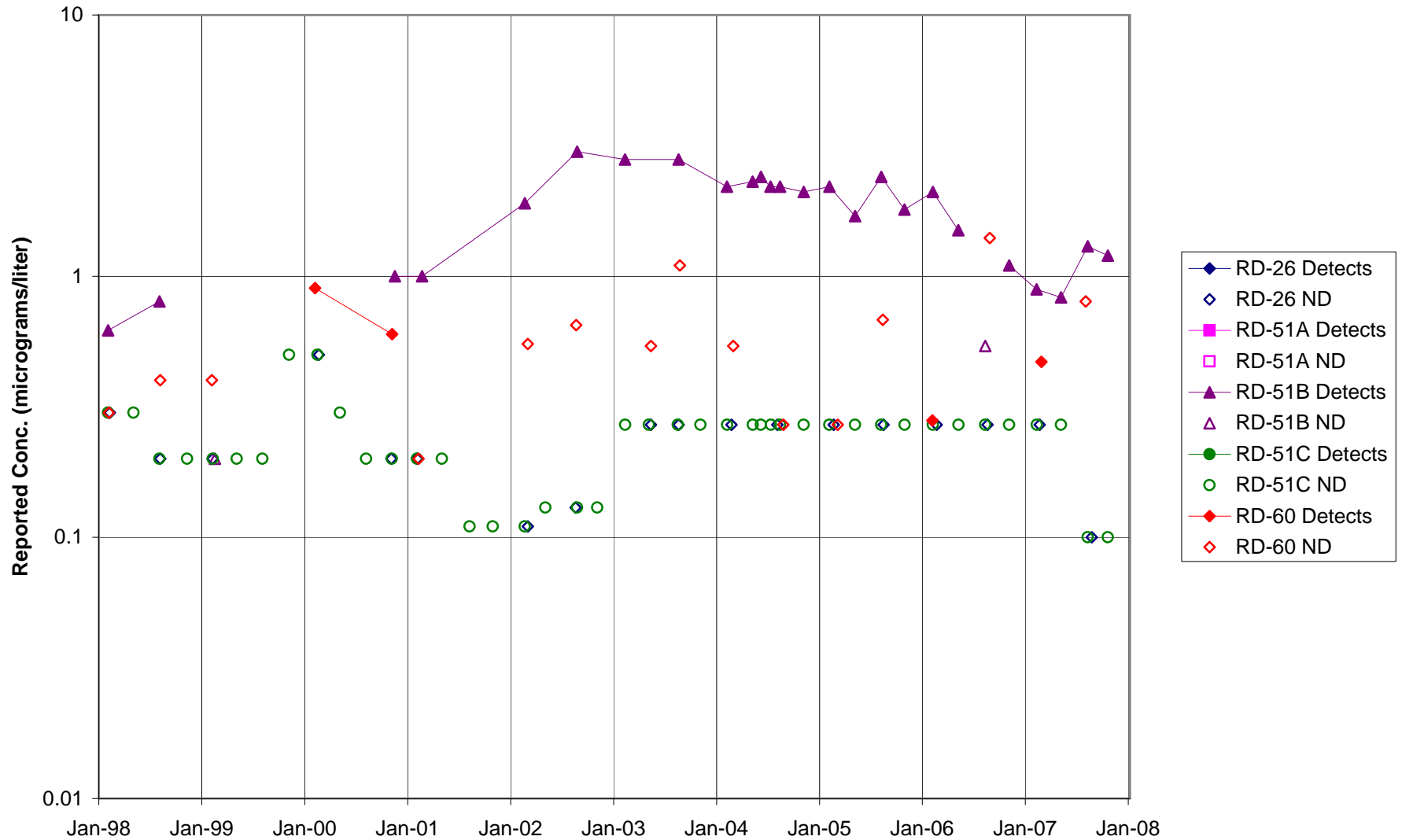


FIGURE F-332. TRANS-1,2-DCE in ALFA / BRAVO AREA WELLS

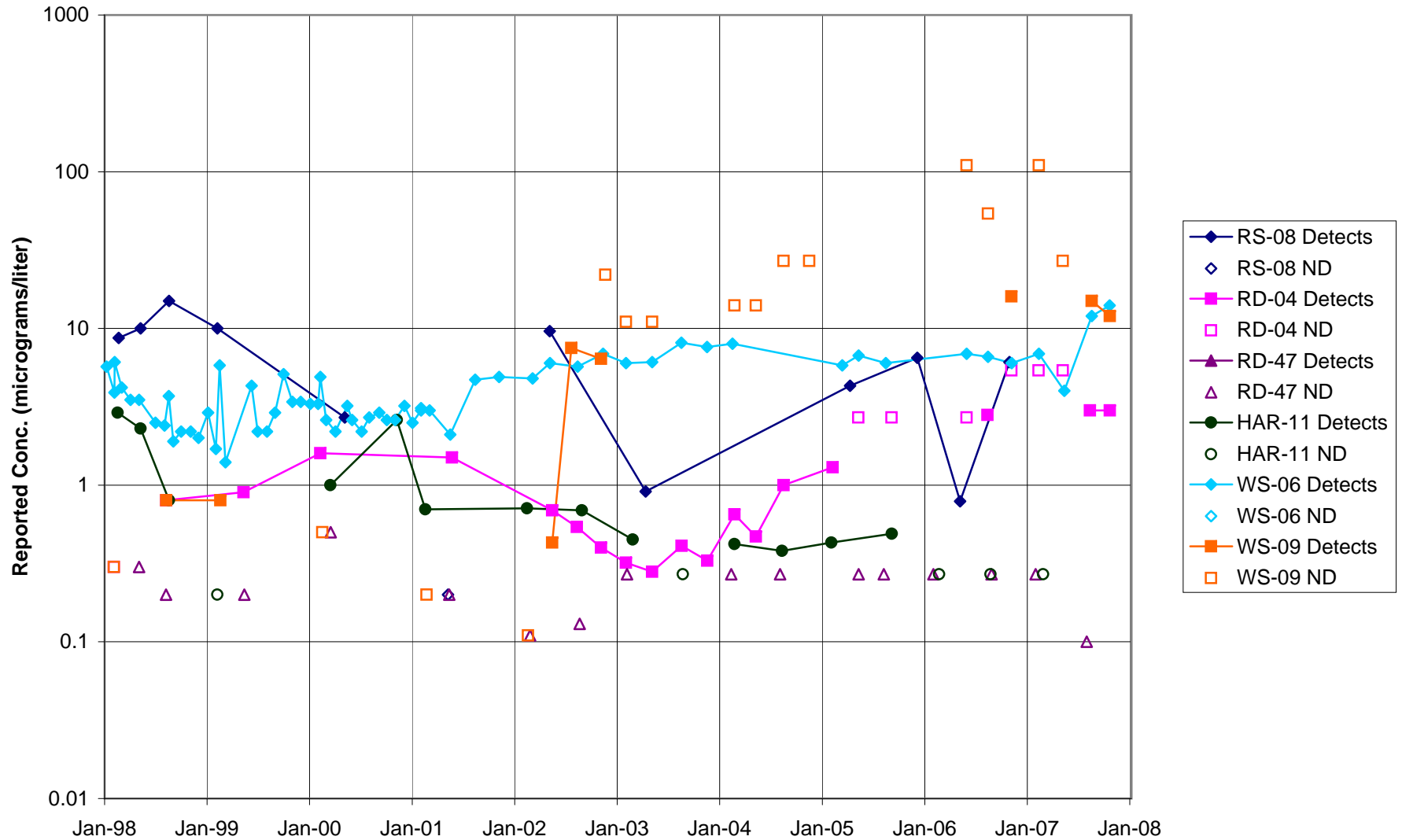


FIGURE F-333. TRANS-1,2-DCE in SPA AREA WELLS

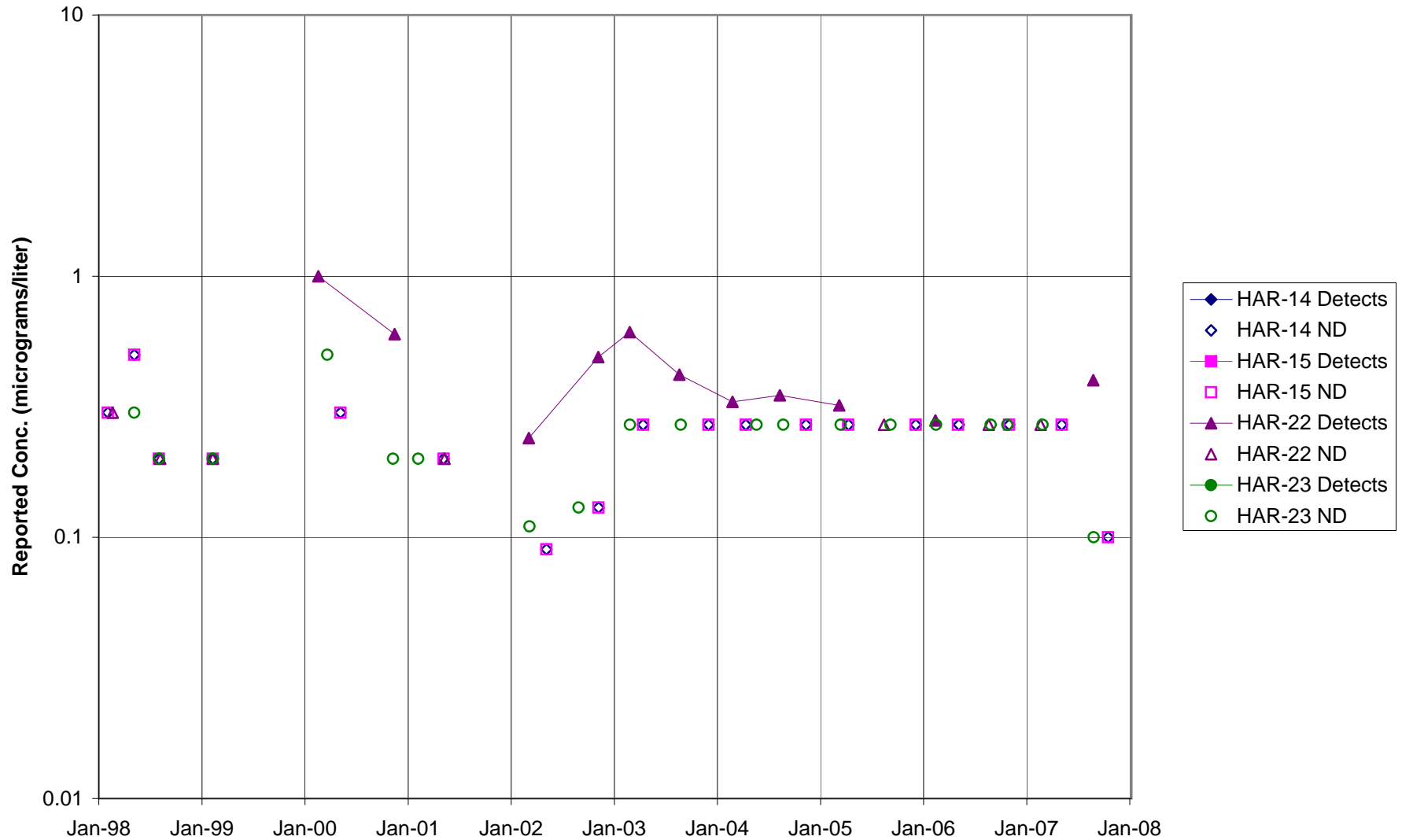


FIGURE F-334. TRANS-1,2-DCE in COCA / PLF AREA WELLS

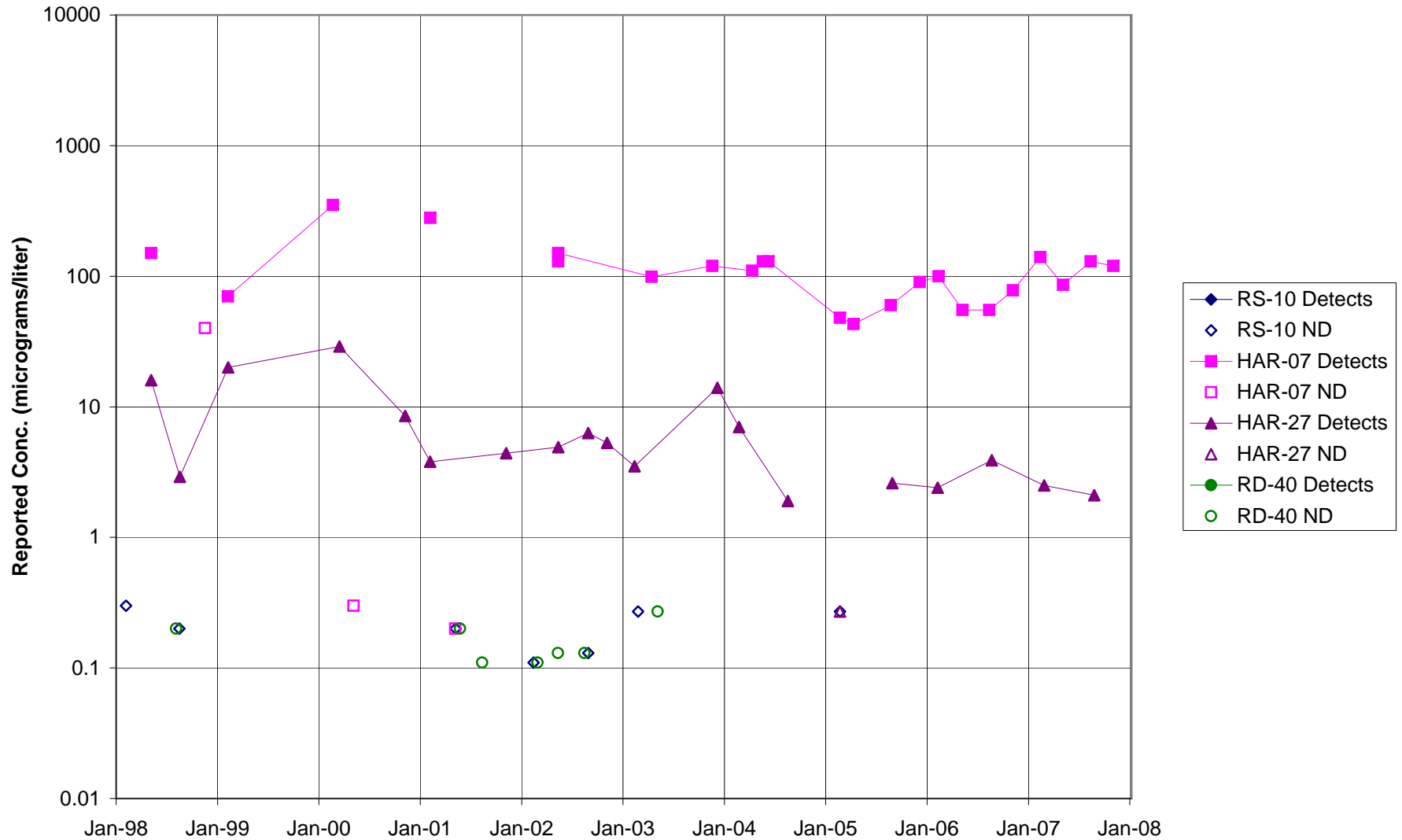


FIGURE F-335. TRANS-1,2-DCE in DELTA / BUFFER ZONE AREA WELLS

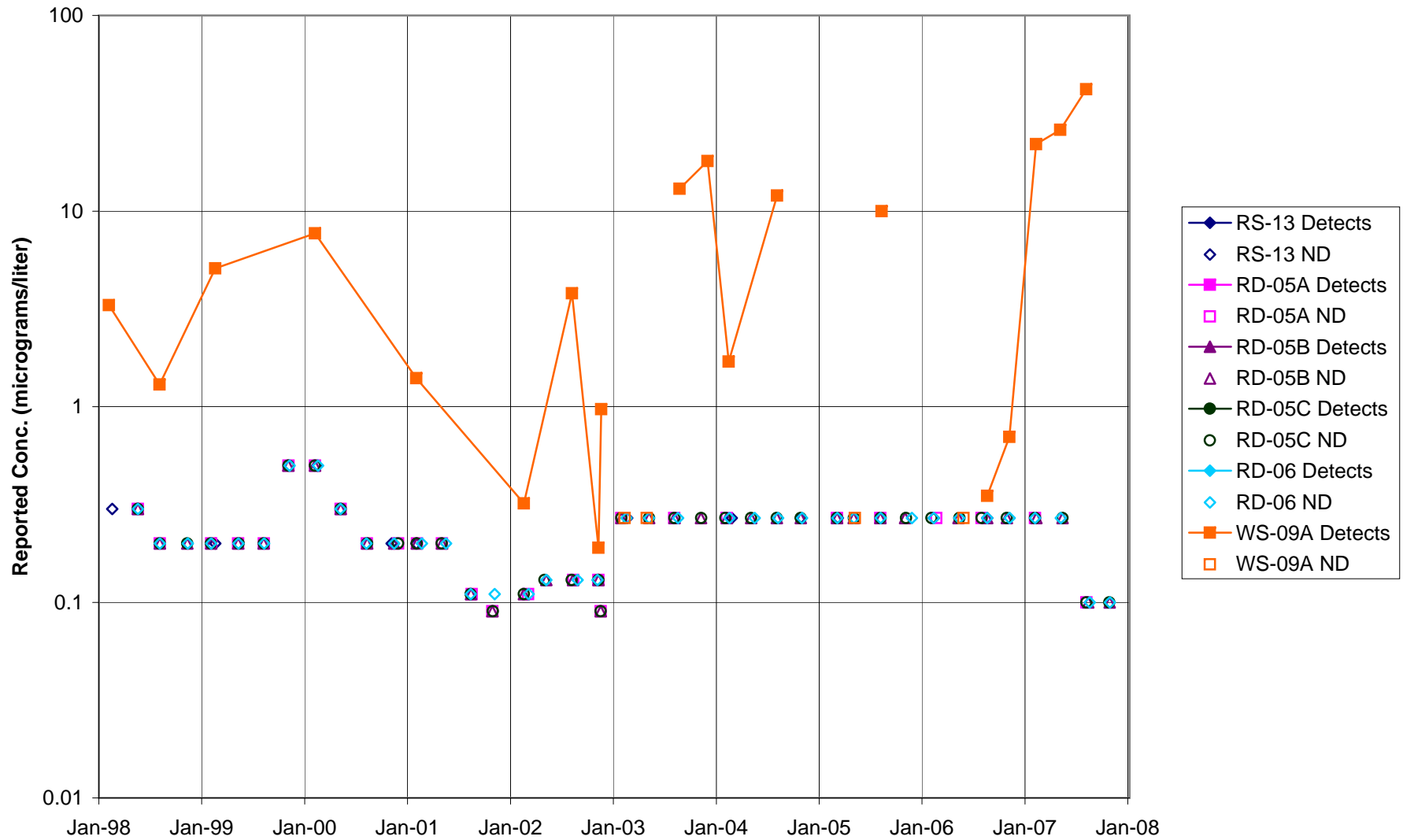






FIGURE F-337. TCE in STL-IV AREA SHALLOW WELLS

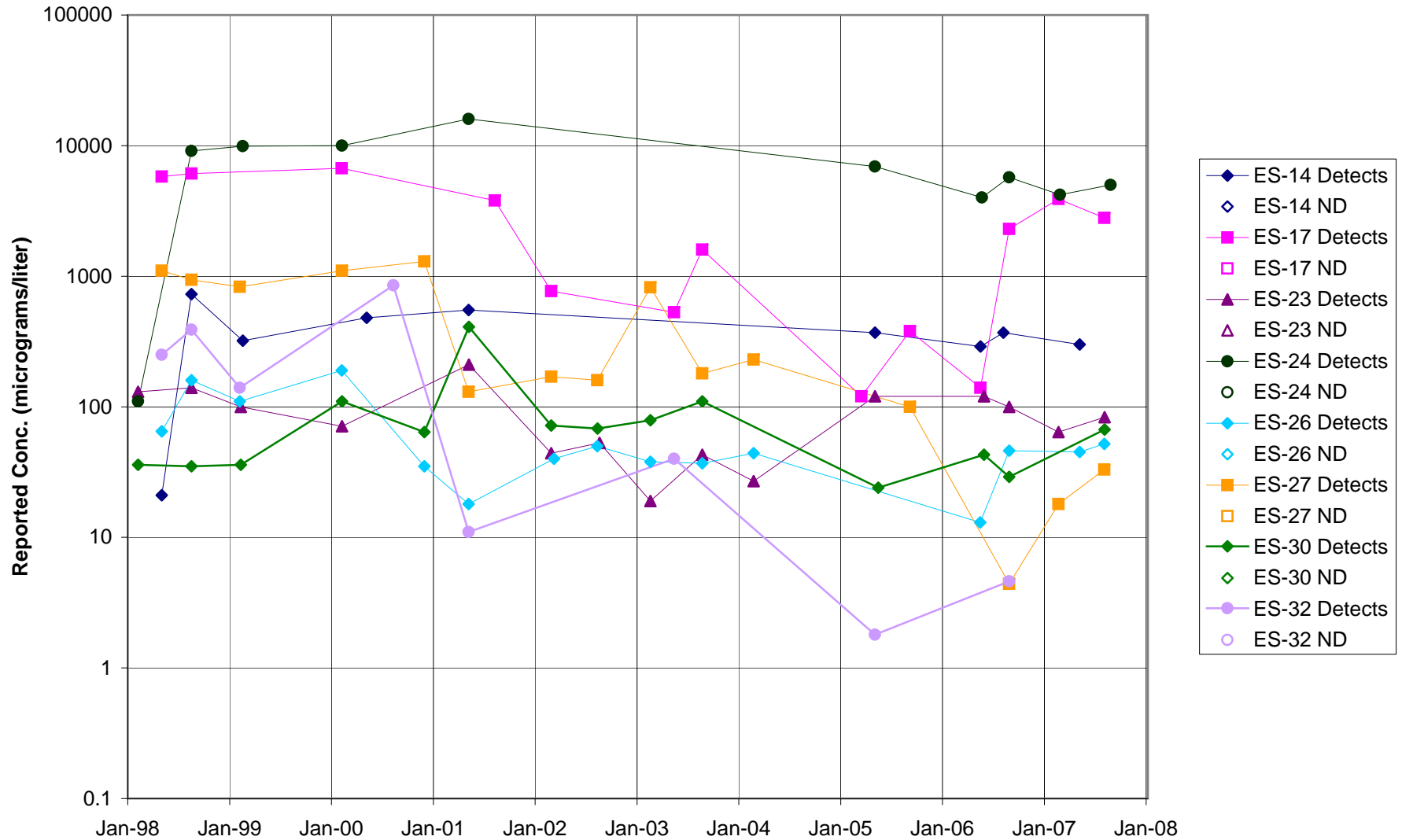


FIGURE F-338. TCE in STL-IV AREA CHATSWORTH FORMATION WELLS

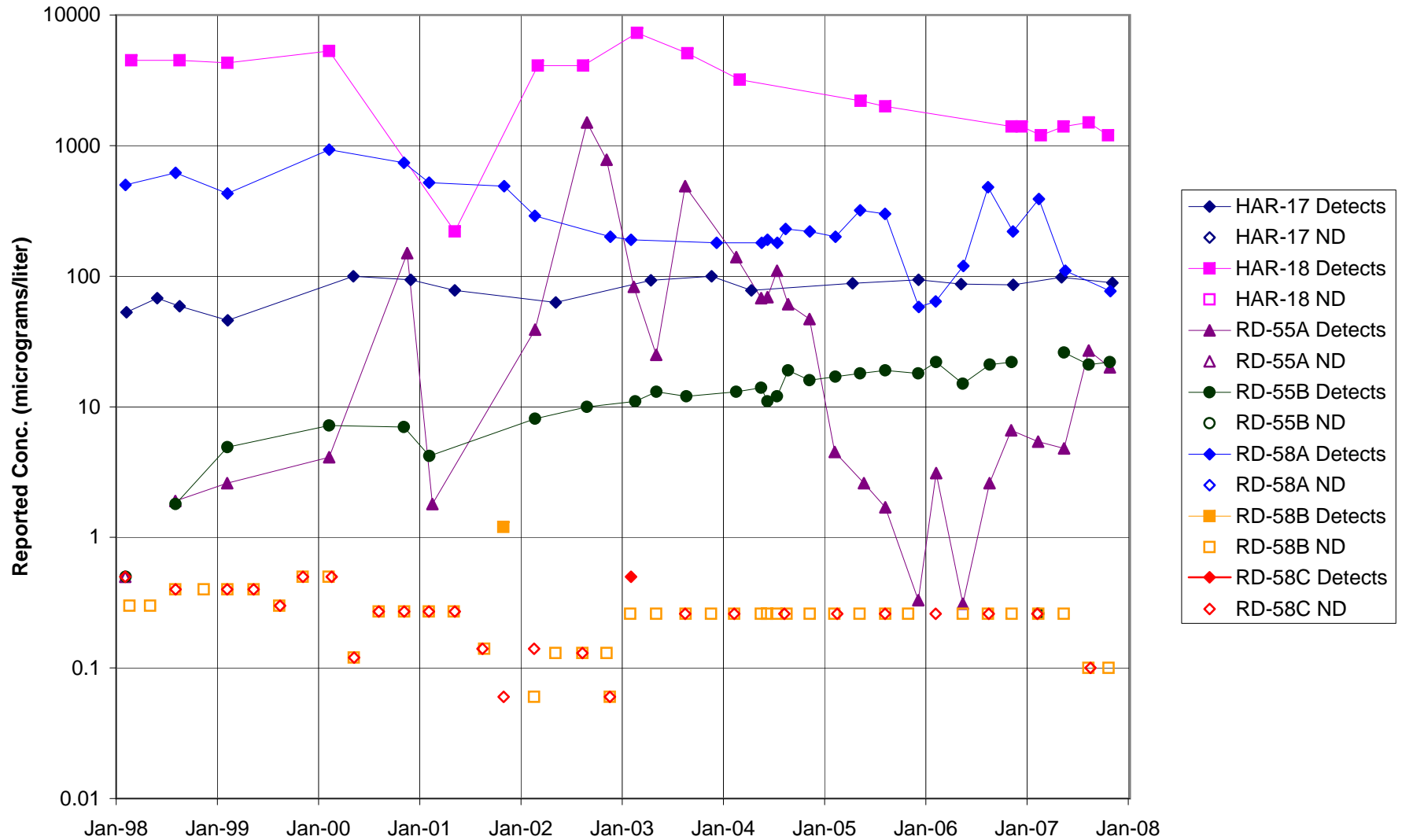


FIGURE F-339. TCE in MAIN GATE AREA WELLS - 1

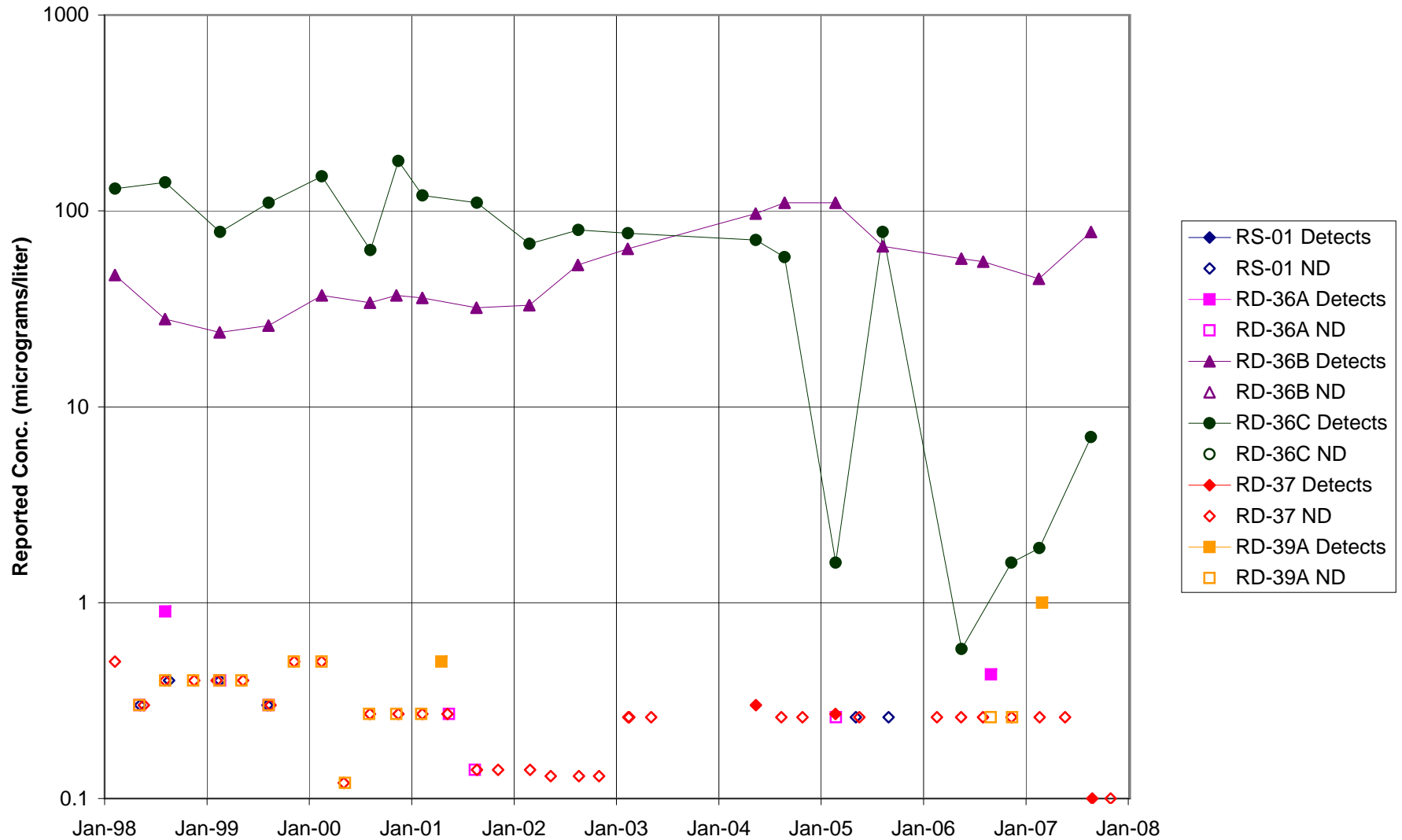


FIGURE F-340. TCE in MAIN GATE AREA WELLS - 2

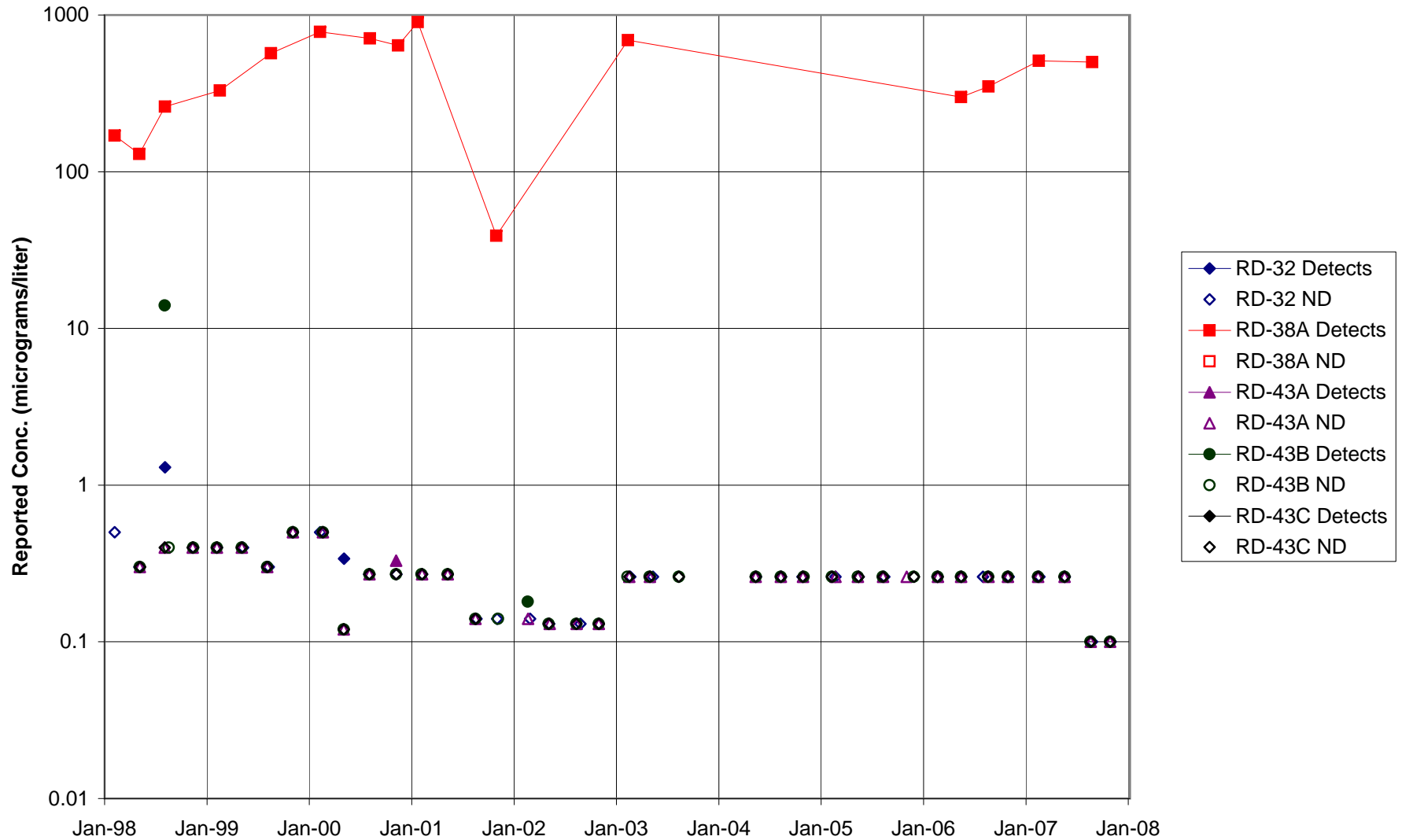


FIGURE F-341. TCE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 1

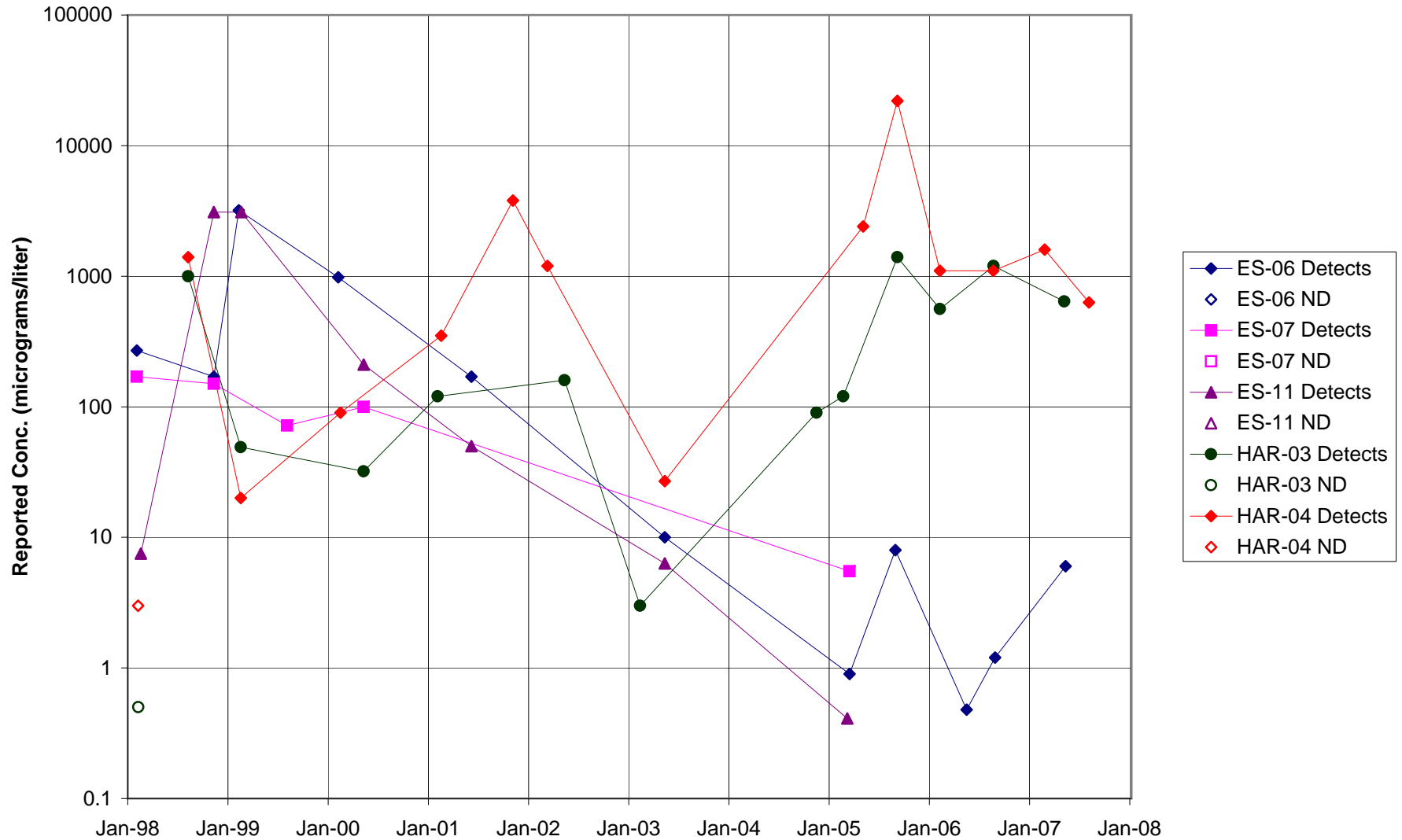
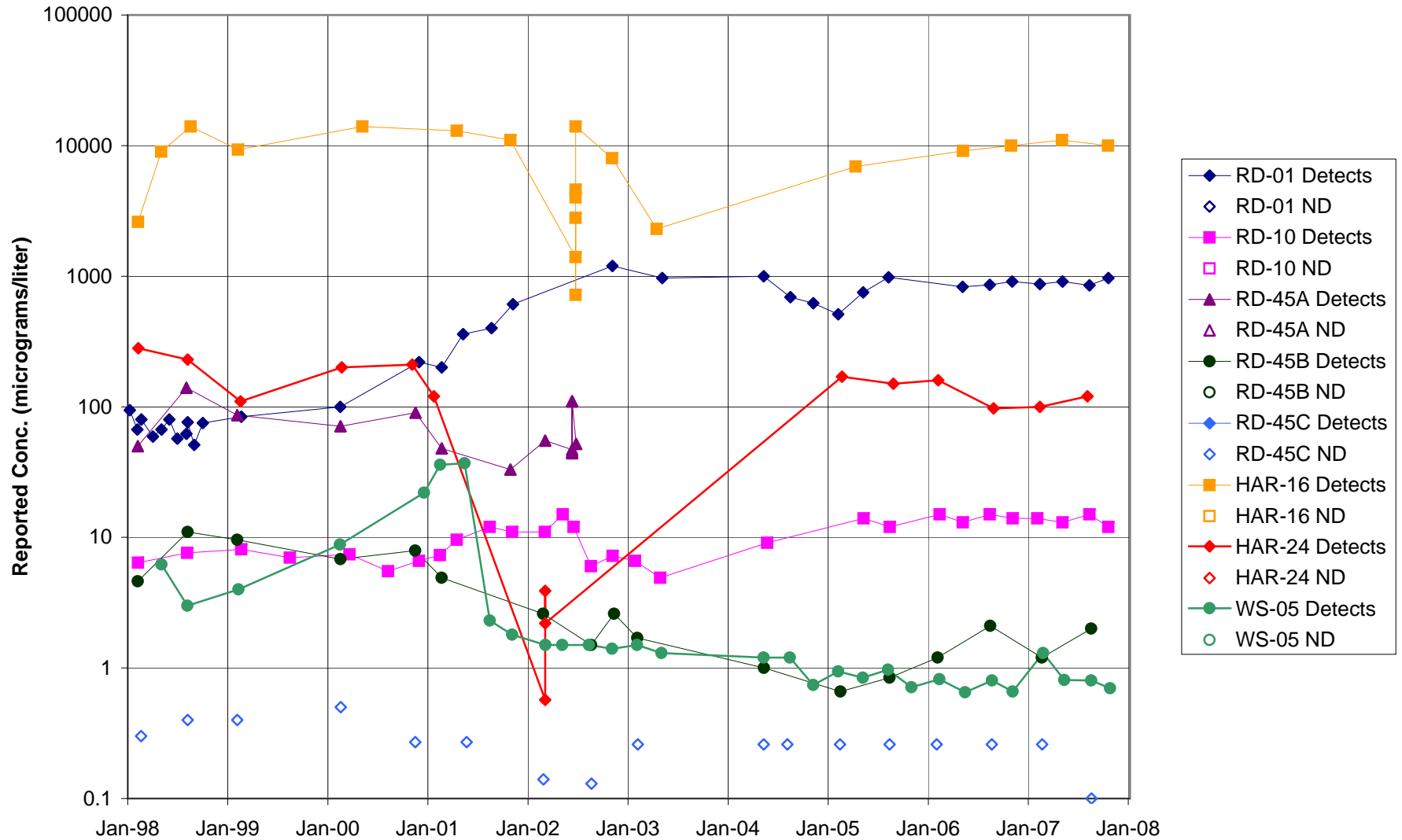


FIGURE F-342. TCE in APTF, CANYON, & HAPPY VALLEY AREA WELLS - 2



**FIGURE F-343. TCE in CTL-III / PERIMETER POND AREA WELLS**

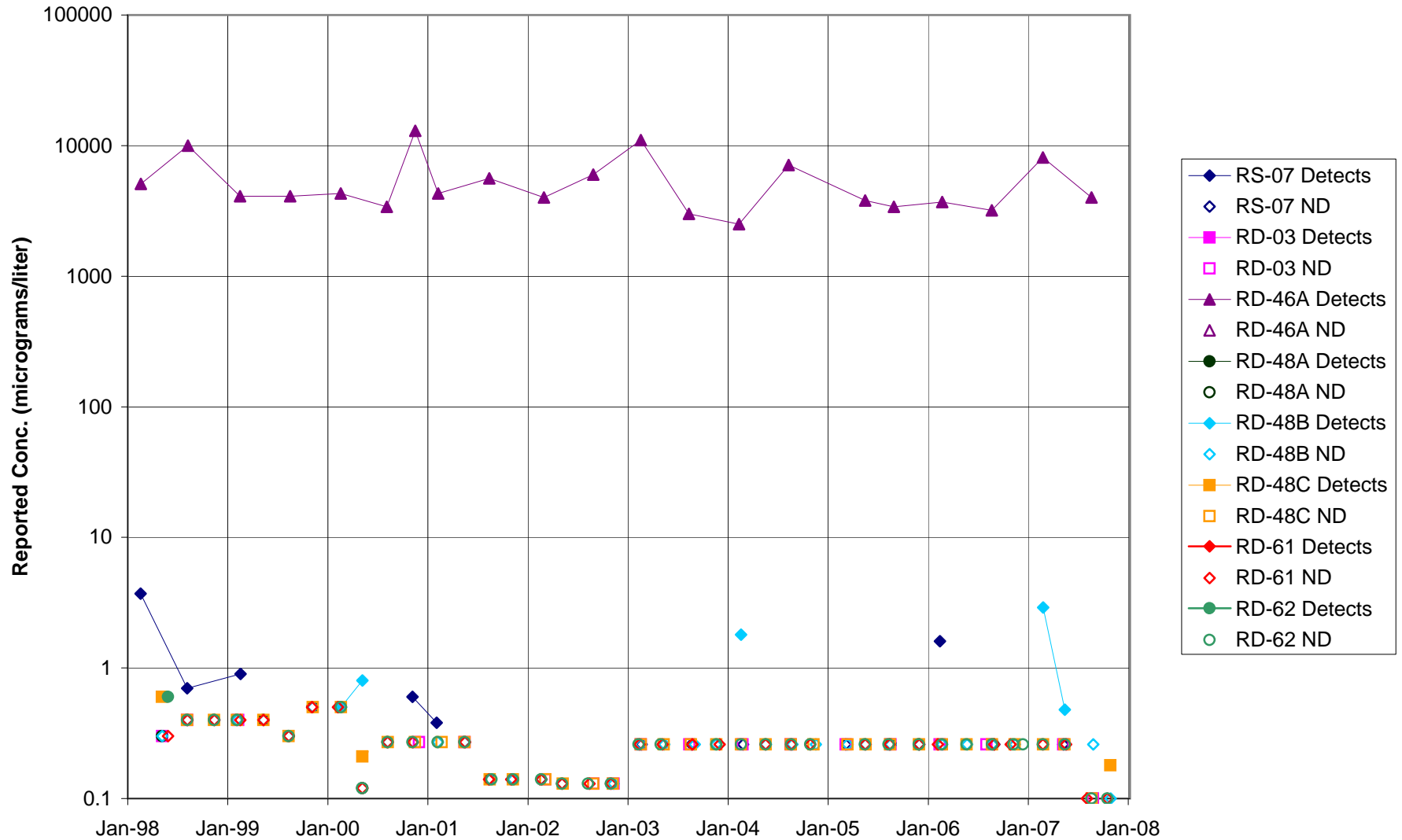


FIGURE F-344. TCE in BOWL AREA WELLS

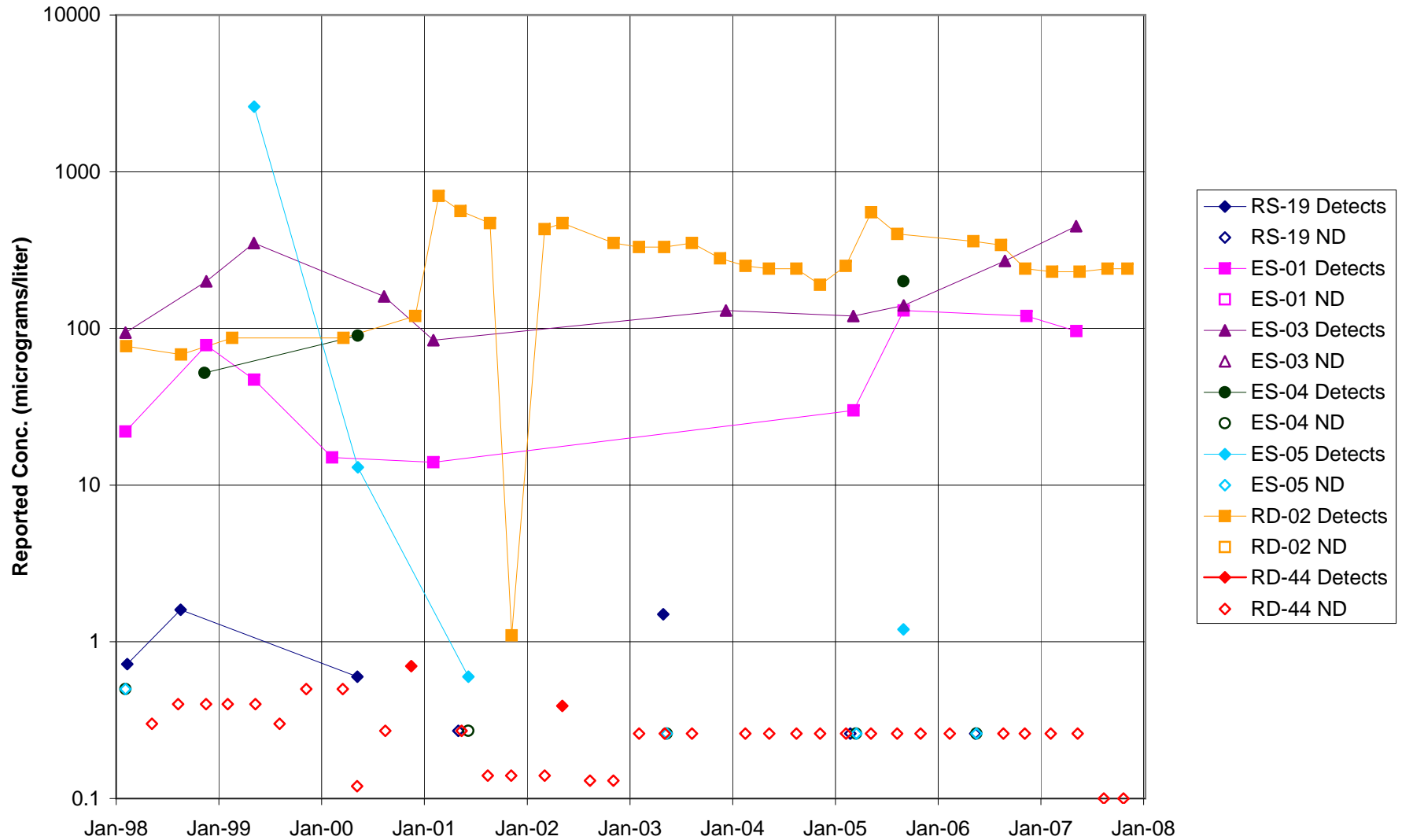




FIGURE F-345. TCE in ECL AREA WELLS

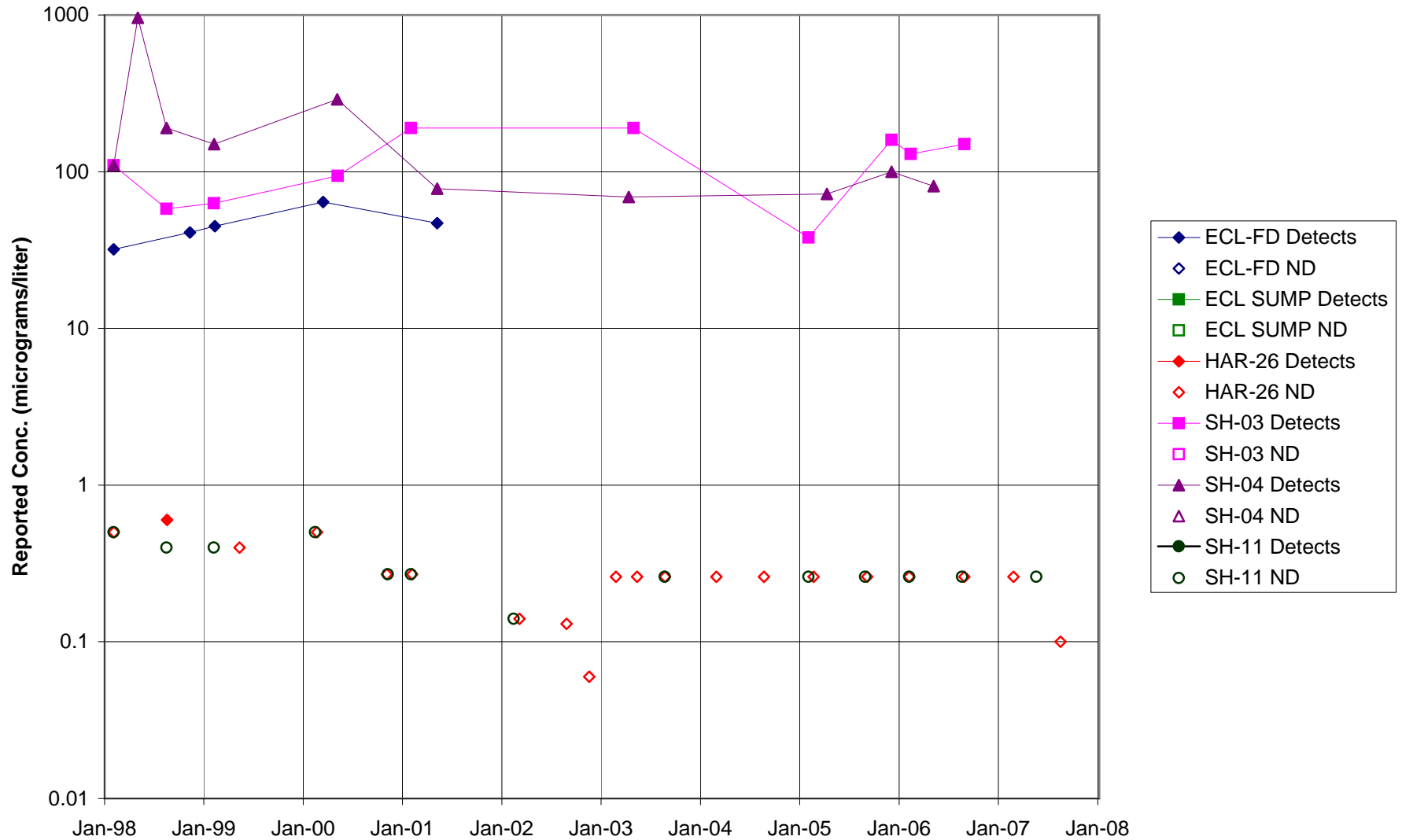


FIGURE F-346. TCE in FORMER LOX PLANT AREA WELLS

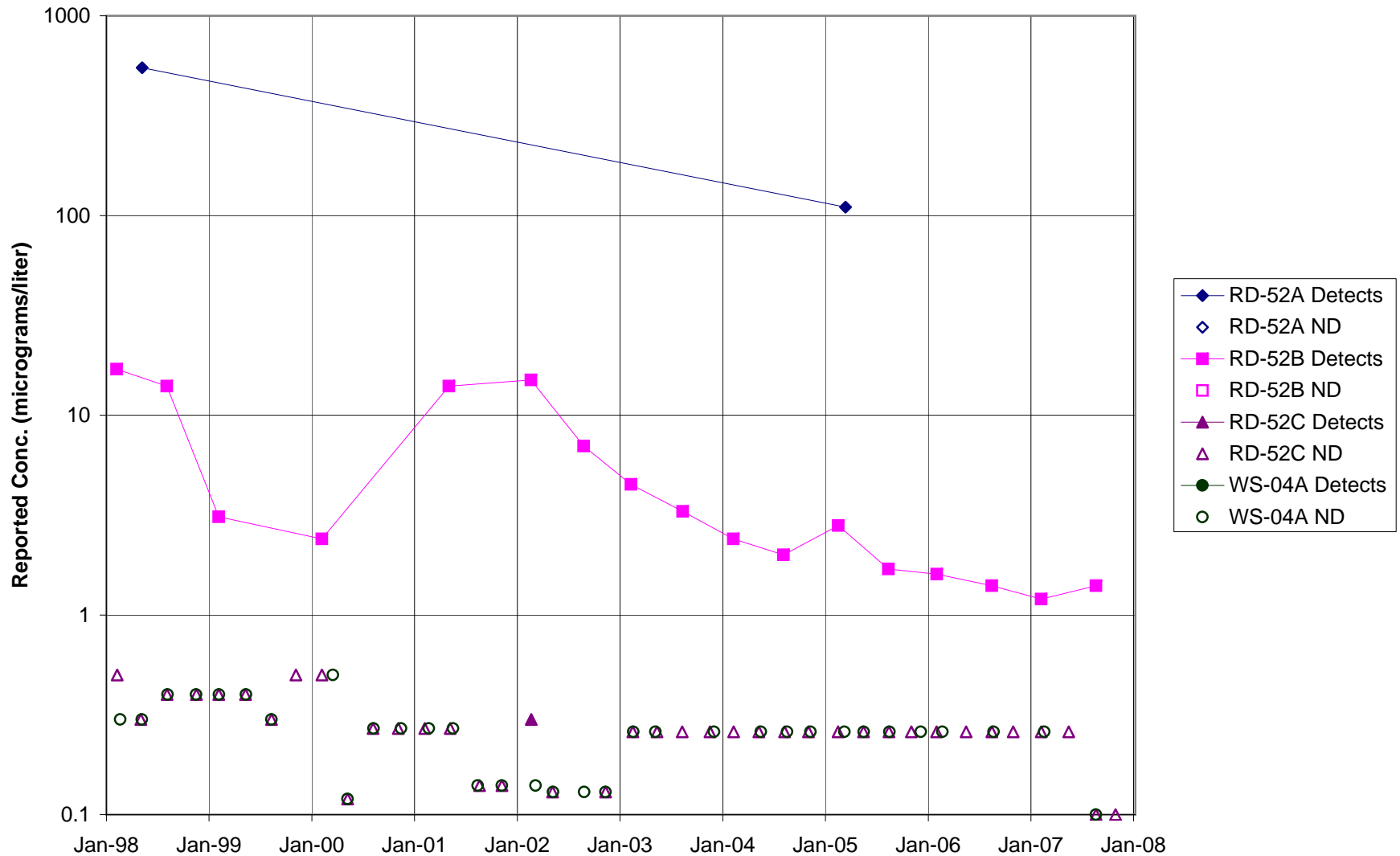


FIGURE F-347. TCE in RD-09 AREA WELLS

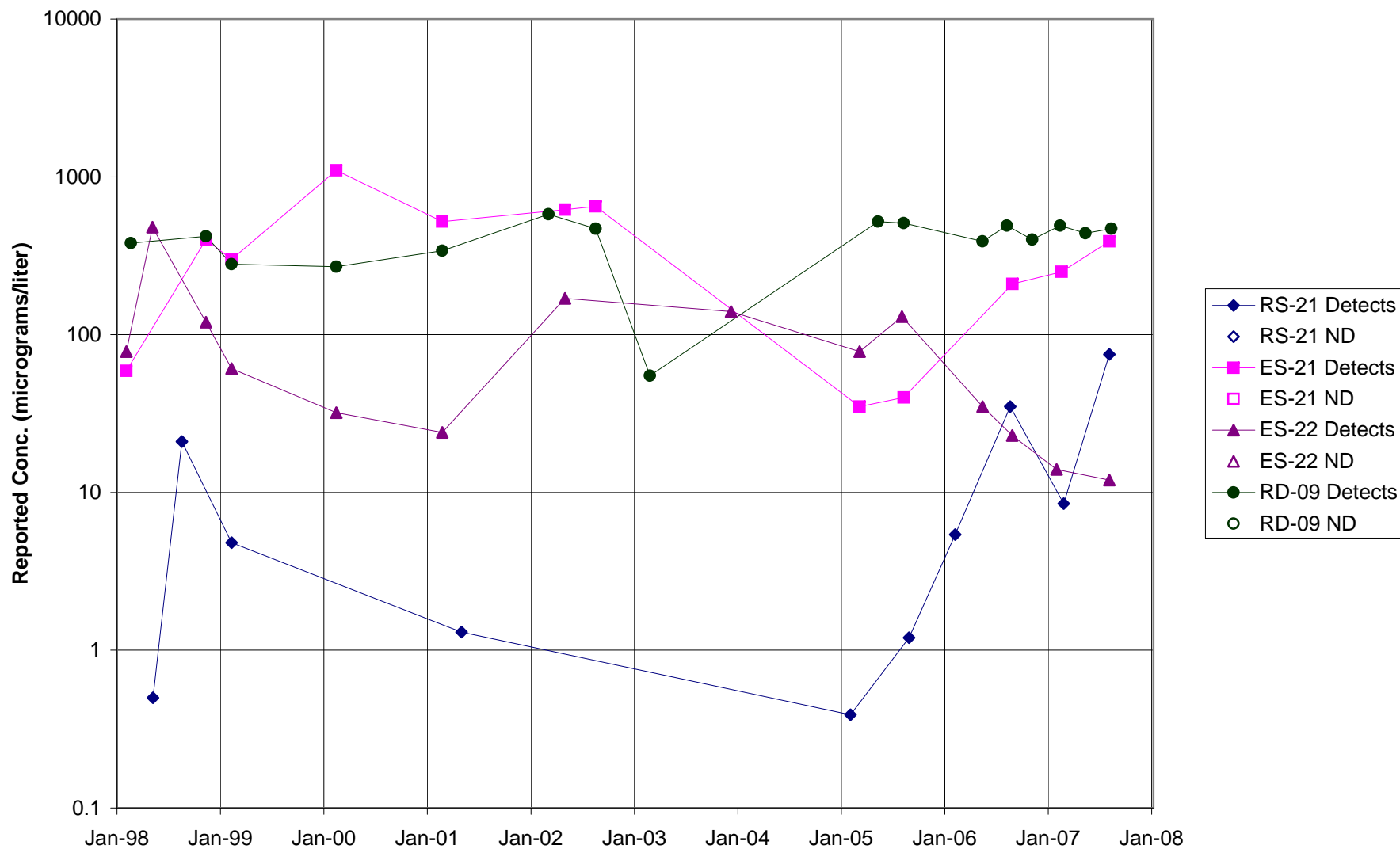
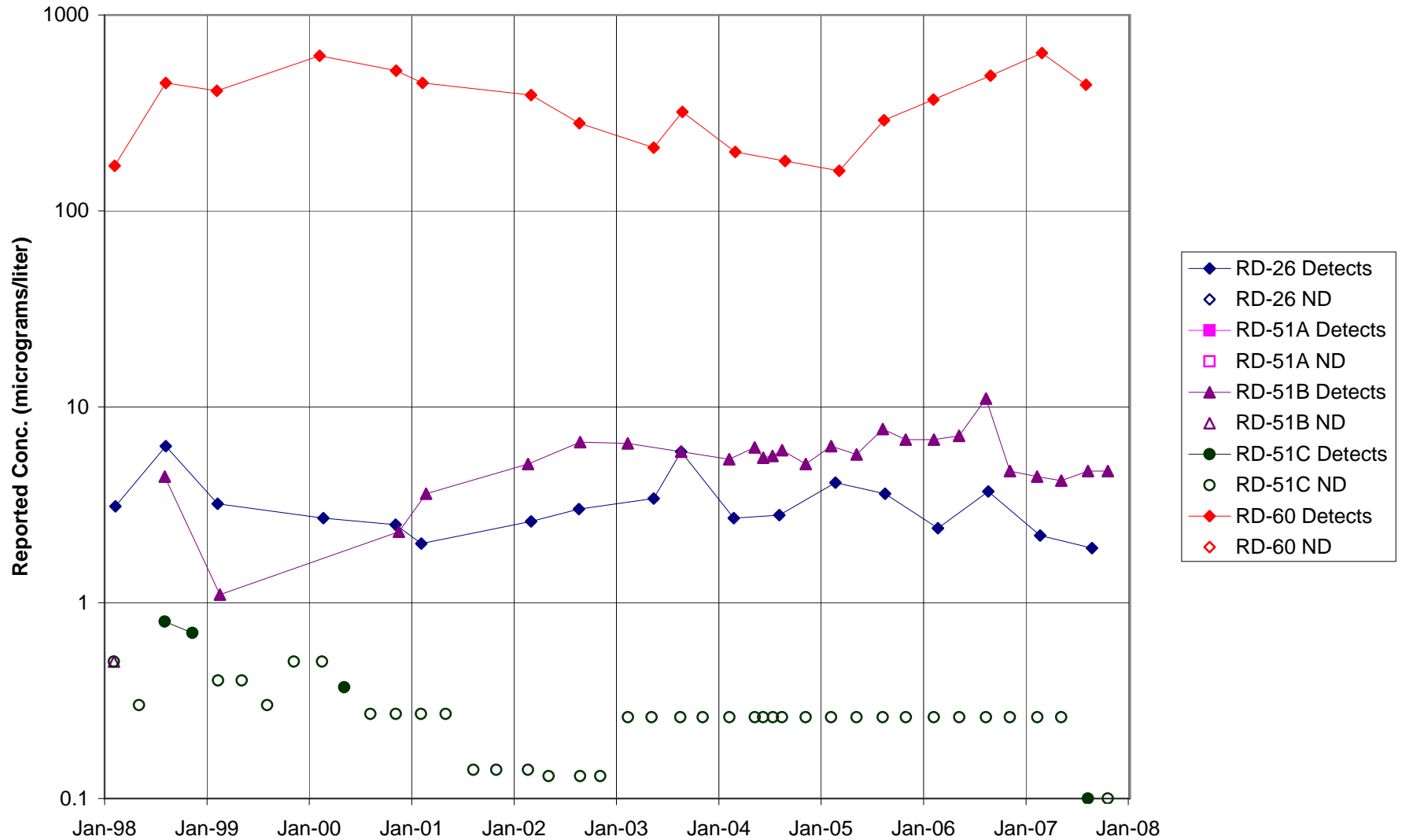


FIGURE F-348. TCE in HELIPORT, B/204 AREA WELLS



**FIGURE F-349. TCE in ALFA / BRAVO AREA WELLS**

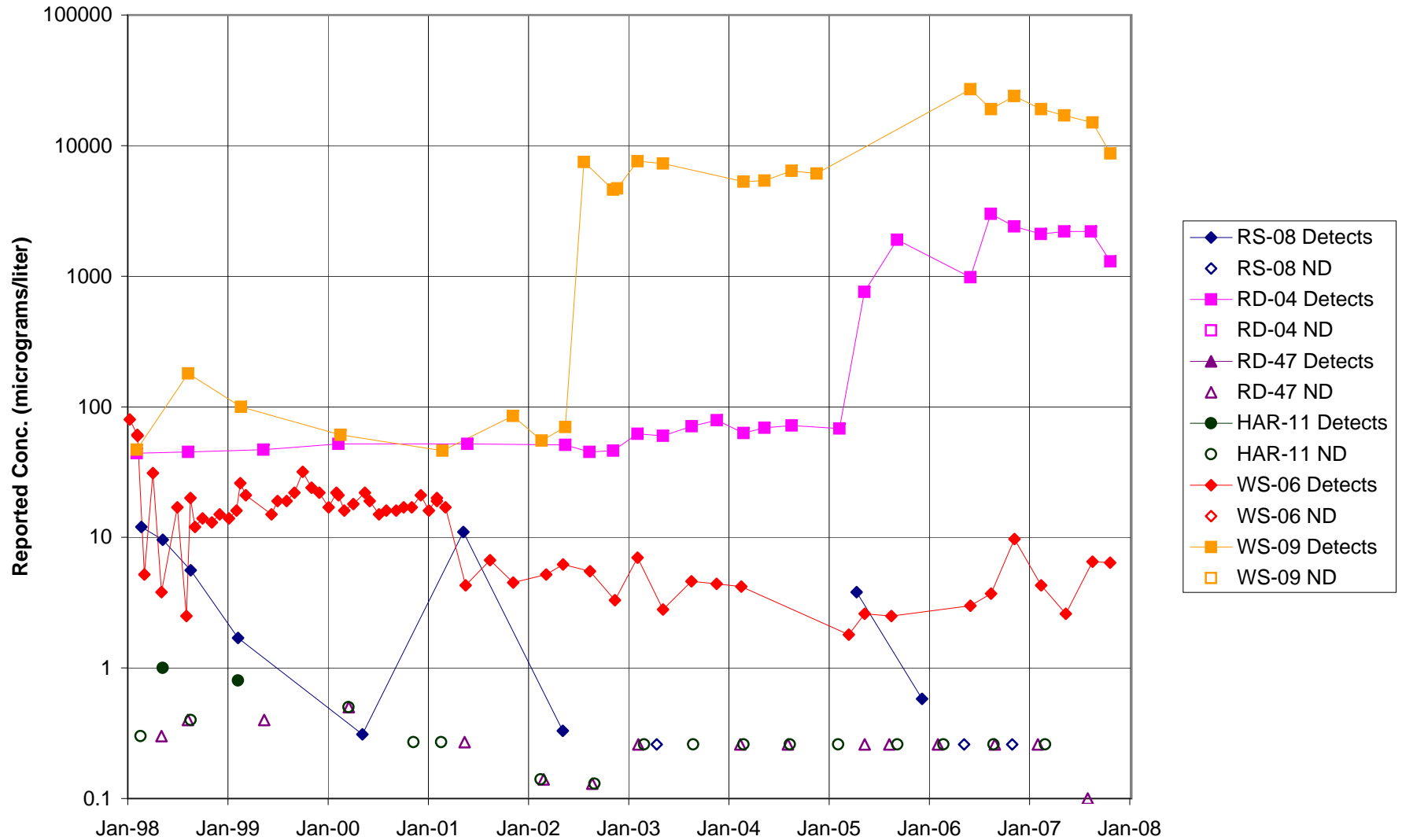


FIGURE F-350. TCE in SPA AREA WELLS

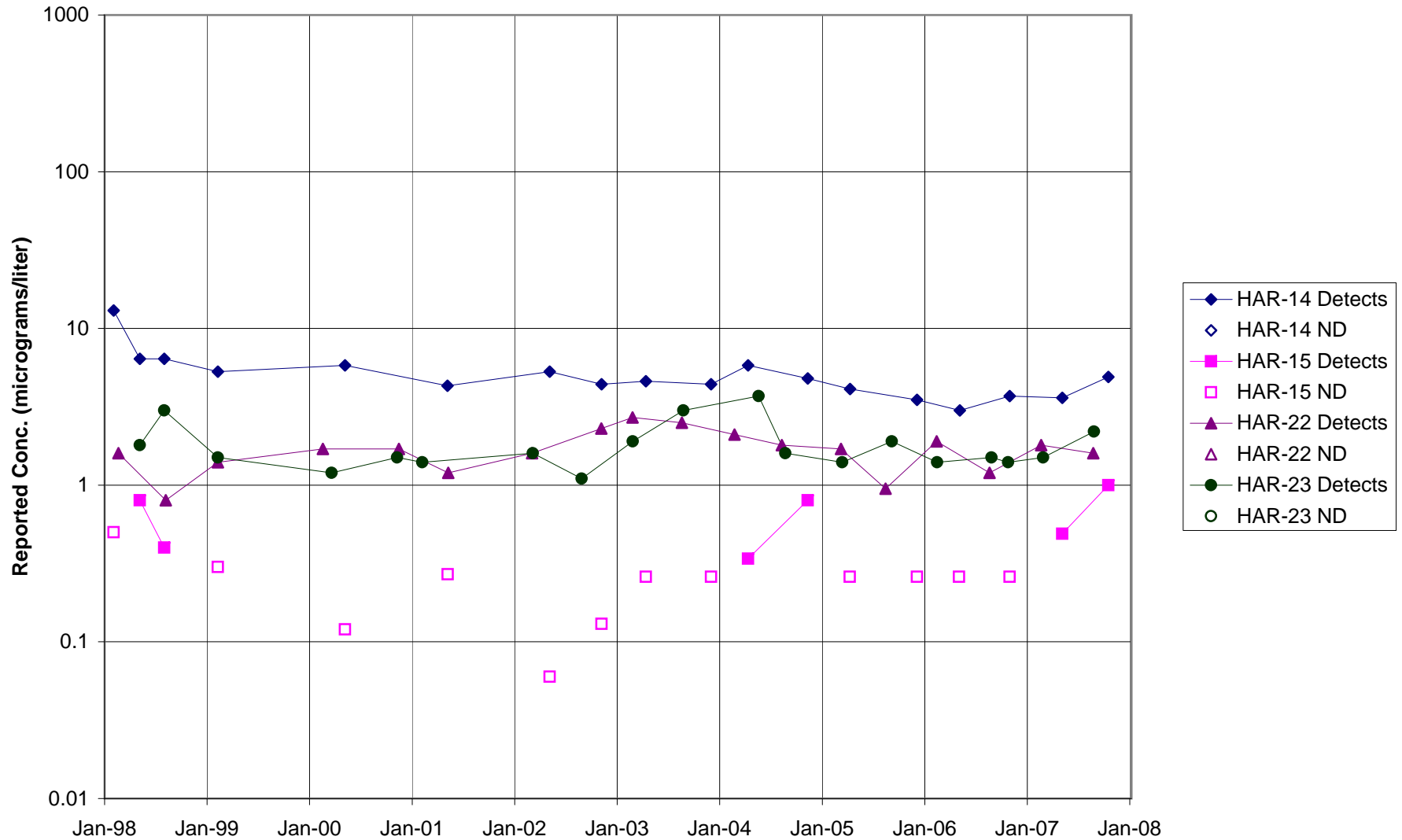


FIGURE F-351. TCE in COCA / PLF AREA WELLS

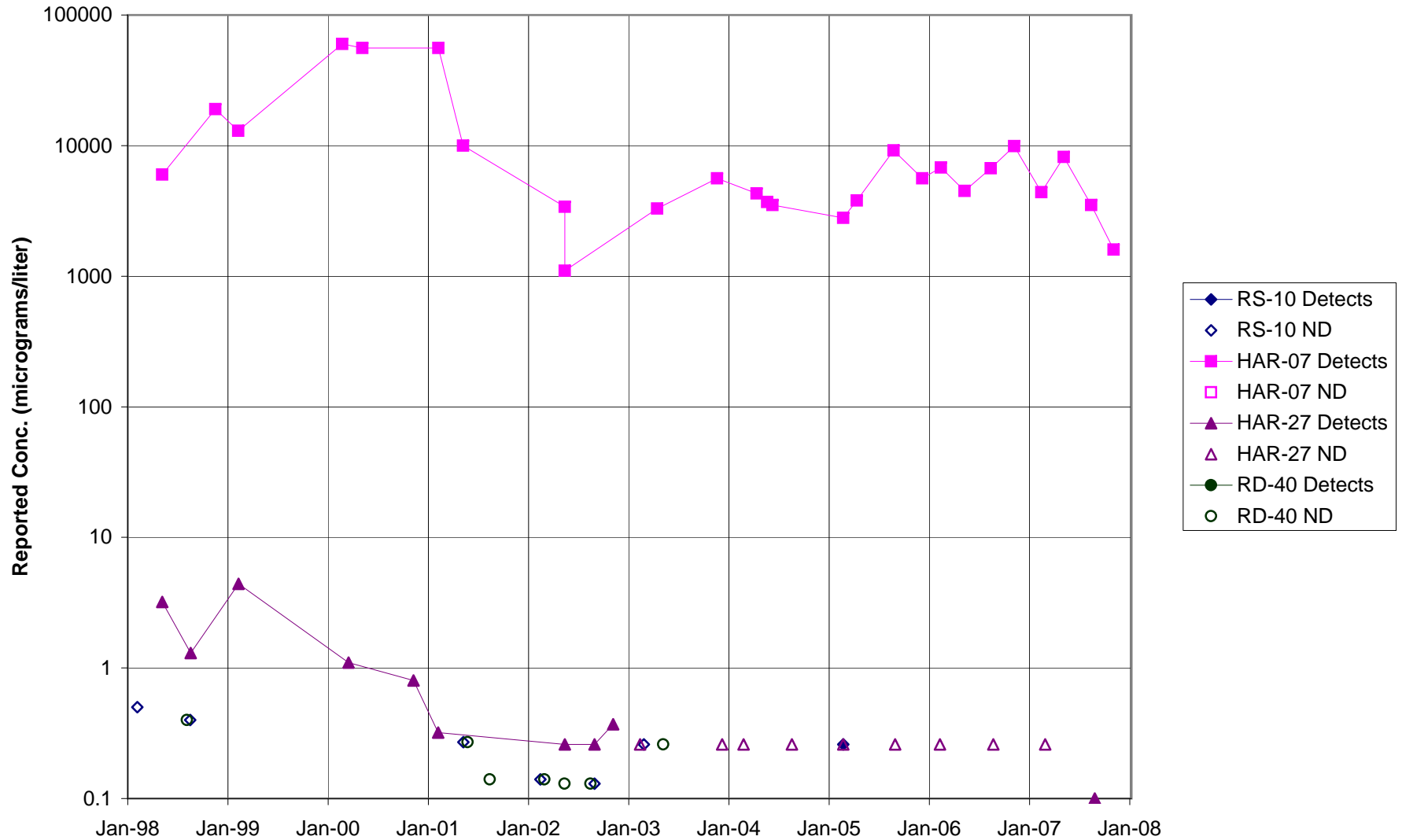


FIGURE F-352. TCE in DELTA / BUFFER ZONE AREA WELLS

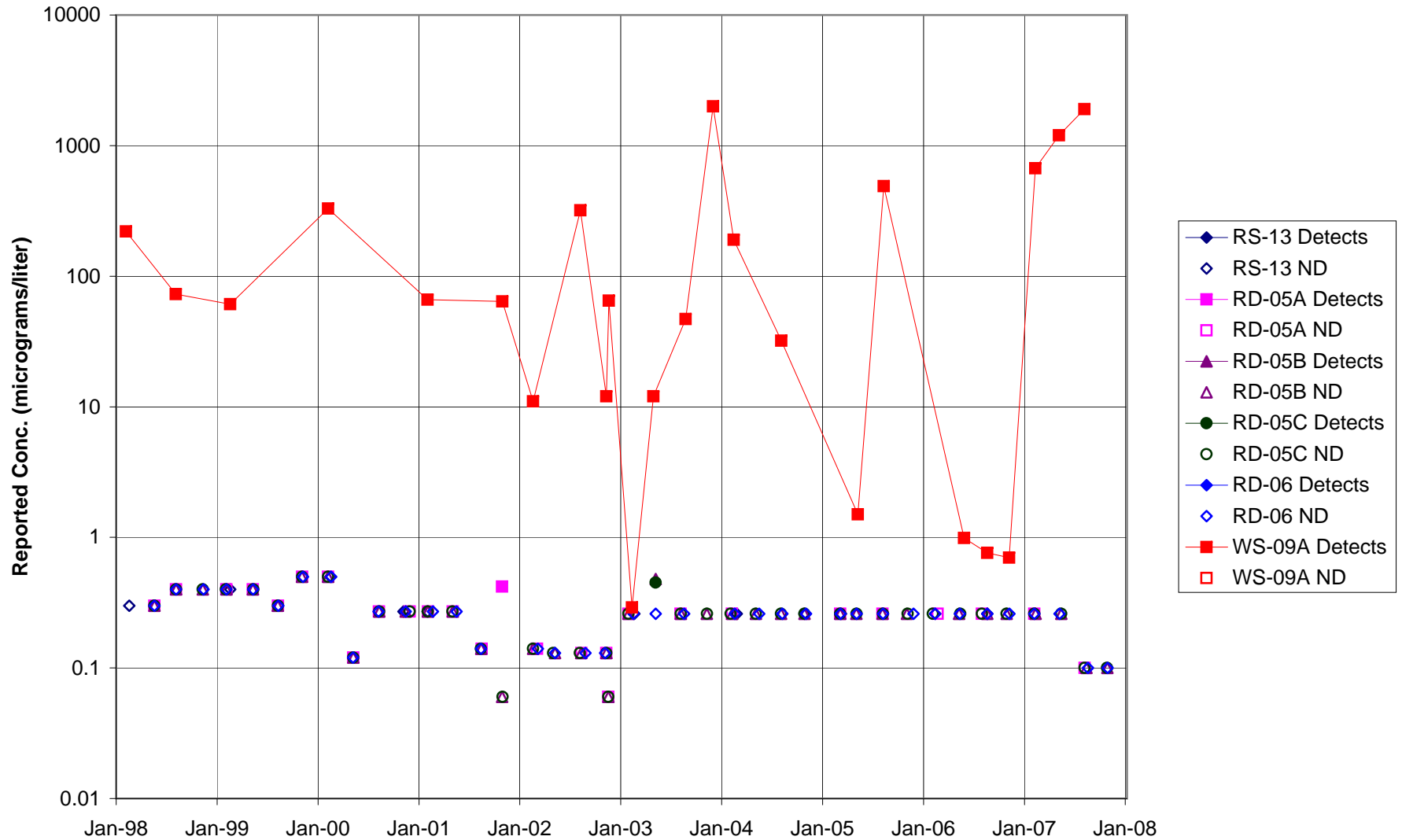
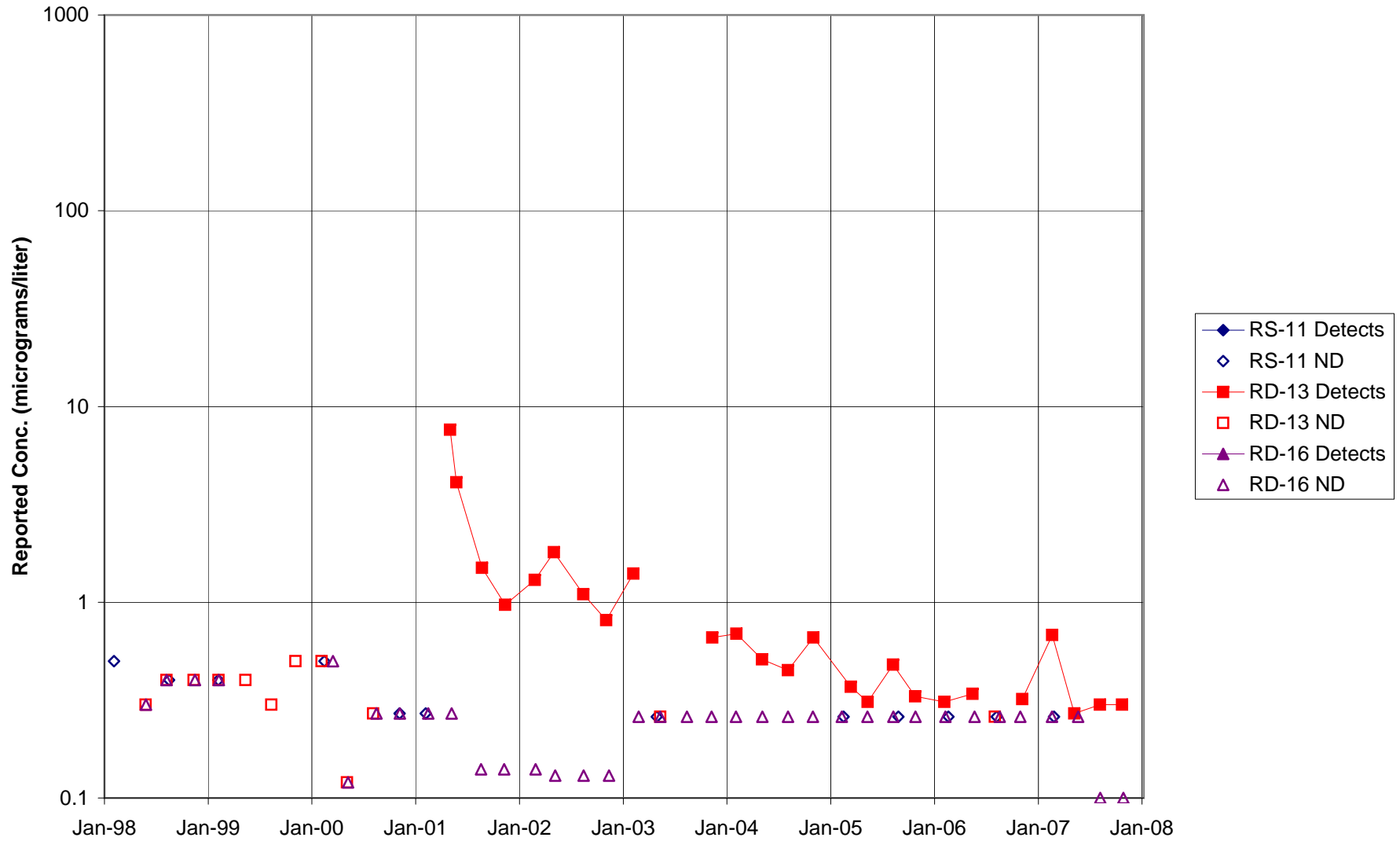
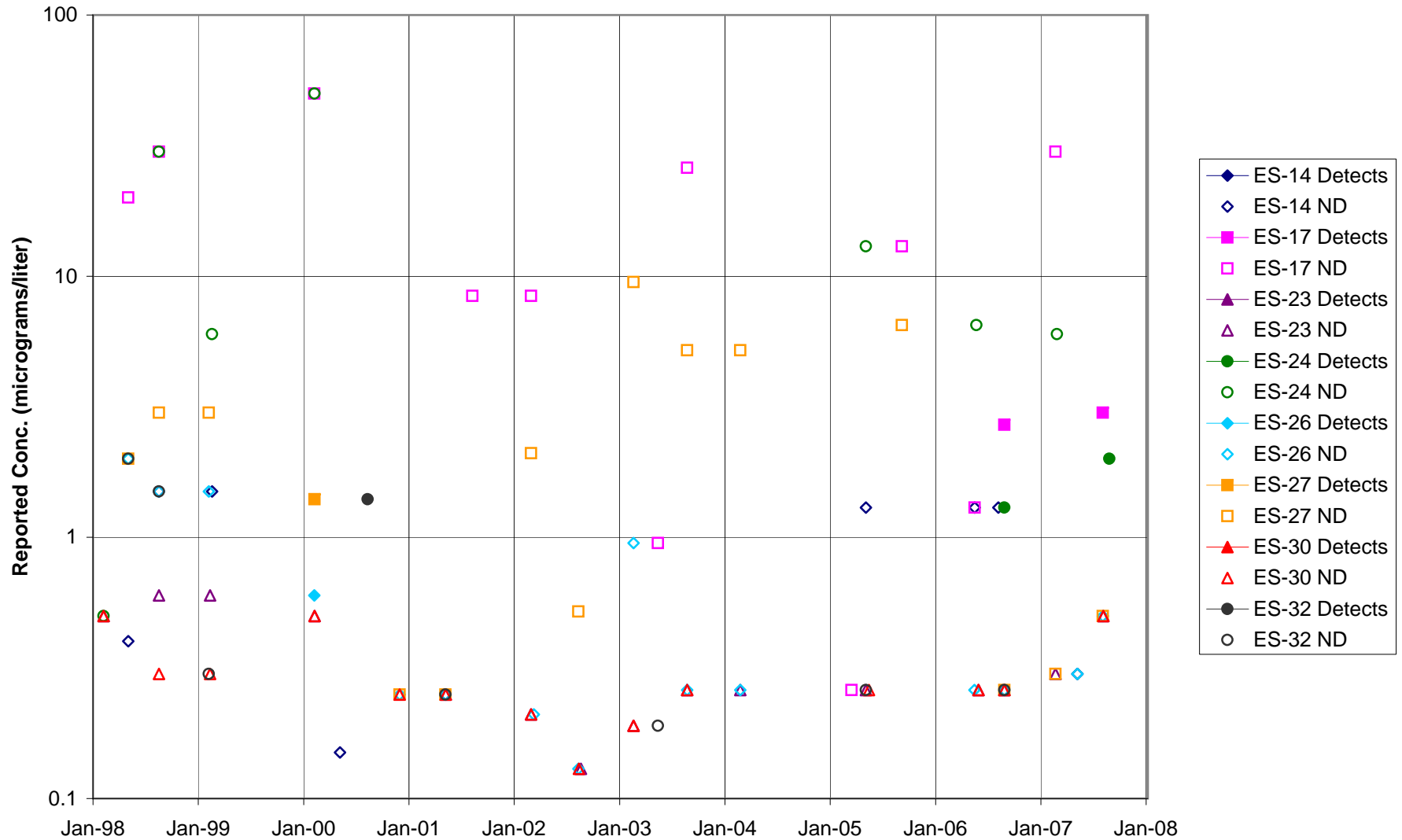




FIGURE F-353. TCE in AREA IV WELLS



**FIGURE F-354. VINYL CHLORIDE in STL-IV AREA SHALLOW WELLS**



**FIGURE F-355. VINYL CHLORIDE in STL-IV AREA CHATSWORTH FORMATION WELLS**

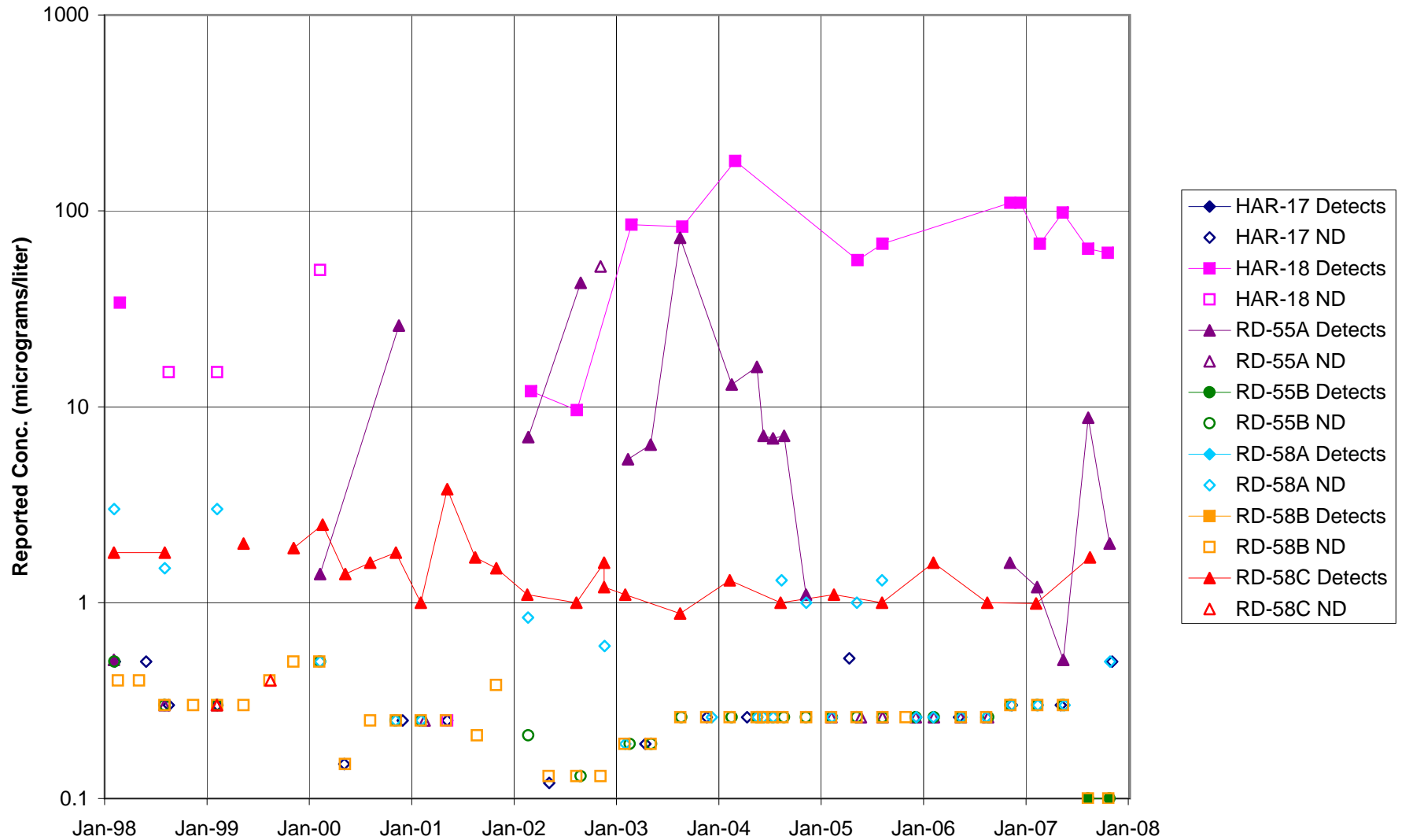


FIGURE F-356. VINYL CHLORIDE in MAIN GATE AREA WELLS - 1

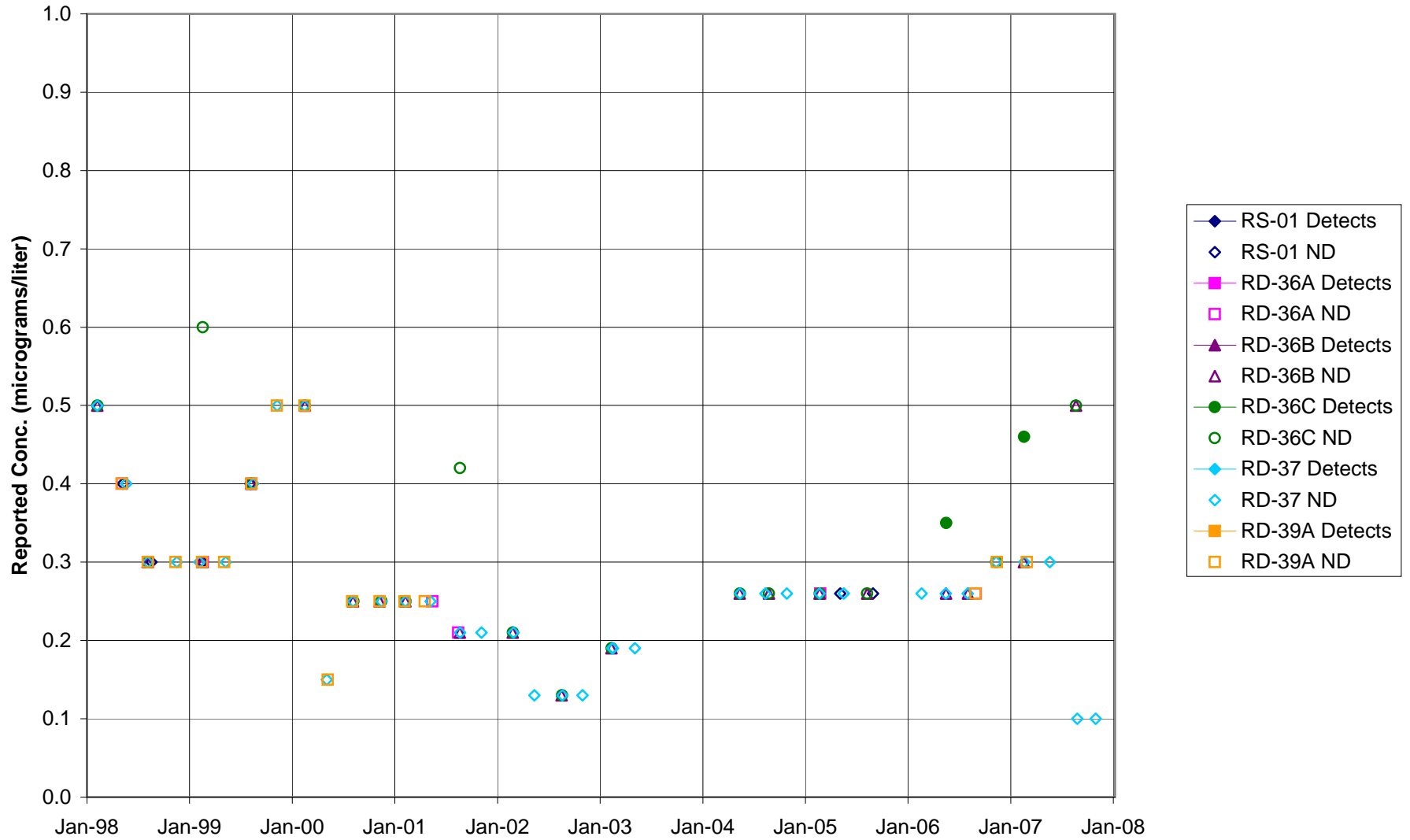
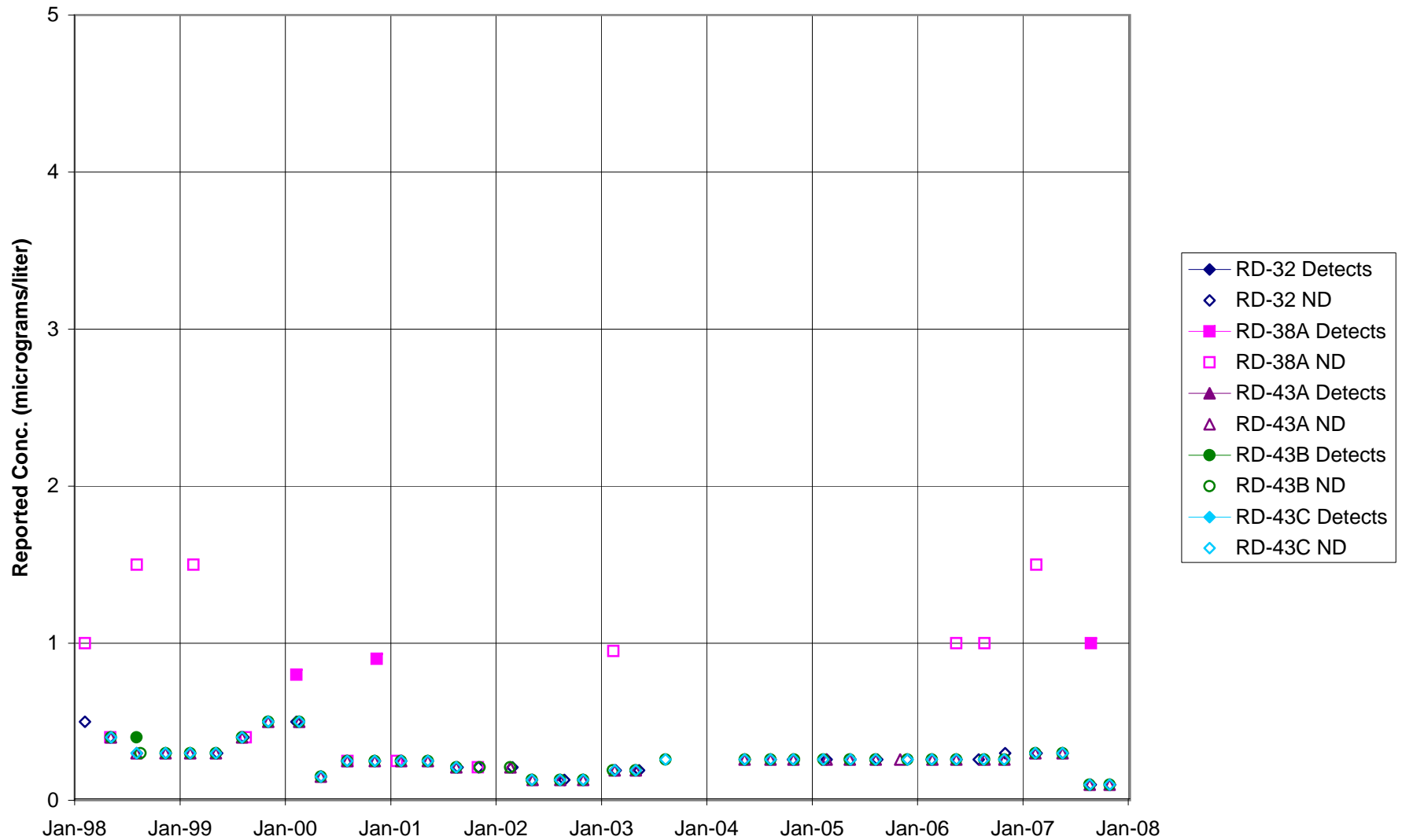
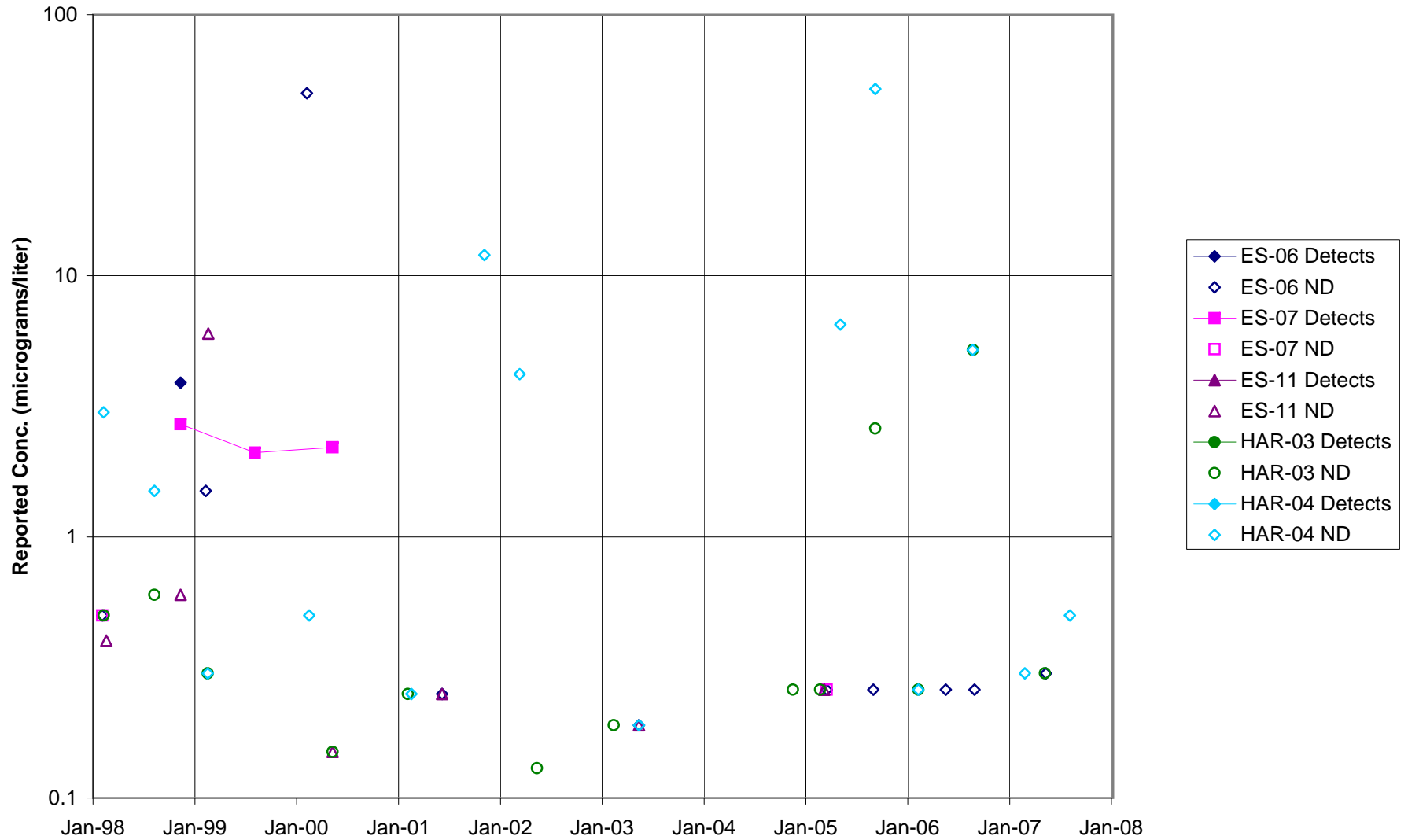


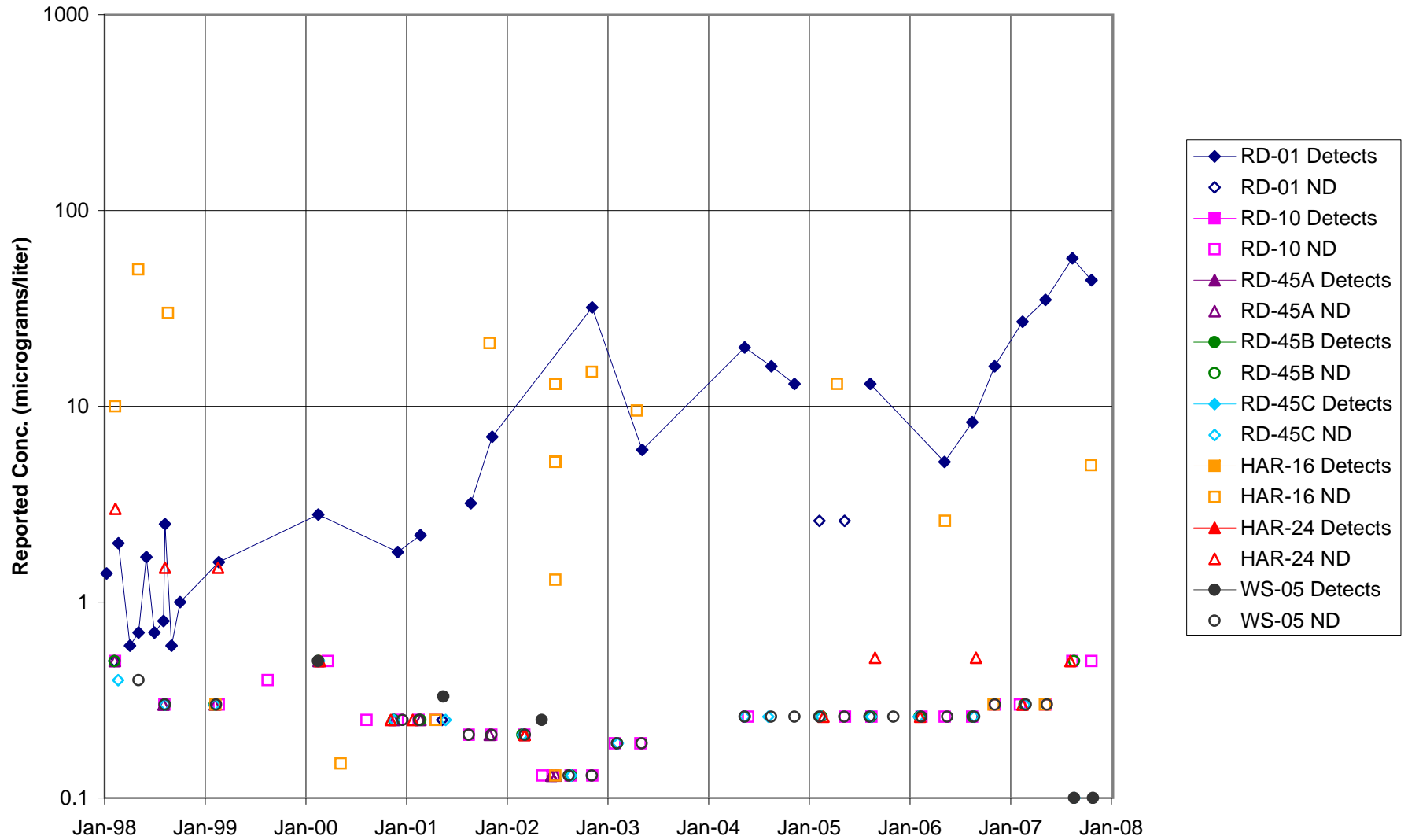
FIGURE F-357. VINYL CHLORIDE in MAIN GATE AREA WELLS - 2



**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**

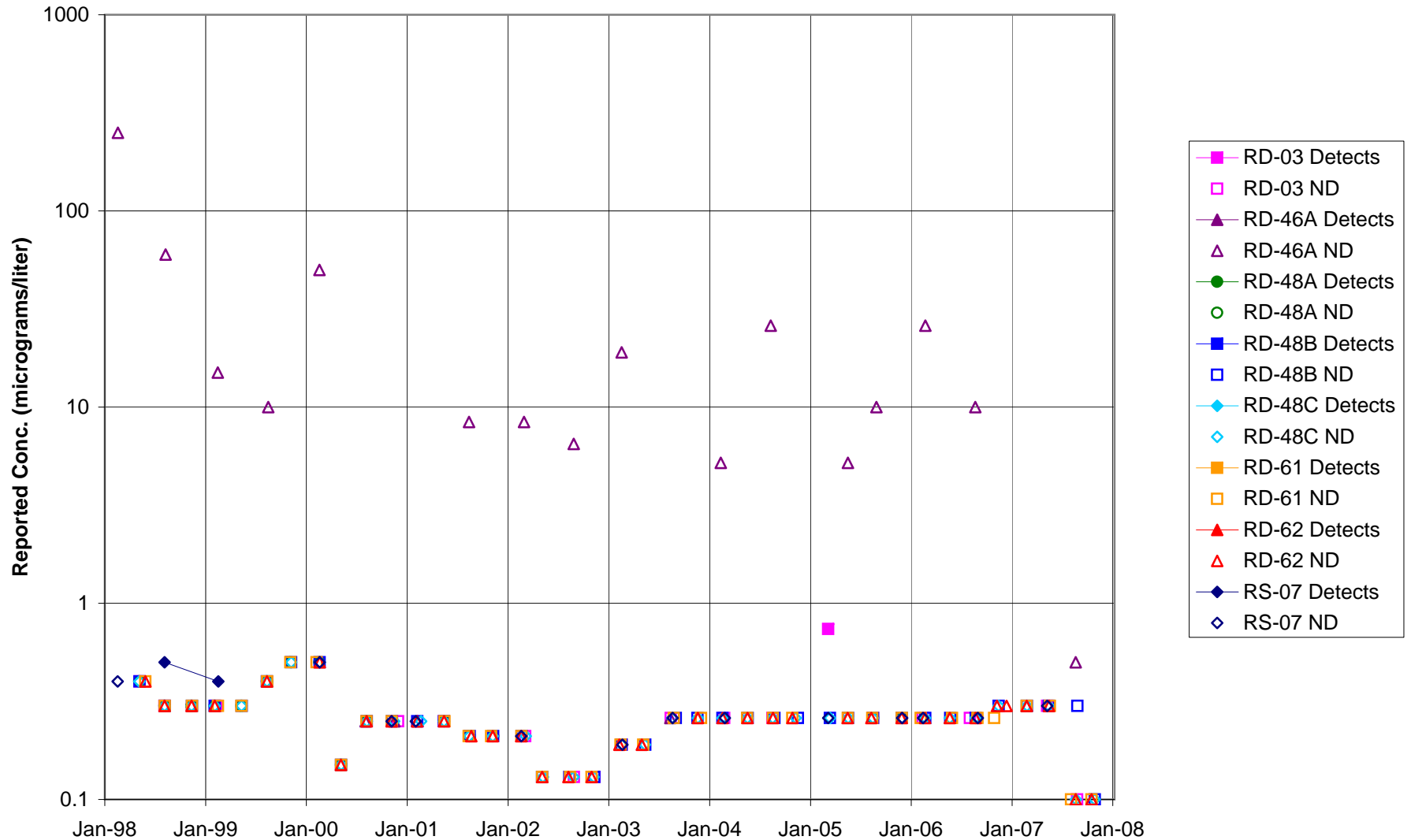




FIGURE F-361. VINYL CHLORIDE in BOWL AREA WELLS

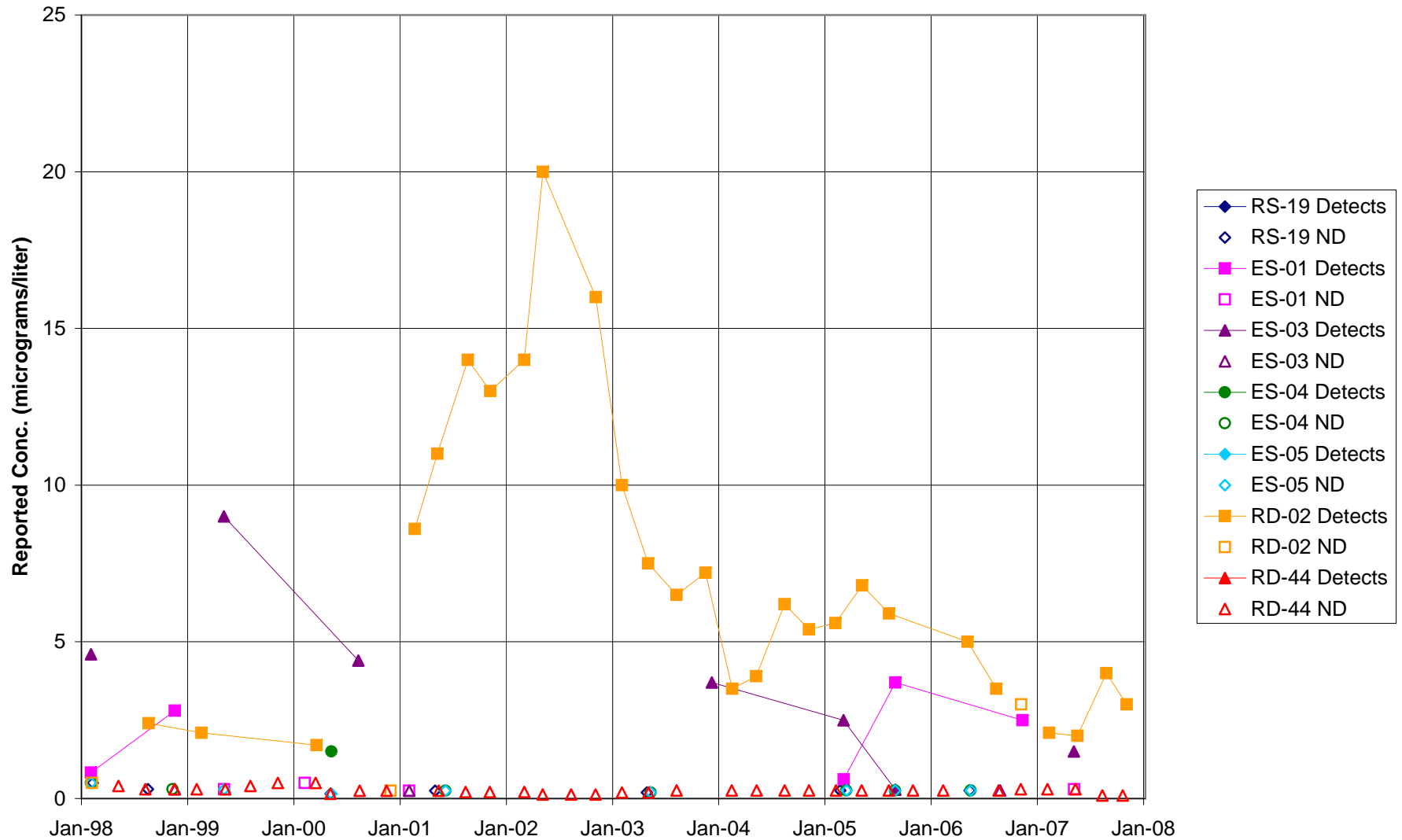
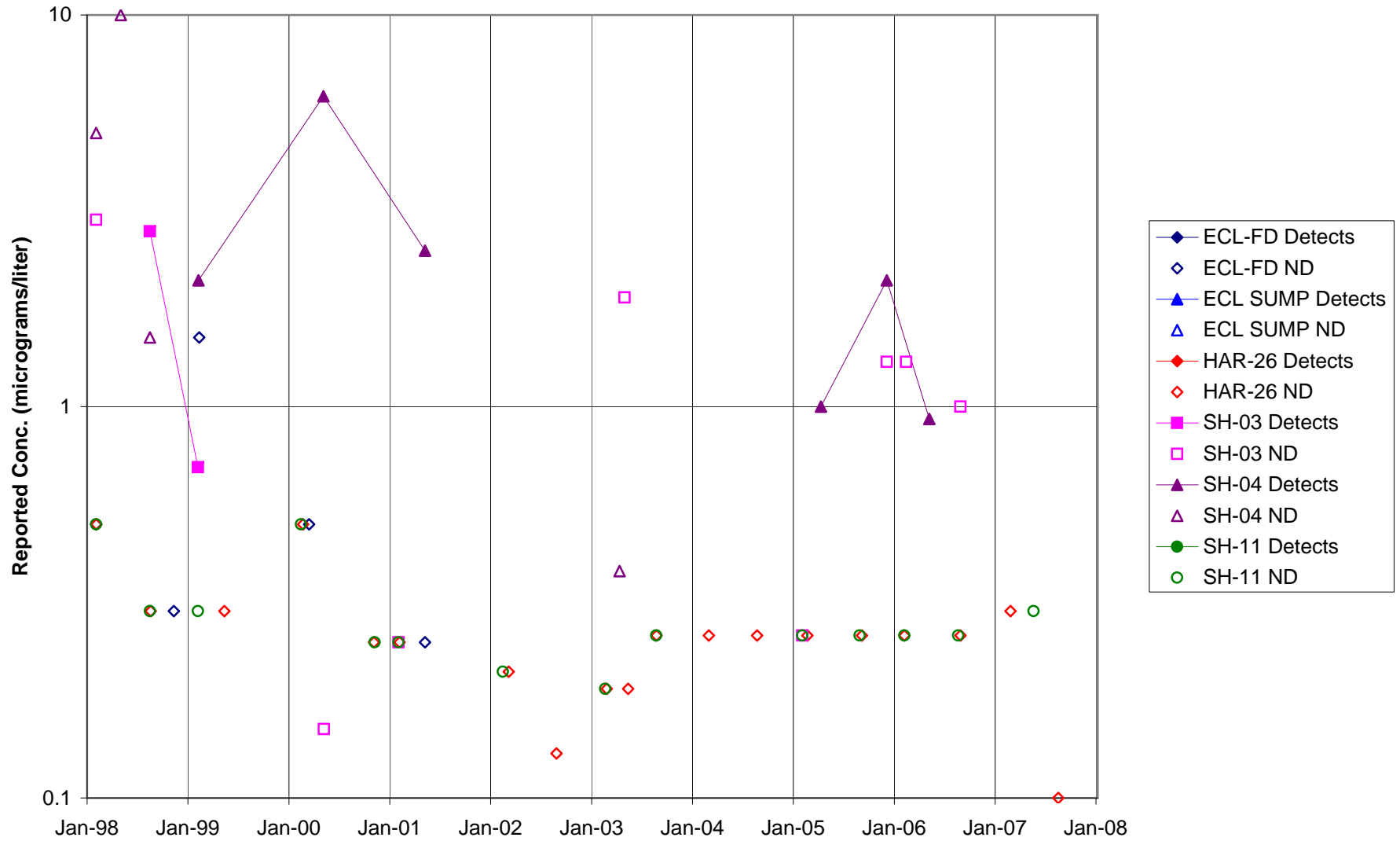


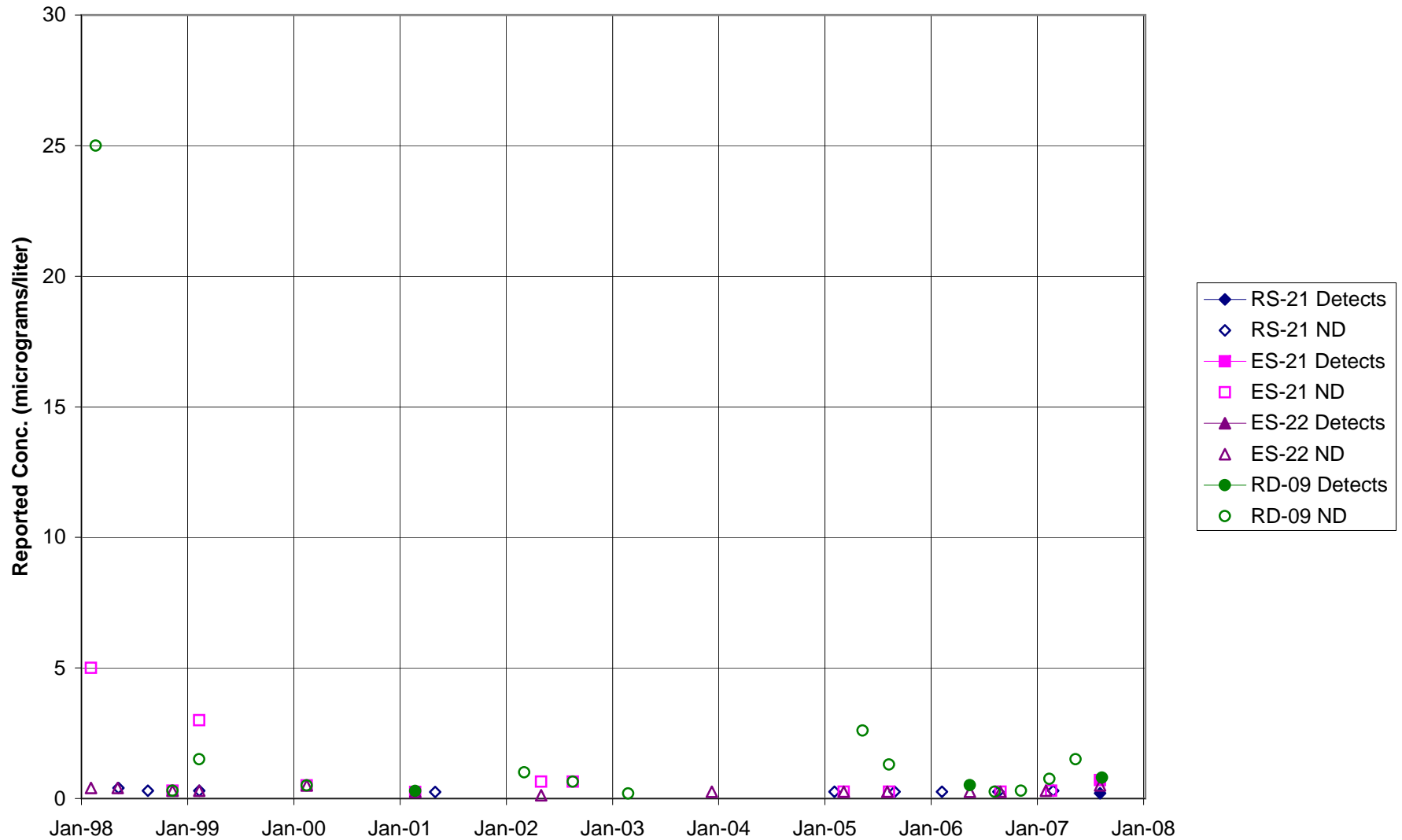
FIGURE F-362. VINYL CHLORIDE in ECL AREA WELLS



**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**

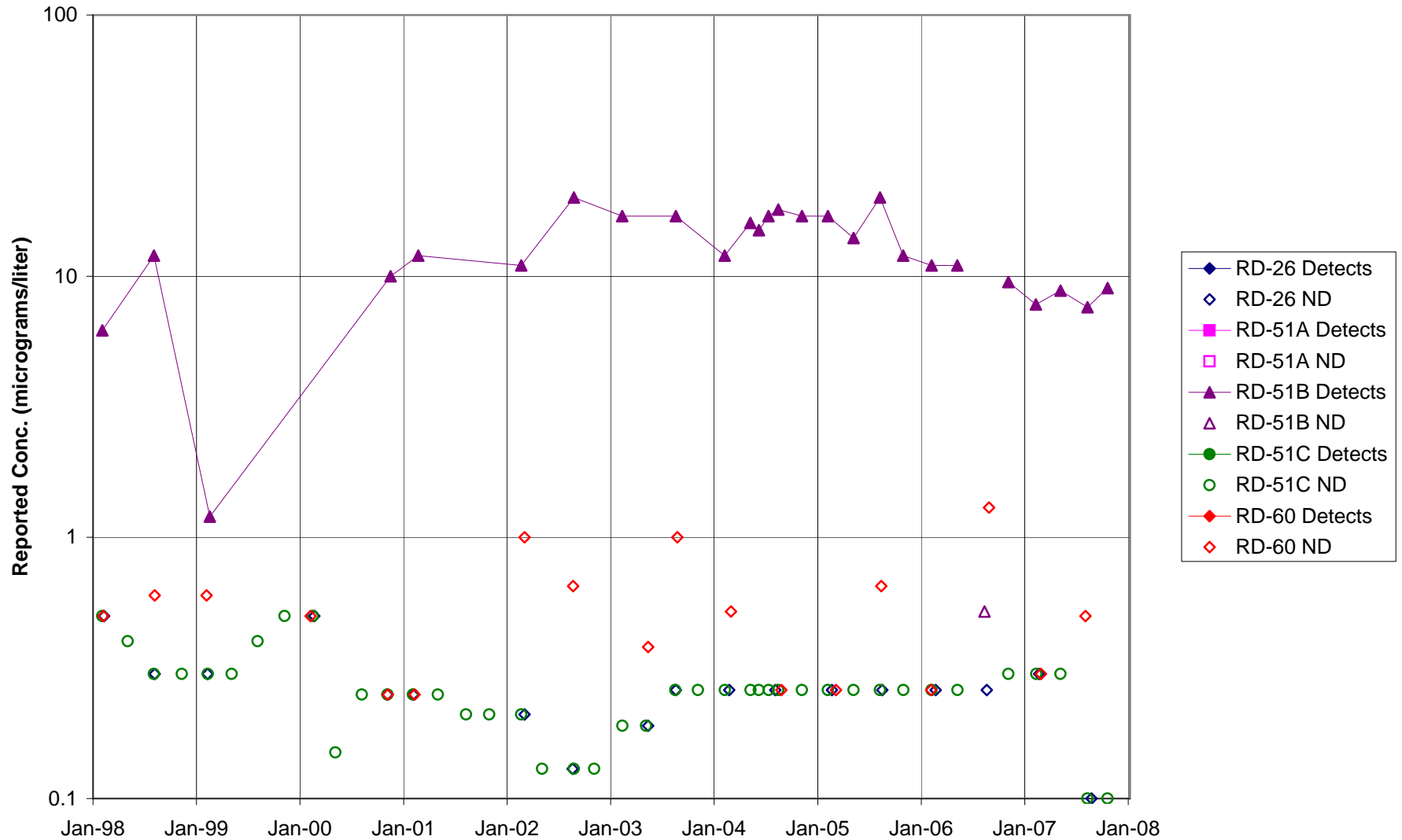


FIGURE F-366. VINYL CHLORIDE in ALFA / BRAVO AREA WELLS

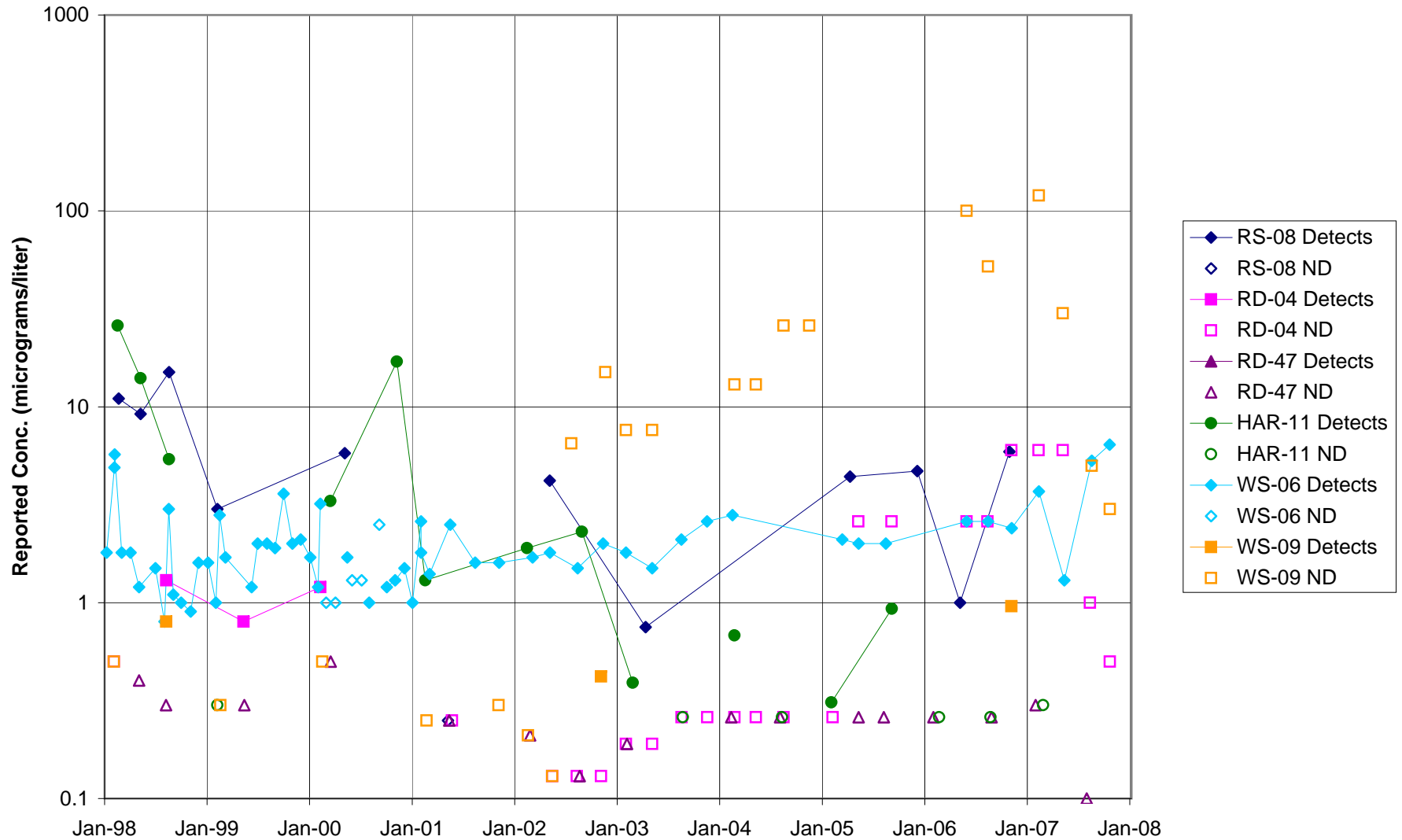


FIGURE F-367. VINYL CHLORIDE in SPA AREA WELLS

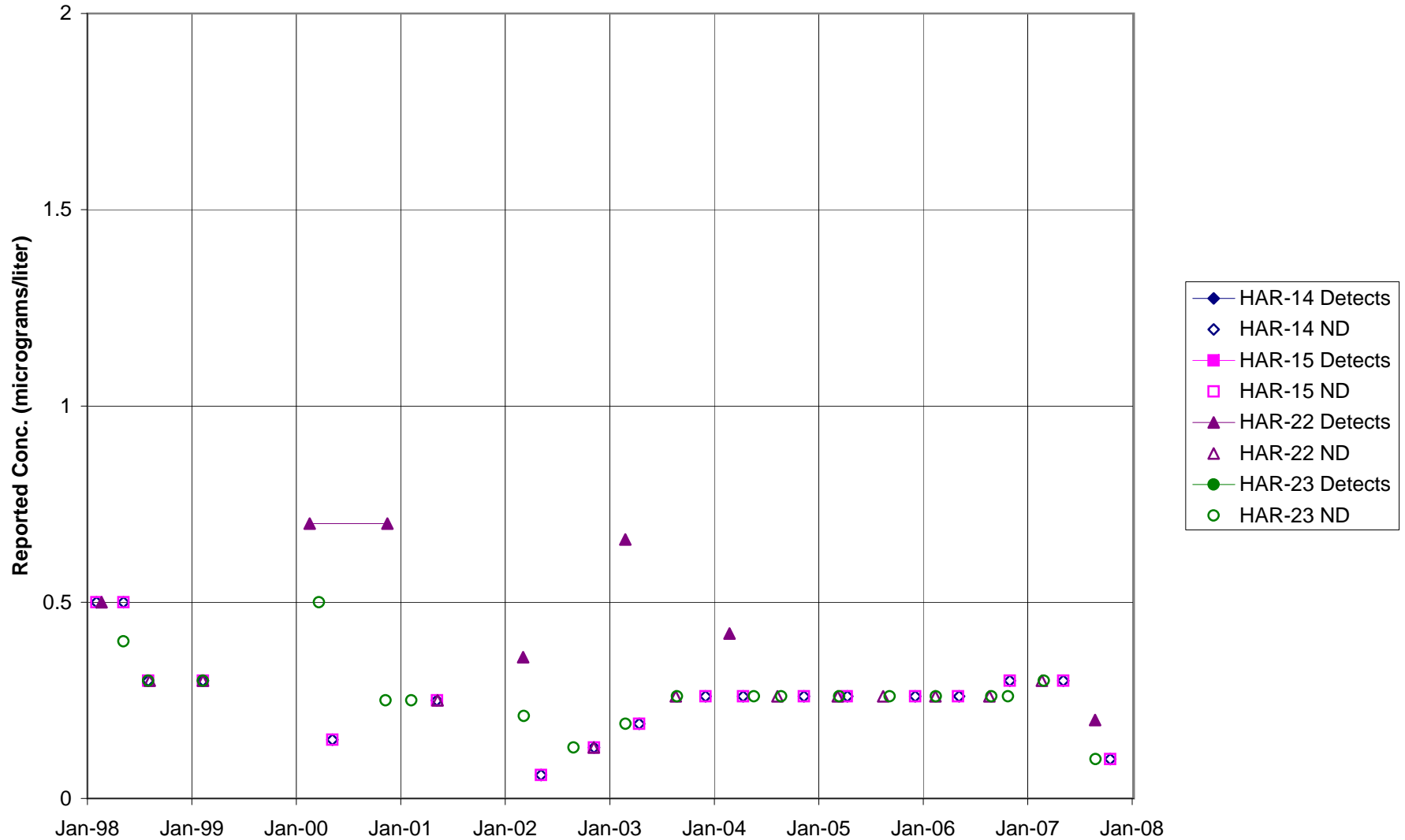
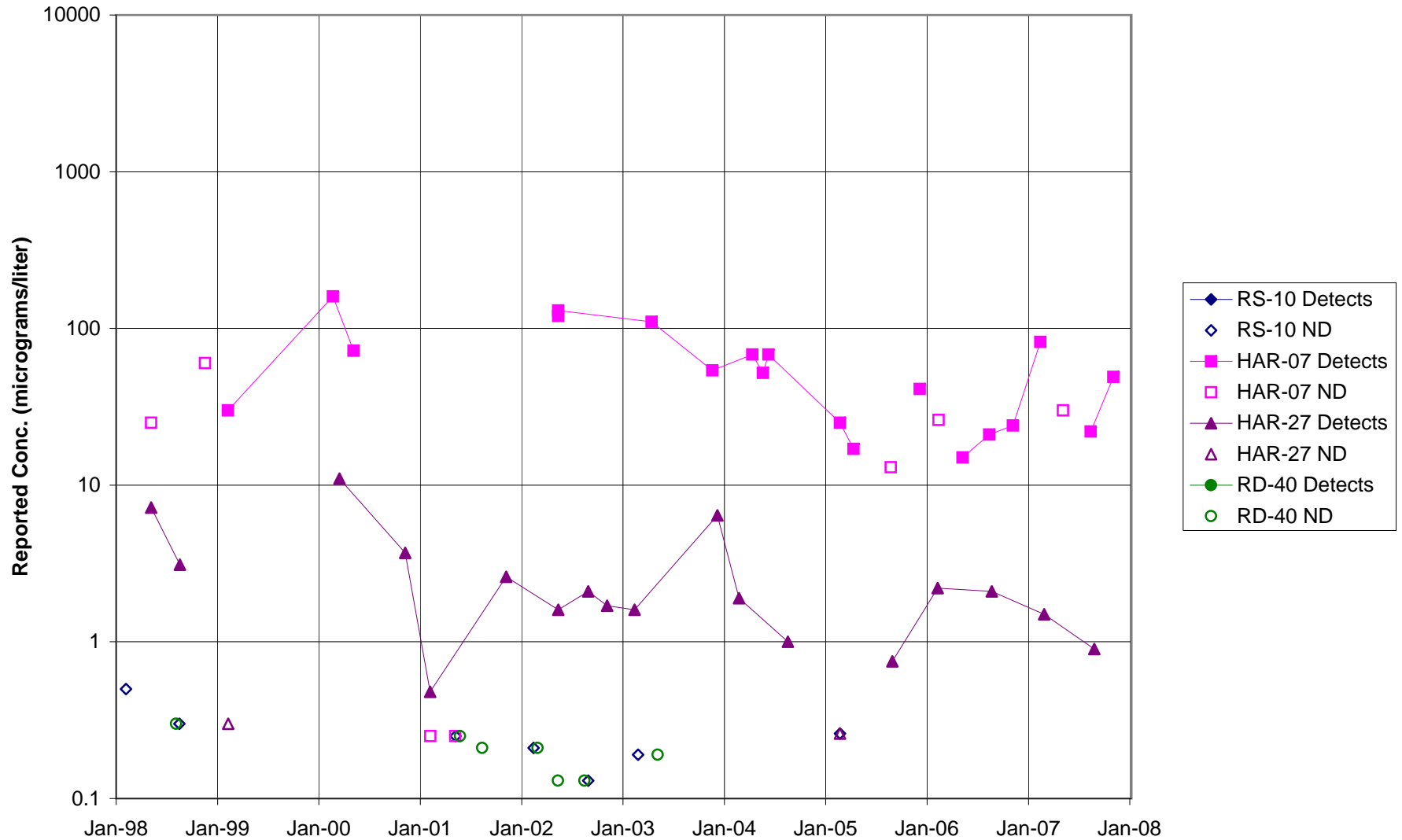
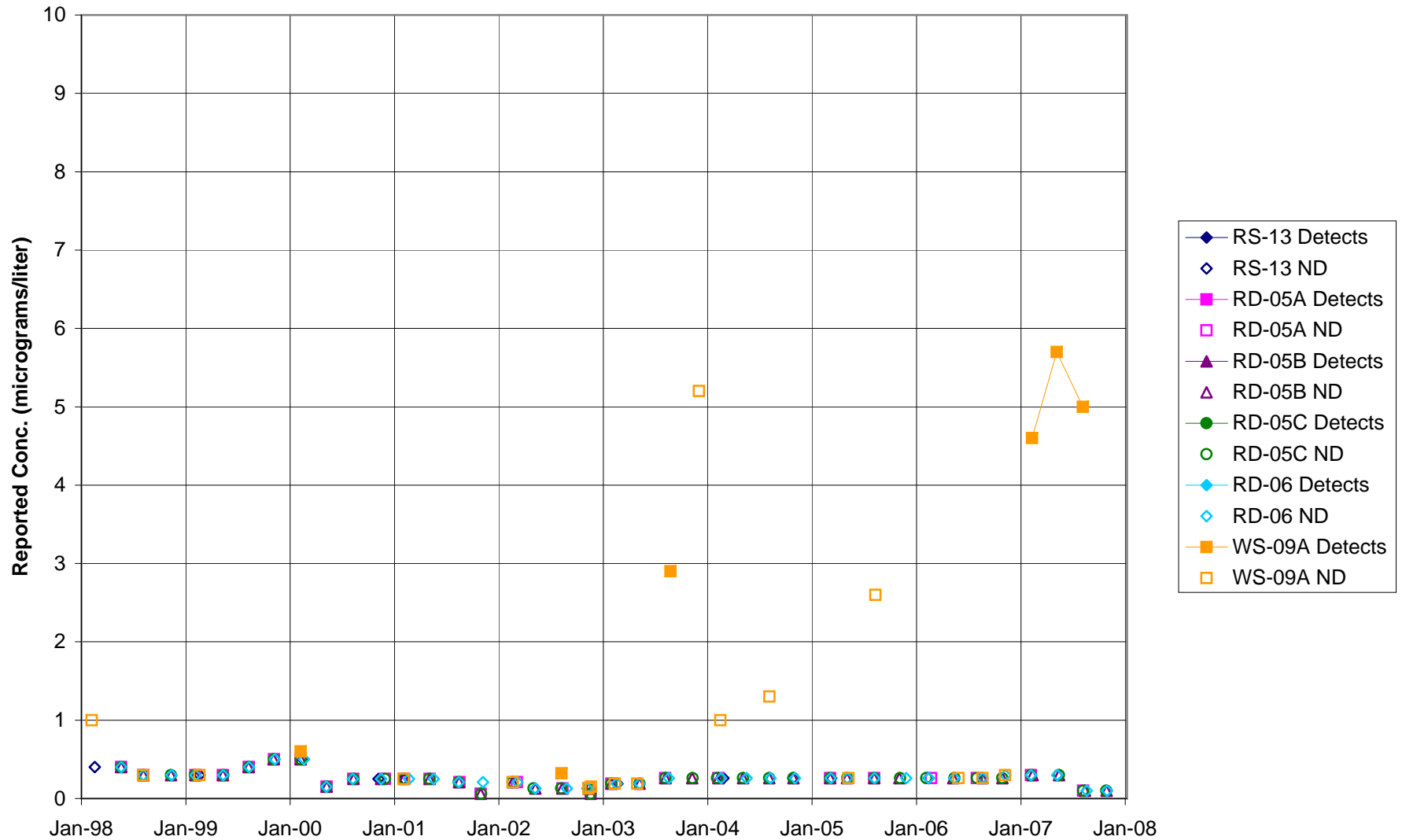


FIGURE F-368. VINYL CHLORIDE in COCA / PLF AREA WELLS

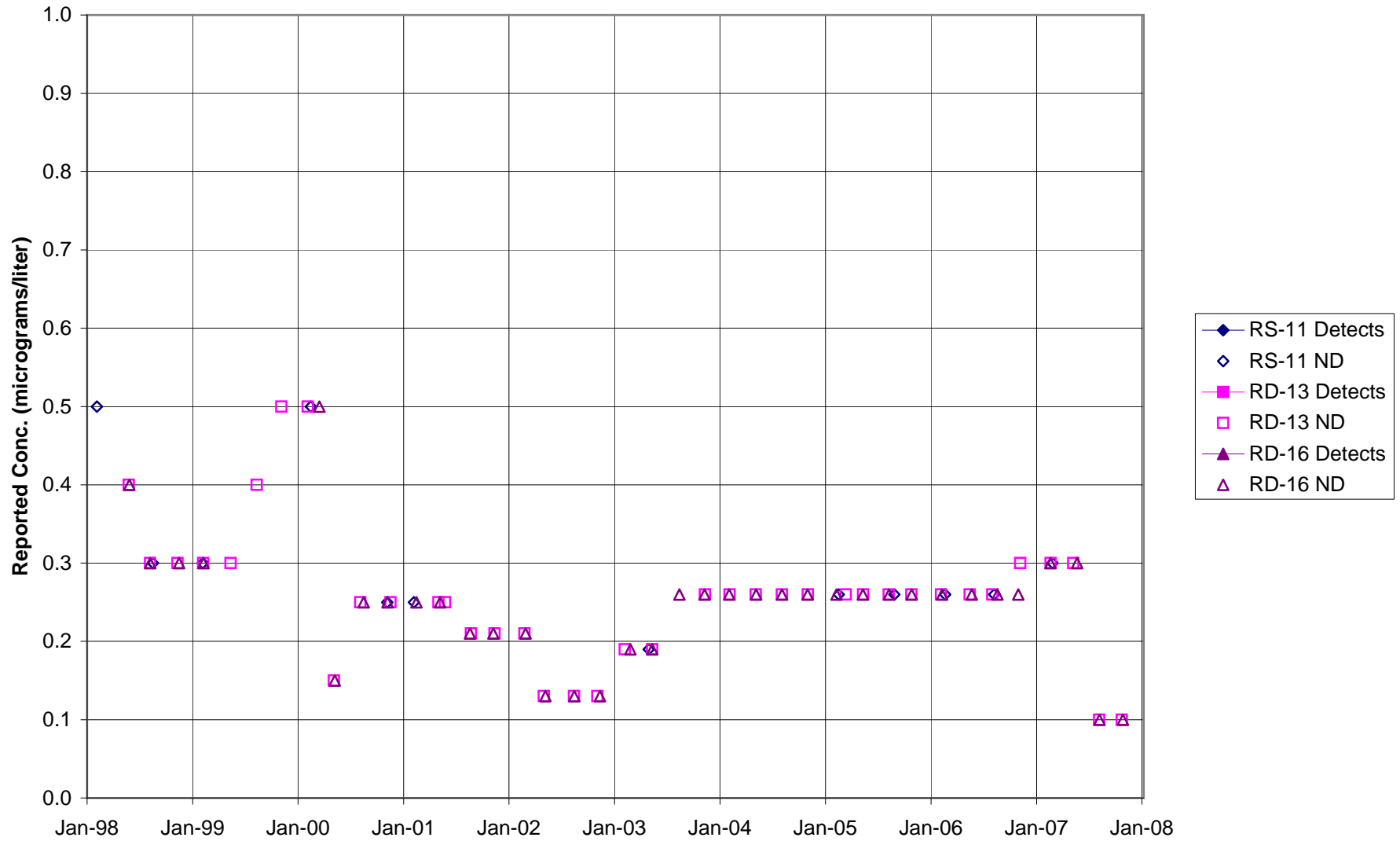




**FIGURE F-369. VINYL CHLORIDE in DELTA / BUFFER ZONE AREA WELLS**



**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  
REMEDATION SYSTEMS**

**TABLE OF CONTENTS**

**LIST OF TABLES**

<b>Table No.</b>	<b>Title</b>
G-I	NPDES Permit CA0001309, Outfall-002, 2007 Reporting Summary
G-II	NPDES Permit CA0001309, Outfall-002, 2007 Mass Based Results
G-III	NPDES Permit CA0001309, Outfall-002, Summary of 2007 Permit Limit Exceedances
G-IV	NPDES Permit CA0001309. 2007 Reporting Summary Notes

**LIST OF FIGURES**

<b>Figure No.</b>	<b>Title</b>
G-1	Monthly Pumpage & VOC Mass Removed – Delta ASU – 2007
G-2	Cumulative Pumpage & VOC Mass Removed to Date – Delta ASU – 2007
G-3	Cumulative Pumpage & VOC Mass Removed to Date – Alfa ASU – 2007
G-4	Cumulative Pumpage & VOC Mass Removed to Date – Bravo ASU – 2007
G-5	Cumulative Pumpage & VOC Mass Removed to Date – Area I Rd ASU – 2007
G-6	Monthly Pumpage & VOC Mass Removed – WS-05 UV/H2O2 – 2007
G-7	Cumulative Pumpage & VOC Mass Removed to Date – WS-05 UV/H2O2 – 2007
G-8	Cumulative Pumpage & VOC Mass Removed to Date – STL-IV ASU – 2007

## **APPENDIX G**

### **SURFACE WATER DISCHARGE and PERMITTED GROUNDWATER REMEDICATION 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. Outfall 001 was dry during 2007. Discharge limits and results of water quality analyses of surface water samples collected at Outfall 002 during 2007 are presented in Tables G-I through G-IV. Discharge Monitoring Reports (DMR) for the SSFL NPDES outfalls are available at

[www.boeing.com/aboutus/environment/santa\\_susana/water\\_quality.html](http://www.boeing.com/aboutus/environment/santa_susana/water_quality.html).

Monthly and cumulative extraction volume and VOC mass removal at each permitted groundwater remediation system are presented in Figures G-1 to G-8. These figures were prepared using data summarized in monthly remediation system reports provided by EnviroSolve Corporation (2007a through 2007m).

Sample Date:			9/22/2007	
ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	RESULT	VALIDATION QUALIFIER
Ammonia as Nitrogen (N)	mg/L	10.1/1.96	5.9	--
Biochemical Oxygen Demand (BOD 5 day)	mg/L	30/20	20	--
Chloride	mg/L	150/-	4.4	--
Specific Conductivity (Lab)	umhos/cm	-/-	300	--
Surfactants (MBAS)	mg/L	0.5/-	0.13	--
Fluoride	mg/L	1.6/-	0.50	J (DNQ)
Nitrate + Nitrite as Nitrogen (N)	mg/L	8.0/-	4.0	--
Nitrate as Nitrogen (N)	mg/L	8.0/-	3.8	--
Nitrite-N	mg/L	1.0/-	0.22	J (Q)
Oil & Grease	mg/L	15/10	1.5	J (DNQ)
Perchlorate	ug/L	6.0/-	ND < 3.0	U
pH (Field)	pH units	6.5-8.5/-	7.0	*
Total Settleable Solids	ml/L	0.3/0.1	ND < 0.10	R (*III)
Sulfate	mg/L	300/-	11	--
Temperature	deg. F	86/-	54	*
Total Cyanide	ug/L	8.5/4.3	10	--
Total Dissolved Solids	mg/L	950/-	780	--
Hardness	mg/L	-/-	990	--
Hardness, dissolved	mg/L	-/-	110	--
Total Organic Carbon	mg/L	-/-	53	--
Total Residual Chlorine	mg/L	0.1/-	ND < 0.10	UJ (H)
Total Suspended Solids	mg/L	45/15	33000	--
Turbidity	NTU	-/-	8400	--
Volume Discharged	MGD	160/-	0.234	*
<b>METALS</b>				
Antimony	ug/L	6.0/-	ND < 1.0	U
Antimony, dissolved	ug/L	-/-	0.93	J (DNQ)
Arsenic	ug/L	10/-	35	--
Barium	mg/L	1.0/-	2.3	--
Barium, dissolved	mg/L	-/-	0.044	--
Beryllium	ug/L	4.0/-	11	--
Beryllium, dissolved	ug/L	-/-	ND < 0.90	U
Boron	mg/L	-/-	0.22	--
Boron, dissolved	mg/L	-/-	0.083	--
Calcium	mg/L	-/-	310	--
Calcium, Dissolved	mg/L	-/-	32	--
Cobalt	ug/L	-/-	91	--
Cobalt, dissolved	ug/L	-/-	3.2	J (DNQ)
Cadmium	ug/L	3.1/2.0	6.9	--
Cadmium, dissolved	ug/L	-/-	ND < 0.22	U
Chromium	ug/L	16.3/8.1	100	--
Chromium, dissolved	ug/L	-/-	ND < 2.0	U
Chromium VI	ug/L	16.3/8.1	ANR	ANR
Copper	ug/L	14.0/7.1	100	--
Copper, dissolved	ug/L	-/-	7.9	--
Iron	mg/L	0.3/-	97	--
Iron, dissolved	mg/L	-/-	0.62	--

See Table G-IV for abbreviations, definitions and other explanations.

Data provided by MWH.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M-490 2007 Annual\AppG\Tables\2008-0228-HAI-SSFL\_M490\_G-I-F.xls

February 2008

**TABLE G-I**  
 NPDES PERMIT CA0001309, OUTFALL-002, 2007 REPORTING SUMMARY  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Sample Date:			9/22/2007	
ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	RESULT	VALIDATION QUALIFIER
Lead	ug/L	5.2/2.6	310	--
Lead, dissolved	ug/L	-/-	1.9	J (DNQ)
Magnesium	mg/L	-/-	54	--
Magnesium, Dissolved	mg/L	-/-	7.6	--
Manganese	ug/L	50/-	11000	--
Manganese, dissolved	ug/L	-/-	260	--
Mercury	ug/L	0.10/0.05	0.042	J (DNQ)
Mercury, dissolved	ug/L	-/-	0.029	J (DNQ)
Nickel	ug/L	96/35	110	--
Nickel, dissolved	ug/L	-/-	5.3	--
Selenium	ug/L	8.2/4.1	3.9	J (DNQ)
Selenium, dissolved	ug/L	-/-	0.76	J (DNQ)
Silver	ug/L	4.1/2.0	ND < 1.0	U
Silver, dissolved	ug/L	-/-	ND < 0.40	U
Thallium	ug/L	2.0/-	1.9	J (DNQ)
Thallium, dissolved	ug/L	-/-	0.31	J (DNQ)
Vanadium	ug/L	-/-	210	--
Vanadium, dissolved	ug/L	-/-	4.2	J (DNQ)
Zinc	ug/L	119/54	790	--
Zinc, dissolved	ug/L	-/-	ND < 6.0	U
<b>ORGANICS</b>				
Benzene	ug/L	-/-	ND < 0.28	U
Carbon Tetrachloride	ug/L	-/-	ND < 0.28	U
Chloroform	ug/L	-/-	ND < 0.33	U
1,1-Dichloroethane	ug/L	-/-	ND < 0.27	U
1,2-Dichloroethane	ug/L	-/-	ND < 0.28	U
1,1-Dichloroethene	ug/L	6.0/3.2	ND < 0.42	U
1,4-Dioxane	ug/L	-/-	ND < 1.0	U (B)
Ethylbenzene	ug/L	-/-	ND < 0.25	U
Tetrachloroethene	ug/L	-/-	ND < 0.32	U
Toluene	ug/L	-/-	ND < 0.36	U
Xylenes (Total)	ug/L	-/-	ND < 0.90	U
1,1,1-Trichloroethane	ug/L	-/-	ND < 0.30	U
1,1,2-Trichloroethane	ug/L	-/-	ND < 0.30	U
Trichloroethene	ug/L	5.0/-	ND < 0.26	U
Trichlorofluoromethane	ug/L	-/-	ND < 0.34	U
Trichlorotrifluoroethane (Freon 113)	ug/L	-/-	ND < 1.5	U
Vinyl Chloride	ug/L	-/-	ND < 0.30	U
<b>TPH</b>				
EFH (C13 - C22)	mg/L	-/-	0.20	J (DNQ)
GRO (C4 - C12)	mg/L	-/-	ND < 0.025	U
TRPH	mg/L	-/-	ND < 0.60	U
<b>ADDITIONAL ANALYTES</b>				
1,2-Dichloro-1,1,2-trifluoroethane	ug/L	-/-	ND < 2.5	UJ (*III)
2,4,5-Trichlorophenol	ug/L	-/-	ND < 0.19	U
1,1,2,2-Tetrachloroethane	ug/L	-/-	ND < 0.24	U
1,2,4-Trichlorobenzene	ug/L	-/-	ANR	ANR
1,2-Dichlorobenzene	ug/L	-/-	ND < 0.32	U

See Table G-IV for abbreviations, definitions and other explanations.

Data provided by MWH.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M-490 2007 Annual\AppG\Tables\2008-0228-HAI-SSFL\_M490\_G-I-F.xls

February 2008

TABLE G-I

NPDES PERMIT CA0001309, OUTFALL-002, 2007 REPORTING SUMMARY  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Sample Date:			9/22/2007	
ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	RESULT	VALIDATION QUALIFIER
1,2-Dichloropropane	ug/L	-/-	ND < 0.35	U
1,2-Diphenylhydrazine/Azobenzene	ug/L	-/-	ANR	ANR
1,3-Dichlorobenzene	ug/L	-/-	ND < 0.35	U
1,4-Dichlorobenzene	ug/L	-/-	ND < 0.37	U
2,4,6-Trichlorophenol	ug/L	13.0/6.5	ND < 0.094	U
2,4-Dichlorophenol	ug/L	-/-	ND < 0.19	U
2,4-Dimethylphenol	ug/L	-/-	0.32	J (DNQ)
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	U
2-Chloroethylvinylether	ug/L	-/-	ND < 1.8	U
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-Nitrophenol	ug/L	-/-	ND < 0.094	U
3,3'-Dichlorobenzidine	ug/L	-/-	ND < 0.38	U
4,4'-DDD	ug/L	-/-	ND < 0.028	UJ (S)
4,4'-DDE	ug/L	-/-	ND < 0.028	UJ (S)
4,4'-DDT	ug/L	-/-	ND < 0.028	UJ (S)
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	U
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	U
Acrylonitrile	ug/L	-/-	ND < 0.70	U
Acute Toxicity	% SURVIVAL	70-100/-	100	*
Aldrin	ug/L	-/-	ND < 0.028	UJ (S)
alpha-BHC	ug/L	0.03/0.01	ND < 0.0024	UJ (S)
Anthracene	ug/L	-/-	ND < 0.094	U
Aroclor-1016	ug/L	-/-	ND < 0.42	UJ (S)
Aroclor-1221	ug/L	-/-	ND < 0.094	UJ (S)
Aroclor-1232	ug/L	-/-	ND < 0.24	UJ (S)
Aroclor-1242	ug/L	-/-	ND < 0.24	UJ (S)
Aroclor-1248	ug/L	-/-	ND < 0.24	UJ (S)
Aroclor-1254	ug/L	-/-	ND < 0.24	UJ (S)
Aroclor-1260	ug/L	-/-	ND < 0.28	UJ (S)
Benzidine	ug/L	-/-	ND < 0.94	UJ (*III)
Benzo(a)anthracene	ug/L	-/-	ND < 0.094	U
Benzo(a)pyrene	ug/L	-/-	ND < 0.094	UJ (C)
Benzo(b)fluoranthene	ug/L	-/-	ND < 0.094	U
Benzo(g,h,l)perylene	ug/L	-/-	ND < 0.094	U
Benzo(k)fluoranthene	ug/L	-/-	ND < 0.094	U
beta-BHC	ug/L	-/-	ND < 0.038	UJ (S)
bis (2-Chloroethyl) ether	ug/L	-/-	ND < 0.094	U
bis (2-ethylhexyl) Phthalate	ug/L	4.0/-	ND < 4.7	U (B)

See Table G-IV for abbreviations, definitions and other explanations.

Data provided by MWH.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M-490 2007 Annual\AppG\Tables\2008-0228-HAI-SSFL\_M490\_G-I-F.xls

February 2008



TABLE G-I

NPDES PERMIT CA0001309, OUTFALL-002, 2007 REPORTING SUMMARY  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Sample Date:			9/22/2007	
ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	RESULT	VALIDATION QUALIFIER
bis(2-Chloroethoxy) methane	ug/L	-/-	ND < 0.094	U
bis(2-Chloroisopropyl) ether	ug/L	-/-	ND < 0.094	U
Bromodichloromethane	ug/L	-/-	ND < 0.30	U
Bromoform	ug/L	-/-	ND < 0.40	U
Bromomethane	ug/L	-/-	ND < 0.42	U
Butylbenzylphthalate	ug/L	-/-	ND < 4.7	U (B)
Chlordane	ug/L	-/-	ND < 0.19	UJ (S)
Chlorobenzene	ug/L	-/-	ND < 0.36	U
Chloroethane	ug/L	-/-	ND < 0.40	U
Chloromethane	ug/L	-/-	ND < 0.40	U
Chronic Toxicity	TUC	1.0/-	16.0	*
Chrysene	ug/L	-/-	ND < 0.094	U
cis-1,2-Dichloroethene	ug/L	-/-	ANR	ANR
cis-1,3-Dichloropropene	ug/L	-/-	ND < 0.22	U
Cyclohexane	ug/L	-/-	ND < 2.5	UJ (*III)
delta-BHC	ug/L	-/-	ND < 0.019	UJ (S)
Dibenzo(a,h)anthracene	ug/L	-/-	ND < 0.094	U
Dibenzofuran	ug/L	-/-	ND < 0.094	U
Dibromochloromethane	ug/L	-/-	ND < 0.28	UJ (C)
Dieldrin	ug/L	-/-	ND < 0.028	UJ (S)
Diethylphthalate	ug/L	-/-	ND < 0.094	U
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 < 0.028	UJ (S)
Endosulfan II	ug/L	-/-	ND < 0.038	UJ (S)
Endosulfan sulfate	ug/L	-/-	ND < 0.047	UJ (S,C)
Endrin	ug/L	-/-	ND < 0.028	UJ (S)
Endrin aldehyde	ug/L	-/-	ND < 0.047	UJ (S)
Endrin ketone	ug/L	-/-	ND < 0.038	UJ (S,C)
Fluoranthene	ug/L	-/-	ND < 0.094	U
Fluorene	ug/L	-/-	ND < 0.094	U
Heptachlor	ug/L	-/-	ND < 0.028	UJ (S)
Heptachlor epoxide	ug/L	-/-	ND < 0.028	UJ (S)
Hexachlorobenzene	ug/L	-/-	ND < 0.094	U
Hexachlorobutadiene	ug/L	-/-	ANR	ANR
Hexachlorocyclopentadiene	ug/L	-/-	ND < 0.094	U
Hexachloroethane	ug/L	-/-	ND < 0.19	U
Hydrazine	ug/L	-/-	ND < 0.15	R (Q)
Indeno(1,2,3-cd)pyrene	ug/L	-/-	ND < 0.094	U
Isophorone	ug/L	-/-	ND < 0.094	U
Lindane (gamma-BHC)	ug/L	-/-	ND < 0.028	UJ (S)
Methoxychlor	ug/L	-/-	ND < 0.038	UJ (S,C)
Methylene Chloride	ug/L	-/-	ND < 0.95	U
Monomethyl Hydrazine	ug/L	-/-	ND < 0.56	R (Q)
Naphthalene	ug/L	-/-	ANR	ANR
Nitrobenzene	ug/L	-/-	ND < 0.094	U
n-Nitrosodimethylamine	ug/L	16.3/8.1	ND < 0.094	U

See Table G-IV for abbreviations, definitions and other explanations.

Data provided by MWH.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M-490 2007 Annual\AppG\Tables\2008-0228-HAI-SSFL\_M490\_G-I-F.xls

February 2008

**TABLE G-I**

NPDES PERMIT CA0001309, OUTFALL-002, 2007 REPORTING SUMMARY  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Sample Date:			9/22/2007	
ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	RESULT	VALIDATION QUALIFIER
n-Nitroso-di-n-propylamine	ug/L	-/-	ND < 0.094	U
n-Nitrosodiphenylamine	ug/L	-/-	ND < 0.094	U
p-Cresol	ug/L	-/-	18	--
Pentachlorophenol	ug/L	16.5/8.2	ND < 0.094	U
Phenanthrene	ug/L	-/-	ND < 0.094	U
Phenol	ug/L	-/-	3.2	--
Pyrene	ug/L	-/-	ND < 0.094	U
Toxaphene	ug/L	-/-	ND < 1.4	UJ (S)
trans-1,2-Dichloroethene	ug/L	-/-	ND < 0.27	U
trans-1,3-Dichloropropene	ug/L	-/-	ND < 0.32	U
Unsymmetrical Dimethyl Hydrazine	ug/L	-/-	ND < 0.32	UJ (Q)

See Table G-IV for abbreviations, definitions and other explanations.

Data provided by MWH.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M-490 2007 Annual\AppG\Tables\2008-0228-HAI-SSFL\_M490\_G-I-F.xls

February 2008

**TABLE G-I**  
 NPDES PERMIT CA0001309, OUTFALL-002, 2007 REPORTING SUMMARY  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Sample Date: 9/22/2007							
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	5.97E-04	--	0.01	5.97E-06	5.97E-06
1,2,3,4,6,7,8-HpCDF	0.00E+00	2.50E-05	1.37E-04	--	0.01	1.37E-06	1.37E-06
1,2,3,4,7,8,9-HpCDF	0.00E+00	2.50E-05	1.10E-05	J (DNQ)	0.01	1.10E-07	ND
1,2,3,4,7,8-HxCDD	0.00E+00	2.50E-05	2.38E-05	J (DNQ)	0.1	2.38E-06	ND
1,2,3,4,7,8-HxCDF	0.00E+00	2.50E-05	2.15E-05	J (DNQ)	0.1	2.15E-06	ND
1,2,3,6,7,8-HxCDD	0.00E+00	2.50E-05	4.77E-05	--	0.1	4.77E-06	4.77E-06
1,2,3,6,7,8-HxCDF	0.00E+00	2.50E-05	1.97E-05	J (DNQ)	0.1	1.97E-06	ND
1,2,3,7,8,9-HxCDD	0.00E+00	2.50E-05	4.33E-05	--	0.1	4.33E-06	4.33E-06
1,2,3,7,8,9-HxCDF	0.00E+00	2.50E-05	6.70E-06	J (DNQ)	0.1	6.70E-07	ND
1,2,3,7,8-PeCDD	0.00E+00	2.50E-05	2.19E-05	J (DNQ)	1	2.19E-05	ND
1,2,3,7,8-PeCDF	0.00E+00	2.50E-05	1.70E-05	J (DNQ)	0.05	8.50E-07	ND
2,3,4,6,7,8-HxCDF	0.00E+00	2.50E-05	2.25E-05	J (DNQ)	0.1	2.25E-06	ND
2,3,4,7,8-PeCDF	0.00E+00	2.50E-05	3.37E-05	--	0.5	1.69E-05	1.69E-05
2,3,7,8-TCDD	0.00E+00	5.00E-06	5.12E-06	--	1	5.12E-06	5.12E-06
2,3,7,8-TCDF	0.00E+00	5.00E-06	3.58E-05	--	0.1	3.58E-06	3.58E-06
OCDD	0.00E+00	5.00E-05	4.84E-03	--	0.0001	4.84E-07	4.84E-07
OCDF	0.00E+00	5.00E-05	3.31E-04	--	0.0001	3.31E-08	3.31E-08
<b>TCDD TEQ w/ DNQ Values</b>						<b>7.48E-05</b>	
<b>TCDD TEQ w/out DNQ Values</b>							<b>4.26E-05</b>

Dioxin TCDD TEQ compliance limit established for this outfall?

Yes

TCDD TEQ PERMIT LIMIT = 2.80E-08

See Table G-IV for abbreviations, definitions and other explanations.

Data provided by MWH.

Haley & Aldrich, Inc.

G:\Projects\ 26472\Reports\M-490 2007 Annual\App G\Tables\2008-0228-HAI-SSFL\_M490\_G-I-F.xls

Sample Date:			9/22/2007		
ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	RESULT	MDA	VALIDATION QUALIFIER
<b>RADIOACTIVITY</b>					
Gross Alpha	pCi/L	15/-	701 ±170	120	J (H,R)
Gross Beta	pCi/L	50/-	426 ±95	140	J (H)
Strontium-90	pCi/L	8.0/-	2.79 ±0.44	0.46	J (H)
Total Combined Radium-226 & Radium 228	pCi/L	5.0/-	17.01 ± 1.301	0.87	J (H)
Tritium	pCi/L	20000/-	15.4 ±110	190	U
Ac-228 (G)	pCi/L	-/-	48.0 ±11	14	J (H)
Am-241 (G)	pCi/L	-/-	ND < 18	18	UJ (H)
Bi-212 (G)	pCi/L	-/-	47.2 ±30	34	J (H,E)
Bi-214 (G)	pCi/L	-/-	24.1 ±4.5	4.8	J (H,E)
Co-58 (G)	pCi/L	-/-	ND < 2.4	2.4	UJ (H)
Co-60 (G)	pCi/L	-/-	ND < 2.2	2.2	UJ (H)
Cs-134 (G)	pCi/L	-/-	ND < 3.2	3.2	UJ (H)
Cs-137 (G)	pCi/L	-/-	9.06 ±2.3	2.5	J (H,E)
Eu-152 (G)	pCi/L	-/-	ND < 6.0	6.0	UJ (H)
Eu-154 (G)	pCi/L	-/-	ND < 6.7	6.7	UJ (H)
K-40 (G)	pCi/L	-/-	268 ±38	28	J (H,E)
Mn-54 (G)	pCi/L	-/-	ND < 2.1	2.1	UJ (H)
Pb-210 (G)	pCi/L	-/-	ND < 600	600	UJ (H)
Pb-212 (G)	pCi/L	-/-	43.0 ±3.5	3.3	J (H)
Pb-214 (G)	pCi/L	-/-	27.2 ±5.9	5.5	J (H)
Ra-226 (G)	pCi/L	-/-	23.4 ±4.4	4.7	J (H,E)
Th-228 (G)	pCi/L	-/-	ND < 14	14	UJ (H)
Th-230 (G)	pCi/L	-/-	ND < 640	640	UJ (H)
Th-232 (G)	pCi/L	-/-	47.8 ±11	9.7	J (H)
Th-234 (G)	pCi/L	-/-	ND < 2.0	2.0	UJ (H)
Tl-208 (G)	pCi/L	-/-	16.4 ±2.6	2.5	J (H,E)
U-234 (G)	pCi/L	-/-	ND < 550	550	UJ (H)
U-235 (G)	pCi/L	-/-	ND < 11	11	UJ (H)
U-238 (G)	pCi/L	-/-	ND < 340	340	UJ (H)

See Table G-IV for abbreviations, definitions and other explanations.

Data provided by MWH.

Haley & Aldrich, Inc.

G:\Projects\ 26472\Reports\M-490 Annual\App G\Tables\2008-0228-HAI-SSFL\_M490\_G-I-F.xls

February 2008

**TABLE G-II**

NPDES PERMIT CA0001309, OUTFALL-002  
 2007 MASS BASED RESULTS  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Sample Date:			9/22/2007	
ANALYTE	UNITS	Mass-Based Permit Limit Daily Max/Monthly Avg	Result	CONCENTRATION RESULT VALIDATION QUALIFIER
Biochemical Oxygen Demand (BOD 5 day)	LBS/DAY	40,032/26,700	39	--
Chloride	LBS/DAY	200,160/-	8.6	--
Surfactants (MBAS)	LBS/DAY	667/-	0.25	--
Fluoride	LBS/DAY	2,135/-	0.97	J (DNQ)
Nitrate + Nitrite as Nitrogen (N)	LBS/DAY	10,700/-	7.8	--
Oil & Grease	LBS/DAY	20,016/13,344	2.9	J (DNQ)
Perchlorate	LBS/DAY	8/-	ND	U
Sulfate	LBS/DAY	400,320/-	21	--
Total Cyanide	LBS/DAY	11.3/5.7	0.019	--
Total Dissolved Solids	LBS/DAY	1,270,000/-	1519	--
Total Residual Chlorine	LBS/DAY	133/-	ND	UJ (H)
Total Suspended Solids	LBS/DAY	60,048/20,016	64275	--
<b>METALS</b>				
Antimony	LBS/DAY	8.01/-	ND	U
Arsenic	LBS/DAY	66.7/-	0.068	--
Barium	LBS/DAY	1,330/-	4.48	--
Beryllium	LBS/DAY	5.34/-	0.021	--
Cadmium	LBS/DAY	5.34/2.7	0.013	--
Chromium	LBS/DAY	21.8/10.8	0.19	--
Copper	LBS/DAY	18.7/9.5	0.19	--
Iron	LBS/DAY	400/-	189	--
Lead	LBS/DAY	6.94/3.5	0.60	--
Manganese	LBS/DAY	66.7/-	21	--
Mercury	LBS/DAY	0.13/0.07	0.00008	J (DNQ)
Nickel	LBS/DAY	128/47	0.21	--
Selenium	LBS/DAY	10.9/5.5	0.008	J (DNQ)
Silver	LBS/DAY	5.5/2.7	ND	U
Thallium	LBS/DAY	2.7/-	0.0037	J (DNQ)
Zinc	LBS/DAY	159/72	1.54	--
<b>ORGANICS</b>				
1,1-Dichloroethene	LBS/DAY	8/4.3	ND	U
Trichloroethene	LBS/DAY	6.7/-	ND	U
<b>ADDITIONAL ANALYTES</b>				
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 (S)
bis (2-ethylhexyl) Phthalate	LBS/DAY	5.3/-	ND	U (B)
n-Nitrosodimethylamine	LBS/DAY	21.8/10.8	ND	U
Pentachlorophenol	LBS/DAY	22/10.9	ND	U
TCDD TEQ_NoDNQ	LBS/DAY	3.7E-08/1.9E-08	8.31E-08	*

See Table G-IV for abbreviations, definitions and other explanations.

Data provided by MWH.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M-490 Annual\App G\Tables\2008-0228-HAI-SSFL\_M490\_G-II-F.xls

**TABLE G-III**

NPDES PERMIT CA0001309, OUTFALL-002  
SUMMARY OF 2007 PERMIT LIMIT EXCEEDANCES  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

DAILY MAX PERMIT LIMIT EXCEEDANCES							
OUTFALL	LOCATIONS	SAMPLE DATE	ANALYTE	PERMIT LIMIT DAILY MAX/ MONTHLY AVERAGE	DAILY MAX RESULT	UNITS	VALIDATION QUALIFIER
Outfall 002	South Slope below R-2 Pond	09/22/07	Arsenic	10/-	35	ug/L	--
Outfall 002	South Slope below R-2 Pond	09/22/07	Barium	1.0/-	2.3	mg/L	--
Outfall 002	South Slope below R-2 Pond	09/22/07	Beryllium	4.0/-	11	ug/L	--
Outfall 002	South Slope below R-2 Pond	09/22/07	Cadmium	3.1/2.0	6.9	ug/L	--
Outfall 002	South Slope below R-2 Pond	09/22/07	Chronic Toxicity	1.0/-	16.0	Tuc	*
Outfall 002	South Slope below R-2 Pond	09/22/07	Chromium	16.3/8.1	100	ug/L	--
Outfall 002	South Slope below R-2 Pond	09/22/07	Copper	14.0/7.1	100	ug/L	--
Outfall 002	South Slope below R-2 Pond	09/22/07	Gross Alpha	15/-	701±170	pCi/L	J (H,R)
Outfall 002	South Slope below R-2 Pond	09/22/07	Gross Beta	50/-	426±95	pCi/L	J (H)
Outfall 002	South Slope below R-2 Pond	09/22/07	Iron	0.3/-	97	mg/L	--
Outfall 002	South Slope below R-2 Pond	09/22/07	Lead	5.2/2.6	310	ug/L	--
Outfall 002	South Slope below R-2 Pond	09/22/07	Manganese	50/-	11000	ug/L	--
Outfall 002	South Slope below R-2 Pond	09/22/07	Nickel	96/35	110	ug/L	--
Outfall 002	South Slope below R-2 Pond	09/22/07	TCDD TEQ_NoDNQ	2.80E-08/1.40E-08	4.26E-05	ug/L	--
Outfall 002	South Slope below R-2 Pond	09/22/07	Total Combined Radium-226 & Radium 228	5.0/-	17.01±1.3	pCi/L	J (H)
Outfall 002	South Slope below R-2 Pond	09/22/07	Total Cyanide	8.5/4.3	10	ug/L	--
Outfall 002	South Slope below R-2 Pond	09/22/07	Zinc	119/54	790	ug/L	--

See Table G-IV for abbreviations, definitions and other explanations.

Data provided by MWH.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M-490 2007 Annual\App G\Tables\2008-0228-HAI-SSFL\_M490\_G-III-F.xls

February 2008

**TABLE G-III**

NPDES PERMIT CA0001309, OUTFALL-002  
SUMMARY OF 2007 PERMIT LIMIT EXCEEDANCES  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

MONTHLY AVERAGE PERMIT LIMIT EXCEEDANCES							
OUTFALL	LOCATIONS	SAMPLE DATE	ANALYTE	PERMIT LIMIT DAILY MAX/ MONTHLY AVERAGE	MONTHLY AVERAGE RESULT	UNITS	VALIDATION QUALIFIER
Outfall 002	South Slope below R-2 Pond	09/22/07	Ammonia as Nitrogen (N)	1.96	5.9	mg/L	*
Outfall 002	South Slope below R-2 Pond	09/22/07	Cadmium	2.0	6.9	ug/L	*
Outfall 002	South Slope below R-2 Pond	09/22/07	Chromium	8.1	100	ug/L	*
Outfall 002	South Slope below R-2 Pond	09/22/07	Copper	7.1	100	ug/L	*
Outfall 002	South Slope below R-2 Pond	09/22/07	Lead	2.6	310	ug/L	*
Outfall 002	South Slope below R-2 Pond	09/22/07	Nickel	35	110	ug/L	*
Outfall 002	South Slope below R-2 Pond	09/22/07	Total Cyanide	4.3	10	ug/L	*
Outfall 002	South Slope below R-2 Pond	09/22/07	Zinc	54	790	ug/L	*
Outfall 002	South Slope below R-2 Pond	09/22/07	TCDD TEQ_NoDNQ	1.40E-08	4.26E-05	ug/L	*

MASS-BASED DAILY MAX PERMIT LIMIT EXCEEDANCES							
OUTFALL	LOCATIONS	SAMPLE DATE	ANALYTE	MASS-BASED PERMIT LIMIT DAILY MAX	DAILY MAX MASS- LOADING RESULT	UNITS	VALIDATION QUALIFIER
Outfall 002	South Slope below R-2 Pond	09/22/07	TCDD TEQ_NoDNQ	3.70E-08	8.31E-08	lbs/day	*

MASS-BASED MONTHLY AVERAGE PERMIT LIMIT EXCEEDANCES							
OUTFALL	LOCATIONS	SAMPLE DATE	ANALYTE	MASS-BASED PERMIT LIMIT MONTHLY AVERAGE	MONTHLY AVERAGE MASS- LOADING RESULT	UNITS	VALIDATION QUALIFIER
Outfall 002	South Slope below R-2 Pond	Sep-2007	TCDD TEQ_NoDNQ	1.90E-08	2.82E-08	lbs/day	*

See Table G-IV for abbreviations, definitions and other explanations.

Data provided by MWH.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M-490 2007 Annual\App G\Tables\2008-0228-HAI-SSFL\_M490\_G-III-F.xls

February 2008

**Notes:**

1. 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 1998 World Health Organization's (WHO) toxic equivalency factor (TEF). The resulting compliance TCDD TEQ does not include those congener concentrations that are reported as DNQ, as specified on Page 46 of the NPDES permit.
2. For some sample dates, pH was determined with a field instrument to obtain a more representative result and was noted as such. These results were not validated.
3. The NPDES permit limits for mercury of 0.10 µg/L (Outfalls 001, 002, 011, and 018) and 0.13 µg/L (Outfalls 3-10) are not achievable by the laboratory; therefore, the laboratory reporting limit of 0.20 µg/L was used to determine compliance.
4. The following assumptions and rationale were used to report the DMR Quantity or Loading results:

Loading (lbs/day) = Measured Sample Concentration (mg/L) x 8.34 x Outfall flow (MGD)

Monthly Average Loading (lbs/day) = Sum of Event Mass Discharges within a Month / Number of Days of Flow for all Sample Events

Where:

Event Mass Discharge = Measured Sample Concentration for Event (mg/L) x 8.34 x Total Flow for Sample Event (MGD)

In Compliance with the Permit (Page 44, Section D), for Monthly Average Discharge Values:

- For calculating the monthly average, one-half of the MDL was used for concentration results reported as ND.
  - For calculating the monthly average, the estimated value was used for concentration results reported as DNQ.
  - If all pollutants belonging to the same group are reported as ND or DNQ, the sum of the individual pollutant concentrations were considered zero for calculation of the monthly average.
5. Data presented in the report tables are reported as quantified to the MDL (ND < MDL) and includes estimated detections (DNQ values) to provide low-level information and to give an indication of the sensitivity of the methods used. The laboratory-derived MDLs are designed to be reliable however, the data generation and validation procedures are designed to establish defensibility of quantified data to the RL. Data presented in the tables are accurate and reliable as qualified, but the final laboratory data reports and data validation reports must be used to determine legal defensibility. This does not affect compliance determination, since values below the RL are not used for compliance purposes.
  6. Outfall 002 is located on the south slope below the R-2 pond.

**Symbols and Abbreviations:**

The following symbols and abbreviations may occur on report tables:

---

-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)
*	improper preservation of sample



**TABLE G-IV**

NPDES PERMIT CA0001309  
 2007 REPORTING SUMMARY NOTES  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

*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
*4	Extractable Fuel Hydrocarbon (EFH) recovery was above control limit in the blank spike only and relative percent difference for the EFH blank spike/blank spike duplicate pair exceeded the quality control (QC) limit of <math>\pm 25\%</math>
*5	blank spike/blank spike duplicate relative percent difference was outside the control limit
*7	BOD results were estimated due to method derivation
*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	Unusual problems found with the data that have been described in Section II, "Sample Management" of the validation reports.
*III	Unusual problems found with the data that have been described in Section III, "Method Analyses" of the validation reports.
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	analysis with this flag should not be used because another more technically sound analysis is available
%D	percent difference between the initial and continuing calibration relative response factors
deg F	degrees Fahrenheit
DL	detection limit
DNQ	detected but not quantified (constituent value greater than or equal to the laboratory method detection limit and less than 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
lbs/day	pounds per day
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
M-3	Results exceeded the linear range in the MS and/or MS duplicate and therefore are not available for reporting. The batch was accepted based on acceptable recovery in the Blank Spike (LCS).
MDA	minimum detectable activity
MDL	method detection limit
MGD	million gallons per day
mg/L	milligrams per liter
ml/L	milliliters per liter
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
pCi/L	picocuries per liter
pg/L	picograms per liter

**TABLE G-IV**

NPDES PERMIT CA0001309  
2007 REPORTING SUMMARY NOTES  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

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	(as a 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 equivalency quotient
T	presumed contamination, as indicated by a detect in the trip blank
TU <sub>c</sub>	toxicity units (chronic)
U	result not detected
ug/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
+	False positive – reported compound was not present. Not applicable.

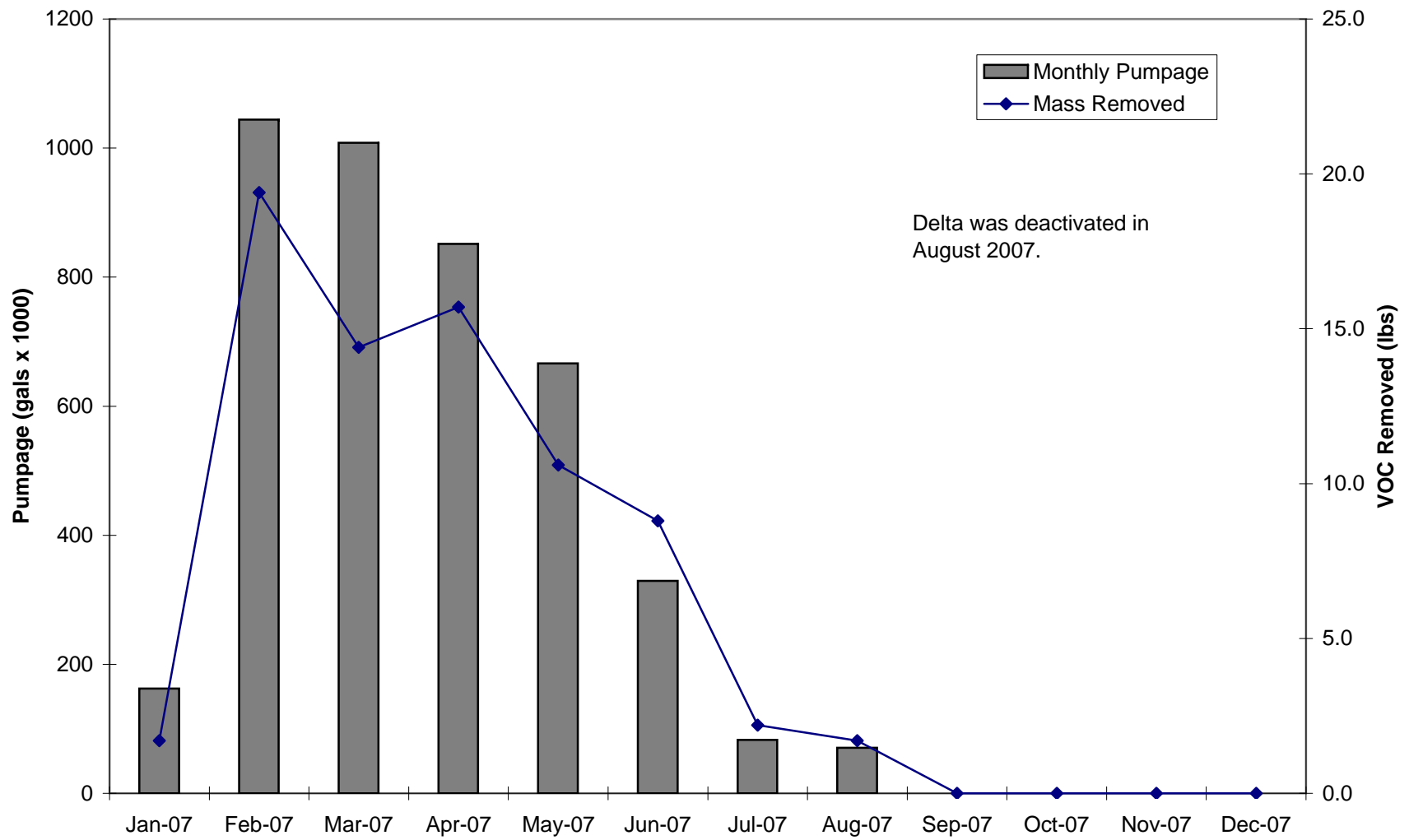
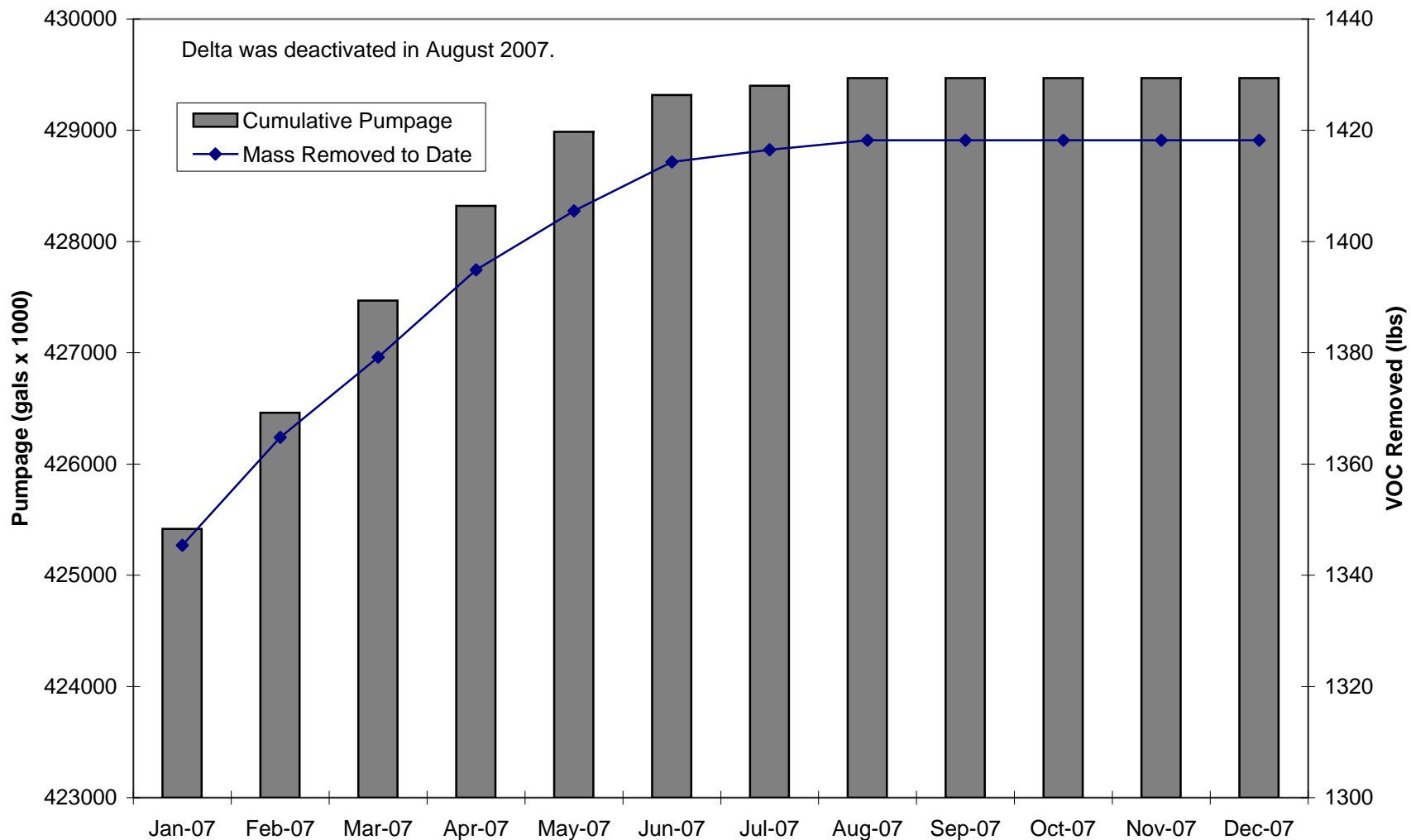
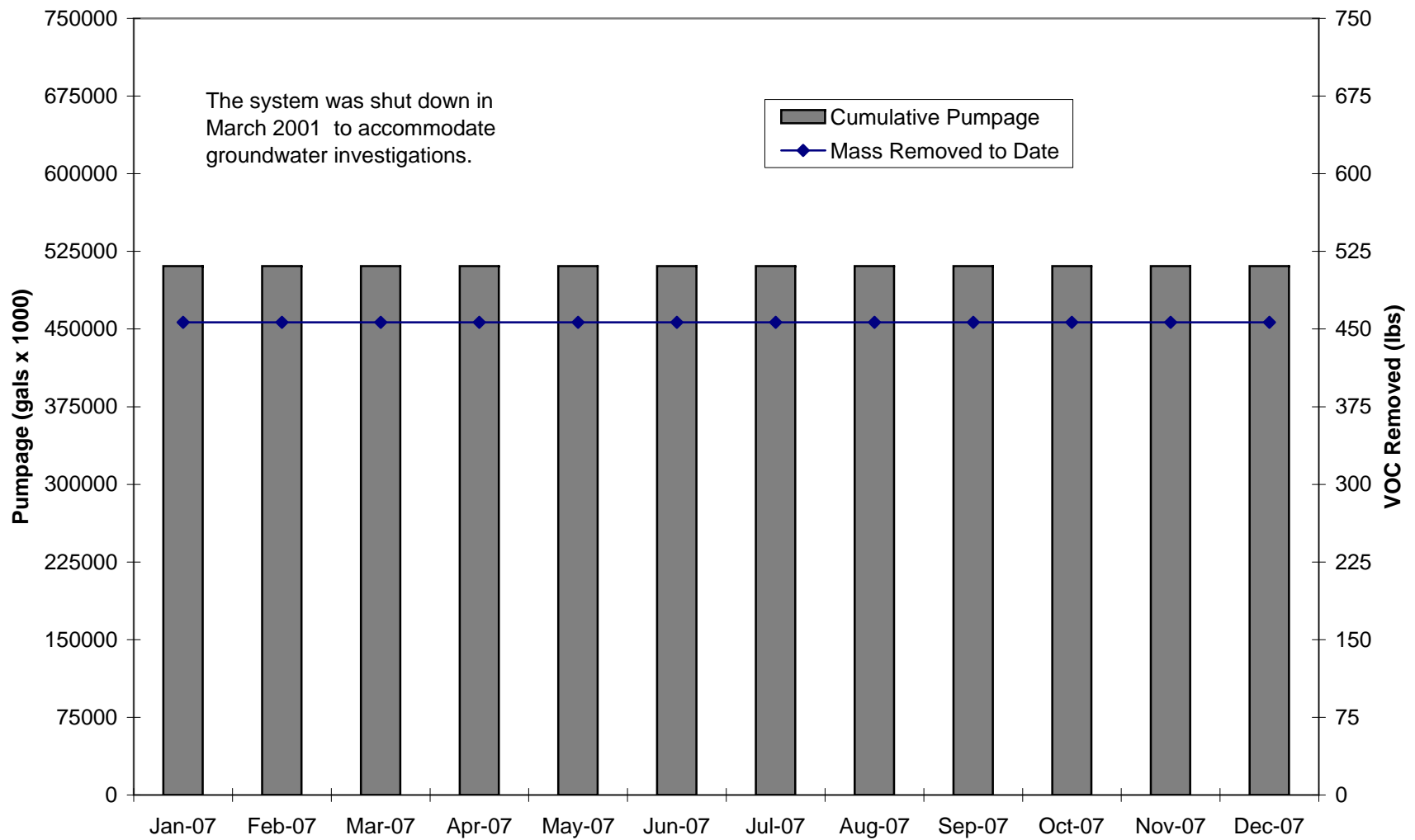


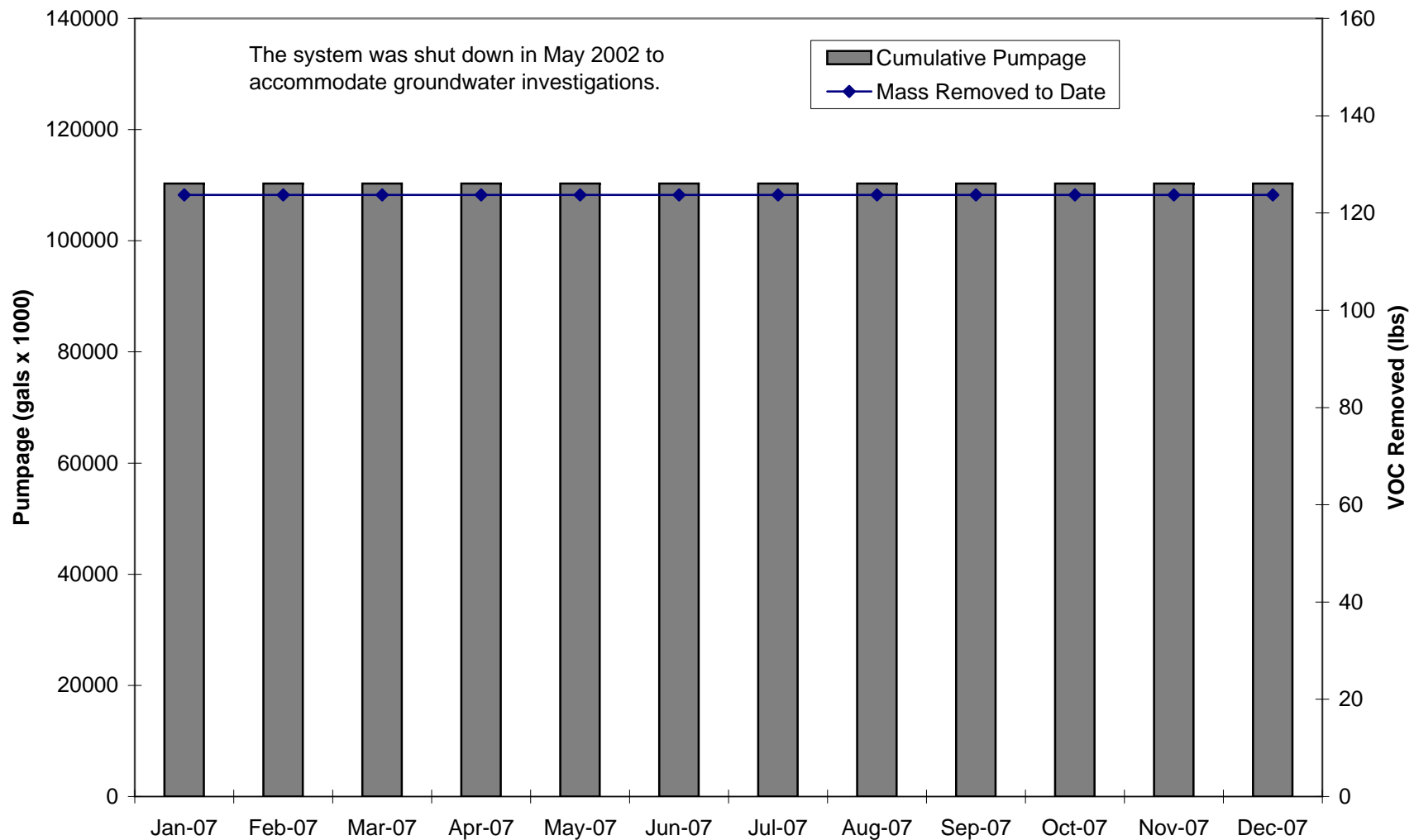
Figure G-1. Monthly Pumpage & VOC Mass Removed-Delta ASU-2007



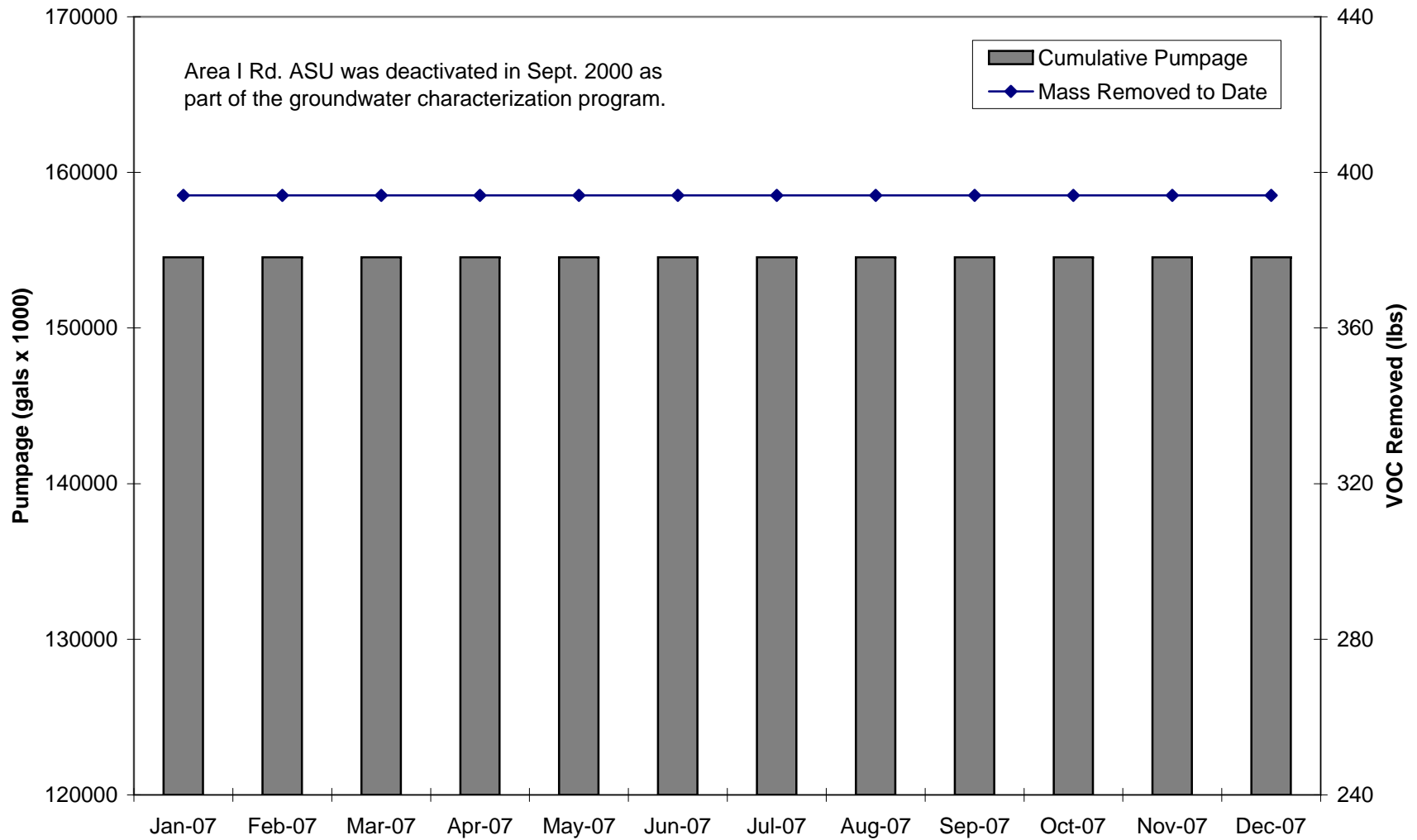
**Figure G-2. Cumulative Pumpage & VOC Mass Removed to Date-Delta ASU-2007**



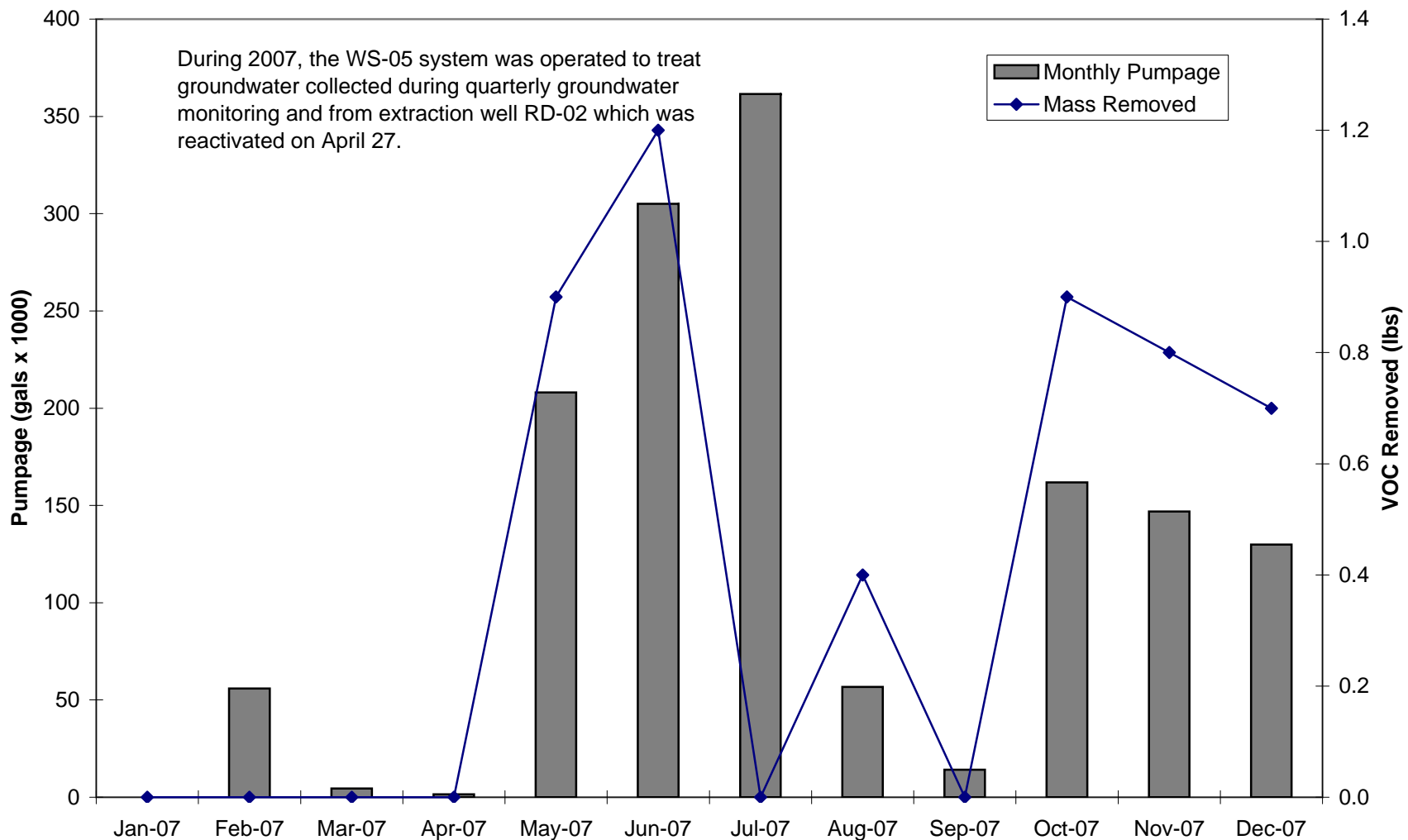
**Figure G-3. Cumulative Pumpage & VOC Mass Removed to Date-Alfa ASU-2007**



**Figure G-4. Cumulative Pumpage & VOC Mass Removed to Date-Bravo ASU-2007**

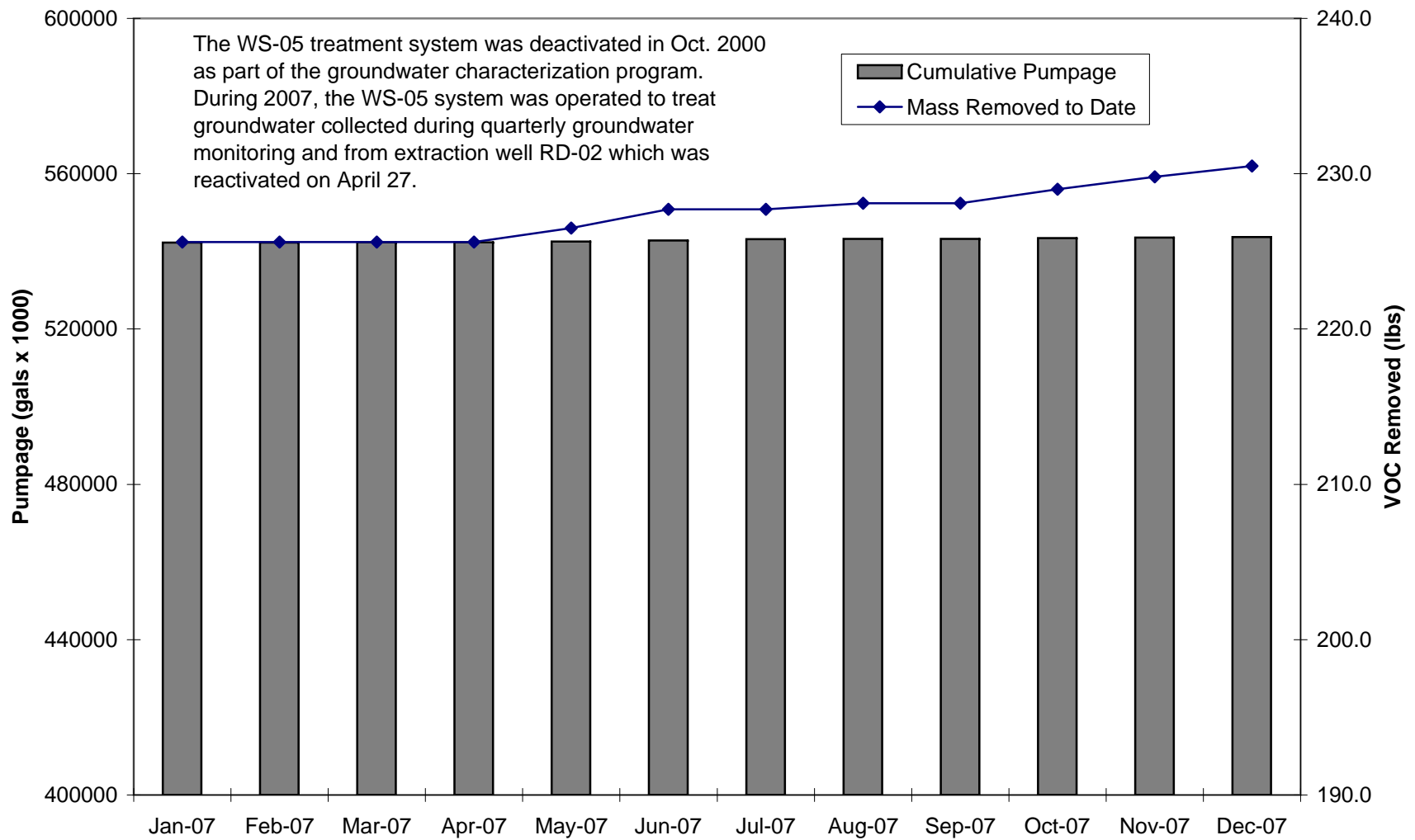


**Figure G-5. Cumulative Pumpage & VOC Mass Removed to Date-Area I Rd ASU-2007**

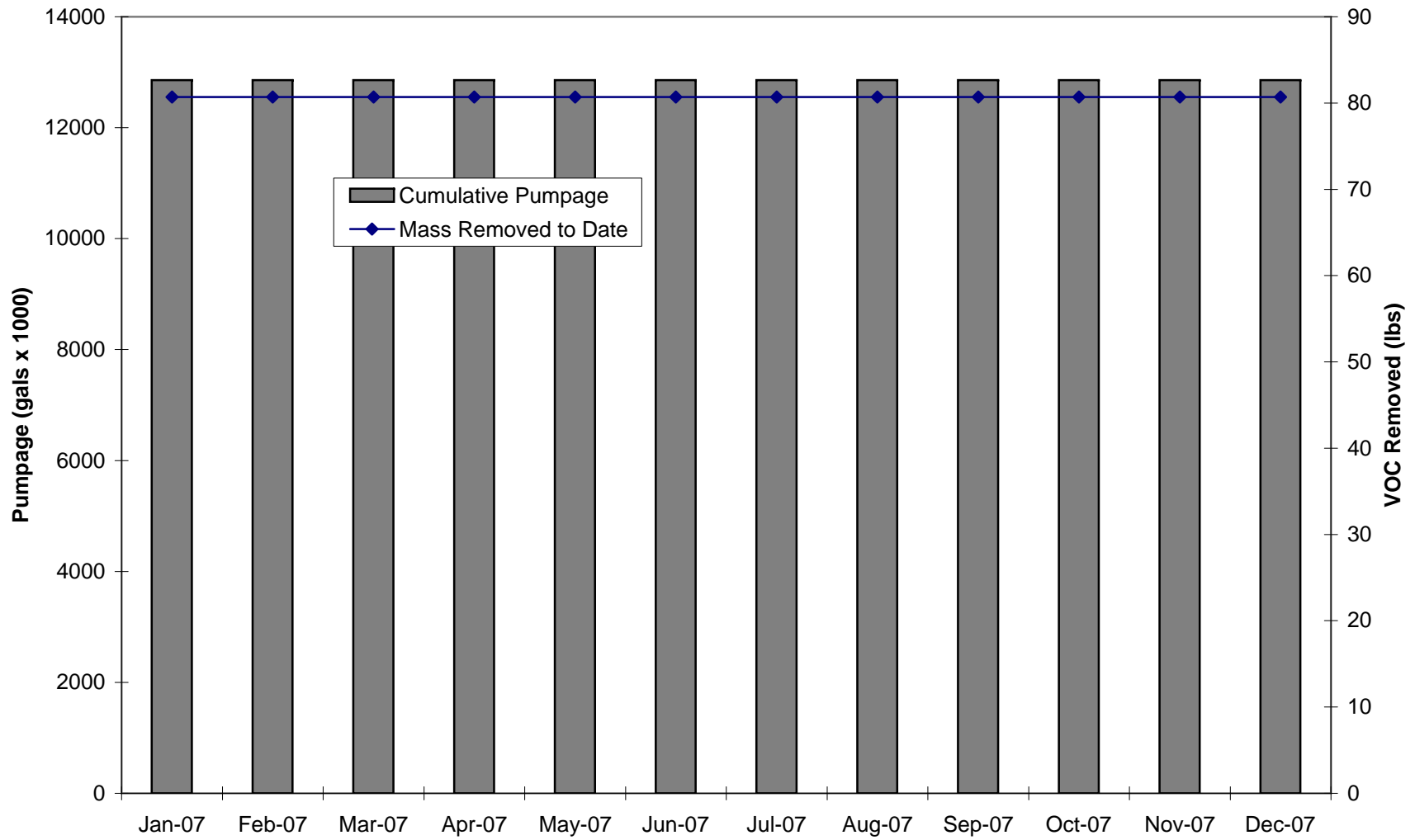


**Figure G-6. Monthly Pumpage & VOC Mass Removed-WS-05 UV/H2O2-2007**





**Figure G-7. Cumulative Pumpage & VOC Mass Removed to Date-WS-05 UV/H2O2-2007**



**Figure G-8. Cumulative Pumpage & VOC Mass Removed to Date-STL-IV ASU-2007**

**APPENDIX H**  
**CORRECTED CHEMICAL RESULTS**

**APPENDIX H  
CORRECTED CHEMICAL RESULTS**

**TABLE OF CONTENTS**

	<b>Page</b>
<b>1. SUMMARY OF CORRECTIONS TO CHEMICAL RESULTS</b>	<b>1</b>
1.1 Revised Results	1
1.2 Revised Data Qualifications for the 2006 Annual Report	2
1.2.1 Revised Data Qualifications due to Blank Sample Contamination	2
1.2.2 Revised Data Qualifications of Samples by MECX	2

**LIST OF TABLES**

<b>Table No.</b>	<b>Title</b>
H-I	Summary of Changes to Analytical Results due to MDL Corrections, 2006
H-II	Summary of 2006 Data Qualification due to Blank Sample Contamination, Revision 1 to Table D-IV of the 2006 Annual Groundwater Monitoring Report
H-III	Summary of 2006 Data Qualification of Samples by MECX, Revision 1 to Table D-VIII of the 2006 Annual Groundwater Monitoring Report

## 1. SUMMARY OF CORRECTIONS TO CHEMICAL RESULTS

The 2006 annual groundwater report [*Report on Annual Groundwater Monitoring, 2006, Santa Susana Field Laboratory, Ventura County, California* (Haley & Aldrich, 2007a)] was published on February 28, 2007. Some of the results of analyses for VOCs, dissolved metals, and inorganics reported for November 2006 were subsequently changed because the analytical laboratory did not use the appropriate August and September 2006 method detection limits (MDLs).

In May 2007, Haley & Aldrich identified discrepancies in MDLs reported by TestAmerica for metals. TestAmerica concluded that some MDL updates that became effective in 2006 had not been applied. The originally reported and revised MDLs are the following:

Constituent	Originally reported MDL (mg/L)	Revised MDL (mg/L)	MDL effective date range
Aroclor 1016	0.2 ( $\mu\text{g/L}$ )	0.45 ( $\mu\text{g/L}$ )	06/29/06 - 12/18/06
Arsenic	0.0005	0.0007	09/27/06 - current
Bromoform	0.32 ( $\mu\text{g/L}$ )	0.4 ( $\mu\text{g/L}$ )	10/18/06 - current
Chloromethane	0.3 ( $\mu\text{g/L}$ )	0.4 ( $\mu\text{g/L}$ )	10/18/06 - current
Cadmium	0.000025	0.00005	09/27/06 - 05/14/07
Chloride	0.15	0.1	08/11/06 - 05/08/07
Chromium	0.00056	0.0007	09/27/06 - current
Cobalt	0.000035	0.00015	09/27/06 - current
Copper	0.00025	0.0004	09/27/06 - 05/14/07
Lead	0.00004	0.0001	09/27/06 - current
Magnesium	0.007	0.008	10/16/06 - 07/16/07
Mercury	0.00005	0.00015	06/29/06 - 03/12/07
Methylene chloride	0.7 ( $\mu\text{g/L}$ )	0.95 ( $\mu\text{g/L}$ )	10/18/06 - current
Nickel	0.00035	0.0009	09/27/06 - current
Nitrate	0.35	0.25	08/11/06 - current
Silver	0.000025	0.0001	09/27/06 - 05/14/07
Sulfate	0.45	0.15	08/11/06 - 05/08/07
Zinc	0.001	0.0025	09/27/06 - current

mg/L = milligrams per liter

$\mu\text{g/L}$  = micrograms per liter

### 1.1 Revised Results

MDL corrections were applicable to the following 394 results:

- 22 results changed from detected to non-detected.
- 2 results changed from non-detected to detected.
- 238 results remained non-detected below the correct MDLs.
- 53 results remain detected between the MDL and reporting limit.
- 71 results remained detected above the reporting limit
- 8 results changed from non-detected due to blank sample contamination to non-detected due to MDL correction.

Only results that changed from detected to non-detected, from non-detected to detected, or from non-detected due to blank sample contamination to non-detected due to MDL correction are summarized below and in Table H-I.

The results of analyses for 22 metal samples collected during November 2006 were incorrectly reported as detected at estimated concentrations based on the originally reported MDLs. The incorrect results changed to non-detected using the current MDLs.

The results of analyses for 2 nitrate samples collected during August 2006 were incorrectly reported as non-detected based on the old MDL. Using the revised MDL, the incorrect nitrate results changed to detections at estimated concentrations between the MDL and the reporting limit.

The results of analyses for 8 metal samples changed to non-detected below the MDL. Previously, these results had been qualified as non-detected due to the presence of the analytes in blank samples.

TestAmerica issued revised analytical reports for the affected samples. The text of the 2006 annual groundwater report is not affected by any of the revised results.

## **1.2 Revised Data Qualifications for the 2006 Annual Report**

### **1.2.1 Revised Data Qualifications due to Blank Sample Contamination**

MDL corrections affected method blank and trip blank results and the field sample results associated with these blank samples.

In accordance with the data usability review process described in Appendix D, field sample results from monitoring during 2006 that were associated with contaminated blank samples were qualified with a "U" flag (Table H-II). Table H-II replaces Table D-IV of the 2006 annual groundwater monitoring report. Due to increases to some of the MDLs, method blank contamination was no longer applicable to six sample results originally listed in the 2006 annual groundwater monitoring report, and these records were removed from Table H-II. Since publication of the 2006 annual report, method blank contamination was identified for one additional result. The antimony result for the November 2006 RS-20 sample was qualified as non-detected ("U") because the antimony concentration within the sample was less than 10 times (10X) the amount of antimony detected in the associated method blank.

### **1.2.2 Revised Data Qualifications of Samples by MECX**

Two mercury results for piezometer PZ-045 and well RD-23 sampled during August 2006 changed from detected to non-detected due to the higher MDL. MECX validation performed in 2006 is no longer applicable to these results. The records listing MECX's validation of these samples have been removed in Table H-III. Table H-III replaces the summary table of MECX data validation, Table D-VIII of the 2006 annual groundwater monitoring report.

TABLE H-I

SUMMARY OF CHANGES TO ANALYTICAL RESULTS DUE TO MDL CORRECTIONS, 2006  
BOEING SANTA SUSANA FIELD LABORATORY  
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port	Geological Unit	Sample Date	Analyte	Incorrectly Reported Result	Revised Result	Result Value Units
<b>Results that changed from detected to non-detected</b>							
HAR-04		Shallow	11/15/06	Arsenic, dissolved	0.00061 J	0.0007 U	mg/L
HAR-04		Shallow	11/15/06	Cadmium, dissolved	0.000037 J	0.00005 U	mg/L
HAR-04		Shallow	11/15/06	Cobalt, dissolved	0.000081 J	0.00015 U	mg/L
HAR-04		Shallow	11/15/06	Lead, dissolved	0.000076 J	0.0001 U	mg/L
HAR-04		Shallow	11/15/06	Nickel, dissolved	0.00046 J	0.0009 U	mg/L
HAR-06		Chatsworth	11/14/06	Arsenic, dissolved	0.00058 J	0.0007 U	mg/L
HAR-06		Chatsworth	11/14/06	Chromium, dissolved	0.00064 J	0.0007 U	mg/L
HAR-06		Chatsworth	11/14/06	Nickel, dissolved	0.00042 J	0.0009 U	mg/L
HAR-19		Chatsworth	11/16/06	Arsenic, dissolved	0.0005 J	0.0007 U	mg/L
HAR-19		Chatsworth	11/16/06	Chromium, dissolved	0.00059 J	0.0007 U	mg/L
HAR-25		Chatsworth	11/07/06	Cadmium, dissolved	0.000031 J	0.00005 U	mg/L
HAR-25		Chatsworth	11/07/06	Cobalt, dissolved	0.000052 J	0.00015 U	mg/L
HAR-25		Chatsworth	11/07/06	Nickel, dissolved	0.00057 J	0.0009 U	mg/L
RD-10		Chatsworth	11/07/06	Chromium, dissolved	0.00063 J	0.0007 U	mg/L
RD-41A		Chatsworth	11/09/06	Chromium, dissolved	0.00064 J	0.0007 U	mg/L
RD-42		Chatsworth	11/01/06	Cobalt, dissolved	0.00014 J	0.00015 U	mg/L
RD-45B		Chatsworth	11/16/06	Arsenic, dissolved	0.00057 J	0.0007 U	mg/L
RD-49A		Chatsworth	11/07/06	Arsenic, dissolved	0.00069 J	0.0007 U	mg/L
RD-49A		Chatsworth	11/07/06	Cadmium, dissolved	0.000049 J	0.00005 U	mg/L
RD-77		Chatsworth	11/02/06	Arsenic, dissolved	0.00069 J	0.0007 U	mg/L
RD-80		Chatsworth	11/08/06	Cadmium, dissolved	0.000026 J	0.00005 U	mg/L
RS-20		Shallow	11/02/06	Antimony, dissolved	0.000059 J	0.000059 U	mg/L
<b>Results that changed from non-detected to detected</b>							
HAR-20		Chatsworth	08/31/06	Nitrate-NO3	0.35 U	0.33 J	mg/L
WS-09		Chatsworth	08/16/06	Nitrate-NO3	0.35 U	0.26 J	mg/L
<b>Results that changed from non-detected due to blank sample contamination to non-detected due to MDL correction</b>							
HAR-06		Chatsworth	11/14/06	Cadmium, dissolved	0.000026 U	0.00005 U	mg/L
HAR-24		Chatsworth	11/07/06	Silver, dissolved	0.000028 U	0.0001 U	mg/L
PZ-045		Shallow	08/17/06	Mercury, dissolved	0.000073 UJ	0.00015 U	mg/L
RD-05C		Chatsworth	10/31/06	Methylene chloride	0.93 U	0.95 U	ug/L
RD-10		Chatsworth	11/07/06	Silver, dissolved	0.000073 U	0.0001 U	mg/L
RD-23	Z3	Chatsworth	08/17/06	Mercury, dissolved	0.000055 UJ	0.00015 U	mg/L
RD-51B		Chatsworth	11/07/06	Silver, dissolved	0.000037 U	0.0001 U	mg/L
RD-78		Chatsworth	11/14/06	Cadmium, dissolved	0.000036 U	0.00005 U	mg/L

See last page of table for notes and abbreviations.

Haley &amp; Aldrich, Inc.

February 2008

G:\Projects\26472\Reports\M490 2007 Annual\AppH\2008-0228-HAI-SSFL\_M490\_H-I-F.xls

**TABLE H-I**  
**NOTES AND ABBREVIATIONS**

---

1. mg/L = Milligrams per liter.
2. ug/L = Micrograms per liter.
3. Chatsworth = Chatsworth Formation wells.
4. Shallow = Shallow wells.
5. 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 (for details, see Appendix D in "Report on Annual Groundwater Monitoring, 2006, Santa Susana Field Laboratory, Ventura County, California", Haley & Aldrich, Inc., 28 February 2007).
6. U = Not detected; numerical value represents the Method Detection Limit for that compound.
7. UJ = Not detected. Estimated detection limit as a result of analytical quality control deficiencies, see Appendix D in "Report on Annual Groundwater Monitoring, 2006, Santa Susana Field Laboratory, Ventura County, California", Haley & Aldrich, Inc., 28 February 2007).
8. Mercury was analyzed by EPA method 7470A.  
Metals were analyzed by EPA method 6020.  
Methylene chloride was analyzed by EPA method 8260B.  
Nitrate-NO<sub>3</sub> was analyzed by EPA method 300.0.
9. Metal samples were filtered and preserved in the field using a 0.45 micron filter.
10. All samples were analyzed by TestAmerica of Irvine, California except for mercury which was analyzed by Weck Laboratories of City of Industry, California.



**TABLE H-II**

SUMMARY OF 2006 DATA QUALIFICATION DUE TO BLANK SAMPLE CONTAMINATION  
 REVISION 1 TO TABLE D-IV OF THE 2006 ANNUAL GROUNDWATER MONITORING REPORT  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Blank Sample Identification	Blank Sample Type	Sample Date	Lab Report	Target Compound(s) Detected in the Blank	100	Flag Associated Field Sample results with a "U" if less than or equal to this value	Affected Field Samples
<b>General Minerals (mg/l)</b>							
6B20077-BLK1	Method	02/09/06	IPB0920	Ammonia	0.129 J	0.645	RD-41A, RD-51B, RD-51C
6B21085-BLK1	Method	02/13/06	IPB1230	Ammonia	0.139 J	0.695	RD-44
6B21121-BLK1	Method	02/13/06	IPB1231	Ammonia	0.139 J	0.695	WS-05
6B21121-BLK1	Method	02/14/06	IPB1363	Ammonia	0.125 J	0.625	RD-10, HAR-07, HAR-08
C6B2408-BLK1	Method	02/22/06	IPB2059	Formaldehyde	27.4 B,J	137	HAR-20
C6E1217-BLK1	Method	05/10/06 - 05/11/06	IPE0986, IPE1126, IPE1128	Formaldehyde	64.7 B	323.5	RD-41B, RD-41A, RD-49B, RD-51C, RD-51B, HAR-07, HAR-08
C6K0915-BLK1	Method	11/06/06-11/07/06	IPK0553, IPK0778, IPK0779	Formaldehyde	33.2 B,J	166	RD-10, RD-49C, WS-05
6K14125-BLK1	Method	11/07/06	IPK0778, IPK0779	Ammonia	0.0722 J	0.361	RD-10, RD-51C, RD-55A, WS-05
6K15121-BLK1	Method	11/08/06	IPK0968	Ammonia	0.125 J	0.625	RD-09, HAR-07, WS-09
6K16042-BLK1	Method	11/15/06	IPK1829	Fluoride	0.168 J	0.84	HAR-20
<b>Semi-Volatile Organic Compounds (ug/l)</b>							
W6E0291-BLK1	Method	05/05/06	IPE0592	Diethylphthalate	0.450 J	4.5	HAR-15
				Bis(2-Ethylhexyl)phthalate	0.48 J	4.8	HAR-15
W6E0516-BLK1	Method	05/08/06 - 05/09/06	IPE0717, IPE0836	Bis(2-Ethylhexyl)phthalate	0.810 J	8.1	RS-08, HAR-14
W6E0666-BLK1	Method	05/10/06 - 05/11/06	IPE0987, IPE1128	Bis(2-Ethylhexyl)phthalate	0.450 J	4.5	SH-04, HAR-07, HAR-17, HAR-16
6K19032-BLK1	Method	11/15/06	IPK1829	Butyl benzyl phthalate	5.64 J	56.4	HAR-20
<b>Volatile Organic Compounds (ug/l)</b>							
RD-45C_020306_78_D	Trip	02/03/06	IPB0321	Methylene chloride	1.1 J	11	RD-52B
6B23037-BLK1	Method	02/13/06	IPB1230	Methylene chloride	0.540 J	5.4	RD-44
HAR-08_021406_78_D	Trip	02/14/06	IPB1363	Methylene chloride	0.71 J	7.1	RD-10
RD-10_021406_78_D	Trip	02/14/06	IPB1363	Methylene chloride	0.65 J	6.5	RD-10
RD-03_021406_78_D	Trip	02/14/06	IPB1387	Methylene chloride	0.78 J	7.8	RS-13 (prim, field), RD-03
RS-07_021506_78_D	Trip	02/15/06	IPB1500	Methylene chloride	1.8 J	18	RS-07
RD-50(Z2)_021506_19_D	Field	02/15/06	IPB1573	Methylene chloride	1.5 J	15	RD-50(Z2)
RD-33A(Z2)_021706_78_D	Trip	02/17/06	IPB1769	Methylene chloride	1.7 J	17	RS-28, RD-23(Z3), RD-30 (prim, dup), RD-34B, RD-33A(Z2)
RD-34B_021706_78_D	Trip	02/17/06	IPB1769	Methylene chloride	1.1 J	11	RS-28, RD-23(Z3), RD-30 (prim, dup), RD-34B, RD-33A(Z2)
6B28009-BLK1	Method	02/17/06	IPB1769	Toluene	0.83 J	4.15	RD-23(Z3)
RS-18_022006_78_D	Trip	02/20/06	IPB1904	Methylene chloride	0.81 J	8.1	RD-27, RD-54B, RD-57(Z7)

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\App H\2008-0228-HAI-SSFL\_M490\_H-II-F.xls

February 2008

TABLE H-II

SUMMARY OF 2006 DATA QUALIFICATION DUE TO BLANK SAMPLE CONTAMINATION  
 REVISION 1 TO TABLE D-IV OF THE 2006 ANNUAL GROUNDWATER MONITORING REPORT  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Blank Sample Identification	Blank Sample Type	Sample Date	Lab Report	Target Compound(s) Detected in the Blank	100	Flag Associated Field Sample results with a "U" if less than or equal to this value	Affected Field Samples
<b>Volatile Organic Compounds (ug/l)</b>							
6C02003-BLK1	Method	02/21/06	IPB1947	4-Methyl-2-pentanone (MIBK)	3.65 J	18.25	RD-32
HAR-14_050806_78_D	Trip	05/08/06	IPE0717	Methylene chloride	1.4 J	14	HAR-14
RS-08_050906_78_D	Trip	05/09/06	IPE0836	Methylene chloride	1.7 B, J	17	RS-08
6E17017-BLK1	Method	05/09/06	IPE0836, IPE0871	Methylene chloride	1.7 J	17	RS-08 (prim, trip), RD-97
P6E1716-BLK1	Method	05/10/06	IPE0986	1,4-Dioxane	0.340 J	1.7	RD-51B
HAR-16_051006_78_D, SH-04_051006_78_D, HAR-17_051006_78_D	Trip	05/10/06	IPE0987	Isobutanol (2-Methyl-1-Propanol)	20, 24, 25	100,120,125	HAR-17, SH-04
6E18022-BLK1	Method	05/10/06	IPE0987	Methylene chloride	1.56 J	15.6	SH-04
6E18017-BLK1	Method	05/11/06	IPE1126, IPE1195	Methylene chloride	3.59 J	35.9	RS-32, RD-41A (prim, dup), RD-41B (prim, field, trip), RD-51C (prim, trip), HAR-08
RD-41B_051106_78_D; RD-51C_051106_78_D	Trip	05/11/06	IPE1126	Methylene chloride	1.2 J, 1.2 J	12	RD-49B
RD-49C_051506_78_D	Trip	05/15/06	IPE1418	Methylene chloride	1.3 J	13	RD-49C
RD-56B_051506_19_D	Field	05/15/06	IPE1438	Acetone	4.7 J	47	RD-56B
RS-19_051506_78_D	Trip	05/15/06	IPE1438	Methylene chloride	1.6 J	16	RD-06
RD-58B_051606_78_D	Trip	05/16/06	IPE1527	Methylene chloride	2.6 J	26	RD-55A, RD-55B (prim, dup), RD-58B, HAR-20
6E20009-BLK1	Method	05/16/06	IPE1527, IPE1531	Acetone	4.99 J	49.9	RD-09 (field), RD-58B (trip)
RD-09_051606_78_D	Trip	05/16/06	IPE1531	Methylene chloride	3.3 J	33	RD-09 (prim, field)
6E19029-BLK1	Method	05/17/06	IPE1701	Methylene chloride	2.27 J	22.7	RD-43A (prim, trip), RD-43B (prim, field), RD-43C
6E23030-BLK1	Method	05/17/06	IPE1701, IPE1740	Methylene chloride	2.53 J	25.3	RD-13 (prim, dup, trip), RD-37, RD-38B
RD-66_051906_19_D	Field	05/19/06	IPE1958	Methylene chloride	2.4 J	24	RD-66
RD-53_051906_19_D	Field	05/19/06	IPE1958	Methylene chloride	2.5 J	25	RD-53
RD-66_051906_78_D	Trip	05/19/06	IPE1958	Methylene chloride	4.1 J	41	RD-36C, RD-53 (prim, field), RD-66 (prim, field), RD-71
RD-33C_052206_78_D	Trip	05/22/06	IPE2133	Methylene chloride	1.3 J	13	RD-33C (prim, field)
RD-19_052306_78_D	Trip	05/23/06	IPE2262	Methylene chloride	2.4 J	24	RD-19, RD-22(Z2)

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\App H\2008-0228-HAI-SSFL\_M490\_H-II-F.xls

February 2008

**TABLE H-II**

SUMMARY OF 2006 DATA QUALIFICATION DUE TO BLANK SAMPLE CONTAMINATION  
 REVISION 1 TO TABLE D-IV OF THE 2006 ANNUAL GROUNDWATER MONITORING REPORT  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Blank Sample Identification	Blank Sample Type	Sample Date	Lab Report	Target Compound(s) Detected in the Blank	100	Flag Associated Field Sample results with a "U" if less than or equal to this value	Affected Field Samples
<b><i>Volatile Organic Compounds (ug/l)</i></b>							
ES-30_060106_78_D	Trip	06/01/06	IPF0146	Methylene chloride Trichlorotrifluoroethane (Freon 113)	1.0 J 1.3 J	10 6.5	ES-23, ES-30 (field) ES-23
ES-30_060106_19_D	Field	06/01/06	IPF0146	1,1-Dichloroethene	0.44 J	2.2	ES-30
6H17023-BLK1	Method	08/03/06	IPH0590	Methylene chloride	3.08 J	30.8	RD-37
RD-03_080406_78_T	Trip	08/04/06	IPH0590	Methylene chloride	0.96 J	9.6	RD-36B
6H25025-BLK1	Method	08/14/06	IPH1469	Methylene chloride	1.00 J	10	RD-56B (prim, field, trip)
6H28018-BLK1	Method	08/15/06	IPH1622, IPH1749, IPH1751	Chloroform	0.51 J	2.55	RD-10, RD-41A, RD-41B, RD-70 (field, trip), WS-09 (trip)
WS-09_081606_78_T	Trip	08/16/06	IPH1751	Methylene chloride	1.2 J	12	RD-01
RD-41B_081606_78_T	Trip	08/16/06	IPH1749	Methylene chloride	0.88 J	8.8	RD-10, RD-41A
RD-50(Z2)_081606_78_T	Trip	08/16/06	IPH1803	Methylene chloride	1.1 J	11	RD-07(Z3), RD-21(Z2), RD-22(Z2), RD-50(Z2)
6H30113-BLK1	Method	08/18/06-08/21/06	IPH2081, IPH2218	Methylene chloride	1.44 J	14.4	RD-45B (prim, trip), RD-55A, RD-58C (prim, dup)
RD-27_082506_78_T	Trip	08/25/06	IPH2864	Methylene chloride	1.5 J	15	RD-27 (prim, field)
RD-92_082506_78_T	Trip	08/25/06	IPH2864	Methylene chloride	1.9 J	19	RD-92
6H30021-BLK1	Method	08/21/06, 08/22/06	IPH2224, IPH2225, IPH2372, IPH2373, IPH2404	Methylene chloride	1.26 J	12.6	RD-16 (prim, dup, field, trip), RD-43B (prim, trip), RD-43C (prim, dup, trip), RD-55B (prim, trip), RD-67, WS-09A (prim, dup),
RD-48C_082406_78_T	Trip	08/24/06	IPH2722	Methylene chloride	1.0 J	10	RD-48C (prim, field), WS-04A
RD-53_082406_78_T	Trip	08/24/06	IPH2722	Methylene chloride	1.1 J	11	RD-39B
ES-17_083006_78_T	Trip	08/30/06	IPH3230	Methylene chloride Trichloroethene	1.2 J 0.31 J	12 1.55	ES-06, ES-24 ES-06
HAR-20_083106_78_T	Trip	08/31/06	IPH3334	Methylene chloride	1.4 J	14	HAR-20
6I08033-BLK1	Method	08/31/06	IPH3335	Methylene chloride	0.710 J	7.1	RD-39A
6I09015-BLK1	Method	09/01/06	IPI0116	Methylene chloride	1.01 J	10.1	RD-36A, RD-69
RD-43A_103106_78_T	Trip	10/31/06	IPJ3159	Methylene chloride	1.5 J	15	RD-05B, RD-43A (prim, field), RD-43B, RD-61
RD-01_110606_78_T	Trip	11/06/06	IPK0548	Methylene chloride	0.96 J	9.6	RD-01 (prim, dup, field)
6K11012-BLK1	Method	11/06/06	IPK0553	cis-1,2-Dichloroethene	1.82 B	9.1	RD-49C (trip)
<b><i>Fuel Hydrocarbons (mg/l)</i></b>							
6E17046-BLK1	Method	05/11/06	IPE1195	Gasoline Range Organics (C6-C12)	34.9 J	174.5	RS-31, RS-32
6E24065-BLK1	Method	05/18/06	IPE1837	Extractable Fuel Hydrocarbons (C8-C30)	0.0527	0.264	RD-83
6E25148-BLK1	Method	05/18/06-05/19/06	IPE1837, IPE1958	Gasoline Range Organics (C6-C12)	31.1 J	155.5	RD-36B, RD-36C, RD-36D, RD-53

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\App H\2008-0228-HAI-SSFL\_M490\_H-II-F.xls

February 2008

**TABLE H-II**  
 SUMMARY OF 2006 DATA QUALIFICATION DUE TO BLANK SAMPLE CONTAMINATION  
 REVISION 1 TO TABLE D-IV OF THE 2006 ANNUAL GROUNDWATER MONITORING REPORT  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Blank Sample Identification	Blank Sample Type	Sample Date	Lab Report	Target Compound(s) Detected in the Blank	100	Flag Associated Field Sample results with a "U" if less than or equal to this value	Affected Field Samples
<b>Fuel Hydrocarbons (mg/l)</b>							
6H24054-BLK1	Method	08/17/06	IPH1977, IPH1936	Extractable Fuel Hydrocarbons (C8-C30)	0.0650 B,J	0.325	PZ-048, HAR-16
6I05054-BLK1	Method	08/30/06	IPH3206	Extractable Fuel Hydrocarbons (C8-C30)	0.0453 J	0.2265	HAR-24
RD-32_110306_19_T	Field	11/03/06	IPK0456	Gasoline Range Organics (C6-C12)	32 J	160	RD-32 (prim, dup)
P6K1620-BLK1	Method	11/03/06	IPK1018	Gasoline Range Organics (C6-C12)	0.0223 J	0.112	RD-32 (split)
<b>Trace Metals (mg/l)</b>							
6B20088-BLK1	Method	02/16/06	IPB1648	Selenium	0.000662 J	0.0062	RD-21(Z2), RD-54A(Z2)
6B22078-BLK1	Method	02/02/06-02/21/06	IPB1904, IPB1952	Chromium	0.00117 J	0.0117	RS-18, RD-34A, RD-57(Z7)
6B23080-BLK1	Method	02/22/06	IPB2062	Antimony	0.000208 J	0.00208	RD-59B, RD-59C
				Cobalt	0.000131 J	0.00131	RD-59B, RD-59C
				Lead	0.00005 J	0.0005	RD-59C
				Thallium	0.000171 J	0.00171	RD-59C
				Zinc	0.00206 J	0.0206	RD-59B, RD-59C
6B25037-BLK1	Method	02/21/06-02/23/06	IPB2271	Antimony	0.000067 J	0.00067	RS-54, RD-54C
6E08118-BLK1	Method	05/05/06	IPE0592	Arsenic	0.000994 J	0.00994	HAR-15
				Cadmium	0.000064 J	0.00064	HAR-15
				Chromium	0.000588 J	0.00588	HAR-15
6E09090-BLK1	Method	05/08/06	IPE0717	Arsenic	0.000713 J	0.00713	HAR-14
6E11123-BLK1	Method	05/09/06 - 05/10/06	IPE0836, IPE0897	Zinc	0.00185 J	0.0185	RS-08, SH-04
6E15097-BLK1	Method	05/11/06	IPE1126	Chromium	0.00109 J	0.0109	RD-49B
6E17081-BLK1	Method	05/11/06	IPE1126	Molybdenum	0.000302 J	0.00302	RD-41B
6E13050-BLK1	Method	05/11/06	IPE1128	Zinc	0.002884 J	0.02884	HAR-07
		05/19/06,	IPE1958,	Cadmium	0.000035 J	0.00035	RD-81, HAR-19
		05/23/06	IPE2367				
6E25075-BLK1	Method	05/23/06	IPE2367	Cobalt	0.0000398 J	0.000398	HAR-19
6H15069-BLK1	Method	08/08/06-08/09/06	IPH0905, IPH1014	Cadmium	0.0000260 J	0.00026	RD-15, RD-42
		08/09/06	IPH1014	Lead	0.0000730 J	0.00073	RD-42
6H17159-BLK1	Method	08/10/06	IPH1164, IPH1161	Chromium	0.000730 J	0.0073	RD-54C, RD-49A
6H19045-BLK1	Method	08/11/06, 08/14/06-08/15/06	IPH1310, IPH1468, IPH1469, IPH1620	Lead	0.0000680 J	0.00068	RD-56B, RD-78, RD-80, RD-81, RD-83
		08/15/06	IPH1617	Zinc	0.00250 J	0.025	HAR-07

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\App H\2008-0228-HAI-SSFL\_M490\_H-II-F.xls

**TABLE H-II**  
 SUMMARY OF 2006 DATA QUALIFICATION DUE TO BLANK SAMPLE CONTAMINATION  
 REVISION 1 TO TABLE D-IV OF THE 2006 ANNUAL GROUNDWATER MONITORING REPORT  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Blank Sample Identification	Blank Sample Type	Sample Date	Lab Report	Target Compound(s) Detected in the Blank	100	Flag Associated Field Sample results with a "U" if less than or equal to this value	Affected Field Samples
<i>Trace Metals (mg/l)</i>							
6H23137-BLK1	Method	08/16/06	IPH1801, IPH1803	Lead	0.0000750 J	0.00075	RD-01, RD-21(Z2)
			IPH1803	Zinc	0.00176 J	0.0176	RD-21(Z2)
6H25065-BLK1	Method	08/17/06	IPH1950, IPH1952, IPH1936, IPH1977, IPH2079, IPH2077	Lead	0.000122 J	0.00122	PZ-020, PZ-045, PZ-071, RD-23(Z3), RD-72(Z4), RD-77, HAR-16
			IPH1950, IPH1952, IPH1936, IPH2077	Silver	0.0000480 J	0.00048	PZ-071, RD-54A(Z2), RD-72(Z4), RD-77, HAR-16
			IPH1950, IPH1952, IPH1977, IPH2079, IPH2077	Zinc	0.00207 J	0.0207	PZ-020, PZ-045, PZ-071, RD-23(Z3), RD-72(Z4)
6H29055-BLK1	Method	8/21/06, 08/23/06	IPH2223, IPH2507	Nickel	0.000642 J	0.00642	PZ-114, RD-54B, RD-59A, RD-59B, RD-59C
			IPH2223, IPH2507	Zinc	0.00184 J	0.0184	PZ-114, RD-59B, RD-59C
6H31155-BLK1	Method	08/24/06	IPH2733, IPH2730, IPH2728, IPH2861, IPH2854, IPH3091	Zinc	0.00256 J	0.0256	HAR-06, HAR-04, HAR-27, HAR-11, RD-86, HAR-29
6I05122-BLK1	Method	8/31/06-9/01/06	IPI0110 IPH3341, IPI0110	Chromium Zinc	0.00104 J 0.00469 J	0.0104 0.0469	HAR-15 RS-08, HAR-15
6J31088-BLK1	Method	10/27/06	IPJ2915	Zinc	0.00218 J	0.0218	HAR-11
6K03069-BLK1	Method	11/02/06	IPK0269 IPK0269	Antimony Zinc	0.00005 J 0.00138 J	0.0005 0.0138	RS-20 RS-20
6K14121-BLK1	Method	11/07/06, 11/09/06	IPK0807, IPK0808, IPK0809, IPK1159, IPK1862	Antimony	0.000270 J	0.0027	RD-10, RD-41A, RD-49A, RD-51B, HAR-25

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\App H\2008-0228-HAI-SSFL\_M490\_H-II-F.xls

**TABLE H-II**  
 SUMMARY OF 2006 DATA QUALIFICATION DUE TO BLANK SAMPLE CONTAMINATION  
 REVISION 1 TO TABLE D-IV OF THE 2006 ANNUAL GROUNDWATER MONITORING REPORT  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Blank Sample Identification	Blank Sample Type	Sample Date	Lab Report	Target Compound(s) Detected in the Blank	100	Flag Associated Field Sample results with a "U" if less than or equal to this value	Affected Field Samples
<i>Trace Metals (mg/l)</i>							
6K14121-BLK1	Method	11/07/06-11/09/06	IPK0807, IPK0808, IPK0809, IPK1015, IPK1159, IPK1160, IPK1862	Molybdenum	0.00128 J	0.0128	RD-10, RD-41A, RD-49A, RD-51B, RD-75, HAR-24, HAR-25
			IPK0807, IPK0808, IPK0809, IPK1015, IPK1160	Silver	0.000745 J	0.00745	RD-49A, RD-75
6K17115-BLK1	Method	11/14/06	IPK1655, IPK1656	Antimony	0.000125 J	0.00125	RD-78, HAR-06
			IPK1655, IPK1656	Cobalt	0.000233 J	0.00233	RD-78, HAR-06
			IPK1655, IPK1656	Molybdenum	0.000493 J	0.00493	RD-78, HAR-06
			IPK1655, IPK1656	Thallium	0.000584 J	0.00584	RD-78, HAR-06
			IPK1656	Zinc	0.00227 J	0.0227	HAR-06
6L01063-BLK1	Method	11/27/06-11/29/06	IPK3021, IPK3150	Antimony	0.000051 J	0.00051	PZ-017A, PZ-071, PZ-126

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\app H\2008-0228-HAI-SSFL\_M490\_H-II-F.xls

**TABLE H-II**  
**NOTES AND ABBREVIATIONS**

---

1. mg/l = Milligrams per liter.
2. ug/l = Micrograms per liter.
3. Prim = Primary sample.
4. Dup = Duplicate sample.
5. Field = Field equipment blank.
6. Method = Method blank.
7. Trip = Trip blank.
8. B = Analyte was detected in the associated method blank.
9. 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).
10. U = Not detected; numerical value represents the Method Detection Limit for that compound.
11. Z = FLUTE sample port number.

**TABLE H-III**  
 SUMMARY OF 2006 DATA QUALIFICATION OF SAMPLES BY MECX  
 REVISION 1 TO TABLE D-VIII OF THE 2006 ANNUAL GROUNDWATER MONITORING REPORT  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Date	Sample Type	Analyte	Data Validation Issues	Qualified Result	Project and Lab Qualifier Codes	Units	MECX Validation Qualifier	Lab
<b>Piezometers</b>									
PZ-056	03/16/06	Primary	Antimony	Calibration blank outside acceptance criteria.	0.00023	J	mg/l	UJ	DMA
			Mercury	Calibration blank outside acceptance criteria.	0.000063	U	mg/l	UJ	DMA
			Vanadium	Method blank contamination.	0.0031	B	mg/l	UJ	DMA
		Primary	Total PeCDF	Estimated maximum possible concentration (EMPC) did not meet identification criteria.	1.68	U	pg/l	UJ	ALTA
PZ-096	08/17/06	Primary	OCDD	Estimated maximum possible concentration (EMPC) did not meet identification criteria.	3.87	U	pg/l	UJ	Alta
			1,2,3,4,7,8-HxCDF		1.29	U	pg/l	UJ	Alta
			1,2,3,6,7,8-HxCDF		1.10	U	pg/l	UJ	Alta
			1,2,3,4,6,7,8-HpCDF		2.24	U	pg/l	UJ	Alta
			OCDF		4.11	U	pg/l	UJ	Alta
			Total HxCDF		2.40	U	pg/l	UJ	Alta
			Total HpCDF		2.24	U	pg/l	UJ	Alta
<b>Shallow Wells</b>									
SH-03	02/15/06	Primary	NDMA	Rejected. Exceeds calibration range. Diluted sample result accepted and listed in Table XV.	0.7452	E	ug/l	R	PA
		Dup	NDMA	Rejected. Exceeds calibration range. Diluted sample result accepted and listed in Table XV.	0.7607	E	ug/l	R	PA
		Split	NDMA	Calibration %RSD was noncompliant.	0.81		ug/l	J	WECK
		Split	NDMA	Calibration %RSD was noncompliant.	0.81		ug/l	J	WECK
SH-04	05/10/06	Primary	1,2,3,4,6,7,8-HpCDD	Result was qualified an an estimated nondetect because an estimated maximum possible concentration (EMPC) was reported.	4.33	U	pg/l	UJ	Alta
	05/10/06	Primary	1,2,3-Trichloropropane	Rejected in favor of reanalysis.	0.0037	J	ug/l	R	TA
RS-08	05/09/06	Primary	Diethyl phthalate	The % RSD exceeded 15%.	0.23	U	ug/l	UJ	DMA
HAR-11	08/25/06	Primary	Arsenic	Continuing calibration blank outside acceptance criteria.	0.0022		mg/l	J	TA

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\App H\2008-0228-HAI-SSFL\_M490\_H-III-F.xls



**TABLE H-III**

SUMMARY OF 2006 DATA QUALIFICATION OF SAMPLES BY MECX  
 REVISION 1 TO TABLE D-VIII OF THE 2006 ANNUAL GROUNDWATER MONITORING REPORT  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Date	Sample Type	Analyte	Data Validation Issues	Qualified Result	Project and Lab Qualifier Codes	Units	MECX Validation Qualifier	Lab
HAR-15	05/05/06	Primary	2,3,7,8-TCDF	Result was qualified as estimated because the lab did not preform the required confirmation for this analyte.	7.24		pg/l	J	Alta
<b>Chatsworth Formation Wells</b>									
RD-01	05/08/06	Primary	1,2,3-Trichloropropane	Field blank contaminantion.	0.004	J	ug/l	U	DMA
		Dup	1,2,3-Trichloropropane	Field blank contaminantion.	0.0043	J	ug/l	U	DMA
RD-14	03/16/06	Primary	Antimony	Calibration blank outside acceptance criteria.	0.00014	J	mg/l	UJ	DMA
			Mercury	Calibration blank outside acceptance criteria.	0.000063	U	mg/l	UJ	DMA
			Molybdenum	Method blank contamination.	0.00063	J	mg/l	UJ	DMA
RD-41A	08/16/06	Primary	Manganese	Internal Standard recovery outside acceptance criteria.	0.54		mg/l	J	TA
RD-54A	08/17/06	Primary	Mercury	Continuing calibration blank outside acceptance criteria. Reported result could not be verified by hand calculation, therefore result was re-calculated using the initial calibration.	0.000088	J	mg/l	UJ	TA
RD-86	03/16/06	Primary	Antimony	Calibration blank outside acceptance criteria.	0.00021	J	mg/l	UJ	DMA
			Mercury	Calibration blank outside acceptance criteria.	0.000063	U	mg/l	UJ	DMA
			Vanadium	Method blank contamination.	0.0023	B	mg/l	UJ	DMA
RD-92	03/16/06	Primary	Antimony	Calibration blank outside acceptance criteria.	0.00014	J	mg/l	UJ	DMA
			Mercury	Calibration blank outside acceptance criteria.	0.000063	U	mg/l	UJ	DMA
			Vanadium	Method blank contamination.	0.0025	B	mg/l	UJ	DMA
HAR-07	03/16/06	Primary	1,4-Dioxane	Matrix spike recoveries above QC limits.	1.2	M1	ug/l	J	DMA
HAR-16	05/10/06	Primary	1,2,3-Trichloropropane	Rejected in favor of reanalysis.	0.0093		ug/l	R	TA
		Dup	1,2,3-Trichloropropane	Field blank contaminantion.	0.0061	U	ug/l	UJ	TA
HAR-25	05/10/06	Primary	1,2,3-Trichloropropane	MS/MSD recovery below acceptance criteria.	0.0017	U	ug/l	UJ	DMA

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\App H\2008-0228-HAI-SSFL\_M490\_H-III-F.xls

February 2008

**TABLE H-III**

SUMMARY OF 2006 DATA QUALIFICATION OF SAMPLES BY MECX  
 REVISION 1 TO TABLE D-VIII OF THE 2006 ANNUAL GROUNDWATER MONITORING REPORT  
 BOEING SANTA SUSANA FIELD LABORATORY  
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Date	Sample Type	Analyte	Data Validation Issues	Qualified Result	Project and Lab Qualifier Codes	Units	MECX Validation Qualifier	Lab
OS-09R (P01)	07/27/06	Primary	Nitrate-N*	The MDL for nitrate was raised to the level of interference at 0.15 mg/l.	0.15	U	mg/l	U	TA
	07/27/06	Primary	Perchlorate	Continuing calibration verification outside acceptance criteria.	0.8	U	ug/l	UJ	TA
OS-09R (P02)	07/27/06	Primary	Nitrate-N*	The MDL for nitrate was raised to the level of interference at 0.15 mg/l.	0.15	U	mg/l	U	TA
			Perchlorate	Continuing calibration verification outside acceptance criteria.	0.8	U	ug/l	UJ	TA
OS-09R (P03)	07/27/06	Primary	Nitrate-N*	The MDL for nitrate was raised to the level of interference at 0.15 mg/l.	0.15	U	mg/l	U	TA
OS-09R (P04)	07/27/06	Dup	Nitrate-N*	The MDL for nitrate was raised to the level of interference at 0.15 mg/l.	0.15	U	mg/l	U	TA
OS-09R (P04)	07/27/06	Primary	Nitrate-N*	The MDL for nitrate was raised to the level of interference at 0.15 mg/l.	0.15	U	mg/l	U	TA
OS-09R (P05)	07/27/06	Primary	Nitrate-N*	The MDL for nitrate was raised to the level of interference at 0.15 mg/l.	0.15	U	mg/l	U	TA
OS-09R (P06)	07/27/06	Primary	Nitrate-N*	The MDL for nitrate was raised to the level of interference at 0.15 mg/l.	0.15	U	mg/l	U	TA
OS-09R (P07)	07/27/06	Primary	Nitrate-N*	The MDL for nitrate was raised to the level of interference at 0.15 mg/l.	0.15	U	mg/l	U	TA
OS-09R (P08)	07/26/06	Primary	Nitrate-N*	The MDL for nitrate was raised to the level of interference at 0.15 mg/l.	0.15	U	mg/l	U	TA
OS-09R (P10)	07/26/06	Primary	Bromide	The MDL for bromide was raised to the level of interference at 1 mg/l.	1	U	mg/l	U	TA
OS-09R (P11)	07/26/06	Primary	Bromide	The MDL for bromide was raised to the level of interference at 1 mg/l.	1	U	mg/l	U	TA
OS-09R (P12)	07/26/06	Primary	Bromide	The MDL for bromide was raised to the level of interference at 1 mg/l.	1	U	mg/l	U	TA
OS-09R (P13)	07/26/06	Primary	Bromide	The MDL for bromide was raised to the level of interference at 1 mg/l.	1	U	mg/l	U	TA
OS-09R (P14)			Bromide	The MDL for bromide was raised two times to the level of interference at 0.7 mg/l.	0.7	U	mg/l	U	TA

See last page of table for notes and abbreviations.

Haley & Aldrich, Inc.

G:\Projects\26472\Reports\M490 2007 Annual\App H\2008-0228-HAI-SSFL\_M490\_H-III-F.xls

February 2008

**TABLE H-III**  
**NOTES AND ABBREVIATIONS**

---

1. Alta = Alta Analytical Laboratory, Inc. of El Dorado Hills, California.
2. TA = TestAmerica of Irvine, California, formerly Del Mar Analytical.
3. DMA = Del Mar Analytical of Irvine, California.
4. PA = Pacific Analytical of Carlsbad, California.
5. Weck = Weck Laboratories of City of Industry, California.
6. mg/l = Milligrams per liter.
7. pg/l = Picograms per liter.
8. ug/l = Micrograms per liter.
9. \* = Nitrate-N results were converted to Nitrate-NO<sub>3</sub> in report Table XIII.
10. B = Method blank contamination.
11. E = Result exceeds calibration curve.
12. J = Estimated value. For Project and Lab Qualifiers, J indicates the analyte was detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). For MECX, J indicates that the organic analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample or that the associated value for the inorganic analyte is an estimated quantity.
13. P = Westbay sample port number.
14. M1 = The MS and/or MSD were above the acceptance limits due to sample matrix interference.
15. R = Result rejected.
16. U = Not detected; numerical value represents the Method Detection Limit for that compound except where EMPC (estimated maximum possible concentration) is indicated.
17. UJ = Not detected; estimated method detection limit.
18. MS/MSD = Matrix Spike/Matrix Spike Duplicate.
19. RSD = Relative Standard Deviation.
20. 1,2,3,4,6,7,8-HpCDD = 1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin  
 1,2,3,4,6,7,8-HpCDF = 1,2,3,4,6,7,8-Heptachlorodibenzofuran  
 1,2,3,4,7,8-HxCDF = 1,2,3,4,7,8-Hexachlorodibenzofuran  
 1,2,3,6,7,8-HxCDF = 1,2,3,6,7,8-Hexachlorodibenzofuran  
 OCDD = 1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin  
 OCDF = 1,2,3,4,6,7,8,9-Octachlorodibenzofuran  
 Total HxCDF = Total hexachlorodibenzofuran  
 Total HpCDF = Total heptachlorodibenzofuran  
 Total PeCDF = Total pentachlorodibenzofuran
21. During the first quarter, low level 1,4-dioxane analyses were performed on primary samples by Del Mar Analytical of Phoenix, Arizona using modified EPA method 8260SIM.

Note: Results validated by MECX that did not require qualification are not listed in this table.