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*Date:* October 28, 2008  
*Refer To:* EP2008-0535

James P. Bearzi, Bureau Chief  
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 New Mexico Environment Department  
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**Subject: Submittal of the Periodic Monitoring Report for Vapor Sampling Activities at Material Disposal Area L, Solid Waste Management Unit 54-006, at Technical Area 54, for Third Quarter Fiscal Year 2008**

Dear Mr. Bearzi:

Enclosed please find two hard copies with electronic files of the Periodic Monitoring Report for Vapor Sampling Activities at Material Disposal Area L, Solid Waste Management Unit 54-006, at Technical Area 54, for Third Quarter Fiscal Year 2008.

If you have any questions, please contact Steve Paris at (505) 606-0915 (smparis@lanl.gov) or Ed Worth at (505) 606-0398 (eworth@doeal.gov).

Sincerely,

Susan G. Stiger, Associate Director  
 Environmental Programs  
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Sincerely,

David R. Gregory, Project Director  
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SS/DG/DM/SP:sm

Enclosures: 1) Two hard copies with electronic files - Periodic Monitoring Report for Vapor Sampling Activities at Material Disposal Area L, Solid Waste Management Unit 54-006, at Technical Area 54, for Third Quarter Fiscal Year 2008 (LA-UR-08- )

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LA-UR-08-6776  
October 2008  
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**Periodic Monitoring Report for  
Vapor-Sampling Activities at  
Material Disposal Area L,  
Solid Waste Management Unit 54-006,  
at Technical Area 54 for  
Third Quarter Fiscal Year 2008**

Prepared by the Environmental Programs Directorate

Los Alamos National Laboratory, operated by Los Alamos National Security, LLC, for the U.S. Department of Energy under Contract No. DE-AC52-06NA25396, has prepared this document pursuant to the Compliance Order on Consent, signed March 1, 2005. The Compliance Order on Consent contains requirements for the investigation and cleanup, including corrective action, of contamination at Los Alamos National Laboratory. The U.S. government has rights to use, reproduce, and distribute this document. The public may copy and use this document without charge, provided that this notice and any statement of authorship are reproduced on all copies.

Periodic Monitoring Report for  
Vapor-Sampling Activities at  
Material Disposal Area L,  
Solid Waste Management Unit 54-006,  
at Technical Area 54  
for Third Quarter Fiscal Year 2008

October 2008

Responsible project leader:

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## **EXECUTIVE SUMMARY**

This periodic monitoring report summarizes field-screening and sampling activities conducted during the third quarter of fiscal year 2008 at Material Disposal Area (MDA) L, Solid Waste Management Unit 54-006, in Technical Area 54 at Los Alamos National Laboratory. The objective of the monitoring is to evaluate volatile organic compound (VOC) and tritium concentration trends in subsurface vapor at MDA L over time and over their distances from known VOC source areas.

Validated analytical results and field monitoring confirm the presence of tritium in vapor and two VOC source areas. VOC concentrations in each source area decrease from the base of the shafts, pit, and impoundments (where organic chemicals had been disposed of) to borehole total depths (TDs). The borehole TDs range from 80 ft in angled borehole location 54-02021 to 608 ft in open borehole location 54-24399. Pore-gas results indicate the need for continued monitoring of pore gas for both VOCs and tritium.





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## 1.0 INTRODUCTION

Material Disposal Area (MDA) L (Solid Waste Management Unit [SWMU] 54-006) is located in the east-central portion of Los Alamos National Laboratory (LANL or the Laboratory) on Mesita del Buey (Figure 1.0-1), within an 1100-ft- x 3000-ft- (2.5-acre-) fenced area known as Area L. The MDA L corrective action unit consists of one inactive subsurface disposal pit (Pit A), one inactive subsurface treatment and disposal impoundment (Impoundment C), and 12 inactive disposal shafts (Shafts 2–12 and 18). Also, the Area L landfill consists of two inactive surface impoundments (Impoundments B and D) and 22 inactive disposal shafts (Shafts 1, 13–17, and 19–34). The Area L landfill units received hazardous waste after the effective date of the Resource Conservation and Recovery Act (RCRA) and are hazardous waste disposal units subject to RCRA closure requirements rather than to the March 1, 2005, Compliance Order on Consent (Consent Order) requirements. Because the MDA L corrective action units and Area L landfill units are collocated and received similar wastes, they are being investigated and monitored collectively. Shafts 36 and 37 are former lead-stringer storage shafts at Area L that are undergoing RCRA closure and are not part of SWMU 54-006. The former lead-stringer shafts did not receive any waste containing volatile organic compounds (VOCs).

Area L is relatively flat and most of the surface overlying MDA L is paved with asphalt to house ongoing waste management activities, including the storage of chemical, hazardous, and mixed low-level waste managed within container-storage units. During the late 1950s, the Laboratory, with the approval of the U.S. Atomic Energy Commission and upon recommendation of the U.S. Geological Survey, selected Mesita del Buey within Technical Area 54 (TA-54) for underground disposal of Laboratory-generated waste (Rogers 1977, 005707; Rogers 1977, 005708, p. G-1). Since then, the main waste storage and disposal facilities for the Laboratory have been located at TA-54. MDA L is one of four inactive MDAs on Mesita del Buey, which is bounded by Pajarito Canyon to the south and Cañada del Buey to the north.

MDA L was used for disposal of nonradiological liquid chemical waste, including containerized and uncontainerized liquid wastes, bulk quantities of treated aqueous waste, batch-treated salt solutions, electroplating wastes (including precipitated heavy metals), and small-batch quantities of treated lithium hydride. MDA L operated from the early 1960s to 1985 when it was decommissioned (i.e., removed from service).

One pit, 3 impoundments, and 34 shafts were excavated into the overlying soil and unit 2 of the Tshirege Member of the Bandelier Tuff at MDA L. The site features are shown in Figure 1.0-2. The subsurface disposal units range in depth from 10 to 65 ft below the original ground surface. The depth of the regional aquifer is estimated to be approximately 930 ft below ground surface (bgs), based on data from other wells at the Laboratory and the predictions of the hydrogeologic conceptual site model for the Pajarito Plateau (LANL 1998, 059599). The pit, impoundments, and shafts are unlined. The bottoms of the pit and impoundments are level, so liquid would spread over the entire surface area to facilitate evaporation. After they were decommissioned, the pit and impoundments were filled and covered with clean, crushed consolidated tuff. The bottom of each shaft was covered with 3 ft of crushed tuff to seal cracks and joints, and a steel cap was placed over the opening. When the shafts were filled to approximately 3 ft of the surface, they were capped with a 3-ft concrete plug (LANL 1992, 007669, p. 5-108).

Because sampling methods and resulting data quality have changed substantially over the years, pore-gas data collected before 1996 were used only semiquantitatively in the MDA L investigation work plan (LANL 2004, 087624). Data collected from 1997 to the present have been subjected to rigorous quality assurance/quality control procedures. The pore-gas monitoring data for MDA L indicate that 1,1,1-trichloroethane (TCA) is the predominant VOC detected, followed by trichloroethene (TCE). The VOCs are the primary chemicals of potential concern in the subsurface at MDA L. Information on

radioactive materials and radionuclides, including the results of sampling and analysis of radioactive constituents, is voluntarily provided to the New Mexico Environment Department (NMED) in accordance with U.S. Department of Energy (DOE) policy.

In 1994 and 1995, two deep-angled boreholes, designated as borehole locations 54-01015 and 54-01016, were drilled from the adjacent canyon slope northeast of MDA L within Cañada del Buey to investigate the possible presence of vapor-phase contaminants at depth beneath MDA L (Figure 1.0-2). These boreholes were drilled to depths of 530 and 600 ft bgs, respectively, beneath MDA L by air-rotary installation of 8-in.-diameter STRATEX casing to the bottom of each borehole. Borehole location 54-01015 was drilled to intersect the region below the closed disposal shafts located in the western part of MDA L. Borehole location 54-01016 was drilled to intersect the region below the closed pit, impoundments, and shafts located in the eastern part of MDA L. The boreholes were selectively cored for approximately 10 ft within every 40-ft interval below a depth of 260 ft bgs. From discontinuous core, 22 samples were collected and analyzed at an off-site contract laboratory for VOCs and tritium. Following the installation of Solinst multiport vapor- and lysimeter-coupled systems in each borehole, the STRATEX casing was withdrawn while annular well completion materials were emplaced to complete the borehole for vapor monitoring. Both boreholes are maintained as vapor-monitoring wells.

Results of geologic logging were recorded in the borehole logs. Saturation was not encountered in any of the Phase I RCRA facility investigation (RFI) boreholes at MDA L; however, moist cuttings and core were observed in RFI borehole locations 54-01015 and 54-01016. Borehole logs document moist to wet cuttings and core at depths of 343 ft bgs (Puye Formation paleosol), 449 ft bgs (basalt), and 475 ft bgs (basalt) in borehole location 54-01015. Similarly, the borehole log for location 54-01016 showed moist cuttings and core at a depth of 219 ft bgs (Cerro Toledo interval) and at multiple depths within the basalt (312, 370, 371, 397, 459, 479, 497, and 510 ft bgs) beneath MDA L. Lysimeters were installed to collect both pore vapor and water where moist to wet conditions were found at two depths (308.3 and 461.4 ft bgs) in borehole location 54-01015 and at four depths (162.3, 274.7, 414.3, and 517.6 ft bgs) in borehole location 54-01016. In April 1996, initial attempts to collect water samples during pore-gas monitoring yielded approximately 0.5 to 1 mL for the samples from borehole location 54-01015 and no water for the samples from borehole location 54-01016 (Lowry 1996, 081612). During quarterly pore-gas monitoring conducted from 1996 to 2005, the ports in target zones of potential perched water were sampled for pore gas and water; however, no water was recovered during this period.

Analyses of the pore-gas monitoring data indicate that a subsurface vapor-phase VOC plume is present. The plume has two unique sources: (1) shaft fields 1 through 28, referred to as the western source area, and (2) shaft fields 29 through 34, referred to as the eastern source area. The dominant VOC in the plume is TCA.

Since 1985, pore-gas monitoring has been required at MDA L. A summary of monitoring at MDA L follows.

- In 1985, the Laboratory received a Consent Order from NMED stipulating, among other requirements, characterization of pore gas at Areas G and L. The Laboratory installed seven vapor-monitoring wells to characterize pore gas.
- From 1986 to 1990, the Laboratory voluntarily installed 22 additional vapor-monitoring wells to characterize the VOC plume at Areas G and L.
- In 1990, the U.S. Environmental Protection Agency (EPA) issued Module VIII of the Laboratory's Hazardous Waste Facility Permit. Module VIII included requirements for quarterly pore-gas sampling at MDAs G and L as input into the RFI.

- In 2005, the Consent Order required pore-gas monitoring during the site investigations for all MDAs and required the submittal of a long-term pore-gas monitoring plan for each MDA. Section XI.D of the Consent Order requires the reporting of periodic pore-gas monitoring data in a quarterly periodic monitoring report.
- In September 2005, the Laboratory submitted a proposed long-term monitoring plan for pore gas in Appendix I of the MDA L investigation report (LANL 2005, 092591).
- During June and July 2006, a soil-vapor extraction pilot study was conducted at MDA L. An estimated 800 lb of VOCs was removed from the eastern and western source areas (LANL 2006, 094152).
- During February and March 2007, three boreholes were drilled to contact with basalt at Area L, core from each borehole was analyzed, and the boreholes were constructed as vapor-monitoring wells to characterize the VOC plume.
- On July 12, 2007, NMED approved the MDA L investigation report and required the Laboratory to produce an interim vapor-monitoring plan (LANL 2007, 098712; NMED 2007, 098409).
- On August 29, 2007, the Laboratory submitted the "Interim Subsurface Vapor-Monitoring Plan for Material Disposal Area L at Technical Area 54" (2007, 098712) to NMED.
- On September 25, 2007, NMED issued a notice of disapproval for the interim vapor-monitoring plan (2007, 098559).
- On October 30, 2007, the Laboratory submitted the "Interim Subsurface Vapor-Monitoring Plan for Material Disposal Area L at Technical Area 54, Revision 1" (hereafter, the revised interim vapor-monitoring plan) (2007, 099372), which identified monitoring and sampling requirements.
- On November 8, 2007, NMED approved with modifications the revised interim vapor-monitoring plan (2007, 098999) and identified sampling requirements in addition to those proposed in the October 30, 2007, submittal (LANL 2007, 099372).

Subsurface vapor field screening and sampling are performed by the Laboratory's Environmental Programs-Corrective Actions Project to characterize trends of VOCs and tritium in subsurface vapor. Analytical laboratory results and monitoring data for the third quarter of fiscal year (FY) 2008 are presented in this report. The monitoring locations at SWMU 54-006 associated with MDA L are shown in Figure 1.0-2.

## 2.0 SCOPE OF ACTIVITIES

The sampling program implemented is consistent with sampling presented in the approval with modifications (NMED 2007, 098999) to the October 2007 "Interim Subsurface Vapor-Monitoring Plan for Material Disposal Area L at Technical Area 54, Revision 1," received November 8, 2007 (LANL 2007, 099372). Sampling at 24 locations from 83 port depths for VOCs and tritium was completed.

During the third quarter of FY2008, borehole field screening and sampling were conducted from May 16 to June 16, 2008. The field screening and samples collected at MDA L during the third quarter of FY2008 are presented in Table 2.0-1.

- Each interval was purged to ensure that formation air was being sampled in accordance with Standard Operating Procedure 06.31, Sampling of Subatmospheric Air.

- Pore gas from each accessible instrumented interval was field screened for VOCs using a Brüel and Kræjer (B&K) Type 1302 multigas photoacoustic analyzer and field screened for carbon dioxide using a Landtec GEM-500.
- Vapor samples were collected from selected intervals in SUMMA canisters for laboratory analyses of VOCs using EPA Method TO-15.
- Tritium samples were collected with silica gel columns for laboratory analysis using EPA Method 906.0.
- A total of 157 ports in 24 boreholes were field screened for VOCs.
- A total of 83 ports in 24 boreholes were sampled for VOCs.
- A total of 83 ports in 24 boreholes were sampled for tritium.

No investigation-derived waste was generated during quarterly monitoring activities.

### **3.0 REGULATORY CRITERIA**

The Consent Order does not identify any cleanup standards, risk-based screening levels, risk-based cleanup goals, or other regulatory criteria for pore gas at MDA L. Therefore, an analysis was conducted to evaluate the potential for contamination of groundwater by VOCs in pore gas using groundwater cleanup levels provided in the Consent Order. The analysis evaluated the water concentration that would be in equilibrium with the maximum concentrations of VOCs detected at MDA L during the most recent round of monitoring.

If the predicted groundwater concentration of a particular VOC in equilibrium with pore gas was less than the groundwater cleanup level, the groundwater cleanup levels would not be exceeded. The screening-level analysis for MDA L is discussed in section 5.0.

### **4.0 FIELD-SCREENING SUMMARY**

Field screening at accessible instrumented ports during the third quarter of FY2008 was conducted with a B&K Type 1302 multigas photoacoustic analyzer. The B&K is calibrated for analysis of four organic chemicals: trichlorofluoromethane (Freon 11), tetrachloroethene (PCE), TCA, and TCE. The field-screening results will be presented in the annual "Periodic Monitoring Report for Vapor-Sampling Activities Conducted at Technical Area 54, Material Disposal Area L, for Fiscal Year 2008."

### **5.0 ANALYTICAL DATA RESULTS**

Validated analytical results for VOCs in pore gas were produced from laboratory analyses of vapor collected in SUMMA canisters and analyzed for VOCs using EPA Method TO-15. Validated analytical results for tritium were produced from laboratory analysis of subsurface vapor collected in silica gel columns and analyzed for tritium using EPA Method 906.0. During third quarter FY2008, subsurface vapor sampling was conducted from May 16 to June 16, 2008, at MDA L.

Table 5.0-1 presents VOC analytical data from the first, second, and third quarter FY2008 sampling events. Table 5.0-2 presents tritium analytical data from first, second, and third quarter FY2008 sampling events.

## 5.1 Summary of Pore-Gas VOC and Tritium Results

During the third quarter of FY2008, 31 VOCs were detected at least once in vapor samples collected from MDA L. TCA was detected at a concentration of 3,500,000  $\mu\text{g}/\text{m}^3$  in the 117-ft port in the borehole at location 54-27642.

Tritium concentrations (ranging from 211.7 to 542,010 pCi/L) were detected in 41 of the 83 samples collected. The two highest concentrations of tritium were detected in the same borehole (location 54-24243). The highest concentration was detected in the 75-ft port, which had not been sampled previously. This concentration is consistent with the tritium concentration (153,000 pCi/L) detected at 66 ft during the 2005 sampling event. The next highest tritium concentration (36,143.4 pCi/L) was detected in the 125-ft port and is consistent with concentrations of tritium detected in the second quarter of FY2008. Borehole 54-24243 is located approximately 40 ft south of the eastern MDA L shaft field. The base of the shaft field is at a depth of approximately 60 ft, which is within the same formation as the 75-ft port (unit Qbt 1v). The 75-ft and 125-ft ports have been sampled for tritium as part of fourth quarter FY2008 pore-gas monitoring activities.

## 5.2 Pore-Gas VOC and Tritium Concentrations with Sampling Depth from Surface

Concentrations of VOCs detected in pore gas using EPA Method TO-15 generally reach maximum concentration between 65 and 120 ft bgs, which is near the depths of the base of the shafts and pit, and decrease to borehole total depth (TD). Table 2.0-1 presents boreholes with samples collected in SUMMA canisters at multiple depths during third quarter FY2008, and the analytical data from these samples are presented in Table 5.0-1. The deepest geologic unit monitored is the Otowi Member (Qbo), which was monitored at five borehole locations (54-02034, 54-24399, 54-27641, 54-27642, and 54-27643). The minimum detected concentrations of all VOCs were in the samples collected from the Qbo interval.

Tritium concentrations detected in pore gas using EPA Method 906.0 vary, depending on borehole location and depth. Table 2.0-1 presents boreholes with samples collected in silica gel columns at multiple depths during third quarter FY2008; the analytical data from these samples are presented in Table 5.0-2. The deepest geologic unit monitored is the Otowi Member (Qbo), which was monitored at five borehole locations (54-02034, 54-24399, 54-27641, 54-27642, and 54-27643). Tritium concentrations were not detected in samples collected from the Qbo interval.

## 5.3 VOC Vapor-Phase Partitioning to Water

VOC results were screened to evaluate whether vapor-phase concentrations of VOCs in the plume are a potential source of groundwater contamination. Because no screening levels exist for pore gas that address the potential for groundwater contamination, the screening evaluation was based on groundwater cleanup levels contained in the Consent Order and on Henry's law constants ( $H'$ ) that describe the equilibrium relationship between vapor and water concentrations. The source of the Henry's law constants was the NMED soil-screening level technical background document (2006, 092513). The following dimensionless form of Henry's law constant was used:

$$H' = \frac{C_{air}}{C_{water}} \quad \text{Equation 5-1}$$

where  $H'$  is the dimensionless Henry's law constant,  $C_{air}$  is the volumetric concentration of contaminant in air, and  $C_{water}$  is the volumetric concentration of contaminant in water. Equation 5-1 can be used to calculate the following screening value (SV):

$$SV = \frac{C_{air}}{1,000 \times H' \times SL} \quad \text{Equation 5-2}$$

where  $C_{air}$  is the concentration of VOC in the pore-gas sample ( $\mu\text{g}/\text{m}^3$ ), 1000 is a conversion factor from L to  $\text{m}^3$ ,  $H'$  is the dimensionless Henry's law constant, and  $SL$  is the screening level ( $\mu\text{g}/\text{L}$ ). The SLs are groundwater cleanup levels specified in the Consent Order. These levels are the EPA maximum contaminant level (MCL) or the New Mexico Water Quality Control Commission (NMWQCC) groundwater standard, whichever is lower. As specified in the Consent Order, if no MCL or NMWQCC standard exists, the EPA Region 6 tap water screening level (2007, 099314) is used. The numerator in Equation 5-2 is the concentration of VOC in pore gas, and the denominator represents the concentration in pore gas needed to exceed the SL. Therefore, if the SV is less than 1, the concentration of VOC in pore gas will not be sufficiently high to cause the water SL to be exceeded, even if the VOC plume is in contact with groundwater.

Equation 5-2 was used to screen the concentrations of VOCs detected in pore-gas samples at MDA L during third quarter FY2008. As shown in Table 5.3-1, 506 detected sample concentrations of 13 VOCs resulted in SVs greater than 1. The SVs of detected VOCs ranged from 0.0000000403 to 3240. Table 5.3-2 summarizes the 13 VOCs whose SVs are greater than 1, including the maximum SV and the location and depth interval reported with the maximum SV. Maximum concentrations of three VOCs were found at borehole location 54-24240 from 52 to 54 ft bgs. Maximum concentrations of three VOCs were found at borehole location 54-27642 from 113.5 to 118.5 ft and from 172.5 to 177.5 ft bgs. Maximum results were from nine sample ports at seven locations. Six of these ports were screened in Qbt 1v(u), one in Qbt 2, one in Qbt 1v(c), and one in Qbt 1g. There were results with SVs greater than 1 in 79 of the 83 ports screened: 19 in Qbt 2, 25 in Qbt 1v(u), 10 in Qbt 1v(c), 18 in Qbt 1g, 4 in Qct, and 3 in Qbo.

## 6.0 SUMMARY

The purpose of the quarterly field-screening and sampling activities at MDA L is to evaluate concentration trends in VOCs and tritium over time and distance from known source areas. The results from third quarter FY2008 may be summarized as follows.

- The VOC concentration trends at MDA L are consistent with a diffusive plume.
- The VOC concentrations increase from ground surface to the base of the shafts and pit where VOCs were disposed of and decrease to borehole TD.
- The VOC concentrations in the central portion of each source area are above screening concentrations, based on groundwater cleanup standards.
- The tritium concentrations at MDA L vary with borehole location and depth. Tritium has not been detected as deep as the Qbo unit.

## 7.0 REFERENCES AND MAP DATA SOURCES

### 7.1 References

*The following list includes all documents cited in this report. Parenthetical information following each reference provides the author(s), publication date, and ER ID number. This information is also included in text citations. ER ID numbers are assigned by the Environmental Programs Directorate's Records Processing Facility (RPF) and are used to locate the document at the RPF and, where applicable, in the master reference set.*



*Copies of the master reference set are maintained at the NMED Hazardous Waste Bureau; DOE-Los Alamos Site Office; EPA, Region 6; and the Directorate. The set was developed to ensure that the administrative authority has all material needed to review this document, and it is updated with every document submitted to the administrative authority. Documents previously submitted to the administrative authority are not included.*

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NMED (New Mexico Environment Department), November 8, 2007. "Approval with Modifications for the Interim Subsurface Vapor-Monitoring Plan for Material Disposal Area (MDA) L, Solid Waste Management Unit 54-006, at Technical Area 54, Revision 1," New Mexico Environment Department letter to D. Gregory (DOE-LASO) and D. McInroy (LANL) from J.P. Bearzi (NMED-HWB), Santa Fe, New Mexico. (NMED 2007, 098999)

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Rogers, M.A., June 1977. "History and Environmental Setting of LASL Near-Surface Land Disposal Facilities for Radioactive Wastes (Areas A, B, C, D, E, F, G, and T)," Vol. II, Los Alamos Scientific Laboratory report LA-6848-MS, Los Alamos, New Mexico. (Rogers 1977, 005708)

## 7.2 Map Data Sources

Data sources used in original figures created for this report are described below and identified by legend title.

Legend Item	Data Source
Disposal pit/impoundment	Waste Storage Features; Los Alamos National Laboratory, Environment and Remediation Support Services Division, GIS/Geotechnical Services Group, EP2007-0032; 1:2,500 Scale Data; 13 April 2007.
Disposal shaft	Waste Storage Features; Los Alamos National Laboratory, Environment and Remediation Support Services Division, GIS/Geotechnical Services Group, EP2007-0032; 1:2,500 Scale Data; 13 April 2007.
Elevation contour	Hypsography, 10, 20, & 100 Foot Contour Intervals; Los Alamos National Laboratory, ENV Environmental Remediation and Surveillance Program; 1991.
Fence	Security and Industrial Fences and Gates; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 10 September 2007.
LANL boundary	LANL Areas Used and Occupied; Los Alamos National Laboratory, Site Planning & Project Initiation Group, Infrastructure Planning Division; 19 September 2007.
Material disposal area	Materials Disposal Areas; Los Alamos National Laboratory, ENV Environmental Remediation and Surveillance Program; ER2004-0221; 1:2,500 Scale Data; 23 April 2004.
Paved road	Paved Road Arcs; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 10 September 2007.
Structure	Structures; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 10 September 2007.
TA boundary	Technical Area Boundaries; Los Alamos National Laboratory, Site Planning & Project Initiation Group, Infrastructure Planning Division; 19 September 2007.
Unpaved road	Dirt Road Arcs; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 10 September 2007.
Vapor monitoring well	Point Feature Locations of the Environmental Restoration Project Database; Los Alamos National Laboratory, Environment and Remediation Support Services Division, EP2007-0754; 30 November 2007.



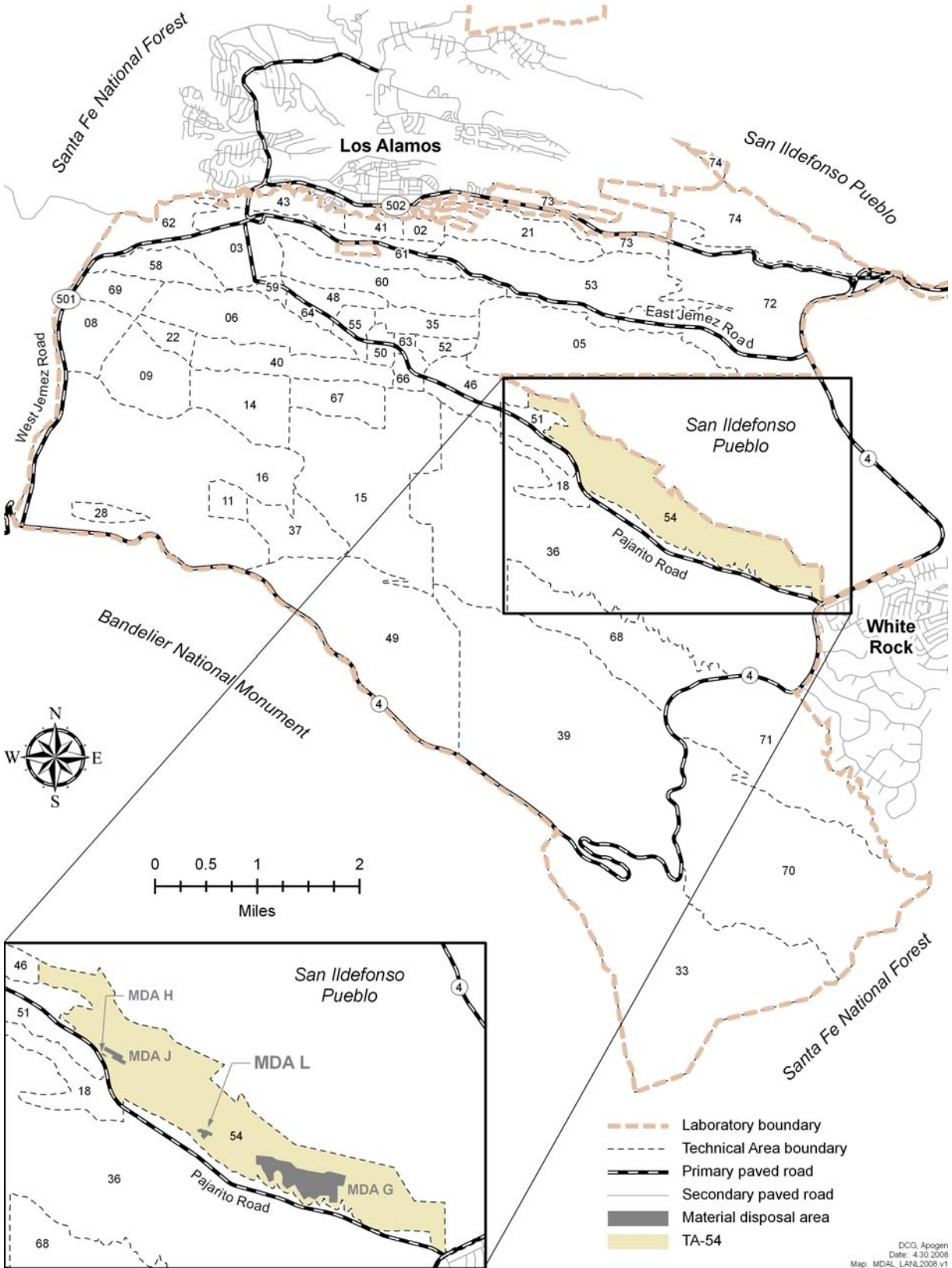


Figure 1.0-1 Location of MDA L in TA-54

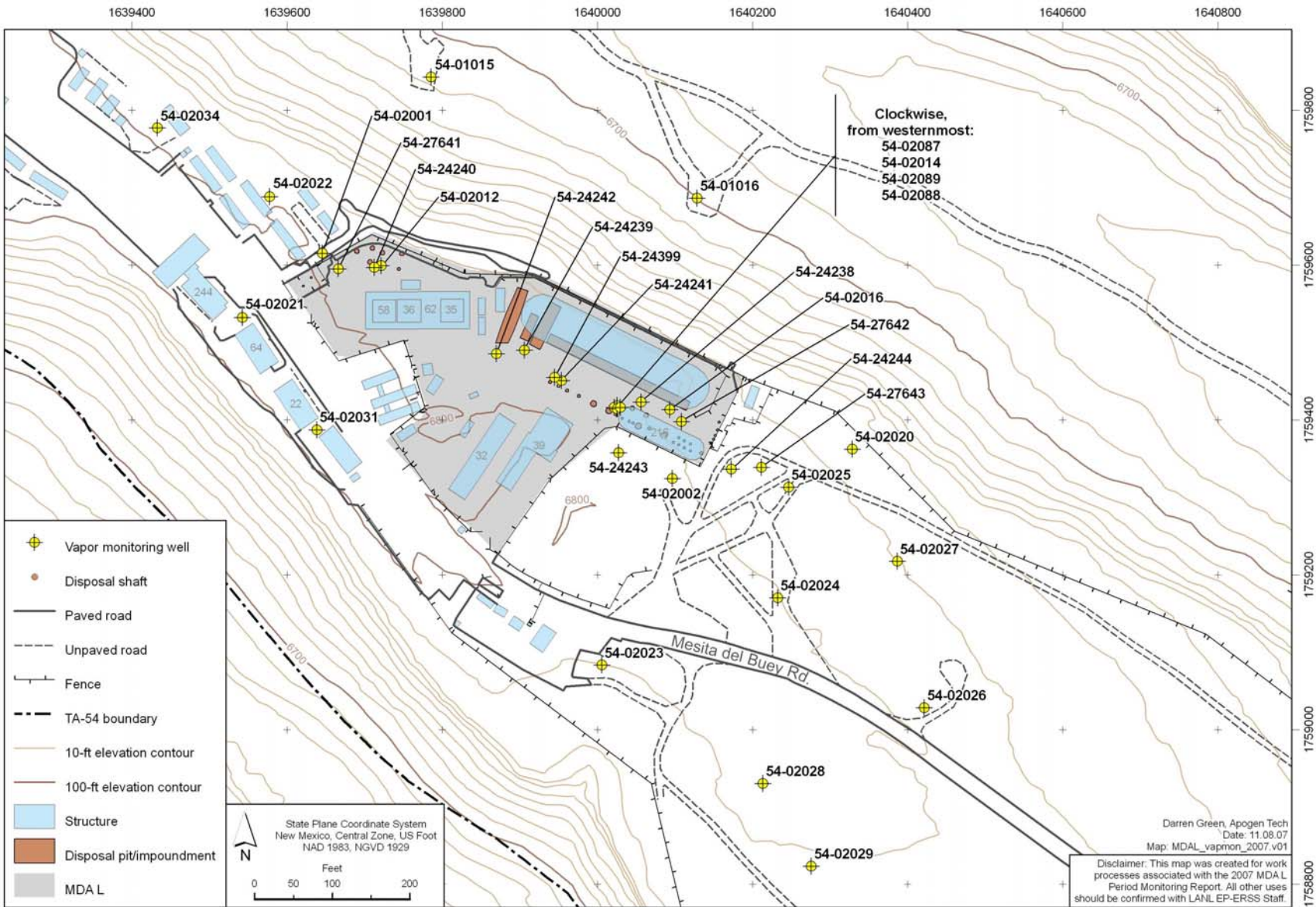


Figure 1.0-2 MDA L pre-gas monitoring locations

**Table 2.0-1**  
**Third Quarter FY2008 Field Screening and Samples Collected at MDA L**

Location ID	Port Depth (ft)	Geologic Unit	Field-Screening Date	Tritium Collection Date	VOC Collection Date
54-01015	37.6	Qbt 1v	6/13/2008	NR <sup>a</sup>	NR
54-01015	165.4	Qbt 1g	6/13/2008	NR	NR
54-01015	308.3	Qbo	blocked	NR	NR
54-01015	333.3	Qtb	6/13/2008	NR	NR
54-01015	377.7	Qtb	6/13/2008	NR	NR
54-01015	426.5	Qtb	6/13/2008	NR	NR
54-01015	462.1	Qtb	6/13/2008	NR	NR
54-01016	30.8	Qbt 1v	6/13/2008	NR	NR
54-01016	162.2	Qct	6/13/2008	NR	NR
54-01016	274.7	Qbo	6/13/2008	NR	NR
54-01016	336.3	Qtb	6/13/2008	NR	NR
54-01016	414.3	Qtb	blocked	NR	NR
54-01016	459.5	Qtb	blocked	NR	NR
54-01016	517.6	Qtb	blocked	NR	NR
54-02001	20	Qbt 2	5/27/2008	NR	NR
<b>54-02001</b>	<b>40</b>	<b>Qbt 2</b>	5/27/2008	5/30/2008	5/27/2008
54-02001	60	Qbt 1v(u)	partially blocked	NR	NR
<b>54-02001</b>	<b>80</b>	<b>Qbt 1v(u)</b>	5/27/2008	5/30/2008	5/27/2008
54-02001	100	Qbt 1v(u)	5/27/2008	NR	NR
<b>54-02001</b>	<b>120</b>	<b>Qbt 1v(c)</b>	5/27/2008	5/30/2008	5/27/2008
<b>54-02001</b>	<b>140</b>	<b>Qbt 1g</b>	5/27/2008	5/30/2008	5/27/2008
54-02001	160	Qbt 1g	blocked	NR	NR
54-02001	180	Qbt 1g	blocked	NR	NR
54-02001	200	Qbt 1g	5/27/2008	NR	NR
54-02002	20	Qbt 2	blocked	NR	NR
<b>54-02002</b>	<b>40</b>	<b>Qbt 2</b>	blocked	6/18/2008	No sample <sup>b</sup>
54-02002	60	Qbt 1v(u)	6/3/2008	NR	6/3/2008
54-02002	80	Qbt 1v(u)	blocked	NR	NR
<b>54-02002</b>	<b>100</b>	<b>Qbt 1v(u)</b>	6/3/2008	6/18/2008	6/3/2008
<b>54-02002</b>	<b>120</b>	<b>Qbt 1v(c)</b>	6/3/2008	6/18/2008	6/3/2008
54-02002	140	Qbt 1g	6/3/2008	NR	NR
54-02002	157	Qbt 1g	6/3/2008	NR	NR
<b>54-02002</b>	<b>180</b>	<b>Qbt 1g</b>	6/3/2008	6/18/2008	6/3/2008
54-02002	200	Qbt 1g	6/3/2008	NR	NR
54-02016	18	Qbt 2	blocked	NR	NR
<b>54-02016</b>	<b>31</b>	<b>Qbt 2</b>	5/16/2008	5/19/2008	5/16/2008
<b>54-02016</b>	<b>82</b>	<b>Qbt 1v(u)</b>	5/16/2008	5/19/2008	5/16/2008

Table 2.0-1 (continued)

Location ID	Port Depth (ft)	Geologic Unit	Field-Screening Date	Tritium Collection Date	VOC Collection Date
<b>54-02021</b>	<b>20</b>	<b>Qbt 2</b>	5/28/2008	6/4/2008	5/28/2008
54-02021	40	Qbt 2	blocked	NR	NR
54-02021	60	Qbt 1v(u)	5/28/2008	NR	NR
54-02021	80	Qbt 1v(u)	5/28/2008	NR	NR
<b>54-02021</b>	<b>100</b>	<b>Qbt 1v(u)</b>	5/28/2008	6/4/2008	5/28/2008
<b>54-02021</b>	<b>120</b>	<b>Qbt 1v(c)</b>	5/28/2008	6/4/2008	5/28/2008
<b>54-02021</b>	<b>140</b>	<b>Qbt 1g</b>	5/28/2008	6/4/2008	5/28/2008
54-02021	160	Qbt 1g	5/28/2008	NR	NR
54-02021	180	Qbt 1g	5/28/2008	NR	NR
54-02021	198	Qbt 1g	5/28/2008	NR	NR
54-02022	20	Qbt 2	5/23/2008	NR	NR
<b>54-02022</b>	<b>40</b>	<b>Qbt 2</b>	5/23/2008	5/29/2008	5/23/2008
54-02022	60	Qbt 1v(u)	5/23/2008	NR	NR
<b>54-02022</b>	<b>80</b>	<b>Qbt 1v(u)</b>	5/23/2008	5/29/2008	5/23/2008
54-02022	100	Qbt 1v(u)	partially blocked	No sample	No sample
<b>54-02022</b>	<b>120</b>	<b>Qbt 1v(c)</b>	5/23/2008	5/29/2008	5/23/2008
<b>54-02022</b>	<b>140</b>	<b>Qbt 1g</b>	5/23/2008	5/29/2008	5/23/2008
54-02022	160	Qbt 1g	5/23/2008	NR	NR
54-02022	180	Qbt 1g	5/23/2008	NR	NR
54-02022	200	Qbt 1g	5/23/2008	NR	NR
54-02023	20	Qbt 2	6/9/2008	NR	NR
<b>54-02023</b>	<b>40</b>	<b>Qbt 2</b>	6/9/2008	6/24/2008	6/9/2008
54-02023	60	Qbt 1v(u)	6/9/2008	NR	NR
54-02023	80	Qbt 1v(u)	6/9/2008	NR	NR
<b>54-02023</b>	<b>100</b>	<b>Qbt 1v(u)</b>	6/9/2008	6/24/2008	6/9/2008
<b>54-02023</b>	<b>120</b>	<b>Qbt 1v(c)</b>	6/9/2008	6/24/2008	6/9/2008
54-02023	140	Qbt 1g	6/9/2008	NR	NR
<b>54-02023</b>	<b>159</b>	<b>Qbt 1g</b>	6/9/2008	6/24/2008	6/9/2008
54-02023	180	Qbt 1g	6/9/2008	NR	NR
54-02023	200	Qbt 1g	6/9/2008	NR	NR
54-02024	20	Qbt 2	6/9/2008	NR	NR
<b>54-02024</b>	<b>40</b>	<b>Qbt 2</b>	6/9/2008	6/16/2008	6/9/2008
54-02024	60	Qbt 1v(u)	6/9/2008	NR	NR
54-02024	80	Qbt 1v(u)	6/9/2008	NR	NR
<b>54-02024</b>	<b>100</b>	<b>Qbt 1v(u)</b>	6/9/2008	6/16/2008	6/9/2008
<b>54-02024</b>	<b>120</b>	<b>Qbt 1v(c)</b>	Blocked	6/16/2008	No sample
54-02024	140	Qbt 1g	6/9/2008	NR	6/9/2008
<b>54-02024</b>	<b>160</b>	<b>Qbt 1g</b>	6/9/2008	6/16/2008	6/9/2008
54-02024	180	Qbt 1g	6/9/2008	NR	NR



Table 2.0-1 (continued)

Location ID	Port Depth (ft)	Geologic Unit	Field-Screening Date	Tritium Collection Date	VOC Collection Date
54-02024	200	Qbt 1g	6/9/2008	NR	NR
<b>54-02025</b>	<b>20</b>	<b>Qbt 2</b>	5/30/2008	6/12/2008	5/30/2008
54-02025	60	Qbt 1v(u)	blocked	NR	NR
<b>54-02025</b>	<b>100</b>	<b>Qbt 1v(u)</b>	5/30/2008	6/12/2008	5/30/2008
<b>54-02025</b>	<b>160</b>	<b>Qbt 1g</b>	5/30/2008	6/12/2008	5/30/2008
54-02025	190	Qbt 1g	5/30/2008	NR	NR
<b>54-02026</b>	<b>20</b>	<b>Qbt 2</b>	6/5/2008	6/20/2008	6/5/2008
54-02026	60	Qbt 1v(u)	6/5/2008	NR	NR
<b>54-02026</b>	<b>100</b>	<b>Qbt 1v(u)</b>	6/5/2008	6/20/2008	6/5/2008
<b>54-02026</b>	<b>160</b>	<b>Qbt 1g</b>	6/5/2008	6/20/2008	6/5/2008
54-02026	200	Qbt 1g	6/5/2008	NR	NR
54-02026	215	Qbt 1g	6/5/2008	NR	NR
<b>54-02027</b>	<b>20</b>	<b>Qbt 2</b>	6/4/2008	6/17/2008	6/4/2008
54-02027	60	Qbt 1v(u)	6/4/2008	NR	NR
<b>54-02027</b>	<b>100</b>	<b>Qbt 1v(u)</b>	6/4/2008	6/17/2008	6/4/2008
54-02027	160	Qbt 1g	6/4/2008	NR	NR
<b>54-02027</b>	<b>200</b>	<b>Qbt 1g</b>	6/4/2008	6/17/2008	6/4/2008
54-02027	220	Qbt 1g	6/4/2008	NR	NR
54-02027	250	Qbt 1g	6/4/2008	NR	NR
<b>54-02028</b>	<b>20</b>	<b>Qbt 2</b>	6/5/2008	6/23/2008	6/5/2008
54-02028	60	Qbt 1v(u)	6/5/2008	NR	NR
<b>54-02028</b>	<b>100</b>	<b>Qbt 1v(u)</b>	6/5/2008	6/23/2008	6/5/2008
<b>54-02028</b>	<b>160</b>	<b>Qbt 1g</b>	6/5/2008	6/23/2008	6/5/2008
54-02028	200	Qbt 1g	6/5/2008	NR	NR
54-02028	220	Qbt 1g	6/5/2008	NR	NR
54-02028	250	Qbt 1g	6/5/2008	NR	NR
<b>54-02031</b>	<b>20</b>	<b>Qbt 2</b>	5/29/2008	6/5/2008	5/29/2008
54-02031	60	Qbt 1v(u)	5/29/2008	NR	NR
<b>54-02031</b>	<b>100</b>	<b>Qbt 1v(u)</b>	5/29/2008	6/5/2008	5/29/2008
<b>54-02031</b>	<b>160</b>	<b>Qbt 1g</b>	5/29/2008	6/5/2008	5/29/2008
54-02031	200	Qbt 1g	5/29/2008	NR	NR
54-02031	220	Qbt 1g	5/29/2008	NR	NR
<b>54-02031</b>	<b>260</b>	<b>Qct</b>	5/29/2008	6/5/2008	5/29/2008
<b>54-02034</b>	<b>20</b>	<b>Qbt 2</b>	5/27/2008	6/3/2008	5/27/2008
<b>54-02034</b>	<b>60</b>	<b>Qbt 1v(u)</b>	5/27/2008	6/3/2008	5/27/2008
54-02034	100	Qbt 1v(u)	5/27/2008	NR	NR
<b>54-02034</b>	<b>160</b>	<b>Qbt 1g</b>	5/27/2008	6/3/2008	5/27/2008
54-02034	200	Qbt 1g	5/27/2008	NR	NR
54-02034	220	Qbt 1g	5/27/2008	NR	NR

Table 2.0-1 (continued)

Location ID	Port Depth (ft)	Geologic Unit	Field-Screening Date	Tritium Collection Date	VOC Collection Date
<b>54-02034</b>	<b>260</b>	<b>Qct</b>	5/27/2008	6/3/2008	5/27/2008
<b>54-02034</b>	<b>300</b>	<b>Qbo</b>	5/27/2008	6/3/2008	5/27/2008
54-02089	13	Qbt 2	5/19/2008	NR	NR
<b>54-02089</b>	<b>31</b>	<b>Qbt 2</b>	5/19/2008	5/21/2008	5/19/2008
<b>54-02089</b>	<b>46</b>	<b>Qbt 1v(u)</b>	5/19/2008	5/21/2008	5/19/2008
54-02089	86	Qbt 1v(u)	5/19/2008	NR	NR
54-24238	44	Qbt 1v(u)	5/16/2008	NR	NR
<b>54-24238</b>	<b>64</b>	<b>Qbt 1v(u)</b>	5/16/2008	5/19/2008	5/16/2008
54-24238	84	Qbt 1v(u)	5/16/2008	NR	NR
<b>54-24239</b>	<b>25</b>	<b>Qbt 2</b>	5/20/2008	5/23/2008	5/20/2008
54-24239	50	Qbt 1v(u)	5/20/2008	NR	NR
<b>54-24239</b>	<b>75</b>	<b>Qbt 1v(u)</b>	5/20/2008	5/23/2008	5/20/2008
54-24239	99.5	Qbt 1v(u)	5/20/2008	NR	NR
<b>54-24240</b>	<b>28</b>	<b>Qbt 2</b>	6/16/2008	5/16/2008	6/16/2008
<b>54-24240</b>	<b>53</b>	<b>Qbt 1v(u)</b>	6/16/2008	5/16/2008	6/16/2008
54-24240	78	Qbt 1v(u)	6/16/2008	NR	NR
54-24240	103	Qbt 1v(u)	6/16/2008	NR	NR
<b>54-24240</b>	<b>128</b>	<b>Qbt 1v(c)</b>	6/16/2008	5/16/2008	6/16/2008
<b>54-24240</b>	<b>153</b>	<b>Qbt 1g</b>	6/16/2008	5/16/2008	6/16/2008
<b>54-24241</b>	<b>73</b>	<b>Qbt 1v(u)</b>	5/20/2008	5/22/2008	5/20/2008
54-24241	93	Qbt 1v(u)	5/20/2008	NR	NR
<b>54-24241</b>	<b>113</b>	<b>Qbt 1v(c)</b>	5/20/2008	5/22/2008	5/20/2008
<b>54-24241</b>	<b>133</b>	<b>Qbt 1g</b>	5/20/2008	5/22/2008	5/20/2008
54-24241	153	Qbt 1g	5/20/2008	NR	NR
54-24241	173	Qbt 1g	5/20/2008	NR	NR
54-24241	193	Qbt 1g	5/20/2008	NR	NR
<b>54-24242</b>	<b>25</b>	<b>Qbt 2</b>	5/21/2008	5/28/2008	5/21/2008
<b>54-24242</b>	<b>50</b>	<b>Qbt 1v(u)</b>	5/21/2008	5/23/2008	5/21/2008
54-24242	75	Qbt 1v(u)	5/21/2008	NR	NR
54-24242	100	Qbt 1v(u)	5/21/2008	NR	NR
<b>54-24243</b>	<b>25</b>	<b>Qbt 2</b>	6/3/2008	6/19/2008	6/3/2008
54-24243	50	Qbt 1v(u)	6/3/2008	NR	NR
<b>54-24243</b>	<b>75</b>	<b>Qbt 1v(u)</b>	6/3/2008	6/19/2008	6/3/2008
54-24243	100	Qbt 1v(u)	6/3/2008	NR	NR
<b>54-24243</b>	<b>125</b>	<b>Qbt 1v(c)</b>	6/3/2008	6/19/2008	6/3/2008
54-24244 <sup>c</sup>	n/a <sup>d</sup>	n/a	n/a	NR	NR
<b>54-24399</b>	<b>550<sup>e</sup></b>	<b>Qbo</b>	6/16/2008	6/16/2008	6/16/2008
<b>54-27641</b>	<b>32</b>	<b>Qbt</b>	5/16/2008	5/16/2008	5/16/2008
<b>54-27641</b>	<b>82</b>	<b>Qbt 1v(u)</b>	5/16/2008	5/16/2008	5/16/2008

Table 2.0-1 (continued)

Location ID	Port Depth (ft)	Geologic Unit	Field-Screening Date	Tritium Collection Date	VOC Collection Date
<b>54-27641</b>	<b>115</b>	<b>Qbt 1v(c)</b>	5/16/2008	5/16/2008	5/16/2008
<b>54-27641</b>	<b>182</b>	<b>Qbt 1g</b>	5/16/2008	5/16/2008	5/16/2008
54-27641	232	Qbt 1g	5/16/2008	NR	NR
<b>54-27641</b>	<b>271</b>	<b>Qct</b>	5/16/2008	5/16/2008	5/16/2008
<b>54-27641</b>	<b>332.5</b>	<b>Qbo</b>	5/16/2008	5/16/2008	5/16/2008
<b>54-27642</b>	<b>30</b>	<b>Qbt 2</b>	5/19/2008	5/20/2008	5/19/2008
<b>54-27642</b>	<b>75</b>	<b>Qbt 1v(u)</b>	5/19/2008	5/20/2008	5/19/2008
<b>54-27642</b>	<b>116</b>	<b>Qbt 1v(c)</b>	5/19/2008	5/20/2008	5/19/2008
<b>54-27642</b>	<b>175</b>	<b>Qbt 1g</b>	5/19/2008	5/20/2008	5/19/2008
54-27642	235	Qbt 1g	5/19/2008	NR	NR
<b>54-27642</b>	<b>275</b>	<b>Qct</b>	5/19/2008	5/20/2008	5/19/2008
<b>54-27642</b>	<b>338</b>	<b>Qbo</b>	5/19/2008	5/20/2008	5/19/2008
<b>54-27643</b>	<b>30</b>	<b>Qbt 2</b>	6/4/2008	6/9/2008	6/4/2008
<b>54-27643</b>	<b>74</b>	<b>Qbt 1v(u)</b>	6/4/2008	6/9/2008	6/4/2008
<b>54-27643</b>	<b>117</b>	<b>Qbt 1v(c)</b>	6/4/2008	6/9/2008	6/4/2008
<b>54-27643</b>	<b>167</b>	<b>Qbt 1g</b>	6/4/2008	6/9/2008	6/4/2008
54-27643	235	Qbt 1g	6/4/2008	NR	NR
<b>54-27643</b>	<b>275</b>	<b>Qct</b>	6/4/2008	6/9/2008	6/4/2008
<b>54-27643</b>	<b>354</b>	<b>Qbo</b>	6/4/2008	6/9/2008	6/4/2008

Notes: Sampling is required at the ports and depths indicated in bold per the "Approval with Modifications of the Interim Monitoring Plan" (NMED 2007, 098999). If "blocked" or "partially blocked" appears in the Field-Screening Date column, it means that screening could not be conducted at the designated location.

<sup>a</sup> NR = Sample collection not required.

<sup>b</sup> Sample not collected because of partially blocked or blocked port.

<sup>c</sup> Field screening not performed and sample not collected.

<sup>d</sup> n/a = Not applicable.

<sup>e</sup> Location 54-24399 is an open borehole from 550 to 608 ft.

**Table 5.0-1  
VOC Pore-Gas Sampling Results at MDA L**

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-02001	40	Chloroform	4600 (U)	4500	2000
54-02001	40	Cyclohexane	21000 (U)	36000	6200
54-02001	40	Dichlorodifluoromethane	10000	14000	5900
54-02001	40	Dichloroethane[1,1-]	59000	46000	16000
54-02001	40	Dichloroethane[1,2-]	83000	72000	40000
54-02001	40	Dichloroethene[1,1-]	240000	10000	4800
54-02001	40	Methylene Chloride	51000 (U)	51000	20000
54-02001	40	Propanol[2-]	4500 (U)	2500 (U)	3500
54-02001	40	Tetrachloroethene	180000	150000	65000
54-02001	40	Toluene	1700 (U)	1100	2400
54-02001	40	Trichloro-1,2,2-trifluoroethane[1,1,2-]	27000 (U)	36000	17000
54-02001	40	Trichloroethane[1,1,1-]	1300000	1300000	570000
54-02001	40	Trichloroethene	410000	360000	150000
54-02001	40	Trichlorofluoromethane	8700	10000	5200
54-02001	80	Chloroform	— <sup>a</sup>	—	2500
54-02001	80	Cyclohexane	—	—	7400
54-02001	80	Dichlorodifluoromethane	—	—	4600
54-02001	80	Dichloroethane[1,1-]	—	—	16000
54-02001	80	Dichloroethane[1,2-]	—	—	38000
54-02001	80	Dichloroethene[1,1-]	—	—	6400
54-02001	80	Methylene Chloride	—	—	25000
54-02001	80	Tetrachloroethene	—	—	66000
54-02001	80	Toluene	—	—	1900
54-02001	80	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	—	14000
54-02001	80	Trichloroethane[1,1,1-]	—	—	650000
54-02001	80	Trichloroethene	—	—	110000
54-02001	80	Trichlorofluoromethane	—	—	4700
54-02001	120	Chloroform	5400 (U)	4600	2400
54-02001	120	Cyclohexane	17000 (U)	24000	7200
54-02001	120	Dichlorodifluoromethane	5400	3400	2800
54-02001	120	Dichloroethane[1,1-]	28000	25000	13000
54-02001	120	Dichloroethane[1,2-]	52000	36000	28000
54-02001	120	Dichloroethene[1,1-]	230000	16000	10000
54-02001	120	Dichloropropane[1,2-]	4300	3800	1800
54-02001	120	Methylene Chloride	40000 (U)	36000	20000
54-02001	120	Tetrachloroethene	52000	50000	26000
54-02001	120	Toluene	900 (U)	640 (U)	2900

Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-02001	120	Trichloro-1,2,2-trifluoroethane[1,1,2-]	18000 (U)	20000	13000
54-02001	120	Trichloroethane[1,1,1-]	1100000	810000	680000
54-02001	120	Trichloroethene	230000	200000	100000
54-02001	120	Trichlorofluoromethane	4900	960 (U)	3200
54-02001	140	Chloroform	—	—	3300
54-02001	140	Cyclohexane	—	—	8600
54-02001	140	Dichlorodifluoromethane	—	—	3300
54-02001	140	Dichloroethane[1,1-]	—	—	16000
54-02001	140	Dichloroethane[1,2-]	—	—	36000
54-02001	140	Dichloroethene[1,1-]	—	—	11000
54-02001	140	Dichloropropane[1,2-]	—	—	2500
54-02001	140	Methylene Chloride	—	—	26000
54-02001	140	Propanol[2-]	—	—	13000
54-02001	140	Tetrachloroethene	—	—	35000
54-02001	140	Toluene	—	—	1700 (J)
54-02001	140	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	—	16000
54-02001	140	Trichloroethane[1,1,1-]	—	—	800000
54-02001	140	Trichloroethene	—	—	120000
54-02001	140	Trichlorofluoromethane	—	—	4200
54-02002	60	Carbon Tetrachloride	—	34000 (U)	4000
54-02002	60	Chloroform	—	26000 (U)	22000
54-02002	60	Cyclohexane	—	—	12000
54-02002	60	Dichlorodifluoromethane	—	26000 (U)	1300
54-02002	60	Dichloroethane[1,1-]	—	22000	20000
54-02002	60	Dichloroethane[1,2-]	—	21000 (U)	7400
54-02002	60	Dichloroethene[1,1-]	—	29000	280000
54-02002	60	Dichloropropane[1,2-]	—	47000	49000
54-02002	60	Methylene Chloride	—	18000 (U)	4500
54-02002	60	Tetrachloroethene	—	37000 (U)	37000
54-02002	60	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	290000	210000
54-02002	60	Trichloroethane[1,1,1-]	—	1600000	920000
54-02002	60	Trichloroethene	—	230000	230000
54-02002	60	Trichlorofluoromethane	—	29000 (U)	11000
54-02002	100	Benzene	—	26000 (U)	1700
54-02002	100	Carbon Tetrachloride	—	35000 (U)	5100
54-02002	100	Chlorobenzene	—	24000 (U)	1500
54-02002	100	Chloroform	—	27000	25000
54-02002	100	Cyclohexane	—	—	13000

Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-02002	100	Dichlorodifluoromethane	—	26000 (U)	1700
54-02002	100	Dichloroethane[1,1-]	—	22000 (U)	17000
54-02002	100	Dichloroethane[1,2-]	—	22000 (U)	17000
54-02002	100	Dichloroethene[1,1-]	—	39000	230000
54-02002	100	Dichloropropane[1,2-]	—	55000	52000
54-02002	100	Ethanol	—	—	5700
54-02002	100	Methylene Chloride	—	59000	43000
54-02002	100	Tetrachloroethene	—	37000 (U)	38000
54-02002	100	Tetrahydrofuran	—	—	23000
54-02002	100	Toluene	—	20000 (U)	6600
54-02002	100	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	310000	220000
54-02002	100	Trichloroethane[1,1,1-]	—	1500000	930000
54-02002	100	Trichloroethene	—	260000	240000
54-02002	100	Trichlorofluoromethane	—	29000 (U)	18000
54-02002	100	Xylene[1,2-]	—	23000 (U)	2800
54-02002	100	Xylene[1,3-]+Xylene[1,4-]	—	—	2800
54-02002	120	Benzene	—	20000 (U)	2100
54-02002	120	Carbon Tetrachloride	—	27000 (U)	5300
54-02002	120	Chlorobenzene	—	19000 (U)	1600
54-02002	120	Chloroform	—	25000	25000
54-02002	120	Cyclohexane	—	—	12000
54-02002	120	Dichlorodifluoromethane	—	21000 (U)	1800
54-02002	120	Dichloroethane[1,1-]	—	17000 (U)	15000
54-02002	120	Dichloroethane[1,2-]	—	18000	18000
54-02002	120	Dichloroethene[1,1-]	—	40000	190000
54-02002	120	Dichloropropane[1,2-]	—	42000	46000
54-02002	120	Ethanol	—	—	6400
54-02002	120	Hexane	—	—	790
54-02002	120	Methylene Chloride	—	60000	52000
54-02002	120	Tetrachloroethene	—	29000 (U)	36000
54-02002	120	Tetrahydrofuran	—	—	7000
54-02002	120	Toluene	—	16000 (U)	5000
54-02002	120	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	270000	210000
54-02002	120	Trichloroethane[1,1,1-]	—	1200000	900000
54-02002	120	Trichloroethene	—	240000	250000
54-02002	120	Trichlorofluoromethane	—	23000 (U)	20000
54-02002	120	Xylene[1,2-]	—	18000 (U)	2800
54-02002	120	Xylene[1,3-]+Xylene[1,4-]	—	—	2000

Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-02002	180	Benzene	—	—	1900
54-02002	180	Carbon Tetrachloride	—	—	5100
54-02002	180	Chlorobenzene	—	—	1300
54-02002	180	Chloroform	—	—	24000
54-02002	180	Cyclohexane	—	—	12000
54-02002	180	Dichlorodifluoromethane	—	—	1800
54-02002	180	Dichloroethane[1,1-]	—	—	14000
54-02002	180	Dichloroethane[1,2-]	—	—	17000
54-02002	180	Dichloroethene[1,1-]	—	—	190000
54-02002	180	Dichloropropane[1,2-]	—	—	42000
54-02002	180	Ethanol	—	—	5800
54-02002	180	Hexane	—	—	780
54-02002	180	Methylene Chloride	—	—	49000
54-02002	180	Tetrachloroethene	—	—	31000
54-02002	180	Tetrahydrofuran	—	—	5400
54-02002	180	Toluene	—	—	3800
54-02002	180	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	—	200000
54-02002	180	Trichloroethane[1,1,1-]	—	—	820000
54-02002	180	Trichloroethene	—	—	220000
54-02002	180	Trichlorofluoromethane	—	—	20000
54-02002	180	Xylene[1,2-]	—	—	2100
54-02002	180	Xylene[1,3-]+Xylene[1,4-]	—	—	1100
54-02016	31	Chloroform	—	16000	12000
54-02016	31	Cyclohexane	—	37000	14000
54-02016	31	Dichloroethane[1,1-]	—	25000	20000
54-02016	31	Dichloroethane[1,2-]	—	79000	71000
54-02016	31	Dichloroethene[1,1-]	—	29000	28000
54-02016	31	Dichloropropane[1,2-]	—	42000	25000
54-02016	31	Methylene Chloride	—	3000	2400
54-02016	31	Propanol[2-]	—	4300 (U)	12000
54-02016	31	Tetrachloroethene	—	30000	12000
54-02016	31	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	390000	310000
54-02016	31	Trichloroethane[1,1,1-]	—	1400000	1200000
54-02016	31	Trichloroethene	—	290000	160000
54-02016	31	Trichlorofluoromethane	—	9900	9900
54-02016	82	Chloroform	—	—	5800
54-02016	82	Cyclohexane	—	—	9400
54-02016	82	Dichloroethane[1,1-]	—	—	11000

Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-02016	82	Dichloroethane[1,2-]	—	—	4600
54-02016	82	Dichloroethene[1,1-]	—	—	21000
54-02016	82	Dichloropropane[1,2-]	—	—	9200
54-02016	82	Propanol[2-]	—	—	23000
54-02016	82	Tetrachloroethene	—	—	51000
54-02016	82	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	—	240000
54-02016	82	Trichloroethane[1,1,1-]	—	—	870000
54-02016	82	Trichloroethene	—	—	110000
54-02016	82	Trichlorofluoromethane	—	—	7500
54-02021	20	Chloroform	—	—	270
54-02021	20	Cyclohexane	—	—	900
54-02021	20	Dichlorodifluoromethane	—	—	300
54-02021	20	Dichloroethane[1,1-]	—	—	1400
54-02021	20	Dichloroethane[1,2-]	—	—	1200
54-02021	20	Dichloroethene[1,1-]	—	—	1800
54-02021	20	Tetrachloroethene	—	—	2400
54-02021	20	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	—	1800
54-02021	20	Trichloroethane[1,1,1-]	—	—	85000
54-02021	20	Trichloroethene	—	—	14000
54-02021	20	Trichlorofluoromethane	—	—	430
54-02021	100	Cyclohexane	—	600 (U)	1100
54-02021	100	Dichloroethane[1,1-]	—	5500	1700
54-02021	100	Dichloroethane[1,2-]	—	7600	2700
54-02021	100	Dichloroethene[1,1-]	—	8100	2100
54-02021	100	Methylene Chloride	—	3200	980
54-02021	100	Tetrachloroethene	—	6500	2600
54-02021	100	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	6400	2300
54-02021	100	Trichloroethane[1,1,1-]	—	330000	110000
54-02021	100	Trichloroethene	—	54000	18000
54-02021	120	Chloroform	—	—	210
54-02021	120	Cyclohexane	—	—	660
54-02021	120	Dichlorodifluoromethane	—	—	250
54-02021	120	Dichloroethane[1,1-]	—	—	920
54-02021	120	Dichloroethane[1,2-]	—	—	1300
54-02021	120	Dichloroethene[1,1-]	—	—	1300
54-02021	120	Methylene Chloride	—	—	640
54-02021	120	Tetrachloroethene	—	—	1300
54-02021	120	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	—	1500



Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-02021	120	Trichloroethane[1,1,1-]	—	—	64000
54-02021	120	Trichloroethene	—	—	9900
54-02021	120	Trichlorofluoromethane	—	—	300
54-02021	140	Chloroform	—	1300	430
54-02021	140	Cyclohexane	—	590 (U)	1700
54-02021	140	Dichlorodifluoromethane	—	1500	460
54-02021	140	Dichloroethane[1,1-]	—	5500	1900
54-02021	140	Dichloroethane[1,2-]	—	6000	1800
54-02021	140	Dichloroethene[1,1-]	—	9400	12000
54-02021	140	Methylene Chloride	—	4000	1600
54-02021	140	Tetrachloroethene	—	6100	2600
54-02021	140	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	8100	3100
54-02021	140	Trichloroethane[1,1,1-]	—	350000	100000
54-02021	140	Trichloroethene	—	58000	20000
54-02021	140	Trichlorofluoromethane	—	1700	600
54-02022	40	Dichloroethane[1,1-]	8400	3700	7500
54-02022	40	Dichloroethane[1,2-]	13000	3900	7800
54-02022	40	Dichloroethene[1,1-]	99000	2300	5700
54-02022	40	Tetrachloroethene	13000	5700	3700
54-02022	40	Toluene	340 (U)	200 (U)	2100
54-02022	40	Trichloro-1,2,2-trifluoroethane[1,1,2-]	5200	2600	6700
54-02022	40	Trichloroethane[1,1,1-]	380000	180000	350000
54-02022	40	Trichloroethene	72000	29000	39000
54-02022	80	Dichloroethane[1,1-]	—	—	8400
54-02022	80	Dichloroethane[1,2-]	—	—	10000
54-02022	80	Dichloroethene[1,1-]	—	—	7000
54-02022	80	Methylene Chloride	—	—	3700
54-02022	80	Tetrachloroethene	—	—	4000
54-02022	80	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	—	7800
54-02022	80	Trichloroethane[1,1,1-]	—	—	440000
54-02022	80	Trichloroethene	—	—	49000
54-02022	120	Dichlorodifluoromethane	2400	1700	2000
54-02022	120	Dichloroethane[1,1-]	11000	8800	8700
54-02022	120	Dichloroethane[1,2-]	14000	9400	9000
54-02022	120	Dichloroethene[1,1-]	120000	8900	10000
54-02022	120	Methylene Chloride	5500	4100	4400
54-02022	120	Tetrachloroethene	12000	9800	3400
54-02022	120	Toluene	530 (U)	450 (U)	1400

Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-02022	120	Trichloro-1,2,2-trifluoroethane[1,1,2-]	4600	7200	9000
54-02022	120	Trichloroethane[1,1,1-]	580000	560000	500000
54-02022	120	Trichloroethene	110000	85000	56000
54-02022	120	Trichlorofluoromethane	2300	670 (U)	2200
54-02022	140	Dichlorodifluoromethane	—	—	1900
54-02022	140	Dichloroethane[1,1-]	—	—	6600
54-02022	140	Dichloroethane[1,2-]	—	—	4400
54-02022	140	Dichloroethene[1,1-]	—	—	11000
54-02022	140	Methylene Chloride	—	—	6000
54-02022	140	Propanol[2-]	—	—	3500
54-02022	140	Tetrachloroethene	—	—	2800
54-02022	140	Toluene	—	—	1500
54-02022	140	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	—	8400
54-02022	140	Trichloroethane[1,1,1-]	—	—	400000
54-02022	140	Trichloroethene	—	—	48000
54-02022	140	Trichlorofluoromethane	—	—	2500
54-02023	40	Carbon Tetrachloride	—	560 (U)	280
54-02023	40	Chloroform	—	1600	1500
54-02023	40	Cyclohexane	—	—	710
54-02023	40	Dichlorodifluoromethane	—	420 (U)	280
54-02023	40	Dichloroethane[1,1-]	—	510	520
54-02023	40	Dichloroethane[1,2-]	—	350 (U)	78
54-02023	40	Dichloroethene[1,1-]	—	3000	6700
54-02023	40	Dichloropropane[1,2-]	—	600 (U)	420
54-02023	40	Methylene Chloride	—	290 (U)	61
54-02023	40	Tetrachloroethene	—	1400	1600
54-02023	40	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	16000	13000
54-02023	40	Trichloroethane[1,1,1-]	—	58000	53000
54-02023	40	Trichloroethene	—	14000	13000
54-02023	40	Trichlorofluoromethane	—	2000	2000
54-02023	100	Benzene	—	1400 (U)	120
54-02023	100	Carbon Tetrachloride	—	1900 (U)	520
54-02023	100	Chloroform	—	2200	2600
54-02023	100	Cyclohexane	—	—	1200
54-02023	100	Dichlorodifluoromethane	—	1500 (U)	510
54-02023	100	Dichloroethane[1,1-]	—	1200 (U)	850
54-02023	100	Dichloroethane[1,2-]	—	1200 (U)	230
54-02023	100	Dichloroethene[1,1-]	—	5000	11000

Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-02023	100	Dichloropropane[1,2-]	—	2100 (U)	660
54-02023	100	Methylene Chloride	—	1000 (U)	660
54-02023	100	Tetrachloroethene	—	2100 (U)	2600
54-02023	100	Toluene	—	1100 (U)	100
54-02023	100	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	25000	23000
54-02023	100	Trichloroethane[1,1,1-]	—	87000	89000
54-02023	100	Trichloroethene	—	20000	24000
54-02023	100	Trichlorofluoromethane	—	2800	3300
54-02023	120	Benzene	—	170	150
54-02023	120	Carbon Tetrachloride	—	640	620
54-02023	120	Chloroform	—	2400	2800
54-02023	120	Cyclohexane	—	—	1300
54-02023	120	Dichlorodifluoromethane	—	620	590
54-02023	120	Dichloroethane[1,1-]	—	1200	900
54-02023	120	Dichloroethane[1,2-]	—	200	200
54-02023	120	Dichloroethene[1,1-]	—	5600	13000
54-02023	120	Dichloropropane[1,2-]	—	720	630
54-02023	120	Methylene Chloride	—	600	450
54-02023	120	Tetrachloroethene	—	2700	2800
54-02023	120	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	27000	26000
54-02023	120	Trichloroethane[1,1,1-]	—	91000	95000
54-02023	120	Trichloroethene	—	23000	26000
54-02023	120	Trichlorofluoromethane	—	3400	3900
54-02023	159	Benzene	—	—	210
54-02023	159	Carbon Tetrachloride	—	—	840
54-02023	159	Chloroform	—	—	2200
54-02023	159	Cyclohexane	—	—	1200
54-02023	159	Dichlorodifluoromethane	—	—	720
54-02023	159	Dichloroethane[1,1-]	—	—	680
54-02023	159	Dichloroethene[1,1-]	—	—	12000
54-02023	159	Dichloropropane[1,2-]	—	—	310
54-02023	159	Methylene Chloride	—	—	380
54-02023	159	Tetrachloroethene	—	—	2300
54-02023	159	Toluene	—	—	110
54-02023	159	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	—	29000
54-02023	159	Trichloroethane[1,1,1-]	—	—	86000
54-02023	159	Trichloroethene	—	—	24000
54-02023	159	Trichlorofluoromethane	—	—	3900

Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-02024	40	Carbon Tetrachloride	—	1300 (U)	410
54-02024	40	Chloroform	—	1800	2300
54-02024	40	Cyclohexane	—	—	960
54-02024	40	Dichlorodifluoromethane	—	990 (U)	250
54-02024	40	Dichloroethane[1,1-]	—	810 (U)	810
54-02024	40	Dichloroethane[1,2-]	—	810 (U)	250
54-02024	40	Dichloroethene[1,1-]	—	2700	7600
54-02024	40	Dichloropropane[1,2-]	—	1400 (U)	1400
54-02024	40	Tetrachloroethene	—	1700	2600
54-02024	40	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	17000	15000
54-02024	40	Trichloroethane[1,1,1-]	—	63000	72000
54-02024	40	Trichloroethene	—	13000	17000
54-02024	40	Trichlorofluoromethane	—	2200	2500
54-02024	100	Benzene	—	2100 (U)	200
54-02024	100	Carbon Tetrachloride	—	2900 (U)	820
54-02024	100	Chloroform	—	3600	4000
54-02024	100	Cyclohexane	—	—	1700
54-02024	100	Dichlorodifluoromethane	—	2200 (U)	530
54-02024	100	Dichloroethane[1,1-]	—	1800 (U)	1300
54-02024	100	Dichloroethane[1,2-]	—	1800 (U)	790
54-02024	100	Dichloroethene[1,1-]	—	5700	16000
54-02024	100	Dichloropropane[1,2-]	—	3100 (U)	2300
54-02024	100	Methylene Chloride	—	2100	1700
54-02024	100	Tetrachloroethene	—	3100 (U)	4400
54-02024	100	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	33000	30000
54-02024	100	Trichloroethane[1,1,1-]	—	120000	120000
54-02024	100	Trichloroethene	—	24000	31000
54-02024	100	Trichlorofluoromethane	—	4200	4900
54-02024	140	Benzene	—	—	420
54-02024	140	Carbon Tetrachloride	—	—	1200
54-02024	140	Chloroform	—	—	5600
54-02024	140	Cyclohexane	—	—	2200
54-02024	140	Dichlorodifluoromethane	—	—	840
54-02024	140	Dichloroethane[1,1-]	—	—	1600
54-02024	140	Dichloroethane[1,2-]	—	—	1100
54-02024	140	Dichloroethene[1,1-]	—	—	19000
54-02024	140	Dichloropropane[1,2-]	—	—	2500
54-02024	140	Methylene Chloride	—	—	5100

Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-02024	140	Tetrachloroethene	—	—	5600
54-02024	140	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	—	44000
54-02024	140	Trichloroethane[1,1,1-]	—	—	160000
54-02024	140	Trichloroethene	—	—	42000
54-02024	140	Trichlorofluoromethane	—	—	7000
54-02024	160	Benzene	—	1600 (U)	480
54-02024	160	Carbon Tetrachloride	—	2200 (U)	1200
54-02024	160	Chloroform	—	4700	5600
54-02024	160	Cyclohexane	—	—	2200
54-02024	160	Dichlorodifluoromethane	—	1700 (U)	880
54-02024	160	Dichloroethane[1,1-]	—	1400 (U)	1500
54-02024	160	Dichloroethane[1,2-]	—	1400 (U)	1100
54-02024	160	Dichloroethene[1,1-]	—	8600	19000
54-02024	160	Dichloropropane[1,2-]	—	2400 (U)	2300
54-02024	160	Methylene Chloride	—	5800	6600
54-02024	160	Tetrachloroethene	—	3700	5400
54-02024	160	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	45000	46000
54-02024	160	Trichloroethane[1,1,1-]	—	140000	160000
54-02024	160	Trichloroethene	—	34000	42000
54-02024	160	Trichlorofluoromethane	—	5700	7200
54-02025	20	Acetone	—	6500 (U)	1100 (J)
54-02025	20	Carbon Disulfide	—	8400 (U)	670
54-02025	20	Chloroform	—	5000	4000
54-02025	20	Dichloroethane[1,1-]	—	2300	2000
54-02025	20	Dichloroethane[1,2-]	—	2200 (U)	560
54-02025	20	Dichloroethene[1,1-]	—	5000	9000
54-02025	20	Dichloropropane[1,2-]	—	6500	3600
54-02025	20	Methylene Chloride	—	1900 (U)	410
54-02025	20	Propanol[2-]	—	—	3600
54-02025	20	Tetrachloroethene	—	7000	82000
54-02025	20	Toluene	—	2000 (U)	660
54-02025	20	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	40000	36000
54-02025	20	Trichloroethane[1,1,1-]	—	220000	150000
54-02025	20	Trichloroethene	—	33000	16000
54-02025	20	Trichlorofluoromethane	—	4500	5000
54-02025	100	Carbon Disulfide	—	17000 (U)	630
54-02025	100	Chloroform	—	9500	7700
54-02025	100	Dichlorodifluoromethane	—	5400 (U)	980

Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-02025	100	Dichloroethane[1,1-]	—	4400 (U)	3300
54-02025	100	Dichloroethane[1,2-]	—	4400 (U)	2900
54-02025	100	Dichloroethene[1,1-]	—	12000	18000
54-02025	100	Dichloropropane[1,2-]	—	12000	5800
54-02025	100	Methylene Chloride	—	8600	8900
54-02025	100	Propanol[2-]	—	—	1900
54-02025	100	Tetrachloroethene	—	9800	56000
54-02025	100	Tetrahydrofuran	—	—	620
54-02025	100	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	76000	72000
54-02025	100	Trichloroethane[1,1,1-]	—	330000	230000
54-02025	100	Trichloroethene	—	60000	26000
54-02025	100	Trichlorofluoromethane	—	9800	12000
54-02025	160	Benzene	—	—	690
54-02025	160	Carbon Disulfide	—	—	640
54-02025	160	Carbon Tetrachloride	—	—	1300
54-02025	160	Chloroform	—	—	9200
54-02025	160	Dichlorodifluoromethane	—	—	1300
54-02025	160	Dichloroethane[1,1-]	—	—	3300
54-02025	160	Dichloroethane[1,2-]	—	—	2900
54-02025	160	Dichloroethene[1,1-]	—	—	27000
54-02025	160	Dichloropropane[1,2-]	—	—	5400
54-02025	160	Methylene Chloride	—	—	21000
54-02025	160	Tetrachloroethene	—	—	45000
54-02025	160	Toluene	—	—	1000
54-02025	160	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	—	93000
54-02025	160	Trichloroethane[1,1,1-]	—	—	240000
54-02025	160	Trichloroethene	—	—	32000
54-02025	160	Trichlorofluoromethane	—	—	15000
54-02026	20	Chloroform	—	240	200
54-02026	20	Cyclohexane	—	—	67
54-02026	20	Dichlorodifluoromethane	—	160 (U)	40
54-02026	20	Dichloroethane[1,1-]	—	130 (U)	38
54-02026	20	Dichloroethene[1,1-]	—	350	790
54-02026	20	Tetrachloroethene	—	270	220
54-02026	20	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	2300	1700
54-02026	20	Trichloroethane[1,1,1-]	—	7900	5000
54-02026	20	Trichloroethene	—	1800	1400
54-02026	20	Trichlorofluoromethane	—	250	220

Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-02026	100	Carbon Tetrachloride	—	260 (U)	100
54-02026	100	Chloroform	—	450	430
54-02026	100	Cyclohexane	—	—	140
54-02026	100	Dichlorodifluoromethane	—	200 (U)	110
54-02026	100	Dichloroethane[1,1-]	—	160 (U)	84
54-02026	100	Dichloroethene[1,1-]	—	780	1700
54-02026	100	Dichloropropane[1,2-]	—	280 (U)	57
54-02026	100	Methylene Chloride	—	140 (U)	33
54-02026	100	Tetrachloroethene	—	410	470
54-02026	100	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	4800	4200
54-02026	100	Trichloroethane[1,1,1-]	—	14000	11000
54-02026	100	Trichloroethene	—	3100	3100
54-02026	100	Trichlorofluoromethane	—	510	540
54-02026	160	Carbon Tetrachloride	—	—	170
54-02026	160	Chloroform	—	—	500
54-02026	160	Cyclohexane	—	—	200
54-02026	160	Dichlorodifluoromethane	—	—	190
54-02026	160	Dichloroethane[1,1-]	—	—	98
54-02026	160	Dichloroethene[1,1-]	—	—	2400
54-02026	160	Methylene Chloride	—	—	190
54-02026	160	Tetrachloroethene	—	—	630
54-02026	160	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	—	6700
54-02026	160	Trichloroethane[1,1,1-]	—	—	14000
54-02026	160	Trichloroethene	—	—	4300
54-02026	160	Trichlorofluoromethane	—	—	810
54-02027	20	Carbon Tetrachloride	—	460 (U)	76
54-02027	20	Chloroform	—	970	960
54-02027	20	Cyclohexane	—	—	280
54-02027	20	Dichlorodifluoromethane	—	350 (U)	120
54-02027	20	Dichloroethane[1,1-]	—	280 (U)	210
54-02027	20	Dichloroethene[1,1-]	—	1300	4000
54-02027	20	Dichloropropane[1,2-]	—	490 (U)	340
54-02027	20	Methylene Chloride	—	240 (U)	31
54-02027	20	Tetrachloroethene	—	790	940
54-02027	20	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	8500	6400
54-02027	20	Trichloroethane[1,1,1-]	—	28000	22000
54-02027	20	Trichloroethene	—	5800	5600
54-02027	20	Trichlorofluoromethane	—	1100	880

Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-02027	100	Benzene	—	1000 (U)	110
54-02027	100	Carbon Tetrachloride	—	1400 (U)	410
54-02027	100	Chloroform	—	2700	2800
54-02027	100	Cyclohexane	—	—	960
54-02027	100	Dichlorodifluoromethane	—	1100 (U)	360
54-02027	100	Dichloroethane[1,1-]	—	870 (U)	610
54-02027	100	Dichloroethane[1,2-]	—	870 (U)	220
54-02027	100	Dichloroethene[1,1-]	—	3600	7600
54-02027	100	Dichloropropane[1,2-]	—	1500 (U)	1100
54-02027	100	Methylene Chloride	—	950	800
54-02027	100	Tetrachloroethene	—	2000	2900
54-02027	100	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	23000	21000
54-02027	100	Trichloroethane[1,1,1-]	—	74000	73000
54-02027	100	Trichloroethene	—	16000	17000
54-02027	100	Trichlorofluoromethane	—	2600	2600
54-02027	200	Benzene	—	—	300
54-02027	200	Carbon Tetrachloride	—	—	810
54-02027	200	Chloroform	—	—	2600
54-02027	200	Cyclohexane	—	—	950
54-02027	200	Dichlorodifluoromethane	—	—	630
54-02027	200	Dichloroethane[1,1-]	—	—	490
54-02027	200	Dichloroethane[1,2-]	—	—	120
54-02027	200	Dichloroethene[1,1-]	—	—	10000
54-02027	200	Dichloropropane[1,2-]	—	—	400
54-02027	200	Methylene Chloride	—	—	3000
54-02027	200	Tetrachloroethene	—	—	2900
54-02027	200	Toluene	—	—	790
54-02027	200	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	—	27000
54-02027	200	Trichloroethane[1,1,1-]	—	—	69000
54-02027	200	Trichloroethene	—	—	19000
54-02027	200	Trichlorofluoromethane	—	—	3000
54-02028	20	Carbon Tetrachloride	—	280 (U)	160
54-02028	20	Chloroform	—	330	220
54-02028	20	Cyclohexane	—	—	130
54-02028	20	Dichlorodifluoromethane	—	210 (U)	200
54-02028	20	Dichloroethane[1,1-]	—	170 (U)	56
54-02028	20	Dichloroethene[1,1-]	—	450	2000
54-02028	20	Methylene Chloride	—	150 (U)	120



Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-02028	20	Tetrachloroethene	—	320	350
54-02028	20	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	3100	5500
54-02028	20	Trichloroethane[1,1,1-]	—	12000	9300
54-02028	20	Trichloroethene	—	2800	3000
54-02028	20	Trichlorofluoromethane	—	390	700
54-02028	100	Carbon Tetrachloride	—	440 (U)	99
54-02028	100	Chloroform	—	500	480
54-02028	100	Cyclohexane	—	—	190
54-02028	100	Dichlorodifluoromethane	—	340 (U)	110
54-02028	100	Dichloroethane[1,1-]	—	280 (U)	130
54-02028	100	Dichloroethene[1,1-]	—	870	2100
54-02028	100	Dichloropropane[1,2-]	—	480 (U)	96
54-02028	100	Methylene Chloride	—	230 (U)	95
54-02028	100	Tetrachloroethene	—	480 (U)	500
54-02028	100	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	5300	4500
54-02028	100	Trichloroethane[1,1,1-]	—	16000	14000
54-02028	100	Trichloroethene	—	4200	4000
54-02028	100	Trichlorofluoromethane	—	610	620
54-02028	160	Carbon Tetrachloride	—	—	120
54-02028	160	Chloroform	—	—	340
54-02028	160	Cyclohexane	—	—	140
54-02028	160	Dichlorodifluoromethane	—	—	130
54-02028	160	Dichloroethane[1,1-]	—	—	86
54-02028	160	Dichloroethene[1,1-]	—	—	2200
54-02028	160	Methylene Chloride	—	—	180
54-02028	160	Tetrachloroethene	—	—	390
54-02028	160	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	—	4600
54-02028	160	Trichloroethane[1,1,1-]	—	—	10000
54-02028	160	Trichloroethene	—	—	3400
54-02028	160	Trichlorofluoromethane	—	—	600
54-02031	20	Chloroform	—	1000 (U)	540
54-02031	20	Cyclohexane	—	—	880
54-02031	20	Dichlorodifluoromethane	—	1100 (U)	250
54-02031	20	Dichloroethane[1,1-]	—	1300	900
54-02031	20	Dichloroethane[1,2-]	—	870 (U)	200
54-02031	20	Dichloroethene[1,1-]	—	3000	7200
54-02031	20	Tetrachloroethene	—	3300	2400
54-02031	20	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	5500	4000

Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-02031	20	Trichloroethane[1,1,1-]	—	69000	54000
54-02031	20	Trichloroethene	—	14000	12000
54-02031	20	Trichlorofluoromethane	—	1200 (U)	550
54-02031	100	Chloroform	—	3400 (U)	1300
54-02031	100	Cyclohexane	—	—	2400
54-02031	100	Dichlorodifluoromethane	—	3500 (U)	740
54-02031	100	Dichloroethane[1,1-]	—	3000	2300
54-02031	100	Dichloroethane[1,2-]	—	2800 (U)	1300
54-02031	100	Dichloroethene[1,1-]	—	7200	21000
54-02031	100	Methylene Chloride	—	2400 (U)	1000
54-02031	100	Tetrachloroethene	—	8400	6500
54-02031	100	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	16000	14000
54-02031	100	Trichloroethane[1,1,1-]	—	160000	140000
54-02031	100	Trichloroethene	—	36000	34000
54-02031	100	Trichlorofluoromethane	—	3900 (U)	1700
54-02031	160	Chloroform	—	—	1100
54-02031	160	Cyclohexane	—	—	2000
54-02031	160	Dichlorodifluoromethane	—	—	770
54-02031	160	Dichloroethane[1,1-]	—	—	1700
54-02031	160	Dichloroethane[1,2-]	—	—	800
54-02031	160	Dichloroethene[1,1-]	—	—	18000
54-02031	160	Methylene Chloride	—	—	1200
54-02031	160	Tetrachloroethene	—	—	5400
54-02031	160	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	—	14000
54-02031	160	Trichloroethane[1,1,1-]	—	—	110000
54-02031	160	Trichloroethene	—	—	30000
54-02031	160	Trichlorofluoromethane	—	—	1800
54-02031	260	Carbon Disulfide	—	5300 (U)	110
54-02031	260	Carbon Tetrachloride	—	2200 (U)	160
54-02031	260	Chloroform	—	1700 (U)	210
54-02031	260	Cyclohexane	—	—	430
54-02031	260	Dichlorodifluoromethane	—	1700 (U)	260
54-02031	260	Dichloroethane[1,1-]	—	1400 (U)	290
54-02031	260	Dichloroethene[1,1-]	—	8000	3800
54-02031	260	Methylene Chloride	—	1300	260
54-02031	260	Tetrachloroethene	—	5600	1300
54-02031	260	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	20000	4800
54-02031	260	Trichloroethane[1,1,1-]	—	93000	24000

Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-02031	260	Trichloroethene	—	24000	6600
54-02031	260	Trichlorofluoromethane	—	2200	560
54-02034	20	Chloroform	—	99	83
54-02034	20	Cyclohexane	—	800	380
54-02034	20	Dichlorodifluoromethane	—	150	120
54-02034	20	Dichloroethane[1,1-]	—	300	240
54-02034	20	Dichloroethene[1,1-]	—	580	2200
54-02034	20	Tetrachloroethene	—	480	340
54-02034	20	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	510	440
54-02034	20	Trichloroethane[1,1,1-]	—	33000	24000
54-02034	20	Trichloroethene	—	4600	3500
54-02034	20	Trichlorofluoromethane	—	47 (U)	130
54-02034	60	Chloroform	—	—	100
54-02034	60	Cyclohexane	—	—	510
54-02034	60	Dichlorodifluoromethane	—	—	160
54-02034	60	Dichloroethane[1,1-]	—	—	410
54-02034	60	Dichloroethane[1,2-]	—	—	140
54-02034	60	Dichloroethene[1,1-]	—	—	3000
54-02034	60	Methylene Chloride	—	—	93
54-02034	60	Tetrachloroethene	—	—	420
54-02034	60	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	—	600
54-02034	60	Trichloroethane[1,1,1-]	—	—	32000
54-02034	60	Trichloroethene	—	—	5100
54-02034	60	Trichlorofluoromethane	—	—	180
54-02034	160	Cyclohexane	—	—	380
54-02034	160	Dichlorodifluoromethane	—	—	240
54-02034	160	Dichloroethane[1,1-]	—	—	240
54-02034	160	Dichloroethene[1,1-]	—	—	2600
54-02034	160	Methylene Chloride	—	—	130
54-02034	160	Tetrachloroethene	—	—	260
54-02034	160	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	—	830
54-02034	160	Trichloroethane[1,1,1-]	—	—	21000
54-02034	160	Trichloroethene	—	—	3800
54-02034	160	Trichlorofluoromethane	—	—	300
54-02034	260	Acetone	—	17 (U)	24
54-02034	260	Benzene	—	5.6 (U)	5.2
54-02034	260	Butanone[2-]	—	5.2 (U)	4
54-02034	260	Carbon Tetrachloride	—	32	12

Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-02034	260	Cyclohexane	—	6 (U)	31
54-02034	260	Dichlorodifluoromethane	—	150	65
54-02034	260	Dichloroethane[1,1-]	—	11	4.2
54-02034	260	Dichloroethene[1,1-]	—	430	220
54-02034	260	Propylene	—	12 (U)	7.1
54-02034	260	Tetrachloroethene	—	52	17
54-02034	260	Toluene	—	6.6 (U)	6.6
54-02034	260	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	380	200
54-02034	260	Trichloroethane[1,1,1-]	—	3800	1400
54-02034	260	Trichloroethene	—	240	69
54-02034	260	Trichlorofluoromethane	—	280	120
54-02034	300	Cyclohexane	—	2.9 (U)	4.3
54-02034	300	Dichlorodifluoromethane	—	38	23
54-02034	300	Dichloroethene[1,1-]	—	79	47
54-02034	300	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	100	62
54-02034	300	Trichloroethane[1,1,1-]	—	370	180
54-02034	300	Trichloroethene	—	38	5.7
54-02034	300	Trichlorofluoromethane	—	84	48
54-02089	31	Acetone	—	4200 (U)	12000
54-02089	31	Chloroform	—	25000	30000
54-02089	31	Cyclohexane	—	55000	34000
54-02089	31	Dichloroethane[1,1-]	—	50000	63000
54-02089	31	Dichloroethane[1,2-]	—	56000	100000
54-02089	31	Dichloroethene[1,1-]	—	27000	38000
54-02089	31	Dichloropropane[1,2-]	—	130000	150000
54-02089	31	Tetrachloroethene	—	33000	26000
54-02089	31	Toluene	—	1600 (U)	15000
54-02089	31	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	430000	580000
54-02089	31	Trichloroethane[1,1,1-]	—	1600000	2000000
54-02089	31	Trichloroethene	—	560000	600000
54-02089	31	Trichlorofluoromethane	—	15000	21000
54-02089	46	Chloroform	—	—	48000
54-02089	46	Cyclohexane	—	—	43000
54-02089	46	Dichloroethane[1,1-]	—	—	80000
54-02089	46	Dichloroethane[1,2-]	—	—	61000
54-02089	46	Dichloroethene[1,1-]	—	—	49000
54-02089	46	Dichloropropane[1,2-]	—	—	310000
54-02089	46	Tetrachloroethene	—	—	67000

Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-02089	46	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	—	760000
54-02089	46	Trichloroethane[1,1,1-]	—	—	3100000
54-02089	46	Trichloroethene	—	—	950000
54-02089	46	Trichlorofluoromethane	—	—	28000
54-24238	64	Chloroform	—	—	33000
54-24238	64	Dichloroethane[1,1-]	—	—	43000
54-24238	64	Dichloroethane[1,2-]	—	—	71000
54-24238	64	Dichloroethene[1,1-]	—	—	41000
54-24238	64	Dichloropropane[1,2-]	—	—	200000
54-24238	64	Methylene Chloride	—	—	340000
54-24238	64	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	—	520000
54-24238	64	Trichloroethane[1,1,1-]	—	—	1500000
54-24238	64	Trichloroethene	—	—	400000
54-24239	25	Butanol[1-]	1600 (U)	—	12000
54-24239	25	Carbon Tetrachloride	4300	3500 (U)	2500
54-24239	25	Chloroform	14000	8300	9200
54-24239	25	Cyclohexane	7400 (J+)	—	4000
54-24239	25	Dichloroethane[1,1-]	13000	9000	9800
54-24239	25	Dichloroethane[1,2-]	5400	2200	3400
54-24239	25	Dichloroethene[1,1-]	94000	12000	14000
54-24239	25	Dichloropropane[1,2-]	7400	3800 (U)	5200
54-24239	25	Tetrachloroethene	520000	270000	230000
54-24239	25	Toluene	510 (U)	2000 (U)	1400
54-24239	25	Trichloro-1,2,2-trifluoroethane[1,1,2-]	45000	40000	46000
54-24239	25	Trichloroethane[1,1,1-]	500000	360000	400000
54-24239	25	Trichloroethene	210000	110000	120000
54-24239	25	Trichlorofluoromethane	4400	3000 (U)	3500
54-24239	75	Carbon Tetrachloride	—	—	4300
54-24239	75	Chloroform	—	—	15000
54-24239	75	Cyclohexane	—	—	8000
54-24239	75	Dichloroethane[1,1-]	—	—	16000
54-24239	75	Dichloroethane[1,2-]	—	—	11000
54-24239	75	Dichloroethene[1,1-]	—	—	26000
54-24239	75	Dichloropropane[1,2-]	—	—	7100
54-24239	75	Methylene Chloride	—	—	6000
54-24239	75	Tetrachloroethene	—	—	140000
54-24239	75	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	—	88000
54-24239	75	Trichloroethane[1,1,1-]	—	—	750000

Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-24239	75	Trichloroethene	—	—	150000
54-24239	75	Trichlorofluoromethane	—	—	7800
54-24240	28	Acetone	5600 (U)	82000 (U)	9600
54-24240	28	Chloroform	15000	34000 (U)	11000
54-24240	28	Dichlorodifluoromethane	39000	75000	15000
54-24240	28	Dichloroethane[1,1-]	100000	92000	54000
54-24240	28	Dichloroethane[1,2-]	420000	420000	340000
54-24240	28	Dichloroethene[1,1-]	570000	27000 (U)	49000
54-24240	28	Methylene Chloride	60000	41000	12000
54-24240	28	Tetrachloroethene	280000	300000	220000
54-24240	28	Trichloro-1,2,2-trifluoroethane[1,1,2-]	79000	99000	58000
54-24240	28	Trichloroethane[1,1,1-]	1600000	2000000	1300000
54-24240	28	Trichloroethene	850000	720000	580000
54-24240	28	Trichlorofluoromethane	32000	48000	20000
54-24240	53	Acetone	—	—	20000
54-24240	53	Carbon Tetrachloride	—	—	8200
54-24240	53	Chloroform	—	—	36000
54-24240	53	Dichlorodifluoromethane	—	—	42000
54-24240	53	Dichloroethane[1,1-]	—	—	86000
54-24240	53	Dichloroethane[1,2-]	—	—	650000
54-24240	53	Dichloroethene[1,1-]	—	—	110000
54-24240	53	Methylene Chloride	—	—	210000
54-24240	53	Tetrachloroethene	—	—	270000
54-24240	53	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	—	97000
54-24240	53	Trichloroethane[1,1,1-]	—	—	2300000
54-24240	53	Trichloroethene	—	—	860000
54-24240	53	Trichlorofluoromethane	—	—	52000
54-24240	128	Chloroform	5500	18000 (U)	9400
54-24240	128	Dichlorodifluoromethane	4000	18000 (U)	8200
54-24240	128	Dichloroethane[1,1-]	23000	37000	30000
54-24240	128	Dichloroethane[1,2-]	24000	49000	60000
54-24240	128	Dichloroethene[1,1-]	220000	32000	82000
54-24240	128	Methylene Chloride	4600	15000	20000
54-24240	128	Tetrachloroethene	46000	83000	86000
54-24240	128	Trichloro-1,2,2-trifluoroethane[1,1,2-]	33000	53000	44000
54-24240	128	Trichloroethane[1,1,1-]	670000	1300000	1200000
54-24240	128	Trichloroethene	230000	300000	260000
54-24240	128	Trichlorofluoromethane	5200	20000 (U)	8800

Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-24240	153	Acetone	1400 (U)	43000 (U)	13000
54-24240	153	Chloroform	5000	18000 (U)	8400
54-24240	153	Dichlorodifluoromethane	4200	18000 (U)	7100
54-24240	153	Dichloroethane[1,1-]	20000	29000	26000
54-24240	153	Dichloroethane[1,2-]	15000	25000	47000
54-24240	153	Dichloroethene[1,1-]	240000	33000	84000
54-24240	153	Methylene Chloride	1600	12000 (U)	9500
54-24240	153	Tetrachloroethene	41000	71000	75000
54-24240	153	Trichloro-1,2,2-trifluoroethane[1,1,2-]	35000	48000	45000
54-24240	153	Trichloroethane[1,1,1-]	600000	1100000	1200000
54-24240	153	Trichloroethene	210000	250000	260000
54-24240	153	Trichlorofluoromethane	5200	20000 (U)	8000
54-24241	73	Carbon Tetrachloride	—	—	11000
54-24241	73	Chloroform	—	—	22000
54-24241	73	Cyclohexane	—	—	13000
54-24241	73	Dichloroethane[1,1-]	—	—	29000
54-24241	73	Dichloroethane[1,2-]	—	—	18000
54-24241	73	Dichloroethene[1,1-]	—	—	31000
54-24241	73	Dichloropropane[1,2-]	—	—	16000
54-24241	73	Methylene Chloride	—	—	5400
54-24241	73	Tetrachloroethene	—	—	50000
54-24241	73	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	—	170000
54-24241	73	Trichloroethane[1,1,1-]	—	—	1200000
54-24241	73	Trichloroethene	—	—	200000
54-24241	73	Trichlorofluoromethane	—	—	11000
54-24241	113	Carbon Tetrachloride	14000 (U)	25000 (U)	7500
54-24241	113	Chloroform	12000	25000	19000
54-24241	113	Cyclohexane	—	—	11000
54-24241	113	Dichloroethane[1,1-]	9700	27000	17000
54-24241	113	Dichloroethane[1,2-]	8800	19000	14000
54-24241	113	Dichloroethene[1,1-]	28000	35000	37000
54-24241	113	Dichloropropane[1,2-]	15000 (U)	26000 (U)	13000
54-24241	113	Propanol[2-]	—	—	27000
54-24241	113	Tetrachloroethene	54000	110000	85000
54-24241	113	Toluene	7900 (U)	14000 (U)	3000
54-24241	113	Trichloro-1,2,2-trifluoroethane[1,1,2-]	110000	170000	150000
54-24241	113	Trichloroethane[1,1,1-]	630000	1000000	960000
54-24241	113	Trichloroethene	150000	250000	210000

Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-24241	113	Trichlorofluoromethane	12000 (U)	21000 (U)	13000
54-24241	133	Carbon Tetrachloride	—	—	5500
54-24241	133	Chloroform	—	—	15000
54-24241	133	Cyclohexane	—	—	8200
54-24241	133	Dichloroethane[1,1-]	—	—	13000
54-24241	133	Dichloroethane[1,2-]	—	—	11000
54-24241	133	Dichloroethene[1,1-]	—	—	33000
54-24241	133	Dichloropropane[1,2-]	—	—	7400
54-24241	133	Methylene Chloride	—	—	5000
54-24241	133	Propanol[2-]	—	—	12000
54-24241	133	Tetrachloroethene	—	—	31000
54-24241	133	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	—	110000
54-24241	133	Trichloroethane[1,1,1-]	—	—	720000
54-24241	133	Trichloroethene	—	—	130000
54-24241	133	Trichlorofluoromethane	—	—	11000
54-24242	25	Carbon Tetrachloride	3900	3300	3600
54-24242	25	Chloroform	15000	14000	13000
54-24242	25	Cyclohexane	9200 (J+)	14000	6000
54-24242	25	Dichloroethane[1,1-]	16000	13000	14000
54-24242	25	Dichloroethane[1,2-]	6000	5200	5400
54-24242	25	Dichloroethene[1,1-]	180000	18000	21000
54-24242	25	Dichloropropane[1,2-]	8600	7000	6000
54-24242	25	Propanol[2-]	1100 (U)	1400 (U)	12000
54-24242	25	Tetrachloroethene	250000	240000	99000
54-24242	25	Trichloro-1,2,2-trifluoroethane[1,1,2-]	77000	61000	61000
54-24242	25	Trichloroethane[1,1,1-]	470000	580000	610000
54-24242	25	Trichloroethene	190000	170000	130000
54-24242	25	Trichlorofluoromethane	5900	4400	4900
54-24242	50	Carbon Tetrachloride	—	—	4100
54-24242	50	Chloroform	—	—	15000
54-24242	50	Cyclohexane	—	—	7700
54-24242	50	Dichloroethane[1,1-]	—	—	16000
54-24242	50	Dichloroethane[1,2-]	—	—	9000
54-24242	50	Dichloroethene[1,1-]	—	—	27000
54-24242	50	Dichloropropane[1,2-]	—	—	6600
54-24242	50	Propanol[2-]	—	—	7400
54-24242	50	Tetrachloroethene	—	—	110000
54-24242	50	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	—	75000



Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-24242	50	Trichloroethane[1,1,1-]	—	—	760000
54-24242	50	Trichloroethene	—	—	150000
54-24242	50	Trichlorofluoromethane	—	—	6800
54-24243	25	Carbon Tetrachloride	2900	19000 (U)	3800
54-24243	25	Chloroform	17000	21000	17000
54-24243	25	Cyclohexane	11000 (J+)	—	10000
54-24243	25	Dichlorodifluoromethane	1100	15000 (U)	1300
54-24243	25	Dichloroethane[1,1-]	20000	25000	21000
54-24243	25	Dichloroethane[1,2-]	3700	12000 (U)	5700
54-24243	25	Dichloroethene[1,1-]	210000	21000	150000
54-24243	25	Dichloropropane[1,2-]	40000	49000	41000
54-24243	25	Tetrachloroethene	17000	21000	21000
54-24243	25	Trichloro-1,2,2-trifluoroethane[1,1,2-]	240000	310000	220000
54-24243	25	Trichloroethane[1,1,1-]	590000	1200000	760000
54-24243	25	Trichloroethene	200000	260000	220000
54-24243	25	Trichlorofluoromethane	8400	16000 (U)	7200
54-24243	75	Benzene	—	—	1100
54-24243	75	Carbon Tetrachloride	—	—	6600
54-24243	75	Chloroform	—	—	29000
54-24243	75	Cyclohexane	—	—	18000
54-24243	75	Dichlorodifluoromethane	—	—	2100
54-24243	75	Dichloroethane[1,1-]	—	—	29000
54-24243	75	Dichloroethane[1,2-]	—	—	11000
54-24243	75	Dichloroethene[1,1-]	—	—	240000
54-24243	75	Dichloropropane[1,2-]	—	—	100000
54-24243	75	Methylene Chloride	—	—	8600
54-24243	75	Tetrachloroethene	—	—	27000
54-24243	75	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	—	390000
54-24243	75	Trichloroethane[1,1,1-]	—	—	1300000
54-24243	75	Trichloroethene	—	—	340000
54-24243	75	Trichlorofluoromethane	—	—	15000
54-24243	125	Benzene	2500	20000 (U)	1900
54-24243	125	Carbon Tetrachloride	5900	28000 (U)	6000
54-24243	125	Chloroform	29000	26000	27000
54-24243	125	Cyclohexane	19000 (J+)	—	14000
54-24243	125	Dichlorodifluoromethane	2200	21000 (U)	2200
54-24243	125	Dichloroethane[1,1-]	22000	19000	20000
54-24243	125	Dichloroethane[1,2-]	26000	23000	24000

Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-24243	125	Dichloroethene[1,1-]	320000	47000	240000
54-24243	125	Dichloropropane[1,2-]	71000	59000	66000
54-24243	125	Ethanol	1600 (U)	—	2200
54-24243	125	Methylene Chloride	53000	44000	41000
54-24243	125	Tetrachloroethene	35000	30000 (U)	36000
54-24243	125	Trichloro-1,2,2-trifluoroethane[1,1,2-]	310000	300000	250000
54-24243	125	Trichloroethane[1,1,1-]	980000	1400000	950000
54-24243	125	Trichloroethene	350000	270000	310000
54-24243	125	Trichlorofluoromethane	25000	23000 (U)	19000
54-24399	550 <sup>b</sup>	Carbon Tetrachloride	—	140 (U)	55
54-24399	550	Chloroform	—	110 (U)	150
54-24399	550	Dichlorodifluoromethane	—	110 (U)	34
54-24399	550	Dichloroethane[1,1-]	—	140	190
54-24399	550	Dichloroethane[1,2-]	—	88 (U)	67
54-24399	550	Dichloroethene[1,1-]	—	230	370
54-24399	550	Dichloropropane[1,2-]	—	150 (U)	69
54-24399	550	Methylene Chloride	—	75 (U)	31
54-24399	550	Tetrachloroethene	—	490	980
54-24399	550	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	840	920
54-24399	550	Trichloroethane[1,1,1-]	—	5200	6000
54-24399	550	Trichloroethene	—	1000	1600
54-24399	550	Trichlorofluoromethane	—	120 (U)	67
54-27641	32	Chloroform	5500	26000 (U)	4800
54-27641	32	Cyclohexane	26000 (J+)	—	14000
54-27641	32	Dichlorodifluoromethane	12000	26000 (U)	18000
54-27641	32	Dichloroethane[1,1-]	81000	71000	47000
54-27641	32	Dichloroethane[1,2-]	100000	120000	84000
54-27641	32	Dichloroethene[1,1-]	400000	21000 (U)	12000
54-27641	32	Methylene Chloride	50000	40000	26000
54-27641	32	Propanol[2-]	2400 (U)	—	15000
54-27641	32	Tetrachloroethene	160000	180000	58000
54-27641	32	Trichloro-1,2,2-trifluoroethane[1,1,2-]	51000	62000	45000
54-27641	32	Trichloroethane[1,1,1-]	1200000	1600000	1300000
54-27641	32	Trichloroethene	560000	510000	310000
54-27641	32	Trichlorofluoromethane	12000	29000 (U)	14000
54-27641	82	Chloroform	5700	24000 (U)	4800
54-27641	82	Cyclohexane	21000 (J+)	—	11000
54-27641	82	Dichlorodifluoromethane	7700	25000 (U)	12000

Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-27641	82	Dichloroethane[1,1-]	40000	49000	30000
54-27641	82	Dichloroethane[1,2-]	68000	83000	60000
54-27641	82	Dichloroethene[1,1-]	330000	20000 (U)	12000
54-27641	82	Methylene Chloride	66000	82000	64000
54-27641	82	Propanol[2-]	2100 (U)	—	14000
54-27641	82	Tetrachloroethene	140000	210000	58000
54-27641	82	Trichloro-1,2,2-trifluoroethane[1,1,2-]	34000	46000	26000
54-27641	82	Trichloroethane[1,1,1-]	920000	1500000	920000
54-27641	82	Trichloroethene	240000	260000	130000
54-27641	82	Trichlorofluoromethane	7900	27000 (U)	9800
54-27641	115	Chloroform	6700	25000 (U)	4800
54-27641	115	Cyclohexane	19000 (J+)	—	12000
54-27641	115	Dichlorodifluoromethane	7900	25000 (U)	6900
54-27641	115	Dichloroethane[1,1-]	34000	39000	27000
54-27641	115	Dichloroethane[1,2-]	73000	58000	42000
54-27641	115	Dichloroethene[1,1-]	260000	24000	17000
54-27641	115	Methylene Chloride	37000	45000	35000
54-27641	115	Propanol[2-]	4000 (U)	—	10000
54-27641	115	Tetrachloroethene	98000	110000	34000
54-27641	115	Trichloro-1,2,2-trifluoroethane[1,1,2-]	24000	39000	26000
54-27641	115	Trichloroethane[1,1,1-]	1200000	1400000	1100000
54-27641	115	Trichloroethene	260000	230000	130000
54-27641	115	Trichlorofluoromethane	7000	28000 (U)	6700
54-27641	182	Carbon Tetrachloride	1600	—	760
54-27641	182	Chloroform	3400	—	600
54-27641	182	Cyclohexane	12000 (J+)	—	1700
54-27641	182	Dichlorodifluoromethane	3700	—	1600
54-27641	182	Dichloroethane[1,1-]	16000	—	1700
54-27641	182	Dichloroethene[1,1-]	210000	—	12000
54-27641	182	Methylene Chloride	22000	—	1800
54-27641	182	Tetrachloroethene	21000	—	5600
54-27641	182	Trichloro-1,2,2-trifluoroethane[1,1,2-]	27000	—	12000
54-27641	182	Trichloroethane[1,1,1-]	550000	—	130000
54-27641	182	Trichloroethene	160000	—	36000
54-27641	182	Trichlorofluoromethane	4600	—	2200
54-27641	271	Carbon Tetrachloride	820	3500 (U)	140
54-27641	271	Chloroform	570	2600 (U)	40
54-27641	271	Cyclohexane	3200 (J+)	—	170

Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-27641	271	Dichlorodifluoromethane	2000	2700 (U)	330
54-27641	271	Dichloroethane[1,1-]	1800	2200 (U)	83
54-27641	271	Dichloroethene[1,1-]	21000	15000	2500
54-27641	271	Methylene Chloride	1600	2400	53
54-27641	271	Tetrachloroethene	5400	6100	690
54-27641	271	Trichloro-1,2,2-trifluoroethane[1,1,2-]	18000	19000	3800
54-27641	271	Trichloroethane[1,1,1-]	140000	140000	10000
54-27641	271	Trichloroethene	37000	36000	3500
54-27641	271	Trichlorofluoromethane	2700	3000 (U)	680
54-27641	332.5	Chloroform	44	160 (U)	2800
54-27641	332.5	Cyclohexane	210 (J+)	—	7800
54-27641	332.5	Dichlorodifluoromethane	460	560	3700
54-27641	332.5	Dichloroethane[1,1-]	120	130 (U)	14000
54-27641	332.5	Dichloroethane[1,2-]	36	86 (U)	8400
54-27641	332.5	Dichloroethene[1,1-]	3700	3700	23000
54-27641	332.5	Methylene Chloride	54	110 (U)	22000
54-27641	332.5	Tetrachloroethene	990	930	16000
54-27641	332.5	Trichloro-1,2,2-trifluoroethane[1,1,2-]	3400	6900	23000
54-27641	332.5	Trichloroethane[1,1,1-]	9600	16000	730000
54-27641	332.5	Trichloroethene	4400	5300	99000
54-27641	332.5	Trichlorofluoromethane	760	1100	3900
54-27642	30	Chloroform	51000 (U)	49000 (U)	26000
54-27642	30	Cyclohexane	—	—	31000
54-27642	30	Dichloroethane[1,1-]	42000 (U)	44000	44000
54-27642	30	Dichloroethane[1,2-]	42000 (U)	41000 (U)	10000
54-27642	30	Dichloroethene[1,1-]	43000	51000	45000
54-27642	30	Dichloropropane[1,2-]	76000	70000 (U)	73000
54-27642	30	Tetrachloroethene	72000 (U)	70000 (U)	27000
54-27642	30	Toluene	39000 (U)	38000 (U)	8300
54-27642	30	Trichloro-1,2,2-trifluoroethane[1,1,2-]	380000	400000	370000
54-27642	30	Trichloroethane[1,1,1-]	3400000	3500000	3300000
54-27642	30	Trichloroethene	250000	220000	240000
54-27642	30	Trichlorofluoromethane	57000 (U)	55000 (U)	14000
54-27642	75	Acetone	59000 (U)	49000 (U)	8600
54-27642	75	Carbon Disulfide	77000 (U)	63000 (U)	3400
54-27642	75	Carbon Tetrachloride	32000 (U)	26000 (U)	6900
54-27642	75	Chloroform	38000	31000	36000
54-27642	75	Cyclohexane	—	—	18000

Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-27642	75	Dichloroethane[1,1-]	26000	23000	23000
54-27642	75	Dichloroethane[1,2-]	28000	21000	31000
54-27642	75	Dichloroethene[1,1-]	69000	57000	63000
54-27642	75	Dichloropropane[1,2-]	91000	80000	77000
54-27642	75	Methylene Chloride	24000	17000	25000
54-27642	75	Propanol[2-]	—	—	20000
54-27642	75	Tetrachloroethene	52000	36000	29000
54-27642	75	Tetrahydrofuran	—	—	19000
54-27642	75	Toluene	19000 (U)	15000 (U)	8100
54-27642	75	Trichloro-1,2,2-trifluoroethane[1,1,2-]	390000	340000	320000
54-27642	75	Trichloroethane[1,1,1-]	2100000	1600000	1700000
54-27642	75	Trichloroethene	430000	300000	310000
54-27642	75	Trichlorofluoromethane	32000	27000	34000
54-27642	116	Chloroform	53000 (U)	39000 (U)	55000
54-27642	116	Cyclohexane	—	—	34000
54-27642	116	Dichloroethane[1,1-]	44000 (U)	39000	52000
54-27642	116	Dichloroethane[1,2-]	44000 (U)	32000 (U)	39000
54-27642	116	Dichloroethene[1,1-]	59000	62000	70000
54-27642	116	Dichloropropane[1,2-]	150000	130000	180000
54-27642	116	Tetrachloroethene	76000 (U)	56000 (U)	88000
54-27642	116	Tetrahydrofuran	—	—	17000
54-27642	116	Trichloro-1,2,2-trifluoroethane[1,1,2-]	500000	510000	570000
54-27642	116	Trichloroethane[1,1,1-]	2700000	2800000	3500000
54-27642	116	Trichloroethene	430000	340000	560000
54-27642	116	Trichlorofluoromethane	60000 (U)	44000 (U)	30000
54-27642	175	Acetone	—	—	9000
54-27642	175	Benzene	—	—	3200
54-27642	175	Carbon Disulfide	—	—	2500
54-27642	175	Carbon Tetrachloride	—	—	6500
54-27642	175	Chloroform	—	—	26000
54-27642	175	Cyclohexane	—	—	10000
54-27642	175	Dichlorodifluoromethane	—	—	2900
54-27642	175	Dichloroethane[1,1-]	—	—	11000
54-27642	175	Dichloroethane[1,2-]	—	—	17000
54-27642	175	Dichloroethene[1,1-]	—	—	62000
54-27642	175	Dichloropropane[1,2-]	—	—	26000
54-27642	175	Ethanol	—	—	6000
54-27642	175	Hexane	—	—	2200

Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-27642	175	Methylene Chloride	—	—	88000
54-27642	175	Propanol[2-]	—	—	14000
54-27642	175	Tetrachloroethene	—	—	21000
54-27642	175	Toluene	—	—	23000
54-27642	175	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	—	220000
54-27642	175	Trichloroethane[1,1,1-]	—	—	980000
54-27642	175	Trichloroethene	—	—	240000
54-27642	175	Trichlorofluoromethane	—	—	35000
54-27642	275	Benzene	5900 (U)	4800 (U)	1700
54-27642	275	Carbon Tetrachloride	8000 (U)	6500 (U)	5000
54-27642	275	Chloroform	8700	8900	10000
54-27642	275	Cyclohexane	—	—	4400
54-27642	275	Dichlorodifluoromethane	6100 (U)	5000 (U)	3300
54-27642	275	Dichloroethane[1,1-]	5000 (U)	4100 (U)	3200
54-27642	275	Dichloroethene[1,1-]	48000	53000	63000
54-27642	275	Dichloropropane[1,2-]	8700 (U)	7000 (U)	2600
54-27642	275	Hexane	—	—	2900
54-27642	275	Methylene Chloride	25000	26000	34000
54-27642	275	Propanol[2-]	—	—	3400
54-27642	275	Tetrachloroethene	9900	8500	7500
54-27642	275	Toluene	6500	4100	4000
54-27642	275	Trichloro-1,2,2-trifluoroethane[1,1,2-]	150000	170000	170000
54-27642	275	Trichloroethane[1,1,1-]	330000	360000	400000
54-27642	275	Trichloroethene	110000	110000	120000
54-27642	275	Trichlorofluoromethane	15000	19000	24000
54-27642	338	Benzene	1500 (U)	1200 (U)	460
54-27642	338	Carbon Tetrachloride	2100 (U)	1700 (U)	1900
54-27642	338	Chloroform	1600	1300 (U)	1300
54-27642	338	Cyclohexane	—	—	960
54-27642	338	Dichlorodifluoromethane	1600 (U)	1300 (U)	1400
54-27642	338	Dichloroethane[1,1-]	1300 (U)	1000 (U)	420
54-27642	338	Dichloroethene[1,1-]	24000	21000	22000
54-27642	338	Hexane	—	—	1100
54-27642	338	Methylene Chloride	3400	2700	2900
54-27642	338	Tetrachloroethene	2600	1800 (U)	2700
54-27642	338	Toluene	1200 (U)	960 (U)	580
54-27642	338	Trichloro-1,2,2-trifluoroethane[1,1,2-]	53000	47000	49000
54-27642	338	Trichloroethane[1,1,1-]	89000	69000	77000

Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-27642	338	Trichloroethene	35000	24000	32000
54-27642	338	Trichlorofluoromethane	5000	4500	5500
54-27643	30	Carbon Tetrachloride	3100	5400 (U)	2500
54-27643	30	Chloroform	13000	8600	9500
54-27643	30	Cyclohexane	5100 (J+)	—	4600
54-27643	30	Dichlorodifluoromethane	800	4100 (U)	550
54-27643	30	Dichloroethane[1,1-]	6000	4400	5200
54-27643	30	Dichloroethane[1,2-]	5200	3400 (U)	3300
54-27643	30	Dichloroethene[1,1-]	100000	6700 (U)	63000
54-27643	30	Dichloropropane[1,2-]	25000	20000	21000
54-27643	30	Tetrachloroethene	28000	15000	20000
54-27643	30	Trichloro-1,2,2-trifluoroethane[1,1,2-]	54000	58000 (U)	56000
54-27643	30	Trichloroethane[1,1,1-]	340000	370000	330000
54-27643	30	Trichloroethene	93000	58000 (U)	69000
54-27643	30	Trichlorofluoromethane	10000	6000 (U)	6700
54-27643	74	Benzene	1100	10000 (U)	750
54-27643	74	Carbon Tetrachloride	4300	14000 (U)	3100
54-27643	74	Chlorobenzene	980	10000 (U)	740
54-27643	74	Chloroform	19000	14000	13000
54-27643	74	Cyclohexane	7000 (J+)	—	5800
54-27643	74	Dichlorodifluoromethane	1200	11000 (U)	800
54-27643	74	Dichloroethane[1,1-]	7900	8800 (U)	6000
54-27643	74	Dichloroethane[1,2-]	13000	9000	7800
54-27643	74	Dichloroethene[1,1-]	130000	14000 (U)	63000
54-27643	74	Dichloropropane[1,2-]	32000	29000	28000
54-27643	74	Ethanol	900 (U)	—	2400
54-27643	74	Methylene Chloride	10000	8900 (U)	6600
54-27643	74	Tetrachloroethene	30000	20000	24000
54-27643	74	Tetrahydrofuran	20000	—	20000
54-27643	74	Toluene	1900	8200 (U)	1500
54-27643	74	Trichloro-1,2,2-trifluoroethane[1,1,2-]	78000	94000 (U)	70000
54-27643	74	Trichloroethane[1,1,1-]	470000	530000	420000
54-27643	74	Trichloroethene	130000	98000	97000
54-27643	74	Trichlorofluoromethane	18000	12000 (U)	10000
54-27643	74	Xylene[1,2-]	1800	9500 (U)	1300
54-27643	117	Benzene	1800	9700 (U)	1400
54-27643	117	Carbon Tetrachloride	4400	13000 (U)	3600
54-27643	117	Chlorobenzene	1100	9300 (U)	970

Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-27643	117	Chloroform	22000	17000	17000
54-27643	117	Cyclohexane	7200 (J+)	—	6700
54-27643	117	Dichlorodifluoromethane	1700	10000 (U)	1200
54-27643	117	Dichloroethane[1,1-]	7900	8200 (U)	7000
54-27643	117	Dichloroethane[1,2-]	16000	11000	11000
54-27643	117	Dichloroethene[1,1-]	140000	22000 (U)	86000
54-27643	117	Dichloropropane[1,2-]	30000	25000	29000
54-27643	117	Ethanol	1000 (U)	—	3700
54-27643	117	Hexane	520	—	380
54-27643	117	Methylene Chloride	26000	22000	19000
54-27643	117	Tetrachloroethene	28000	18000	25000
54-27643	117	Tetrahydrofuran	2100	—	2000
54-27643	117	Toluene	6000	7600 (U)	4600
54-27643	117	Trichloro-1,2,2-trifluoroethane[1,1,2-]	98000	120000 (U)	100000
54-27643	117	Trichloroethane[1,1,1-]	500000	580000	490000
54-27643	117	Trichloroethene	150000	120000	130000
54-27643	117	Trichlorofluoromethane	23000	15000 (U)	16000
54-27643	117	Xylene[1,2-]	2500	8800 (U)	2200
54-27643	167	Benzene	—	—	2000
54-27643	167	Carbon Tetrachloride	—	—	3800
54-27643	167	Chlorobenzene	—	—	710
54-27643	167	Chloroform	—	—	18000
54-27643	167	Cyclohexane	—	—	5600
54-27643	167	Dichlorodifluoromethane	—	—	1800
54-27643	167	Dichloroethane[1,1-]	—	—	5500
54-27643	167	Dichloroethane[1,2-]	—	—	8500
54-27643	167	Dichloroethene[1,1-]	—	—	100000
54-27643	167	Dichloropropane[1,2-]	—	—	19000
54-27643	167	Ethanol	—	—	1300
54-27643	167	Hexane	—	—	1100
54-27643	167	Methylene Chloride	—	—	35000
54-27643	167	Tetrachloroethene	—	—	20000
54-27643	167	Toluene	—	—	6400
54-27643	167	Trichloro-1,2,2-trifluoroethane[1,1,2-]	—	—	120000
54-27643	167	Trichloroethane[1,1,1-]	—	—	400000
54-27643	167	Trichloroethene	—	—	140000
54-27643	167	Trichlorofluoromethane	—	—	18000
54-27643	167	Xylene[1,2-]	—	—	1800



Table 5.0-1 (continued)

Location ID	Port Depth (ft)	Analyte	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-27643	275	Benzene	1800	1300	1200
54-27643	275	Carbon Tetrachloride	3800	3000	2900
54-27643	275	Chloroform	9900	9700	7400
54-27643	275	Cyclohexane	3100 (J+)	—	2600
54-27643	275	Dichlorodifluoromethane	2700	2000 (U)	1900
54-27643	275	Dichloroethane[1,1-]	2100	2300	1800
54-27643	275	Dichloroethane[1,2-]	490	340	300
54-27643	275	Dichloroethene[1,1-]	88000	31000 (U)	59000
54-27643	275	Dichloropropane[1,2-]	2400	2300	1900
54-27643	275	Ethyltoluene[4-]	400 (U)	210 (U)	600
54-27643	275	Hexane	2200	—	1500
54-27643	275	Methylene Chloride	22000	17000	17000
54-27643	275	Tetrachloroethene	11000	8200	8200
54-27643	275	Toluene	4600	2800	2500
54-27643	275	Trichloro-1,2,2-trifluoroethane[1,1,2-]	96000	100000 (U)	90000
54-27643	275	Trichloroethane[1,1,1-]	190000	210000 (U)	170000
54-27643	275	Trichloroethene	99000	66000 (U)	75000
54-27643	275	Trichlorofluoromethane	17000	15000 (U)	11000
54-27643	275	Trimethylbenzene[1,2,4-]	400 (U)	330 (U)	650
54-27643	275	Trimethylbenzene[1,3,5-]	400 (U)	330 (U)	380
54-27643	354	Benzene	480	670 (U)	390
54-27643	354	Carbon Tetrachloride	1800	900 (U)	1200
54-27643	354	Chloroform	1400	720 (U)	1000
54-27643	354	Cyclohexane	1100 (J+)	—	860
54-27643	354	Dichlorodifluoromethane	1500	690 (U)	1000
54-27643	354	Dichloroethane[1,1-]	320	560 (U)	280
54-27643	354	Dichloroethene[1,1-]	21000	12000 (U)	16000
54-27643	354	Dichloropropane[1,2-]	87	970 (U)	74
54-27643	354	Hexane	1200	—	920
54-27643	354	Methylene Chloride	2200	1400 (U)	1700
54-27643	354	Tetrachloroethene	2700	1300 (U)	2200
54-27643	354	Toluene	530	520 (U)	420
54-27643	354	Trichloro-1,2,2-trifluoroethane[1,1,2-]	34000	31000 (U)	34000
54-27643	354	Trichloroethane[1,1,1-]	62000	41000 (U)	52000
54-27643	354	Trichloroethene	25000	14000 (U)	20000
54-27643	354	Trichlorofluoromethane	5400	2900 (U)	3800

Note: Units are in  $\mu\text{g}/\text{m}^3$ .

<sup>a</sup> — = Analysis not requested.

<sup>b</sup> Location 54-24399 is an open borehole from 550 to 608 ft.

**Table 5.0-2  
Tritium Detects in Pore-Gas Sampling Results at MDA L**

Location ID	Port Depth (ft)	First Quarter FY08 Result	Second Quarter FY08 Result	Third Quarter FY08 Result
54-02001	40	NA*	4132.55	290.047
54-02001	80	NA	NA	325.087
54-02002	40	NA	227.681	1134.07
54-02002	100	NA	246.634	2326.01
54-02002	120	NA	144.783	1431.09
54-02002	180	NA	NA	1080
54-02016	31	NA	258.309 (U)	639.503
54-02023	100	NA	-13.132 (U)	316.607
54-02023	159	NA	NA	261.992
54-02024	40	NA	1067.43	405.96
54-02024	100	NA	736.998	394.561
54-02024	120	NA	2421.45	1645.87
54-02025	20	NA	15.457 (U)	232.296
54-02025	160	NA	NA	15130.1
54-02026	20	NA	227.429	325.028
54-02026	100	NA	60.256 (U)	222.977
54-02026	160	NA	NA	248.585
54-02027	20	NA	1185.83	211.724
54-02028	20	NA	216.755	275.147
54-02028	160	NA	NA	249.16
54-02089	31	NA	5045.93	1352.85
54-02089	46	NA	NA	1377.97
54-24238	64	NA	NA	1612.08
54-24240	53	NA	NA	378.636
54-24240	153	NA	1734.37	411.48
54-24241	73	NA	NA	609.182
54-24241	113	NA	713.786	253.141
54-24242	25	NA	523.42	626.759
54-24243	25	NA	678.684	3278.32
54-24243	75	NA	NA	542010
54-24243	125	NA	5560.36	36143.4
54-27641	32	3773.28	1033.9	530.666
54-27641	115	1754.44	NA	901.566
54-27642	75	162.639 (U)	2872.2	2603.18
54-27642	116	2562.98	8314.39	5560.34
54-27642	175	NA	NA	339.66
54-27643	30	1371.73	324.25 (U)	372.649
54-27643	74	2677.47	418.113	533.487
54-27643	117	623	985.217	697.983
54-27643	167	NA	NA	293.028
54-27643	275	1577.05	372.854 (U)	260.009

Note: Units are in pCi/L.

\* NA = Not analyzed.

**Table 5.3-1  
Comparison of Detected VOC Pore-Gas Concentrations to Screening Values at MDA L**

Location ID	Port Depth (ft)	Analyte	Result (µg/m <sup>3</sup> )	H <sup>c</sup> (µg/m <sup>3</sup> )	SL (µg/m <sup>3</sup> )	SV (µg/m <sup>3</sup> )
54-02001	40	Chloroform	2000	0.15	1.65	8.08
54-02001	40	Cyclohexane	6200	8.2	13000	0.0000582
54-02001	40	Dichlorodifluoromethane	5900	4.1	390	0.00369
54-02001	40	Dichloroethane[1,1-]	16000	0.23	1220	0.057
54-02001	40	Dichloroethane[1,2-]	40000	0.0401	5	200
54-02001	40	Dichloroethene[1,1-]	4800	1.1	5	0.873
54-02001	40	Methylene Chloride	20000	0.09	5	44.4
54-02001	40	Propanol[2-]	3500	89	na <sup>a</sup>	na
54-02001	40	Tetrachloroethene	65000	0.754	5	17.2
54-02001	40	Toluene	2400	0.272	750	0.0118
54-02001	40	Trichloro-1,2,2-trifluoroethane[1,1,2-]	17000	21.4	59000	0.0000135
54-02001	40	Trichloroethane[1,1,1-]	570000	0.705	60	13.5
54-02001	40	Trichloroethene	150000	0.422	5	71.1
54-02001	40	Trichlorofluoromethane	5200	4	1300	0.001
54-02001	80	Chloroform	2500	0.15	1.65	10.1
54-02001	80	Cyclohexane	7400	8.2	13000	0.0000694
54-02001	80	Dichlorodifluoromethane	4600	4.1	390	0.00288
54-02001	80	Dichloroethane[1,1-]	16000	0.23	1220	0.057
54-02001	80	Dichloroethane[1,2-]	38000	0.0401	5	190
54-02001	80	Dichloroethene[1,1-]	6400	1.1	5	1.16
54-02001	80	Methylene Chloride	25000	0.09	5	55.6
54-02001	80	Tetrachloroethene	66000	0.754	5	17.5
54-02001	80	Toluene	1900	0.272	750	0.00931
54-02001	80	Trichloro-1,2,2-trifluoroethane[1,1,2-]	14000	21.4	59000	0.0000111
54-02001	80	Trichloroethane[1,1,1-]	650000	0.705	60	15.4
54-02001	80	Trichloroethene	110000	0.422	5	52.1
54-02001	80	Trichlorofluoromethane	4700	4	1300	0.000904
54-02001	120	Chloroform	2400	0.15	1.65	9.7
54-02001	120	Cyclohexane	7200	8.2	13000	0.0000675
54-02001	120	Dichlorodifluoromethane	2800	4.1	390	0.00175
54-02001	120	Dichloroethane[1,1-]	13000	0.23	1220	0.0463
54-02001	120	Dichloroethane[1,2-]	28000	0.0401	5	140
54-02001	120	Dichloroethene[1,1-]	10000	1.1	5	1.82
54-02001	120	Dichloropropane[1,2-]	1800	0.11	5	3.27
54-02001	120	Methylene Chloride	20000	0.09	5	44.4
54-02001	120	Tetrachloroethene	26000	0.754	5	6.9

Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result ( $\mu\text{g}/\text{m}^3$ )	H <sup>-</sup> ( $\mu\text{g}/\text{m}^3$ )	SL ( $\mu\text{g}/\text{m}^3$ )	SV ( $\mu\text{g}/\text{m}^3$ )
54-02001	120	Toluene	2900	0.272	750	0.0142
54-02001	120	Trichloro-1,2,2-trifluoroethane[1,1,2-]	13000	21.4	59000	0.0000103
54-02001	120	Trichloroethane[1,1,1-]	680000	0.705	60	16.1
54-02001	120	Trichloroethene	100000	0.422	5	47.4
54-02001	120	Trichlorofluoromethane	3200	4	1300	0.000615
54-02001	140	Chloroform	3300	0.15	1.65	13.3
54-02001	140	Cyclohexane	8600	8.2	13000	0.0000807
54-02001	140	Dichlorodifluoromethane	3300	4.1	390	0.00206
54-02001	140	Dichloroethane[1,1-]	16000	0.23	1220	0.057
54-02001	140	Dichloroethane[1,2-]	36000	0.0401	5	180
54-02001	140	Dichloroethene[1,1-]	11000	1.1	5	2
54-02001	140	Dichloropropane[1,2-]	2500	0.11	5	4.55
54-02001	140	Methylene Chloride	26000	0.09	5	57.8
54-02001	140	Propanol[2-]	13000	89	na	na
54-02001	140	Tetrachloroethene	35000	0.754	5	9.28
54-02001	140	Toluene	1700(J)	0.272	750	0.00833
54-02001	140	Trichloro-1,2,2-trifluoroethane[1,1,2-]	16000	21.4	59000	0.0000127
54-02001	140	Trichloroethane[1,1,1-]	800000	0.705	60	18.9
54-02001	140	Trichloroethene	120000	0.422	5	56.9
54-02001	140	Trichlorofluoromethane	4200	4	1300	0.000808
54-02002	60	Carbon Tetrachloride	4000	1.25	5	0.64
54-02002	60	Chloroform	22000	0.15	1.65	88.9
54-02002	60	Cyclohexane	12000	8.2	13000	0.000113
54-02002	60	Dichlorodifluoromethane	1300	4.1	390	0.000813
54-02002	60	Dichloroethane[1,1-]	20000	0.23	1220	0.0713
54-02002	60	Dichloroethane[1,2-]	7400	0.0401	5	36.9
54-02002	60	Dichloroethene[1,1-]	280000	1.1	5	50.9
54-02002	60	Dichloropropane[1,2-]	49000	0.11	5	89.1
54-02002	60	Methylene Chloride	4500	0.09	5	10
54-02002	60	Tetrachloroethene	37000	0.754	5	9.81
54-02002	60	Trichloro-1,2,2-trifluoroethane[1,1,2-]	210000	21.4	59000	0.000166
54-02002	60	Trichloroethane[1,1,1-]	920000	0.705	60	21.7
54-02002	60	Trichloroethene	230000	0.422	5	109
54-02002	60	Trichlorofluoromethane	11000	4	1300	0.00212
54-02002	100	Benzene	1700	0.228	5	1.49
54-02002	100	Carbon Tetrachloride	5100	1.25	5	0.816
54-02002	100	Chlorobenzene	1500	0.15	100	0.1
54-02002	100	Chloroform	25000	0.15	1.65	101

Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result (µg/m <sup>3</sup> )	H <sup>-</sup> (µg/m <sup>3</sup> )	SL (µg/m <sup>3</sup> )	SV (µg/m <sup>3</sup> )
54-02002	100	Cyclohexane	13000	8.2	13000	0.000122
54-02002	100	Dichlorodifluoromethane	1700	4.1	390	0.00106
54-02002	100	Dichloroethane[1,1-]	17000	0.23	1220	0.0606
54-02002	100	Dichloroethane[1,2-]	17000	0.0401	5	84.8
54-02002	100	Dichloroethene[1,1-]	230000	1.1	5	41.8
54-02002	100	Dichloropropane[1,2-]	52000	0.11	5	94.5
54-02002	100	Ethanol	5700	200	na	na
54-02002	100	Methylene Chloride	43000	0.09	5	95.6
54-02002	100	Tetrachloroethene	38000	0.754	5	10.1
54-02002	100	Tetrahydrofuran	23000	0.002895	8.8	903
54-02002	100	Toluene	6600	0.272	750	0.0324
54-02002	100	Trichloro-1,2,2-trifluoroethane[1,1,2-]	220000	21.4	59000	0.000174
54-02002	100	Trichloroethane[1,1,1-]	930000	0.705	60	22
54-02002	100	Trichloroethene	240000	0.422	5	114
54-02002	100	Trichlorofluoromethane	18000	4	1300	0.00346
54-02002	100	Xylene[1,2-]	2800	0.213	10000	0.00131
54-02002	100	Xylene[1,3-]+Xylene[1,4-]	2800	0.3	620	0.0151
54-02002	120	Benzene	2100	0.228	5	1.84
54-02002	120	Carbon Tetrachloride	5300	1.25	5	0.848
54-02002	120	Chlorobenzene	1600	0.15	100	0.107
54-02002	120	Chloroform	25000	0.15	1.65	101
54-02002	120	Cyclohexane	12000	8.2	13000	0.000113
54-02002	120	Dichlorodifluoromethane	1800	4.1	390	0.00113
54-02002	120	Dichloroethane[1,1-]	15000	0.23	1220	0.0535
54-02002	120	Dichloroethane[1,2-]	18000	0.0401	5	89.8
54-02002	120	Dichloroethene[1,1-]	190000	1.1	5	34.5
54-02002	120	Dichloropropane[1,2-]	46000	0.11	5	83.6
54-02002	120	Ethanol	6400	200	na	na
54-02002	120	Hexane	790	5	420	0.000376
54-02002	120	Methylene Chloride	52000	0.09	5	116
54-02002	120	Tetrachloroethene	36000	0.754	5	9.55
54-02002	120	Tetrahydrofuran	7000	0.002895	8.8	275
54-02002	120	Toluene	5000	0.272	750	0.0245
54-02002	120	Trichloro-1,2,2-trifluoroethane[1,1,2-]	210000	21.4	59000	0.000166
54-02002	120	Trichloroethane[1,1,1-]	900000	0.705	60	21.3
54-02002	120	Trichloroethene	250000	0.422	5	118
54-02002	120	Trichlorofluoromethane	20000	4	1300	0.00385
54-02002	120	Xylene[1,2-]	2800	0.213	10000	0.00131

Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result (µg/m <sup>3</sup> )	H <sup>-</sup> (µg/m <sup>3</sup> )	SL (µg/m <sup>3</sup> )	SV (µg/m <sup>3</sup> )
54-02002	120	Xylene[1,3-]+Xylene[1,4-]	2000	0.3	620	0.0108
54-02002	180	Benzene	1900	0.228	5	1.67
54-02002	180	Carbon Tetrachloride	5100	1.25	5	0.816
54-02002	180	Chlorobenzene	1300	0.15	100	0.0867
54-02002	180	Chloroform	24000	0.15	1.65	97
54-02002	180	Cyclohexane	12000	8.2	13000	0.000113
54-02002	180	Dichlorodifluoromethane	1800	4.1	390	0.00113
54-02002	180	Dichloroethane[1,1-]	14000	0.23	1220	0.0499
54-02002	180	Dichloroethane[1,2-]	17000	0.0401	5	84.8
54-02002	180	Dichloroethene[1,1-]	190000	1.1	5	34.5
54-02002	180	Dichloropropane[1,2-]	42000	0.11	5	76.4
54-02002	180	Ethanol	5800	200	na	na
54-02002	180	Hexane	780	5	420	0.000371
54-02002	180	Methylene Chloride	49000	0.09	5	109
54-02002	180	Tetrachloroethene	31000	0.754	5	8.22
54-02002	180	Tetrahydrofuran	5400	0.002895	8.8	212
54-02002	180	Toluene	3800	0.272	750	0.0186
54-02002	180	Trichloro-1,2,2-trifluoroethane[1,1,2-]	200000	21.4	59000	0.000158
54-02002	180	Trichloroethane[1,1,1-]	820000	0.705	60	19.4
54-02002	180	Trichloroethene	220000	0.422	5	104
54-02002	180	Trichlorofluoromethane	20000	4	1300	0.00385
54-02002	180	Xylene[1,2-]	2100	0.213	10000	0.000986
54-02002	180	Xylene[1,3-]+Xylene[1,4-]	1100	0.3	620	0.00591
54-02016	31	Chloroform	12000	0.15	1.65	48.5
54-02016	31	Cyclohexane	14000	8.2	13000	0.000131
54-02016	31	Dichloroethane[1,1-]	20000	0.23	1220	0.0713
54-02016	31	Dichloroethane[1,2-]	71000	0.0401	5	354
54-02016	31	Dichloroethene[1,1-]	28000	1.1	5	5.09
54-02016	31	Dichloropropane[1,2-]	25000	0.11	5	45.5
54-02016	31	Methylene Chloride	2400	0.09	5	5.33
54-02016	31	Propanol[2-]	12000	89	na	na
54-02016	31	Tetrachloroethene	12000	0.754	5	3.18
54-02016	31	Trichloro-1,2,2-trifluoroethane[1,1,2-]	310000	21.4	59000	0.000246
54-02016	31	Trichloroethane[1,1,1-]	1200000	0.705	60	28.4
54-02016	31	Trichloroethene	160000	0.422	5	75.8
54-02016	31	Trichlorofluoromethane	9900	4	1300	0.0019
54-02016	82	Chloroform	5800	0.15	1.65	23.4
54-02016	82	Cyclohexane	9400	8.2	13000	0.0000882

Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result ( $\mu\text{g}/\text{m}^3$ )	H <sup>+</sup> ( $\mu\text{g}/\text{m}^3$ )	SL ( $\mu\text{g}/\text{m}^3$ )	SV ( $\mu\text{g}/\text{m}^3$ )
54-02016	82	Dichloroethane[1,1-]	11000	0.23	1220	0.0392
54-02016	82	Dichloroethane[1,2-]	4600	0.0401	5	22.9
54-02016	82	Dichloroethene[1,1-]	21000	1.1	5	3.82
54-02016	82	Dichloropropane[1,2-]	9200	0.11	5	16.7
54-02016	82	Propanol[2-]	23000	89	na	na
54-02016	82	Tetrachloroethene	51000	0.754	5	13.5
54-02016	82	Trichloro-1,2,2-trifluoroethane[1,1,2-]	240000	21.4	59000	0.00019
54-02016	82	Trichloroethane[1,1,1-]	870000	0.705	60	20.6
54-02016	82	Trichloroethene	110000	0.422	5	52.1
54-02016	82	Trichlorofluoromethane	7500	4	1300	0.00144
54-02021	20	Chloroform	270	0.15	1.65	1.09
54-02021	20	Cyclohexane	900	8.2	13000	0.00000844
54-02021	20	Dichlorodifluoromethane	300	4.1	390	0.000188
54-02021	20	Dichloroethane[1,1-]	1400	0.23	1220	0.00499
54-02021	20	Dichloroethane[1,2-]	1200	0.0401	5	5.99
54-02021	20	Dichloroethene[1,1-]	1800	1.1	5	0.327
54-02021	20	Tetrachloroethene	2400	0.754	5	0.637
54-02021	20	Trichloro-1,2,2-trifluoroethane[1,1,2-]	1800	21.4	59000	0.00000143
54-02021	20	Trichloroethane[1,1,1-]	85000	0.705	60	2.01
54-02021	20	Trichloroethene	14000	0.422	5	6.64
54-02021	20	Trichlorofluoromethane	430	4	1300	0.0000827
54-02021	100	Cyclohexane	1100	8.2	13000	0.0000103
54-02021	100	Dichloroethane[1,1-]	1700	0.23	1220	0.00606
54-02021	100	Dichloroethane[1,2-]	2700	0.0401	5	13.5
54-02021	100	Dichloroethene[1,1-]	2100	1.1	5	0.382
54-02021	100	Methylene Chloride	980	0.09	5	2.18
54-02021	100	Tetrachloroethene	2600	0.754	5	0.69
54-02021	100	Trichloro-1,2,2-trifluoroethane[1,1,2-]	2300	21.4	59000	0.00000182
54-02021	100	Trichloroethane[1,1,1-]	110000	0.705	60	2.6
54-02021	100	Trichloroethene	18000	0.422	5	8.53
54-02021	120	Chloroform	210	0.15	1.65	0.848
54-02021	120	Cyclohexane	660	8.2	13000	0.00000619
54-02021	120	Dichlorodifluoromethane	250	4.1	390	0.000156
54-02021	120	Dichloroethane[1,1-]	920	0.23	1220	0.00328
54-02021	120	Dichloroethane[1,2-]	1300	0.0401	5	6.48
54-02021	120	Dichloroethene[1,1-]	1300	1.1	5	0.236
54-02021	120	Methylene Chloride	640	0.09	5	1.42
54-02021	120	Tetrachloroethene	1300	0.754	5	0.345

Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result ( $\mu\text{g}/\text{m}^3$ )	H <sup>-</sup> ( $\mu\text{g}/\text{m}^3$ )	SL ( $\mu\text{g}/\text{m}^3$ )	SV ( $\mu\text{g}/\text{m}^3$ )
54-02021	120	Trichloro-1,2,2-trifluoroethane[1,1,2-]	1500	21.4	59000	0.00000119
54-02021	120	Trichloroethane[1,1,1-]	64000	0.705	60	1.51
54-02021	120	Trichloroethene	9900	0.422	5	4.69
54-02021	120	Trichlorofluoromethane	300	4	1300	0.0000577
54-02021	140	Chloroform	430	0.15	1.65	1.74
54-02021	140	Cyclohexane	1700	8.2	13000	0.0000159
54-02021	140	Dichlorodifluoromethane	460	4.1	390	0.000288
54-02021	140	Dichloroethane[1,1-]	1900	0.23	1220	0.00677
54-02021	140	Dichloroethane[1,2-]	1800	0.0401	5	8.98
54-02021	140	Dichloroethene[1,1-]	12000	1.1	5	2.18
54-02021	140	Methylene Chloride	1600	0.09	5	3.56
54-02021	140	Tetrachloroethene	2600	0.754	5	0.69
54-02021	140	Trichloro-1,2,2-trifluoroethane[1,1,2-]	3100	21.4	59000	0.00000246
54-02021	140	Trichloroethane[1,1,1-]	100000	0.705	60	2.36
54-02021	140	Trichloroethene	20000	0.422	5	9.48
54-02021	140	Trichlorofluoromethane	600	4	1300	0.000115
54-02022	40	Dichloroethane[1,1-]	7500	0.23	1220	0.0267
54-02022	40	Dichloroethane[1,2-]	7800	0.0401	5	38.9
54-02022	40	Dichloroethene[1,1-]	5700	1.1	5	1.04
54-02022	40	Tetrachloroethene	3700	0.754	5	0.981
54-02022	40	Toluene	2100	0.272	750	0.0103
54-02022	40	Trichloro-1,2,2-trifluoroethane[1,1,2-]	6700	21.4	59000	0.00000531
54-02022	40	Trichloroethane[1,1,1-]	350000	0.705	60	8.27
54-02022	40	Trichloroethene	39000	0.422	5	18.5
54-02022	80	Dichloroethane[1,1-]	8400	0.23	1220	0.0299
54-02022	80	Dichloroethane[1,2-]	10000	0.0401	5	49.9
54-02022	80	Dichloroethene[1,1-]	7000	1.1	5	1.27
54-02022	80	Methylene Chloride	3700	0.09	5	8.22
54-02022	80	Tetrachloroethene	4000	0.754	5	1.06
54-02022	80	Trichloro-1,2,2-trifluoroethane[1,1,2-]	7800	21.4	59000	0.00000618
54-02022	80	Trichloroethane[1,1,1-]	440000	0.705	60	10.4
54-02022	80	Trichloroethene	49000	0.422	5	23.2
54-02022	120	Dichlorodifluoromethane	2000	4.1	390	0.00125
54-02022	120	Dichloroethane[1,1-]	8700	0.23	1220	0.031
54-02022	120	Dichloroethane[1,2-]	9000	0.0401	5	44.9
54-02022	120	Dichloroethene[1,1-]	10000	1.1	5	1.82
54-02022	120	Methylene Chloride	4400	0.09	5	9.78
54-02022	120	Tetrachloroethene	3400	0.754	5	0.902



Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result ( $\mu\text{g}/\text{m}^3$ )	H <sup>-</sup> ( $\mu\text{g}/\text{m}^3$ )	SL ( $\mu\text{g}/\text{m}^3$ )	SV ( $\mu\text{g}/\text{m}^3$ )
54-02022	120	Toluene	1400	0.272	750	0.00686
54-02022	120	Trichloro-1,2,2-trifluoroethane[1,1,2-]	9000	21.4	59000	0.00000713
54-02022	120	Trichloroethane[1,1,1-]	500000	0.705	60	11.8
54-02022	120	Trichloroethene	56000	0.422	5	26.5
54-02022	120	Trichlorofluoromethane	2200	4	1300	0.000423
54-02022	140	Dichlorodifluoromethane	1900	4.1	390	0.00119
54-02022	140	Dichloroethane[1,1-]	6600	0.23	1220	0.0235
54-02022	140	Dichloroethane[1,2-]	4400	0.0401	5	21.9
54-02022	140	Dichloroethene[1,1-]	11000	1.1	5	2
54-02022	140	Methylene Chloride	6000	0.09	5	13.3
54-02022	140	Propanol[2-]	3500	89	na	na
54-02022	140	Tetrachloroethene	2800	0.754	5	0.743
54-02022	140	Toluene	1500	0.272	750	0.00735
54-02022	140	Trichloro-1,2,2-trifluoroethane[1,1,2-]	8400	21.4	59000	0.00000665
54-02022	140	Trichloroethane[1,1,1-]	400000	0.705	60	9.46
54-02022	140	Trichloroethene	48000	0.422	5	22.7
54-02022	140	Trichlorofluoromethane	2500	4	1300	0.000481
54-02023	40	Carbon Tetrachloride	280	1.25	5	0.0448
54-02023	40	Chloroform	1500	0.15	1.65	6.06
54-02023	40	Cyclohexane	710	8.2	13000	0.00000666
54-02023	40	Dichlorodifluoromethane	280	4.1	390	0.000175
54-02023	40	Dichloroethane[1,1-]	520	0.23	1220	0.00185
54-02023	40	Dichloroethane[1,2-]	78	0.0401	5	0.389
54-02023	40	Dichloroethene[1,1-]	6700	1.1	5	1.22
54-02023	40	Dichloropropane[1,2-]	420	0.11	5	0.764
54-02023	40	Methylene Chloride	61	0.09	5	0.136
54-02023	40	Tetrachloroethene	1600	0.754	5	0.424
54-02023	40	Trichloro-1,2,2-trifluoroethane[1,1,2-]	13000	21.4	59000	0.0000103
54-02023	40	Trichloroethane[1,1,1-]	53000	0.705	60	1.25
54-02023	40	Trichloroethene	13000	0.422	5	6.16
54-02023	40	Trichlorofluoromethane	2000	4	1300	0.000385
54-02023	100	Benzene	120	0.228	5	0.105
54-02023	100	Carbon Tetrachloride	520	1.25	5	0.0832
54-02023	100	Chloroform	2600	0.15	1.65	10.5
54-02023	100	Cyclohexane	1200	8.2	13000	0.0000113
54-02023	100	Dichlorodifluoromethane	510	4.1	390	0.000319
54-02023	100	Dichloroethane[1,1-]	850	0.23	1220	0.00303
54-02023	100	Dichloroethane[1,2-]	230	0.0401	5	1.15

Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result (µg/m <sup>3</sup> )	H <sup>-</sup> (µg/m <sup>3</sup> )	SL (µg/m <sup>3</sup> )	SV (µg/m <sup>3</sup> )
54-02023	100	Dichloroethene[1,1-]	11000	1.1	5	2
54-02023	100	Dichloropropane[1,2-]	660	0.11	5	1.2
54-02023	100	Methylene Chloride	660	0.09	5	1.47
54-02023	100	Tetrachloroethene	2600	0.754	5	0.69
54-02023	100	Toluene	100	0.272	750	0.00049
54-02023	100	Trichloro-1,2,2-trifluoroethane[1,1,2-]	23000	21.4	59000	0.0000182
54-02023	100	Trichloroethane[1,1,1-]	89000	0.705	60	2.1
54-02023	100	Trichloroethene	24000	0.422	5	11.4
54-02023	100	Trichlorofluoromethane	3300	4	1300	0.000635
54-02023	120	Benzene	150	0.228	5	0.132
54-02023	120	Carbon Tetrachloride	620	1.25	5	0.0992
54-02023	120	Chloroform	2800	0.15	1.65	11.3
54-02023	120	Cyclohexane	1300	8.2	13000	0.0000122
54-02023	120	Dichlorodifluoromethane	590	4.1	390	0.000369
54-02023	120	Dichloroethane[1,1-]	900	0.23	1220	0.00321
54-02023	120	Dichloroethane[1,2-]	200	0.0401	5	0.998
54-02023	120	Dichloroethene[1,1-]	13000	1.1	5	2.36
54-02023	120	Dichloropropane[1,2-]	630	0.11	5	1.15
54-02023	120	Methylene Chloride	450	0.09	5	1
54-02023	120	Tetrachloroethene	2800	0.754	5	0.743
54-02023	120	Trichloro-1,2,2-trifluoroethane[1,1,2-]	26000	21.4	59000	0.0000206
54-02023	120	Trichloroethane[1,1,1-]	95000	0.705	60	2.25
54-02023	120	Trichloroethene	26000	0.422	5	12.3
54-02023	120	Trichlorofluoromethane	3900	4	1300	0.00075
54-02023	159	Benzene	210	0.228	5	0.184
54-02023	159	Carbon Tetrachloride	840	1.25	5	0.134
54-02023	159	Chloroform	2200	0.15	1.65	8.89
54-02023	159	Cyclohexane	1200	8.2	13000	0.0000113
54-02023	159	Dichlorodifluoromethane	720	4.1	390	0.00045
54-02023	159	Dichloroethane[1,1-]	680	0.23	1220	0.00242
54-02023	159	Dichloroethene[1,1-]	12000	1.1	5	2.18
54-02023	159	Dichloropropane[1,2-]	310	0.11	5	0.564
54-02023	159	Methylene Chloride	380	0.09	5	0.844
54-02023	159	Tetrachloroethene	2300	0.754	5	0.61
54-02023	159	Toluene	110	0.272	750	0.000539
54-02023	159	Trichloro-1,2,2-trifluoroethane[1,1,2-]	29000	21.4	59000	0.000023
54-02023	159	Trichloroethane[1,1,1-]	86000	0.705	60	2.03
54-02023	159	Trichloroethene	24000	0.422	5	11.4

Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result ( $\mu\text{g}/\text{m}^3$ )	H <sup>-</sup> ( $\mu\text{g}/\text{m}^3$ )	SL ( $\mu\text{g}/\text{m}^3$ )	SV ( $\mu\text{g}/\text{m}^3$ )
54-02023	159	Trichlorofluoromethane	3900	4	1300	0.00075
54-02024	40	Carbon Tetrachloride	410	1.25	5	0.0656
54-02024	40	Chloroform	2300	0.15	1.65	9.29
54-02024	40	Cyclohexane	960	8.2	13000	0.0000901
54-02024	40	Dichlorodifluoromethane	250	4.1	390	0.000156
54-02024	40	Dichloroethane[1,1-]	810	0.23	1220	0.00289
54-02024	40	Dichloroethane[1,2-]	250	0.0401	5	1.25
54-02024	40	Dichloroethene[1,1-]	7600	1.1	5	1.38
54-02024	40	Dichloropropane[1,2-]	1400	0.11	5	2.55
54-02024	40	Tetrachloroethene	2600	0.754	5	0.69
54-02024	40	Trichloro-1,2,2-trifluoroethane[1,1,2-]	15000	21.4	59000	0.0000119
54-02024	40	Trichloroethane[1,1,1-]	72000	0.705	60	1.7
54-02024	40	Trichloroethene	17000	0.422	5	8.06
54-02024	40	Trichlorofluoromethane	2500	4	1300	0.000481
54-02024	100	Benzene	200	0.228	5	0.175
54-02024	100	Carbon Tetrachloride	820	1.25	5	0.131
54-02024	100	Chloroform	4000	0.15	1.65	16.2
54-02024	100	Cyclohexane	1700	8.2	13000	0.0000159
54-02024	100	Dichlorodifluoromethane	530	4.1	390	0.000331
54-02024	100	Dichloroethane[1,1-]	1300	0.23	1220	0.00463
54-02024	100	Dichloroethane[1,2-]	790	0.0401	5	3.94
54-02024	100	Dichloroethene[1,1-]	16000	1.1	5	2.91
54-02024	100	Dichloropropane[1,2-]	2300	0.11	5	4.18
54-02024	100	Methylene Chloride	1700	0.09	5	3.78
54-02024	100	Tetrachloroethene	4400	0.754	5	1.17
54-02024	100	Trichloro-1,2,2-trifluoroethane[1,1,2-]	30000	21.4	59000	0.0000238
54-02024	100	Trichloroethane[1,1,1-]	120000	0.705	60	2.84
54-02024	100	Trichloroethene	31000	0.422	5	14.7
54-02024	100	Trichlorofluoromethane	4900	4	1300	0.000942
54-02024	140	Benzene	420	0.228	5	0.368
54-02024	140	Carbon Tetrachloride	1200	1.25	5	0.192
54-02024	140	Chloroform	5600	0.15	1.65	22.6
54-02024	140	Cyclohexane	2200	8.2	13000	0.0000206
54-02024	140	Dichlorodifluoromethane	840	4.1	390	0.000525
54-02024	140	Dichloroethane[1,1-]	1600	0.23	1220	0.0057
54-02024	140	Dichloroethane[1,2-]	1100	0.0401	5	5.49
54-02024	140	Dichloroethene[1,1-]	19000	1.1	5	3.45
54-02024	140	Dichloropropane[1,2-]	2500	0.11	5	4.55

Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result ( $\mu\text{g}/\text{m}^3$ )	H <sup>-</sup> ( $\mu\text{g}/\text{m}^3$ )	SL ( $\mu\text{g}/\text{m}^3$ )	SV ( $\mu\text{g}/\text{m}^3$ )
54-02024	140	Methylene Chloride	5100	0.09	5	11.3
54-02024	140	Tetrachloroethene	5600	0.754	5	1.49
54-02024	140	Trichloro-1,2,2-trifluoroethane[1,1,2-]	44000	21.4	59000	0.0000348
54-02024	140	Trichloroethane[1,1,1-]	160000	0.705	60	3.78
54-02024	140	Trichloroethene	42000	0.422	5	19.9
54-02024	140	Trichlorofluoromethane	7000	4	1300	0.00135
54-02024	160	Benzene	480	0.228	5	0.421
54-02024	160	Carbon Tetrachloride	1200	1.25	5	0.192
54-02024	160	Chloroform	5600	0.15	1.65	22.6
54-02024	160	Cyclohexane	2200	8.2	13000	0.0000206
54-02024	160	Dichlorodifluoromethane	880	4.1	390	0.00055
54-02024	160	Dichloroethane[1,1-]	1500	0.23	1220	0.00535
54-02024	160	Dichloroethane[1,2-]	1100	0.0401	5	5.49
54-02024	160	Dichloroethene[1,1-]	19000	1.1	5	3.45
54-02024	160	Dichloropropane[1,2-]	2300	0.11	5	4.18
54-02024	160	Methylene Chloride	6600	0.09	5	14.7
54-02024	160	Tetrachloroethene	5400	0.754	5	1.43
54-02024	160	Trichloro-1,2,2-trifluoroethane[1,1,2-]	46000	21.4	59000	0.0000364
54-02024	160	Trichloroethane[1,1,1-]	160000	0.705	60	3.78
54-02024	160	Trichloroethene	42000	0.422	5	19.9
54-02024	160	Trichlorofluoromethane	7200	4	1300	0.00138
54-02025	20	Acetone	1100(J)	0.0016	5500	0.125
54-02025	20	Carbon Disulfide	670	1.2	1000	0.000558
54-02025	20	Chloroform	4000	0.15	1.65	16.2
54-02025	20	Dichloroethane[1,1-]	2000	0.23	1220	0.00713
54-02025	20	Dichloroethane[1,2-]	560	0.0401	5	2.79
54-02025	20	Dichloroethene[1,1-]	9000	1.1	5	1.64
54-02025	20	Dichloropropane[1,2-]	3600	0.11	5	6.55
54-02025	20	Methylene Chloride	410	0.09	5	0.911
54-02025	20	Propanol[2-]	3600	89	na	na
54-02025	20	Tetrachloroethene	82000	0.754	5	21.8
54-02025	20	Toluene	660	0.272	750	0.00324
54-02025	20	Trichloro-1,2,2-trifluoroethane[1,1,2-]	36000	21.4	59000	0.0000285
54-02025	20	Trichloroethane[1,1,1-]	150000	0.705	60	3.55
54-02025	20	Trichloroethene	16000	0.422	5	7.58
54-02025	20	Trichlorofluoromethane	5000	4	1300	0.000962
54-02025	100	Carbon Disulfide	630	1.2	1000	0.000525
54-02025	100	Chloroform	7700	0.15	1.65	31.1

Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result ( $\mu\text{g}/\text{m}^3$ )	H <sup>-</sup> ( $\mu\text{g}/\text{m}^3$ )	SL ( $\mu\text{g}/\text{m}^3$ )	SV ( $\mu\text{g}/\text{m}^3$ )
54-02025	100	Dichlorodifluoromethane	980	4.1	390	0.000613
54-02025	100	Dichloroethane[1,1-]	3300	0.23	1220	0.0118
54-02025	100	Dichloroethane[1,2-]	2900	0.0401	5	14.5
54-02025	100	Dichloroethene[1,1-]	18000	1.1	5	3.27
54-02025	100	Dichloropropane[1,2-]	5800	0.11	5	10.5
54-02025	100	Methylene Chloride	8900	0.09	5	19.8
54-02025	100	Propanol[2-]	1900	89	na	na
54-02025	100	Tetrachloroethene	56000	0.754	5	14.9
54-02025	100	Tetrahydrofuran	620	0.002895	8.8	24.3
54-02025	100	Trichloro-1,2,2-trifluoroethane[1,1,2-]	72000	21.4	59000	0.000057
54-02025	100	Trichloroethane[1,1,1-]	230000	0.705	60	5.44
54-02025	100	Trichloroethene	26000	0.422	5	12.3
54-02025	100	Trichlorofluoromethane	12000	4	1300	0.00231
54-02025	160	Benzene	690	0.228	5	0.605
54-02025	160	Carbon Disulfide	640	1.2	1000	0.000533
54-02025	160	Carbon Tetrachloride	1300	1.25	5	0.208
54-02025	160	Chloroform	9200	0.15	1.65	37.2
54-02025	160	Dichlorodifluoromethane	1300	4.1	390	0.000813
54-02025	160	Dichloroethane[1,1-]	3300	0.23	1220	0.0118
54-02025	160	Dichloroethane[1,2-]	2900	0.0401	5	14.5
54-02025	160	Dichloroethene[1,1-]	27000	1.1	5	4.91
54-02025	160	Dichloropropane[1,2-]	5400	0.11	5	9.82
54-02025	160	Methylene Chloride	21000	0.09	5	46.7
54-02025	160	Tetrachloroethene	45000	0.754	5	11.9
54-02025	160	Toluene	1000	0.272	750	0.0049
54-02025	160	Trichloro-1,2,2-trifluoroethane[1,1,2-]	93000	21.4	59000	0.0000737
54-02025	160	Trichloroethane[1,1,1-]	240000	0.705	60	5.67
54-02025	160	Trichloroethene	32000	0.422	5	15.2
54-02025	160	Trichlorofluoromethane	15000	4	1300	0.00288
54-02026	20	Chloroform	200	0.15	1.65	0.808
54-02026	20	Cyclohexane	67	8.2	13000	0.00000629
54-02026	20	Dichlorodifluoromethane	40	4.1	390	0.000025
54-02026	20	Dichloroethane[1,1-]	38	0.23	1220	0.000135
54-02026	20	Dichloroethene[1,1-]	790	1.1	5	0.144
54-02026	20	Tetrachloroethene	220	0.754	5	0.0584
54-02026	20	Trichloro-1,2,2-trifluoroethane[1,1,2-]	1700	21.4	59000	0.00000135
54-02026	20	Trichloroethane[1,1,1-]	5000	0.705	60	0.118
54-02026	20	Trichloroethene	1400	0.422	5	0.664

Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result ( $\mu\text{g}/\text{m}^3$ )	H <sup>-</sup> ( $\mu\text{g}/\text{m}^3$ )	SL ( $\mu\text{g}/\text{m}^3$ )	SV ( $\mu\text{g}/\text{m}^3$ )
54-02026	20	Trichlorofluoromethane	220	4	1300	0.0000423
54-02026	100	Carbon Tetrachloride	100	1.25	5	0.016
54-02026	100	Chloroform	430	0.15	1.65	1.74
54-02026	100	Cyclohexane	140	8.2	13000	0.00000131
54-02026	100	Dichlorodifluoromethane	110	4.1	390	0.0000688
54-02026	100	Dichloroethane[1,1-]	84	0.23	1220	0.000299
54-02026	100	Dichloroethene[1,1-]	1700	1.1	5	0.309
54-02026	100	Dichloropropane[1,2-]	57	0.11	5	0.104
54-02026	100	Methylene Chloride	33	0.09	5	0.0733
54-02026	100	Tetrachloroethene	470	0.754	5	0.125
54-02026	100	Trichloro-1,2,2-trifluoroethane[1,1,2-]	4200	21.4	59000	0.00000333
54-02026	100	Trichloroethane[1,1,1-]	11000	0.705	60	0.26
54-02026	100	Trichloroethene	3100	0.422	5	1.47
54-02026	100	Trichlorofluoromethane	540	4	1300	0.000104
54-02026	160	Carbon Tetrachloride	170	1.25	5	0.0272
54-02026	160	Chloroform	500	0.15	1.65	2.02
54-02026	160	Cyclohexane	200	8.2	13000	0.00000188
54-02026	160	Dichlorodifluoromethane	190	4.1	390	0.000119
54-02026	160	Dichloroethane[1,1-]	98	0.23	1220	0.000349
54-02026	160	Dichloroethene[1,1-]	2400	1.1	5	0.436
54-02026	160	Methylene Chloride	190	0.09	5	0.422
54-02026	160	Tetrachloroethene	630	0.754	5	0.167
54-02026	160	Trichloro-1,2,2-trifluoroethane[1,1,2-]	6700	21.4	59000	0.00000531
54-02026	160	Trichloroethane[1,1,1-]	14000	0.705	60	0.331
54-02026	160	Trichloroethene	4300	0.422	5	2.04
54-02026	160	Trichlorofluoromethane	810	4	1300	0.000156
54-02027	20	Carbon Tetrachloride	76	1.25	5	0.0122
54-02027	20	Chloroform	960	0.15	1.65	3.88
54-02027	20	Cyclohexane	280	8.2	13000	0.00000263
54-02027	20	Dichlorodifluoromethane	120	4.1	390	0.000075
54-02027	20	Dichloroethane[1,1-]	210	0.23	1220	0.000748
54-02027	20	Dichloroethene[1,1-]	4000	1.1	5	0.727
54-02027	20	Dichloropropane[1,2-]	340	0.11	5	0.618
54-02027	20	Methylene Chloride	31	0.09	5	0.0689
54-02027	20	Tetrachloroethene	940	0.754	5	0.249
54-02027	20	Trichloro-1,2,2-trifluoroethane[1,1,2-]	6400	21.4	59000	0.00000507
54-02027	20	Trichloroethane[1,1,1-]	22000	0.705	60	0.52
54-02027	20	Trichloroethene	5600	0.422	5	2.65

Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result ( $\mu\text{g}/\text{m}^3$ )	H <sup>-</sup> ( $\mu\text{g}/\text{m}^3$ )	SL ( $\mu\text{g}/\text{m}^3$ )	SV ( $\mu\text{g}/\text{m}^3$ )
54-02027	20	Trichlorofluoromethane	880	4	1300	0.000169
54-02027	100	Benzene	110	0.228	5	0.0965
54-02027	100	Carbon Tetrachloride	410	1.25	5	0.0656
54-02027	100	Chloroform	2800	0.15	1.65	11.3
54-02027	100	Cyclohexane	960	8.2	13000	0.00000901
54-02027	100	Dichlorodifluoromethane	360	4.1	390	0.000225
54-02027	100	Dichloroethane[1,1-]	610	0.23	1220	0.00217
54-02027	100	Dichloroethane[1,2-]	220	0.0401	5	1.1
54-02027	100	Dichloroethene[1,1-]	7600	1.1	5	1.38
54-02027	100	Dichloropropane[1,2-]	1100	0.11	5	2
54-02027	100	Methylene Chloride	800	0.09	5	1.78
54-02027	100	Tetrachloroethene	2900	0.754	5	0.769
54-02027	100	Trichloro-1,2,2-trifluoroethane[1,1,2-]	21000	21.4	59000	0.0000166
54-02027	100	Trichloroethane[1,1,1-]	73000	0.705	60	1.73
54-02027	100	Trichloroethene	17000	0.422	5	8.06
54-02027	100	Trichlorofluoromethane	2600	4	1300	0.0005
54-02027	200	Benzene	300	0.228	5	0.263
54-02027	200	Carbon Tetrachloride	810	1.25	5	0.13
54-02027	200	Chloroform	2600	0.15	1.65	10.5
54-02027	200	Cyclohexane	950	8.2	13000	0.00000891
54-02027	200	Dichlorodifluoromethane	630	4.1	390	0.000394
54-02027	200	Dichloroethane[1,1-]	490	0.23	1220	0.00175
54-02027	200	Dichloroethane[1,2-]	120	0.0401	5	0.599
54-02027	200	Dichloroethene[1,1-]	10000	1.1	5	1.82
54-02027	200	Dichloropropane[1,2-]	400	0.11	5	0.727
54-02027	200	Methylene Chloride	3000	0.09	5	6.67
54-02027	200	Tetrachloroethene	2900	0.754	5	0.769
54-02027	200	Toluene	790	0.272	750	0.00387
54-02027	200	Trichloro-1,2,2-trifluoroethane[1,1,2-]	27000	21.4	59000	0.0000214
54-02027	200	Trichloroethane[1,1,1-]	69000	0.705	60	1.63
54-02027	200	Trichloroethene	19000	0.422	5	9
54-02027	200	Trichlorofluoromethane	3000	4	1300	0.000577
54-02028	20	Carbon Tetrachloride	160	1.25	5	0.0256
54-02028	20	Chloroform	220	0.15	1.65	0.889
54-02028	20	Cyclohexane	130	8.2	13000	0.00000122
54-02028	20	Dichlorodifluoromethane	200	4.1	390	0.000125
54-02028	20	Dichloroethane[1,1-]	56	0.23	1220	0.0002
54-02028	20	Dichloroethene[1,1-]	2000	1.1	5	0.364

Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result ( $\mu\text{g}/\text{m}^3$ )	H <sup>-</sup> ( $\mu\text{g}/\text{m}^3$ )	SL ( $\mu\text{g}/\text{m}^3$ )	SV ( $\mu\text{g}/\text{m}^3$ )
54-02028	20	Methylene Chloride	120	0.09	5	0.267
54-02028	20	Tetrachloroethene	350	0.754	5	0.0928
54-02028	20	Trichloro-1,2,2-trifluoroethane[1,1,2-]	5500	21.4	59000	0.00000436
54-02028	20	Trichloroethane[1,1,1-]	9300	0.705	60	0.22
54-02028	20	Trichloroethene	3000	0.422	5	1.42
54-02028	20	Trichlorofluoromethane	700	4	1300	0.000135
54-02028	100	Carbon Tetrachloride	99	1.25	5	0.0158
54-02028	100	Chloroform	480	0.15	1.65	1.94
54-02028	100	Cyclohexane	190	8.2	13000	0.00000178
54-02028	100	Dichlorodifluoromethane	110	4.1	390	0.0000688
54-02028	100	Dichloroethane[1,1-]	130	0.23	1220	0.000463
54-02028	100	Dichloroethene[1,1-]	2100	1.1	5	0.382
54-02028	100	Dichloropropane[1,2-]	96	0.11	5	0.175
54-02028	100	Methylene Chloride	95	0.09	5	0.211
54-02028	100	Tetrachloroethene	500	0.754	5	0.133
54-02028	100	Trichloro-1,2,2-trifluoroethane[1,1,2-]	4500	21.4	59000	0.00000356
54-02028	100	Trichloroethane[1,1,1-]	14000	0.705	60	0.331
54-02028	100	Trichloroethene	4000	0.422	5	1.9
54-02028	100	Trichlorofluoromethane	620	4	1300	0.000119
54-02028	160	Carbon Tetrachloride	120	1.25	5	0.0192
54-02028	160	Chloroform	340	0.15	1.65	1.37
54-02028	160	Cyclohexane	140	8.2	13000	0.00000131
54-02028	160	Dichlorodifluoromethane	130	4.1	390	0.0000813
54-02028	160	Dichloroethane[1,1-]	86	0.23	1220	0.000306
54-02028	160	Dichloroethene[1,1-]	2200	1.1	5	0.4
54-02028	160	Methylene Chloride	180	0.09	5	0.4
54-02028	160	Tetrachloroethene	390	0.754	5	0.103
54-02028	160	Trichloro-1,2,2-trifluoroethane[1,1,2-]	4600	21.4	59000	0.00000364
54-02028	160	Trichloroethane[1,1,1-]	10000	0.705	60	0.236
54-02028	160	Trichloroethene	3400	0.422	5	1.61
54-02028	160	Trichlorofluoromethane	600	4	1300	0.000115
54-02031	20	Chloroform	540	0.15	1.65	2.18
54-02031	20	Cyclohexane	880	8.2	13000	0.00000826
54-02031	20	Dichlorodifluoromethane	250	4.1	390	0.000156
54-02031	20	Dichloroethane[1,1-]	900	0.23	1220	0.00321
54-02031	20	Dichloroethane[1,2-]	200	0.0401	5	0.998
54-02031	20	Dichloroethene[1,1-]	7200	1.1	5	1.31
54-02031	20	Tetrachloroethene	2400	0.754	5	0.637



Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result ( $\mu\text{g}/\text{m}^3$ )	H <sup>-</sup> ( $\mu\text{g}/\text{m}^3$ )	SL ( $\mu\text{g}/\text{m}^3$ )	SV ( $\mu\text{g}/\text{m}^3$ )
54-02031	20	Trichloro-1,2,2-trifluoroethane[1,1,2-]	4000	21.4	59000	0.00000317
54-02031	20	Trichloroethane[1,1,1-]	54000	0.705	60	1.28
54-02031	20	Trichloroethene	12000	0.422	5	5.69
54-02031	20	Trichlorofluoromethane	550	4	1300	0.000106
54-02031	100	Chloroform	1300	0.15	1.65	5.25
54-02031	100	Cyclohexane	2400	8.2	13000	0.0000225
54-02031	100	Dichlorodifluoromethane	740	4.1	390	0.000463
54-02031	100	Dichloroethane[1,1-]	2300	0.23	1220	0.0082
54-02031	100	Dichloroethane[1,2-]	1300	0.0401	5	6.48
54-02031	100	Dichloroethene[1,1-]	21000	1.1	5	3.82
54-02031	100	Methylene Chloride	1000	0.09	5	2.22
54-02031	100	Tetrachloroethene	6500	0.754	5	1.72
54-02031	100	Trichloro-1,2,2-trifluoroethane[1,1,2-]	14000	21.4	59000	0.0000111
54-02031	100	Trichloroethane[1,1,1-]	140000	0.705	60	3.31
54-02031	100	Trichloroethene	34000	0.422	5	16.1
54-02031	100	Trichlorofluoromethane	1700	4	1300	0.000327
54-02031	160	Chloroform	1100	0.15	1.65	4.44
54-02031	160	Cyclohexane	2000	8.2	13000	0.0000188
54-02031	160	Dichlorodifluoromethane	770	4.1	390	0.000482
54-02031	160	Dichloroethane[1,1-]	1700	0.23	1220	0.00606
54-02031	160	Dichloroethane[1,2-]	800	0.0401	5	3.99
54-02031	160	Dichloroethene[1,1-]	18000	1.1	5	3.27
54-02031	160	Methylene Chloride	1200	0.09	5	2.67
54-02031	160	Tetrachloroethene	5400	0.754	5	1.43
54-02031	160	Trichloro-1,2,2-trifluoroethane[1,1,2-]	14000	21.4	59000	0.0000111
54-02031	160	Trichloroethane[1,1,1-]	110000	0.705	60	2.6
54-02031	160	Trichloroethene	30000	0.422	5	14.2
54-02031	160	Trichlorofluoromethane	1800	4	1300	0.000346
54-02031	260	Carbon Disulfide	110	1.2	1000	0.0000917
54-02031	260	Carbon Tetrachloride	160	1.25	5	0.0256
54-02031	260	Chloroform	210	0.15	1.65	0.848
54-02031	260	Cyclohexane	430	8.2	13000	0.00000403
54-02031	260	Dichlorodifluoromethane	260	4.1	390	0.000163
54-02031	260	Dichloroethane[1,1-]	290	0.23	1220	0.00103
54-02031	260	Dichloroethene[1,1-]	3800	1.1	5	0.691
54-02031	260	Methylene Chloride	260	0.09	5	0.578
54-02031	260	Tetrachloroethene	1300	0.754	5	0.345
54-02031	260	Trichloro-1,2,2-trifluoroethane[1,1,2-]	4800	21.4	59000	0.0000038

Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result ( $\mu\text{g}/\text{m}^3$ )	H <sup>+</sup> ( $\mu\text{g}/\text{m}^3$ )	SL ( $\mu\text{g}/\text{m}^3$ )	SV ( $\mu\text{g}/\text{m}^3$ )
54-02031	260	Trichloroethane[1,1,1-]	24000	0.705	60	0.567
54-02031	260	Trichloroethene	6600	0.422	5	3.13
54-02031	260	Trichlorofluoromethane	560	4	1300	0.000108
54-02034	20	Chloroform	83	0.15	1.65	0.335
54-02034	20	Cyclohexane	380	8.2	13000	0.00000356
54-02034	20	Dichlorodifluoromethane	120	4.1	390	0.000075
54-02034	20	Dichloroethane[1,1-]	240	0.23	1220	0.000855
54-02034	20	Dichloroethene[1,1-]	2200	1.1	5	0.4
54-02034	20	Tetrachloroethene	340	0.754	5	0.0902
54-02034	20	Trichloro-1,2,2-trifluoroethane[1,1,2-]	440	21.4	59000	0.000000348
54-02034	20	Trichloroethane[1,1,1-]	24000	0.705	60	0.567
54-02034	20	Trichloroethene	3500	0.422	5	1.66
54-02034	20	Trichlorofluoromethane	130	4	1300	0.000025
54-02034	60	Chloroform	100	0.15	1.65	0.404
54-02034	60	Cyclohexane	510	8.2	13000	0.00000478
54-02034	60	Dichlorodifluoromethane	160	4.1	390	0.0001
54-02034	60	Dichloroethane[1,1-]	410	0.23	1220	0.00146
54-02034	60	Dichloroethane[1,2-]	140	0.0401	5	0.698
54-02034	60	Dichloroethene[1,1-]	3000	1.1	5	0.545
54-02034	60	Methylene Chloride	93	0.09	5	0.207
54-02034	60	Tetrachloroethene	420	0.754	5	0.111
54-02034	60	Trichloro-1,2,2-trifluoroethane[1,1,2-]	600	21.4	59000	0.000000475
54-02034	60	Trichloroethane[1,1,1-]	32000	0.705	60	0.757
54-02034	60	Trichloroethene	5100	0.422	5	2.42
54-02034	60	Trichlorofluoromethane	180	4	1300	0.0000346
54-02034	160	Cyclohexane	380	8.2	13000	0.00000356
54-02034	160	Dichlorodifluoromethane	240	4.1	390	0.00015
54-02034	160	Dichloroethane[1,1-]	240	0.23	1220	0.000855
54-02034	160	Dichloroethene[1,1-]	2600	1.1	5	0.473
54-02034	160	Methylene Chloride	130	0.09	5	0.289
54-02034	160	Tetrachloroethene	260	0.754	5	0.069
54-02034	160	Trichloro-1,2,2-trifluoroethane[1,1,2-]	830	21.4	59000	0.000000657
54-02034	160	Trichloroethane[1,1,1-]	21000	0.705	60	0.496
54-02034	160	Trichloroethene	3800	0.422	5	1.8
54-02034	160	Trichlorofluoromethane	300	4	1300	0.0000577
54-02034	260	Acetone	24	0.0016	5500	0.00273
54-02034	260	Benzene	5.2	0.228	5	0.00456
54-02034	260	Butanone[2-]	4	0.0011	7100	0.000512

Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result (µg/m <sup>3</sup> )	H <sup>-</sup> (µg/m <sup>3</sup> )	SL (µg/m <sup>3</sup> )	SV (µg/m <sup>3</sup> )
54-02034	260	Carbon Tetrachloride	12	1.25	5	0.00192
54-02034	260	Cyclohexane	31	8.2	13000	0.00000291
54-02034	260	Dichlorodifluoromethane	65	4.1	390	0.0000407
54-02034	260	Dichloroethane[1,1-]	4.2	0.23	1220	0.000015
54-02034	260	Dichloroethene[1,1-]	220	1.1	5	0.04
54-02034	260	Propylene	7.1	na	na	na
54-02034	260	Tetrachloroethene	17	0.754	5	0.00451
54-02034	260	Toluene	6.6	0.272	750	0.0000324
54-02034	260	Trichloro-1,2,2-trifluoroethane[1,1,2-]	200	21.4	59000	0.00000158
54-02034	260	Trichloroethane[1,1,1-]	1400	0.705	60	0.0331
54-02034	260	Trichloroethene	69	0.422	5	0.0327
54-02034	260	Trichlorofluoromethane	120	4	1300	0.0000231
54-02034	300	Cyclohexane	4.3	8.2	13000	0.000000403
54-02034	300	Dichlorodifluoromethane	23	4.1	390	0.0000144
54-02034	300	Dichloroethene[1,1-]	47	1.1	5	0.00855
54-02034	300	Trichloro-1,2,2-trifluoroethane[1,1,2-]	62	21.4	59000	0.000000491
54-02034	300	Trichloroethane[1,1,1-]	180	0.705	60	0.00426
54-02034	300	Trichloroethene	5.7	0.422	5	0.0027
54-02034	300	Trichlorofluoromethane	48	4	1300	0.00000923
54-02089	31	Acetone	12000	0.0016	5500	1.36
54-02089	31	Chloroform	30000	0.15	1.65	121
54-02089	31	Cyclohexane	34000	8.2	13000	0.000319
54-02089	31	Dichloroethane[1,1-]	63000	0.23	1220	0.225
54-02089	31	Dichloroethane[1,2-]	100000	0.0401	5	499
54-02089	31	Dichloroethene[1,1-]	38000	1.1	5	6.91
54-02089	31	Dichloropropane[1,2-]	150000	0.11	5	273
54-02089	31	Tetrachloroethene	26000	0.754	5	6.9
54-02089	31	Toluene	15000	0.272	750	0.0735
54-02089	31	Trichloro-1,2,2-trifluoroethane[1,1,2-]	580000	21.4	59000	0.000459
54-02089	31	Trichloroethane[1,1,1-]	2000000	0.705	60	47.3
54-02089	31	Trichloroethene	600000	0.422	5	284
54-02089	31	Trichlorofluoromethane	21000	4	1300	0.00404
54-02089	46	Chloroform	48000	0.15	1.65	194
54-02089	46	Cyclohexane	43000	8.2	13000	0.000403
54-02089	46	Dichloroethane[1,1-]	80000	0.23	1220	0.285
54-02089	46	Dichloroethane[1,2-]	61000	0.0401	5	304
54-02089	46	Dichloroethene[1,1-]	49000	1.1	5	8.91
54-02089	46	Dichloropropane[1,2-]	310000	0.11	5	564

Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result ( $\mu\text{g}/\text{m}^3$ )	H <sup>-</sup> ( $\mu\text{g}/\text{m}^3$ )	SL ( $\mu\text{g}/\text{m}^3$ )	SV ( $\mu\text{g}/\text{m}^3$ )
54-02089	46	Tetrachloroethene	67000	0.754	5	17.8
54-02089	46	Trichloro-1,2,2-trifluoroethane[1,1,2-]	760000	21.4	59000	0.000602
54-02089	46	Trichloroethane[1,1,1-]	3100000	0.705	60	73.3
54-02089	46	Trichloroethene	950000	0.422	5	450
54-02089	46	Trichlorofluoromethane	28000	4	1300	0.00538
54-24238	64	Chloroform	33000	0.15	1.65	133
54-24238	64	Dichloroethane[1,1-]	43000	0.23	1220	0.153
54-24238	64	Dichloroethane[1,2-]	71000	0.0401	5	354
54-24238	64	Dichloroethene[1,1-]	41000	1.1	5	7.45
54-24238	64	Dichloropropane[1,2-]	200000	0.11	5	364
54-24238	64	Methylene Chloride	340000	0.09	5	756
54-24238	64	Trichloro-1,2,2-trifluoroethane[1,1,2-]	520000	21.4	59000	0.000412
54-24238	64	Trichloroethane[1,1,1-]	1500000	0.705	60	35.5
54-24238	64	Trichloroethene	400000	0.422	5	190
54-24239	25	Butanol[1-]	12000	0.000347	3700	9.35
54-24239	25	Carbon Tetrachloride	2500	1.25	5	0.4
54-24239	25	Chloroform	9200	0.15	1.65	37.2
54-24239	25	Cyclohexane	4000	8.2	13000	0.0000375
54-24239	25	Dichloroethane[1,1-]	9800	0.23	1220	0.0349
54-24239	25	Dichloroethane[1,2-]	3400	0.0401	5	17
54-24239	25	Dichloroethene[1,1-]	14000	1.1	5	2.55
54-24239	25	Dichloropropane[1,2-]	5200	0.11	5	9.45
54-24239	25	Tetrachloroethene	230000	0.754	5	61
54-24239	25	Toluene	1400	0.272	750	0.00686
54-24239	25	Trichloro-1,2,2-trifluoroethane[1,1,2-]	46000	21.4	59000	0.0000364
54-24239	25	Trichloroethane[1,1,1-]	400000	0.705	60	9.46
54-24239	25	Trichloroethene	120000	0.422	5	56.9
54-24239	25	Trichlorofluoromethane	3500	4	1300	0.000673
54-24239	75	Carbon Tetrachloride	4300	1.25	5	0.688
54-24239	75	Chloroform	15000	0.15	1.65	60.6
54-24239	75	Cyclohexane	8000	8.2	13000	0.000075
54-24239	75	Dichloroethane[1,1-]	16000	0.23	1220	0.057
54-24239	75	Dichloroethane[1,2-]	11000	0.0401	5	54.9
54-24239	75	Dichloroethene[1,1-]	26000	1.1	5	4.73
54-24239	75	Dichloropropane[1,2-]	7100	0.11	5	12.9
54-24239	75	Methylene Chloride	6000	0.09	5	13.3
54-24239	75	Tetrachloroethene	140000	0.754	5	37.1
54-24239	75	Trichloro-1,2,2-trifluoroethane[1,1,2-]	88000	21.4	59000	0.0000697

Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result ( $\mu\text{g}/\text{m}^3$ )	H <sup>-</sup> ( $\mu\text{g}/\text{m}^3$ )	SL ( $\mu\text{g}/\text{m}^3$ )	SV ( $\mu\text{g}/\text{m}^3$ )
54-24239	75	Trichloroethane[1,1,1-]	750000	0.705	60	17.7
54-24239	75	Trichloroethene	150000	0.422	5	71.1
54-24239	75	Trichlorofluoromethane	7800	4	1300	0.0015
54-24240	28	Acetone	9600	0.0016	5500	1.09
54-24240	28	Chloroform	11000	0.15	1.65	44.4
54-24240	28	Dichlorodifluoromethane	15000	4.1	390	0.00938
54-24240	28	Dichloroethane[1,1-]	54000	0.23	1220	0.192
54-24240	28	Dichloroethane[1,2-]	340000	0.0401	5	1700
54-24240	28	Dichloroethene[1,1-]	49000	1.1	5	8.91
54-24240	28	Methylene Chloride	12000	0.09	5	26.7
54-24240	28	Tetrachloroethene	220000	0.754	5	58.4
54-24240	28	Trichloro-1,2,2-trifluoroethane[1,1,2-]	58000	21.4	59000	0.0000459
54-24240	28	Trichloroethane[1,1,1-]	1300000	0.705	60	30.7
54-24240	28	Trichloroethene	580000	0.422	5	275
54-24240	28	Trichlorofluoromethane	20000	4	1300	0.00385
54-24240	53	Acetone	20000	0.0016	5500	2.27
54-24240	53	Carbon Tetrachloride	8200	1.25	5	1.31
54-24240	53	Chloroform	36000	0.15	1.65	145
54-24240	53	Dichlorodifluoromethane	42000	4.1	390	0.0263
54-24240	53	Dichloroethane[1,1-]	86000	0.23	1220	0.306
54-24240	53	Dichloroethane[1,2-]	650000	0.0401	5	3240
54-24240	53	Dichloroethene[1,1-]	110000	1.1	5	20
54-24240	53	Methylene Chloride	210000	0.09	5	467
54-24240	53	Tetrachloroethene	270000	0.754	5	71.6
54-24240	53	Trichloro-1,2,2-trifluoroethane[1,1,2-]	97000	21.4	59000	0.0000768
54-24240	53	Trichloroethane[1,1,1-]	2300000	0.705	60	54.4
54-24240	53	Trichloroethene	860000	0.422	5	408
54-24240	53	Trichlorofluoromethane	52000	4	1300	0.01
54-24240	128	Chloroform	9400	0.15	1.65	38
54-24240	128	Dichlorodifluoromethane	8200	4.1	390	0.00513
54-24240	128	Dichloroethane[1,1-]	30000	0.23	1220	0.107
54-24240	128	Dichloroethane[1,2-]	60000	0.0401	5	299
54-24240	128	Dichloroethene[1,1-]	82000	1.1	5	14.9
54-24240	128	Methylene Chloride	20000	0.09	5	44.4
54-24240	128	Tetrachloroethene	86000	0.754	5	22.8
54-24240	128	Trichloro-1,2,2-trifluoroethane[1,1,2-]	44000	21.4	59000	0.0000348
54-24240	128	Trichloroethane[1,1,1-]	1200000	0.705	60	28.4
54-24240	128	Trichloroethene	260000	0.422	5	123

Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result (µg/m <sup>3</sup> )	H <sup>-</sup> (µg/m <sup>3</sup> )	SL (µg/m <sup>3</sup> )	SV (µg/m <sup>3</sup> )
54-24240	128	Trichlorofluoromethane	8800	4	1300	0.00169
54-24240	153	Acetone	13000	0.0016	5500	1.48
54-24240	153	Chloroform	8400	0.15	1.65	33.9
54-24240	153	Dichlorodifluoromethane	7100	4.1	390	0.00444
54-24240	153	Dichloroethane[1,1-]	26000	0.23	1220	0.0927
54-24240	153	Dichloroethane[1,2-]	47000	0.0401	5	234
54-24240	153	Dichloroethene[1,1-]	84000	1.1	5	15.3
54-24240	153	Methylene Chloride	9500	0.09	5	21.1
54-24240	153	Tetrachloroethene	75000	0.754	5	19.9
54-24240	153	Trichloro-1,2,2-trifluoroethane[1,1,2-]	45000	21.4	59000	0.0000356
54-24240	153	Trichloroethane[1,1,1-]	1200000	0.705	60	28.4
54-24240	153	Trichloroethene	260000	0.422	5	123
54-24240	153	Trichlorofluoromethane	8000	4	1300	0.00154
54-24241	73	Carbon Tetrachloride	11000	1.25	5	1.76
54-24241	73	Chloroform	22000	0.15	1.65	88.9
54-24241	73	Cyclohexane	13000	8.2	13000	0.000122
54-24241	73	Dichloroethane[1,1-]	29000	0.23	1220	0.103
54-24241	73	Dichloroethane[1,2-]	18000	0.0401	5	89.8
54-24241	73	Dichloroethene[1,1-]	31000	1.1	5	5.64
54-24241	73	Dichloropropane[1,2-]	16000	0.11	5	29.1
54-24241	73	Methylene Chloride	5400	0.09	5	12
54-24241	73	Tetrachloroethene	50000	0.754	5	13.3
54-24241	73	Trichloro-1,2,2-trifluoroethane[1,1,2-]	170000	21.4	59000	0.000135
54-24241	73	Trichloroethane[1,1,1-]	1200000	0.705	60	28.4
54-24241	73	Trichloroethene	200000	0.422	5	94.8
54-24241	73	Trichlorofluoromethane	11000	4	1300	0.00212
54-24241	113	Carbon Tetrachloride	7500	1.25	5	1.2
54-24241	113	Chloroform	19000	0.15	1.65	76.8
54-24241	113	Cyclohexane	11000	8.2	13000	0.000103
54-24241	113	Dichloroethane[1,1-]	17000	0.23	1220	0.0606
54-24241	113	Dichloroethane[1,2-]	14000	0.0401	5	69.8
54-24241	113	Dichloroethene[1,1-]	37000	1.1	5	6.73
54-24241	113	Dichloropropane[1,2-]	13000	0.11	5	23.6
54-24241	113	Propanol[2-]	27000	89	na	na
54-24241	113	Tetrachloroethene	85000	0.754	5	22.5
54-24241	113	Toluene	3000	0.272	750	0.0147
54-24241	113	Trichloro-1,2,2-trifluoroethane[1,1,2-]	150000	21.4	59000	0.000119
54-24241	113	Trichloroethane[1,1,1-]	960000	0.705	60	22.7

Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result ( $\mu\text{g}/\text{m}^3$ )	H <sup>-</sup> ( $\mu\text{g}/\text{m}^3$ )	SL ( $\mu\text{g}/\text{m}^3$ )	SV ( $\mu\text{g}/\text{m}^3$ )
54-24241	113	Trichloroethene	210000	0.422	5	99.5
54-24241	113	Trichlorofluoromethane	13000	4	1300	0.0025
54-24241	133	Carbon Tetrachloride	5500	1.25	5	0.88
54-24241	133	Chloroform	15000	0.15	1.65	60.6
54-24241	133	Cyclohexane	8200	8.2	13000	0.0000769
54-24241	133	Dichloroethane[1,1-]	13000	0.23	1220	0.0463
54-24241	133	Dichloroethane[1,2-]	11000	0.0401	5	54.9
54-24241	133	Dichloroethene[1,1-]	33000	1.1	5	6
54-24241	133	Dichloropropane[1,2-]	7400	0.11	5	13.5
54-24241	133	Methylene Chloride	5000	0.09	5	11.1
54-24241	133	Propanol[2-]	12000	89	na	na
54-24241	133	Tetrachloroethene	31000	0.754	5	8.22
54-24241	133	Trichloro-1,2,2-trifluoroethane[1,1,2-]	110000	21.4	59000	0.0000871
54-24241	133	Trichloroethane[1,1,1-]	720000	0.705	60	17
54-24241	133	Trichloroethene	130000	0.422	5	61.6
54-24241	133	Trichlorofluoromethane	11000	4	1300	0.00212
54-24242	25	Carbon Tetrachloride	3600	1.25	5	0.576
54-24242	25	Chloroform	13000	0.15	1.65	52.5
54-24242	25	Cyclohexane	6000	8.2	13000	0.0000563
54-24242	25	Dichloroethane[1,1-]	14000	0.23	1220	0.0499
54-24242	25	Dichloroethane[1,2-]	5400	0.0401	5	26.9
54-24242	25	Dichloroethene[1,1-]	21000	1.1	5	3.82
54-24242	25	Dichloropropane[1,2-]	6000	0.11	5	10.9
54-24242	25	Propanol[2-]	12000	89	na	na
54-24242	25	Tetrachloroethene	99000	0.754	5	26.3
54-24242	25	Trichloro-1,2,2-trifluoroethane[1,1,2-]	61000	21.4	59000	0.0000483
54-24242	25	Trichloroethane[1,1,1-]	610000	0.705	60	14.4
54-24242	25	Trichloroethene	130000	0.422	5	61.6
54-24242	25	Trichlorofluoromethane	4900	4	1300	0.000942
54-24242	50	Carbon Tetrachloride	4100	1.25	5	0.656
54-24242	50	Chloroform	15000	0.15	1.65	60.6
54-24242	50	Cyclohexane	7700	8.2	13000	0.0000722
54-24242	50	Dichloroethane[1,1-]	16000	0.23	1220	0.057
54-24242	50	Dichloroethane[1,2-]	9000	0.0401	5	44.9
54-24242	50	Dichloroethene[1,1-]	27000	1.1	5	4.91
54-24242	50	Dichloropropane[1,2-]	6600	0.11	5	12
54-24242	50	Propanol[2-]	7400	89	na	na
54-24242	50	Tetrachloroethene	110000	0.754	5	29.2

Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result ( $\mu\text{g}/\text{m}^3$ )	H <sup>+</sup> ( $\mu\text{g}/\text{m}^3$ )	SL ( $\mu\text{g}/\text{m}^3$ )	SV ( $\mu\text{g}/\text{m}^3$ )
54-24242	50	Trichloro-1,2,2-trifluoroethane[1,1,2-]	75000	21.4	59000	0.0000594
54-24242	50	Trichloroethane[1,1,1-]	760000	0.705	60	18
54-24242	50	Trichloroethene	150000	0.422	5	71.1
54-24242	50	Trichlorofluoromethane	6800	4	1300	0.00131
54-24243	25	Carbon Tetrachloride	3800	1.25	5	0.608
54-24243	25	Chloroform	17000	0.15	1.65	68.7
54-24243	25	Cyclohexane	10000	8.2	13000	0.0000938
54-24243	25	Dichlorodifluoromethane	1300	4.1	390	0.000813
54-24243	25	Dichloroethane[1,1-]	21000	0.23	1220	0.0748
54-24243	25	Dichloroethane[1,2-]	5700	0.0401	5	28.4
54-24243	25	Dichloroethene[1,1-]	150000	1.1	5	27.3
54-24243	25	Dichloropropane[1,2-]	41000	0.11	5	74.5
54-24243	25	Tetrachloroethene	21000	0.754	5	5.57
54-24243	25	Trichloro-1,2,2-trifluoroethane[1,1,2-]	220000	21.4	59000	0.000174
54-24243	25	Trichloroethane[1,1,1-]	760000	0.705	60	18
54-24243	25	Trichloroethene	220000	0.422	5	104
54-24243	25	Trichlorofluoromethane	7200	4	1300	0.00138
54-24243	75	Benzene	1100	0.228	5	0.965
54-24243	75	Carbon Tetrachloride	6600	1.25	5	1.06
54-24243	75	Chloroform	29000	0.15	1.65	117
54-24243	75	Cyclohexane	18000	8.2	13000	0.000169
54-24243	75	Dichlorodifluoromethane	2100	4.1	390	0.00131
54-24243	75	Dichloroethane[1,1-]	29000	0.23	1220	0.103
54-24243	75	Dichloroethane[1,2-]	11000	0.0401	5	54.9
54-24243	75	Dichloroethene[1,1-]	240000	1.1	5	43.6
54-24243	75	Dichloropropane[1,2-]	100000	0.11	5	182
54-24243	75	Methylene Chloride	8600	0.09	5	19.1
54-24243	75	Tetrachloroethene	27000	0.754	5	7.16
54-24243	75	Trichloro-1,2,2-trifluoroethane[1,1,2-]	390000	21.4	59000	0.000309
54-24243	75	Trichloroethane[1,1,1-]	1300000	0.705	60	30.7
54-24243	75	Trichloroethene	340000	0.422	5	161
54-24243	75	Trichlorofluoromethane	15000	4	1300	0.00288
54-24243	125	Benzene	1900	0.228	5	1.67
54-24243	125	Carbon Tetrachloride	6000	1.25	5	0.96
54-24243	125	Chloroform	27000	0.15	1.65	109
54-24243	125	Cyclohexane	14000	8.2	13000	0.000131
54-24243	125	Dichlorodifluoromethane	2200	4.1	390	0.00138
54-24243	125	Dichloroethane[1,1-]	20000	0.23	1220	0.0713



Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result ( $\mu\text{g}/\text{m}^3$ )	H <sup>-</sup> ( $\mu\text{g}/\text{m}^3$ )	SL ( $\mu\text{g}/\text{m}^3$ )	SV ( $\mu\text{g}/\text{m}^3$ )
54-24243	125	Dichloroethane[1,2-]	24000	0.0401	5	120
54-24243	125	Dichloroethene[1,1-]	240000	1.1	5	43.6
54-24243	125	Dichloropropane[1,2-]	66000	0.11	5	120
54-24243	125	Ethanol	2200	200	na	na
54-24243	125	Methylene Chloride	41000	0.09	5	91.1
54-24243	125	Tetrachloroethene	36000	0.754	5	9.55
54-24243	125	Trichloro-1,2,2-trifluoroethane[1,1,2-]	250000	21.4	59000	0.000198
54-24243	125	Trichloroethane[1,1,1-]	950000	0.705	60	22.5
54-24243	125	Trichloroethene	310000	0.422	5	147
54-24243	125	Trichlorofluoromethane	19000	4	1300	0.00365
54-24399	550 <sup>b</sup>	Carbon Tetrachloride	55	1.25	5	0.0088
54-24399	550	Chloroform	150	0.15	1.65	0.606
54-24399	550	Dichlorodifluoromethane	34	4.1	390	0.0000213
54-24399	550	Dichloroethane[1,1-]	190	0.23	1220	0.000677
54-24399	550	Dichloroethane[1,2-]	67	0.0401	5	0.334
54-24399	550	Dichloroethene[1,1-]	370	1.1	5	0.0673
54-24399	550	Dichloropropane[1,2-]	69	0.11	5	0.125
54-24399	550	Methylene Chloride	31	0.09	5	0.0689
54-24399	550	Tetrachloroethene	980	0.754	5	0.26
54-24399	550	Trichloro-1,2,2-trifluoroethane[1,1,2-]	920	21.4	59000	0.00000729
54-24399	550	Trichloroethane[1,1,1-]	6000	0.705	60	0.142
54-24399	550	Trichloroethene	1600	0.422	5	0.758
54-24399	550	Trichlorofluoromethane	67	4	1300	0.0000129
54-27641	32	Chloroform	4800	0.15	1.65	19.4
54-27641	32	Cyclohexane	14000	8.2	13000	0.000131
54-27641	32	Dichlorodifluoromethane	18000	4.1	390	0.0113
54-27641	32	Dichloroethane[1,1-]	47000	0.23	1220	0.167
54-27641	32	Dichloroethane[1,2-]	84000	0.0401	5	419
54-27641	32	Dichloroethene[1,1-]	12000	1.1	5	2.18
54-27641	32	Methylene Chloride	26000	0.09	5	57.8
54-27641	32	Propanol[2-]	15000	89	na	na
54-27641	32	Tetrachloroethene	58000	0.754	5	15.4
54-27641	32	Trichloro-1,2,2-trifluoroethane[1,1,2-]	45000	21.4	59000	0.0000356
54-27641	32	Trichloroethane[1,1,1-]	1300000	0.705	60	30.7
54-27641	32	Trichloroethene	310000	0.422	5	147
54-27641	32	Trichlorofluoromethane	14000	4	1300	0.00269
54-27641	82	Chloroform	4800	0.15	1.65	19.4
54-27641	82	Cyclohexane	11000	8.2	13000	0.000103

Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result ( $\mu\text{g}/\text{m}^3$ )	H <sup>-</sup> ( $\mu\text{g}/\text{m}^3$ )	SL ( $\mu\text{g}/\text{m}^3$ )	SV ( $\mu\text{g}/\text{m}^3$ )
54-27641	82	Dichlorodifluoromethane	12000	4.1	390	0.0075
54-27641	82	Dichloroethane[1,1-]	30000	0.23	1220	0.107
54-27641	82	Dichloroethane[1,2-]	60000	0.0401	5	299
54-27641	82	Dichloroethene[1,1-]	12000	1.1	5	2.18
54-27641	82	Methylene Chloride	64000	0.09	5	142
54-27641	82	Propanol[2-]	14000	89	na	na
54-27641	82	Tetrachloroethene	58000	0.754	5	15.4
54-27641	82	Trichloro-1,2,2-trifluoroethane[1,1,2-]	26000	21.4	59000	0.0000206
54-27641	82	Trichloroethane[1,1,1-]	920000	0.705	60	21.7
54-27641	82	Trichloroethene	130000	0.422	5	61.6
54-27641	82	Trichlorofluoromethane	9800	4	1300	0.00188
54-27641	115	Chloroform	4800	0.15	1.65	19.4
54-27641	115	Cyclohexane	12000	8.2	13000	0.000113
54-27641	115	Dichlorodifluoromethane	6900	4.1	390	0.00432
54-27641	115	Dichloroethane[1,1-]	27000	0.23	1220	0.0962
54-27641	115	Dichloroethane[1,2-]	42000	0.0401	5	209
54-27641	115	Dichloroethene[1,1-]	17000	1.1	5	3.09
54-27641	115	Methylene Chloride	35000	0.09	5	77.8
54-27641	115	Propanol[2-]	10000	89	na	na
54-27641	115	Tetrachloroethene	34000	0.754	5	9.02
54-27641	115	Trichloro-1,2,2-trifluoroethane[1,1,2-]	26000	21.4	59000	0.0000206
54-27641	115	Trichloroethane[1,1,1-]	1100000	0.705	60	26
54-27641	115	Trichloroethene	130000	0.422	5	61.6
54-27641	115	Trichlorofluoromethane	6700	4	1300	0.00129
54-27641	182	Carbon Tetrachloride	760	1.25	5	0.122
54-27641	182	Chloroform	600	0.15	1.65	2.42
54-27641	182	Cyclohexane	1700	8.2	13000	0.0000159
54-27641	182	Dichlorodifluoromethane	1600	4.1	390	0.001
54-27641	182	Dichloroethane[1,1-]	1700	0.23	1220	0.00606
54-27641	182	Dichloroethene[1,1-]	12000	1.1	5	2.18
54-27641	182	Methylene Chloride	1800	0.09	5	4
54-27641	182	Tetrachloroethene	5600	0.754	5	1.49
54-27641	182	Trichloro-1,2,2-trifluoroethane[1,1,2-]	12000	21.4	59000	0.0000095
54-27641	182	Trichloroethane[1,1,1-]	130000	0.705	60	3.07
54-27641	182	Trichloroethene	36000	0.422	5	17.1
54-27641	182	Trichlorofluoromethane	2200	4	1300	0.000423
54-27641	271	Carbon Tetrachloride	140	1.25	5	0.0224
54-27641	271	Chloroform	40	0.15	1.65	0.162

Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result ( $\mu\text{g}/\text{m}^3$ )	H <sup>-</sup> ( $\mu\text{g}/\text{m}^3$ )	SL ( $\mu\text{g}/\text{m}^3$ )	SV ( $\mu\text{g}/\text{m}^3$ )
54-27641	271	Cyclohexane	170	8.2	13000	0.00000159
54-27641	271	Dichlorodifluoromethane	330	4.1	390	0.000206
54-27641	271	Dichloroethane[1,1-]	83	0.23	1220	0.000296
54-27641	271	Dichloroethene[1,1-]	2500	1.1	5	0.455
54-27641	271	Methylene Chloride	53	0.09	5	0.118
54-27641	271	Tetrachloroethene	690	0.754	5	0.183
54-27641	271	Trichloro-1,2,2-trifluoroethane[1,1,2-]	3800	21.4	59000	0.00000301
54-27641	271	Trichloroethane[1,1,1-]	10000	0.705	60	0.236
54-27641	271	Trichloroethene	3500	0.422	5	1.66
54-27641	271	Trichlorofluoromethane	680	4	1300	0.000131
54-27641	332.5	Chloroform	2800	0.15	1.65	11.3
54-27641	332.5	Cyclohexane	7800	8.2	13000	0.0000732
54-27641	332.5	Dichlorodifluoromethane	3700	4.1	390	0.00231
54-27641	332.5	Dichloroethane[1,1-]	14000	0.23	1220	0.0499
54-27641	332.5	Dichloroethane[1,2-]	8400	0.0401	5	41.9
54-27641	332.5	Dichloroethene[1,1-]	23000	1.1	5	4.18
54-27641	332.5	Methylene Chloride	22000	0.09	5	48.9
54-27641	332.5	Tetrachloroethene	16000	0.754	5	4.24
54-27641	332.5	Trichloro-1,2,2-trifluoroethane[1,1,2-]	23000	21.4	59000	0.0000182
54-27641	332.5	Trichloroethane[1,1,1-]	730000	0.705	60	17.3
54-27641	332.5	Trichloroethene	99000	0.422	5	46.9
54-27641	332.5	Trichlorofluoromethane	3900	4	1300	0.00075
54-27642	30	Chloroform	26000	0.15	1.65	105
54-27642	30	Cyclohexane	31000	8.2	13000	0.000291
54-27642	30	Dichloroethane[1,1-]	44000	0.23	1220	0.157
54-27642	30	Dichloroethane[1,2-]	10000	0.0401	5	49.9
54-27642	30	Dichloroethene[1,1-]	45000	1.1	5	8.18
54-27642	30	Dichloropropane[1,2-]	73000	0.11	5	133
54-27642	30	Tetrachloroethene	27000	0.754	5	7.16
54-27642	30	Toluene	8300	0.272	750	0.0407
54-27642	30	Trichloro-1,2,2-trifluoroethane[1,1,2-]	370000	21.4	59000	0.000293
54-27642	30	Trichloroethane[1,1,1-]	3300000	0.705	60	78
54-27642	30	Trichloroethene	240000	0.422	5	114
54-27642	30	Trichlorofluoromethane	14000	4	1300	0.00269
54-27642	75	Acetone	8600	0.0016	5500	0.977
54-27642	75	Carbon Disulfide	3400	1.2	1000	0.00283
54-27642	75	Carbon Tetrachloride	6900	1.25	5	1.1
54-27642	75	Chloroform	36000	0.15	1.65	145

Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result ( $\mu\text{g}/\text{m}^3$ )	H <sup>-</sup> ( $\mu\text{g}/\text{m}^3$ )	SL ( $\mu\text{g}/\text{m}^3$ )	SV ( $\mu\text{g}/\text{m}^3$ )
54-27642	75	Cyclohexane	18000	8.2	13000	0.000169
54-27642	75	Dichloroethane[1,1-]	23000	0.23	1220	0.082
54-27642	75	Dichloroethane[1,2-]	31000	0.0401	5	155
54-27642	75	Dichloroethene[1,1-]	63000	1.1	5	11.5
54-27642	75	Dichloropropane[1,2-]	77000	0.11	5	140
54-27642	75	Methylene Chloride	25000	0.09	5	55.6
54-27642	75	Propanol[2-]	20000	89	na	Na
54-27642	75	Tetrachloroethene	29000	0.754	5	7.69
54-27642	75	Tetrahydrofuran	19000	0.002895	8.8	746
54-27642	75	Toluene	8100	0.272	750	0.0397
54-27642	75	Trichloro-1,2,2-trifluoroethane[1,1,2-]	320000	21.4	59000	0.000253
54-27642	75	Trichloroethane[1,1,1-]	1700000	0.705	60	40.2
54-27642	75	Trichloroethene	310000	0.422	5	147
54-27642	75	Trichlorofluoromethane	34000	4	1300	0.00654
54-27642	116	Chloroform	55000	0.15	1.65	222
54-27642	116	Cyclohexane	34000	8.2	13000	0.000319
54-27642	116	Dichloroethane[1,1-]	52000	0.23	1220	0.185
54-27642	116	Dichloroethane[1,2-]	39000	0.0401	5	195
54-27642	116	Dichloroethene[1,1-]	70000	1.1	5	12.7
54-27642	116	Dichloropropane[1,2-]	180000	0.11	5	327
54-27642	116	Tetrachloroethene	88000	0.754	5	23.3
54-27642	116	Tetrahydrofuran	17000	0.002895	8.8	667
54-27642	116	Trichloro-1,2,2-trifluoroethane[1,1,2-]	570000	21.4	59000	0.000451
54-27642	116	Trichloroethane[1,1,1-]	3500000	0.705	60	82.7
54-27642	116	Trichloroethene	560000	0.422	5	265
54-27642	116	Trichlorofluoromethane	30000	4	1300	0.00577
54-27642	175	Acetone	9000	0.0016	5500	1.02
54-27642	175	Benzene	3200	0.228	5	2.81
54-27642	175	Carbon Disulfide	2500	1.2	1000	0.00208
54-27642	175	Carbon Tetrachloride	6500	1.25	5	1.04
54-27642	175	Chloroform	26000	0.15	1.65	105
54-27642	175	Cyclohexane	10000	8.2	13000	0.0000938
54-27642	175	Dichlorodifluoromethane	2900	4.1	390	0.00181
54-27642	175	Dichloroethane[1,1-]	11000	0.23	1220	0.0392
54-27642	175	Dichloroethane[1,2-]	17000	0.0401	5	84.8
54-27642	175	Dichloroethene[1,1-]	62000	1.1	5	11.3
54-27642	175	Dichloropropane[1,2-]	26000	0.11	5	47.3
54-27642	175	Ethanol	6000	200	na	na

Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result ( $\mu\text{g}/\text{m}^3$ )	H <sup>-</sup> ( $\mu\text{g}/\text{m}^3$ )	SL ( $\mu\text{g}/\text{m}^3$ )	SV ( $\mu\text{g}/\text{m}^3$ )
54-27642	175	Hexane	2200	5	420	0.00105
54-27642	175	Methylene Chloride	88000	0.09	5	196
54-27642	175	Propanol[2-]	14000	89	na	na
54-27642	175	Tetrachloroethene	21000	0.754	5	5.57
54-27642	175	Toluene	23000	0.272	750	0.113
54-27642	175	Trichloro-1,2,2-trifluoroethane[1,1,2-]	220000	21.4	59000	0.000174
54-27642	175	Trichloroethane[1,1,1-]	980000	0.705	60	23.2
54-27642	175	Trichloroethene	240000	0.422	5	114
54-27642	175	Trichlorofluoromethane	35000	4	1300	0.00673
54-27642	275	Benzene	1700	0.228	5	1.49
54-27642	275	Carbon Tetrachloride	5000	1.25	5	0.8
54-27642	275	Chloroform	10000	0.15	1.65	40.4
54-27642	275	Cyclohexane	4400	8.2	13000	0.0000413
54-27642	275	Dichlorodifluoromethane	3300	4.1	390	0.00206
54-27642	275	Dichloroethane[1,1-]	3200	0.23	1220	0.0114
54-27642	275	Dichloroethene[1,1-]	63000	1.1	5	11.5
54-27642	275	Dichloropropane[1,2-]	2600	0.11	5	4.73
54-27642	275	Hexane	2900	5	420	0.00138
54-27642	275	Methylene Chloride	34000	0.09	5	75.6
54-27642	275	Propanol[2-]	3400	89	na	na
54-27642	275	Tetrachloroethene	7500	0.754	5	1.99
54-27642	275	Toluene	4000	0.272	750	0.0196
54-27642	275	Trichloro-1,2,2-trifluoroethane[1,1,2-]	170000	21.4	59000	0.000135
54-27642	275	Trichloroethane[1,1,1-]	400000	0.705	60	9.46
54-27642	275	Trichloroethene	120000	0.422	5	56.9
54-27642	275	Trichlorofluoromethane	24000	4	1300	0.00462
54-27642	338	Benzene	460	0.228	5	0.404
54-27642	338	Carbon Tetrachloride	1900	1.25	5	0.304
54-27642	338	Chloroform	1300	0.15	1.65	5.25
54-27642	338	Cyclohexane	960	8.2	13000	0.00000901
54-27642	338	Dichlorodifluoromethane	1400	4.1	390	0.000876
54-27642	338	Dichloroethane[1,1-]	420	0.23	1220	0.0015
54-27642	338	Dichloroethene[1,1-]	22000	1.1	5	4
54-27642	338	Hexane	1100	5	420	0.000524
54-27642	338	Methylene Chloride	2900	0.09	5	6.44
54-27642	338	Tetrachloroethene	2700	0.754	5	0.716
54-27642	338	Toluene	580	0.272	750	0.00284
54-27642	338	Trichloro-1,2,2-trifluoroethane[1,1,2-]	49000	21.4	59000	0.0000388

Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result ( $\mu\text{g}/\text{m}^3$ )	H <sup>-</sup> ( $\mu\text{g}/\text{m}^3$ )	SL ( $\mu\text{g}/\text{m}^3$ )	SV ( $\mu\text{g}/\text{m}^3$ )
54-27642	338	Trichloroethane[1,1,1-]	77000	0.705	60	1.82
54-27642	338	Trichloroethene	32000	0.422	5	15.2
54-27642	338	Trichlorofluoromethane	5500	4	1300	0.00106
54-27643	30	Carbon Tetrachloride	2500	1.25	5	0.4
54-27643	30	Chloroform	9500	0.15	1.65	38.4
54-27643	30	Cyclohexane	4600	8.2	13000	0.0000432
54-27643	30	Dichlorodifluoromethane	550	4.1	390	0.000344
54-27643	30	Dichloroethane[1,1-]	5200	0.23	1220	0.0185
54-27643	30	Dichloroethane[1,2-]	3300	0.0401	5	16.5
54-27643	30	Dichloroethene[1,1-]	63000	1.1	5	11.5
54-27643	30	Dichloropropane[1,2-]	21000	0.11	5	38.2
54-27643	30	Tetrachloroethene	20000	0.754	5	5.31
54-27643	30	Trichloro-1,2,2-trifluoroethane[1,1,2-]	56000	21.4	59000	0.0000444
54-27643	30	Trichloroethane[1,1,1-]	330000	0.705	60	7.8
54-27643	30	Trichloroethene	69000	0.422	5	32.7
54-27643	30	Trichlorofluoromethane	6700	4	1300	0.00129
54-27643	74	Benzene	750	0.228	5	0.658
54-27643	74	Carbon Tetrachloride	3100	1.25	5	0.496
54-27643	74	Chlorobenzene	740	0.15	100	0.0493
54-27643	74	Chloroform	13000	0.15	1.65	52.5
54-27643	74	Cyclohexane	5800	8.2	13000	0.0000544
54-27643	74	Dichlorodifluoromethane	800	4.1	390	0.0005
54-27643	74	Dichloroethane[1,1-]	6000	0.23	1220	0.0214
54-27643	74	Dichloroethane[1,2-]	7800	0.0401	5	38.9
54-27643	74	Dichloroethene[1,1-]	63000	1.1	5	11.5
54-27643	74	Dichloropropane[1,2-]	28000	0.11	5	50.9
54-27643	74	Ethanol	2400	200	na	na
54-27643	74	Methylene Chloride	6600	0.09	5	14.7
54-27643	74	Tetrachloroethene	24000	0.754	5	6.37
54-27643	74	Tetrahydrofuran	20000	0.002895	8.8	785
54-27643	74	Toluene	1500	0.272	750	0.00735
54-27643	74	Trichloro-1,2,2-trifluoroethane[1,1,2-]	70000	21.4	59000	0.0000554
54-27643	74	Trichloroethane[1,1,1-]	420000	0.705	60	9.93
54-27643	74	Trichloroethene	97000	0.422	5	46
54-27643	74	Trichlorofluoromethane	10000	4	1300	0.00192
54-27643	74	Xylene[1,2-]	1300	0.213	10000	0.00061
54-27643	117	Benzene	1400	0.228	5	1.23
54-27643	117	Carbon Tetrachloride	3600	1.25	5	0.576

Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result ( $\mu\text{g}/\text{m}^3$ )	H <sup>-</sup> ( $\mu\text{g}/\text{m}^3$ )	SL ( $\mu\text{g}/\text{m}^3$ )	SV ( $\mu\text{g}/\text{m}^3$ )
54-27643	117	Chlorobenzene	970	0.15	100	0.0647
54-27643	117	Chloroform	17000	0.15	1.65	68.7
54-27643	117	Cyclohexane	6700	8.2	13000	0.0000629
54-27643	117	Dichlorodifluoromethane	1200	4.1	390	0.00075
54-27643	117	Dichloroethane[1,1-]	7000	0.23	1220	0.0249
54-27643	117	Dichloroethane[1,2-]	11000	0.0401	5	54.9
54-27643	117	Dichloroethene[1,1-]	86000	1.1	5	15.6
54-27643	117	Dichloropropane[1,2-]	29000	0.11	5	52.7
54-27643	117	Ethanol	3700	200	na	Na
54-27643	117	Hexane	380	5	420	0.000181
54-27643	117	Methylene Chloride	19000	0.09	5	42.2
54-27643	117	Tetrachloroethene	25000	0.754	5	6.63
54-27643	117	Tetrahydrofuran	2000	0.002895	8.8	78.5
54-27643	117	Toluene	4600	0.272	750	0.0225
54-27643	117	Trichloro-1,2,2-trifluoroethane[1,1,2-]	100000	21.4	59000	0.0000792
54-27643	117	Trichloroethane[1,1,1-]	490000	0.705	60	11.6
54-27643	117	Trichloroethene	130000	0.422	5	61.6
54-27643	117	Trichlorofluoromethane	16000	4	1300	0.00308
54-27643	117	Xylene[1,2-]	2200	0.213	10000	0.00103
54-27643	167	Benzene	2000	0.228	5	1.75
54-27643	167	Carbon Tetrachloride	3800	1.25	5	0.608
54-27643	167	Chlorobenzene	710	0.15	100	0.0473
54-27643	167	Chloroform	18000	0.15	1.65	72.7
54-27643	167	Cyclohexane	5600	8.2	13000	0.0000525
54-27643	167	Dichlorodifluoromethane	1800	4.1	390	0.00113
54-27643	167	Dichloroethane[1,1-]	5500	0.23	1220	0.0196
54-27643	167	Dichloroethane[1,2-]	8500	0.0401	5	42.4
54-27643	167	Dichloroethene[1,1-]	100000	1.1	5	18.2
54-27643	167	Dichloropropane[1,2-]	19000	0.11	5	34.5
54-27643	167	Ethanol	1300	200	na	na
54-27643	167	Hexane	1100	5	420	0.000524
54-27643	167	Methylene Chloride	35000	0.09	5	77.8
54-27643	167	Tetrachloroethene	20000	0.754	5	5.31
54-27643	167	Toluene	6400	0.272	750	0.0314
54-27643	167	Trichloro-1,2,2-trifluoroethane[1,1,2-]	120000	21.4	59000	0.000095
54-27643	167	Trichloroethane[1,1,1-]	400000	0.705	60	9.46
54-27643	167	Trichloroethene	140000	0.422	5	66.4
54-27643	167	Trichlorofluoromethane	18000	4	1300	0.00346

Table 5.3-1 (continued)

Location ID	Port Depth (ft)	Analyte	Result ( $\mu\text{g}/\text{m}^3$ )	H <sup>1</sup> ( $\mu\text{g}/\text{m}^3$ )	SL ( $\mu\text{g}/\text{m}^3$ )	SV ( $\mu\text{g}/\text{m}^3$ )
54-27643	167	Xylene[1,2-]	1800	0.213	10000	0.000845
54-27643	275	Benzene	1200	0.228	5	1.05
54-27643	275	Carbon Tetrachloride	2900	1.25	5	0.464
54-27643	275	Chloroform	7400	0.15	1.65	29.9
54-27643	275	Cyclohexane	2600	8.2	13000	0.0000244
54-27643	275	Dichlorodifluoromethane	1900	4.1	390	0.00119
54-27643	275	Dichloroethane[1,1-]	1800	0.23	1220	0.00641
54-27643	275	Dichloroethane[1,2-]	300	0.0401	5	1.5
54-27643	275	Dichloroethene[1,1-]	59000	1.1	5	10.7
54-27643	275	Dichloropropane[1,2-]	1900	0.11	5	3.45
54-27643	275	Ethyltoluene[4-]	600	na	na	na
54-27643	275	Hexane	1500	5	420	0.000714
54-27643	275	Methylene Chloride	17000	0.09	5	37.8
54-27643	275	Tetrachloroethene	8200	0.754	5	2.18
54-27643	275	Toluene	2500	0.272	750	0.0123
54-27643	275	Trichloro-1,2,2-trifluoroethane[1,1,2-]	90000	21.4	59000	0.0000713
54-27643	275	Trichloroethane[1,1,1-]	170000	0.705	60	4.02
54-27643	275	Trichloroethene	75000	0.422	5	35.5
54-27643	275	Trichlorofluoromethane	11000	4	1300	0.00212
54-27643	275	Trimethylbenzene[1,2,4-]	650	0.23	12.3	0.23
54-27643	275	Trimethylbenzene[1,3,5-]	380	na	na	Na
54-27643	354	Benzene	390	0.228	5	0.342
54-27643	354	Carbon Tetrachloride	1200	1.25	5	0.192
54-27643	354	Chloroform	1000	0.15	1.65	4.04
54-27643	354	Cyclohexane	860	8.2	13000	0.00000807
54-27643	354	Dichlorodifluoromethane	1000	4.1	390	0.000625
54-27643	354	Dichloroethane[1,1-]	280	0.23	1220	0.000998
54-27643	354	Dichloroethene[1,1-]	16000	1.1	5	2.91
54-27643	354	Dichloropropane[1,2-]	74	0.11	5	0.135
54-27643	354	Hexane	920	5	420	0.000438
54-27643	354	Methylene Chloride	1700	0.09	5	3.78
54-27643	354	Tetrachloroethene	2200	0.754	5	0.584
54-27643	354	Toluene	420	0.272	750	0.00206
54-27643	354	Trichloro-1,2,2-trifluoroethane[1,1,2-]	34000	21.4	59000	0.0000269
54-27643	354	Trichloroethane[1,1,1-]	52000	0.705	60	1.23
54-27643	354	Trichloroethene	20000	0.422	5	9.48
54-27643	354	Trichlorofluoromethane	3800	4	1300	0.000731

<sup>a</sup> na = Not available.

<sup>b</sup> Location 54-24399 is an open borehole from 550 to 608 ft.



**Table 5.3-2**  
**Summary of VOC Detections with SVs Greater Than 1 at MDA L**

VOC	Number of Detections with SV >1	Maximum SV ( $\mu\text{g}/\text{m}^3$ )	Location with Largest SV (port depth [ft])
Acetone	5	2.27	54-24240 (53)
Benzene	9	2.81	54-27642 (175)
Butanol[1-]	1	9.35	54-24239 (25)
Carbon Tetrachloride	6	1.76	54-24241 (73)
Chloroform	67	222	54-27642 (116)
Dichloroethane[1,2-]	59	3240	54-24240 (53)
Dichloroethene[1,1-]	64	50.9	54-02002 (60)
Dichloropropane[1,2-]	41	564	54-02089 (46)
Methylene Chloride	49	756	54-24238 (64)
Tetrachloroethene	50	71.6	54-24240 (53)
Tetrahydrofuran	8	903	54-02002 (100)
Trichloroethane[1,1,1-]	68	82.7	54-27642 (116)
Trichloroethene	79	450	54-02089 (46)



# **Appendix A**

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*Acronyms and Abbreviations, Metric Conversion Table,  
and Data Qualifier Definitions*



## A-1.0 ACRONYMS AND ABBREVIATIONS

B&K	Brüel and Kræjer
bgs	below ground surface
COC	chain of custody
DER	duplicate error ratio
DOE	Department of Energy (U.S.)
EPA	Environmental Protection Agency (U.S.)
FY	fiscal year
LANL	Los Alamos National Laboratory
LCS	laboratory control sample
MCL	maximum contaminant level
MDA	material disposal area
NMED	New Mexico Environment Department
NMWQCC	New Mexico Water Quality Control Commission
PCE	tetrachloroethene
PID	photoionization detector
QA	quality assurance
QC	quality control
RCRA	Resource Conservation and Recovery Act
RFI	RCRA facility investigation
RPD	relative percent difference
SL	screening level
SOP	standard operating procedure
SV	screening value
SWMU	solid waste management unit
TA	technical area
TCA	1,1,1-trichloroethane
TCE	trichloroethene
TD	total depth
TPU	total propagated uncertainty
VOC	volatile organic compound

**A-2.0 METRIC CONVERSION TABLE**

Multiply SI (Metric) Unit	by	To Obtain U.S. Customary Unit
kilometers (km)	0.622	miles (mi)
kilometers (km)	3281	feet (ft)
meters (m)	3.281	feet (ft)
meters (m)	39.37	inches (in.)
centimeters (cm)	0.03281	feet (ft)
centimeters (cm)	0.394	inches (in.)
millimeters (mm)	0.0394	inches (in.)
micrometers or microns ( $\mu\text{m}$ )	0.000394	inches (in.)
square kilometers ( $\text{km}^2$ )	0.3861	square miles ( $\text{mi}^2$ )
hectares (ha)	2.5	acres
square meters ( $\text{m}^2$ )	10.764	square feet ( $\text{ft}^2$ )
cubic meters ( $\text{m}^3$ )	35.31	cubic feet ( $\text{ft}^3$ )
kilograms (kg)	2.2046	pounds (lb)
grams (g)	0.0353	ounces (oz)
grams per cubic centimeter ( $\text{g}/\text{cm}^3$ )	62.422	pounds per cubic foot ( $\text{lb}/\text{ft}^3$ )
milligrams per kilogram (mg/kg)	1	parts per million (ppm)
micrograms per gram ( $\mu\text{g}/\text{g}$ )	1	parts per million (ppm)
liters (L)	0.26	gallons (gal.)
milligrams per liter (mg/L)	1	parts per million (ppm)
degrees Celsius ( $^{\circ}\text{C}$ )	$9/5 + 32$	degrees Fahrenheit ( $^{\circ}\text{F}$ )

**A-3.0 DATA QUALIFIER DEFINITIONS**

Data Qualifier	Definition
U	The analyte was analyzed for but not detected.
J	The analyte was positively identified, and the associated numerical value is estimated to be more uncertain than would normally be expected for that analysis.
J+	The analyte was positively identified, and the result is likely to be biased high.
J-	The analyte was positively identified, and the result is likely to be biased low.
UJ	The analyte was not positively identified in the sample, and the associated value is an estimate of the sample-specific detection or quantitation limit.
R	The data are rejected as a result of major problems with quality assurance/quality control parameters.

# **Appendix B**

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*Quality Assurance/Quality Control Program*





## **B-1.0 INTRODUCTION**

In accordance with Section XI.D.13.b of the Compliance Order on Consent, this appendix discusses analytical methods, data quality objectives, and data quality review. Additionally, this appendix summarizes the effects of data quality exceptions on the acceptability of the field and laboratory analytical data as they impact the investigation and site status.

Quality assurance (QA), quality control (QC), and data validation procedures were implemented in accordance with the Los Alamos National Laboratory (LANL or the Laboratory) "Quality Assurance Project Plan Requirements for Sampling and Analysis" (LANL 1996, 054609) and the Laboratory's statement of work for analytical services (LANL 2000, 071233). The results of the QA/QC activities were used to estimate the accuracy, bias, and precision of the analytical measurements. QC samples, including method blanks, blank spikes, matrix spikes, laboratory control samples (LCSs), internal standards, initial and continuing calibrations, surrogates, and tracers, were used to assess laboratory accuracy and bias.

The type and frequency of QC analyses are described in the analytical services contract. Other QC factors, such as sample preservation and holding times, were also assessed. The requirements for sample preservation and holding times are given in the Environmental Programs Directorate Standard Operating Procedure (SOP) 01.02, Sample Containers and Preservation. Evaluating these QC indicators allows estimates to be made of the accuracy, bias, and precision of the analytical suites. A focused data validation was also performed for all the data packages (identified by request number). The procedures used for data validation are given in Table B-1.0-1. The focused validation followed the same procedure discussed above and included a more detailed review of the raw data results generated by the analytical laboratory. Copies of the raw analytical data, laboratory logbooks, and instrument printouts used during focused validation are provided in data packages as Appendix C (on CD included with this document).

Analytical data were reviewed and evaluated based on U.S. Environmental Protection Agency (EPA) National Functional Guidelines for inorganic and organic chemical data review where applicable (EPA 1994, 048639; EPA 1999, 066649). Data have also been assessed using guidelines established in SW-846 (EPA 1997, 057589). As a result of the data validation and assessment efforts, qualifiers have been assigned to each analytical record. Definitions for the data qualifiers used in data validation are given in Table B-1.0-2. Data validators and reviewers made judgments about the following industry-accepted QA/QC analytical quality functions.

### **Maintenance of Chain of Custody**

To maintain chain of custody (COC) is to document or demonstrate the possession of an item by only authorized individuals. The COC process provides confidence in and documentation of analytical data integrity by establishing the traceability of the sample from the time of collection through processing to final maintenance as a record.

### **Sample Documentation**

Establishing sample documentation acceptability is the first step toward verifying that an analytical system has produced data of known quality. Documentation is dependent upon the accessibility of review items that accurately and completely describe the work performed. Without adequate sample documentation, data quality cannot be independently verified.

## **Sample Preservation**

Sample preservation is the use of specific types of sample containers and preservation techniques. Sample preservation is mandatory for hazardous site investigations because the integrity of any sample decreases over time. Physical factors (light, pressure, temperature, etc.), chemical factors (changes in pH, volatilization, etc.), and biological factors may alter the original quality of a sample. Because the various target parameters are uniquely altered at varying rates, distinct sample containers, preservation techniques, and holding times have been established to maintain sample integrity for a reasonable and acceptable period of time.

## **Holding Time**

Holding time is the maximum amount of time a sample can be stored without unacceptable changes in analyte concentrations. Holding times apply under prescribed conditions; deviations from these conditions may affect the holding time. Extraction holding time refers to the time that lapses between sample collection and sample preparation; analytical holding time refers to the time that lapses between sample preparation and analysis.

## **Initial and Continuing Calibration Verification (including interference-check standards)**

Calibration verification is the establishment of a quantitative relationship between the response of the analytical procedure and the concentration of the target analyte. There are two aspects of calibration verification: initial and continuing. The initial calibration verifies the accuracy of the calibration curve as well as the individual calibration standards being used to perform the calibration. The continuing calibration ensures that the initial calibration is still holding and correct as the instrument is used to process samples. Interference-check samples are used to determine if a high concentration of a single analyte in a sample interferes with the accurate quantitation of other analytes.

## **Analyte Identification (including spectra review and thermal ionization cavity review)**

Analyte identification is the process of associating an instrument signal with a compound or analyte of interest. Evaluation of signal retention times, spectral overlap, multipeak pattern matching, and mass spectral library searches are tools for making analyte identification determinations.

## **Analyte Quantitation**

Analyte quantitation is the association of an instrument signal with a concentration and the determination that a recorded signal is detected or not detected. Detection limits, instrument calibration linear ranges, internal standards, and carrier recoveries are tools for making analyte quantitation evaluations.

Organic and inorganic chemical results are considered to be not detected if reported results are less than or equal to the method detection limit adjusted by sample-specific dilution or concentration factors.

Radiochemical results reported with values less than the minimum detectable activity are considered to be not detected (U). Each radiochemical result is also compared with the corresponding 1-sigma total propagated uncertainty (TPU). If the result is not greater than 3 times the TPU, it is also qualified as not detected.

### **Method Blank**

A method blank is an analyte-free matrix to which all reagents are added in the same volumes or proportions as those used in the environmental sample processing and which is extracted and analyzed in the same manner as the corresponding environmental samples. Method blanks are used to assess the potential for sample contamination during extraction and analysis. All target analytes should be below the contract-required detection limit in the method blank (LANL 2000, 071233).

### **Matrix Spike Recoveries**

A matrix spike is an aliquot of sample spiked with a known concentration of the target analyte(s). Matrix spike samples are used to measure the ability to recover prescribed analytes from a native sample matrix. Spiking typically occurs before sample preparation and analysis. Acceptable percentage recoveries for matrix spikes vary by method but should generally be greater than 10% for an analytical result to be usable (LANL 2000, 071233).

### **Surrogate and Tracer Recoveries**

A surrogate (an organic chemical compound) and a tracer (a radiochemical isotope) are similar in composition and behavior to target analytes but are not typically found in environmental samples. Surrogates and tracers are added to every blank, sample, and spike to evaluate the efficiency with which target analytes are recovered during extraction and analysis. The recovery percentages of the surrogates and tracers vary by method but should generally be greater than 10% for an analytical result to be usable (LANL 2000, 071233).

### **Internal Standard Responses and Carrier Recoveries**

Internal standards and carriers are chemical compounds that are added to blank, sample, and standard extracts at known concentrations. They are used to compensate for (1) analyte concentration changes that might occur during storage of the extract and (2) quantitation variations that can occur during analysis. Internal standard responses and carrier recoveries are used to adjust the reported concentrations for the quantitation of target analytes. The response factors for internal standards vary by method but should generally range from  $\geq 50\%$  to  $\leq 200\%$ . The recoveries for carriers vary by method but should generally be greater than 10% for an analytical result to be usable (LANL 2000, 071233).

### **LCS Recoveries**

An LCS is a known matrix that has been spiked with compound(s) representative of the target analytes. The LCS is used to document laboratory performance. The acceptance criteria for LCSs are method-specific but should generally be greater than 10% for an analytical result to be usable (LANL 2000, 071233).

### **Laboratory and Field Duplicates (including serial dilutions)**

Laboratory duplicates are two portions of a sample taken from the same sample container (prepared for analysis and analyzed independently but under identical conditions) that are used to assess or demonstrate acceptable laboratory-method precision at the time of analysis. Each duplicate sample is equally representative of the original material. Duplicate analyses are also performed to generate data and to determine the long-term precision of an analytical method on various matrices. All relative percent differences (RPDs) between samples and field duplicates should be  $\pm 35\%$  (LANL 2000, 071233). RPD is

defined by the equation  $RPD = [|D1 - D2| / (D1 + D2)] \times 100\%$ , where D1 and D2 represent analytical measurements on duplicate samples.

For radionuclides, the duplicate error ratio (DER) may also be used to quantify precision. DER is defined by the equation  $DER = |S-D| / \sqrt{(2\sigma_S^2 + 2\sigma_D^2)}$ , where S represents the original sample value, D represents the duplicate value, and  $2\sigma_S$  and  $2\sigma_D$  represent the 2-sigma uncertainties surrounding the original and duplicate samples, respectively. A DER below 3 indicates precision between the sample and field duplicate that is in control.

Field duplicates are independent samples that are collected as closely as possible to the same point in space and time. They are two separate samples taken from the same source, stored in separate containers, and analyzed independently.

Serial dilution checks are performed for certain inorganic analyses to determine if dilutions have been prepared correctly and to identify any effects that may arise from characteristics of the sample matrix.

### **Trip Blanks, Field Blanks, and Rinsate Blanks**

Trip blanks, field blanks, and rinsate blanks are collected and analyzed to establish whether concentration values assigned to an analyte or compound are attributable to contamination of the analytical system or to the presence of the analyte in the samples collected.

*Trip blank*—a sample of analyte-free medium that is taken to the sampling site and returned unopened to an analytical laboratory. Trip blanks are used to identify contamination attributable to shipping or field handling procedures. Trip blanks are required for all field events that include the collection of volatile samples.

*Field blank*—a sample of analyte-free medium that is taken to the sampling site and exposed to the atmosphere during sample-collection activities. Field blanks are used to measure contamination introduced during sample collection.

*Equipment rinsate blank*—a sample of analyte-free medium that has been used to rinse the sampling equipment. It is collected after completion of decontamination and before sampling. Equipment rinsate blanks are used to assess the cleanliness of sampling equipment.

## **B-2.0 LABORATORY ANALYSIS SUMMARY**

During the second quarter of fiscal year (FY) 2008, 80 pore-gas samples, 5 field duplicate samples, 3 field blank samples, 1 equipment rinsate blank, and 3 performance evaluation samples were collected for volatile organic compounds (VOCs); 83 pore-gas samples and 5 field duplicate samples were collected for tritium at Solid Waste Management Unit 54-006. Analysis of pore gas was conducted for VOCs using EPA Method TO-15 and for tritium using EPA Method 906.0. All QC procedures were followed as required by the analytical services contract. Table B-2.0-1 lists the analytical methods used for radiochemical and organic chemical analyses.

The data, including the qualified data, are usable for evaluation and interpretive purposes. The entire data set meets the standards set for use in this report.

The analytical methods used for radionuclides, inorganic chemicals, and organic chemicals are summarized in the following sections. The required estimated detection limit or estimated quantitation limit for each analyte is defined in the analytical services contract.

### **B-3.0 ORGANIC CHEMICAL ANALYSES**

The summaries for these analyses are presented in the sections below. All QC procedures were followed as required by the analytical services contract.

#### **Maintenance of COC**

COC was properly maintained for all samples.

#### **Sample Documentation and Dilutions**

Samples were properly documented in the field.

#### **Sample Preservation**

Preservation criteria were met for all samples.

#### **Holding Time**

Holding times were met for all samples.

#### **Initial and Continuing Calibration Verification**

Initial acceptance criteria were met for all but 54 sample analyses. One result was not analyzed with a valid 5-point calibration curve and/or a standard at the reporting limit. Fifty-three reported results were analyzed with an initial calibration curve that exceeded the percent relative standard deviation criteria and/or the associated multipoint calibration correlation coefficient is  $<0.995$ . Affected records were qualified as being an estimate of their sample-specific quantitation limit.

Continuing calibration percent differences were recovered outside the method-specific limits, affecting EPA Method TO-15 analyses of 86 nondetected organic chemical analytical records. Affected records were qualified as being an estimate of their sample-specific quantitation limit.

#### **Analyte Identification (including internal standards, spectra review, and thermal ionization cavity review)**

Analyte identification criteria were met for internal standard, spectra review, thermal ionization cavity criteria for each sample analyses.

#### **Analyte Quantitation**

Analyte quantitation criteria were met for all sample analyses.

#### **Method Blank**

Method blank results for organic chemical analyses were within acceptable limits for all but 26 sample analyses. Affected sample results are less than or equal to 5 times the concentration of the related analyte in the trip blank or equipment blank, which indicate the reported detection is considered indistinguishable from the contamination in the blank.

### **Matrix Spike Recoveries**

All matrix spike recoveries for organic chemical analyses were within acceptable limits.

### **Surrogate Recoveries**

All surrogate recoveries for organic chemical analyses were within acceptable limits.

### **Internal Standard Responses**

All internal standard responses for organic chemical analyses were within acceptable limits.

### **LCS Recoveries**

LCS recoveries were within acceptable limits for all but three EPA Method TO-15 chemical analyses. The affected sample results are associated LCS recoveries that are less than the lower acceptance limits but are above 10%.

### **Laboratory and Field Duplicates**

Laboratory and field duplicates collected for organic chemical analyses indicate acceptable precision for all analyses.

### **Trip Blanks, Field Blanks, and Rinsate Blanks**

Trip, field, and rinsate blank samples were not collected during VOC SUMMA sampling.

One equipment rinsate blank collected on March 28, 2008, for EPA Method TO-15 analysis contained detectable amounts of 1,2-dichloroethane; tetrachloroethene; 1,1,1-trichloroethane; and trichloroethene. Three field blanks collected on April 4, 2008, and April 8, 2008, contained detectable amounts of chloroform; 1,1-dichloroethene; 1,2-dichloropropane; ethylbenzene; methylene chloride; tetrachloroethene; toluene; 1,1,2-trichloro-1,2,2-trifluoroethane; 1,1,1-trichloroethane; trichloroethene; and total xylene. Equipment blank concentrations within 5 times the concentration of samples analyzed indicate that the analyte detected in these samples could be the result of contamination. Detected field blank results do not impact the investigation or site status.

## **B-4.0 RADIONUCLIDE ANALYSES**

### **Maintenance of COC**

COC was properly maintained for all samples.

### **Sample Documentation and Dilutions**

Samples were properly documented in the field.

### **Sample Preservation**

Preservation criteria were met for all samples.

### **Holding Times**

Holding times were met for all radionuclide analyses.

### **Initial and Continuing Calibration Verification**

Initial and continuing calibrations were acceptable for all radionuclide analyses.

### **Analyte Identification**

Analyte identification criteria were met for all radionuclide analyses.

### **Analyte Quantitation**

Analyte quantitation criteria were met for all radionuclide analyses.

### **Method Blanks**

The method blank results for radionuclide analyses were within acceptable limits all sample results.

### **Matrix Spike Recoveries**

The matrix spike recoveries for radionuclide analyses were within acceptable limits for all the analyses.

### **Carrier and Tracer Recoveries**

Tracer and carrier recoveries for radionuclide analyses were within acceptable limits for all analyses.

### **LCS Recoveries**

The LCS recoveries for radionuclide analyses were within acceptable limits for all analyses.

### **Laboratory and Field Duplicates**

Laboratory duplicates collected for all radionuclide analyses indicate acceptable precision.

Field duplicates collected for radionuclide analyses indicate that three results were not in control. The DER was above 3 for three results. Results were not qualified based on field duplicate precision. Samples potentially affected by field blank and equipment blank contamination are presented in Table B-4.0-1.

### **Trip, Field, and Rinsate Blanks**

Trip, field, and rinsate blank samples were not collected for radionuclide analyses.

## **B-5.0 FIELD-MONITORING SUMMARY**

Field-monitoring data are less costly to generate than laboratory data and are immediately available to guide field decisions. Field-monitoring results are generated by rapid methods of analysis that provide

less precision than laboratory analyses. Field-monitoring data provide analyte (or at least chemical class) identification and quantification, although the quantification may be relatively imprecise.

Field monitoring of subsurface vapor monitoring at MDA L was conducted using guidance provided in SOP-06.31, Revision 2, Sampling of Subatmospheric Air. This procedure covers the use of the Brüel and Kræjer (B&K) Type 1302 multigas analyzer and Landtec GEM 500 photoionization detector (PID).

The B&K is calibrated annually by a certified calibration laboratory. The B&K is adjusted before each day's use to compensate for ambient pressure and temperature. Calibration is confirmed before each day's use by analyzing readings of ambient air and triplicate readings of known quantities of mixed organic analytes in nitrogen. These calibration verification check analyses confirm (1) analytical stability is present, (2) the instrument zero point for each analyte is correctly set, and (3) the stored calibration curve remains applicable to current instrument response to the presence of organic analytes. Concentrations of calibration standards analyzed before each day's use are expected to be within  $\pm 20\%$  of their known values. Additionally, during each sample analysis, a low sample flow condition triggers an alarm on the B&K and VOC measurement is then not completed.

The presence of nontarget organic chemicals biases B&K target analyte results if they have an acoustic response to infrared light that is similar to the target analyte. Trichlorofluoromethane (Freon 11) generates a measurable acoustic signal in response to light with a wavelength of 11.6  $\mu\text{m}$  that is proportional to its concentration. Other VOCs generating an acoustic signal to light at this wavelength include Freon 114 (CAS 76-14-2; 1,2-dichloro-1,1,2,2-tetrafluoroethane) and Freon 21 (CAS 75-43-4), which are not reported by EPA Method TO-15. Tetrachloroethene (PCE) generates an acoustic signal in response to light with a wavelength of 11.1  $\mu\text{m}$ . Other VOCs responding to light at this wavelength include styrene (CAS 100-42-5); Freon 113 (CAS 76-13-1), which is not reported by EPA Method TO-15; Freon 12 (CAS 75-71-8, dichlorodifluoromethane); ethanol (CAS 64-17-5); and 1,1-dichloroethene (CAS 75-35-4). EPA Method TO-15 analytical results indicate that 1,1-dichloroethene and Freon 113 are present in most samples at MDA L at detectable concentrations that would be included in the signal interpreted as PCE. Table B-5.0-1 presents VOCs that interfere with each of the four B&K target analytes.

Analytical data generated using the B&K Type 1302 are supported by annual calibration records that bracket the periods of analyses. Calibration information is reported below for each of the two B&K photoacoustic analyzers used to generate results presented in this periodic monitoring report.

- The B&K with serial number 1692083 was calibrated on July 3, 2007. The zero point was set for 1,1,1-trichloroethane (TCA); trichloroethene (TCE); Freon 11; PCE; carbon dioxide ( $\text{CO}_2$ ); and water ( $\text{H}_2\text{O}$ ). Span concentrations of TCA at 61.4 ppm, TCE at 8.1 ppm, Freon 11 at 53 ppm, PCE at 19.24 ppm, and  $\text{CO}_2$  at 1265 ppm were used to generate calibration response curves.
- The B&K with serial number 1732805 was calibrated on July 12, 2007. The zero point was set for TCA, TCE, Freon 11, PCE,  $\text{CO}_2$ , and  $\text{H}_2\text{O}$ . Span concentrations of TCA at 47.1 ppm, TCE at 49.7 ppm, Freon 11 at 53.0 ppm, PCE at 48.4 ppm, and  $\text{CO}_2$  at 0.126% were used to generate calibration response curves.

The Landtec GEM 500 PID is calibrated annually by a certified calibration laboratory. During calibration, methane ( $\text{CH}_4$ ), oxygen ( $\text{O}_2$ ), and  $\text{CO}_2$  zero points are set, and each analyte's calibration response curves are developed. The  $\text{CH}_4$  reading is filtered to an infrared absorption frequency of 3.41  $\mu\text{m}$  (nominal), the frequency specific to hydrocarbon bonds. Landtec instruments are calibrated using certified  $\text{CH}_4$  mixtures and will give correct readings provided there are no other hydrocarbon gases present within the sample (e.g., ethane, propane, and butane). If there are other hydrocarbons present, the  $\text{CH}_4$  reading will be higher (never lower) than the actual  $\text{CH}_4$  concentration being monitored. The extent to which the  $\text{CH}_4$



reading is affected depends upon the concentration of the CH<sub>4</sub> in the sample and the concentration of the other hydrocarbons. The effect of other hydrocarbons is nonlinear and difficult to predict. The CO<sub>2</sub> reading is filtered to an infrared absorption frequency of 4.29 μm (nominal), the frequency specific to CO<sub>2</sub>. Therefore, any other gases usually found on landfill sites will not affect the CO<sub>2</sub> reading. The O<sub>2</sub> sensor is a galvanic cell type and suffers no influence from CO<sub>2</sub>, hydrogen sulfide, nitrate, sulfide, or hydrogen.

Calibration is confirmed before each day's use by analyzing multiple readings of ambient air. Zero readings of CH<sub>4</sub> and CO<sub>2</sub> are expected. Oxygen is expected to read 20.9%. Oxygen readings within ± 25% of 20.9% are considered acceptable.

Analytical data generated using the Landtec GEM-500 PID are supported by annual calibration records that bracket the periods of analyses. Calibration is performed by Geotech's Colorado Service Center in Denver, Colorado. Calibration information is reported below for the two Landtec PIDs used to generate results presented in this periodic monitoring report.

- Unit 1139 was calibrated on March 18, 2008. The zero point was set for CH<sub>4</sub>, CO<sub>2</sub>, and O<sub>2</sub>. Calibration was performed so that CH<sub>4</sub> and CO<sub>2</sub> reached ±15% of a known concentration, and O<sub>2</sub> was set to read ambient air at 20.9%. Pump flow was confirmed to be 500 cc/min.
- Unit 903 was calibrated on March 19, 2008. The zero point was set for CH<sub>4</sub>, CO<sub>2</sub>, and O<sub>2</sub>. Calibration was performed so that CH<sub>4</sub> and CO<sub>2</sub> reached ±15% of a known concentration, and O<sub>2</sub> was set to read ambient air at 20.9%. Pump flow was confirmed to be 500 cc/min.

## B-6.0 REFERENCES

*The following list includes all documents cited in this appendix. Parenthetical information following each reference provides the author(s), publication date, and ER ID number. This information is also included in text citations. ER ID numbers are assigned by the Environmental Programs Directorate's Records Processing Facility (RPF) and are used to locate the document at the RPF and, where applicable, in the master reference set.*

*Copies of the master reference set are maintained at the New Mexico Environment Department Hazardous Waste Bureau; the U.S. Department of Energy-Los Alamos Site Office; EPA, Region 6; and the Directorate. The set was developed to ensure that the administrative authority has all material needed to review this document, and it is updated with every document submitted to the administrative authority. Documents previously submitted to the administrative authority are not included.*

EPA (U.S. Environmental Protection Agency), February 1994. "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review," EPA-540/R-94/013, Office of Emergency and Remedial Response, Washington, D.C. (EPA 1994, 048639)

EPA (U.S. Environmental Protection Agency), 1997. "Test Methods for Evaluating Solid Waste, Laboratory Manual, Physical/Chemical Methods," SW-846, 3rd ed., Update III, Office of Solid Waste and Emergency Response, Washington, D.C. (EPA 1997, 057589)

EPA (U.S. Environmental Protection Agency), October 1999. "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review," EPA540/R-99/008, Office of Emergency and Remedial Response, Washington, D.C. (EPA 1999, 066649)

LANL (Los Alamos National Laboratory), March 1996. "Quality Assurance Project Plan Requirements for Sampling and Analysis," Los Alamos National Laboratory document LA-UR-96-441, Los Alamos, New Mexico. (LANL 1996, 054609)

LANL (Los Alamos National Laboratory), December 2000. "University of California, Los Alamos National Laboratory (LANL), I8980SOW0-8S, Statement of Work for Analytical Laboratories," Rev. 1, Los Alamos National Laboratory, Los Alamos, New Mexico. (LANL 2000, 071233)

**Table B-1.0-1  
Data Analysis and Assessment Procedures**

Procedure	Title	Effective Date
SOP-15.01, Rev. 1	Routine Validation of Volatile Organic Data	4/20/2004
SOP-15.07, Rev. 1	Routine Validation of Chemical Separation Alpha Spectrometry, Gas Proportional Counting, and Liquid Scintillation Data	4/20/2004

**Table B-1.0-2  
Definition of Data Qualifiers Used in Data Validation**

Qualifier	Explanation
U	The analyte was analyzed for but not detected. Reported value is the sample-specific estimated quantitation limit or detection limit.
J	The reported value should be regarded as estimated.
J+	The reported value should be regarded as estimated and biased high.
J-	The reported value should be regarded as estimated and biased low.
UJ	The analyte was analyzed for but not detected. Reported value is an estimate of the sample-specific quantitation limit or detection limit.
R	The sample results were rejected because of serious deficiencies in the ability to analyze the sample and meet quality-control criteria; presence or absence cannot be verified.

**Table B-2.0-1  
Analytical Method Used for Organic Chemical Analyses**

Analytical Method	Analytical Description	Target Compound List
EPA Method TO-15 Sampling and Analysis	VOCs in air	See analytical services statement of work. (LANL 2000, 071233)
EPA Method 906.0	Tritium analysis	See analytical services statement of work. (LANL 2000, 071233)

**Table B-4.0-1  
Sample Records Potentially Affected by Detected Field Duplicate Results**

Location ID	Sample Depth (ft)	Sample Result (pCi/L)	Sample Precision	Sample Qualifier	Field Duplicate Result (pCi/L)	Field Duplicate Precision	Field Duplicate Qualifier	DER
54-02025	190–190	297.279	74.197	—*	-78.319	69.476	U	3.69
54-24241	192–194	1416.14	208.512	—	638.883	145.489	—	3.06
54-24399	550–608	225.096	123.984	U	9642.05	1017.24	—	9.19

\* — = The result was detected without qualification.

**Table B-5.0-1  
B&K Target Analytes  
and Potential Interfering Analytes**

Target	Potential Interfering Analyte
PCE	Styrene
PCE	Freon 113
PCE	Freon 12
PCE	1,1-Dichloroethene
PCE	Ethylene Oxide
PCE	Ethanol
PCE	Dipropylnitrosamine
PCE	1,1-Dimethylhydrazine
PCE	1,4-Diethylene dioxide
PCE	Cyclohexene
PCE	tert-Butyl Alcohol
PCE	m-Vinyltoluene
PCE	Vinyl cChloride
PCE	Tetrahydrofurane
PCE	Silicium Tetrafluoride
PCE	Nitromethane
PCE	Nitrogen Trifluoride
PCE	$\alpha$ -Methylstyrene
PCE	Monomethyl Hydrazine
PCE	Methyl Iodide
PCE	n-Hexane
PCE	Acetic Anhydride
PCE	1,3-Butadiene
Freon 11	Freon 114
Freon 11	Freon 21
Freon 11	Carbonyl Sulphide
Freon 11	Methyl Acetate
Freon 11	Chloropicrine
Freon 11	Cyclohexane
Freon 11	Dimethylnitrosamine
Freon 11	Epichlorohydrine
Freon 11	Ethane
Freon 11	Ethylene Oxide
Freon 11	Ethyl Formate
Freon 11	2-Nitropropane
Freon 11	Phosgene

**Table B-5.0-1 (continued)**

Target	Potential Interfering Analyte
Freon 11	Vinyl Acetate
TCA	Fluorobenzene
TCA	Ethyl Benzene
TCA	Dimethyl formamide
TCA	Dichloromethane
TCA	1,2-Dichloroethane
TCA	o-Dichlorobenzene
TCA	Dibutyl Phthalate
TCA	Chloromethane
TCA	m-Xylene
TCA	1,1,2-Trichloroethane
TCA	o-Toluidine
TCA	Toluene
TCA	Phenol
TCA	Chlorobenzene
TCA	Carbon dioxide
TCA	Boron trifluoride
TCA	Aniline
TCA	Acetophenone
TCA	Hydrogen Cyanide
TCA	n-Heptane
TCE	Arsine
TCE	Butanone
TCE	Freon 152
TCE	Diethyl Ketone
TCE	Dinitroendifluoride
TCE	2-Pentanone
TCE	2-Propanol
TCE	Sulfur Hexafluoride
TCE	Vinyl Chloride



## **Appendix C**

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*Data Packages and Chain-of-Custody Forms  
(on CD included with this document)*