LA-UR-10-0269
January 2010
EP2010-0013

Periodic Monitoring Report for Vapor-Sampling Activities at Material Disposal Area G, at Technical Area 54, for Fiscal Year 2009

Los Alamos
NATIONAL LABORATORY
EST.1943

Prepared by the Environmental Programs Directorate

LA-UR-10-0269
EP2010-0013

Periodic Monitoring Report for Vapor-Sampling Activities at Material Disposal Area G, at Technical Area 54, for Fiscal Year 2009

January 2010

Responsible project leader:

Printed Name	Signature	Title	Organization	Date
Jarrett Rice		Project Leader	Environmental Programs	1/26/2010

Responsible LANS representative:

Printed Name	Signature	Title	Organization	Date
Michael J. Graham		Associate Director	Environmental Programs	1/27/10

Responsible DOE representative:

Printed Name	Signature	Title	Organization	Date
David R. Gregory		Project Director	DOE-LASO	1/28/2010

EXECUTIVE SUMMARY

This periodic monitoring report summarizes the annual vapor-monitoring activities at Material Disposal Area (MDA) G in Technical Area 54 at Los Alamos National Laboratory. The objective of the monitoring is to evaluate trends in volatile organic compound (VOC) concentrations and tritium activity levels over time in subsurface vapor at MDA G.

Monitoring conducted at MDA G during the fourth quarter of fiscal year (FY) 2009 included field screening of sample ports in 20 of the 20 existing vapor-monitoring boreholes and 1 open borehole. Vapor samples were collected from these boreholes for laboratory analyses of VOCs and tritium.

VOC sampling results and tritium activities for FY2009 pore-gas monitoring are similar to those measured in the fourth quarter of FY2008, the first quarter of FY2008, and the fourth quarter of FY2007. The highest VOC concentrations are usually detected at shallow depths near the base elevation of the adjacent disposal units, between 20 and 60 ft below ground surface (bgs), and then gradually decrease with depth. Trace VOC concentrations of 15 VOCs have been measured in the last four monitoring events in the deepest borehole, 54-25105, between 485 and 701 ft bgs. All VOC concentrations from this borehole and have yielded screening values less than those found at shallower depths.

CONTENTS

Figures

Tables

Appendixes

Plate

1.0 INTRODUCTION

This periodic monitoring report presents the results of vapor-monitoring activities conducted during the fourth quarter of fiscal year (FY) 2009 at Material Disposal Area (MDA) G in Technical Area 54 (TA-54) at Los Alamos National Laboratory (LANL or the Laboratory). MDA G is located in the east-central portion of the Laboratory at TA-54, Area G, on Mesita del Buey (Figure 1.0-1). Vapor-monitoring activities were conducted in accordance with the approved vapor-monitoring plan (LANL 2007, 098608; LANL 2007, 099372). MDA G consists of inactive subsurface disposal units located within Area G that include 32 pits, 193 shafts, and 4 trenches with depths ranging from 10 to 65 ft below the original ground surface. The pits, trenches, and shafts are constructed in unit 2 (caprock) and unit 1 (subsurface) of the Tshirege Member of the Bandelier Tuff (consolidated tuff units). The regional aquifer is estimated to be at an average depth of approximately 930 ft below ground surface (bgs) at MDA G, based on data from wells near the area and the predictions of the hydrogeologic conceptual model for the Pajarito Plateau (LANL 1998, 059599). The surface topography of Area G is relatively flat. Portions of the disposal units at MDA G are covered with concrete and asphalt. Surface runoff from the site is controlled and discharges into drainages to the north (toward Cañada del Buey) and the south (toward Pajarito Canyon). Stormwater and sediment monitoring stations are distributed throughout Area G and in drainages leading to the canyons.

During the 1950s, the Laboratory, with approval of the U.S. Atomic Energy Commission and upon the recommendation of the U.S. Geological Survey, selected Mesita del Buey within TA-54 for underground disposal of Laboratory-derived 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 G began operations in 1957 as one of four MDAs on Mesita del Buey between Pajarito Canyon (south) and Cañada del Buey (north). MDA G is a decommissioned (i.e., removed from service) subsurface site for the past disposition of low-level waste, certain radioactively contaminated infectious waste, asbestos-contaminated material, and polychlorinated biphenyls. It was also used for the retrievable storage of transuranic waste.

Pore-gas monitoring at MDA G has been required since 1985. A summary of pore-gas monitoring at MDA G follows.

- In 1985, the Laboratory received a compliance order from the New Mexico Environment Department (NMED) that required characterization of pore gas at Areas G and L, in addition to other requirements. 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 volatile organic compound (VOC) plumes 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 Resource Conservation and Recovery Act facility investigation.
- In 2005, the Compliance Order on Consent (the Consent Order) required pore-gas monitoring during the site investigations of all MDAs and submittal of a long-term pore-gas monitoring plan for each MDA.
- In September 2005, the Laboratory submitted a long-term monitoring plan for pore gas in the MDA G investigation report (LANL 2005, 090513).

- In October 2007, the Laboratory submitted a revised long-term monitoring plan for pore gas in the MDA G corrective measures evaluation plan (LANL 2007, 098608).
- Boreholes 54-01116 and 54-01117 were redrilled and sampling ports were installed at new depths in May and June 2008 to support the soil-vapor extraction pilot test. The locations of the MDA G monitoring boreholes are shown in Figure 1.0-2.
- In May 2008, LANL submitted a revised Table D-1, MDA G Pore-Gas Monitoring Locations, that was approved by the NMED (Shen 2008, 103907). These MDA G subsurface vapor-monitoring locations are provided in Table 1.0-1.
- In August 2008, a pilot study was conducted at MDA G to assess the potential for short-circuiting between sample port depths in boreholes constructed with Group 4 vapor-monitoring systems. The results of this pilot test are reported in "Pilot Test Report Evaluating Type 4 Vapor-Sampling Systems at Material Disposal Area G" (LANL 2008, 103020).
- In August 2008, a second pilot study was conducted at MDA G to compare vapor sampling results among three vapor-sampling systems currently in use at TA-54: the newer FLUTe system, the older FLUTe monitoring system installed in MDA G during the 1990s, and the Group 1 system currently used in numerous boreholes at TA-54 (including MDA G). The results of this pilot test are reported in "Pilot Test Report Evaluating FLUTe Vapor-Sampling Systems in Use at Material Disposal Area G," (LANL 2008, 103262).
- From June to October 2008, a soil vapor extraction (SVE) pilot study was conducted at MDA G to evaluate SVE as a treatment option for the MDA G VOC plumes. The results of the pilot study are reported in "Pilot Test Report for Evaluating Soil Vapor Extraction at Material Disposal Area G," (LANL 2008, 103902).

Subsurface vapor monitoring is performed to characterize VOC and tritium concentrations in the subsurface vadose zone. Field-screening data and analytical laboratory data for FY2009 are presented in this report. These results are compared to the data from three previous monitoring events conducted in the fourth quarter of FY2008, the first quarter of FY2008, and the fourth quarter of FY2007.

Information on radioactive materials and radionuclides, including the results of sampling and analysis of radioactive constituents, is voluntarily provided to NMED in accordance with U.S. Department of Energy policy.

2.0 SCOPE OF ACTIVITIES

Annual pore-gas sampling at MDA G was conducted from August 5 to September 30, 2009. Forty-two VOC and tritium samples were collected from boreholes at MDA G. Vapor-monitoring borehole locations, port depths, and corresponding sampling intervals that were field screened and sampled are presented in Table 2.0-1. The port depths sampled are those nearest the lowest base elevation of the adjacent disposal unit and at the total depth (TD) of the borehole. The following activities were conducted during this monitoring event.

- Each sampling interval was purged in accordance with Standard Operating Procedure EP-ERSS-5074 to ensure that formation air was being sampled. Sampling intervals are shown in Table 2.0-1.
- Pore gas from each accessible sample interval was field screened for carbon dioxide (CO_2) and oxygen (O_2) using a Landtec GEM-500 photoionization detector and for selected VOCs, CO_2, and water vapor using a Brüel and Kjær (B&K) Type 1302 multigas photoacoustic analyzer. Pressure differential (kPa) was also measured at each accessible instrumented interval.

- A total of 42 ports in 20 boreholes and 1 open borehole (54-25105 at the depth interval of 485 to 701 ft bgs) were field screened for VOCs using the Landtec and B&K analyzer.
- Vapor samples were collected from selected depth intervals in SUMMA canisters for laboratory analyses of VOCs using EPA Method TO-15. Sampled depth intervals are presented in Table 2.0-1 as bolded depth intervals.
- A total of 41 VOC samples were collected in SUMMA canisters from 41 ports in 20 boreholes; 1 VOC sample was collected from the 485 to 701 ft bgs sample interval in borehole 54-25105.
- Borehole 54-25105 is cased to 485 ft bgs. The borehole is sampled by packing off the borehole at 400 ft bgs inside the casing using the packer system. Subatmospheric air is sampled from the Cerros del Rio basalt from the end of the casing at 485 ft bgs to total depth of the borehole at 701 ft bgs.
- Tritium samples were collected in silica gel columns from selected depth intervals for laboratory analysis using EPA Method 906.0.
- A total of 41 tritium samples were collected from 41 ports in 20 boreholes; 1 tritium sample was collected from the 485 to 701 ft bgs sample interval in borehole 54-25105.

No investigation-derived waste was generated during the vapor-monitoring activities.

2.1 FY2009 Deviations

Approved vapor-monitoring locations, port depths, and corresponding sampling intervals for MDA G are shown in Table 1.0-1. The following deviations occurred during FY2009 sampling activities.

- Because borehole 54-01117 was re-drilled deeper into the subsurface as discussed in section 1.0, the bottom port sampled was at 179.8 ft bgs instead of 85 ft bgs. This TD and the top port depth of 20 ft bgs were also sampled in the fourth quarter of FY2008. The previous TD of 85 ft bgs and the top port depth of 31.5 ft bgs were sampled in the previous two monitoring events.
- VOC and tritium samples were collected from two additional depths in eastern borehole 54-22116. These additional samples were collected from port depths at 244 and 262 ft bgs, the two ports directly above the TD of 280 ft bgs. These two depths were chosen because they had the highest 1,1,1-trichloroethane (TCA) screening values measured by the B&K multigas analyzer on September 9, 2009. These samples were added to the samples collected from the three required port depths of 172, 190, and 280 ft bgs that were sampled in FY2008 and FY2009.
- Blocked ports were observed in boreholes 54-2009 at 79 ft bgs, 54-02010 at 53 ft bgs, and 54-24397 at 188 ft bgs. These ports could not be field screened for VOCs. The approved vapor monitoring plan does not require VOC or tritium samples to be collected from these blocked ports (Shen 2008, 103907).

3.0 REGULATORY CRITERIA

The Consent Order does not identify cleanup standards, risk-based screening levels (SLs), risk-based cleanup goals, or other regulatory criteria for pore gas. Therefore, an analysis was conducted of fourth-quarter data and the three previous sampling events to evaluate the potential for contamination of groundwater by VOCs in pore gas using SLs based on groundwater cleanup levels in the Consent Order. The analysis evaluated the groundwater concentration that would be in equilibrium with the maximum pore-gas concentrations of VOCs detected at MDA G, if the pore-gas concentration were in equilibrium

with ground water, during the most recent round of monitoring. The equilibrium relationship between air and water concentrations is described by the following equation.

$$C_{water} = C_{air}/H' \qquad \textbf{Equation 3.0-1}$$

Where, C_{water} = the volumetric concentration of contaminant in water,

C_{air} = the volumetric concentration of contaminant in air, and

H' = dimensionless form of Henry's law constant.

If the predicted concentration of a particular VOC in groundwater is less than the SL, then no potential exists for exceedances of groundwater cleanup levels. An analysis of the MDA G pore-gas data is presented in section 5.0.

Because there are no SLs for pore gas that address the potential for groundwater contamination, the screening evaluation was based on groundwater standards or tap water SLs and the Henry's law constant that describes the equilibrium relationship between vapor and water concentrations. The source of the Henry's law constant is the NMED technical background document (NMED 2009, 106420) or the EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm). Some of the Henry's law constants have changed since the FY2008 monitoring report, leading to changes in the calculated pore-gas concentrations that correspond to the groundwater standards. The following dimensionless form of the Henry's law constant was used:

$$H' = \frac{C_{air}}{C_{water}} \qquad \textbf{Equation 3.0-2}$$

Equation 3.0-2 can be used to calculate the following screening value (SV):

$$SV = \frac{C_{air}}{1000 \times H' \times SL} \qquad \textbf{Equation 3.0-3}$$

where C_{air} is the concentration of a particular VOC in the pore gas sample (µg/m^3), H' is the dimensionless Henry's law constant, SL is the screening level (µg/L), and 1000 is a conversion factor from liters to cubic meters (L to m^3). The SLs are the groundwater standards or tap water SLs. The groundwater standards are the EPA maximum contaminant level (MCL) or New Mexico Water Quality Control Commission (NMWQCC) groundwater standard, whichever is lower. If there is no MCL or NMWQCC standard, the EPA regional tap water SL (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) is used and adjusted to 10^{-5} risk for carcinogens. The numerator in Equation 3.0-3 is the actual concentration of the 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 the VOC in pore gas does not exceed the SL, even if the VOC plume were in direct contact with groundwater. Table 3.0-1 shows the calculated concentrations of contaminants in pore gas corresponding to groundwater SLs. Table 3.0-2 shows the SVs calculated for the maximum pore-gas concentrations of VOCs detected for FY2009. Table 3.0-3 shows the SV calculated for toluene, the only VOC detected during FY2009 in the deepest borehole sampled, borehole 54-25105. Table 3.0-4 shows the SVs calculated for the maximum detected VOCs during the last four monitoring events.

4.0 FIELD-SCREENING RESULTS

FY2009 vapor-monitoring field-screening activities were conducted at MDA G from August 5 to September 29, 2009. Vapor-monitoring borehole locations, port depths, and corresponding sampling intervals sampled during this quarter are provided in Table 2.0-1. Sampling locations are shown in Figure 1.0-2. Monitoring activities included field screening of subsurface vapor for VOCs, water vapor, and percent CO_2 and O_2.

Before sampling, each interval was purged to ensure formation air was being collected. The vapor from each port was field screened using a Landtec GEM-500 photoionization detector equipped with an 11.7-electronvolt lamp to measure percent CO_2 and O_2. Each interval was monitored with the Landtec until CO_2 and O_2 readings stabilized. The stabilized percent CO_2 and O_2 values measured at each port depth in each borehole for FY2009 and the previous three monitoring events, are provided in Table 4.0-1. After purging and stabilization, VOC field-screening results were collected using a B&K Type 1302 multigas photoacoustic analyzer to estimate VOC concentrations. The B&K was calibrated for analysis of four VOCs: trichlorofluoromethane (Freon-11), tetrachloroethene (PCE), TCA, and trichloroethene (TCE). It also measures CO_2 and water vapor. The stabilized B&K field-monitoring values for FY2009 and the previous three monitoring events are provided in Table 4.0-2. The field-screening quality assurance/quality control (QA/QC) program is summarized in Appendix B, section B-5.0.

Blocked ports were observed in boreholes 54-2009 at 79 ft bgs, 54-02010 at 53 ft bgs, and 54-24397 at 188 ft bgs. The approved vapor monitoring plan does not require VOC or tritium samples to be collected at these port depths in these boreholes (Shen 2008, 103907).

5.0 ANALYTICAL DATA RESULTS

FY2009 vapor-sampling activities were conducted at MDA G from August 5 to September 30, 2009. Borehole sampling locations and port depths are provided in Table 2.0-1 and are highlighted in bold text. Borehole sampling locations are shown in Figure 1.0-2. Vapor samples were collected in SUMMA canisters and submitted for laboratory analyses of VOCs according to EPA Method TO-15. Table 5.0-1 and Appendix C present the detected concentrations of VOCs in MDA G vapor samples during FY2009 and the three previous monitoring events. Detected VOC concentrations for FY2009 sampling locations are shown in Plate 1.

Vapor samples were also collected in silica gel columns and submitted for laboratory analysis of tritium according to EPA Method 906.0. Table 5.0-2 presents the detected activity levels of tritium in MDA G vapor samples during FY2009 and the three previous monitoring events. Detected tritium activity levels for FY2009 sampling locations are shown in Figure 5.0-1.

VOC and tritium analytical data were reviewed in accordance with the QA/QC program presented in Appendix B. Analytical data and reports for FY2009 and the three previous monitoring events are included in Appendix C (on CD included with this document).

Tritium concentrations have been corrected using the percent moisture value to account for dilution from the bound water.

5.1 Data Summary

During the FY2009 sampling, eighteen VOCs were detected at least once in laboratory-analyzed vapor samples collected from MDA G. TCA was detected in 41 of the 42 samples, with a maximum concentration of 860,000 µg/m^3 (160,000 ppbv) from borehole 54-24386 at the 40 ft port depth

(Table 5.0-1). The next four highest TCA concentrations were detected in eastern boreholes; three were collected from shallow depths between 20 and 40 ft bgs in boreholes 54-01116, 54-01121, and 54-01128, while the other was collected from borehole 54-22116 at the 280 ft port length. Also detected in at least 88% of FY2009 samples were 1,1-dichloroethene, PCE, 1,1-dichloroethane, and TCE. FY2009 VOC concentrations were generally consistent with concentrations detected during previous sampling events (Table 5.0-1).

With some exceptions, VOC concentrations were higher in the shallower ports than in the borehole TDs sampled. In addition to the highest TCA concentration in FY2009 sampling, the highest concentrations of 1,1-dichlorethene and 1,1-dichloroethane were detected at the 40 ft port depth in eastern borehole location 54-24386 between pits 4 and 5. Western borehole location 54-24394 east of pit 33 had the highest FY2009 concentrations of TCE at the 50 ft port depth. Plate 1 presents the VOC results for FY2009.

During the last four sampling events, 31 VOCs were detected at least once in laboratory-analyzed vapor samples collected from MDA G. The five VOCs detected in more than 90% of the 108 pore-gas samples collected at MDA G boreholes in the last four monitoring events were TCA, 1,1-dichloroethane, 1,1-dichloroethene, TCE, and PCE. Since the 2007 sampling, detected concentrations of these VOCs appear to remain stable with time. In the four boreholes where multiple depths were sampled in the fourth quarter of FY2007 (boreholes 54-24370, 54-24386, 54-24394, and 54-27436), the concentrations of these 4 VOCs decrease gradually with depth.

In more than 30 pore-gas samples in the last four monitoring events, 1,1,2-trichloro-1,2,2-trifluoromethane, dichlorodifluoromethane, chloroform, and trichlorotrifluoromethane were detected. In fewer than 10 samples in the last four monitoring events, 19 VOCs were detected, including benzene, 1,3-butadiene, 2-butanone, carbon disulfide, carbon tetrachloride, chlorodifluoromethane, cis-1,2-dichloroethene, ethanol, ethylbenzene, 4-ethyltoluene, hexane, methanol, n-heptane, propylene, toluene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 1,2-xylene, and 1,3-xylene+1,4-xylene. The other VOCs detected in at least 10 (but fewer than 30) pore gas samples were: methylene chloride, acetone, and cyclohexane.

During the last four monitoring events, the deepest borehole (54-25105) was only sampled during fourth quarter of FY2008 and fourth quarter of FY2009. Borehole 54-25105 is located at the heavy equipment lay down yard at MDA G. The location is subject to surface contamination. Toluene was the only VOC detected in FY2009, while 15 VOCs were detected in the fourth quarter of FY2008. Nine of these fifteen VOCs were only detected once in the 108 samples collected from MDA G boreholes in the last four monitoring events. The remaining 6 VOCs detected were trace concentrations of acetone, 2-butanone, cyclohexane, hexane, toluene, and 1,2,4-trimethylbenzene.

Tritium was detected in 41 of the 42 samples analyzed during FY2009 sampling at activity levels ranging from 554 to 236,115,000 pCi/L (Table 5.0-2). The maximum tritium activity level (236,115,000 pCi/L) detected was collected from the 20 ft port depth in borehole 54-01117. Borehole 54-01117 is located northwest of pit 2 in the eastern part of MDA G. The second highest tritium result (211,019,000 pCi/L) was from the 20 ft port depth in borehole 54-01111, located in the south-central part of MDA G west of trench A. Of the remaining 39 estimated and qualified tritium activity levels, two were greater than 100,000,000 pCi/L, four were between 10,000,000 and 100,000,000 pCi/L, five were between 1,000,000 and 10,000,000 pCi/L, seven were between 100,000 and 1,000,000 pCi/L, twelve were between 10,000 and 100,000 pCi/L, and nine were less than 10,000 pCi/L.

Tritium results were generally consistent with results from the fourth quarter FY2008. Only two boreholes (boreholes 54-24394 and 54-24397) were sampled for tritium in the previous two monitoring events; tritium activities were similar at those locations with the more recent measurements. The maximum tritium activity level (450,721,000 pCi/L) detected during the last four monitoring events was collected from the 20 ft port depth in borehole 54-01111. Borehole 54-01111 is located west of trench A in the south-central part of MDA G. The next four highest tritium activity levels measured during the last four monitoring events were collected from the 20 ft port depth of borehole 54-01117, the 20 ft port depth of borehole 54-01111, the 35 ft port depth of borehole 54-01126, and the 60 ft port depth of borehole 54-01110.

5.2 Data Evaluation

A screening evaluation was performed to evaluate if the VOC concentrations detected during FY2009 are a potential source of groundwater contamination. Because there are no SLs for pore gas that address the potential for groundwater contamination, the screening evaluation was based on groundwater standards or tap water SLs and Henry's law constants that describe the equilibrium relationship between vapor and water concentrations (see section 3.0).

SVs were calculated using Equation 3.0-3 for the maximum concentrations of VOCs detected in pore-gas samples at MDA G during FY2009. The screening evaluated 17 detected VOCs that have MCLs, NMWQCC standards, or EPA regional tap water SLs. Table 3.0-2 shows the SVs calculated for the relevant VOCs for FY2009. Five VOCs had SVs greater than 1.0: 1,1-dichloroethane; 1,1-dichloroethene; PCE; TCA; and TCE. The maximum concentrations of 1,1-dichloroethane (SV of 7.1), 1,1-dichloroethene (SV of 8.9), and TCA (SV of 20) were detected in borehole 54-24386 at the 40 ft depth bgs. The maximum concentration of PCE (SV 5.8) was detected in borehole 54-22116 at the 280 ft length along the borehole. The highest SV was for TCE (SV of 39). The maximum concentration of TCE was detected in borehole 54-24394 at the 50 ft depth bgs.

Analysis was conducted on the toluene concentration detected in the deepest pore-gas sample. Toluene was the only VOC detected from borehole 54-25105. Borehole 54-25105 was sampled at a depth interval of 485 ft bgs to 701 ft bgs in the Cerros del Rio basalt. The aquifer is approximately 230 ft below the total depth of this borehole. This borehole is subject to contamination because the location of the borehole is at the heavy equipment lay down yard for MDA G. The screening analysis of toluene yielded an SV less than 1.0 (Table 3.0-3). Based on this evaluation, the concentrations of VOCs in the pore gas do not pose an immediate potential source of groundwater contamination.

SVs were calculated using Equation 3.0-3 for the maximum concentrations of VOCs detected in pore-gas samples at MDA G during the last four monitoring events. The screening evaluated the maximum concentrations for 27 detected VOCs that have MCLs, NMWQCC standards, or EPA regional tap water SLs. Table 3.0-4 shows the SVs calculated for these VOCs for the last four monitoring events. Eight VOCs had SVs that exceeded 1.0 at least once during the last four monitoring events. These VOCs included the five listed above for FY2009, plus acetone, methanol, and methylene chloride. The maximum pore gas concentrations of acetone, methylene chloride, and methanol were observed in samples collected from borehole 54-24386 in the fourth quarter of FY2007 at 40 ft, 40 ft, and 117.5 ft bgs, respectively. These samples were collected from shallow geologic units of the Bandelier Tuff, the Tshirege member (Qbt2), and the Cerro Toledo Interval (Qct).

The maximum pore gas concentrations for TCA, 1,1-dichloroethene, 1,1-dichloroethane, and TCE were collected from the shallow Qbt2 unit. PCE maximum pore-gas concentrations were collected from the horizontal borehole 54-22116, that extends eastward under pits 1 and 3. None of the maximum pore-gas concentrations with SVs greater than 1.0 were collected from deep geologic units, so the VOCs in the pore gas beneath MDA G do not pose an immediate potential source of groundwater contamination.

6.0 SUMMARY

The purpose of monitoring pore gas at MDA G is to identify changes in the configuration of the plumes, monitor changes in contaminant concentration distribution, and identify data needs for future modeling or trend analyses. The following summarizes the results from the FY2009 monitoring event.

- VOCs were detected in all 42 pore-gas samples from FY2009.
- VOC concentrations are consistent with concentrations reported during the previous three monitoring events.
- The highest VOC concentrations are usually detected at shallow depths near the base elevation of the adjacent disposal units, between 20 and 60 ft bgs.
- The toluene concentration measured at the deepest depth interval (485 to 701 ft bgs) in borehole 54-25105 drilled into the Cerros del Rio basalt was below a SV of 1.0, indicating that VOCs do not pose an immediate potential source of groundwater contamination because the measured concentration does not exceed the SL.
- Tritium was detected in 41 of the 42 samples from FY2009.
- Tritium activities are consistent with activities reported during the previous three monitoring events.
- Tritium activities ranged from 554 to 236,115,000 pCi/L and varied with depth and location.

The pore-gas sampling results from the last four monitoring events are summarized as follows.

- The four VOCs detected in more than 90% of the 108 pore-gas samples collected from MDA G borehole locations were TCA, 1,1-dichloroethane, TCE, and PCE. Concentrations of these VOCs do not appear to change with time.
- Fourteen VOCs detected in the deepest borehole, 54-25105, were detected only once during the last four monitoring events. One VOC, toluene, was detected twice from this borehole during the last four monitoring events. Nine of these VOCs were not detected in any of the other 108 pore-gas samples collected in the last four monitoring events.
- The five highest tritium activity levels were detected in pore-gas samples collected from shallow port depths between 20 and 60 ft bgs. The highest tritium activity level measured in the last four monitoring events was from a sample collected from the 20 ft port depth of borehole 54-01111 on July 18, 2008.

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. This information is also included in text citations. ER IDs 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 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.

LANL (Los Alamos National Laboratory), May 22, 1998. "Hydrogeologic Workplan," Los Alamos National Laboratory document LA-UR-01-6511, Los Alamos, New Mexico. (LANL 1998, 059599)

LANL (Los Alamos National Laboratory), September 2005. "Investigation Report for Material Disposal Area G, Consolidated Unit 54-013(b)-99, at Technical Area 54," Los Alamos National Laboratory document LA-UR-05-6398, Los Alamos, New Mexico. (LANL 2005, 090513)

LANL (Los Alamos National Laboratory), October 2007. "Corrective Measures Evaluation Plan for Material Disposal Area G at Technical Area 54, Revision 2," Los Alamos National Laboratory document LA-UR-07-6882, Los Alamos, New Mexico. (LANL 2007, 098608)

LANL (Los Alamos National Laboratory), October 2007. "Interim Subsurface Vapor-Monitoring Plan for Material Disposal Area L at Technical Area 54, Revision 1," Los Alamos National Laboratory document LA-UR-07-7040, Los Alamos, New Mexico. (LANL 2007, 099372)

LANL (Los Alamos National Laboratory), August 2008. "Pilot Test Report Evaluating Type 4 Vapor-Sampling Systems at Material Disposal Area G," Los Alamos National Laboratory document LA-UR-08-5227, Los Alamos, New Mexico. (LANL 2008, 103020)

LANL (Los Alamos National Laboratory), August 2008. "Pilot Test Report for Evaluating FLUTe Vapor-Sampling Systems in Use at Material Disposal Area G," Los Alamos National Laboratory document LA-UR-08-5385, Los Alamos, New Mexico. (LANL 2008, 103262)

LANL (Los Alamos National Laboratory), October 2008. "Pilot Test Report for Evaluating Soil-Vapor Extraction at Material Disposal Area G at Technical Area 54," Los Alamos National Laboratory document LA-UR-08-6883, Los Alamos, New Mexico. (LANL 2008, 103902)

NMED (New Mexico Environment Department), August 2009. "Technical Background Document for Development of Soil Screening Levels, Revision 5.0," New Mexico Environment Department, Hazardous Waste Bureau and Ground Water Quality Bureau Voluntary Remediation Program, Santa Fe, New Mexico. (NMED 2009, 106420)

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. I, Los Alamos Scientific Laboratory report LA-6848-MS, Los Alamos, New Mexico. (Rogers 1977, 005707)

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)

Shen, H., May 15, 2008. RE: MDA G 3rd Quarter Sampling Event [and previous correspondence, including attached revised Table D-1]. E-mail message to S. Paris (LANL) from H. Shen (NMED), Santa Fe, New Mexico. (Shen 2008, 103907)

7.2 Map Data Sources

Legend Item	Data Source
10 ft elevation contour	Hypsography, 10 ft Contour Interval; Los Alamos National Laboratory, ENV Environmental Remediation and Surveillance Program; 1991.
10 ft elevation contour	Hypsography, 20 ft Contour Interval; Los Alamos National Laboratory, ENV Environmental Remediation and Surveillance Program; 1991.
100 ft elevation contour	Hypsography, 100 ft Contour Interval; Los Alamos National Laboratory, ENV Environmental Remediation and Surveillance Program; 1991.
Disposal pit/impoundment 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; April 13, 2007.
Fence	Security and Industrial Fences and Gates; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; January 6, 2004; as published October 15, 2008.
Laboratory boundary	LANL Areas Used and Occupied; Los Alamos National Laboratory, Site Planning & Project Initiation Group, Infrastructure Planning Office; September19, 2007; as published December 4, 2008.
MDA G	Material Disposal Areas; Los Alamos National Laboratory, ENV Environmental Remediation and Surveillance Program; ER2004-0221; 1:2,500 Scale Data; April 23, 2004.
Paved road	Paved Road Arcs; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; January 6, 2004; as published October 15, 2008.
Primary paved road Secondary paved road	Road Centerlines for the County of Los Alamos; County of Los Alamos, Information Services; as published December 3, 2007.
Structure	Paved Road Arcs; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; January 6, 2004; as published October 15, 2008.
Technical Area boundary TA-54	Technical Area Boundaries; Los Alamos National Laboratory, Site Planning & Project Initiation Group, Infrastructure Planning Office; September 2007; as published December 4, 2008.
Unpaved road	Dirt Road Arcs; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; January 6, 2004; as published October 15, 2008.
Vapor-monitoring well	Point Feature Locations of the Environmental Restoration Project Database; Los Alamos National Laboratory, Waste and Environmental Services Division, EP2008-0592; November 4, 2008.

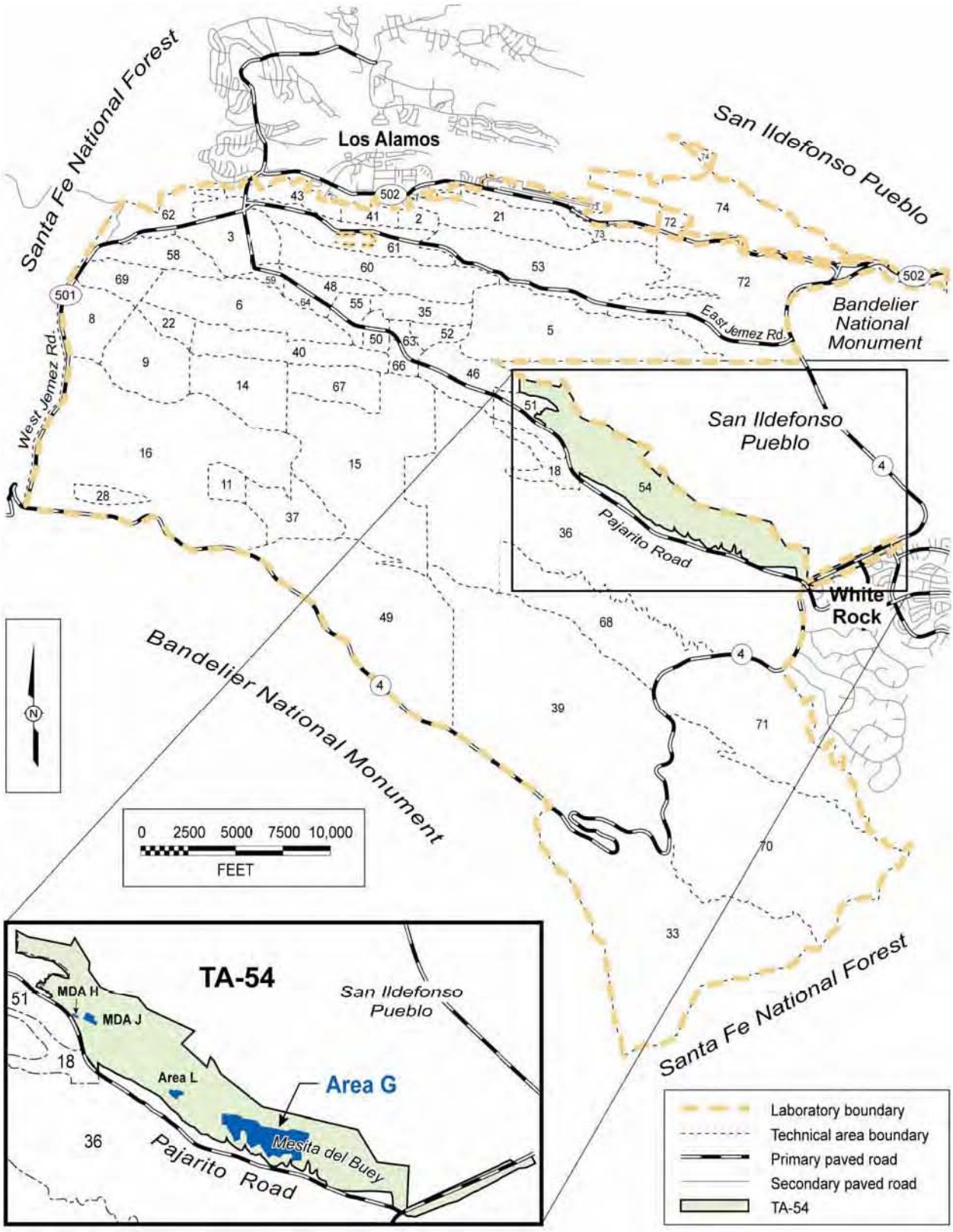

Figure 1.0-1 MDA G in TA-54 with respect to Laboratory TAs and surrounding land holdings

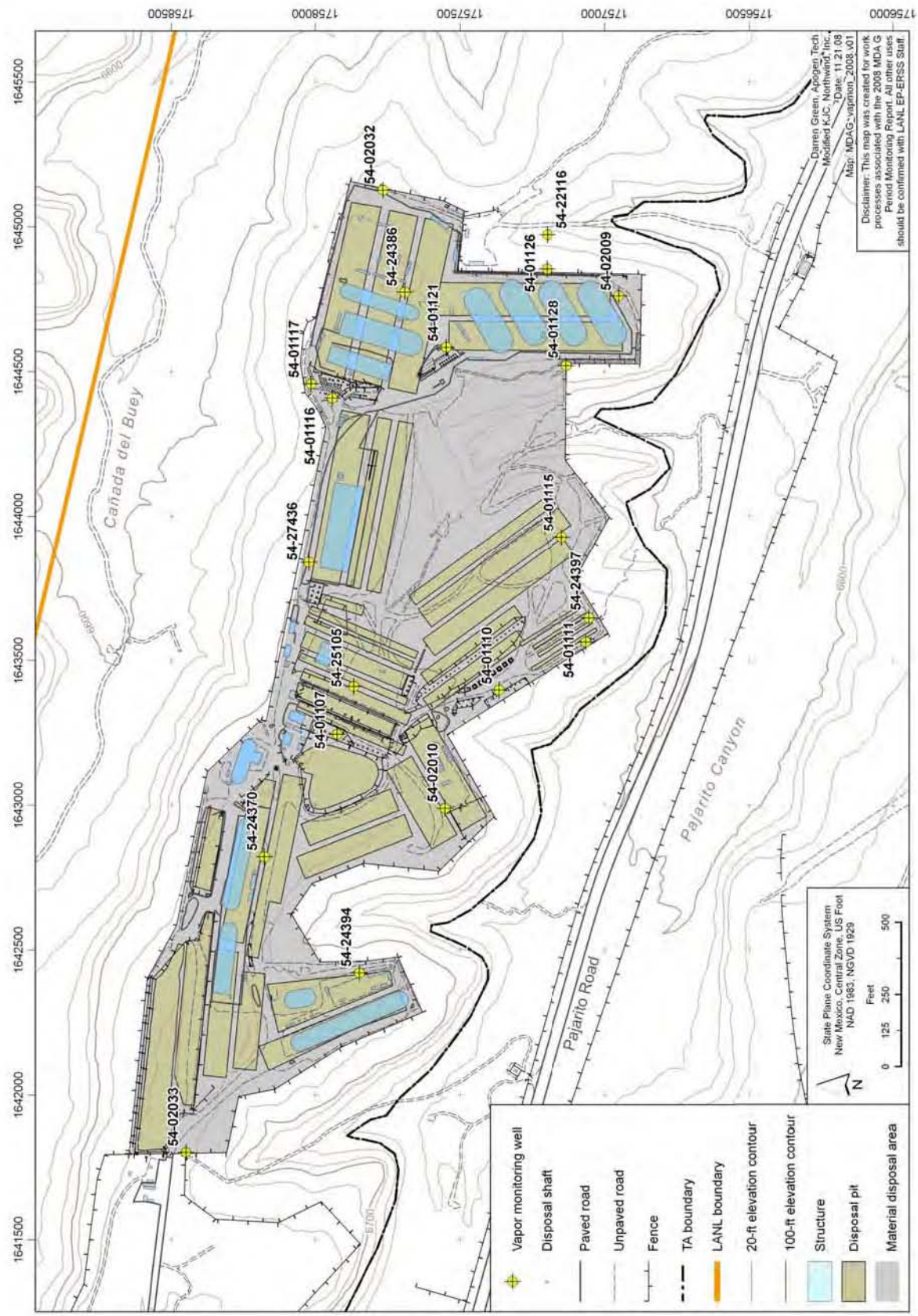

Figure 1.0-2 MDA G pore-gas monitoring boreholes

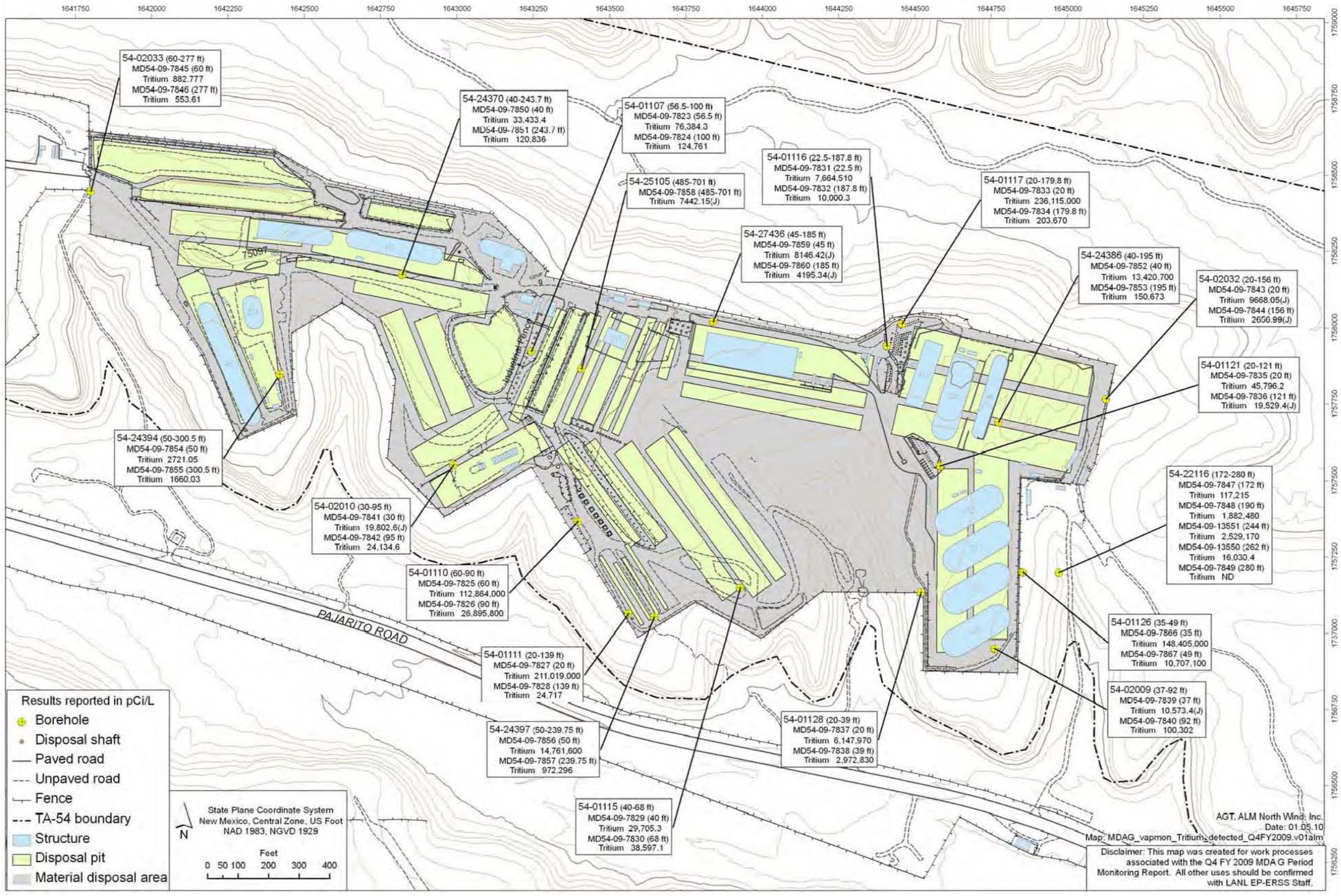

Figure 5.0-1 Tritium detected in vapor samples at MDA G

Table 1.0-1
MDA G Subsurface Vapor-Monitoring Locations

Borehole ID	VOC and Tritium Sampling Port Depths Intervals (ft bgs)
54-01107	20 (19–21), 44.5 (43.5–45.5), **56.5 (55.5–57.5)**, 74 (73–75), 91 (90–92), **100 (99–101)**
54-01110	20 (19–20), 48 (47–49), **60 (59–61)**, 70 (69–71), 85 (84–86), **90 (89–91)**
54-01111	**20 (19–21)**, 39.5 (38.5–40.5), 50 (49–51), 70 (69–71), 78 (77–79), 100 (99–101), **139 (138–140)**
54-01115[a]	7 (6–8), 26 (25–27), **40 (39–41)**, 53 (52–54), 63 (62–64), **68 (67–69)**
54-01116	**22.5 (20–25)**, 42.5 (40–45), 67.5 (65–70), 82.5 (80–85), 97.5 (95–100), 132.5 (130–135), 151.5 (149–154), 165 (162.5–167.5), **187.8 (185.3–190.3)**
54-01117[b]	**20 (20),** 31.5 (31.5), 55 (55), 73 (73), 82 (82), **85 (85)**
54-01117[c]	**20 (18.5–22.5)**, 42.5 (40–45), 67.5 (65–70), 82.5 (80–85), 97.5 (95–100), 132.5 (130–135), 150 (147.5–152.5), 159.5 (157–162), **179.8 (177.3–182.3)**
54-01121	**20 (19–21)**, 26 (25–27), 61.5 (60.5–62.5), 70 (69–71), 76 (75–77), 98 (97–99), **121 (120–122)**
54-01126[a]	7 (6–8), 17 (16–18), 28 (27–29), **35 (34–36)**, 42 (41–43), **49 (48–50)**
54-01128[a]	7.5 (6.5–8.5), 15(14–16), **20 (19–21)**, 30 (29–31), **39 (38–40)**
54-02009	**37 (34.5–39.5)**, 62 (59.5–64.5), 79 (76.5–81.5) **92 (89.5–94.5)**
54-02010	**30 (27.5–32.5)**, 53 (51.5–55.5), **95 (92.5–97.5)**
54-02032	**20 (20)**, 60 (60), 100 (100), 130 (130), **156 (156)**
54-02033	20 (20), **60 (60)**, 100 (100), 160 (160), 200 (200), 220 (220), 260 (260), **277 (277)**
54-22116[d]	28 (27–29), 46 (45–47), 64 (63–65), 82 (81–83), 100 (99–101), 118 (117–119), 136 (135–137), 154 (153–155), **172 (171–173), 190 (189–191),** 208 (207-209), 226 (225–227), 244 (243–245), 262 (261–263), **280 (279–281)**
54-24370	**40 (35–45)**, 72.5 (67.5–77.5), 120 (115–125), 174.7 (169.7–179.7), 200 (195–205), **243.7 (238.7–248.7)**
54-24386	**40 (37.5–42.5)**, 83 (80.5–85.5), 117 (114.5–119.5), 135 (132.5–137.5), **195 (192.5–197.5)**
54-24394	**50 (45–55)**, 100 (95–105), 150 (145–155), 192.5 (187.5–197.5), 245.25 (240.25–250.25), **300.5 (295.5–305.5)**
54-24397	**50 (45–55)**, 90 (85–95), 130 (125–135), 165 (160–170), 188 (183–193), **239.75 (234.75–244.3)**
54-25105[e]	**485 (485–701)**
54-27436	**45 (40–50)**, 70 (65–75), 115 (110–120), 163 (158–168), **185 (180–190)**

Note: Depths highlighted in bold denote intervals where VOC and tritium samples are to be collected.

[a] Borehole location is an angled borehole. Port depth and interval is depth below ground surface.

[b] Borehole depth represents old port intervals prior to redrill and installation of new depths.

[c] Borehole location redrilled during the reporting time frame (May and June of 2008).

[d] Borehole location is horizontal borehole. Port depths and intervals are length from borehole head.

[e] Open Borehole.

Table 2.0-1
FY2009 MDA G Subsurface Vapor-Monitoring Locations

Borehole ID	VOC and Tritium Sampling Port Depths Intervals (ft bgs)
54-01107	20 (19–21), 44.5 (43.5–45.5), **56.5 (55.5–57.5)**, 74 (73–75), 91 (9–92), **100 (99–101)**
54-01110	20 (19–20), 48 (47–49), **60 (59–61)**, 70 (69–71), 85 (84–86), **90 (89–91)**
54-01111	**20 (19–21)**, 39.5 (38.5–40.5), 50 (49–51), 70 (69–71), 78 (77–79), 100 (99–101), **139 (138–140)**
54-01115[a]	7 (6–8), 26 (25–27), **40 (39–41)**, 53 (52–54), 63 (62–64), **68 (67–69)**
54-01116	**22.5 (20–25)**, 42.5 (40–45), 67.5 (65–70), 82.5 (80–85), 97.5 (95–100), 132.5 (130–135), 151.5 (149–154), 165 (162.5–167.5), **187.8 (185.3–190.3)**
54-01117	**20 (18.5–22.5)**, 42.5 (40–45), 67.5 (65–70), 82.5 (80–85), 97.5 (95–100), 132.5 (130–135), 150 (147.5–152.5), 159.5 (157–162), **179.8 (177.3–182.3)**
54-01121	**20 (19–21)**, 26 (25–27), 61.5 (60.5–62.5), 70 (69–71), 76 (75–77), 98 (97–99), **121 (120-122)**
54-01126[a]	7 (6–8), 17 (16–18), 28 (27–29), **35 (34–36)**, 42 (41–43), **49 (48–50)**
54-01128[a]	7.5 (6.5–8.5), 15(14–16), **20 (19–21)**, 30 (29–31), **39 (38–40)**
54-02009	**37 (34.5–39.5)**, 62 (59.5–64.5), 79 (76.5–81.5)[b], **92 (89.5–94.5)**
54-02010	**30 (27.5–32.5)**, 53 (51.5–55.5)[b], **95 (92.5–97.5)**
54-02032	**20 (20)**, 60 (60), 100 (100), 130 (130), **156 (156)**
54-02033	20 (20), **60 (60)**, 100 (100), 160 (160), 200 (200), 220 (220), 260 (260), **277 (277)**
54-22116[c]	28 (27–29), 46 (45–47), 64 (63–65), 82 (81–83), 100 (99–101), 118 (117–119), 136 (135–137), 154 (153–155), **172 (171–173), 190 (189–191),** 208 (207–209), 226 (225–227), **244 (243–245)**, **262 (261–263)**, **280 (279–281)**
54-24370	**40 (35–45)**, 72.5 (67.5–77.5), 120 (115–125), 174.7 (169.7–179.7), 200 (195–205), **243.7 (238.7–248.7)**
54-24386	**40 (37.5–42.5)**, 83 (80.5–85.5), 117 (114.5–119.5), 135 (132.5–137.5), **195 (192.5–197.5)**
54-24394	**50 (45–55)**, 100 (95–105), 150 (145–155), 192.5 (187.5–197.5), 245.25 (240.25–250.25), **300.5 (295.5–305.5)**
54-24397	**50 (45–55)**, 90 (85–95), 130 (125–135), 165 (160–170), 188 (183–193)[b], **239.75 (234.75–244.3)**
54-25105[d]	**485 (485–701)**
54-27436	**45 (40–50)**, 70 (65–75), 115 (110–120), 163 (158–168), **185 (180–190)**

Note: Depths highlighted in bold denote intervals where VOC and tritium samples were collected.

[a] Borehole location is an angled borehole. Port depth and interval is depth below ground surface.

[b] Port blocked, could not be screened.

[c] Borehole location is horizontal borehole. Port depths and intervals are length from borehole head.

[d] Open Borehole.

Table 3.0-1
Henry's Law Constants, Groundwater SLs, and the Calculated Concentration of Detected VOCs during the Last Four Quarters in Pore Gas Corresponding to Groundwater Standards

VOC	Henry's Law Constant (dimensionless)[a]	Groundwater SL (µg/L)	Source of Groundwater SL	Calculated Concentrations in Pore Gas Corresponding to Groundwater Standard (µg/m^3)
Acetone	0.0016	22,000	EPA regional SL	35,200
Benzene	0.228	5	EPA MCL	1140
Butadiene[1,3-]	3	0.018	EPA regional SL	54
Butanone[2-]	0.0023	7100	EPA regional SL	16,330
Carbon Disulfide	0.59	1000	EPA regional SL	590,000
Carbon Tetrachloride	1.1	5	EPA MCL	5500
Chlorodifluoromethane	1.7	100,000	EPA regional SL	170,000,000
Chloroform	0.15	100	NMWQCC	15,000
Cyclohexane	6.1	13,000	EPA regional SL	79,300,000
Dichlorodifluoromethane	14	390	EPA regional SL	5,460,000
Dichloroethane[1,1-]	0.23	25	NMWQCC	5750
Dichloroethene[1,1-]	1.1	5	NMWQCC	5500
Dichloroethene[cis-1,2-]	0.17	70	EPA MCL	11,900
Ethanol	na[b]	na	na	na
Ethylbenzene	0.323	700	EPA MCL	226,100
Ethyltoluene[4-]	na	na	na	na
Hexane	74	880	EPA regional SL	65,120,000
Methanol	0.00019	18,000	EPA regional SL	3420
Methylene Chloride	0.13	5	EPA MCL	650
n-Heptane	na	na	na	na
Propylene	na	na	na	na
Tetrachloroethene	0.72	5	EPA MCL	3600
Toluene	0.272	750	NMWQCC	204,000
Trichloro-1,2,2-trifluoroethane[1,1,2-]	22	59,000	EPA regional SL	1,298,000,000
Trichloroethane[1,1,1-]	0.705	60	NMWQCC	42,300
Trichloroethene	0.4	5	EPA MCL	2000
Trichlorofluoromethane	4	1300	EPA regional SL	5,200,000
Trimethylbenzene[1,2,4-]	0.25	15	EPA regional SL	3750
Trimethylbenzene[1,3,5-]	0.36	12	EPA regional SL	4320
Xylene[1,2-]	0.213	1400	EPA regional SL	298,200
Xylene[1,3-]+Xylene[1,4-]	0.27	10,000[c]	EPA MCL	2,700,000

Note: Calculated concentrations in pore gas exceeding groundwater standard derived from the denominator of Equation 3.0-3. Screening value derived from Equation 3.0-3.

[a] NMED (2009, 106420, Appendix B).

[b] na = Not available.

[c] SL for Xylene[1,3-]+Xylene[1,4-] is for xylene mixture.

Table 3.0-2
Screening of VOCs Detected During Fourth Quarter FY2009 in Pore Gas at MDA G

VOCs	Maximum Pore-Gas Concentration (µg/m³)	Calculated Concentrations in Pore Gas Corresponding to Groundwater Standard (µg/m³)	Screening Value (unitless)	Screening Value >1?[a]
Acetone	54	35,200	0.0015	No
Butanone[2-]	15	16,330	0.00092	No
Carbon Disulfide	8	590,000	0.000014	No
Chlorodifluoromethane	330	170,000,000	0.0000019	No
Chloroform	270	15,000	0.018	No
Cyclohexane	12,000	79,300,000	0.00015	No
Dichlorodifluoromethane	7200	5,460,000	0.0013	No
Dichloroethane[1,1-]	41,000	5750	7.1	Yes
Dichloroethene[1,1-]	49,000	5500	8.9	Yes
Ethanol	8.1	na[b]	na	na
Methanol	270	3420	0.079	No
Methylene Chloride	380	650	0.58	No
Tetrachloroethene	21,000	3600	5.8	Yes
Toluene	450	204,000	0.0022	No
Trichloro-1,2,2-trifluoroethane[1,1,2-]	140,000	1,298,000,000	0.00011	No
Trichloroethane[1,1,1-]	860,000	42,300	20	Yes
Trichloroethene	78,000	2000	39	Yes
Trichlorofluoromethane	13,000	5,200,000	0.0025	No

Note: Calculated concentrations in pore gas corresponding to groundwater SLs derived from denominator of Equation 3.0-3. Screening value derived from Equation 3.0-3.

[a] If the screening value is less than 1, then the concentration of the VOC in pore gas does not exceed the groundwater screening level. The VOC is not a threat to groundwater if the screening value is less than 1.

[b] na = Not available.

Table 3.0-3
Screening of VOCs Detected During Fourth Quarter FY2009 in Pore Gas at the Deepest Depth in Borehole Location 54-25105 at MDA G

VOCs	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Maximum Pore-Gas Concentration (µg/m³)	Calculated Concentrations in Pore Gas Corresponding to Groundwater Standard (µg/m³)	Screening Value (unitless)	Screening Value >1?*
Toluene	485	485-701	21	204,000	0.0001	No

Note: Calculated concentrations in pore gas corresponding to groundwater SLs derived from denominator of Equation 3.0-3. Screening value derived from Equation 3.0-3.

* If the screening value is less than 1, then the concentration of the VOC in pore gas does not exceed the groundwater screening level. The VOC is not a threat to ground water if the screening value is less than 1.

Table 3.0-4
Screening of VOCs Detected during the Last Four Sampling Events in Pore Gas at MDA G

Analyte	Maximum Pore-Gas Concentration (µg/m³)	Calculated Concentrations in Pore Gas Corresponding to Groundwater Standard (µg/m³)	Screening Value (unitless)	Screening Value >1?[a]
Acetone	140,000	35,200	4	Yes
Benzene	64	1140	0.056	No
Butadiene[1,3-]	6.4	54	0.12	No
Butanone[2-]	8000	16,330	0.49	No
Carbon Disulfide	3700	590,000	0.0063	No
Carbon Tetrachloride	1300	5500	0.24	No
Chlorodifluoromethane	26,000	170,000,000	0.00015	No
Chloroform	760	15,000	0.051	No
Cyclohexane	32,000	79,300,000	0.0004	No
Dichlorodifluoromethane	23,000	5,460,000	0.0042	No
Dichloroethane[1,1-]	42,000	5750	7.3	Yes
Dichloroethene[1,1-]	66,000	5500	12	Yes
Dichloroethene[cis-1,2-]	750	11,900	0.063	No
Ethanol	8.1	na[b]	na	na
Ethylbenzene	23	226,100	0.0001	No
Ethyltoluene[4-]	23	na	na	na
Hexane	6000	65,120,000	0.000092	No
Methanol	71,000	3420	21	Yes
Methylene Chloride	9300	650	14	Yes
n-Heptane	20	na	na	na
Propylene	28	na	na	na

Table 3.0-4 (continued)

Analyte	Maximum Pore-Gas Concentration (µg/m³)	Calculated Concentrations in Pore Gas Corresponding to Groundwater Standard (µg/m³)	Screening Value (unitless)	Screening Value >1?[a]
Tetrachloroethene	36,000	3600	10	Yes
Toluene	450	204,000	0.0022	No
Trichloro-1,2,2-trifluoroethane[1,1,2-]	140,000	1,298,000,000	0.00011	No
Trichloroethane[1,1,1-]	1,400,000	42,300	33	Yes
Trichloroethene	160,000	2000	80	Yes
Trichlorofluoromethane	16,000	5,200,000	0.0031	No
Trimethylbenzene[1,2,4-]	55	3750	0.015	No
Trimethylbenzene[1,3,5-]	8.1	4320	0.0019	No
Xylene[1,2-]	30	298,200	0.0001	No
Xylene[1,3-]+Xylene[1,4-]	80	2,700,000	0.00003	No

Note: Calculated concentrations in pore gas corresponding to groundwater SLs derived from denominator of Equation 3.0-3. Screening value derived from Equation 3.0-3.

[a] If the screening value is less than 1, then the concentration of the VOC in pore gas does not exceed the groundwater screening level. The VOC is not a threat to groundwater if the screening value is less than 1.

[b] na = Not available.

Table 4.0-1
Field-Screening Results Using a Landtec GEM-500 at MDA G

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result (%)	Date	Result (%)	Date	Result (%)	Date	Result (%)
54-01107	Ambient	Ambient	CO_2	NS[a]	NS	12/20/07	0	7/23/08	0	8/11/09	0
			O_2	NS	NS	12/20/07	20.6	7/23/08	21.2	8/11/09	20.8
	20	19–21	CO_2	NS	NS	12/20/07	3.4	7/23/08	2.3	8/11/09	2.1
			O_2	NS	NS	12/20/07	17.4	7/23/08	18.6	8/11/09	17.1
	44.5	43.5–45.5	CO_2	NS	NS	12/20/07	3.2	7/23/08	2.1	8/11/09	1.9
			O_2	NS	NS	12/20/07	17.5	7/23/08	18.9	8/11/09	17.3
	56.5	55.5–57.5	CO_2	NS	NS	12/20/07	3.4	7/23/08	2.3	8/11/09	2.1
			O_2	NS	NS	12/20/07	17.2	7/23/08	18.3	8/11/09	17
	74	73–75	CO_2	NS	NS	12/20/07	3.5	7/23/08	2.3	8/11/09	2.2
			O_2	NS	NS	12/20/07	17.2	7/23/08	18.2	8/11/09	17
	91	90–92	CO_2	NS	NS	12/20/07	2.8	7/23/08	1.5	8/11/09	1.1
			O_2	NS	NS	12/20/07	18.1	7/23/08	19.4	8/11/09	18.6
	100	99–101	CO_2	NS	NS	12/20/07	2.9	7/23/08	2.2	8/11/09	2
			O_2	NS	NS	12/20/07	18	7/23/08	18.2	8/11/09	17.2
54-01110	Ambient	Ambient	CO_2	NS	NS	12/17/07	0	7/17/08	0	8/25/09	0
			O_2	NS	NS	12/17/07	20.6	7/17/08	21.5	8/25/09	21.2
	20	19–20	CO_2	NS	NS	12/17/07	0.5	7/17/08	0.1	8/25/09	0.1
			O_2	NS	NS	12/17/07	20.6	7/17/08	21.3	8/25/09	20.8
	48	47–49	CO_2	NS	NS	12/17/07	0.7	7/17/08	0.3	8/25/09	0.1
			O_2	NS	NS	12/17/07	20.5	7/17/08	21.1	8/25/09	20.7
	60	59–61	CO_2	NS	NS	12/17/07	0.8	7/17/08	0.4	8/25/09	0.1
			O_2	NS	NS	12/17/07	20.5	7/17/08	20.9	8/25/09	20.6
	70	69–71	CO_2	NS	NS	12/17/07	0.8	7/17/08	0.4	8/25/09	0.1
			O_2	NS	NS	12/17/07	20.3	7/17/08	20.9	8/25/09	20.6

Table 4.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result (%)	Date	Result (%)	Date	Result (%)	Date	Result (%)
54-01110 (cont.)	85	84–86	CO_2	NS	NS	12/17/07	0.9	7/17/08	0.4	8/25/09	0.2
			O_2	NS	NS	12/17/07	26.4	7/17/08	20.7	8/25/09	20.5
	90	89–91	CO_2	NS	NS	12/17/07	0.9	7/17/08	0.4	8/25/09	0.1
			O_2	NS	NS	12/17/07	20.3	7/17/08	20.6	8/25/09	20.6
54-01111	Ambient	Ambient	CO_2	NS	NS	12/17/07	0	7/16/08	0	8/25/09	0
			O_2	NS	NS	12/17/07	20.7	7/16/08	21.3	8/25/09	21.2
	20	19–21	CO_2	NS	NS	12/17/07	0.8	7/16/08	0.4	8/25/09	0.1
			O_2	NS	NS	12/17/07	20.4	7/16/08	21.1	8/25/09	20.9
	39.5	38.5–40.5	CO_2	NS	NS	12/17/07	0.7	7/16/08	0.2	8/25/09	0
			O_2	NS	NS	12/17/07	20.3	7/16/08	21	8/25/09	20.8
	50	49–51	CO_2	NS	NS	12/17/07	0.6	7/16/08	0.2	8/25/09	0
			O_2	NS	NS	12/17/07	20.3	7/16/08	21	8/25/09	20.8
	70	69–71	CO_2	NS	NS	12/17/07	0.6	7/16/08	0.1	8/25/09	0
			O_2	NS	NS	12/17/07	20.4	7/16/08	21	8/25/09	20.7
	78	77–79	CO_2	NS	NS	12/17/07	0.6	7/16/08	0.1	8/25/09	0
			O_2	NS	NS	12/17/07	20.4	7/16/08	20.9	8/25/09	20.6
	100	99–101	CO_2	NS	NS	12/17/07	0.6	7/16/08	0.1	8/25/09	0
			O_2	NS	NS	12/17/07	20.6	7/16/08	20	8/25/09	20.7
	139	138–140	CO_2	NS	NS	12/17/07	0.4	7/16/08	0.1	8/25/09	0
			O_2	NS	NS	12/17/07	20.7	7/16/08	21	8/25/09	20.7
54-01115	Ambient	Ambient	CO_2	NS	NS	12/17/07	0	7/17/08	0	8/11/09	0
			O_2	NS	NS	12/17/07	21	7/17/08	21.1	8/11/09	21.5
	7	6–8	CO_2	NS	NS	12/17/07	0.9	7/17/08	1.3	8/11/09	0.4
			O_2	NS	NS	12/17/07	20.3	7/17/08	19.9	8/11/09	20.2
	26	25-27	CO_2	NS	NS	12/17/07	2.8	7/17/08	2.1	8/11/09	1.5
			O_2	NS	NS	12/17/07	18.8	7/17/08	19.3	8/11/09	18.8
	40	39–41	CO_2	NS	NS	12/17/07	3.4	7/17/08	2.2	8/11/09	1.8
			O_2	NS	NS	12/17/07	18.2	7/17/08	19	8/11/09	18.1

Table 4.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result (%)	Date	Result (%)	Date	Result (%)	Date	Result (%)
54-01115 (cont.)	53	52–54	CO_2	NS	NS	12/17/07	3.7	7/17/08	2.3	8/11/09	2
			O_2	NS	NS	12/17/07	17.9	7/17/08	19	8/11/09	17.8
	63	62–64	CO_2	NS	NS	12/17/07	3.8	7/17/08	2.2	8/11/09	2
			O_2	NS	NS	12/17/07	17.8	7/17/08	19	8/11/09	17.6
	68	67–69	CO_2	NS	NS	12/17/07	3.8	7/17/08	2.3	8/11/09	2
			O_2	NS	NS	12/17/07	17.7	7/17/08	18.9	8/11/09	17.6
	Ambient	Ambient	CO_2	NS	NS	NS	NS	7/8/08	0	8/10/09	0
			O_2	NS	NS	NS	NS	7/8/08	21.2	8/10/09	21.3
54-01116	22.5	20–25	CO_2	NS	NS	NS	NS	7/8/08	0	8/10/09	0.3
			O_2	NS	NS	NS	NS	7/8/08	20.7	8/10/09	20
	42.5	40–45	CO_2	NS	NS	NS	NS	7/8/08	1.4	8/10/09	0.4
			O_2	NS	NS	NS	NS	7/8/08	20.3	8/10/09	19.9
	67.5	65–70	CO_2	NS	NS	NS	NS	7/8/08	1.5	8/10/09	0.3
			O_2	NS	NS	NS	NS	7/8/08	20.3	8/10/09	19.9
	82.5	80–85	CO_2	NS	NS	NS	NS	7/8/08	1.5	8/10/09	0.3
			O_2	NS	NS	NS	NS	7/8/08	20.4	8/10/09	19.9
	97.5	95–100	CO_2	NS	NS	NS	NS	7/8/08	1.5	8/10/09	0.3
			O_2	NS	NS	NS	NS	7/8/08	20.4	8/10/09	19.9
	132.5	130–135	CO_2	NS	NS	NS	NS	7/8/08	1.3	8/10/09	0.3
			O_2	NS	NS	NS	NS	7/8/08	20.4	8/10/09	19.8
	151.5	149–154	CO_2	NS	NS	NS	NS	7/8/08	1.1	8/10/09	0.1
			O_2	NS	NS	NS	NS	7/8/08	20.7	8/10/09	19.9
	165	162.5–167.5	CO_2	NS	NS	NS	NS	7/8/08	0.9	8/10/09	0.2
			O_2	NS	NS	NS	NS	7/8/08	20.9	8/10/09	19.9
	187.8	185.3–190.3	CO_2	NS	NS	NS	NS	7/8/08	0.2	8/10/09	0
			O_2	NS	NS	NS	NS	7/8/08	21.2	8/10/09	20.2
	Ambient	Ambient	CO_2	NS	NS	12/20/07	0	7/8/08	0	8/7/09	0
			O_2	NS	NS	12/20/07	20.7	7/8/08	21.5	8/7/09	20.9

Table 4.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result (%)	Date	Result (%)	Date	Result (%)	Date	Result (%)
54-01117	20	18.5–22.5	CO_2	NS	NS	12/20/07	1.2	7/8/08	0.7	8/7/09	0.2
			O_2	NS	NS	12/20/07	19.9	7/8/08	21	8/7/09	20.1
	31.5	31.5	CO_2	NS	NS	12/20/07	1.1	NS	NS	NS	NS
			O_2	NS	NS	12/20/07	19.8	NS	NS	NS	NS
	42.5	40–45	CO_2	NS	NS	NS	NS	7/8/08	0.7	8/7/09	0.2
			O_2	NS	NS	NS	NS	7/8/08	21	8/7/09	20.1
	55	55	CO_2	NS	NS	12/20/07	1.1	NS	NS	NS	NS
			O_2	NS	NS	12/20/07	19.8	NS	NS	NS	NS
	67.5	65–70	CO_2	NS	NS	NS	NS	7/8/08	0.8	8/7/09	0.3
			O_2	NS	NS	NS	NS	7/8/08	21.8	8/7/09	19.9
	73	73	CO_2	NS	NS	12/20/07	1	NS	NS	NS	NS
			O_2	NS	NS	12/20/07	20	NS	NS	NS	NS
	82.5	80–85	CO_2	NS	NS	12/20/07	0.9	7/8/08	0.7	8/7/09	0.3
			O_2	NS	NS	12/20/07	20.2	7/8/08	21	8/7/09	19.7
	85	85	CO_2	NS	NS	12/20/07	0.6	NS	NS	NS	NS
			O_2	NS	NS	12/20/07	20.4	NS	NS	NS	NS
	97.5	95–100	CO_2	NS	NS	NS	NS	7/8/08	0.8	8/7/09	0.3
			O_2	NS	NS	NS	NS	7/8/08	21	8/7/09	19.5
	132.5	130–135	CO_2	NS	NS	NS	NS	7/8/08	0.5	8/7/09	0.3
			O_2	NS	NS	NS	NS	7/8/08	21.2	8/7/09	19.3
	150	147.5–152.5	CO_2	NS	NS	NS	NS	7/8/08	0.4	8/7/09	0
			O_2	NS	NS	NS	NS	7/8/08	21.5	8/7/09	19.7
	159.5	157–162	CO_2	NS	NS	NS	NS	7/8/08	0.4	8/7/09	0
			O_2	NS	NS	NS	NS	7/8/08	21.5	8/7/09	19.4
	179.8	177.3–182.3	CO_2	NS	NS	NS	NS	7/8/08	0	8/7/09	0
			O_2	NS	NS	NS	NS	7/8/08	21	8/7/09	20.3
	Ambient	Ambient	CO_2	NS	NS	12/17/07	0	7/14/08	0	8/25/09	0
			O_2	NS	NS	12/17/07	20.8	7/14/08	21.2	8/25/09	21.2

Table 4.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result (%)	Date	Result (%)	Date	Result (%)	Date	Result (%)
54-01121	20	19–21	CO_2	NS	NS	12/17/07	3.6	7/14/08	2.6	8/25/09	1.9
			O_2	NS	NS	12/17/07	17.4	7/14/08	18.4	8/25/09	18.3
	26	25–27	CO_2	NS	NS	12/17/07	3.6	7/14/08	2.6	8/25/09	1.6
			O_2	NS	NS	12/17/07	17.3	7/14/08	18.4	8/25/09	18.4
	61.5	60.5–62.5	CO_2	NS	NS	12/17/07	3.5	7/14/08	2.4	8/25/09	1.8
			O_2	NS	NS	12/17/07	17.4	7/14/08	15.5	8/25/09	18.3
	70	69–71	CO_2	NS	NS	12/17/07	3.5	7/14/08	2.4	8/25/09	1.7
			O_2	NS	NS	12/17/07	17.4	7/14/08	18.5	8/25/09	18.4
	76	75–77	CO_2	NS	NS	12/17/07	3.4	7/14/08	2.3	8/25/09	0.7
			O_2	NS	NS	12/17/07	17.4	7/14/08	18.5	8/25/09	18.4
	98	97–99	CO_2	NS	NS	12/17/07	2.9	7/14/08	1.8	8/25/09	1.9
			O_2	NS	NS	12/17/07	17.9	7/14/08	19.2	8/25/09	18.1
	121	120–122	CO_2	NS	NS	12/17/07	2.8	7/14/08	1.7	8/25/09	1.5
			O_2	NS	NS	12/17/07	18.2	7/14/08	19.3	8/25/09	18.7
	Ambient	Ambient	CO_2	NS	NS	NS	NS	NS	NS	9/29/09	0
			O_2	NS	NS	NS	NS	NS	NS	9/29/09	20.9
54-01126	7	6-8	CO_2	NS	NS	NS	NS	NS	NS	9/29/09	0.1
			O_2	NS	NS	NS	NS	NS	NS	9/29/09	19.7
	17	16-18	CO_2	NS	NS	NS	NS	NS	NS	9/29/09	0
			O_2	NS	NS	NS	NS	NS	NS	9/29/09	20
	28	27-29	CO_2	NS	NS	NS	NS	NS	NS	9/29/09	0.4
			O_2	NS	NS	NS	NS	NS	NS	9/29/09	19.2
	35	34-36	CO_2	NS	NS	NS	NS	NS	NS	9/29/09	0.6
			O_2	NS	NS	NS	NS	NS	NS	9/29/09	18.7
	42	41-43	CO_2	NS	NS	NS	NS	NS	NS	9/29/09	1.2
			O_2	NS	NS	NS	NS	NS	NS	9/29/09	18
	49	48-50	CO_2	NS	NS	NS	NS	NS	NS	9/29/09	1.1
			O_2	NS	NS	NS	NS	NS	NS	9/29/09	18.1

Table 4.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result (%)	Date	Result (%)	Date	Result (%)	Date	Result (%)
54-01126 (cont.)	Ambient	Ambient	CO_2	NS	NS	12/18/07	0	7/11/08	0	8/21/09	0
			O_2	NS	NS	12/18/07	20.6	7/11/08	21.3	8/21/09	20.9
54-01128	7.5	6.5-8.5	CO_2	NS	NS	12/18/07	1.3	7/11/08	0.8	8/21/09	0.5
			O_2	NS	NS	12/18/07	19.5	7/11/08	20.4	8/21/09	19.7
	15	14-16	CO_2	NS	NS	12/18/07	2.5	7/11/08	1.6	8/21/09	1.2
			O_2	NS	NS	12/18/07	18.6	7/11/08	20.6	8/21/09	18.3
	20	19-21	CO_2	NS	NS	12/18/07	3.3	7/11/08	2.1	8/21/09	1.7
			O_2	NS	NS	12/18/07	17.9	7/11/08	18.8	8/21/09	17.5
	30	29-31	CO_2	NS	NS	12/18/07	3.8[b]	7/11/08	2.4	8/21/09	1.1[c]
			O_2	NS	NS	12/18/07	17[b]	7/11/08	18.2	8/21/09	18[c]
	39	38-40	CO_2	NS	NS	12/18/07	4.2	7/11/08	2.7	8/21/09	2
			O_2	NS	NS	12/18/07	16.6	7/11/08	17.8	8/21/09	16.8
	Ambient	Ambient	CO_2	NS	NS	12/18/07	0	7/11/08	0	8/19/09	0
			O_2	NS	NS	12/18/07	21	7/11/08	21.2	8/19/09	21.2
54-02009	37	34.5–39.5	CO_2	NS	NS	12/18/07	2.1	7/11/08	1.3	8/19/09	0.6
			O_2	NS	NS	12/18/07	19	7/11/08	19.8	8/19/09	19.3
	62	59.5–64.5	CO_2	NS	NS	12/18/07	2.1	7/11/08	1.3	8/19/09	0
			O_2	NS	NS	12/18/07	18.9	7/11/08	19.8	8/19/09	21
	79	76.5–81.5	CO_2	NS	NS	12/18/07	1.8[b]	NS	NS	8/19/09	0.1[b]
			O_2	NS	NS	12/18/07	19.2[b]	NS	NS	8/19/09	20.3[b]
	92	89.5–94.5	CO_2	NS	NS	12/18/07	1.8	7/11/08	0.9	8/19/09	0.1
			O_2	NS	NS	12/18/07	19	7/11/08	20	8/19/09	20.2
	Ambient	Ambient	CO_2	NS	NS	12/13/07	0	7/9/08	0	8/19/09	0
			O_2	NS	NS	12/13/07	21.1	7/9/08	21.8	8/19/09	21.5

Table 4.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result (%)	Date	Result (%)	Date	Result (%)	Date	Result (%)
54-02010	30	27.5–32.5	CO_2	NS	NS	12/13/07	3	7/9/08	3.7	8/19/09	3.2
			O_2	NS	NS	12/13/07	18	7/9/08	17.9	8/19/09	17
	53	51.5–55.5	CO_2	NS	NS	12/13/07	2.8[b]	7/9/08	3.4	8/19/09	2[b]
			O_2	NS	NS	12/13/07	18[b]	7/9/08	18	8/19/09	18.1[b]
	95	92.5–97.5	CO_2	NS	NS	12/13/07	3.4	7/9/08	3.3	8/19/09	2.3
			O_2	NS	NS	12/13/07	17.6	7/9/08	18.5	8/19/09	17.5
	Ambient	Ambient	CO_2	NS	NS	12/13/07	0	7/10/08	0	8/27/09	0
			O_2	NS	NS	12/13/07	21.3	7/10/08	21.1	8/27/09	21.1
54-02032	20	20	CO_2	NS	NS	12/13/07	0.6	7/10/08	0.9	8/27/09	0.4
			O_2	NS	NS	12/13/07	20.5	7/10/08	20	8/27/09	20.1
	60	60	CO_2	NS	NS	12/13/07	0.7	7/10/08	0.8	8/27/09	0.4
			O_2	NS	NS	12/13/07	20.4	7/10/08	20.2	8/27/09	19.7
	100	100	CO_2	NS	NS	12/13/07	0.7	7/10/08	0	8/27/09	0.3
			O_2	NS	NS	12/13/07	20.5	7/10/08	21	8/27/09	20.1
	130	130	CO_2	NS	NS	12/13/07	0.7	7/10/08	0	8/27/09	0
			O_2	NS	NS	12/13/07	20.5	7/10/08	21	8/27/09	20.2
	156	156	CO_2	NS	NS	12/13/07	0.7	7/10/08	0.7	8/27/09	0.4
			O_2	NS	NS	12/13/07	20.5	7/10/08	20	8/27/09	19.1
	Ambient	Ambient	CO_2	NS	NS	12/13/07	0	7/9/08	0	8/5/09	0
			O_2	NS	NS	12/13/07	20	7/9/08	21.3	8/5/09	20.8
54-02033	20	20	CO_2	NS	NS	12/13/07	0.5	7/9/08	0.9	8/5/09	0.2
			O_2	NS	NS	12/13/07	19.7	7/9/08	20.8	8/5/09	19.9
	60	60	CO_2	NS	NS	12/13/07	0.7	7/9/08	0.9	8/5/09	0.2
			O_2	NS	NS	12/13/07	19.1	7/9/08	20.7	8/5/09	19.8
	100	100	CO_2	NS	NS	12/13/07	0.7	7/9/08	1	8/5/09	0.3
			O_2	NS	NS	12/13/07	19.3	7/9/08	20.5	8/5/09	19.7
	160	160	CO_2	NS	NS	12/13/07	0.6	7/9/08	0.8	8/5/09	0.2
			O_2	NS	NS	12/13/07	19.5	7/9/08	20.6	8/5/09	19.4

Table 4.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result (%)	Date	Result (%)	Date	Result (%)	Date	Result (%)
54-02033 (cont.)	200	200	CO_2	NS	NS	12/13/07	0.5	7/9/08	0.7	8/5/09	0.1
			O_2	NS	NS	12/13/07	19.7	7/9/08	20.7	8/5/09	19.7
	220	220	CO_2	NS	NS	12/13/07	0.4	7/9/08	0.7	8/5/09	0.1
			O_2	NS	NS	12/13/07	20	7/9/08	20.7	8/5/09	19.4
	260	260	CO_2	NS	NS	12/13/07	0.4	7/9/08	0.6	8/5/09	0
			O_2	NS	NS	12/13/07	20.2	7/9/08	20.7	8/5/09	19.7
	277	277	CO_2	NS	NS	12/13/07	0.3	7/9/08	0.6	8/5/09	0
			O_2	NS	NS	12/13/07	20.4	7/9/08	20.8	8/5/09	19.7
	Ambient	Ambient	CO_2	NS	NS	NS	NS	7/31/08	0	9/9/09	0
			O_2	NS	NS	NS	NS	7/31/08	21.3	9/9/09	20.9
54-22116	28	27–29	CO_2	NS	NS	NS	NS	7/31/08	0.5	9/9/09	0
			O_2	NS	NS	NS	NS	7/31/08	20.4	9/9/09	20.2
	46	45–47	CO_2	NS	NS	NS	NS	7/31/08	0.6	9/9/09	0
			O_2	NS	NS	NS	NS	7/31/08	20.4	9/9/09	20.2
	64	63–65	CO_2	NS	NS	NS	NS	7/31/08	0.3	9/9/09	0
			O_2	NS	NS	NS	NS	7/31/08	20.6	9/9/09	20.3
	82	81–83	CO_2	NS	NS	NS	NS	7/31/08	0.8	9/9/09	0.1
			O_2	NS	NS	NS	NS	7/31/08	20	9/9/09	20.2
	100	99–101	CO_2	NS	NS	NS	NS	7/31/08	0.9	9/9/09	0.4
			O_2	NS	NS	NS	NS	7/31/08	19.8	9/9/09	20
	118	117–119	CO_2	NS	NS	NS	NS	7/31/08	0.1	9/9/09	0.5
			O_2	NS	NS	NS	NS	7/31/08	19.7	9/9/09	19.9
	136	135–137	CO_2	NS	NS	NS	NS	7/31/08	2	9/9/09	0.1
			O_2	NS	NS	NS	NS	7/31/08	17.8	9/9/09	20.8
	154	153–155	CO_2	NS	NS	NS	NS	7/31/08	1.6	9/9/09	0.6
			O_2	NS	NS	NS	NS	7/31/08	19.1	9/9/09	19.8
	172	171–173	CO_2	NS	NS	NS	NS	7/31/08	0.8	9/9/09	1.2
			O_2	NS	NS	NS	NS	7/31/08	20.1	9/9/09	18.6

Table 4.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result (%)	Date	Result (%)	Date	Result (%)	Date	Result (%)
54-22116 (cont.)	190	189–191	CO_2	NS	NS	NS	NS	7/31/08	2.6	9/9/09	1.7
			O_2	NS	NS	NS	NS	7/31/08	17.9	9/9/09	17.6
	208	207–209	CO_2	NS	NS	NS	NS	NS	NS	9/9/09	2.7
			O_2	NS	NS	NS	NS	NS	NS	9/9/09	15.8
	226	225–227	CO_2	NS	NS	NS	NS	NS	NS	9/9/09	3.1
			O_2	NS	NS	NS	NS	NS	NS	9/9/09	15.2
	244	243–245	CO_2	NS	NS	NS	NS	NS	NS	9/9/09	3.6
			O_2	NS	NS	NS	NS	NS	NS	9/9/09	14.9
	262	261–263	CO_2	NS	NS	NS	NS	NS	NS	9/9/09	0
			O_2	NS	NS	NS	NS	NS	NS	9/9/09	21.6
	280	279–281	CO_2	NS	NS	NS	NS	NS	NS	9/9/09	0
			O_2	NS	NS	NS	NS	NS	NS	9/9/09	21.5
	Ambient	Ambient	CO_2	7/31/07	0	12/19/07	0	7/10/08	0.1	8/27/09	0
			O_2	7/31/07	20.4	12/19/07	20.7	7/10/08	21.1	8/27/09	20.9
54-24370	40	35–45	CO_2	7/31/07	12.9	12/19/07	13.6	7/10/08	11.9	8/27/09	11.4
			O_2	7/31/07	4.9	12/19/07	5.4	7/10/08	8.6	8/27/09	5.5
	72.5	67.5–77.5	CO_2	7/31/07	12.8	12/19/07	13.8	7/10/08	12.6	8/27/09	11.9
			O_2	7/31/07	4.9	12/19/07	5.1	7/10/08	8.1	8/27/09	5.2
	120	115–125	CO_2	7/31/07	9.1	12/19/07	9.7	7/10/08	11.8	8/27/09	8.1
			O_2	7/31/07	7.7	12/19/07	8	7/10/08	9.1	8/27/09	7.8
	174.7	169.7–179.7	CO_2	7/31/07	6.8	12/19/07	7.2	7/10/08	6.8	8/27/09	5.9
			O_2	7/31/07	12.8	12/19/07	12.8	7/10/08	14	8/27/09	13
	200	195–205	CO_2	7/31/07	6.3	12/19/07	6.3	7/10/08	6.2	8/27/09	5.3
			O_2	7/31/07	13.4	12/19/07	13.5	7/10/08	14.7	8/27/09	13.8
	243.7	238.7–248.7	CO_2	7/31/07	0.7	12/19/07	3.1	7/10/08	0.8	8/27/09	0
			O_2	7/31/07	19.6	12/19/07	17.2	7/10/08	21	8/27/09	20.2
	Ambient	Ambient	CO_2	7/31/07	0	NS	NS	7/14/08	0	8/18/09	0
			O_2	7/31/07	20.7	NS	NS	7/14/08	21.1	8/18/09	21.2

Table 4.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result (%)	Date	Result (%)	Date	Result (%)	Date	Result (%)
54-24386	40	37.5–42.5	CO_2	7/31/07	8	NS	NS	7/14/08	6.6	8/18/09	8.4
			O_2	7/31/07	7.2	NS	NS	7/14/08	11.1	8/18/09	6.5
	83	80.5–85.5	CO_2	7/31/07	5	NS	NS	7/14/08	4.7	8/18/09	4.2
			O_2	7/31/07	13.3	NS	NS	7/14/08	14.2	8/18/09	13.8
	117	114.5–119.5	CO_2	7/31/07	4	NS	NS	7/14/08	4	8/18/09	4.1
			O_2	7/31/07	15	NS	NS	7/14/08	15.4	8/18/09	13.9
	135	132.5–137.5	CO_2	7/31/07	3.6	NS	NS	7/14/08	3.7	8/18/09	3.7
			O_2	7/31/07	15.6	NS	NS	7/14/08	16	8/18/09	14.4
	195	192.5–197.5	CO_2	7/31/07	0.2	NS	NS	7/14/08	0.4	8/18/09	0
			O_2	7/31/07	20.1	NS	NS	7/14/08	20.7	8/18/09	19.7
	Ambient	Ambient	CO_2	7/30/07	0	12/19/07	0	7/9/08	0	9/3/09	0
			O_2	7/30/07	20.5	12/19/07	21.2	7/9/08	21.6	9/3/09	21
54-24394	50	45–55	CO_2	7/30/07	3	12/19/07	2.6	7/9/08	2.7	9/3/09	1.9
			O_2	7/30/07	17.5	12/19/07	18.3	7/9/08	19	9/3/09	18.2
	100	95–105	CO_2	7/30/07	2.9	12/19/07	2.2	7/9/08	2.8	9/3/09	1.8
			O_2	7/30/07	17.6	12/19/07	18.6	7/9/08	19	9/3/09	18.3
	150	145–155	CO_2	7/30/07	2.6	12/19/07	2.2	7/9/08	2.6	9/3/09	1.7
			O_2	7/30/07	17.6	12/19/07	18.7	7/9/08	19.2	9/3/09	18.5
	192.5	187.5–197.5	CO_2	7/30/07	1.9	12/19/07	2	7/9/08	2.3	9/3/09	1.4
			O_2	7/30/07	18.5	12/19/07	19	7/9/08	19.4	9/3/09	19
	245.25	240.25–250.25	CO_2	7/30/07	1.7	12/19/07	1.6	7/9/08	1.8	9/3/09	0.8
			O_2	7/30/07	18.8	12/19/07	19.7	7/9/08	19.9	9/3/09	19.3
	300.5	295.5–305.5	CO_2	7/30/07	0.2	12/19/07	0	7/9/08	0.2	9/3/09	0
			O_2	7/30/07	20.1	12/19/07	21.6	7/9/08	21.5	9/3/09	20.7
	Ambient	Ambient	CO_2	NS	NS	12/18/07	0	7/14/08	0	8/7/09	0
			O_2	NS	NS	12/18/07	20.7	7/14/08	21.3	8/7/09	21.3

Table 4.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result (%)	Date	Result (%)	Date	Result (%)	Date	Result (%)
54-24397	50	45–55	CO_2	NS	NS	12/18/07	0.8	7/14/08	0.4	8/7/09	0.2
			O_2	NS	NS	12/18/07	20.3	7/14/08	20.9	8/7/09	20.4
	90	85–95	CO_2	NS	NS	12/18/07	0.8	7/14/08	0.4	8/7/09	0.2
			O_2	NS	NS	12/18/07	20.3	7/14/08	21	8/7/09	20.1
	130	125–135	CO_2	NS	NS	12/18/07	0.7	7/14/08	0.4	8/7/09	0.3
			O_2	NS	NS	12/18/07	20.5	7/14/08	21.1	8/7/09	19.9
	165	160–170	CO_2	NS	NS	12/18/07	0.7	7/14/08	0.5	8/7/09	0.3
			O_2	NS	NS	12/18/07	20.6	7/14/08	21	8/7/09	19.9
	188	183–193	CO_2	NS	NS	12/18/07	0.5[b]	7/14/08	0.1[b]	8/7/09	0[b]
			O_2	NS	NS	12/18/07	20.5[b]	7/14/08	21.1[b]	8/7/09	19.8[b]
	239.75	234.75–244.3	CO_2	NS	NS	12/18/07	0.2	7/14/08	0	8/7/09	0
			O_2	NS	NS	12/18/07	21	7/14/08	21.1	8/7/09	19.3
	Ambient	Ambient	CO_2	NS	NS	NS	NS	8/1/08	0	8/24/09	0
			O_2	NS	NS	NS	NS	8/1/08	21	8/24/09	21.1
54-25105	485	485–701	CO_2	NS	NS	NS	NS	8/1/08	0	8/24/09	0
			O_2	NS	NS	NS	NS	8/1/08	21.4	8/24/09	21
	Ambient	Ambient	CO_2	8/2/07	0	12/18/07	0	7/18/08	0	8/19/09	0
			O_2	8/2/07	20.4	12/18/07	20.9	7/18/08	21.2	8/19/09	21.4

Table 4.0-1 (continued

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result (%)	Date	Result (%)	Date	Result (%)	Date	Result (%)
54-27436	45	40–50	CO_2	8/2/07	1.4	12/18/07	1.6	7/18/08	0	8/19/09	0.5
			CO_2	8/2/07	19.1	12/18/07	19.8	7/18/08	21.2	8/19/09	20.1
	70	65–75	CO_2	8/2/07	1.3	12/18/07	1.5	7/18/08	0.9	8/19/09	0.5
			O_2	8/2/07	19.2	12/18/07	19.9	7/18/08	20.5	8/19/09	20.1
	115	110–120	CO_2	8/2/07	1.1	12/18/07	1.2	7/18/08	0.9	8/19/09	0.5
			O_2	8/2/07	19.5	12/18/07	20.2	7/18/08	20.5	8/19/09	20
	163	158–168	CO_2	8/2/07	0.8	12/18/07	1.1	7/18/08	0.8	8/19/09	0.5
			O_2	8/2/07	19.7	12/18/07	20.3	7/18/08	20.2	8/19/09	20
	185	180–190	CO_2	8/2/07	0.3	12/18/07	0.3	7/18/08	0.3	8/19/09	0.2
			O_2	8/2/07	20.1	12/18/07	20.9	7/18/08	21.1	8/19/09	20.1

[a] NS = Not sampled.
[b] Port blocked. Results may not be representative of sample depth.
[c] Partially blocked port. Results may not be representative of sample depth.

Table 4.0-2
Field-Screening Results Using B&K Multigas Analyzer at MDA G

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-01107	Ambient	Ambient	CO_2 (µg/m^3)	NS[a]	NS	12/20/07	947,000	7/23/08	695,000	8/11/09	1,040,000
			Freon-11 (µg/m^3)	NS	NS	12/20/07	309	7/23/08	996	8/11/09	568
			H_2O (µg/m^3)	NS	NS	12/20/07	7,360,000	7/23/08	14,100,000	8/11/09	7,863,000
			PCE (µg/m^3)	NS	NS	12/20/07	4260	7/23/08	-313	8/11/09	635
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/11/09	0
			TCA (µg/m^3)	NS	NS	12/20/07	-3960	7/23/08	-2536	8/11/09	-1900
			TCE (µg/m^3)	NS	NS	12/20/07	2580	7/23/08	-123	8/11/09	-1500
	20	19–21	CO_2 (µg/m^3)	NS	NS	12/20/07	41,900,000	7/23/08	31,300,000	8/11/09	45,700,000
			Freon-11 (µg/m^3)	NS	NS	12/20/07	3200	7/23/08	-115	8/11/09	244
			H_2O (µg/m^3)	NS	NS	12/20/07	7,810,000	7/23/08	14,000,000	8/11/09	14,200,000
			PCE (µg/m^3)	NS	NS	12/20/07	19,100	7/23/08	9180	8/11/09	10,300
			Pressure Differential (kPa)	NS	NS	12/20/07	0	NS	NS	8/11/09	0.02
			TCA (µg/m^3)	NS	NS	12/20/07	-287,000	7/23/08	107,000	8/11/09	149,000
			TCE (µg/m^3)	NS	NS	12/20/07	3840	7/23/08	91,600	8/11/09	2180
	44.5	43.5–45.5	CO_2 (µg/m^3)	NS	NS	12/20/07	42,100,000	7/23/08	29,000,000	8/11/09	42,000,000
			Freon-11 (µg/m^3)	NS	NS	12/20/07	3220	7/23/08	-779	8/11/09	583
			H_2O (µg/m^3)	NS	NS	12/20/07	8,030,000	7/23/08	13,700,000	8/11/09	14,400,000
			PCE (µg/m^3)	NS	NS	12/20/07	18,000	7/23/08	8340	8/11/09	9160
			Pressure Differential (kPa)	NS	NS	12/20/07	0	NS	NS	8/11/09	0.02
			TCA (µg/m^3)	NS	NS	12/20/07	-261,000	7/23/08	93,600	8/11/09	125,000
			TCE (µg/m^3)	NS	NS	12/20/07	3300	7/23/08	10,600	8/11/09	465

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-01107 (cont.)	56.5	55.5–57.5	CO_2 (µg/m^3)	NS	NS	12/20/07	42,300,000	7/23/08	31,700,000	8/11/09	40,500,000
			Freon-11 (µg/m^3)	NS	NS	12/20/07	3000	7/23/08	-286	8/11/09	-574
			H_2O (µg/m^3)	NS	NS	12/20/07	7,810,000	7/23/08	13,800,000	8/11/09	13,400,000
			PCE (µg/m^3)	NS	NS	12/20/07	16,800	7/23/08	10,800	8/11/09	8410
			Pressure Differential (kPa)	NS	NS	12/20/07	0	NS	NS	8/11/09	0
			TCA (µg/m^3)	NS	NS	12/20/07	-239,000	7/23/08	124,000	8/11/09	129,000
			TCE (µg/m^3)	NS	NS	12/20/07	3830	7/23/08	10,800	8/11/09	6290
	74	73–75	CO_2 (µg/m^3)	NS	NS	12/20/07	43,400,000	7/23/08	32,400,000	8/11/09	47,000,000
			Freon-11 (µg/m^3)	NS	NS	12/20/07	3200	7/23/08	-115	8/11/09	-199
			H_2O (µg/m^3)	NS	NS	12/20/07	7,520,000	7/23/08	13,900,000	8/11/09	14,000,000
			PCE (µg/m^3)	NS	NS	12/20/07	19,200	7/23/08	10,000	8/11/09	12,500
			Pressure Differential (kPa)	NS	NS	12/20/07	0	NS	NS	8/11/09	0.02
			TCA (µg/m^3)	NS	NS	12/20/07	-239,000	7/23/08	133,000	8/11/09	179,000
			TCE (µg/m^3)	NS	NS	12/20/07	2420	7/23/08	10,200	8/11/09	2590
	91	90–92	CO_2 (µg/m^3)	NS	NS	12/20/07	36,000,000	7/23/08	22,500,000	8/11/09	28,600,000
			Freon-11 (µg/m^3)	NS	NS	12/20/07	2200	7/23/08	-298	8/11/09	383
			H_2O (µg/m^3)	NS	NS	12/20/07	7,960,000	7/23/08	13,400,000	8/11/09	13,900,000
			PCE (µg/m^3)	NS	NS	12/20/07	14,500	7/23/08	5990	8/11/09	3930
			Pressure Differential (kPa)	NS	NS	12/20/07	0	NS	NS	8/11/09	0.02
			TCA (µg/m^3)	NS	NS	12/20/07	-207,000	7/23/08	69,700	8/11/09	74,300
			TCE (µg/m^3)	NS	NS	12/20/07	5080	7/23/08	7550	8/11/09	359
	100	99–101	CO_2 (µg/m^3)	NS	NS	12/20/07	38,200,000	7/23/08	31,000,000	8/11/09	38,600,000
			Freon-11 (µg/m^3)	NS	NS	12/20/07	2970	7/23/08	-389	8/11/09	323

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-01107 (cont.)	100	99–101	H_2O (µg/m^3)	NS	NS	12/20/07	7,440,000	7/23/08	13,600,000	8/11/09	13,200,000
			PCE (µg/m^3)	NS	NS	12/20/07	17,900	7/23/08	9800	8/11/09	11,100
			Pressure Differential (kPa)	NS	NS	12/20/07	0	NS	NS	8/11/09	0
			TCA (µg/m^3)	NS	NS	12/20/07	-223,000	7/23/08	133,000	8/11/09	136,000
			TCE (µg/m^3)	NS	NS	12/20/07	2550	7/23/08	10,300	8/11/09	3260
54-01110	Ambient	Ambient	CO_2 (µg/m^3)	NS	NS	12/17/07	1,210,000	7/17/08	1,080,000	8/25/09	815,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	-49.9	7/17/08	52	8/25/09	824
			H_2O (µg/m^3)	NS	NS	12/17/07	8,250,000	7/17/08	13,800,000	8/25/09	12,700,000
			PCE (µg/m^3)	NS	NS	12/17/07	1830	7/17/08	-6610	8/25/09	10,400
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/25/09	0
			TCA (µg/m^3)	NS	NS	12/17/07	-11,200	7/17/08	1040	8/25/09	2270
			TCE (µg/m^3)	NS	NS	12/17/07	1610	7/17/08	473	8/25/09	-1800
	20	19–20	CO_2 (µg/m^3)	NS	NS	12/17/07	7,340,000	7/17/08	5,260,000	8/25/09	8,220,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	262	7/17/08	318	8/25/09	-3500
			H_2O (µg/m^3)	NS	NS	12/17/07	6,180,000	7/17/08	15,000,000	8/25/09	14,500,000
			PCE (µg/m^3)	NS	NS	12/17/07	3910	7/17/08	3070	8/25/09	1930
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/25/09	-0.02
			TCA (µg/m^3)	NS	NS	12/17/07	-49,400	7/17/08	1610	8/25/09	-15,000
			TCE (µg/m^3)	NS	NS	12/17/07	1950	7/17/08	1990	8/25/09	10,900
	48	47–49	CO_2 (µg/m^3)	NS	NS	12/17/07	10,600,000	7/17/08	6,660,000	8/25/09	9,060,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	374	7/17/08	-143	8/25/09	1410
			H_2O (µg/m^3)	NS	NS	12/17/07	6,210,000	7/17/08	13,700,000	8/25/09	14,400,000
			PCE (µg/m^3)	NS	NS	12/17/07	5640	7/17/08	3350	8/25/09	8200

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-01110 (cont.)	48	47–49	Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/25/09	-0.03
			TCA (µg/m^3)	NS	NS	12/17/07	-58,500	7/17/08	10,700	8/25/09	-11,000
			TCE (µg/m^3)	NS	NS	12/17/07	2700	7/17/08	3260	8/25/09	-1500
	60	59–61	CO_2 (µg/m^3)	NS	NS	12/17/07	11,400,000	7/17/08	7,380,000	8/25/09	9,050,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	819	7/17/08	-172	8/25/09	329
			H_2O (µg/m^3)	NS	NS	12/17/07	6,360,000	7/17/08	13,900,000	8/25/09	16,000,000
			PCE (µg/m^3)	NS	NS	12/17/07	6840	7/17/08	3290	8/25/09	5260
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/25/09	-0.06
			TCA (µg/m^3)	NS	NS	12/17/07	-58,500	7/17/08	10,200	8/25/09	-6200
			TCE (µg/m^3)	NS	NS	12/17/07	814	7/17/08	4460	8/25/09	2400
	70	69–71	CO_2 (µg/m^3)	NS	NS	12/17/07	11,900,000	7/17/08	7,700,000	8/25/09	10,000,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	802	7/17/08	529	8/25/09	547
			H_2O (µg/m^3)	NS	NS	12/17/07	6,440,000	7/17/08	13,900,000	8/25/09	14,400,000
			PCE (µg/m^3)	NS	NS	12/17/07	6420	7/17/08	5940	8/25/09	4010
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/25/09	-0.08
			TCA (µg/m^3)	NS	NS	12/17/07	-58,500	7/17/08	15,500	8/25/09	563
			TCE (µg/m^3)	NS	NS	12/17/07	2490	7/17/08	391	8/25/09	2730
	85	84–86	CO_2 (µg/m^3)	NS	NS	12/17/07	12,400,000	7/17/08	8,350,000	8/25/09	10,500,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	933	7/17/08	515	8/25/09	923
			H_2O (µg/m^3)	NS	NS	12/17/07	6,460,000	7/17/08	13,900,000	8/25/09	14,300,000
			PCE (µg/m^3)	NS	NS	12/17/07	6610	7/17/08	1350	8/25/09	5970
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/25/09	-0.08

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-01110 (cont.)	85	84–86	TCA (µg/m^3)	NS	NS	12/17/07	-58,500	7/17/08	22,300	8/25/09	2920
			TCE (µg/m^3)	NS	NS	12/17/07	2640	7/17/08	3360	8/25/09	1440
	90	89–91	CO_2 (µg/m^3)	NS	NS	12/17/07	12,600,000	7/17/08	8,410,000	8/25/09	10,000,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	842	7/17/08	299	8/25/09	706
			H_2O (µg/m^3)	NS	NS	12/17/07	6,560,000	7/17/08	13,600,000	8/25/09	14,300,000
			PCE (µg/m^3)	NS	NS	12/17/07	6950	7/17/08	4220	8/25/09	3990
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/25/09	-0.08
			TCA (µg/m^3)	NS	NS	12/17/07	-58,500	7/17/08	22,200	8/25/09	5900
			TCE (µg/m^3)	NS	NS	12/17/07	2580	7/17/08	2790	8/25/09	3480
54-01111	Ambient	Ambient	CO_2 (µg/m^3)	NS	NS	12/17/07	947,000	7/16/08	1,190,000	8/25/09	876,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	-52.1	7/16/08	-247	8/25/09	-174
			H_2O (µg/m^3)	NS	NS	12/17/07	8,110,000	7/16/08	14,400,000	8/25/09	14,600,000
			PCE (µg/m^3)	NS	NS	12/17/07	3620	7/16/08	-358	8/25/09	2570
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/25/09	0
			TCA (µg/m^3)	NS	NS	12/17/07	-3730	7/16/08	-1910	8/25/09	1230
			TCE (µg/m^3)	NS	NS	12/17/07	3440	7/16/08	-400	8/25/09	570
	20	19–21	CO_2 (µg/m^3)	NS	NS	12/17/07	10,800,000	7/16/08	7,330,000	8/25/09	8,210,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	1180	7/16/08	836	8/25/09	300
			H_2O (µg/m^3)	NS	NS	12/17/07	7,290,000	7/16/08	14,600,000	8/25/09	14,800,000
			PCE (µg/m^3)	NS	NS	12/17/07	9530	7/16/08	6700	8/25/09	5200
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/25/09	-0.2
			TCA (µg/m^3)	NS	NS	12/17/07	-51,000	7/16/08	1620	8/25/09	3240
			TCE (µg/m^3)	NS	NS	12/17/07	2540	7/16/08	2260	8/25/09	1650

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-01111 (cont.)	39.5	38.5–40.5	CO_2 (µg/m^3)	NS	NS	12/17/07	9,920,000	7/16/08	6,680,000	8/25/09	8,110,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	1480	7/16/08	1220	8/25/09	1470
			H_2O (µg/m^3)	NS	NS	12/17/07	7,270,000	7/16/08	14,400,000	8/25/09	14,700,000
			PCE (µg/m^3)	NS	NS	12/17/07	13,300	7/16/08	8480	8/25/09	11,700
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/25/09	-0.12
			TCA (µg/m^3)	NS	NS	12/17/07	-31,900	7/16/08	2060	8/25/09	24,300
			TCE (µg/m^3)	NS	NS	12/17/07	1190	7/16/08	1370	8/25/09	346
	50	49–51	CO_2 (µg/m^3)	NS	NS	12/17/07	9,040,000	7/16/08	6,170,000	8/25/09	7,430,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	1550	7/16/08	1300	8/25/09	2360
			H_2O (µg/m^3)	NS	NS	12/17/07	7,270,000	7/16/08	14,000,000	8/25/09	14,800,000
			PCE (µg/m^3)	NS	NS	12/17/07	13,600	7/16/08	13,000	8/25/09	17,300
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/25/09	-0.08
			TCA (µg/m^3)	NS	NS	12/17/07	-18,100	7/16/08	33,500	8/25/09	49,500
			TCE (µg/m^3)	NS	NS	12/17/07	2200	7/16/08	863	8/25/09	411
	70	69–71	CO_2 (µg/m^3)	NS	NS	12/17/07	9,110,000	7/16/08	6,170,000	8/25/09	7,400,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	1820	7/16/08	1410	8/25/09	2200
			H_2O (µg/m^3)	NS	NS	12/17/07	7,160,000	7/16/08	14,000,000	8/25/09	14,600,000
			PCE (µg/m^3)	NS	NS	12/17/07	16,500	7/16/08	15,400	8/25/09	19,400
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/25/09	-0.08
			TCA (µg/m^3)	NS	NS	12/17/07	-11,700	7/16/08	45,700	8/25/09	64,500
			TCE (µg/m^3)	NS	NS	12/17/07	1230	7/16/08	1020	8/25/09	1270
	78	77–79	CO_2 (µg/m^3)	NS	NS	12/17/07	8,770,000	7/16/08	6,030,000	8/25/09	7,300,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	2500	7/16/08	1760	8/25/09	2620

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-01111 (cont.)	78	77–79	H_2O (µg/m^3)	NS	NS	12/17/07	7,110,000	7/16/08	13,700,000	8/25/09	14,700,000
			PCE (µg/m^3)	NS	NS	12/17/07	20,500	7/16/08	17,600	8/25/09	21,800
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/25/09	-0.06
			TCA (µg/m^3)	NS	NS	12/17/07	-1970	7/16/08	44,900	8/25/09	70,300
			TCE (µg/m^3)	NS	NS	12/17/07	417	7/16/08	369	8/25/09	2760
	100	99–101	CO_2 (µg/m^3)	NS	NS	12/17/07	8,280,000	7/16/08	6,030,000	8/25/09	7,280,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	2690	7/16/08	1600	8/25/09	1170
			H_2O (µg/m^3)	NS	NS	12/17/07	7,010,000	7/16/08	13,500,000	8/25/09	14,900,000
			PCE (µg/m^3)	NS	NS	12/17/07	18,300	7/16/08	17,100	8/25/09	19,500
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/25/09	-0.03
			TCA (µg/m^3)	NS	NS	12/17/07	-750	7/16/08	43,300	8/25/09	70,200
			TCE (µg/m^3)	NS	NS	12/17/07	108	7/16/08	114	8/25/09	2280
	139	138–140	CO_2 (µg/m^3)	NS	NS	12/17/07	6,790,000	7/16/08	6,280,000	8/25/09	6,470,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	1920	7/16/08	985	8/25/09	1360
			H_2O (µg/m^3)	NS	NS	12/17/07	7,160,000	7/16/08	13,000,000	8/25/09	14,500,000
			PCE (µg/m^3)	NS	NS	12/17/07	16,100	7/16/08	13,100	8/25/09	9870
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/25/09	-0.02
			TCA (µg/m^3)	NS	NS	12/17/07	-10,100	7/16/08	36,000	8/25/09	49,500
			TCE (µg/m^3)	NS	NS	12/17/07	863	7/16/08	1980	8/25/09	749
54-01115	Ambient	Ambient	CO_2 (µg/m^3)	NS	NS	12/17/07	918,000	7/17/08	601,000	8/11/09	797,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	-218	7/17/08	186	8/11/09	-498
			H_2O (µg/m^3)	NS	NS	12/17/07	3,510,000	7/17/08	1,210,000	8/11/09	7,220,000
			PCE (µg/m^3)	NS	NS	12/17/07	1560	7/17/08	716	8/11/09	-1000

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-01115 (cont.)	Ambient	Ambient	Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/11/09	0
			TCA (µg/m^3)	NS	NS	12/17/07	-6380	7/17/08	1500	8/11/09	1820
			TCE (µg/m^3)	NS	NS	12/17/07	1640	7/17/08	1260	8/11/09	157
	7	6–8	CO_2 (µg/m^3)	NS	NS	12/17/07	14,600,000	7/17/08	15,400,000	8/11/09	15,200,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	398	7/17/08	224	8/11/09	41.1
			H_2O (µg/m^3)	NS	NS	12/17/07	5,000,000	7/17/08	17,000,000	8/11/09	18,300,000
			PCE (µg/m^3)	NS	NS	12/17/07	4670	7/17/08	960	8/11/09	3060
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/11/09	-0.02
			TCA (µg/m^3)	NS	NS	12/17/07	-90,400	7/17/08	3070	8/11/09	-7000
			TCE (µg/m^3)	NS	NS	12/17/07	2310	7/17/08	6640	8/11/09	2100
	26	25-27	CO_2 (µg/m^3)	NS	NS	12/17/07	37,400,000	7/17/08	2,770,000	8/11/09	31,700,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	819	7/17/08	247	8/11/09	678
			H_2O (µg/m^3)	NS	NS	12/17/07	5,280,000	7/17/08	14,500,000	8/11/09	15,500,000
			PCE (µg/m^3)	NS	NS	12/17/07	9730	7/17/08	11,100	8/11/09	8620
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/11/09	-0.02
			TCA (µg/m^3)	NS	NS	12/17/07	-191,000	7/17/08	52,500	8/11/09	34,200
			TCE (µg/m^3)	NS	NS	12/17/07	5340	7/17/08	8470	8/11/09	900
	40	39–41	CO_2 (µg/m^3)	NS	NS	12/17/07	45,700,000	7/17/08	2,950,000	8/11/09	32,800,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	1680	7/17/08	508	8/11/09	-56
			H_2O (µg/m^3)	NS	NS	12/17/07	5,560,000	7/17/08	19,000,000	8/11/09	14,800,000
			PCE (µg/m^3)	NS	NS	12/17/07	15,300	7/17/08	12,200	8/11/09	9280
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/11/09	-0.05

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-01115 (cont.)	40	39–41	TCA (µg/m^3)	NS	NS	12/17/07	-213,000	7/17/08	70,700	8/11/09	47,100
			TCE (µg/m^3)	NS	NS	12/17/07	5840	7/17/08	6860	8/11/09	1930
	53	52–54	CO_2 (µg/m^3)	NS	NS	12/17/07	49,900,000	7/17/08	3,130,000	8/11/09	43,700,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	2720	7/17/08	-275	8/11/09	-354
			H_2O (µg/m^3)	NS	NS	12/17/07	5,560,000	7/17/08	15,200,000	8/11/09	16,300,000
			PCE (µg/m^3)	NS	NS	12/17/07	19,200	7/17/08	11,200	8/11/09	13,600
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/11/09	-0.11
			TCA (µg/m^3)	NS	NS	12/17/07	-218,000	7/17/08	95,700	8/11/09	103,000
			TCE (µg/m^3)	NS	NS	12/17/07	3430	7/17/08	11,300	8/11/09	4410
	63	62–64	CO_2 (µg/m^3)	NS	NS	12/17/07	50,900,000	7/17/08	3,010,000	8/11/09	44,900,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	2920	7/17/08	-50.4	8/11/09	710
			H_2O (µg/m^3)	NS	NS	12/17/07	5,560,000	7/17/08	15,100,000	8/11/09	16,300,000
			PCE (µg/m^3)	NS	NS	12/17/07	21,300	7/17/08	11,300	8/11/09	12,900
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/11/09	-0.13
			TCA (µg/m^3)	NS	NS	12/17/07	-207,000	7/17/08	100,000	8/11/09	116,000
			TCE (µg/m^3)	NS	NS	12/17/07	4250	7/17/08	9750	8/11/09	3120
	68	67–69	CO_2 (µg/m^3)	NS	NS	12/17/07	51,300,000	7/17/08	3,200,000	8/11/09	36,000,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	2940	7/17/08	278	8/11/09	433
			H_2O (µg/m^3)	NS	NS	12/17/07	5,700,000	7/17/08	15,300,000	8/11/09	14,600,000
			PCE (µg/m^3)	NS	NS	12/17/07	21,700	7/17/08	13,600	8/11/09	13,300
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/11/09	-0.11
			TCA (µg/m^3)	NS	NS	12/17/07	-202,000	7/17/08	127,000	8/11/09	83,400
			TCE (µg/m^3)	NS	NS	12/17/07	3900	7/17/08	9910	8/11/09	4890

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-01116	Ambient	Ambient	CO_2 (µg/m^3)	NS	NS	NS	NS	7/8/08	608,000	8/10/09	786,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/8/08	34	8/10/09	416
			H_2O (µg/m^3)	NS	NS	NS	NS	7/8/08	13,100,000	8/10/09	3,560,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/8/08	2250	8/10/09	3950
			Pressure Differential (kPa)	NS	NS	NS	NS	7/8/08	0	8/10/09	0
			TCA (µg/m^3)	NS	NS	NS	NS	7/8/08	-2050	8/10/09	-214
			TCE (µg/m^3)	NS	NS	NS	NS	7/8/08	350	8/10/09	460
	22.5	20–25	CO_2 (µg/m^3)	NS	NS	NS	NS	7/8/08	11,300,000	8/10/09	14,200,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/8/08	6300	8/10/09	2720
			H_2O (µg/m^3)	NS	NS	NS	NS	7/8/08	13,400,000	8/10/09	13,000,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/8/08	57,600	8/10/09	25,500
			Pressure Differential (kPa)	NS	NS	NS	NS	7/8/08	0	8/10/09	0
			TCA (µg/m^3)	NS	NS	NS	NS	7/8/08	1,370,000	8/10/09	792,000
			TCE (µg/m^3)	NS	NS	NS	NS	7/8/08	16,800	8/10/09	24,500
	42.5	40–45	CO_2 (µg/m^3)	NS	NS	NS	NS	7/8/08	13,100,000	8/10/09	14,700,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/8/08	8200	8/10/09	3180
			H_2O (µg/m^3)	NS	NS	NS	NS	7/8/08	13,200,000	8/10/09	13,900,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/8/08	69,400	8/10/09	31,100
			Pressure Differential (kPa)	NS	NS	NS	NS	7/8/08	0	8/10/09	0
			TCA (µg/m^3)	NS	NS	NS	NS	7/8/08	1,470,000	8/10/09	745,000
			TCE (µg/m^3)	NS	NS	NS	NS	7/8/08	16,400	8/10/09	18,900
	67.5	65–70	CO_2 (µg/m^3)	NS	NS	NS	NS	7/8/08	13,800,000	8/10/09	13,200,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/8/08	9160	8/10/09	2310

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-01116 (cont.)	67.5	65–70	H_2O (µg/m^3)	NS	NS	NS	NS	7/8/08	12,600,000	8/10/09	13,800,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/8/08	78,600	8/10/09	18,400
			Pressure Differential (kPa)	NS	NS	NS	NS	7/8/08	-0.04	8/10/09	-0.03
			TCA (µg/m^3)	NS	NS	NS	NS	7/8/08	1,330,000	8/10/09	487,000
			TCE (µg/m^3)	NS	NS	NS	NS	7/8/08	15,100	8/10/09	13,600
	82.5	80–85	CO_2 (µg/m^3)	NS	NS	NS	NS	7/8/08	13,800,000	8/10/09	12,700,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/8/08	8700	8/10/09	2860
			H_2O (µg/m^3)	NS	NS	NS	NS	7/8/08	12,500,000	8/10/09	13,700,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/8/08	74,400	8/10/09	21,000
			Pressure Differential (kPa)	NS	NS	NS	NS	7/8/08	-0.06	8/10/09	-0.04
			TCA (µg/m^3)	NS	NS	NS	NS	7/8/08	1,180,000	8/10/09	409,000
			TCE (µg/m^3)	NS	NS	NS	NS	7/8/08	14,500	8/10/09	8490
	97.5	95–100	CO_2 (µg/m^3)	NS	NS	NS	NS	7/8/08	13,800,000	8/10/09	13,700,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/8/08	8600	8/10/09	2180
			H_2O (µg/m^3)	NS	NS	NS	NS	7/8/08	12,800,000	8/10/09	13,800,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/8/08	70,900	8/10/09	23,600
			Pressure Differential (kPa)	NS	NS	NS	NS	7/8/08	-0.1	8/10/09	-0.09
			TCA (µg/m^3)	NS	NS	NS	NS	7/8/08	1,080,000	8/10/09	450,000
			TCE (µg/m^3)	NS	NS	NS	NS	7/8/08	13,300	8/10/09	12,700
	132.5	130–135	CO_2 (µg/m^3)	NS	NS	NS	NS	7/8/08	12,900,000	8/10/09	14,700,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/8/08	6240	8/10/09	4450
			H_2O (µg/m^3)	NS	NS	NS	NS	7/8/08	12,500,000	8/10/09	13,900,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/8/08	44,400	8/10/09	25,000

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-01116 (cont.)	132.5	130–135	Pressure Differential (kPa)	NS	NS	NS	NS	7/8/08	-0.17	8/10/09	-0.2
			TCA (µg/m^3)	NS	NS	NS	NS	7/8/08	691,000	8/10/09	458,000
			TCE (µg/m^3)	NS	NS	NS	NS	7/8/08	10,100	8/10/09	7710
	151.5	149–154	CO_2 (µg/m^3)	NS	NS	NS	NS	7/8/08	266,000	8/10/09	10,800,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/8/08	4980	8/10/09	1530
			H_2O (µg/m^3)	NS	NS	NS	NS	7/8/08	12,500,000	8/10/09	12,800,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/8/08	34,000	8/10/09	14,600
			Pressure Differential (kPa)	NS	NS	NS	NS	7/8/08	-0.16	8/10/09	-0.15
			TCA (µg/m^3)	NS	NS	NS	NS	7/8/08	542,000	8/10/09	216,000
			TCE (µg/m^3)	NS	NS	NS	NS	7/8/08	9050	8/10/09	6630
	165	162.5–167.5	CO_2 (µg/m^3)	NS	NS	NS	NS	7/8/08	1620	8/10/09	12,000,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/8/08	-3680	8/10/09	3250
			H_2O (µg/m^3)	NS	NS	NS	NS	7/8/08	12,300,000	8/10/09	13,500,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/8/08	25,400	8/10/09	16,600
			Pressure Differential (kPa)	NS	NS	NS	NS	7/8/08	-0.12	8/10/09	-0.19
			TCA (µg/m^3)	NS	NS	NS	NS	7/8/08	399,000	8/10/09	291,000
			TCE (µg/m^3)	NS	NS	NS	NS	7/8/08	7770	8/10/09	5630
	187.8	185.3–190.3	CO_2 (µg/m^3)	NS	NS	NS	NS	7/8/08	2,950,000	8/10/09	3,640,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/8/08	-2270	8/10/09	-453
			H_2O (µg/m^3)	NS	NS	NS	NS	7/8/08	12,500,000	8/10/09	13,000,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/8/08	203	8/10/09	3790
			Pressure Differential (kPa)	NS	NS	NS	NS	7/8/08	-0.06	8/10/09	-0.06

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-01116 (cont.)	187.8	185.3–190.3	TCA (µg/m^3)	NS	NS	NS	NS	7/8/08	-5130	8/10/09	5330
			TCE (µg/m^3)	NS	NS	NS	NS	7/8/08	-1580	8/10/09	751
54-01117	Ambient	Ambient	CO_2 (µg/m^3)	NS	NS	12/20/07	1,100,000	7/8/08	662,000	8/7/09	850,000
			Freon-11 (µg/m^3)	NS	NS	12/20/07	189	7/8/08	-5040	8/7/09	245
			H_2O (µg/m^3)	NS	NS	12/20/07	9,880,000	7/8/08	13,300,000	8/7/09	12,500,000
			PCE (µg/m^3)	NS	NS	12/20/07	4780	7/8/08	-945	8/7/09	2530
			Pressure Differential (kPa)	NS	NS	NS	NS	7/8/08	0	8/7/09	0
			TCA (µg/m^3)	NS	NS	12/20/07	-6380	7/8/08	-707	8/7/09	329
			TCE (µg/m^3)	NS	NS	12/20/07	2910	7/8/08	182	8/7/09	967
	20	18.5–22.5	CO_2 (µg/m^3)	NS	NS	12/20/07	16,700,000	7/8/08	8,140,000	8/7/09	12,100,000
			Freon-11 (µg/m^3)	NS	NS	12/20/07	4750	7/8/08	1210	8/7/09	1690
			H_2O (µg/m^3)	NS	NS	12/20/07	9,070,000	7/8/08	12,100,000	8/7/09	13,100,000
			PCE (µg/m^3)	NS	NS	12/20/07	28,000	7/8/08	12,400	8/7/09	8660
			Pressure Differential (kPa)	NS	NS	12/20/07	0	NS	NS	8/7/09	0.03
			TCA (µg/m^3)	NS	NS	12/20/07	349,000	7/8/08	166,000	8/7/09	115,000
			TCE (µg/m^3)	NS	NS	12/20/07	9110	7/8/08	7930	8/7/09	4210
	31.5	31.5	CO_2 (µg/m^3)	NS	NS	12/20/07	16,500,000	NS	NS	NS	NS
			Freon-11 (µg/m^3)	NS	NS	12/20/07	4370	NS	NS	NS	NS
			H_2O (µg/m^3)	NS	NS	12/20/07	7,810,000	NS	NS	NS	NS
			PCE (µg/m^3)	NS	NS	12/20/07	26,400	NS	NS	NS	NS
			Pressure Differential (kPa)	NS	NS	12/20/07	0	NS	NS	NS	NS
			TCA (µg/m^3)	NS	NS	12/20/07	338,000	NS	NS	NS	NS
			TCE (µg/m^3)	NS	NS	12/20/07	9640	NS	NS	NS	NS

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-01117 (cont.)	42.5	40–45	CO_2 (µg/m^3)	NS	NS	NS	NS	7/8/08	9,190,000	8/7/09	12,100,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/8/08	1960	8/7/09	827
			H_2O (µg/m^3)	NS	NS	NS	NS	7/8/08	12,000,000	8/7/09	13,100,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/8/08	16,800	8/7/09	9330
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/7/09	0.05
			TCA (µg/m^3)	NS	NS	NS	NS	7/8/08	274,000	8/7/09	186,000
			TCE (µg/m^3)	NS	NS	NS	NS	7/8/08	8090	8/7/09	8150
	55	55	CO_2 (µg/m^3)	NS	NS	12/20/07	16,100,000	NS	NS	NS	NS
			Freon-11 (µg/m^3)	NS	NS	12/20/07	3960	NS	NS	NS	NS
			H_2O (µg/m^3)	NS	NS	12/20/07	7,740,000	NS	NS	NS	NS
			PCE (µg/m^3)	NS	NS	12/20/07	24,500	NS	NS	NS	NS
			Pressure Differential (kPa)	NS	NS	12/20/07	0	NS	NS	NS	NS
			TCA (µg/m^3)	NS	NS	12/20/07	312,000	NS	NS	NS	NS
			TCE (µg/m^3)	NS	NS	12/20/07	9380	NS	NS	NS	NS
	67.5	65–70	CO_2 (µg/m^3)	NS	NS	12/20/07	15,500,000	7/8/08	9,540,000	8/7/09	13,200,000
			Freon-11 (µg/m^3)	NS	NS	12/20/07	3590	7/8/08	2910	8/7/09	923
			H_2O (µg/m^3)	NS	NS	12/20/07	7,810,000	7/8/08	11,900,000	8/7/09	13,200,000
			PCE (µg/m^3)	NS	NS	12/20/07	22,900	7/8/08	20,600	8/7/09	13,100
			Pressure Differential (kPa)	NS	NS	12/20/07	0	NS	NS	8/7/09	0.07
			TCA (µg/m^3)	NS	NS	12/20/07	28,900	7/8/08	317,000	8/7/09	259,000
			TCE (µg/m^3)	NS	NS	12/20/07	9380	7/8/08	7880	8/7/09	11,000
	82.5	80–85	CO_2 (µg/m^3)	NS	NS	12/20/07	13,400,000	7/8/08	9,830,000	8/7/09	13,500,000
			Freon-11 (µg/m^3)	NS	NS	12/20/07	2910	7/8/08	3450	8/7/09	3360

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-01117 (cont.)	82.5	80–85	H_2O (µg/m^3)	NS	NS	12/20/07	7,810,000	7/8/08	11,600,000	8/7/09	13,100,000
			PCE (µg/m^3)	NS	NS	12/20/07	19,000	7/8/08	25,900	8/7/09	20,200
			Pressure Differential (kPa)	NS	NS	12/20/07	0	NS	NS	8/7/09	0.08
			TCA (µg/m^3)	NS	NS	12/20/07	200,000	7/8/08	364,000	8/7/09	304,000
			TCE (µg/m^3)	NS	NS	12/20/07	8800	7/8/08	7070	8/7/09	6880
	85	85	CO_2 (µg/m^3)	NS	NS	12/20/07	10,100,000	NS	NS	NS	NS
			Freon-11 (µg/m^3)	NS	NS	12/20/07	2090	NS	NS	NS	NS
			H_2O (µg/m^3)	NS	NS	12/20/07	7,590,000	NS	NS	NS	NS
			PCE (µg/m^3)	NS	NS	12/20/07	14,100	NS	NS	NS	NS
			Pressure Differential (kPa)	NS	NS	12/20/07	0	NS	NS	NS	NS
			TCA (µg/m^3)	NS	NS	12/20/07	118,000	NS	NS	NS	NS
			TCE (µg/m^3)	NS	NS	12/20/07	7550	NS	NS	NS	NS
	97.5	95–100	CO_2 (µg/m^3)	NS	NS	NS	NS	7/8/08	10,900,000	8/7/09	15,000,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/8/08	-4080	8/7/09	4740
			H_2O (µg/m^3)	NS	NS	NS	NS	7/8/08	11,400,000	8/7/09	13,400,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/8/08	27,000	8/7/09	23,100
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/7/09	0.11
			TCA (µg/m^3)	NS	NS	NS	NS	7/8/08	427,000	8/7/09	395,000
			TCE (µg/m^3)	NS	NS	NS	NS	7/8/08	8470	8/7/09	8140
	132.5	130–135	CO_2 (µg/m^3)	NS	NS	NS	NS	7/8/08	10,700,000	8/7/09	15,500,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/8/08	4230	8/7/09	5390
			H_2O (µg/m^3)	NS	NS	NS	NS	7/8/08	11,600,000	8/7/09	13,400,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/8/08	26,400	8/7/09	27,800

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-01117 (cont.)	132.5	130–135	Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/7/09	0.11
			TCA (µg/m^3)	NS	NS	NS	NS	7/8/08	420,000	8/7/09	434,000
			TCE (µg/m^3)	NS	NS	NS	NS	7/8/08	8470	8/7/09	9600
	150	147.5–152.5	CO_2 (µg/m^3)	NS	NS	NS	NS	7/8/08	6,350,000	8/7/09	9,630,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/8/08	3260	8/7/09	3720
			H_2O (µg/m^3)	NS	NS	NS	NS	7/8/08	10,800,000	8/7/09	13,100,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/8/08	13,600	8/7/09	13,800
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/7/09	0.09
			TCA (µg/m^3)	NS	NS	NS	NS	7/8/08	217,000	8/7/09	184,000
			TCE (µg/m^3)	NS	NS	NS	NS	7/8/08	5080	8/7/09	3460
	159.5	157–162	CO_2 (µg/m^3)	NS	NS	NS	NS	7/8/08	6,430,000	8/7/09	9,230,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/8/08	3210	8/7/09	3200
			H_2O (µg/m^3)	NS	NS	NS	NS	7/8/08	11,600,000	8/7/09	13,300,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/8/08	16,300	8/7/09	13,300
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/7/09	0.05
			TCA (µg/m^3)	NS	NS	NS	NS	7/8/08	220,000	8/7/09	171,000
			TCE (µg/m^3)	NS	NS	NS	NS	7/8/08	4160	8/7/09	5300
	179.8	177.3–182.3	CO_2 (µg/m^3)	NS	NS	NS	NS	7/8/08	2,750,000	8/7/09	3,600,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/8/08	-258	8/7/09	-175
			H_2O (µg/m^3)	NS	NS	NS	NS	7/8/08	11,600,000	8/7/09	13,100,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/8/08	-2430	8/7/09	1270
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/7/09	0.07

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-01117 (cont.)	179.8	177.3–182.3	TCA (µg/m^3)	NS	NS	NS	NS	7/8/08	3410	8/7/09	-1100
			TCE (µg/m^3)	NS	NS	NS	NS	7/8/08	3170	8/7/09	2110
54-01121	Ambient	Ambient	CO_2 (µg/m^3)	NS	NS	12/17/07	999,000	7/14/08	725,000	8/25/09	813,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	-137	7/14/08	155	8/25/09	79.1
			H_2O (µg/m^3)	NS	NS	12/17/07	8,110,000	7/14/08	13,800,000	8/25/09	13,100,000
			PCE (µg/m^3)	NS	NS	12/17/07	4160	7/14/08	-1650	8/25/09	953
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/25/09	0
			TCA (µg/m^3)	NS	NS	12/17/07	-3380	7/14/08	-2900	8/25/09	148
			TCE (µg/m^3)	NS	NS	12/17/07	2710	7/14/08	175	8/25/09	478
	20	19–21	CO_2 (µg/m^3)	NS	NS	12/17/07	47,000,000	7/14/08	33,300,000	8/25/09	34,900,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	8700	7/14/08	6580	8/25/09	6070
			H_2O (µg/m^3)	NS	NS	12/17/07	8,180,000	7/14/08	15,000,000	8/25/09	15,100,000
			PCE (µg/m^3)	NS	NS	12/17/07	36,200	7/14/08	32,300	8/25/09	25,300
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/25/09	-0.11
			TCA (µg/m^3)	NS	NS	12/17/07	56,900	7/14/08	375,000	8/25/09	239,000
			TCE (µg/m^3)	NS	NS	12/17/07	10,400	7/14/08	18,200	8/25/09	4940
	26	25–27	CO_2 (µg/m^3)	NS	NS	12/17/07	46,800,000	7/14/08	33,300,000	8/25/09	35,400,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	7840	7/14/08	6010	8/25/09	3980
			H_2O (µg/m^3)	NS	NS	12/17/07	7,370,000	7/14/08	14,700,000	8/25/09	15,900,000
			PCE (µg/m^3)	NS	NS	12/17/07	34,300	7/14/08	30,700	8/25/09	17,900
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/25/09	0
			TCA (µg/m^3)	NS	NS	12/17/07	55,300	7/14/08	378,000	8/25/09	218,000
			TCE (µg/m^3)	NS	NS	12/17/07	11,800	7/14/08	17,400	8/25/09	8210

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-01121 (cont.)	61.5	60.5–62.5	CO_2 (µg/m^3)	NS	NS	12/17/07	46,100,000	7/14/08	31,300,000	8/25/09	39,700,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	7270	7/14/08	3720	8/25/09	5620
			H_2O (µg/m^3)	NS	NS	12/17/07	7,160,000	7/14/08	14,800,000	8/25/09	15,700,000
			PCE (µg/m^3)	NS	NS	12/17/07	32,500	7/14/08	23,500	8/25/09	24,100
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/25/09	-0.02
			TCA (µg/m^3)	NS	NS	12/17/07	45,100	7/14/08	331,000	8/25/09	293,000
			TCE (µg/m^3)	NS	NS	12/17/07	10,200	7/14/08	16,300	8/25/09	10,800
	70	69–71	CO_2 (µg/m^3)	NS	NS	12/17/07	44,600,000	7/14/08	31,000,000	8/25/09	38,800,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	5960	7/14/08	3200	8/25/09	4390
			H_2O (µg/m^3)	NS	NS	12/17/07	7,080,000	7/14/08	14,600,000	8/25/09	15,700,000
			PCE (µg/m^3)	NS	NS	12/17/07	29,100	7/14/08	22,200	8/25/09	24,000
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/25/09	-0.02
			TCA (µg/m^3)	NS	NS	12/17/07	26,400	7/14/08	320,000	8/25/09	279,000
			TCE (µg/m^3)	NS	NS	12/17/07	9590	7/14/08	16,100	8/25/09	10,700
	76	75–77	CO_2 (µg/m^3)	NS	NS	12/17/07	43,900,000	7/14/08	30,200,000	8/25/09	39,300,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	5380	7/14/08	2740	8/25/09	4000
			H_2O (µg/m^3)	NS	NS	12/17/07	6,960,000	7/14/08	14,600,000	8/25/09	15,600,000
			PCE (µg/m^3)	NS	NS	12/17/07	28,400	7/14/08	21,000	8/25/09	24,400
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/25/09	0
			TCA (µg/m^3)	NS	NS	12/17/07	17,900	7/14/08	307,000	8/25/09	285,000
			TCE (µg/m^3)	NS	NS	12/17/07	7880	7/14/08	15,200	8/25/09	9090
	98	97–99	CO_2 (µg/m^3)	NS	NS	12/17/07	37,300,000	7/14/08	24,800,000	8/25/09	41,200,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	2850	7/14/08	996	8/25/09	6050

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-01121 (cont.)	98	97–99	H_2O (µg/m^3)	NS	NS	12/17/07	6,660,000	7/14/08	14,300,000	8/25/09	15,200,000
			PCE (µg/m^3)	NS	NS	12/17/07	17,500	7/14/08	11,200	8/25/09	25,600
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/25/09	-0.08
			TCA (µg/m^3)	NS	NS	12/17/07	-31,400	7/14/08	204,000	8/25/09	315,000
			TCE (µg/m^3)	NS	NS	12/17/07	6860	7/14/08	11,200	8/25/09	10,300
	121	120–122	CO_2 (µg/m^3)	NS	NS	12/17/07	35,500,000	7/14/08	23,900,000	8/25/09	32,300,000
			Freon-11 (µg/m^3)	NS	NS	12/17/07	2580	7/14/08	716	8/25/09	3300
			H_2O (µg/m^3)	NS	NS	12/17/07	6,480,000	7/14/08	14,500,000	8/25/09	16,400,000
			PCE (µg/m^3)	NS	NS	12/17/07	17,000	7/14/08	12,900	8/25/09	17,100
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/25/09	0
			TCA (µg/m^3)	NS	NS	12/17/07	-27,600	7/14/08	196,000	8/25/09	199,000
			TCE (µg/m^3)	NS	NS	12/17/07	5680	7/14/08	8410	8/25/09	5540
54-01126	Ambient	Ambient	CO_2 (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	905,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	1040
			H_2O (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	6,260,000
			PCE (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	-2100
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	9/29/09	0
			TCA (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	5010
			TCE (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	2990
	7	6-8	CO_2 (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	11,100,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	-1100
			H_2O (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	16,800,000
			PCE (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	6350

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-01126 (cont.)	7	6-8	Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	9/29/09	0.1
			TCA (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	23,800
			TCE (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	13,000
	17	16-18	CO_2 (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	6,240,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	-589
			H_2O (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	12,400,000
			PCE (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	118
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	9/29/09	0.11
			TCA (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	12,200
			TCE (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	15,400
	28	27-29	CO_2 (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	14,700,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	-411
			H_2O (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	11,700,000
			PCE (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	6590
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	9/29/09	0.12
			TCA (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	60,200
			TCE (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	28,800
	35	34-36	CO_2 (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	20,900,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	-536
			H_2O (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	11,700,000
			PCE (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	9350
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	9/29/09	0.14

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-01126 (cont.)	35	34-36	TCA (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	99,000
			TCE (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	45,400
	42	41-43	CO_2 (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	32,800,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	1790
			H_2O (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	11,600,000
			PCE (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	9930
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	9/29/09	0.14
			TCA (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	230,000
			TCE (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	77,200
	49	48-50	CO_2 (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	29,300,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	1530
			H_2O (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	11,200,000
			PCE (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	9230
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	9/29/09	0.16
			TCA (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	200,000
			TCE (µg/m^3)	NS	NS	NS	NS	NS	NS	9/29/09	62,900
54-01128	Ambient	Ambient	CO_2 (µg/m^3)	NS	NS	12/18/07	997,000	7/11/08	1,190,000	8/21/09	784,000
			Freon-11 (µg/m^3)	NS	NS	12/18/07	22.6	7/11/08	-51	8/21/09	5.4
			H_2O (µg/m^3)	NS	NS	12/18/07	8,110,000	7/11/08	14,200,000	8/21/09	11,700,000
			PCE (µg/m^3)	NS	NS	12/18/07	2880	7/11/08	234	8/21/09	1260
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/21/09	0
			TCA (µg/m^3)	NS	NS	12/18/07	-4710	7/11/08	-12,200	8/21/09	195
			TCE (µg/m^3)	NS	NS	12/18/07	3970	7/11/08	948	8/21/09	665

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-01128 (cont.)	7.5	6.5-8.5	CO_2 (µg/m^3)	NS	NS	12/18/07	18,400,000	7/11/08	13,500,000	8/21/09	17,400,000
			Freon-11 (µg/m^3)	NS	NS	12/18/07	836	7/11/08	418	8/21/09	128
			H_2O (µg/m^3)	NS	NS	12/18/07	7,160,000	7/11/08	16,100,000	8/21/09	16,900,000
			PCE (µg/m^3)	NS	NS	12/18/07	7440	7/11/08	1590	8/21/09	3600
			Pressure Differential (kPa)	NS	NS	12/18/07	0	NS	NS	8/21/09	0.03
			TCA (µg/m^3)	NS	NS	12/18/07	-63,800	7/11/08	47,700	8/21/09	45,300
			TCE (µg/m^3)	NS	NS	12/18/07	3200	7/11/08	3060	8/21/09	1120
	15	14-16	CO_2 (µg/m^3)	NS	NS	12/18/07	33,500,000	7/11/08	2,230,000	8/21/09	29,100,000
			Freon-11 (µg/m^3)	NS	NS	12/18/07	1450	7/11/08	435	8/21/09	180
			H_2O (µg/m^3)	NS	NS	12/18/07	7,200,000	7/11/08	13,900,000	8/21/09	14,500,000
			PCE (µg/m^3)	NS	NS	12/18/07	11,100	7/11/08	5270	8/21/09	5680
			Pressure Differential (kPa)	NS	NS	12/18/07	0	NS	NS	8/21/09	0.04
			TCA (µg/m^3)	NS	NS	12/18/07	-90,400	7/11/08	123,000	8/21/09	117,000
			TCE (µg/m^3)	NS	NS	12/18/07	2880	7/11/08	7290	8/21/09	1160
	20	19-21	CO_2 (µg/m^3)	NS	NS	12/18/07	44,500,000	7/11/08	2,860,000	8/21/09	36,200,000
			Freon-11 (µg/m^3)	NS	NS	12/18/07	1750	7/11/08	-28.6	8/21/09	-12
			H_2O (µg/m^3)	NS	NS	12/18/07	6,780,000	7/11/08	13,900,000	8/21/09	14,400,000
			PCE (µg/m^3)	NS	NS	12/18/07	12,500	7/11/08	7720	8/21/09	7890
			Pressure Differential (kPa)	NS	NS	12/18/07	0	NS	NS	8/21/09	0.04
			TCA (µg/m^3)	NS	NS	12/18/07	-90,400	7/11/08	199,000	8/21/09	182,000
			TCE (µg/m^3)	NS	NS	12/18/07	4360	7/11/08	8520	8/21/09	2440
	30	29-31	CO_2 (µg/m^3)	NS	NS	NS	NS	7/11/08	9,700,000	8/21/09	24,500,000[c]
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/11/08	-85.9	8/21/09	190[c]

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-01128 (cont.)	30	29-31	H_2O (µg/m^3)	NS	NS	NS	NS	7/11/08	13,900,000	8/21/09	15,900,000[c]
			PCE (µg/m^3)	NS	NS	NS	NS	7/11/08	2310	8/21/09	5690[c]
			Pressure Differential (kPa)	NS	NS	12/18/07	0[b]	NS	NS	8/21/09	0[c]
			TCA (µg/m^3)	NS	NS	NS	NS	7/11/08	54,800	8/21/09	119,000[c]
			TCE (µg/m^3)	NS	NS	NS	NS	7/11/08	3250	8/21/09	1680[c]
	39	38-40	CO_2 (µg/m^3)	NS	NS	12/18/07	55,800,000	7/11/08	36,200,000	8/21/09	41,900,000
			Freon-11 (µg/m^3)	NS	NS	12/18/07	2390	7/11/08	68.1	8/21/09	676
			H_2O (µg/m^3)	NS	NS	12/18/07	6,850,000	7/11/08	13,900,000	8/21/09	14,700,000
			PCE (µg/m^3)	NS	NS	12/18/07	18,000	7/11/08	11,600	8/21/09	10,600,000
			Pressure Differential (kPa)	NS	NS	12/18/07	0	NS	NS	8/21/09	0.05
			TCA (µg/m^3)	NS	NS	12/18/07	-29,200	7/11/08	357,000	8/21/09	282,000
			TCE (µg/m^3)	NS	NS	12/18/07	6750	7/11/08	10,900	8/21/09	2780
54-02009	Ambient	Ambient	CO_2 (µg/m^3)	NS	NS	12/18/07	965,000	7/11/08	689,000	8/19/09	1,390,000
			Freon-11 (µg/m^3)	NS	NS	12/18/07	95.6	7/11/08	70.4	8/19/09	-5.88
			H_2O (µg/m^3)	NS	NS	12/18/07	8,480,000	7/11/08	13,600,000	8/19/09	4,950,000
			PCE (µg/m^3)	NS	NS	12/18/07	3990	7/11/08	667.5	8/19/09	1660
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/19/09	0
			TCA (µg/m^3)	NS	NS	12/18/07	-4400	7/11/08	-2515	8/19/09	-3800
			TCE (µg/m^3)	NS	NS	12/18/07	3280	7/11/08	-53.6	8/19/09	1080
	37	34.5–39.5	CO_2 (µg/m^3)	NS	NS	12/18/07	27,500,000	7/11/08	17,200,000	8/19/09	21,600,000
			Freon-11 (µg/m^3)	NS	NS	12/18/07	2100	7/11/08	1060	8/19/09	637
			H_2O (µg/m^3)	NS	NS	12/18/07	8,550,000	7/11/08	14,600,000	8/19/09	14,800,000
			PCE (µg/m^3)	NS	NS	12/18/07	14,300	7/11/08	11,300	8/19/09	8420

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-02009 (cont.)	37	34.5–39.5	Pressure Differential (kPa)	NS	NS	12/18/07	0	NS	NS	8/19/09	0.02
			TCA ($\mu g/m^3$)	NS	NS	12/18/07	9040	7/11/08	120,000	8/19/09	143,000
			TCE ($\mu g/m^3$)	NS	NS	12/18/07	4600	7/11/08	5630	8/19/09	3410
	62	59.5–64.5	CO_2 ($\mu g/m^3$)	NS	NS	12/18/07	26,100,000	7/11/08	17,200,000	8/19/09	22,800,000
			Freon-11 ($\mu g/m^3$)	NS	NS	12/18/07	2370	7/11/08	1360	8/19/09	998
			H_2O ($\mu g/m^3$)	NS	NS	12/18/07	8,330,000	7/11/08	14,400,000	8/19/09	14,300,000
			PCE ($\mu g/m^3$)	NS	NS	12/18/07	16,300	7/11/08	11,400	8/19/09	10,300
			Pressure Differential (kPa)	NS	NS	12/18/07	0	NS	NS	8/19/09	0.02
			TCA ($\mu g/m^3$)	NS	NS	12/18/07	45,900	7/11/08	155,000	8/19/09	177,000
			TCE ($\mu g/m^3$)	NS	NS	12/18/07	4600	7/11/08	5170	8/19/09	5400
	79	76.5–81.5	CO_2 ($\mu g/m^3$)	NS	NS	NS	NS	NS	NS	NS	NS
			Freon-11 ($\mu g/m^3$)	NS	NS	NS	NS	NS	NS	NS	NS
			H_2O ($\mu g/m^3$)	NS	NS	NS	NS	NS	NS	NS	NS
			PCE ($\mu g/m^3$)	NS	NS	NS	NS	NS	NS	NS	NS
			Pressure Differential (kPa)	NS	NS	12/18/07	0[b]	NS	NS	8/19/09	0[b]
			TCA ($\mu g/m^3$)	NS	NS	NS	NS	NS	NS	NS	NS
			TCE ($\mu g/m^3$)	NS	NS	NS	NS	NS	NS	NS	NS
	92	89.5–94.5	CO_2 ($\mu g/m^3$)	NS	NS	12/18/07	23,600,000	7/11/08	16,200,000	8/19/09	18,900,000
			Freon-11 ($\mu g/m^3$)	NS	NS	12/18/07	2860	7/11/08	1590	8/19/09	1280
			H_2O ($\mu g/m^3$)	NS	NS	12/18/07	8,180,000	7/11/08	13,800,000	8/19/09	12,800,000
			PCE ($\mu g/m^3$)	NS	NS	12/18/07	17,000	7/11/08	10,400	8/19/09	7680
			Pressure Differential (kPa)	NS	NS	12/18/07	0	NS	NS	8/19/09	0

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-02009 (cont.)	92	89.5–94.5	TCA (µg/m^3)	NS	NS	12/18/07	75,000	7/11/08	183,000	8/19/09	167,000
			TCE (µg/m^3)	NS	NS	12/18/07	3680	7/11/08	6540	8/19/09	5590
54-02010	0	Ambient	CO_2 (µg/m^3)	NS	NS	12/13/07	1,230,000	7/9/08	668,000	8/19/09	927,000
			Freon-11 (µg/m^3)	NS	NS	12/13/07	-195	7/9/08	-80.2	8/19/09	-141
			H_2O (µg/m^3)	NS	NS	12/13/07	7,740,000	7/9/08	10,300,000	8/19/09	5,080,000
			PCE (µg/m^3)	NS	NS	12/13/07	1910	7/9/08	1500	8/19/09	1400
			Pressure Differential (kPa)	NS	NS	12/13/07	0	NS	NS	8/19/09	0
			TCA (µg/m^3)	NS	NS	12/13/07	-4560	7/9/08	-649	8/19/09	-1300
			TCE (µg/m^3)	NS	NS	12/13/07	2200	7/9/08	-782	8/19/09	2130
	30	27.5–32.5	CO_2 (µg/m^3)	NS	NS	12/13/07	43,400,000	7/9/08	41,200,000	8/19/09	54,100,000
			Freon-11 (µg/m^3)	NS	NS	12/13/07	2860	7/9/08	-664	8/19/09	604
			H_2O (µg/m^3)	NS	NS	12/13/07	6,910,000	7/9/08	15,600,000	8/19/09	17,200,000
			PCE (µg/m^3)	NS	NS	12/13/07	9460	7/9/08	5420	8/19/09	9530
			Pressure Differential (kPa)	NS	NS	12/13/07	0.01	NS	NS	8/19/09	0.03
			TCA (µg/m^3)	NS	NS	12/13/07	37,400	7/9/08	223,000	8/19/09	176,000
			TCE (µg/m^3)	NS	NS	12/13/07	-8040	7/9/08	14,900	8/19/09	2460
	53	51.5–55.5	CO_2 (µg/m^3)	NS	NS	NS	NS	7/9/08	11,900,000	NS	NS
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/9/08	72.1	NS	NS
			H_2O (µg/m^3)	NS	NS	NS	NS	7/9/08	13,200,000	NS	NS
			PCE (µg/m^3)	NS	NS	NS	NS	7/9/08	1900	NS	NS
			Pressure Differential (kPa)	NS	NS	12/13/07	0.03[b]	NS	NS	8/19/09	0[b]
			TCA (µg/m^3)	NS	NS	NS	NS	7/9/08	27,500	NS	NS
			TCE (µg/m^3)	NS	NS	NS	NS	7/9/08	6000	NS	NS

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-02010 (cont.)	95	92.5–97.5	CO_2 (µg/m^3)	NS	NS	12/13/07	47,300,000	7/9/08	36,000,000	8/19/09	44,600,000
			Freon-11 (µg/m^3)	NS	NS	12/13/07	5160	7/9/08	865	8/19/09	2090
			H_2O (µg/m^3)	NS	NS	12/13/07	6,640,000	7/9/08	16,200,000	8/19/09	17,000,000
			PCE (µg/m^3)	NS	NS	12/13/07	18,300	7/9/08	11,100	8/19/09	14,900
			Pressure Differential (kPa)	NS	NS	12/13/07	0.15	NS	NS	8/19/09	0.06
			TCA (µg/m^3)	NS	NS	12/13/07	76,600	7/9/08	208,000	8/19/09	146,000
			TCE (µg/m^3)	NS	NS	12/13/07	-11,300	7/9/08	11,300	8/19/09	2410
54-02032	Ambient	Ambient	CO_2 (µg/m^3)	NS	NS	12/13/07	1,270,000	7/10/08	1,010,000	8/27/09	788,000
			Freon-11 (µg/m^3)	NS	NS	12/13/07	-441	7/10/08	-178	8/27/09	-805
			H_2O (µg/m^3)	NS	NS	12/13/07	6,460,000	7/10/08	12,800,000	8/27/09	10,200,000
			PCE (µg/m^3)	NS	NS	12/13/07	702	7/10/08	2180	8/27/09	-1300
			Pressure Differential (kPa)	NS	NS	12/13/07	0	NS	NS	8/27/09	0
			TCA (µg/m^3)	NS	NS	12/13/07	-12,200	7/10/08	-1410	8/27/09	-899
			TCE (µg/m^3)	NS	NS	12/13/07	2640	7/10/08	-60	8/27/09	2070
	20	20	CO_2 (µg/m^3)	NS	NS	12/13/07	13,600,000	7/10/08	12,500,000	8/27/09	16,000,000
			Freon-11 (µg/m^3)	NS	NS	12/13/07	555	7/10/08	-441	8/27/09	221
			H_2O (µg/m^3)	NS	NS	12/13/07	5,710,000	7/10/08	12,700,000	8/27/09	13,400,000
			PCE (µg/m^3)	NS	NS	12/13/07	4630	7/10/08	3160	8/27/09	5930
			Pressure Differential (kPa)	NS	NS	12/13/07	0.1	NS	NS	8/27/09	-0.06
			TCA (µg/m^3)	NS	NS	12/13/07	-19,100	7/10/08	45,400	8/27/09	10,900
			TCE (µg/m^3)	NS	NS	12/13/07	-863	7/10/08	4620	8/27/09	3800
	60	60	CO_2 (µg/m^3)	NS	NS	12/13/07	16,200,000	7/10/08	12,800,000	8/27/09	16,000,000
			Freon-11 (µg/m^3)	NS	NS	12/13/07	1480	7/10/08	1660	8/27/09	132

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-02032 (cont.)	60	60	H_2O (µg/m^3)	NS	NS	12/13/07	5,590,000	7/10/08	12,800,000	8/27/09	14,000,000
			PCE (µg/m^3)	NS	NS	12/13/07	6840	7/10/08	4510	8/27/09	6030
			Pressure Differential (kPa)	NS	NS	12/13/07	0.15	NS	NS	8/27/09	-0.09
			TCA (µg/m^3)	NS	NS	12/13/07	-4990	7/10/08	56,900	8/27/09	21,400
			TCE (µg/m^3)	NS	NS	12/13/07	-2090	7/10/08	5520	8/27/09	2070
	100	100	CO_2 (µg/m^3)	NS	NS	12/13/07	12,000,000	7/10/08	7,810,000	8/27/09	8,770,000
			Freon-11 (µg/m^3)	NS	NS	12/13/07	1420	7/10/08	527	8/27/09	-112
			H_2O (µg/m^3)	NS	NS	12/13/07	5,560,000	7/10/08	11,700,000	8/27/09	12,300,000
			PCE (µg/m^3)	NS	NS	12/13/07	7090	7/10/08	2770	8/27/09	3220
			Pressure Differential (kPa)	NS	NS	12/13/07	0.19	NS	NS	8/27/09	-0.09
			TCA (µg/m^3)	NS	NS	12/13/07	845	7/10/08	34,800	8/27/09	20,000
			TCE (µg/m^3)	NS	NS	12/13/07	-589	7/10/08	3640	8/27/09	4850
	130	130	CO_2 (µg/m^3)	NS	NS	12/13/07	15,400,000	7/10/08	12,600,000	8/27/09	16,600,000
			Freon-11 (µg/m^3)	NS	NS	12/13/07	2140	7/10/08	933	8/27/09	1770
			H_2O (µg/m^3)	NS	NS	12/13/07	5,430,000	7/10/08	12,800,000	8/27/09	13,900,000
			PCE (µg/m^3)	NS	NS	12/13/07	8760	7/10/08	4520	8/27/09	16,300
			Pressure Differential (kPa)	NS	NS	12/13/07	0.25	NS	NS	8/27/09	-0.16
			TCA (µg/m^3)	NS	NS	12/13/07	10,000	7/10/08	67,500	8/27/09	45,300
			TCE (µg/m^3)	NS	NS	12/13/07	-1620	7/10/08	5050	8/27/09	1950
	156	156	CO_2 (µg/m^3)	NS	NS	12/13/07	15,000,000	7/10/08	12,100,000	8/27/09	14,700,000
			Freon-11 (µg/m^3)	NS	NS	12/13/07	2280	7/10/08	744	8/27/09	670
			H_2O (µg/m^3)	NS	NS	12/13/07	5,360,000	7/10/08	12,400,000	8/27/09	13,200,000
			PCE (µg/m^3)	NS	NS	12/13/07	10,200	7/10/08	7790	8/27/09	7200

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-02032 (cont.)	156	156	Pressure Differential (kPa)	NS	NS	12/13/07	0.26	NS	NS	8/27/09	-0.16
			TCA (µg/m^3)	NS	NS	12/13/07	12,200	7/10/08	70,200	8/27/09	41,200
			TCE (µg/m^3)	NS	NS	12/13/07	-2180	7/10/08	4190	8/27/09	2970
54-02033	Ambient	Ambient	CO_2 (µg/m^3)	NS	NS	12/13/07	913,000	7/9/08	625,000	8/5/09	7,810,000
			Freon-11 (µg/m^3)	NS	NS	12/13/07	-74.4	7/9/08	-74	8/5/09	-197
			H_2O (µg/m^3)	NS	NS	12/13/07	6,870,000	7/9/08	11,400,000	8/5/09	9,340,000
			PCE (µg/m^3)	NS	NS	12/13/07	4760	7/9/08	2560	8/5/09	-447
			Pressure Differential (kPa)	NS	NS	12/13/07	0	NS	NS	8/5/09	0
			TCA (µg/m^3)	NS	NS	12/13/07	-5260	7/9/08	-1630	8/5/09	667
			TCE (µg/m^3)	NS	NS	12/13/07	3290	7/9/08	889	8/5/09	1400
	20	20	CO_2 (µg/m^3)	NS	NS	12/13/07	9,630,000	7/9/08	9,000,000	8/5/09	12,500,000
			Freon-11 (µg/m^3)	NS	NS	12/13/07	-344	7/9/08	-321	8/5/09	-436
			H_2O (µg/m^3)	NS	NS	12/13/07	8,180,000	7/9/08	13,600,000	8/5/09	13,000,000
			PCE (µg/m^3)	NS	NS	12/13/07	5000	7/9/08	-1070	8/5/09	1140
			Pressure Differential (kPa)	NS	NS	12/13/07	0	NS	NS	8/5/09	0
			TCA (µg/m^3)	NS	NS	12/13/07	-42,000	7/9/08	-7980	8/5/09	24,700
			TCE (µg/m^3)	NS	NS	12/13/07	-627	7/9/08	3750	8/5/09	1970
	60	60	CO_2 (µg/m^3)	NS	NS	12/13/07	12,300,000	7/9/08	9,400,000	8/5/09	12,900,000
			Freon-11 (µg/m^3)	NS	NS	12/13/07	506	7/9/08	214	8/5/09	-253
			H_2O (µg/m^3)	NS	NS	12/13/07	9,070,000	7/9/08	13,900,000	8/5/09	12,500,000
			PCE (µg/m^3)	NS	NS	12/13/07	4950	7/9/08	3400	8/5/09	1430
			Pressure Differential (kPa)	NS	NS	12/13/07	0.04	NS	NS	8/5/09	0.02

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-02033 (cont.)	60	60	TCA (µg/m^3)	NS	NS	12/13/07	-44,100	7/9/08	-6910	8/5/09	26,600
			TCE (µg/m^3)	NS	NS	12/13/07	-879	7/9/08	4420	8/5/09	2730
	100	100	CO_2 (µg/m^3)	NS	NS	12/13/07	12,900,000	7/9/08	10,200,000	8/5/09	14,300,000
			Freon-11 (µg/m^3)	NS	NS	12/13/07	263	7/9/08	888	8/5/09	-65
			H_2O (µg/m^3)	NS	NS	12/13/07	9,580,000	7/9/08	13,600,000	8/5/09	12,200,000
			PCE (µg/m^3)	NS	NS	12/13/07	4070	7/9/08	6950	8/5/09	2510
			Pressure Differential (kPa)	NS	NS	12/13/07	0.06	NS	NS	8/5/09	0
			TCA (µg/m^3)	NS	NS	12/13/07	-44,100	7/9/08	-4010	8/5/09	31,300
			TCE (µg/m^3)	NS	NS	12/13/07	441	7/9/08	3210	8/5/09	2670
	160	160	CO_2 (µg/m^3)	NS	NS	12/13/07	11,000,000	7/9/08	8,640,000	8/5/09	12,500,000
			Freon-11 (µg/m^3)	NS	NS	12/13/07	853	7/9/08	945	8/5/09	407
			H_2O (µg/m^3)	NS	NS	12/13/07	8,620,000	7/9/08	13,900,000	8/5/09	12,400,000
			PCE (µg/m^3)	NS	NS	12/13/07	2500	7/9/08	2140	8/5/09	1430
			Pressure Differential (kPa)	NS	NS	12/13/07	0	NS	NS	8/5/09	-0.08
			TCA (µg/m^3)	NS	NS	12/13/07	-38,300	7/9/08	915	8/5/09	27,400
			TCE (µg/m^3)	NS	NS	12/13/07	4.78	7/9/08	150	8/5/09	1390
	200	200	CO_2 (µg/m^3)	NS	NS	12/13/07	9,360,000	7/9/08	7,580,000	8/5/09	10,600,000
			Freon-11 (µg/m^3)	NS	NS	12/13/07	412	7/9/08	-424	8/5/09	-323
			H_2O (µg/m^3)	NS	NS	12/13/07	8,700,000	7/9/08	13,800,000	8/5/09	13,300,000
			PCE (µg/m^3)	NS	NS	12/13/07	1350	7/9/08	1200	8/5/09	1620
			Pressure Differential (kPa)	NS	NS	12/13/07	0	NS	NS	8/5/09	-0.1
			TCA (µg/m^3)	NS	NS	12/13/07	-33,000	7/9/08	6110	8/5/09	21,400
			TCE (µg/m^3)	NS	NS	12/13/07	1280	7/9/08	5950	8/5/09	2800

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-02033 (cont.)	220	220	CO_2 (µg/m^3)	NS	NS	12/13/07	8,710,000	7/9/08	7,060,000	8/5/09	9,760,000
			Freon-11 (µg/m^3)	NS	NS	12/13/07	256	7/9/08	-303	8/5/09	30.5
			H_2O (µg/m^3)	NS	NS	12/13/07	8,330,000	7/9/08	13,500,000	8/5/09	13,300,000
			PCE (µg/m^3)	NS	NS	12/13/07	2160	7/9/08	1160	8/5/09	1080
			Pressure Differential (kPa)	NS	NS	12/13/07	0	NS	NS	8/5/09	-0.1
			TCA (µg/m^3)	NS	NS	12/13/07	-28,700	7/9/08	2680	8/5/09	19,600
			TCE (µg/m^3)	NS	NS	12/13/07	922	7/9/08	911	8/5/09	2420
	260	260	CO_2 (µg/m^3)	NS	NS	12/13/07	6,950,000	7/9/08	5,960,000	8/5/09	4,070,000
			Freon-11 (µg/m^3)	NS	NS	12/13/07	484	7/9/08	928	8/5/09	277
			H_2O (µg/m^3)	NS	NS	12/13/07	7,660,000	7/9/08	14,400,000	8/5/09	12,000,000
			PCE (µg/m^3)	NS	NS	12/13/07	2110	7/9/08	-2810	8/5/09	523
			Pressure Differential (kPa)	NS	NS	12/13/07	0.09	NS	NS	8/5/09	0
			TCA (µg/m^3)	NS	NS	12/13/07	-23,400	7/9/08	2170	8/5/09	6610
			TCE (µg/m^3)	NS	NS	12/13/07	707	7/9/08	-91.1	8/5/09	908
	277	277	CO_2 (µg/m^3)	NS	NS	12/13/07	6,370,000	7/9/08	5,760,000	8/5/09	6,410,000
			Freon-11 (µg/m^3)	NS	NS	12/13/07	398	7/9/08	-664	8/5/09	-98
			H_2O (µg/m^3)	NS	NS	12/13/07	7,440,000	7/9/08	13,300,000	8/5/09	12,200,000
			PCE (µg/m^3)	NS	NS	12/13/07	1860	7/9/08	-1180	8/5/09	638
			Pressure Differential (kPa)	NS	NS	12/13/07	0.08	NS	NS	8/5/09	0
			TCA (µg/m^3)	NS	NS	12/13/07	-20,700	7/9/08	1650	8/5/09	13,800
			TCE (µg/m^3)	NS	NS	12/13/07	284	7/9/08	5140	8/5/09	2230

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-22116	Ambient	Ambient	CO_2 (µg/m^3)	NS	NS	NS	NS	7/31/08	626,000	9/9/09	804,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/31/08	174	9/9/09	75.5
	Ambient	Ambient	H_2O (µg/m^3)	NS	NS	NS	NS	7/31/08	10,200,000	9/9/09	10,900,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/31/08	271	9/9/09	574
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	9/9/09	0
			TCA (µg/m^3)	NS	NS	NS	NS	7/31/08	-1380	9/9/09	481
			TCE (µg/m^3)	NS	NS	NS	NS	7/31/08	1430	9/9/09	1140
	28	27–29	CO_2 (µg/m^3)	NS	NS	NS	NS	7/31/08	8,910,000	9/9/09	4,580,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/31/08	317	9/9/09	-59
			H_2O (µg/m^3)	NS	NS	NS	NS	7/31/08	14,200,000	9/9/09	15,600,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/31/08	5690	9/9/09	2690
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	9/9/09	-0.03
			TCA (µg/m^3)	NS	NS	NS	NS	7/31/08	52,400	9/9/09	870
			TCE (µg/m^3)	NS	NS	NS	NS	7/31/08	12,900	9/9/09	3080
	46	45–47	CO_2 (µg/m^3)	NS	NS	NS	NS	7/31/08	10,700,000	9/9/09	8,410,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/31/08	261	9/9/09	229
			H_2O (µg/m^3)	NS	NS	NS	NS	7/31/08	13,600,000	9/9/09	14,900,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/31/08	7930	9/9/09	4310
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	9/9/09	-0.03
			TCA (µg/m^3)	NS	NS	NS	NS	7/31/08	75,000	9/9/09	10,300
			TCE (µg/m^3)	NS	NS	NS	NS	7/31/08	15,900	9/9/09	4280

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-22116 (cont.)	64	63–65	CO_2 (µg/m^3)	NS	NS	NS	NS	7/31/08	6,230,000	9/9/09	8,220,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/31/08	3180	9/9/09	334
			H_2O (µg/m^3)	NS	NS	NS	NS	7/31/08	15,000,000	9/9/09	16,600,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/31/08	9180	9/9/09	4620
	64	63–65	Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	9/9/09	-0.03
			TCA (µg/m^3)	NS	NS	NS	NS	7/31/08	67,500	9/9/09	15,100
			TCE (µg/m^3)	NS	NS	NS	NS	7/31/08	16,800	9/9/09	5370
	82	81–83	CO_2 (µg/m^3)	NS	NS	NS	NS	7/31/08	12,900,000	9/9/09	12,400,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/31/08	4790	9/9/09	453
			H_2O (µg/m^3)	NS	NS	NS	NS	7/31/08	16,100,000	9/9/09	18,100,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/31/08	8550	9/9/09	5780
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	9/9/09	-0.04
			TCA (µg/m^3)	NS	NS	NS	NS	7/31/08	105,000	9/9/09	31,100
			TCE (µg/m^3)	NS	NS	NS	NS	7/31/08	18,100	9/9/09	7570
	100	99–101	CO_2 (µg/m^3)	NS	NS	NS	NS	7/31/08	15,700,000	9/9/09	17,500,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/31/08	2610	9/9/09	415
			H_2O (µg/m^3)	NS	NS	NS	NS	7/31/08	14,300,000	9/9/09	15,000,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/31/08	11,900	9/9/09	8990
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	9/9/09	-0.07
			TCA (µg/m^3)	NS	NS	NS	NS	7/31/08	136,000	9/9/09	67,500
			TCE (µg/m^3)	NS	NS	NS	NS	7/31/08	22,300	9/9/09	13,800

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-22116 (cont.)	118	117–119	CO_2 (µg/m^3)	NS	NS	NS	NS	7/31/08	17,400,000	9/9/09	20,100,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/31/08	431	9/9/09	748
			H_2O (µg/m^3)	NS	NS	NS	NS	7/31/08	14,000,000	9/9/09	15,500,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/31/08	13,500	9/9/09	12,600
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	9/9/09	-0.05
	118	117–119	TCA (µg/m^3)	NS	NS	NS	NS	7/31/08	172,000	9/9/09	94,700
			TCE (µg/m^3)	NS	NS	NS	NS	7/31/08	28,700	9/9/09	17,800
	136	135–137	CO_2 (µg/m^3)	NS	NS	NS	NS	7/31/08	2,740,000	9/9/09	15,200,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/31/08	515	9/9/09	466
			H_2O (µg/m^3)	NS	NS	NS	NS	7/31/08	21,500,000	9/9/09	12,900,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/31/08	20,600	9/9/09	10,400
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	9/9/09	-0.05
			TCA (µg/m^3)	NS	NS	NS	NS	7/31/08	313,000	9/9/09	74,800
			TCE (µg/m^3)	NS	NS	NS	NS	7/31/08	77,200	9/9/09	17,700
	154	153–155	CO_2 (µg/m^3)	NS	NS	NS	NS	7/31/08	22,300,000	9/9/09	24,100,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/31/08	-6.87	9/9/09	483
			H_2O (µg/m^3)	NS	NS	NS	NS	7/31/08	13,800,000	9/9/09	14,800,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/31/08	17,300	9/9/09	15,800
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	9/9/09	-0.06
			TCA (µg/m^3)	NS	NS	NS	NS	7/31/08	248,000	9/9/09	148,000
			TCE (µg/m^3)	NS	NS	NS	NS	7/31/08	54,100	9/9/09	33,900

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-22116 (cont.)	172	171–173	CO_2 (µg/m^3)	NS	NS	NS	NS	7/31/08	17,300,000	9/9/09	25,700,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/31/08	-218	9/9/09	601
			H_2O (µg/m^3)	NS	NS	NS	NS	7/31/08	12,300,000	9/9/09	16,700,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/31/08	13,600	9/9/09	16,900
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	9/9/09	0
			TCA (µg/m^3)	NS	NS	NS	NS	7/31/08	185,000	9/9/09	167,000
			TCE (µg/m^3)	NS	NS	NS	NS	7/31/08	37,900	9/9/09	41,300
	190	189–191	CO_2 (µg/m^3)	NS	NS	NS	NS	7/31/08	36,900,000	9/9/09	25,800,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/31/08	-366	9/9/09	354
			H_2O (µg/m^3)	NS	NS	NS	NS	7/31/08	13,300,000	9/9/09	12,600,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/31/08	30,600	9/9/09	15,500
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	9/9/09	-0.07
			TCA (µg/m^3)	NS	NS	NS	NS	7/31/08	473,000	9/9/09	156,000
			TCE (µg/m^3)	NS	NS	NS	NS	7/31/08	91,600	9/9/09	41,900
	208	207–209	CO_2 (µg/m^3)	NS	NS	NS	NS	7/31/08	19,600,000	9/9/09	47,000,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/31/08	-298	9/9/09	542
			H_2O (µg/m^3)	NS	NS	NS	NS	7/31/08	12,800,000	9/9/09	16,700,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/31/08	14,000	9/9/09	30,700
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	9/9/09	-0.06
			TCA (µg/m^3)	NS	NS	NS	NS	7/31/08	206,000	9/9/09	386,000
			TCE (µg/m^3)	NS	NS	NS	NS	7/31/08	29,800	9/9/09	76,900

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-22116 (cont.)	226	225–227	CO_2 (µg/m^3)	NS	NS	NS	NS	7/31/08	31,500,000	9/9/09	55,500,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/31/08	39.5	9/9/09	130
			H_2O (µg/m^3)	NS	NS	NS	NS	7/31/08	12,900,000	9/9/09	18,900,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/31/08	22,200	9/9/09	38,100
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	9/9/09	-0.07
			TCA (µg/m^3)	NS	NS	NS	NS	7/31/08	382,000	9/9/09	477,000
			TCE (µg/m^3)	NS	NS	NS	NS	7/31/08	19,400	9/9/09	72,900
	244	243–245	CO_2 (µg/m^3)	NS	NS	NS	NS	7/31/08	31,100,000	9/9/09	60,900,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/31/08	-206	9/9/09	951
	244	243–245	H_2O (µg/m^3)	NS	NS	NS	NS	7/31/08	11,900,000	9/9/09	15,400,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/31/08	23,100	9/9/09	38,800
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	9/9/09	-0.08
			TCA (µg/m^3)	NS	NS	NS	NS	7/31/08	389,000	9/9/09	573,000
			TCE (µg/m^3)	NS	NS	NS	NS	7/31/08	20,600	9/9/09	23,600
	262	261–263	CO_2 (µg/m^3)	NS	NS	NS	NS	7/31/08	34,000,000	9/9/09	62,700,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/31/08	1200	9/9/09	441
			H_2O (µg/m^3)	NS	NS	NS	NS	7/31/08	34,800,000	9/9/09	19,500,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/31/08	21,900	9/9/09	43,500
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	9/9/09	-0.02
			TCA (µg/m^3)	NS	NS	NS	NS	7/31/08	404,000	9/9/09	584,000
			TCE (µg/m^3)	NS	NS	NS	NS	7/31/08	16,300	9/9/09	34,100

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-22116 (cont.)	280	279–281	CO_2 (µg/m^3)	NS	NS	NS	NS	7/31/08	25,900,000	9/9/09	26,800,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	7/31/08	418	9/9/09	24
			H_2O (µg/m^3)	NS	NS	NS	NS	7/31/08	13,100,000	9/9/09	11,100,000
			PCE (µg/m^3)	NS	NS	NS	NS	7/31/08	19,800	9/9/09	11,700
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	9/9/09	-0.09
			TCA (µg/m^3)	NS	NS	NS	NS	7/31/08	303,000	9/9/09	170,000
			TCE (µg/m^3)	NS	NS	NS	NS	7/31/08	21,500	9/9/09	14,900
54-24370	Ambient	Ambient	CO_2 (µg/m^3)	7/31/07	855,000	12/19/07	2,250,000	7/10/08	749,000	8/27/09	1,020,000
			Freon-11 (µg/m^3)	7/31/07	-292	12/19/07	50.7	7/10/08	770	8/27/09	-2300
			H_2O (µg/m^3)	7/31/07	14,100,000	12/19/07	4,760,000	7/10/08	12,800,000	8/27/09	9,910,000
			PCE (µg/m^3)	7/31/07	709	12/19/07	2980	7/10/08	920	8/27/09	4750
	Ambient	Ambient	Pressure Differential (kPa)	7/31/07	0	12/19/07	0	NS	NS	8/27/09	0
			TCA (µg/m^3)	7/31/07	-5850	12/19/07	-34,600	7/10/08	-1990	8/27/09	-2800
			TCE (µg/m^3)	7/31/07	2310	12/19/07	814	7/10/08	-2200	8/27/09	9080
	40	35–45	CO_2 (µg/m^3)	7/31/07	140,000,000	12/19/07	113,000,000	7/10/08	104,000,000	8/27/09	130,000,000
			Freon-11 (µg/m^3)	7/31/07	19,700	12/19/07	29,600	7/10/08	13,300	8/27/09	18,700
			H_2O (µg/m^3)	7/31/07	19,100,000	12/19/07	8,920,000	7/10/08	18,100,000	8/27/09	18,200,000
			PCE (µg/m^3)	7/31/07	84,100	12/19/07	100,000	7/10/08	94,600	8/27/09	116,000
			Pressure Differential (kPa)	7/31/07	0	12/19/07	0	NS	NS	8/27/09	0
			TCA (µg/m^3)	7/31/07	152,000	12/19/07	532,000	7/10/08	840,000	8/27/09	965,000
			TCE (µg/m^3)	7/31/07	35,700	12/19/07	-16,600	7/10/08	42,400	8/27/09	11,900

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-24370 (cont.)	72.5	67.5–77.5	CO_2 (µg/m^3)	7/31/07	134,000,000	12/19/07	112,000,000	7/10/08	98,300,000	8/27/09	134,000,000
			Freon-11 (µg/m^3)	7/31/07	20,400	12/19/07	31,800	7/10/08	14,900	8/27/09	20,500
			H_2O (µg/m^3)	7/31/07	22,000,000	12/19/07	8,110,000	7/10/08	16,900,000	8/27/09	18,600,000
			PCE (µg/m^3)	7/31/07	104,000	12/19/07	131,000	7/10/08	126,000	8/27/09	137,000
			Pressure Differential (kPa)	7/31/07	-0.03	12/19/07	0	NS	NS	8/27/09	0
			TCA (µg/m^3)	7/31/07	88,800	12/19/07	489,000	7/10/08	968,000	8/27/09	1,060,000
			TCE (µg/m^3)	7/31/07	38,000	12/19/07	-14,500	7/10/08	55,200	8/27/09	27,200
	120	115–125	CO_2 (µg/m^3)	7/31/07	108,000,000	12/19/07	93,600,000	7/10/08	171,000,000	8/27/09	109,000,000
			Freon-11 (µg/m^3)	7/31/07	17,600	12/19/07	26,500	7/10/08	11,200	8/27/09	15,000
			H_2O (µg/m^3)	7/31/07	21,000,000	12/19/07	8,550,000	7/10/08	15,500,000	8/27/09	16,200,000
			PCE (µg/m^3)	7/31/07	102,000	12/19/07	120,000	7/10/08	111,000	8/27/09	109,000
			Pressure Differential (kPa)	7/31/07	-0.05	12/19/07	0	NS	NS	8/27/09	-0.09
	120	115–125	TCA (µg/m^3)	7/31/07	-95,700	12/19/07	288,000	7/10/08	681,000	8/27/09	731,000
			TCE (µg/m^3)	7/31/07	29,000	12/19/07	-13,400	7/10/08	46,500	8/27/09	25,700
	174.7	169.7–179.7	CO_2 (µg/m^3)	7/31/07	86,900,000	12/19/07	77,000,000	7/10/08	66,400,000	8/27/09	90,200,000
			Freon-11 (µg/m^3)	7/31/07	15,200	12/19/07	23,600	7/10/08	10,100	8/27/09	11,800
			H_2O (µg/m^3)	7/31/07	19,500,000	12/19/07	8,480,000	7/10/08	14,400,000	8/27/09	15,800,000
			PCE (µg/m^3)	7/31/07	92,500	12/19/07	107,000	7/10/08	97,300	8/27/09	88,500
			Pressure Differential (kPa)	7/31/07	-0.06	12/19/07	0	NS	NS	8/27/09	-0.12
			TCA (µg/m^3)	7/31/07	-175,000	12/19/07	140,000	7/10/08	485,000	8/27/09	506,000
			TCE (µg/m^3)	7/31/07	20,900	12/19/07	-15,000	7/10/08	37,200	8/27/09	23,600

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-24370 (cont.)	200	195–205	CO_2 (µg/m^3)	7/31/07	79,700,000	12/19/07	71,600,000	7/10/08	61,700,000	8/27/09	80,600,000
			Freon-11 (µg/m^3)	7/31/07	14,800	12/19/07	20,700	7/10/08	8470	8/27/09	11,500
			H_2O (µg/m^3)	7/31/07	19,900,000	12/19/07	8,030,000	7/10/08	14,200,000	8/27/09	14,600,000
			PCE (µg/m^3)	7/31/07	88,300	12/19/07	99,400	7/10/08	91,100	8/27/09	76,500
			Pressure Differential (kPa)	7/31/07	-0.06	12/19/07	0	NS	NS	8/27/09	-0.11
			TCA (µg/m^3)	7/31/07	-223,000	12/19/07	116,000	7/10/08	450,000	8/27/09	430,000
			TCE (µg/m^3)	7/31/07	16,700	12/19/07	-10,200	7/10/08	37,400	8/27/09	14,700
	243.7	238.7–248.7	CO_2 (µg/m^3)	7/31/07	9,140,000	12/19/07	32,200,000	7/10/08	5,400,000	8/27/09	9,700,000
			Freon-11 (µg/m^3)	7/31/07	1400	12/19/07	10,400	7/10/08	1280	8/27/09	1210
			H_2O (µg/m^3)	7/31/07	20,500,000	12/19/07	7,890,000	7/10/08	13,900,000	8/27/09	14,200,000
			PCE (µg/m^3)	7/31/07	9800	12/19/07	47,700	7/10/08	1430	8/27/09	5740
			Pressure Differential (kPa)	7/31/07	-0.03	12/19/07	0	NS	NS	8/27/09	-0.02
			TCA (µg/m^3)	7/31/07	-48,400	12/19/07	-42,500	7/10/08	-319	8/27/09	-14,000
			TCE (µg/m^3)	7/31/07	3530	12/19/07	-3950	7/10/08	-129	8/27/09	-1300
54-24386	Ambient	Ambient	CO_2 (µg/m^3)	7/31/07	1,010,000	NS	NS	7/14/08	594,000	8/18/09	1,044,000
			Freon-11 (µg/m^3)	7/31/07	68.7	NS	NS	7/14/08	350	8/18/09	249
			H_2O (µg/m^3)	7/31/07	13,500,000	NS	NS	7/14/08	12,500,000	8/18/09	7,190,000
			PCE (µg/m^3)	7/31/07	417	NS	NS	7/14/08	4070	8/18/09	1120
			Pressure Differential (kPa)	7/31/07	0	NS	NS	NS	NS	8/18/09	0
			TCA (µg/m^3)	7/31/07	-6910	NS	NS	7/14/08	3670	8/18/09	-378
			TCE (µg/m^3)	7/31/07	766	NS	NS	7/14/08	3680	8/18/09	1790

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-24386 (cont.)	40	37.5–42.5	CO_2 (µg/m^3)	7/31/07	110,000,000	NS	NS	7/14/08	72,900,000	8/18/09	10,700,000
			Freon-11 (µg/m^3)	7/31/07	5220	NS	NS	7/14/08	2810	8/18/09	1290
			H_2O (µg/m^3)	7/31/07	21,700,000	NS	NS	7/14/08	20,100,000	8/18/09	20,700,000
			PCE (µg/m^3)	7/31/07	31,700	NS	NS	7/14/08	35,300	8/18/09	36,900
			Pressure Differential (kPa)	7/31/07	0.01	NS	NS	NS	NS	8/18/09	0.07
			TCA (µg/m^3)	7/31/07	675,000	NS	NS	7/14/08	1,100,000	8/18/09	1,320,000
			TCE (µg/m^3)	7/31/07	15,800	NS	NS	7/14/08	25,400	8/18/09	10,900
	83	80.5–85.5	CO_2 (µg/m^3)	7/31/07	56,700,000	NS	NS	7/14/08	57,800,000	8/18/09	78,100,000
			Freon-11 (µg/m^3)	7/31/07	5110	NS	NS	7/14/08	7730	8/18/09	7410
			H_2O (µg/m^3)	7/31/07	19,300,000	NS	NS	7/14/08	18,500,000	8/18/09	17,600,000
			PCE (µg/m^3)	7/31/07	23,200	NS	NS	7/14/08	46,200	8/18/09	43,900
			Pressure Differential (kPa)	7/31/07	0	NS	NS	NS	NS	8/18/09	0.06
			TCA (µg/m^3)	7/31/07	303,000	NS	NS	7/14/08	856,000	8/18/09	912,000
			TCE (µg/m^3)	7/31/07	7610	NS	NS	7/14/08	21,900	8/18/09	11,500
	117	114.5–119.5	CO_2 (µg/m^3)	7/31/07	63,200,000	NS	NS	7/14/08	49,100,000	8/18/09	71,300,000
			Freon-11 (µg/m^3)	7/31/07	8130	NS	NS	7/14/08	9790	8/18/09	11,100
	117	114.5–119.5	H_2O (µg/m^3)	7/31/07	21,500,000	NS	NS	7/14/08	18,000,000	8/18/09	17,900,000
			PCE (µg/m^3)	7/31/07	34,800	NS	NS	7/14/08	46,800	8/18/09	50,600
			Pressure Differential (kPa)	7/31/07	0	NS	NS	NS	NS	8/18/09	0.03
			TCA (µg/m^3)	7/31/07	387,000	NS	NS	7/14/08	712,000	8/18/09	842,000
			TCE (µg/m^3)	7/31/07	11,100	NS	NS	7/14/08	18,600	8/18/09	11,700

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-24386 (cont.)	135	132.5–137.5	CO_2 (µg/m^3)	7/31/07	58,900,000	NS	NS	7/14/08	45,000,000	8/18/09	66,800,000
			Freon-11 (µg/m^3)	7/31/07	8650	NS	NS	7/14/08	9730	8/18/09	11,500
			H_2O (µg/m^3)	7/31/07	21,600,000	NS	NS	7/14/08	18,800,000	8/18/09	17,600,000
			PCE (µg/m^3)	7/31/07	36,700	NS	NS	7/14/08	46,400	8/18/09	50,100
			Pressure Differential (kPa)	7/31/07	0	NS	NS	NS	NS	8/18/09	0.03
			TCA (µg/m^3)	7/31/07	383,000	NS	NS	7/14/08	659,000	8/18/09	785,000
			TCE (µg/m^3)	7/31/07	10,800	NS	NS	7/14/08	18,100	8/18/09	11,200
	195	192.5–197.5	CO_2 (µg/m^3)	7/31/07	8,370,000	NS	NS	7/14/08	7,160,000	8/18/09	7,360,000
			Freon-11 (µg/m^3)	7/31/07	773	NS	NS	7/14/08	1140	8/18/09	639
			H_2O (µg/m^3)	7/31/07	21,000,000	NS	NS	7/14/08	15,300,000	8/18/09	15,800,000
			PCE (µg/m^3)	7/31/07	3280	NS	NS	7/14/08	3960	8/18/09	3150
			Pressure Differential (kPa)	7/31/07	0.01	NS	NS	NS	NS	8/18/09	0.06
			TCA (µg/m^3)	7/31/07	28,200	NS	NS	7/14/08	31,200	8/18/09	21,000
			TCE (µg/m^3)	7/31/07	836	NS	NS	7/14/08	1540	8/18/09	1290
54-24394	Ambient	Ambient	CO_2 (µg/m^3)	NS	NS	12/19/07	1,190,000	7/9/08	727,000	9/3/09	814,000
			Freon-11 (µg/m^3)	NS	NS	12/19/07	-624	7/9/08	-178	9/3/09	-301
			H_2O (µg/m^3)	NS	NS	12/19/07	9,140,000	7/9/08	10,700,000	9/3/09	9,510,000
			PCE (µg/m^3)	NS	NS	12/19/07	1070	7/9/08	-327	9/3/09	1080
	Ambient	Ambient	Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	9/3/09	0
			TCA (µg/m^3)	NS	NS	12/19/07	-9570	7/9/08	-3060	9/3/09	-217
			TCE (µg/m^3)	NS	NS	12/19/07	2900	7/9/08	616	9/3/09	2440

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-24394 (cont.)	50	45–55	CO_2 (µg/m^3)	7/30/07	40,300,000	12/19/07	37,600,000	7/9/08	28,400,000	9/3/09	39,000,000
			Freon-11 (µg/m^3)	7/30/07	21,700	12/19/07	27,000	7/9/08	15,800	9/3/09	28,100
			H_2O (µg/m^3)	7/30/07	19,200,000	12/19/07	10,400,000	7/9/08	14,100,000	9/3/09	14,900,000
			PCE (µg/m^3)	7/30/07	128,000	12/19/07	157,000	7/9/08	150,000	9/3/09	210,000
			Pressure Differential (kPa)	7/30/07	0	NS	NS	NS	NS	9/3/09	0
			TCA (µg/m^3)	7/30/07	-170,000	12/19/07	-23,400	7/9/08	85,100	9/3/09	44,100
			TCE (µg/m^3)	7/30/07	84,700	12/19/07	85,700	7/9/08	103,000	9/3/09	66,600
	100	95–105	CO_2 (µg/m^3)	7/30/07	36,000,000	12/19/07	35,800,000	7/9/08	29,700,000	9/3/09	38,200,000
			Freon-11 (µg/m^3)	7/30/07	11,500	12/19/07	16,300	7/9/08	5410	9/3/09	18,200
			H_2O (µg/m^3)	7/30/07	20,900,000	12/19/07	9,880,000	7/9/08	13,300,000	9/3/09	15,800,000
			PCE (µg/m^3)	7/30/07	63,300	12/19/07	89,000	7/9/08	45,800	9/3/09	126,000
			Pressure Differential (kPa)	7/30/07	-0.02	NS	NS	NS	NS	9/3/09	0
			TCA (µg/m^3)	7/30/07	-128,000	12/19/07	-17,500	7/9/08	98,900	9/3/09	53,600
			TCE (µg/m^3)	7/30/07	41,600	12/19/07	47,000	7/9/08	36,600	9/3/09	72,200
	150	145–155	CO_2 (µg/m^3)	7/30/07	32,800,000	12/19/07	33,300,000	7/9/08	27,000,000	9/3/09	35,700,000
			Freon-11 (µg/m^3)	7/30/07	5960	12/19/07	9510	7/9/08	5350	9/3/09	9510
			H_2O (µg/m^3)	7/30/07	21,400,000	12/19/07	10,100,000	7/9/08	13,300,000	9/3/09	14,800,000
			PCE (µg/m^3)	7/30/07	29,700	12/19/07	40,800	7/9/08	46,100	9/3/09	57,400
			Pressure Differential (kPa)	7/30/07	-0.05	NS	NS	NS	NS	9/3/09	0.1
	150	145–155	TCA (µg/m^3)	7/30/07	-95,700	12/19/07	-24,500	7/9/08	93,600	9/3/09	41,100
			TCE (µg/m^3)	7/30/07	22,700	12/19/07	16,000	7/9/08	35,800	9/3/09	35,100

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-24394 (cont.)	192.5	187.5–197.5	CO_2 (µg/m^3)	7/30/07	27,200,000	12/19/07	29,700,000	7/9/08	24,100,000	9/3/09	32,200,000
			Freon-11 (µg/m^3)	7/30/07	3640	12/19/07	6990	7/9/08	3440	9/3/09	6030
			H_2O (µg/m^3)	7/30/07	20,500,000	12/19/07	9,580,000	7/9/08	13,300,000	9/3/09	15,100,000
			PCE (µg/m^3)	7/30/07	17,900	12/19/07	27,000	7/9/08	26,600	9/3/09	32,000
			Pressure Differential (kPa)	7/30/07	-0.06	NS	NS	NS	NS	9/3/09	0.1
			TCA (µg/m^3)	7/30/07	-17,000	12/19/07	-29,800	7/9/08	79,800	9/3/09	30,300
			TCE (µg/m^3)	7/30/07	15,100	12/19/07	8040	7/9/08	22,400	9/3/09	19,800
	245.25	240.25–250.25	CO_2 (µg/m^3)	7/30/07	21,600,000	12/19/07	23,900,000	7/9/08	19,400,000	9/3/09	26,200,000
			Freon-11 (µg/m^3)	7/30/07	2410	12/19/07	4350	7/9/08	1770	9/3/09	2770
			H_2O (µg/m^3)	7/30/07	18,100,000	12/19/07	9,070,000	7/9/08	13,900,000	9/3/09	14,700,000
			PCE (µg/m^3)	7/30/07	9530	12/19/07	13,600	7/9/08	13,400	9/3/09	17,700
			Pressure Differential (kPa)	7/30/07	-0.06	NS	NS	NS	NS	9/3/09	0.1
			TCA (µg/m^3)	7/30/07	-19,100	12/19/07	-36,200	7/9/08	59,000	9/3/09	7800
			TCE (µg/m^3)	7/30/07	8730	12/19/07	2210	7/9/08	14,100	9/3/09	10,300
	300.5	295.5–305.5	CO_2 (µg/m^3)	7/30/07	4,520,000	12/19/07	4,840,000	7/9/08	3,260,000	9/3/09	12,000,000
			Freon-11 (µg/m^3)	7/30/07	-235	12/19/07	413	7/9/08	34.4	9/3/09	280
			H_2O (µg/m^3)	7/30/07	21,000,000	12/19/07	8,480,000	7/9/08	14,200,000	9/3/09	16,000,000
			PCE (µg/m^3)	7/30/07	2170	12/19/07	2910	7/9/08	-1150	9/3/09	1440
			Pressure Differential (kPa)	7/30/07	-0.03	NS	NS	NS	NS	9/3/09	0.1
			TCA (µg/m^3)	7/30/07	-14,400	12/19/07	-22,300	7/9/08	-1130	9/3/09	-6700
			TCE (µg/m^3)	7/30/07	3660	12/19/07	1150	7/9/08	3590	9/3/09	1110

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-24397	Ambient	Ambient	CO_2 (µg/m^3)	NS	NS	12/18/07	943,000	7/14/08	241,200,000	8/7/09	781,000
			Freon-11 (µg/m^3)	NS	NS	12/18/07	198	7/14/08	664	8/7/09	-1400
			H_2O (µg/m^3)	NS	NS	12/18/07	6,430,000	7/14/08	14,500,000	8/7/09	13,900,000
			PCE (µg/m^3)	NS	NS	12/18/07	3670	7/14/08	8760	8/7/09	438
			Pressure Differential (kPa)	NS	NS	12/18/07	0	NS	NS	8/7/09	0
			TCA (µg/m^3)	NS	NS	12/18/07	-4840	7/14/08	194,000	8/7/09	3120
			TCE (µg/m^3)	NS	NS	12/18/07	2520	7/14/08	12,000	8/7/09	4820
	50	45–55	CO_2 (µg/m^3)	NS	NS	12/18/07	11,900,000	7/14/08	8,060,000	8/7/09	9,680,000
			Freon-11 (µg/m^3)	NS	NS	12/18/07	870	7/14/08	554	8/7/09	907
			H_2O (µg/m^3)	NS	NS	12/18/07	6,950,000	7/14/08	14,800,000	8/7/09	17,000,000
			PCE (µg/m^3)	NS	NS	12/18/07	8550	7/14/08	4960	8/7/09	5570
			Pressure Differential (kPa)	NS	NS	12/18/07	0	NS	NS	8/7/09	0
			TCA (µg/m^3)	NS	NS	12/18/07	-79,800	7/14/08	9840	8/7/09	-5300
			TCE (µg/m^3)	NS	NS	12/18/07	2780	7/14/08	627	8/7/09	-895
	90	85–95	CO_2 (µg/m^3)	NS	NS	12/18/07	12,200,000	7/14/08	7,780,000	8/7/09	10,900,000
			Freon-11 (µg/m^3)	NS	NS	12/18/07	670	7/14/08	479	8/7/09	684
			H_2O (µg/m^3)	NS	NS	12/18/07	6,880,000	7/14/08	15,600,000	8/7/09	15,400,000
			PCE (µg/m^3)	NS	NS	12/18/07	8200	7/14/08	4550	8/7/09	3010
			Pressure Differential (kPa)	NS	NS	12/18/07	0	NS	NS	8/7/09	0
			TCA (µg/m^3)	NS	NS	12/18/07	-79,800	7/14/08	16,000	8/7/09	-2400
			TCE (µg/m^3)	NS	NS	12/18/07	3330	7/14/08	2960	8/7/09	628

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-24397 (cont.)	130	125–135	CO_2 (µg/m^3)	NS	NS	12/18/07	12,000,000	7/14/08	9,810,000	8/7/09	12,000,000
			Freon-11 (µg/m^3)	NS	NS	12/18/07	853	7/14/08	716	8/7/09	883
			H_2O (µg/m^3)	NS	NS	12/18/07	6,840,000	7/14/08	15,000,000	8/7/09	16,400,000
			PCE (µg/m^3)	NS	NS	12/18/07	8130	7/14/08	5000	8/7/09	5430
			Pressure Differential (kPa)	NS	NS	12/18/07	0	NS	NS	8/7/09	0.04
			TCA (µg/m^3)	NS	NS	12/18/07	-69,100	7/14/08	20,600	8/7/09	-2100
			TCE (µg/m^3)	NS	NS	12/18/07	2980	7/14/08	2820	8/7/09	687
	165	160–170	CO_2 (µg/m^3)	NS	NS	12/18/07	12,800,000	7/14/08	10,300,000	8/7/09	13,300,000
			Freon-11 (µg/m^3)	NS	NS	12/18/07	1190	7/14/08	255	8/7/09	1700
			H_2O (µg/m^3)	NS	NS	12/18/07	7,050,000	7/14/08	14,900,000	8/7/09	15,200,000
			PCE (µg/m^3)	NS	NS	12/18/07	8620	7/14/08	6380	8/7/09	7820
			Pressure Differential (kPa)	NS	NS	12/18/07	0	NS	NS	8/7/09	0.05
			TCA (µg/m^3)	NS	NS	12/18/07	-74,400	7/14/08	22,500	8/7/09	-546
			TCE (µg/m^3)	NS	NS	12/18/07	2530	7/14/08	2670	8/7/09	-4900
	188	183–193	CO_2 (µg/m^3)	NS	NS	NS	NS	NS	NS	NS	NS
			Freon-11 (µg/m^3)	NS	NS	NS	NS	NS	NS	NS	NS
			H_2O (µg/m^3)	NS	NS	NS	NS	NS	NS	NS	NS
			PCE (µg/m^3)	NS	NS	NS	NS	NS	NS	NS	NS
			Pressure Differential (kPa)	NS	NS	12/18/07	0[b]	NS	NS	8/7/09	0[b]
			TCA (µg/m^3)	NS	NS	NS	NS	NS	NS	NS	NS
			TCE (µg/m^3)	NS	NS	NS	NS	NS	NS	NS	NS
	239.75	234.75–244.3	CO_2 (µg/m^3)	NS	NS	12/18/07	4,140,000	7/14/08	4,990,000	8/7/09	6,600,000
			Freon-11 (µg/m^3)	NS	NS	12/18/07	50.2	7/14/08	161	8/7/09	1180

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-24397 (cont.)	239.75	234.75–244.3	H_2O (µg/m^3)	NS	NS	12/18/07	6,900,000	7/14/08	14,400,000	8/7/09	24,100,000
			PCE (µg/m^3)	NS	NS	12/18/07	3750	7/14/08	648	8/7/09	3860
			Pressure Differential (kPa)	NS	NS	12/18/07	0	NS	NS	8/7/09	0
			TCA (µg/m^3)	NS	NS	12/18/07	-20,700	7/14/08	8720	8/7/09	501
			TCE (µg/m^3)	NS	NS	12/18/07	2640	7/14/08	3330	8/7/09	-395
54-25105	Ambient	Ambient	CO_2 (µg/m^3)	NS	NS	NS	NS	8/1/08	630,000	8/24/09	804,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	8/1/08	109	8/24/09	-157
			H_2O (µg/m^3)	NS	NS	NS	NS	8/1/08	6,960,000	8/24/09	13,800,000
			PCE (µg/m^3)	NS	NS	NS	NS	8/1/08	-66.05	8/24/09	1150
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/24/09	0
			TCA (µg/m^3)	NS	NS	NS	NS	8/1/08	-681	8/24/09	140
			TCE (µg/m^3)	NS	NS	NS	NS	8/1/08	113	8/24/09	1490
	485	485–701	CO_2 (µg/m^3)	NS	NS	NS	NS	8/1/08	668,000	8/24/09	962,000
			Freon-11 (µg/m^3)	NS	NS	NS	NS	8/1/08	-647	8/24/09	116
			H_2O (µg/m^3)	NS	NS	NS	NS	8/1/08	8,330,000	8/24/09	15,500,000
			PCE (µg/m^3)	NS	NS	NS	NS	8/1/08	-1240	8/24/09	967
			Pressure Differential (kPa)	NS	NS	NS	NS	NS	NS	8/24/09	-0.02
			TCA (µg/m^3)	NS	NS	NS	NS	8/1/08	1420	8/24/09	22.3
			TCE (µg/m^3)	NS	NS	NS	NS	8/1/08	2750	8/24/09	384
54-27436	Ambient	Ambient	CO_2 (µg/m^3)	8/2/07	841,000	12/18/07	929,000	7/18/08	607,000	8/19/09	816,000
			Freon-11 (µg/m^3)	8/2/07	284	12/18/07	-80.2	7/18/08	301	8/19/09	431
			H_2O (µg/m^3)	8/2/07	13,500,000	12/18/07	7,960,000	7/18/08	12,300,000	8/19/09	5,840,000
			PCE (µg/m^3)	8/2/07	1200	12/18/07	3840	7/18/08	622	8/19/09	2380

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-27436 (cont.)	Ambient	Ambient	Pressure Differential (kPa)	8/2/07	0	NS	NS	7/18/08	0	8/19/09	0
			TCA (µg/m^3)	8/2/07	-5850	12/18/07	-2660	7/18/08	1020	8/19/09	-1600
			TCE (µg/m^3)	8/2/07	729	12/18/07	2880	7/18/08	541	8/19/09	-777
	45	40–50	CO_2 (µg/m^3)	8/2/07	20,700,000	12/18/07	22,000,000	7/18/08	133,000,000	8/19/09	17,800,000
			Freon-11 (µg/m^3)	8/2/07	996	12/18/07	1590	7/18/08	-85.9	8/19/09	355
			H_2O (µg/m^3)	8/2/07	16,300,000	12/18/07	8,550,000	7/18/08	14,400,000	8/19/09	14,500,000
			PCE (µg/m^3)	8/2/07	15,000	12/18/07	22,900	7/18/08	15,200	8/19/09	15,700
			Pressure Differential (kPa)	8/2/07	0	12/18/07	0	7/18/08	0	8/19/09	-0.02
			TCA (µg/m^3)	8/2/07	-74,400	12/18/07	-90,400	7/18/08	-4220	8/19/09	-4100
			TCE (µg/m^3)	8/2/07	158,000	12/18/07	151,000	7/18/08	102,000	8/19/09	79,600
	70	65–75	CO_2 (µg/m^3)	8/2/07	19,800,000	12/18/07	20,900,000	7/18/08	769,000	8/19/09	17,200,000
			Freon-11 (µg/m^3)	8/2/07	5570	12/18/07	1410	7/18/08	-74.4	8/19/09	-1000
			H_2O (µg/m^3)	8/2/07	15,300,000	12/18/07	8,480,000	7/18/08	14,100,000	8/19/09	14,700,000
			PCE (µg/m^3)	8/2/07	13,100	12/18/07	19,100	7/18/08	793	8/19/09	17,200
			Pressure Differential (kPa)	8/2/07	-0.08	12/18/07	0	7/18/08	0	8/19/09	-0.03
			TCA (µg/m^3)	8/2/07	-58,500	12/18/07	-79,800	7/18/08	-2160	8/19/09	4650
			TCE (µg/m^3)	8/2/07	132,000	12/18/07	126,000	7/18/08	2390	8/19/09	74,600
	115	110–120	CO_2 (µg/m^3)	8/2/07	18,900,000	12/18/07	20,000,000	7/18/08	14,300,000	8/19/09	18,200,000
			Freon-11 (µg/m^3)	8/2/07	5510	12/18/07	1040	7/18/08	-223	8/19/09	738
			H_2O (µg/m^3)	8/2/07	16,500,000	12/18/07	8,550,000	7/18/08	14,300,000	8/19/09	14,800,000
			PCE (µg/m^3)	8/2/07	7790	12/18/07	14,000	7/18/08	9040	8/19/09	8490
			Pressure Differential (kPa)	8/2/07	-0.14	12/18/07	0	7/18/08	-0.03	8/19/09	-0.03

Table 4.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
				Date	Result	Date	Result	Date	Result	Date	Result
54-27436 (cont.)	115	110–120	TCA (µg/m^3)	8/2/07	-52,100	12/18/07	-69,100	7/18/08	15,000	8/19/09	12,400
			TCE (µg/m^3)	8/2/07	67,000	12/18/07	74,500	7/18/08	73,400	8/19/09	61,200
	163	158–168	CO_2 (µg/m^3)	8/2/07	16,000,000	12/18/07	18,700,000	7/18/08	13,600,000	8/19/09	17,900,000
			Freon-11 (µg/m^3)	8/2/07	1570	12/18/07	756	7/18/08	10.3	8/19/09	-40
			H_2O (µg/m^3)	8/2/07	19,100,000	12/18/07	8,480,000	7/18/08	13,800,000	8/19/09	15,000,000
			PCE (µg/m^3)	8/2/07	4230	12/18/07	9660	7/18/08	4260	8/19/09	9490
			Pressure Differential (kPa)	8/2/07	-0.16	12/18/07	0	7/18/08	-0.02	8/19/09	-0.03
			TCA (µg/m^3)	8/2/07	-36,700	12/18/07	-69,100	7/18/08	18,200	8/19/09	16,200
			TCE (µg/m^3)	8/2/07	27,900	12/18/07	36,500	7/18/08	42,000	8/19/09	39,900
	185	180–190	CO_2 (µg/m^3)	8/2/07	6,070,000	12/18/07	6,840,000	7/18/08	6,700,000	8/19/09	12,700,000
			Freon-11 (µg/m^3)	8/2/07	44.1	12/18/07	263	7/18/08	125	8/19/09	-737
			H_2O (µg/m^3)	8/2/07	21,800,000	12/18/07	8,250,000	7/18/08	13,100,000	8/19/09	17,000,000
			PCE (µg/m^3)	8/2/07	2680	12/18/07	4770	7/18/08	3500	8/19/09	4860
			Pressure Differential (kPa)	8/2/07	-0.11	12/18/07	0	7/18/08	-0.01	8/19/09	-0.04
			TCA (µg/m^3)	8/2/07	-20,200	12/18/07	-29,200	7/18/08	-1700	8/19/09	4650
			TCE (µg/m^3)	8/2/07	4160	12/18/07	7230	7/18/08	10,400	8/19/09	24,600

[a] NS = Not Sampled.

[b] Port blocked. Results may not be representative of sample depth.

[c] Partially blocked port. Results may not be representative of sample depth.

Table 5.0-1
Pore-Gas VOCs Detected at MDA G

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07			1st Quarter FY08			4th Quarter FY08			4th Quarter FY09		
				Date	Result (ppbv)	Result (µg/m^3)	Date	Result (ppbv)	Result (µg/m^3)	Date	Result (ppbv)	Result (µg/m^3)	Date	Result (ppbv)	Result (µg/m^3)
54-01107	56.5	55.5–57.5	Chlorodifluoromethane	NS[a]	NS	NS	NS	NS	NS	7/23/08	56	200	8/11/09	94	330
			Dichlorodifluoromethane	NS	NS	NS	NS	NS	NS	7/23/08	120	610	8/11/09	110	540
			Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	7/23/08	61	250	8/11/09	50	200
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/23/08	190	760	8/11/09	140	540
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	7/23/08	450	3000	8/11/09	370	2500
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	NS	NS	NS	NS	NS	NS	7/23/08	600	4600	8/11/09	550	4200
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/23/08	3000	16,000	8/11/09	2800	15,000
			Trichloroethene	NS	NS	NS	NS	NS	NS	7/23/08	62	330	8/11/09	61	330
			Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	7/23/08	210	1200	8/11/09	180	1000
	100	99–101	Chlorodifluoromethane	NS	NS	NS	NS	NS	NS	7/23/08	56	200	8/11/09	ND[b]	ND
			Chloroform	NS	NS	NS	NS	NS	NS	7/23/08	10	51	8/11/09	ND	ND
			Dichlorodifluoromethane	NS	NS	NS	NS	NS	NS	7/23/08	130	630	8/11/09	100	500
			Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	7/23/08	54	220	8/11/09	45	180
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/23/08	210	820	8/11/09	150	600
			Methylene Chloride	NS	NS	NS	NS	NS	NS	7/23/08	11	37	8/11/09	ND	ND
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	7/23/08	460	3100	8/11/09	390	2600
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	NS	NS	NS	NS	NS	NS	7/23/08	580	4400	8/11/09	520	4000
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/23/08	2800	15,000	8/11/09	2600	14,000
			Trichloroethene	NS	NS	NS	NS	NS	NS	7/23/08	58	310	8/11/09	59	320
			Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	7/23/08	200	1100	8/11/09	180	1000
54-01110	60	59–61	Dichlorodifluoromethane	NS	NS	NS	NS	NS	NS	7/23/08	30	150	8/25/09	32	160
			Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	7/23/08	100	410	8/25/09	110	450
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/23/08	150	600	8/25/09	170	680

Table 5.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07			1st Quarter FY08			4th Quarter FY08			4th Quarter FY09		
				Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)
54-01110 (cont.)	60	59–61	Tetrachloroethene	NS	NS	NS	NS	NS	NS	7/23/08	48	320	8/25/09	45	310
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	NS	NS	NS	NS	NS	NS	7/23/08	250	1900	8/25/09	250	1900
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/23/08	3200	18,000	8/25/09	3200	17,000
			Trichloroethene	NS	NS	NS	NS	NS	NS	7/23/08	110	580	8/25/09	180	950
			Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	7/23/08	19	110	8/25/09	ND	ND
	90	89–91	Chloroform	NS	NS	NS	NS	NS	NS	7/23/08	11	56	8/25/09	ND	ND
			Dichlorodifluoromethane	NS	NS	NS	NS	NS	NS	7/23/08	47	230	8/25/09	43	210
			Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	7/23/08	120	490	8/25/09	130	510
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/23/08	240	960	8/25/09	230	930
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	7/23/08	67	460	8/25/09	64	430
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	NS	NS	NS	NS	NS	NS	7/23/08	320	2400	8/25/09	300	2300
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/23/08	3700	20,000	8/25/09	3600	20,000
			Trichloroethene	NS	NS	NS	NS	NS	NS	7/23/08	160	860	8/25/09	150	790
			Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	7/23/08	27	150	8/25/09	ND	ND
54-01111	20	19–21	Dichlorodifluoromethane	NS	NS	NS	NS	NS	NS	7/16/08	66	330	8/25/09	48	240
			Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	7/16/08	40	160	8/25/09	46	190
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/16/08	230	900	8/25/09	200	790
			Methylene Chloride	NS	NS	NS	NS	NS	NS	7/16/08	31 (J)	110 (J)	8/25/09	69	240
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	7/16/08	31	210	8/25/09	ND	ND
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	NS	NS	NS	NS	NS	NS	7/16/08	510	3900	8/25/09	570	4300
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/16/08	2600	14,000	8/25/09	3200	17,000
			Trichloroethene	NS	NS	NS	NS	NS	NS	7/16/08	51	270	8/25/09	42	220
			Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	7/16/08	24	140	8/25/09	ND	ND

Table 5.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07			1st Quarter FY08			4th Quarter FY08			4th Quarter FY09		
				Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)
54-01111 (cont.)	139	138–140	Carbon Disulfide	NS	NS	NS	NS	NS	NS	7/16/08	24	74	8/25/09	ND	ND
			Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	7/16/08	41	160	8/25/09	ND	ND
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/16/08	88	350	8/25/09	260	1000
			Methylene Chloride	NS	NS	NS	NS	NS	NS	7/16/08	47 (J)	160 (J)	8/25/09	110	380
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	NS	NS	NS	NS	NS	NS	7/16/08	970	7400	8/25/09	1400	11,000
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/16/08	4400	24,000	8/25/09	9200	50,000
54-01115	40	39–41	Chloroform	NS	NS	NS	NS	NS	NS	7/17/08	55	270	8/11/09	38	180
			Dichlorodifluoromethane	NS	NS	NS	NS	NS	NS	7/17/08	340	1700	8/11/09	170	840
			Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	7/17/08	120	500	8/11/09	65	260
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/17/08	280	1100	8/11/09	130	520
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	7/17/08	170	1200	8/11/09	130	910
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	NS	NS	NS	NS	NS	NS	7/17/08	410	3100	8/11/09	280	2200
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/17/08	3300	18,000	8/11/09	2000	11,000
			Trichloroethene	NS	NS	NS	NS	NS	NS	7/17/08	70	380	8/11/09	47	250
			Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	7/17/08	140	800	8/11/09	89	500
	68	67–69	Chloroform	NS	NS	NS	NS	NS	NS	7/17/08	54	260	8/11/09	34	170
			Dichlorodifluoromethane	NS	NS	NS	NS	NS	NS	7/17/08	400	2000	8/11/09	230	1200
			Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	7/17/08	200	830	8/11/09	140	590
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/17/08	460	1800	8/11/09	290	1200
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	7/17/08	200	1300	8/11/09	170	1100
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	NS	NS	NS	NS	NS	NS	7/17/08	570	4400	8/11/09	500	3800
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/17/08	5000	27,000	8/11/09	3800	21,000
			Trichloroethene	NS	NS	NS	NS	NS	NS	7/17/08	100	550	8/11/09	93	500
			Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	7/17/08	140	820	8/11/09	92	520

Table 5.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07			1st Quarter FY08			4th Quarter FY08			4th Quarter FY09		
				Date	Result (ppbv)	Result (µg/m^3)	Date	Result (ppbv)	Result (µg/m^3)	Date	Result (ppbv)	Result (µg/m^3)	Date	Result (ppbv)	Result (µg/m^3)
54-01116	22.5	20–25	Cyclohexane	NS	NS	NS	NS	NS	NS	7/8/08	9300	32,000	8/10/09	3400	12,000
			Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	7/8/08	5100	21,000	8/10/09	3400	14,000
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/8/08	11,000	43,000	8/10/09	1700	6600
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	7/8/08	ND	ND	8/10/09	560	3800
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	NS	NS	NS	NS	NS	NS	7/8/08	4400	34,000	8/10/09	1500	12,000
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/8/08	270,000	1,400,000	8/10/09	120,000	670,000
			Trichloroethene	NS	NS	NS	NS	NS	NS	7/8/08	2700	14,000	8/10/09	2800	15,000
	187.8	185.3–190.3	Carbon Disulfide	NS	NS	NS	NS	NS	NS	7/8/08	ND	ND	8/10/09	2.6	8
			Cyclohexane	NS	NS	NS	NS	NS	NS	7/8/08	27	94	8/10/09	11	38
			Dichlorodifluoromethane	NS	NS	NS	NS	NS	NS	7/8/08	4.8	24	8/10/09	3.1	16
			Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	7/8/08	37	150	8/10/09	26	100
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/8/08	120	460	8/10/09	64	250
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	7/8/08	7.6	51	8/10/09	5.6	38
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	NS	NS	NS	NS	NS	NS	7/8/08	27	200	8/10/09	13	100
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/8/08	870	4700	8/10/09	420	2300
			Trichloroethene	NS	NS	NS	NS	NS	NS	7/8/08	18	100	8/10/09	13	69
			Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	7/8/08	ND	ND	8/10/09	2.1	12
54-01117	20	18.5–22.5	Cyclohexane	NS	NS	NS	NS	NS	NS	7/8/08	750	2600	8/7/09	ND	ND
			Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	7/8/08	730	3000	8/7/09	600	2400
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/8/08	1700	6700	8/7/09	480	1900
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	7/8/08	200	1400	8/7/09	160	1100
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	NS	NS	NS	NS	NS	NS	7/8/08	610	4700	8/7/09	340	2600
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/8/08	24,000	130,000	8/7/09	18000	96,000
			Trichloroethene	NS	NS	NS	NS	NS	NS	7/8/08	790	4200	8/7/09	800	4300

Table 5.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07			1st Quarter FY08			4th Quarter FY08			4th Quarter FY09		
				Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)
54-01117 (cont.)	179.8	177.3–182.3	Chloroform	NS	NS	NS	NS	NS	NS	7/8/08	1.2	5.7	8/7/09	ND	ND
			Cyclohexane	NS	NS	NS	NS	NS	NS	7/8/08	9.8	34	8/7/09	ND	ND
			Dichlorodifluoromethane	NS	NS	NS	NS	NS	NS	7/8/08	4.2	21	8/7/09	3.6	18
			Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	7/8/08	22	90	8/7/09	14	57
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/8/08	65	260	8/7/09	40	160
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	7/8/08	6	41	8/7/09	4.5	30
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	NS	NS	NS	NS	NS	NS	7/8/08	11	82	8/7/09	7.4	56
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/8/08	310	1700	8/7/09	150	830
			Trichloroethene	NS	NS	NS	NS	NS	NS	7/8/08	11	62	8/7/09	9.4	51
			Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	7/8/08	2.7	15	8/7/09	2.3	13
54-01121	20	19–21	Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	7/14/08	2600	10,000	8/25/09	4000	16,000
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/14/08	7700	31,000	8/25/09	11,000	42,000
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	7/14/08	610	4100	8/25/09	990	6700
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	NS	NS	NS	NS	NS	NS	7/14/08	180	1400	8/25/09	260	2000
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/14/08	29,000	160,000	8/25/09	41,000	220,000
			Trichloroethene	NS	NS	NS	NS	NS	NS	7/14/08	1100	6200	8/25/09	1600	8900
	121	120–122	Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	7/14/08	1400	5800	8/25/09	2600	10,000
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/14/08	3700	15,000	8/25/09	5900	23,000
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	7/14/08	600	4100	8/25/09	740	5000
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/14/08	22,000	120,000	8/25/09	28,000	160,000
			Trichloroethene	NS	NS	NS	NS	NS	NS	7/14/08	620	3300	8/25/09	1000	5700
54-01126	35	34-36	Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	NS	NS	NS	9/29/09	2000	8000
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	NS	NS	NS	9/29/09	2100	8400
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	9/29/09	620	4200

Table 5.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07			1st Quarter FY08			4th Quarter FY08			4th Quarter FY09		
				Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)
54-01126 (cont.)	35	34-36	Toluene	NS	NS	NS	NS	NS	NS	NS	NS	NS	9/29/09	120	450
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	NS	NS	NS	9/29/09	17,000	95,000
			Trichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	9/29/09	8300	45,000
	49	48-50	Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	NS	NS	NS	9/29/09	3100	12,000
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	NS	NS	NS	9/29/09	3400	13,000
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	9/29/09	950	6400
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	NS	NS	NS	9/29/09	27,000	150,000
			Trichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	9/29/09	12,000	65,000
54-01128	20	19-21	Chloroform	NS	NS	NS	NS	NS	NS	7/11/08	71	340	8/21/09	ND	ND
			Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	7/11/08	1200	4900	8/21/09	1200	4700
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/11/08	2700	11,000	8/21/09	2000	8000
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	7/11/08	490	3300	8/21/09	510	3500
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/11/08	23,000	130,000	8/21/09	19,000	100,000
			Trichloroethene	NS	NS	NS	NS	NS	NS	7/11/08	120	670	8/21/09	170 (J)	930 (J)
	39	38-40	Chloroform	NS	NS	NS	NS	NS	NS	7/11/08	150	730	8/21/09	ND	ND
			Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	7/11/08	2200	9000	8/21/09	2200	8900
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/11/08	5100	20,000	8/21/09	3800	15,000
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	7/11/08	790	5400	8/21/09	720	4900
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/11/08	42,000	230,000	8/21/09	32,000	180,000
			Trichloroethene	NS	NS	NS	NS	NS	NS	7/11/08	280	1500	8/21/09	ND	ND
54-02009	37	34.5–39.5	Cyclohexane	NS	NS	NS	NS	NS	NS	7/11/08	ND	ND	8/19/09	490	1700
			Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	7/11/08	1500	6100	8/19/09	1400	5700
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/11/08	3600	14,000	8/19/09	2200	8600
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	7/11/08	470	3200	8/19/09	380	2600
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/11/08	26,000	140,000	8/19/09	19,000	100,000
			Trichloroethene	NS	NS	NS	NS	NS	NS	7/11/08	240	1300	8/19/09	220	1200

Table 5.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07			1st Quarter FY08			4th Quarter FY08			4th Quarter FY09		
				Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)
54-02009 (cont.)	92	89.5–94.5	Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	7/11/08	1600	6400	8/19/09	1600	6400
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/11/08	4600	18,000	8/19/09	2900	12,000
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	7/11/08	540	3700	8/19/09	480	3300
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/11/08	31,000	170,000	8/19/09	24,000	130,000
			Trichloroethene	NS	NS	NS	NS	NS	NS	7/11/08	270	1500	8/19/09	250	1300
54-02010	30	27.5–32.5	Dichlorodifluoromethane	NS	NS	NS	NS	NS	NS	7/9/08	78	390	8/19/09	78	380
			Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	7/9/08	350	1400	8/19/09	350	1400
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/9/08	420	1600	8/19/09	170	660
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	7/9/08	110	780	8/19/09	110	730
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	NS	NS	NS	NS	NS	NS	7/9/08	560	4300	8/19/09	510	3900
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/9/08	7900	43,000	8/19/09	6900	38,000
			Trichloroethene	NS	NS	NS	NS	NS	NS	7/9/08	250	1400	8/19/09	240	1300
			Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	7/9/08	300	1700	8/19/09	260	1400
	95	92.5–97.5	Dichlorodifluoromethane	NS	NS	NS	NS	NS	NS	7/9/08	130	650	8/19/09	100	510
			Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	7/9/08	490	2000	8/19/09	430	1800
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/9/08	930	3700	8/19/09	500	2000
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	7/9/08	160	1100	8/19/09	130	910
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	NS	NS	NS	NS	NS	NS	7/9/08	990	7600	8/19/09	850	6500
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/9/08	10,000	56,000	8/19/09	8400	46,000
			Trichloroethene	NS	NS	NS	NS	NS	NS	7/9/08	220	1200	8/19/09	200	1100
			Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	7/9/08	320	1800	8/19/09	250	1400
54-02032	20	20	Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	7/10/08	350	1400	8/27/09	320	1300
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/10/08	830	3300	8/27/09	610	2400
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	7/10/08	240	1600	8/27/09	200	1300

Table 5.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07			1st Quarter FY08			4th Quarter FY08			4th Quarter FY09		
				Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)
54-02032 (cont.)	20	20	Trichloro-1,2,2-trifluoroethane[1,1,2-]	NS	NS	NS	NS	NS	NS	7/10/08	26	200	8/27/09	19	140
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/10/08	4000	22,000	8/27/09	2900	16,000
			Trichloroethene	NS	NS	NS	NS	NS	NS	7/10/08	79	430	8/27/09	66	360
	156	156	Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	7/10/08	830	3300	8/27/09	1000	4200
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/10/08	2600	10,000	8/27/09	2500	10,000
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	7/10/08	440	3000	8/27/09	480	3200
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	NS	NS	NS	NS	NS	NS	7/10/08	58	440	8/27/09	51	390
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/10/08	8000	43,000	8/27/09	7500	41,000
			Trichloroethene	NS	NS	NS	NS	NS	NS	7/10/08	190	1000	8/27/09	220	1200
54-02033	60	60	Acetone	NS	NS	NS	NS	NS	NS	7/9/08	ND	ND	8/5/09	4	9.4
			Chlorodifluoromethane	NS	NS	NS	NS	NS	NS	7/9/08	13	46	8/5/09	21	74
			Chloroform	NS	NS	NS	NS	NS	NS	7/9/08	1.4	6.7	8/5/09	1.4	6.6
			Dichlorodifluoromethane	NS	NS	NS	NS	NS	NS	7/9/08	34	170	8/5/09	28	140
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/9/08	1.4	5.6	8/5/09	ND	ND
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	7/9/08	30	210	8/5/09	24	170
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	NS	NS	NS	NS	NS	NS	7/9/08	34	260	8/5/09	34	260
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/9/08	35	190	8/5/09	38	210
			Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	7/9/08	54	300	8/5/09	51	290
	277	277	Acetone	NS	NS	NS	NS	NS	NS	7/9/08	ND	ND	8/5/09	11	26
			Butanone[2-]	NS	NS	NS	NS	NS	NS	7/9/08	ND	ND	8/5/09	1.9	5.6
			Chlorodifluoromethane	NS	NS	NS	NS	NS	NS	7/9/08	ND	ND	8/5/09	22	78
			Dichlorodifluoromethane	NS	NS	NS	NS	NS	NS	7/9/08	ND	ND	8/5/09	46	230
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/9/08	ND	ND	8/5/09	10	40
			Methylene Chloride	NS	NS	NS	NS	NS	NS	7/9/08	ND	ND	8/5/09	0.93 (J)	3.2 (J)

Table 5.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07			1st Quarter FY08			4th Quarter FY08			4th Quarter FY09		
				Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)
54-02033 (cont.)	277	277	Tetrachloroethene	NS	NS	NS	NS	NS	NS	7/9/08	ND	ND	8/5/09	1.7	12
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	NS	NS	NS	NS	NS	NS	7/9/08	ND	ND	8/5/09	21	160
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/9/08	ND	ND	8/5/09	21	110
			Trichloroethene	NS	NS	NS	NS	NS	NS	7/9/08	ND	ND	8/5/09	1.1	5.8
			Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	7/9/08	ND	ND	8/5/09	72	400
54-22116	172	171–173	Carbon Tetrachloride	NS	NS	NS	NS	NS	NS	7/31/08	120	740	9/9/09	ND	ND
			Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	7/31/08	2200	8800	9/9/09	2400	9600
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/31/08	1900	7500	9/9/09	2200	8700
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	7/31/08	1300	9000	9/9/09	1600	11,000
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/31/08	27,000	140,000	9/9/09	23,000	130,000
			Trichloroethene	NS	NS	NS	NS	NS	NS	7/31/08	5800	31,000	9/9/09	6900	37,000
	190	189–191	Carbon Tetrachloride	NS	NS	NS	NS	NS	NS	7/31/08	200	1300	9/9/09	ND	ND
			Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	7/31/08	4700	19,000	9/9/09	2700	11,000
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/31/08	3600	14,000	9/9/09	2200	8500
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	7/31/08	3100	21,000	9/9/09	1700	12,000
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/31/08	58,000	310,000	9/9/09	26,000	140,000
			Trichloroethene	NS	NS	NS	NS	NS	NS	7/31/08	14,000	78,000	9/9/09	9100	49,000
	244	243–245	Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	NS	NS	NS	9/15/09	1500	6000
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	NS	NS	NS	9/15/09	1500	5900
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	9/15/09	950	6400
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	NS	NS	NS	9/15/09	17,000	92,000
			Trichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	9/15/09	960	5100
	262	261–263	Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	NS	NS	NS	9/15/09	1500	6100
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	NS	NS	NS	9/15/09	1200	4900
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	9/15/09	1100	7400

Table 5.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07			1st Quarter FY08			4th Quarter FY08			4th Quarter FY09		
				Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)
54-22116 (cont.)	262	261–263	Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	NS	NS	NS	9/15/09	16,000	88,000
			Trichloroethene	NS	NS	NS	NS	NS	NS	NS	NS	NS	9/15/09	1400	7600
	280	279–281	Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	7/31/08	8200	33,000	9/9/09	3800	15,000
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/31/08	6400	26,000	9/9/09	3300	13,000
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	7/31/08	5200	36,000	9/9/09	3100	21,000
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/31/08	100,000	560,000	9/9/09	42,000	230,000
			Trichloroethene	NS	NS	NS	NS	NS	NS	7/31/08	5500	29,000	9/9/09	5000	27,000
54-24370	40	35–45	Chlorodifluoromethane	7/31/07	ND	ND	NS	NS	NS	7/10/08	7300	26,000	8/27/09	ND	ND
			Chloroform	7/31/07	160	760	NS	NS	NS	7/10/08	150	720	8/27/09	ND	ND
			Dichlorodifluoromethane	7/31/07	1900	9200	NS	NS	NS	7/10/08	1700	8400	8/27/09	1400	7200
			Dichloroethane[1,1-]	7/31/07	3800	16,000	NS	NS	NS	7/10/08	2800	12,000	8/27/09	2900	12,000
			Dichloroethene[1,1-]	7/31/07	2100 (J+)	8300 (J+)	NS	NS	NS	7/10/08	1600	6400	8/27/09	1200	4700
			Tetrachloroethene	7/31/07	270	1800	NS	NS	NS	7/10/08	260	1800	8/27/09	280	1900
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	7/31/07	6300	49,000	NS	NS	NS	7/10/08	7600	59,000	8/27/09	9500	72,000
			Trichloroethane[1,1,1-]	7/31/07	34,000	180,000	NS	NS	NS	7/10/08	32,000	170,000	8/27/09	30,000	160,000
			Trichloroethene	7/31/07	3600	19,000	NS	NS	NS	7/10/08	3500	19,000	8/27/09	3400	18,000
			Trichlorofluoromethane	7/31/07	3000	16,000	NS	NS	NS	7/10/08	2600	15,000	8/27/09	2400	13,000
	72.5	67.5–77.5	Chloroform	7/31/07	140	700	12/19/07	ND	ND	NS	NS	NS	NS	NS	NS
			Dichlorodifluoromethane	7/31/07	2600	13,000	12/19/07	ND	ND	NS	NS	NS	NS	NS	NS
			Dichloroethane[1,1-]	7/31/07	4200	17,000	12/19/07	5000	20,000	NS	NS	NS	NS	NS	NS
			Dichloroethene[1,1-]	7/31/07	1700	6800	12/19/07	1500	6000	NS	NS	NS	NS	NS	NS
			Dichloroethene[cis-1,2-]	7/31/07	150	600	12/19/07	190	750	NS	NS	NS	NS	NS	NS
			Tetrachloroethene	7/31/07	280	1900	12/19/07	370	2500	NS	NS	NS	NS	NS	NS
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	7/31/07	7700	59,000	12/19/07	8700	67,000	NS	NS	NS	NS	NS	NS

Table 5.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07			1st Quarter FY08			4th Quarter FY08			4th Quarter FY09		
				Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)
54-24370 (cont.)	72.5	67.5–77.5	Trichloroethane[1,1,1-]	7/31/07	35,000	190,000	12/19/07	38000	210,000	NS	NS	NS	NS	NS	NS
			Trichloroethene	7/31/07	4200	22,000	12/19/07	6300	34,000	NS	NS	NS	NS	NS	NS
			Trichlorofluoromethane	7/31/07	2600	15,000	12/19/07	2800	16,000	NS	NS	NS	NS	NS	NS
	120	115–125	Chloroform	7/31/07	100	500	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichlorodifluoromethane	7/31/07	4600	23,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichloroethane[1,1-]	7/31/07	2800	11,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichloroethene[1,1-]	7/31/07	2100 (J+)	8400 (J+)	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichloroethene[cis-1,2-]	7/31/07	160	630	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Methylene Chloride	7/31/07	160	550	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Tetrachloroethene	7/31/07	260	1800	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	7/31/07	6800	52,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloroethane[1,1,1-]	7/31/07	25,000	140,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloroethene	7/31/07	2800	15,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichlorofluoromethane	7/31/07	2700	15,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
	174.7	169.7–179.7	Dichlorodifluoromethane	7/31/07	3700	18,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichloroethane[1,1-]	7/31/07	1600	6400	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichloroethene[1,1-]	7/31/07	2000 (J+)	7800 (J+)	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichloroethene[cis-1,2-]	7/31/07	96	380	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Methylene Chloride	7/31/07	100	360	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Tetrachloroethene	7/31/07	170	1200	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	7/31/07	5300	41,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloroethane[1,1,1-]	7/31/07	16,000	85,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloroethene	7/31/07	1700	9000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichlorofluoromethane	7/31/07	2100	12,000	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 5.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07			1st Quarter FY08			4th Quarter FY08			4th Quarter FY09		
				Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)
54-24370 (cont.)	200	195–205	Chloroform	7/31/07	38	190	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichlorodifluoromethane	7/31/07	3600	18,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichloroethane[1,1-]	7/31/07	1100	4400	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichloroethene[1,1-]	7/31/07	1800 (J+)	7300 (J+)	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichloroethene[cis-1,2-]	7/31/07	77	300	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Methylene Chloride	7/31/07	170	600	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Tetrachloroethene	7/31/07	170	1200	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	7/31/07	4700	36,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloroethane[1,1,1-]	7/31/07	13,000	71,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloroethene	7/31/07	1400	7600	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichlorofluoromethane	7/31/07	2000	11,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
	243.7	238.7–248.7	Chlorodifluoromethane	7/31/07	17	60	12/19/07	ND	ND	7/10/08	12	44	8/27/09	ND	ND
			Chloroform	7/31/07	ND	ND	12/19/07	ND	ND	7/10/08	1.7 (J)	8.5 (J)	8/27/09	ND	ND
			Dichlorodifluoromethane	7/31/07	320	1600	12/19/07	1200	5900	7/10/08	130	630	8/27/09	120	590
			Dichloroethane[1,1-]	7/31/07	76	310	12/19/07	200	820	7/10/08	35	140	8/27/09	46	180
			Dichloroethene[1,1-]	7/31/07	200	790	12/19/07	540	2100	7/10/08	110	440	8/27/09	100	420
			Dichloroethene[cis-1,2-]	7/31/07	5.2	20	12/19/07	14	57	7/10/08	2.2	8.7	8/27/09	ND	ND
			Methylene Chloride	7/31/07	14	47	12/19/07	32	110	7/10/08	4.8	17	8/27/09	ND	ND
			Tetrachloroethene	7/31/07	21	140	12/19/07	46	310	7/10/08	12	82	8/27/09	12	81
			Toluene	7/31/07	5.3	20	12/19/07	17	63	7/10/08	ND	ND	8/27/09	ND	ND
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	7/31/07	480	3700	12/19/07	1600	12,000	7/10/08	160	1200	8/27/09	180	1400
			Trichloroethane[1,1,1-]	7/31/07	1200	6400	12/19/07	3400	19,000	7/10/08	540	2900	8/27/09	520	2800
			Trichloroethene	7/31/07	120	660	12/19/07	370	2000	7/10/08	56	300	8/27/09	65	350
			Trichlorofluoromethane	7/31/07	180	1000	12/19/07	580	3300	7/10/08	68	380	8/27/09	62	350

Table 5.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07			1st Quarter FY08			4th Quarter FY08			4th Quarter FY09		
				Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)
54-24386	40	37.5–42.5	Acetone	7/31/07	57,000	140,000	NS	NS	NS	7/14/08	ND	ND	8/18/09	ND	ND
			Butanone[2-]	7/31/07	2700	8000	NS	NS	NS	7/14/08	ND	ND	8/18/09	ND	ND
			Carbon Disulfide	7/31/07	1200	3700	NS	NS	NS	7/14/08	ND	ND	8/18/09	ND	ND
			Dichloroethane[1,1-]	7/31/07	8400	34,000	NS	NS	NS	7/14/08	10,000	42,000	8/18/09	10,000	41,000
			Dichloroethene[1,1-]	7/31/07	9600 (J+)	38,000 (J+)	NS	NS	NS	7/14/08	14,000	54,000	8/18/09	12,000	49,000
			Hexane	7/31/07	1700	6000	NS	NS	NS	7/14/08	ND	ND	8/18/09	ND	ND
			Methylene Chloride	7/31/07	2700	9300	NS	NS	NS	7/14/08	ND	ND	8/18/09	ND	ND
			Tetrachloroethene	7/31/07	ND	ND	NS	NS	NS	7/14/08	1000	6900	8/18/09	1500	10,000
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	7/31/07	ND	ND	NS	NS	NS	7/14/08	930	7100	8/18/09	ND	ND
			Trichloroethane[1,1,1-]	7/31/07	140,000	770,000	NS	NS	NS	7/14/08	180,000	1,000,000	8/18/09	160,000	860,000
			Trichloroethene	7/31/07	830	4400	NS	NS	NS	7/14/08	1400	7300	8/18/09	1700	9000
	83	80.5–85.5	Acetone	7/31/07	27,000	64,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Butanone[2-]	7/31/07	1600	4600	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Carbon Disulfide	7/31/07	560	1700	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichloroethane[1,1-]	7/31/07	6100	25,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichloroethene[1,1-]	7/31/07	9500	38,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Methylene Chloride	7/31/07	520	1800	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Tetrachloroethene	7/31/07	430	2900	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	7/31/07	420	3200	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloroethane[1,1,1-]	7/31/07	69,000	380,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloroethene	7/31/07	780	4200	NS	NS	NS	NS	NS	NS	NS	NS	NS
	117	114.5–119.5	Acetone	7/31/07	29,000	69,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Butanone[2-]	7/31/07	1200	3500	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Carbon Disulfide	7/31/07	610	1900	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 5.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07			1st Quarter FY08			4th Quarter FY08			4th Quarter FY09		
				Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)
54-24386 (cont.)	117	114.5–119.5	Dichloroethane[1,1-]	7/31/07	7800	32,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichloroethene[1,1-]	7/31/07	17,000 (J+)	66,000 (J+)	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Methanol	7/31/07	54,000	71,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Methylene Chloride	7/31/07	910	3200	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Tetrachloroethene	7/31/07	440	3000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	7/31/07	540	4100	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloroethane[1,1,1-]	7/31/07	76,000	420,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloroethene	7/31/07	1000	5600	NS	NS	NS	NS	NS	NS	NS	NS	NS
	135	132.5–137.5	Acetone	7/31/07	51	120	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Carbon Disulfide	7/31/07	4	12	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichloroethane[1,1-]	7/31/07	81	330	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichloroethene[1,1-]	7/31/07	160 (J+)	650 (J+)	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Tetrachloroethene	7/31/07	5.1	34	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Toluene	7/31/07	4.3	16	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	7/31/07	4.9	38	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloroethane[1,1,1-]	7/31/07	800	4400	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloroethene	7/31/07	12	62	NS	NS	NS	NS	NS	NS	NS	NS	NS
	195	192.5–197.5	Dichloroethane[1,1-]	7/31/07	880	3600	NS	NS	NS	7/14/08	740	3000	8/18/09	540	2200
			Dichloroethene[1,1-]	7/31/07	1800	7000	NS	NS	NS	7/14/08	1700	6600	8/18/09	1200	4600
			Tetrachloroethene	7/31/07	150	990	NS	NS	NS	7/14/08	130	880	8/18/09	110	720
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	7/31/07	60	460	NS	NS	NS	7/14/08	59	450	8/18/09	48	370
			Trichloroethane[1,1,1-]	7/31/07	8200	45,000	NS	NS	NS	7/14/08	8200	45,000	8/18/09	5000	27,000
			Trichloroethene	7/31/07	190	1000	NS	NS	NS	7/14/08	170	910	8/18/09	150	820

Table 5.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07			1st Quarter FY08			4th Quarter FY08			4th Quarter FY09		
				Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)
54-24394	50	45–55	Cyclohexane	7/30/07	ND	ND	NS	NS	NS	7/9/08	ND	ND	9/3/09	150	510
			Dichlorodifluoromethane	7/30/07	270	1400	NS	NS	NS	7/9/08	250	1200	9/3/09	240	1200
			Dichloroethane[1,1-]	7/30/07	740	3000	NS	NS	NS	7/9/08	620	2500	9/3/09	630	2500
			Dichloroethene[1,1-]	7/30/07	390	1600	NS	NS	NS	7/9/08	490	2000	9/3/09	390	1500
			Tetrachloroethene	7/30/07	120	840	NS	NS	NS	7/9/08	94	640	9/3/09	ND	ND
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	7/30/07	15,000	120,000	NS	NS	NS	7/9/08	15,000	110,000	9/3/09	19,000	140,000
			Trichloroethane[1,1,1-]	7/30/07	7600	41,000	NS	NS	NS	7/9/08	6900	38,000	9/3/09	6800	37,000
			Trichloroethene	7/30/07	20,000	110,000	NS	NS	NS	7/9/08	20,000	100,000	9/3/09	14,000	78,000
			Trichlorofluoromethane	7/30/07	790	4400	NS	NS	NS	7/9/08	630	3600	9/3/09	580	3300
	100	95–105	Chloroform	7/30/07	46	220	12/19/07	49	240	NS	NS	NS	NS	NS	NS
			Dichlorodifluoromethane	7/30/07	350	1700	12/19/07	ND	ND	NS	NS	NS	NS	NS	NS
			Dichloroethane[1,1-]	7/30/07	660	2700	12/19/07	720	2900	NS	NS	NS	NS	NS	NS
			Dichloroethene[1,1-]	7/30/07	390 (J+)	1500 (J+)	12/19/07	340	1300	NS	NS	NS	NS	NS	NS
			Tetrachloroethene	7/30/07	110	730	12/19/07	100	690	NS	NS	NS	NS	NS	NS
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	7/30/07	7000	54,000	12/19/07	7800	60,000	NS	NS	NS	NS	NS	NS
			Trichloroethane[1,1,1-]	7/30/07	5900	32,000	12/19/07	6000	33,000	NS	NS	NS	NS	NS	NS
			Trichloroethene	7/30/07	9400	51,000	12/19/07	12,000	67,000	NS	NS	NS	NS	NS	NS
			Trichlorofluoromethane	7/30/07	670	3800	12/19/07	610	3400	NS	NS	NS	NS	NS	NS
	150	145–155	Chloroform	7/30/07	36	180	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichlorodifluoromethane	7/30/07	470	2300	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichloroethane[1,1-]	7/30/07	430	1700	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichloroethene[1,1-]	7/30/07	420	1600	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Methylene Chloride	7/30/07	23	80	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Tetrachloroethene	7/30/07	100	710	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 5.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07			1st Quarter FY08			4th Quarter FY08			4th Quarter FY09		
				Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)
54-24394 (cont.)	150	145–155	Trichloro-1,2,2-trifluoroethane[1,1,2-]	7/30/07	3200	25,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloroethane[1,1,1-]	7/30/07	4300	24,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloroethene	7/30/07	4200	22,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichlorofluoromethane	7/30/07	760	4300	NS	NS	NS	NS	NS	NS	NS	NS	NS
	192.5	187.5–197.5	Chloroform	7/30/07	27	130	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichlorodifluoromethane	7/30/07	470	2300	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichloroethane[1,1-]	7/30/07	250	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichloroethene[1,1-]	7/30/07	360 (J+)	1400 (J+)	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Methylene Chloride	7/30/07	21	73	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Tetrachloroethene	7/30/07	87	590	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	7/30/07	1800	14,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloroethane[1,1,1-]	7/30/07	3000	17,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloroethene	7/30/07	2200	12,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichlorofluoromethane	7/30/07	720	4000	NS	NS	NS	NS	NS	NS	NS	NS	NS
	245.25	240.25–250.25	Carbon Disulfide	7/30/07	20	61	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Chloroform	7/30/07	15	73	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichlorodifluoromethane	7/30/07	390	1900	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichloroethane[1,1-]	7/30/07	110	440	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichloroethene[1,1-]	7/30/07	290 (J+)	1200 (J+)	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Methylene Chloride	7/30/07	16	57	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Tetrachloroethene	7/30/07	65	440	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	7/30/07	980	7500	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloroethane[1,1,1-]	7/30/07	1800	9900	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloroethene	7/30/07	850	4600	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichlorofluoromethane	7/30/07	580	3200	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 5.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07			1st Quarter FY08			4th Quarter FY08			4th Quarter FY09		
				Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)
54-24394 (cont.)	300.5	295.5–305.5	Acetone	7/30/07	8	19	12/19/07	3.6	8.6	7/9/08	9.1	22	9/3/09	23	54
			Butanone[2-]	7/30/07	ND	ND	12/19/07	ND	ND	7/9/08	2.1	6.1	9/3/09	5	15
			Chloroform	7/30/07	1	4.9	12/19/07	0.96	4.7	7/9/08	ND	ND	9/3/09	ND	ND
			Cyclohexane	7/30/07	ND	ND	12/19/07	ND	ND	7/9/08	ND	ND	9/3/09	3.4	12
			Dichlorodifluoromethane	7/30/07	42	210	12/19/07	ND	ND	7/9/08	17	85	9/3/09	21	100
			Dichloroethane[1,1-]	7/30/07	12	49	12/19/07	12	49	7/9/08	9.1	37	9/3/09	10	40
			Dichloroethene[1,1-]	7/30/07	66 (J+)	260 (J+)	12/19/07	55	220	7/9/08	41	160	9/3/09	42	170
			Ethanol	7/30/07	ND	ND	12/19/07	ND	ND	7/9/08	ND	ND	9/3/09	4.3	8.1
			Methanol	7/30/07	ND	ND	12/19/07	ND	ND	7/9/08	ND	ND	9/3/09	210 (J)	270 (J)
			Methylene Chloride	7/30/07	1.2	4.3	12/19/07	1.2	4	7/9/08	ND	ND	9/3/09	0.86	3
			Tetrachloroethene	7/30/07	7.6	51	12/19/07	6.9	47	7/9/08	5.2	35	9/3/09	6.3	43
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	7/30/07	78	600	12/19/07	71	540	7/9/08	36	280	9/3/09	54	410
			Trichloroethane[1,1,1-]	7/30/07	180	1000	12/19/07	170	940	7/9/08	120	680	9/3/09	120	670
			Trichloroethene	7/30/07	44	230	12/19/07	60	320	7/9/08	32	170	9/3/09	40	220
			Trichlorofluoromethane	7/30/07	53	300	12/19/07	42	240	7/9/08	18	100	9/3/09	23	130
54-24397	50	45–55	Dichlorodifluoromethane	NS	NS	NS	NS	NS	NS	7/14/08	60	300	8/7/09	32	160
			Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	7/14/08	30	120	8/7/09	25	100
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/14/08	140	550	8/7/09	71	280
			Methylene Chloride	NS	NS	NS	NS	NS	NS	7/14/08	14	50	8/7/09	18	61
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	7/14/08	31	210	8/7/09	23	160
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	NS	NS	NS	NS	NS	NS	7/14/08	410	3100	8/7/09	320	2400
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/14/08	1800	10,000	8/7/09	1500	8200
			Trichloroethene	NS	NS	NS	NS	NS	NS	7/14/08	29	160	8/7/09	24	130
			Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	7/14/08	20	110	8/7/09	12	68

Table 5.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07			1st Quarter FY08			4th Quarter FY08			4th Quarter FY09		
				Date	Result (ppbv)	Result ($\mu g/m^3$)	Date	Result (ppbv)	Result ($\mu g/m^3$)	Date	Result (ppbv)	Result ($\mu g/m^3$)	Date	Result (ppbv)	Result ($\mu g/m^3$)
54-24397 (cont.)	239.75	234.75–244.3	Chloroform	NS	NS	NS	NS	NS	NS	7/14/08	1.8	9	8/7/09	2	9.8
			Dichlorodifluoromethane	NS	NS	NS	NS	NS	NS	7/14/08	48	240	8/7/09	40	200
			Dichloroethane[1,1-]	NS	NS	NS	NS	NS	NS	7/14/08	23	92	8/7/09	24	98
			Dichloroethene[1,1-]	NS	NS	NS	NS	NS	NS	7/14/08	180	700	8/7/09	180	700
			Tetrachloroethene	NS	NS	NS	NS	NS	NS	7/14/08	18	120	8/7/09	24	160
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	NS	NS	NS	NS	NS	NS	7/14/08	100	790	8/7/09	130	1000
			Trichloroethane[1,1,1-]	NS	NS	NS	NS	NS	NS	7/14/08	540	2900	8/7/09	570	3100
			Trichloroethene	NS	NS	NS	NS	NS	NS	7/14/08	30	160	8/7/09	39	210
			Trichlorofluoromethane	NS	NS	NS	NS	NS	NS	7/14/08	18	100	8/7/09	18	98
54-25105[c]	485	485–701[d]	Acetone	NS	NS	NS	NS	NS	NS	8/1/08	43	100	8/24/09	ND	ND
			Benzene	NS	NS	NS	NS	NS	NS	8/1/08	20	64	8/24/09	ND	ND
			Butadiene[1,3-]	NS	NS	NS	NS	NS	NS	8/1/08	2.9	6.4	8/24/09	ND	ND
			Butanone[2-]	NS	NS	NS	NS	NS	NS	8/1/08	2	6	8/24/09	ND	ND
			Cyclohexane	NS	NS	NS	NS	NS	NS	8/1/08	4.4	15	8/24/09	ND	ND
			Ethylbenzene	NS	NS	NS	NS	NS	NS	8/1/08	5.4	23	8/24/09	ND	ND
			Ethyltoluene[4-]	NS	NS	NS	NS	NS	NS	8/1/08	4.7	23	8/24/09	ND	ND
			Hexane	NS	NS	NS	NS	NS	NS	8/1/08	14	49	8/24/09	ND	ND
			n-Heptane	NS	NS	NS	NS	NS	NS	8/1/08	4.8	20	8/24/09	ND	ND
			Propylene	NS	NS	NS	NS	NS	NS	8/1/08	16	28	8/24/09	ND	ND
			Toluene	NS	NS	NS	NS	NS	NS	8/1/08	38	140	8/24/09	5.5	21
			Trimethylbenzene[1,2,4-]	NS	NS	NS	NS	NS	NS	8/1/08	5.6	28	8/24/09	ND	ND
			Trimethylbenzene[1,3,5-]	NS	NS	NS	NS	NS	NS	8/1/08	1.6	8.1	8/24/09	ND	ND
			Xylene[1,2-]	NS	NS	NS	NS	NS	NS	8/1/08	6.8	30	8/24/09	ND	ND
			Xylene[1,3-]+Xylene[1,4-]	NS	NS	NS	NS	NS	NS	8/1/08	18	80	8/24/09	ND	ND

Table 5.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07			1st Quarter FY08			4th Quarter FY08			4th Quarter FY09		
				Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)
54-27436	45	40–50	Chloroform	8/2/07	ND	ND	NS	NS	NS	7/18/08	91	440	8/19/09	55	270
			Dichlorodifluoromethane	8/2/07	ND	ND	NS	NS	NS	7/18/08	ND	ND	8/19/09	52	260
			Dichloroethane[1,1-]	8/2/07	290	1200	NS	NS	NS	7/18/08	270	1100	8/19/09	170	690
			Dichloroethene[1,1-]	8/2/07	210 (J+)	830 (J+)	NS	NS	NS	7/18/08	120	460	8/19/09	74	290
			Tetrachloroethene	8/2/07	1600	11,000	NS	NS	NS	7/18/08	1200	8100	8/19/09	1000	7000
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	8/2/07	360	2700	NS	NS	NS	7/18/08	220	1700	8/19/09	220	1700
			Trichloroethane[1,1,1-]	8/2/07	3500	19,000	NS	NS	NS	7/18/08	2600	14,000	8/19/09	1800	9800
			Trichloroethene	8/2/07	30,000	160,000	NS	NS	NS	7/18/08	19,000	100,000	8/19/09	12,000	65,000
	70	65–75	Dichloroethane[1,1-]	8/2/07	320	1300	12/20/07	300	1200	NS	NS	NS	NS	NS	NS
			Dichloroethene[1,1-]	8/2/07	220 (J+)	880 (J+)	12/20/07	120	460	NS	NS	NS	NS	NS	NS
			Tetrachloroethene	8/2/07	1400	9500	12/20/07	940	6400	NS	NS	NS	NS	NS	NS
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	8/2/07	260	2000	12/20/07	260	2000	NS	NS	NS	NS	NS	NS
			Trichloroethane[1,1,1-]	8/2/07	4000	22,000	12/20/07	3100	17,000	NS	NS	NS	NS	NS	NS
			Trichloroethene	8/2/07	27,000	150,000	12/20/07	23,000	120,000	NS	NS	NS	NS	NS	NS
	115	110–120	Chloroform	8/2/07	92	450	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichlorodifluoromethane	8/2/07	76	380	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichloroethane[1,1-]	8/2/07	330	1300	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichloroethene[1,1-]	8/2/07	240	970	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Tetrachloroethene	8/2/07	680	4600	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	8/2/07	160	1200	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloroethane[1,1,1-]	8/2/07	3400	18,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloroethene	8/2/07	12,000	66,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
	163	158–168	Chloroform	8/2/07	90	440	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichlorodifluoromethane	8/2/07	72	360	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 5.0-1 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	Analyte	4th Quarter FY07			1st Quarter FY08			4th Quarter FY08			4th Quarter FY09		
				Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)	Date	Result (ppbv)	Result (µg/m³)
54-27436 (cont.)	163	158–168	Dichloroethane[1,1-]	8/2/07	330	1300	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Dichloroethene[1,1-]	8/2/07	230	910	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Methylene Chloride	8/2/07	35	120	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Tetrachloroethene	8/2/07	310	2100	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	8/2/07	110	810	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloroethane[1,1,1-]	8/2/07	2700	15,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichloroethene	8/2/07	5600	30,000	NS	NS	NS	NS	NS	NS	NS	NS	NS
			Trichlorofluoromethane	8/2/07	22	120	NS	NS	NS	NS	NS	NS	NS	NS	NS
	185	180–190	Chloroform	8/2/07	16	77	12/20/07	53	260	7/18/08	35	170	8/19/09	41	200
			Dichlorodifluoromethane	8/2/07	16	80	12/20/07	ND	ND	7/18/08	28	140	8/19/09	34	170
			Dichloroethane[1,1-]	8/2/07	63	250	12/20/07	200	800	7/18/08	120	480	8/19/09	150	600
			Dichloroethene[1,1-]	8/2/07	85 (J+)	340 (J+)	12/20/07	160	650	7/18/08	110	440	8/19/09	120	470
			Methylene Chloride	8/2/07	6.3	22	12/20/07	24	84	7/18/08	11 (J)	37 (J)	8/19/09	13	46
			Tetrachloroethene	8/2/07	48	320	12/20/07	140	940	7/18/08	87	590	8/19/09	140	980
			Trichloro-1,2,2-trifluoroethane[1,1,2-]	8/2/07	22	170	12/20/07	68	520	7/18/08	34	260	8/19/09	60	460
			Trichloroethane[1,1,1-]	8/2/07	550	3000	12/20/07	1600	8500	7/18/08	890	4800	8/19/09	1300	7200
			Trichloroethene	8/2/07	750	4000	12/20/07	3400	18,000	7/18/08	1700	9300	8/19/09	2900	16,000
			Trichlorofluoromethane	8/2/07	6.9	39	12/20/07	ND	ND	7/18/08	9	50	8/19/09	ND	ND
			Trimethylbenzene[1,2,4-]	8/2/07	ND	ND	12/20/07	ND	ND	7/18/08	11	55	8/19/09	ND	ND

Note: See Appendix A for data qualifier definitions.

[a] NS = Not sampled.

[b] ND = Nondetect.

[c] Open Borehole.

[d] Packer sample interval.

Table 5.0-2
Tritium Pore-Vapor Results at MDA G

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
			Date	Result (pCi/L)	Date	Result (pCi/L)	Date	Result (pCi/L)	Date	Result (pCi/L)
54-01107	56.5	55.5–57.5	NS[a]	NS	NS	NS	7/29/08	883,608	8/17/09	76,384.3
	100	99–101	NS	NS	NS	NS	7/29/08	100,421	8/17/09	124,761
54-01110	60	59–61	NS	NS	NS	NS	7/25/08	136,196,000	8/27/09	112,864,000
	90	89–91	NS	NS	NS	NS	7/25/08	31,963,700	8/27/09	26,895,800
54-01111	20	19–21	NS	NS	NS	NS	7/18/08	450,721,000	8/26/09	211,019,000
	139	138–140	NS	NS	NS	NS	7/18/08	17,041,600 (J)	8/26/09	24,717
54-01115	40	39–41	NS	NS	NS	NS	7/23/08	81,254.6	8/13/09	29,705.3
	68	67–69	NS	NS	NS	NS	7/23/08	9926.52 (J)	8/13/09	38,597.1
54-01116	22.5	20–25	NS	NS	NS	NS	7/22/08	5,861,640	8/13/09	7,664,510
	187.8	185.3–190.3	NS	NS	NS	NS	7/22/08	9157.37 (J)	8/13/09	10,000.3
54-01117	20	18.5–22.5	NS	NS	NS	NS	7/22/08	57,277,000	8/11/09	236,115,000
	179.8	177.3–182.3	NS	NS	NS	NS	7/22/08	67,566.4	8/11/09	203,670
54-01121	20	19–21	NS	NS	NS	NS	7/17/08	552,870	8/31/09	45,796.2
	121	120–122	NS	NS	NS	NS	7/17/08	2,4554	8/31/09	19,529.4 (J)
54-01126	35	34–36	NS	NS	NS	NS	NS	NS	9/30/09	148,405,000
	49	48–50	NS	NS	NS	NS	NS	NS	9/30/09	10,707,100
54-01128	20	19–21	NS	NS	NS	NS	7/15/08	8383.74	8/24/09	6,147,970
	39	38–40	NS	NS	NS	NS	7/15/08	2,867,670	8/25/09	2,972,830
54-02009	37	34.5–39.5	NS	NS	NS	NS	7/16/08	9863.64	8/21/09	10,573.4 (J)
	92	89.5–94.5	NS	NS	NS	NS	7/16/08	36,102.7	8/21/09	100,302
54-02010	30	27.5–32.5	NS	NS	NS	NS	7/11/08	11,683.7	8/24/09	19,802.6 (J)
	95	92.5–97.5	NS	NS	NS	NS	7/11/08	3221.76	8/25/09	24,134.6
54-02032	20	20	NS	NS	NS	NS	7/14/08	6439.67	9/1/09	9668.05 (J)
	156	156	NS	NS	NS	NS	7/14/08	1019.47	9/1/09	2656.99 (J)

Table 5.0-2 (continued)

Borehole ID	Port Depth (ft bgs)	Sampling Port Depth or Interval (ft bgs)	4th Quarter FY07		1st Quarter FY08		4th Quarter FY08		4th Quarter FY09	
			Date	Result (pCi/L)	Date	Result (pCi/L)	Date	Result (pCi/L)	Date	Result (pCi/L)
54-02033	60	60	NS	NS	NS	NS	7/8/08	765.902	8/6/09	882.777
	277	277	NS	NS	NS	NS	7/8/08	ND[b]	8/6/09	553.61
54-22116	172	171–173	NS	NS	NS	NS	8/4/08	951.945	9/10/09	117,215
	190	189–191	NS	NS	NS	NS	8/4/08	26,528.9	9/10/09	1,882,480
	244	243–245	NS	NS	NS	NS	NS	NS	9/22/09	2,529,170
	262	261–263	NS	NS	NS	NS	NS	NS	9/22/09	16,030.4
	280	279–281	NS	NS	NS	NS	8/4/08	5027.13	9/10/09	ND
54-24370	40	35–45	NS	NS	NS	NS	7/10/08	811.571	9/1/09	33,433.4
	243.7	238.7–248.7	NS	NS	NS	NS	7/10/08	1890.99	9/2/09	120,836
54-24386	40	37.5–42.5	NS	NS	NS	NS	7/17/08	16,657,700	8/20/09	13,420,700
	195	192.5–197.5	NS	NS	NS	NS	7/17/08	173,146	8/20/09	150,673
54-24394	50	45–55	NS	NS	NS	NS	7/9/08	ND	9/10/09	2721.05
	100	95–105	NS	NS	12/17/07	236,808 (J-)	NS	NS	NS	NS
	300.5	295.5–305.5	NS	NS	12/17/07	8378.01 (J-)	7/9/08	1329.61	9/10/09	1660.03
54-24397	50	45–55	7/31/07	12,486,200	12/17/07	8,000,480 (J-)	7/18/08	13,010,200	8/11/09	14,761,600
	90	85–95	7/31/07	701,095	12/17/07	1,093,380 (J-)	NS	NS	NS	NS
	130	125–135	7/31/07	125,484	12/17/07	1,418,000 (J-)	NS	NS	NS	NS
	165	160–170	7/31/07	29,134	12/17/07	448,371 (J-)	NS	NS	NS	NS
	188	183–193	7/31/07	147,089	12/17/07	682,799 (J-)	NS	NS	NS	NS
	239.75	234.75–244.3	7/31/07	3480.96	12/17/07	138,302 (J-)	7/18/08	89,498.9	8/11/09	972,296
54-25105[c]	485	485–701[d]	NS	NS	NS	NS	8/1/08	3275.2	8/24/09	7442.15 (J)
54-27436	45	40–50	NS	NS	NS	NS	7/18/08	50,550.3	8/20/09	8146.42 (J)
	185	180–190	NS	NS	NS	NS	7/18/08	46,684.4 (J)	8/20/09	4195.34 (J)

Note: See Appendix A for data qualifier definitions.

[a] NS = Not sampled.

[b] ND = Nondetect.

[c] Open Borehole.

[d] Packer sample interval.

Appendix A

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

A-1.0 ACRONYMS AND ABBREVIATIONS

CH_4	methane
CO_2	carbon dioxide
B&K	Brüel and Kjær
bgs	below ground surface
Consent Order	Compliance Order on Consent
DCE	1,1-dichloroethylene
EPA	Environmental Protection Agency (U.S.)
ER ID	Environmental Remediation and Surveillance Program identification number
FLUTe	Flexible Liner Underground Technology
FY	fiscal year
H_2O	water
kPa	pressure differential
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
O_2	oxygen
PCE	tetrachloroethene
pCi/L	picocurie(s) per liter
PD	percent difference
PID	photoionization detector
QA	quality assurance
Qbt2	Tshirege Member
QC	quality control
Qct	Cerro Toledo Interval
RPF	Records Processing Facility
SL	screening level
SOP	standard operating procedure
SOW	statement of work
SV	screening value
SVE	soil vapor extraction
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 (µm)	0.0000394	inches (in.)
square kilometers (km^2)	0.3861	square miles (mi^2)
hectares (ha)	2.5	acres
square meters (m^2)	10.764	square feet (ft^2)
cubic meters (m^3)	35.31	cubic feet (ft^3)
kilograms (kg)	2.2046	pounds (lb)
grams (g)	0.0353	ounces (oz)
grams per cubic centimeter (g/cm^3)	62.422	pounds per cubic foot (lb/ft^3)
milligrams per kilogram (mg/kg)	1	parts per million (ppm)
micrograms per gram (µg/g)	1	parts per million (ppm)
liters (L)	0.26	gallons (gal.)
milligrams per liter (mg/L)	1	parts per million (ppm)
degrees Celsius (°C)	9/5 + 32	degrees Fahrenheit (°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

Quality Assurance/Quality Control Program

B-1.0 INTRODUCTION

This appendix presents the analytical methods and data quality review and summarizes the data quality of the field and laboratory data.

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 (SOW) 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, and surrogates, were used to assess laboratory accuracy and bias.

The type and frequency of QC analyses are described in the analytical services SOW (LANL 2000, 071233). Other QC factors, such as sample preservation and holding times, were also assessed. The requirements for sample preservation and holding times are presented in the Standard Operating Procedure (SOP) EP-ERSS-SOP-5056, 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) that included a more detailed review of the raw data. The SOPs used for data validation are presented in Table B-1.0-1. Copies of the analytical data, laboratory logbooks, and instrument printouts are provided in Appendix C (on CD).

A systematic low bias in previously reported tritium pore-vapor measurements was identified (Whicker et al. 2009, 106429), and all tritium data presented in this report are corrected for this bias (Marczak 2009, 106500). The tritium results were corrected using the percent moisture value determined by the analytical laboratory. Details are discussed in section B-4.0.

Analytical data were reviewed and evaluated based on U.S. Environmental Protection Agency (EPA) National Functional Guidelines for 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 the appropriate analytical records. Definitions of the data qualifiers are presented in Appendix A.

B-1.1 Maintenance of Chain of Custody

To maintain chain of custody is to document or demonstrate the possession of an item by only authorized individuals. The chain-of-custody process, described in EP-ERSS-SOP-5058, Chain of Custody for Analytical Data Record Packages, 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. The chain-of-custody forms are provided in Appendix C (on CD).

B-1.2 Sample Documentation

Establishing sample documentation acceptability, as described in EP-ERSS-SOP-5058, is the first step toward verifying an analytical system has produced data of known quality. Documentation depends on the accessibility of review items that accurately and completely describe the work performed. In the absence of adequate sample documentation, data quality cannot be independently verified.

B-1.3 Sample Preservation

Sample preservation is the use of specific types of sample containers and preservation techniques, as described in EP-ERSS-SOP-5056, Sample Containers and Preservation. Sample preservation is mandatory for hazardous site investigations because the integrity of any sample decreases over time. Physical factors (e.g., light, pressure, temperature), chemical factors (e.g., changes in pH, volatilization), 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.

B-1.4 Holding Time

Holding time, the maximum amount of time a sample can be stored without potential unacceptable changes in analyte concentrations, is described in EP-ERSS-SOP-5056. Extraction holding time refers to the time that elapses between sample collection and sample preparation; analytical holding time refers to the time that elapses between sample preparation and analysis.

B-1.5 Initial and Continuing Calibration Verification (Including Interference-Check Standards)

Calibration verification establishes 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 and 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.

B-1.6 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.

B-1.7 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 chemical results are not detected if reported results are less than or equal to the method detection limit adjusted by sample-specific dilution or concentration factors.

Tritium results reported at less than the minimum detectable activity are not detected. Each tritium 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 (U).

Uncertainty and minimum detectable activity results for tritium have been modified in the same manner as the analytical results to account for the bound water found in silica gel used for sample collection (section B-4.0).

B-1.8 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 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).

B-1.9 Matrix Spike Recoveries

A matrix spike is an aliquot of a 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).

B-1.10 Surrogate

Surrogates (organic chemical compounds) are similar in composition and behavior to target analytes but are not typically found in environmental samples. Surrogates 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 vary by method but should generally be greater than 10% for an analytical result to be usable (LANL 2000, 071233).

B-1.11 Internal Standard Responses and Carrier Recoveries

Internal standards are chemical compounds 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 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 be within the range from $\geq$50% to $\leq$200% (LANL 2000, 071233).

B-1.12 Laboratory Control Sample Recoveries

A Laboratory Control Sample (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).

B-1.13 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 determine the long-term precision of an analytical method on various matrices. All percent differences (PDs) between samples and field duplicates should be $\pm$35% (LANL 2000, 071233). The PD is defined by the equation $PD = [|D1 - D2|/(D1 + D2)] \times 100\%$, where D1 and D2 represent analytical measurements on duplicate samples.

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

B-1.14 Field Blanks, Equipment Blanks, and Performance Evaluations

A field blank is a sample of analyte-free medium 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.

An equipment blank is a sample used to verify cleanliness of the sampling equipment. It is collected after completion of decontamination and before sampling.

A performance evaluation is a sample of the field-screening instrument (Brüel and Kjær (B&K)) operational check gas. The operational check gas is of known quantities of mixed organic analytes in nitrogen.

B-2.0 LABORATORY ANALYSIS SUMMARY

During the fourth quarter of fiscal year (FY) 2009, 42 volatile organic compound (VOC) pore-gas samples, 5 field blank samples, 5 field duplicate samples, and 3 VOC performance evaluation samples were collected at Solid Waste Management Unit, also known as Material Disposal Area (MDA) G. Additionally, 42 tritium samples, 5 field blank samples, and 5 field duplicate samples were collected. Analysis of pore gas was conducted for VOCs using EPA Method TO-15, and analysis for tritium was conducted using EPA Method 906.0. Table B-2.0-1 lists the analytical methods used for VOC and tritium analyses. All QC procedures were followed, as required by the analytical services SOW (LANL 2000, 071233). Validated analytical results have been corrected for tritium underreporting.

Sample locations, sampling ports, and validated analytical results are presented in Tables 5.0-1 and 5.0-2 of this periodic monitoring report. The data, including the qualified data, are usable for evaluation purposes. The entire data set meets the standards for use in this report.

The tritium and VOC analyses are summarized in the following sections. The required minimum detectable activity or estimated quantitation limit is prescribed in the analytical services SOW (LANL 2000, 071233).

B-3.0 ORGANIC CHEMICAL ANALYSES

No VOC data were rejected.

B-3.1 Maintenance of Chain of Custody

Chain of custody was properly maintained for all samples.

B-3.2 Sample Documentation

All samples were properly documented in the field.

B-3.3 Sample Preservation

No sample preservation is required for VOCs.

B-3.4 Holding Time

The holding times were met for all samples.

B-3.5 Initial and Continuing Calibration Verification

The initial calibration verification and/or the multipoint calibration coefficient did not meet the appropriate criteria for 74 VOC results. All 74 results were qualified as estimated not detected (UJ),

Initial or continuing calibration verification was recovered outside method-specific limits for 27 results. All 27 results were qualified as estimated not detected (UJ),

B-3.6 Analyte Identification (Including Internal Standards and Spectra Review)

Analyte identification criteria were met for all VOC results.

B-3.7 Method Blank

Method blank results were within acceptable limits.

B-3.8 Surrogate Recoveries

All surrogate recoveries were within acceptable limits.

B-3.9 Internal Standard Responses

All internal standard responses were within acceptable limits.

B-3.10 LCS Recoveries

The LCS recoveries were less than the lower allowable limit but greater than 10% for 14 VOC results. Affected results were qualified as estimated not detected (UJ),

B-3.11 Laboratory and Field Duplicates

Laboratory duplicates indicate acceptable precision. Three field duplicate results and their associated sample results had percent differences that were greater than 35%. These include the results for TCA and TCE from borehole 54-22116 at 280 ft bgs collected on September 9, 2009, These also include the results for toluene from open borehole 54-25105 at 485 ft bgs collected on August 24, 2009. Field duplicate results are presented in Table 3.11-1.

B-3.12 Field Blanks

One field blank collected on August 11, 2009 from borehole location 54-01107 had detectable levels of trichloroethane (1,1,1) which was also detected in the related field sample for that borehole at 56.5 ft bgs and 100 ft bgs, One field blank collected on August 19, 2009 from borehole location 54-02009 had detectable levels of dichloroethane (1,1), dichloroethene (1,1), tetrachloroethene, trichloroethane (1,1,1)

and trichloroethene, These analytes were also detected in the related field sample for this borehole at 37 ft bgs and 92 ft bgs, Two field blanks collected on August 24, 2009 at borehole location 54-25105 contained detectable levels of acetone, butanone (2-), tetrachloroethene, trichloroethane (1,1,1) and trichloroethene, Tetrachloroethene and trichloroethene were not detected in the related field sample, Acetone, butanone (2-) and trichloroethane (1,1,1) were detected in the related field sample but were qualified as not detected because they were detected at a concentration ≤5 times that found in the associated field blank. One field blank collected on September 15, 2009 from borehole location 54-22116 was not analyzed because the analytical lab inadvertently released the sample contents before analysis could take place.

B-4.0 RADIONUCLIDE ANALYSES

No tritium data were rejected,

During a technical review of EP-ERSS-SOP-5074, Sampling Sub-Atmospheric Air, the Laboratory determined that analytical results were not being corrected for water bound in the silica gel used to collect vapor samples, thereby identifying a systematic low bias in previously reported tritium results (Whicker et al. 2009, 106429). The bias results from the properties of the silica gel, the sample medium used to collect water vapor from pore-gas samples. Silica gel contains non-tritiated water vapor bound to the silica gel molecules that cannot be completely removed by drying before its use in sampling, without degrading the silica gel properties. Thus, when water vapor is collected from pore space, the tritiated sample water vapor is mixed/diluted into the clean water bound to the silica gel molecules. The amount of dilution is proportional to the amount of silica gel–bound water in the original sample and the amount of moisture collected in the sample. The tritium results were corrected using the percent moisture value determined by the analytical laboratory (Marczak 2009, 106500). The corrected tritium results are reported in Table 5.0-2 and in Appendix C (on CD).

B-4.1 Maintenance of Chain of Custody

Chain of custody was properly maintained for all samples.

B-4.2 Sample Documentation

Samples were properly documented in the field.

B-4.3 Sample Preservation

No sample preservation is required for tritium.

B-4.4 Holding Times

The holding times were met for all tritium analyses.

B-4.5 Analyte Quantitation

Analyte quantitation was within acceptable limits for all tritium samples,

B-4.6 Method Blanks

Eight tritium results were qualified as estimated (J) because tritium was detected in the method blank but at a concentration >5 times that found in the method blank,

B-4.7 LCS Recoveries

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

B-4.8 Laboratory Duplicates

All laboratory duplicates indicate acceptable precision,

B-4.9 Field Blanks

One tritium sample result was qualified as not detected (U) because the sample result is ≤5 times the concentration of the related analyte in the trip blank. This results is from borehole location 54-22116 at 280 ft bgs.

B-5.0 FIELD-MONITORING SUMMARY

B-5.1 VOCs

Field-monitoring data are less costly to generate than analytical 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 analytical laboratory analyses. Field-monitoring data provide analyte (or at least chemical class) identification and often some degree of quantification.

Field monitoring of subsurface vapor monitoring at MDA L is conducted using EP-ERSS-SOP-5074, Sampling of Subatmospheric Air. This procedure covers the use of the B&K Type 1302 multigas analyzer and the Landtec GEM 500 photoionization detector (PID).

The B&K is maintained through calibration and changing or cleaning of filters as needed. The B&K is calibrated before use each quarter by a certified calibration laboratory. The B&K is adjusted before each day's use to compensate for ambient pressure and temperature. An operational check is conducted before each day's use through the analysis of ambient air readings and triplicate readings of known quantities of organic analytes in nitrogen. These verification check analyses confirm analytical stability, the instrument zero point for each analyte is correctly set, and the stored calibration curve remains applicable to current instrument response to the presence of organic chemicals. Concentrations of gas standards analyzed before each day's use are within ±20% of their known values. Additionally, during each sample analysis, a low-sample flow condition triggers an alarm on the B&K, and the VOC measurement is not completed.

The presence of nontarget VOCs bias B&K target analyte results if they have an acoustic response to infrared light similar to the target analyte. Trichlorofluoromethane (Freon-11) generates a measurable acoustic signal in response to light with a wavelength of 11.6 µm proportional to its concentration. Other VOCs generating an acoustic signal in response to light at this wavelength include 1,2-dichloro-1,1,2,2-tetrafluoroethane (Freon-114) and dichlorofluoromethane (Freon-21), neither of which is reported by EPA Method TO-15. PCE generates an acoustic signal in response to light with a wavelength of 11.1 µm. Other VOCs responding to light at this wavelength include styrene and 1,1,2-trichloro-1,2,2-trifluoroethane (Freon-113), neither of which is reported by EPA Method TO-15, and

dichlorodifluoromethane (Freon-12), ethanol, and 1,1-dichloroethylene (DCE). Results indicate that DCE and Freon-113 are detected in most samples at MDA L at concentrations that generate a measurable acoustic signal in response to light with a wavelength that is included in the acoustic signal interpreted as PCE that may bias the PCE readings high using the B&K. Table B-5.0-1 presents VOCs that interfere with each of the four B&K target analytes.

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

- On June 15, 2009, the B&K with serial number 1732805 was calibrated before the fourth quarter monitoring event. The zero points were set for TCA, TCE, Freon-11, PCE, carbon dioxide (CO_2), and water vapor. Span concentrations of TCA at 10.4 ppm, TCE at 19.46 ppm, Freon-11 at 3.8 ppm, PCE at 21.4 ppm, and CO_2 at 2.5 ppm were used to generate calibration response curves.
- After the fourth quarter monitoring event, the B&K with serial number 1732805 was calibrated on November 10, 2009.

The Landtec GEM 500 PID is calibrated by a certified calibration laboratory. During calibration, methane (CH_4), oxygen (O_2), and CO_2 zero points are set, and each analyte's calibration response curve is developed. The CH_4 reading is filtered to an infrared absorption frequency of 3.41 mm (nominal), the frequency specific to hydrocarbon bonds. Landtec instruments are calibrated using certified CH_4 mixtures and will give correct readings, provided no other hydrocarbon gases are present within the sample (e.g., ethane, propane, and butane). If other hydrocarbons are present, the CH_4 reading will be higher (never lower) than the actual CH_4 concentration being monitored. The extent to which the CH_4 reading is affected depends upon the concentration of the CH_4 in the sample and the concentration of the other hydrocarbons. The effect of other hydrocarbons is nonlinear and difficult to predict. The CO_2 reading is filtered to an infrared absorption frequency of 4.29 µm (nominal), the frequency specific to CO_2. Therefore, any other gases usually found on landfill sites will not affect the CO_2 reading. The O_2 sensor is a galvanic cell type and suffers no influence from CO_2, hydrogen sulfide, nitrate, sulfide, or hydrogen.

Calibration is confirmed before each day's use through the analysis of multiple readings of ambient air. Zero readings of CH_4 and CO_2 are expected. O_2 is expected to read 20.9%. O_2 readings within ± 25% of 20.9% are acceptable.

Data generated using the Landtec GEM-500 PID is supported by calibration records that arrive with the rented instrument before the period of analyses. Calibration is performed by Geotech's Colorado Service Center in Denver, Colorado. Calibration information is reported below for the Landtec PID used to generate results presented in this periodic monitoring report.

- Unit 915 was calibrated on June 26, 2009. The zero points were set for CH_4, CO_2, and O_2. Calibration was performed so that CH_4 and CO_2 reached ±15% of a known concentration, and O_2 was set to read ambient air at 20.9%. Pump flow was confirmed to be 500 cc/min.

B-5.2 Tritium

Silica gel is the medium used at the Laboratory to collect moisture from pore-vapor samples. This moisture is analyzed for tritium using liquid scintillation counting. Dry silica gel contains bound water, which dilutes the tritium in the pore-vapor moisture sample. A correction factor for this dilution is developed for each sample based on the percent moisture determined by the analytical laboratory (Marczak 2009, 106500; Whicker et al. 2009, 106429).

Silica gel is prepared for sampling by drying it at a temperature above 100°C. This drying does not remove bound water. The amount of silica gel used in each sample is weighed before sample collection (typically about 135 g). The sample canister with silica gel is weighed before sampling. The sampling procedure, EP-ERSS-SOP-5074, Sampling of Sub-Atmospheric Air, requires that at least 5 g of moisture be collected. Following sampling, the sample canister with silica gel is weighed again.

The sample (canister plus silica gel) is shipped to the analytical laboratory where the canister with silica gel is weighed again. The silica gel is emptied into a distillation apparatus and heated to 110°C, driving moisture off the silica gel. This moisture is collected and analyzed for tritium by liquid scintillation. The laboratory also weighs the empty canister. The laboratory calculates the percent moisture of the sample as the amount of moisture collected divided by the calculated weight of the wet silica gel. The value of the tritium concentration and the calculated percent moisture are reported to the Laboratory in the analytical data package and the electronic data deliverable.

The correction factor for the impact of bound water is determined for each sample using the percent moisture value determined by the analytical laboratory (Marczak 2009, 106500). Tritium results presented in this report have been corrected for bound-water dilution.

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. This information is also included in text citations. ER IDs 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 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)

Marczak, S., July 2009. "Technical Implementation of the Correction Factor Calculation for Tritium in Pore-Gas Data," Los Alamos National Laboratory document LA-UR-09-4629, Los Alamos, New Mexico. (Marczak 2009, 106500)

Whicker, J.J., J.M. Dewart, S.P. Allen, W.F. Eisele, M.C. McNaughton, and A.A. Green, June 17, 2009. "Corrections for Measurement of Tritium in Subterranean Vapor Using Silica Gel," Los Alamos National Laboratory document LA-UR-09-03837, Los Alamos, New Mexico. (Whicker et al. 2009, 106429)

Table B-1.0-1
Data Validation Procedures

Procedure	Title	Effective Date
SOP-5161, Rev. 0	Routine Validation of Volatile Organic Compound (VOC) Analytical Data	6/10/2008
SOP-5166, Rev. 0	Routine Validation of Gamma Spectroscopy, Chemical Separation Alpha Spectrometry, Gas Proportional Counting, and Liquid Scintillation Analytical Data	6/30/2008

Table B-2.0-1
Analytical Methods Used for Sample Analyses

Analytical Method	Analytical Description	Target Compound List
EPA Method TO-15	VOCs in pore gas	See analytical services statement of work (LANL 2000, 071233)
EPA Method 906.0	Tritium in pore gas	Tritium

Table B-3.11-1
VOC Sample Record with Field Duplicate Percent Difference Above 35%

Borehole ID	Depth (ft)	Analyte	Sample Standard Result (ug/m^3)	FD Result (ug/m^3)	Percent Difference
54-22116	280	Trichloroethene (1,1,1)	230000	160000	35.9%
54-22116	280	Trichloroethene	27000	18000	40.0%
54-25105	550	Toluene	21	52	84.9%

Table B-5.1-1
B&K Target Analytes and Potential Interfering Analytes

Target	Potential Interfering Analyte
PCE	Styrene
PCE	Freon-113
PCE	Freon-12
PCE	DCE
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 chloride
PCE	Tetrahydrofurane
PCE	Silicium tetrafluoride
PCE	Nitromethane
PCE	Nitrogen trifluoride
PCE	α-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 sulfide
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
Freon-11	Vinyl acetate
TCA	Fluorobenzene
TCA	Ethyl benzene
TCA	Dimethyl formamide
TCA	Dichloromethane

Table B-5.1-1 (continued)

Target	Potential Interfering Analyte
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	Dinitrogendifluoride
TCE	2-Pentanone
TCE	2-Propanol
TCE	Sulfur hexafluoride
TCE	Vinyl chloride

Appendix C

Analytical Suites and Results and Analytical Reports
(on CD included with this document)